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FINAL
TECHNICAL MEMORANDUM FOR
PARCEL E SOIL EXCAVATION CHARACTERIZATION

HUNTERS POINT NAVAL SHIPYARD
SAN FRANCISCO, CALIFORNIA

June 2013

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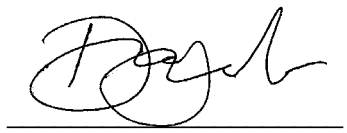

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EXECUTIVE SUMMARY

ARCADIS U.S., Inc. (contractor) has prepared this Technical Memorandum (TM) for a soil investigation at Hunters Point Naval Shipyard (HPNS) Parcel E to document the procedures, results, and conclusions of the soil investigation conducted to determine the lateral and vertical extent of chemicals of concern (COCs) associated with proposed excavation areas. This work was performed for the Naval Facilities Engineering Command Southwest, 1220 Pacific Highway San Diego, California, and in accordance with the *Final Parcel E Soil Excavation Characterization Work Plan* (ARCADIS 2012). Several locations throughout Parcel E have historic detections of COCs (Total petroleum hydrocarbons as gasoline [TPHg], diesel [TPHd], and motor oil [TPHmo], semi-volatile organic compounds [SVOCs; benzo(a)anthracene, benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, bis(2-ethylhexyl)phthalate and 3,3'-dichlorobenzidine], metals [arsenic, cadmium, copper, lead, manganese, vanadium, zinc, and mercury], chlorinated pesticides [dieldrin, heptachlor epoxide, and alpha-BHC], and polychlorinated biphenyls [PCBs; Aroclor 1254 and 1260]) in soil that exceed established remedial goals. Tier 1 locations were defined in the FS Report as areas where COC concentrations exceeded the remedial goal by ten times or more. Tier 1 locations in this project also include the detected Total Petroleum Hydrocarbon (TPH) soil concentrations that are greater than the source criterion, which was previously defined as 3,500 mg/kg (Shaw Environmental, Inc. [Shaw] 2007). Tier 2 locations were defined in the FS as areas where COC concentrations exceeded the remedial goal by five times or more.

The objectives of this soil excavation characterization was the following:

1. To confirm and, if necessary, expand the boundaries of the proposed excavation areas, which were defined in the *Draft Final Feasibility Study Report for Parcel E, Hunters Point Shipyard, San Francisco, California* (FS), dated July 2011.

2. To use the final boundary extents to provide estimates of the volume of material to be removed from Parcel E. These estimated areas will ultimately be incorporated into the remedial design (RD) for Parcel E.

To meet these objectives, the following scope of work was performed:

1. Soil samples were systematically collected from initial delineation borings surrounding the perimeter of the proposed excavation areas to characterize the areal and volumetric extent of the Tier 1 and Tier 2 locations. The samples were analyzed for the specific COCs identified in the FS that are associated with each proposed excavation area. Additionally, soil samples were also collected from step-out contingency locations surrounding the perimeter of the pothole locations within Parcel E identified in the *Final Work Plan Addendum Time-Critical Removal Action for the PCB Hot Spot Area at Parcel E-2* (Shaw 2010).

2. The lateral and vertical boundaries of the proposed excavation areas were then used to calculate the total volume of soil to be removed from each specific excavation area, and finally the total volume to be removed from all of Parcel E.

The analytical data generated by this investigation are presented in Section 5 of this report, and the excavation area recommendations and excavation volumes are presented in Section 6. Based on the redefined extents of the proposed excavation areas, the total approximate volume of soil to be excavated from Parcel E is 42,604 cubic yards. The results are summarized in the table below.

Redevelopment Block	**Total Excavation Volume (yds^3)**
EOS-1	21,352
EOS-2	2,962
EOS-3	4,453
EOS-4	2,722
MU-1	8,641
MU-2	1,825
MU-3	1,716
Railroad ROW	403
Total Volume Parcel E	44,075

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ACRONYMS

APP	Accident Prevention Plan
bgs	below ground surface
COC	Chemical of Concern
CTO	Contract Task Order
DPT	Direct Push Technology
DQA	Data Quality Assessment
EOS	Parcel E Open Space
ERRG	Engineering/Remediation Resources Group
FS	Feasibility Study
GPS	Global Positioning System
HPNS	Hunters Point Naval Shipyard
IDW	Investigation derived waste
LCS	Laboratory Control Limits
msl	Mean sea level
MU	Mixed Use
PCB	Polychlorinated biphenyl
PAL	Project action level
QA/QC	Quality Assurance/Quality Control
QC	Quality control
RD	Remedial Design
RG	Remedial goal
RI	Remedial Investigation
RPD	Relative Percent Difference
RPM	Remedial Project Manager
SAP	Sampling and Analysis Plan
SOP	Standard Operating Procedure
SVOC	Semivolatile organic compound
SSHP	Site Safety and Health Plan
TM	Technical Memorandum
TPH	Total petroleum hydrocarbons
TPHg	Total petroleum hydrocarbons as gasoline
TPHd	Total petroleum hydrocarbons as diesel
TPHmo	Total petroleum hydrocarbons as motor oil
EPA	U.S. Environmental Protection Agency

1.0 INTRODUCTION

ARCADIS U.S., Inc. (contractor) prepared this technical memorandum (TM) on behalf of the U.S. Navy under Contract Task Order (CTO) No. 0001, issued under Contract No. N62473-11-D-2226. This TM describes the soil sampling and analysis procedures, results, and conclusions implemented by the contractor and their subcontractors for the Parcel E Soil Excavation Characterization project at the Hunters Point Naval Shipyard (HPNS) in San Francisco, California. The site location is shown on Figure 1.

This soil investigation was conducted within the development blocks of Parcel E at HPNS to determine the lateral and vertical extent of chemicals of concern (COCs) associated with the proposed excavation areas defined in the *Final Feasibility Study Report for Parcel E, Hunters Point Shipyard, San Francisco, California* (FS). The Parcel E layout is shown on Figure 2. The proposed excavation areas throughout Parcel E have historic detections of COCs (Total petroleum hydrocarbons as gasoline [TPHg], diesel [TPHd], and motor oil [TPHmo], semi-volatile organic compounds [SVOCs; benzo(a)anthracene, benzo(a)pyrene, Benzo(b)flouranthene, Benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, bis(2-ethylhexyl)phthalate and 3,3'-dichlorobenzidine], metals [arsenic, cadmium, copper, lead, manganese, vanadium, zinc, and mercury], chlorinated pesticides [dieldrin, heptachlor epoxide, and alpha-BHC], and polychlorinated biphenyls [PCBs; Aroclor 1254 and 1260]) in soil that exceed established remedial goals (RG). The purpose of this investigation was to completely delineate the extent of each proposed excavation area using historical soil analytical data presented in the FS, new soil analytical data from the current investigation, or a combination of the two. The current investigation was accomplished by systematically collecting soil samples from step-out locations surrounding the undefined perimeters of the proposed excavation areas.

The project was conducted in accordance with the following planning documents:

- *Final Parcel E Soil Excavation Characterization Work Plan, Hunters Point* ***Shipyard, San Francisco, California*** **(Work Plan; ARCADIS 2012).**

- ***Final Sampling and Analysis Plan (SAP), Parcel E Soil Excavation*** *Characterization, Hunters Point Shipyard, San Francisco, California* (ARCADIS 2012). This document was published as Appendix A to the Work Plan.

Prior to implementing the work under the above documents, key personnel reviewed the Final SAP as indicted in the Personnel Sign-off Sheet included in Appendix A.

1.1 Project Objectives

The objective of this investigation was to determine the extent of COC concentrations within each proposed excavation area that are above the established Project Action

Levels (PALs). The PALs were established in the FS and are based on the COC concentrations defined as follows (ERRG, 2011):

- Tier 1 - Locations where the COCs are at concentrations greater than or equal to 10 times their respective remedial goals, and/or the total petroleum hydrocarbons (TPH) source criterion (3,500 milligrams per kilogram [mg/kg]); (Shaw 2007).
- Tier 2 – Locations where COCs are at concentrations greater than or equal to 5 times their respective remedial goals. The Tier 2 PAL was the concentration threshold used to laterally and vertically delineate the proposed excavation areas. The side of a proposed excavation area was considered defined when an adjacent soil concentration was less than the Tier 2 PAL.

Data obtained during this investigation was used to meet the following objectives:

- Characterize the vertical and horizontal extent of the COCs in soil at each of the proposed excavation areas surrounding the Tier 1 and Tier 2 locations defined in the FS, as well as the pothole sample locations within Parcel E identified in the *Final Work Plan Addendum Time-Critical Removal Action for the PCB Hot Spots Area at Parcel E-2* (Shaw 2010) and
- Use the horizontal and vertical extents of the proposed excavation areas surrounding the Tier 1 and Tier 2 locations to calculate future excavation volumes in support of the RD.

1.2 Scope of Work

This site investigation was implemented using the following approach:

- Collect soil samples from various depths within delineation soil borings using a hand auger and slide hammer type sampler for borings less than 3 feet below ground surface (bgs), and a DPT drill rig for borings greater than 3 feet bgs.
- If COC concentrations at a delineation boring are greater than the Tier 2 PAL, collect additional soil samples by stepping-out from the original delineation boring and advancing contingency soil borings to complete the delineation of the Tier 1 or Tier 2 location.
- Survey the location and elevation of the borehole locations.

2.0 SITE BACKGROUND

Prior to 1940, the site operated as a civilian shipyard. The Navy obtained ownership of HPNS in 1940 to conduct shipbuilding, repair, and maintenance activities. HPNS infrastructure and facilities expanded through the late 1940s. Activities shifted to focus on submarine maintenance and repair after World War II. However, the Navy continued to operate carrier overhaul and ship maintenance and repair facilities through the 1960s. HPNS was also involved in the decontamination of ships used during Operation Crossroads nuclear weapons tests. These decontamination activities occurred mainly in 1946 and 1947. HPNS was also the site of the Naval Radiological Defense Laboratory (NRDL) from the late 1940s until 1969.

Documented HPNS practices included metallurgy (casting, welding, grinding, etc.); sand blasting; painting; metals treatment ("pickling" and plating); degreasing/cleaning; fuel and chemical storage; boiler operation; and the use of cutting, cooling and lubrication oils, and dielectric fluids; application of anti-biological agents; landfill operation; and slag disposal/dumping. Between 1976 and 1986, the majority of HPNS was leased to Triple A Machine Shop, Inc., a private ship repair company. The various industrial activities in Parcel E have resulted in a broad distribution of polycyclic aromatic hydrocarbons (PAHs), PCBs, SVOCs, TPH, and metals in soil.

HPNS is located in southeastern San Francisco on a peninsula that extends to the east into the San Francisco Bay (see Figure 1). HPNS was subdivided into seven parcels, Parcels A through F and E-2. One parcel, Parcel A, was transferred to the San Francisco Redevelopment Agency in 2004 and is no longer Navy property. In September 2004, Parcel E was divided into two parcels (Parcels E and E-2). Additional information regarding Parcel E background can be found in the following reports:

- The Final Revised Remedial Investigation (RI) Report for Parcel E (Barajas & Associates, 2008), and

- The Revised Draft Final FS Report for Parcel E (ERRG, 2011).

2.1 Parcel E Environmental Setting

Parcel E includes 138 acres of shoreline along the southwestern portion of HPNS. Parcel E consists of relatively level lowlands with surface elevations ranging from 0 to 12 feet above mean sea level (msl). Predominant ground surface elevations range from 7 to 10 feet above msl. Surface water runoff is collected and discharged to San Francisco Bay through a storm drain system. Surface water not collected by the storm water system drains via sheet flow towards San Francisco Bay. The Parcel E and E-2 shoreline area extends the full length (2.5 kilometers) of the southern boundary of HPNS, from the western edge at Yosemite Creek to the eastern boundary at Berth 38. In 2003, most of the debris (concrete, metal rebar, wiring, brick, and wood) along the Parcels E and E-2

shoreline was removed. Riprap remaining along the shoreline consists of large pieces of concrete and wood that is maintained along a large portion of the shoreline to prevent erosion (Barajas & Associates, Inc. 2008).

Approximately 30 percent of Parcel E is covered by ruderal habitat characterized by shrubs and grasses, while 65 percent is covered by pavement, 44 buildings, and sparse vegetation. These 44 building were considered "pavement" when choosing the delineation and step-out boring locations. The remaining 5 percent of land surface includes beach, intertidal, and wetland areas. Thirty-seven Installation Restoration (IR) sites are located within Parcel E. The parcel has been divided into eight redevelopment blocks: MU-1, MU-2, MU-3, EOS-1 through EOS-4, EOS-5(a, b, and c) (EERG, 2011). The redevelopment blocks are illustrated on Figure 2. Proposed land uses for these blocks include residential and light industrial (mixed use [MU]), and open space (EOS).

Several locations throughout Parcel E have historic detections of COCs in soil that exceed established remedial goals (RGs) or source criterion (Shaw 2007). Excavation areas at Tier 1 locations were defined in the FS Report as areas where COC concentrations exceeded RGs by ten times or more. For the purposes of this project, TPH concentrations above the source criterion (3,500 mg/kg) that are not comingled with other COCs are also considered Tier 1 locations. Excavation areas at Tier 2 locations were defined in the FS as areas where COC concentrations exceeded RGs by five times or more. This project includes the systematic collection of soil samples at step-out locations from proposed excavation areas surrounding Tier 1 and Tier 2 locations, which were identified in the FS. The additional data will be used to characterize the areal and volumetric extent of contamination at these Parcel E excavation locations to a maximum depth of 10 feet below ground surface (bgs).

2.2 Site Geology

Five geologic units underlie HPNS, including four units of unconsolidated sedimentary deposits of Quaternary age and a fifth of underlying Jurassic-Cretaceous-age Franciscan Complex bedrock. The stratigraphic sequence of these geologic units, from the youngest (shallowest) to oldest (deepest), is generally Artificial Fill, Undifferentiated Upper Sands, Bay Mud, Undifferentiated Sediments and Bedrock. Artificial Fill and Bedrock are the most likely units to be encountered above 10 feet bgs, but other units may be observed, such as Bay Mud along the railroad right-of-way.

Artificial Fill

Artificial fill material covers the unconsolidated Holocene-age sediments. Artificial Fill at Parcel E is typically observed to be silty and sandy clays with gravel to poorly graded sands, boulders, and debris deposits. Based on previous investigations, most of the coarse fill material is locally derived from the Franciscan Complex bedrock, the main constituents of which are serpentinite, greenstone, shale, greywacke, and chert. Chemical analysis of bedrock at HPNS revealed elevated concentrations of arsenic, iron, and manganese in chert and elevated concentrations of nickel in serpentinite. These metals

appear to be ubiquitous at HPNS and occur at elevated concentrations in the bedrock-derived fill material.

Undifferentiated Upper Sands

Undifferentiated Upper Sands, found below the Artificial Fill, are alluvial deposits and estuarine marine sands of the Holocene-age that usually overlie, but in places are interbedded with, the Bay Mud.

Bay Mud

Bay Mud consists of Holocene-age estuarine sediments and is almost exclusively composed of silt and clay. The Bay Mud mostly underlies Artificial Fill, but in places, it underlies or is interbedded with Undifferentiated Upper Sands. Bay Mud is present over most of Parcel E, with the exception of the bedrock highs in the central and southeastern portions of the parcel and at the northwestern border of Parcel E, where the depth to bedrock may be less than 5 feet bgs.

Undifferentiated Sediments

Undifferentiated Sediments are typically interbedded clays, silts, and sands, and underlie the Artificial Fill, Undifferentiated Upper Sands, and Bay Mud. Undifferentiated Sediments are about 230 feet thick in the south-central area of Parcel E, thin to the north and east, and are absent at the bedrock highs in the central and southeastern portions of the parcel and at the northwestern border.

Bedrock

Bedrock at HPNS is part of the Franciscan Complex, and includes basalt (greenstone), serpentinite, chert, sandstone, siltstone, and shale. The depth to bedrock is shallowest (less than 5 feet bgs) at the northwestern border of Parcel E and deepest (about 280 feet bgs) in the south-central portion of the parcel. Two bedrock outcrops are located in Parcel E: one near Buildings 406, 413, and 414, and one in the southeastern corner at Building 521 (Barajas & Associates, Inc., 2008).

2.3 Hydrostratigraphy

Three hydrostratigraphic units are found at Parcel E. These include (1) the A-aquifer, (2) the B-aquifer, and (3) the bedrock water-bearing zone. An aquitard composed of the Bay Mud separates the A-aquifer from the B-aquifer across most of Parcel E.

- The A-aquifer at Parcel E may include (1) Undifferentiated Upper Sands; (2) sandy units within the Bay Mud; and (3) the upper weathered bedrock zone, where the A-aquifer directly overlies bedrock (such as in the southeastern corner of Parcel E at Building 521). The A-aquifer covers most of Parcel E and ranges in thickness from a few feet to over 50 feet. The A-aquifer is generally unconfined throughout most of Parcel E, but semi-confined conditions may exist in places

where fine-grained sediments below the water table overlie more permeable materials. Depth to groundwater ranges from 4 to 15 feet bgs, with an average depth to groundwater of approximately 8 feet bgs.

- The Bay Mud Aquitard is a 30-ft to 40-ft thick aquitard that separates the A-aquifer from the B-aquifer across the majority of Parcel E; thickest in the southern portion of Parcel E; absent in the northern portion and near bedrock highs.

- B-aquifer – sequence of 30-ft to 40-ft thick, laterally continuous layers of sand and silty and clayey sand which are separated by laterally continuous layers of silt and clay; behaves as a single aquifer with the A-aquifer where the Bay Mud Aquitard is absent.

- Bedrock Water-Bearing Zone – saturated, fractured, unweathered bedrock with limited flow capability and low storage capacity; estimated groundwater velocity is 0.12 to 0.34 feet per day.

Primary sources of recharge for the A-aquifer are infiltration of precipitation and runoff, leakage from utility supply lines, intrusion of bay water, horizontal flow of groundwater from upgradient areas, and vertical flow of water from the B-aquifer. The primary sources of recharge for the B-aquifer include infiltration of precipitation and runoff and horizontal groundwater flow from upgradient areas north and west of Parcel E. The Bedrock Water-Bearing Zone likely discharges into the B-aquifer at upgradient contacts and is recharged by infiltration of precipitation at outcrop areas north and northwest of Parcel E.

The A-aquifer is subject to tidal effects that cause the influx and mixing of San Francisco Bay saline surface water with near-shore groundwater through daily tidal action. A tidal mixing zone extends at least 70 feet inland from the shoreline at Parcel E. A 2002 study indicated the maximum fluctuation of bay water levels between high and low tide was approximately 9 feet.

2.4 Summary of Previous Investigations and Response Actions

As summarized in the Revised RI Report for Parcel E (Barajas & Associates, 2008), multiple investigations have been conducted to identify sites where releases of hazardous substances may have occurred at HPNS. Starting with the 1984 Initial Assessment Report (Naval Energy and Environmental Support Activity, 1984), site assessments and remedial investigations culminated in a draft RI report being issued in 1997 (Tetra Tech EM Inc., and others, 1997). Subsequently, focused investigations were completed to address identified data gaps. As a result, the Navy conducted the onshore Standard Data Gaps Investigation (SDGI) in 2002 to collect additional soil data for Parcel E. The SDGI focused on sampling two distinct areas in Parcel E: (1) shoreline soils and sediments in the area between the shoreline riprap and the mean tide line and (2) onshore soils within

Parcel E (Tetra Tech, Inc., 2005). The following removal and cleanup actions have been performed in Parcel E to date:

- 1988: Basewide removal of polychlorinated biphenyl (PCB)-containing electrical transformers
- 1988: Removal of soil at IR-08 PCB spill area
- 1991: Removal of floating product at IR-03
- 1991 to 1994: Removal of 8 USTs, closure of 2 USTs in place, and removal of 12 ASTs
- 1991 to 1995: Removal and fixation of sandblast waste
- 1996 to 1998: Installation of a 900-foot long sheet-pile wall and low-permeability cap at the former oil reclamation ponds in IR-03
- 1996 to 1997: Removal of sediment from the storm drain system
- 1996: Removal of soil from the exploratory excavation at IR-11/14/15
- 2001:Time-critical removal of soil containing non-volatile organic compounds at IR-08
- 2002 to 2004: Decontamination of industrial process equipment and removal of various wastes and ASTs from Building 521
- 2003 to 2004: Removal of various debris from the Parcel E shoreline
- 2003 to 2004: Removal of five soil stockpiles from IR-02 Southeast and IR-73
- 2004: Removal of TPH-contaminated soil from IR-05, IR-36 West, IR-39, and IR-73
- 2005 to 2007: Removal of radioactive soil and debris at IR-02 Northwest and Central Area
- 2005 to 2007: Removal action of radioactive soil and debris at IR-02 Southeast Metal Debris Reef
- 2005 to 2007: Removal of PCB- and TPH-contaminated soil, as well as radioactive soil and debris, at PCB Hotspot Area (IR-02 Northwest)

A removal action to replace the storm drains across the majority of Parcel E is ongoing.

Information from previous investigations and response actions will be used to support the RD at Parcel E. Portions of Parcel E are currently designated as Radiological Control Areas, and operations within these areas are subject to specific controls.

3.0 SOIL SAMPLING

The objective of this investigation is to characterize the vertical and horizontal extent of the proposed excavation areas surrounding Tier 1 and Tier 2 locations defined in the FS, and to use the data to calculate and refine future excavation volumes in support of the RD. To meet these objectives, ARCADIS (1) collected additional soil samples in the vicinity of FS excavation locations, (2) conducted laboratory analyses for the specific COCs that defined the Tier 1 or 2 locations, and (3) used the data to characterize the lateral and vertical extent of contamination surrounding each proposed excavation area. The project quality objectives and the planning process is presented in detail in Worksheet #11 of the SAP. The COCs include:

- TPHg, TPHd, and TPHmo
- SVOCs: benzo(a)anthracene, benzo(a)pyrene, benzo(b)flouranthene, benzo(k)flouranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, bis(2-ethylhexyl)phthalate and 3,3'-dichlorobenzidine
- Metals: arsenic, cadmium, copper, lead, manganese, vanadium, zinc, and mercury
- Chlorinated pesticides: dieldrin, heptachlor epoxide, and alpha-BHC
- PCBs: Aroclor 1254 and Aroclor 1260

The technical approach, including sampling design and procedures, is presented in detail in Worksheet #17 of the SAP. This investigation included the collection of soil samples from various depths within delineation soil borings. If the concentration of at least one COC within an initial delineation boring met or exceeded the PAL, additional step-out soil borings were advanced to further delineate the concentration of COCs. The distance and direction of each contingency boring was determined in the field based on the concentrations of the delineation borings, the existing data of the surrounding contingency borings, and the site logistics.

In Summary, field work activities consisted of the following:

- Mobilization
- Site reconnaissance to assess the condition of the areas to be investigated
- Clearing the accessible boring locations for subsurface utilities
- Soil borehole advancement and soil sampling using hand tools and DPT
- Sampling of investigation-derived waste (IDW)

- Laboratory analysis of soil, and solid and liquid waste
- Demobilization

3.1 Preparatory Activities

Prior to beginning field work, the following preparatory activities took place:

- The Navy Remedial Project Manager (RPM), Resident Officer in Charge of Construction (ROICC), and the appropriate HPS security and fire department personnel were notified regarding the anticipated work.
- Sampling personnel reviewed the appropriate sections of the Final SAP attached to the Work Plan and signed the project sign-off sheet.
- Affected personnel read the Accident Prevention Plan and associated Site-Specific Safety and Health Plan, and also attended the required HPNS Radiation Awareness Training conducted by Tetra Tech EC before the field activities commenced.
- Underground Service Alert was notified one week in advance of any coring/drilling activity. Additionally, the investigation areas were geophysically surveyed to identify potential obstructions or utilities at borehole locations, and borehole locations with conflicts were modified as necessary.
- Mobilization activities included site reconnaissance, marking the boring locations, movement of equipment and materials to the site, and orientation of field personnel. Upon receipt of appropriate authorization, site personnel mobilized to the site.

3.2 Soil Boreholes and Sampling

A total of 283 initial and step-out soil samples, 17 field quality control (QC) samples (Equipment blanks), and 13 laboratory QC samples (Matrix spike and matrix spike duplicate [MS/MSD]) were collected and submitted to Curtis and Tompkins (C&T), Ltd., Analytical Laboratories, located in Berkeley, California. C&T is accredited by the Department of Defense (DOD) Environmental Laboratory Accreditation Program (ELAP), the National Laboratory Accreditation Program (NELAP), and the California Department of Health Services (DHS) ELAP to perform the analyses. The location-specific sampling methods can be found in Worksheet #18 of the SAP, and any deviations from these methods are provided in Section 3.2.3 of this Technical Memorandum.

3.2.1 Initial Borings

Between September 4 and October 10, 2012, two hundred thirty-three (233) initial delineation borings were advanced at the locations shown on Figures 3 through 20 in accordance with the procedures detailed in the Final SAP. Forty-six (46) borings were advanced within EOS-1, twenty-six (26) borings within EOS-2, thirty-eight (38) within EOS-3, twenty-one (21) within EOS-4, fifty-nine (59) within MU-1, twelve (12) within MU-2, twenty-two (22) within MU-3, and nine (9) within the Railroad Right of Way (ROW). Prior to advancing the boreholes, concrete or asphalt was cored at the borings located in paved areas. The decision logic for the soil sampling and analysis is shown on Figure 21.

For the locations where samples were collected at depths less than 3 feet below grade, the boreholes were advanced by Rice General of Long Beach, California, using a steel auger (approximately 3-inch diameter) to remove the soils overlying the sample interval. Once the top of the soil sampling interval was reached, soil samples were collected with a manually operated slide hammer that advanced a 2.5-inch diameter by 6-inch long stainless steel core barrel lined with an acetate sleeve into the undisturbed sample interval. The slide hammer sampling assembly was then removed from the borehole, and the acetate sleeve within the stainless steel core barrel removed from the assembly and the sample collected for analysis and soil classification.

For the locations where samples were collected at depths greater than 3 feet below grade, the boreholes were advanced by PeneCore Drilling of Woodland, California (C57 licensee #906899) using a steel auger to remove the soils overlying the sample interval (up to 5 feet bgs), then a truck-mounted hydraulic DPT rig was used to advance 2.5-inch diameter steel sampling barrel lined with acetate sleeves into the undisturbed sample interval. Upon retrieval, the acetate sleeves were cut open, and samples collected for analysis and soil classification. In both scenarios the soil samples were then transferred to the appropriate laboratory-provided sample container, which are detailed in Worksheet #19 of the SAP. Soil boring logs are presented in Appendix B. Note that due to scheduling and access issues within some of the work areas, samples less than 3 feet bgs were collected from a limited number of borings using the DPT rig, rather than the slide hammer.

After each sample was collected in the appropriately labeled container, they were placed in individual seam-sealing plastic bags and stored in a cooler with ice. The samples were then transported to the analytical laboratory consistent with chain-of-custody procedures in accordance with the SAP. Sample custody was maintained and custody transfer was documented from the time of sample collection through sample disposal by the laboratory.

Soil samples were collected between 2 and 9.5 feet bgs, with the number of samples and sample depths varying by boring location. The specific sampling depths were based on Worksheets #11 and #18 of the SAP. If a boring location encountered refusal at depth, step-out borings were advanced within 2-3 feet of the original location until the sample depth was reached.

3.2.2 Step-out Borings

Between September 27 and October 10, 2012, thirty-one (31) step-out contingency borings were advanced in EOS-1 through EOS-4, and MU-1. Eleven (11) borings were advanced within EOS-1, five (5) borings within EOS-2, nine (9) within EOS-3, one boring within EOS-4, and five (5) within MU-1. Step-out contingency borings were based on the decision criteria presented in the SAP Worksheet #11 (Step 5). A step-out contingency boring was advanced because the initial delineation boring had at least one COC above the Tier 2 PAL. The placement of the step-out boring was based on the concentration of the initial delineation boring (For Tier 1 concentrations the step-out boring was 20 feet from the initial boring, and for Tier 2 the step-out boring was 10 feet), the presence of historical borings locations with soil concentrations less than the PAL, and general site logistics.

The step-out contingency borings were advanced by PeneCore Drilling using a truck-mounted hydraulic DPT rig. The drilling and sampling techniques were the same as those described in the previous section.

3.2.3 Deviations from the Final SAP

Boring placement and sample depths varied from the final SAP at some locations based on subsurface utility conflicts and current site logistics. The deviations presented by redevelopment block are:

EOS-1:

- The proposed excavation areas located within the current radiation soil screening pads were delineated at sample depths below those presented in the Final SAP. Following the collection and analysis of the Tier 1 and Tier 2 soil samples presented in the FS (up until 2008), up to approximately 6 feet of clean fill was used to regrade these areas in June 2010 (Shaw 2010). To delineate the native soil below the approximately 6 feet of clean fill, soil samples were collected from the deepest sample interval of this investigation (7.0 to 7.5 feet bgs). If soil samples were collected at the original depths presented in the Final SAP (1.5 to 2.0, or 3.5 to 4.0 feet bgs), the soil sample would have consisted of clean fill. The excavation areas within the soil screening pads were the following (shown in Figures 3 and 4):

    - EX02B122
    - EX02B250
    - EX02B412
    - EX02B442
    - EX02B456
    - EX02B524
    - EX02B525
    - EX02GR73SW

- EX02GR93SW
- EX02GR117SW

· The excavation areas EX02GR184SW, EX02SS310, and EX02GR179SW located along the southern shoreline of EOS-1 could not be delineated at the borings presented in the final SAP because the sloped shoreline was inaccessible to both the hand auger and DPT crews. The approximate shoreline elevation contours and a cross section are provided on Figure 4. The sloped shoreline and the presence of large rip rap cobbles/concrete debris made accessing the boring locations a health and safety concern. These boring locations and excavation areas are located between the Northwest and Central Removal Action Area (Shaw 2010) and San Francisco Bay, which is a relatively narrow area that will not benefit from further COC delineation. Instead, the modified proposed excavation areas are presented on Figure 4 to address the potential COC concentrations up to the San Francisco Bay shoreline.

EOS-2:

· Initial delineation boring EX02B415C could not be sampled on the western side of proposed excavation area EX02B415 because the sloped shoreline was inaccessible to both the hand auger and DPT crews. The sloped shoreline and the presence of large rip rap cobbles/concrete debris made accessing the boring locations a health and safety concern. The modified proposed excavation area is presented on Figure 6 to address the potential COC concentrations to the west of proposed excavation area EX02B415.

EOS-3:

· The proposed excavation areas EX02GP016A, EX02MW146, EX02MW173A, EX02GP038, EX02GP040 and EX02TA40B, located within the TPH plume footprint were not included in the Final SAP because they were to be addressed during a separate remedial action; however delineation borings were sampled around these areas to expedite the RD and eventual remedial action within EOS-3 (Figure 8).

EOS-4:

· Initial delineation borings were not collected in the vicinity of EX14B026 because this was previously excavated to a depth of approximately 3 feet bgs (Figure 9). The excavation area was still open and active during the soil sampling activities discussed in this Technical Memorandum.

· Excavation areas EX02B369, EX02B355, and EX02B468 were located within a fenced area containing a covered soil stockpile with a height approximately 2 to 3 feet above the current grade (Figure 10). In order to collect soil samples at the depths presented in the Final SAP, a DPT drill rig was used to drive through the

covered soil stockpile and collect the soil sample below grade. The final sample depths of EX02B355A, EX02B369A, EX02B369B, and EX02B468D were adjusted approximately 2 feet deeper to account for the elevation above grade of the covered soil stockpile. The stockpile cover was patched at the completion of each borehole.

- Initial delineation boring EX02B468A could not be sampled on the northern side of proposed excavation area EX02B468 because the elevated and sloped stockpile sides were inaccessible to both the hand auger and DPT crews. Boring EX02B369C was relocated to an area outside the fenced stockpile for the same logistical issues with the sloped stockpile sides.

- The excavation areas EX02GR93SW, EX02G105, EX02B493, and EX02B497 located along the southern shoreline of EOS-4 could not be delineated at the borings presented in the final SAP because the shoreline was inaccessible to both the hand auger and DPT crews because large rip rap cobbles made accessing the boring locations a health and safety concern. Additionally, delineation boring EX02B497A could not be accessed because this area of the proposed excavation is within the San Francisco Bay tidewaters. The modified proposed excavation areas are presented on Figure 11 to address the potential COC concentrations up to the San Francisco Bay shoreline.

MU-1:

- Initial delineation boring EX13B010A on the east side of proposed excavation area EX13B010 was sampled from 2.5 to 3.0 feet bgs to account of approximately 1.5 feet of concrete and asphalt creating a secondary containment area above the current grade (Figure 15).

MU-2:

- Initial delineation borings were not collected in the vicinity of EX14MW10A because this was previously excavated to a depth of approximately 3 feet bgs (Figure 17). The excavation area was still open and active during the soil sampling activities discussed in this Technical Memorandum.

3.3 Field Equipment Decontamination

During the hand auger and DPT sampling activities, all non-disposable sampling equipment was decontaminated after each use using a three-stage procedure. During the hand auger sampling this equipment included the hand auger bucket and the slide hammer core barrel, and during the DPT sampling the equipment included the hand auger bucket and the steel sampling rods/core barrel. The three-stage decontamination procedure consisted of washing with a stiff bristled brush in a bucket with non-phosphate

detergent, then rinsing in a second bucket filled with deionized water, and finally rinsing in a third bucket of deionized water. The soil collection equipment was cleaned until all visible soil and debris was removed.

3.4 Borehole Abandonment

Following the sample collection activities, each borehole was backfilled with bentonite grout to within a few inches of the current grade. The surface of each location was then finished with either surface soil from the surrounding area (unpaved areas), or with either concrete or asphalt patch (paved areas).

3.5 Investigation Derived Waste

All investigation derived waste (IDW) including soil cuttings and decontamination water generated during this project were stored in appropriately labeled Department of Transportation (DOT)-approved 55-gallon steel drums. All soil cuttings were screened for radiation by Tetra Tech EC prior to storage, and the full drums were again screened for radiation prior to collecting a representative waste sample. None of the soil waste was above the Tetra Tech EC radiation screening criteria. A representative waste sample was then collected from the waste stored in each container using a clean stainless steel trowel for soil, and a clean disposable bailer for liquid waste. For soil waste, a composite sample was collected from several areas within each drum. The waste characterization samples were transferred into clean, laboratory-provided containers and placed in a cooler with ice for transportation to C&T laboratory under proper chain-of-custody procedures.

Following waste characterization and profiling, the containers were transferred by Belshire Environmental Services Inc. of Foothill Ranch, California, to the US Ecology disposal facility located in Betty, Nevada. The Navy provided the appropriate EPA identification number, signed all required documentation, and performed other related functions required of a waste generator. The disposal documentation is provided in Appendix C.

3.6 Location Surveying

A hand-held Global Positioning System (GPS) unit was used to locate the initial delineation soil borings presented in the Final SAP. At the completion of the sampling activities, the sample locations were surveyed by California licensed surveyors PLS Surveys, Inc. of Oakland, California, to document the actual boring locations. The surveyor provided the surface elevation recorded from the center of the abandoned borehole location to a precision of plus or minus 0.1 foot. The elevations were surveyed relative the 1988 National Geodetic Vertical Datum, and the borehole locations were surveyed using the 1983 North American Datum State Plane Coordinate System, California, Zone3.

3.7 Health and Safety

All field activities associated with this project were performed in accordance with the *Final Parcel E Soil Excavation Characterization Accident Prevention Plan and Site Safety and Health Plan* (ARCADIS 2012). Tetra Tech EC conducted the radiation training for ARCADIS and their subcontractors, and completed the monitoring of personnel, tools, equipment, and IDW in accordance with a project-specific work instruction. Tetra Tech EC also directed the radiological testing on all equipment and materials mobilized and demobilized from the site.

4.0 SOIL ANALYTICAL RESULTS

The soil samples were analyzed by C&T laboratory for one or more of the following:

- TPHg, TPHd, and TPHmo by United States Environmental Protection Agency (USEPA) Method 8015D
- The SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)flouranthene, benzo(k)flouranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, bis(2-ethylhexyl)phthalate and 3,3'-dichlorobenzidine) by USEPA Method 8270D
- Arsenic, cadmium, copper, lead, manganese, vanadium, and zinc by USEPA Method 6010C, and mercury by USEPA Method 7471B
- Chlorinated pesticides dieldrin, heptachlor epoxide, and alpha-BHC by USEPA Method 8081B
- PCBs Aroclor 1254 and Aroclor 1260 by USEPA Method 8082

The laboratory analytical results and the Tier 2 PALs for the COCs are provided in Table 1 and the results above and below the respective PALs are shown on Figures 3 through 20. Executed chain-of-custody documents are included in Appendix D, and the hardcopy sample summary results are incorporated into the data validation report and included on the CD Rom presented in Appendix E.

4.1 Redevelopment Block EOS-1

The analytical results for the forty-six (46) initial delineation and eleven (11) step-out contingency borings collected from Redevelopment Block EOS-1 are described in this section. The results are summarized in Figures 3 and 4, and Table 1.

4.1.1 TPH

Thirty-four (34) soil samples were collected in EOS-1 for TPH analysis from thirty-one (31) boring locations at depths of 1.5 to 2.0 feet bgs (10 locations) and 7.0 to 7.5 feet bgs (21 locations).

- TPHg was detected in thirty (30) soil samples, with concentrations ranging from 0.011 mg/kg at EX02B428C.2, to 1,400 mg/kg at EX02TA16AB.7.5.
- TPHd was detected in thirty-one (31) soil samples, with concentrations ranging from 2.9 mg/kg at EX02B412D.2, to 5,200 mg/kg at EX02TA16AB.7.5.

- TPHmo was detected in thirty-four (34) soil samples, with concentrations ranging from 14 mg/kg at EX02B456A.2, to 6,600 mg/kg at EX02TA126AB.7.5.

The samples EX02B428D.2 (7,400 mg/kg), EX02TA16AB.7.5 (13,200 mg/kg), and EX02TA16AB1.7.5 (5,603 mg/kg) were the only TPH composite results that were greater than the 3,500 mg/kg PAL.

4.1.2 SVOCs

Eighteen (18) soil samples were collected in EOS-1 for select SVOC analysis from eighteen (18) boring locations at depths of 1.5 to 2.0 feet bgs (15 locations) and 7.0 to 7.5 feet bgs (2 locations). The select SVOCs analyzed from each analytical suite are provided in Table 1, and the select SVOCs detected are provided below:

- Benzo(a)anthracene was detected in ten (10) soil samples, with concentrations ranging from 0.025 mg/kg at EX02B524D.2, to 2,200 mg/kg at EX02B122C1.2. Six (6) of the soil samples were above the Tier 2 PAL of 1.85 mg/kg.

- Benzo(a)pyrene was detected in twelve (12) soil samples, with concentrations ranging from 0.028 mg/kg at EX02B524C.7.5, to 2,800 mg/kg at EX02B122C1.2. Six (6) of the soil samples were above the Tier 2 PAL of 1.65 mg/kg.

4.1.3 Metals

Twenty-six (26) soil samples were collected in EOS-1 for select metals analysis from twenty-six (26) boring locations at depths of 1.5 to 2.0 feet bgs (9 locations), 3.4 to 4.0 feet bgs (4 locations) and 7.0 to 7.5 feet bgs (16 locations). The select metals analyzed from each analytical suite are provided in Table 1, and the select metals detected are provided below:

- Arsenic was detected in four (4) soil samples, with concentrations ranging from 1.8 mg/kg at EX02B524A.7.5, to 10 mg/kg at EX02B524C.7.5. None of the soil samples were above the Tier 2 PAL of 55.5 mg/kg.

- Copper was detected in twenty-three (23) soil samples, with concentrations ranging from 34 mg/kg at EX02GR132BTB.2, to 14,000 mg/kg at EX02B524C.7.5. Nine (9) of the soil samples were above the Tier 2 PAL of 800 mg/kg.

- Lead was detected in twenty-three (23) soil samples, with concentrations ranging from 13 mg/kg at EX02GR73SWA.7.5, to 3,400 mg/kg at EX02B122C.2. Seven (7) of the soil samples were above the Tier 2 PAL of 775 mg/kg.

- Zinc was detected in twenty-five (25) soil samples, with concentrations ranging from 34 mg/kg at EX02B288A1.4, to 8,500 mg/kg at EX02B288A.4. Eight (8) of the soil samples were above the Tier 2 PAL of 1,850 mg/kg.

4.1.4 Chlorinated Pesticides

Four (4) soil samples were collected in EOS-1 for select chlorinated pesticides analysis from four (4 boring locations at depths of 1.5 to 2.0 feet bgs (9 locations), 3.4 to 4.0 feet bgs (4) locations) and 7.0 to 7.5 feet bgs (16 locations). The select chlorinated pesticides analyzed from each analytical suite are provided in Table 1, and the select chlorinated pesticides detected are provided below:

- Dieldrin was detected in EX02B524B.7.5 at 0.084 mg/kg, which is above the Tier 2 PAL of 0.017 mg/kg.

4.1.5 PCBs

Twenty-four (24) soil samples were collected in EOS-1 for select PCB analysis from twenty-four (24) boring locations at depths of 1.5 to 2.0 feet bgs (7 locations) and 7.0 to 7.5 feet bgs (17 locations). The select PCBs analyzed from each analytical suite are provided in Table 1, and the select PCBs detected are provided below:

- Aroclor-1254 was detected in eight (8) soil samples, with concentrations ranging from 0.081 mg/kg at EX02GR131SWC.2, to 24 mg/kg at EX02B122D.2. Five (5) of the soil samples were above the Tier 2 PAL of 0.465 mg/kg.

- Aroclor-1260 was detected in twenty (20) soil samples, with concentrations ranging from 0.014 mg/kg at EX02B524A.7.5, to 14 mg/kg at EX02B122D.2. Four (4) of the soil samples were above the Tier 2 PAL of 1.05 mg/kg.

4.2 Redevelopment Block EOS-2

The analytical results for the twenty-six (26) initial delineation and five (5) step-out contingency borings collected from Redevelopment Block EOS-2 are described in this section. The results are summarized in Figures 5 through 7.

4.2.1 SVOCs

Twelve (12) soil samples were collected in EOS-2 for select SVOC analysis from twelve (12) boring locations at a depth of 1.5 to 2.0 feet bgs. The select SVOCs analyzed from each analytical suite are provided in Table 1, and the select SVOCs detected are provided below:

- Benzo(b)fluoranthene was detected in five (5) soil samples, with concentrations ranging from 0.028 mg/kg at EX02S320A.2, to 0.30 mg/kg at EX02B415B.2. None of the soil samples were above the Tier 2 PAL of 1.7 mg/kg.

- Benzo(a)pyrene was detected in eight (8) soil samples, with concentrations ranging from 0.020 mg/kg at EX02S320A.2, to 0.930 mg/kg at EX02BMW149B.2. None of the soil samples were above the Tier 2 PAL of 1.65 mg/kg.

4.2.2 Metals

Seventeen (17) soil samples were collected in EOS-2 for select metals analysis from seventeen (17) boring locations at depths of 1.5 to 2.0 feet bgs (15 locations) and 7.0 to 7.5 feet bgs (2 locations). The select metals from each analytical suite are provided in Table 1, and the select metals detected are provided below:

- Arsenic was detected in eight (8) soil samples, with concentrations ranging from 2.5 mg/kg at EX02BMW149C.2, to 21 mg/kg at EX02MW149E.2. None of the soil samples were above the Tier 2 PAL of 55.5 mg/kg.

- Lead was detected in ten (10) soil samples, with concentrations ranging from 10 mg/kg at EX02B398A.2, to 220 mg/kg at EX02B415B.2. None of the soil samples were above the Tier 2 PAL of 775 mg/kg.

- Manganese was detected in four (4) soil samples, with concentrations ranging from 410 mg/kg at EX02B403C.2, to 1,100 mg/kg at EX02B403A.2. None of the soil samples were above the Tier 2 PAL of 7,155 mg/kg.

- Zinc was detected in three (3) soil samples, with concentrations ranging from 51 mg/kg at EX02B405B.7.5, to 70 mg/kg at EX02B405A.7.5. None of the soil samples were above the Tier 2 PAL of 1,850 mg/kg.

4.2.3 PCBs

Twelve (12) soil samples were collected in EOS-2 for select metals analysis from twelve (12) boring locations at a depth of 1.5 to 2.0 feet bgs. The select PCBs analyzed from each analytical suite are provided in Table 1, and the select PCBs detected are provided below:

- Aroclor-1260 was detected in twelve (12) soil samples, with concentrations ranging from 0.48 mg/kg at EX02B401B2.2, to 6,100 mg/kg at EX02B100A.2. Nine (9) of the soil samples were above the Tier 2 PAL of 1.05 mg/kg.

4.3 Redevelopment Block EOS-3

The analytical results for the thirty-eight (38) initial delineation and nine (9) step-out contingency borings collected from Redevelopment Block EOS-3 are described in this section. The results are summarized in Figure 8.

4.3.1 TPH

Twenty-one (21) soil samples were collected in EOS-3 for TPH analysis from twenty-one (21) boring locations at a depth of 7.0 to 7.5 feet bgs.

- TPHg was detected in nineteen (19) soil samples, with concentrations ranging from 0.0098 mg/kg at EX02GP016AE.7.5, to 4.9 mg/kg at EX02MW173AA.7.5.

- TPHd was detected in twenty-one (21) soil samples, with concentrations ranging from 5.5 mg/kg at EX02GP002C.7.5, to 1,400 mg/kg at EX02MW173AA.7.5.

- TPHmo was detected in twenty-one (21) soil samples, with concentrations ranging from 13 mg/kg at EX02GP008B.7.5, to 1,800 mg/kg at EX02GP016AA.7.5.

None of the TPH composite results in EOS-3 were greater than the 3,500 mg/kg PAL.

4.3.2 SVOCs

Seven (7) soil samples were collected in EOS-3 for select SVOC analysis from seven (7) boring locations at depths of 1.5 to 2.0 feet bgs (6 locations) and 7.0 to 7.5 feet bgs (1 location). The select SVOCs analyzed from each analytical suite are provided in Table 1, and the select SVOCs detected are provided below:

- Benzo(a)anthracene was detected in EX02B524D.2 at 0.170 mg/kg, which is below the Tier 2 PAL of 1.85 mg/kg.

- Benzo(b)fluoranthene was detected in two (2) soil samples, with concentrations ranging from 0.013 mg/kg at EX03SS368A.2, to 0.310 mg/kg at EX03SS368B.2. None of the soil samples were above the Tier 2 PAL of 1.70 mg/kg.

- Benzo(a)pyrene was detected in four (4) soil samples, with concentrations ranging from 0.0098 mg/kg at EX03SS368A.2, to 1.2 mg/kg at EX02GP016AA.7.5. None of the soil samples were above the Tier 2 PAL of 1.65 mg/kg.

- Dibenz(a,h)anthracene was detected in EX03SS368B.2 at 0.029 mg/kg, which is below the Tier 2 PAL of 1.65 mg/kg.

- Indeno(1,2,3-cd)pyrene was detected in EX03SS368B.2 at 0.099 mg/kg, which is below the Tier 2 PAL of 1.50 mg/kg.

4.3.3 Metals

Thirty (30) soil samples were collected in EOS-3 for select metals analysis from thirty (30) boring locations at depths of 1.5 to 2.0 feet bgs (24 locations) and 7.0 to 7.5 feet bgs (6 locations). The select metals analyzed from each analytical suite are provided in Table 1, and the select metals detected are provided below:

- Arsenic was detected in eight (8) soil samples, with concentrations ranging from 3.5 mg/kg at EX02B098DA.2, to 69 mg/kg at EX02TA40BA.2, which was the only soil sample above the Tier 2 PAL of 55.5 mg/kg.

- Copper was detected in thirty (30) soil samples, with concentrations ranging from 9.7 mg/kg at EX03SS368A.2, to 11,000 mg/kg at EX03B344D.2. Ten (10) of the soil samples were above the Tier 2 PAL of 800 mg/kg.

- Lead was detected in two (2) soil samples, with concentrations ranging from 18 mg/kg at EX02MW173AB.7.5, to 27 mg/kg at EX02MW173AA.7.5. None of the soil samples were above the Tier 2 PAL of 775 mg/kg.

4.4 Redevelopment Block EOS-4

The analytical results for the twenty-one (21) initial delineation and one (1) step-out contingency borings collected from Redevelopment Block EOS-4 are described in this section. The results are summarized in Figures 9 through 11.

4.4.1 TPH

Seven (7) soil samples were collected in EOS-4 for TPH analysis from seven (7) boring locations at depths of 1.5 to 2.0 feet bgs (3 locations), 3.4 to 4.0 feet bgs (2 locations) and 9.0 to 9.5 feet bgs (2 locations).

- TPHg was detected in four (4) soil samples, with concentrations ranging from 0.014 mg/kg at EX02B468C.2, to 0.029 mg/kg at EX02B369C.2.

- TPHd was detected in seven (7) soil samples, with concentrations ranging from 0.84 mg/kg at EX02B355A.9.5, to 100 mg/kg at EX02B369C.2 and EX02B468D.9.5.

- TPHmo was detected in seven (7) soil samples, with concentrations ranging from 2.2 mg/kg at EX02B355A.9.5, to 730 mg/kg at EX02B369C.2.

None of the TPH composite results in EOS-4 were greater than the 3,500 mg/kg PAL.

4.4.2 SVOCs

Eight (8) soil samples were collected in EOS-4 for select SVOC analysis from eight (8) boring locations at a depth of 1.5 to 2.0 feet bgs. The select SVOCs analyzed from each analytical suite are provided in Table 1, and the select SVOCs detected are provided below:

- Benzo(a)anthracene was detected in two (2) soil samples, with concentrations ranging from 0.052 mg/kg at EX02B464A.2, to 1.1 mg/kg at EX02B464B.2. None of the soil samples were above the Tier 2 PAL of 1.85 mg/kg

- Benzo(b)fluoranthene was detected in two (2) soil samples, with concentrations ranging from 0.096 mg/kg at EX02B464A.2, to 1.1 mg/kg at EX02B464B.2. None of the soil samples were above the Tier 2 PAL of 1.70 mg/kg.

- Benzo(k)fluoranthene was detected in two (2) soil samples, with concentrations ranging from 0.022 mg/kg at EX02B464A.2, to 0.400 mg/kg at EX02B464B.2. None of the soil samples were above the Tier 2 PAL of 1.70 mg/kg.

- Benzo(a)pyrene was detected in three (3) soil samples, with concentrations ranging from 0.037 mg/kg at EX02B468B.2, to 0.760 mg/kg at EX02B464B.2. None of the soil samples were above the Tier 2 PAL of 1.65 mg/kg.

4.4.3 Metals

Ten (10) soil samples were collected in EOS-4 for select metals analysis from ten (10) boring locations at depths of 1.5 to 2.0 feet bgs (8 locations) and 3.5 to 4.0 feet bgs (2 locations). The select metals analyzed from each analytical suite are provided in Table 1, and the select metals detected are provided below:

- Copper was detected in nine (9) soil samples, with concentrations ranging from 22 mg/kg at EX02B369A.4, to 1,300 mg/kg at EX15B027B.2, which was above the Tier 2 PAL of 800 mg/kg.

- Lead was detected in six (6) soil samples, with concentrations ranging from 6.0 mg/kg at EX11SS022A.2, to 67 mg/kg at EX15B027A.2. None of the soil samples were above the Tier 2 PAL of 775 mg/kg.

4.4.4 PCBs

Three (3) soil samples were collected in EOS-4 for select metals analysis from three (3) boring locations at a depth of 1.5 to 2.0 feet bgs. The select PCBs analyzed from each analytical suite are provided in Table 1, and the select PCBs detected are provided below:

- Aroclor-1254 was not detected in EX11B023A.2.

- Aroclor-1260 was detected in two (2) soil samples, with concentrations ranging from 0.072 mg/kg at EX02B493B.2, to 0.130 mg/kg at EX02B493C.2. None of the soil samples were above the Tier 2 PAL of 1.05 mg/kg.

4.5 Redevelopment Block MU-1

The analytical results for the fifty-nine (59) initial delineation and five (5) step-out contingency borings collected from Redevelopment Block MU-1 are described in this section. The results are summarized in Figures 12 through 15.

4.5.1 SVOCs

Twenty-five (25) soil samples were collected in MU-1 for select SVOC analysis from twenty-five (25) boring locations at depths of 1.5 to 2.0 feet bgs (12 locations), 2.5 to 3.0 feet bgs (1 location) 3.4 to 4.0 feet bgs (5 locations) and 7.0 to 7.5 feet bgs (7 locations). The select SVOCs analyzed from each analytical suite are provided in Table 1, and the select SVOCs detected are provided below:

- 3,3-Dichlorbenzidine was not detected in samples EX36B062A.7.5 or EX36B062B.7.5.

- Bis(2-ethylhexyl)ohthalate was only detected in EX12MW18AA.7.5 at 0.010 mg/kg, which is below the Tier 2 PAL of 5.5 mg/kg.

- Benzo(a)anthracene was detected in two (2) soil samples, with concentrations ranging from 0.150 mg/kg at EX13B010A.3, to 0.210 mg/kg at EX13B003BA1.2. Neither of the soil samples was above the Tier 2 PAL of 1.85 mg/kg.

- Benzo(b)fluoranthene was detected in nine (9) soil samples, with concentrations ranging from 0.011 mg/kg at EX12SS17B.4, to 1.3 mg/kg at EX13B003BA.2. None of the soil samples were above the Tier 2 PAL of 1.70 mg/kg.

- Benzo(k)fluoranthene was not detected in samples EX36B062A.7.5 or EX36B062B.7.5.

- Benzo(a)pyrene was detected in five (5) soil samples, with concentrations ranging from 0.015 mg/kg at EX36B136B.2, to 0.79 mg/kg at EX36B208C.2. None of the soil samples were above the Tier 2 PAL of 1.65 mg/kg.

- Dibenz(a,h)anthracene was not detected in samples EX36B062A.7.5 or EX36B062B.7.5.

- Indeno(1,2,3-cd)pyrene was not detected in samples EX36B062A.7.5 or EX36B062B.7.5.

- Naphthalene was only detected in EX05MW85AA.4 at 0.460 mg/kg, which is below the Tier 2 PAL of 8.5 mg/kg.

4.5.2 Metals

Forty-one (41) soil samples were collected in MU-1 for select metals analysis from forty-one (41) boring locations at depths of 1.5 to 2.0 feet bgs (22 locations), 3.4 to 4.0 feet bgs (12 locations) and 7.0 to 7.5 feet bgs (7 locations). The select metals analyzed from each analytical suite are provided in Table 1, and the select metals detected are provided below:

- Arsenic was detected in three (3) soil samples, with concentrations ranging from 1.5 mg/kg at EX36B062B.7.5, to 3.7 mg/kg at EX05MW85AA.2. None of the soil samples were above the Tier 2 PAL of 55.5 mg/kg.

- Copper was detected in thirty-one (31) soil samples, with concentrations ranging from 6.7 mg/kg at EX123SS17A.2, to 5,000 mg/kg at EX13B003BA.2, which was the only sample above the Tier 2 PAL of 800 mg/kg.

- Lead was detected in eight (8) soil samples, with concentrations ranging from 2.3 mg/kg at EX36B062A.7.5, to 40 mg/kg at EX12MW18AB.4. None of the soil samples were above the Tier 2 PAL of 775 mg/kg.

- Mercury was detected in eleven (11) soil samples, with concentrations ranging from 0.081 mg/kg at EX05MW85AB1.4, to 240 mg/kg at EX05MW85AB.4, which was the only sample above the Tier 2 PAL of 11.4 mg/kg.

- Vanadium was detected in five (5) soil samples, with concentrations ranging from 20 mg/kg at EX12SS16B.2, to 60 mg/kg at EX12TA10A.4. None of the soil samples were above the Tier 2 PAL of 585 mg/kg.

- Zinc was detected in twenty (20) soil samples, with concentrations ranging from 21 mg/kg at EX12SS17A.2, to 9,700 mg/kg at EX13B003BA1.2, which was the only sample above the Tier 2 PAL of 1,850 mg/kg.

4.5.3 Chlorinated Pesticides

Two (2) soil samples were collected in MU-1 for select chlorinated pesticides analysis from two (2) boring locations at a depth of 7.0 to 7.5 feet bgs. The select chlorinated pesticides analyzed from each analytical suite are provided in Table 1, and the select chlorinated pesticides detected are provided below:

- Alpha-BHC was not detected in EX36B062A.7.5 and EX36B062B.7.5.
- Dieldrin was not detected in EX36B062A.7.5 and EX36B062B.7.5.
- Heptachlor epoxide was only detected in EX36B062B.7.5 at 0.0011 mg/kg, which is below the Tier 2 PAL of 0.027 mg/kg.

4.5.4 PCBs

Forty-three (43) soil samples were collected in MU-1 for select PCB analysis from forty-three (43) boring locations at depths of 1.5 to 2.0 feet bgs (35 locations), 3.4 to 4.0 feet bgs (7 locations) and 7.0 to 7.5 feet bgs (1 location). The select PCBs analyzed from each analytical suite are provided in Table 1, and the select PCBs detected are provided below:

- Aroclor-1254 was detected in seven (7) soil samples, with concentrations ranging from 0.011 mg/kg at EX12SS18A.2, to 1.4 mg/kg at EX12TA10B.2, which was the only sample above the Tier 2 PAL of 0.465 mg/kg.
- Aroclor-1260 was detected in thirty-two (32) soil samples, with concentrations ranging from 0.004 mg/kg at EX12SS16D.2, to 4.5 mg/kg at EX05B094B.2. Two (2) of the soil samples were above the Tier 2 PAL of 1.05 mg/kg.

4.6 Redevelopment Block MU-2

The analytical results for the twelve (12) initial delineation borings collected from Redevelopment Block MU-2 are described in this section. The results are summarized in Figures 16 and 17.

4.6.1 SVOCs

Four (4) soil samples were collected in MU-2 for select SVOC analysis from Four (4) boring locations at a depth of 1.5 to 2.0 feet bgs. The select SVOCs analyzed from each analytical suite are provided in Table 1, and the select SVOCs detected are provided below:

- Bis(2-ethylhexyl)ohthalate was not detected in any of the four (4) samples.

4.6.2 Metals

Eight (8) soil samples were collected in MU-2 for select metals analysis from eight (8) boring locations at a depth of 1.5 to 2.0 feet bgs. The select metals analyzed from each analytical suite are provided in Table 1, and the select metals detected are provided below:

- Arsenic was detected in three (3) soil samples, with concentrations ranging from 6.9 mg/kg at EX36B072A.2, to 19 mg/kg at EX36B072C.2. None of the soil samples were above the Tier 2 PAL of 55.5 mg/kg.

- Copper was detected in eight (8) soil samples, with concentrations ranging from 40 mg/kg at EX38SS01C.2, to 930 mg/kg at EX36B072C.2, which was the only sample above the Tier 2 PAL of 800 mg/kg.

- Mercury was detected in three (3) soil samples, with concentrations ranging from 0.92 mg/kg at EX36B163A.2, to 3.3 mg/kg at EX36B072C.2. None of the soil samples were above the Tier 2 PAL of 11.4 mg/kg.

4.6.3 Chlorinated Pesticides

One (1) soil sample was collected in MU-2 for Alpha-BHC from one (1) boring location at a depth of 1.5 to 2.0 feet bgs. Alpha-BHC was not detected in EX36B163A.2.

4.7 Redevelopment Block MU-3

The analytical results for the twenty-two (22) initial delineation borings collected from Redevelopment Block MU-3 are described in this section. The results are summarized in Figures 18 and 19.

4.7.1 TPH

Two (2) soil samples were collected in MU-3 for TPH analysis from two (2) boring locations at a depth of 7.0 to 7.5 feet bgs.

- TPHg was detected in two (2) soil samples, with concentrations ranging from 0.024 mg/kg at EX04B012A.7.5, to 1.2 mg/kg at EX04B012B.7.5.

- TPHd was detected in two (2) soil samples, with concentrations ranging from 1.6 mg/kg at EX04B012A.7.5, to 5.8 mg/kg at EX04B012B.7.5.

- TPHmo was detected in two (2) soil samples, with concentrations ranging from 4.5 mg/kg at EX04B012A.7.5, to 8.8 mg/kg at EX04B012B.7.5.

None of the TPH composite results in MU-3 were greater than the 3,500 mg/kg PAL.

4.7.2 Metals

Ten (10) soil samples were collected in EOS-4 for select metals analysis from ten (10) boring locations at depths of 1.5 to 2.0 feet bgs (8 locations) and 3.5 to 4.0 feet bgs (2

locations). The select metals analyzed from each analytical suite are provided in Table 1, and the select metals detected are provided below:

- Copper was detected in nine (9) soil samples, with concentrations ranging from 12 mg/kg at EX12TA13D.4, to 150 mg/kg at EX04B011B.2. None of the soil samples were above the Tier 2 PAL of 800 mg/kg.

- Lead was detected in nine (9) soil samples, with concentrations ranging from 2.6 mg/kg at EX04B012A.7.5, to 440 mg/kg at EX12SS02D.2. None of the soil samples were above the Tier 2 PAL of 775 mg/kg.

- Mercury was detected in five (5) soil samples, with concentrations ranging from 0.044 mg/kg at EX56B021C.2, to 0.13 mg/kg at EX04B012B.7.5 and EX56B021A.2. None of the samples were above the Tier 2 PAL of 11.4 mg/kg.

- Zinc was detected in four (4) soil samples, with concentrations ranging from 25 mg/kg at EX04B012A.7.5, to 61 mg/kg at EX72SS23A.2. None of the samples were above the Tier 2 PAL of 1,850 mg/kg.

4.7.3 PCBs

Nine (9) soil samples were collected in MU-3 for select metals analysis from nine (9) boring locations at depths of 1.5 to 2.0 feet bgs (7 locations) and 7.0 to 7.5 feet bgs (2 locations). The select PCBs analyzed from each analytical suite are provided in Table 1, and the select PCBs detected are provided below:

- Aroclor-1260 was detected in four (4) soil samples, with concentrations ranging from 0.0087 mg/kg at EX04B012A.7.5, to 0.530 mg/kg at EX04B011B.2. None of the soil samples were above the Tier 2 PAL of 1.05 mg/kg.

4.8 Railroad ROW

The analytical results for the nine (9) initial delineation borings collected from the Railroad ROW are described in this section. The results are summarized in Figure 20.

4.8.1 TPH

Three (3) soil samples were collected in the Railroad ROW for TPH analysis from three (3) boring locations at a depth of 1.5 to 2.0 feet bgs.

- TPHg was detected in three (3) soil samples, with concentrations ranging from 0.014 mg/kg at EX52SS02A.2, to 0.017 mg/kg at EX52SS02B.2.

- TPHd was detected in three (3) soil samples, with concentrations ranging from 2.6 mg/kg at EX52SS02C.2, to 9.9 mg/kg at EX52SS02A.2

- TPHmo was detected in three (3) soil samples, with concentrations ranging from 16 mg/kg at EX52SS02C.2, to 66 mg/kg at EX52SS02A.2.

None of the TPH composite results in the Railroad ROW were greater than the 3,500 mg/kg PAL.

4.8.2 SVOCs

Four (4) soil samples were collected in MU-1 for select SVOC analysis from four (4) boring locations at a depth of 3.5 to 4.0 feet bgs. The select SVOCs analyzed from each analytical suite are provided in Table 1, and the select SVOCs detected are provided below:

- Benzo(a)anthracene was detected in four (4) soil samples, with concentrations ranging from 0.022 mg/kg at EX52B009B.4, to 0.250 mg/kg at EX52B009A.4. None of the soil samples were above the Tier 2 PAL of 1.85 mg/kg.

- Benzo(b)fluoranthene was detected in four (4) soil samples, with concentrations ranging from 0.052 mg/kg at EX52B009B.4, to 3.3 mg/kg at EX52B009A.4. None of the soil samples were above the Tier 2 PAL of 1.70 mg/kg.

- Benzo(k)fluoranthene was detected in four (4) soil samples, with concentrations ranging from 0.016 mg/kg at EX52B009B.4, to 0.130 mg/kg at EX52B009A.4. None of the soil samples were above the Tier 2 PAL of 1.70 mg/kg.

- Benzo(a)pyrene was detected in four (4) soil samples, with concentrations ranging from 0.030 mg/kg at EX52B009B.4, to 0.260 mg/kg at EX52B009A.4. None of the soil samples were above the Tier 2 PAL of 1.65 mg/kg.

- Dibenz(a,h)anthracene was detected in three (3) soil samples, with concentrations ranging from 0.049 mg/kg at EX52B009C.4, to 0.063 mg/kg at EX52B009A.4. None of the soil samples were above the Tier 2 PAL of 1.65 mg/kg.

- Indeno(1,2,3-cd)pyrene was detected in four (4) soil samples, with concentrations ranging from 0.027 mg/kg at EX52B009B.4, to 0.200 mg/kg at EX52B009A.4. None of the soil samples were above the Tier 2 PAL of 1.50 mg/kg.

4.8.3 Metals

Two (2) soil samples were collected in the Railroad ROW for select metals analysis from two (2) boring locations at a depth of 1.5 to 2.0 feet bgs. The select metals analyzed from

each analytical suite are provided in Table 1, and the select metals detected are provided below:

- Copper was detected in two (2) soil samples, with concentrations ranging from 27 mg/kg at EX52SS06B.2, to 50 mg/kg at EX52SS06A.2. None of the soil samples were above the Tier 2 PAL of 800 mg/kg.

- Lead was detected in two (2) soil samples, with concentrations ranging from 31 mg/kg at EX52SS06B.2, to 53 mg/kg at EX52SS06A.2. None of the soil samples were above the Tier 2 PAL of 775 mg/kg.

5.0 DATA QUALITY VALIDATION

5.1 Quality Control Samples

Field and laboratory QC samples were collected in the field to evaluate and monitor the quality of both the field and laboratory procedures. Field QC samples consisted of the following types:

- Trip blank samples
- Equipment rinsate blank samples
- Source Water Sample
- Excess sample volume for matrix spike/matrix spike duplicate (MS/MSD) samples
- Temperature blank samples

Table 2 presents the field QC analytical results.

The temperature blanks were used by the laboratory upon receipt of the sample coolers to measure the sample temperature. Samples were preserved with ice and were shipped the same day. No data were qualified by the data validator based upon cooler temperature.

During the data quality assessment (DQA), analytes detected reported in the samples with less than five times the concentration detected in blanks (or 10 times for common laboratory contaminants) were qualified as not detected and assigned a “U” flag.

If the laboratory results were affected by blank contamination, they were qualified by the data validator (see the data validation reports in Appendix E).

5.2 Data Quality Assessment

The DQA process consists of a systematic review, verification, validation, and usability assessment of the data generated for this investigation. The purpose of the DQA process is to evaluate and monitor the performance of the field sampling and analytical process and assess the quality of the data. Field data and records were verified by the project team leader. Laboratory Data Consultants, Inc. (LDC), located in Carlsbad, California were selected to perform independent, third-party validation and review of the analytical data. The analyses were validated using the following documents, as applicable to each analytical method:

- Final Sampling and Analysis Plan, Parcel E Soil Excavation Characterization, Hunters Point Naval Shipyard, San Francisco, CA, July 2012.

- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, Version 4.2, October 2010.

- USEPA SW 846, Third Edition, Test Methods for Evaluating Soil Waste updated 1 July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998, IIIB, November 2004; update IV, February 2007.

Third Party Independent Data validation by was performed by LDC on 100 percent of the laboratory chemical data. Approximately 100 percent of the data were validated by LDC at level III and 20 percent were also validated at level IV in accordance as specified in the approved Final SAP and per the requirements in NAVFAC Southwest Environmental Work Instruction Number 1, Chemical Data Validation, (Navy, November 2001).

Data on a total of approximately 313 samples including samples analyzed for SVOCs, chlorinated pesticides, PCBs, Metals, and TPH were evaluated by LDC during the data review and validation process.

The data validation reports which discuss data qualifications in detail are provided on CD ROM in Appendix C.

The following are the definitions of the data validation qualifiers:

U	Indicate the compound or analyte was analyzed for but not detected at or above the stated limit.
Y	Indicates sample exhibits chromatographic pattern which does not resemble standard.
J	Indicated an estimated value.
R	Quality control indicates the data is not usable.
UJ	Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is the estimated value,
A	Indicates the finding is based upon technical validation criteria.
P	Indicates the finding is related to a protocol/contractual deviation
None	Indicates the data was not significantly impacted by finding, therefore qualification was not required.

None of the data were rejected during data validation none, but some of the data were qualified as estimated for a number of reasons discussed in the data validation reports included in Appendix E. Results were qualified as estimated for one or more of the following reasons:

- Calibration with percent differences outside the acceptable limits;
- Laboratory or Field Blank contamination;
- Serial dilution criteria exceeded;
- Compound quantitation (relative percent differences);
- MS/MDS duplicate recovery or relative percent differences outside of acceptance limits; or
- LDC recovery outside of acceptance limits

Results qualified as estimated ("J" or "UJ" flagged), or not resembling the standard ("Y" flagged) are still considered usable.

The data quality indicators, otherwise known as precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS), were evaluated in accordance with the PARCCS parameters defined in the Final SAP. The PARCCS parameters met for the data gap investigation, and were assessed as follows:

- **Precision** was assessed by evaluating by evaluating relative percent difference (RPDs) of the MS/MSD samples and were generally within acceptance criteria indicating that data were precise.
- **Accuracy** was assessed by evaluating MS recoveries, laboratory control limits (LCS), and surrogate recoveries for the applicable method.
- **Representativeness** was assessed by the use of established field and laboratory procedures and their consistent application and the Final SAP. Representativeness was maintained by using standard operating procedures (SOPs), including chain-of-custody protocol and documentation, soil sampling, sample labeling, packaging and transport, as well as documenting the condition of the samples upon receipt at the laboratory.
- **Comparability** was assessed by evaluating the use of well-documented methods and SOPs, QC samples, and reporting each data type in consistent units. The use of USEPA methods and well documented analyses, laboratories accredited by State of California and the Department of Defense Environmental Laboratory Accreditation Program, and a standardized data quality assessment process gives the data a high degree of analytical comparability,

- **Completeness** was assessed by evaluating the validity of data obtained as a result of the data quality assessment process (i.e., amount of valid data obtained as compared to the amount expected to be obtained under normal conditions). All of the data on the samples submitted to the laboratory were found to be usable. All of the samples were collected as specified in the SAP with the exceptions previously noted on Section 3.2.3.

- **Sensitivity** was assessed by evaluating the project quantitation limits. In general, the quantitation limits were low enough to satisfy the action levels being applied and used to evaluate the project data.

As a result of the DQA process, it has been concluded that the data quality indicators either met or exceeded the parameters, as specified in the Final SAP for the chemical data generated by the Parcel E data gap investigation.

6.0 RECOMMENDATIONS

The following sections present the proposed excavation areas within each of the redevelopment blocks. The pertinent information for each proposed excavation includes:

- The soil sample locations from previous investigations and those described in this TM that define the lateral excavation extents below the Tier 2 PAL
- The total proposed area of the excavation in square feet
- The proposed excavation depth, which was based on the criteria presented in the Final SAP. For excavation areas where the COCs were delineated from 1.5 to 2.0 feet bgs the proposed excavation depth is approximately 3 feet bgs, and for areas where the COCs were delineated from 3.5 to 4.0 feet bgs the proposed excavation depth is approximately 5 feet bgs. The maximum excavation depth is the top 10 feet of soil, which is based on the Baseline Human Health Risk Assessment presented in the Final Revised RI Report for Parcel E (Barajas & Associates 2008).
- The total proposed volume of the excavation in cubic yards

The proposed excavation extents from the FS and Final SAP were modified inside an area defined by the soil sample locations from previous investigations below the Tier 2 PAL, as well as those identified below the Tier 2 PAL during this soil investigation. Within Section 6.0, all previous or current sample locations below the Tier 2 PAL will be referred to as just below the PAL. The excavation areas were modified to maintain the basic original equilateral square or rectangle shapes presented in the FS. Any changes to the approximate lateral excavation limits were defined similar to the extents first presented in the FS, and then presented in the Final SAP. These lateral limits were defined either at the halfway point between where the COC concentrations in soil are less than the PAL, at the location where the COC concentrations in soil are less than the PAL, or just beyond where the COC concentrations in soil are less than the PAL. For proposed excavation areas where the lateral extents were not fully defined due to inaccessibility, soil confirmation (or bottom) samples will be proposed and implemented as part of the final RD and collected from the excavation bottoms and side walls to confirm the final extent of the proposed excavations. The proposed excavation areas are shown on Figures 3 through 20, and the excavation areas and volumes are provided in Table 3.

6.1 Redevelopment Block EOS-1

EX02B122 in Figure 3 is defined to the north by one previous sample location below the PAL, boring EX02B122A, and boring EX02B122C2. The south side is defined by the proposed excavation area EX02B288, to the west by excavation area EX02B122B, and to the east by boring EX02B524C. The total proposed area is approximately 15,278 square

feet, and the total volume to be excavated to 10 feet bgs is approximately 5,660 cubic yards of soil.

EX02B122B in Figure 3 is defined to the north by the second phase of the *PCB Hot Spot Removal Action Area* completed in 2012, and to the west by the coastline. The south side is defined by boring EX02B288B and proposed excavation area EX02B122, and to the east by boring EX02GR131SWC, boring EX02B428E, and proposed excavation area EX02B122. As discussed in the Final SAP, the COC concentrations were defined around the entire area of pothole sample locations within EOS-1, rather than addressing each individual pothole sample location. The proposed area that includes the pothole locations were defined using the same Tier 1 and Tier 2 criteria for COCs. The total proposed area is approximately 16,890 square feet, and the total volume to be excavated to 10 feet bgs is approximately 6,256 cubic yards of soil.

EX02B250 in Figure 3 is defined to the north by boring EX02B250A, to the east by boring EX02B250B, to the south by boring EX02B250C, and to the west by proposed excavation area EX02B525. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 10 feet bgs is approximately 148 cubic yards of soil.

EX02B256 in Figure 4 is defined to the north by the *Northwest and Central Removal Action Area*, to the west by boring EX02B256B, to the south by boring EX02B256A, and to the east by a previous trench/excavation area. The dashed line along the west side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent in the vicinity of the previous trench/excavation area. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 237 square feet, and the total volume to be excavated to 5.0 feet bgs is approximately 44 cubic yards of soil.

EX02B288 in Figure 3 is defined to the north by proposed excavation area EX02B122, to east by boring EX02B288A1, to the south by the *Northwest and Central Removal Action Area* and one previous sample location below the PAL, and to the west by one previous sample location below the PAL. The total proposed area is approximately 3,919 square feet, and the total volume to be excavated to 5.0 feet bgs is approximately 726 cubic yards of soil.

EX02B412 in Figure 3 is defined to the north by boring EX02B412A, to east by one previous sample location below the PAL and a previous excavation area, to the south by proposed excavation area EX02B456, and to the west by borings EX02B412B, EX02B412C, and EX02B412D. The dashed line along the southeast side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent in the vicinity of the previous trench/excavation area. Confirmation soil samples will be collected as part of the final RD to provide delineation on this side of the proposed excavation area. The total

proposed area is approximately 3,102 square feet, and the total volume to be excavated to 10 feet bgs is approximately 1,149 cubic yards of soil.

EX02B428 in Figure 3 is defined to the north by boring EX02GR131SWB and a previous excavation area, to east by proposed excavation area EX02GR132BT, to the south by borings EX02GR132BTB, EX02B428C, and EX02TA16AB2, and to the west by boring EX02B428A. The total proposed area is approximately 618 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 69 cubic yards of soil.

EX02B442 in Figure 4 is defined to the north by boring EX02B442A, to east by boring EX02B442B, to the south by boring EX02B442C, and to the west by boring EX02B442D. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 10 feet bgs is approximately 148 cubic yards of soil.

EX02B456 in Figure 3 is defined to the north by boring EX02B412D, to east by boring EX02B456A, and to the south by boring EX02B456B. The dashed line along western boundary is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 3,750 square feet, and the total volume to be excavated to 10 feet bgs is approximately 1,389 cubic yards of soil.

EX02B524 in Figure 3 is defined to the north by boring EX02B524A, to east by boring EX02B524B1 and proposed excavation area EX02GR73SW, to the south by the *Northwest and Central Removal Action Area*, and to the west by boring EX02B524C and one previous sample location below the PAL. The total proposed area is approximately 3,596 square feet, and the total volume to be excavated to 10 feet bgs is approximately 1,332 cubic yards of soil.

EX02B525 in Figure 3 is defined to the north by boring EX02B525A, to east by proposed excavation area EX02B250, to the south by proposed excavation area EX02TA16A and one previous sample location below the PAL, and to the west by boring EX02GR2132BTB and one previous sample location below the PAL. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

EX02GR71SW in Figure 3 is defined to the north by boring EX02GR71SWB, to the east by boring EX02B412A to the south by boring EX02GR71SWA, and to the west by the PCB Hot Spot Removal Action Area. The total proposed area is approximately 70 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 7.8 cubic yards of soil.

EX02GR73SW in Figure 3 is defined to the north by EX02B524B1 and EX02GR73SWA. The south side is defined by the *Northwest and Central Removal Action Area*, and to the west by excavation area EX02B524. One initial delineation

boring was advanced to the east, followed by two step-out contingency borings located approximately 20 and 40 feet from the delineation boring, respectively. The eastern side was not defined by the last contingency boring, so a more conservative excavation area toward the east is proposed. This eastern side will be defined during the eventual soil excavation activities. The total proposed area is 6,449 and the total volume to be excavated to 10 feet bgs is 2,389 cubic yards of soil.

EX02GR93SW in Figure 4 is defined to the north by boring EX02GR93SWA1, to the east by boring EX02GR93SWB, to the south by one previous sample location below the PAL, and to the west by the *Northwest and Central Removal Action Area*. The total proposed area is approximately 1,309 square feet, and the total volume to be excavated to 10 feet bgs is approximately 485 cubic yards of soil.

EX02GR117SW in Figure 3 is defined to the north by the *PCB Hot Spot Removal Action Area*, to the east by one previous sample location below the PAL, to the south by boring EX02GR117SWA, and to the west by proposed excavation area EX02GR132BT. The total proposed area is approximately 928 square feet, and the total volume to be excavated to 10 feet bgs is approximately 344 cubic yards of soil.

EX02GR131SW in Figure 3 is defined to the north and east by the *PCB Hot Spot Removal Action Area*, and to the southwest by boring EX02GR131SWA. The total proposed area is approximately 116 square feet, and the total volume to be excavated to 10 feet bgs is approximately 43 cubic yards of soil.

EX02GR132BT in Figure 3 is defined to the north and west by the *PCB Hot Spot Removal Action Area*, to the east by proposed excavation area EX02GR117SW, and to the south by boring EX02GR132BTB. The total proposed area is approximately 740 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 82 cubic yards of soil.

EX02GR179SW in Figure 4 is defined to the north, east, and southeast by the *Northwest and Central Removal Action Area*, and to the southwest by the coastline. The dashed lines along the boundaries are used to show uncertainty for these sides of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 924 square feet, and the total volume to be excavated to 10 feet bgs is approximately 342 cubic yards of soil.

EX02GR184SW in Figure 4 is defined to the north, east, and southeast by the *Northwest and Central Removal Action Area*, and to the southwest by the coastline. The dashed lines along the boundaries are used to show uncertainty for these sides of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total

proposed area is approximately 1,009 square feet, and the total volume to be excavated to 10 feet bgs is approximately 374 cubic yards of soil.

EX02SS310 in Figure 4 is defined to the north, east, and southeast by the *Northwest and Central Removal Action Area*, and to the southwest by the coastline. The dashed lines along the boundaries are used to show uncertainty for these sides of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 366 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 41 cubic yards of soil.

EX02TA16A in Figure 3 is defined to the north by proposed excavation area EX02B525, to the east by one previous sample location below the PAL, to the south by boring EX02TA16AA, and to the west by one previous sample location below the PAL. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 10 feet bgs is approximately 148 cubic yards of soil.

6.2 Redevelopment Block EOS-2

EX02B100 in Figure 7 is defined to the north, east, and west by three separate previous sample locations below the PAL, and to the south by proposed excavation area EX02B401. The total proposed area is approximately 1,991 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 221 cubic yards of soil.

EX02B398 in Figure 6 is defined to the north and south by two separate previous sample locations below the PAL, to the east by boring EX02B398B, and to the west by boring EX02B398A. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

EX02B401 in Figure 7 is defined to the west by boring EX02B401A and one previous sample location below the PAL, and to the north by boring EX02B401B2 and 5 previous sample locations below the PAL. The eastern side is defined by the adjacent excavation area EX02B403, and the south side is defined by a previous soil excavation and the shoreline. This excavation area was expanded to the north and east from the area initially proposed in the Work Plan due to additional step-out boring locations. The dashed line along the northwest side of the proposed excavation area is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the Remedial Action to provide delineation on this side of the proposed excavation area. The total proposed area is 8,135 and the total volume to be excavated to 3.0 feet bgs is 904 cubic yards of soil.

EX02B403 in Figure 7 is defined to the north by boring EX02B403A, to the east by boring EX02B403B, to the south by boring EX02B403C, and to the west by boring

EX02B403D. The total proposed area is approximately 1,562 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 170 cubic yards of soil.

EX02B405 in Figure 5 is defined to the northwest by one previous sample location below the PAL, to the northeast by EX02B405A, to the southeast by EX02B405B, and to the southwest by EX02B405C. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 10 feet bgs is approximately 148 cubic yards of soil.

EX02B415 in Figure 6 is defined to the north by two previous sample locations below the PAL, to the east by the two previous sample locations below the PAL (locations outside of two step-out contingency borings), and to the south by one previous sample location below the PAL. The southwest side was not defined because the area was inaccessible to the sampling methods, so a more conservative excavation area toward the west is proposed. The dashed line along the southwest side of the proposed excavation area is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the Remedial Action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 7,513 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 835 cubic yards of soil.

EX02B461 in Figure 6 is defined to the north by boring EX02B461A, to the east by boring EX02B461B, to the south by boring EX02B461D, and to the west by boring EX02B461C. The dashed lines along northwest corner are used to show uncertainty for this corner of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 1,449 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 161 cubic yards of soil.

EX02MW149 in Figure 6 is defined to the north by borings EX02MW149A, EX02MW149B, and EX02MW149F, to the east by borings EX02MW149F and EX02MW149E, to the south by borings EX02MW149E, EX02MW149D, and EX02MW149C, and to the west by borings EX02MW149C and EX02MW149A. The total proposed area is approximately 1,513 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 168 cubic yards of soil.

EX02S320 in Figure 6 is defined to the north and south by two separate previous sample locations below the PAL, to the east by boring EX02S320A, and to the west by proposed excavation area EX02B415. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

6.3 Redevelopment Block EOS-3 (Figure 8)

EX02B098D is defined to the north by boring EX02B098DA, to the east by boring EX02B098DB, to the south by boring EX02B098DC2, and to the west by a previous sample location below the PAL and borings EX03B344 D1 and B. The proposed excavation area was extended to the west to account for the additional undefined area created by step-out borings EX02B098DC and EX02B098DC1. The total proposed area is approximately 1,674 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 186 cubic yards of soil.

EX02TA40B is defined to the north by a previous sample location below the PAL, to the east by proposed excavation area EX03B367, to the south by proposed excavation area EX02MW173A, and to the west by a previous sample location below the PAL. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

EX02MW146 is defined to the north by proposed excavation area EX03B343, to the east by boring EX02GP016AC, to the south by boring EX02GP016AE, and to the west by boring EX02GP016AF. The total proposed area is approximately 755 square feet, and the total volume to be excavated to 10 feet bgs is approximately 280 cubic yards of soil.

EX02MW173A is defined to the north by boring EX02MW173AA, to the east by proposed excavation area EX02TA40B, to the south by boring EX02MW173AB, and to the west by boring EX02GP040F. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 10 feet bgs is approximately 148 cubic yards of soil.

EX02GP002 is defined to the north by boring EX02GP002A, to the east by boring EX02GP002B, to the south by boring EX02GP002C, and to the west by a previous sample location below the PAL. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 10 feet bgs is approximately 148 cubic yards of soil.

EX02GP008 is defined to the north by a previous soil excavation, to the east by boring EX02GP008A, to the south by boring EX02GP008B, and to the west by boring EX02GP008C. The dashed lines along the northwest corner boundaries are used to show uncertainty for this corner of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 294 square feet, and the total volume to be excavated to 10 feet bgs is approximately 109 cubic yards of soil.

EX02GP016A is defined to the north by proposed excavation area EX03B343, to the east by proposed excavation area EX02MW146, to the south by boring EX02GP016AE, and to the west by boring EX02GP016AF. The total proposed area is approximately 761

square feet, and the total volume to be excavated to 10 feet bgs is approximately 282 cubic yards of soil.

EX02GP038 is defined to the north by boring EX02GP038A, to the east by boring EX02GP038E, to the south by a previous sample location below the PAL and the shoreline, and to the west by boring EX02GP038B. The total proposed area is approximately 709 square feet, and the total volume to be excavated to 10 feet bgs is approximately 263 cubic yards of soil.

EX02GP040 is defined to the north by boring EX02MW173AB, proposed excavation area EX03B367, and boring EX02GP040AA, to the east by borings EX02GP040A and EX02GP040B, to the south by the shoreline, and to the west by boring EX02GP040E. The dashed line along the southern boundary is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 5,306 square feet, and the total volume to be excavated to 10 feet bgs is approximately 1,965 cubic yards of soil.

EX02GP050 is defined to the north by proposed excavation area EX02GP051A, to the east by boring EX02GP051BB, to the south by the shoreline, and to the west by boring EX02GP040B. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 10 feet bgs is approximately 148 cubic yards of soil.

EX02GP051A is defined to the north by boring EX02GP051AA, to the east by boring EX02GP051BB and a previous sample location below the PAL, to the south by proposed excavation area EX02GP050, and to the west by boring EX02GP040A. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 10 feet bgs is approximately 148 cubic yards of soil.

EX03B220 is defined to the north by boring EX03B220A, to the east by boring EX03B220B, to the south by a previous sample location below the PAL, and to the west by a previous sample location below the PAL. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX03B343 is defined to the north by boring EX03B344D1, to the east and south by proposed excavation areas EX02MW146 and EX02GP016A, and to the west by boring EX03B344D3. The total proposed area is approximately 858 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 95 cubic yards of soil.

EX03B344 is defined to the north by boring EX03B344A, to the east by boring EX03B344B, to the south by proposed excavation area EX03B343, and to the west by boring EX03B344C1. The total proposed area is approximately 516 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 57 cubic yards of soil.

EX03B345 is defined to the north by boring EX03B345A, to the east by a previous sample location below the PAL, to the south by a previous sample location below the PAL, and to the west by boring EX03B345B. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX03B367 is defined to the north by boring EX02TA40BA2, to the east by boring EX03B367A1, to the south by proposed excavation area EX02GP040, and to the west by proposed excavation area EX02TA40B. The total proposed area is approximately 1,614 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 179 cubic yards of soil.

EX03SS368 is defined to the north by a previous sample location below the PAL, to the east by boring EX03SS368B, to the south by a previous sample location below the PAL, and to the west by boring EX03SS368A. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

6.4 Redevelopment Block EOS-4

EX02B184 in Figure 11 is defined on all four sides by separate previous sample locations below the PAL. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX02B355 in Figure 10 is defined to the north by proposed excavation area EX02B369, to the east by boring EX02B355A, and to the south by boring EX02B468D. The western side was not defined because the area was inaccessible to the sampling methods. This western side will be defined during the eventual soil excavation activities. The total proposed area is approximately 212 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 24 cubic yards of soil.

EX02B369 in Figure 10 is defined to the north by a previous sample location below the PAL, to the east by borings EX02B369A, EX02B369B, and two previous sample locations below the PAL, to the south by proposed excavation area EX02B355, and to the west by a previous sample location below the PAL. The total proposed area is approximately 2,783 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 309 cubic yards of soil.

EX02B464 in Figure 11 is defined to the north by a previous sample location below the PAL, to the east by borings EX02B464A and EX02B464B, to the south by three previous sample locations below the PAL, and to the west by the shoreline. The total proposed area is approximately 5,481 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 609 cubic yards of soil.

EX02B468 in Figure 10 is defined to the north by proposed excavation areas EX02B369 and EX02B355 (proposed boring to the north was inaccessible), to the east by boring

EX02B468D, to the south by boring EX02B468B, and to the west by boring EX02B369C. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX02B493 in Figure 11 is defined to the north by boring EX02B493B, to the east by boring EX02B493C, to the south by a previous sample location below the PAL, and to the west by proposed excavation area EX02G105 (area to the west was inaccessible). The proposed soil boring location along the west side of this proposed excavation area was not accessible due to riprap. The approach for accessing and excavating this area will be addressed as part of the remedial design. The dashed line along the west side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 751 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 83 cubic yards of soil.

EX02B497 in Figure 11 is defined to the north, east and west by previous sample locations below the PAL, and to the south by the shoreline and a previous sample location below the PAL (the immediate area to the south was inaccessible). The total proposed area is approximately 2,637 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 293 cubic yards of soil.

EX02B505 in Figure 10 is defined to the north by boring EX02B505A, to the east by boring EX02B369C, to the south by boring EX02B505B, and to the west by a previous sample location below the PAL. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

EX02B506 in Figure 10 is defined to the north by boring EX02B468B, to the east by boring EX02B506A, to the south by boring EX02B506B, and to the west by boring EX02B505B. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX02G105 in Figure 11 is not defined to the north or east because this area was inaccessible due to rip rap along the shoreline, EX02G105 is defined to the south by the shoreline and a previous sample location below the PAL, and to the west by the shoreline. The proposed soil boring locations along the northeast and southeast sides of this proposed excavation area were not accessible due to riprap. The approach for accessing and excavating these areas will be addressed as part of the remedial design. The dashed lines along the north and east sides are used to show uncertainty for these sides of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on these sides of the proposed excavation area. The total proposed area is approximately 1,874 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 208 cubic yards of soil.

EX02GR93SW in Figure 11 is defined to the north by a previous sample location below the PAL, to the east by boring EX02GR93SWA and a previous sample location below the PAL, to the south by proposed excavation area EX02G105, and to the west by the shoreline and a previous sample location below the PAL. The proposed soil boring location along the southwest side of this proposed excavation area was not accessible due to riprap. The approach for accessing and excavating this area will be addressed as part of the remedial design. The dashed lines along the south and west sides are used to show uncertainty for these sides of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on these sides of the proposed excavation area. The total proposed area is approximately 2,053 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 228 cubic yards of soil.

EX11SS022 in Figure 10 is defined to the north by a previous sample location below the PAL and boring EX11SS022A, to the east and southeast by a previous soil excavation, and to the south by a previous sample location below the PAL. The dashed line along the west side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 290 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 32 cubic yards of soil.

EX11B023 in Figure 10 is defined to the north by Building 521, to the east by boring EX11B023A, to the south by a previous sample location below the PAL, and to the west by previous soil excavations. The total proposed area is approximately 558 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 62 cubic yards of soil.

EX11B024 in Figure 10 is defined to the north, east, and west by previous sample locations below the PAL, and to the south by a previous soil excavation. The total proposed area is approximately 503 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 56 cubic yards of soil.

EX15B027 in Figure 9 is defined to the north by boring EX15B027A and a previous sample location below the PAL, to the east by borings EX15B027A and EX15B027B~~2~~1, to the south by boring EX15B027B1 and a previous sample location below the PAL, and to the west by previous soil sample locations below the PAL. The total proposed area is approximately 2,214 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 246 cubic yards of soil.

EX15B040 in Figure 10 is defined on all four sides by previous sample locations below the PAL. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

EX380803 in Figure 9 is defined to the north by previous sample locations below the PAL, to the east by boring EX380803A, to the south by a previous sample location below the PAL, and to the west by a previous soil sample location below the PAL. The total proposed area is approximately 745 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 83 cubic yards of soil.

6.5 Redevelopment Block MU-1

EX01SS349 in Figure 12 is defined to the north by boring EX01SS349A, to the east by boring EX01SS349B, to the south by boring EX01SS349C, and to the west by boring EX01SS349D. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

EX05B094 in Figure 13 is defined to the north by borings EX05B094B1 and EX05B094C, to the east by boring EX05B094D, to the south by two previous sample locations below the PAL, and to the west by boring EX05B094A. The total proposed area is approximately 3,071 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 341 cubic yards of soil.

EX05B104 in Figure 13 is defined to the north by boring EX05B104A1, to the east by a previous sample location below the PAL, to the south by a previous sample location below the PAL, and to the west by boring EX05B104B. The total proposed area is approximately 8,558 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 951 cubic yards of soil.

EX05MW85A in Figure 13 is defined to the north by boring EX05MW85AA and a previous sample location below the PAL, to the east by two previous sample locations below the PAL, to the south by three previous sample locations below the PAL, and to the west by EX05MW85AB1 and a previous sample location below the PAL. The total proposed area is approximately 6,418 square feet, and the total volume to be excavated to 5.0 feet bgs is approximately 1,189 cubic yards of soil.

EX12MW17A in Figure 12 is defined to the north by boring EX12MW17AA, to the east by boring EX12TA10A, to the south by boring EX12MW17AC, and to the west by boring EX12MW17AB. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 10 feet bgs is approximately 593 cubic yards of soil.

EX12MW18A in Figure 12 is defined to the north by boring EX12MW18AA, to the east by boring EX12MW18AB, to the south by proposed excavation area EX12TA10, and to the west by boring EX12TA10A. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 10 feet bgs is approximately 593 cubic yards of soil.

EX12SS16 in Figure 12 is defined to the north by boring EX12SS16A, to the east by boring EX12SS16B, to the south by boring EX12SS16D, and to the west by boring EX12SS16C. The dashed lines along the southeast corner boundary are used to show

uncertainty for this corner of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 1,743 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 194 cubic yards of soil.

EX12SS17 in Figure 12 is defined to the north by boring EX12SS17A, to the east by boring EX12SS17B, to the south by a previous sample location below the PAL, and to the west by boring EX12SS17C. The dashed lines along the northeast corner boundary are used to show uncertainty for this corner of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 1,279 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 142 cubic yards of soil.

EX12SS18 in Figure 12 is defined to the north by proposed excavation area EX12TA08, to the east by boring EX12SS18A, to the south by boring EX12MW17AA, and to the west by boring EX12TA08D. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX12TA08 in Figure 12 is defined to the north by boring EX12TA08A, to the east by boring EX12TA08C, to the south by proposed excavation area EX12SS18, and to the west by boring EX12TA08B. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 10 feet bgs is approximately 593 cubic yards of soil.

EX12TA10 in Figure 12 is defined to the north by boring EX12TA10A and the proposed excavation area EX12MW18A, to the east by boring EX12TA10B1, to the south by boring EX12TA10C, and to the west by boring EX12MW17AC. The total proposed area is approximately 2,429 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 270 cubic yards of soil.

EX13B003B in Figure 15 is defined to the north by a previous sample location below the PAL, to the east by a previous sample location below the PAL and proposed excavation area EX13B023, and to the south by proposed excavation area EX13B021. The dashed line along the west side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the final RD to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 1,769 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 197 cubic yards of soil.

EX13B004 in Figure 15 is defined to the north by boring EX13B004A, to the east by a previous sample location below the PAL, to the south by boring EX13B023A, and to the west by a previous sample location below the PAL. The total proposed area is approximately 1,167 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 130 cubic yards of soil.

EX13B007 in Figure 15 is defined to the north by previous sample locations below the PAL, to the east by boring EX13B007A, to the south by two previous sample locations below the PAL, and to the west by a previous sample location below the PAL. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

EX13B010 in Figure 15 is defined to the north by previous sample locations below the PAL, to the east by boring EX13B010A, to the south by boring EX13B010B, and to the west by previous sample locations below the PAL. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

EX13B021 in Figure 15 is defined to the north by proposed excavation area EX13B023, to the east by EX13B021A, and to the west proposed excavation area EX13B003B. The dashed line along the south side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 1,332 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 148 cubic yards of soil.

EX13B023 in Figure 15 is defined to the north by previous sample locations below the PAL, to the east by boring EX13B023A, to the south by boring EX13B023B, and to the west by proposed excavation areas EX13B003B and EX13B021. The dashed lines along the northwest corner boundary are used to show uncertainty for this corner of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent in the vicinity of the previous trench/excavation area. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 3,194 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 355 cubic yards of soil.

EX36B027 in Figure 14 is defined to the north by previous sample locations below the PAL, to the east by previous sample locations below the PAL, to the south by boring EX36B027B, and to the west by boring EX36B027A. The total proposed area is approximately 1,334 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 148 cubic yards of soil.

EX36B056 in Figure 14 is defined to the north, east, and west by previous sample locations below the PAL, and to the south by boring EX36B056A. The total proposed

area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX36B062 in Figure 14 is defined to the north by previous sample locations below the PAL and proposed excavation area EX36B063, to the east by previous sample locations below the PAL, to the south by boring EX36B062B, and to the west by boring EX36B062A. The total proposed area is approximately 2,399 square feet, and the total volume to be excavated to 10 feet bgs is approximately 889 cubic yards of soil.

EX36B063 in Figure 14 is defined to the north by previous sample locations below the PAL, to the east by boring EX36B063B, to the south by proposed excavation area EX36B062, and to the west by boring EX36B063A. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 10 feet bgs is approximately 593 cubic yards of soil.

EX36B078 in Figure 13 is defined to the north, south and west by previous sample locations below the PAL, and to the east by boring EX36B078A. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX36B105 in Figure 14 is defined to the north, east, and south by previous sample locations below the PAL, and to the west by boring EX36B105A. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX36B136 in Figure 14 is defined to the north by boring EX36B136A, to the east by boring EX36B136B, to the south by boring EX36B136C, and to the west by a previous sample location below the PAL. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX36B138 in Figure 14 is defined to the north by boring EX36B138A, to the east by a previous sample location below the PAL, and to the south and west by previous sample locations below the PAL. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

EX36B180 in Figure 14 is defined to the north by a previous sample location below the PAL, to the east by two previous sample locations below the PAL, to the south by boring EX36B180C, and to the west by borings EX36B180A and EX36B180B. The total proposed area is approximately 3,069 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 341 cubic yards of soil.

EX36B208 in Figure 14 is defined to the north by boring EX36B208A, to the east by boring EX36B208B, to the south by boring EX36B208C, and to the west by boring EX36B136B. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

6.6 Redevelopment Block MU-2

EX14MW10A in Figure 17: Initial delineation borings were not collected in the vicinity of EX14MW10A because this was previously excavated to a depth of approximately 3 feet bgs. The excavation area was still open and active during the soil sampling activities discussed in this Technical Memorandum. No further excavation activities are recommended for this area.

EX14SS05 in Figure 17 is defined on all four sides previous sample locations below the PAL. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil..

EX36B015 in Figure 16 is defined to the north by a previous sample location below the PAL, to the east by boring EX36B015A, to the south by previous sample locations below the PAL, and to the west by proposed excavation area EX36B163. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

EX36B072 in Figure 16 is defined to the north and east by previous sample locations below the PAL, to the south by boring EX36B072B, and to the west by boring EX36B072A. The total proposed area is approximately 2,505 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 278 cubic yards of soil.

EX36B116 in Figure 16 is defined to the north by boring EX36B116A, to the east by boring EX36B116B, to the south by boring EX36B116D, and to the west by boring EX36B116C. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.

EX36B162 in Figure 16 is defined to the north and east by previous sample locations below the PAL, to the south by Building 413, and to the west by proposed excavation area EX36B072. The total proposed area is approximately 2,510 square feet, and the total volume to be excavated to 10 feet bgs is approximately 910 cubic yards of soil.

EX36B163 in Figure 16 is defined to the north and south previous sample locations below the PAL, to the east by proposed excavation area EX36B015, and to the west by boring EX36B163A. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX38SS01 in Figure 17 is defined to the north by boring EX38SS01A, to the east by boring EX38SS01C, to the south by Building 500, and to the west by boring EX38SS01B. The total proposed area is approximately 352 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 39 cubic yards of soil.

6.7 Redevelopment Block MU-3

EX04B011 in Figure 19 is defined to the north by a previous sample location below the PAL, to the east by borings EX04B011B and EX04B011C, to the south by a previous sample location below the PAL, and to the west by boring EX04B011A. The total proposed area is approximately 5,540 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 616 cubic yards of soil.

EX04B012 in Figure 19 is defined to the north and east by a previous sample location below the PAL, to the south by boring EX04B012B, and to the west by boring EX04B012A. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 10 feet bgs is approximately 593 cubic yards of soil.

EX04B034 in Figure 19 is defined to the north by boring EX04B034A, to the east by boring EX04B034B, to the south by boring EX04B034C, and to the west by boring EX04B034D. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX12SS02 in Figure 19 is defined to the north by boring EX12SS02A, to the east by boring EX12SS02B, to the south by boring EX12SS02C, and to the west by boring EX12SS02D. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX12TA13 in Figure 19 is defined to the north by boring EX12TA13A, to the east by boring EX12TA13B, to the south by boring EX12TA13C, and to the west by boring EX12TA13D. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 5.0 feet bgs is approximately 296 cubic yards of soil.

EX56B021 in Figure 18 is defined to the north and east by boring EX56B021A, to the east by boring EX56B021A, to the south by borings EX56B021C and EX56B021B, and to the west by a previous sample location below the PAL. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.

EX72B023 in Figure 18 is defined to the north by boring EX72N023B, to the east by boring EX72N023A, to the south by the parcel boundary, and to the west by a previous soil excavation area. The total proposed area is approximately 702 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 78 cubic yards of soil.

6.8 Railroad Right of Way (Figure 20)

EX52B009 is defined to the north by boring EX52B009D, to the east by boring EX52B009A, to the south by boring EX52B009B, and to the west by boring EX52B009C. The total proposed area is approximately 1,103 square feet, and the total volume to be excavated to 5.0 feet bgs is approximately 204 cubic yards of soil.

EX52SS02 is defined to the north by boring EX52SS02B, to the east by boring EX52SS02C, to the south by a previous sample location below the PAL, and to the west by boring EX52SS02A. The total proposed area is approximately 694 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 77 cubic yards of soil.

EX52SS06 is defined to the north by boring EX52SS06A, to the east by boring EX52SS06B, to the south and west by previous sample locations below the PAL. The total proposed area is approximately 1,097 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 122 cubic yards of soil.

6.9 Total Excavation Volumes

Redevelopment Block	Original Excavation Volume (cubic yards)	Revised Excavation Volume (cubic yards)
EOS-1	8,149	21,352
EOS-2	2,447	2,962
EOS-3	3,531	4,453
EOS-4	2,630	2,722
MU-1	8,179	8,641
MU-2	1,459	1,825
MU-3	1,716	1,716
Railroad ROW	403	403
Total Volume Parcel E	28,515	44,075

7.0 REFERENCES

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Shaw Environmental, Inc., 2007. *Final New Preliminary Screening Criteria and Petroleum Program Strategy, Hunters Point Shipyard, San Francisco, California.* December 21.

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TABLE 1
Soil Analytical Results
Parcel E Soil Excavation Characterization
Hunters Point Naval Shipyard, San Francisco, CA

Location	Sample Depth (ft bgs)	Sample Date	USEPA 8015			USEPA 8270D									USEPA 6010C							USEPA 8081B			USEPA 8082	
			TPHg (C7-C12) (mg/kg)	TPHd (C10 - C24) (mg/kg)	TPHmo (C24 - C36) (mg/kg)	3,3'-Dichlorobenzidine (mg/kg)	Bis (2-Ethyhexyl) phthalate (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Benzo (a) pyrene (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Napthalene (mg/kg)	Arsenic (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Manganese (mg/kg)	Mercury (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)	Alpha-BHC (mg/kg)	Dieldrin (mg/kg)	Heptachlor epoxide (mg/kg)	Aroclor-1254 (mg/kg)	Aroclor-1260 (mg/kg)
PALs (Tier 2 PALs)			**Total TPH = 3,500**			**0.04**	**5.5**	**1.85**	**1.7**	**1.7**	**1.65**	**1.65**	**1.5**	**8.5**	**55.5**	**800**	**775**	**7,155**	**11.4**	**585**	**1,850**	**0.0095**	**0.017**	**0.027**	**0.465**	**1.05**
Redevelopment Block EOS-1																										
EX02B122A.7.5	7.0-7.5	9/26/2012	0.052 U	110	170	--	--	0.150	--	--	0.260	--	--	--	--	630	230	--	--	--	260	--	--	--	--	0.400 J
EX02B122B.2	1.5-2.0	9/13/2012	0.013 U	510	2,200	--	--	**2.3 J**	--	--	**2.6 J**	--	--	--	--	**2,200**	450	--	--	--	1,500 J	--	--	--	--	**2.2**
EX02B122B1.2	1.5-2.0	10/8/2012	--	--	--	--	--	**1.9**	--	--	**2.6**	--	--	--	--	**3,300**	--	--	--	--	1,500	--	--	--	**0.930**	0.350
EX02B122B2.2	1.5-2.0	10/8/2012	--	--	--	--	--	**2.2**	--	--	**2.9 J**	--	--	--	--	**2,300 J**	--	--	--	--	**2,200 J**	--	--	--	**1.5 J**	0.900
EX02B122C.2	1.5-2.0	9/18/2012	--	--	--	--	--	**1.9**	--	--	**2.8**	--	--	--	--	**3,200 J**	**3,400 J**	--	--	--	1,200 J	--	--	--	--	--
EX02B122C1.2	1.5-2.0	10/8/2012	--	--	--	--	--	**2.2**	--	--	**2.8**	--	--	--	--	**1,400**	420 J	--	--	--	670	--	--	--	--	--
EX02B122C2.2	1.5-2.0	10/8/2012	--	--	--	--	--	0.890 J	--	--	0.980 J	--	--	--	--	190 J	45 J	--	--	--	82 J	--	--	--	--	--
EX02B122C.7.5	7.0-7.5	9/18/2012	2.5	910	2,500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.270 J	0.480 J
EX02B122D.2	1.5-2.0	9/18/2012	--	--	--	--	--	**7.4**	--	--	**14**	--	--	--	--	**11,000**	770 J	--	--	--	**3,000 J**	--	--	--	**24 J**	**14**
EX02B122D.7.5	7.0-7.5	9/18/2012	0.26	120	290	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B250A.7.5	7.0-7.5	9/26/2012	0.8	460	1,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B250B.7.5	7.0-7.5	9/26/2012	0.14 J	100	260	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B250C.7.5	7.0-7.5	9/26/2012	0.020 U	49	220	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B256A.4	3.5-4.0	9/13/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	180	57 J	--	--	--	170 J	--	--	--	--	--
EX02B256B.4	3.5-4.0	9/13/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	170	66 J	--	--	--	160 J	--	--	--	--	--
EX02B288A.4	3.5-4.0	9/18/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2,800 J**	--	--	--	**8,500 J**	--	--	--	--	--
EX02B288A1.4	3.5-4.0	10/8/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.0 J	--	--	--	34	--	--	--	--	--
EX02B288B.7.5	7.0-7.5	9/18/2012	0.021 U	630	2,600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0067 U	0.280
EX02B412A.2	1.5-2.0	9/18/2012	--	--	--	--	--	--	--	--	1.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B412B.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	0.076 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B412C.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B412D.2	1.5-2.0	10/8/2012	0.017 U	4.7	28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B412D.7.5	7.0-7.5	9/26/2012	0.032 U	60	550	--	--	--	--	--	0.860 U	--	--	--	--	77 J	--	--	--	--	90	--	--	--	--	--
EX02B428A.2	1.5-2.0	9/13/2012	0.022 U	57	130	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B428B.2	1.5-2.0	9/13/2012	0.051 U	95	300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B428C.2	1.5-2.0	9/13/2012	0.011 U	76	94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B428D.2	1.5-2.0	9/13/2012	**0.014 U**	**2700**	**4,700**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B428E.2	1.5-2.0	9/18/2012	0.026 U	53	140	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B428E.7.5	7.0-7.5	9/18/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0066 U	0.230
EX02B442A.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.300
EX02B442B.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.055 J
EX02B442C.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0012 UJ
EX02B442D.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.140
EX02B456A.2	1.5-2.0	10/8/2012	0.018 U	2.9	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B456A.7.5	7.0-7.5	9/26/2012	0.057 U	52	150	--	--	--	--	--	--	--	--	--	--	450 J	--	--	--	--	380	--	--	--	--	--
EX02B456B.2	1.5-2.0	10/10/2012	0.040 U	12	74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B456B.7.5	7.0-7.5	9/26/2012	0.23	390	580	--	--	--	--	--	--	--	--	--	--	170	--	--	--	--	210	--	--	--	--	--
EX02B524A.7.5	7.0-7.5	9/26/2012	0.061 U	65	170	--	--	--	--	--	--	--	--	--	1.8	370 J	540	--	--	--	1,300	--	--	--	--	0.014 J
EX02B524B.7.5	7.0-7.5	9/26/2012	0.048 U	250	510	--	--	--	--	--	--	--	--	--	8.9	**2,500 J**	**1,900**	--	--	--	**5,200**	--	**0.084 J**	--	**0.730 J**	0.520 J
EX02B524B1.7.5	7.0-7.5	10/8/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	92	65 J	--	--	--	240	--	0.0037 UJ	--	0.0066 U	--
EX02B524C.7.5	7.0-7.5	9/26/2012	0.58	43	53	--	--	0.045 J	--	--	0.028 J	--	--	--	10	**14,000 J**	**1,800**	--	--	--	**6,700**	--	--	--	--	0.120 J
EX02B524D.2	1.5-2.0	9/13/2012	0.014 U	77	300	--	--	0.025 J	--	--	0.031 J		--	--	3.9	430	270 J	--		--	670 J	--	--	--	--	0.780
EX02B525A.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	690	--	--	--	--	--	--	--	--	--	--
EX02GR71SWA.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	0.072 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GR71SWB.2	1.5-2.0	9/19/2012	--	--	--	--	--	--	--	--	0.340 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GR73SWA.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--		13	--	--	--	56	--	0.0062 UJ	--	0.0081 UJ	--
EX02GR73SWB.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1,500**	--	--	--	**6,000**	--	0.013 UJ	--	0.170 J	--
EX02GR73SWB1.7.5	7.0-7.5	10/8/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	260 J	--	--	--	**2,000**	--	--	--	--	--
EX02GR73SWB2.7.5	7.0-7.5	10/8/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2,700**	--	--	--	**6,700**	--	--	--	--	--
EX02GR93SWA.7.5	7.0-7.5	9/19/2012	0.32	660	1,400	--	--	--	--	--	--	--	--	--	--	**3,800**	**2,500**	--	--	--	--	--	--	--	--	--
EX02GR93SWA1.7.5	7.0-7.5	10/8/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	140	56 J	--	--	--	--	--	--	--	--	--
EX02GR93SWA2.7.5	7.0-7.5	10/8/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	44 J	--	--	--	120 J	--	--	--	--	--
EX02GR93SWB.7.5	7.0-7.5	9/19/2012	0.026 U	33	110	--	--	--	--	--	--	--	--	--	--	350	170	--	--	--	--	--	--	--	--	--
EX02GR117SWA.7.5	7.0-7.5	9/26/2012	0.081 U	140	230	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	--	--	0.062 J
EX02GR131SWA.7.5	7.0-7.5	9/18/2012	2.5	1100	1,300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GR131SWB.7.5	7.0-7.5	9/18/2012	0.24	920	150	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GR131SWC.2	1.5-2.0	9/18/2012	0.042 U	30 Y	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.081	0.270
EX02GR132BTA.2	1.5-2.0	9/13/2012	0.017 U	47 Y	110	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.2 J**
EX02GR132BTB.2	1.5-2.0	9/13/2012	0.014 U	3.9 Y	31	--	--	--	--	--	--	--	--	--	--	34	--	--	--	--	--	--	--	--	--	--
EX02TA16AA.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	0.300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02TA16AB.2	1.5-2.0	9/18/2012	--	--	--	--	--	--	--	--	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02TA16AB.7.5	7.0-7.5	9/18/2012	**1,400 J**	**5,200**	**6,600 J**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9 J**	**5.5 J**
EX02TA16AB1.7.5	7.0-7.5	10/8/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0068 U	0.370
EX02TA16AB1.7.5	7.0-7.5	10/10/2012	**3.4 Y**	**3,000**	**2,600**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02TA16AB2.7.5	7.0-7.5	10/10/2012	0.018 U	110	160	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redevelopment Block EOS-2																										
EX02B100A.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**6,100**
EX02B398A.2	1.5-2.0	9/13/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10 J	--	--	--	--	--	--	--	--	--
EX02B398B.2	1.5-2.0	9/13/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11 J	--	--	--	--	--	--	--	--	--
EX02B401A.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.97
EX02B401B.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**730**
EX02B401B1.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**67 J**
EX02B401B2.2	1.5-2.0	10/8/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.480 J
EX02B401C.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**8.6**
EX02B401C1.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**5.2 J**
EX02B401C2.2	1.5-2.0	10/8/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.9**
EX02B403A.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,100	--	--	--	--	--	--	--	--
EX02B403B.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	910	--	--	--	--	--	--	--	--
EX02B403C.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	410	--	--	--	--	--	--	--	--
EX02B403D.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	750	--	--	--	--	--	--	--	--
EX02B405A.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	70	--	--	--	--	--

TABLE 1
Soil Analytical Results
Parcel E Soil Excavation Characterization
Hunters Point Naval Shipyard, San Francisco, CA

Location	Sample Depth (ft bgs)	Sample Date	USEPA 8015			USEPA 8270D									USEPA 6010C							USEPA 8081B			USEPA 8082	
			TPHg (C7-C12) (mg/kg)	TPHd (C10 - C24) (mg/kg)	TPHmo (C24 - C36) (mg/kg)	3,3'-Dichlorobenzidine (mg/kg)	Bis (2-Ethyhexyl) phthalate (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Benzo (a) pyrene (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Napthalene (mg/kg)	Arsenic (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Manganese (mg/kg)	Mercury (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)	Alpha-BHC (mg/kg)	Dieldrin (mg/kg)	Heptachlor epoxide (mg/kg)	Aroclor-1254 (mg/kg)	Aroclor-1260 (mg/kg)
PALs (Tier 2 PALs)			**Total TPH = 3,500**			**0.04**	**5.5**	**1.85**	**1.7**	**1.7**	**1.65**	**1.65**	**1.5**	**8.5**	**55.5**	**800**	**775**	**7,155**	**11.4**	**585**	**1,850**	**0.0095**	**0.017**	**0.027**	**0.465**	**1.05**
EX02B405B.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	51 J	--	--	--	--	--
EX02B405C.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	62	--	--	--	--	--
EX02B415A.2	1.5-2.0	9/13/2012	--	--	--	--	--	--	--	--	--	--	--	--	5.8	--	170 J	--	--	--	--	--	--	--	--	**4.8**
EX02B415A1.2	1.5-2.0	10/10/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.6 J**
EX02B415B.2	1.5-2.0	9/13/2012	--	--	--	--	--	--	0.300 J	--	0.210 J	--	--	--	6.8	--	220 J	--	--	--	--	--	--	--	--	**1.6**
EX02B461A.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	0.240	--	0.170 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B461B.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	0.100 J	--	0.360 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B461C.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	0.270 J	--	0.960 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B461D.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	1.8 U	--	1.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02MW149A.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	0.380 U	--	--	--	4.8	--	57	--	--	--	--	--	--	--	--	--
EX02MW149B.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	0.930	--	--	--	9.7	--	140	--	--	--	--	--	--	--	--	--
EX02MW149C.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	0.041 J	--	--	--	2.5	--	19	--	--	--	--	--	--	--	--	--
EX02MW149D.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	0.650	--	--	--	7.7	--	97	--	--	--	--	--	--	--	--	--
EX02MW149E.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	0.210	--	--	--	21	--	77	--	--	--	--	--	--	--	--	--
EX02MW149F.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	--	--	0.190	--	--	--	3.9	--	88	--	--	--	--	--	--	--	--	--
EX02S320A.2	1.5-2.0	9/11/2012	--	--	--	--	--	--	0.028 J	--	0.020 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50
Redevelopment Block EOS-3																										
EX02B098DA.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	3.5 J	14	--	--	--	--	--	--	--	--	--	--
EX02B098DB.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	8.8 J	15	--	--	--	--	--	--	--	--	--	--
EX02B098DC.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	14 J	**1,200**	--	--	--	--	--	--	--	--	--	--
EX02B098DC1.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	**1,900**	--	--	--	--	--	--	--	--	--	--
EX02B098DC2.2	1.5-2.0	10/9/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	380	--	--	--	--	--	--	--	--	--	--
EX02TA40BA.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	**69 J**	**1,600**	--	--	--	--	--	--	--	--	--	--
EX02TA40BA1.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	**2,100**	--	--	--	--	--	--	--	--	--	--
EX02TA40BA2.2	1.5-2.0	10/9/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	86	--	--	--	--	--	--	--	--	--	--
EX02MW173AA.7.5	7.0-7.5	10/9/2012	4.9	1400	530	--	--	--	--	--	--	--	--	--	5.0	150	27 J	--	--	--	--	--	--	--	--	--
EX02MW173AB.7.5	7.0-7.5	10/9/2012	0.015 U	75	110	--	--	--	--	--	--	--	--	--	12	68	18 J	--	--	--	--	--	--	--	--	--
EX02GP002A.7.5	7.0-7.5	9/19/2012	0.048 U	200	540	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP002B.7.5	7.0-7.5	9/19/2012	0.062 U	33	87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP002C.7.5	7.0-7.5	9/19/2012	0.15 J	5.5 J	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP008A.7.5	7.0-7.5	9/19/2012	0.15 J	22	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP008B.7.5	7.0-7.5	9/19/2012	0.087 J	5.6	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP008C.7.5	7.0-7.5	9/19/2012	0.020 U	6.4	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP016AA.7.5	7.0-7.5	10/9/2012	2.4 J	450	1800	--	--	--	--	--	1.2 J	--	--	--	--	**3,300**	--	--	--	--	--	--	--	--	--	--
EX02GP016AC.7.5	7.0-7.5	10/9/2012	0.011 U	110	310	--	--	--	--	--	--	--	--	--	--	45	--	--	--	--	--	--	--	--	--	--
EX02GP016AE.7.5	7.0-7.5	10/9/2012	0.0098 U	10	99	--	--	--	--	--	--	--	--	--	--	300	--	--	--	--	--	--	--	--	--	--
EX02GP016AF.7.5	7.0-7.5	10/9/2012	0.34	1000	1100	--	--	--	--	--	--	--	--	--	--	240	--	--	--	--	--	--	--	--	--	--
EX02GP038A.7.5	7.0-7.5	10/9/2012	0.019 U	45	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP038B.7.5	7.0-7.5	10/9/2012	0.011 U	61	310	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP040A.7.5	7.0-7.5	9/19/2012	0.040 U	55	210	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP040B.7.5	7.0-7.5	9/19/2012	0.45	78	240	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP040E.7.5	7.0-7.5	10/9/2012	0.020 U	45	140	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP040F.7.5	7.0-7.5	10/9/2012	0.086 J	150	380	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP040AA.7.5	7.0-7.5	10/9/2012	0.013 U	79 J	190 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP051AA.7.5	7.0-7.5	9/19/2012	3.2 J	51	150	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GP051AB.7.5	7.0-7.5	9/19/2012	0.050 U	150	340	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX03B220A.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	0.034 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX03B220B.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	0.034 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX03B344A.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	59	--	--	--	--	--	--	--	--	--	--
EX03B344B.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	350	--	--	--	--	--	--	--	--	--	--
EX03B344C.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	**870**	--	--	--	--	--	--	--	--	--	--
EX03B344C1.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	230	--	--	--	--	--	--	--	--	--	--
EX03B344D.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	0.110	--	--	--	--	**11,000**	--	--	--	--	--	--	--	--	--	--
EX03B344D1.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	420	--	--	--	--	--	--	--	--	--	--
EX03B344D2.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	**950**	--	--	--	--	--	--	--	--	--	--
EX03B344D3.2	1.5-2.0	10/9/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	220	--	--	--	--	--	--	--	--	--	--
EX03B345A.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	94	--	--	--	--	--	--	--	--	--	--
EX03B345B.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	470	--	--	--	--	--	--	--	--	--	--
EX03B367A.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	20 J	**1,500**	--	--	--	--	--	--	--	--	--	--
EX03B367A1.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--	--	--
EX03B367B.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	30 J	**830**	--	--	--	--	--	--	--	--	--	--
EX03SS368A.2	1.5-2.0	9/6/2012	--	--	--	--	--	0.034 U	0.013 J	--	0.0098 J	0.034 U	0.034 U	--	--	9.7	--	--	--	--	--	--	--	--	--	--
EX03SS368B.2	1.5-2.0	9/6/2012	--	--	--	--	--	0.170	0.310	--	0.210	0.029 J	0.099	--	--	190	--	--	--	--	--	--	--	--	--	--
EX03SS368C.2	1.5-2.0	9/7/2012	--	--	--	--	--	0.036 U	0.036 U	--	0.036 U	0.036 U	0.036 U	--	--	84 J	--	--	--	--	--	--	--	--	--	--
Redevelopment Block EOS-4																										
EX02B355A.9.5	9.0-9.5	10/10/2012	0.021 U	0.84 J	2.2 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B369A.4	3.5-4.0	10/10/2012	0.024 U	2.2	22	--	--	--	--	--	--	--	--	--	--	22	34 J	--	--	--	--	--	--	--	--	--
EX02B369B.4	3.5-4.0	10/10/2012	0.020 U	6.0	22	--	--	--	--	--	--	--	--	--	--	81	11 J	--	--	--	--	--	--	--	--	--
EX02B369C.2	1.5-2.0	9/25/2012	0.029 U	100	730	--	--	--	3.4 U	--	3.4 U	--	--	--	--	220 J	52	--	--	--	--	--	--	--	--	--
EX02B464A.2	1.5-2.0	9/6/2012	--	--	--	--	--	0.052 J	0.096	0.022 J	0.037 J	--	--	--	--	100	--	--	--	--	--	--	--	--	--	--
EX02B464B.2	1.5-2.0	9/6/2012	--	--	--	--	--	1.1 J	1.1 J	0.400 J	0.760 J	--	--	--	--	170	--	--	--	--	--	--	--	--	--	--
EX02B468B.2	1.5-2.0	9/7/2012	0.016 U	11	41	--	--	--	--	--	0.150	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B468C.2	1.5-2.0	9/7/2012	0.014 U	32	280	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B468D.9.5	9.0-9.5	10/10/2012	0.024 U	100	570	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B493B.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.072 J
EX02B493C.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.130
EX02B505A.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	7.2 U	--	7.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B505B.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	1.7 U	--	1.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B506A.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	--	--	0.037 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02B506B.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	--	--	0.350 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX02GR93SWA.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	37	--	--	--	--	--	--	--	--	--	--
EX11SS022A.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.0	--	--	--	--	--	--	--	--	--

TABLE 1
Soil Analytical Results
Parcel E Soil Excavation Characterization
Hunters Point Naval Shipyard, San Francisco, CA

Location	Sample Depth (ft bgs)	Sample Date	USEPA 8015			USEPA 8270D									USEPA 6010C							USEPA 8081B			USEPA 8082	
			TPHg (C7-C12) (mg/kg)	TPHd (C10 - C24) (mg/kg)	TPHmo (C24 - C36) (mg/kg)	3,3'-Dichlorobenzidine (mg/kg)	Bis (2-Ethyhexyl) phthalate (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Benzo (a) pyrene (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Napthalene (mg/kg)	Arsenic (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Manganese (mg/kg)	Mercury (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)	Alpha-BHC (mg/kg)	Dieldrin (mg/kg)	Heptachlor epoxide (mg/kg)	Aroclor-1254 (mg/kg)	Aroclor-1260 (mg/kg)
PALs (Tier 2 PALs)			**Total TPH = 3,500**			**0.04**	**5.5**	**1.85**	**1.7**	**1.7**	**1.65**	**1.65**	**1.5**	**8.5**	**55.5**	**800**	**775**	**7,155**	**11.4**	**585**	**1,850**	**0.0095**	**0.017**	**0.027**	**0.465**	**1.05**
EX11B023A.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0069 UJ	--
EX15B027A.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	62 J	67 J	--	--	--	--	--	--	--	--	--
EX15B027B.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	**1,300 J**	59 J	--	--	--	--	--	--	--	--	--
EX15B027B1.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	60	--	--	--	--	--	--	--	--	--	--
EX380803A.2	1.5-2.0	9/7/2012	--	--	--	--	--	--	0.038 U	--	0.038 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redevelopment Block MU-1																										
EX01SS349A.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.055 J
EX01SS349B.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.140
EX01SS349C.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.012 J
EX01SS349D.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.180
EX05B094A.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.034 J
EX05B094B.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.5 J**
EX05B094B1.7.5	7.0-7.5	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.035 J
EX05B094C.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.740 J
EX05B094D.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.032 J
EX05B104A.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.3 J**
EX05B104A1.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.280 J
EX05B104B.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.130
EX05MW85AA.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	3.7	72 J	--	--	--	--	--	--	--	--	--	--
EX05MW85AA.4	3.5-4.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	0.460 J	--	--	--	--	2.3	--	1,700 J	--	--	--	--	--
EX05MW85AB.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	1.8	16 J	--	--	--	--	--	--	--	--	--	--
EX05MW85AB.4	3.5-4.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	0.210 U	--	--	--	--	**240**	--	900 J	--	--	--	--	--
EX05MW85AB1.4	3.5-4.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.081	--	--	--	--	--	--	--
EX12MW17AA.4	3.5-4.0	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	88 J	--	--	--	--	--	--	--	--	0.230	0.520 J
EX12MW17AA.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	140	--	--	--	--	--
EX12MW17AB.4	3.5-4.0	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.120
EX12MW17AB.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	62	--	--	--	--	--
EX12MW17AC.4	3.5-4.0	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	54 J	--	--	--	48	--	--	--	--	--	0.017
EX12MW17AC.7.5	7.0-7.5	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	64	--	--	--	--	--
EX12MW18AA.2	1.5-2.0	9/18/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.095 J	--
EX12MW18AA.4	3.5-4.0	9/18/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21 J	--	--	--	93 J	--	--	--	--	--
EX12MW18AA.7.5	7.0-7.5	9/18/2012	--	--	--	--	0.010 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX12MW18AB.2	1.5-2.0	9/18/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.110 J	--
EX12MW18AB.4	3.5-4.0	9/18/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	40 J	--	--	--	140 J	--	--	--	--	--
EX12MW18AB.7.5	7.0-7.5	9/18/2012	--	--	--	--	0.036 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX12SS16A.4	3.5-4.0	9/26/2012	--	--	--	--	--	--	0.037 U	--	--	--	--	--	--	19 J	--	--	--	--	39	--	--	--	--	0.043 J
EX12SS16B.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	0.230	--	--	--	--	--	--	160	--	--	--	20	630 J	--	--	--	--	0.470 J
EX12SS16C.4	3.5-4.0	9/26/2012	--	--	--	--	--	--	3.6 U	--	--	--	--	--	--	680 J	--	--	--	--	490	--	--	--	--	0.150 J
EX12SS16D.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	0.016 J	--	--	--	--	--	--	54	--	--	--	--	140 J	--	--	--	--	0.004 J
EX12SS17A.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	6.7	--	--	--	--	21 J	--	--	--	0.0053 UJ	0.0049 J
EX12SS17B.4	3.5-4.0	9/26/2012	--	--	--	--	--	--	0.011 J	--	--	--	--	--	--	88 J	--	--	--	--	98	--	--	--	--	0.0031 UJ
EX12SS17C.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	44	--	--	--	--	65 J	--	--	--	0.0054 UJ	0.0027 UJ
EX12SS18A.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	17	--	--	--	--	--	--	--	--	0.011	--
EX12TA08A.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0066 U	0.018
EX12TA08B.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0066 U	0.019
EX12TA08C.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0068 U	0.022
EX12TA08D.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	45	--	--	--	--	--	--	--	--	0.0066 U	0.073
EX12TA10A.4	3.5-4.0	9/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	130 J	--	--	--	60	--	--	--	--	0.180 J	0.740 J
EX12TA10B.2	1.5-2.0	9/18/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	300	--	--	--	37 J	--	--	--	--	**1.4 J**	0.300 J
EX12TA10B.4	3.5-4.0	9/18/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.4 J	--	--	--	65 J	--	--	--	--	--
EX12TA10B.7.5	7.0-7.5	9/18/2012	--	--	--	--	0.037 U	--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--
EX12TA10B1.2	1.5-2.0	10/8/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0067 U	--
EX12TA10C.2	1.5-2.0	9/18/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	69	--	--	--	54 J	--	--	--	--	--	0.0046 J
EX13B003BA.2	1.5-2.0	9/5/2012	--	--	--	--	--	--	1.3 J	--	--	--	--	--	--	**5,000**	--	--	--	--	--	--	--	--	--	0.084
EX13B003BA1.2	1.5-2.0	9/27/2012	--	--	--	--	--	0.210 J	0.480	--	0.150 J	--	--	--	--	120	--	--	0.94	--	**9,700 J**	--	--	--	--	--
EX13B004A.2	1.5-2.0	9/5/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	150	--	--	0.27	--	--	--	--	--	--	--
EX13B007A.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0042 J
EX13B010A.3	2.5-3.0	9/5/2012	--	--	--	--	--	0.150	0.150	--	0.100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX13B010B.2	1.5-2.0	9/5/2012	--	--	--	--	--	0.110 U	0.110 U	--	0.110 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX13B021A.2	1.5-2.0	9/5/2012	--	--	--	--	--	--	0.940 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX13B023A.2	1.5-2.0	9/5/2012	--	--	--	--	--	0.710 U	0.710 U	--	0.710 U	--	--	--	--	440	--	--	1.6	--	250	--	--	--	--	--
EX13B023B.2	1.5-2.0	9/5/2012	--	--	--	--	--	0.076 U	0.099 J	--	0.027 J	--	--	--	--	560	--	--	2.8	--	740	--	--	--	--	--
EX36B027A.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	47	--	--	--	--	--	--	--	--	--	--
EX36B027B.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	120 J	--	--	--	--	--	--	--	--	--	--
EX36B056A.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.0	--	--	--	--	--	--	--	--	--
EX36B062A.7.5	7.0-7.5	9/25/2012	--	--	--	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.14 U	8.6 J	2.3	--	0.019	--	23 J	0.00060 U	0.0012 UJ	0.00060 U	--	--
EX36B062B.7.5	7.0-7.5	9/25/2012	--	--	--	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	1.5	43 J	6.4	--	0.14	--	53 J	0.00072 U	0.0014 UJ	0.0011 J	--	--
EX36B063A.7.5	7.0-7.5	9/25/2012	--	--	--	--	--	--	0.029 J	--	--	--	--	--	68 J	7.3	--	0.55	--	--	--	--	--	--	--	--
EX36B063B.7.5	7.0-7.5	9/25/2012	--	--	--	--	--	--	0.039 U	--	--	--	--	--	74 J	3.5	--	0.37	--	--	--	--	--	--	--	--
EX36B078A.2	1.5-2.0	9/5/2012	--	--	--	--	--	--	--	--	--	--	--	--	98	--	--	--	--	--	--	--	--	--	--	--
EX36B105A.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0097 J
EX36B136A.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0068 UJ	--
EX36B136B.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	0.015 J	--	--	--	--	--	--	--	--	--	--	--	--	--	0.110 J	--
EX36B136C.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	0.0010 UJ	--
EX36B138A.2	1.5-2.0	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.270
EX36B180A.2	1.5-2.0	9/5/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	130	--	--	--	--	--	--	--	--	--	0.380
EX36B180B.2	1.5-2.0	9/5/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--	--	--	--	0.0035 UJ
EX36B180C.2	1.5-2.0	9/5/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	34	--	--	--	--	--	--	--	--	--	0.0034 UJ
EX36B208A.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	1.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX36B208B.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	0.360 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX36B208C.2	1.5-2.0	9/25/2012	--	--	--	--	--	--	--	--	0.790 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 1
Soil Analytical Results
Parcel E Soil Excavation Characterization
Hunters Point Naval Shipyard, San Francisco, CA

Location	Sample Depth (ft bgs)	Sample Date	USEPA 8015			USEPA 8270D									USEPA 6010C							USEPA 8081B			USEPA 8082	
			TPHg (C7-C12) (mg/kg)	TPHd (C10 - C24) (mg/kg)	TPHmo (C24 - C36) (mg/kg)	3,3'-Dichlorobenzidine (mg/kg)	Bis (2-Ethyhexyl) phthalate (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Benzo (a) pyrene (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Napthalene (mg/kg)	Arsenic (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Manganese (mg/kg)	Mercury (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)	Alpha-BHC (mg/kg)	Dieldrin (mg/kg)	Heptachlor epoxide (mg/kg)	Aroclor-1254 (mg/kg)	Aroclor-1260 (mg/kg)
PALs (Tier 2 PALs)			**Total TPH = 3,500**			**0.04**	**5.5**	**1.85**	**1.7**	**1.7**	**1.65**	**1.65**	**1.5**	**8.5**	**55.5**	**800**	**775**	**7,155**	**11.4**	**585**	**1,850**	**0.0095**	**0.017**	**0.027**	**0.465**	**1.05**
Redevelopment Block MU-2																										
EX36B015A.2	1.5-2.0	9/4/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	77	--	--	3.1	--	--	--	--	--	--	--
EX36B072A.2	1.5-2.0	9/5/2012	--	--	--	--	--	--	--	--	--	--	--	--	6.9	59	--	--	--	--	--	--	--	--	--	--
EX36B072B.2	1.5-2.0	9/5/2012	--	--	--	--	--	--	--	--	--	--	--	--	7.2	130	--	--	--	--	--	--	--	--	--	--
EX36B072C.2	1.5-2.0	9/5/2012	--	--	--	--	--	--	--	--	--	--	--	--	19	**930**	--	--	3.3	--	--	--	--	--	--	--
EX36B116A.2	1.5-2.0	9/4/2012	--	--	--	--	0.037 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX36B116B.2	1.5-2.0	9/4/2012	--	--	--	--	0.700 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX36B116C.2	1.5-2.0	9/4/2012	--	--	--	--	0.036 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX36B116D.2	1.5-2.0	9/4/2012	--	--	--	--	0.075 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX36B163A.2	1.5-2.0	9/4/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	190	--	--	0.92	--	--	0.0019 UJ	--	--	--	--
EX38SS01A.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	160	--	--	--	--	--	--	--	--	--	--
EX38SS01B.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	54	--	--	--	--	--	--	--	--	--	--
EX38SS01C.2	1.5-2.0	9/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--	--	--	--	--	--
Redevelopment Block MU-3																										
EX04B011A.2	1.5-2.0	9/17/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	68	54 J	--	--	--	--	--	--	--	--	0.033 J
EX04B011B.2	1.5-2.0	9/10/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	150	49	--	--	--	--	--	--	--	--	0.500
EX04B011C.2	1.5-2.0	9/17/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	46	4.5 J	--	--	--	--	--	--	--	--	0.058 J
EX04B012A.7.5	7.0-7.5	9/17/2012	0.024 J	1.6 Y	4.5 J	--	--	--	--	--	--	--	--	--	--	25	2.6 J	--	0.076	--	25 J	--	--	--	--	0.0087 J
EX04B012B.7.5	7.0-7.5	9/17/2012	1.2 Y	5.8 Y	8.8	--	--	--	--	--	--	--	--	--	--	40	5.2 J	--	0.13	--	35 J	--	--	--	--	0.0036 UJ
EX04B034A.2	1.5-2.0	9/19/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0033 UJ
EX04B034B.2	1.5-2.0	9/19/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0034 UJ
EX04B034C.2	1.5-2.0	9/19/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0011 UJ
EX04B034D.2	1.5-2.0	9/19/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0032 UJ
EX12SS02A.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21 J	--	--	--	--	--	--	--	--	--
EX12SS02B.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	34 J	--	--	--	--	--	--	--	--	--
EX12SS02C.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	150 J	--	--	--	--	--	--	--	--	--
EX12SS02D.2	1.5-2.0	9/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	440 J	--	--	--	--	--	--	--	--	--
EX12TA13A.4	3.5-4.0	9/17/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--	--	--	--	--	--
EX12TA13B.4	3.5-4.0	9/17/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	110	--	--	--	--	--	--	--	--	--	--
EX12TA13C.4	3.5-4.0	9/17/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	68	--	--	--	--	--	--	--	--	--	--
EX12TA13D.4	3.5-4.0	9/17/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--	--	--
EX56B021A.2	1.5-2.0	9/10/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	--	--	--	--	--	--
EX56B021B.2	1.5-2.0	9/10/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--
EX56B021C.2	1.5-2.0	9/10/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.044	--	--	--	--	--	--	--
EX72SS23A.2	1.5-2.0	9/10/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	61 J	--	--	--	--	--
EX72SS23B.2	1.5-2.0	9/10/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	49 J	--	--	--	--	--
Railroad ROW																										
EX52B009A.4	3.5-4.0	9/19/2012	--	--	--	--	--	0.250	0.330	0.130 J	0.260	0.063 J	0.200 J	--	--	--	--	--	--	--	--	--	--	--	--	--
EX52B009B.4	3.5-4.0	9/19/2012	--	--	--	--	--	0.022 J	0.052 J	0.016 J	0.030 J	0.034 U	0.027 J	--	--	--	--	--	--	--	--	--	--	--	--	--
EX52B009C.4	3.5-4.0	9/19/2012	--	--	--	--	--	0.130	0.240	0.093	0.210	0.049 J	0.140	--	--	--	--	--	--	--	--	--	--	--	--	--
EX52B009D.4	3.5-4.0	9/19/2012	--	--	--	--	--	0.077	0.200	0.054 J	0.170	0.050 J	0.160	--	--	--	--	--	--	--	--	--	--	--	--	--
EX52SS02A.2	1.5-2.0	9/10/2012	0.014 U	9.9	66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX52SS02B.2	1.5-2.0	9/10/2012	0.017 U	4.0	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX52SS02C.2	1.5-2.0	9/10/2012	0.015 U	2.6	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX52SS06A.2	1.5-2.0	9/10/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	50	31 J	--	--	--	--	--	--	--	--	--
EX52SS06B.2	1.5-2.0	9/10/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	27	53 J	--	--	--	--	--	--	--	--	--

-- = not analyzed or applicable
mg/kg = milligrams per kilogram
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TPHmo = Total Petroleum Hydrocarbons as motor oil
U = Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
J = Indicates an estimated value.
Y = Indicates sample exhibits chromatographic pattern which does not resemble standard.
UJ = Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
* = Analyzed by USEPA Method 8260B
Notes:
1. Bold concentrations indicate detections above their respective PAL.

TABLE 2
QC Analytical Results
Parcel E Soil Excavation Characterization
Hunters Point Naval Shipyard, San Francisco, CA

Location	Sample Date	USEPA 8015			USEPA 8270D									USEPA 6010C								USEPA 8081B			USEPA 8082	
		TPHg (C7-C12)	TPHd (C10 - C24)	TPHmo (C24 - C36)	3,3'-Dichlorobenzidine	Bis (2-Ethyhexyl) phthalate	Benzo (a) anthracene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Napthalene	Arsenic	Cadmium	Copper	Lead	Manganese	Mercury	Vanadium	Zinc	Alpha-BHC	Dieldrin	Heptachlor epoxide	Aroclor-1254	Aroclor-1260
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
FB.09042012	9/4/2012	20 U	16 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	0.10 U	1.3 U	5.0 U	0.03 UJ	0.06 UJ	0.03 U	0.19 UJ	0.19 UJ
EB.09042012	9/4/2012	--	--	--	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	0.10 U	1.3 U	5.0 U	0.03 UJ	0.06 UJ	0.03 U	--	--
EB.09052012	9/5/2012	--	--	--	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	0.10 U	1.3 U	5.0 U	--	--	--	0.19 UJ	0.19 UJ
EB.09062012	9/6/2012	--	--	--	2.4 U	3.2 J	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	0.20 U	1.3 U	5.0 U	--	--	--	0.20 UJ	0.20 UJ
EB.09072012	9/7/2012	11 J	26 U	100 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.6 J	1.3 U	5.0 U	1.3 U	5.0 U	0.20 U	1.3 U	2.7 J	--	--	--	0.19 UJ	0.19 UJ
Trip Blank	9/7/2012	11 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB.09102012	9/10/2012	20 U	12 U	100 U	--	--	--	--	--	--	--	--	--	5.0 U	1.3 U	5.0 U	5.0 U	1.3 U	0.20 U	1.3 U	3.1 J	--	--	--	0.20 UJ	0.20 UJ
Trip Blank	9/10/2012	13 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB.09112012	9/11/2012	14 J	19 U	100 U	4.7 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	5.0 U	1.3 U	5.0 U	5.0 U	0.72 J	0.20 U	1.3 U	5.0 U	--	--	--	0.19 UJ	0.19 UJ
Trip Blank	9/11/2012	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB.09122012	9/12/2012	--	--	--	4.8 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	5.0 U	1.3 U	5.0 U	5.0 U	1.3 U	0.10 U	1.3 U	5.0 U	--	--	--	0.19 U	0.19 U
EB.09132012	9/13/2012	12 J	26 U	100 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	0.10 U	1.3 U	2.5 U	--	--	--	0.19 U	0.19 U
Trip Blank	9/13/2012	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB.09172012	9/17/2012	15 U	17 U	100 U	--	--	--	--	--	--	--	--	--	--	--	5.0 U	5.0 U	--	0.10 U	--	5.0 U	--	--	--	--	0.19 U
Trip Blank	9/17/2012	17 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB.09182012	9/18/2012	11 U	--	--	--	--	--	--	--	--	--	--	--	1.8 UJ	1.3 UJ	5.0 UJ	1.3 U	5.0 U	0.10 U	1.3 UJ	5.0 U	--	--	--	0.19 UJ	0.19 UJ
Trip Blank	9/18/2012	15 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB.09192012	9/19/2012	20 U	--	--	2.3 U	18	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	0.10 U	0.89 J	5.0 U	--	--	--	0.20 UJ	0.20 UJ
Trip Blank	9/19/2012	20 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB.09252012	9/25/2012	16 U	18 U	100 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	5.0 U	1.3 U	5.0 U	5.0 U	1.3 U	0.28	1.3 U	5.0 U	0.01 U	0.03 U	0.01 U	0.19 UJ	0.19 UJ
Trip Blank	9/25/2012	18 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB.09262012	9/26/2012	21 U	19 U	100 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 U	1.3 U	5.0 U	5.0 U	0.17 J	0.20 U	1.3 U	5.0 U	0.02 U	0.03 U	0.02 U	0.19 UJ	0.19 U J
Trip Blank	9/26/2012	14 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB.09272012	9/27/2012	--	--	--	2.3 U	4.7 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 U	1.3 U	5.0 U	3.1 J	5.0 U	0.20 U	1.3 U	5.0 U	--	--	--	0.19 U	0.19 U
EB.10092012	10/9/2012	14 U	46 U	110 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	5.0 U	5.0 U	0.17 J	0.20 U	1.3 U	2.4 U	--	--	--	--	--
Trip Blank	10/9/2012	15 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB.10102012	10/10/2012	17 U	18 U	98 U	--	--	--	--	--	--	--	--	--	5.0 U	1.3 U	5.0 U	5.0 U	1.3 U	0.055 U	58	2.4 U	--	--	--	0.19 UJ	0.19 UJ
Trip Blank	10/10/2012	17 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB.10082012	10/8/2012	13 U	22 U	100 U	2.3 U	4.7 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	5.0 U	1.3 U	5.0 U	5.0 U	0.49 U	0.10 U	1.3 U	5.8 U	--	--	--	0.19 UJ	0.19 UJ
Trip Blank	10/8/2012	13 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

FB = Field/Source blank
EB = Equipment/Rinsate blank
-- = not analyzed or applicable
µg/L = micrograms per Liter
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TPHmo = Total Petroleum Hydrocarbons as motor oil
U = Not Detected at or above the Detection Limit
J = Estimated Value
* = Analyzed by USEPA Method 8260B

TABLE 3
Proposed Excavation Areas
Parcel E Soil Excavation Characterization
Hunters Point Naval Shipyard, San Francisco, CA

Excavation Area Name	Delineated Depth (ft bgs)	Excavation Depth (ft bgs)	Oringinal Excavation Area (Square ft)*	Revised Excavation Area (Square ft)	Original Excavation Volume (Cubic Yards)*	Revised Excavation Volume (Cubic Yards)
Redevelopment Block EOS-1						
EX02B122	8.8	10	3,140	15,278	1,163	5,660
EX02B122B	7.5	10	NA	16,890	NA	6,256
EX02B250	7.5	10	400	400	148	148
EX02B256	4.0	5.0	237	237	44	44
EX02B288	4.0	5.0	3,058	3,919	566	726
EX02B412	7.5	10	3,102	3,102	1,149	1,149
EX02B428	2.0	3.0	618	618	69	69
EX02B442	7.5	10	400	400	148	148
EX02B456	7.5	10	3,750	3,750	1,389	1,389
EX02B524	7.5	10	3,596	3,596	1,332	1,332
EX02B525	2.0	3.0	1,600	1,600	178	178
EX02GR71SW	2.0	3.0	70	70	7.8	7.8
EX02GR73SW	7.5	10	822	6,449	304	2,389
EX02GR93SW	7.5	10	914	1,309	339	485
EX02GR117SW	7.5	10	928	928	344	344
EX02GR131SW	7.5	10	116	116	43	43
EX02GR132BT	2.0	3.0	193	740	21	82
EX02GR179SW	7.5	10	924	924	342	342
EX02GR184SW	7.5	10	1,009	1,009	374	374
EX02SS310	2.0	3.0	366	366	41	41
EX02TA16A	7.5	10	400	400	148	148
Redevelopment Block EOS-2						
EX02B100	2.0	3.0	1,600	1,991	178	221
EX02B398	2.0	3.0	1,600	1,600	178	178
EX02B401	2.0	3.0	3,891	8,135	432	904
EX02B403	2.0	3.0	1,526	1,526	170	170
EX02B405	7.5	10	400	400	148	148
EX02B415	2.0	3.0	7,513	7,513	835	835

TABLE 3
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Parcel E Soil Excavation Characterization
Hunters Point Naval Shipyard, San Francisco, CA

Excavation Area Name	Delineated Depth (ft bgs)	Excavation Depth (ft bgs)	Oringinal Excavation Area (Square ft)*	Revised Excavation Area (Square ft)	Original Excavation Volume (Cubic Yards)*	Revised Excavation Volume (Cubic Yards)
EX02B461	2.0	3.0	1,449	1,449	161	161
EX02MW149	2.0	3.0	1,513	1,513	168	168
EX02S320	2.0	3.0	1,600	1,600	178	178
Redevelopment Block EOS-3						
EX02B098D	2.0	3.0	400	1,674	44	186
EX02TA40B	2.0	3.0	1,600	1,600	178	178
EX02MW146	7.5	10	400	755	148	280
EX02MW173A	7.5	10	400	400	148	148
EX02GP002	7.5	10	400	400	148	148
EX02GP008	7.5	10	294	294	109	109
EX02GP016A	7.5	10	400	761	148	282
EX02GP038	7.5	10	709	709	263	263
EX02GP040	7.5	10	4,457	5,306	1,651	1,965
EX02GP050	7.5	10	400	400	148	148
EX02GP051A	7.5	10	400	400	148	148
EX03B220	2.0	3.0	400	400	44	44
EX03B343	2.0	3.0	400	858	44	95
EX03B344	2.0	3.0	400	516	44	57
EX03B345	2.0	3.0	400	400	44	44
EX03B367	2.0	3.0	400	1,614	44	179
EX03SS368	2.0	3.0	1,600	1,600	178	178
Redevelopment Block EOS-4						
EX02B184	1.75	3.0	400	400	44	44
EX02B355	2.0	3.0	212	212	24	24
EX02B369	2.0	3.0	2,783	2,783	309	309
EX02B464	2.0	3.0	5,481	5,481	609	609
EX02B468	2.0	3.0	400	400	44	44
EX02B493	2.0	3.0	751	751	83	83
EX02B497	3.0	3.0	2,637	2,637	293	293

TABLE 3
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Parcel E Soil Excavation Characterization
Hunters Point Naval Shipyard, San Francisco, CA

Excavation Area Name	Delineated Depth (ft bgs)	Excavation Depth (ft bgs)	Oringinal Excavation Area (Square ft)*	Revised Excavation Area (Square ft)	Original Excavation Volume (Cubic Yards)*	Revised Excavation Volume (Cubic Yards)
EX02B505	2.0	3.0	1,600	1,600	178	178
EX02B506	2.0	3.0	400	400	44	44
EX02G105	2.0	3.0	1,874	1,874	208	208
EX02GR93SW	2.0	3.0	2,053	2,053	228	228
EX11SS022	2.0	3.0	290	290	32	32
EX11B023	2.0	3.0	558	558	62	62
EX11B024	2.0	3.0	288	503	32	56
EX15B027	2.0	3.0	1,600	2,214	178	246
EX15B040	3.0	3.0	1,600	1,600	178	178
EX380803	2.0	3.0	745	745	83	83
Redevelopment Block MU-1						
EX01SS349	2.0	3.0	1,600	1,600	178	178
EX05B094	2.0	3.0	2,399	3,071	267	341
EX05B104	2.0	3.0	6,409	8,558	712	951
EX05MW85A	4.0	5.0	6,409	6,418	1,187	1,189
EX12MW17A	7.5	10	1,600	1,600	593	593
EX12MW18A	7.5	10	1,600	1,600	593	593
EX12SS16	2.0	3.0	1,743	1,743	194	194
EX12SS17	2.0	3.0	1,279	1,279	142	142
EX12SS18	2.0	3.0	400	400	44	44
EX12TA08	8.8	10	1,600	1,600	593	593
EX12TA10	2.0	3.0	1,600	2,429	178	270
EX13B003B	2.0	3.0	1,797	1,769	200	197
EX13B004	2.0	3.0	1,167	1,167	130	130
EX13B007	2.0	3.0	1,600	1,600	178	178
EX13B010	3.0	3.0	1,600	1,600	178	178
EX13B021	2.0	3.0	800	1,332	89	148
EX13B023	2.0	3.0	3,194	3,194	355	355
EX36B027	2.0	3.0	1,334	1,334	148	148

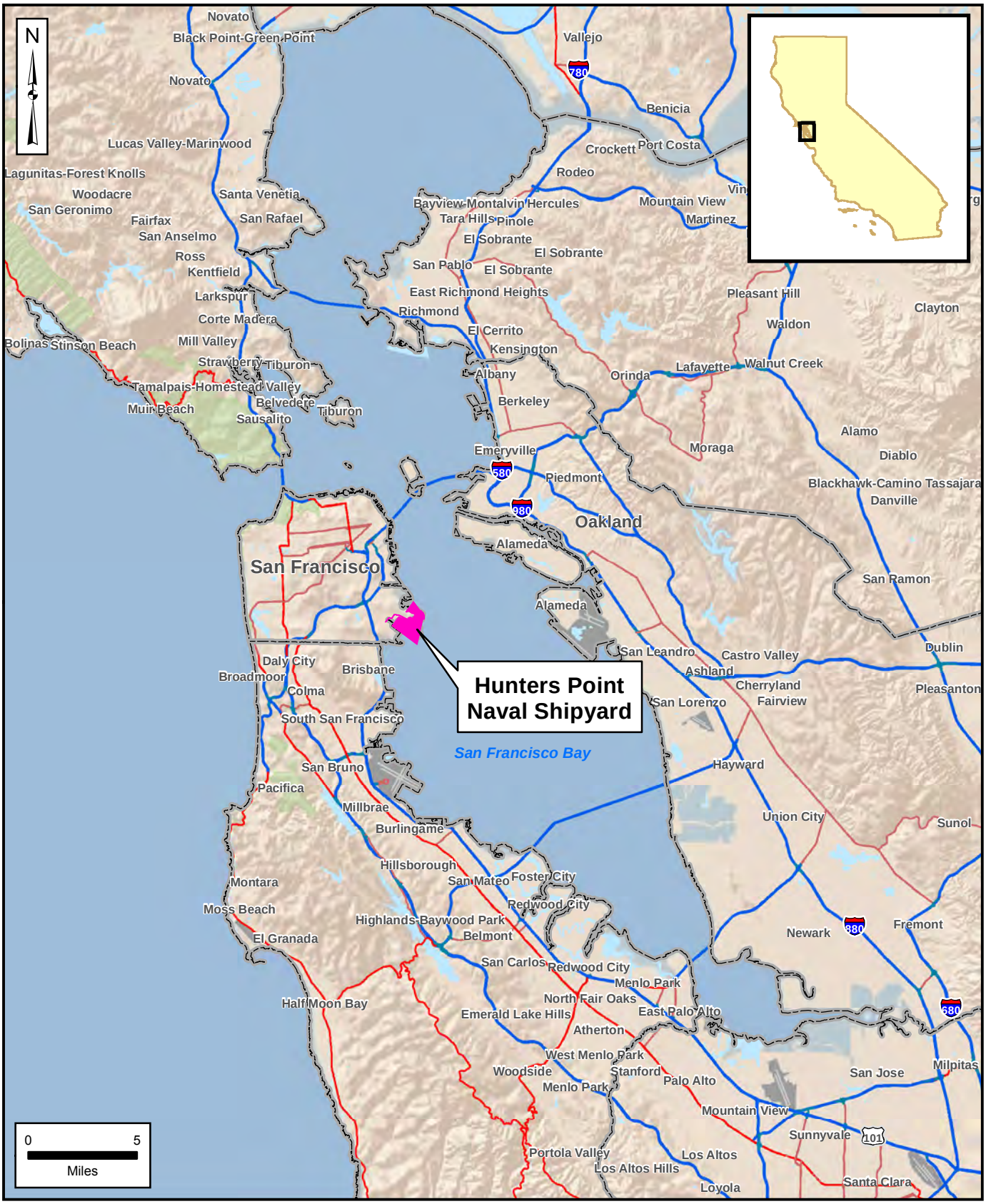
TABLE 3
Proposed Excavation Areas
Parcel E Soil Excavation Characterization
Hunters Point Naval Shipyard, San Francisco, CA

Excavation Area Name	Delineated Depth (ft bgs)	Excavation Depth (ft bgs)	Oringinal Excavation Area (Square ft)*	Revised Excavation Area (Square ft)	Original Excavation Volume (Cubic Yards)*	Revised Excavation Volume (Cubic Yards)
EX36B056	2.0	3.0	400	400	44	44
EX36B062	7.5	10	2,399	2,399	889	889
EX36B063	7.5	10	1,600	1,600	593	593
EX36B078	2.0	3.0	400	400	44	44
EX36B105	2.0	3.0	400	400	44	44
EX36B136	2.0	3.0	400	400	44	44
EX36B138	2.0	3.0	1,600	1,600	178	178
EX36B180	2.0	3.0	3,069	3,069	341	341
EX36B208	2.0	3.0	400	400	44	44
Redevelopment Block MU-2						
EX14SS05	0.5	3.0	1,600	1,600	178	178
EX36B015	2.0	3.0	1,600	1,600	178	178
EX36B072	2.0	3.0	2,505	2,505	278	278
EX36B116	2.0	3.0	1,600	1,600	178	178
EX36B162	10	10	1,524	2,510	564	930
EX36B163	2.0	3.0	400	400	44	44
EX38SS01	2.0	3.0	352	352	39	39
Redevelopment Block MU-3						
EX04B011	2.0	3.0	5,540	5,540	616	616
EX04B012	7.5	10	1,600	1,600	593	593
EX04B034	2.0	3.0	400	400	44	44
EX12SS02	2.0	3.0	400	400	44	44
EX12TA13	4.0	5.0	1,600	1,600	296	296
EX56B021	2.0	3.0	400	400	44	44
EX72SS23	2.0	3.0	702	702	78	78
Railroad Right of Way						
EX52B009	4.0	5.0	1,103	1,103	204	204
EX52SS02	2.0	3.0	694	694	77	77

TABLE 3
Proposed Excavation Areas
Parcel E Soil Excavation Characterization
Hunters Point Naval Shipyard, San Francisco, CA

Excavation Area Name	Delineated Depth (ft bgs)	Excavation Depth (ft bgs)	Oringinal Excavation Area (Square ft)*	Revised Excavation Area (Square ft)	Original Excavation Volume (Cubic Yards)*	Revised Excavation Volume (Cubic Yards)
EX52SS06	2.0	3.0	1,097	1,097	122	122
Total Excavation areas and volumes			**155,783**	**207,481**	**28,515**	**44,075**

ft bgs - feet below ground surface
*The oringal volumes and areas as presented in the Draft Final Feasibiity Study Report for Parcel E (ERRG, 2011)
NA - Not applicable



Date: 3/22/2012

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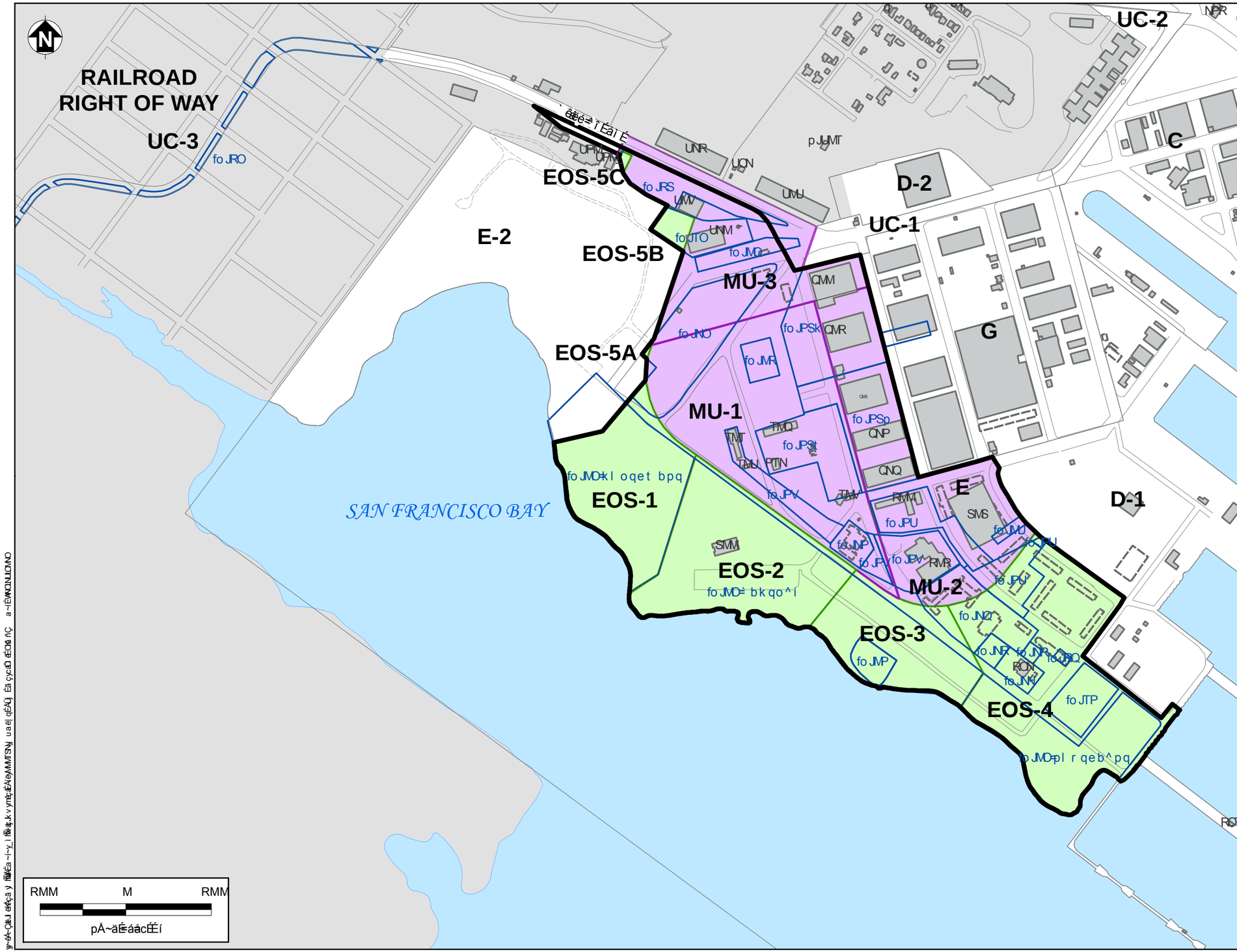
Hunters Point Naval Shipyard
San Francisco, California

FIGURE 1

Hunters Point Naval Shipyard
Vicinity Map



LEGEND

m~êÅÉäb=

l íÜÉêe=mp=m~êÅÉäë

fo=páÉ=_çìåÇ~êó

oç~Ç

bñáëáåÖ=ìáäÇáåÖ

aÉã çäáëÉÇ=ìáäÇáåÖ

kçåJk~î ó=mêçéÉëí

Parcel E Reuse Areas and Redevelopment Blocks

j áíÉÇ=ëÉ

l éÉå=pé~ÅÉ

Notes:

o ÉÑÉëÉåÅÉ Wp~å=ê-åÅëÅç=o ÉÇÉî Éäçéã Éåí=^ ÖÉåÅól=QMNMK
"e ì åíÉëë=mçáåí=p Üáëó~êÇ=o ÉÇÉî Éäçéã Éåí=mä-åK=` áó=-åÇ
` çì åíó=çÑp~å=ê-åÅëÅçK^ ì Öì ëí=PK

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Hunters Point Naval Shipyard, San Francisco, California

r kpKa Éé~ëã Éåí=çÑëÜÉ=k ~î ól=_o^` =mj l =t Éëíl=p~å=a ÉÖçl= ~ãÑçéåá

FIGURE 2

REUSE AREAS, REDEVELOPMENT BLOCKS AND IR SITES AT PARCEL E

qÉÅÜåáÅ~ãj Éã çê-åÇ ã

LEGEND

Notes:

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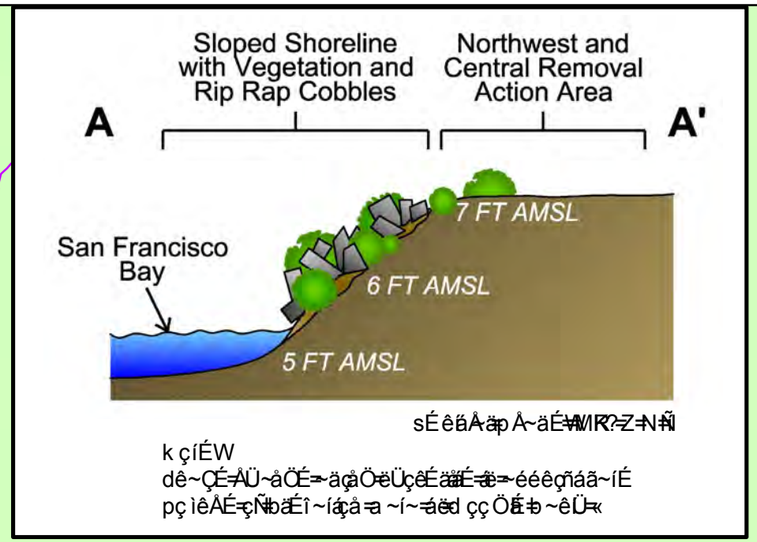
Hunters Point Naval Shipyard, San Francisco, California

FIGURE 3

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK EOS-1 (NORTH)

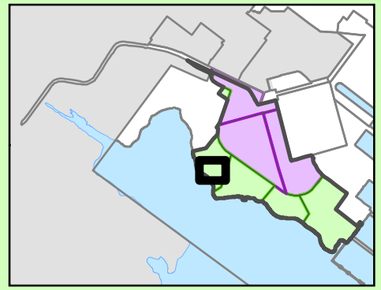


sÉêßÅ·äpÅ~äÉ÷WIR?÷Z÷N÷Ñ

k çíÉW
dê~ÇÉ÷ÁÜ~åÖÉ÷»äçåÖ»ëÜçêÉäæÉ÷æ»éêêçñáã~íÉ
pç ìêÁÉ÷çÑÞäÉÎ~íáçå·a ~í~÷áëd çç ÖßÉ÷Þ~êÛ÷«

EX02GR93SW
- ` çéëÉêÉ÷ENSIMVMF÷ É~Ç÷ENRIMVMFI qme÷ELIRVMF
- a ÉæäÉ~íÉÇ÷a ÉéíÜ÷çÑ÷ I ` ëVATKR÷ÑÑ÷ÄÖë

buMOdloVPpt ^O
buMOdloVPpt ^N
buMOdloVPpt ^
buMOdloVPpt _
foMO_CRO^



buMO_QQQ^
buMO_QQQ_
buMO_QQQa
buMO_QQQ^

EX02B442
- ^êçÅäçêJKDRSM
- a ÉæäÉ~íÉÇ÷a ÉéíÜ÷çÑ÷ I ` ëVATKR÷ÑÑ÷ÄÖë

EX02GR184SW
- ^êçÅäçêJKDRQ÷EVQMF
- a ÉæäÉ~íÉÇ÷a ÉéíÜ÷çÑ÷ I ` ëVATKR÷ÑÑ÷ÄÖë

buMOdloNUQpt ^
buMOdloNUQpt _
buMOppPNM^
buMOppPNM_
foMOppPNO
buMOdloNTVpt ^
buMOdloNTVpt _

A
A'

NORTHWEST AND CENTRAL REMOVAL ACTION AREA
- bñÑ~î ~íÉÇ÷í÷ç»÷ã ~ñäì ã ÷ÇÉéíÜ÷çÑ÷ ~éëêçñäã ~íÉæ÷NNHÑÑ÷ÄÖë

EX02SS310
- i É~Ç
- a ÉæäÉ~íÉÇ÷a ÉéíÜ÷çÑ÷ I ` ëVAOHÑÑ÷ÄÖë

IR-02 NORTHWEST

EX02GR179SW
- ` çéëÉêÉ÷ESSIMVMF÷wäÅ÷ETSIMVMF
- a ÉæäÉ~íÉÇ÷a ÉéíÜ÷çÑ÷ I ` ëVATKR÷ÑÑ÷ÄÖë

7 FT AMSL
6 FT AMSL
5 FT AMSL

EX02B256
- ` çéëÉêÉ÷EURPVF÷ É~Ç÷ENISVTFI wäÅ÷ENRIUTSF
- a ÉæäÉ~íÉÇ÷a ÉéíÜ÷çÑ÷ I ` ëVAOHÑÑ÷ÄÖë

buMO_ORS_
buMO_ORS^

N÷äÁÜ÷Z÷QR÷ÑÉÉí

QR M QR
pÅ~äÉ÷»ä÷cÉÉÍ

LEGEND

- a ÉíÉÁÉÇ÷ëçæäÅçåÁÉåíê~íáçå÷ÑÇëçåÉ÷çêã çÉ÷ I ` F÷äë ÖßÉ~íÉê÷Ü~å÷çêÉèì ~äíç÷NMH÷ã Éë÷ÜÉ÷o d ÷ÉqÆêê÷N÷ çÅ~íáçåF
- a ÉíÉÁÉÇ÷ëçæäÅçåÁÉåíê~íáçå÷ÑÇëçåÉ÷çêã çÉ÷ I ` F÷äë ÖßÉ~íÉê÷Ü~å÷çêÉèì ~äíç÷R÷ã Éë÷ÜÉ÷o d ÷ÉqÆêê÷O÷ çÅ~íáçåF
- a ÉíÉÁÉÇ÷ëçæäÅçåÁÉåíê~íáçåë÷Ñçê~æë I ` ë»÷êÉ ÖßÉ~íÉê÷Ü~å÷ÜÉ÷o d ÷Åì í÷ÆëëÜ~å÷R÷ã Éë÷ÜÉ÷o d
- _ çêäÖ÷ çÅ~íáçå÷Ñçã = ì êßÉåí÷fåîÉ ëíáÐ~íáçå Ëçì íäæÉÇ÷ã÷Åå÷ÅåF
- pçæäÅçåÁÉåíê~íáçå÷ë÷NMH÷ã Éë÷ÜÉ÷ëÉÆÉÅíÉÇ÷ ~Åáçå÷ëÉì ÉÆGG
- mêçéçëÉÇ÷ëçæäÄçêäÖ÷çÅ~íáçå÷íÜ~í÷ ~ë ãä~ÅÅÉëëåÆÉ
- mêçéçëÉÇ÷Þ ñÅ÷î ~íáçå÷çÑ÷qÉêN÷ çÅ~íáçål»÷åÇ\çê ~÷çÅ~íáçå÷íÜ~í÷ë÷ÖßÉ~íÉê÷Ü~å÷ÜÉ÷qme÷ëçì êÁÉ ÅêäÉêçåG
- mêçéçëÉÇ÷Þ ñÅ÷î ~íáçå÷çÑ÷qÉêN÷ çÅ~íáçå=
- mêçéçëÉÇ÷Þ ñÅ÷î ~íáçå÷» ëÉ~÷Ëj çÇÅ÷ÑÇF Ëêæ÷Éë»÷ëÉ÷Ç~ëÜÉÇ÷í÷ç÷ëÜçï ÷ì åÁÉëë~äíóF
- o Éã çî~ æ» Åíáçå÷» ëÉ~÷GGG
- p~â÷c÷ê÷åÅëÅç÷o ÉÇÉï Éæéëã Éãí÷» ÖÉåÁó÷OMNMK
- pÜçëÉæäÉ÷» ëÉ~
- fo÷påÉ=_çì åÇ~êó
- m~êÁÉæb÷=_çì åÇ~êó
- mëÉï áçì ë÷qëÉåÁÜÞ ñÅ÷î ~íáçå÷» ëÉ~
- j ì äáæ÷ ëÉ÷o Éì ëÉ
- bÉÉï~ íáçå÷» çåíçì ê
- I éÉå÷pé~ÁÉ÷o Éì ëÉ

Notes:

ËTISMVF÷Z÷d ëÉ~íÉëí÷ I ` ÷ÅçÁÉåíê~íáçå÷ì áÜäã÷qÆêÑNÉñÁ~î ~íáçå÷»ëÉ~K ═══════r åáë÷»ëÉ÷ã äæÖê~ã ë÷ëÉêëëäçÖê~ã ÷Êã ÜäÖÎK

` I ` ÷Z÷ÁÜÉã åÁ~äçÑÁçåÁÉêëã
çq÷»j pí ÷Z÷ÑÉÉí÷»ÅçÎ Éëã É~â÷ëÉ~ëÉí Éã
ÑÁÖë÷Z÷ÑÉÉí÷ÁÉçï ÷Ößçì åÇ÷ëì ëÑÁÉ
fo ÷Z÷ëëí~äë÷íáçå÷ëÉëíçê~íáçå
mì _ ÷Z÷ëçæÁÅçëëã ~íÉÇ÷ÅëÜÉÁóã
mp ` ÷Z÷ëëçÍÉÁíá É÷ëçæäÅçåÁÉåíê~íáçå
o d ÷Z÷ëÉã ÉÇå÷íáçå÷Öç~ã
qme÷Z÷íç~äëÉíëçÆì ã ÷ÜëÇëçÅ~ëÅçå

GëZ÷PIRMVMã ÖÜåÖ÷Þ Ü~ï ÷Þ·âî ãçåãã Éáí~ã÷fáÅÅ÷OMMTF

GßëZ÷pçæë÷ÁÉíï ÉÉÉá÷P»÷åÇ÷NMÑÉÉí÷ÁÖë÷ï ÉëÉ÷Éì ~ã ~íÉÇ÷íç÷ÇÉíÉëã åÉ÷ï ÜÉëÉ ÉñÁ~î ~íáçåë÷çÑqÉëN÷íáçåëëã åÜÜì÷ëÉÇ ÅÉ÷ÜÉ÷ëç÷ÍÉáíá~äÑÉëÖçì åÇ ~íÉè Åçáí~ã åã~íáçåÑçæÅçåÁÉåíê~íáçåë÷Ñçëã Éï~æ÷ëÑçéëÉëí÷ëÉ~Çí÷ëåÁÉåã»åÇ÷ëãåF ï ÉëÉ»åçã é~ëÉÇ÷íç÷NMH÷ã Éë÷ÜÉ÷mp ` ÷ï ~ã Éë»÷åÇ÷ëç»åÇçÁÉåíê~íáçåë÷Ñçëm ` _ é ï ÉëÉ»åçã é~ëÉÇ÷íç÷NMH÷ã Éë÷ÜÉ÷ë÷ÁÉ~íáçå~æëçåÆëëíáçåÑ÷ñÁ~î ~íáçåë÷ï ÉëÉ ÇÉæäÉ~íÉÇ»÷ëçì åÇ»ë÷ë÷ï ÜÉëÉ÷ÜÉëÉ÷ÁëíÉëå÷ï ÉëÉ÷ÉñÁÉÉÇÉÇÇK

GßëZ÷qÜÉ÷ÞñÁ~î ~íáçå÷ë ëÉ~÷ëæëëqÇÉ÷çÑÜÉ÷k çëÜí Éëí»÷åÇ÷ Éáíê~æo Éã çî ~ã ^ Áíáçå÷ë ëÉ~÷ï ÉëÉ»÷ÇÇëÉëëÉÇ÷Çí ëëÖ÷»ëÉé÷ë~íÉ÷ëÉã ÉÇ÷å»÷Áíáçåk

oÉÑëÉëåÁÉëW

p~â÷c÷ê÷åÅëÅç÷o ÉÇÉï Éæéëã Éãí÷ë ÖÉåÁó÷OMNMK
"e ì áíÉëë÷mçåí÷pÜëé○~ëÇ÷o ÉÇÉï Éæéëã Éãí÷më÷åÍK
` áó÷»åÇ÷ çì åíó÷çÑq~â÷c÷ê÷åÅëÅçK⁶ ì Öí ëí÷PK

bâÖëãÉÉëëãÖo Éã ÉÇå÷íáçå÷o Éëçì ëÁÉé÷ì ëçì ëí÷fåÁK÷OMNMK÷
"a ê~Ñ÷c ë~ãc É~ëëÁëëó÷pí Ç○÷Ñçêm~ëÁÉëëb÷e ì áíÉëë÷mçåí÷p Ü¥ëó~ëÇ
p~â÷c÷ê÷åÅëÅç÷ì ~ãÑçëëá÷"Kgì ãÖK

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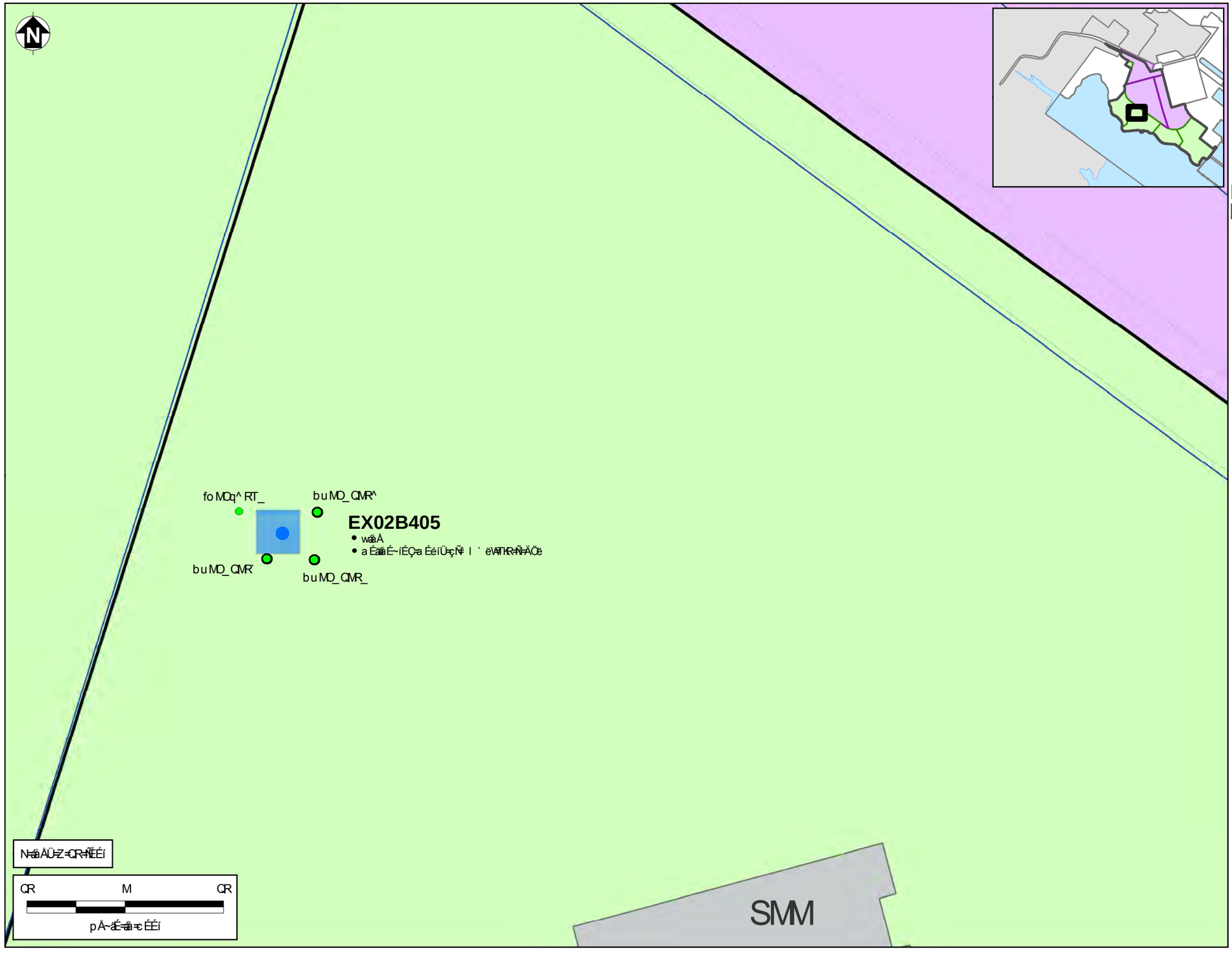
r kpK÷a Éé~ëëã Éáíç÷ÑÜÉÉ÷k ~î ól=_o ^ ` ÷mj I ÷t Éëíí÷p~â÷a ÆÇÇçì÷ ~ãÑçëëá÷

FIGURE 4

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK EOS-1 (SOUTH)

qÉÁÜëëÁ~ãj Éãí çê~âÇçì ã

yw÷ÁÅ~ÇëëJ ëÁÇçã y ÑÑÁÉçã ~í~¿ I ÑÑáçåk v ymçÆëÁëÝMMTSNy ua ëì qÉÁÜj Éãí çÇçÐJ ëÉÇJ bl p.N pçíJ íÜëñÇ a~íÉÑMNNSLONAP



LEGEND

- a ÉÍÉÁÆÉÇ=èçáæÅçàÅÉáÍê~íáçâ=ÐÑçêçâÉ=çêã çÆÉ= l ` F=æ ÖØÉ~íÉê¤Ü~â=çêÉèì ~ãíç=NMH¤ã ÉëH¤ÜÉ=o d =ÐqÆÉê¤N¤ çÁ~íáçâF
- a ÉÍÉÁÆÉÇ=èçáæÅçàÅÉáÍê~íáçâ=ÐÑçêçâÉ=çêã çÆÉ= l ` F=æ ÖØÉ~íÉê¤Ü~â=çêÉèì ~ãíç=R¤ã Éë¤ÜÉ=o d =ÐqÆÉê¤O¤ çÁ~íáçâF
- a ÉÍÉÁÆÉÇ=èçáæÅçàÅÉáÍê~íáçâë=ÑqêÞ=æ= l ` ë=ÞÉ ÖØÉ~íÉê¤Ü~å=¤ÜÉ=o d =Ài í=ÆÉëë¤Ü~å=R¤ã Éë¤ÜÉ=o d
- _ çêãÖ¤ çÁ~íáçâ=Ñçã = ì ëÉÁí=fåîÉ ëíáÐ~íáçâ Ðçì íãæÉÇ=ã=Áã-ÅãF
- mêçéçëÉÇÞ ñÅ~î ~íáçâ=çÑqÆÉê¤O¤ çÁ~íáçå=
- o ç~Ç
- _ ì ãÇçãÖ
- fo=þáÉ=_ çì åÇ~ëó
- m~êÁÉæb =_ çì åÇ~ëó
- j ì ãáær ëÉ=o Éì ëÉ
- l éÉâ=þ é~ÁÉ=o Éì ëÉ

Notes:

^l ` =Z=÷ëÉ~÷çÑÁçâÁÉëã
ÄÖë=Z=ÁÉâçï =Ôêçì åÇ=ëì ëÑ¤ÁÉ
` l ` =Z=ÁÜÉã á~â=âçÑÁçâÁÉëã
Ñ¤ÁÖë=Z=ñÉÉí=ÁÉâçï =Ôêçì åÇ=ëì ëÑ¤ÁÉ
fo=Z=ãëë¦~æ¤íáçâ=ëÉëíçê~íáçâ
m` _=Z=éçäöÁÜæêãã~íÉÇ=Á¤ÜÉáóã
mp ` =Z=éêçíÉÁíáÉ=èçæÅçàÅÉáíê~íáçâ
o d =Z=ëÉã ÉÇâ¤íáçâ=Ôç~â
qme=Z=íçí~æéÉíêçÆÉì ã =Ü¦ÓÇêçÅ~ëÁçâ

o ÉÑÉëÉáÁÉÁþ ~â¤ê~âÁæÅç=o ÉÇÉì Éæçéã Éáí=^ ÖÉáÅóI=ÓMNMK
"e ì áíÉëë=mçáí=þ Üëéó~ëÇ=o ÉÇÉì Éæçéã Éáí=mâ-áK= áó=¤âÇ
` çì åíó=çÑqÞ~â¤ê~âÁæÅçK^ ì Ôì ëí=PK

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r kpKa Éé~ëã Éáí=çÑÜÜÉ¤k ~î óI=_o ^ ` =mj l =t Éëíl=þ~â¤ãÉÔçl= ~ãÇçëâ-

FIGURE 5

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK EOS-2 (NORTH)

qÉÁÜäáÁ~ãj Éã çê~âÇçã

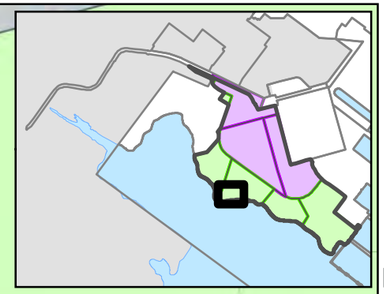
N=ëãÁÜ=Z=ÇR=ÑÉÉí

QR M QR

pÅ~ãÉ=ëã¤c ÉÉí

a~íÉ¤Ñ¤NSÇÖ¤Ñ¦P
ua ëj qÉÑÜj Éã çycãÖ ëÉR bl p.Çj k çëÜÖ¤ ñÇ
yv éÅ~Çæu ëíKçã y ÑëÑ¤Éa ~í~y_l ÑëÑ¤ãçk v ymÇçÉÁëyMMMTSNy

IR-02 CENTRAL



EX02B398

- i É~Ç÷EŒPMVF
- a ÉëâÉ~íÉÇ¬a ÉéíÜ÷ç№÷ l ` ëVAO÷Ñ÷ÄÖë

EX02B461

- _ÉåòçE÷FéóêÊâÉ÷ERKNF⊨_ÉåòçEÆÑâÜçê~âíÜÉåÉ÷EINF
- a ÉëâÉ~íÉÇ¬a ÉéíÜ÷ç№÷ l ` ëVAO÷Ñ÷ÄÖë

EX02B415

- ^êçÅåçêJNŒSMHEŒRF⊨ É~Ç÷EŒPMVF⊨^êëÉåáÅ÷EURKPF
- a ÉëâÉ~íÉÇ¬a ÉéíÜ÷ç№÷ l ` ëVAO÷Ñ÷ÄÖë

EX02MW149

- _ÉåòçE÷FéóêÊâÉÍ÷^êëÉåáÑ÷ É~Ç
- a ÉëâÉ~íÉÇ¬a ÉéíÜ÷ç№÷ l ` ëVAO÷Ñ÷ÄÖë

EX02S320

- ^êçÅåçêJNŒSMHEŒRF⊨_ÉåòçE÷FéóêÊâÉ÷ERKNF⊨_ÉåòçEÆÑâ çê~âíÜÉåÉ÷EIRTF
- a ÉëâÉ~íÉÇ¬a ÉéíÜ÷ç№÷ l ` ëVAO÷Ñ÷ÄÖë

fo MO_QMS
buMO_PVU^
buMO_PVU_
fo MO_QRP
fo MO_QNV
fo MOpp PNT
fo MOpp PNU
buMO_QNR^
buMO_QNR^N
buMO_QNR'
buMO_QNR_
fo MO_QNP
fo MO_QMU
fo MO_QNM
fo MOpp PNV
buMOpp PQM^
buMOj t NQV^
buMOj t NQV_
buMOj t NQV'
buMOj t NQVa
buMOj t NQVc
buMOj t NQVb
buMO_QSN^
buMO_QSN'
buMO_QSN_
buMO_QSNa

N÷âåÅÜ÷Z÷¤QR÷ÑÊÉí

QR M QR

pÅ~âÉ÷åë÷¤ ÉÉí

LEGEND

- a ÉíÉÅÆÉÇ÷ëçæâÅçåÅÉåíê~íáçå÷ÐÑçêçåÉ÷çêåã çÉ≈ l ` F÷æè ÖëÉ~íÉê÷íÜ~å÷çêÉÉèì ~æíç÷NMH÷ãã ÉëÉ÷ÜÉ÷¤ d ÷ÐqÆêê÷N÷ çÅ~íáçåF
- a ÉíÉÅÆÉÇ÷ëçæâÅçåÅÉåíê~íáçå÷ÐÑçêçåÉ÷çêåã çÉ≈ l ` F÷æè ÖëÉ~íÉê÷íÜ~å÷çêÉÉèì ~æíç÷R÷ãã ÉëÉ÷ÜÉ÷¤ d ÷ÐqÆêê÷O÷ çÅ~íáçåF
- a ÉíÉÅÆÉÇ÷ëçæâÅçåÅÉåíê~íáçåë÷Ñçê÷¤æ÷ l ` ë÷¤æÉ ÖëÉ~íÉê÷íÜ~å÷ÜÉ÷¤ d ÷Ài í÷ÆëëëÉÜ~å÷R÷ãã ÉëÉ÷ÜÉ÷¤ d
- _çêãâÖ÷ çÅ~íáçå÷Ñçã ≈ ì ëëÉåí÷fåîÉ ëíáÕ~íáçå ÐçÌ íæãÉÇ÷æã÷ÅåÅåF
- mêçéçëÉÇ÷ëçæâÅçêãâÖ÷æçÅ~íáçå÷íÜ~í÷ ~ë åã~ÅÅÉëëÆåÉ
- mêçéçëÉÇ÷Þñ Å~î ~íáçå÷çÑqÆêê÷N÷ çÅ~íáçåI¤÷åÇIçê ~÷æçÅ~íáçå÷íÜ~í÷ëê÷ÖëÉ~íÉê÷íÜ~å÷íÜÉ÷qme÷ëçì ëÅÉ ÅëãÉêæçåG
- mêçéçëÉÇ÷Þñ Å~î ~íáçå÷çÑqÆêê÷O÷ çÅ~íáçå=
- mêçéçëÉÇ÷Þñ Å~î~ íáçå≈ ëÉ~÷ç ÇÇãÉÇF ÐãëÉê÷¤ëÉ÷Ç~ëÜÉÇ÷í÷ç÷ëÜÇçï ÷ì åÅÉëí~åáíóF
- o ç~Ç
- _ì ãÇçãÖ
- p ~å÷¤ê~åÅëåÅç=_~ó
- pÜçëÉãëÉ≈ ëÉ~
- fo÷¤åÉ=_çì åÇ~êó
- m~ëÅÉãb=_çì åÇ~êó
- mëÉîåçì ë÷qëÉåÅÜÜbñÅ~î ~íáçå≈ ëÉ~
- j ì ãáær ëÉ÷¤ Éì ëÉ
- l éÉå÷pé~ÅÉ÷¤ Éì ëÉ

Notes:

ÐÇPMVF÷Z÷¤l ëÉ~íÉëí= l ` ÷ÅçåÅÉåíê~íáçå÷ï áÜëã¤qÆêê÷N÷ÉñÅ~î ~íáçå÷¤ëÉ~÷K ═══════÷r åáíë÷¤ëÉ÷¤ ãæãÖê~ã ë÷¤ëÉëëáæçÖë~ã ÷Ðã ÖåÕFK

^l ` ÷Z÷¤ëÉ~÷ç№ÅçåÅÉêã
` l ` ÷Z÷ÅÜÉã æÅ~ãç№ÅçåÅÉêã
Ñ÷ÅÖë÷Z÷ÑÊÉí÷ÅÉæï ÷Öëçì åÇ÷¤ëì ëÑ÷ÅÉ
fo÷Z÷ãëí~æ÷íáçå÷¤Éëíçêíáçå
mì _ ÷Z÷¤çæÅÜëçêãã~íÉÇ÷Åë¤ÜÉåóëã
mp` ÷Z÷¤êç íÉÅíåíÉ÷¤çæãÅçåÅÉåíê~íáçå
od ÷Z÷ëÉãã ÉÇçå÷íáçå÷Öç~ã
qme÷Z÷¤ç í~ãëÉíêçÉì ã ÷ÜbÇêç Å~ëÅçã

GZ÷PIRMVã ÖåÕ÷ÐpÜ~ï ÷Þ âî ãëçãã Éåí~ã÷fåÅK÷ÖMMTF

oÉÑÊëÉåÅÉÅVÞ ~å÷¤ê~åÅëåÇ÷¤ ÉÇÉì Éãçëã Éåí÷ª ÖÉåÅóí÷ÖMNMK
ºe ì åíÉëë÷m¤çåí÷pÜëó~ëÇ÷¤ ÉÇÉì Éãçëã Éåí÷më~åK÷ ãó÷¤~åÇ
` çì ãíó÷¢Ñ№ ~å÷¤ê~åÅëåÇK^ì Öì ëí÷FK

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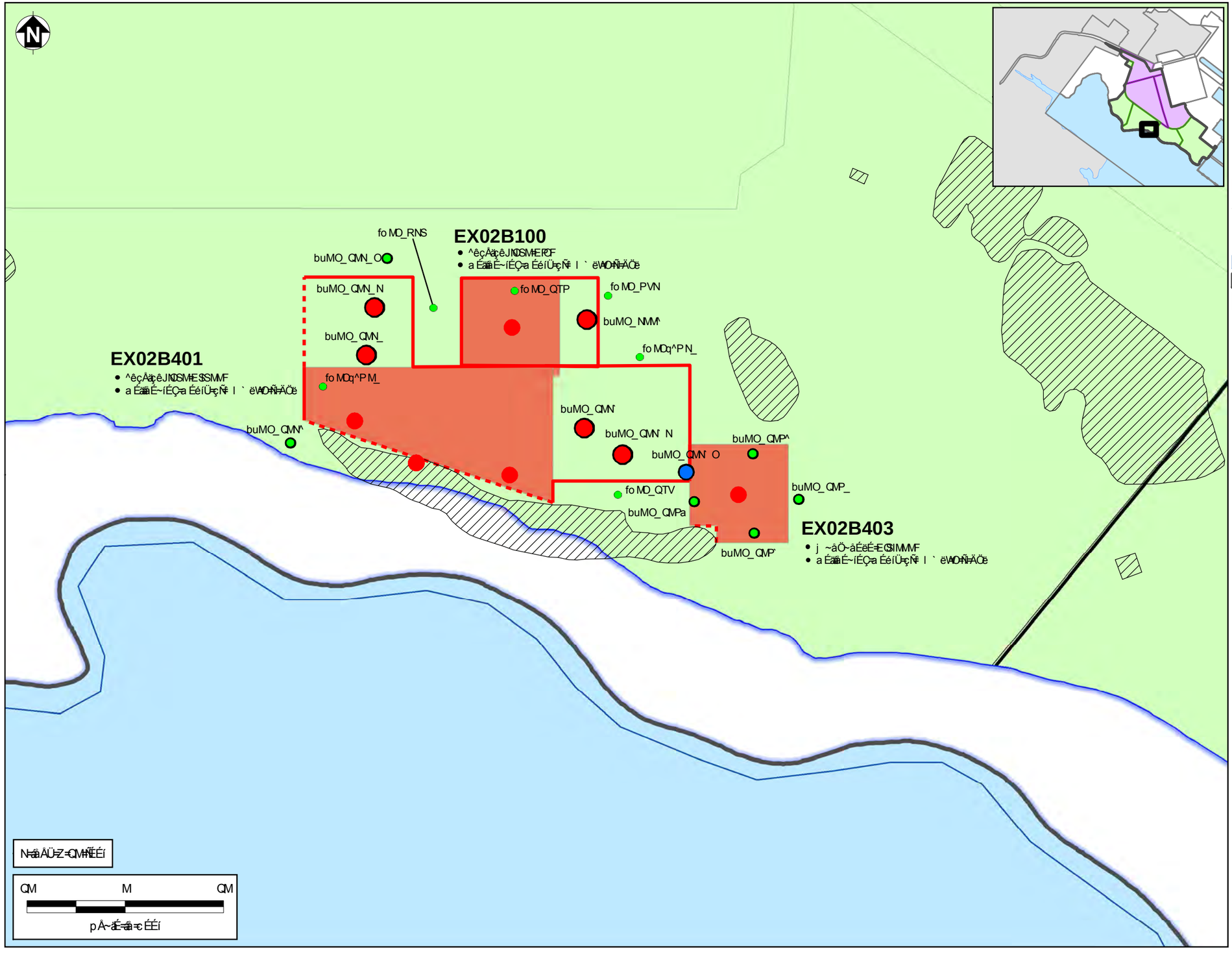
r hpKa Éé~ëã Éåí÷ç№ÜÉ÷k ~ï ól=_o ^ ` ÷mj l ÷t Éëíl÷p ~å÷¤ åÉÖç!÷ ~ãKçëã÷

FIGURE 6

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK EOS-2 (SOUTHWEST)

qÉÅÜëåÅ~ãçj Éã çê~åÇï ã

y÷ëÅ~Çãu ëíKçã y ñKÉa ~í~y_l ñKæç,k v ymtçÉÅëgMMTSNy uaëlqÉÑÜj Éã çyçãÜ ëÉSj b l p.Üj p t kÑ ñÇ a~fÉ÷PÑNLÜCÑNP



LEGEND

a ÉíÉÄÉÇ¬ëçäãÅçäÅÉäíê~íáçä¬ÉÑçëçäÉ¬çêã çÉÉ= I ` F¬ãë
ÖëÉ~íÉê¬íÜ~ä¬çêÉëì ~äíç¬NMM¬ãã Éë¬íÜÉ¬o d ¬ÉqÄÉêÑN¬ çÄ~íáçäF

a ÉíÉÄÉÇ¬ëçäãÅçäÅÉäíê~íáçä¬ÉÑçëçäÉ¬çêã çÉÉ= I ` F¬ãë
ÖëÉ~íÉê¬íÜ~ä¬çêÉëì ~äíç¬R¬ãã Éë¬íÜÉ¬o d ¬ÉqÄÉêÖO¬ çÄ~íáçäF

a ÉíÉÄÉÇ¬ëçäãÅçäÅÉäíê~íáçäë¬ÑçêÑ~äë I ` ë¬ëÉ
ÖëÉ~íÉê¬íÜ~ä¬íÜÉ¬o d ¬ÄìÍ¬ÉëëíÜ~ä¬R¬ãã Éë¬íÜÉ¬o d

_çêãÖ¬ çÄ~íáçä¬Ñçã = ì ëëÉäí¬fäîÉ ëíáÖ~íáçä
Ëçì íäãÉÇ¬ãã¬ÄäÅäF

mêçéçëÉÇ¬b ñÅ~î ~íáçä¬çÑqÄÉê¬N¬ çÄ~íáçäl¬¬åÇlçê
~¬qÄ~íáçä¬íÜ~í¬ãë¬ÖëÉ~íÉê¬íÜ~ä¬íÜÉ¬qme¬ëçì êÅÉ
ÅãäÉêqçäG

mêçéçëÉÇ¬b ñÅ~î~ íáçä¬= ëÉ~¬ëj çÇãÑÉÇF
ËãäÉë¬¬ëÉ~Ç~ëÜÉÇ¬íç¬ëÜçï = åÄÉëã~ãäíóF

o ç~Ç

p ~ä¬c ê~äÅäåÇ=_~ó

p Ücë Éãä É¬= ëÉ~

fo ¬pãÉ=_çì åÇ~ëó

m~êÅÉãb =_çì åÇ~ëó

mëÉì åçì ë¬qëÉäÅÜb ñÅ~î ~íáçä¬= ëÉ~

j ì ãäã¬ ëÉ¬o Éì ëÉ

I éÉä¬p é~ÄÉ¬o Éì ëÉ

Notes:

ËSISMMF¬Z¬d ëÉ~íÉëí= I ` ¬ÅçäÅÉäíê~íáçä¬ï ãÜëã¬qÉëÑN¬ÉñÄ~î ~íáçä¬¬ëÉ~K
═══════r åáë¬¬ëÉ¬ã ãäëÖë~ã ë¬é¬Éëëäåçëã ¬ëã ÖìåÖK

^I ` ¬Z¬¬ëÉ~¬çÑÄçäÅÉëã
` I ` ¬Z¬ÄÜÉã á¬~ãçÑÄçäÅÉëã
ÑÄÖë¬Z¬ÑËÉí¬ÄÉäï ¬Öëçì åÇ¬èì ëÑ¬ÄÉ
fo ¬Z¬ãëí~ãë¬íáçä¬ëÉëíçê~íáçä
m` _¬Z¬é çäÖÄÜäçëã~íÉÇ¬Äëã ÜÉäóä
o d ¬Z¬ëÉã ÉÇä¬íáçä¬Öç~ã
qme¬Z¬íçí~ãéÉíêçÆÉì ã ¬ÜóÇêçÄ~ëÑçâ

GëZ¬PIRMMëã ÖìåÖ¬ÞÜ~í ¬Þ âî ãëçäã Éáí~ä¬fäÅÄK¬OMMTF

o ÉÑËëÉäÄÉÄÞ ~ä¬c ê~äÅëÅç¬o ÉÇÇÌ Éäçéã Éáí¬ ÖÉäÄóì¬OMNMK
“e ì áíÉëë¬¬mçäáí¬p Üëó~ëÇ¬o ÉÇÉì Éäçéã Éáí¬¬më~äK= ãó¬>âÇ
` çì áíó¬ç Ñp ~ä¬c ê~äÅëÅçK¢ ì Öì ëí¬PK

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r kpKa Éé~ëã Éáí¬ç ÑìÜÉ¬k ~î ól=_o ^ ` ¬mj I ¬t Éëíl¬p ~ä¬a ÆÖç!= ~ãNëäã

FIGURE 7

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK EOS-2 (SOUTHEAST)

qÉÄÜäãÄ~ãj Éã çê~äÇì ã

y~ëÄ~Çäu ëMçã y ÑÑ¢Éa ~ ~y_ i ÑÑ¢q¬k v ym¢çÆÄëyMMTSNy uaëj qÉÄÇj Éã çyc¬ÖëTi b l p.JQ p b¢ã ñÇ a ~ÉÄ¢ÑNUÇMP

N
EX02GP002
EX02GP008
EX02B098D
EX03B345
EX03B344
EX03B343
EX02MW146
EX02GP016A
IR-02 CENTRAL
EX03SS368
IR-03
EX03B220
EX02TA40B
EX03B367
EX02MW173A
EX02GP051A
EX02GP038
EX02GP040
EX02GP050
LEGEND
Notes:
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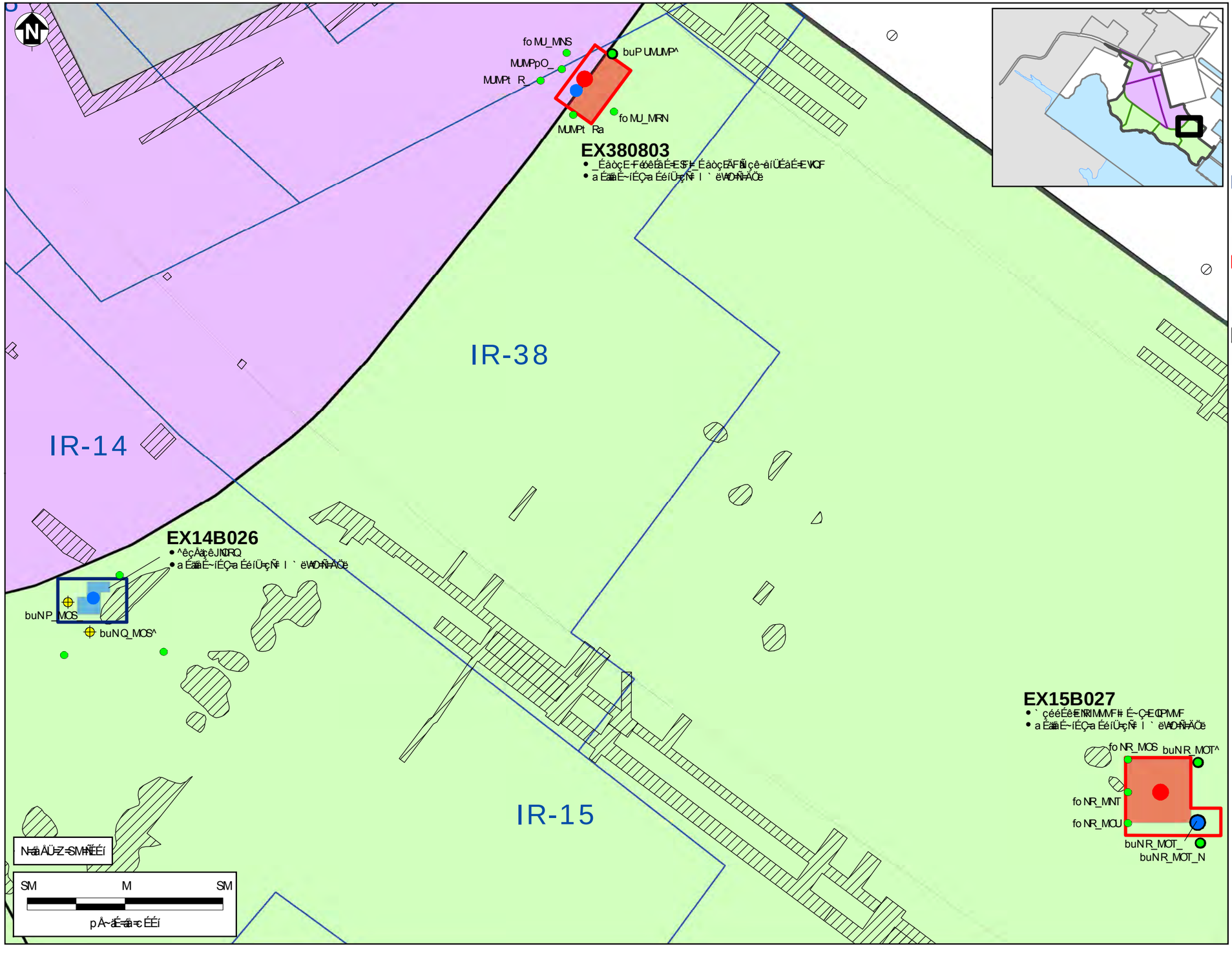
FIGURE 8
SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK EOS-3



LEGEND

- a ÉíÍÉÅÉÇ=èçëäëÅçäÅÉäíê~íáçå=ÉÑçèçåÉ=çêëã çÉÉ= I ` F=ëè ÖëÉ~íÉê=Ü~å=çêÉèì ~äíç=NM=ëã Éë=ÜÉ=o d =ÉqÆê=N=i çÅ~íáçåF
- a ÉíÍÉÅÉÇ=èçëäëÅçäÅÉäíê~íáçå=ÉÑçèçåÉ=çêëã çÉÉ= I ` F=ëè ÖëÉ~íÉê=Ü~å=çêÉèì ~äíç=R=íáã Éë=ÜÉ=o d =ÉqÆê=Oi=i çÅ~íáçåF
- a ÉíÍÉÅÉÇ=èçëäëÅçäÅÉäíê~íáçåëÑçè~äë= I ` ë=~ëÉ ÖëÉ~íÉê=Ü~å=Ü=R=íáã Éë=ÜÉ=o d =Ãì í=ÉëëÜ~å=R=íáã Éë=ÜÉ=o d
- _çêëãÖi= çÅ~íáçå=ÑèçÃ = ì êëÉåí=fåÏÉëíåÖ~íáçå Éçì íáëÉÇ=ëã=Åä=ÅåF
- mêçéçëÉÇ=ëçëäëÅçêëãÖëçÅ~íáçå=Ü~í=ï ~ë ëã~ÅÅÉëëåÅåÉ
- ^ëÉ~=mëÉïáç ì ëëÖ=Þ ñÅ~î~ íÉÇ=íç ~éêêçñkP=ÑÅ=ÅÖë=É~éêêçñëã ~íÉF=GG
- mêçéçëÉÇ=Þ ñÅ~î ~íáçå=çÑèçÉê=N=i çÅ~íáçål=>âÇ\çê ~=ëçÅ~íáçå=Ü~í=ë=ÖÉ~íÉê=Ü~å=Ü=qme =ëçì ëÅÉ ÅëëÉëëçåG
- mêçéçëÉÇ=Þ ñÅ~î ~íáçå=çÑèçÉê=Oi= çÅ~íáçå=
- mêçéçëÉÇ=Þ ñÅ~î~ íáçå=ë ëÉ~=fj çÇëëÉÇF
- o ç~Ç
- _ì ëëÇëëÖ
- fo =p ëÉ=_çì åÇ~êó
- m~êÅÉëëb =_çì åÇ~êó
- mëÉï áçì ë=èëÉåÅÜÞ ñÅ~î ~íáçå=ë ëÉ~
- j ì ëáë= ëÉ=o Éì ëÉ
- l éÉå=p é~ÅÉ=o Éì ëÉ

Notes:

ÉÇ]PMVF=Z=d ëÉ~íÉëí= I ` =ÅçåÉåíê~íáçå=ï åÜëã=èçÉê=N=HÉñÅ~î ~íáçå=>ëÉ~K ═══════= åáëë>~ëÉ~=ã ëëëÖê~ã ë=é=Éëëëåçëê~ã =Ëã ÖåëÖFK

^I ` =Z=>ëÉ~=ç ÑÅ=ÇåÅÉëëã
` I ` =Z=ÅÜÉëã åÅ~ëç ÑÅ=ÇåÅÉëëã
Ñ=Öë=Z=ÑËÉÍ=ÅÉëçï =Öëçì åÇ=ëì ëÑ=ÅÉ
fo =Z=ëëëí~ëë~íáçå=ëÉëíçê~íáçå
o d =Z=ëÉã ÉÇçë~íáçå=Öç~ã
qme =Z=íçí~ëëÉíëçëÉì ã =ÜöÇçëÇ=Å~ëëÇåã

GëZ=PIRMMëã ÖÌåÖ=Ép Ü~ï =Þ åî ëëçåã Éëáí~ã=fåÅÅK=OMMTF

GÖëã Éëëã É~íáçå=ë~ã éåÉë=ëçí=ÅçëëÉÅíÉÇ=Ñëçã =éëÉÌ ëçì ëëëb ═=ÉñÅ~î ~íÉÇ>~ëÉ~ëK=ì çåÑëëã ~íáçå=ë~ã éåÉë=ï ëëëÅÉ ═=ÅçëëÉÅíÉÇ>Çí ëëãÖ=ÜÉ=ëÉã ÉÇçë~ë>Åíáçå K

o ÉÑÑëÉëåÅÉÅëÞ ~å=c ê~åÅëëÅç=o ÉÇÉï Éëçéëã Éëáí=^ ÖÉëåÅóÌ=OMMK "e ì åíÉëë=mçëãí=p Üëéó~ëÇ=o ÉÇÉï Éëçéëã Éëáí=më~åK=ì åó=>âÇ ` çì åíó=çÑèp~å=c ê~åÅëëÅçK^ ì Ói ëí=PK

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r kÞK=Éé~ëã Éáí=çÑÜÉ=k ~î ól=_o ^ ` =mj I =t Éëíí=p~å=ë ÉÇçí= ~ãÑÞëëå~

FIGURE 9

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK EOS-4 (NORTH)

qÉÁÜëëÅ~ãj Éã çê~åÇí ã

IR-02 CENTRAL

IR-02 SOUTHEAST

IR-11

IR-14

IR-15

IR-15

IR-54

IR-73

RON

EX15B040
- _ÉàòçE-FéóêÉàÉ=EIRPF
- a ÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= I ` ëVAPKMHÑÄÖë

EX11B024
- ^êëÉàäN=ɪ É~Ç
- a ÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= I ` ëVAOHÑÄÖë

EX11SS022
- i É~Ç
- a ÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= I ` ëVAOHÑÄÖë

EX11B023
- ^êçÄäçêJMQRQHERUF
- a ÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= I ` ëVAOHÑÄÖë

EX02B369
- ` çéëÉêëEIRRNMFHɪ É~Ç=ESNPMFHqme=ELMMMF
- a ÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= I ` ëVAOHÑÄÖë

EX02B505
- _ÉàòçE-FéóêÉàÉ=EIRPFI
- _ÉàòçEÄÑÜçê~áíÜÉàÉ=EIRMF
- a ÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= I ` ëVAOHÑÄÖë

EX02B355
- qme=ELIRMMF
- a ÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= I ` ëVAOKMHÑÄÖë

EX02B468
- qme=EIRQMMF
- a ÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= I ` ëVAOHÑÄÖë

EX02B506
- _ÉàòçE-FéóêÉàÉ
- a ÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= I ` ëVAOHÑÄÖë

fo NR_MCR
fo NR_MNV
fo NRq^NM_
fo NR_MQO
fo NN_MCR
fo NN_MPO
fo NN_MPP
fo NN_MQS
buNNppMQO^
fo NN_MQN
m^ QTq^MQ
buNN_MQP^
fo MD_QST
buMO_PSV^
fo MD_QTN
fo MD_QSV
buMO_PSV_
fo MD_RMU
fo MCj t QMV^
buMO_RMR^
fo MD_RMQ
buMO_QSU^
buMO_PRR^
buMO_PSV'
buMO_QSUa
buMO_QSU_
buMO_RMR_
buMO_QSU'
buMO_RMS_
buMO_RMS^

N=äÅÜ=Z=SMHÑÉÉí

SM M SM

pÅ~äÉ=äí=c ÉÉí

LEGEND

- a ÉíÉÅÉÇ=ëçäíÅçåÅÉàíê-íáçà=ÑQêçåÉ=çêã çÉ= I ` F=äë ÖëÉ~íÉë=Ü~å=ç ëÉèì ~äíç=NMH=ãà Éë=ÜÉ=o d =ÉqÉêëN=ɪ çÅ~íáçåF
- a ÉíÉÅÉÇ=ëçäíÅçåÅÉàíê-íáçà=ÑQêçåÉ=çêã çÉ= I ` F=äë ÖëÉ~íÉë=Ü~å=ç ëÉèì ~äíç=R=ìãà Ëë=ÜÉ=o d =ÉqÉêëO=ɪ çÅ~íáçåF
- a ÉíÉÅÉÇ=ëçäíÅçåÅÉàíê-íáçåëÑqêò=äí= I ` ë=ëÉ ÖëÉ~íÉë=Ü~å=ÜÉ=o d =Ñì ì=ëËë=Ü~å=R=ìãà Éë=ÜÉ=o d
- _çëäÖ=ɪ çÅ~íáçå=Ñqçã = ì êëÉàí=fàîÉ ëíàÖ~íáçå Ëçì íäëÉÇ=ãà=ÅàÅàF
- a ÉíÉÅÉÇ=qme=ëçäíÅçåÉàíê-íáçå=Ñqçã =ò=ëëÉíáçì ë ÅçëäÖ=äë=ÖëÉ~íÉë=Ü~å=ÜÉ=ëçì ëÅÉ=ÅëãÉëëçåÅàG
- mêçéçëÉÇ=ëçäíÅçëäÖ=qçÅ~íáçå=Ü~ì=ɪ ~ë ãà~ÅÅÉëëåÅÉ
- mêçéçëËÉÇ=bñÅ~î ~íáçå=çÑqíÉëN=ɪ çÅ~íáçàl=»ÇÜçê ~=qçÅ~íáçå=Ü~ì=ãë=ÖëÉ~íÉë=Ü~å=ÜÉ=qme =ëçì ëÅÉ ÅëãÉëëçå
- mêçéçëÉÇ=bñÅ~î ~íáçå=çÑqíÉëO=ɪ çÅ~íáçå=
- mêçéçëÉÇ=bñÅ~î ~ íáçå=ª ëÉ~=fj çÇëÉÇF ÉäãÉë=»ëÉ=Ç~ëÜÉÇ=íç=ëÜçï =ɪ åÅÉëí~ãáíóF
- o ç~Ç
- _ì ãÇäÖ
- p~å=c ê~åÅëÅç=_~ó
- pÜçëÉäãÉ=ª ëÉ~
- fo=pãÉ=_çì åÇ~ëó
- m~ëÅÉäb=_çì åÇ~ëó
- mëÉï ãçì ë=qëÉàÅÜb ñÅ~î ~íáçå=ª ëÉ~
- j ì ãár ëÉ=o Éì ëÉ
- l éÉå=p é~ÅÉ=o Éì ëÉ

Notes:

EPIRNMFZ=d ëÉ~íÉëí= I ` =ÅçåÅÉàíê-íáçå=ɪ åÜëà=qÉêëN=ÉñÅ~î ~íáçå=»ëÉ~K ========r åáë=»ëÉ=ã ãäëÖê~ã ë=éÉëëàçÖê~ã =Éã ÖìåÖFK

^l ` =Z=»ëÉ~=çÑ¼çåÅÉëà
` l ` =Z=ÅÜÉã ãÅ~ãç¼çåÅÉëà
Ñ=Öë=Z=ËËÉí=ÁÉãï =Öëçì åÇ=ëì ëÑ¼ÅÉ
fo =Z=ãëí~ãà=íáçå=ëÉëíçê-íáçå
o d =Z=ëÉã ÉÇçà-íáçå=Öç~ã
qme =Z=íçí~ãéÉíëçÉì ã =Üò Çëç Å~ëÑçå

GEZ=PIRNMFHã ÖìåÖëp Ü~ï =b âî ãëçåã Éãí~ãà=íàÅ¼K=OMMTF

o ÉÑËëÉàÅÉ¼Ap ~à=c ê-àÅëÅç=o ÉÇÉì Éãçéã Éãí=ª ÖÉàÅóí=OMNMK
"e ì àíÉëë=mçãí=p Üëó~ëÇ=o ÉÇÉì Éãçéã Éãí=mà-àK= áó»=àÇ
` çì åíó=çÑp ~à=c ê-àÅëÅç¼ ì Öì ëí=PK

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r kÞKa Éë~ëã Éãí=çÑÜÉ+k ~ío l=_o ^ ` =mj l =ɪ Éëíl=p ~à=a æÉÖç!= ~ãÑçëà-

FIGURE 10

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK EOS-4 (CENTRAL)

qÉÁÜãàÁ~ãæj Éã çë~àÇì ã

y~ëÁ~Çæl ëíÑÇëa ~'~y_i ÑÑÉëa ~'~y_i ÑÑ¼çåÉ¼ëÑÉ¼MMMTSNy ua ëí qÉÁÜj Éã çÇëÉÇ=ëÉNM| b l p.ÇQ ` Éãíë~ãà ñÇ a~íÉ¼MMNUÇOMP

IR-73

IR-02 SOUTHEAST

EX02B464
- _ÉàòçE÷F¨áíÜë¬ÁÉáÉ÷ENUF÷_ÉàòçE÷F¨éóêÉáÉ÷ENRFH
_ÉàòçE/Ñß¡çê¬áíÜÉáÉ÷ENOF÷_ÉàòçE/Ñß¡çê¬áíÜÉáÉ÷ENQFI
`çééÉê÷ENMMMF
- a ÉäëÉ~íÉÇ¬a ÉéíÜ±çÑ÷ l ` ëWÖ¬Ñ÷ÄÖë

EX02GR93SW
- ` çééÉê
- a ÉäëÉ~íÉÇ¬a ÉéíÜ±çÑ÷ l ` ëWÖ¬Ñ÷ÄÖë

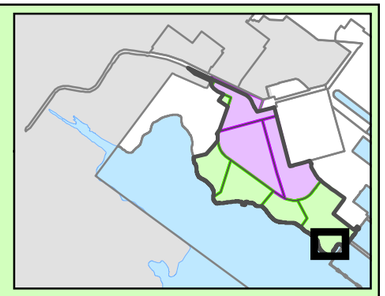
EX02G105
- ^êçÅä¢êJNOSM
- a ÉäëÉ~íÉÇ¬a ÉéíÜ±çÑ÷ l ` ëWÖ¬Ñ÷ÄÖë

EX02B493
- ^êçÅä¢êJNOSM
- a ÉäëÉ~íÉÇ¬a ÉéíÜ±çÑ÷ l ` ëWÖ¬Ñ÷ÄÖë

EX02B497
- ^êëÉäÅ÷E¨PFH÷ É~Ç÷ERMMMF
- a ÉäëÉ~íÉÇ¬a ÉéíÜ±çÑ÷ l ` ëWP÷Ñ÷ÄÖë

EX02B184
- mêçéçëÉÇ÷bñÅ¬î ~íáçå÷ç¬ÑqÆéê÷N÷ íç÷NKTR÷Ñ÷ÄÖë

buMO_QSQ^
foMO_t OMS^O
buMO_QSQ_
foMO_QVM
foMO_QVO
buMOdoVpt ^
foMOq^SN_
dofa÷VOj ao
buMOdoVPpt _
dofa÷VOpfabt ^ii
buMOdNMR^
buMO_QVP_
buMOdNMR_
buMO_QVP^
buMO_QVP'
foMOppPUR
joJNR
foMO_QVS
foMO_QVU
joJNM
buMO_QVT^
foMOppPUO
joJMU
foMO_QUO
foMO_QUQ
foMO_QUU
foMO_QUS



LEGEND

- a ÉíÉÅÉÇ÷ëçäæÅçåÅÉåíê~íáçå÷ÉÑçê¢çÉ÷çêã çÉ= l ` F÷ëè ÖÉ~íÉê÷Ü~â¢çê÷Éèì ~äíç÷NM÷ãà Éë÷ÜÉ÷o d ÷ÉqÆÉê÷N÷ çÅ~íáçåF
- a ÉíÉÅÉÇ÷ëçäæÅçåÅÉåíê~íáçå÷ÉÑçê¢çÉ÷çêã çÉ= l ` F÷ëè ÖÉ~íÉê÷Ü~â¢çê÷Éèì ~äíç÷R÷íà Éë÷ÜÉ÷o d ÷ÉqÆÉê÷Oì÷ çÅ~íáçåF
- a ÉíÉÅÉÇ÷ëçäæÅçåÅÉåíê~íáçåë÷Ñçê~äæ÷ l ` ë=~ÉÉ ÖÉ~íÉê÷Ü~â÷ÜÉ÷o d ÷Åì í÷ÆÉëë÷Ü~â÷R÷íà Éë÷ÜÉ÷o d
- _çêäëÖì÷ çÅ~íáçå÷Ñçêã = ì êÉÉåí÷fâîÉ ëíåÖ·íáçå Ê¢çì íáæÉÇ¬áë÷Åâ~ÅåF
- mêçéçëÉÇ÷ëçäæÅçêäëÖì¢çÅ~íáçå÷íÜ~í÷ ~ë åë~ÅÅÉëëåÅåÉ
- mêçéçëÉÇ÷bñÅ¬î ~íáçå÷ç¬ÑqÆéê÷N÷ çÅ~íáçål=~åÇ¡çê ~÷¢çÅ~íáçå÷íÜ~í÷æ÷ÖÉ~íÉê÷Ü~â÷ÜÉ÷qme÷ëçì êÅÉ ÅëÉëë¢çÅG
- mêçéçëÉÇ÷bñÅ¬î ~íáçå÷ç¬ÑqÆéê÷Oì÷ çÅ~íáçå=
- mêçéçëÉÇ÷bñÅ¬î~ íáçå÷ê=~Ñj çÇëÉÇF ÉäëÉë÷~ëÉÇ~ëÜÉÇ÷ç÷ëÜÇì ÷ì åÅÉëë~äíóF
- o ç~Ç
- p ~å÷ê~åÅëÅç=_ ~ó
- p ÜçëÉäëÉ÷ê ëÉ~
- fo÷p ãÉ=_çì åÇ~êó
- m~êÅÉëb=_çì åÇ~êó
- mëÉì ¢çì ë÷qÆëåÅÜbñÅ¬î ~íáçå÷ê ëÉ~
- j ì ãáër ëÉ÷o Éì ëÉ
- l éÉâ÷p é~ÅÉ÷o Éì ëÉ

Notes:

ERMMMF÷Z÷d ëÉ~íÉëí= l ` ÷Ç¢åÆÉåíê~íáçå÷ì åÜëà÷qÆÉê÷N÷ÉñÅ÷î ~íáçå÷ê=~ëÉ~K ═══════÷r åÅë÷ê=ëÉ~ã ãäëÖê~ã ë÷éÉëëåçÇë~ã ÷ëà ÜÅëÖFK

^l ` ÷Z÷ê=ëÉ~÷ç÷ÑÅçåÅÉëà
` l ` ÷Z÷ÅÜÉã ¢Å~äç÷ÑÅçåÅÉëà
ÑÅÖëë÷Z÷ÑËÉí÷ÅÉãï ÷ÖëçìåÇë÷ëÑÅ
fo÷Z÷ãëí~äë÷íáçå÷ëÉëíçê~íáçå
od ÷Z÷ëÉã ÉÇ¢å÷íáçå÷Ôç~ã
qme÷Z÷íçí~äéÉíéçãÉì ã ÷ÜöÇê¢Å~ëÄçå

GëZ÷PIRMMëã ÜåÖëÞÜ~ï ÷Þ âî ãëçåäã Éáí~ä÷fàÅK÷OMMTF

o ÉÑëëÉåÅÉÝÞ~å÷ç ê~åÅëäÇ÷ç ÉÇÉì Éãçéã Éáí÷= ÖÉåÅóí÷OMNMK
“e ì åíÉëë÷mçãäí÷p Ûëéó~ëÇ÷o ÉÇÉì Éãçéã Éáí÷mä÷åK= åó÷>åÇ
` çì åíó÷çÑÞ~å÷ç ê~åÅëÅçK÷ì Öì ëí÷PK

NëãåÄÜ÷Z÷RR÷ÑÉÉí

RR M RR

pÅ~ãÉ÷ëã÷ç ÉÉÍ

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r kÞK÷a Éé~ëã Éáí÷çÑíÜÉ÷k ~í ól=_o ^ ` ÷mj l ÷t Éëíl÷p~å÷a æÉÖç¡=~ãÑçëà÷

FIGURE 11

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK EOS-4 (SOUTH)

qÉÁÜëàÁ~ãj Éã çê~åÇì ã

wy÷Á÷~Çãu eíK¢å y ÑÑÉÇ¢ ~í~¿_l ÑÑ÷¢å÷k v ymÞçãÉÑëÝëNMMTSNÝj ua ëì qÉÁÜj Éã çÇ÷¢Ñ ëÉÑN b l p.Ôq pçì íÜÑ÷ñÇ a ~íÉÑ÷ÑÑ÷NÔÇÑ÷Ñ

IR-12

buMNpp PQV^

buMNpp PQVa

buMNpp PQV_

buMNpp PQV`

EX01SS349
- ^êçÅąçêJNQSMEPRSF
- a ÉźäÉ~íÉÇ¬a ÉéíÜ¬çÑ¥ l ` ëVAD¬ÑĦÄÖë

buNOq^MU^

buNOq^MU_

buNOq^MU`

EX12TA08
- ^êçÅąçêJNQRQ¥EPPF¥ê̂çÅąçêJNQSMEPNVF
- a ÉźäÉ~íÉÇ¬a ÉéíÜ¬çÑ¥ l ` ëVAUKTR¬ÑĦÄÖë

buNOpp NU^

buNOq^MUa

EX12SS18
- ^êçÅąçêJNQRQ¥ çéé Éê
- a ÉźäÉ~íÉÇ¬a ÉéíÜ¬çÑ¥ l ` ëVAD¬ÑĦÄÖë

EX12MW17A
- ^êçÅąçêJNQSMEPRVH¬vąäÅ¬EOVNVF
- a ÉźäÉ~íÉÇ¬a ÉéíÜ¬çÑ¥ l ` ëVATKR¬ÑĦÄÖë

buNOq t NT^^

buNOq t NU^^

buNOq t NT^_

buNOq^NM^

buNOq t NU^_

EX12MW18A
- ^êçÅąçêJNQRQ¥EMRTF¥ É¬ÇÆSRTMF¥vąäÅ¬EPRQMVFI ÄąæEOÞbíÜóąÜÉñóąFąÜÜą¬íÉ¬ENMVF
- a ÉźäÉ~íÉÇ¬a ÉéíÜ¬çÑ¥ l ` ëVATKR¬ÑĦÄÖë

buNOq^NM_

EX12TA10
- ^êçÅąçêJNQRQ¥ENKCH¬^êçÅąçêJNQSM¥ENKCFI ` çéé Éê¥EOMVSMF¥s~åÇąã ã ¬ESSRF
- a ÉźäÉ~íÉÇ¬a ÉéíÜ¬çÑ¥ l ` ëVAD¬ÑĦÄÖë

buNOpp NT^

buNOpp NT`

buNOpp NT_

fo NO_MW^

EX12SS17
- ^êçÅąçêJNQRQ¥ENSH¬^êçÅąçêJNQSM¥ERPFI ` çéé Éê¥ENPTMF¥vąäÅ¬EOOMVF
- a ÉźäÉ~íÉÇ¬a ÉéíÜ¬çÑ¥ l ` ëVAD¬ÑĦÄÖë

buNOpp NS^

buNOpp NS_

buNOpp NS`

EX12SS16
- ^êçÅąçêJNQSM¥ENSH¬ ÉåòçEÆÑą çê¬åíÜÉåÉ¬ENKUFI ` çéé Éê¥ETVOMF¥vąäÅ¬ENMVUMF
- a ÉźäÉ~íÉÇ¬a ÉéíÜ¬çÑ¥ l ` ëVAD¬ÑĦÄÖë

fo NOpp NR

buNOpp NSa

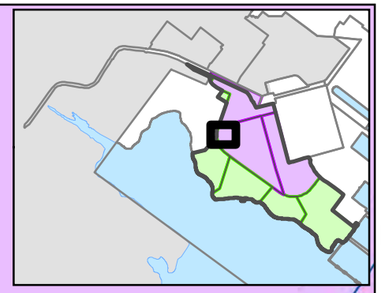
buNOq^NM^

buNOq^NM_N

N¬ąäÅÜ¬Z¬ÇQR¬ÑĦÉÉí

QR M QR

pÅ~ąÉ¬ąä¬ç ÉÉÍí



LEGEND

- a ÉíÉÁÆÉÇ¬ëçąäÅ¬çąÅÉåíê~íąçą¬ÐÇëçąÉ¬çêã çąÉ= l ` F¬äë ÖąÉ~íÉê¬íÜ~ą¬çêÉèì ~äíç¬ÑMH¬ãã ÉëI¬ÜÉ¬o d ¬ÐqÆÉê¬Ñ¬ çÅ~íąçąF
- a ÉíÉÁÆÉÇ¬ëçąäÅ¬çąÅÉåíê~íąçą¬ÐÇëçąÉ¬çêã çąÉ= l ` F¬äë ÖąÉ~íÉê¬íÜ~ą¬çêÉèì ~äíç¬R¬ãã Éë¬íÜÉ¬o d ¬ÐqÆÉê¬O¬ çÅ~íąçąF
- a ÉíÉÁÆÉÇ¬ëçąäÅ¬çąÅÉåíê~íąçąë¬Ñçê~äë¬ l ` ë¬ëÉ ÖąÉ~íÉê¬íÜ~å¬íÜÉ¬o d ¬Ái í¬ÆÉëë¬íÜ~å¬R¬ãã Éë¬íÜÉ¬o d
- _çêãäO¬ çÅ~íąçą¬ÑçãÃ = ì ëëÉáí¬fåîÉ ëíáÜ~íąçą Ęçì íäãäÉÇ¬ãä¬ÁąÅąF
- mêçéçëÉÇ¬bñÅ~î ~íąçą¬çÑęąÉêê¬N¬ çÅ~íąçąl¬åQçê ~¬ąçÅ~íąçą¬íÜ~í¬ãë¬ÖąÉ~íÉê¬íÜ~å¬íÜÉ¬qme ¬ëçì êÁÉ ÅãäÉêąçąG
- mêçéçëÉÇ¬bñÅ~î~ íąçą¬çÑęąÉêê¬O¬ çÅ~íąçą=
- mêçéçëÉÇ¬bñÅ~î~ íąçą¬≠ ëÉ~¬ę çÇąÆÉÇF ĘäãäÉë¬≈¬ëÉ¬ç¬ëÜÉÇ¬íç¬ëÜçï = ¬ áÁÉëí~ąäíóF
- o ç~Ç
- fo¬p áÉ=_çì âÇ~êó
- m~êÁÉãb=_çì âÇ~êó
- mëÉï ąçì ë¬qëÉąÅÜÜbñÅ~î ~íąçą≠ ëÉ~
- j ì äą¬ ëÉ¬o Éì ëÉ
- l éÉą¬p é~ÅÉ¬o Éì ëÉ

Notes:

ĘÇIOMVF¬Z¬d ëÉ~íÉëí= l ` ¬ÁçąÁÉåíê~íąçą¬ í áÜãä¬qÆÉê¬N¬HÉñÅ¬î ~íąçą¬≈¬ëÉ~K ═══════¬ åáë¬≈¬ëÉ¬ã ääÜÖë¬ã ë¬éÉëëąçÖë¬ã ¬ãã ÖląÖFK

^l ` ¬Z¬≈¬ëÉ~¬çÑ¬ÇąÁÉëä
` l ` ¬Z¬ÁÜÉą ąÅ~ąç Ñ¬ÇąÁÉëä
ÑĦÄÖë¬Z¬ĦÉÉí¬ÁÉąçí ¬ÖëçìąÇ¬ëì ëÑ¬ÁÉ
fo¬Z¬ãäëí~ąä¬íąçą¬ëÉëíçê~íąçą
o d ¬HëÉą ÉÇąì íąçą¬ëÇ~ą
qme¬Z¬íçí~ąéÉíëçąÉí ã ¬ÜbÇëçÅ~ëÄçå

GĘ¬PIRMVMä ÖląÖëpÜ~ï ¬b ąî ąçąäã Éáí~ą¬íąÁÄK¬OMVMTF

o ÉÑĘëÉąÁÉÁëp~ą¬ç¬ê¬ąÁąëÅç¬o ÉÇÉí Éąçéą Éáí¬≈ ÖÉąÁóí¬OMNMK °e ì áíÉëë¬mçąäí¬p Üąëó~ëÇ¬o ÉÇÉí Éąçéą Éáí¬mą¬áK= áó¬≈¬áÇ ` çì áíó¬ç Ñp~ą¬ç¬ê¬ąÁąëÅçKº ì Ói ëí¬PK

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FIGURE 12

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK MU-1 (NORTHWEST)

qÉÁÜąąÁ~ąj Éã çë~ąÇì ã

y¬ëÁ~Çąą ëNçą y ÑĦÉą ~¬y_i ÑĦąąk v ynçąÆÁëyMMMTSNy ua ëj qÉÁQj Éã cyçëÖ ëÉNQ j r_N k t ¥ ñÇ a ~íÉMPNNUQNP

LEGEND

Notes:

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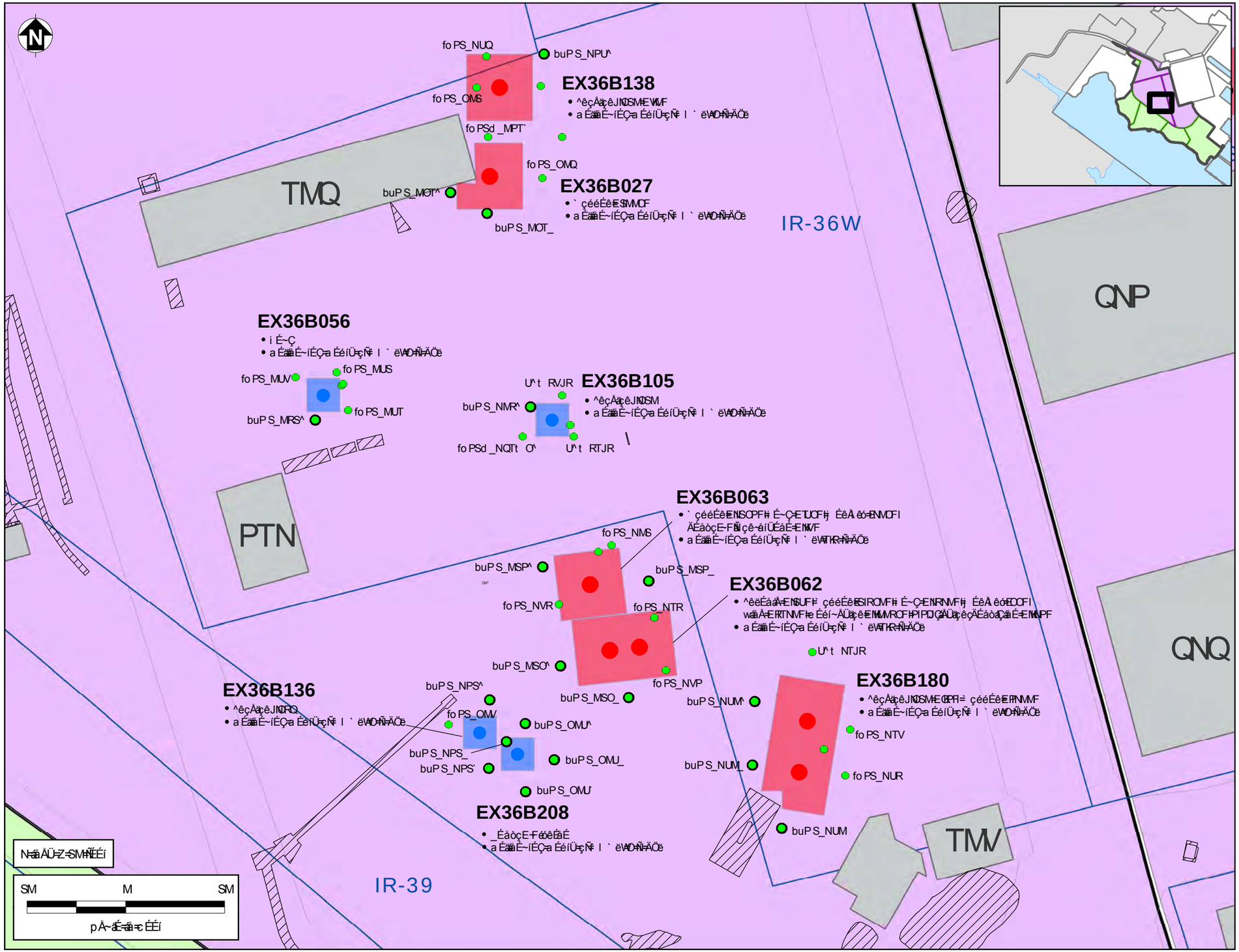
FIGURE 13

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK MU-1 (NORTHEAST)



LEGEND

- a ÉÍÉÁÆÉÇ=ëçáæÁçáÁÉåíê-íáçà=ÑÑçêçáÉ=çêã çÉ= I ` F=æ ÖÉ~íÉê¤Ü~å=çêÉèì ~äíç=NMv¤ã Éë¤ÜÉ=o d =ÉqÆÉêÑN¤ çÅ~íáçåF
- a ÉÍÉÁÆÉÇ=ëçáæÁçáÁÉåíê-íáçà=ÑÑçêçáÉ=çêã çÉ= I ` F=æ ÖÉ~íÉê¤Ü~å=çêÉèì ~äíç=R¤íáã Ëë¤ÜÉ=o d =ÉqÆÉêÖ¤ çÅ~íáçåF
- a ÉÍÉÁÆÉÇ=ëçáæÁçáÁÉåíê-íáçåë=ÑçêÑ=äæ¤ I ` ë=ëÉ ÖÉ~íÉê¤Ü~å=ÜÉ=o d =Ái I ¤ëËëë¤Ü~å=R¤íáã Ëë¤ÜÉ=o d
- _çëãÖ¤ çÅ~íáçå=Ñçã = ì ëëÉáí=fåîÉ ëíáÖ~íáçå Ëç¡ íáæÉÇ~åã=ÅåÅåF
- mëçéçëëÉÇ=bñÅ~î ~íáçå=çÑqÆÉêN¤ çÅ~íáçàl=»åÇ¡çê ~=qÅ~íáçå¤Ü~í=æ=ÖÉ~íÉê¤Ü~å¤ÜÉ=qme =ëçì ëÁÉ ÅæÉëëçåG
- mëçéçëëÉÇ=bñÅ~î~ íáçå=çÑqÆÉêÖ¤ çÅ~íáçå=
- o ç~Ç
- _ì åÇæäÖ
- fo¤páÉ=_çì âÇ~ëó
- m~ëÁÉæb=_çì âÇ~ëó
- mëÉî åçì ë=qÆÉåÅÜbñÅ~î ~íáçå=ª ëÉ~
- j ì ãáær ëÉ=o Éî ëÉ
- l éÉå=pé~ÅÉ=o Éî ëÉ

Notes:

ÉPÍNMvF=Z=d ëÉ~íÉëéî= I ` =ÆçåÁÉåíê-íáçà¤ áÜëã=qÆÉêN¤ÉñÅ~î ~íáçå=»ëÉ~K ═══════¤ åáë=»ëÉ=ã æææÖê~ã ë=éÉëëæåçÖê~ã =Ëã ÖîåÖÑK

^l ` =Z=»ëÉ~=ç¾¼çåÁÉêë ` l ` =Z=ÁÜÉã åÁ~æç¾¼çåÁÉêë ¾¼ÄÖë=Z=ÑËÉî¤ÁÉ¤ï =Öëçì âÇ=ëî ëÑ¤ÁÉ fo¤Z=ëëëî~æ»íáçå=ëÉëíçê-íáçå od =Z=ëÉ=ã ÉÇçå~íáçå=Öç~à qme =Z=íçí~æéÉíëçëÉî ã =Ûò¾Çëç¾Å-ëÑçå

GëZ=PÍRMvFã ÖîåÖÑpÜ~ï =b âî âëçåã Éáí~à¤fåÅ¤K=OMvMTF

oÉÑËëÉåÁÉ¤Ap ~â=c ê-å¤Åæë¾Ç=o ÉÇÇî Éë¡çéã Éåí=ª ÖÉ¤åÁól=OMvMvK ªe ì âíÉëë=mçåáí=p Üæó~ëÇ=o ÉÇÇî Éë¡çéã Éáí=mà-á¤K= áó¤»âÇ ` çì âíó¤ç¾p ~â=c ê-å¤Åæë¾Ç¤Kª ì Öî ëí=PK

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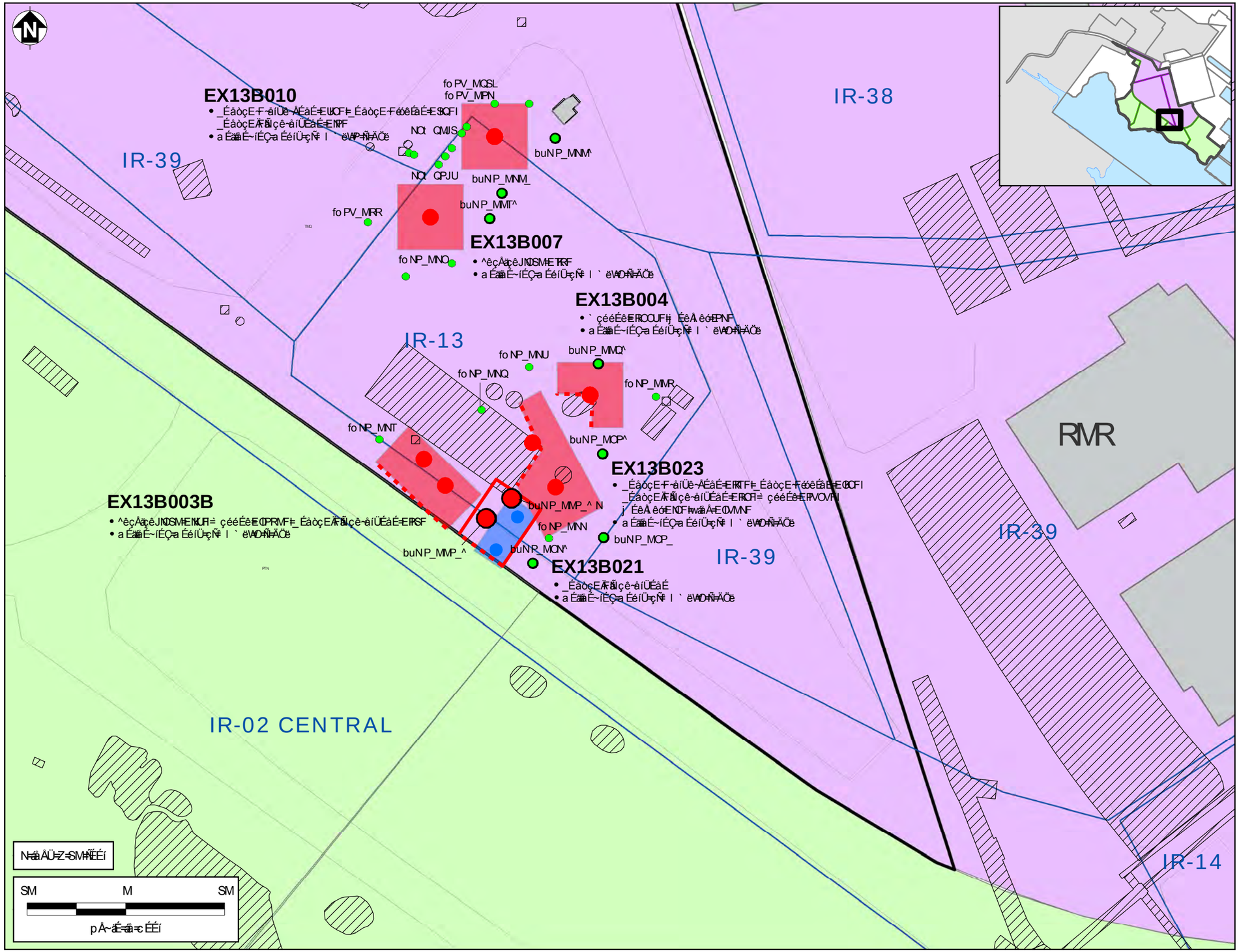
r kpKa Éë~ëã Éåí=ç¾ÜÉ¤k ~î ól=_o ^ ` =mj l =t Éëíl=p ~à=a æÉÖç l= ~ãçëëà-

FIGURE 14

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK MU-1 (CENTRAL)

qÉÄÜëàÁ~ãj Éã çê-ãÇî ã

a ~íÉ¤PÍNMvLOMvP
yw¤Á~Çæu ëÁKçã yl ñÁæÇa ~í~y_l ñÁæ¾uk vymçÉÁëçMMMTSNy uaëi qÉÁÜj Éã çyc¤Ñ ÉÑNQj r ,N ` Éáíë-ëë ñÇ



LEGEND

- a ÉíÍÉÀÉÇ=ëçáæÀçåÀÉåíê-íáçà=ÑQêçÉ=çêã çÉ=ÍÌ` F=ãè ÖÉ~íÉê=Ü~å=ç¤É=Éèì ~äíç=NMH=ãà Éë=ÜÉ=o d =ÉqÀÉê=N=ÍÌ çÅ~íáçåF
- a ÉíÍÉÀÉÇ=ëçáæÀçåÀÉåíê-íáçà=ÑQêçÉ=çêã çÉ=ÍÌ` F=ãè ÖÉ~íÉê=Ü~å=ç¤É=Éèì ~äíç=R=íáà Éë=ÜÉ=o d =ÉqÀÉê=O=Íì çÅ~íáçåF
- a ÉíÍÉÀÉÇ=ëçáæÀçåÀÉåíê-íáçàëê=ÑQêçÉ=æ=äæÍÌ` ë=æ=ÉÉ ÖÉ~íÉê=Ü~å=ÜÉ=o d =Ñì í=ÉëëÍÜ~å=R=íáà Éë=ÜÉ=o d
- _çêáàÖ=ì çÅ~íáçå=ÑQçã = ì êêÉàí=fåîÉ ëíáÖ~íáçå Eçì íáæÉÇ~ãà=ÅàÀåF
- mêçéçëÉÇ=b ñÅ~î ~íáçå=çÑqÀÉê=N=ì çÅ~íáçàl=æåÇçê ~=qÀ~íáçå=ìÜ~í=æ=ÖÉ~íÉê=ÍÜ~å=ÜÉ=qme =ëçì êÁÉ ÅæÉêáçåG
- mêçéçëÉÇ=b ñÅ~î~ íáçå=çÑqÀÉê=O=ì çÅ~íáçå=
- mêçéçëÉÇ=b ñÅ~î~ íáçå=≠ êÉ~=ç ÇÇÃÉÇF EæàÉê=æÉ=Ç~ëÜÉÇ=íç=ëÜçï =ì åÁÉã~æíóF
- o ç~Ç
- _ì áÇæäÖ
- fo=páÉ=_çì åÇ~êó
- m~êÁÉæb=_çì åÇ~êó
- mêÉì áçì ë=qëÉàÅÜb ñÅ~î ~íáçå≠ êÉ~
- j ì äáar ëÉ=o Éì ëÉ
- l éÉå=p é~ÅÉ=o Éì ëÉ

Notes:

EOPRMFZ=d êÉ~ÍÉëí= l ` =ÀçàÁÉåíê-íáçå=ì áÜæ=qÀÉêNHÉñÅ-î ~íáçå=æÉ~K ═══════r åáë=æÉ=ã æãÖè-ã ë=éÉêêåçÖè-ã =Eã ÖlàÖFK

^l ` =Z=æÉ~=ç Ñ¼çåÁÉêà
` l ` =Z=ÁÜÉã á¼~æç Ñ¼çåÁÉêà
Ñ¼ÁÖè=Z=ÑÉÉí=ÁÉ=æì =Öè çì åÇ=ëì ëÑ¼ÁÉ
fo=Z=ãëí~æ=íáçå=ÉÉëíçê-íáçà
o d =Z=ÉÉã ÉÇà-íáçà=Öç~à
qme =Z=ì çí~æéÉíéçÆÉì ã =ÜbÇèçÅ~ëÑçà

GZ=PIRMMã ÖlàÖ=ÉpÜ~ï =b àî æçàã Éáí~à=fàÁK=OMMTF

o ÉÑÉÉåÁÉWp ~à=ê-åÁæÅç=o ÉÇÉì Éæçéã Éáí=≠ ÖÉåÁól=OMNMK
°e ì áíÉëë=mçáí=pÜæó~ëÇ=o ÉÇÉì Éæçéã Éáí=mà-àK= áló=~àÇ
` çì áíó=çÑqp ~à=ê-àÁæÅçK^ ì Öì ëí=FK

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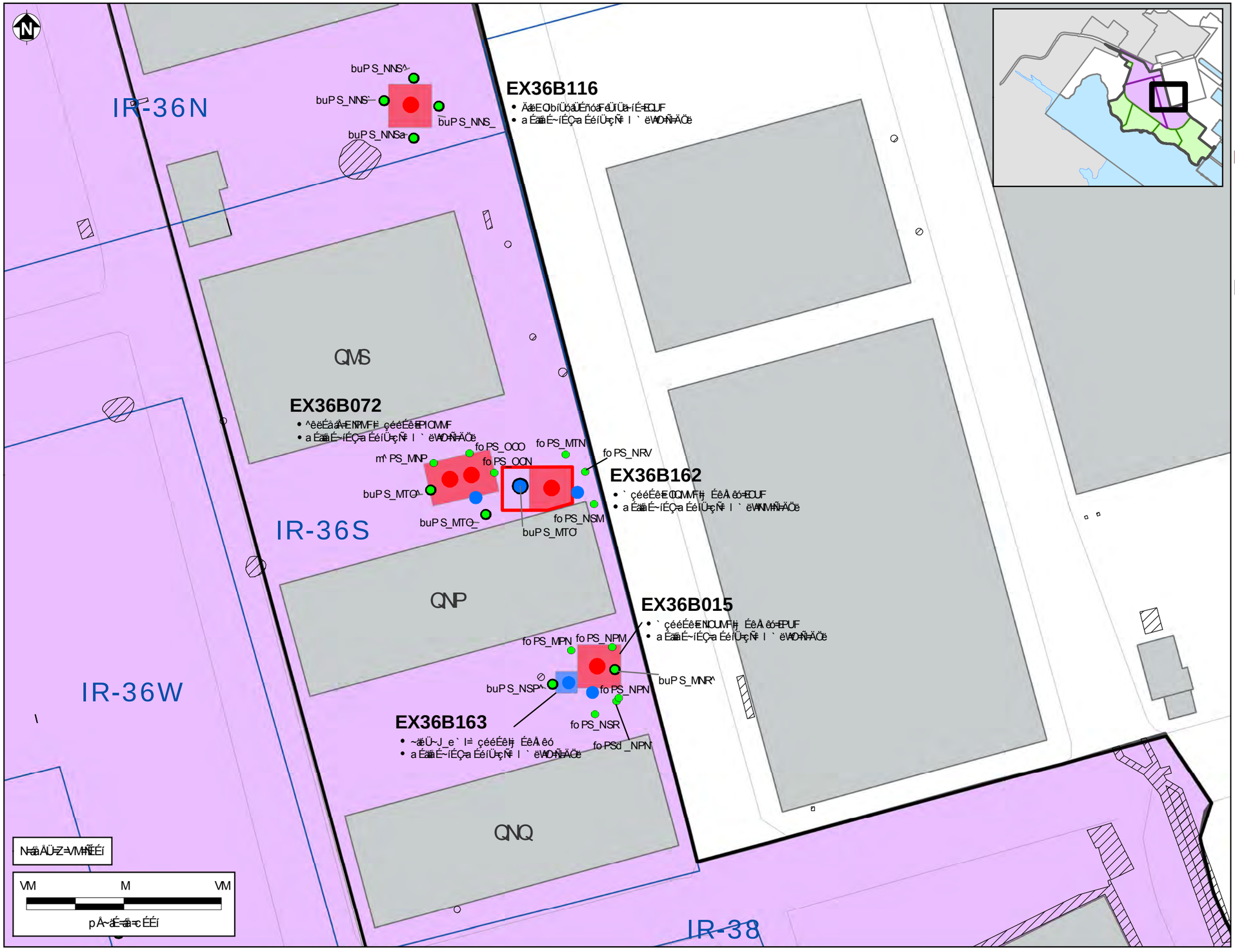
r kpKa Éé~ëã Éáí=ç Ñ¼ÜÉ+k ~î ól=_o ^ ` =mj l =t Éëíl=p ~à=a æÉÖç!= ~ãçæàà-

FIGURE 15

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK MU-1 (SOUTH)

qÉÁÜàáÁ~æj Éã çê~àÇì ã

y~êÑ~Çæl ëMÇa y ÑÑ¼Éa ~r~y_i ÑÑ¼q,k v ynëçÆÉÁëÿMMTSNy ua ëj qÉÁÜj Éã çyc=Ü ëÉNRj r ,N pçí ÜÑ¼ ñÇ a~íÉ¼ÑÑNJ.UCMNP



LEGEND

- a ÉíÉÅÉÇ=ëçåÅçåÅÉåíê~íáçå=ëÑÇëçåÉ=çêã çÉ= I ` F=æ ÖëÉ~íÉê=Ü~å=çêÉèì ~äéç=NMHíãì Éë=ÜÉ=o d =ÉqåÉêëN=i çÅ~íáçåF
- a ÉíÉÅÉÇ=ëçåÅçåÅÉåíê~íáçå=ëÑÇëçåÉ=çêã çÉ= I ` F=æ ÖëÉ~íÉê=Ü~å=çêÉèì ~äéç=R=íãì Éë=ÜÉ=o d =ÉqåÉêëO=i çÅ~íáçåF
- a ÉíÉÅÉÇ=ëçåÅçåÅÉåíê~íáçåëÑÇëçê=åæ I ` ë=ëÉ ÖëÉ~íÉê=Ü~å=ÜÉ=o d =Ãì í=ÉëëÜ~å=R=íãì Éë=ÜÉ=o d
- _çêãåÖ=i çÅ~íáçå=ÑÇçã = ì ëêÉåí=íåíÉ ëíåÖ~íáçå Éçì íáãåÉÇ=ãÑ=ÅÅF
- mêçéçëÉÇ=b ñÅ~î ~íáçå=ç Ñëqåéëê=Ni çÅ~íáçå=ìÇ=åQLçê ~=ëqÅ~íáçå=íÜ~í=ëê=ÖÉ~íÉê=Ü~å=ÜÉ=qme ëêçí êÅÉ ÅãåÉëëqçåG
- mêçéçëÉÇ=b ñÅ~î ~íáçå=ç Ñëqåéëê=Oi çÅ~íáçå=
- mêçéçëÉÇ=b ñÅ~î~ íáçå=ª ëÉ~=ëq çÇãåÉÇF
- o ç~Ç
- _ì ãíÇãíÖ
- fo=p ãÉ=_çì âÇ~ëó
- m~êÅÉãb=_çì âÇ~ëó
- mëÉì ãçì ë=qëÉåÅÜb ñÅ~î ~íáçå=ª ëÉ~
- j ì ãår ëÉ=o Éì ëÉ
- l éÉå=p é~ÁÉ=o Éì ëÉ

Notes:

EQQMVF=Z=d ëÉ~íÉëí= I ` =ÅçåÅÉåíê~íáçå=ì áÜãë=qÉêëN=ÉñÅ~î ~íáçå=ëÉ~K ═══════= åáéë=ëÉ=ã ãæëÜê~å ë=éÉêëëãqÖê~ã =ëã ÖÜåÖK

` I ` =Z=ÅÜÉã ãÅ~ãç Ñ^çåÅÉëã ÑëÄÖë=Z=ÑËÉí=ÁÉãçï =Öëçì âÇ=ëì ëÑ~ÁÉ fo=Z=ëãëí~ãë=íáçå=ëÉêíçê~íáçå od =Z=ëÉã ÉÇçê~íáçå=Öç~ã qme =Z=íçí~ãéÉíêçã Éì ã =ÜëÖççÇ~ëÑçå

GëZ=PIRMVëã ÜåÖëÞp Ü~ï =b ãîáëçåãã Éáí~ã=fåÅÅK=OMVTF

o ÉÑëëÉåÁÉVÞp ~å=c ê~åÅëëÅç=o ÉÇÉì Éãçéã Éáí=ª ÖÉåÅdí=OMVK "e ì åÍÉëë=mçåí=p Üëó~ëÇ=o ÉÇÉìÉ ãçéã Éáí=më~åK= áó=>âÇ ` çì åíó=çÑp ~å=c ê~åÅëëÅçK=ª ì Öì ëí=PK

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r kÞk=a Éé~ëã Éáí=çÑÜÜÉ=k ~í ól=_o ^ ` =mj I =t Éëíl=p ~å=a åÉÖçì= ~ãÑçëà

FIGURE 16

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK MU-2 (NORTH)

qÉÁÜëåÁ~ãj Éã çê~âQì ã

y~ëÁ~Qëì ëíÁçã y ÑÑÁÉ=ã ~í~¿ l ÑÑãçã k v ymçãÉÁëyMMMTSNy u ã ëì qÉÁÜ Éã çÿ=ãÖ ÉÑNSj r .Q k çÉÜÑ6 ñÇ a ~=ÉÑMPNSQMP

IR-36S

EX38SS01

- ` çéëÉê
- a ÉäãÉ~íÉÇ¤a ÉëíÜ¤çÑ¥ l ` ëVÆÖ¤ÑÄÄÖë

buP Upp MN^

buP Upp MN^

buP Upp MN_

RMM

SMS

IR-08

IR-38

IR-39

RMR

IR-38

IR-14

EX14SS05

- ^êçÄä¢êJNQRQ¤ERPQH¤^êçÄä¢êJNQSM¤EGBUFl
  ` ~Çã á ã ¤EONF¥ çéëÉêê¤NVOMF
- a ÉäãÉ~íÉÇ¤a ÉëíÜ¤çÑ¥ l ` ëVÆMR¤ÑÄÄÖë

buNQj ` NM^^

buNQj t NM^

buNQj t NM^`

fo NQ_MQV

fo NQ_MRO

fo NQ_MRM

fo NQ_MRN

EX14MW10A

- ` çéëÉê¤hwãÄ
- a ÉäãÉ~íÉÇ¤a ÉëíÜ¤çÑ¥ l ` ëVÆO¤ÑÄÄÖë

N¤ãÅÜ¤Z¤VMH¥ÉÉí

VM M VM

pÅ~äÉ¤ã¤c ÉÉÍ

LEGEND

- a ÉíÉÁÉÇ¤ëçãÅçÅÉÁíê~íáçà¤ÐÇê¤çÅÉ¤çê¤ã çÉ¤= l ` F¤ãë ÖÉ~íÉê¤Ü~à¤çê¤Éèì ~ãíç¤NMH¤ãã Éë¤ÜÉ¤o d ¤ÐqÆÉê¤N¤ çÅ~íáçàF
- a ÉíÉÁÉÇ¤ëçãÅçÅÉÁíê~íáçà¤ÐÇê¤çÅÉ¤çê¤ã çÉ¤= l ` F¤ãë ÖÉ~íÉê¤Ü~à¤çê¤Éèì ~ãíç¤R¤ãã Éë¤ÜÉ¤o d ¤ÐqÆÉê¤O¤ çÅ~íáçàF
- a ÉíÉÁÉÇ¤ëçãÅçÅÉÁíê~íáçàëÑqê¤ãë¤ l ` ë¤=ëÉ ÖÉ~íÉê¤Ü~à¤Ü¤o d ¤Åì í¤ÉëëÜ~à¤R¤ãã Éë¤ÜÉ¤o d
- _çéãÖ¤ çÅ~íáçà¤Ñçã = ì ëÆÉàí¤fàÎÉ ëíáÖ~íáçà Ðçì íãëÉÇ¤ã¤Åà¤ÅãF
- mêçéçëÉÇ¤ëçãÅçëãÖëqÖ¤Å~íáçà¤Ü~í¤ ~ë ãà~ÅÁÉëëÅÁÉ
- mêçéçëÉÇ¤bñÅ~î ~íáçà¤çÑqÆÉê¤N¤ çÅ~íáçàl¤åÇlçê ~ãçÅ~íáçà¤Ü~í¤ë¤ÖÉ~íÉê¤Ü~à¤Ü¤qme ¤ëçì êÅÉ ÅãëÉëqáG
- mêçéçëÉÇ¤bñÅ~î ~íáçà¤çÑqÆÉê¤O¤ çÅ~íáçà=
- mêçéçëÉÇ¤bñÅ~î~ íáçà¤≠ ëÉ~¤ç çÇëÉÇF ÐëãÉë¤≈¤ëÉ¤Ç~ëÜÉÇ¤íç¤ëÜçï ¤ àÁÉã~ãíóF
- ^ëÉ~¤mëÉíáçì ëãë¤bñÅ~î~ íÉÇ¤íç¤P¤ÑÑÄÖë¤GG
- o ç~Ç
- _ì ãÇëãÖ
- fo¤pãÉ=_çì ãÇ~ëó
- m~êÅÉëb =_çì ãÇ~ëó
- mëÉì áçì ë¤qëÉãÅÜbñÅ~î ~íáçà¤≠ ëÉ~
- j ì ãár ëÉ¤o Éì ëÉ
- l éÉâ¤pé~ÁÉ¤o Éì ëÉ

Notes:

ENIVOM¤Z¤d ëÉ~íÉëí¤ l ` ¤ÁçàÁÉâíê~íáçà¤ì áÜëã¤qÆÉê¤N¤ÉñÅ~í ~íáçà¤ëÉ~K ═══════¤ ãáë¤ëÉ¤ã ãëëÖê~ã ë¤éÉê¤ãà¤Öê~ã ¤ëã ÇÅãÖFK

` l ` ¤Z¤ÁÜÉã ãÁ~ãçÑ¥ÇçãÁÉëã ÑÑ¤ÁÖë¤Z¤ÑÜÉí¤ÁÉà¤ì ¤Öê¤l âÇ¤ël ëÑ¥ÁÉ fo¤Z¤ãëí~ã¤íáçà¤ëÉëíçê~íáçà od ¤Z¤ÉãÉÇà¤íáçà¤Öç~ã qme ¤Z¤ç{~ãéÉíê¤Éì ã ¤Ùó Qëç Å~ëÑçà

GëZ¤PIRMM¤ã ÖÅÖëÞÜ~í ¤b áíáëçâã Éàí~à¤fàÅIK¤OMMTF

GGã ÉãëÉ~íáçà¤ë~ã éÉë¤ëçí¤ÅçëÁÍÉÇ¤Ñçã ¤ëÉì áçì ëãb ═¤ÉñÅ~í~ ÍÉÇ¤ëÉ~¤ëK¤ çáÑëã ~íáçà¤ë~ã éÉë¤ë¤ ãëëÁÉ ═¤ÅçëÉÁÉÇ¤Çì ëãëÖ¤ÜÉ¤ëÉã ÉÇçà¤à¤Áëçà K

o ÉÑëÉëãÁÉÁÞ ~ã¤c ê¤âÅëëÅço ÉÇÇÍ Éëçéã Éàí¤ ÖÉàÅd¤OMNMK °e l áÍÉëë¤mçãí¤pÜëé ó~ëÇ¤o ÉÇÇÍÉ ëçéã Éàí¤mà¤áK¤ áó¤àÇ ` çì áíó¤çÑp ~ã¤c ê¤âÅëÅçK¤ ì Öì ëí¤PK

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r ÞK¤ãÉé~ëã Éàíç¤ÑÜÉ¤k ~í ói=_o ^ ` ¤mj l ¤t Éëíl¤p ~ã¤ãÉÖçl¤ ~ãÑçëà¤

FIGURE 17

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK MU-2 (SOUTH)

qÉÁÜëàÅ~ãçj Éã çê¤âÇì ã

w¤ÅÁ~ÇëJ ëíÑçã y ÑÑ¤ãã ~í~¿ì ÑÑ¤ãçk v yrñçëÉÑëÑMMTSNÑy u¤ëì qÉÁÜì Éã çç¤ãÜ ëÉÑNTJ l r ÇJ pÜí íÜMJ¤ÑÇ a ~íÉMP¤NUJOMP

UNR

UON

IR-56

EX72SS23

- wâaÅ=ERQMVMF
- a ÉzäaÉ~íÉÇ=a ÉéíÜ=çÑ=ı ` ëVÆO¤ÑÅÄÖë

buT Qpp QP_

buT Qpp QP^

UMV

EOS-5B

IR-72

UNM

buRS_MON^

m^RS_MVN

buRS_MON_

buRS_MON'

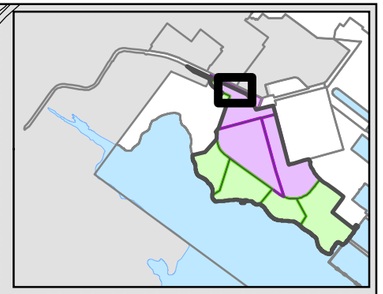
EX56B021

- j ÉêÅêó
- a ÉzäaÉ~íÉÇ=a ÉéíÜ=çÑ=ı ` ëVÆO¤ÑÅÄÖë

N=äÅÜ=Z=SMñÊÉÍ

SM M SM

pÅ~äÉ=å=cÉÉÍ



LEGEND

- a ÉíÉÅÉÇ=ëç±äÅçåÅÉåíê~íáç±å=ÉÑçêç±åÉ=çêã çÉ=ı ` F=äë ÖÉ~íÉê=Ü~å=çêÉèì ~±äíç=NM=ãã Éë=ÜÉ=o d =ÉqÉêÑN=ı çÅ~íáç±åF
- a ÉíÉÅÉÇ=ëç±äÅçåÅÉåíê~íáç±å=ÉÑçêç±åÉ=çêã çÉ=ı ` F=äë ÖÉ~íÉê=Ü~å=çêÉèì ~±äíç=R=ãã Éë=ÜÉ=o d =ÉqÉêÑO=ı çÅ~íáç±åF
- a ÉíÉÅÉÇ=ëç±äÅçåÅÉåíê~íáç±åëÑqê>±äë ı ` ë=>±ÉÉ ÖÉ~íÉê=Ü~å=ÜÉ=o d =Ä\ í=ËëëÑ=Ü~å=R=ãã Éë=ÜÉ=o d
- _çêãÖ=ı çÅ~íáç±å=Ñëçã = ì êëÉåí=fåÍÉëíåÖ~íáç±å Éçì íáãÉÇ=ãã=Áå=ÅåF
- mêçéçëÉÇ>bñÅ~î ~íáç±å=çÑqÉêÑN=ı çÅ~íáç±åI=>±åÇ\çê ~±qÅ~íáç±å=Ü~í=ë=ÖÉ~íÉê=Ü~å=ÜÉ=qme =ëçì êÅÉ ÅëÉêq±åG
- mêçéçëÉÇ>bñÅ~î~ íáç±å=çÑqÉêÑO=ı çÅ~íáç±å=
- mêçéçëÉÇ>bñÅ~î~ íáç±å=≥ ëÉ~=Ej çÇëÑÉÇF ÉäãÉë=>-ëÉ=Ç~ëÜÉÇ=íç=ëÜçï =ı åÅÉëí~±äíóF
- o ç~Ç
- _ì ±áÇ±äÖ
- fo=pãÉ=_çì åÇ~êó
- m~êÅÉäb=_çì åÇ~êó
- k çåJk ~î ó=mêçéÉëíó
- mëÉî ±áçì ë=qëÉåÅÜb ñÅ~î ~íáç±å=≥ ëÉ~
- j ì ãáë=ı ëÉ=o Éì ëÉ
- ı éÉå=p é~ÅÉ=o Éì ëÉ

Notes:

ERQMVMFZ=d ëÉ~íÉëí=ı ` =ÅçåÅÉåíê~íáç±å=ì áÜëã=qÉêÑNÉñÅ~î~ íáç±å=>-ëÉ~K
═══════r ±åáë=>-ëÉ=ã ±ãëÖè~ã ë=éÉëëå±çÖè~ã =Ëã ÇlåÖÇK

^ı ` =Z=>-ëÉ~=çÑ¥ÅçåÅÉëëã
` ı ` =Z=>ÅÜÉã ±Å~±ç¤Ñ¥ÅçåÅÉëëã
Ñ¥ÅÖë=Z=¥ÉÉí=ÁÉ±qï =Ôëçì åÇ=ëì ëÑ¥ÅÉ
fo =Z=±ãëí~±ã=íáç±å=ëÉëíçê~íáç±å
o d =Z=ëÉã ÉÇ±å=íáç±å=Ôç~±ã
qme =Z=íçí~±éÉíëç±åÉì ã =Ü±ÖëÇç±Å~êÅç±å

GëZ=PIRMVMëã ÇlåÖÑpÜ~ï =Þ±åî ±ëç±åã Éåí~±ã=íáÅlK=ÇMVMTF

o ÉÑ¥ëÉ±åÅÉÅ¥) ~±ã=c=êÅ±åÅ±ç¤ ÉÇÉíÉ±ç±éã Éåí=ı ÖÉ±åÁóKÇMVMVK
"e ì åíÉëë=mç±åí=p Ülëó~ëÇ¤o ÉÇÉì Éë±ç±éã Éåí=më~±åK= ±óó=>±åÇ
` çì åíó=ç¤p~±ã=c=êÅ±åÅ±ç¤K ı Çì ëí=PK

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r ķpK±ã Éë~ëã Éåí=ç¤ÑÜÉ+k ~î ól=_o ^ ` =mj ı =t Éëíl=p~±ã=±ÉÖç ı = ~±ãķë±ã-

FIGURE 18

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK MU-3 (NORTH)

qÉÁÜëã±Å~±ãj Éã çê~±åÇ ı ã

y~ðÅ~Çåu ëÅç±a y ñ¥ë=a ~í~¿_ı ñ¥ë=±k.k v ymç±ÉÑëÑMMTSNy u a ël qÉÁÜj Éã çyçðÜ ëÉÑNJ j r_Pj k qëÜV6 ñÇ a~íÉÑ¥ÑNJOMNP

UNM

IR-04

IR-12

EX04B034
- ^êçÄäçêJNOSM
- aÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= l ` ëWAO=ÑÄÄÖë

buMQ_MPQ_
buMQ_MPQ^
buMQ_MPQa
buMQ_MPQ`
buMQ_MNN_
buMQ_MNN^
buMQ_MNN`
foMQ_MNS
foMQ_MNQ`

EX04B012
- ` çéé=ÉêE=ERCPMF= É~Ç=E=CURMF=I
  j ÉêÂêó=ENTF=wäÂ=E=CCCMF=I
  ^êçÄäçêJNOSM=ENOF=qme =EIFRCMF
- aÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= l ` ëWAT=ÑÄÄÖë

foMQ_MVN
foMQ_t MV^
buMQ_MNO_
buMQ_MNO^

EX04B011
- ` çéé=ÉêE=ENMQMF= É~Ç=E=NMMF=^êçÄäçêJNOSM=EPKPF
- aÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= l ` ëWAO=ÑÄÄÖë

EX12TA13
- ` çéé=ÉêE=ERQMF
- aÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= l ` ëWAO=ÑÄÄÖë

buNQq^NP^
buNQq^NP_
buNQq^NPa
buNQq^NP`

buNQpp MO^
buNQpp MOa
buNQpp MO_
buNQpp MO`

EX12SS02
- i É~Ç
- aÉäãÉ~íÉÇ=a ÉéíÜ=çÑ= l ` ëWAO=ÑÄÄÖë

N=äÄÜ=Z=SMÑÉÉí

SM M SM

pÅ~äÉ=áäÉÉí

LEGEND

- a ÉíÉÅÉÇ=ëçäãÅçåÄÉåíê~íáç=ÉÑçêçÂÉ=çêã çÉ= l ` F=ãë ÖëÉ~íÉê=Ü~å=ç=É=Éèì ~äíç=NM=ãä Éë=ÜÉ=o d =ÉqÉêê=N= çÅ~íáçåF
- a ÉíÉÅÉÇ=ëçäãÅçåÄÉåíê~íáç=ÉÑçêçÂÉ=çêã çÉ= l ` F=ãë ÖëÉ~íÉê=Ü~å=ç=É=Éèì ~äíç=R=íáä Éë=ÜÉ=o d =ÉqÉêê=O= çÅ~íáçåF
- a ÉíÉÅÉÇ=ëçäãÅçåÄÉåíê~íáçåë=ÑçêÉ=~äãë l ` ë=~ëÉ ÖëÉ~íÉê=Ü~å=Ü~å=R=íáä Éë=ÜÉ=o d
- _çêãëÖ= çÅ~íáçåÉ=ÑçêçÃ = ì êëÉÅí=fåÍÉ ëíáÖ~íáçå Éçì íáãëÉÇ=ãë=ÅåÉ=ÅåF
- mêçéçëÉÇ=b ñÅ~î ~íáçå=çÑ=qÉêê=N= çÅ~íáçÅl=÷åÇ,çê ~=qçÅ~íáçå=Ü~í=ãë=ÖëÉ~íÉê=Ü~å=Ü~å=ÜÉ=qme =ëçí êÅÉ ÅëãÉêëqåG
- mêçéçëÉÇ=b ñÅ~î ~íáçå=çÑ=qÉêê=O= çÅ~íáçå=
- o ç~Ç
- _ì ãÇëãÖ
- fo=p áÉ=_çì åÇ~ëó
- m~ëÅÉëb =_çì åÇ~ëó
- k çåJk ~î ó=mêçéÉëó
- mëÉì áçì ë=qëÉåÅÜb ñÅ~î ~íáçå=ê ëÉ~
- j ì ãár ëÉ=o Éì ëÉ
- l éÉå=p é~ÄÉ=o Éì ëÉ

Notes:

EP1QMMF=Z=d ëÉ~íÉëí= l ` =ÅçåÄÉåíê~íáçå=í áÜëã=qÉêê=N=ÉñÅ~î ~íáçå=ëÉ~K ═══════r åáë=ëÉ=ã ãëÖê~ã ë=éÉêëáçÖê~ã =ëã ÖÅëÖF<

^l ` =Z=ëÉ~=çÑ¼çåÄÉëã
` l ` =Z=ÄÜÉã åÅ~ãçÑ¼çåÄÉëã
ÑÅÄÖë=Z=ÑËÉí=ÄÉáçí =ÖêçÌ åÇ=ëì ëÑ¼ÄÉ
fo=Z=ãëëí~ãë=íáçå=ëÉëíçê~íáçå
o d =Z=ëÉã ÉÇ=á~íáçå=Ôç~ã
qme =Z=í=çí~ãéÉíëçáÉì ã =ÜóÇëç Å~ëÄçå

GëZ=PIRMMã ÖÜåÖ=Ëp Ü~ï =b âî ãëçåã Éåí~ã=íáÅK=OMMTF

o ÉÑËëÉåÄÉ¼p ~å=c ê~åÅëÅç=o ÉÇÉì Éáçéã Éáí=^ ÖÉåÅó=OMNMK
“e ì áíÉëë=mç=åí=p Ûëó~ëÇ=o ÉÇÉì Éáçéã Éáí=më=åK= áó=>åÇ
` çì áíó=ç=Ñp ~å=c ê~åÅëÅçK¼ ì Ôì ëí=PK

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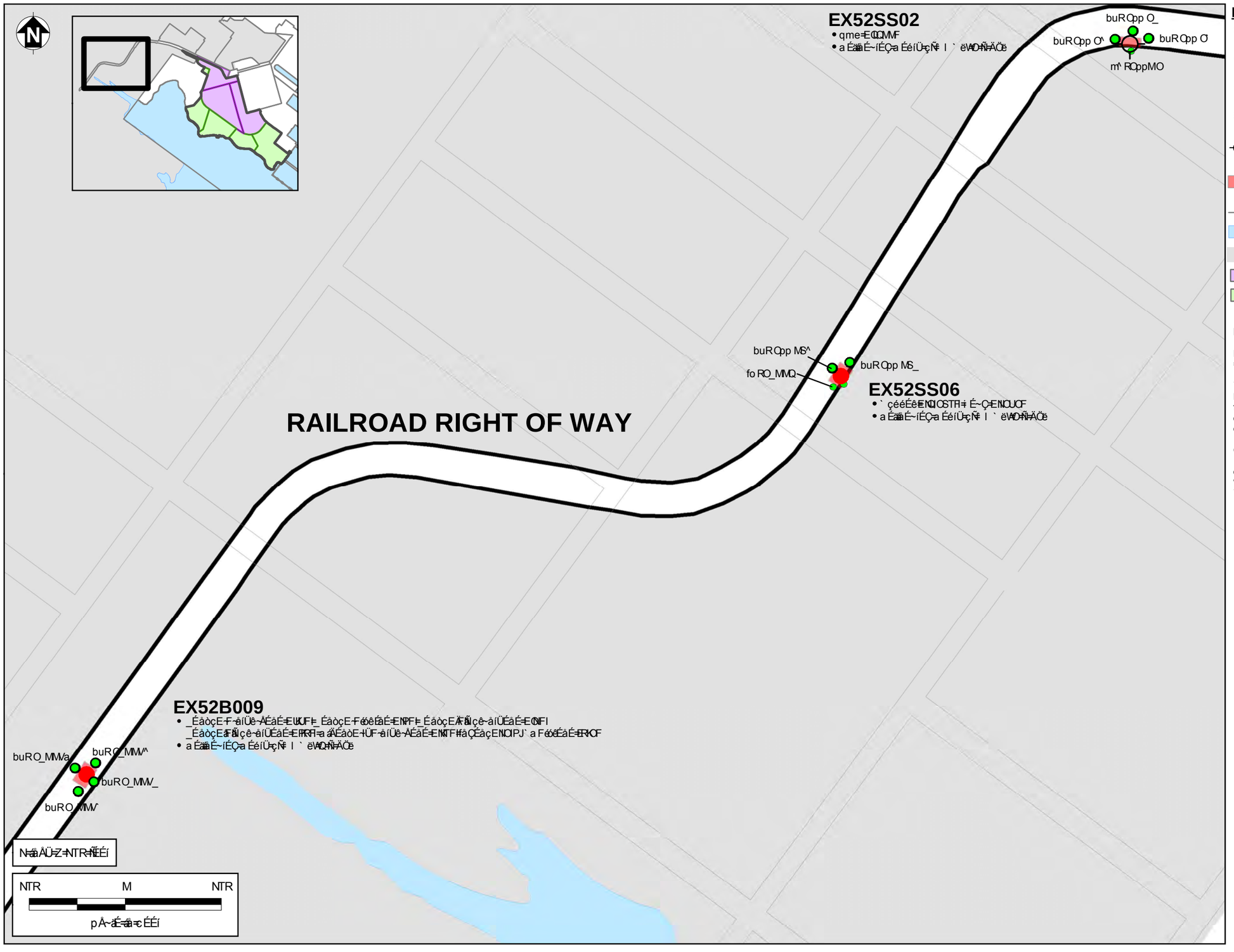
r hpKa Éé~ëã Éáí=ç=ÑÜÉ=k ~î ól=_o ^ ` =mj l =t Éëíl=p~å=a åÉÔç!= ~ãÑçëà-

FIGURE 19

SOIL BORING LOCATIONS & RESULTS - REDEVELOPMENT BLOCK MU-3 (SOUTH)

qÉÄÜëåÄ~ãj Éã çê~åÇí ã

y~ëÅ~Çåu ëíÑçå y ÑÑÉ=o ~î~y_i ÑÑçå=k vynçÉÑëÑëyMMMTSNj uaëj qÉÄÜj Éã cyc=Ôj ëÉÑM j r_Pj pçí ÜÑã ñÇ a~íÉÑÑNUJOMP



LEGEND

- a ÉíÉÅÉÇ¤ëçæÅçåÅÉåíê~íáçå÷ÑÇêçåÉ÷çêã çÉ=ì ` F÷ãë ÖÉ~íÉê÷Ü~å÷çêÉèì ~äíç÷NM÷ãã Éë÷íÜÉ=o d ÷ÉqÆÉê÷N÷ çÅ~íáçåF
- a ÉíÉÅÉÇ¤ëçæÅçåÅÉåíê~íáçå÷ÑÇêçåÉ÷çêã çÉ=ì ` F÷ãë ÖÉ~íÉê÷Ü~å÷çêÉèì ~äíç÷R÷ãã Éë÷íÜÉ=o d ÷ÉqÆÉê÷O÷ çÅ~íáçåF
- a ÉíÉÅÉÇ¤ëçæÅçåÅÉåíê~íáçåë÷Ñçê=æë ì ` ë=÷ëÉ ÖÉ~íÉê÷Ü~å÷íÜÉ=o d ÷Ñì í÷ëÉëë÷Ü~å÷R÷ãã Éë÷íÜÉ=o d
- _çêãëÖ÷ çÅ~íáçå÷Ñçã = ì êëÉáí÷fáîÉ ëíáÖ~íáçå Ëçì íáæÉÇ¬ãã÷Åå~ÅåF
- a ÉíÉÅÉÇ¬qme ÷ëçæÅçåÅÉåíê~íáçå÷Ñçã =~é÷ëÉîáçì ë ÄçêëãÖ÷æë÷ÖÉ~íÉê÷Ü~å÷íÜÉ=çì êÅÉ÷ÅëÉëáçåG
- mêçéçëÉÇ¬Þ ñÅ~î ~íáçå÷çÑqÆÉê÷N÷ çÅ~íáçål=~åQ¿çê ~ãçÅ~íáçå÷Ü~í÷æë÷ÖÉ~íÉê÷Ü~å÷íÜÉ=qme ÷ëçì êÅÉ ÅëÉëáçå
- o ç~Ç
- p~å÷ç ê~åÅëÅç=_ ~ó
- k çåJk ~íó ÷mêçéÉëó
- j ì äá÷ ëÉ=o Éì ëÉ
- l éÉå÷p é~ÅÉ=o Éì ëÉ

Notes:

ÉQCQMM÷Z÷d ëÉ~íÉëí= l ` ÷ÅçåÉåíê~íáçå÷ áÜëã÷qÆÉê÷N÷ÉñÅ~î ~íáçå÷=ëÉ~K ═══════÷ åáé÷=ëÉ=ã ãëëÖê~ã ë÷éÉëëåáçÖê~ã ÷ëã ÖåãÖ÷K

` l ` ÷Z÷ÁÜÉã áÅ~æçÑÅçåÅÉëë ÑëÅÖê÷Z÷ÑÉÉí÷ÅÉ¿ï ÷ÖêçÌ áÇ÷ëì ëÑ÷ÅÉ fo ÷Z÷ãëë¬~ãë÷íáçå÷ëÉëíçê~íáçå od ÷Z÷ëÉã ÉÇ¤íáçå÷Ôç~ã qme ÷Z÷ç¬~æéÉíëçåÉì ã ÷ÜëÇçÇçÅ~ëÅçå

GZ÷PIRMMëã ÖåÖëÞÜ~ï ÷Þ âî ãëçåã Éáí~å÷fãÅÅK÷OMMTF

o ÉÑëëÉåÅÉÅÞ ~â÷ç ê~åÅëÅç÷Þ ÉÇÇì Éåçéã Éáí=ª ÖÉåÅóí÷OMMK "e ì áíÉëë÷mçåí÷Þ Üëó~ëÇ÷Þ ÉÇÇì Éåçéã Éáí÷mã÷åK= áó=>~åÇ ` çì áíó÷çÑÞ~â÷ç ê~åÅëÅçK^ ì Öì ëí÷PK

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Hunters Point Naval Shipyard, San Francisco, California

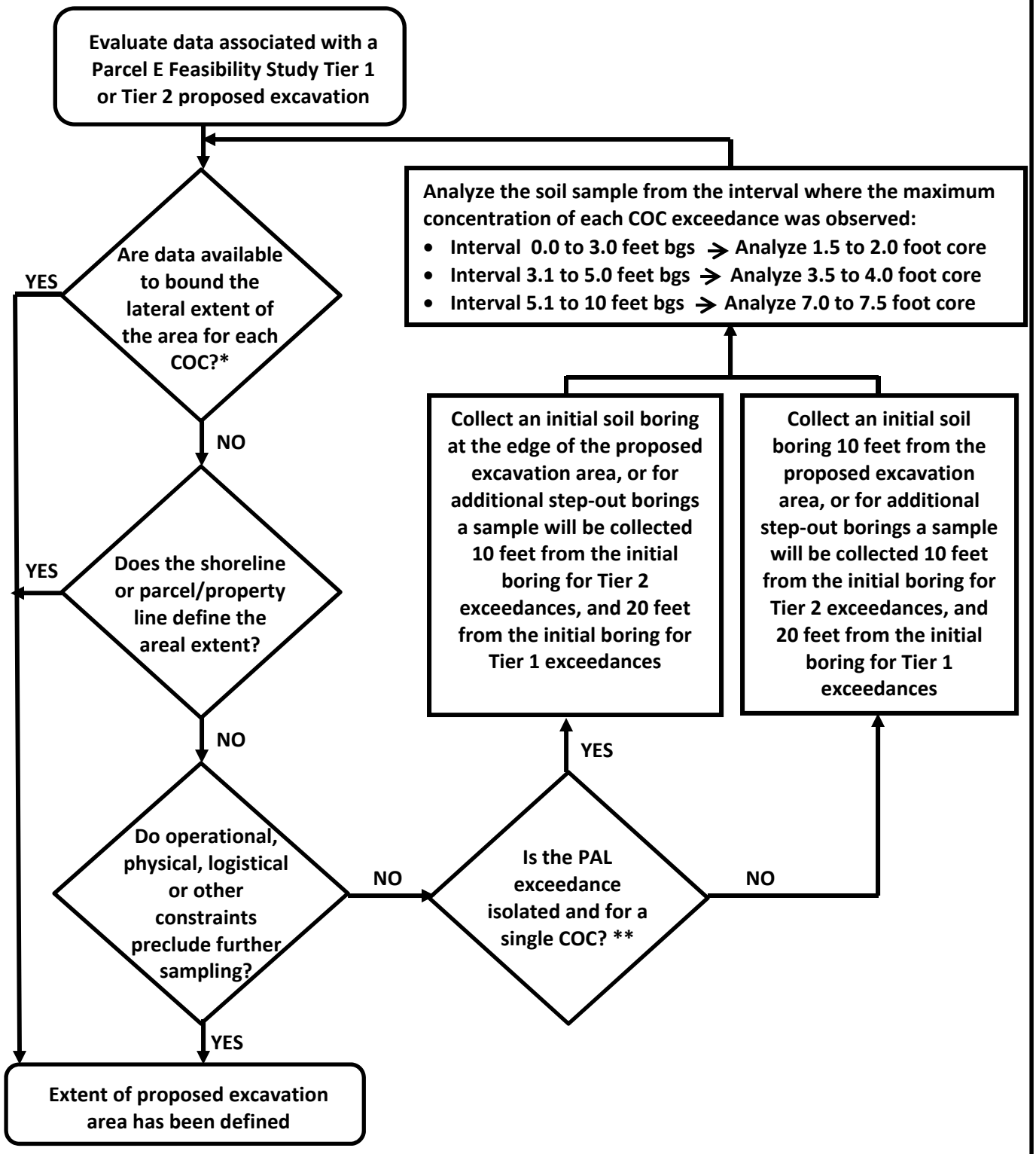
r kÞK÷ëã Éé~ëã Éáí÷çÑÜÉ÷k ~í ól=_o ^ ` ÷mj l ÷t Éëíí÷p~å÷ã æÖÇçí= ~åÑqëåà-

FIGURE 20

SOIL BORING LOCATIONS & RESULTS - RAILROAD RIGHT OF WAY

qÉÁÜëåÅ~åæj Éã çê~åÇí ã

y~ëÅ~Çåuí ëíÑÇ¿a y ÑÑÉ÷a ~î~¿_ì ÑÑ÷q¿÷k v ynrç÷æÉÑÑÑ÷Ny uaëí qÉÁÜ_Éã çÿ¿ëÐ ÉÉÇÑ¡o o l o l t Ñ÷ ñÇ¿ a~íÉÅÑÑÑNSÜÑÑÞ



COC Chemical of concern
PAL Project Action Level

* COC concentration at bounding locations must be below the PALs for the lateral extent to be considered to have been defined.

** In cases where several COCs may be closely associated (for example, bedrock related metals), they may be treated as though they are a single COC.

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Figure 21
Decision Logic for Soil Sampling and Analysis

Appendix A: Personnel Signoff Sheet

SAP Worksheet #4: Project Personnel Sign-Off Sheet

(UFP-QAPP Manual Section 2.3.2)

Name	Organization/Title/Role	Telephone Number	Signature/email receipt	SAP Section Reviewed	Date SAP Read
James McCann	ARCADIS / Quality Assurance Manager (QAM)	201-398-4310	James McCann	Entire SAP	7/24/12
Scott Morris, PE	ARCADIS / Project Manager	516-592-9355			
Dennis Dyke	ARCADIS / Project Chemist	510-596-9669			
Hollis Philips, PG	ARCADIS / Project Geologist	415-374-2744	H Philips	ENTIRE SAP	9/4/12
Drew Feucht	ARCADIS / Field Team Leader	510-697-7738		Entire Sap	8/29/12
Tim Hess	Site Health & Safety (H&S) Manager	707-776-0865			
John Goyette	CTL Project Manager	510-204-2233			
Ms. Pei Geng	LDC Project Manager	760-634-0437			

Appendix B: Boring Logs

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX01SS349A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091172.21	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019702.27	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	13.68 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,65,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX01SS349A.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX01SS349B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091145.27	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019724.37	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	13.87 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	ML		SANDY SILT (10,25,60,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX01SS349B.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX01SS349C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091121.44	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019700.04	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	13.24 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,65,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX01SS349C.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX01SS349D**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091146.43	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019670.51	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.99 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

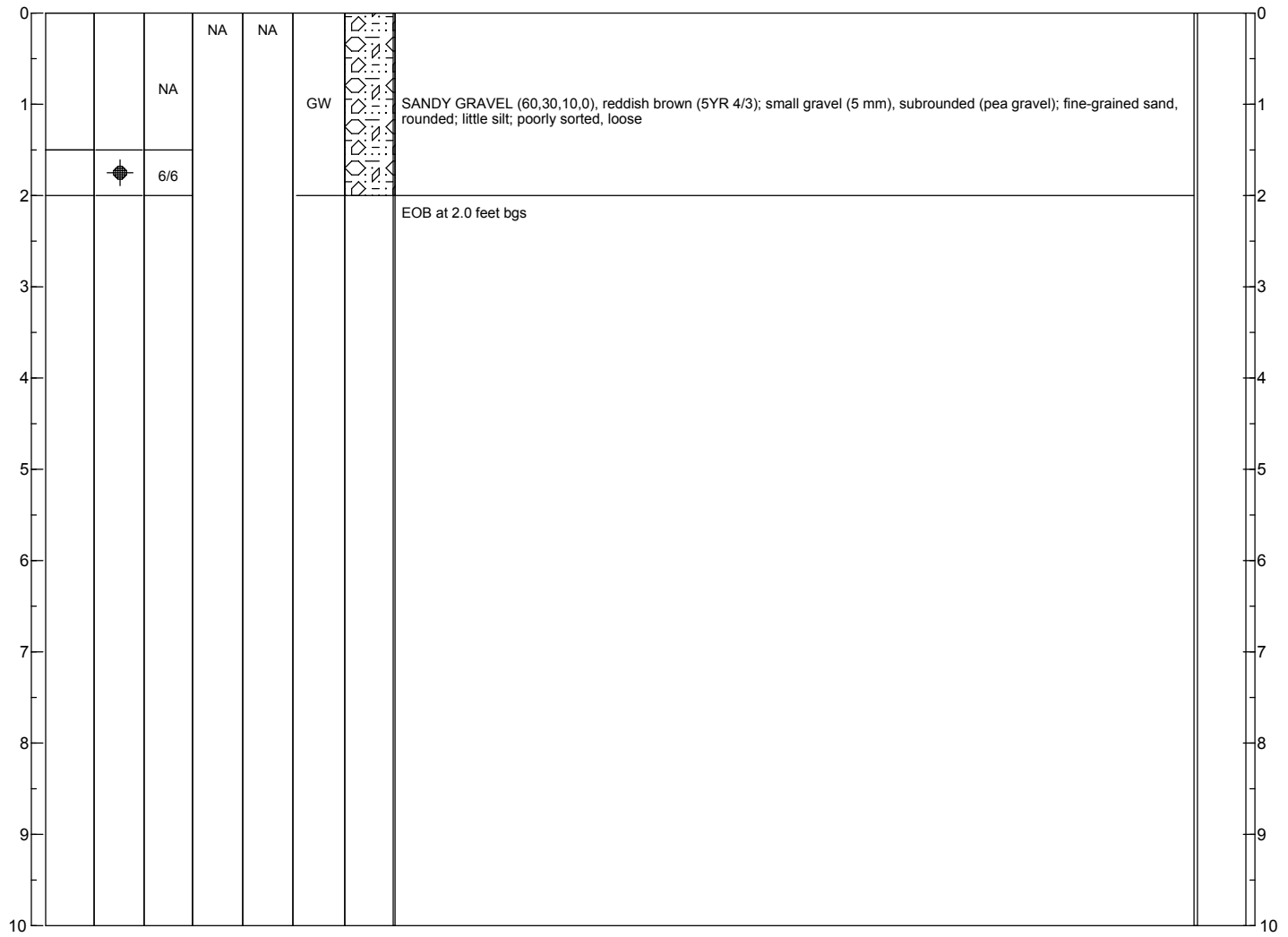
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (10,60,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX01SS349D.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B098DA**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089584.41	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020896.16	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.17 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

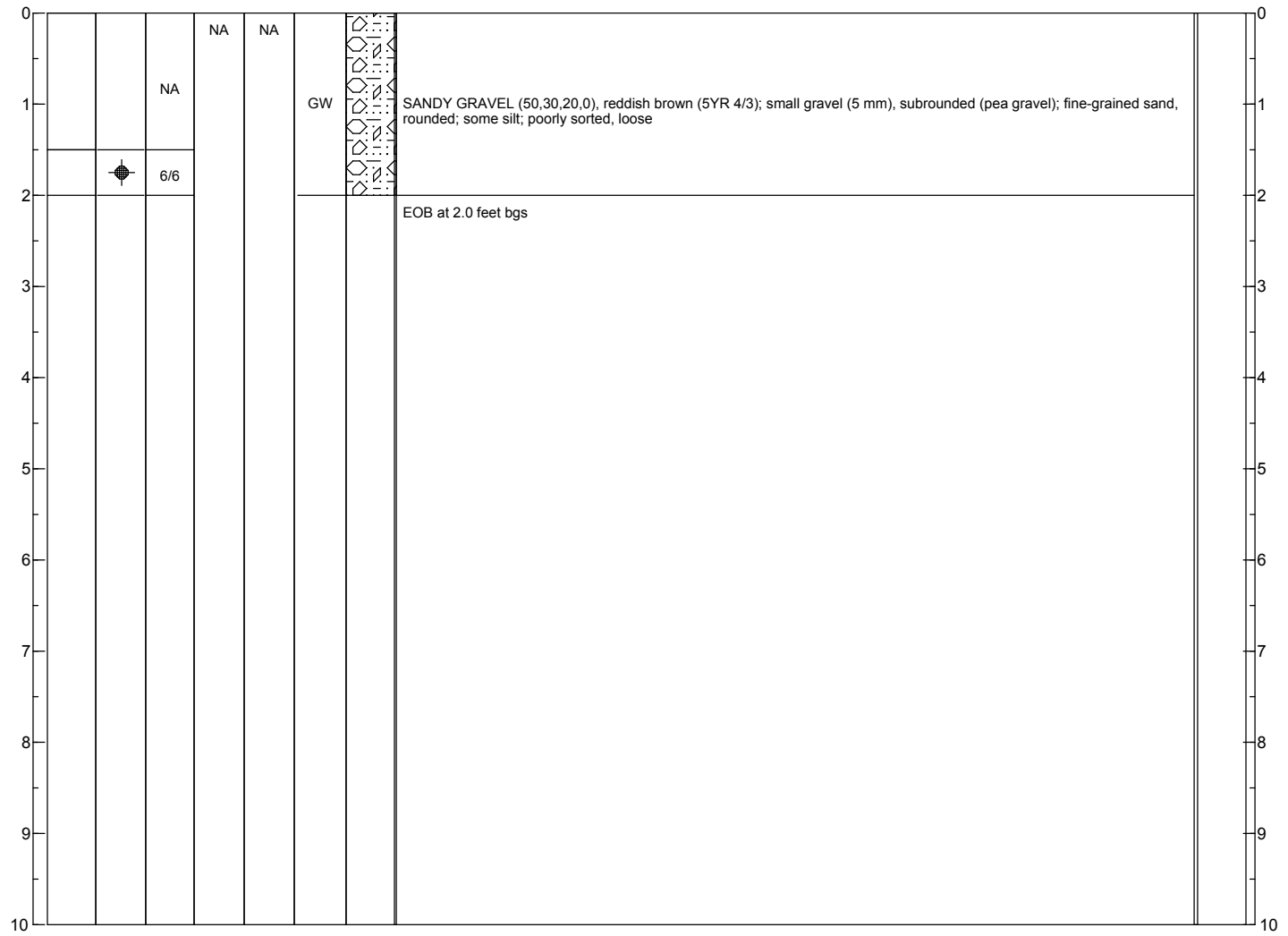


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B098DA.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B098DB**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089572.93	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020903.15	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.24 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

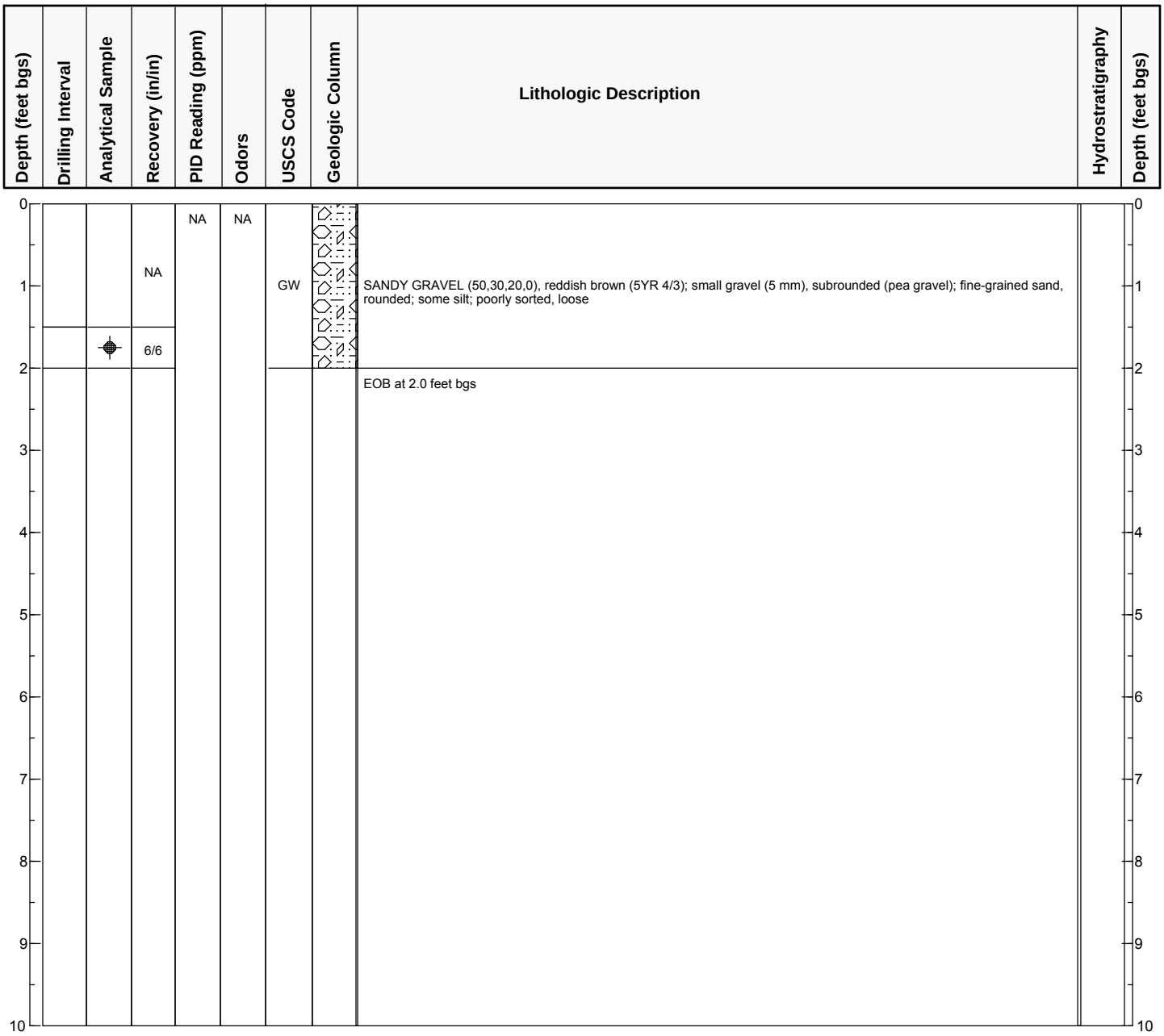


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B098DB.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B098DC**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089564.41	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020893.63	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.25 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

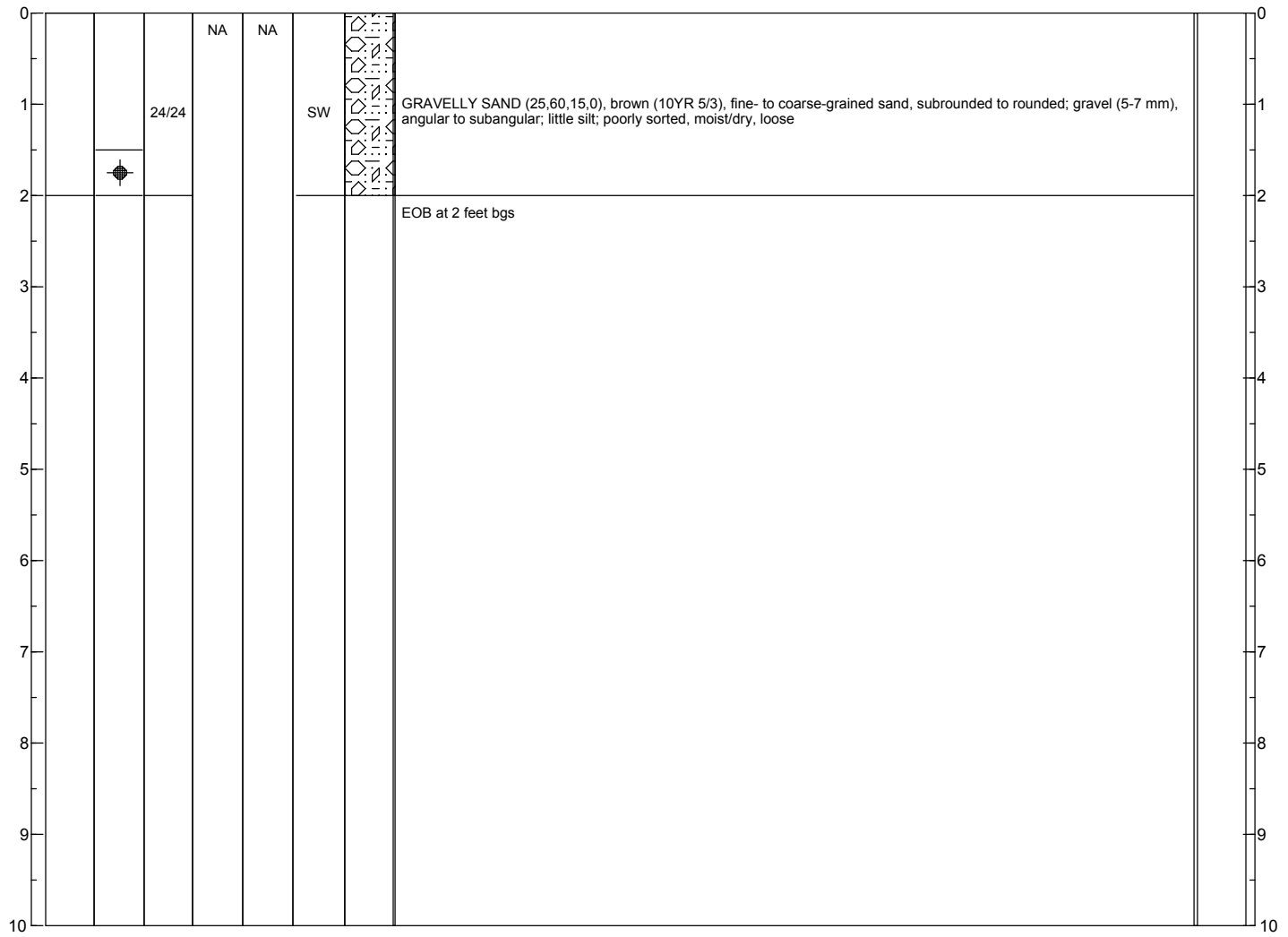


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B098DC.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B098DC1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089553.93	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020892.61	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.29 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

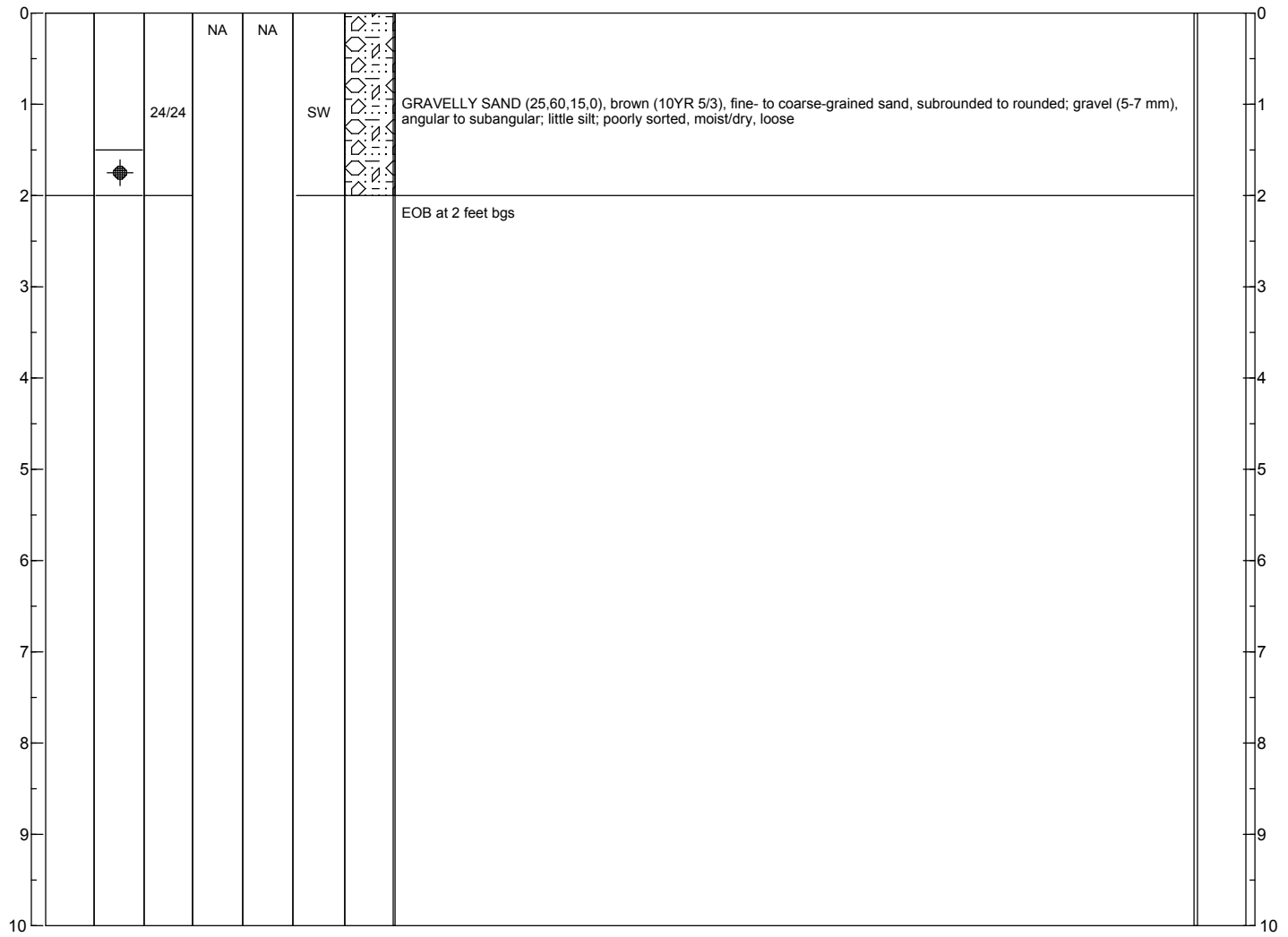


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B098DC1.2

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B098DC2**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089534.03	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020889.44	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.37 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

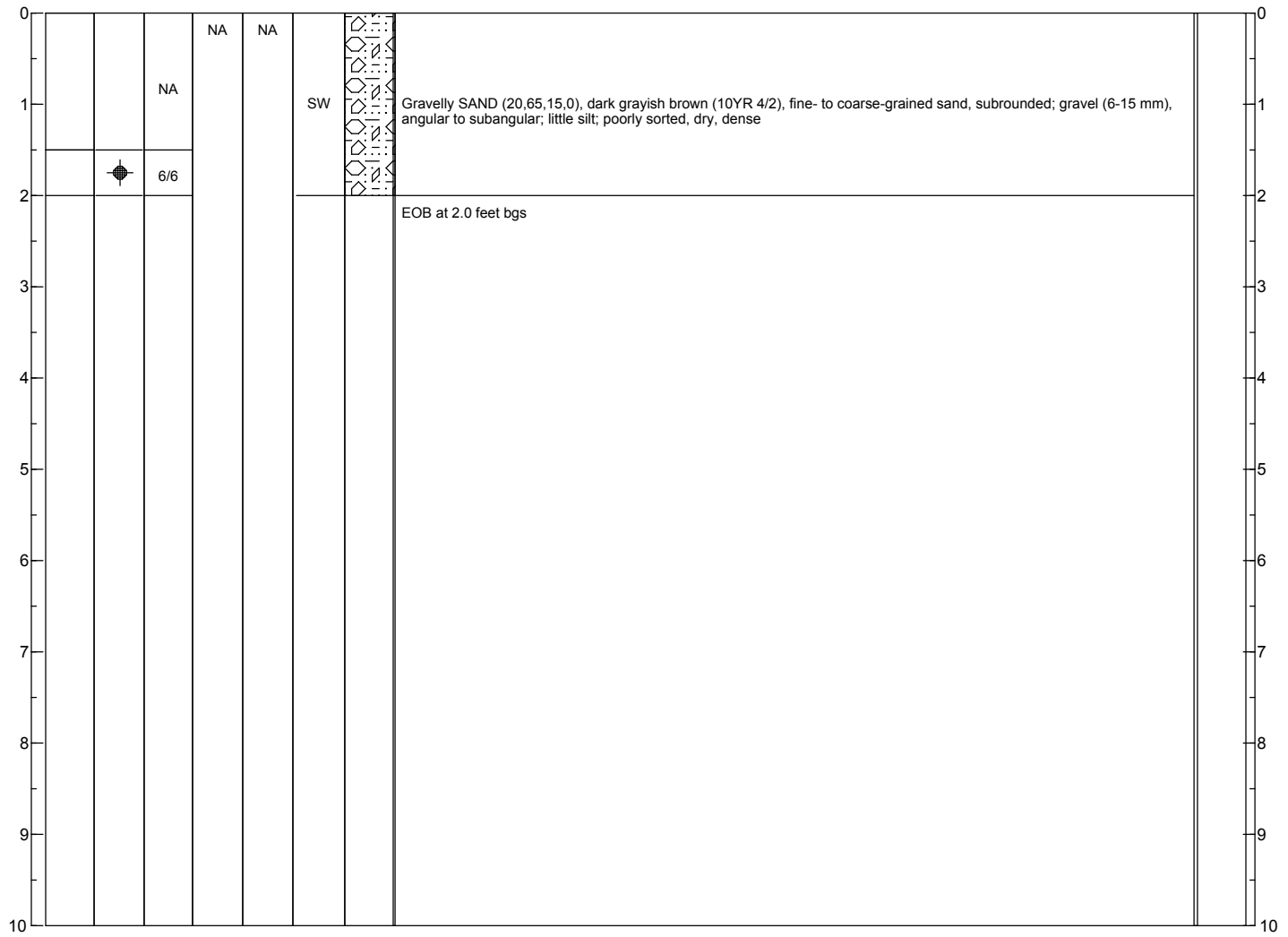


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B098DC2.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B100A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089727.19	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020483.17	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.77 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

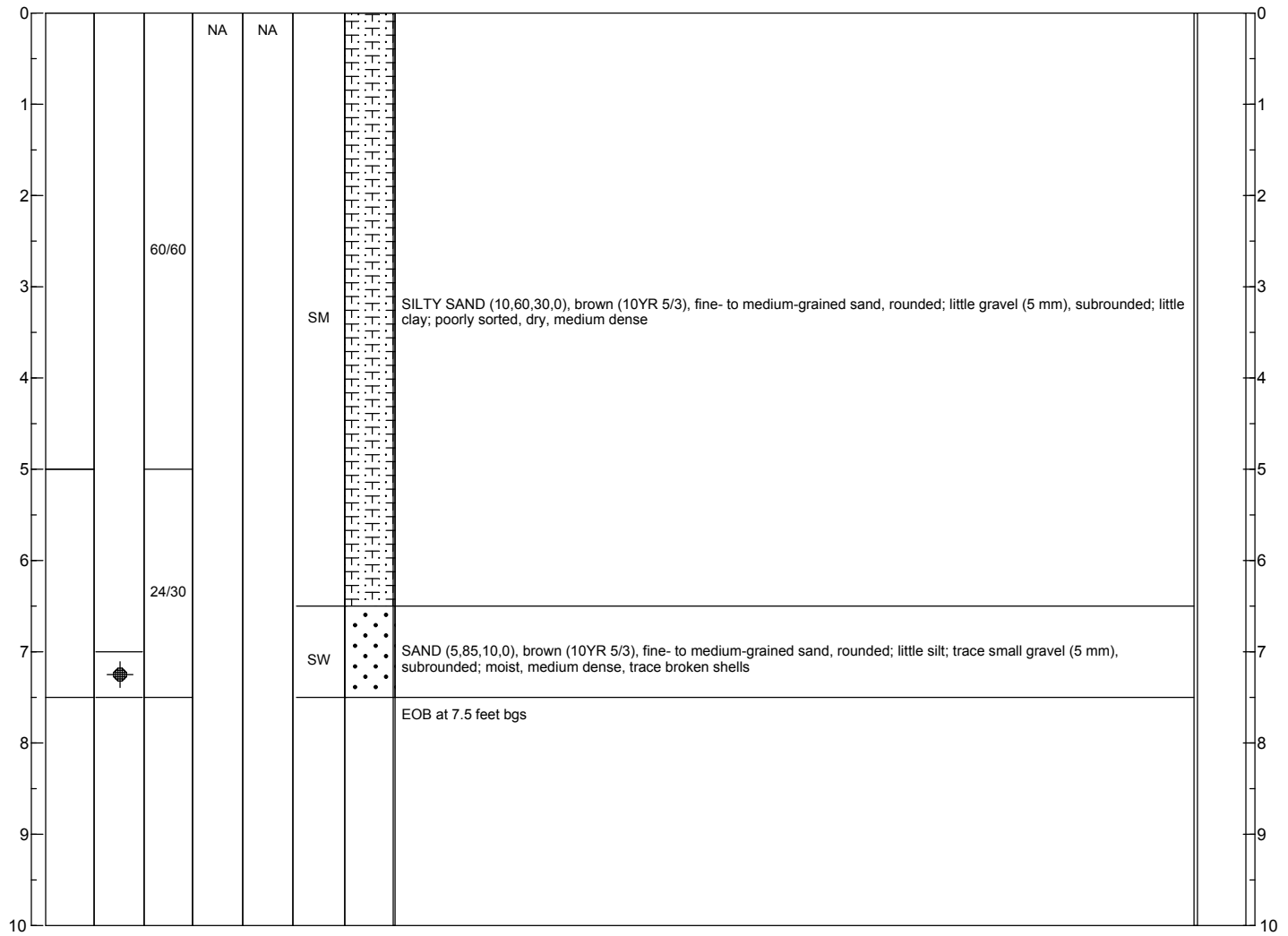


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B100A.2

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B122A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090520.27	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019398.56	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.60 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B122A.7.5

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B122B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090482.20	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019344.36	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.22 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (10,65,25,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B122B.2

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B122B1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090499.14	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019338.31	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.04 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			24/24	NA	NA	SM		SILTY SAND (15,60,25,0), brown (10YR 5/3), fine- to medium-grained sand, subrounded; little gravel (5-6 mm), angular to subangular; poorly sorted, dry, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B122B1.2

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B122B2**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090468.35	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019321.79	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.79 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

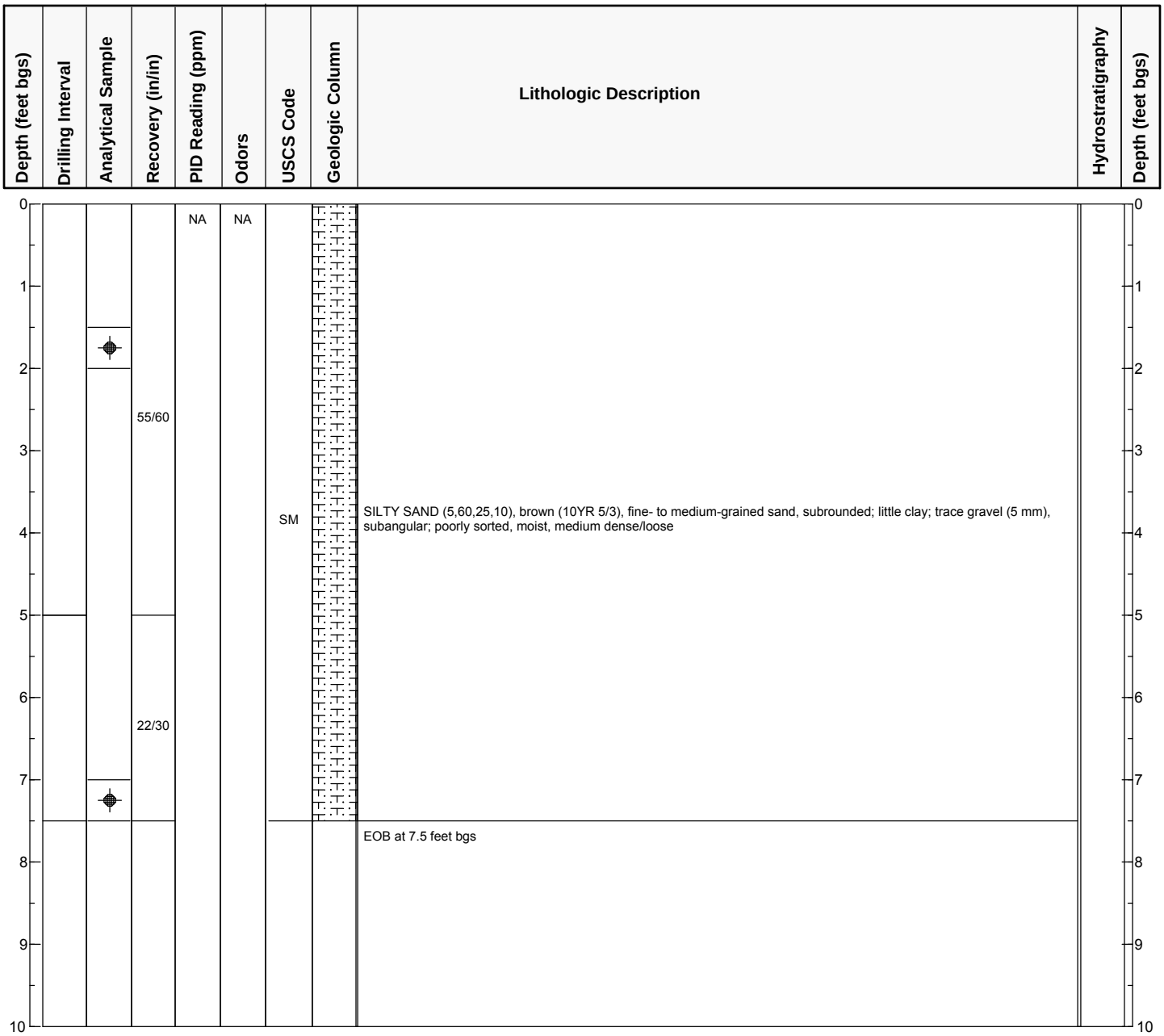
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		⌖	20/24	NA	NA	SW		GRAVELLY SAND (20,60,10,0), brown (10YR 5/3), fine- to coarse-grained sand, subangular to subrounded; gravel (5-10 mm), angular to subangular; little silt; poorly sorted, dry, loose		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B122B2.2

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B122C**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090531.00	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019359.97	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.37 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B122C.2; EX02B122C.7.5

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B122C1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090553.77	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019369.39	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.27 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

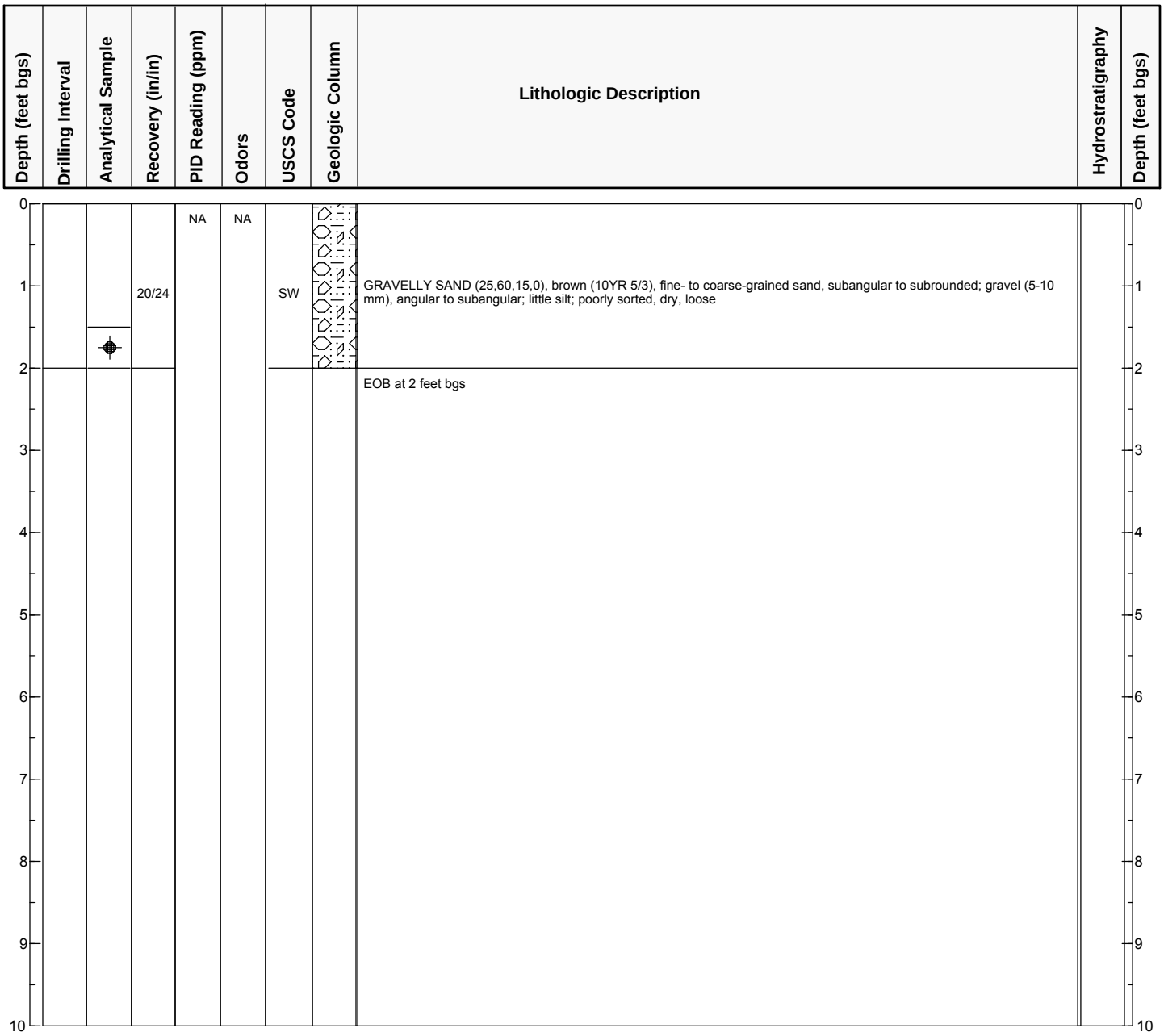
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		✦	24/24	NA	NA	SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subangular to subrounded; gravel (5-10 mm), angular to subangular; little silt; poorly sorted, dry, loose		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B122C1.2

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B122C2**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090575.11	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019375.50	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.85 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

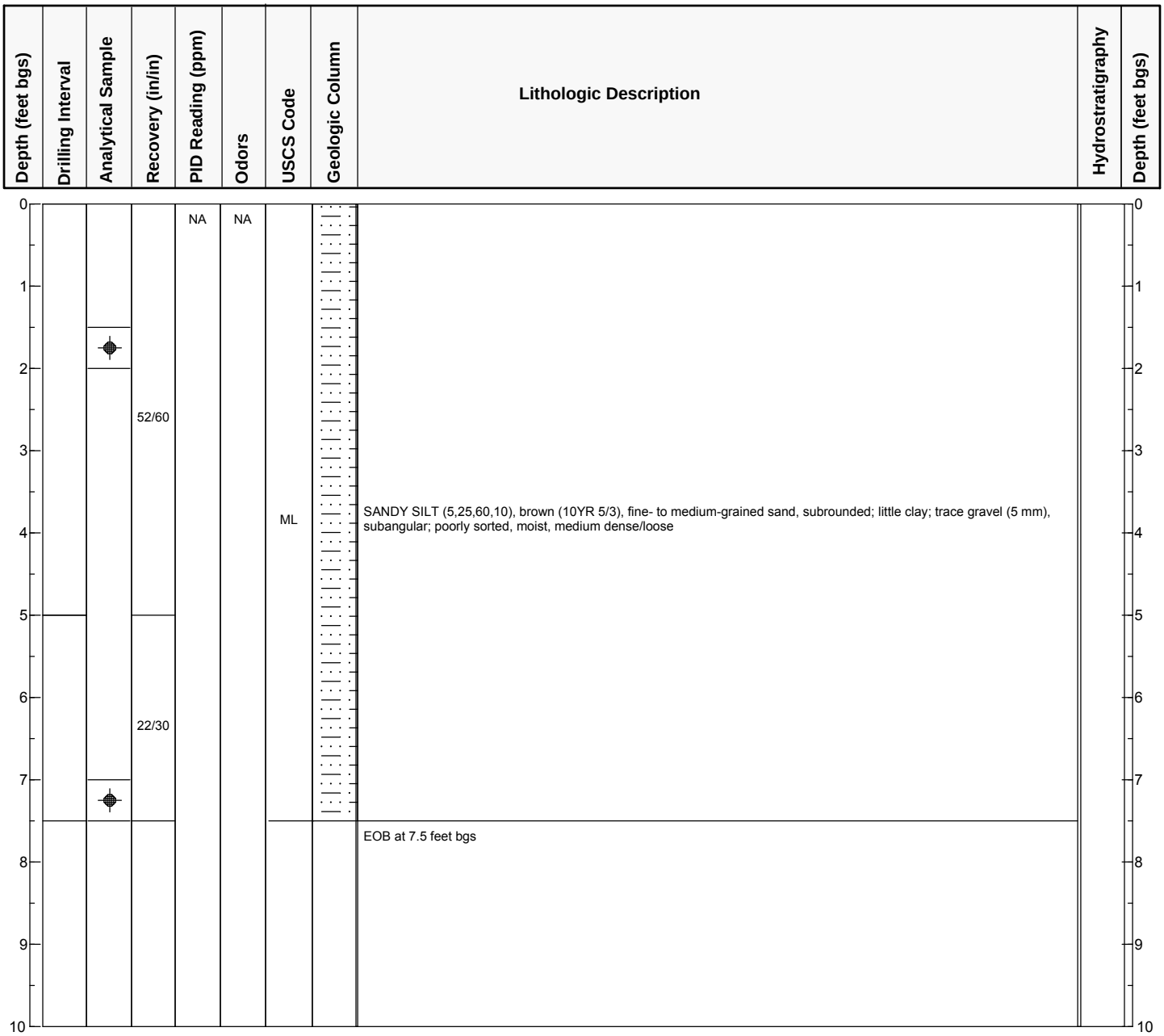


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B122C2.2

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B122D**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090519.50	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019322.61	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.02 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

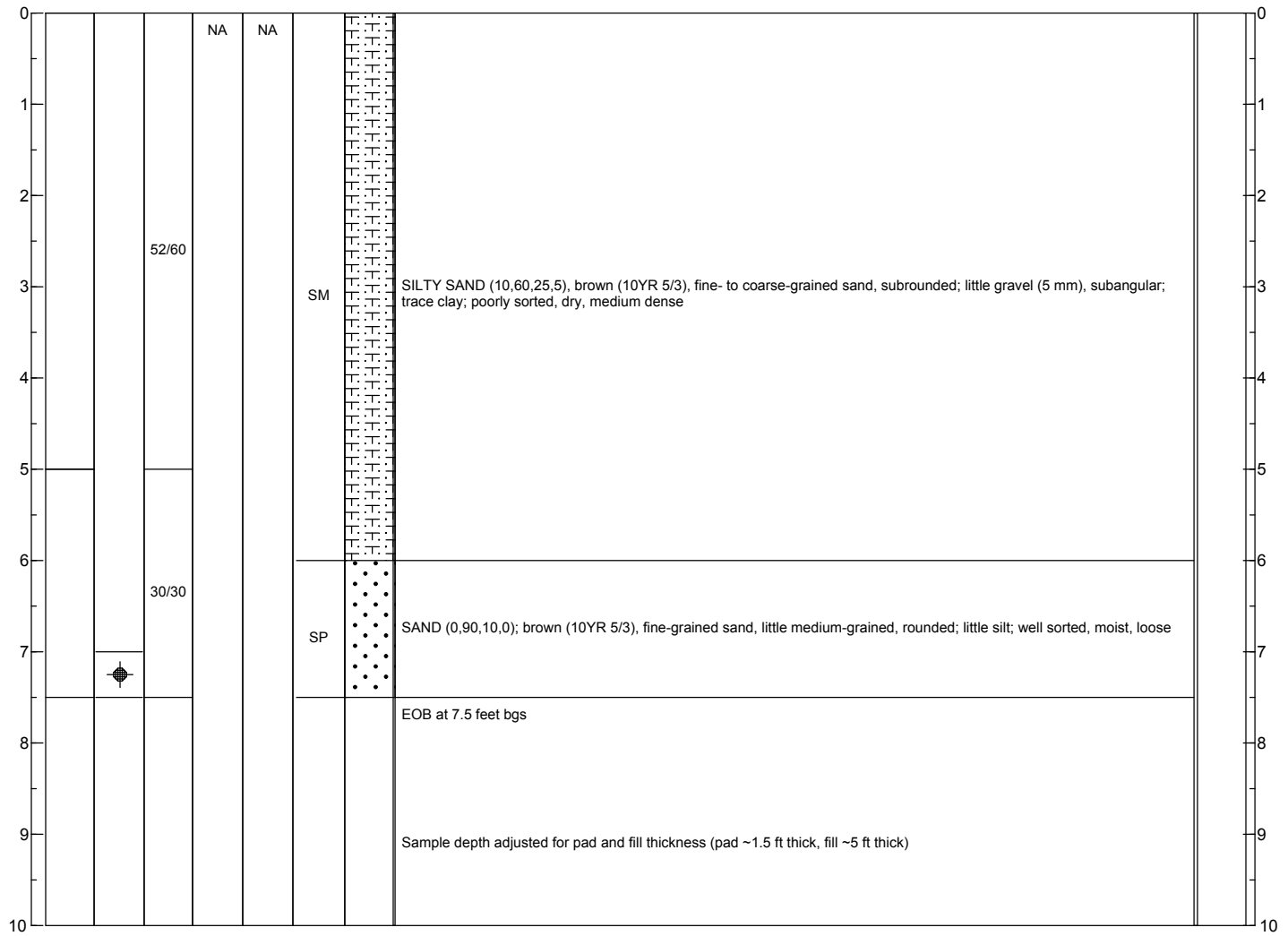


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B122D.2; EX02B122D.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B250A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090627.04	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019446.25	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.41 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

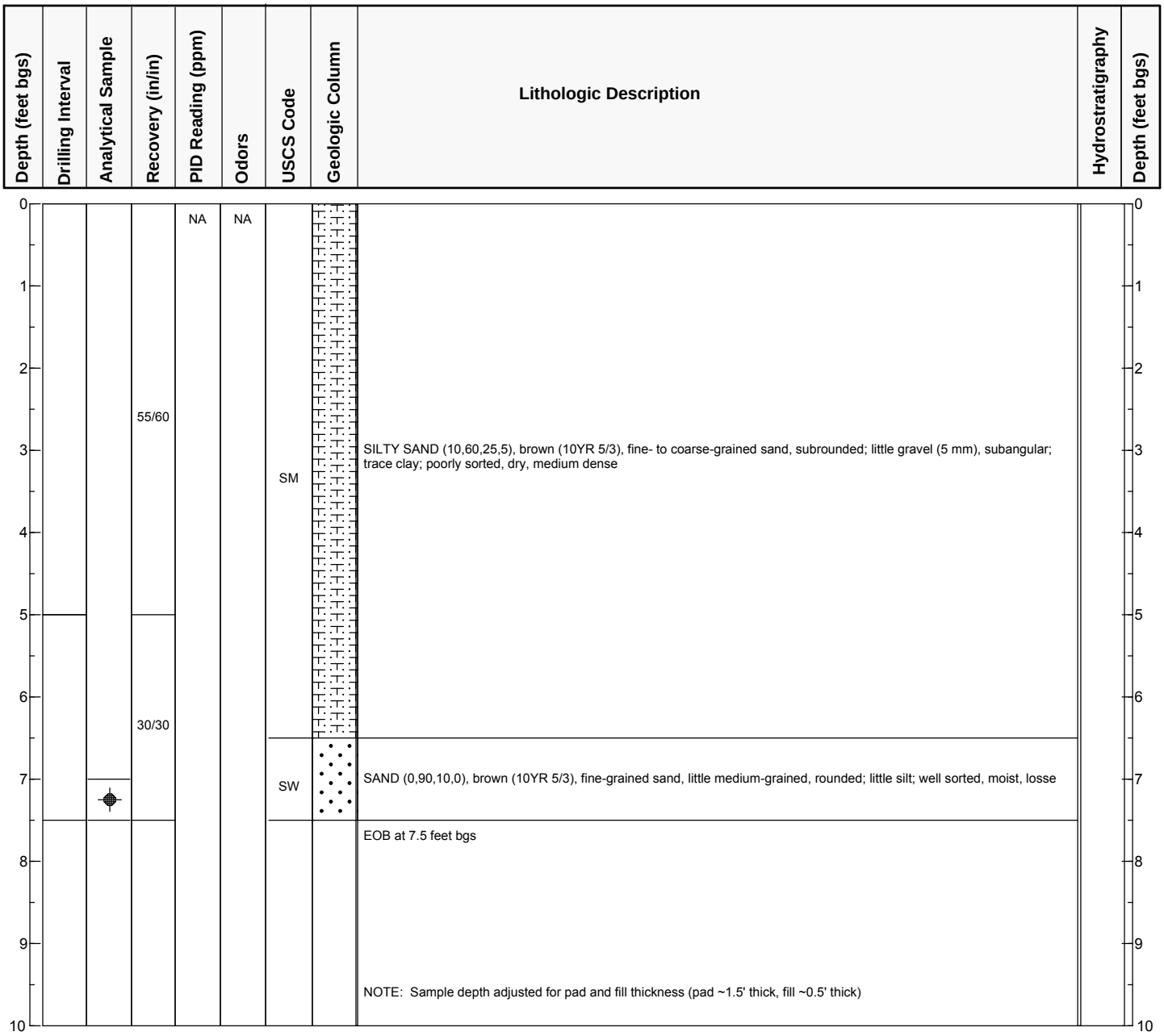


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B250A.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B250B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090614.37	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019458.06	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.45 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B250B.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B250C**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090604.93	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019446.89	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.49 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

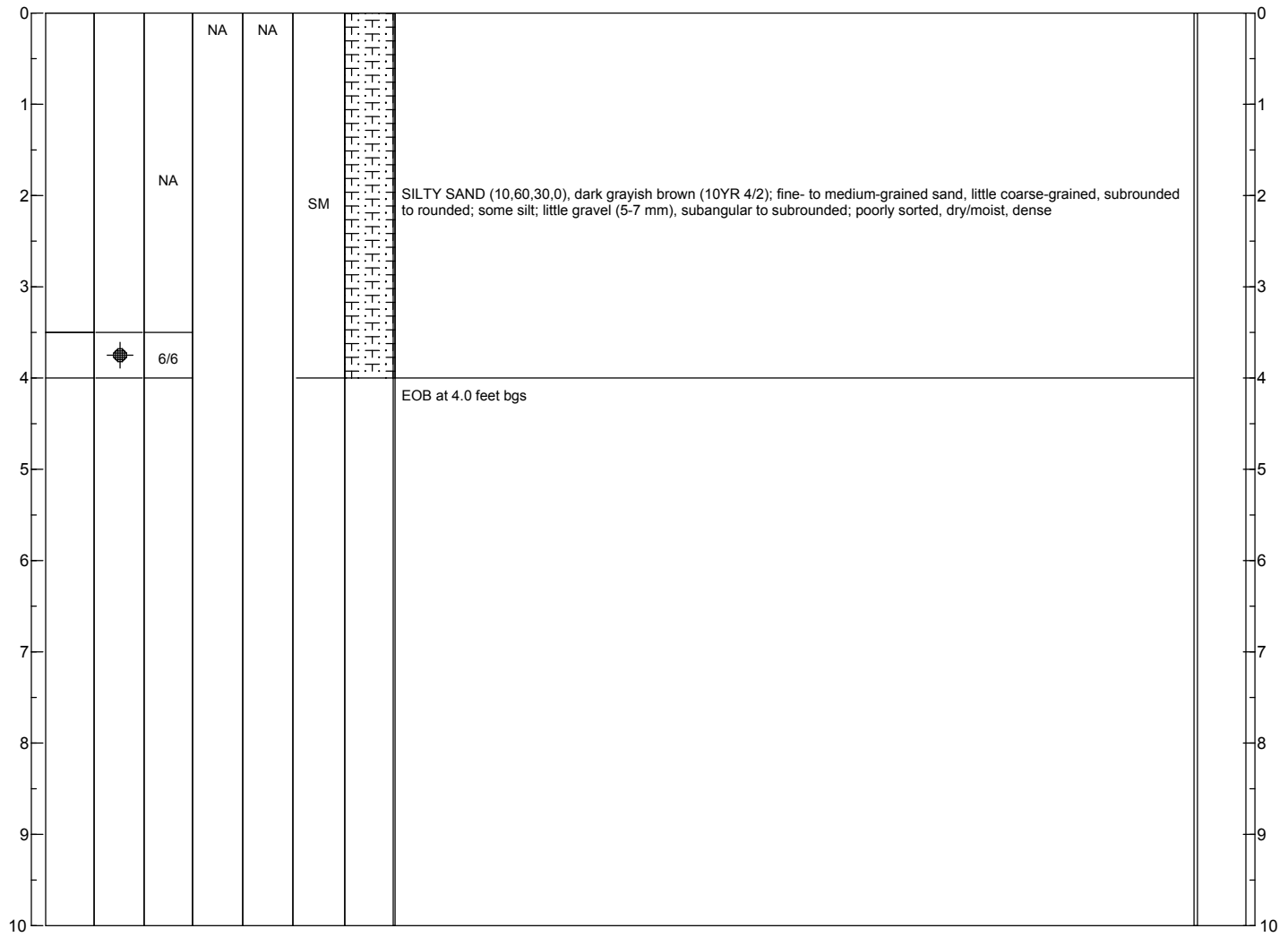
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–5			55/60	NA	NA	SM		SILTY SAND (10,60,25,5), brown (10YR 5/3), fine- to coarse-grained sand, subrounded; little gravel (5 mm), subangular; trace clay; poorly sorted, dry, medium dense		0–5
5–7.5		✦	30/30			SP		SAND (0,90,10,0); brown (10YR 5/3), fine-grained sand, little medium-grained, rounded; little silt; well sorted, moist, loose		5–7.5
7.5								EOB at 7.5 feet bgs		7.5
9								Sample depth adjusted for pad and fill thickness (pad ~1.5 ft thick, fill ~5 ft thick)		9

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B250C.7.5

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B256A**
Total Depth:	4 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090022.98	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019648.48	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.70 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

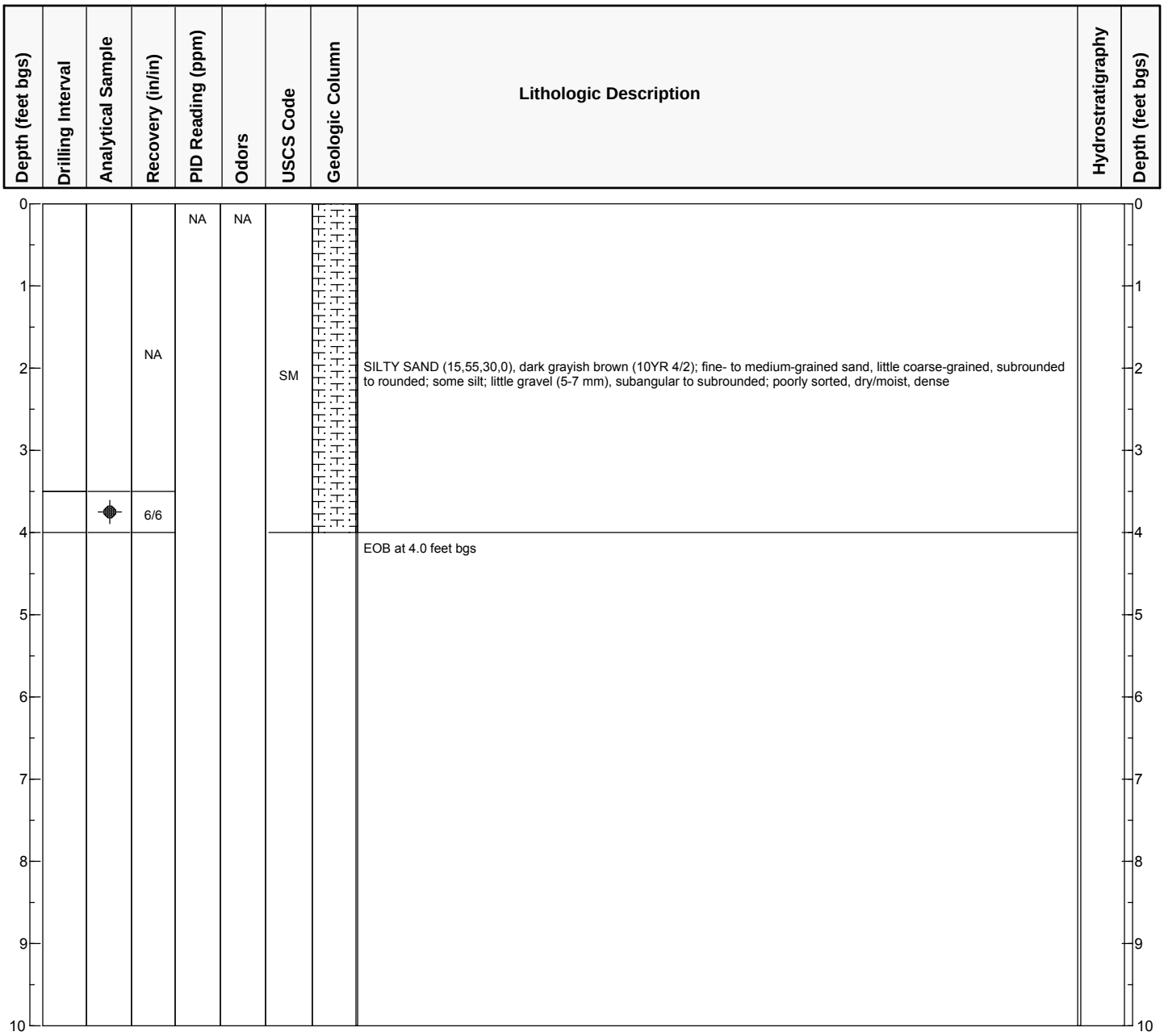


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B256A.4

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B256B**
Total Depth:	4 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090031.11	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019637.28	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.75 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B256B.4

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B288A**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090434.90	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019397.12	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.09 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

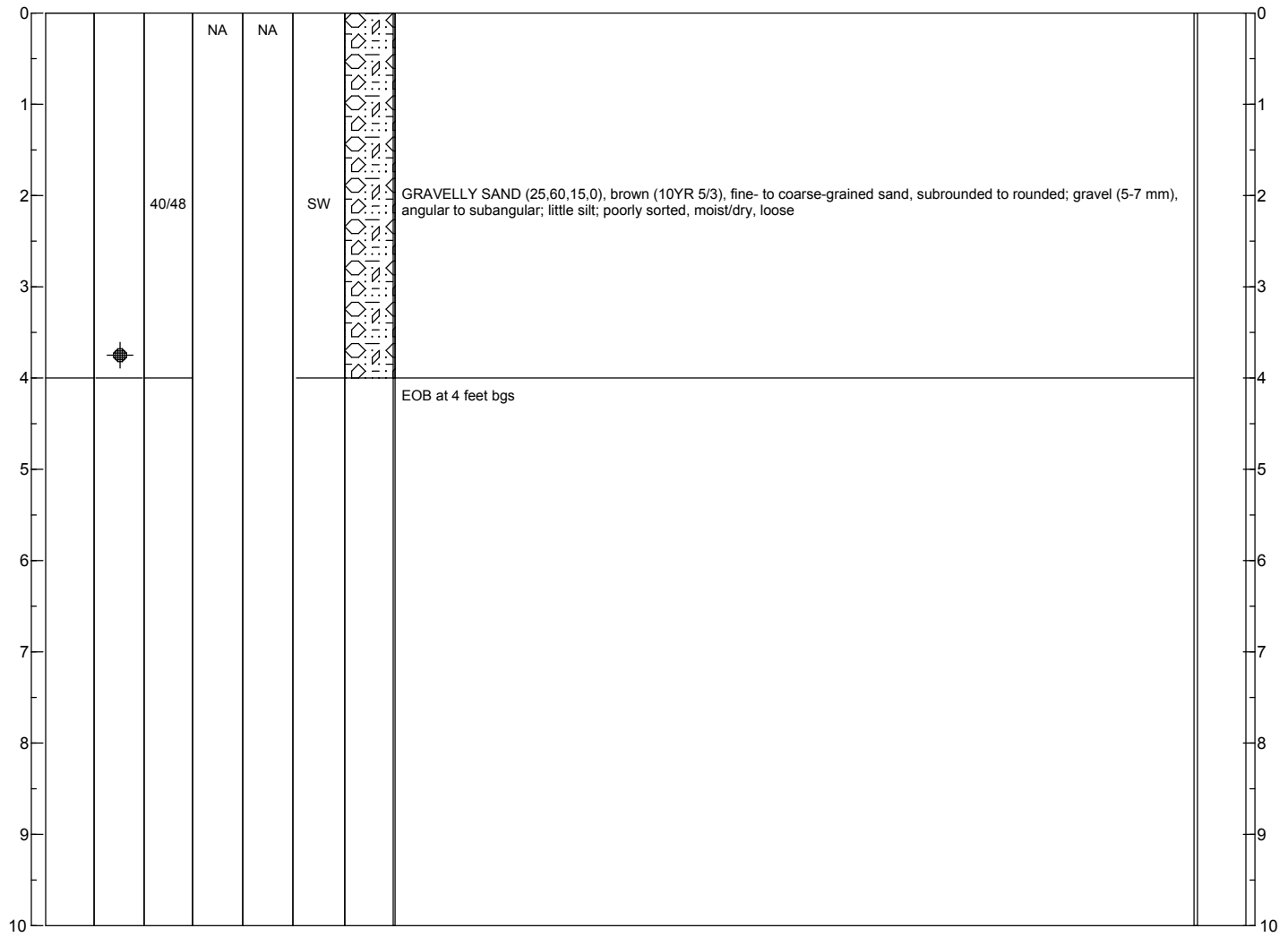
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–4			40/48	NA	NA	SM		SILTY SAND (5,60,30,5), brown (10YR 5/3), fine- to medium-grained sand, subrounded; trace gravel (5-7 mm), subangular; trace clay; poorly sorted, dry, medium dense		0–4
4								EOB at 4 feet bgs		4
5–10										5–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B288A.4

SOIL BORING LOG

Date Drilled:	10/8/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX02B288A1**
Total Depth:	4 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2090432.09		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6019420.41		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	12.35 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001

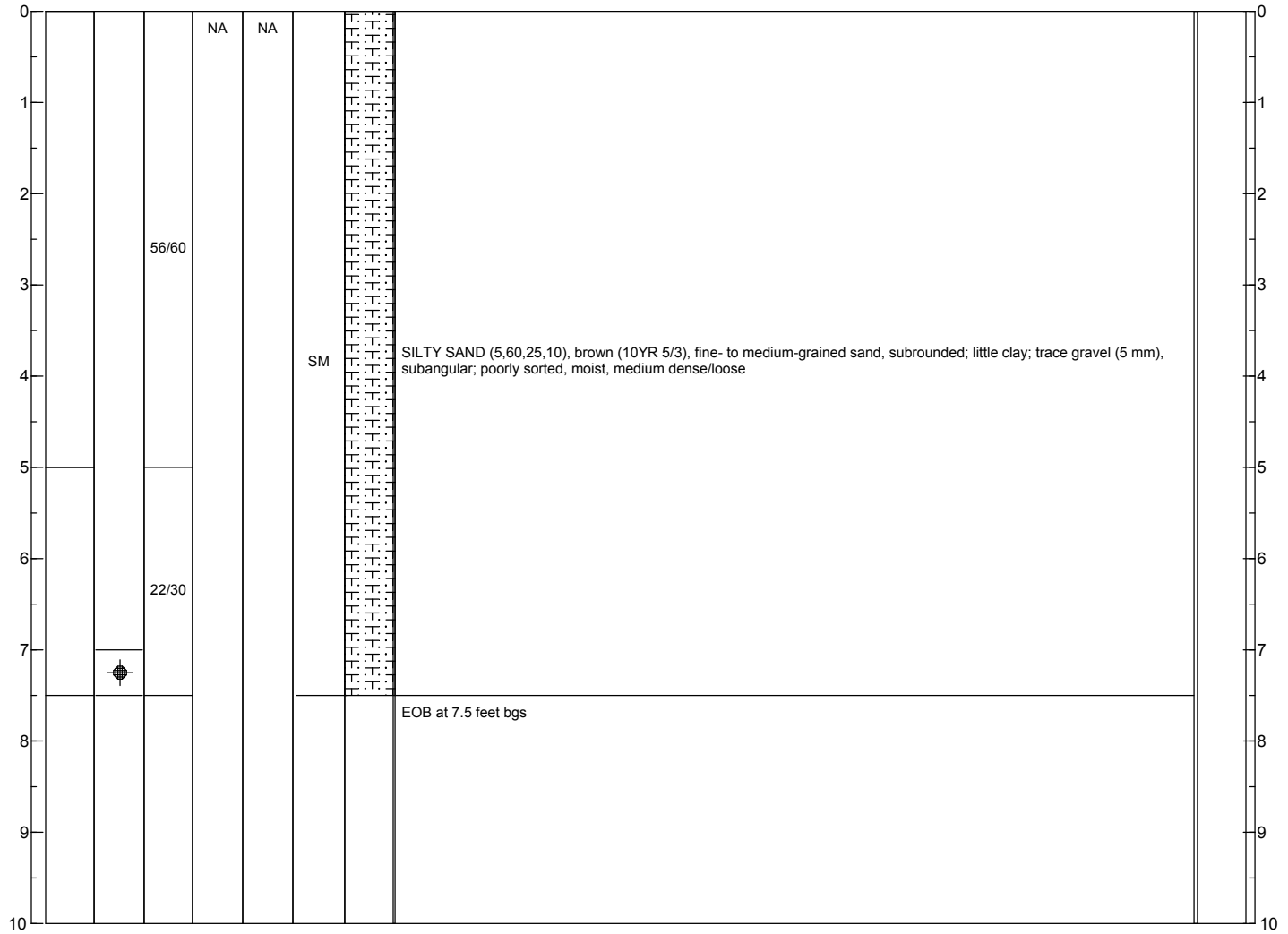


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B288A1.4

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B288B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090463.13	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019246.40	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.44 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B288B.7.5

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B320A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089674.91	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019823.98	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.91 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

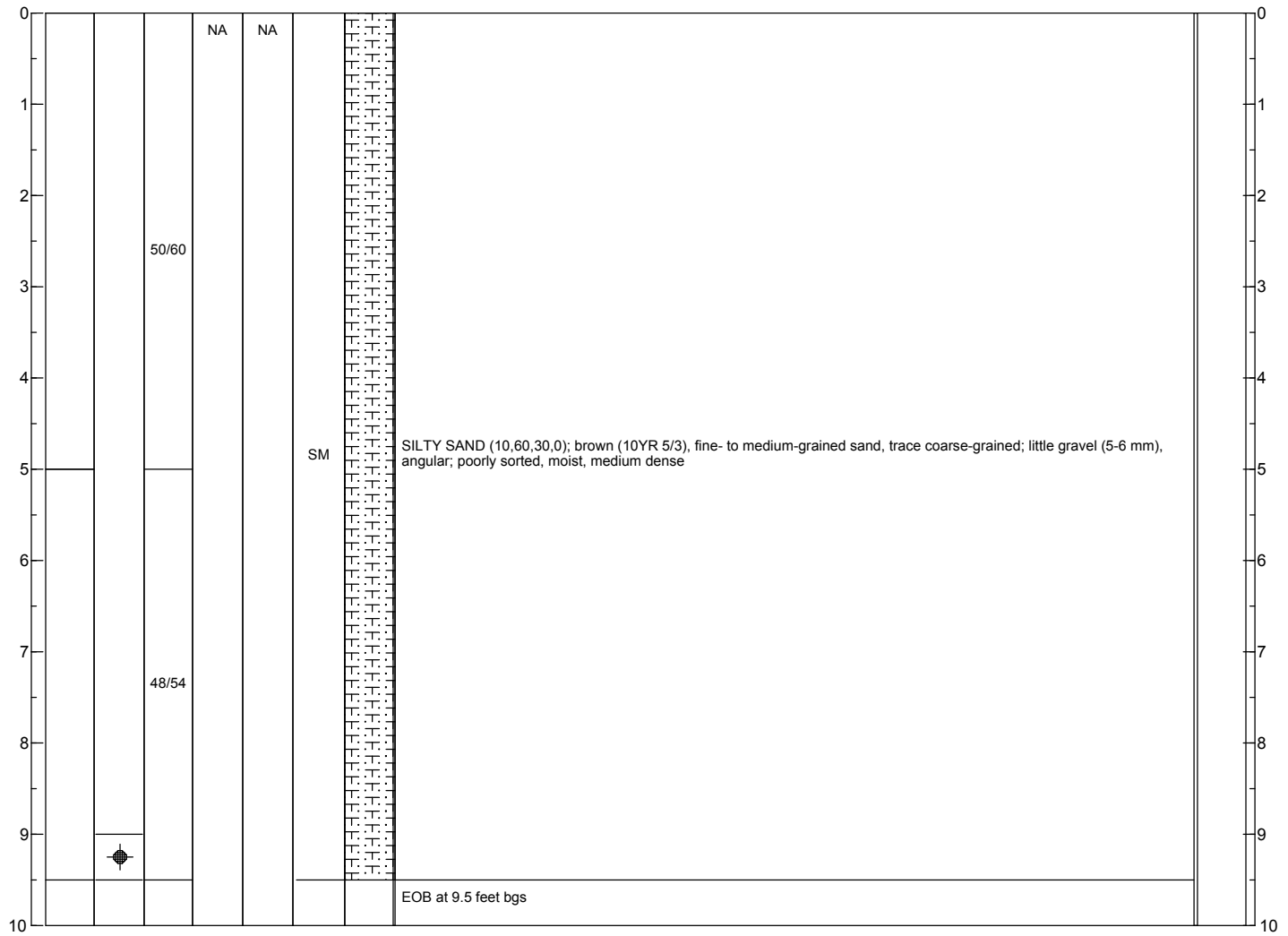
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,60,35,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B320A.2

SOIL BORING LOG

Date Drilled:	10/10/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX02B355A**
Total Depth:	9.5 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2089024.23		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6021823.35		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	7.66 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B355A.9.5

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B369A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089097.84	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021833.74	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.79 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (30,55,15,0), dark grayish brown (10YR 4/2); fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B369A.2

SOIL BORING LOG

Date Drilled:	10/10/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B369A**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089097.84	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021833.74	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.79 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–4		◆	45/48	NA	NA	SM		SILTY SAND (10,50,30,10), brown (10YR 5/3), fine- to medium-grained sand, subrounded to rounded; little gravel (5-8 mm), angular to subangular; little clay; poorly sorted, moist/dry, medium dense		
4								EOB at 4 feet bgs		

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B369A.4

SOIL BORING LOG

Date Drilled:	10/10/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B369B**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089057.67	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021831.85	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.78 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–4		✦	45/48	NA	NA	SM		SILTY SAND (10,55,25,10), brown (10YR 5/3), fine- to medium-grained sand, subrounded to rounded; little gravel (5-8 mm), angular to subangular; little clay; poorly sorted, moist/dry, medium dense		0–4
4								EOB at 4 feet bgs		4
5–10										5–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B369B.4

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B369C**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089019.61	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021749.38	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	5.50 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		⌖	20/24	NA	NA	SM		SILTY SAND (15,60,25,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded; little gravel (5 mm), angular to subangular; poorly sorted, moist, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B369C.2

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B398A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089821.52	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019735.42	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.10 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

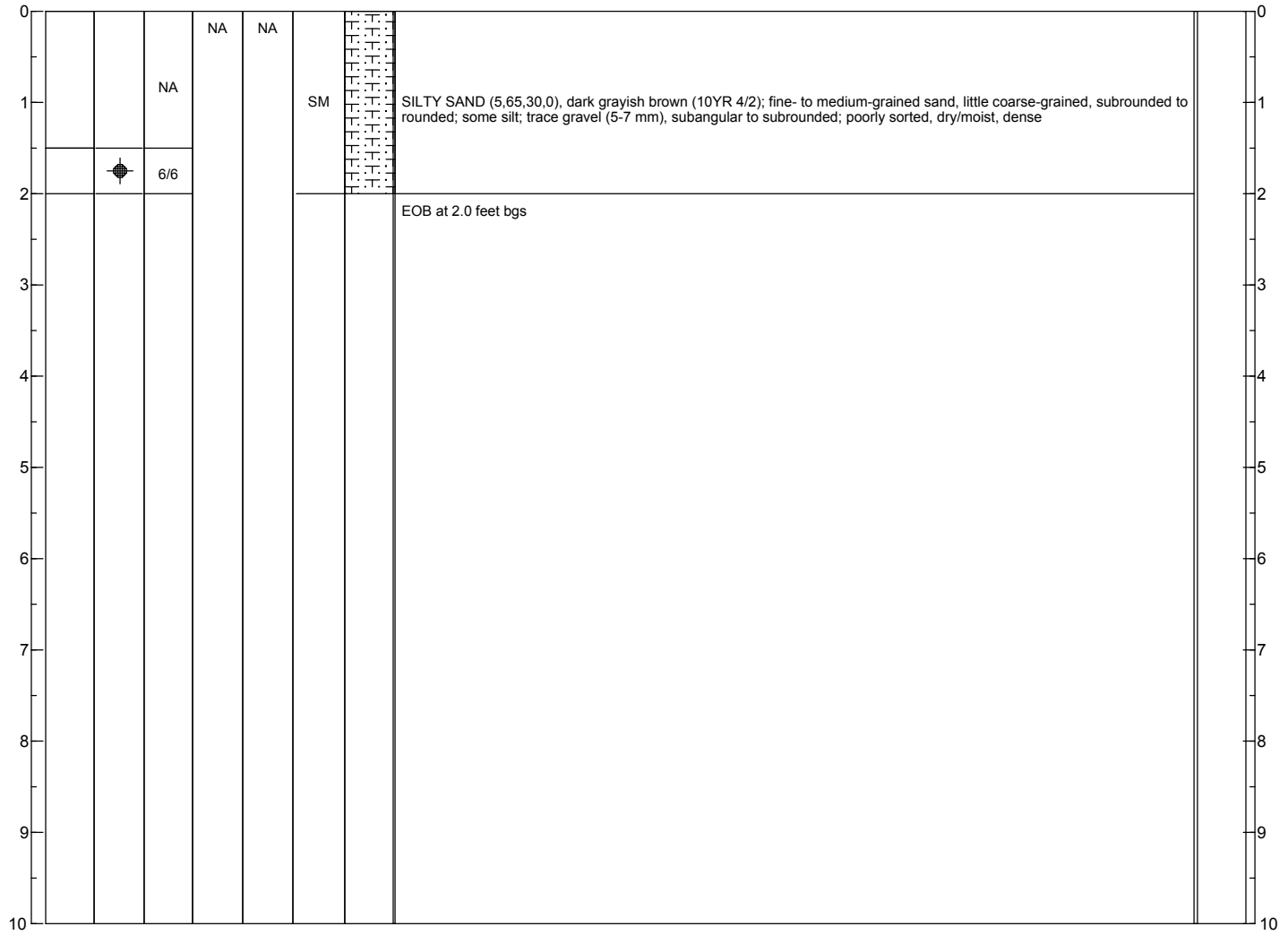
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0										0
			NA	NA	NA					
1						ML		SANDY SILT (10,25,60,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
		⌖	6/6							
2								EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B398A.2

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B398B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089820.99	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019775.71	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.61 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B398B.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B401A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089677.08	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020362.67	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	3.09 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

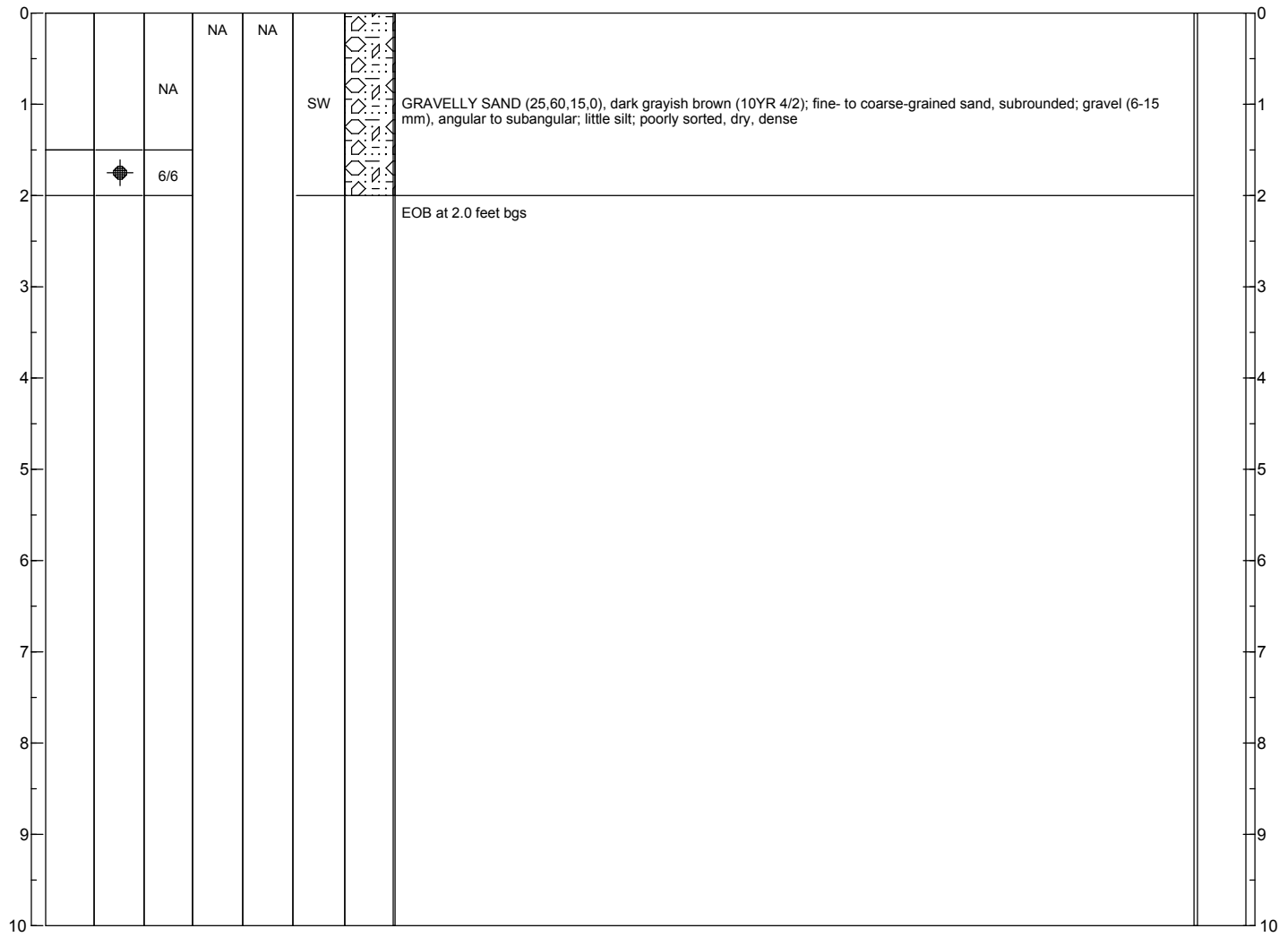
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (10,65,25,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B401A.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B401B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089712.87	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020393.38	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.90 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B401B.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B401B1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089732.19	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020396.69	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.02 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

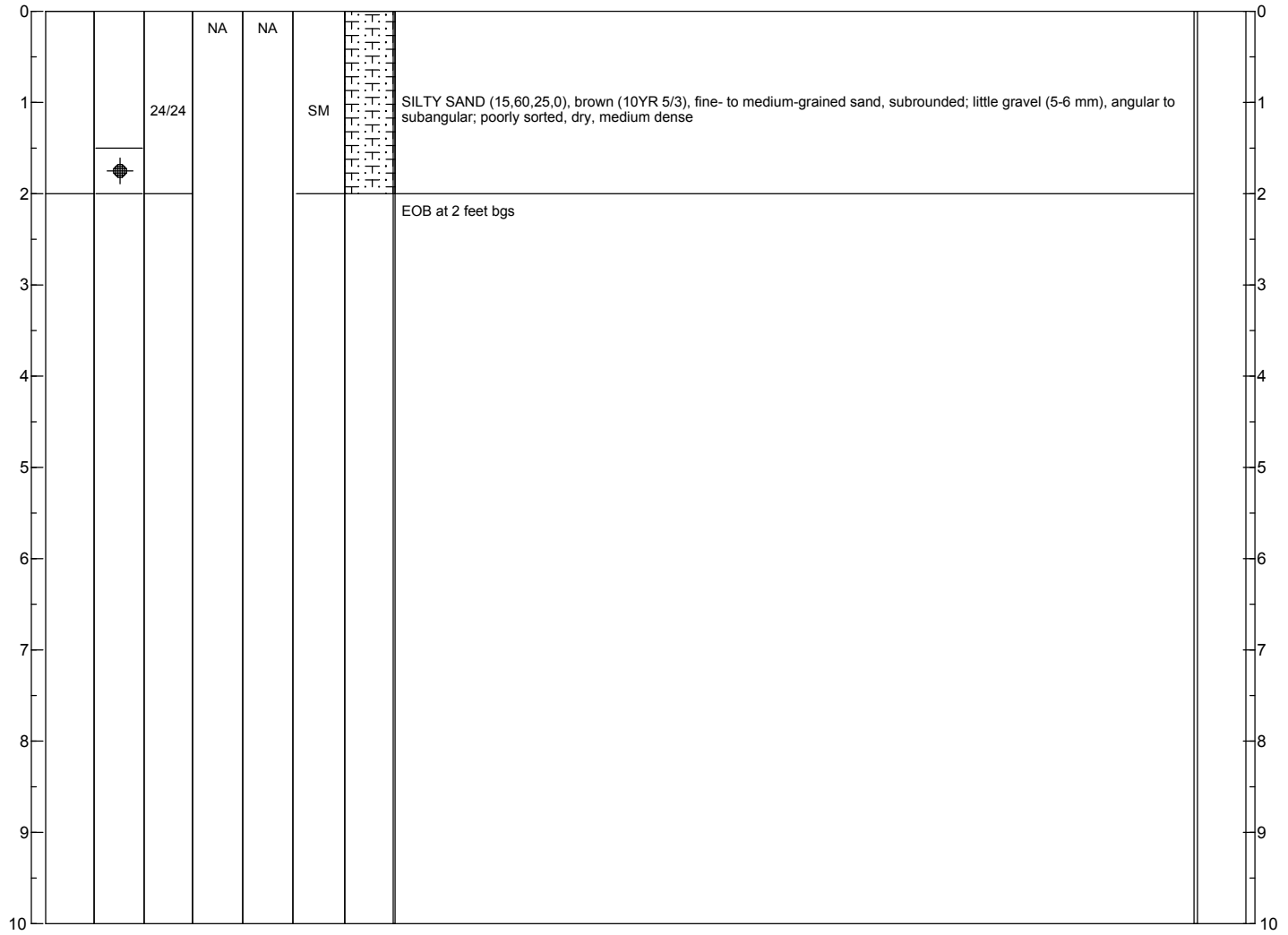
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			24/24	NA	NA	SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; gravel (5-7 mm), angular to subangular; little silt; poorly sorted, moist/dry, loose		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B401B1.2

SOIL BORING LOG

Date Drilled:	10/8/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX02B401B2**
Total Depth:	2 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2089752.17		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6020401.91		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	7.08 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B401B2.2

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B401B3**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089768.75	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020407.86	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.36 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		⌖	24/24	NA	NA	SM		SILTY SAND (10,60,30,0), brown (10YR 5/3), fine- to medium-grained sand, subrounded; little gravel (5-6 mm), angular to subangular; poorly sorted, dry, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B401B3.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B401C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089683.05	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020482.04	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.33 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (25,65,10,0), dark grayish brown (10YR 4/2), fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B401C.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B401C1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089672.32	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020497.64	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.01 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		✦	24/24	NA	NA	SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; gravel (5-7 mm), angular to subangular; little silt; poorly sorted, moist/dry, loose		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B401C1.2

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B401C2**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089665.21	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020523.64	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.13 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		⌖	24/24	NA	NA	SM		SILTY SAND (15,60,25,0), brown (10YR 5/3), fine- to medium-grained sand, subrounded; little gravel (5-6 mm), angular to subangular; poorly sorted, dry, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B401C2.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B403A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089672.74	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020550.71	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.18 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (30,50,20,0), reddish brown (5YR 4/3); small gravel (4-6 mm), subrounded, pea gravel; fine-grained sand, rounded; some silt; poorly sorted, dry, loose		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B403A.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B403B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089654.14	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020569.37	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.49 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA					0
1			NA			SW		GRAVELLY SAND (30,60,10,0), dark grayish brown (10YR 4/2), fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		1
2		✦	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B403B.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B403C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089640.46	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020551.21	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.35 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (45,30,25,0), reddish brown (5YR 4/3), small gravel (4-6 mm), subrounded, peagravel; fine-grained sand, rounded; some silt; poorly sorted, dry, loose		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B403C.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B403D**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089653.29	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020526.81	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.54 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

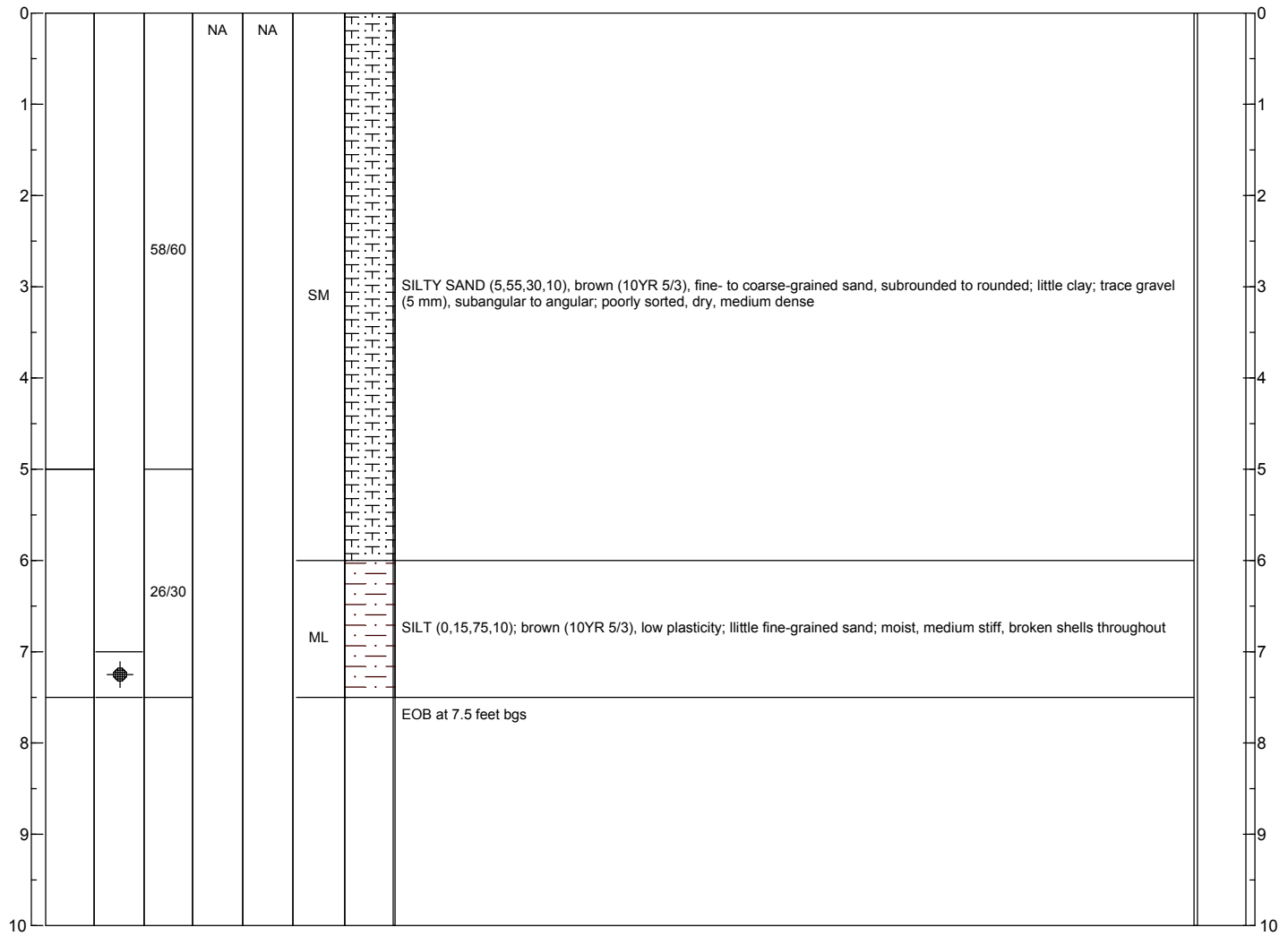
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA					0
1			NA			GW		SANDY GRAVEL (50,30,20,0), reddish brown (5YR 4/3), small gravel (4-6 mm), subrounded, peagravel; fine-grained sand, rounded; some silt; poorly sorted, dry, loose		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B403D.2

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B405A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090228.63	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019939.61	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	13.24 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

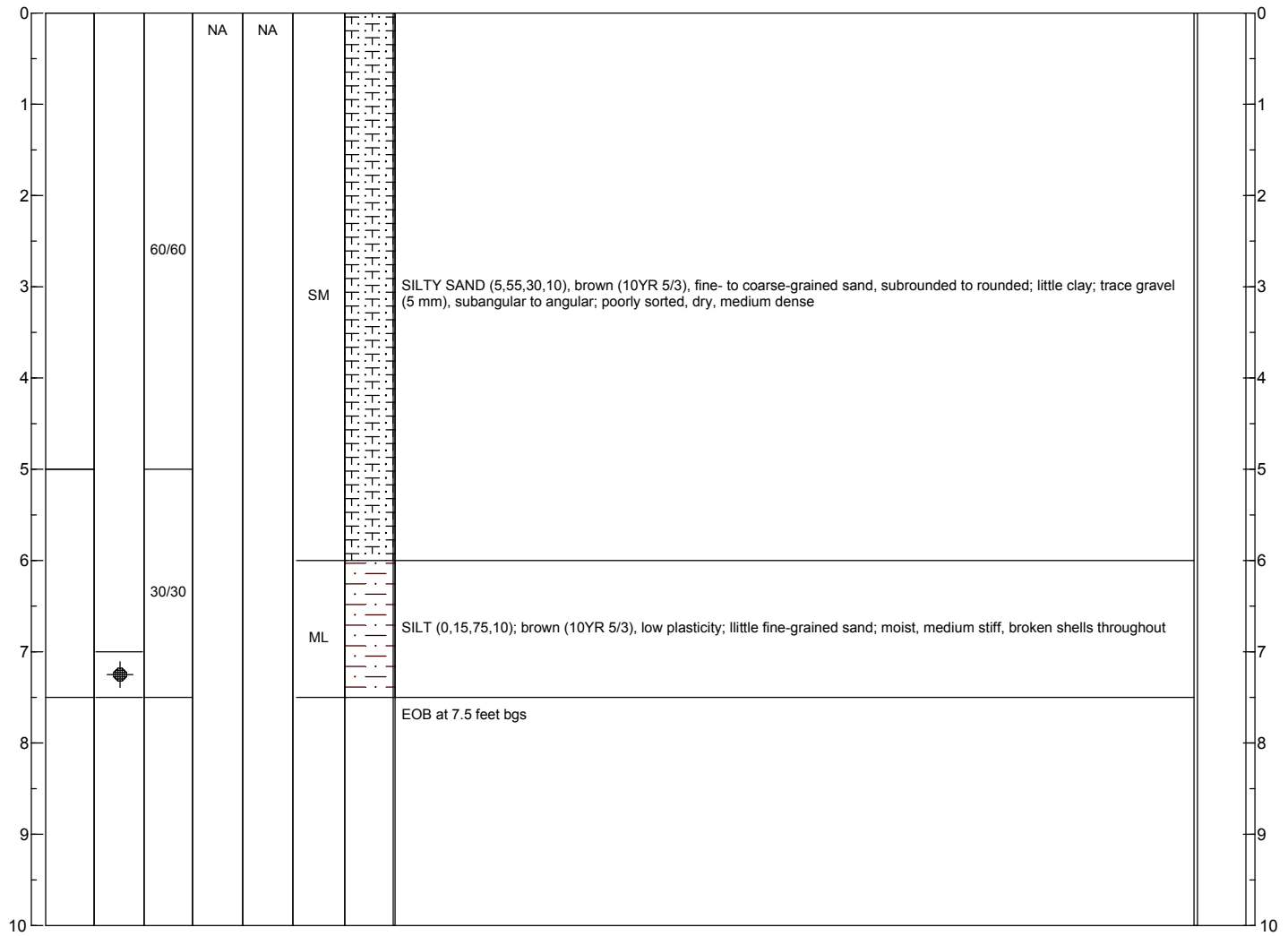


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B405A.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B405B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090206.77	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019938.25	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	13.34 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

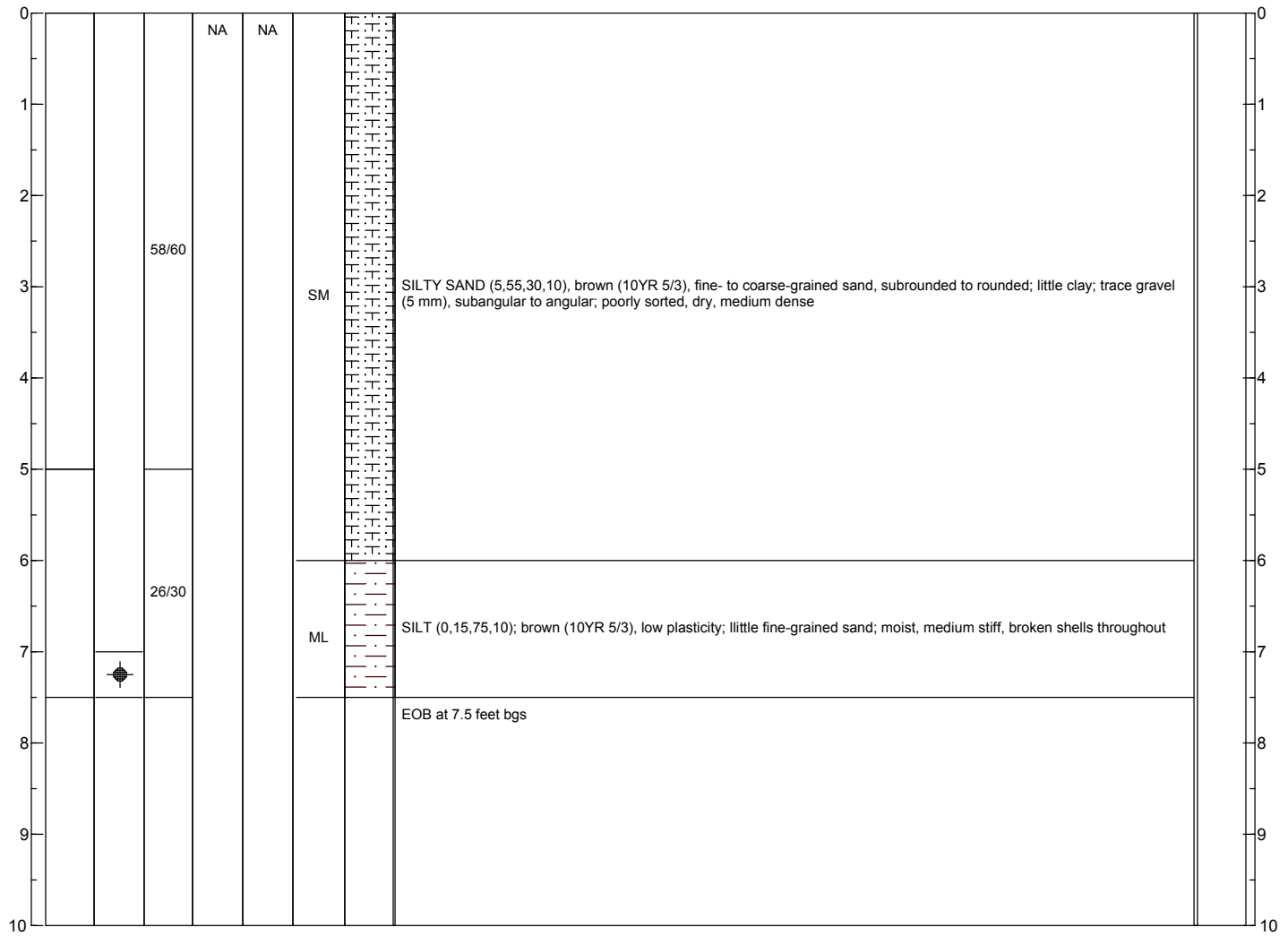


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B405B.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B405C**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090207.23	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019916.52	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	13.12 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B405C.7.5

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B412A**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090811.44	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019583.16	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.09 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			24/24	NA	NA	SM		SILTY SAND (10,65,25,0), brown (10YR 5/3), fine- to medium-grained sand, subrounded; little gravel (5-6 mm), angular to subangular; poorly sorted, dry, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B412A.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B412B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090780.42	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019567.32	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.53 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

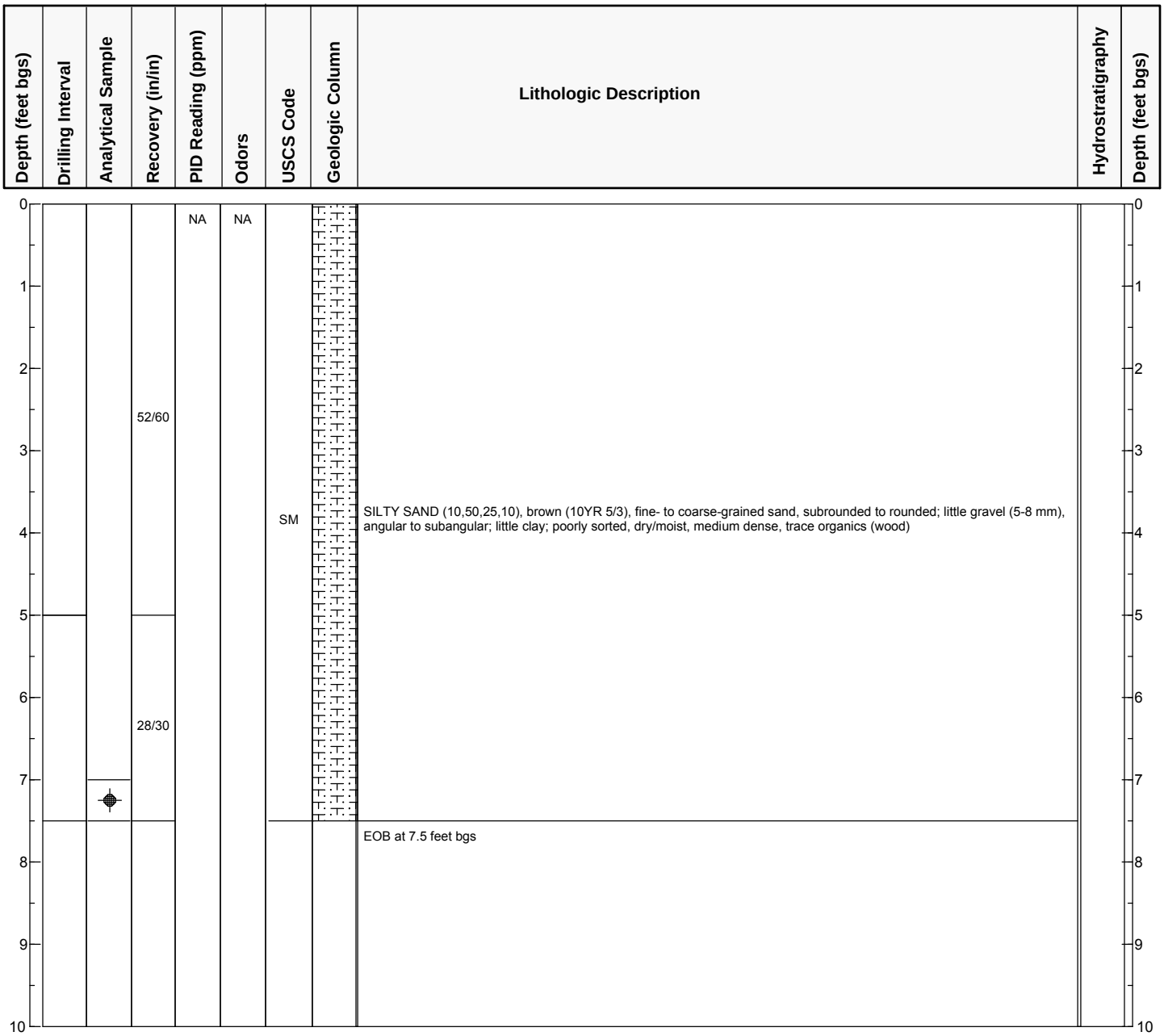
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	ML		SANDY SILT (10,30,55,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B412B.2

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B412C**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090738.70	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019569.83	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.68 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B412C.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B412D**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090698.96	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019578.18	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.67 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

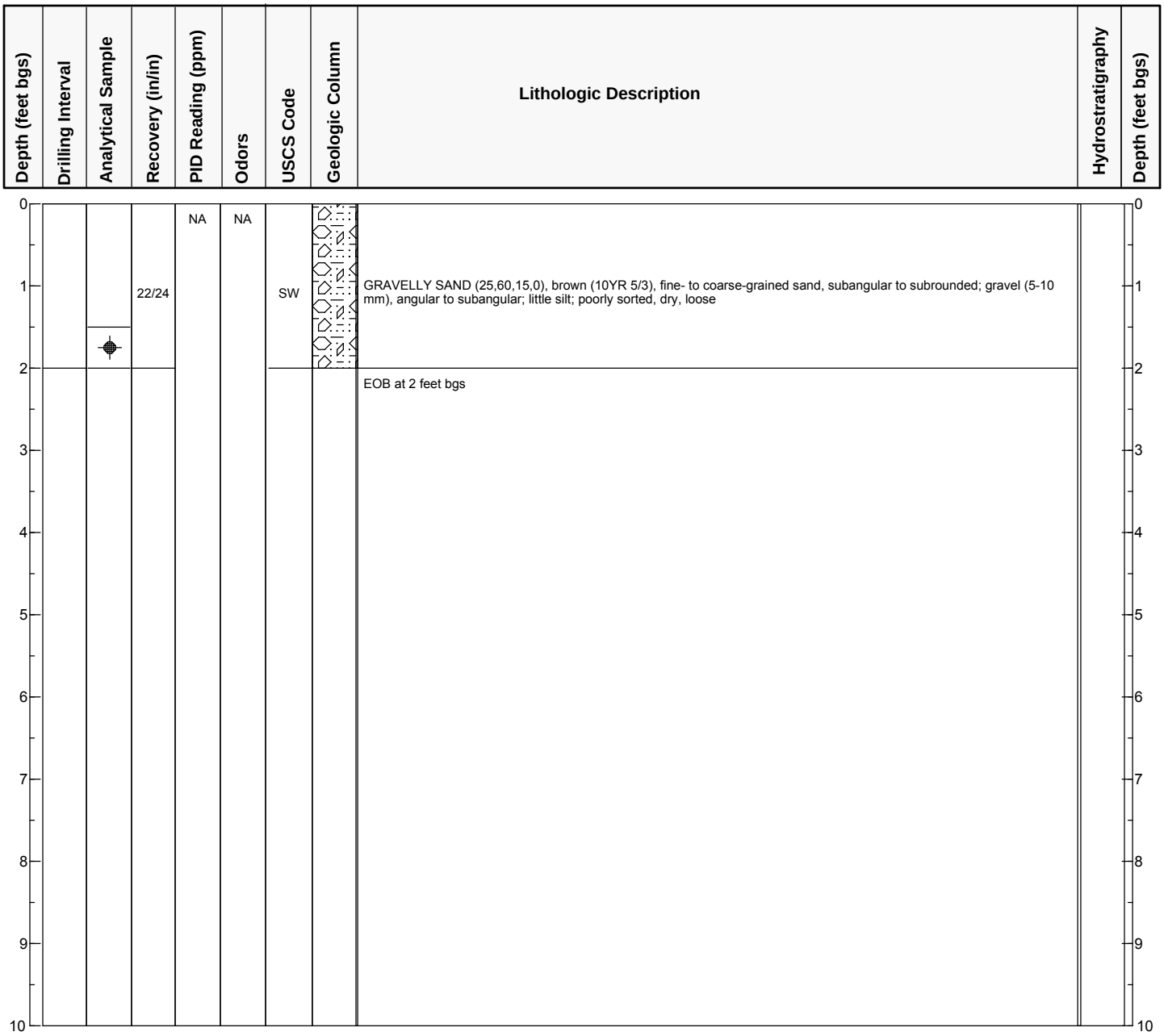
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–5			48/60	NA	NA	SM		SILTY SAND (10,55,25,10), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; little gravel (5-8 mm), angular to subangular; little clay; poorly sorted, dry, dense		0–5
5–7.5		⌖	24/30			SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded; gravel (5-8 mm), angular to subangular; little silt; poorly sorted, dry, medium dense/dense, trace organics (wood)		5–7.5
7.5								EOB at 7.5 feet bgs		7.5

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B412D.7.5

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B412D**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090698.96	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019578.18	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.67 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B412D.2

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B415A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089714.47	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019764.93	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.21 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

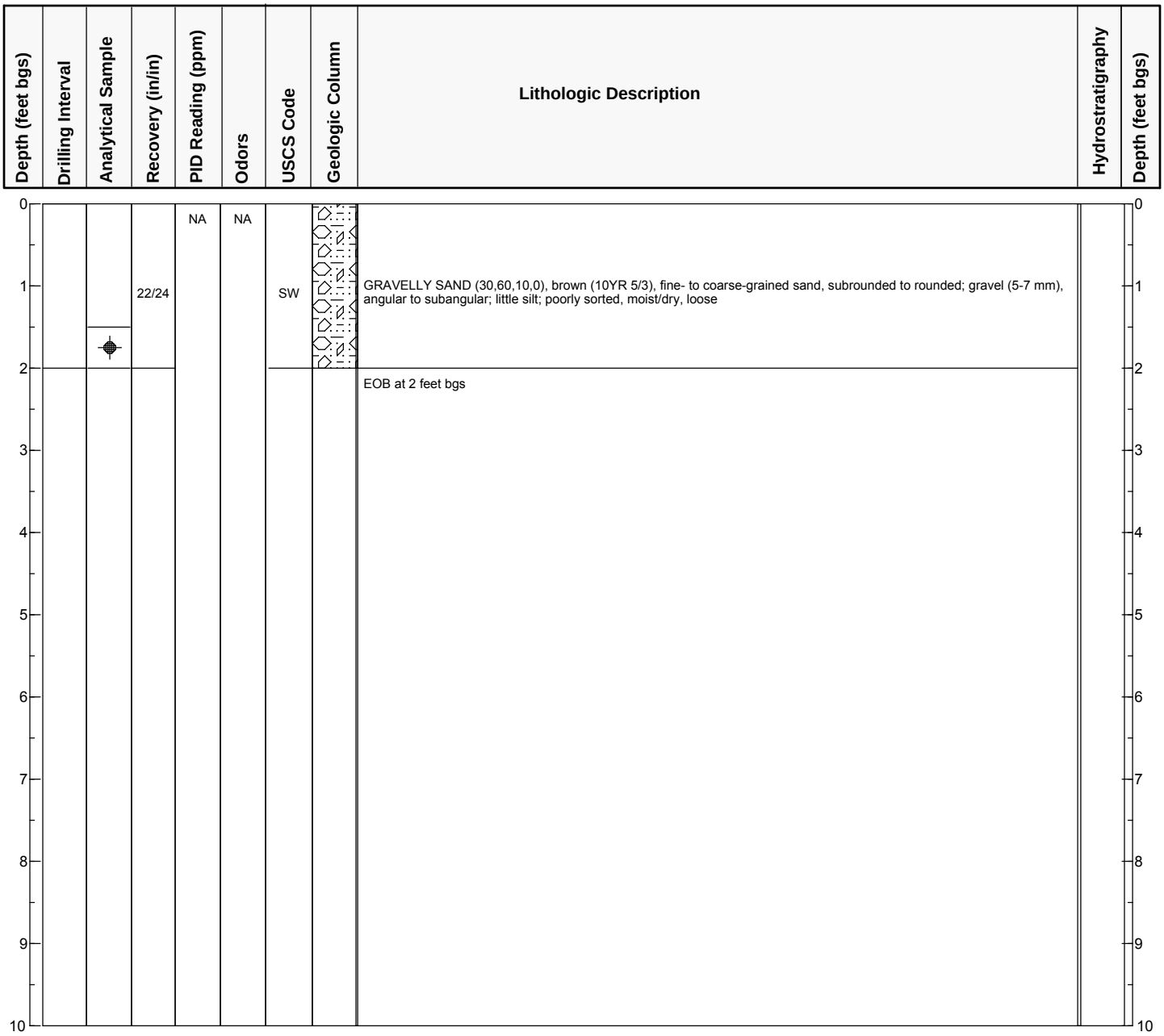
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (25,60,15,0), dark grayish brown (10YR 4/2); fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B415A.2

SOIL BORING LOG

Date Drilled:	10/10/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B415A1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089710.09	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019784.11	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.56 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

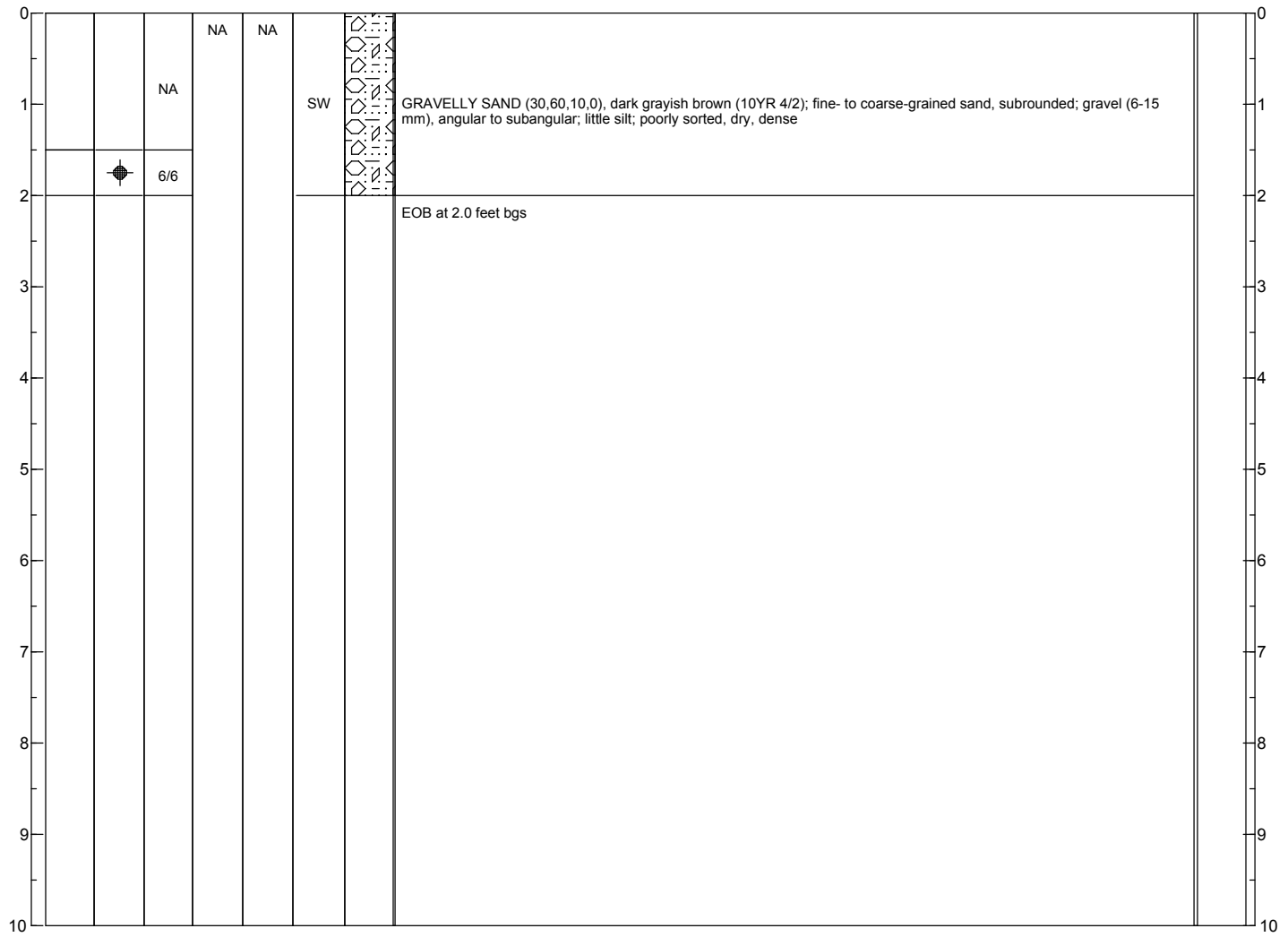


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B415A1.2

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B415B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089673.42	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019756.45	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.63 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

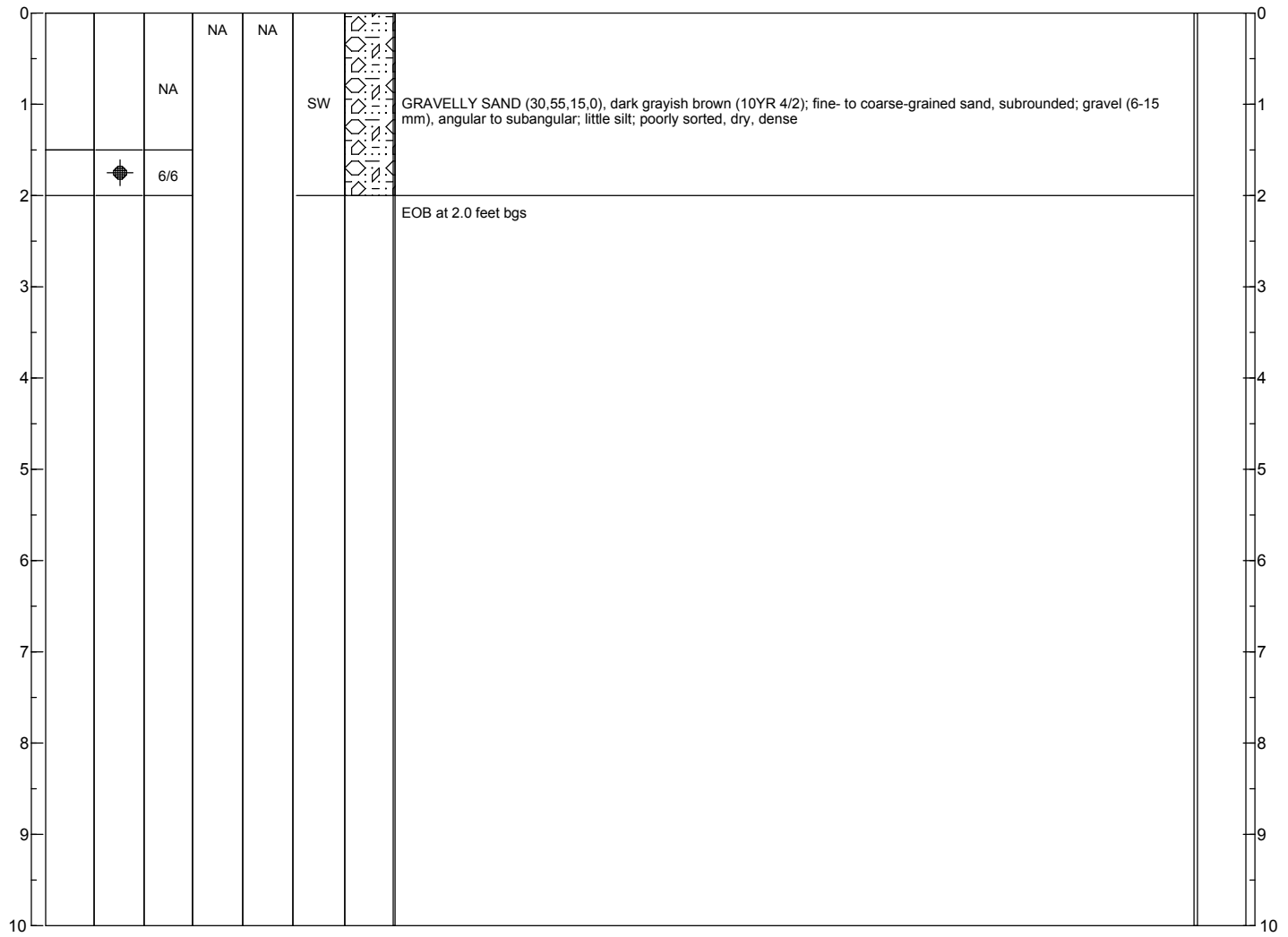


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B415B.2

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B428A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090620.29	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019330.26	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.84 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B428A.2

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B428B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090616.12	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019347.59	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.43 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (15,55,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B428B.2

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B428C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090625.14	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019362.14	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.51 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

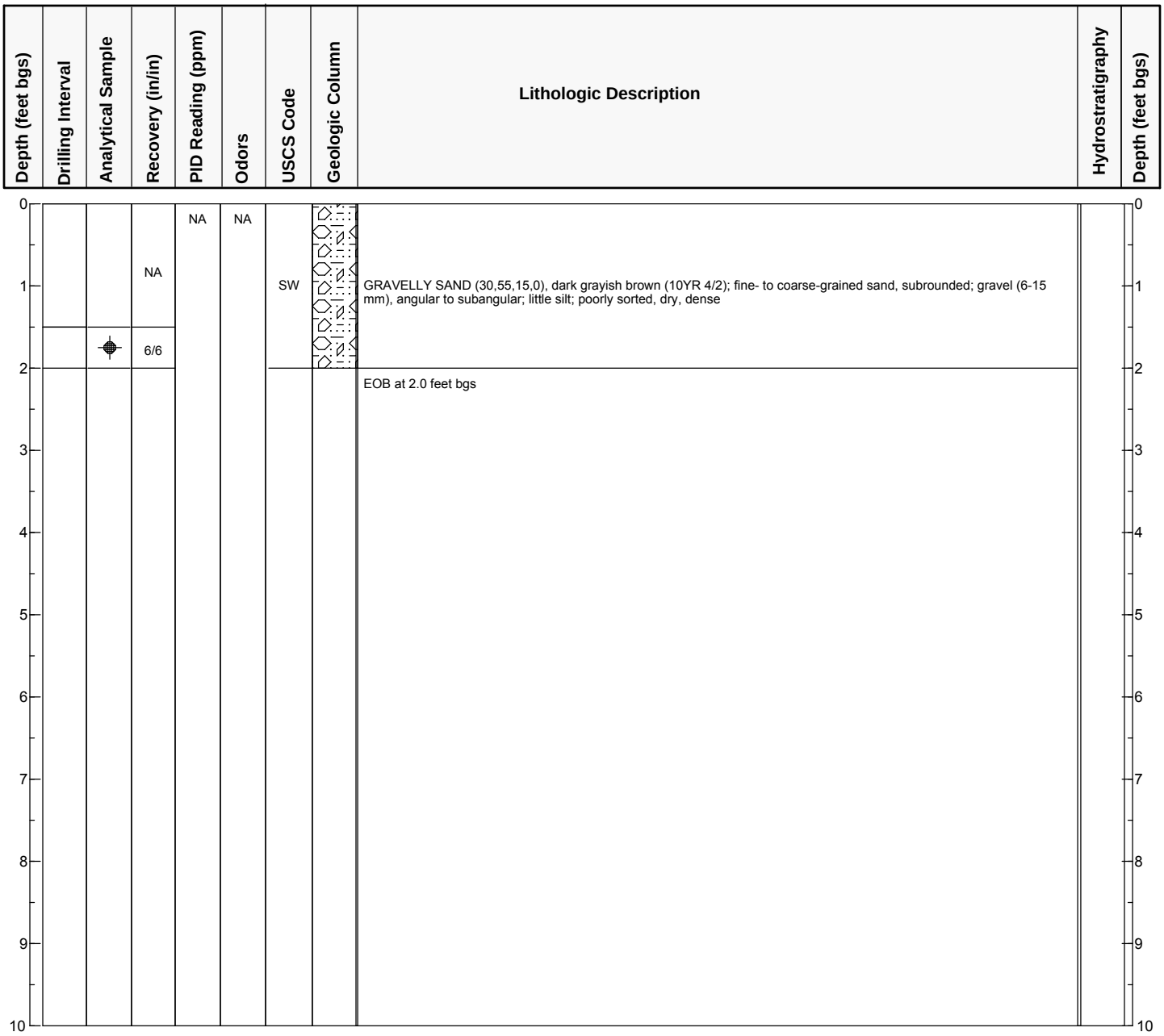
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (15,60,25,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B428C.2

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B428D**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090642.63	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019370.72	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.37 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

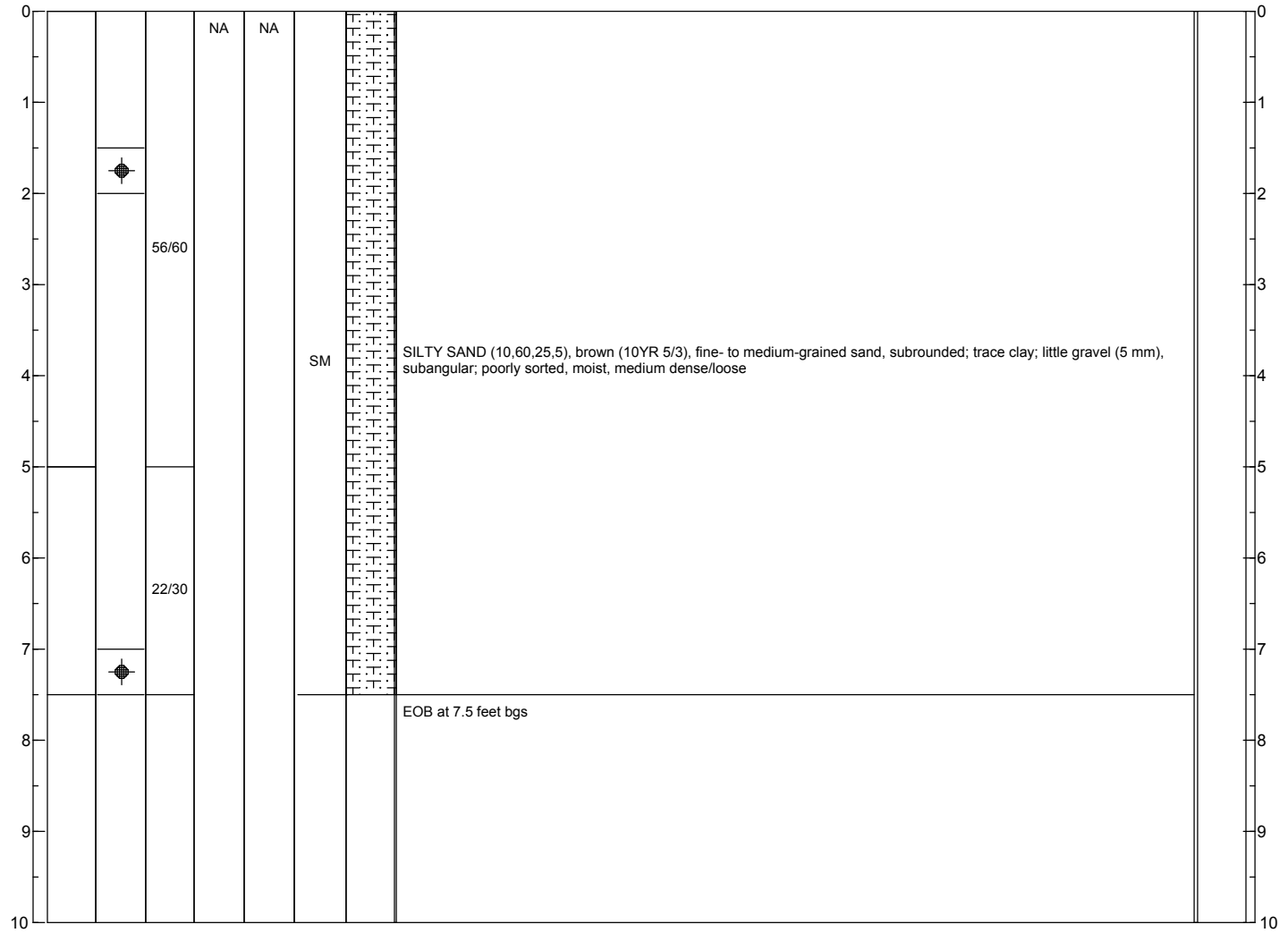


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B428D.2

SOIL BORING LOG

Date Drilled:	9/18/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX02B428E**
Total Depth:	7.5 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2090616.34		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6019309.47		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	7.78 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001

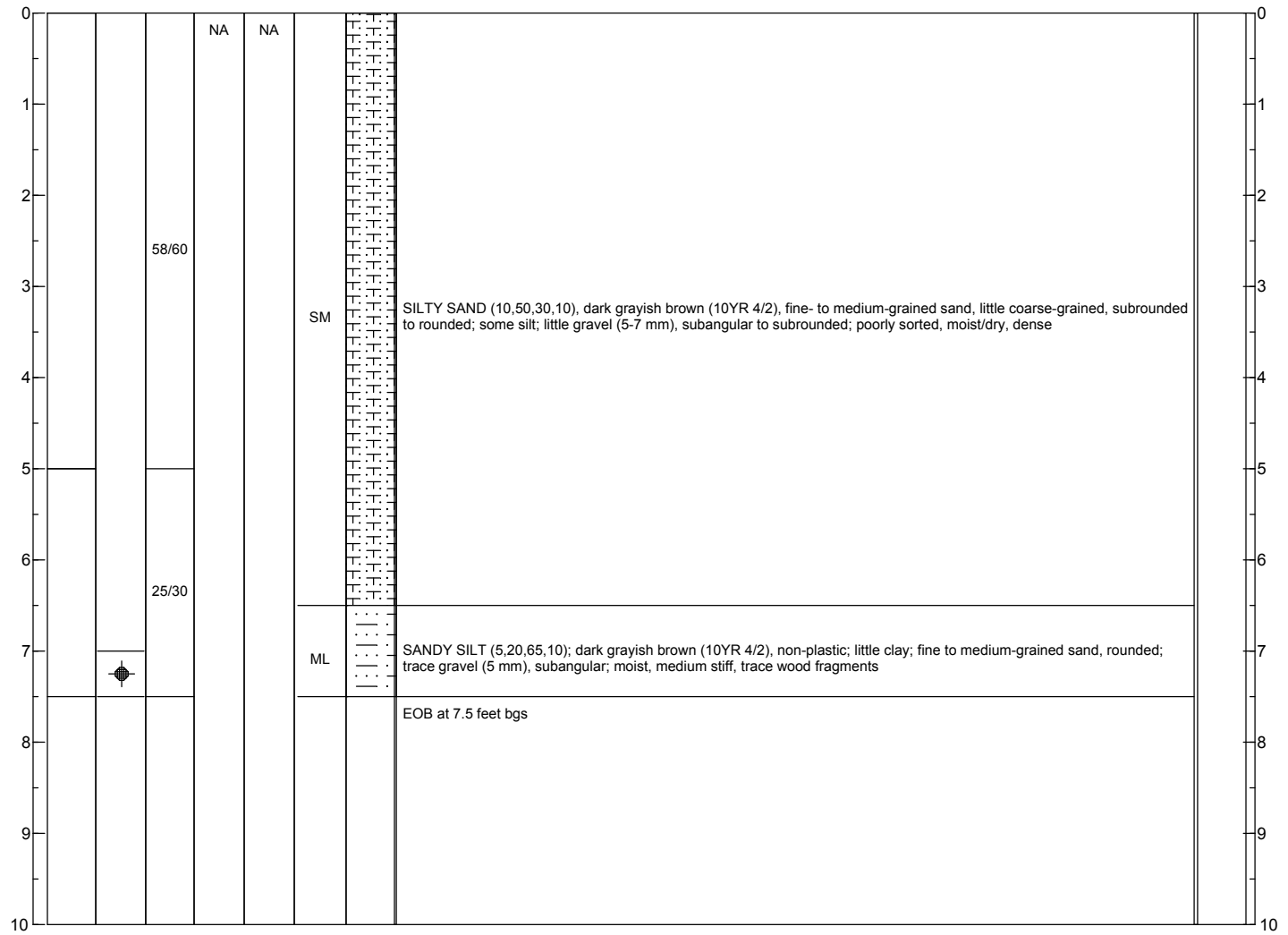


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B428E.2; EX02B428E.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B442A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090306.75	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019777.23	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.62 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

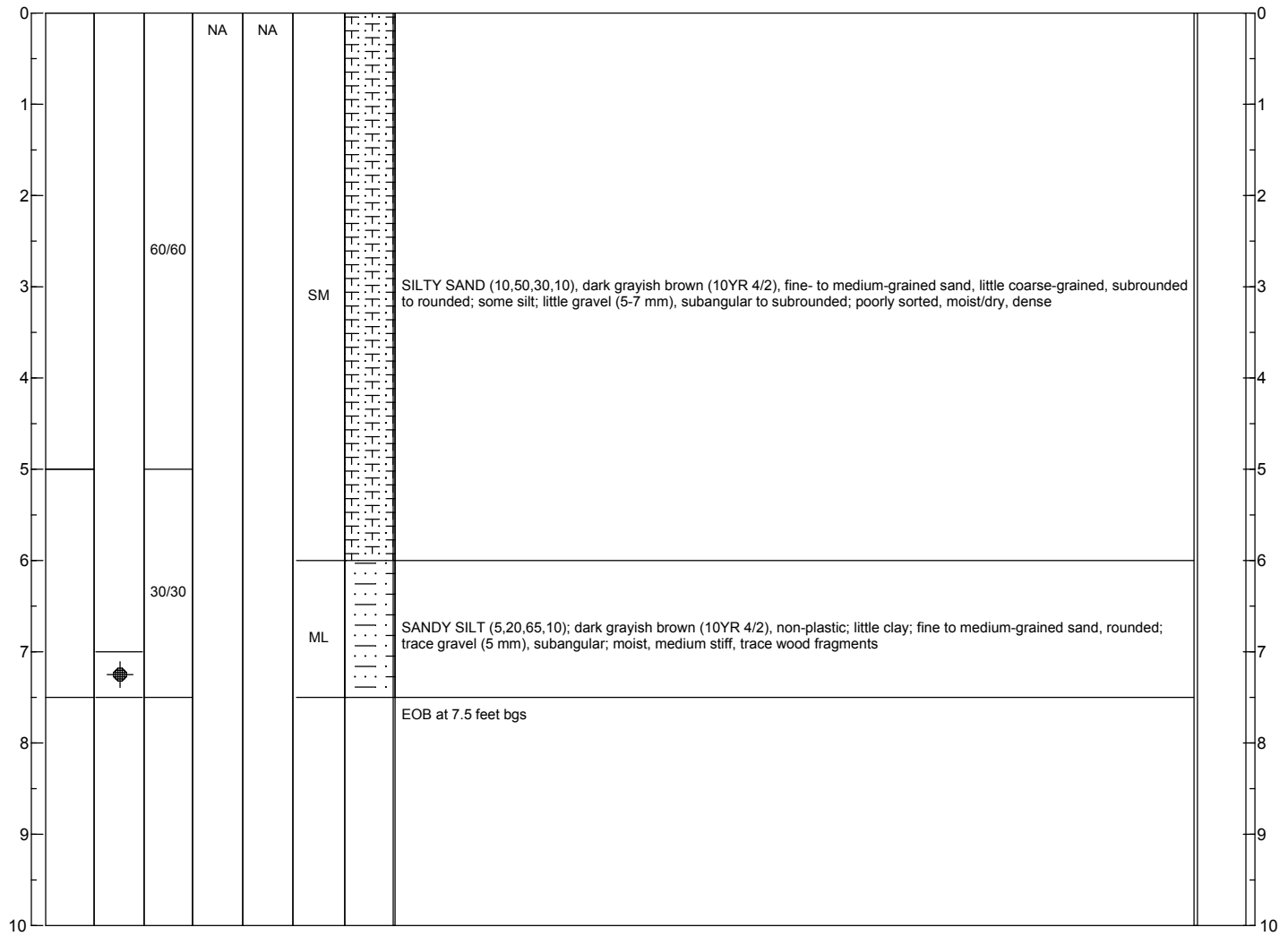


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B442A.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B442B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090294.44	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019792.01	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.74 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B442B.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B442C**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090275.93	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019774.71	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.82 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

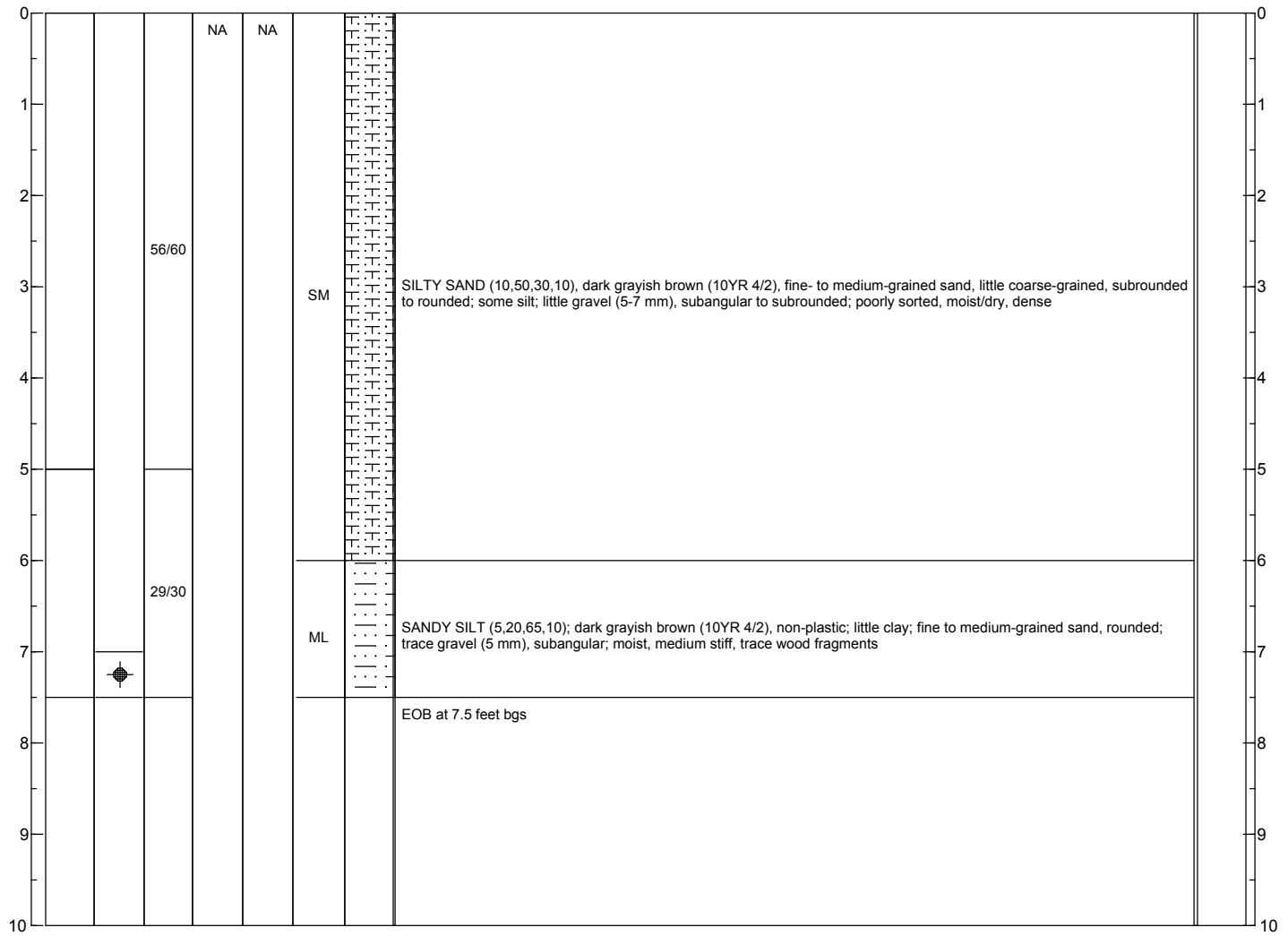
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0			54/60	NA	NA	SM		SILTY SAND (10,50,30,10), dark grayish brown (10YR 4/2), fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, moist/dry, dense		0
5			20/30			ML		SANDY SILT (5,20,65,10); dark grayish brown (10YR 4/2), non-plastic; little clay; fine to medium-grained sand, rounded; trace gravel (5 mm), subangular; moist, medium stiff, trace wood fragments		5
7.5								EOB at 7.5 feet bgs		7.5
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B442C.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B442D**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090289.43	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019762.39	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.75 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

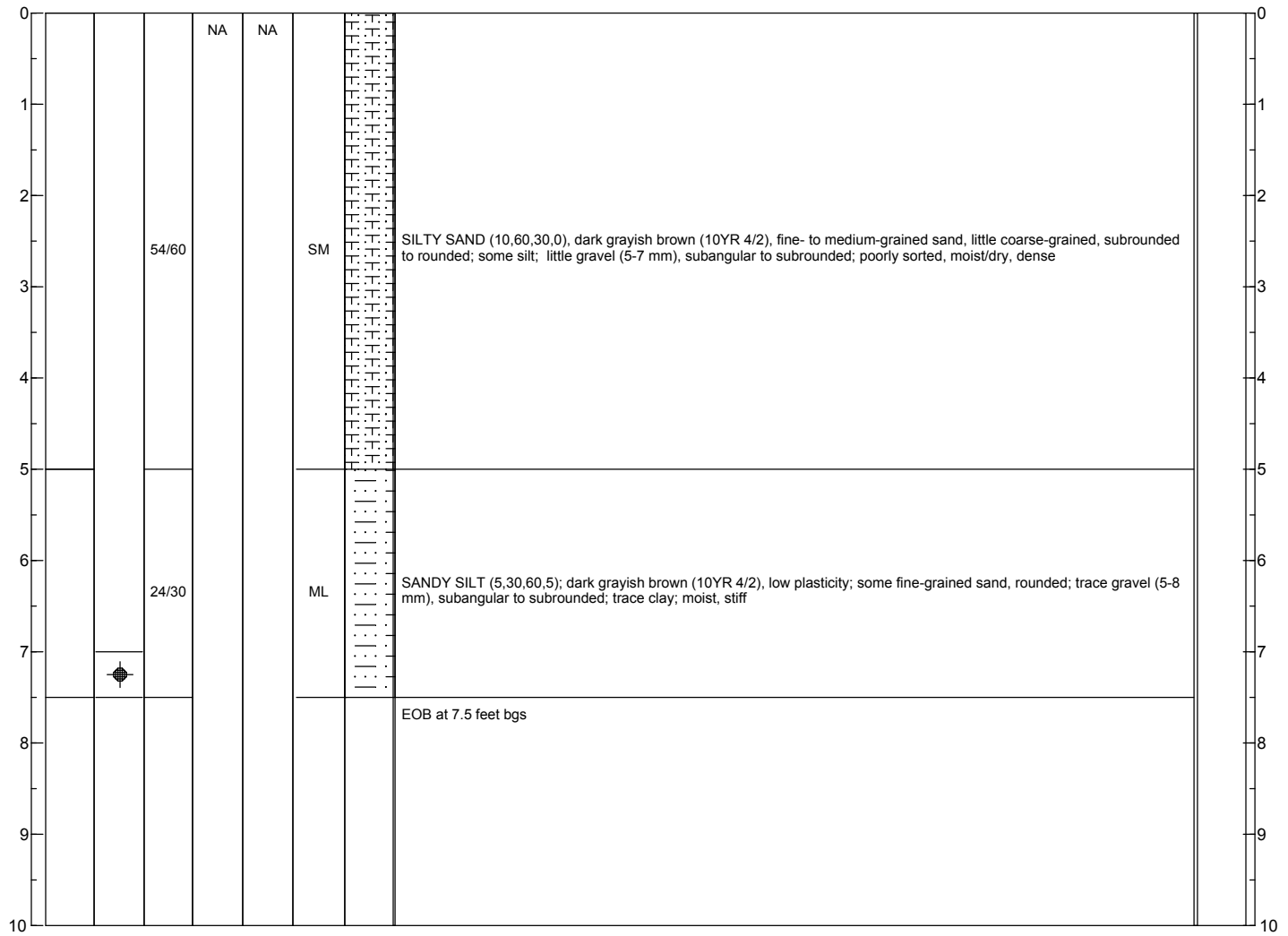


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B442D.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B456A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090652.72	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019622.87	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.57 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

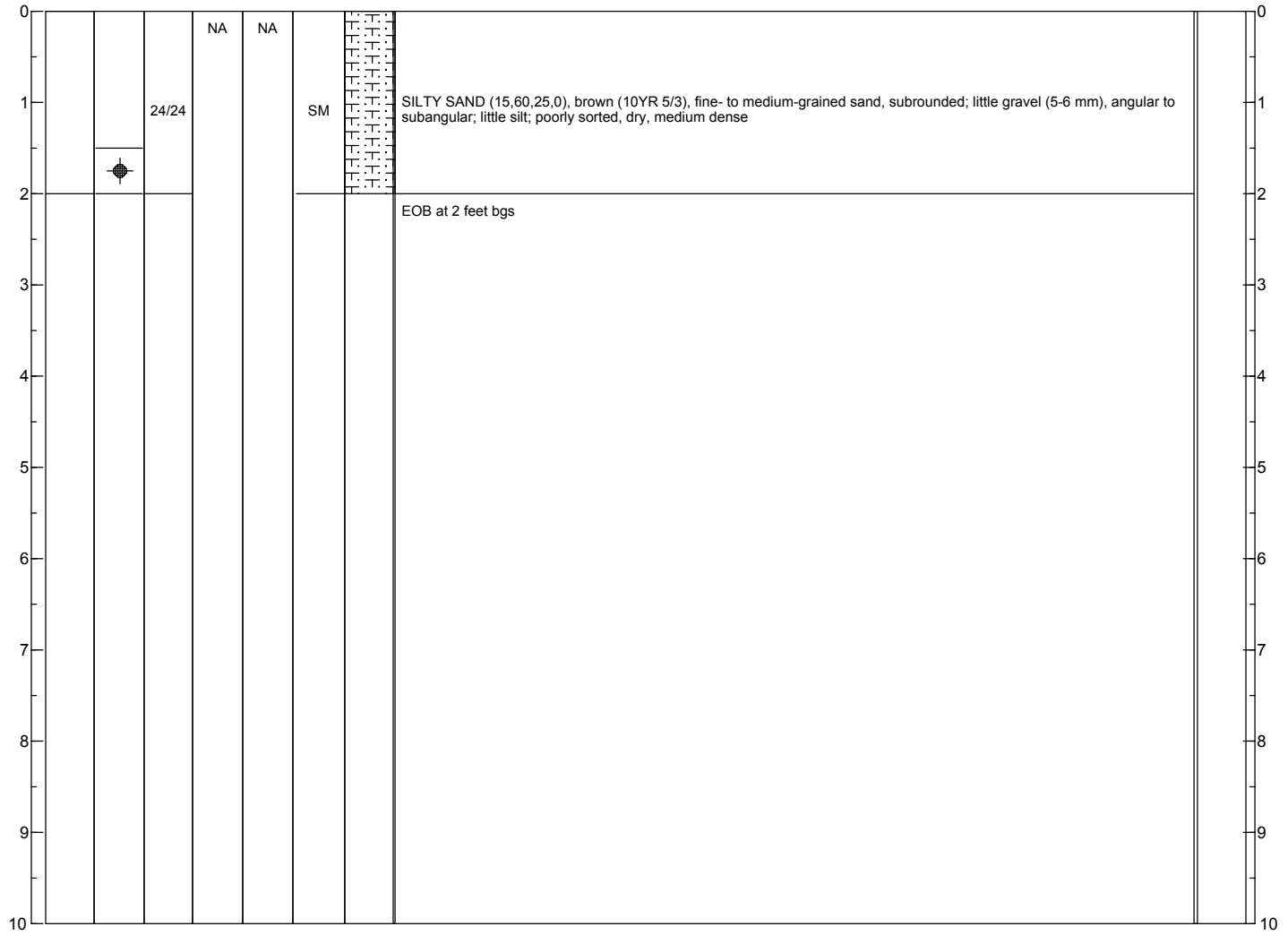


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B456A.7.5

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B456A**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090652.72	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019622.87	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.57 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

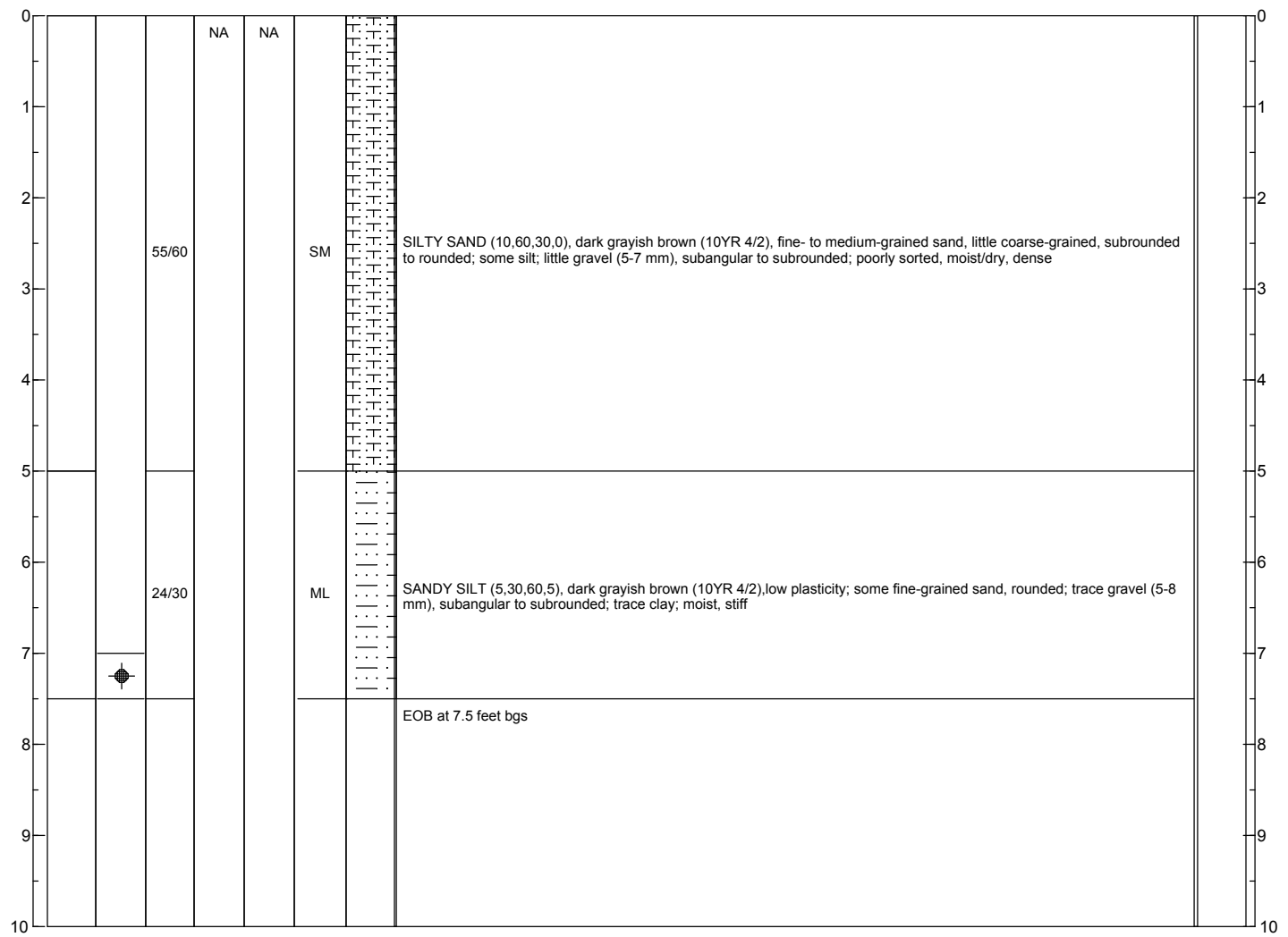


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B456A.2

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B456B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090610.49	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019583.78	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.66 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B456B.7.5

SOIL BORING LOG

Date Drilled:	10/10/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B456B**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090610.49	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019583.78	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.66 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		✦	24/24	NA	NA	SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; gravel (5-7 mm), angular to subangular; little silt; poorly sorted, moist/dry, loose		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B456B.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B461A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089760.66	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020196.82	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.12 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (15,55,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B461A.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B461B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089735.05	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020218.52	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.73 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

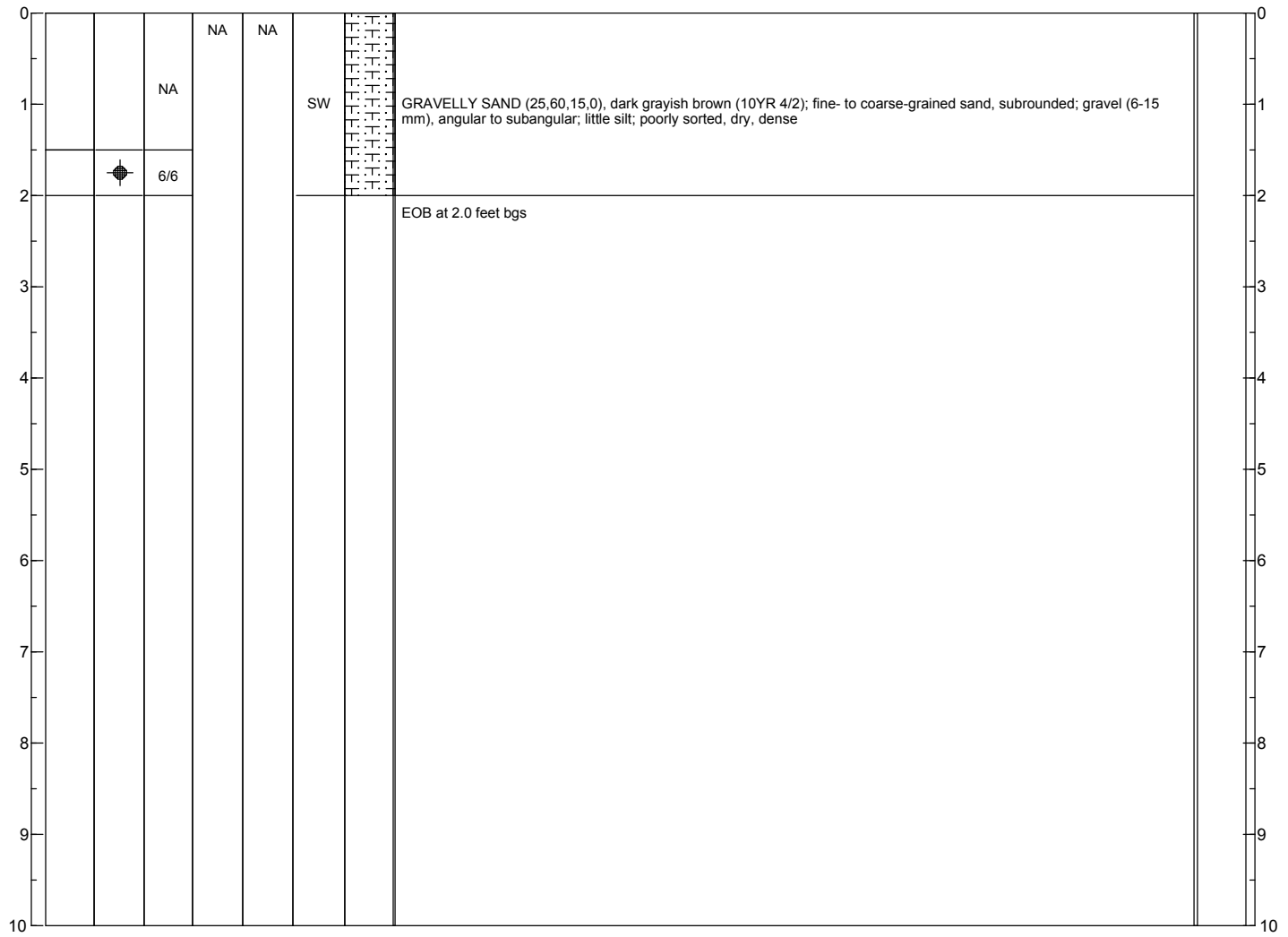
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,65,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B461B.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B461C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089735.78	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020168.08	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.03 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B461C.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B461D**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089722.12	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020205.31	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.55 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (10,70,20,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		✦	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B461D.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B464A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2088935.70	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021902.49	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.01 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (30,50,15,5), dark grayish brown (10YR 4/2); fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B464A.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B464B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2088904.93	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021938.40	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	5.93 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (50,30,20,0), reddish brown (5YR 4/3); small gravel (4-6 mm), subrounded (pea gravel); fine-grained sand, rounded; some silt; poorly sorted, dry, loose		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B464B.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B468B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2088986.15	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021774.62	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	5.58 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Concrete		0
1			NA			ML		SANDY SILT (5,25,65,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; trace gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B468B.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B468C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2088979.22	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021800.19	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	5.77 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

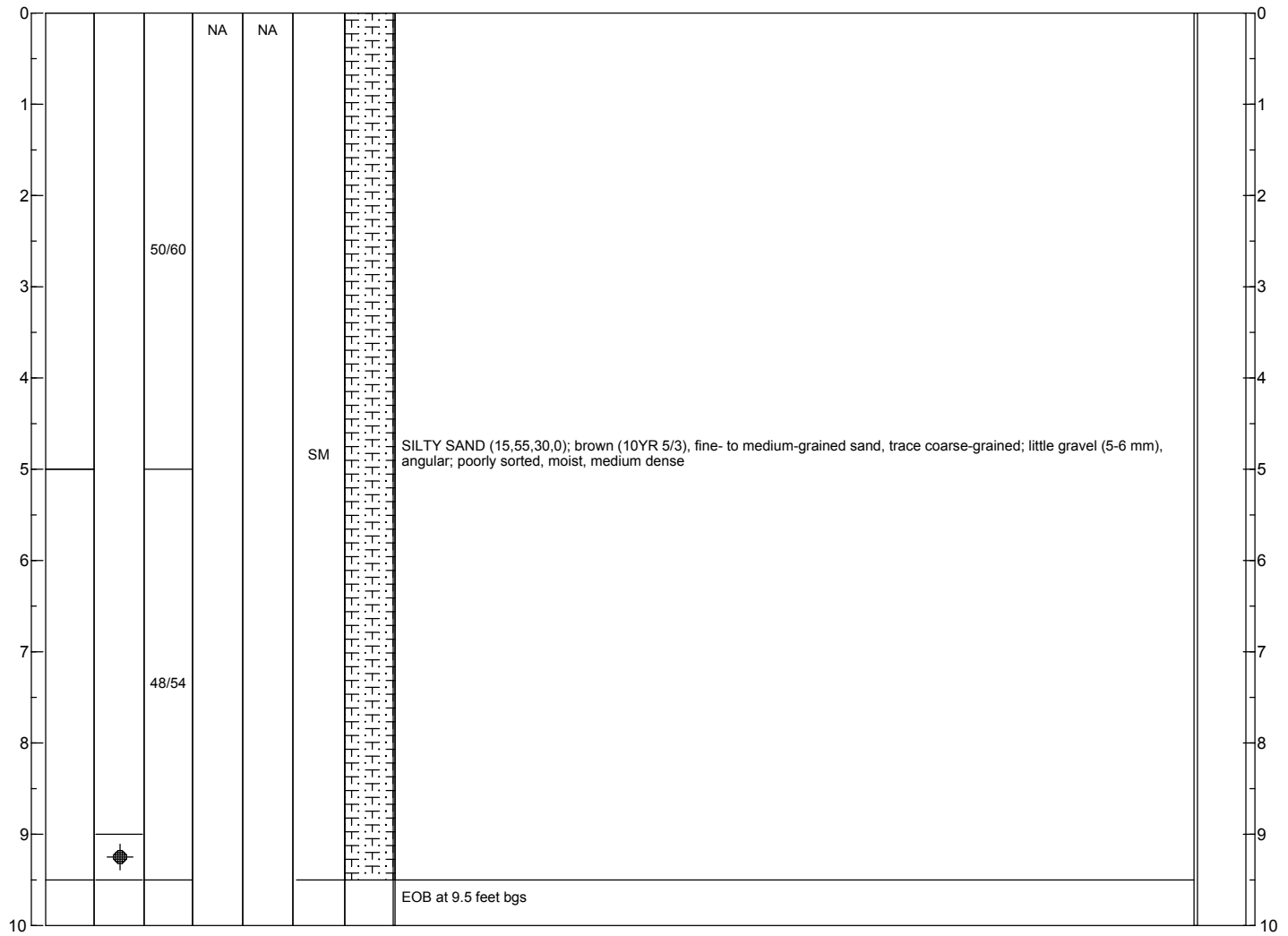
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Concrete		0
1			NA			ML		SANDY SILT (10,20,65,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B468C.2

SOIL BORING LOG

Date Drilled:	10/10/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX02B468D**
Total Depth:	9.5 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2089010.57		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6021815.74		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	8.83 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B468D.9.5

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B493B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2088732.61	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6022007.44	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.81 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (25,60,15,0), dark grayish brown (10YR 4/2); fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense, trace broken shells		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B493B.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B493C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2088716.26	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6022023.05	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.14 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (15,50,30,5), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, moist/dry, dense, little broken shells		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B493C.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B505A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089037.11	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021726.88	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	5.30 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Concrete		0
1			NA			ML		SANDY SILT (5,15,75,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; trace gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B505A.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B505B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2088979.90	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021750.22	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.13 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA					0
1			NA			ML		SANDY SILT (5,25,65,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; trace gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B505B.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B506A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2088954.72	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021781.15	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.09 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0										0
			NA	NA	NA					
1						ML		SANDY SILT (10,25,60,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
		⌖	6/6							
2								EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B506A.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B506B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2088960.50	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021763.66	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.69 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

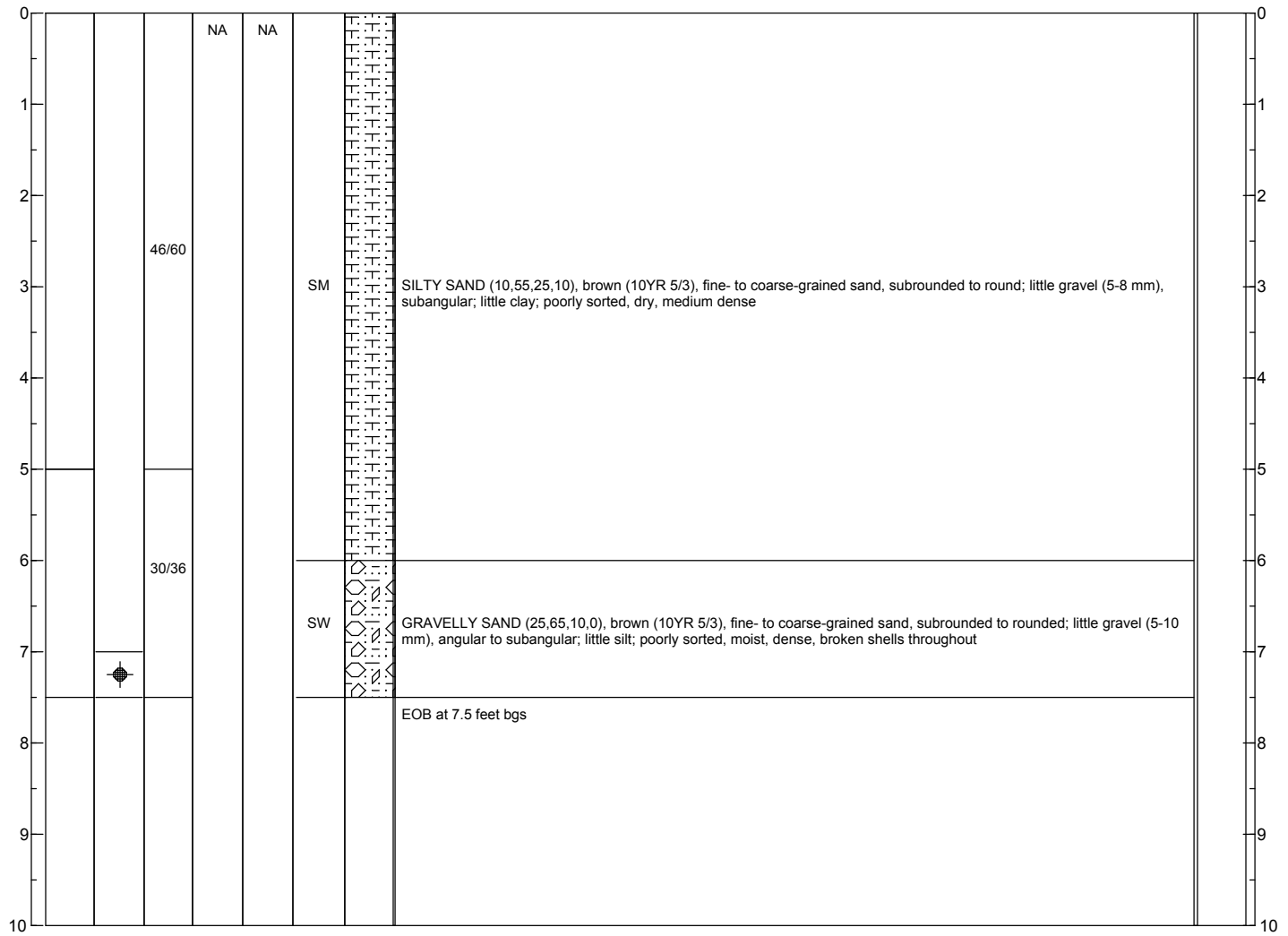
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0										0
1			NA	NA	NA	ML		SANDY SILT (10,20,65,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B506B.2

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B524A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090550.94	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019489.48	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.89 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

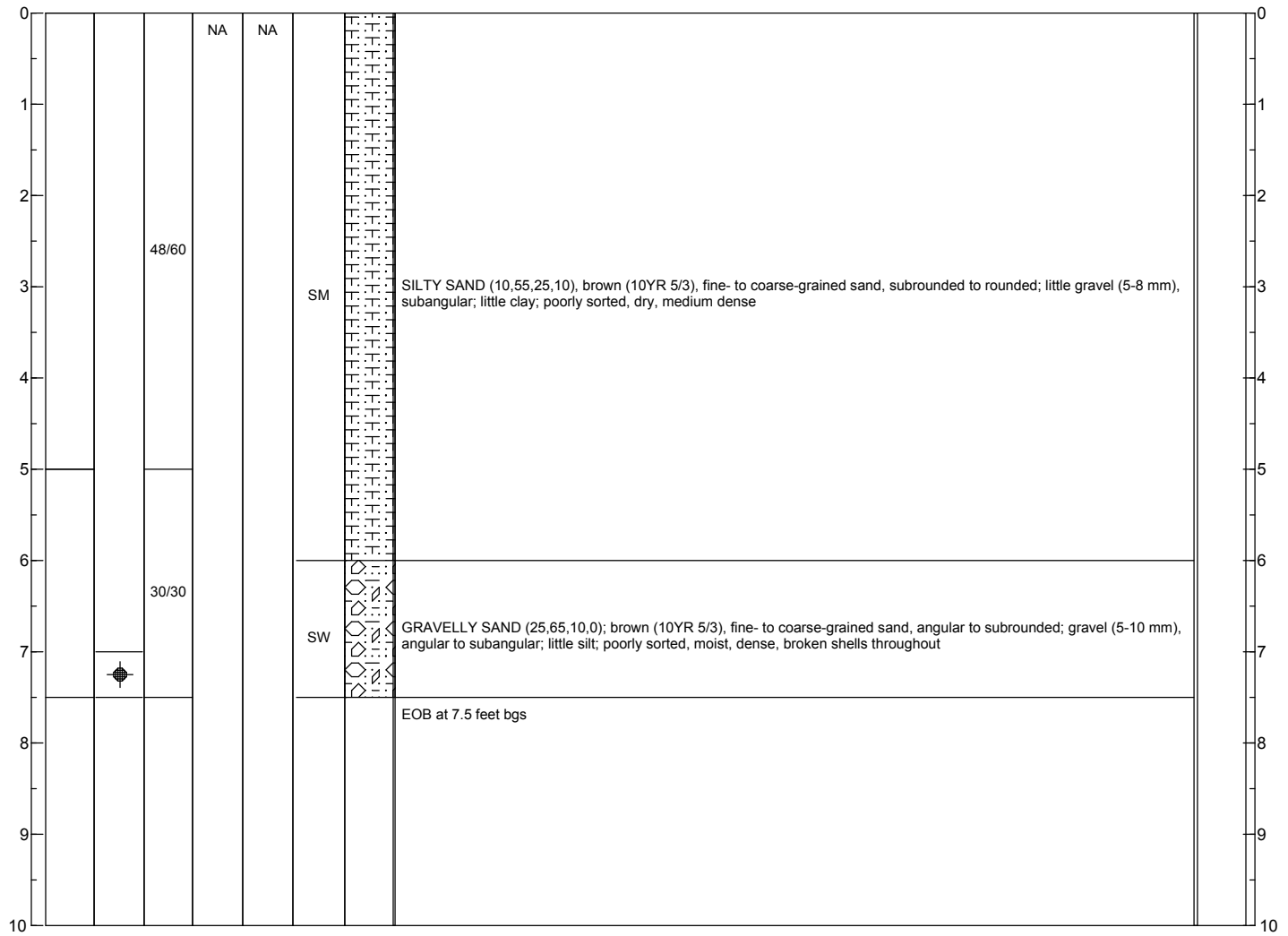


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B524A.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B524B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090513.97	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019525.62	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.15 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

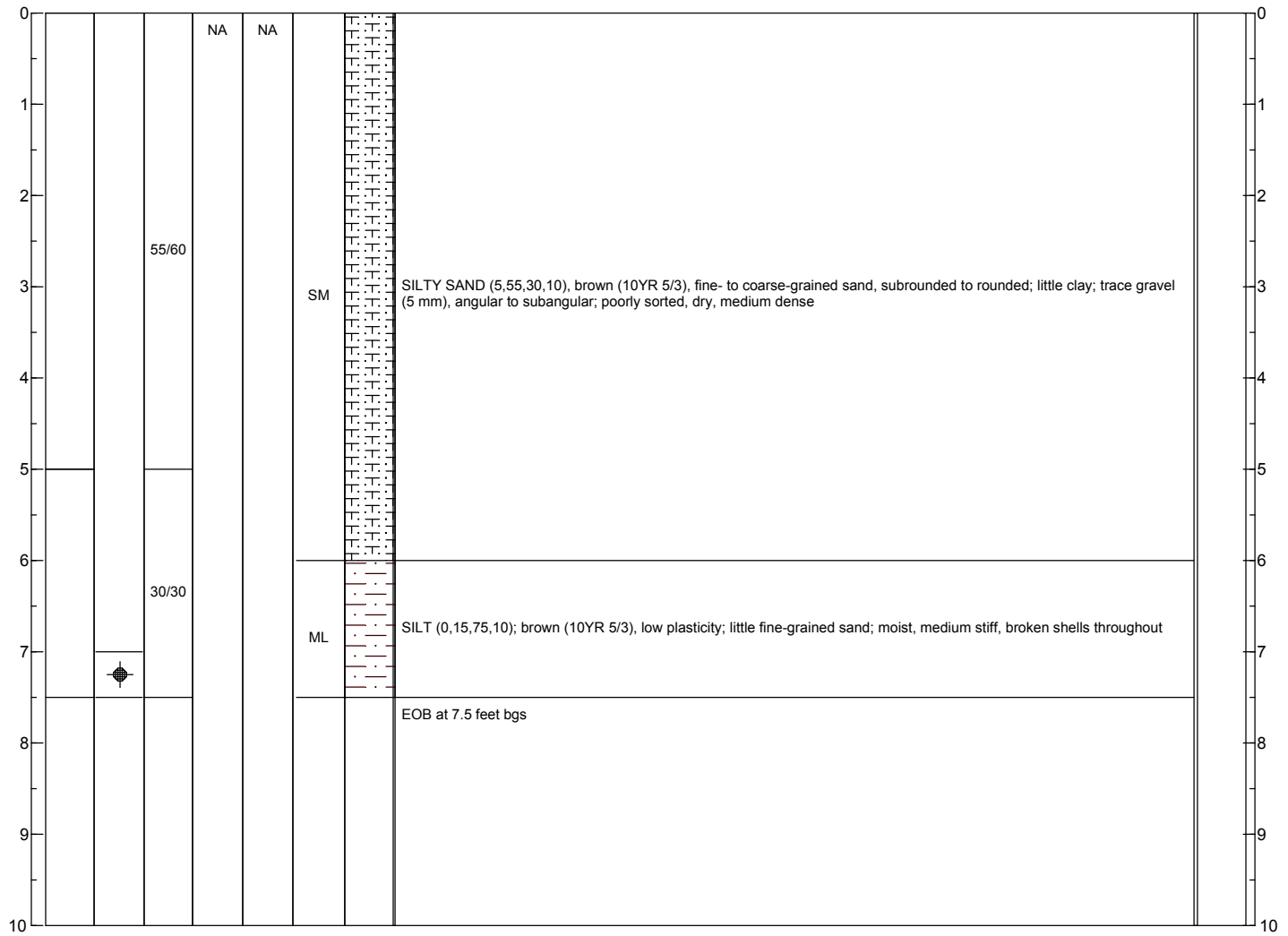


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B524B.7.5

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B524B1**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090534.73	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019526.36	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.73 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

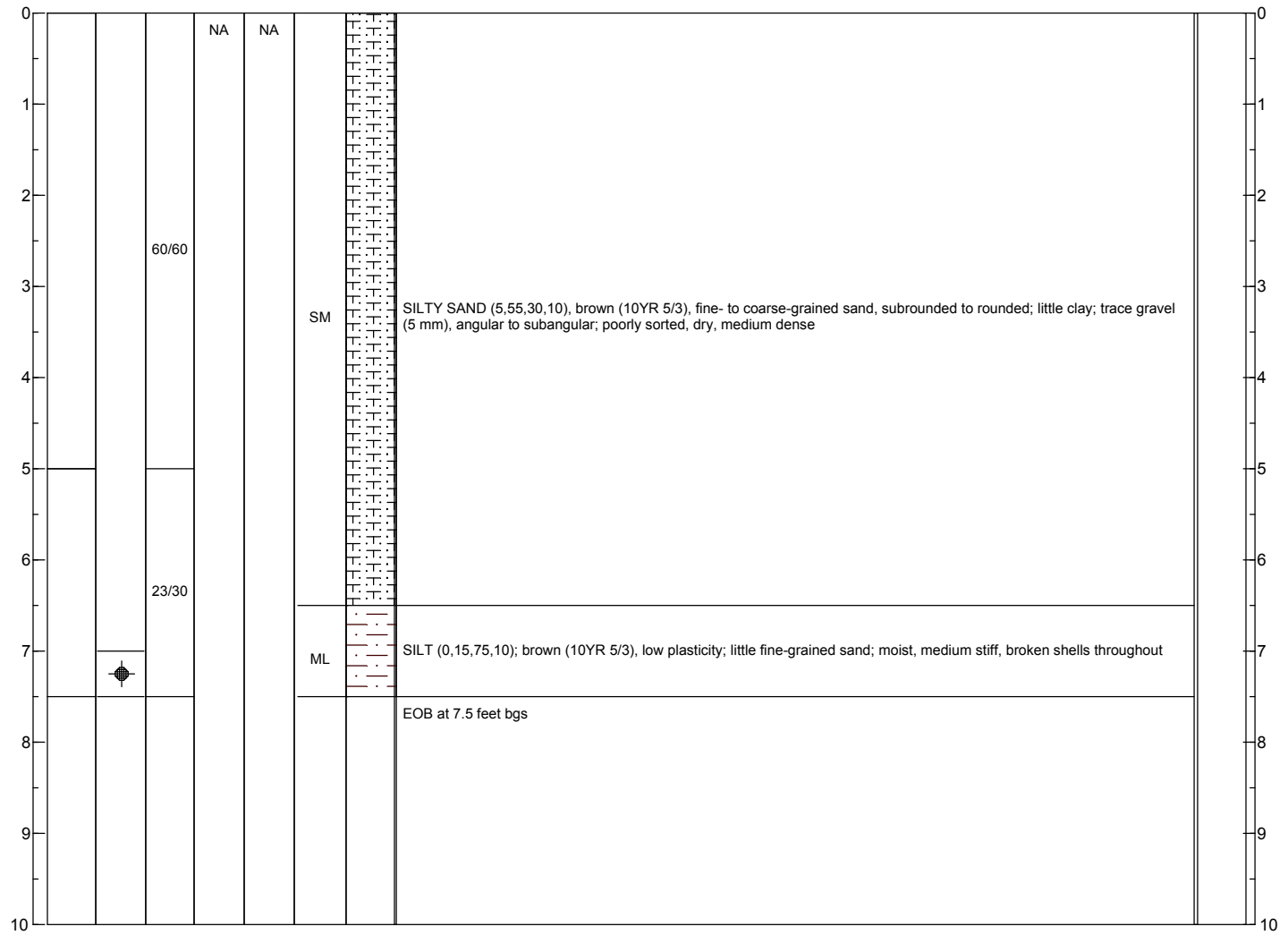


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B524B1.7.5

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B524B2**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090554.25	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019533.13	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.69 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

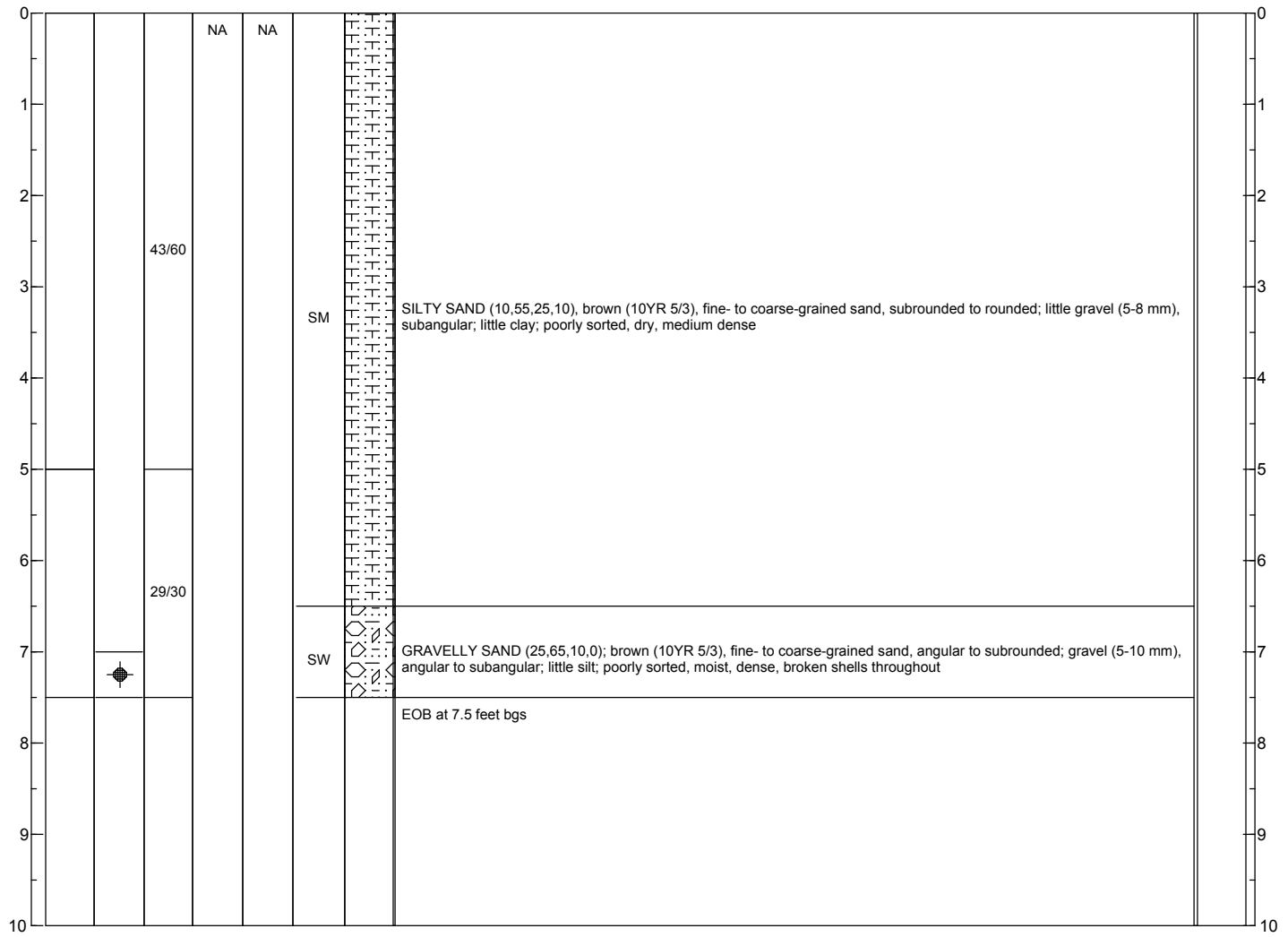


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B524B2.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02B524C**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090493.05	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019438.93	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.66 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B524C.7.5

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B524D**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090461.15	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019433.54	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.39 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	ML		SANDY SILT (15,30,55,0), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B524D.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02B525A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090643.65	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019410.26	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.34 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

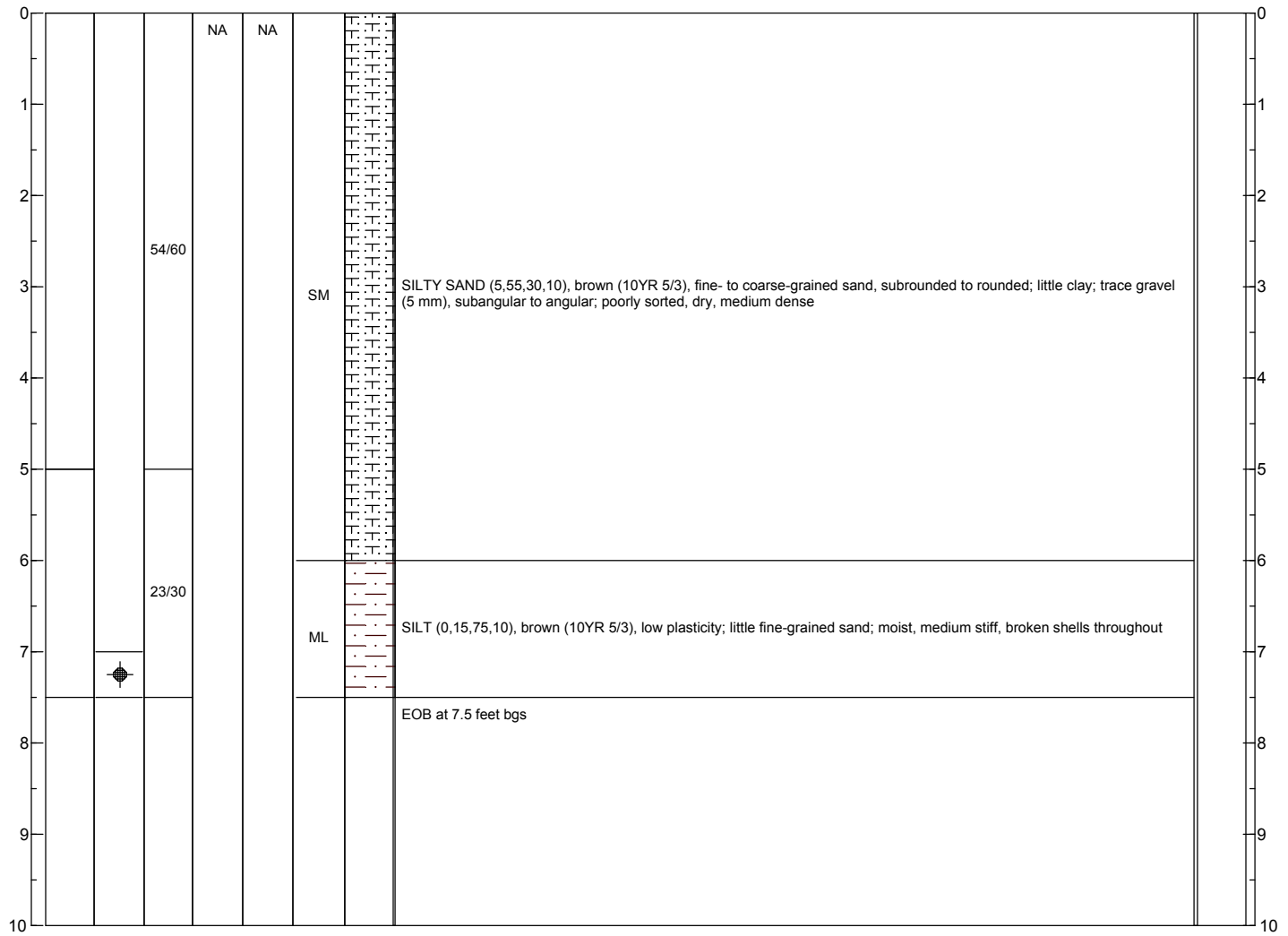
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	ML		SANDY SILT (10,30,55,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02B525A.2

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP002A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089662.71	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020750.08	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.58 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP002A.7.5

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP002B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089650.01	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020771.86	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.77 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–5			50/60	NA	NA	SM		SILTY SAND (5,55,30,10), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; little clay; trace gravel (5 mm), subangular to angular; poorly sorted, dry, medium dense		0–5
5–7.5			20/30			ML		SILT (0,15,75,10), brown (10YR 5/3), low plasticity; little fine-grained sand; moist, medium stiff, broken shells throughout		5–7.5
7.5								EOB at 7.5 feet bgs		7.5

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP002B.7.5

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP002C**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089636.99	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020758.24	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.95 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–5			53/60	NA	NA	SM		SILTY SAND (5,55,30,10), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; little clay; trace gravel (5 mm), subangular to angular; poorly sorted, dry, medium dense		0–5
5–7.5			24/30			ML		SILT (0,15,75,10), brown (10YR 5/3), low plasticity; little fine-grained sand; moist, medium stiff, broken shells throughout		5–7.5
7.5								EOB at 7.5 feet bgs		7.5

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP002C.7.5

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP008A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089624.43	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020849.00	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.66 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–5			48/60	NA	NA	SM		SILTY SAND (10,55,25,10), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; little gravel (5-8 mm), subangular to angular; little clay; poorly sorted, dry, dense		0–5
5–7.5			24/30			SW		GRAVELLY SAND (25,60,15,0); brown (10YR 5/3), fine- to coarse-grained sand, subrounded; gravel (5-8 mm), subangular to angular; little silt; poorly sorted, dry, medium dense/dense, trace organics (wood)		5–7.5
7.5								EOB at 7.5 feet bgs		7.5

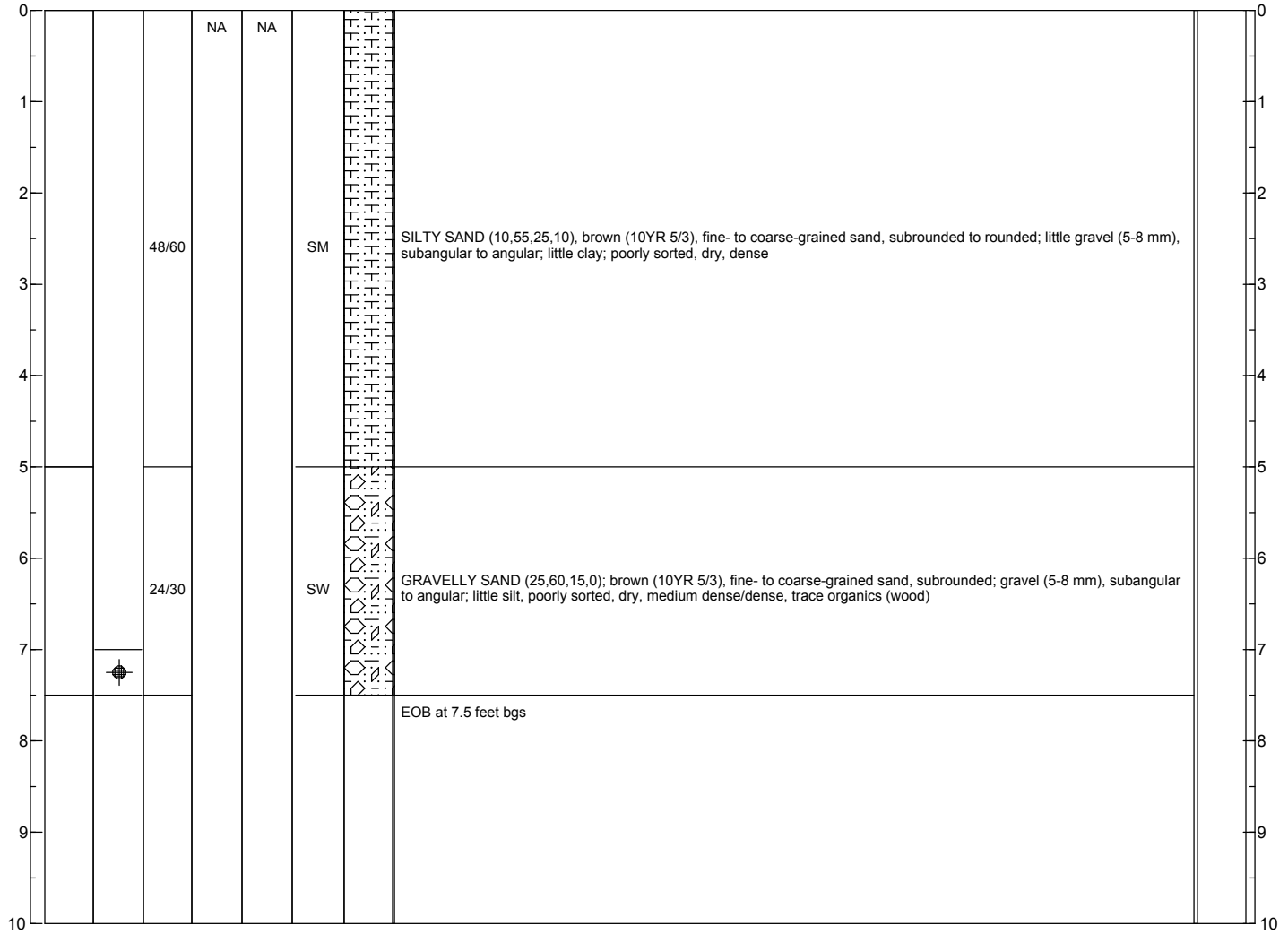
Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP008A.7.5

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP008B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089596.96	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020852.31	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.85 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–5			48/60	NA	NA	SM		SILTY SAND (10,55,25,10), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; little gravel (5-8 mm), subangular to angular; little clay; poorly sorted, dry, dense		
5–7.5		✦	24/30			SW		GRAVELLY SAND (25,60,15,0); brown (10YR 5/3), fine- to coarse-grained sand, subrounded; gravel (5-8 mm), subangular to angular; little silt, poorly sorted, dry, medium dense/dense, trace organics (wood)		
7.5								EOB at 7.5 feet bgs		



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP008B.7.5

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP008C**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089597.09	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020824.79	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.70 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

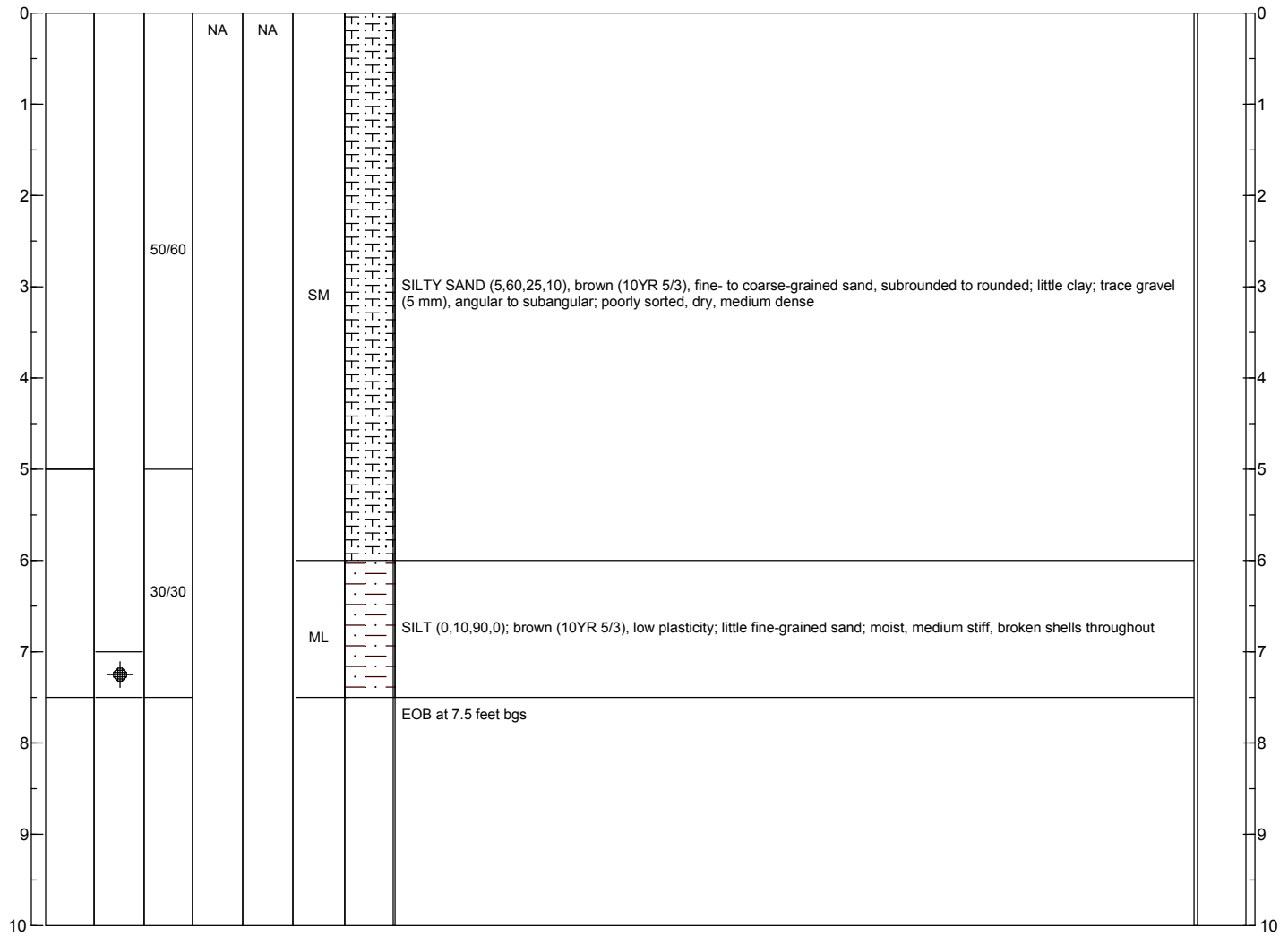
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–5			51/60	NA	NA	SM		SILTY SAND (5,55,30,10), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; little clay; trace gravel (5 mm), subangular to angular; poorly sorted, dry, medium dense		0–5
5–7.5			24/30			ML		SILT (0,15,75,10); brown (10YR 5/3), low plasticity; little fine-grained sand; moist, medium stiff, broken shells throughout		5–7.5
7.5								EOB at 7.5 feet bgs		7.5

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP008C.7.5

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP016AA**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089493.81	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020853.64	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.89 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

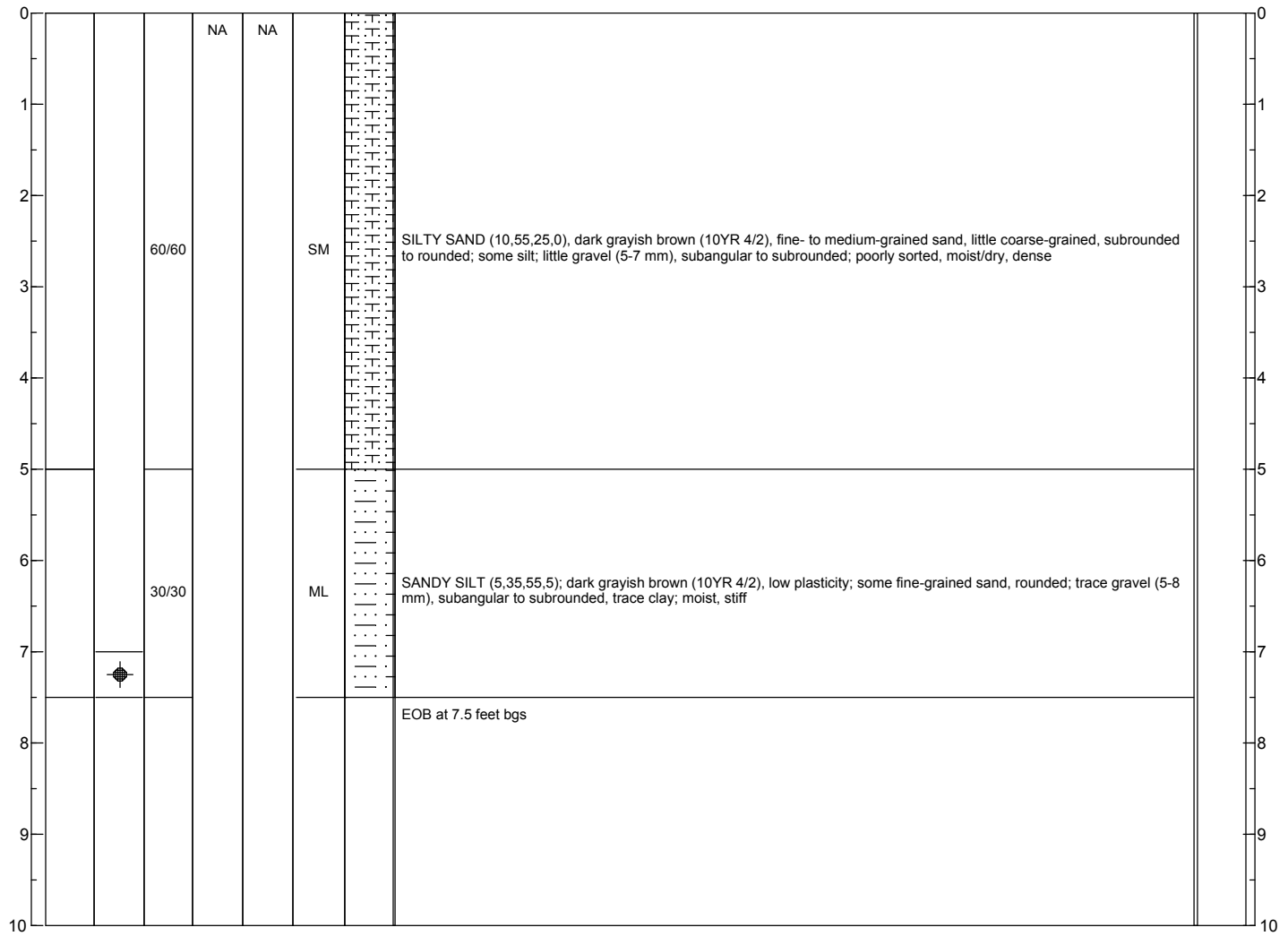


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP016AA.7.5

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP016AC**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089505.62	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020881.61	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.55 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

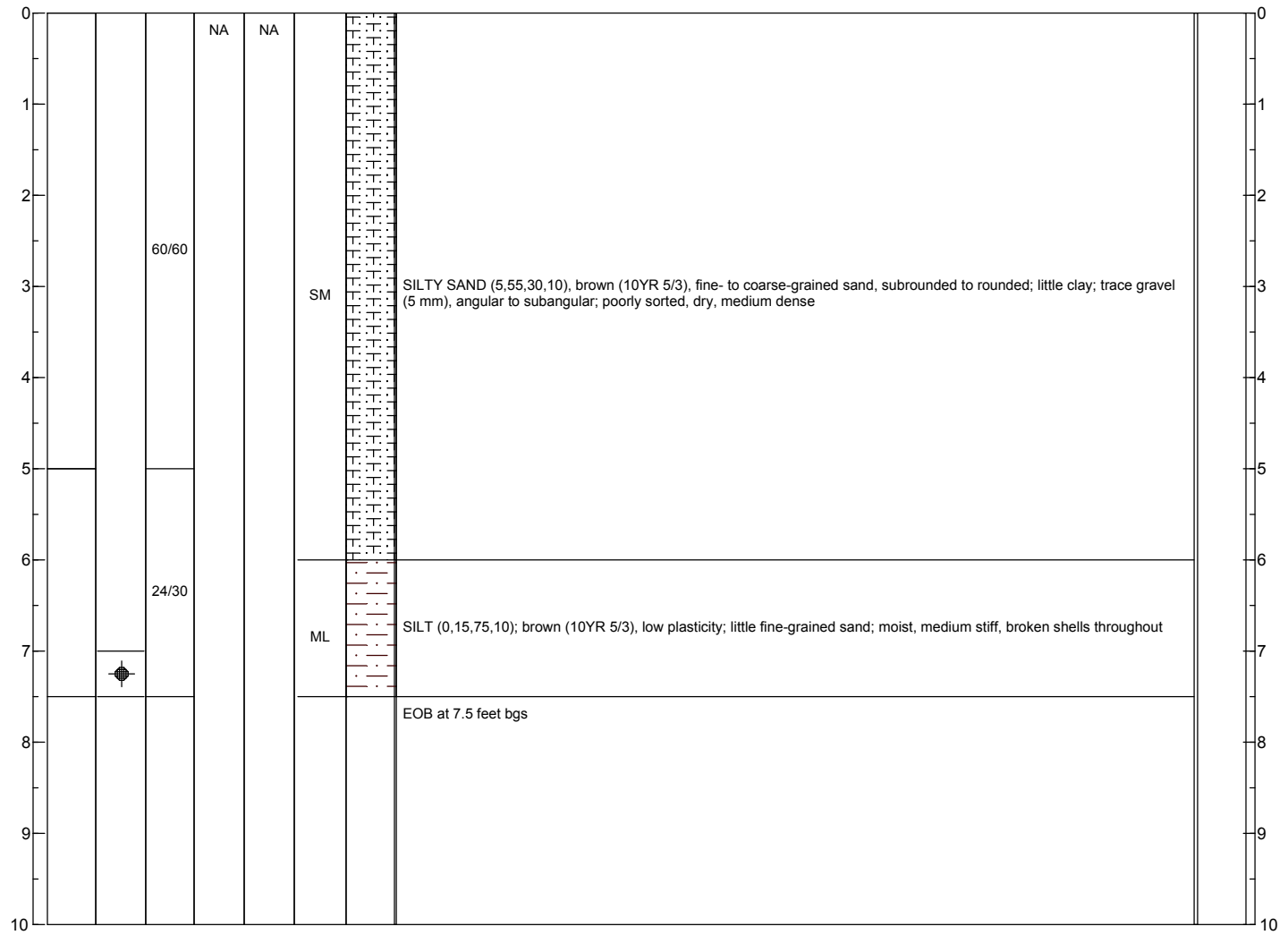


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP016AC.7.5

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP016AE**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089468.45	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020874.09	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.19 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

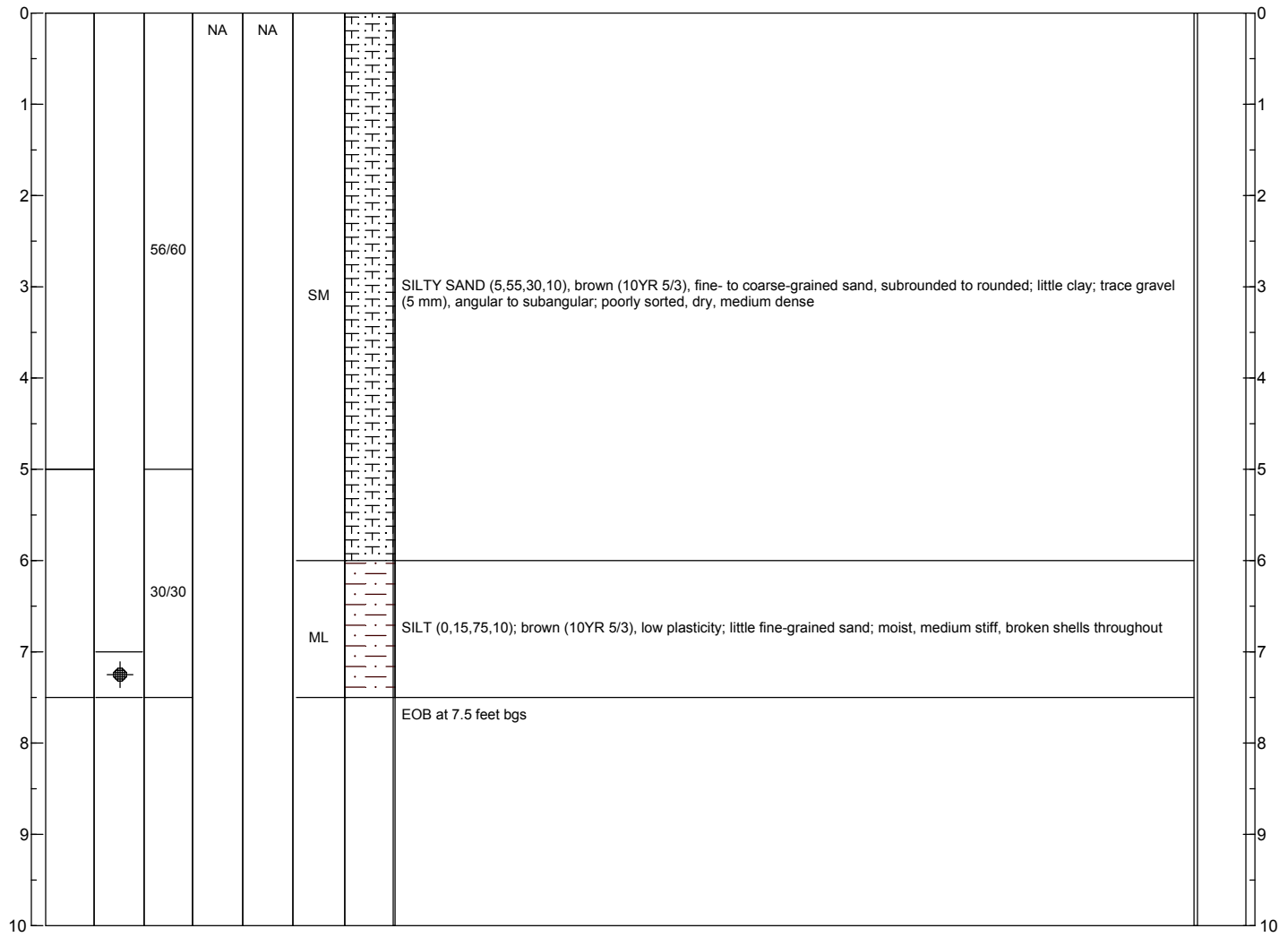


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP016AE.7.5

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP016AF**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089458.65	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020847.66	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.91 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP016AF.7.5

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP038A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089263.74	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021149.96	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.59 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

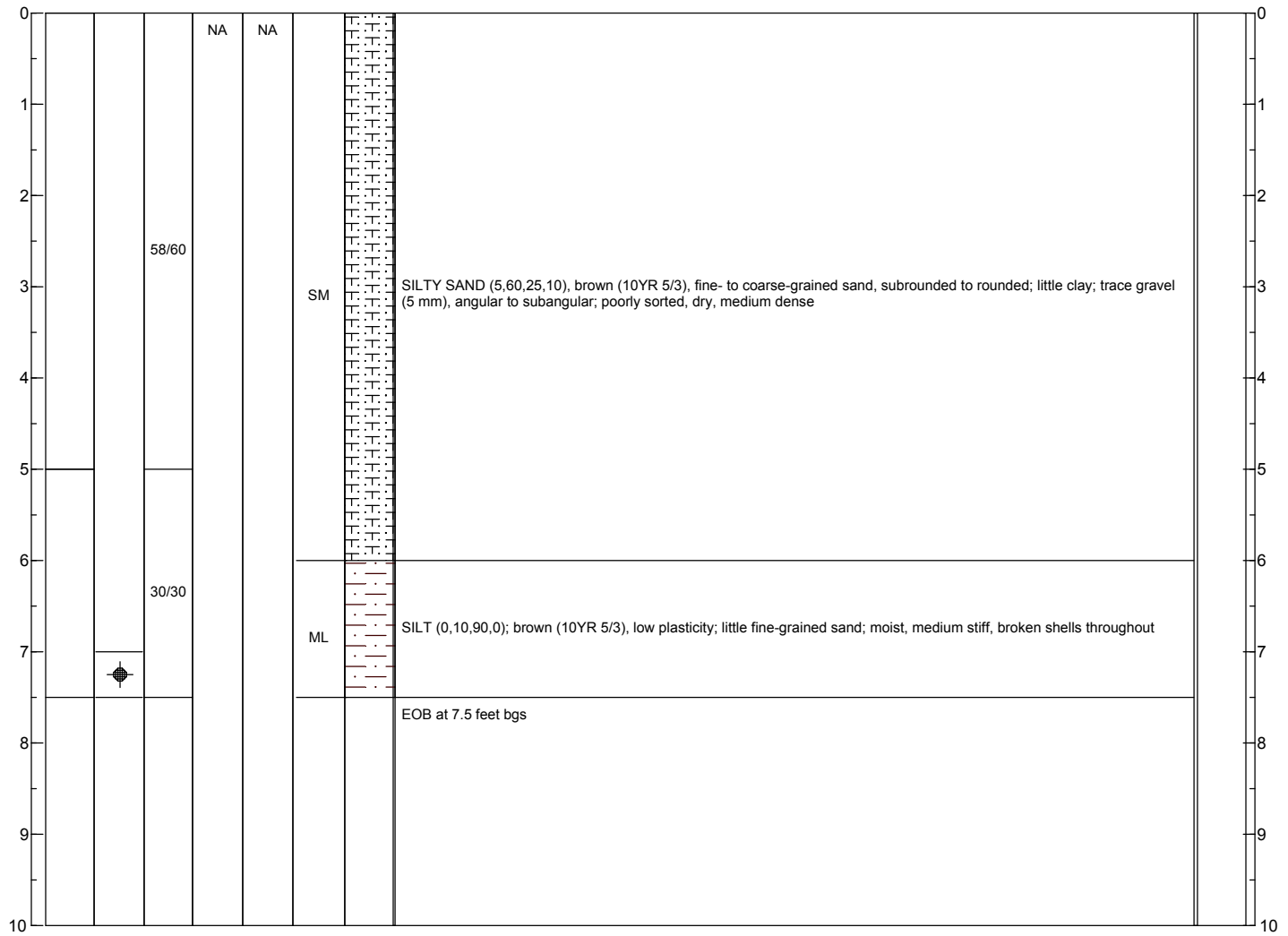
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–5			46/60	NA	NA	SM		SILTY SAND (10,60,20,10), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; little gravel (5-8 mm), subangular; little clay; poorly sorted, dry, medium dense		0–5
5–7.5			30/30			SW		GRAVELLY SAND (20,65,15,0); brown (10YR 5/3), fine- to coarse-grained sand, angular to subrounded; gravel (5-10 mm), angular to subangular; little silt; poorly sorted, moist, dense, broken shells throughout		5–7.5
7.5								EOB at 7.5 feet bgs		7.5

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP038A.7.5

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP038B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089253.71	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021128.91	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.12 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

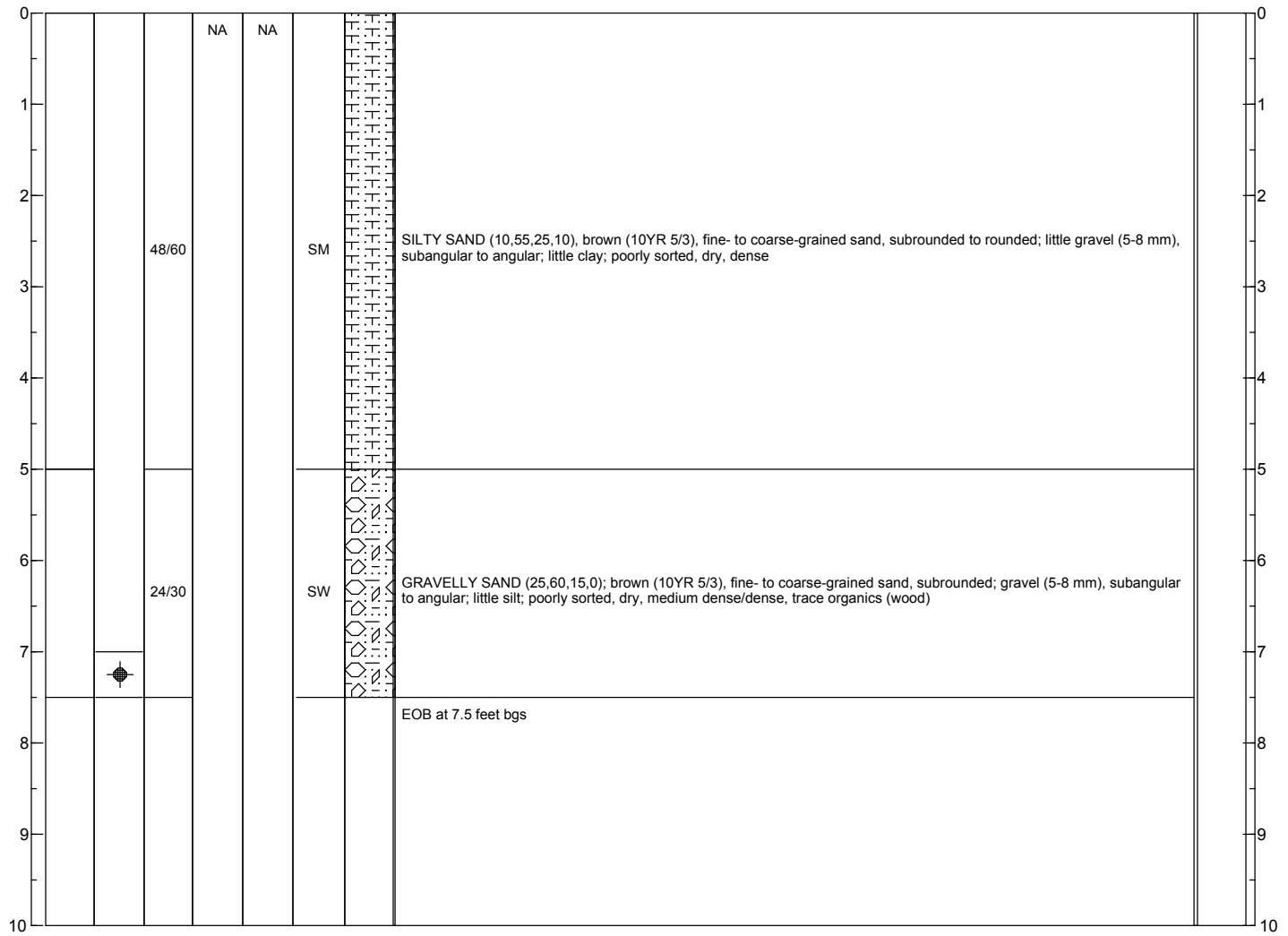


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP038B.7.5

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP040A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089267.35	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021282.28	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.28 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

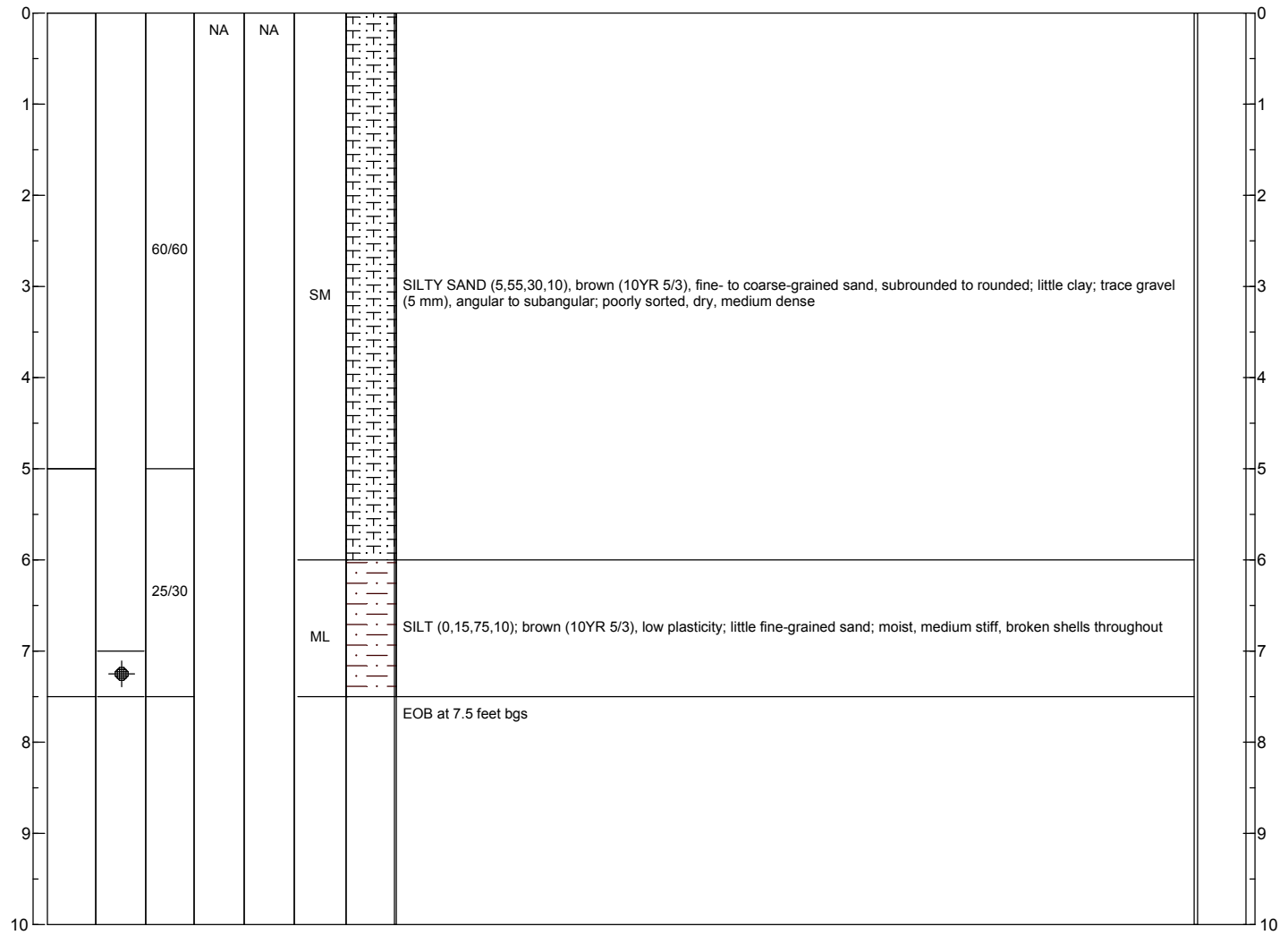


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP040A.7.5

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP040AA**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089275.82	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021259.69	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.00 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP040AA.7.5

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP040B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089249.96	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021292.38	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.54 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

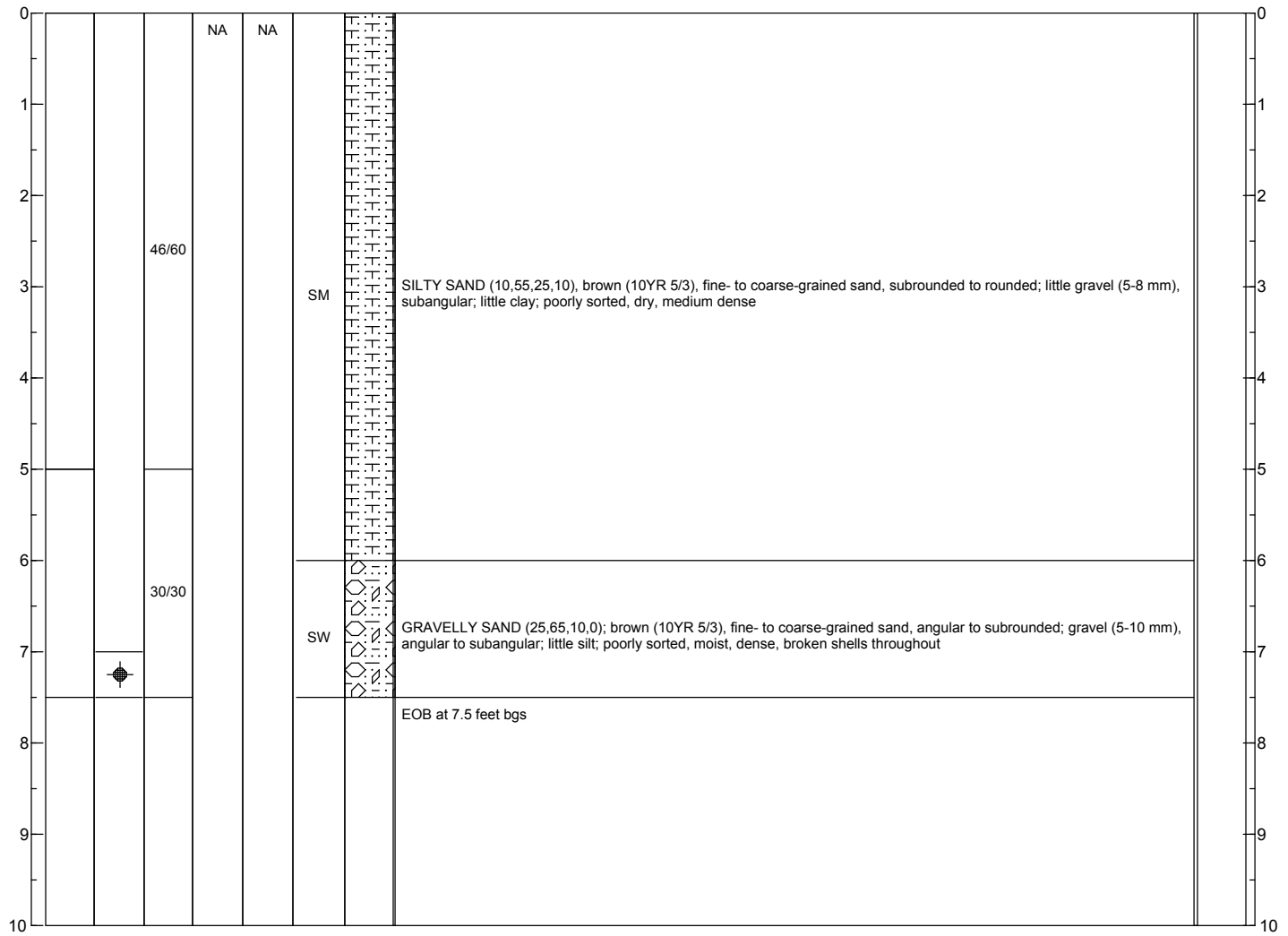
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–5			50/60	NA	NA	SM		SILTY SAND (10,55,25,10), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; little gravel (5-8 mm), subangular to angular; little clay; poorly sorted, dry, dense		0–5
5–7.5			22/30			SW		GRAVELLY SAND (25,60,15,0); brown (10YR 5/3), fine- to coarse-grained sand, subrounded; gravel (5-8 mm), subangular to angular; little silt; poorly sorted, dry, medium dense/dense, trace organics (wood)		5–7.5
7.5								EOB at 7.5 feet bgs		7.5

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP040B.7.5

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP040E**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089255.08	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021159.75	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.48 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

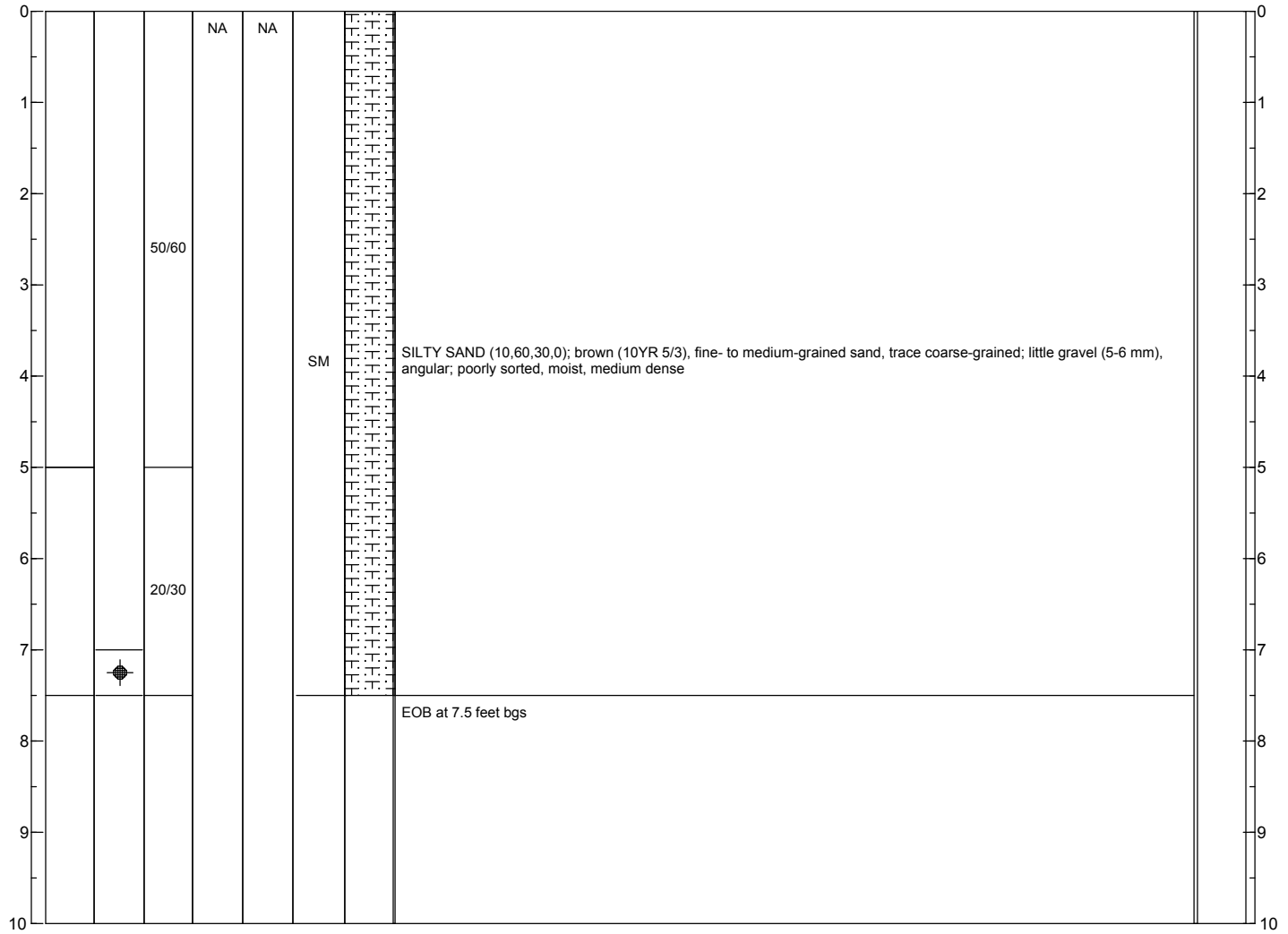


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP040E.7.5

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP040F**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089288.93	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021162.87	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.53 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

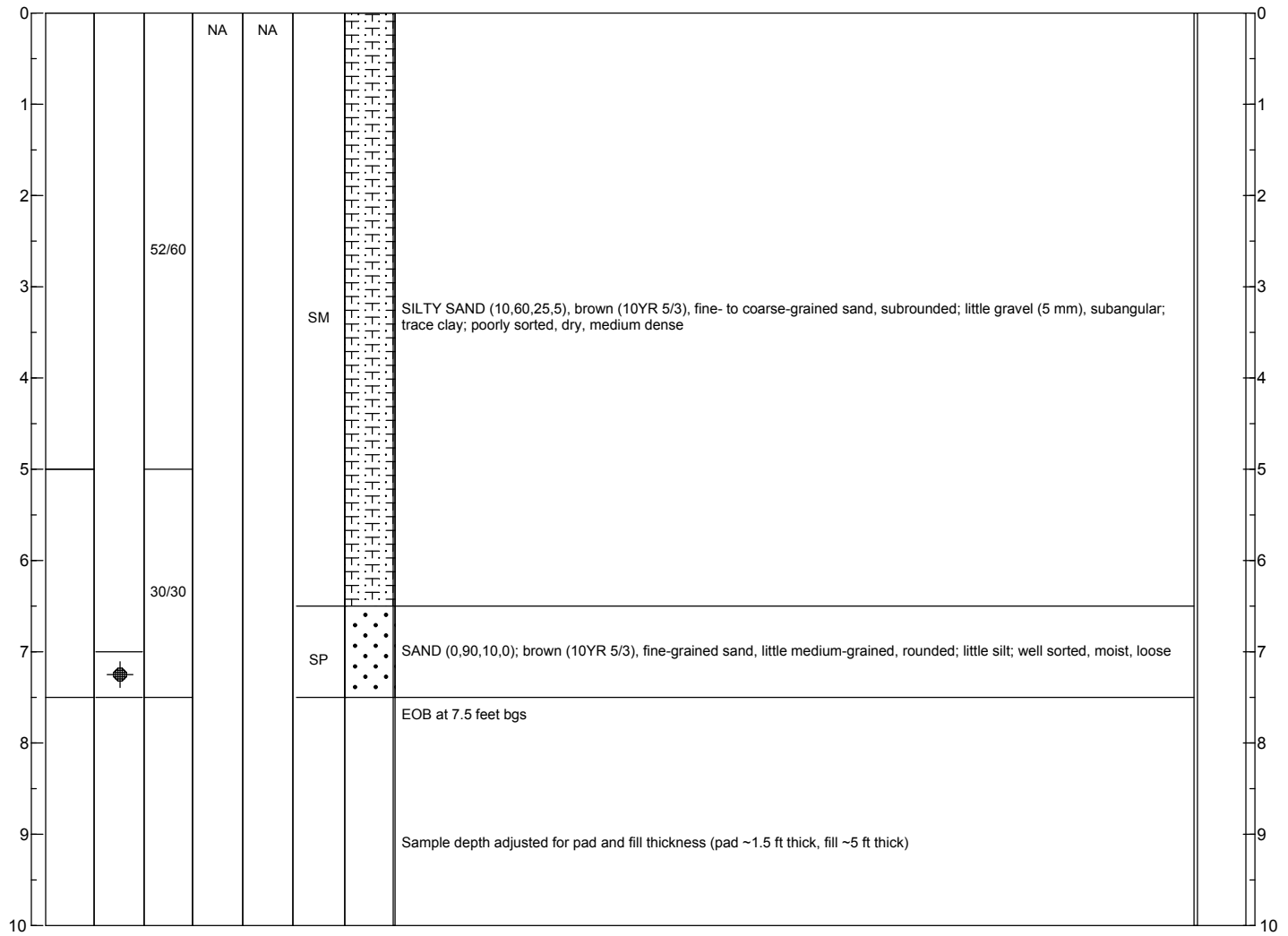


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP040F.7.5

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP051AA**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089277.68	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021318.21	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.09 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

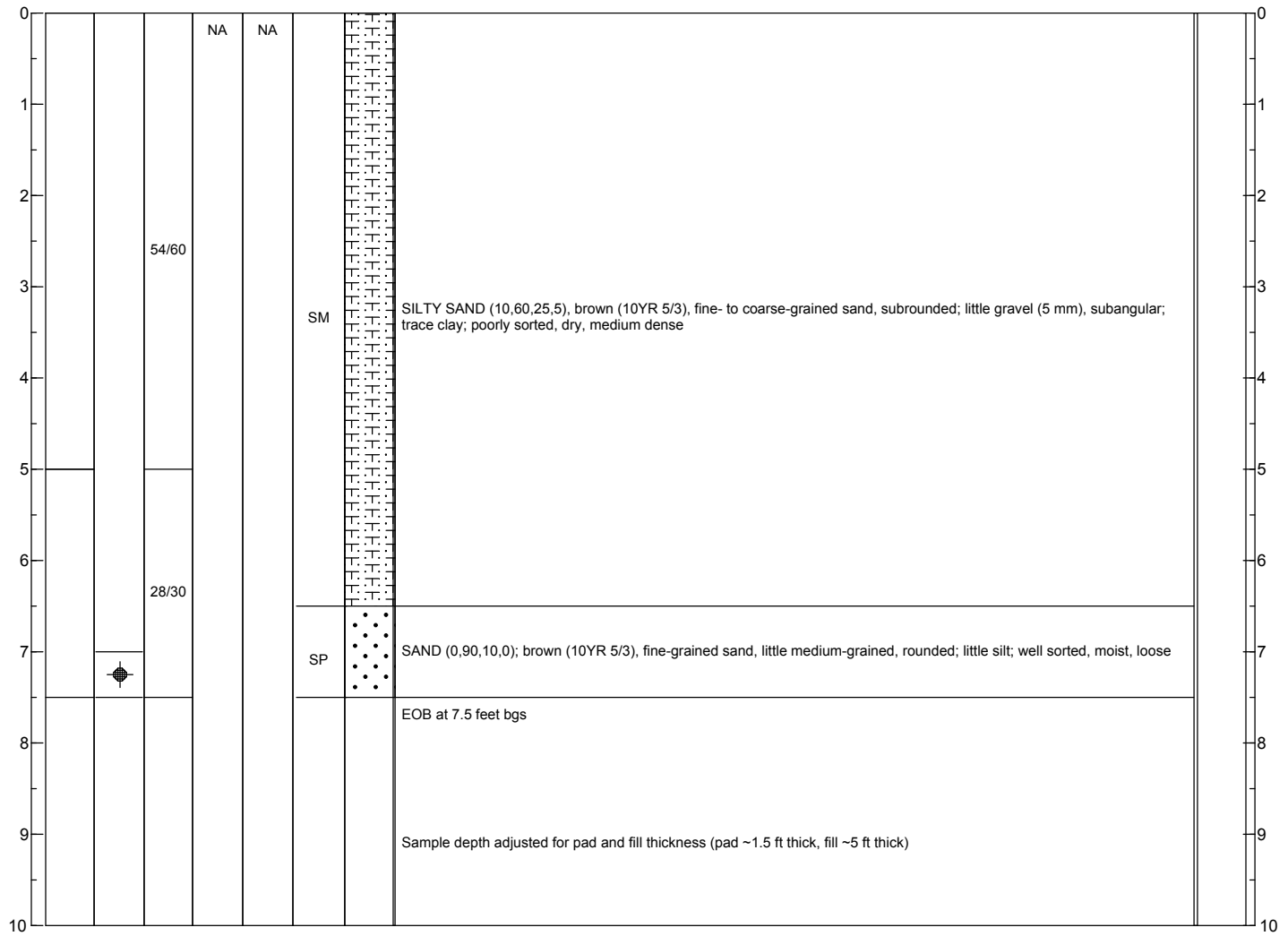


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP051AA.7.5

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GP051AB**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089250.88	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021335.88	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.11 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

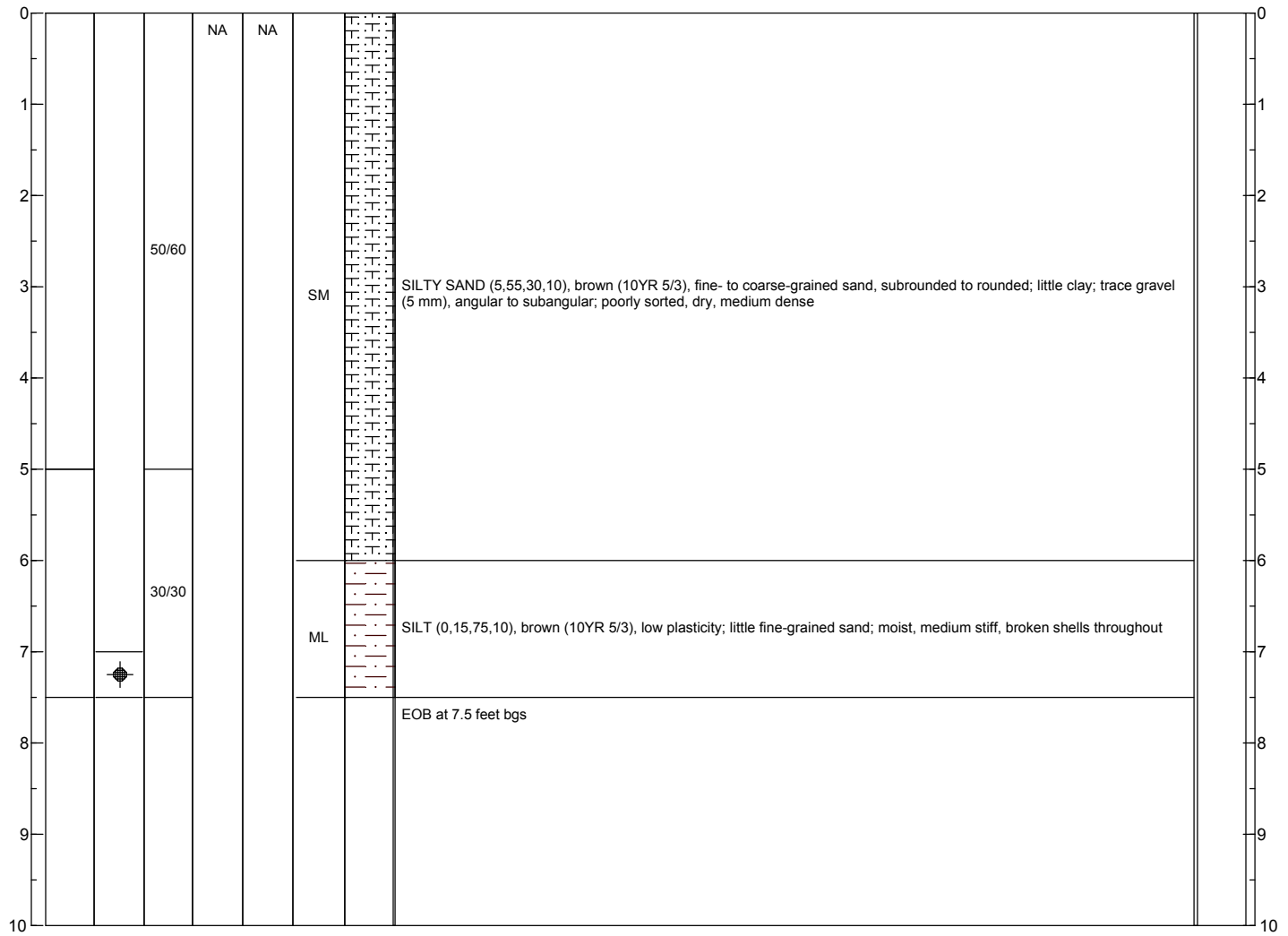


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GP051AB.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR117SWA**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090670.88	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019451.63	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.39 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

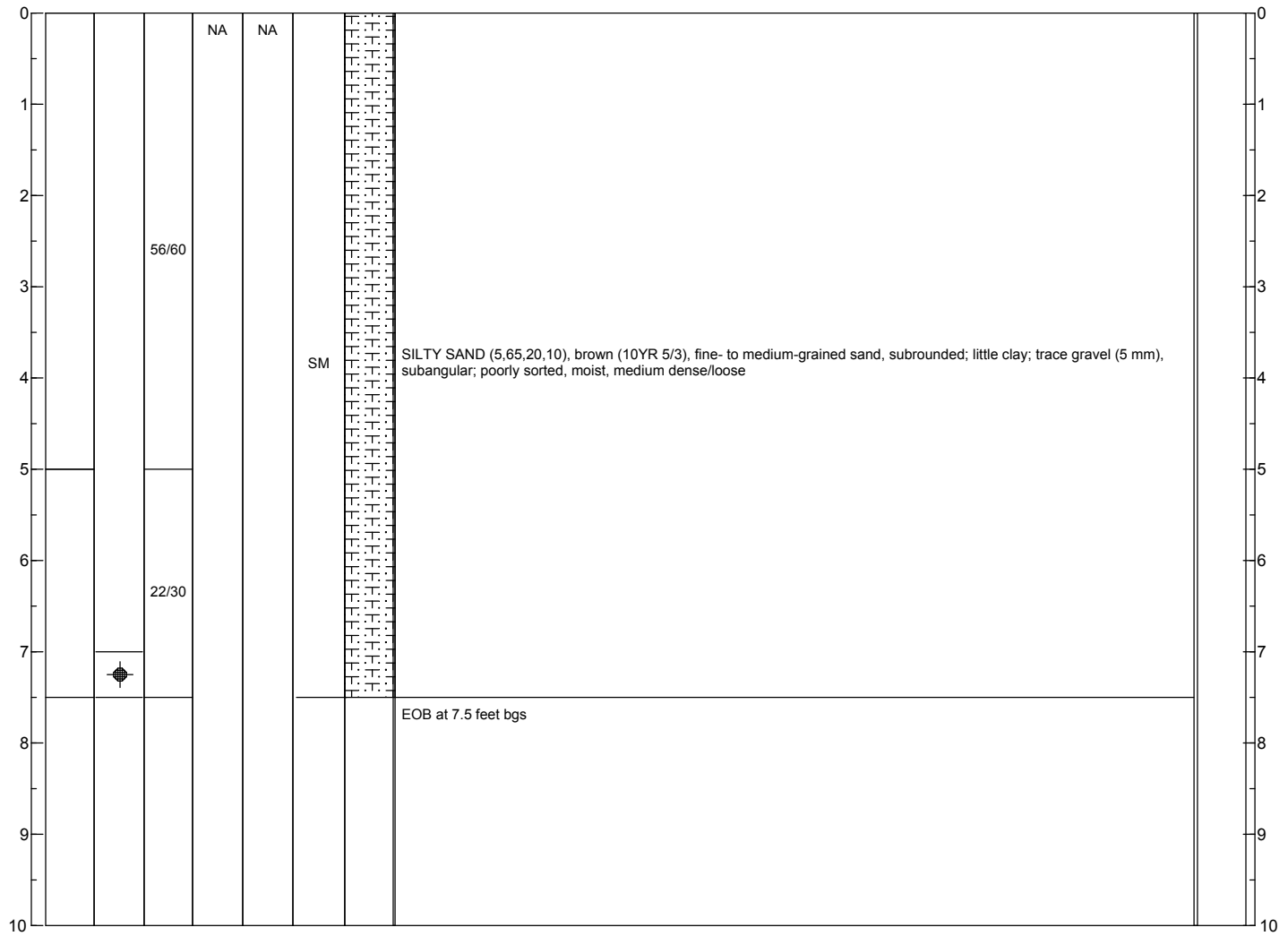


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR117SWA.7.5

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR131SWA**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090655.19	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019299.46	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.72 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

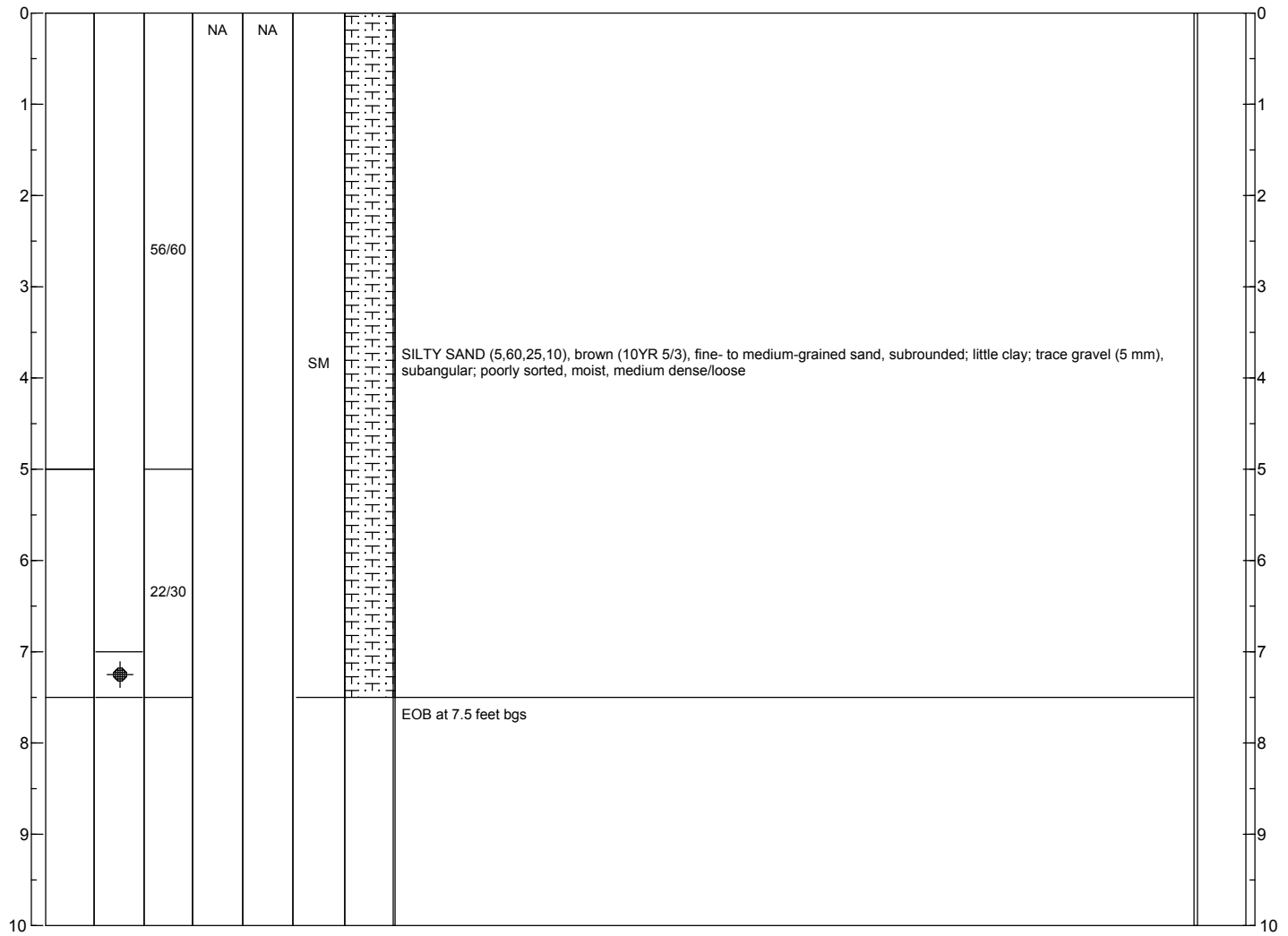


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR131SWA.7.5

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR131SWB**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090640.86	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019329.92	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.25 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR131SWB.7.5

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR131SWC**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090649.73	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019286.10	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.61 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			24/24	NA	NA	SM		SILTY SAND (15,60,25,0), brown (10YR 5/3), fine- to medium-grained sand, subrounded; little gravel (5-6 mm), angular to subangular; poorly sorted, dry, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR131SWC.2

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02GR132BTA**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090668.78	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019413.64	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.01 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0										0
1			NA	NA	NA	ML		SANDY SILT (5,30,60,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; trace gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR132BTA.2

SOIL BORING LOG

Date Drilled:	9/13/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02GR132BTB**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090637.86	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019390.88	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.40 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,65,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR132BTB.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02GR71SWA**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090786.30	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019516.01	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.79 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,60,35,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR71SWA.2

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR71SWB**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090844.21	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019559.31	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.97 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

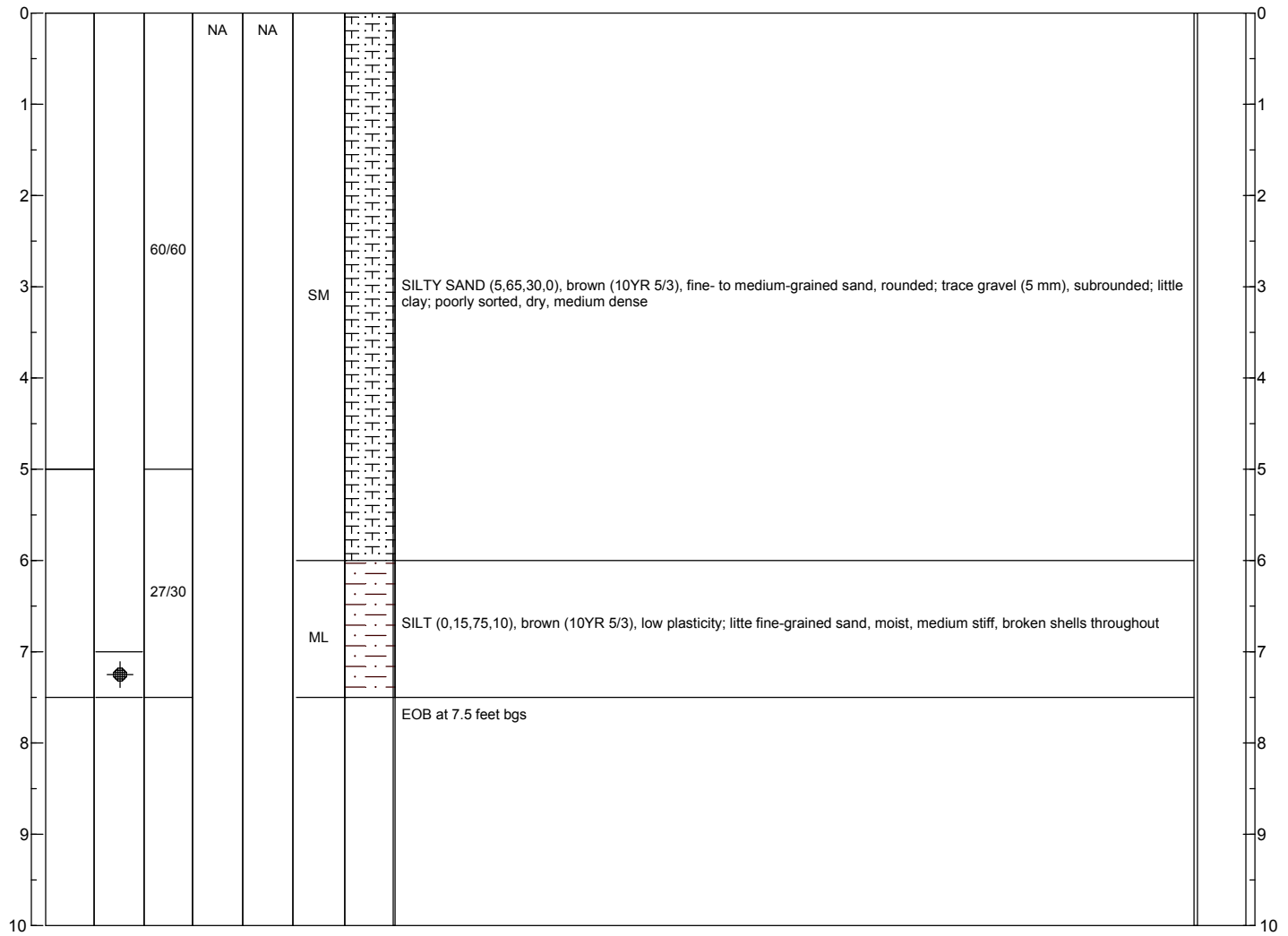
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		⌖	20/24	NA	NA	SM		SILTY SAND (15,60,25,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded; little gravel (5 mm), angular to subangular; poorly sorted, moist, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR71SWB.2

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR73SWA**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090538.27	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019564.66	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.74 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

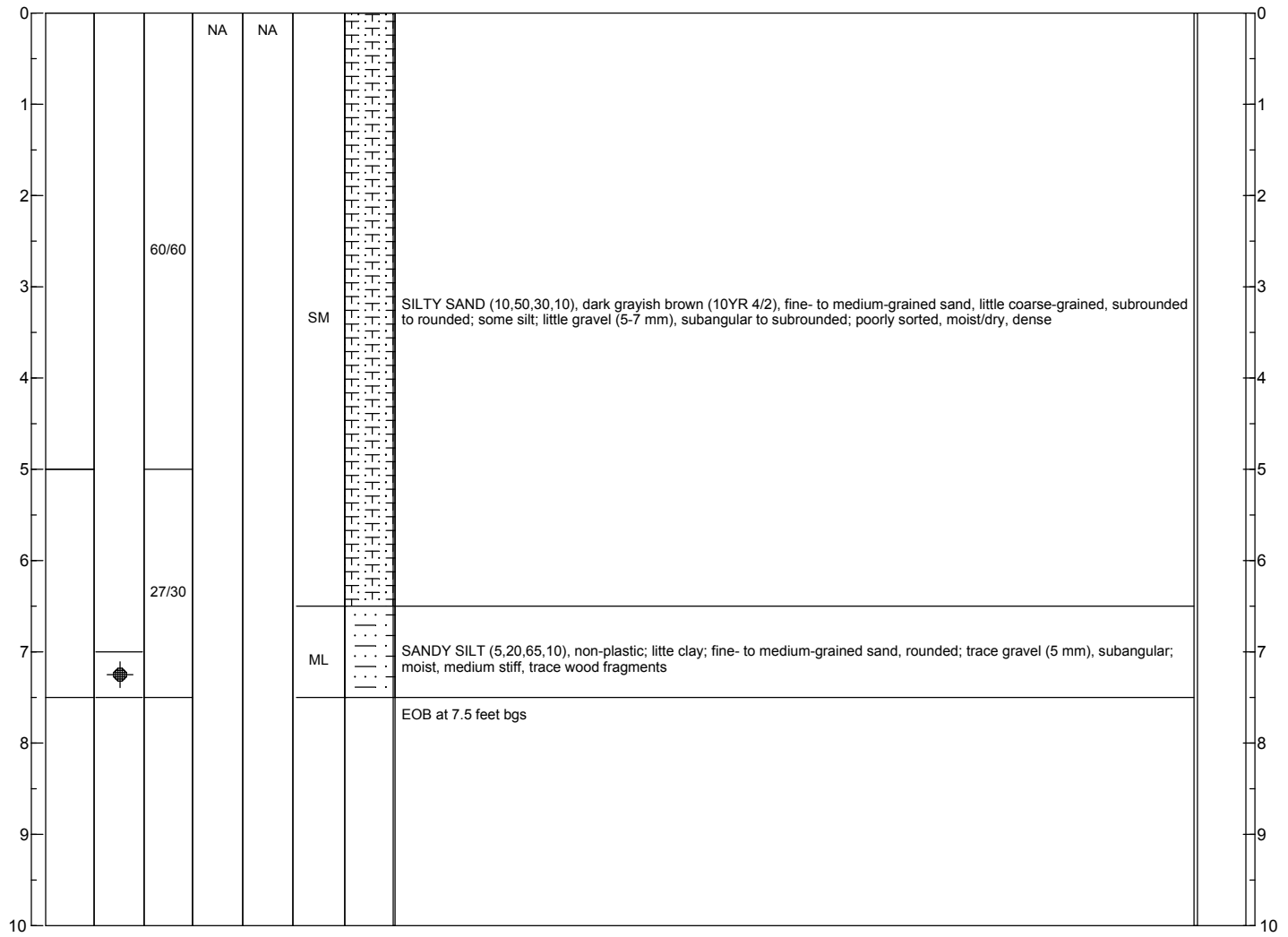


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR73SWA.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR73SWB**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090508.61	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019590.08	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.61 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

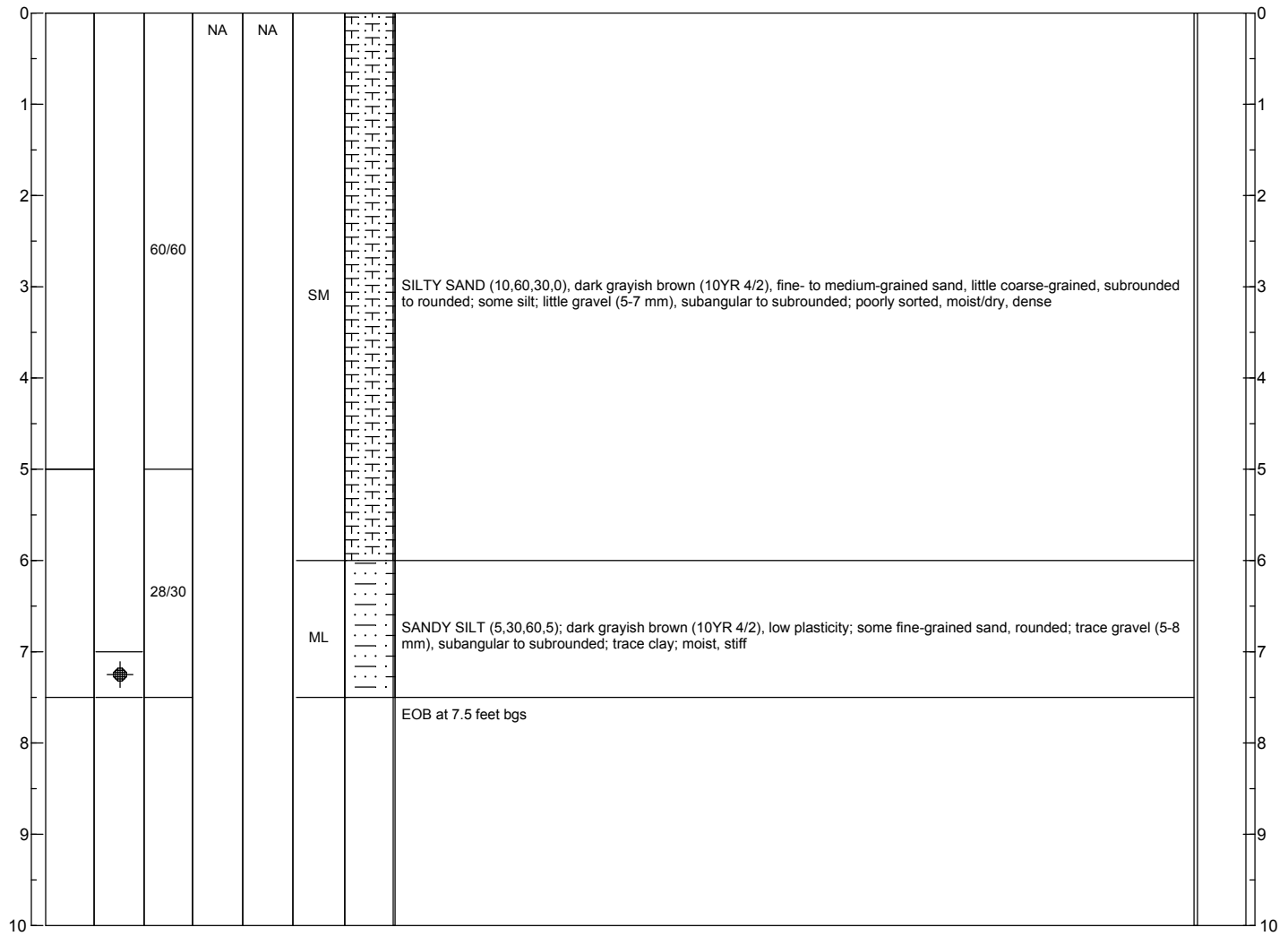


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR73SWB.7.5

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR73SWB1**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090497.87	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019604.77	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.22 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

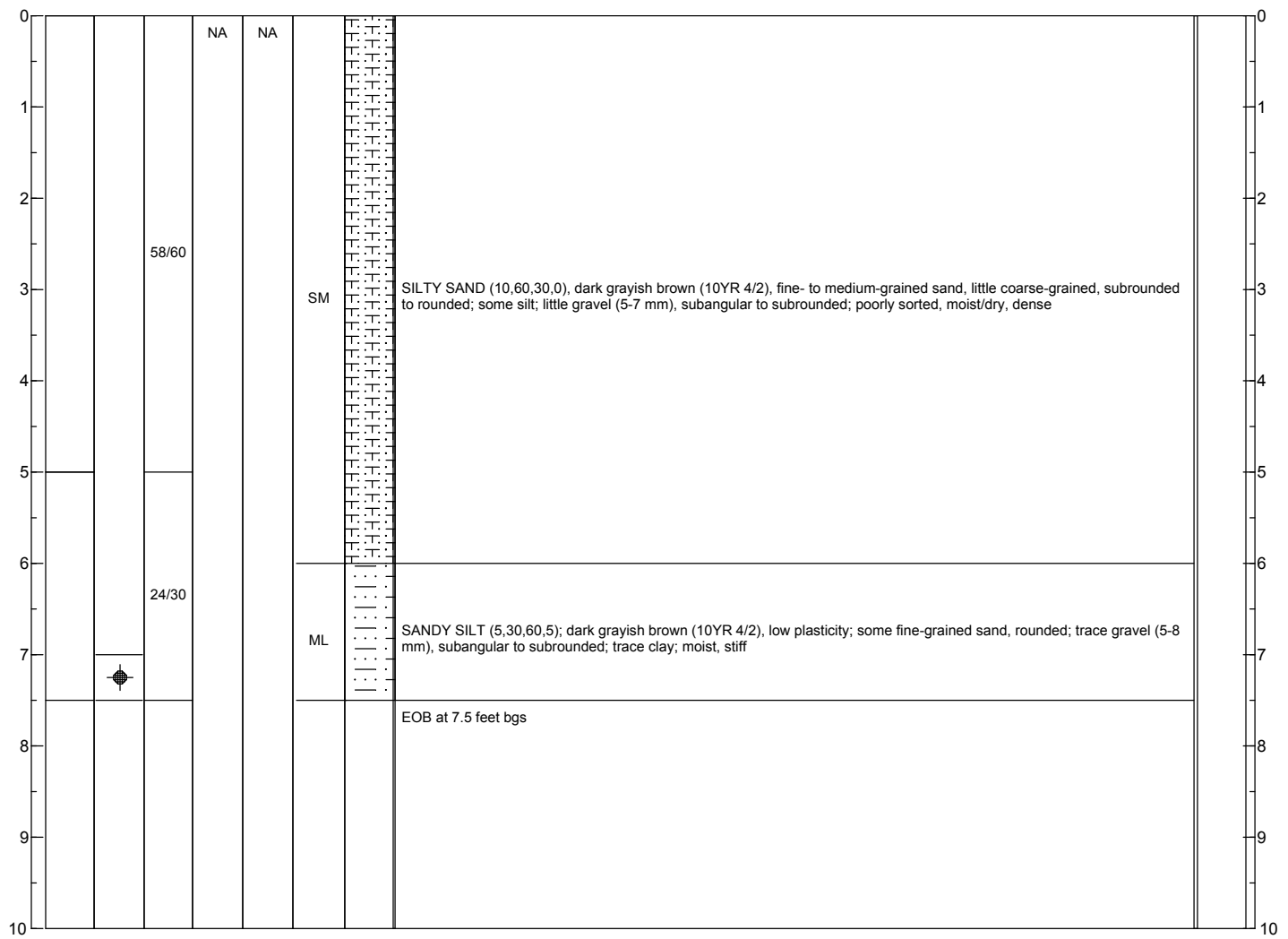


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR73SWB1.7.5

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR73SWB2**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090480.58	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019627.82	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.48 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR73SWB2.7.5

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02GR93SWA**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090386.79	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019659.63	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.11 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

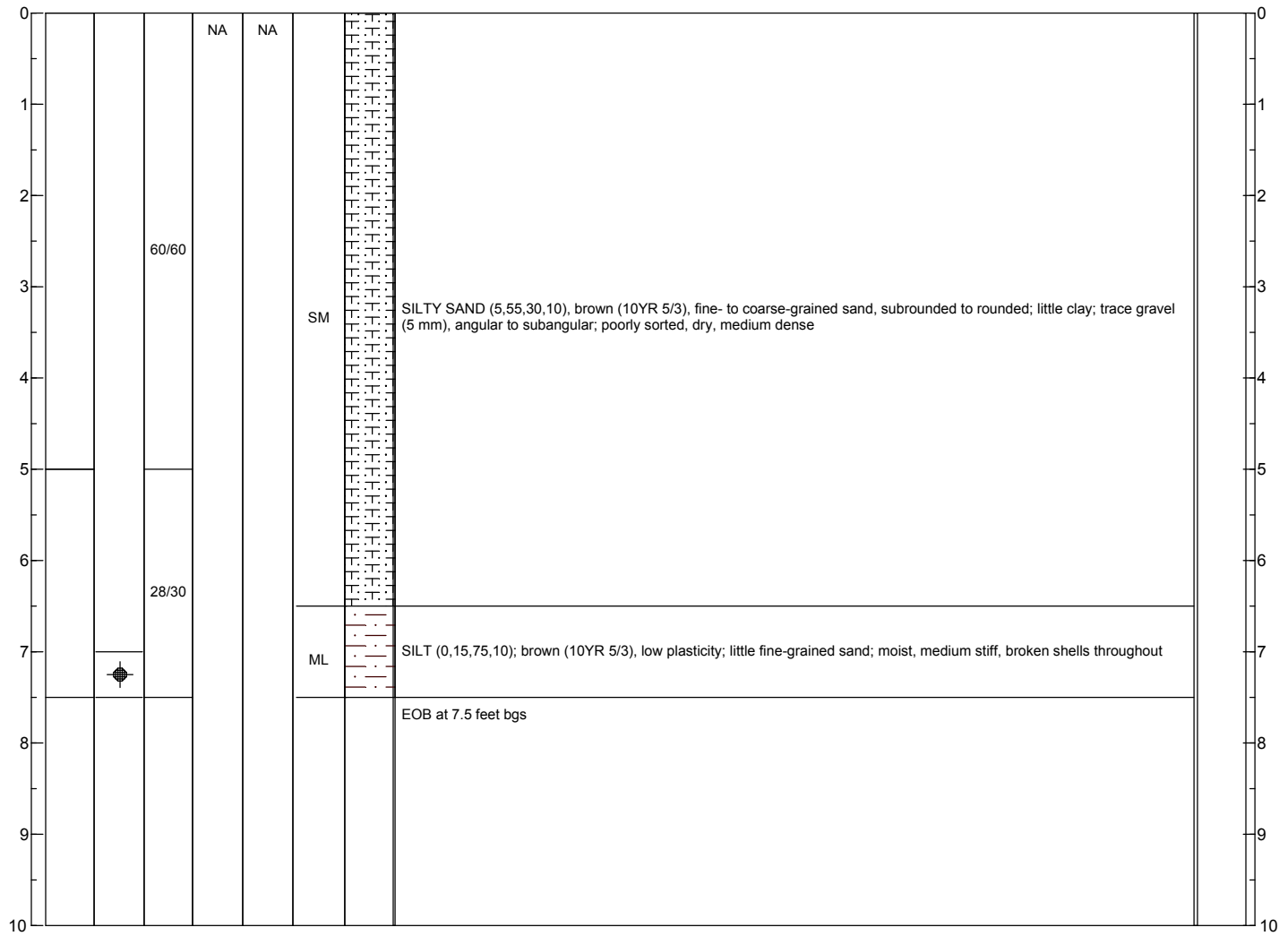
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (10,60,25,5), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, moist/dry, dense, trace organics		0–1
1–2		✦	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR93SWA.2

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR93SWA1**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090407.56	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019661.96	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.96 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

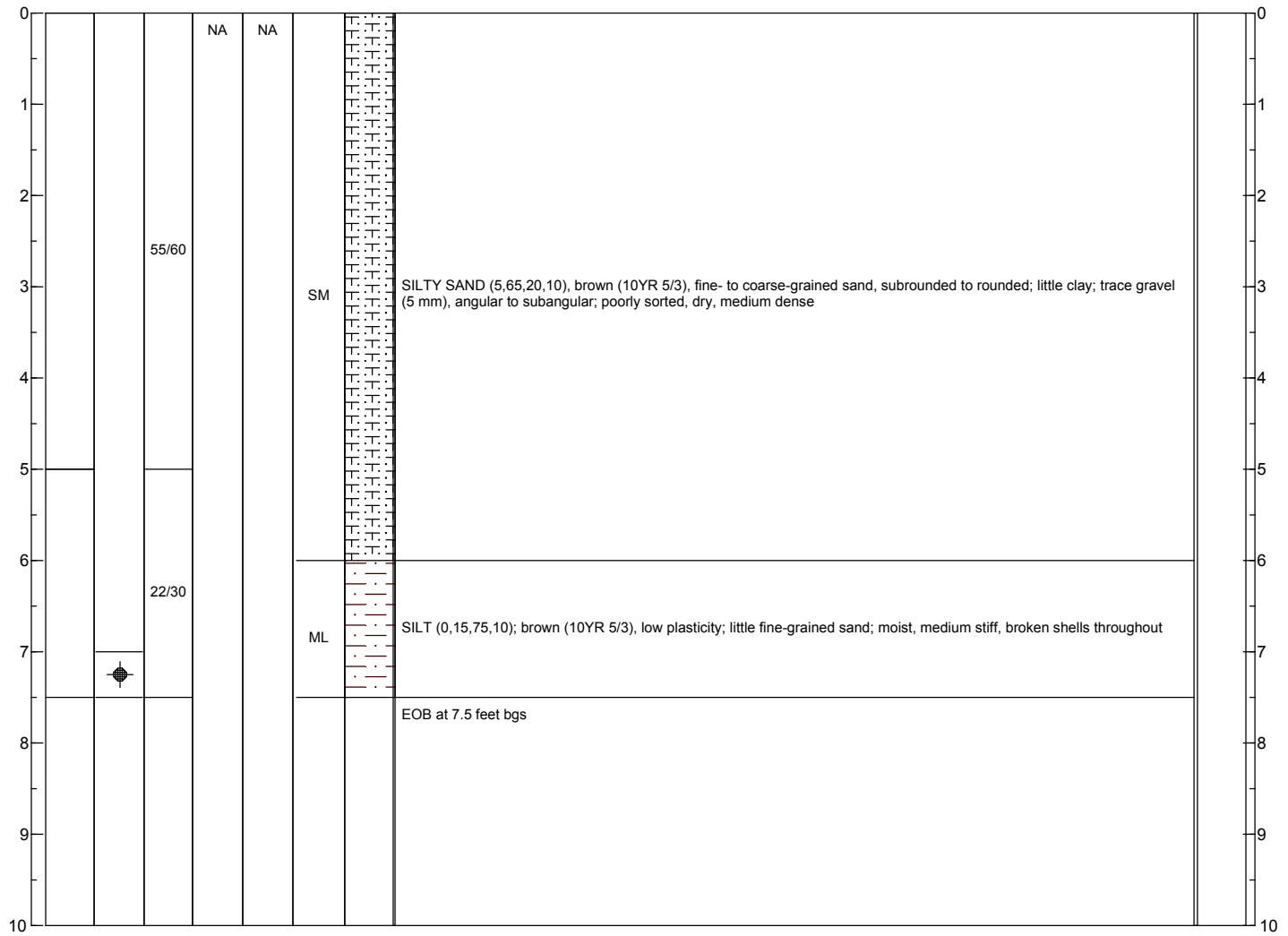


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR93SWA1.7.5

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR93SWA2**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090426.71	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019667.09	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.25 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

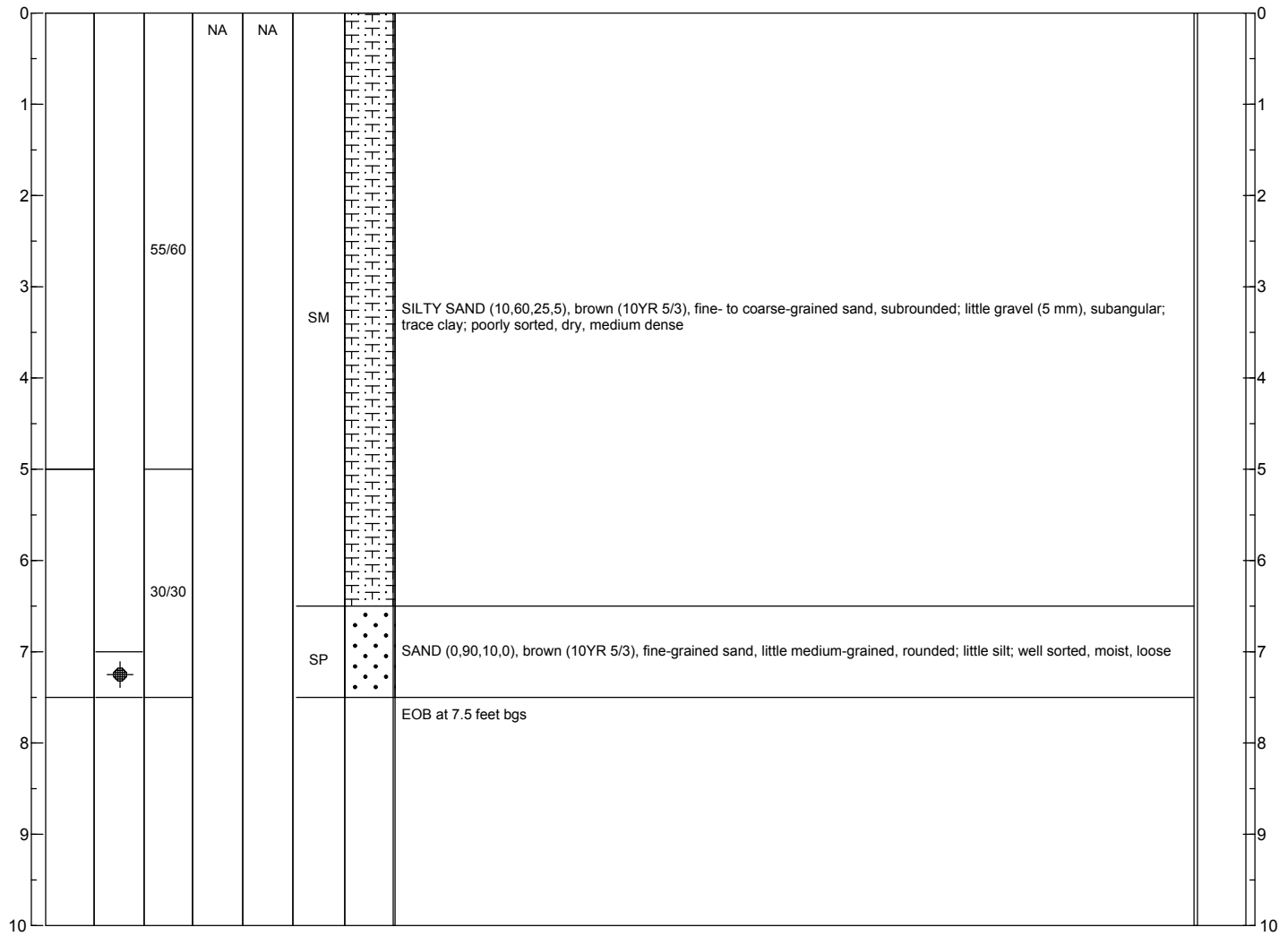


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR93SWA2.7.5

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02GR93SWB**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090360.57	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019683.58	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.19 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02GR93SWB.7.5

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02MW149A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089764.63	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020029.20	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.20 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,65,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6							1–2
2								EOB at 2.0 feet bgs		2
3–10										3–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02MW149A.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02MW149B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089763.58	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020055.41	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.19 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (15,55,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02MW149B.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02MW149C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089738.33	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020024.15	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.56 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (30,55,15,0), dark grayish brown (10YR 4/2); fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02MW149C.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02MW149D**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089737.26	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020055.56	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.42 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (25,65,10,0), dark grayish brown (10YR 4/2); fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02MW149D.2

SOIL BORING LOG

Date Drilled:	9/11/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02MW149E**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089738.20	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020093.71	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	5.48 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (50,30,20,0), reddish brown (5YR 4/3); small gravel (4-6 mm), subrounded, pea gravel; fine-grained sand, rounded; some silt; poorly sorted, dry, loose		
1–2		✦	6/6					EOB at 2.0 feet bgs		

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02MW149E.2

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02MW173AA**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089314.72	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021159.12	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.63 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

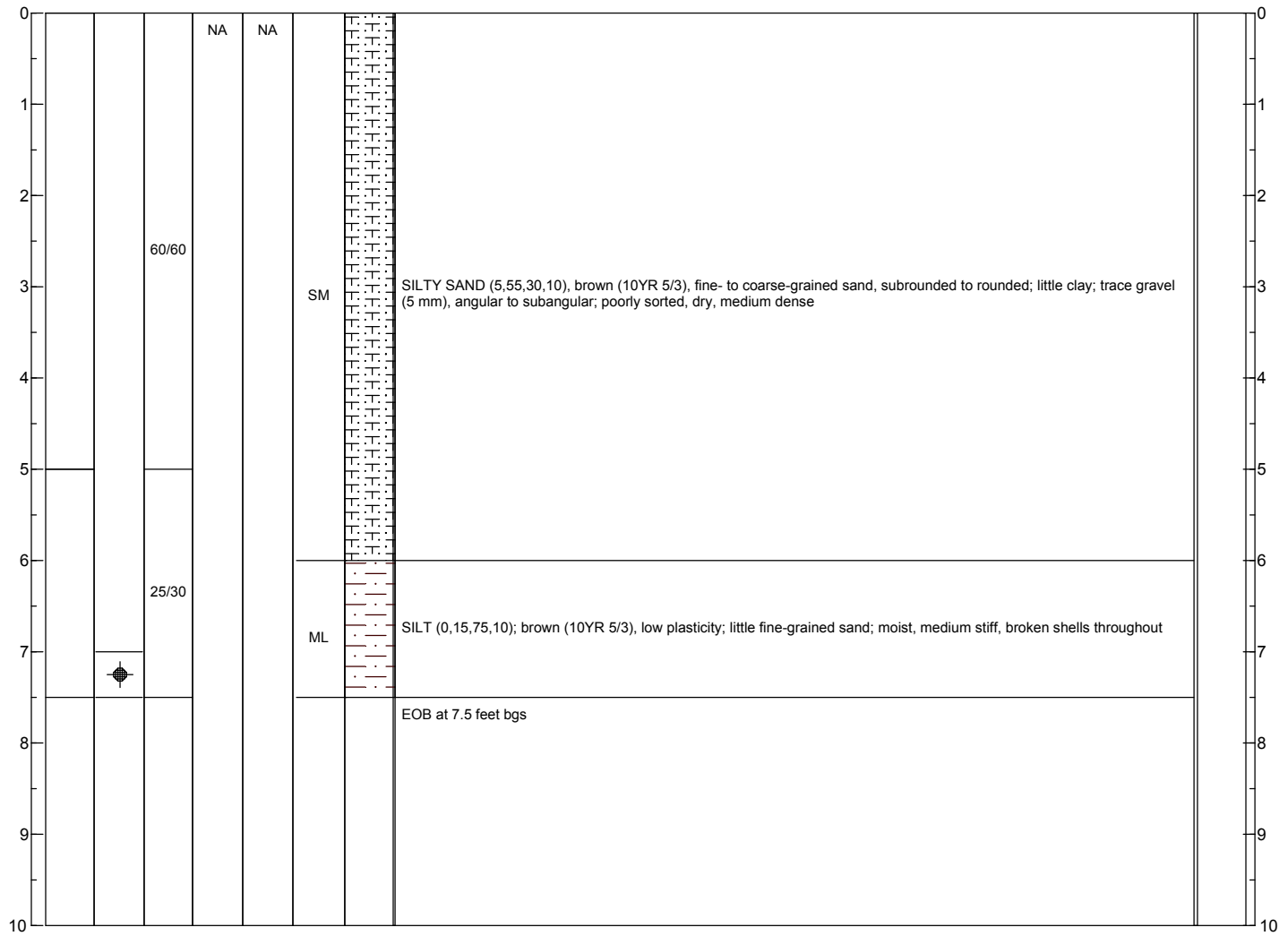
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–5			46/60	NA	NA	SM		SILTY SAND (10,55,25,10), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; little gravel (5-8 mm), subangular; little clay; poorly sorted, dry, medium dense		0–5
5–7.5			30/30			SW		GRAVELLY SAND (25,65,10,0); brown (10YR 5/3), fine- to coarse-grained sand, angular to subrounded; gravel (5-10 mm), angular to subangular; little silt; poorly sorted, moist, dense, broken shells throughout		5–7.5
7.5								EOB at 7.5 feet bgs		7.5

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02MW173AA.7.5

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02MW173AB**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089300.72	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021195.48	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.62 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02MW173AB.7.5

SOIL BORING LOG

Date Drilled:	9/17/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12TA13B**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091432.71	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020233.15	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.39 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Concrete		0
1										1
2			45/48			SW		GRAVELLY SAND (25,55,15,5), dark grayish brown (10YR 4/2), fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		2
3										3
4								EOB at 4 feet bgs		4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA13B.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02TA16AA**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090583.55	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019401.21	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.44 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

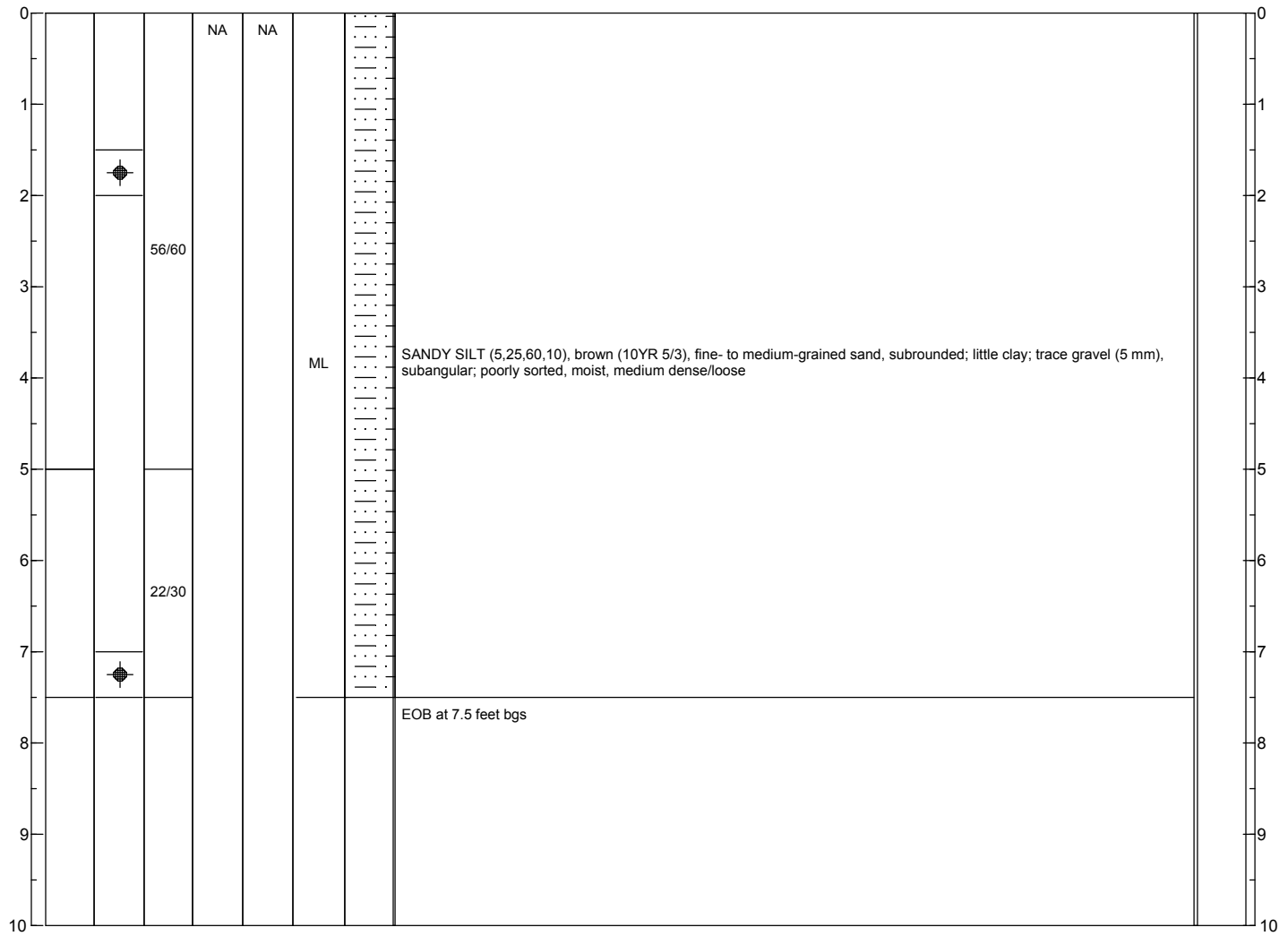
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (25,65,10,0), dark grayish brown (10YR 4/2); fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02TA16AA.2

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02TA16AB**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090563.11	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019342.35	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.19 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

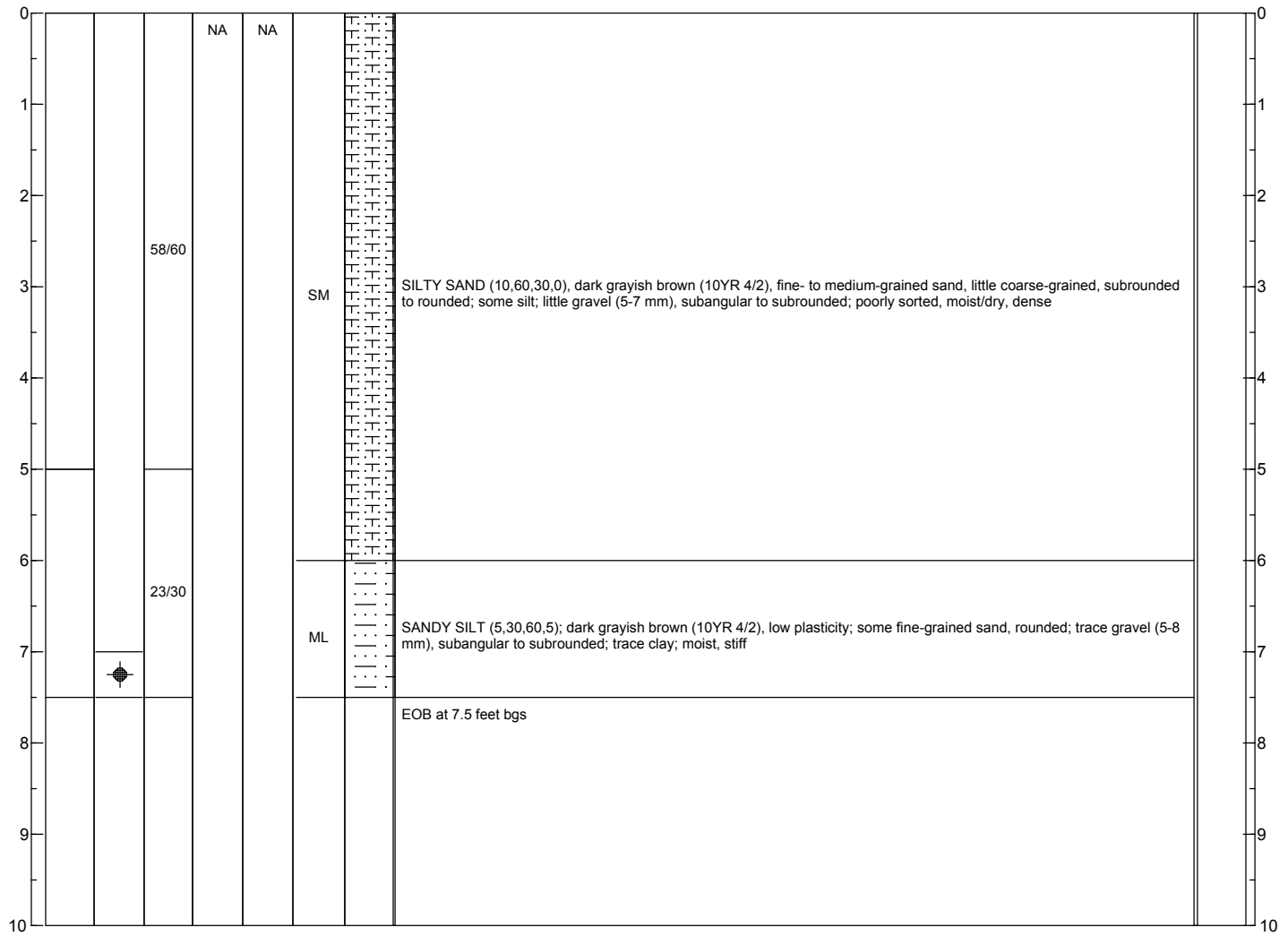


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02TA16AB.2; EX02TA16AB.7.5

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02TA16AB1**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090580.82	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019351.36	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.64 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

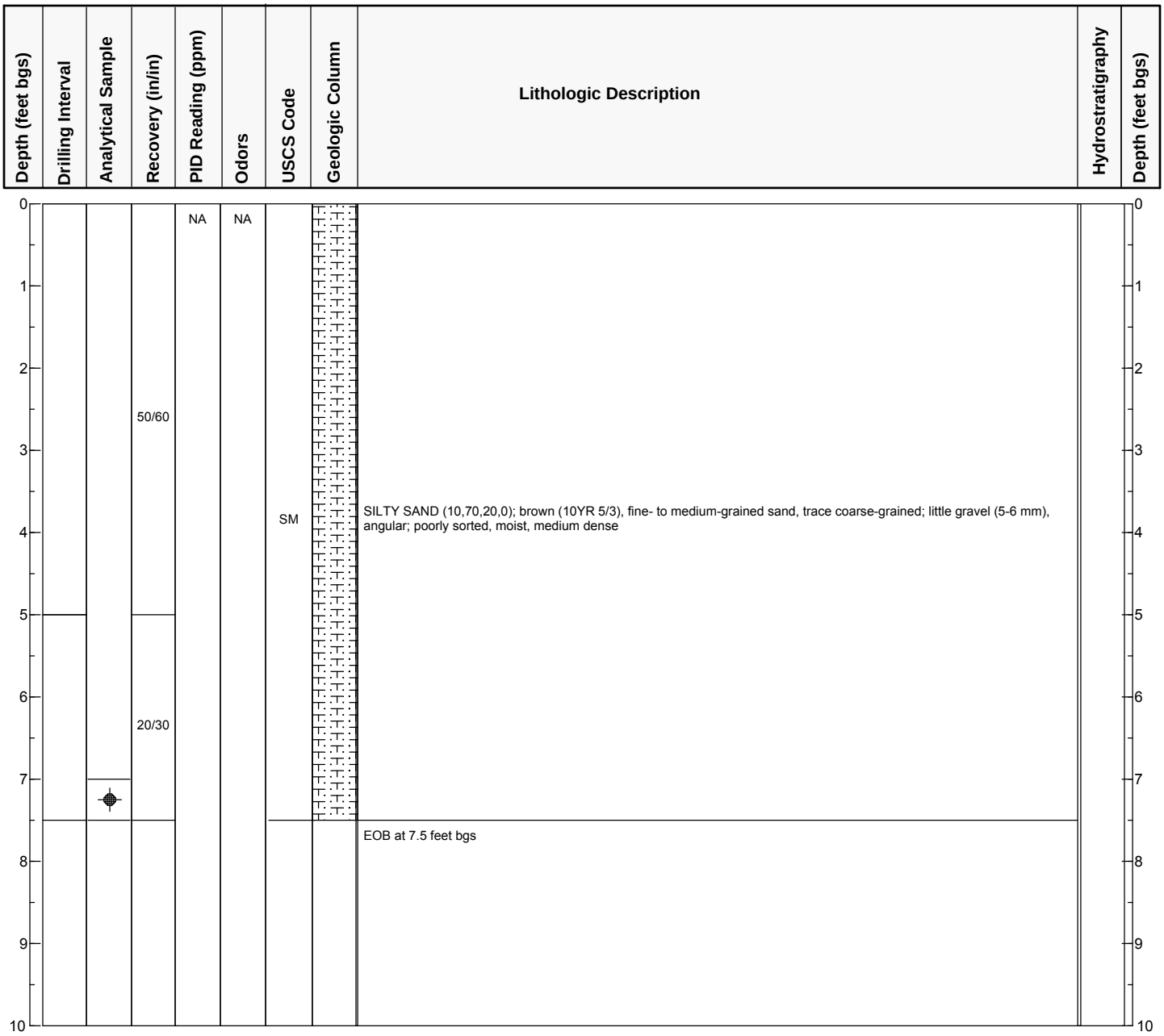


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02TA16AB1.7.5

SOIL BORING LOG

Date Drilled:	10/10/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02TA16AB1**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090580.82	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019351.36	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.64 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

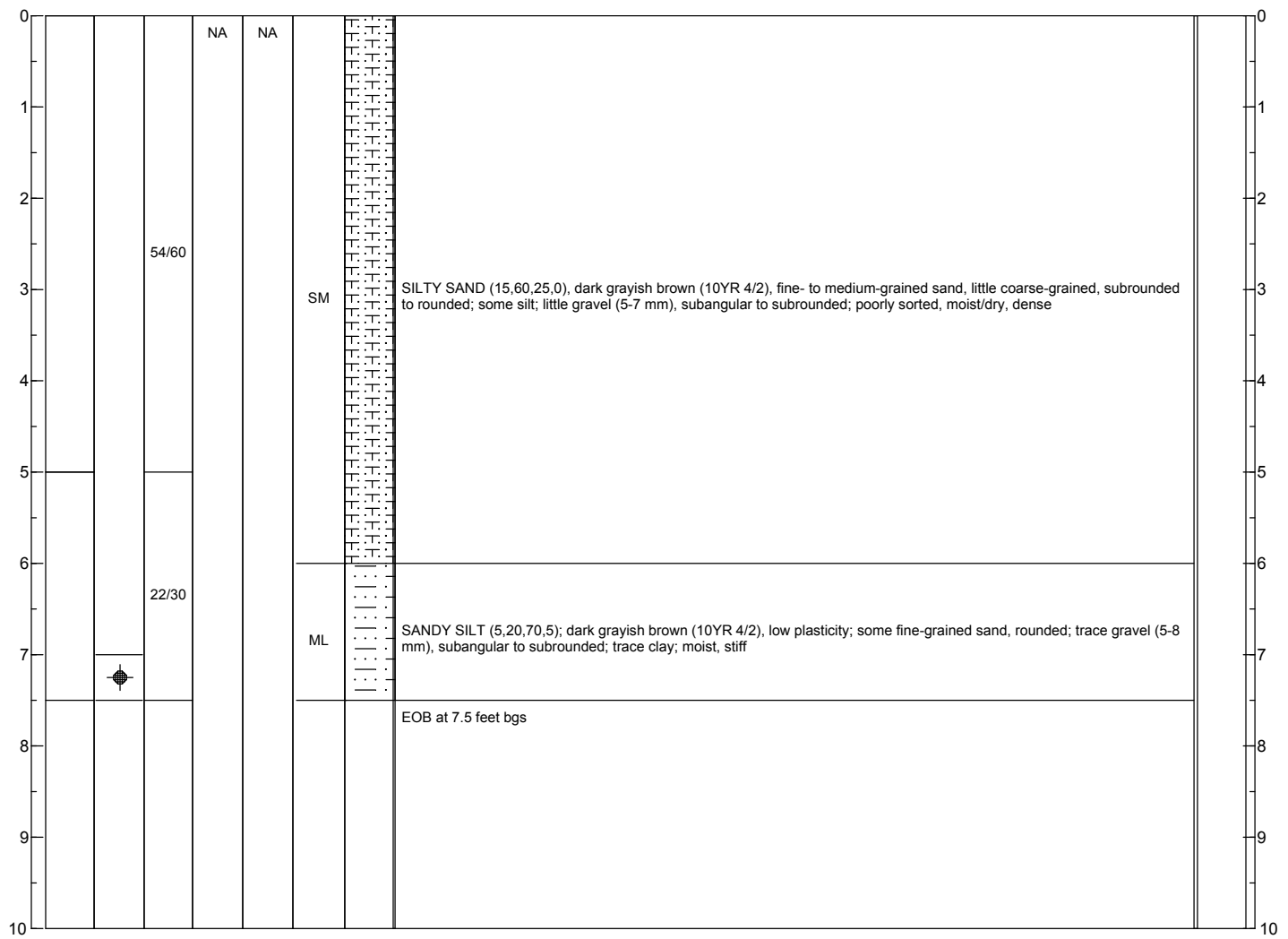


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02TA16AB1.7.5

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02TA16AB2**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090598.46	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019359.77	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.44 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

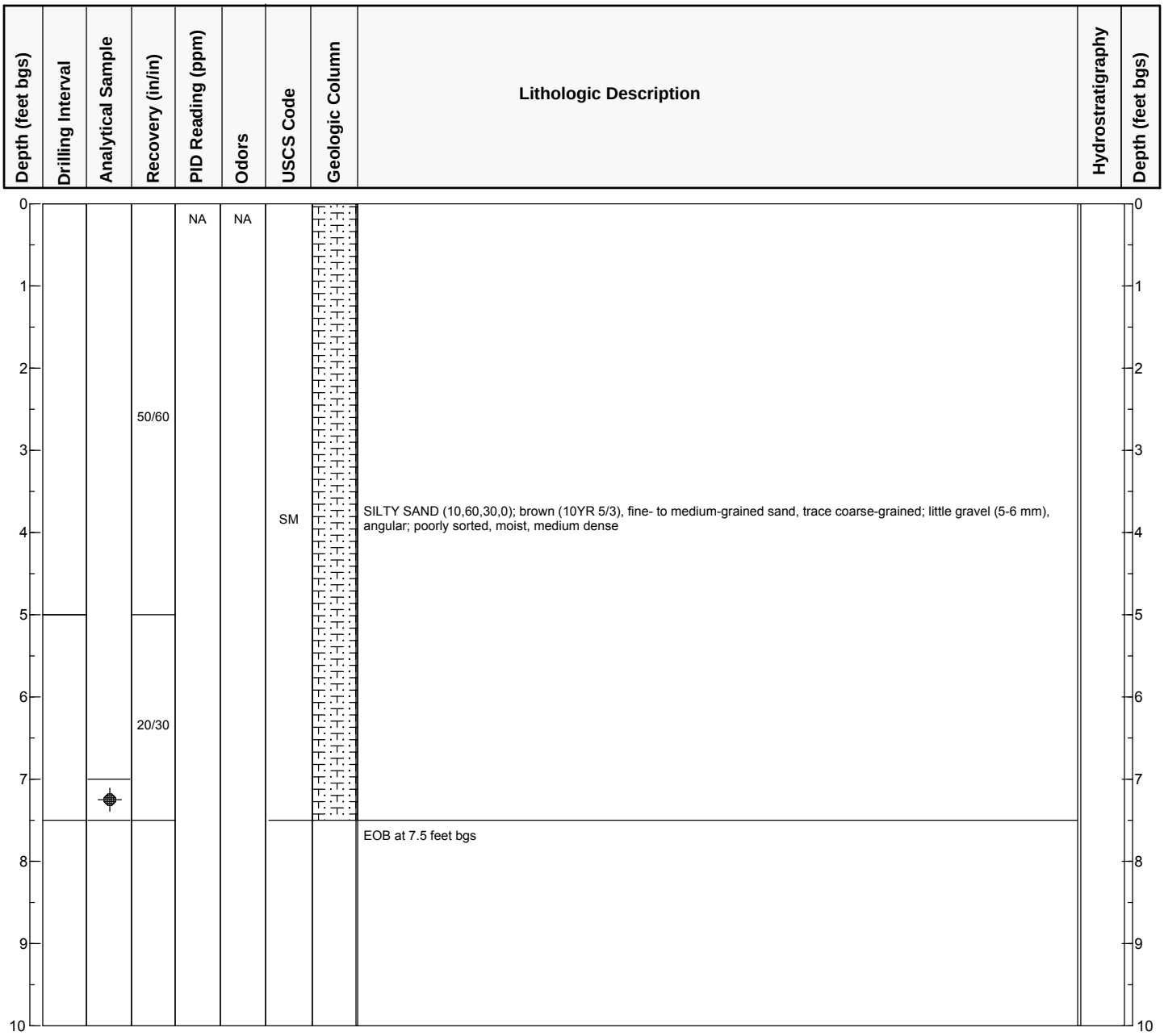


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02TA16AB2.7.5

SOIL BORING LOG

Date Drilled:	10/10/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02TA16AB2**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090598.46	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019359.77	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.44 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02TA16AB2.7.5

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX02TA40BA**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089320.09	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021223.20	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.07 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

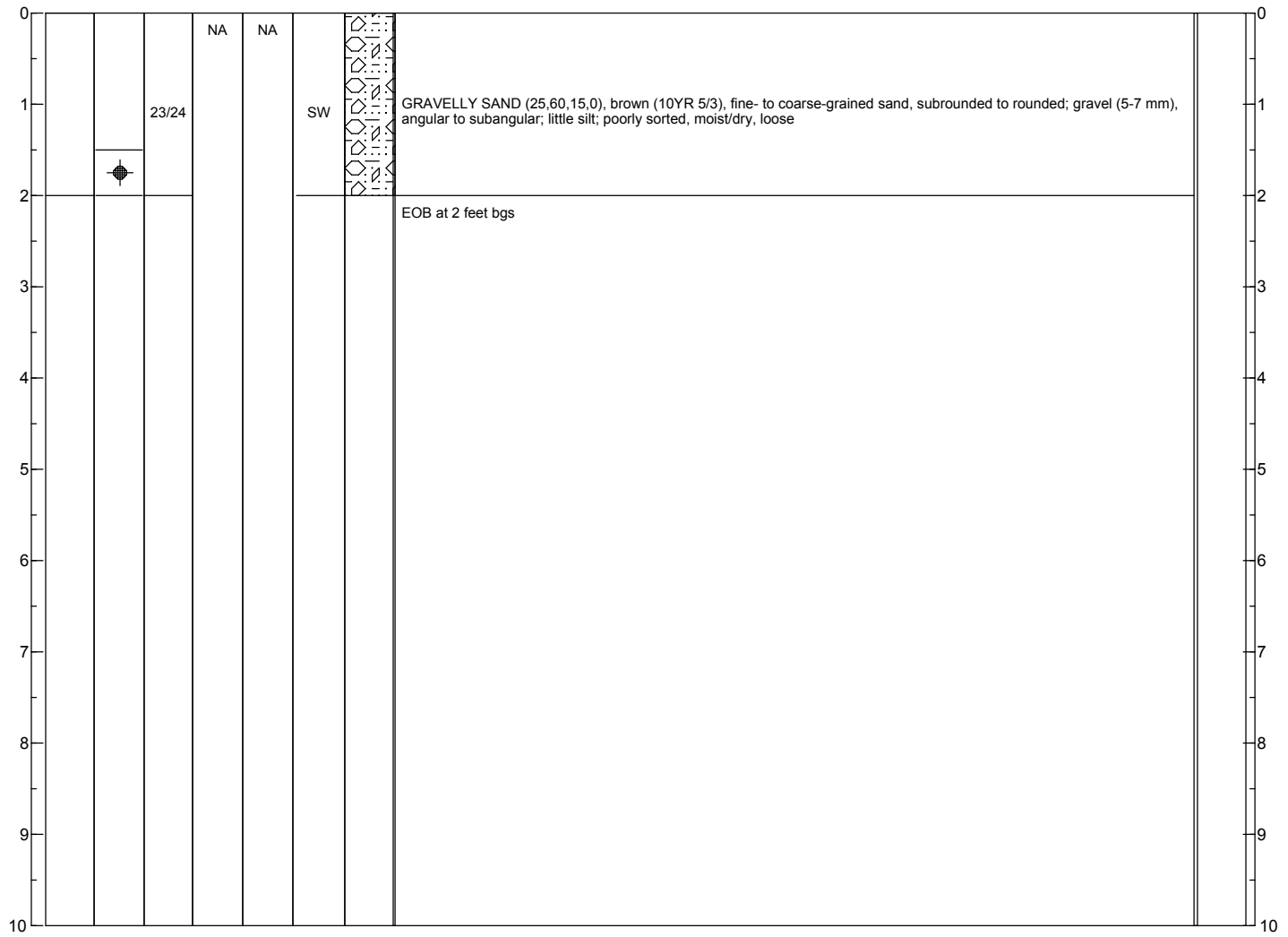
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0										0
1			NA	NA	NA	GW		SANDY GRAVEL (60,30,10,0), reddish brown (5YR 4/3); small gravel (5 mm), subrounded (pea gravel); fine-grained sand, rounded; little silt; poorly sorted, loose		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02TA40BA.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02TA40BA1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089330.90	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021235.85	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.01 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02TA40BA1.2

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX02TA40BA2**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089346.06	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021251.82	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.83 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			24/24	NA	NA	SM		SILTY SAND (15,50,35,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to subangular; little gravel (5-9 mm), angular to subangular; poorly sorted, moist, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX02TA40BA2.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03B220A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089392.56	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021206.08	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.86 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA					0
1			NA			GW		SANDY GRAVEL (60,30,10,0), reddish brown (5YR 4/3); small gravel (5 mm), subrounded (pea gravel); fine-grained sand, rounded; little silt; poorly sorted, loose		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B220A.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03B220B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089375.67	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021234.74	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.30 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (50,30,20,0), reddish brown (5YR 4/3); small gravel (5 mm), subrounded (pea gravel); fine-grained sand, rounded; some silt; poorly sorted, loose		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B220B.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03B344A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089556.84	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020809.02	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.84 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (50,30,20,0), reddish brown (5YR 4/3); small gravel (5 mm), subrounded (pea gravel); fine-grained sand, rounded; some silt; poorly sorted, loose		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B344A.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03B344B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089558.48	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020826.70	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.05 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

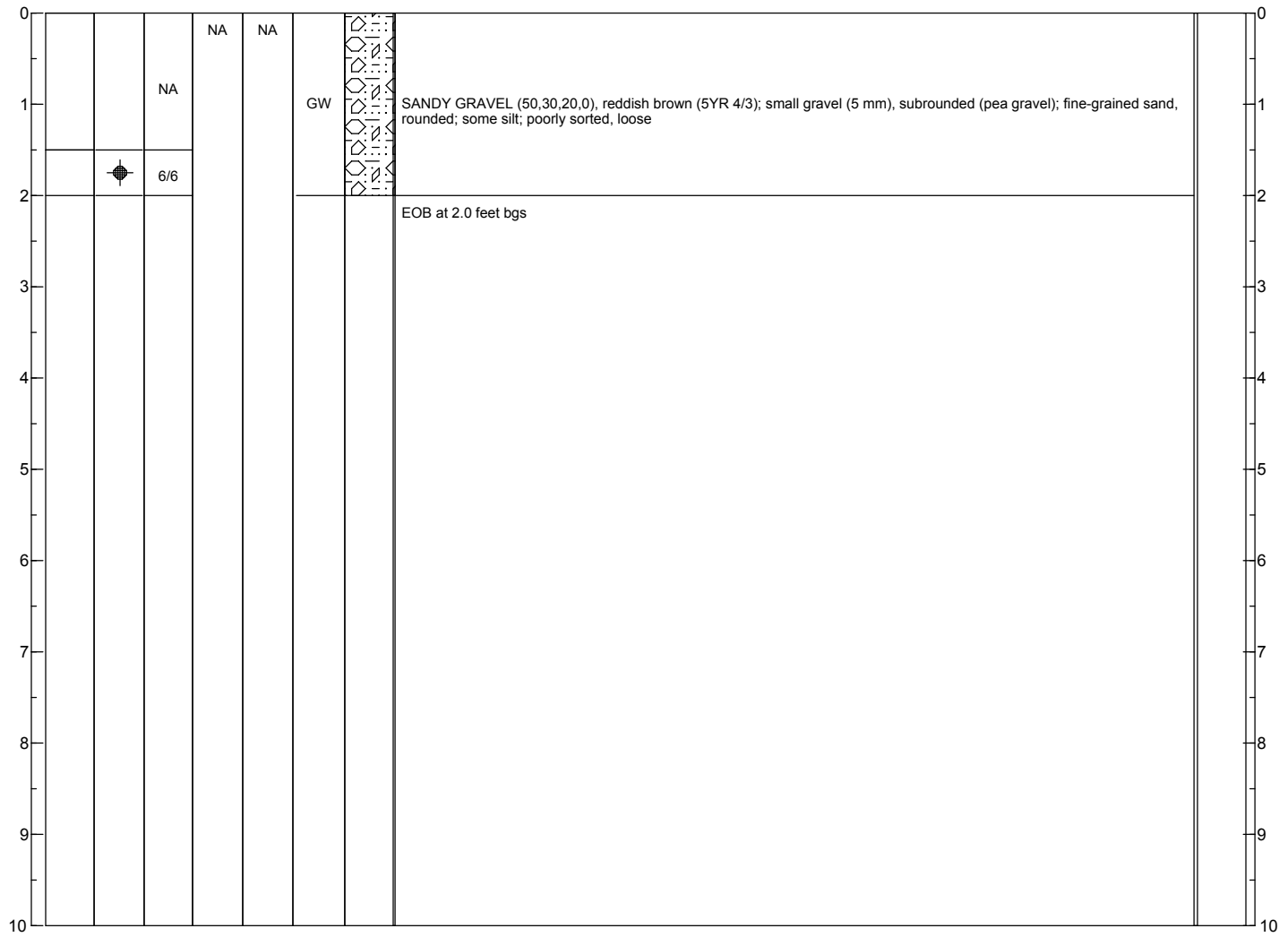
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (40,30,30,0), reddish brown (5YR 4/3); small gravel (5 mm), subrounded (pea gravel); fine-grained sand, rounded; some silt; poorly sorted, loose		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B344B.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03B344C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089537.88	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020803.94	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.49 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

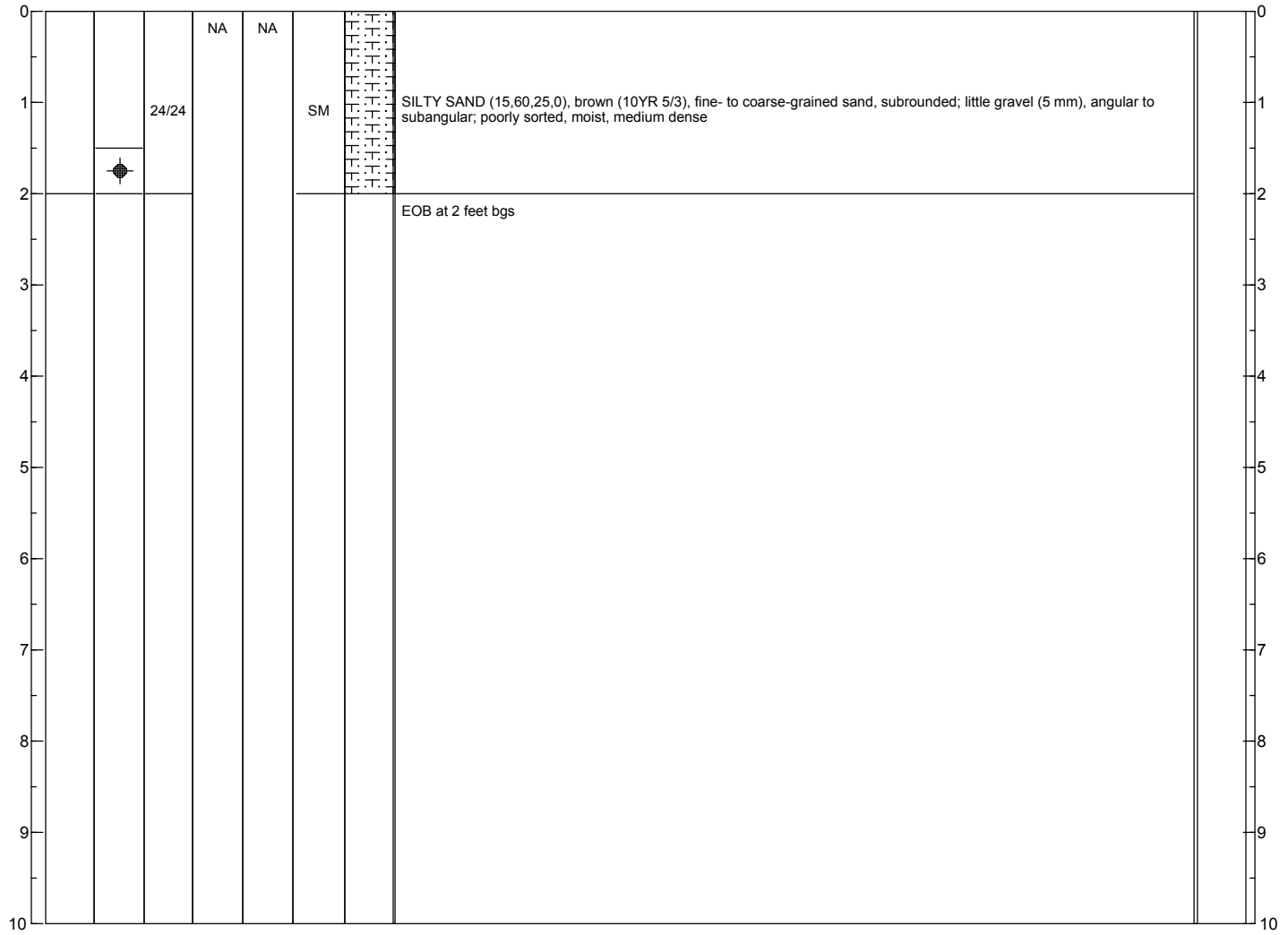


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B344C.2

SOIL BORING LOG

Date Drilled:	9/27/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX03B344C1**
Total Depth:	2 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2089534.31		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6020796.27		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	5.38 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B344C1.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03B344D**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089530.17	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020833.84	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.19 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

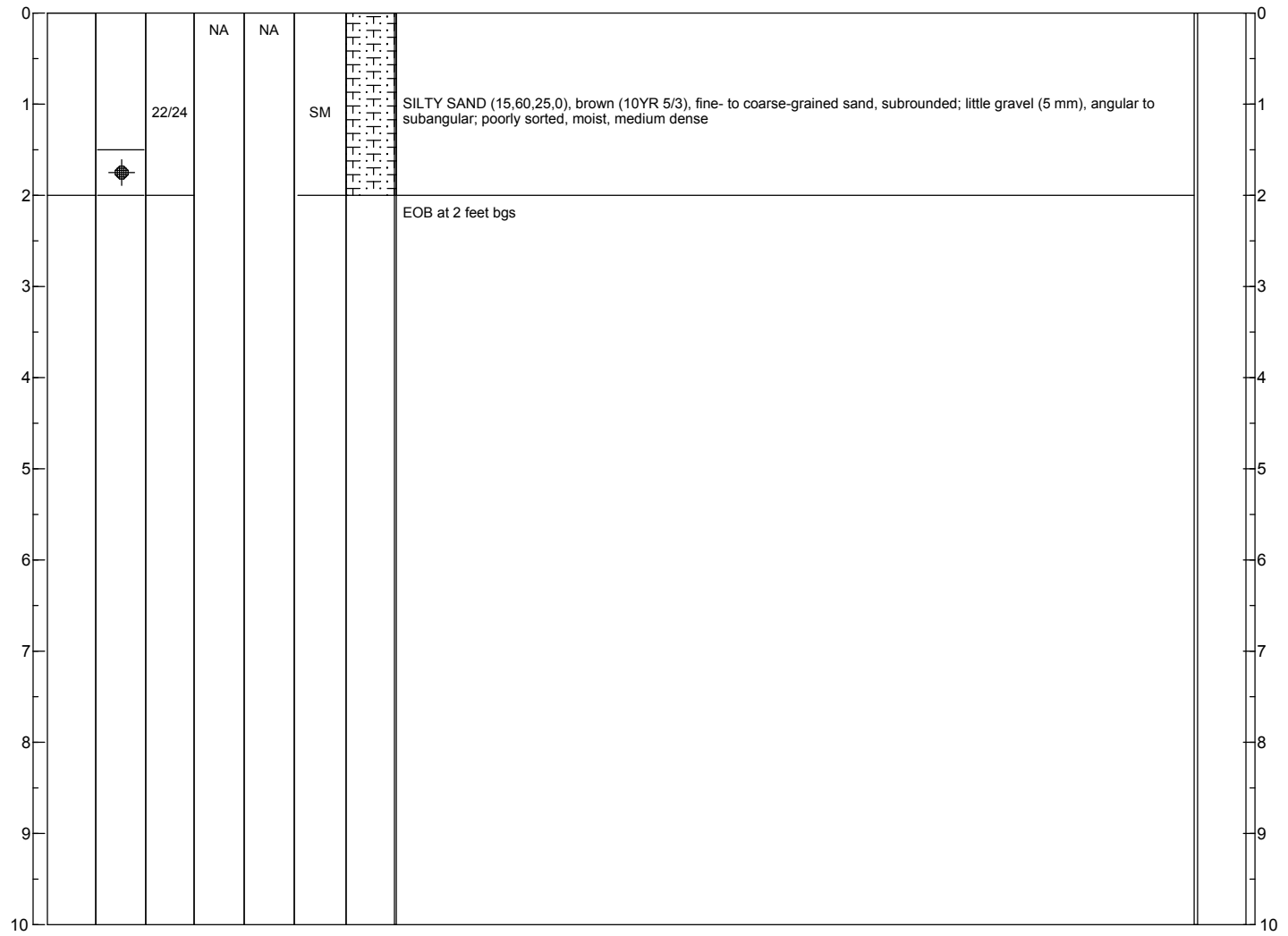
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (50,30,20,0), reddish brown (5YR 4/3); small gravel (5 mm), subrounded (pea gravel); fine-grained sand, rounded; some silt; poorly sorted, loose		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B344D.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX03B344D1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089543.36	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020849.13	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.10 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

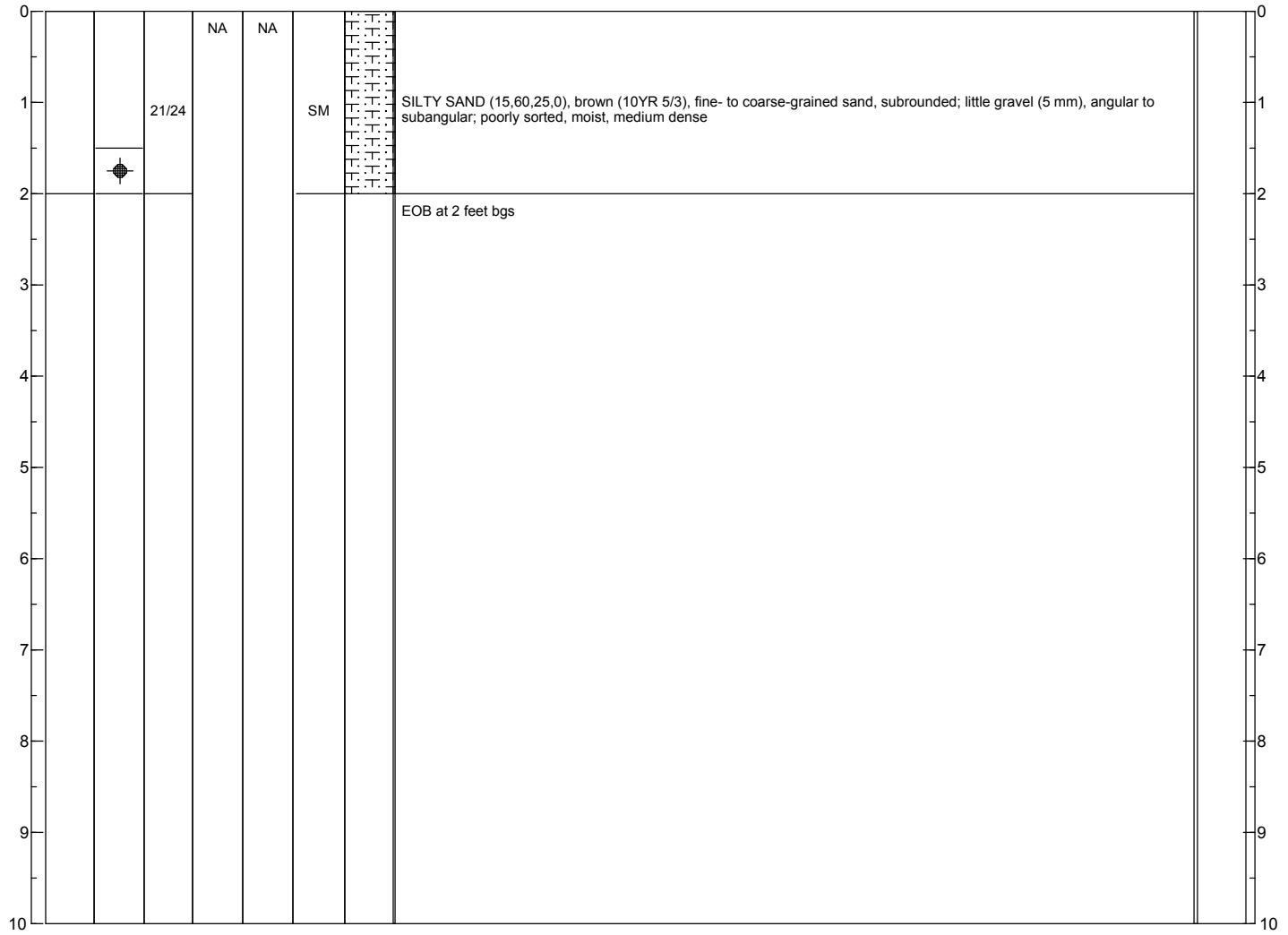


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B344D1.2

SOIL BORING LOG

Date Drilled:	9/27/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX03B344D2**
Total Depth:	2 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2089518.68		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6020816.58		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	7.09 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001

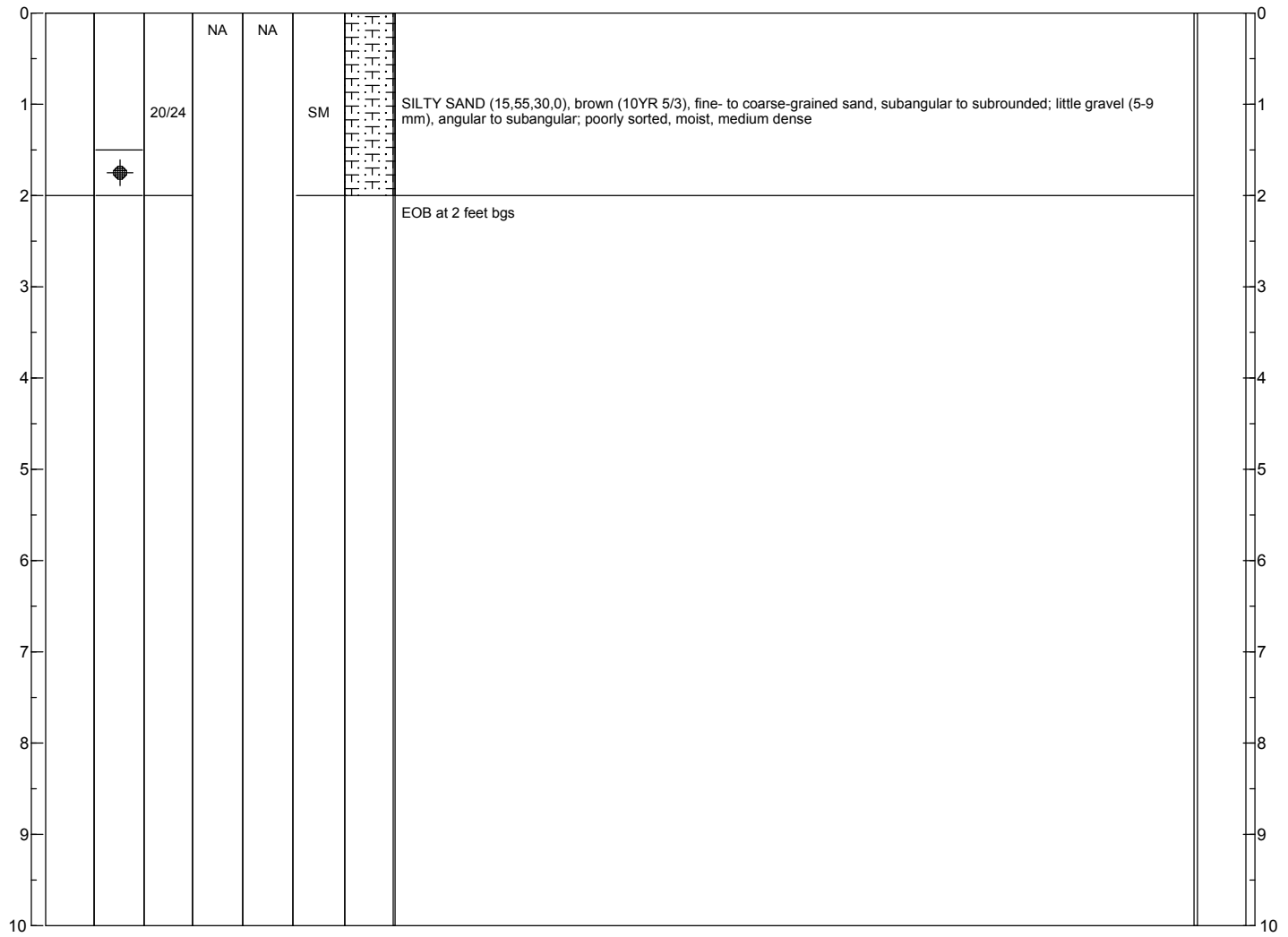


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B344D2.2

SOIL BORING LOG

Date Drilled:	10/9/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX03B344D3**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089514.03	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020807.18	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	5.53 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

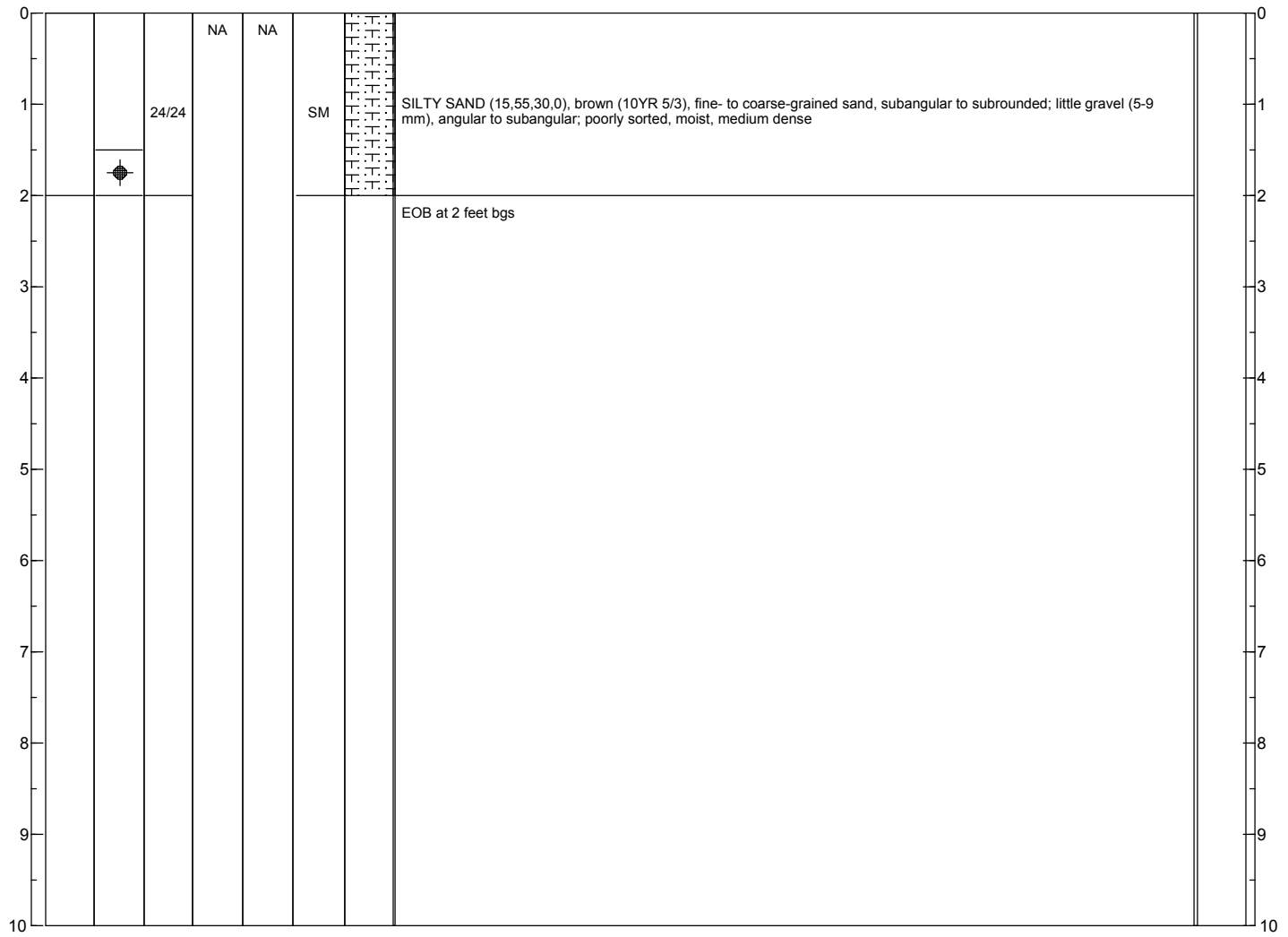


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B344D3.2

SOIL BORING LOG

Date Drilled:	10/9/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX03B344D4**
Total Depth:	2 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2089510.03		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6020797.71		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	5.13 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001

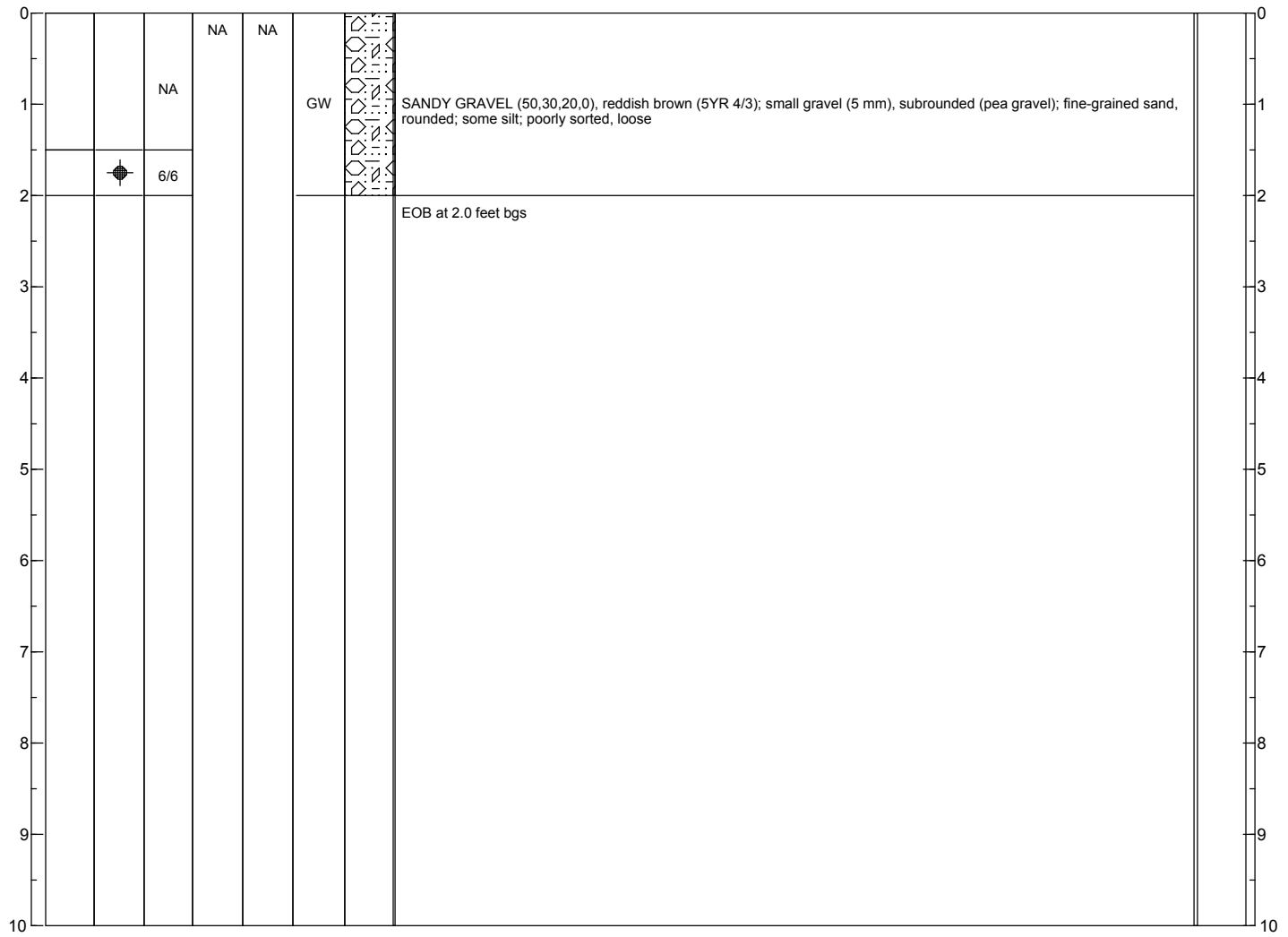


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B344D4.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03B345A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089613.26	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020757.29	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.45 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B345A.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03B345B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089599.04	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020762.61	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.50 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (60,30,10,0), reddish brown (5YR 4/3); small gravel (5 mm), subrounded (pea gravel); fine-grained sand, rounded; little silt; poorly sorted, loose		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B345B.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03B367A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089314.87	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021250.58	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.17 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0										0
1			NA	NA	NA	GW		SANDY GRAVEL (50,30,20,0), reddish brown (5YR 4/3); small gravel (5 mm), subrounded (pea gravel); fine-grained sand, rounded; some silt; poorly sorted, loose		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B367A.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX03B367A1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089316.28	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021261.43	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.13 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		⌖	20/24	NA	NA	SM		SILTY SAND (15,60,25,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded; little gravel (5 mm), angular to subangular; little silt; poorly sorted, moist, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B367A1.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03B367B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089292.29	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021249.91	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.78 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (60,30,10,0), reddish brown (5YR 4/3); small gravel (5 mm), subrounded (pea gravel); fine-grained sand, rounded; little silt; poorly sorted, loose		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03B367B.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03SS368A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089482.21	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021091.99	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.16 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA					0
1			NA			SM		SILTY SAND (10,65,25,0), reddish brown (5YR 4/3); fine-grained sand, little medium-grained, rounded; some silt, non-plastic, little small gravel (5 mm), subangular; poorly sorted, dry, loose		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03SS368A.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03SS368B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089436.29	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021130.36	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.15 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0										0
1			NA	NA	NA	GW		SANDY GRAVEL (60,30,10,0), reddish brown (5YR 4/3); small gravel (5 mm), subrounded (pea gravel); fine-grained sand, rounded; little silt; poorly sorted, loose		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03SS368B.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX03SS368C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	NM	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	NM	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	NM	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA					0
1			NA			ML		SANDY SILT (15,30,50,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
2			6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX03SS368C.2

SOIL BORING LOG

Date Drilled:	9/17/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX04B011A**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091707.88	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020116.32	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.45 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			24/24	NA	NA	SM		SILTY SAND (15,60,25,0), brown (10YR 5/3), fine- to medium-grained sand, subrounded; little gravel (5-6 mm), angular to subangular; poorly sorted, dry, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX04B011A.2

SOIL BORING LOG

Date Drilled:	9/10/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX04B011B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091734.45	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020242.53	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.45 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

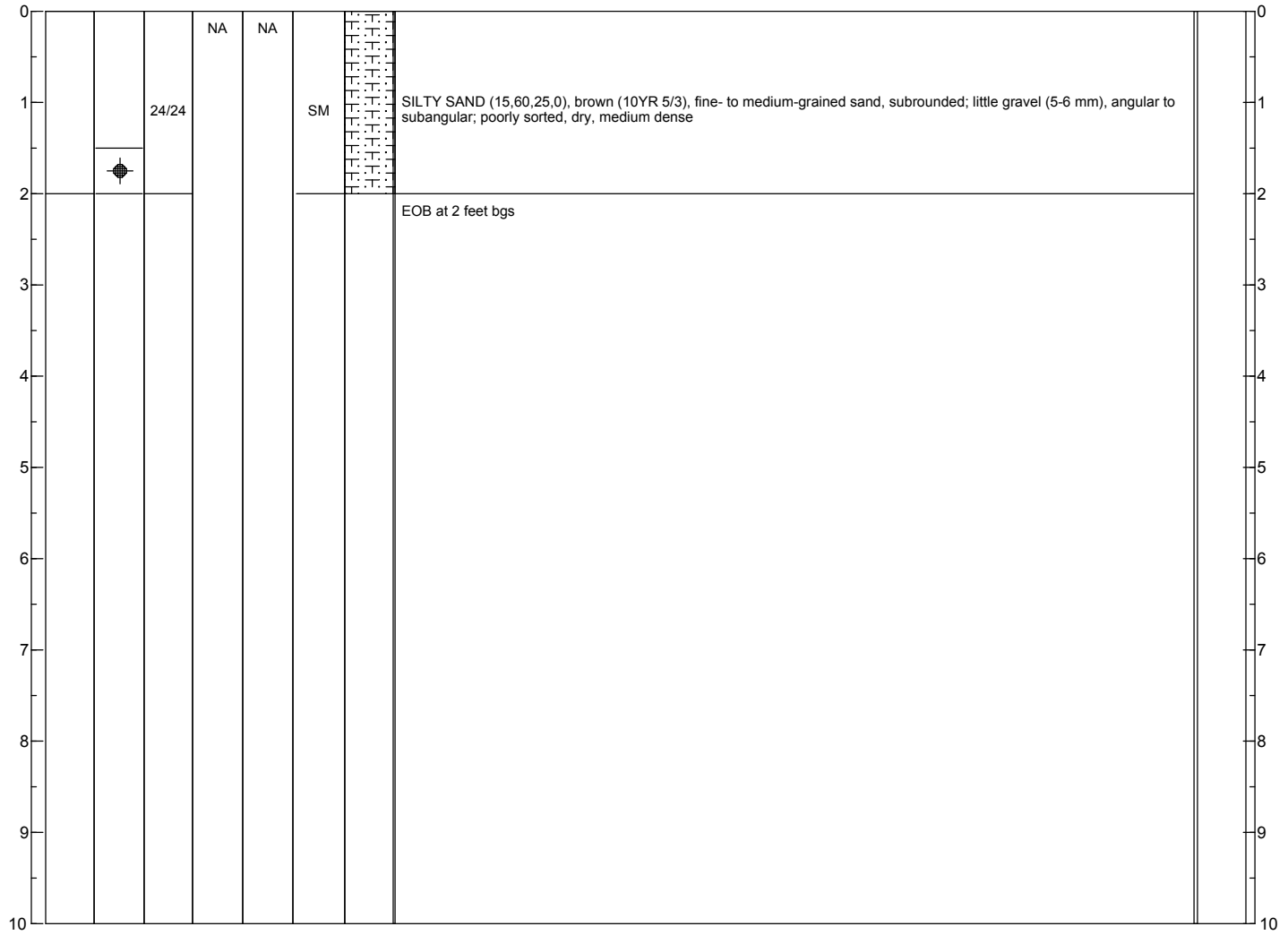
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (50,30,20,0), gray; small gravel (5 mm), subrounded (pea gravel); fine-grained sand, rounded; some silt; poorly sorted, loose		0–1
1–2		✦	6/6							1–2
2								EOB at 2.0 feet bgs		2
3–10										3–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX04B011B.2

SOIL BORING LOG

Date Drilled:	9/17/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX04B011C**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091689.65	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020244.60	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.77 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

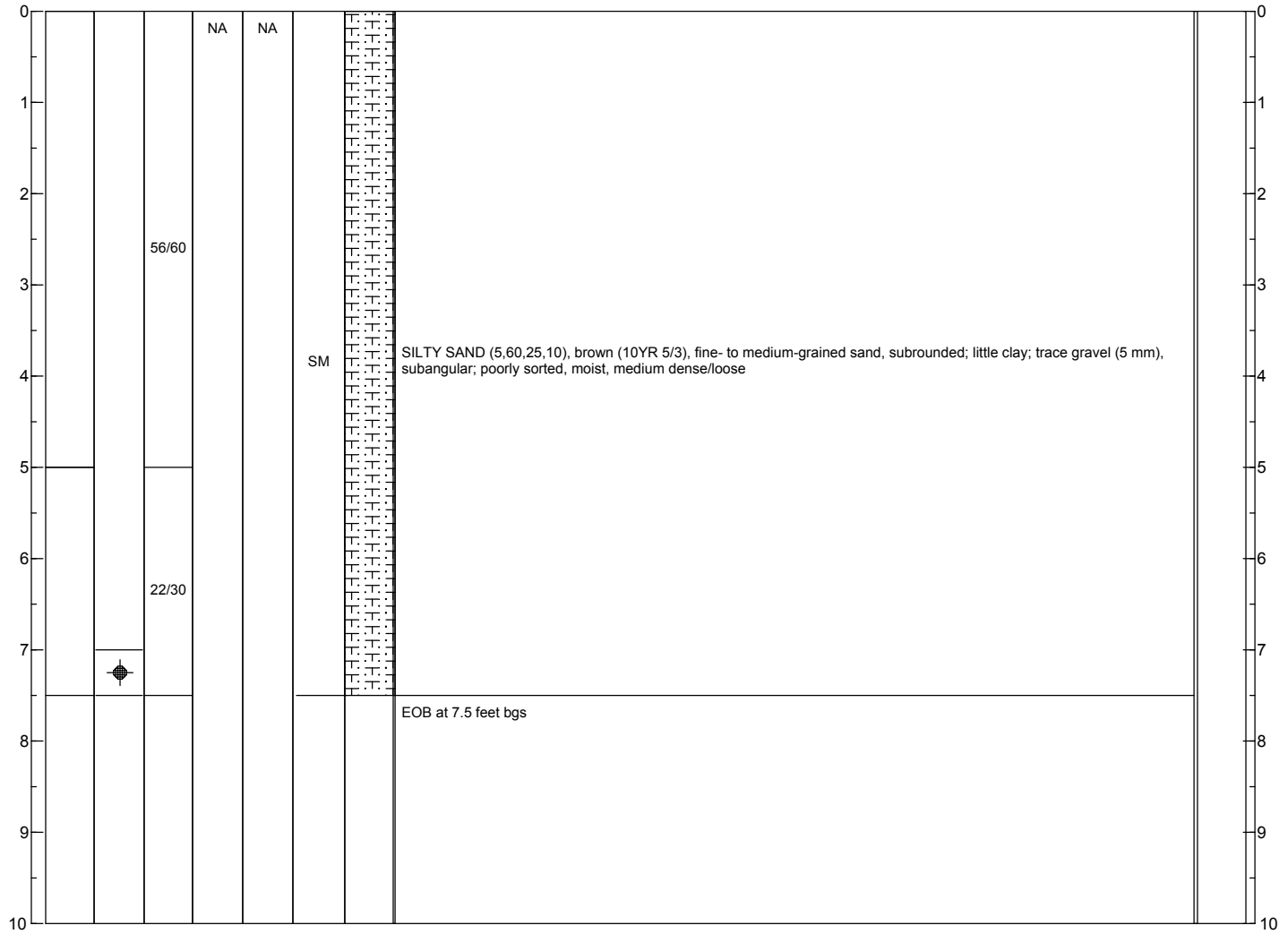


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX04B011C.2

SOIL BORING LOG

Date Drilled:	9/17/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX04B012A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091631.51	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019983.99	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.91 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

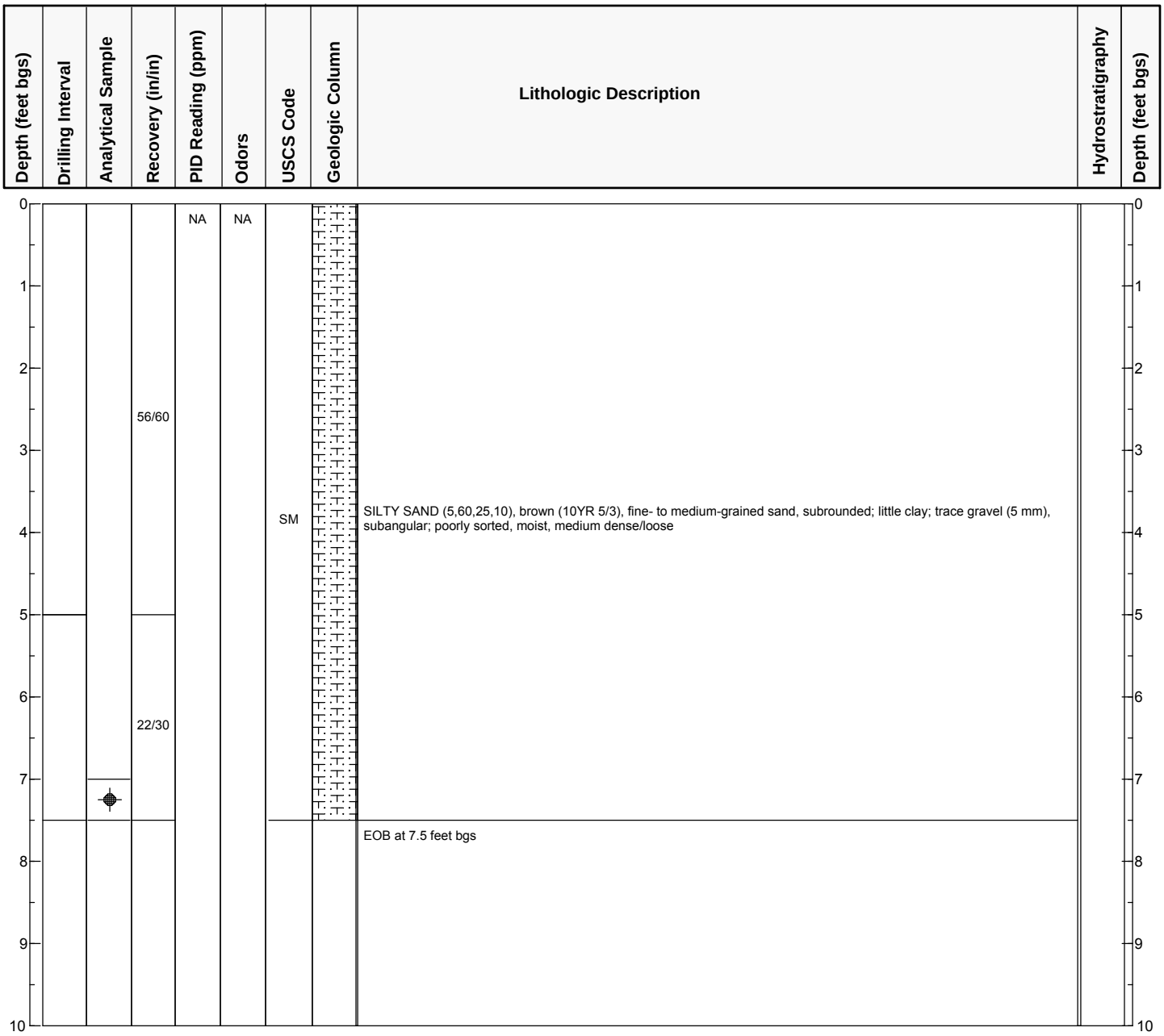


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX04B012A.7.5

SOIL BORING LOG

Date Drilled:	9/17/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX04B012B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091644.51	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020036.27	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.24 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX04B012B.7.5

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX04B034A**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091765.81	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020321.11	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.64 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			23/24	NA	NA	SM		SILTY SAND (10,60,30,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded; little gravel (5 mm), angular to subangular; poorly sorted, moist, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX04B034A.2

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX04B034B**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091751.49	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020336.02	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.57 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

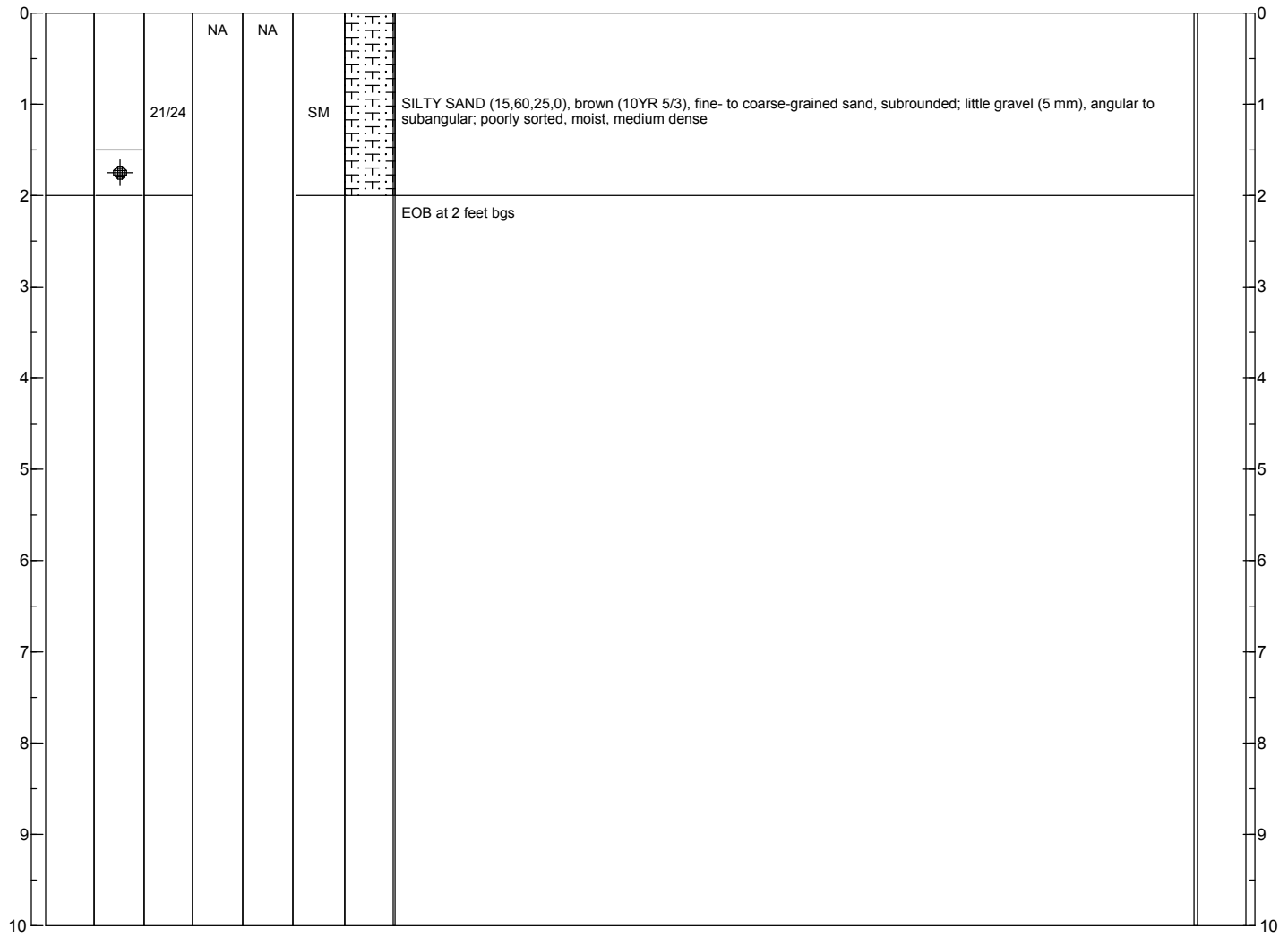
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			22/24	NA	NA	SM		SILTY SAND (15,60,25,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded; little gravel (5 mm), angular to subangular; poorly sorted, moist, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX04B034B.2

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX04B034C**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091739.58	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020321.04	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.31 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX04B034C.2

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX04B034D**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091752.36	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020307.84	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.70 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

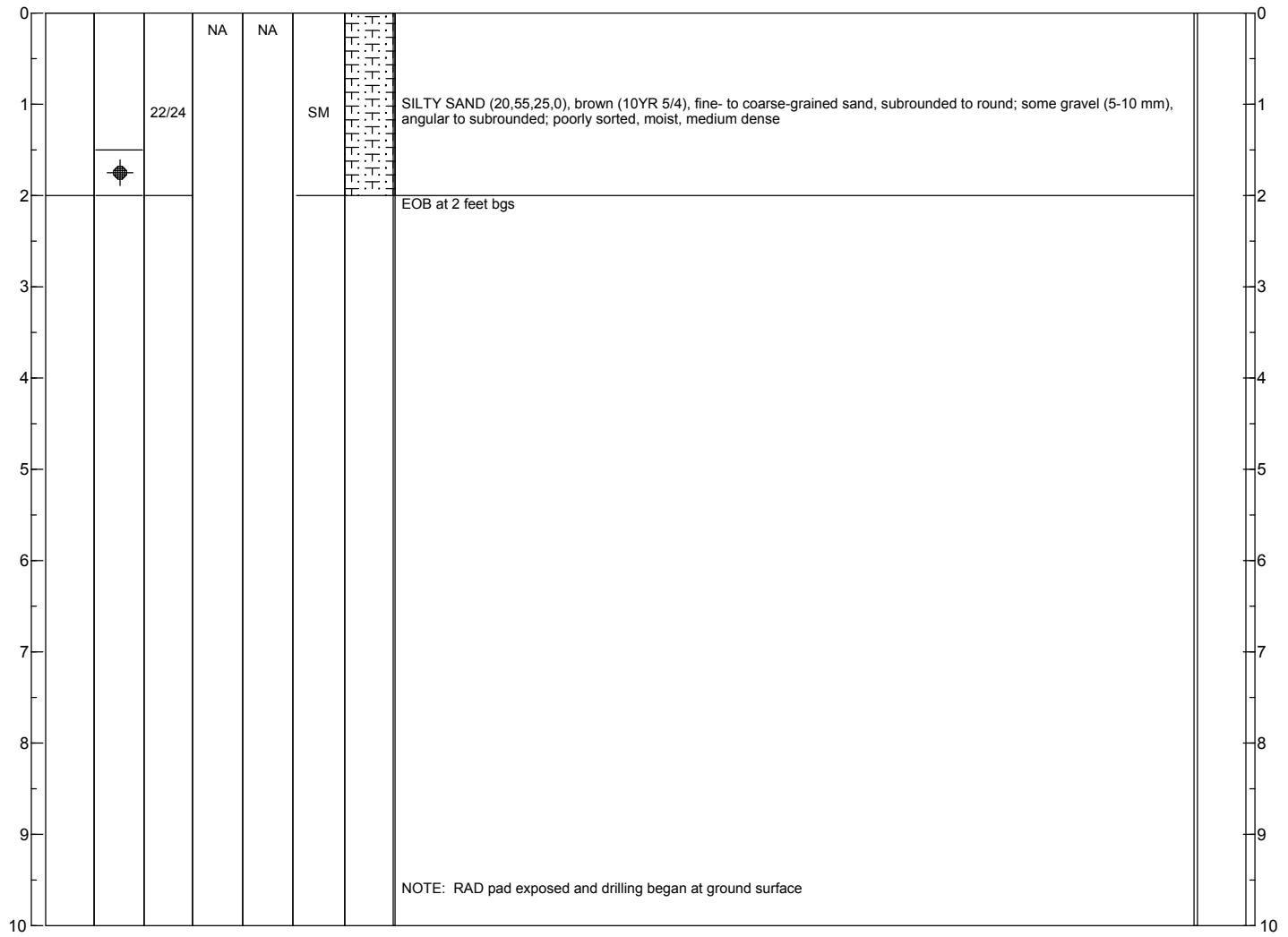
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			24/24	NA	NA	SM		SILTY SAND (10,60,30,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded; little gravel (5 mm), angular to subangular; poorly sorted, moist, medium dense		
2								EOB at 2 feet bgs		

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX04B034D.2

SOIL BORING LOG

Date Drilled:	9/25/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX05B094A**
Total Depth:	2 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2090930.15		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6020431.29		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	7.22 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX05B094A.2

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX05B094B**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090968.66	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020419.69	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.71 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

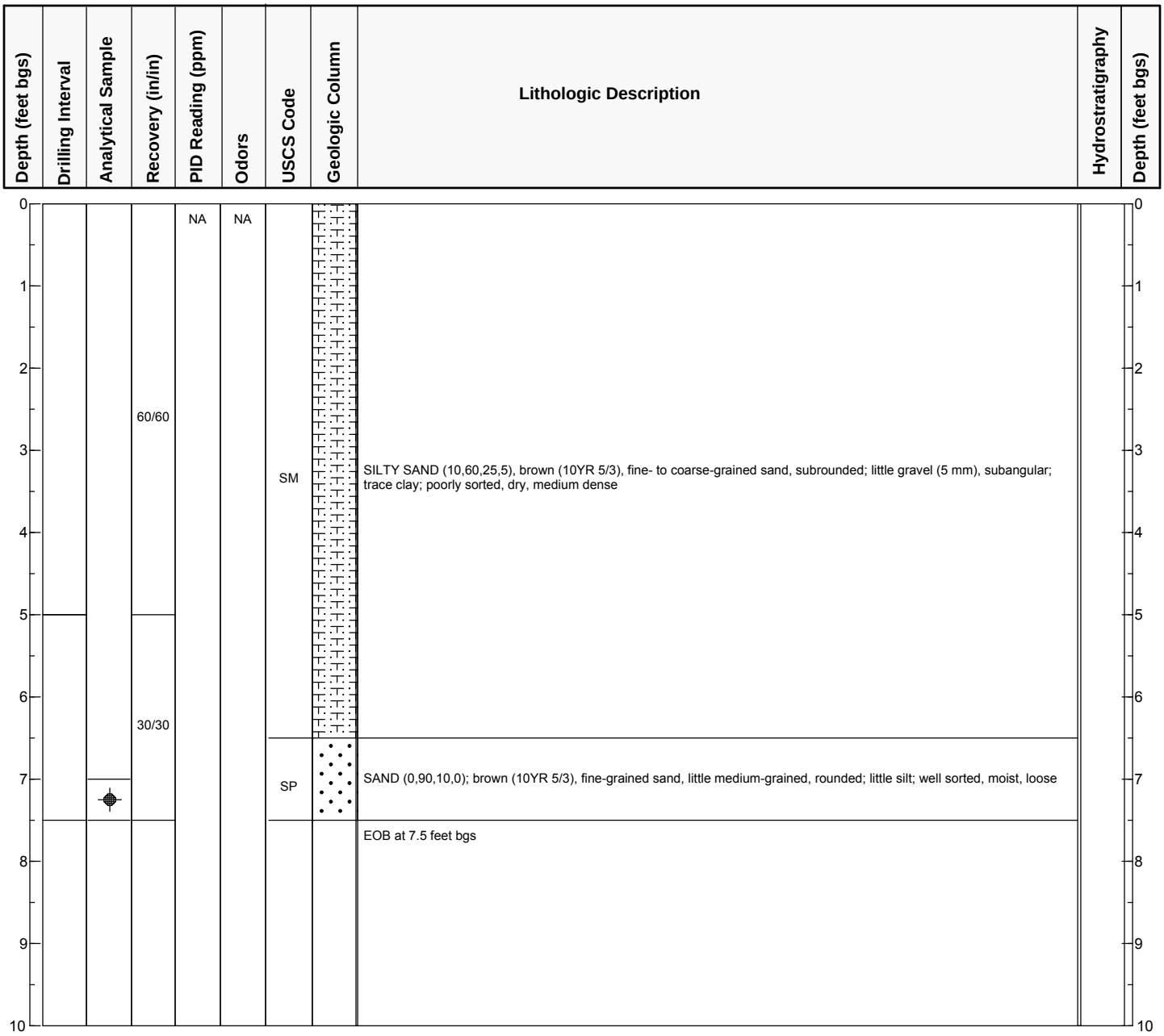
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			22/24	NA	NA	SM		SILTY SAND (10,60,30,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to round; little gravel (5-8 mm), subangular to subrounded; poorly sorted, moist, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX05B094B.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX05B094B1**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090974.88	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020399.97	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.57 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX05B094B1.7.5

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX05B094C**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090997.37	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020441.01	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.64 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

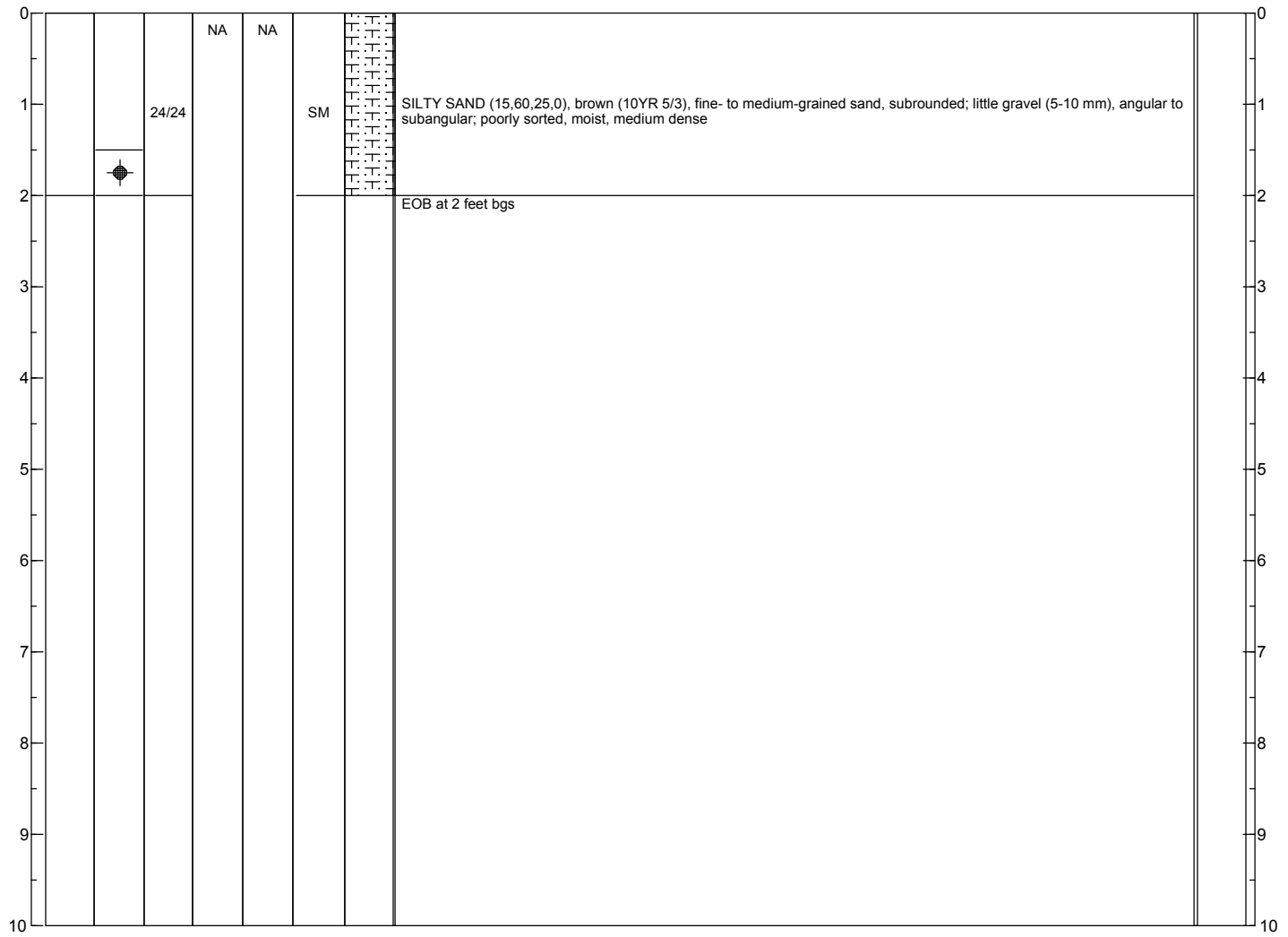
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		✚	24/24	NA	NA	SM		SILTY SAND (10,60,30,0), brown (10YR 5/3), fine- to medium-grained sand, little coarse-grained, subrounded; little gravel (5-8 mm), angular to subangular; poorly sorted, moist, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX05B094C.2

SOIL BORING LOG

Date Drilled:	9/25/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX05B094D**
Total Depth:	2 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2090994.18		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6020483.67		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	6.81 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001

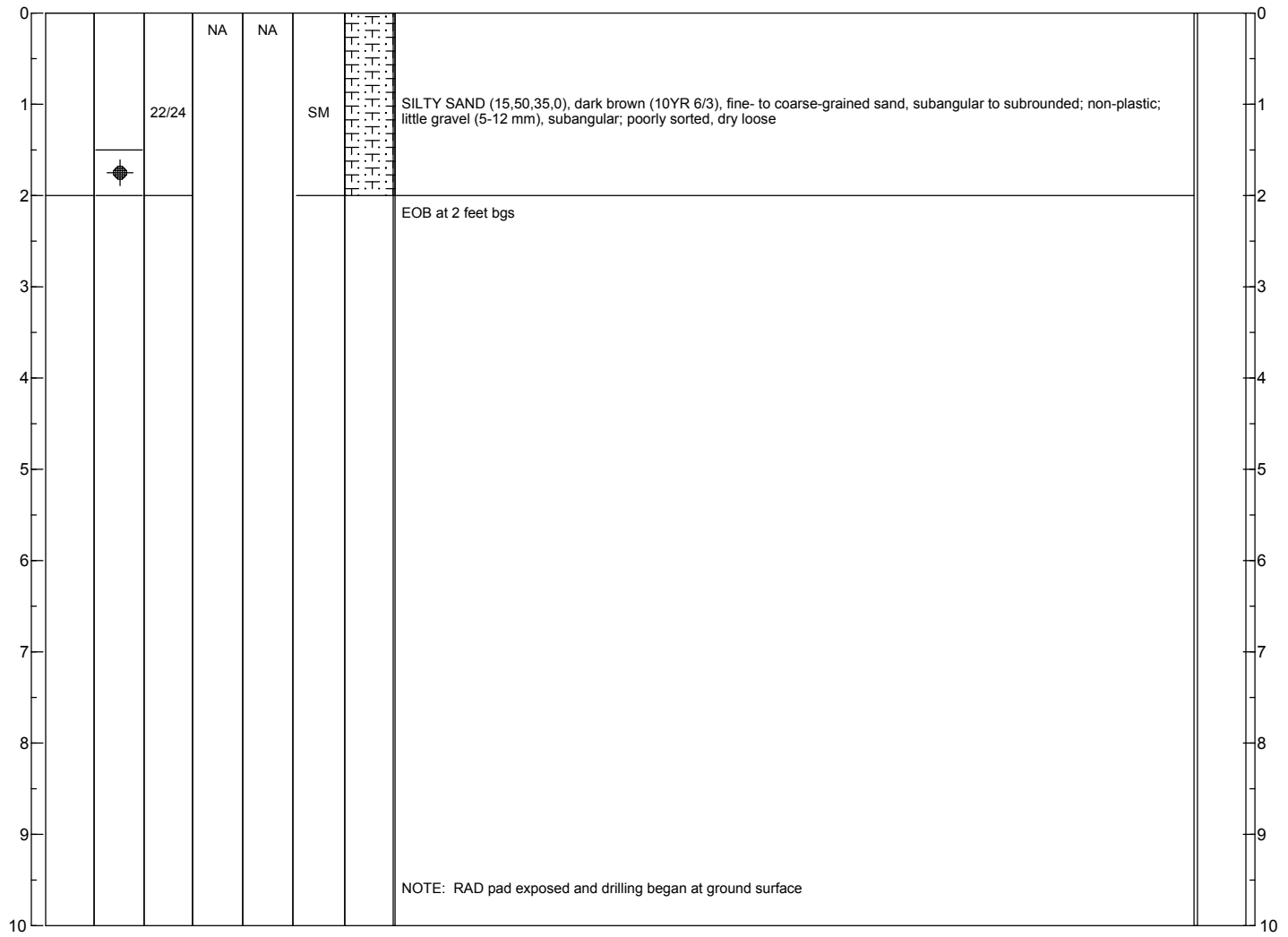


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX05B094D.2

SOIL BORING LOG

Date Drilled:	9/25/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX05B104A**
Total Depth:	2 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2091211.45		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6020279.02		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	7.09 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX05B104A.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX05B104A1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091231.86	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020272.74	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.20 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		✦	24/24	NA	NA	SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; gravel (5-7 mm), angular to subangular; little silt; poorly sorted, moist/dry, loose		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX05B104A1.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX05B104B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091160.40	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020224.26	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	5.95 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

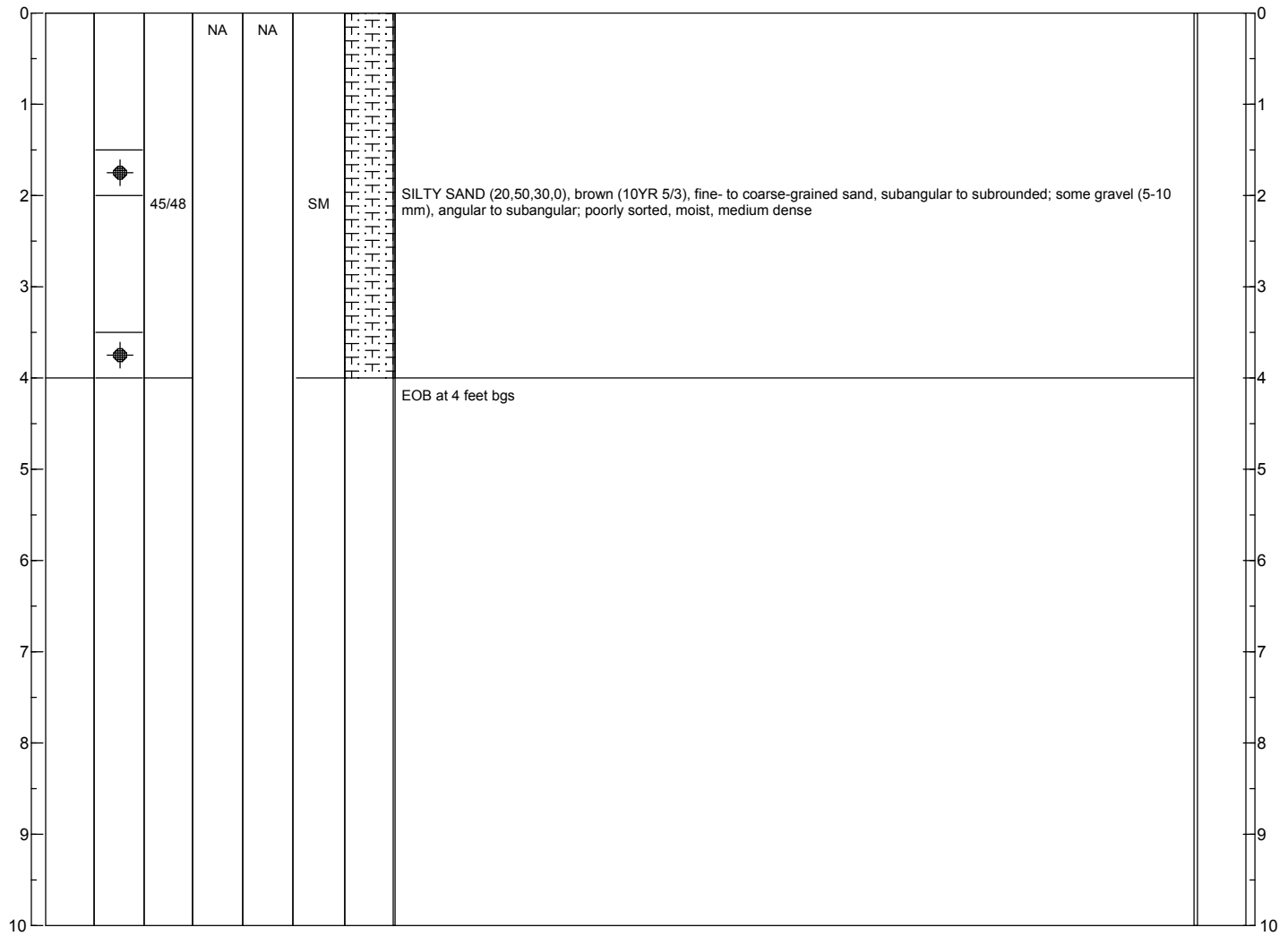
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (60,25,15,0), dark grayish brown (10YR 4/2); angular to subrounded, gravel (8-12 mm); fine- to medium-grained sand, subrounded to rounded; little silt; poorly sorted, moist, dense		0–1
1–2		✦	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX05B104B.2

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX05MW85AA**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091211.01	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020555.66	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.88 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

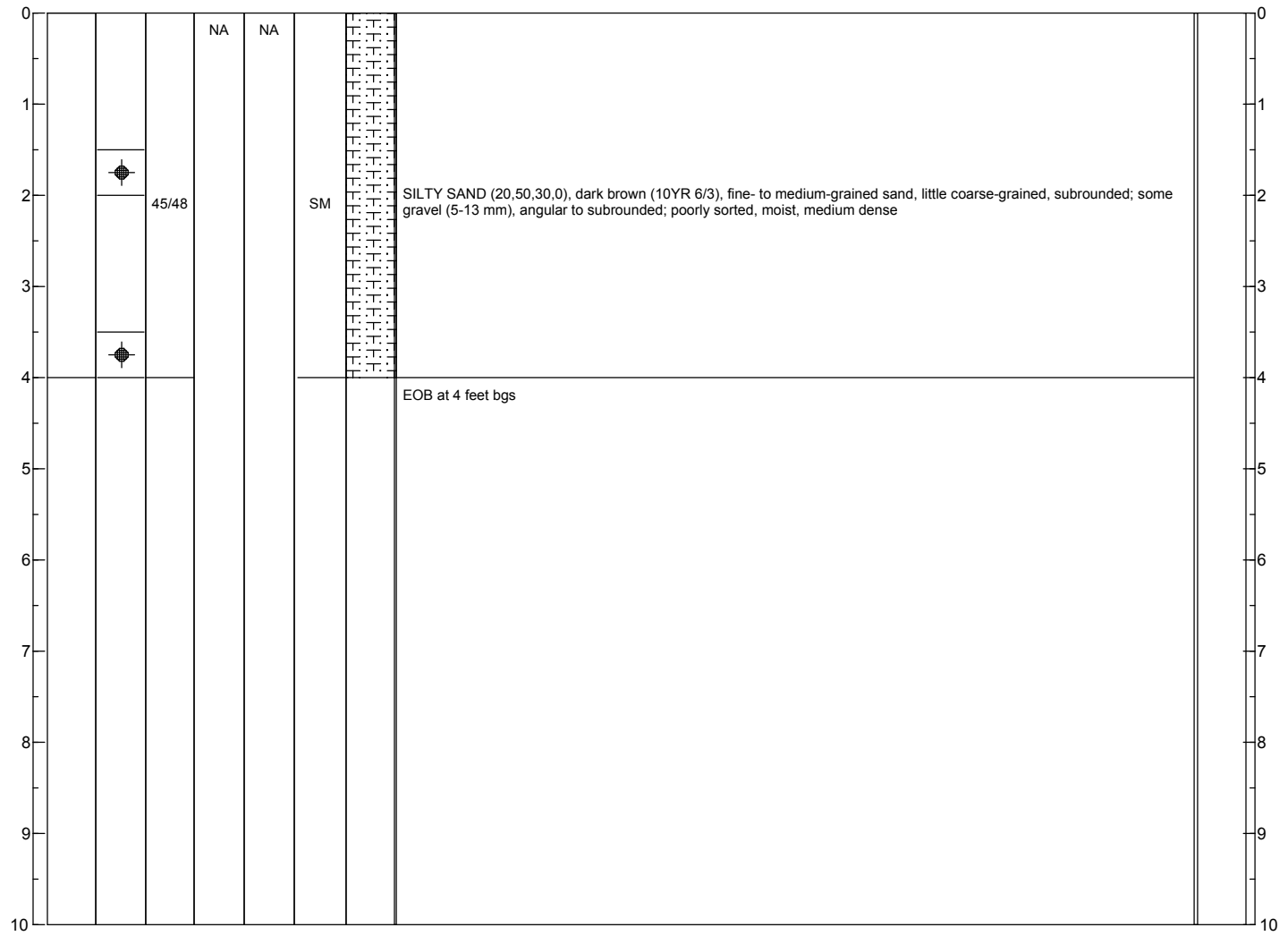


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX05MW85AA.2; EX05MW85AA.4

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX05MW85AB**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091193.91	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020490.49	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.32 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

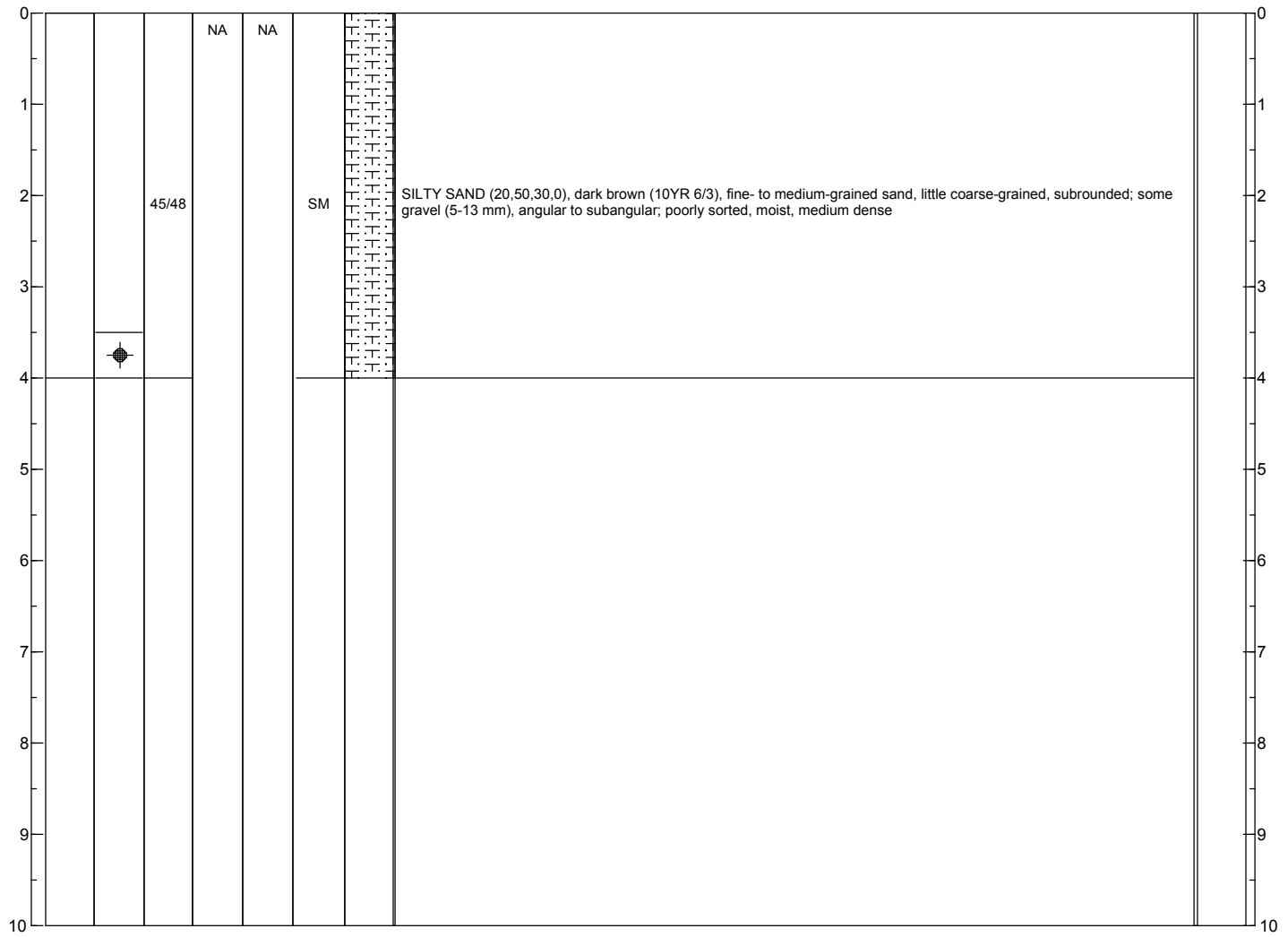


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX05MW85AB.2; EX05MW85AB.4

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX05MW85AB1**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091187.04	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020471.22	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.97 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX05MW85AB1.4

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX11B023A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089274.85	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021836.67	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.53 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	ML		SANDY SILT (10,25,65,0), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX11B023A.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX11SS022A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089371.27	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021814.36	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.57 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

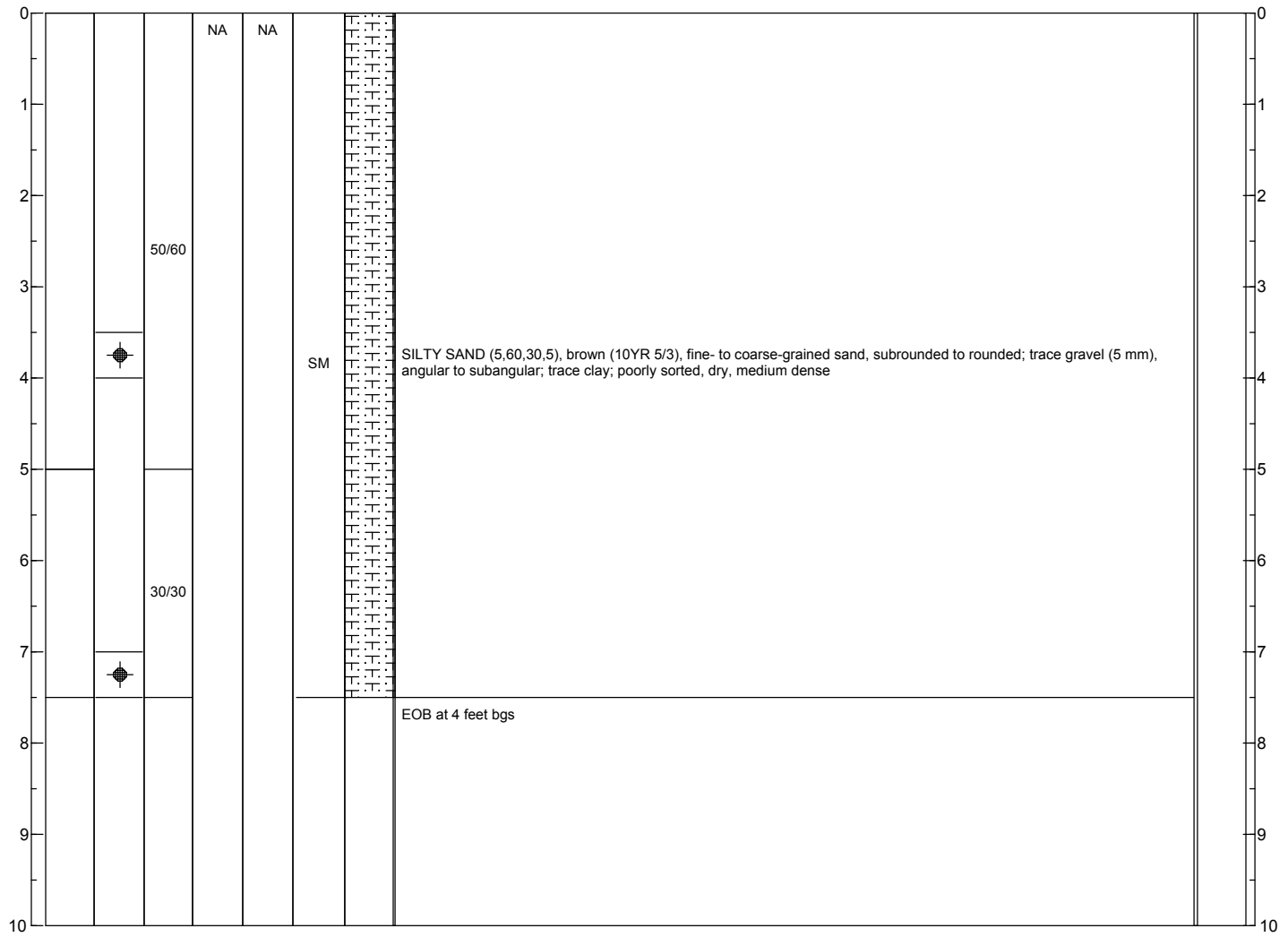
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,70,25,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, moist/dry, dense		0–1
1–2		✦	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX11SS022A.2

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12MW17AA**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091030.42	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019810.59	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.87 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

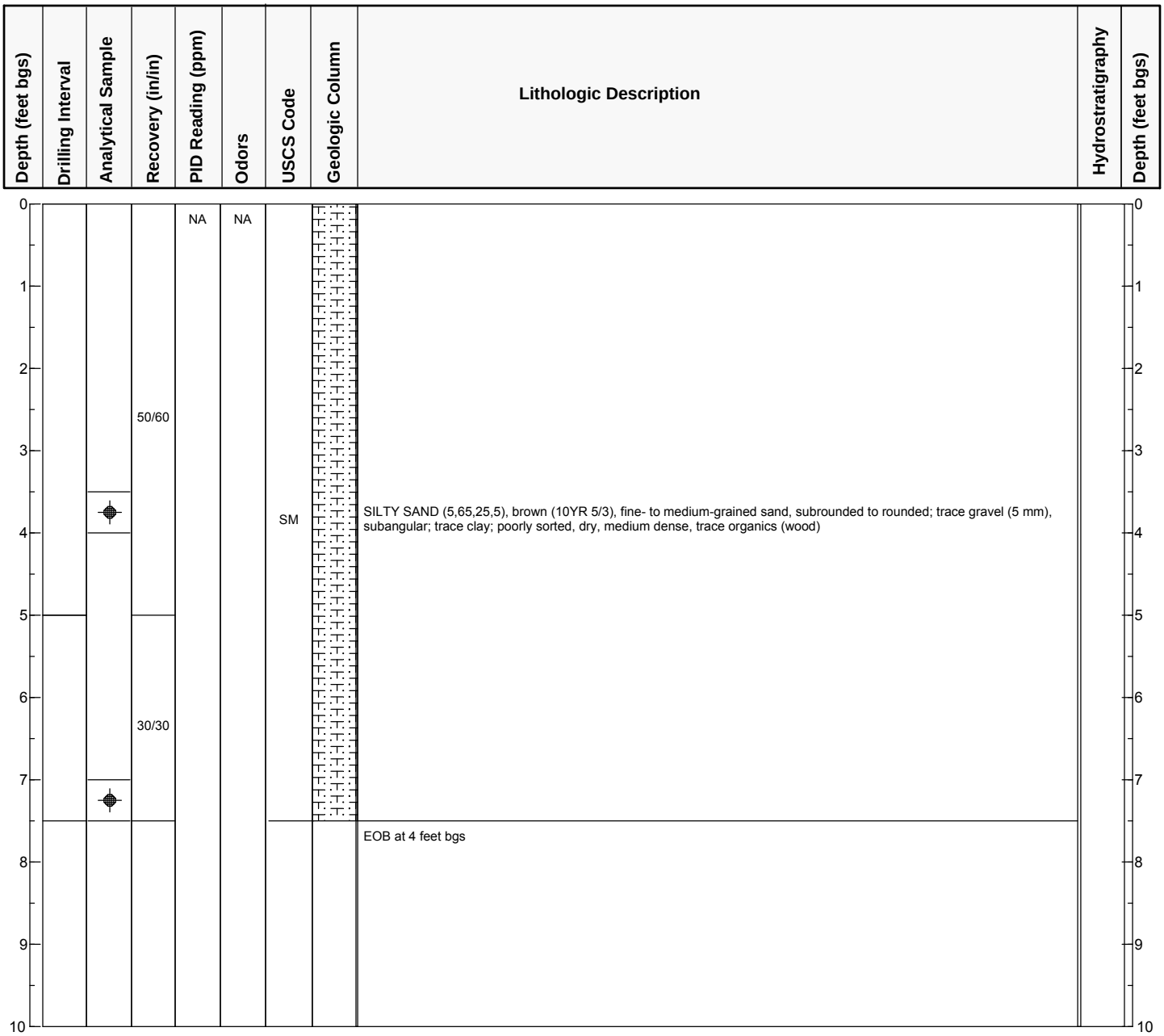


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12MW17AA.4; EX12MW17AA.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12MW17AB**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090991.38	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019779.94	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.11 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

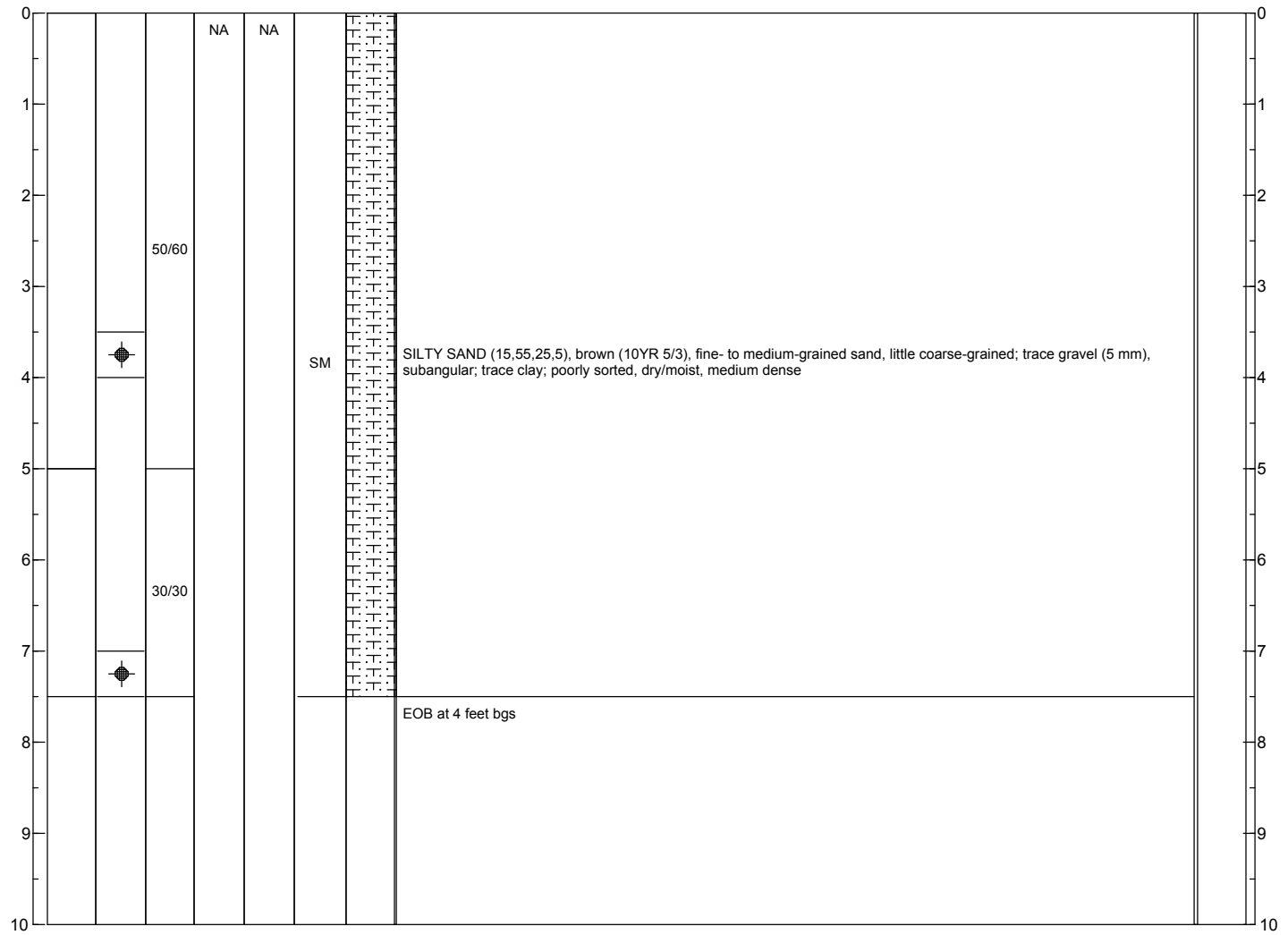


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12MW17AB.4; EX12MW17AB.7.5

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12MW17AC**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090969.38	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019814.36	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.09 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

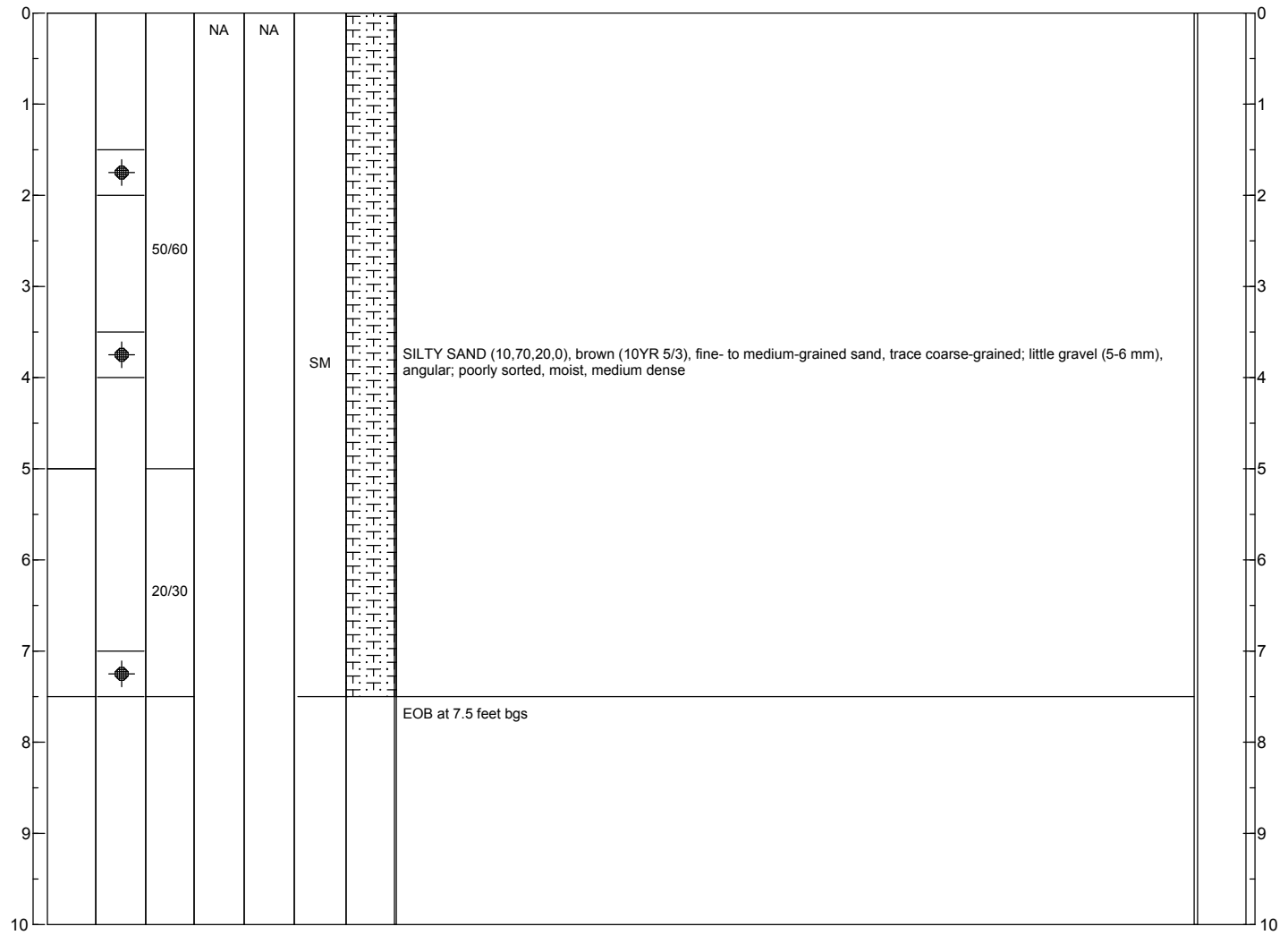


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12MW17AC.4; EX12MW17AC.7.5

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12MW18AA**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091020.64	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019892.08	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.18 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

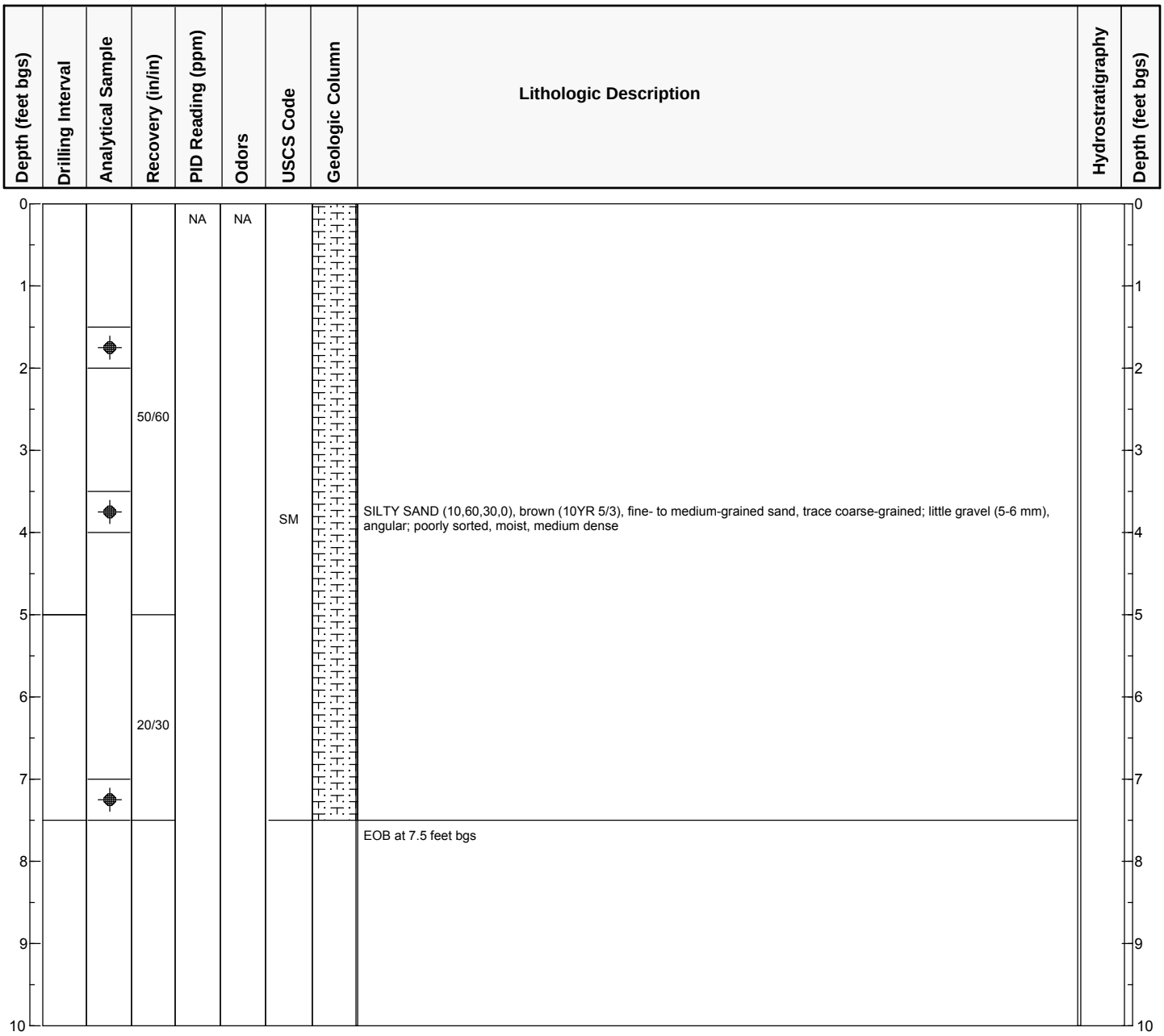


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12MW18AA.2; EX12MW18AA.4; EX12MW18AA.7.5

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12MW18AB**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090998.37	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019909.79	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.22 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12MW18AB.2; EX12MW18AB.4; EX12MW18AB.7.5

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12SS02A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091361.90	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019836.36	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.29 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA					0
1			NA			ML		SANDY SILT (5,20,70,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; trace gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS02A.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12SS02B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091346.68	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019847.26	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.66 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0										0
1			NA	NA	NA	ML		SANDY SILT (5,60,30,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; trace gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS02B.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12SS02C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091333.02	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019834.16	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.62 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA					0
1			NA			SM		SILTY SAND (5,75, 20,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS02C.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12SS02D**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091348.09	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019821.73	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.05 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

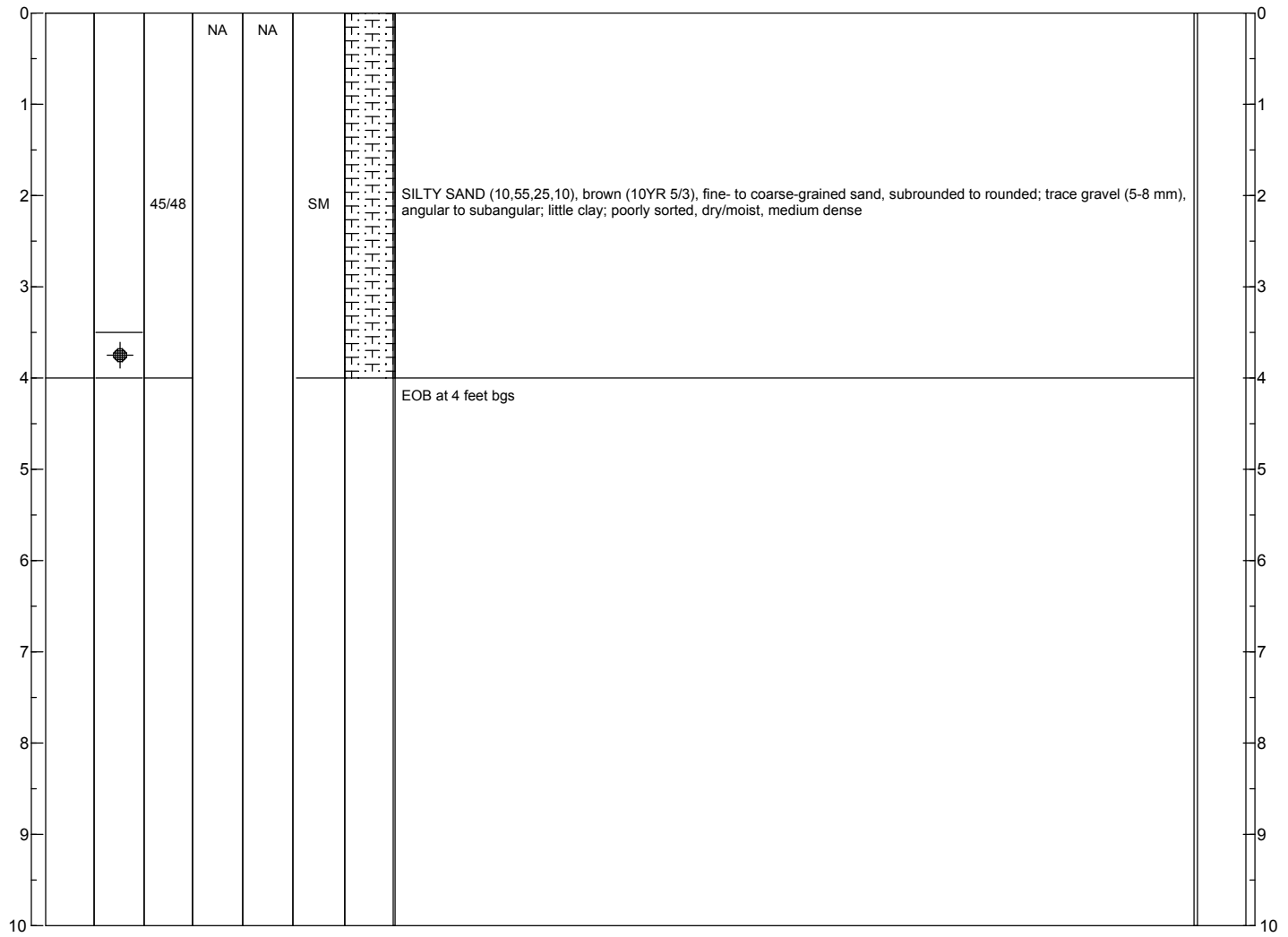
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,65, 30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		✦	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS02D.2

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12SS16A**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090936.24	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019790.51	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.40 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS16A.4

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12SS16B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090923.63	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019839.93	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.41 ft asml	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,65,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

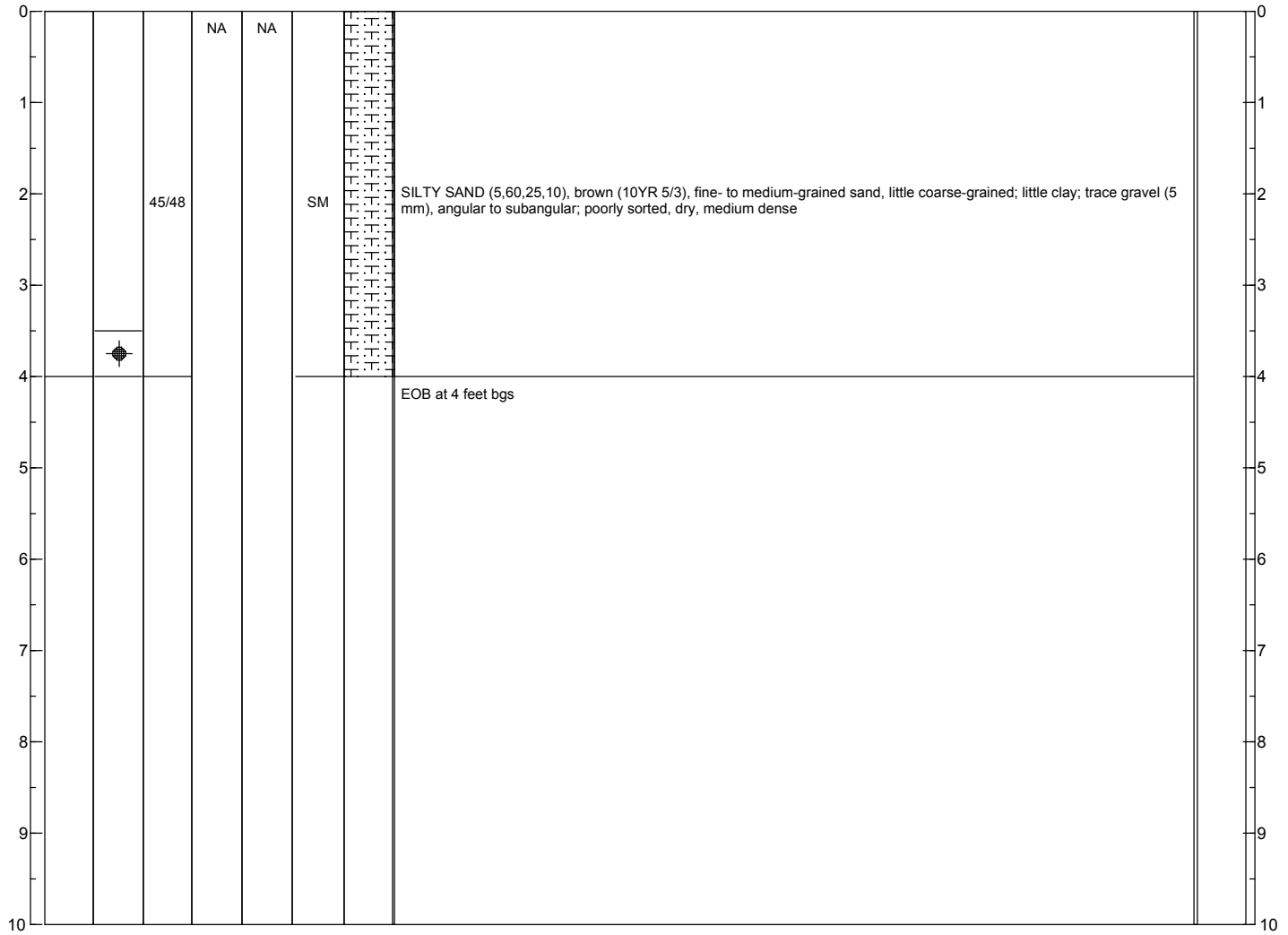
Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS16B.2

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12SS16C**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090909.45	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019781.32	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.46 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–4		◆	45/48	NA	NA	SM		SILTY SAND (5,60,25,10), brown (10YR 5/3), fine- to medium-grained sand, little coarse-grained; little clay; trace gravel (5 mm), angular to subangular; poorly sorted, dry, medium dense		
4								EOB at 4 feet bgs		



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS16C.4

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12SS16D**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090868.11	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019814.34	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.14 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,65,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS16D.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12SS17A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090941.15	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019684.97	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.22 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

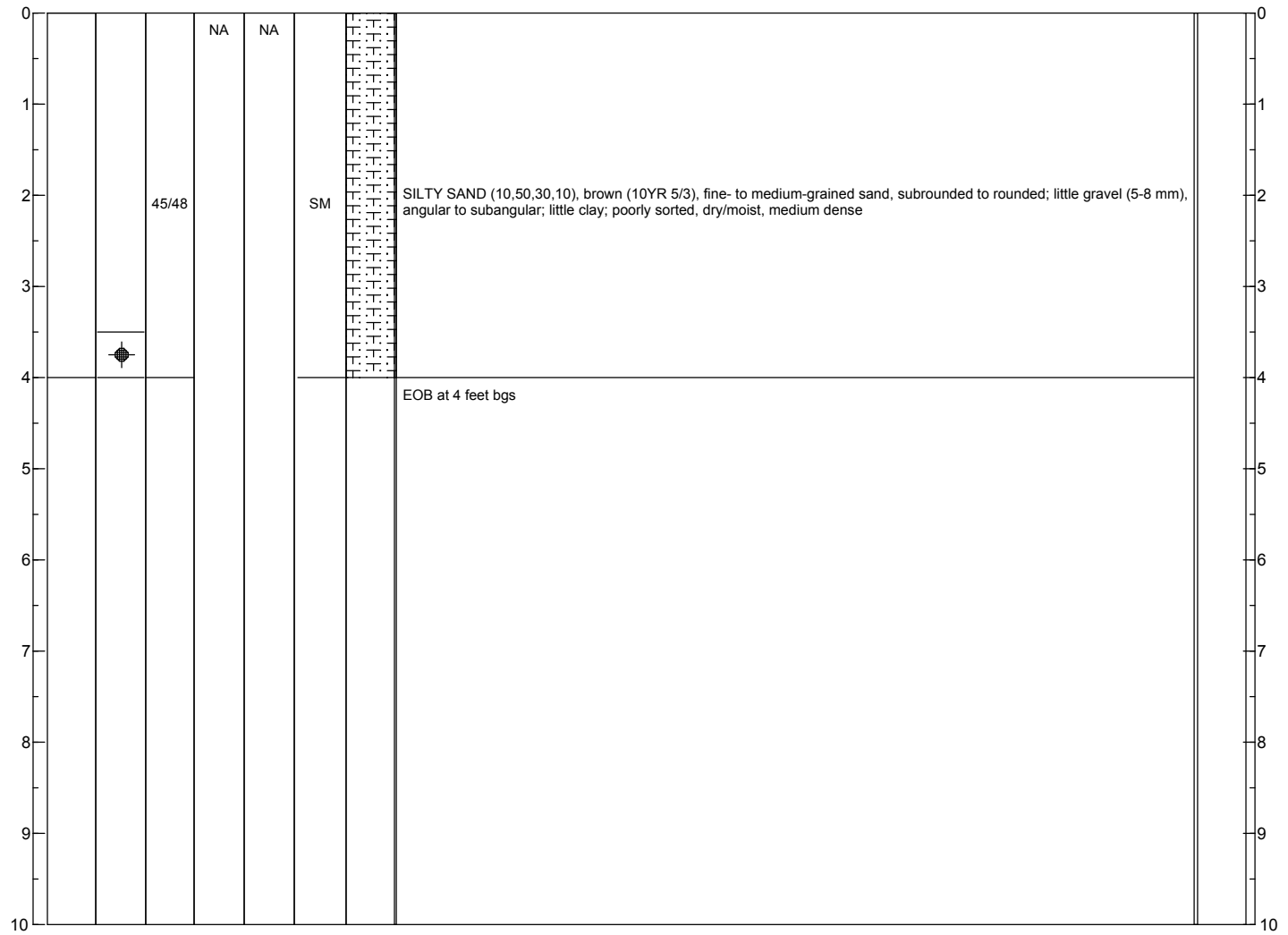
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	ML		SANDY SILT (5,30,60,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; trace gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS17A.2

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12SS17B**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090912.93	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019723.33	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	11.77 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

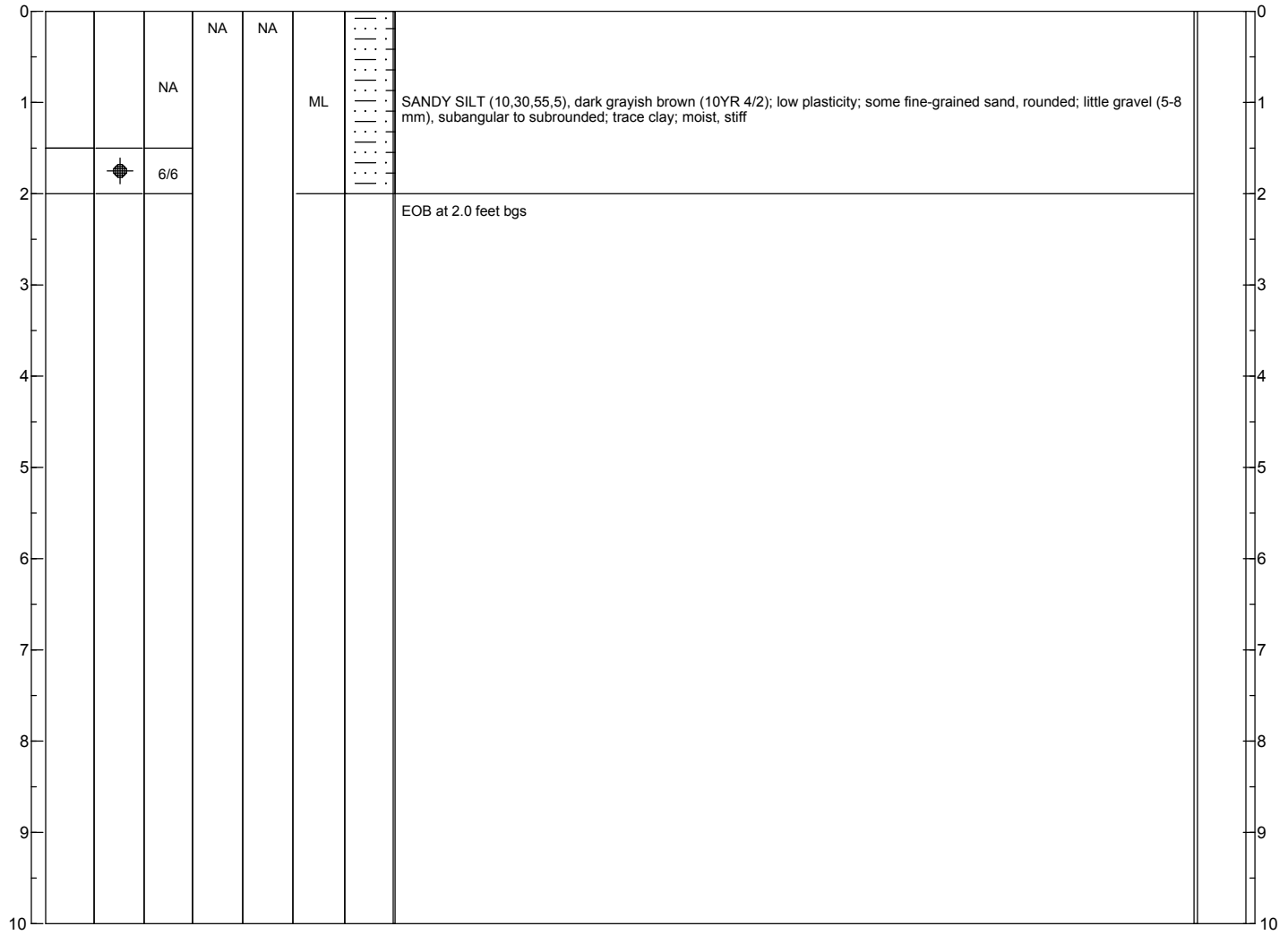


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS17B.4

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12SS17C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090918.86	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019665.67	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.06 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS17C.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12SS18A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091061.64	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019826.19	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.68 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

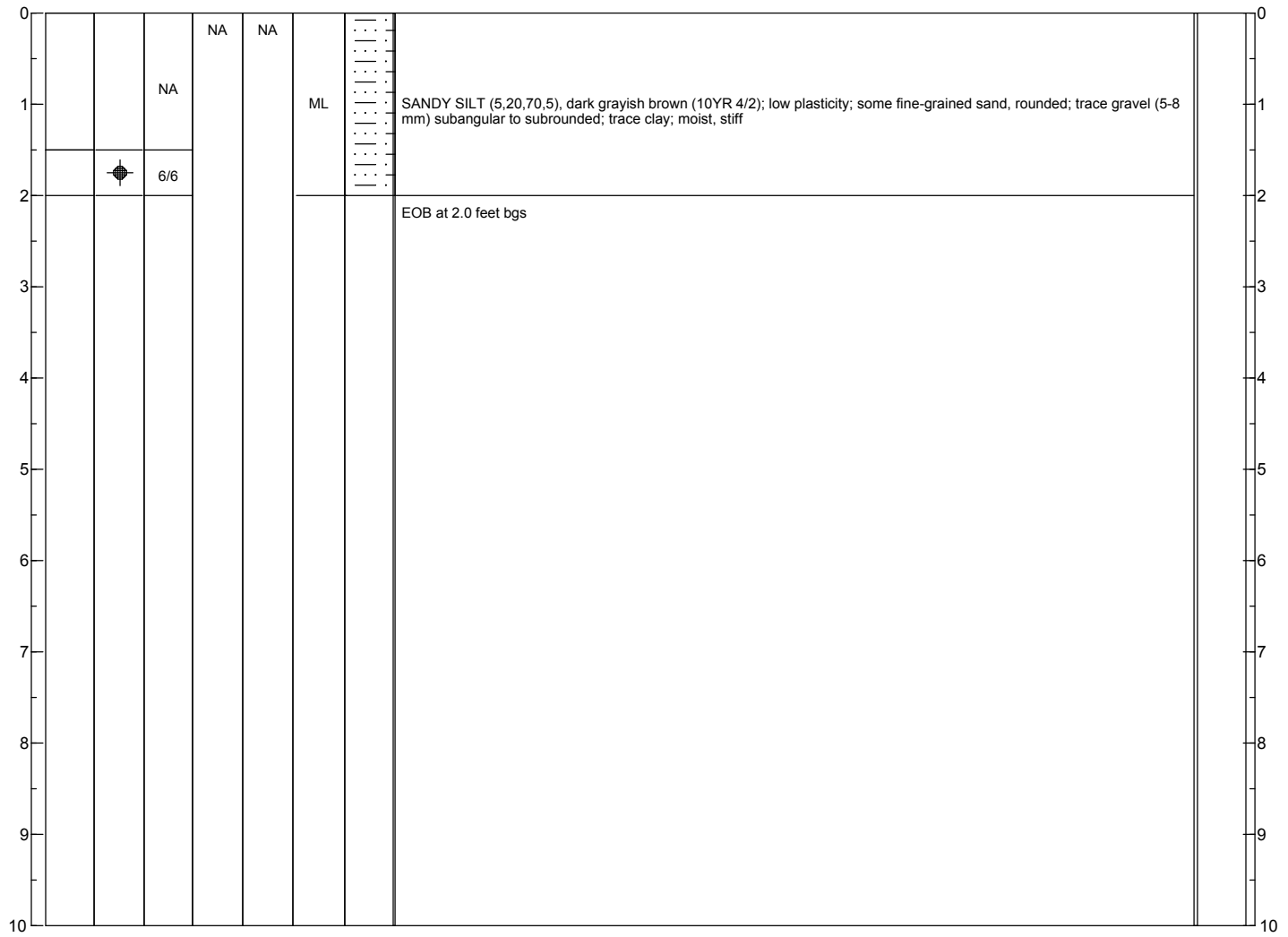
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,75,20,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, dry/moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12SS18A.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12TA08A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091114.07	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019791.21	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	13.33 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA08A.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12TA08B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091086.90	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019766.68	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	13.01 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	ML		SANDY SILT (5,30,60,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; trace gravel (5-8 mm) subangular to subrounded; trace clay; moist, stiff		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA08B.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12TA08C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091084.51	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019817.44	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	13.13 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

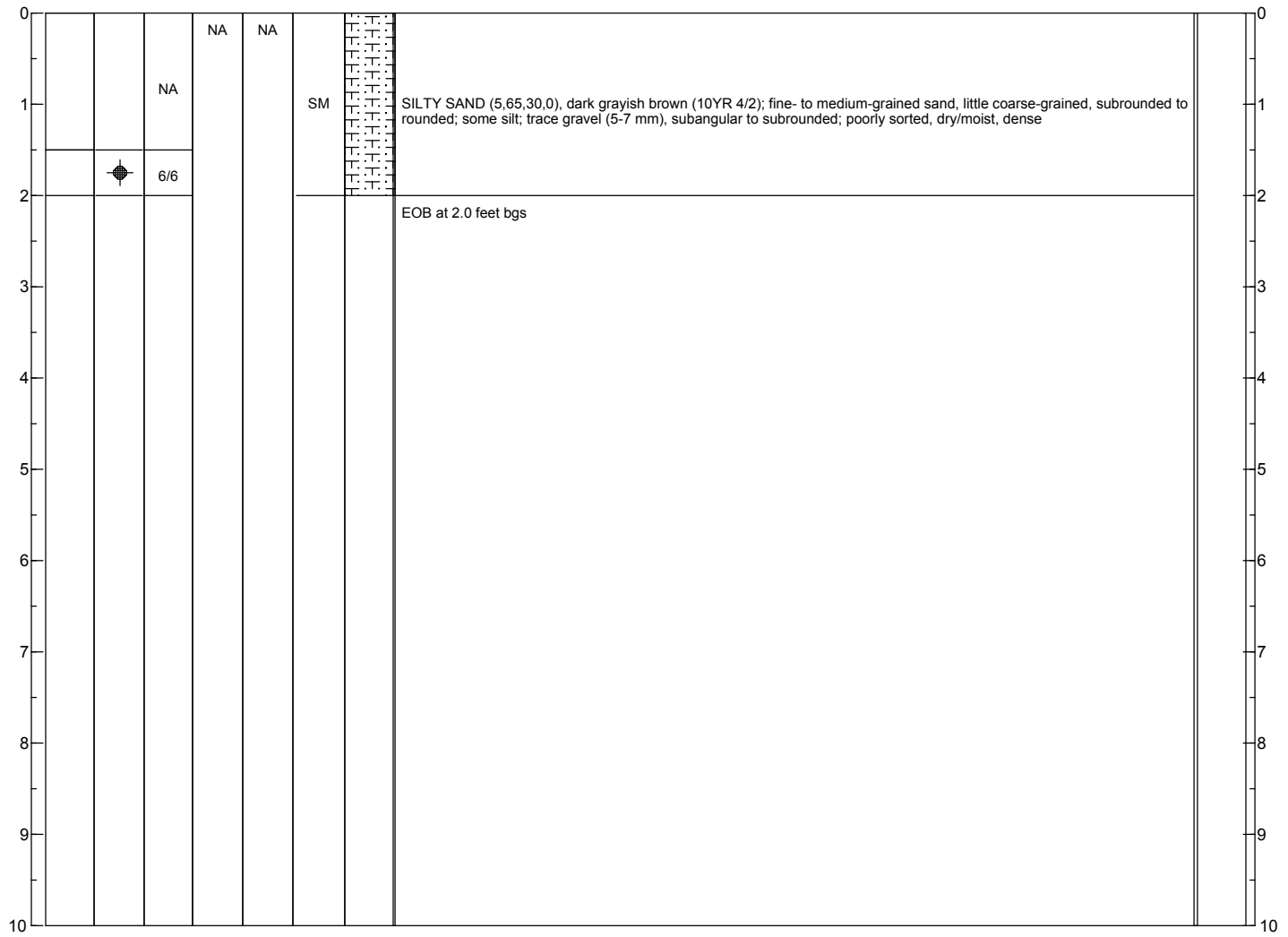
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	ML		SANDY SILT (10,30,55,5), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm) subangular to subrounded; trace clay; moist, stiff		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA08C.2

SOIL BORING LOG

Date Drilled:	9/12/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX12TA08D**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091056.37	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019782.34	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.20 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA08D.2

SOIL BORING LOG

Date Drilled:	9/26/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12TA10A**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090999.99	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019846.58	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.53 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

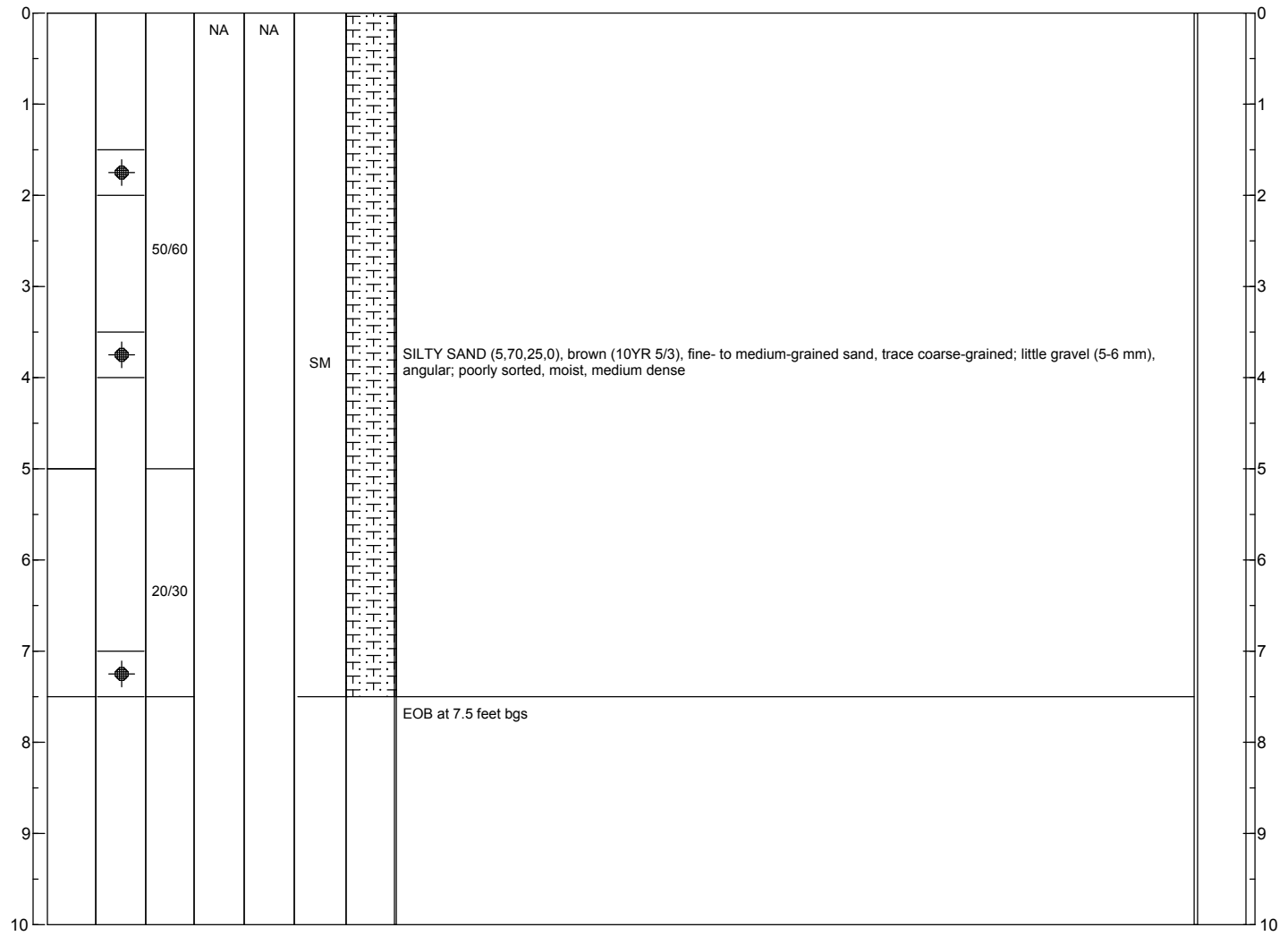
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–4			40/48	NA	NA	SM		SILTY SAND (5,60,30,5), brown (10YR 5/3), fine- to medium-grained sand, subrounded; trace gravel (5-7 mm), subangular; trace clay; poorly sorted, dry, medium dense		0–4
4								EOB at 4 feet bgs		4
5–10										5–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA10A.4

SOIL BORING LOG

Date Drilled:	9/18/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX12TA10B**
Total Depth:	7.5 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2090963.02		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6019890.50		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	10.70 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA10B.2; EX12TA10B.4; EX12TA10B.7.5

SOIL BORING LOG

Date Drilled:	10/8/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12TA10B1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090952.79	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019904.45	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.51 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		⌖	20/24	NA	NA	SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subangular to subrounded; gravel (5-10 mm), angular to subangular; little silt; poorly sorted, dry, loose		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA10B1.2

SOIL BORING LOG

Date Drilled:	9/18/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12TA10C**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090932.02	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6019880.21	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	10.87 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		⌖	24/24	NA	NA	SM		SILTY SAND (15,60,25,0), brown (10YR 5/3), fine- to medium-grained sand, subrounded; little gravel (5-6 mm), angular to subangular; poorly sorted, dry, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA10C.2

SOIL BORING LOG

Date Drilled:	9/17/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12TA13A**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091458.39	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020213.70	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.49 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Concrete		0
1										1
2			45/48			SW		GRAVELLY SAND (25,55,15,5), dark grayish brown (10YR 4/2), fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		2
3										3
4								EOB at 4 feet bgs		4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA13A.4

SOIL BORING LOG

Date Drilled:	9/17/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12TA13C**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091410.07	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020211.62	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.05 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Concrete		0
1										1
2			45/48			SW		GRAVELLY SAND (25,55,15,5), dark grayish brown (10YR 4/2), fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		2
3										3
4								EOB at 4 feet bgs		4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA13C.4

SOIL BORING LOG

Date Drilled:	9/17/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX12TA13D**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091433.70	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020188.54	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.92 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Concrete		0
1										1
2			45/48			SW		GRAVELLY SAND (25,55,15,5), dark grayish brown (10YR 4/2), fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		2
3										3
4								EOB at 4 feet bgs		4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX12TA13D.4

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX13B003BA**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089933.98	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020865.55	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	4.71 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

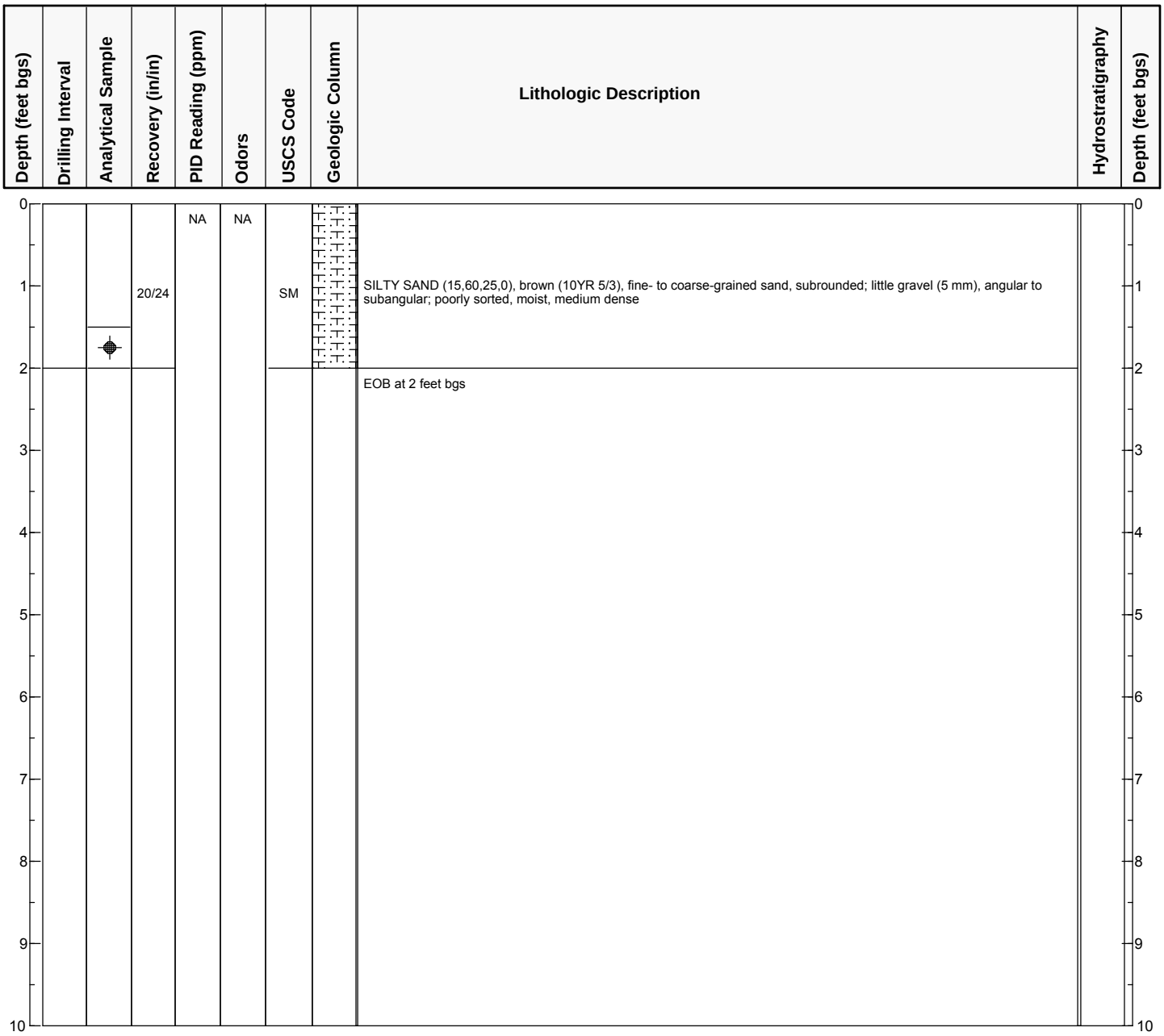
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (50,30,20,0), dark grayish brown (10YR 4/2); gravel (5-13 mm), angular to subangular; fine- to medium-grained sand, trace coarse-grained sand; some silt; poorly sorted, moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX13B003BA.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX13B003BA1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089946.09	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020881.13	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	4.52 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

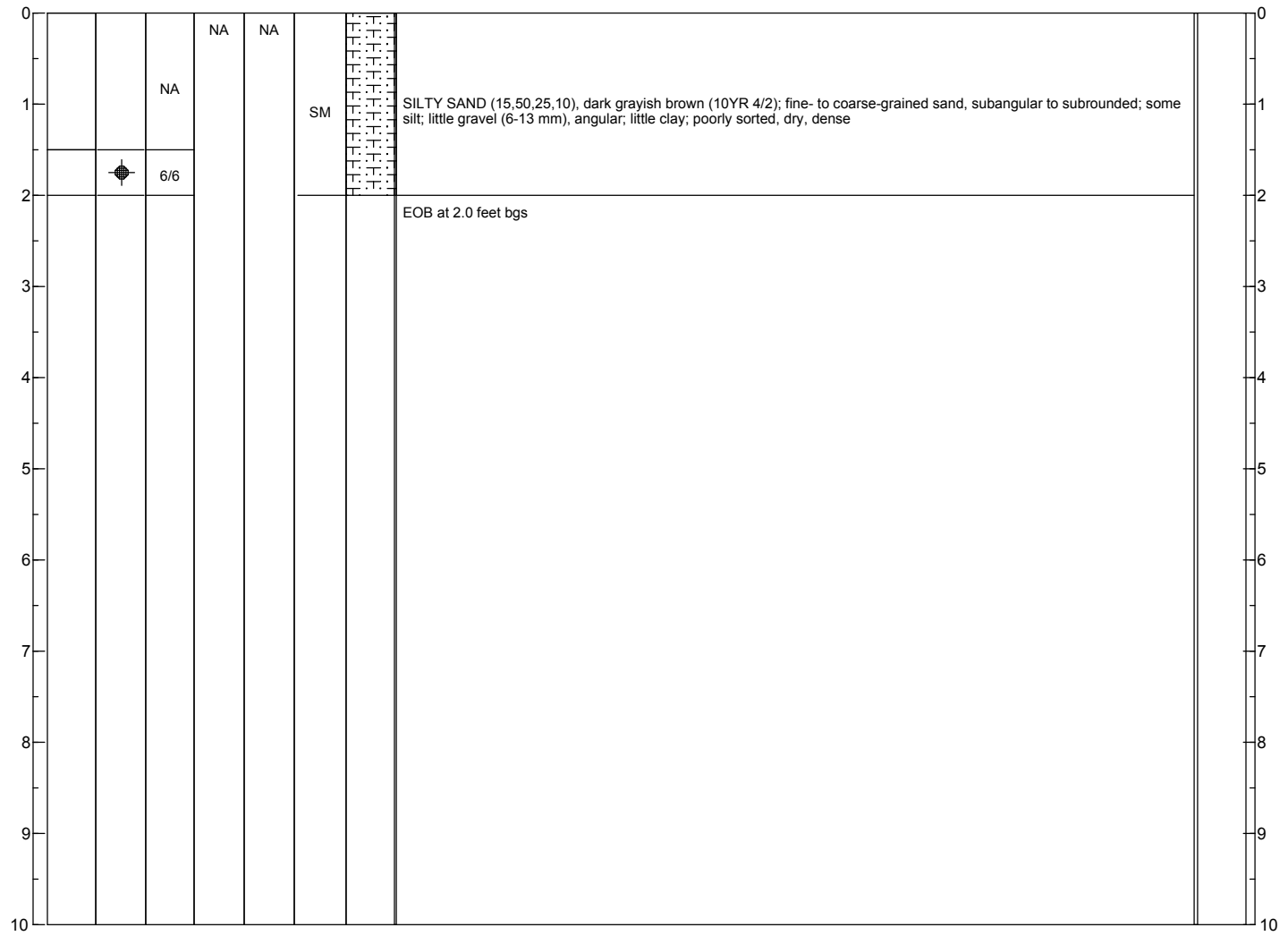


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX13B003BA1.2

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX13B004A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090027.95	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020933.84	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	4.33 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

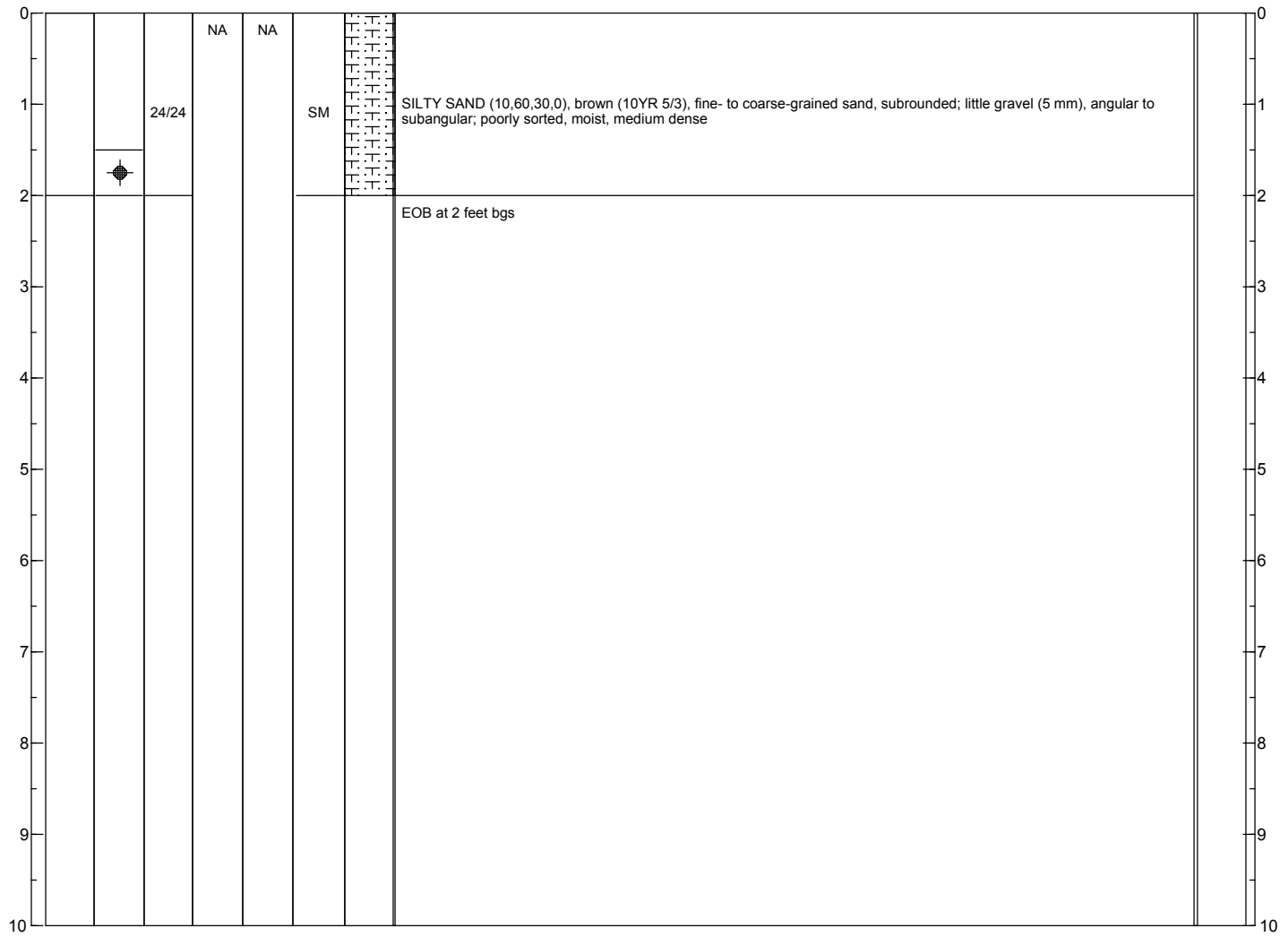


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX13B004A.2

SOIL BORING LOG

Date Drilled:	9/25/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX13B007A**
Total Depth:	2 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2090116.26		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6020867.78		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	4.69 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001

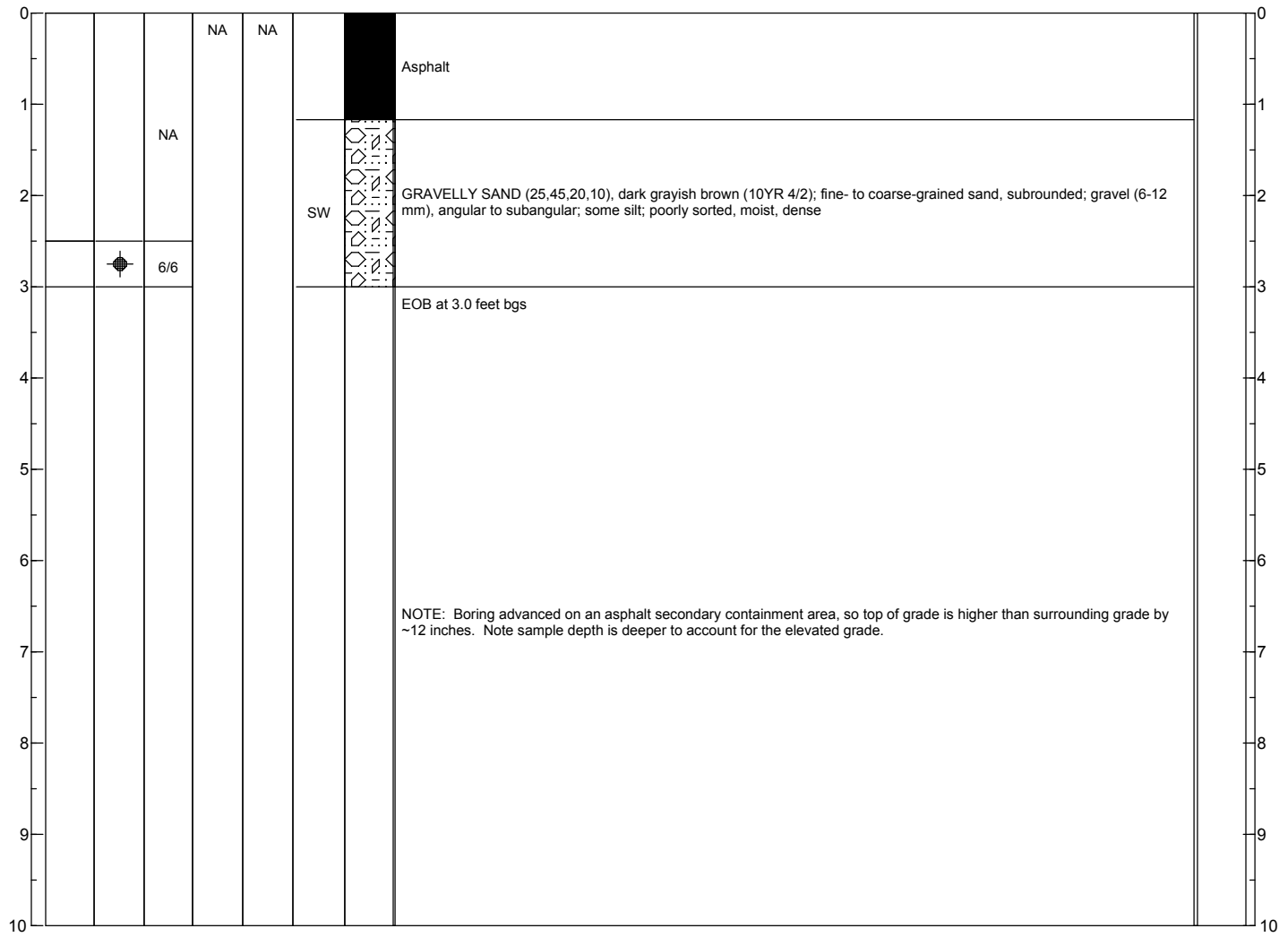


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX13B007A.2

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX13B010A**
Total Depth:	3 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090164.89	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020907.75	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	4.88 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

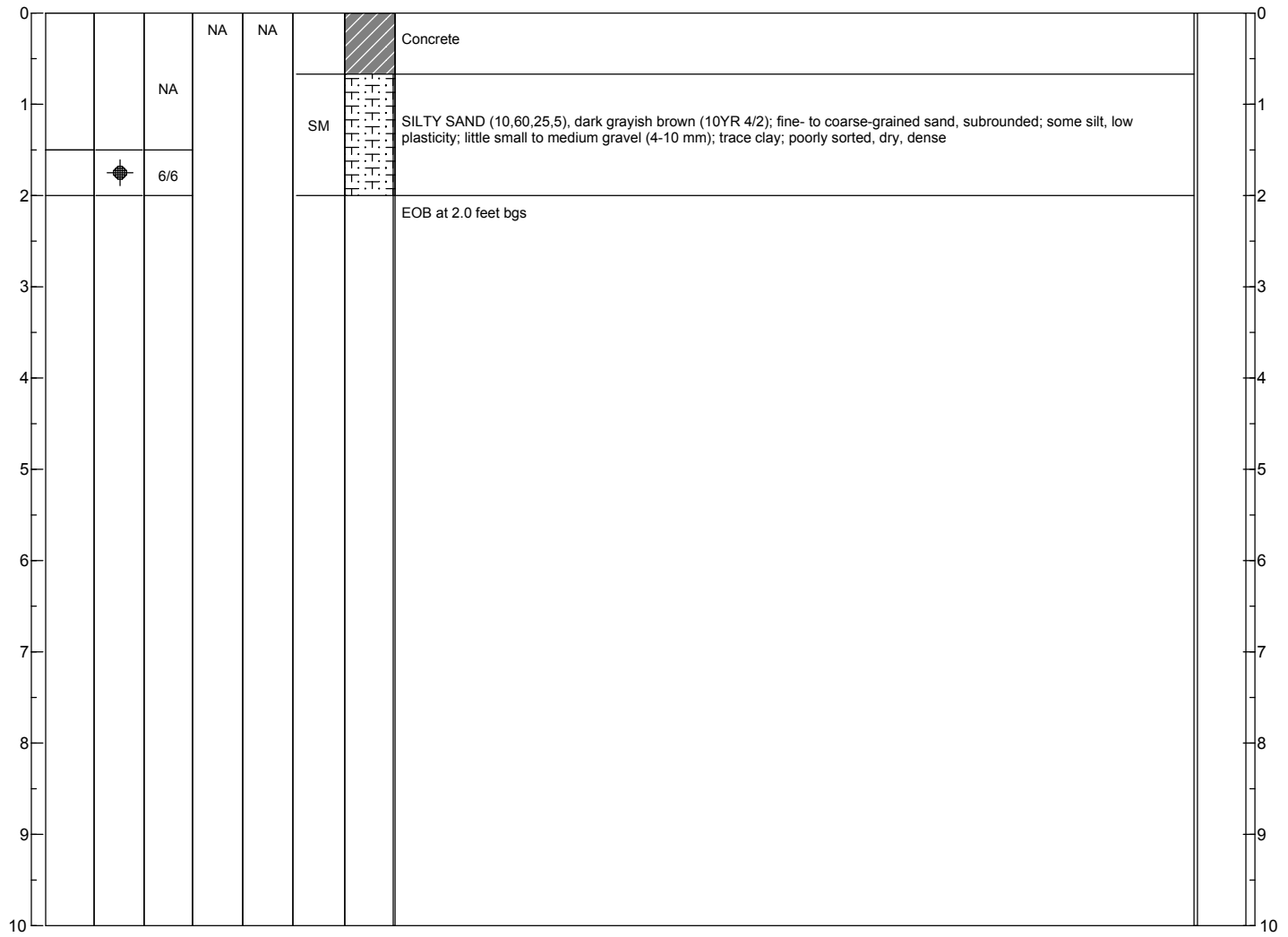


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX13B010A.3

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX13B010B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090131.64	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020875.26	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	4.63 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX13B010B.2

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX13B021A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089906.82	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020894.10	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	3.78 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

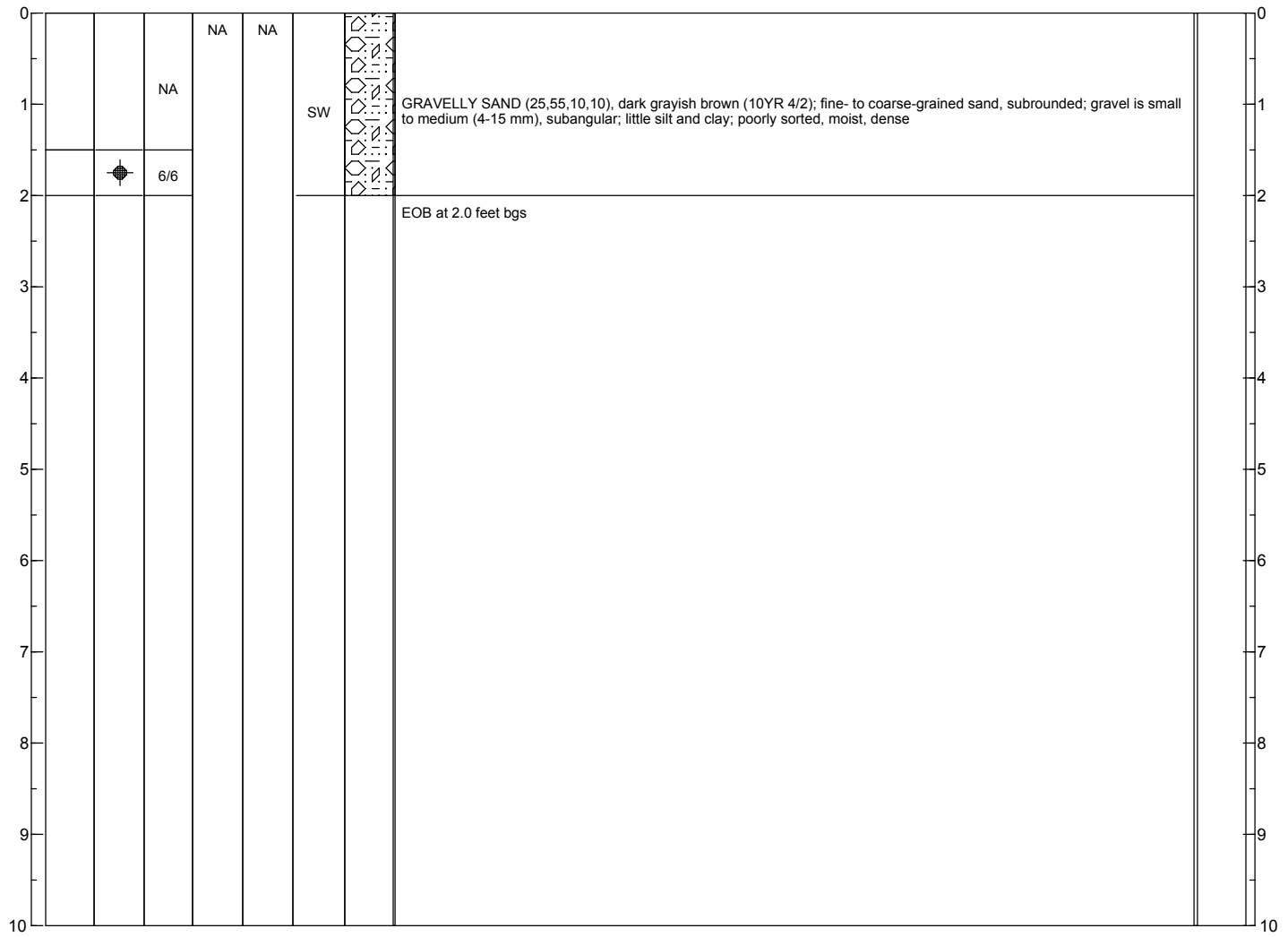
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (25,55,20,0), dark grayish brown (10YR 4/2); fine- to coarse-grained sand, subrounded; gravel (5-15 mm), angular to subangular; some silt; poorly sorted, moist, dense		0–1
1–2		✦	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX13B021A.2

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX13B023A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089973.19	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020936.52	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	4.19 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

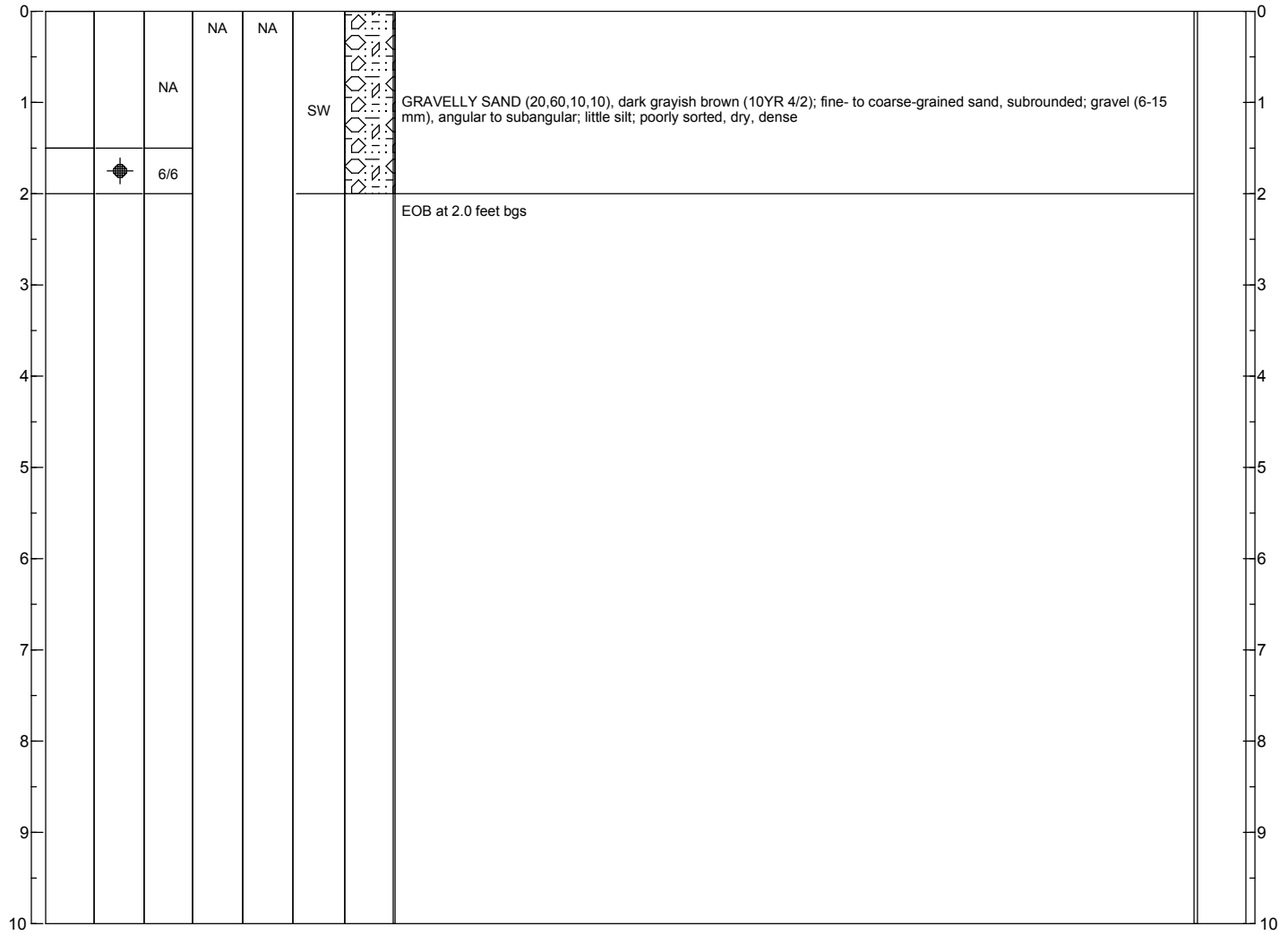


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX13B023A.2

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX13B023B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089922.36	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020937.00	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	4.41 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX13B023B.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX15B027A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089598.27	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6022251.68	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.24 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	ML		SANDY SILT (5,25,70,0), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; trace gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX15B027A.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX15B027B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089561.45	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6022251.65	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.18 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0										0
1			NA	NA	NA	ML		SANDY SILT (10,30,60,0), dark grayish brown (10YR 4/2); low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subangular to subrounded; trace clay; moist, stiff		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX15B027B.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX15B027B1**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2089548.83	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6022253.21	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.95 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			23/24	NA	NA	SM		SILTY SAND (10,60,30,0), brown (10YR 5/3), fine- to coarse-grained sand, subangular to subrounded; little gravel (5-8 mm), angular to subangular; poorly sorted, moist, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX15B027B1.2

SOIL BORING LOG

Date Drilled:	9/4/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B015A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090606.00	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021185.21	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.74 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Asphalt/concrete		0
1			NA			GW		SANDY GRAVEL (65,25,10,0), dark gray (10YR 4/1), small to medium gravel (5-15 mm), angular; fine- to coarse-grained sand, angular to rounded; little silt; poorly sorted, dry, dense		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B015A.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B027A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090710.12	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020543.03	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.37 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (30,50,20,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, subangular to subrounded, gravel (5-14 mm), angular to subangular; some silt; poorly sorted, moist, dense		0–1
1–2			6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B027A.2

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX36B027B**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090697.59	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020565.19	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.89 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		✦	20/24	NA	NA	SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subangular to subrounded; gravel (5-10 mm), angular to subangular; little silt; poorly sorted, dry, loose		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B027B.2

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX36B056A**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090571.93	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020460.77	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.93 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

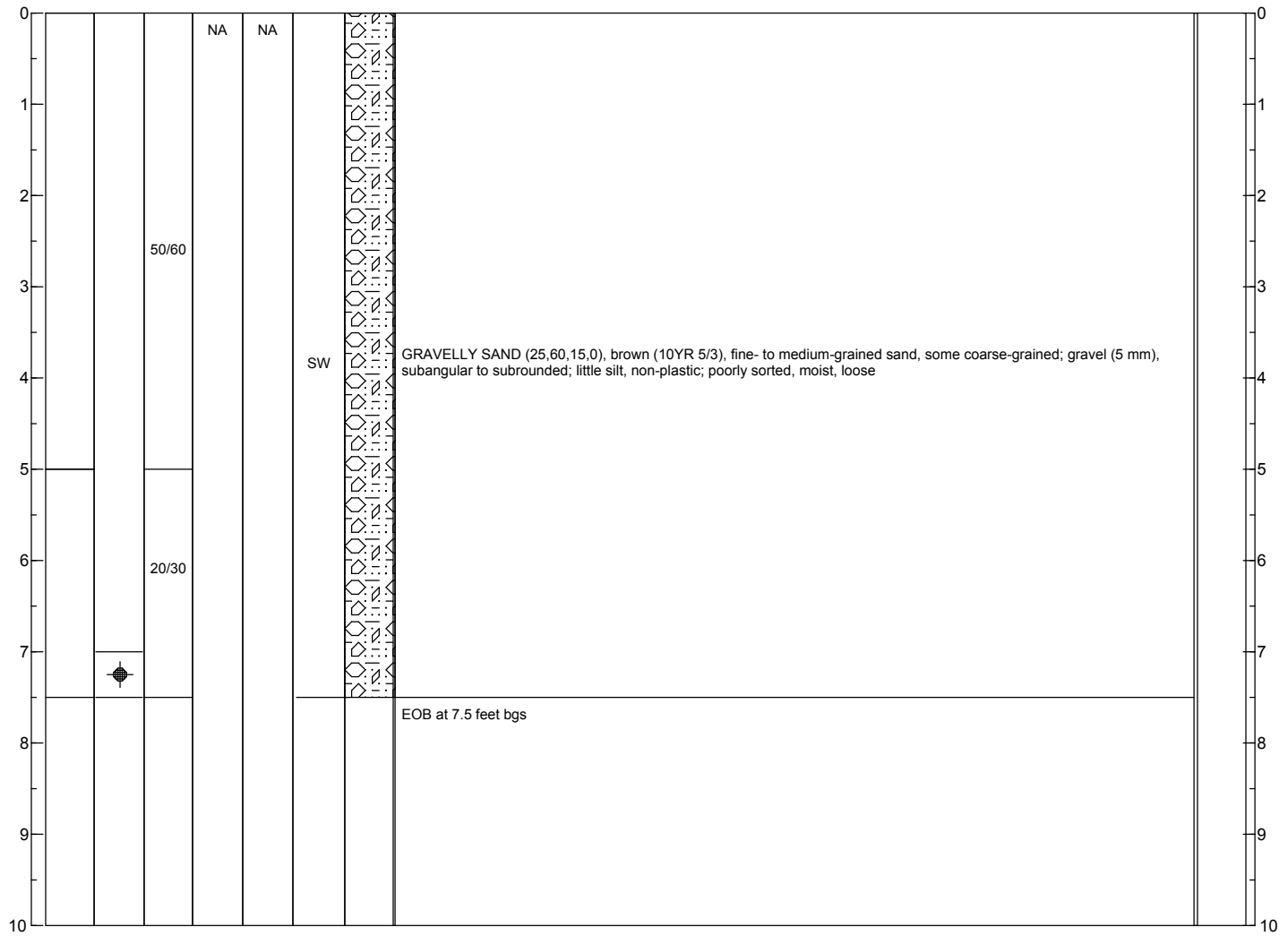
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			22/24	NA	NA	SM		SILTY SAND (15,55,30,0), brown (10YR 5/3), fine- to coarse-grained sand, subangular to subrounded; little gravel (5-9 mm), angular to subangular; poorly sorted, moist, medium dense		
2								EOB at 2 feet bgs		

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B056A.2

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX36B062A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090422.58	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020609.79	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.00 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

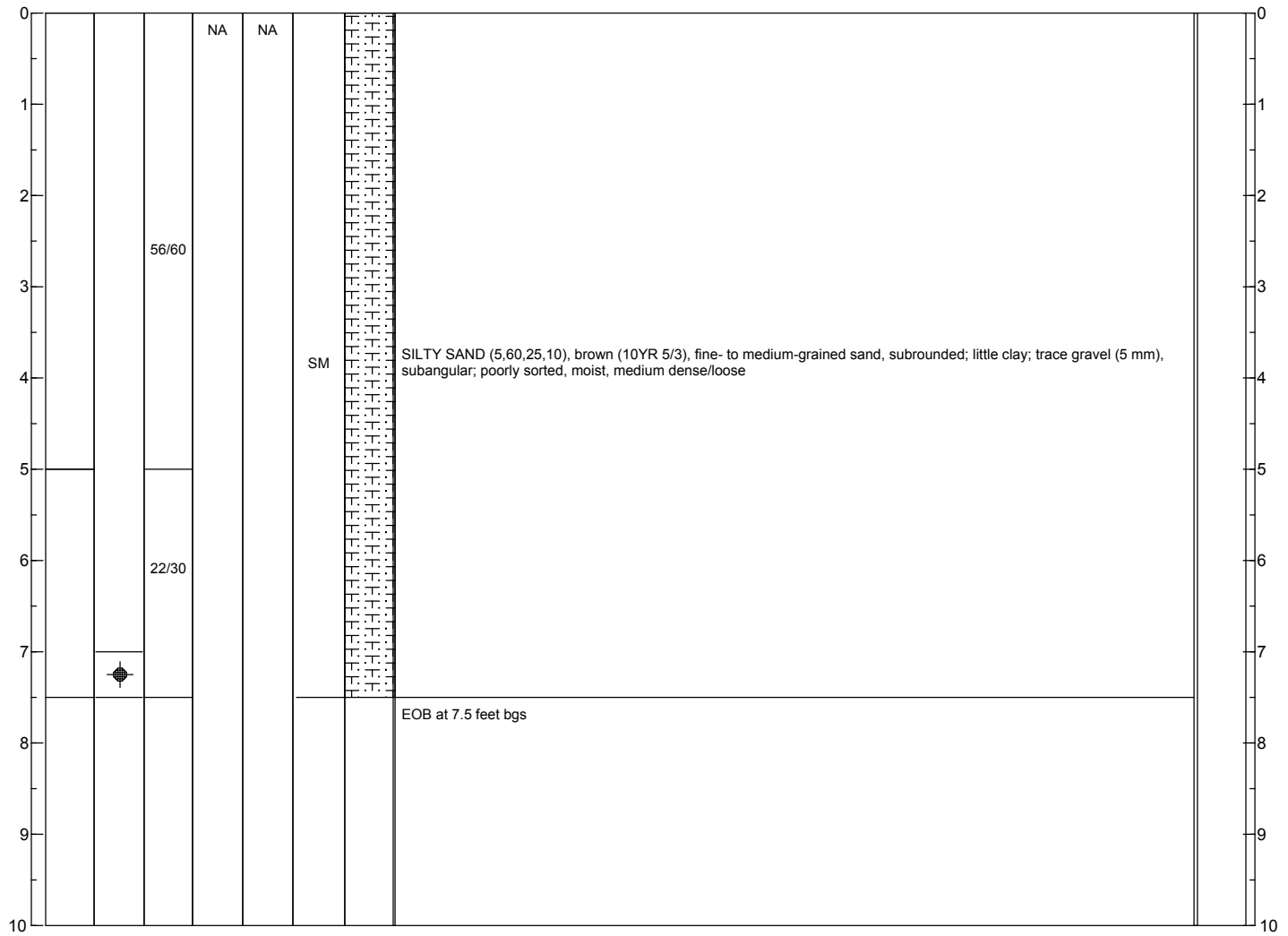


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B062A.7.5

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX36B062B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090403.32	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020651.19	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.96 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

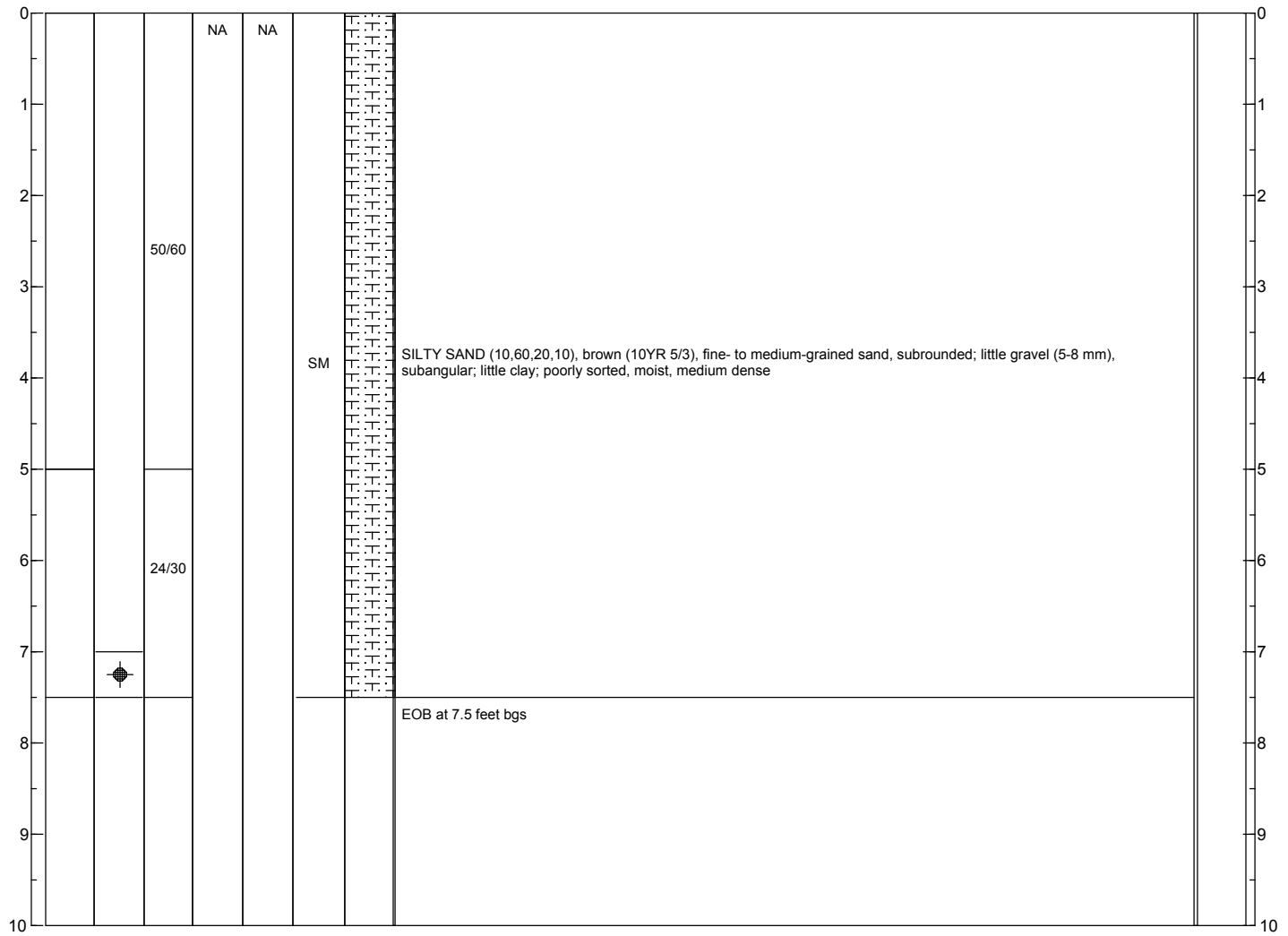


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B062B.7.5

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX36B063A**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090482.70	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020599.08	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.05 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

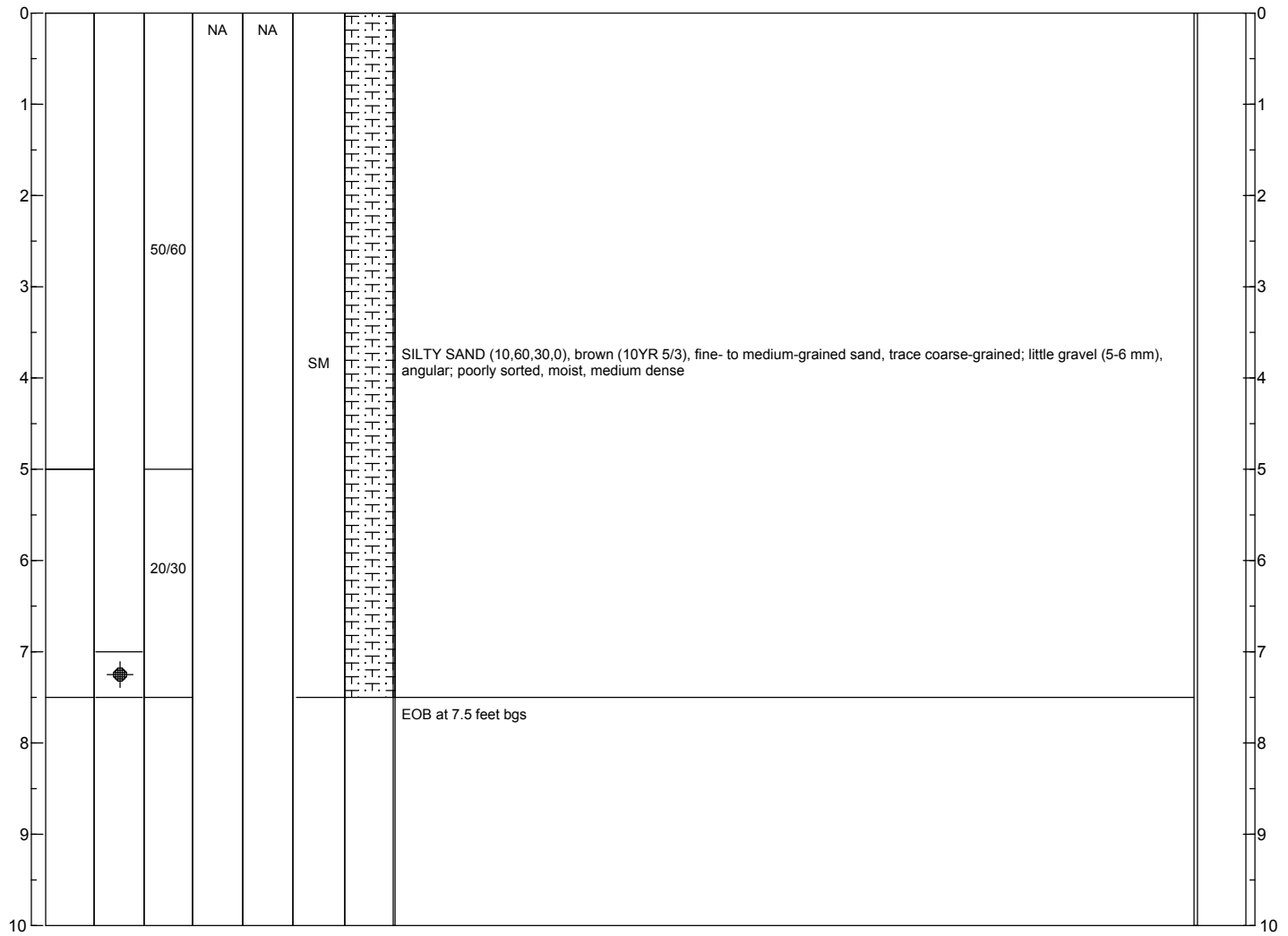


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B063A.7.5

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX36B063B**
Total Depth:	7.5 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090474.06	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020663.37	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.95 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B063B.7.5

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B072A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090772.10	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021015.17	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.84 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

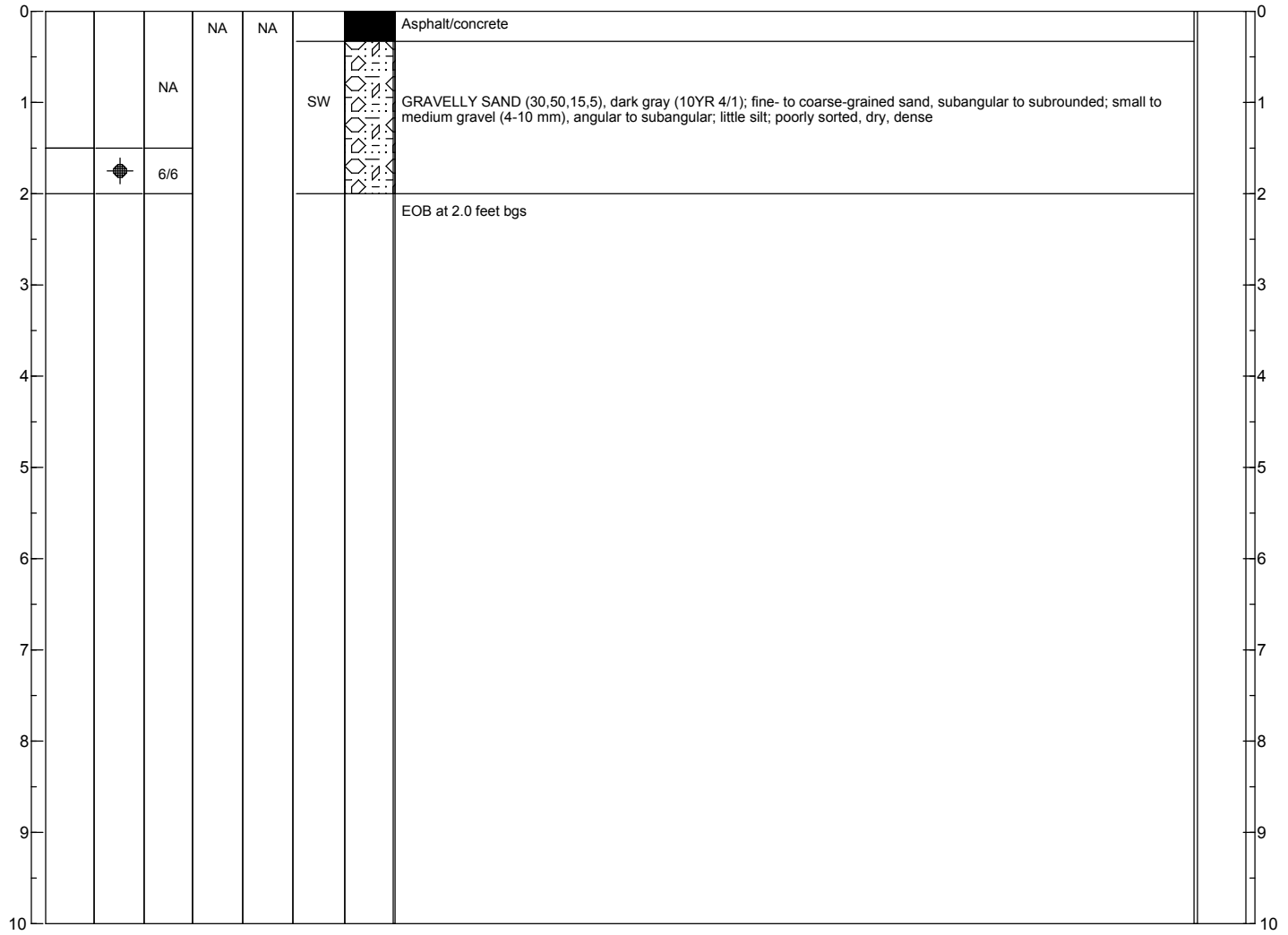
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Concrete		0
1			NA			SW		GRAVELLY SAND (25,60,15,0), dark gray (10YR 4/1); fine- to coarse-grained sand, subangular to subrounded; small to medium gravel (4-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B072A.2

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B072B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090749.37	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021065.97	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.00 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B072B.2

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B072C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090775.61	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021097.84	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.97 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

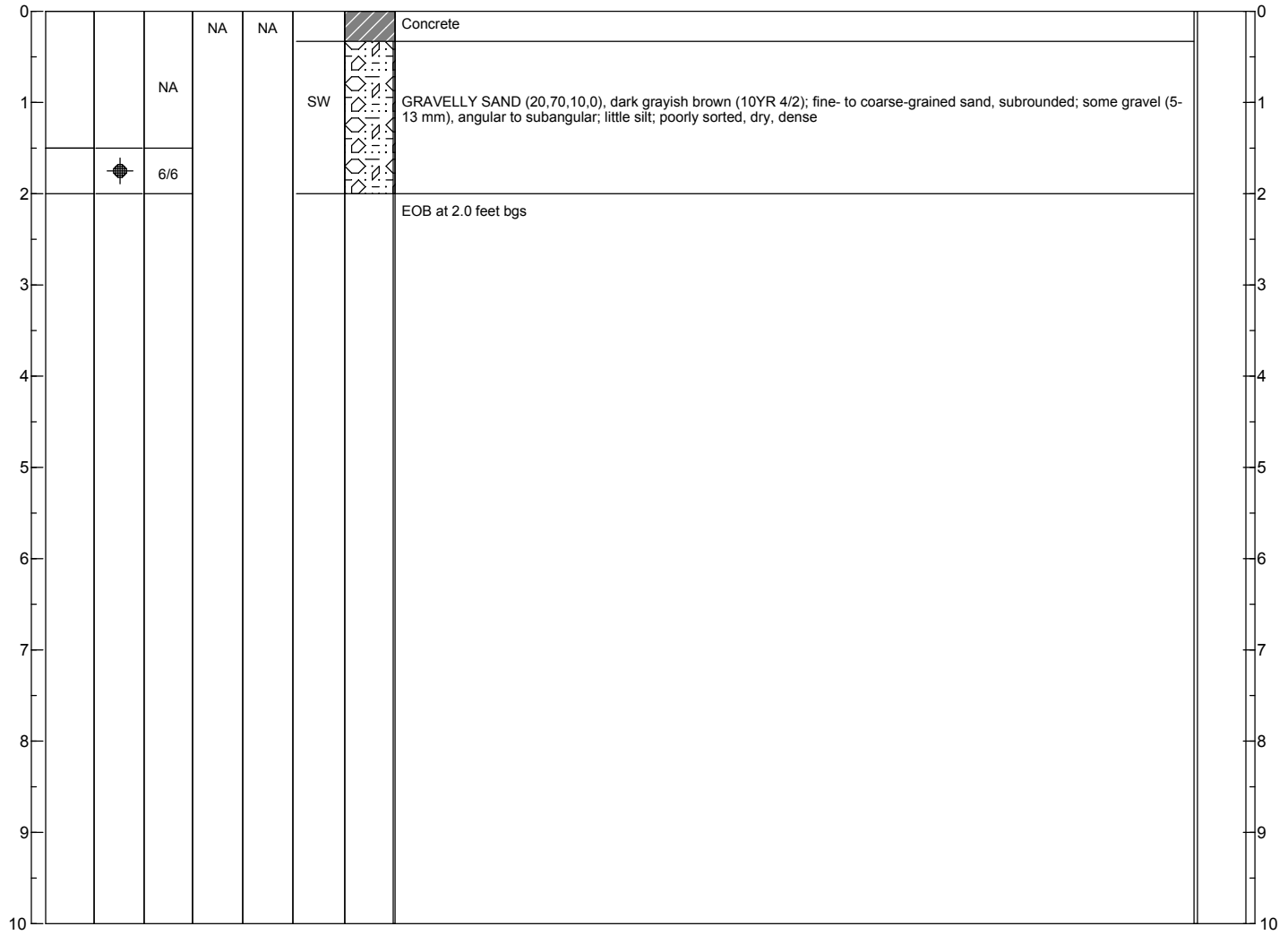
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Asphalt/concrete		0
1			NA			GW		SANDY GRAVEL (70,20,10,0), dark gray (10YR 4/1); small to medium gravel (5-12 mm), angular to subangular; fine- to coarse-grained sand, subangular to subrounded; little silt; poorly sorted, dry, dense		1
2			6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B072C.2

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B078A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090913.85	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020803.68	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.86 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

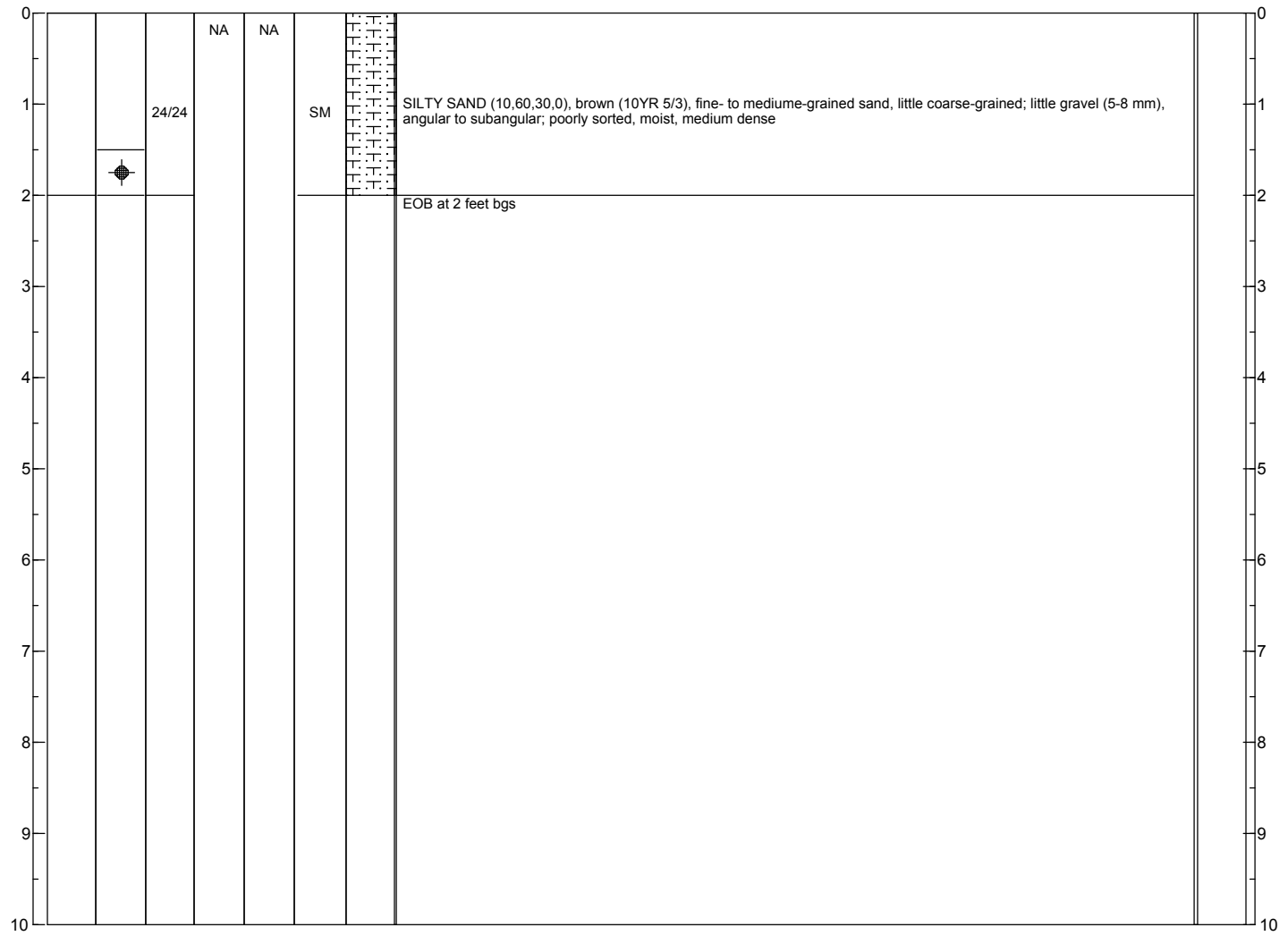


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B078A.2

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX36B105A**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090580.00	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020591.62	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.40 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B105A.2

SOIL BORING LOG

Date Drilled:	9/4/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B116A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091152.55	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020999.25	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.07 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Asphalt/concrete		0
1			NA			GW		SANDY GRAVEL (60,20,10,10), dark gray (10YR 4/1); small to medium gravel (5-13 mm), angular; fine- to coarse-grained sand, angular to subrounded; little silt/clay; poorly sorted, dry, dense		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B116A.2

SOIL BORING LOG

Date Drilled:	9/4/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B116B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091126.92	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021022.49	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.00 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

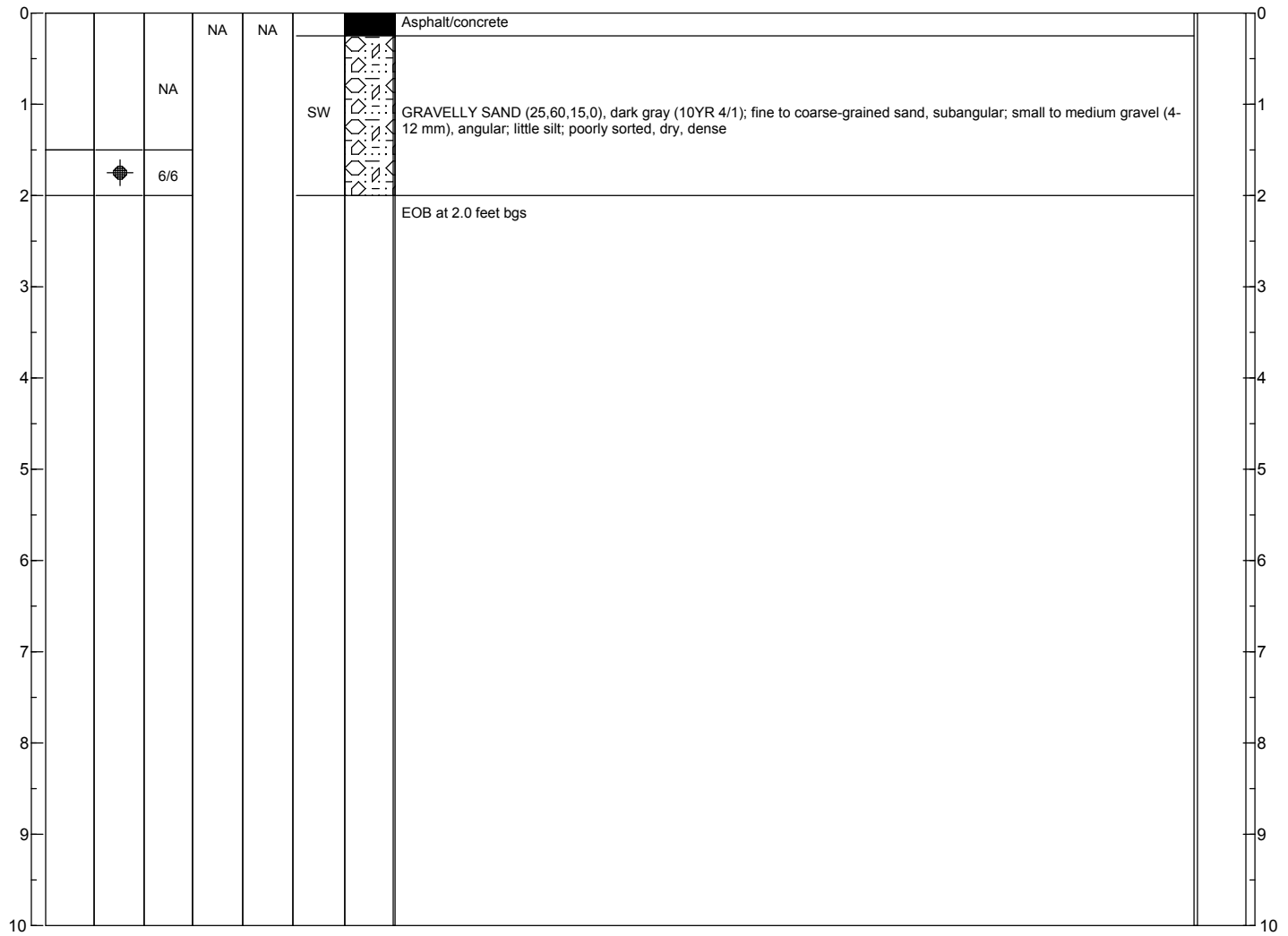
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Asphalt/concrete		0
1			NA			GW		SANDY GRAVEL (70,20,10,0), dark gray (10YR 4/1); small to medium gravel (4-15 mm), angular to subrounded; fine- to coarse-grained sand, angular to subrounded; little silt; poorly sorted, dry, dense. FILL		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B116B.2

SOIL BORING LOG

Date Drilled:	9/4/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B116C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht (ARCADIS US, Inc.)	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091131.75	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020972.05	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.38 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand, %silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B116C.2

SOIL BORING LOG

Date Drilled:	9/4/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B116D**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091097.12	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020999.50	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.78 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

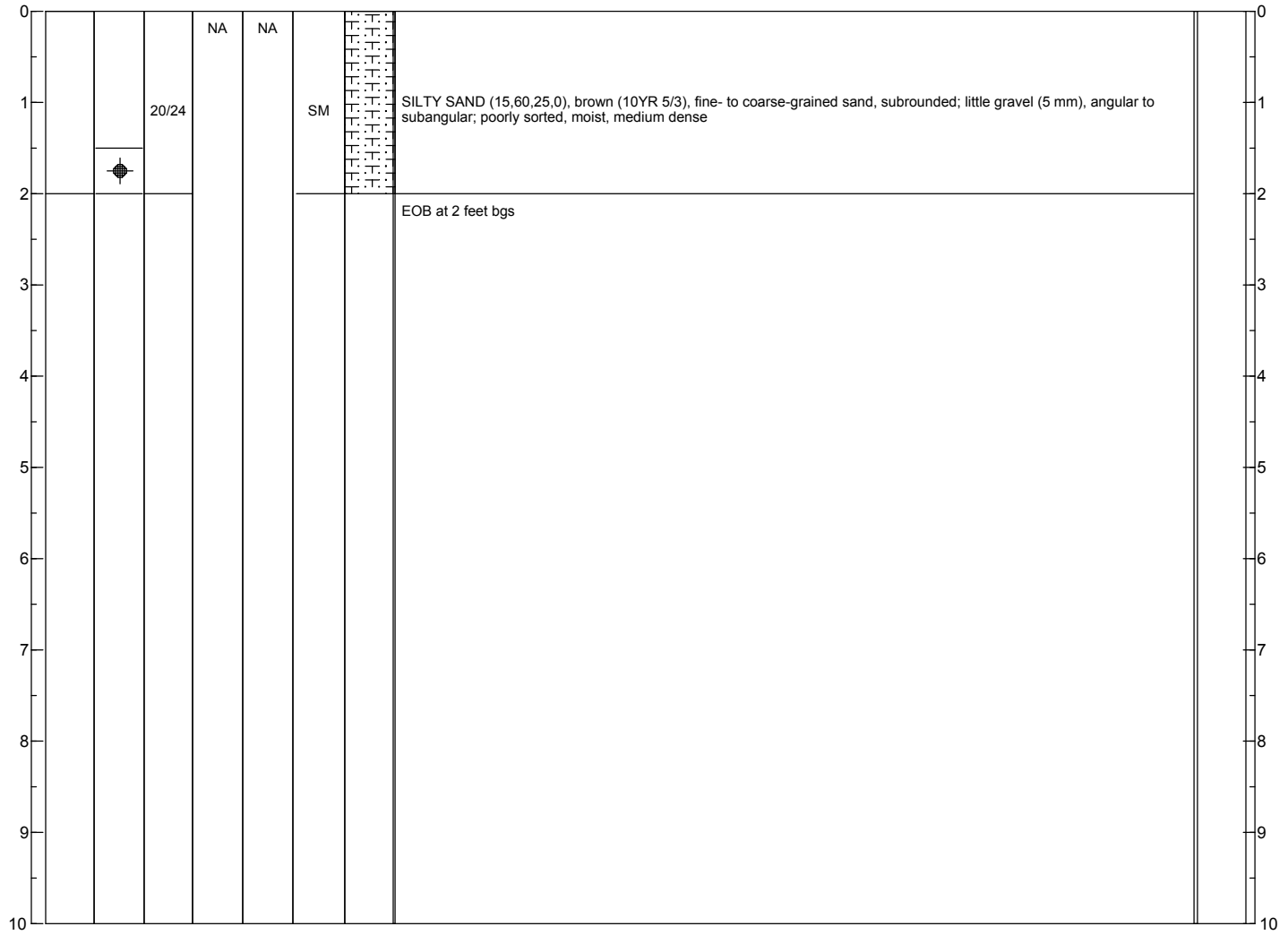
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Asphalt/concrete		0
1			NA			SW		GRAVELLY SAND (30,60,10,0), dark gray (10YR 4/1); fine- to coarse-grained sand, subangular to subrounded; gravel is small to medium (5-14 mm), subangular; little silt; poorly sorted, dry, dense		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B116D.2

SOIL BORING LOG

Date Drilled:	9/25/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX36B136A**
Total Depth:	2 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2090401.97		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6020566.92		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	6.88 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001

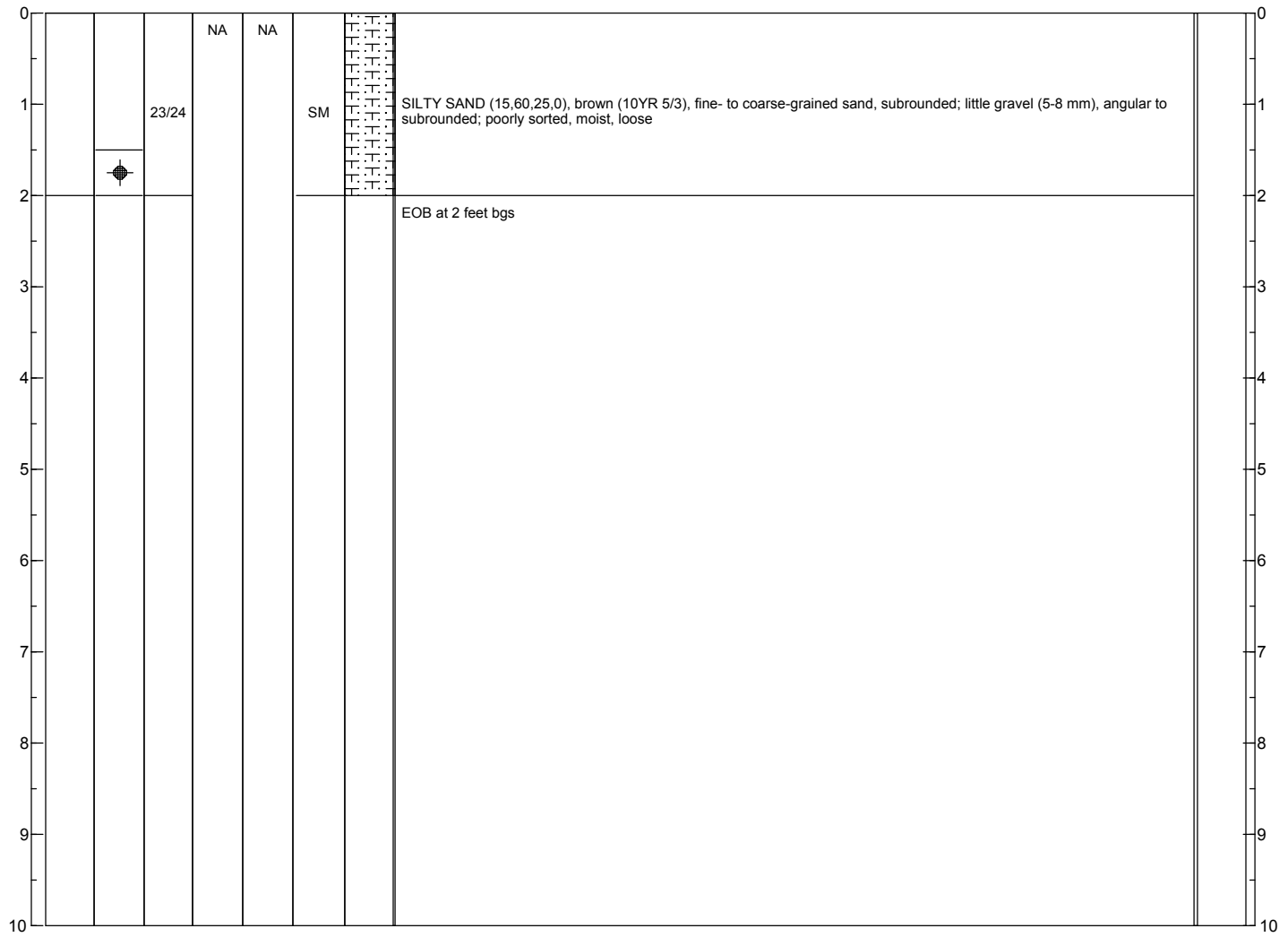


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B136A.2

SOIL BORING LOG

Date Drilled:	9/25/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX36B136B**
Total Depth:	2 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2090376.61		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6020577.05		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	6.80 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001

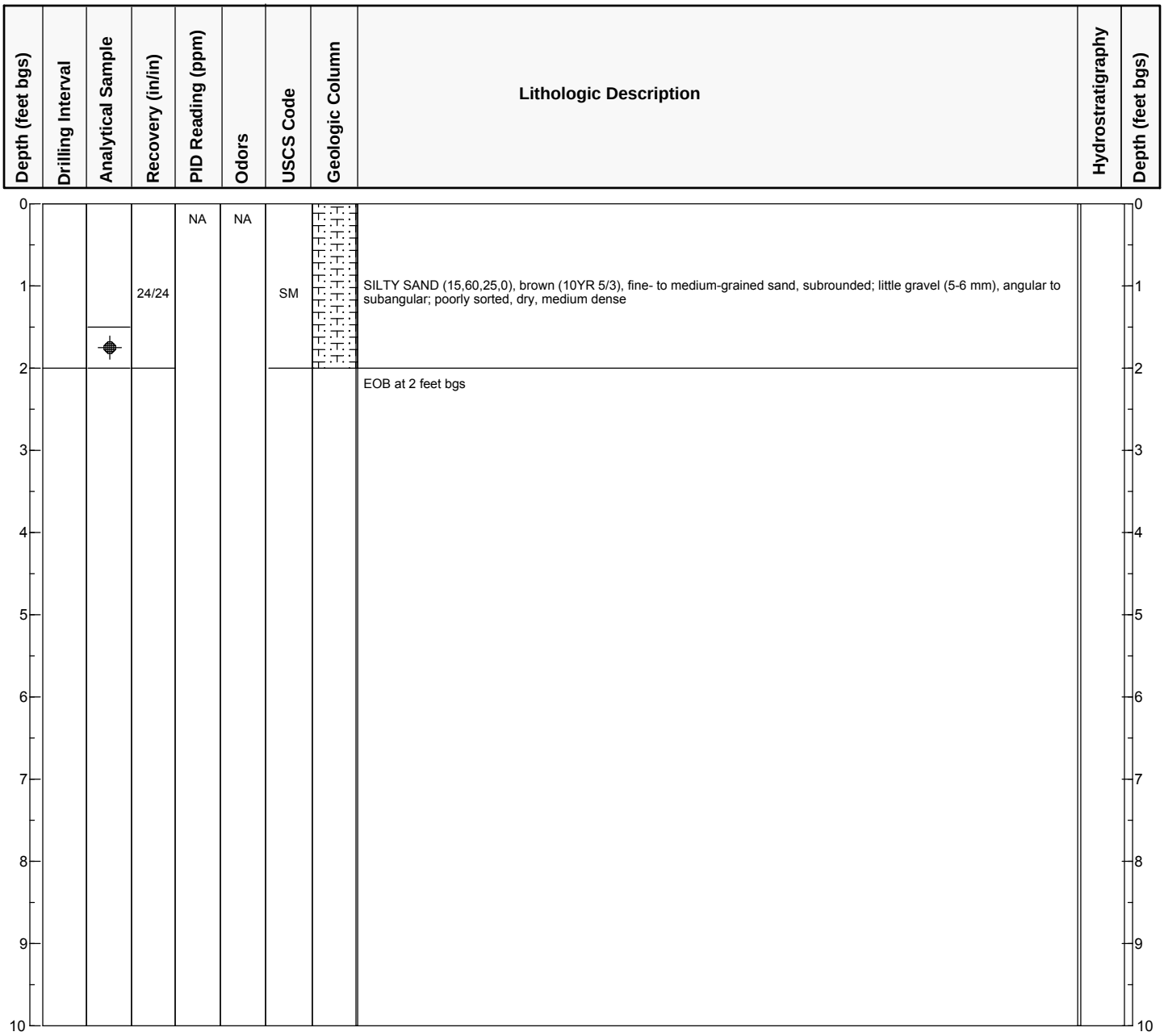


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B136B.2

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX36B136C**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090360.30	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020566.30	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.83 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B136C.2

SOIL BORING LOG

Date Drilled:	9/6/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B138A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090794.43	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020599.90	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.14 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (25,60,15,0), dark grayish brown (10YR 4/2); fine- to coarse-grained sand, subangular to subrounded, gravel (5-15 mm), angular to subangular; little silt; poorly sorted, moist, dense		0–1
1–2			6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B138A.2

SOIL BORING LOG

Date Drilled:	9/4/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B163A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090592.51	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021127.73	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.04 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Asphalt/concrete		0
1			NA			SW		GRAVELLY SAND (25,50,15,0), dark gray (10YR 4/1); fine- to coarse-grained sand, angular to subrounded; gravel is small to medium (5-12 mm), angular to subangular; little silt and clay; poorly sorted, dry, dense		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B163A.2

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B180A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090401.01	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020727.96	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.20 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA					0
1			NA			SM		SILTY SAND (20,50,30,0), dark grayish brown (10YR 4/3); fine- to medium grained sand, little coarse grained; some silt; some gravel (5-15 mm), angular to subangular; poorly sorted, dry, dense		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B180A.2

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B180B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090362.31	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020726.56	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	7.07 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (50,30,20,0), dark grayish brown (10YR 4/2); gravel (5-14 mm), angular to subangular; fine- to coarse-grained sand, subrounded; some silt; poorly sorted, moist, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B180B.2

SOIL BORING LOG

Date Drilled:	9/5/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX36B180C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090324.01	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020744.37	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.69 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	GW		SANDY GRAVEL (60,30,10,0), dark grayish brown (10YR 4/2); gravel (5-14 mm), angular to subangular; fine- to coarse-grained sand, subrounded; little silt; poorly sorted, moist, dense		0–1
1–2			6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B180C.2

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX36B208A**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090387.52	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020588.49	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.90 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		✦	23/24	NA	NA	SM		SILTY SAND (15,60,25,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded; little gravel (5 mm), angular to subangular; poorly sorted, moist, medium dense		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B208A.2

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX36B208B**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090365.51	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020605.98	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.98 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		⌖	20/24	NA	NA	SM		SILTY SAND (10,60,30,0), brown (10YR 5/3), fine- to coarse-grained sand, subangular to subrounded; little gravel (5-8 mm), angular to subangular; poorly sorted, moist, medium dense		0–1
2								EOB at 2 feet bgs		2
3–10										3–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B208B.2

SOIL BORING LOG

Date Drilled:	9/25/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX36B208C**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090346.07	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6020588.62	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.82 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1		✦	22/24	NA	NA	SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; gravel (5-7 mm), angular to subangular; little silt; poorly sorted, moist/dry, loose		0–1
1–2								EOB at 2 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX36B208C.2

SOIL BORING LOG

Date Drilled:	9/7/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX380803A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090032.35	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6021892.83	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	5.05 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

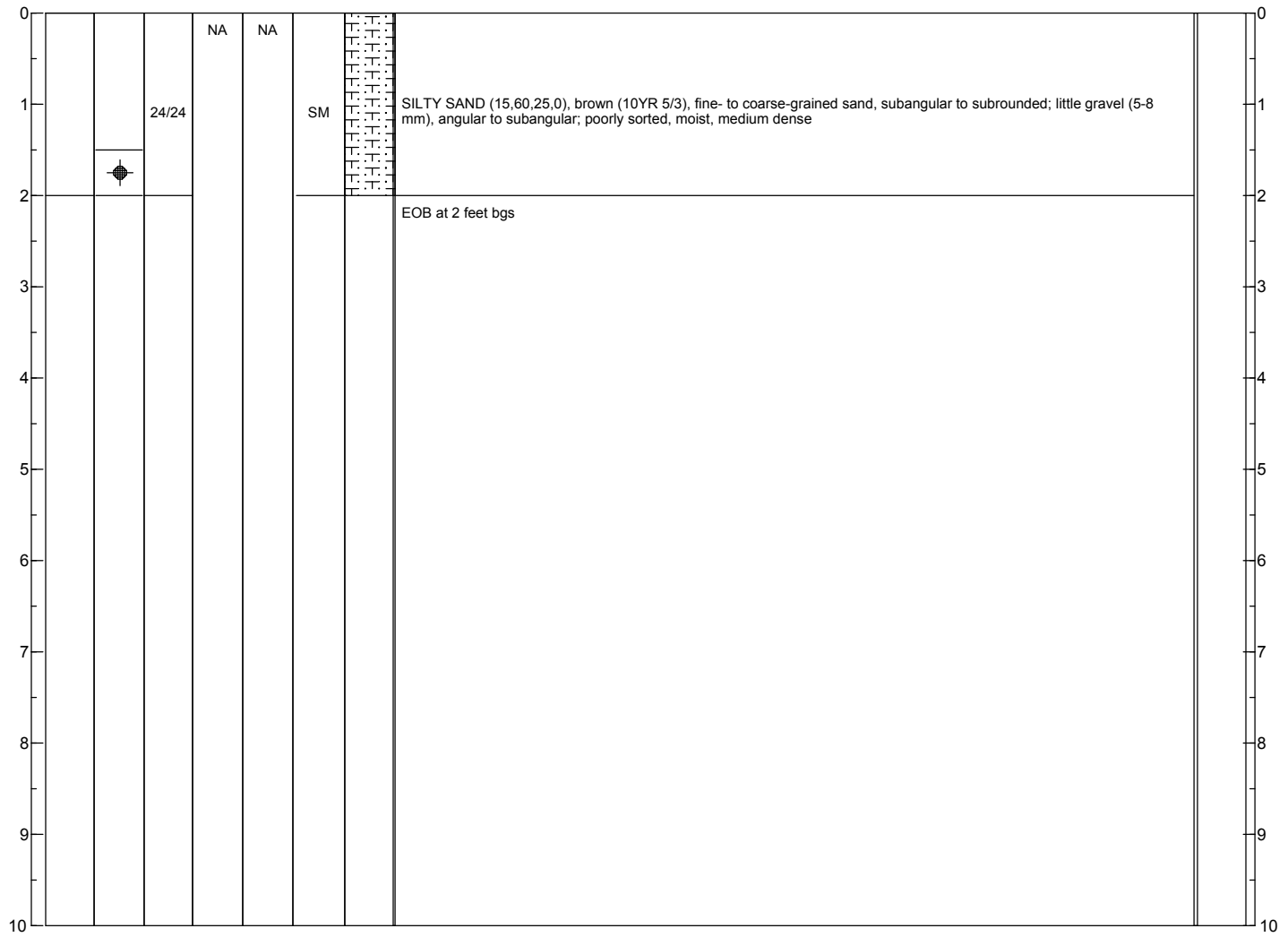
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (15,55,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; little gravel (5-7 mm), subangular to subrounded; poorly sorted, moist/dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX380803A.2

SOIL BORING LOG

Date Drilled:	9/27/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX38SS01A**
Total Depth:	2 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2090323.38		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6021110.51		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	5.22 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001

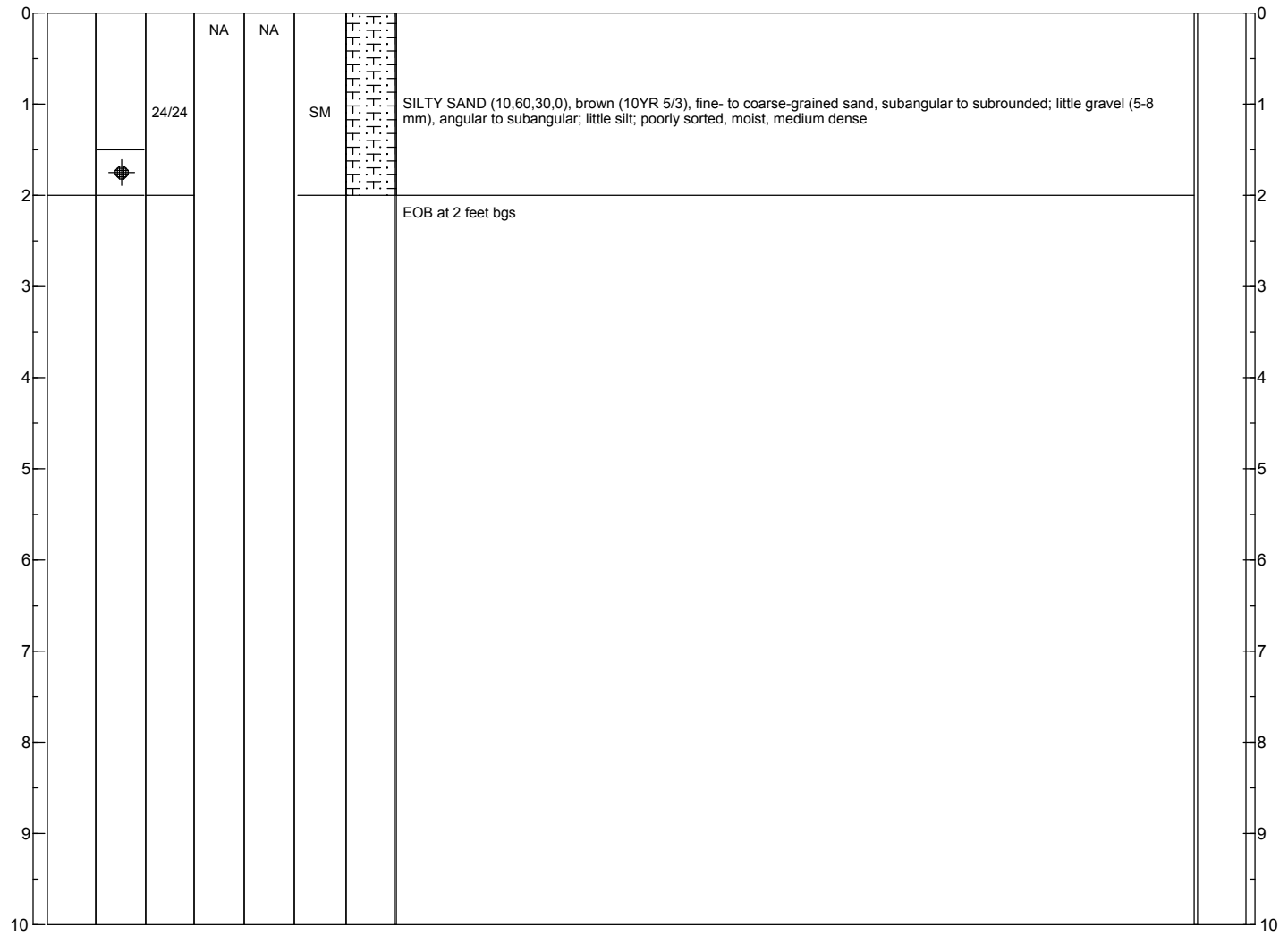


Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX38SS01A.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX38SS01B**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090317.00	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021128.61	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	6.38 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX38SS01B.2

SOIL BORING LOG

Date Drilled:	9/27/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX38SS01C**
Total Depth:	2 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2090308.22	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6021095.76	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	5.99 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			22/24	NA	NA	SM		SILTY SAND (10,60,30,0), brown (10YR 5/3), fine- to coarse-grained sand, subangular to subrounded; little gravel (5-8 mm), angular to subangular; poorly sorted, moist, medium dense		
2								EOB at 2 feet bgs		

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX38SS01C.2

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX52B009A**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091614.45	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6015765.27	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	9.09 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–4			46/48	NA	NA	SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; gravel (5-7 mm), angular to subangular; little silt; poorly sorted, moist/dry, loose		0–4
4								EOB at 4 feet bgs		4
5–10										5–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX52B009A.4

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX52B009B**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091579.90	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6015762.02	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.13 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–4			45/48	NA	NA	SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; gravel (5-7 mm), angular to subangular; little silt; poorly sorted, moist/dry, loose		0–4
4								EOB at 4 feet bgs		4
5–10										5–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX52B009B.4

SOIL BORING LOG

Date Drilled:	9/19/2012	**Drilling Contractor:**	PeneCore Drilling	**ID:**	**EX52B009C**
Total Depth:	4 feet bgs	**Driller's Name:**	S. Aldrid, D. Sanchez		
Logged By:	Drew Feucht	**Drilling Method:**	Direct Push	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Core Barrel	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091562.16	**Rig Type:**	Geoprobe 5600		Hunters Point Naval Shipyard
Easting (X):	6015733.58	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	8.43 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

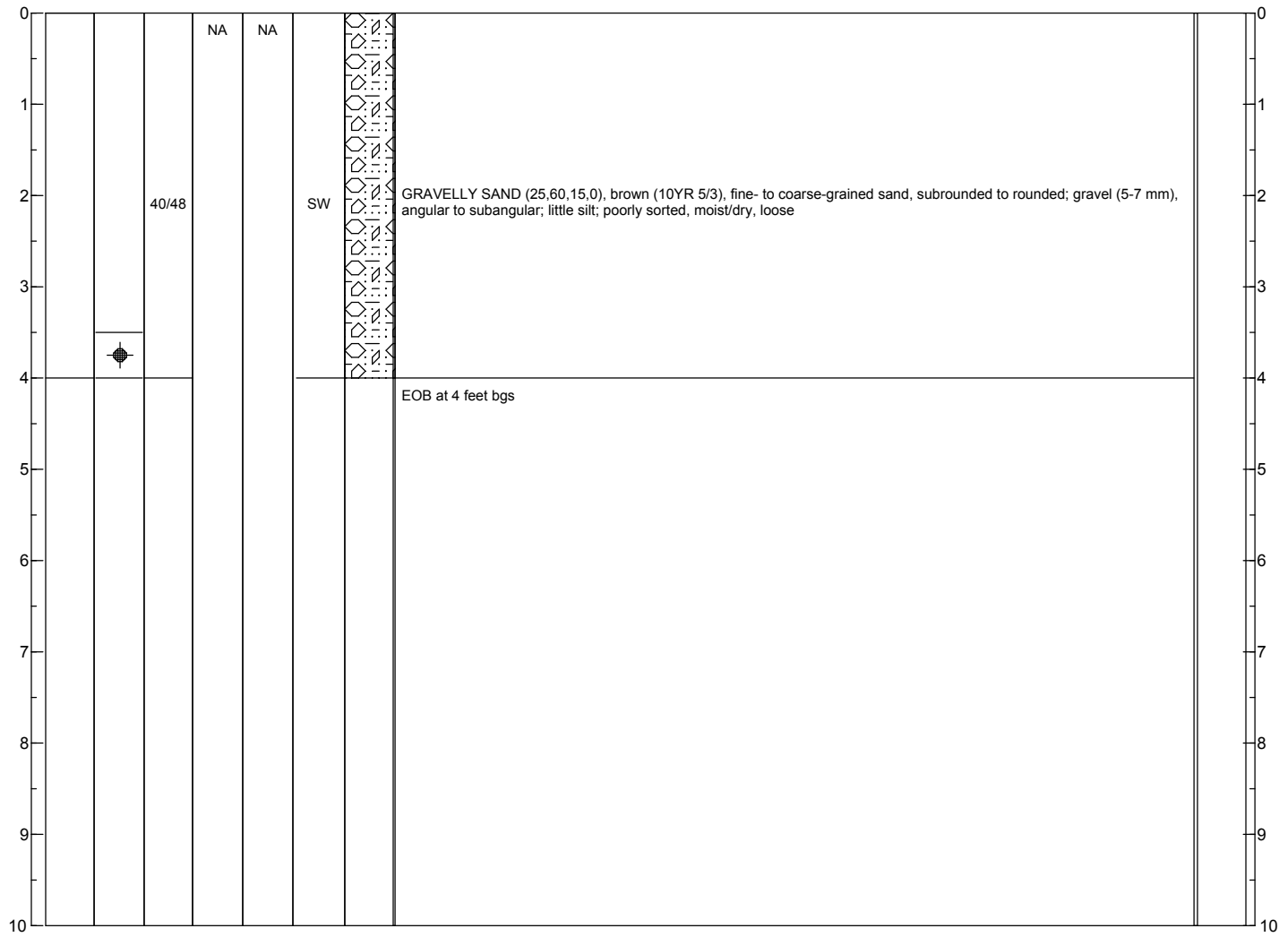
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–4			48/48	NA	NA	SW		GRAVELLY SAND (25,60,15,0), brown (10YR 5/3), fine- to coarse-grained sand, subrounded to rounded; gravel (5-7 mm), angular to subangular; little silt; poorly sorted, moist/dry, loose		0–4
4								EOB at 4 feet bgs		4
5–10										5–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX52B009C.4

SOIL BORING LOG

Date Drilled:	9/19/2012		**Drilling Contractor:**	PeneCore Drilling	**ID: EX52B009D**
Total Depth:	4 feet bgs		**Driller's Name:**	S. Aldrid, D. Sanchez	
Logged By:	Drew Feucht		**Drilling Method:**	Direct Push	**Client:** Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips	PG No. 6887	**Sampling Method:**	Core Barrel	**Location:** Parcel E Soil Excavation
Northing (Y):	2091604.91		**Rig Type:**	Geoprobe 5600	Hunters Point Naval Shipyard
Easting (X):	6015727.74		**Bit Size:**	3-inches	San Francisco, California
Surface Elevation:	9.93 ft amsl		**Sample Length**	6-inches	**Project #:** CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX52B009D.4

SOIL BORING LOG

Date Drilled:	9/10/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX52SS02A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2092933.24	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6017622.33	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	21.12 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (10,60,30,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt, little gravel (5-7 mm), subangular to subrounded; poorly sorted, moist/dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX52SS02A.2

SOIL BORING LOG

Date Drilled:	9/10/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX52SS02B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2092948.32	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6017655.04	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	21.94 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,70,25,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt, trace gravel (5-7 mm), subangular to subrounded; poorly sorted, moist/dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX52SS02B.2

SOIL BORING LOG

Date Drilled:	9/10/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX52SS02C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2092934.95	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6017683.37	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	21.13 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (10,65,25,0), dark grayish brown (10YR 4/2); fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt, little gravel (5-7 mm), subangular to subrounded; poorly sorted, moist/dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX52SS02C.2

SOIL BORING LOG

Date Drilled:	9/10/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX52SS06A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2092333.50	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6017107.40	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	15.76 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0										0
1			NA	NA	NA	ML		SANDY SILT (10,30,55,5), dark grayish brown (10YR 4/2), low plasticity; some fine-grained sand, rounded; little gravel (5-8 mm), subuangular to subrounded; trace clay; dry, stiff		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX52SS06A.2

SOIL BORING LOG

Date Drilled:	9/10/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX52SS06B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2092343.96	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6017139.09	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	16.41 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SM		SILTY SAND (5,60,35,0), dark grayish brown (10YR 4/2), fine- to medium-grained sand, little coarse-grained, subrounded to rounded; some silt; trace gravel (5-7 mm), subangular to subrounded; poorly sorted, moist/dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX52SS06B.2

SOIL BORING LOG

Date Drilled:	9/10/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX56B021A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2092014.23	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020226.73	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.89 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

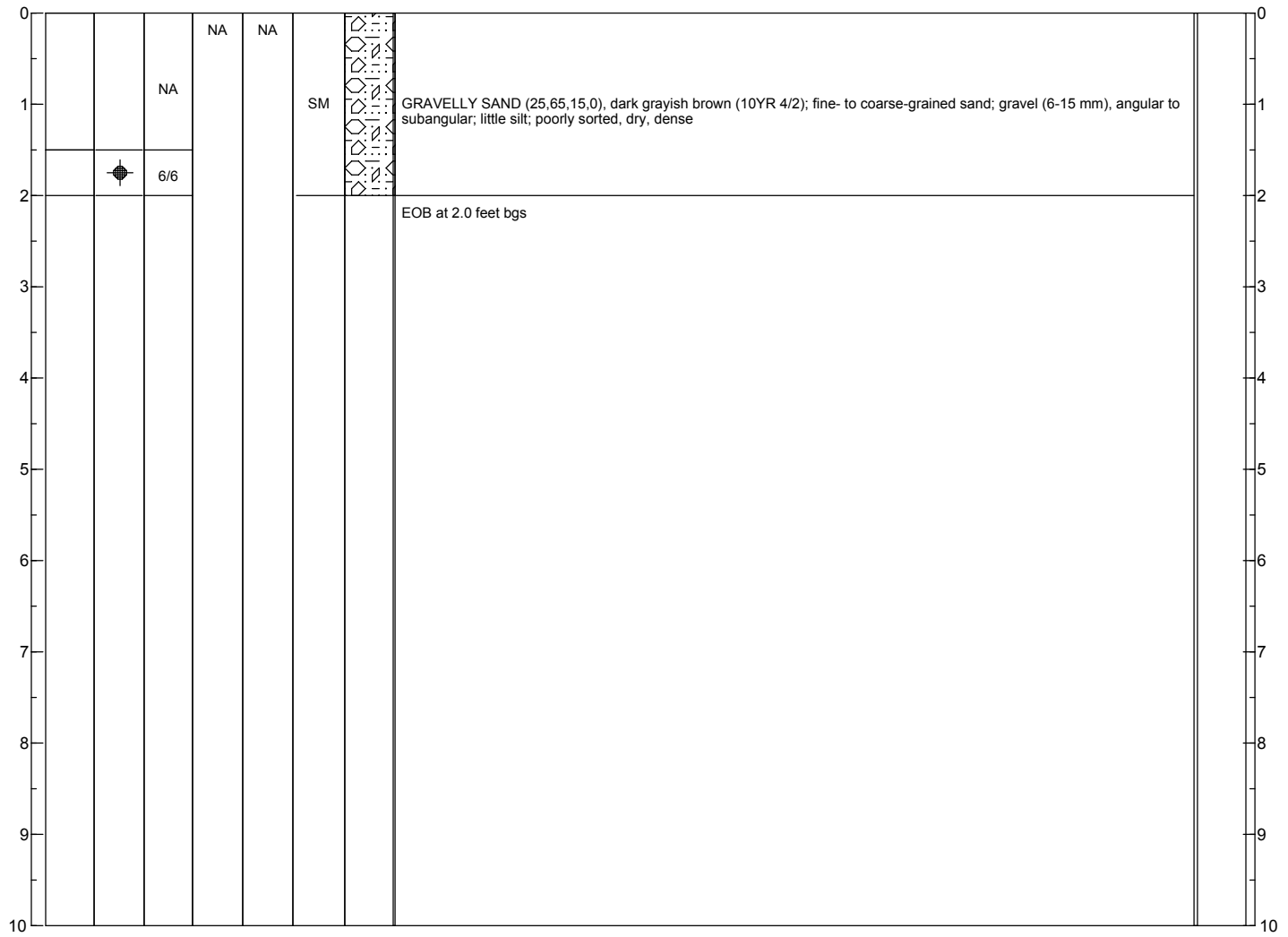
Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0–1			NA	NA	NA	SW		GRAVELLY SAND (30,55,15,0), dark grayish brown (10YR 4/2); fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		0–1
1–2		⌖	6/6					EOB at 2.0 feet bgs		1–2
2–10										2–10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX56B021A.2

SOIL BORING LOG

Date Drilled:	9/10/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX56B021B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091990.33	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020203.43	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	13.12 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001



Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX56B021B.2

SOIL BORING LOG

Date Drilled:	9/10/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX56B021C**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2091984.00	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6020217.77	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.97 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0										0
1			NA	NA	NA	SW		GRAVELLY SAND (30,50,20,0), dark grayish brown (10YR 4/2); fine- to coarse-grained sand, subrounded; gravel (6-15 mm), angular to subangular; little silt; poorly sorted, dry, dense		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX56B021C.2

SOIL BORING LOG

Date Drilled:	9/10/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX72SS23A**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2092044.48	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019773.57	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.24 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA			Asphalt		0
1			NA			SM		SILTY SAND (15,50,30,5), dark grayish brown (10YR 4/2); fine- to medium-grained sand, subangular to subrounded; some silt; little gravel (4-8 mm), angular to subangular; trace clay; poorly sorted, moist/dry, dense		1
2			6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX72SS23A.2

SOIL BORING LOG

Date Drilled:	9/10/2012	**Drilling Contractor:**	Rice General	**ID:**	**EX72SS23B**
Total Depth:	2 feet bgs	**Driller's Name:**	Jerry Rice, Jorge Hernandez		
Logged By:	Drew Feucht	**Drilling Method:**	Hand Auger	**Client:**	Naval Facilities Engineering Command SW
Reviewed By:	Hollis Phillips PG No. 6887	**Sampling Method:**	Slide Hammer	**Location:**	Parcel E Soil Excavation
Northing (Y):	2092069.54	**Rig Type:**	NA		Hunters Point Naval Shipyard
Easting (X):	6019764.02	**Bit Size:**	3-inches		San Francisco, California
Surface Elevation:	12.65 ft amsl	**Sample Length**	6-inches	**Project #:**	CA000761.0001

Depth (feet bgs)	Drilling Interval	Analytical Sample	Recovery (in/in)	PID Reading (ppm)	Odors	USCS Code	Geologic Column	Lithologic Description	Hydrostratigraphy	Depth (feet bgs)
0				NA	NA					0
1			NA			SM		SILTY SAND (10,50,30,10), dark grayish brown (10YR 4/2); fine- to medium-grained sand, subangular to subrounded; some silt; little gravel (4-8 mm), angular to subangular; little clay; poorly sorted, moist/dry, dense		1
2		⌖	6/6					EOB at 2.0 feet bgs		2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10

Abbreviations: bgs = below ground surface, NA = not applicable, in/in = inches per inches, PID = photoionization detector, ppm = parts per million, USCS = Unified Soil Classification System, (65,25,10,0) = %gravel,%sand,%silt,%clay; EOB = end of boring; ft amsl = feet above mean sea level; Northing and Easting in CA NAD83 Z3; Elevation in NGVD29

Samples Collected: EX72SS23B.2

Appendix C: Waste Disposal Documentation

NO. 701885

NON-HAZARDOUS WASTE DATA FORM

TRACKING # 14334

BESI # 212801

GENERATOR

Generator's Name and Mailing Address

US NAVY BRAC, PMO-W (HP)
1 AVE. OF THE PALMS, SUITE 161
SAN FRANCISCO, CA 94130

Generator's Site Address (if different than mailing address)

HUNTERS POINT NAVAL SHIPYARD
PARCEL E, HUNTERS POINT NAVAL SHIPYARD
SAN FRANCISCO, CA

Generator's Phone: 415-743-4713

Container type removed from site:

☒ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☐ Other _____

Quantity 2

Container type transported to receiving facility:

☐ Drums ☒ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☐ Other _____

Quantity _____ Volume _____

WASTE DESCRIPTION NON-HAZARDOUS WATER

GENERATING PROCESS WELL PURGING / DECON WATER

COMPONENTS OF WASTE	PPM	%
1. WATER		99-100%
2. TPH		<1%

COMPONENTS OF WASTE	PPM	%
3.		
4.		

Waste Profile _____ PROPERTIES: pH 7-10 ☐ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: _____

Generator Printed/Typed Name: Michael Mentink on behalf of: ~~Douglas DeLong~~ | Signature: Michael Mentink | Month 12 | Day 19 | Year 12

The Generator certifies that the waste as described is 100% non-hazardous

TRANSPORTER

Transporter 1 Company Name: BELSHIRE | Phone#: 949-460-5200

Transporter 1 Printed/Typed Name: Ron Green | Signature: Ron Green | Month 12 | Day 19 | Year 12

Transporter Acknowledgment of Receipt of Materials

Transporter 2 Company Name: NIETO & SONS TRUCKING, INC. | Phone#: 714-990-6855

Transporter 2 Printed/Typed Name: | Signature: | Month | Day | Year

Transporter Acknowledgment of Receipt of Materials

RECEIVING FACILITY

Designated Facility Name and Site Address

DEMENNO KERDOON
2000 N. ALAMEDA ST.
COMPTON, CA 90222

Phone#: 310-537-7100

Printed/Typed Name: | Signature: | Month | Day | Year

Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
CA0001019694	1	(510) 697-7738	005773984 FLE

5. Generator's Name and Mailing Address
US Navy BRAC, PMO-W (HP)
1 Ave. of the Palms, Suite 161
San Francisco, CA 94130
Generator's Phone: (415) 743-4713

Generator's Site Address (if different than mailing address)
Hunters Point Naval Shipyard
Parcel E, Hunters Point Naval Shipyard, Innes/Donahue St.
San Francisco, CA

6. Transporter 1 Company Name: BELSHIRE — U.S. EPA ID Number: CAR000183913

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
US Ecology, Nevada Operations
Highway 95, 12 miles S. of Beatty
Beatty, NV 89003
Facility's Phone: (775) 553-2203
U.S. EPA ID Number: NVT330010000

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. NA3077, Hazardous Waste, Solid, n.o.s., 9, PG III (Soil with Lead and Chromium) (D008)(D007)	2	Dm	750	P	D007	D008	611
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Wear All Appropriate Personal Protective Equipment!
Profile # 070128303-1488
ERG-171; Generator requires certificate of disposal & weight ticket
BESI:212801
Tracking # 14334

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Michael Mentink ~~Douglas DeLong (on behalf of)~~ — Signature: [signature] — Month 12 Day 19 Year 12

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: [illegible] — Signature: [signature] — Month 12 Day 19 Year 12
Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name — Signature — Month Day Year

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. GENERATOR'S INITIAL COPY

Appendix D: Chain-of-custody forms

CHAIN OF CUSTODY

Page 1 of 1

Chain of Custody # _____

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000701.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: E Manlor and D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	Date Collected	Time Collected	Water	Solid			# of Containers	HCl	H2SO4	HNO3	NaOH	None	Bis(2-Ethyhexyl)phthlate by 8270D	Copper by EPA 6010C	Mercury by EPA 7471B	Alpha-Bilic by EPA 8081B	PCBs by 8082	TPHg by 8015	TPHd by 8015	SVOCs by 8270	Pesticides by 8081	Metals by 6010/7174
	✓ EX36B116D.2	09/04/12	1150		X			1					X	X									
	✓ EX36B116A.2	09/04/12	1155		X			1					X	X									
	✓ EX36B116B.2	09/04/12	1140		X			1					X	X									
	✓ EX36B116C.2	09/04/12	1200		X			1					X	X									
	✓ EX36B015A.2	09/04/12	1250		X			1					X		X	X							
	✓ EX36B163A.2	09/04/12	1315		X			2					X		X	X	X						
	FB.09042012	09/04/12	1455	X				9	3		1		5					X	X	X	X	X	X
	EB.09042012	09/04/12	1505	X				3			1		2								X	X	X
	Temp Blank																						

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
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RELINQUISHED BY:
[signature] DATE: 9/4/12 TIME: 1550
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DATE: TIME:
DATE: TIME:

CHAIN OF CUSTODY

Page 1 of 2

Chain of Custody # _____

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 Day ☐ Standard

Sampler: D Feucht / E Manlor
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.COM

ANALYTICAL REQUEST

Lab No.	Sample ID.	Date Collected	Time Collected	Water	Solid		# of Containers	HCl	H2SO4	HNO3	NaOH	None	Arsenic by 6010C	Copper by 6010C	Mercury by 7471B	Benzo(a)pyrene by 8270D	Benzo(a)anthracene by 8270D	Benzo(b)(1)(2)anthracene by 8270D	Zinc by 6010C	Aroclor 1260 by 8082
	✓ EX36B072A.2	9/5/12	0840		X		1					X	X	X						
	✓ EX36B072B.2	9/5/12	0855		X		1					X	X	X						
	✓ EX36B072C.2	9/5/12	0917		X		1					X	X	X	X					
	✓ EX36B078A.2	9/5/12	0955		X		1					X		X						
	~~EX36~~ EAM 9/5/12																			
	✓ EX13B010A.3	9/5/12	1020		X		1					X				X	X	X		
	✓ EX13B010B.2	9/5/12	1045		X		1					X				X	X	X		
	✓ EX13B004A.2	9/5/12	1110		X		1					X		X	X					
	✓ EX13B023A.2	9/5/12	1135		X		2					X		X	X	X	X	X	X	
	✓ EX13B023B.2	9/5/12	1155		X		2					X		X	X	X	X	X	X	
	~~EX13B003BA.2~~	~~9/5/12~~	~~1315~~		~~X~~		~~2~~					~~X~~		~~X~~	~~X~~					
	✓ EX13B003BA.2	9/5/12	1315		X		2					X		X				X		X
	✓ EX13B021A.2	9/5/12	1330		X		1					X						X		

EAM 9/5/12

EAM 9/5/12

Notes:

SAMPLE RECEIPT
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2323 Fifth Street
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Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht / L Marin
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	
	EX36B180C.2	9/5/12	1420		X			2					X	X X
	EX36B180B.2	9/5/12	1435		X			2					X	X X
	EX36B180A.2	9/5/12	1445		X			2					X	X X
	FB.090512	9/5/12	1515	X				3			1		2	X X X

Notes:

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DATE: 9/5/12 TIME: 1539
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DATE: TIME:

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C&T LOGIN # ______

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht / E Mank
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 647 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	Date Collected	Time Collected	Water	Solid			# of Containers	HCl	H2SO4	HNO3	NaOH	None
✓	✓ EX03SS368B.2	9/6/12	1305		X			1					X
✓	✓ EX03B220A.2	9/6/12	1318		X			1					X
✓	✓ EX03 B220B.2	9/6/12	1320		X			1					X
✓	✓ EX02TA40BA.2	9/6/12	1330		X			1					X
	~~EX03 BB367A.2~~		1335										
✓	✓ EX03B367A.2	9/6/12	1335		X			1					X
✓	✓ EX03 B367B.2	9/6/12	1340		X			1					X
✓	✓ EX02B464B.2	9/6/12	1410		X			6					X
✓	✓ EX02 B464A.2	9/6/12	1440		X			2					X
	EB.09062012	9/6/12	1535	X				3			1		2
	Temp blank												

ANALYTICAL REQUEST

Sample ID.	Benzo(a)Pyrene by 8270D	Benzo(a)anthracene by 8270D	Benzo(b)fluoranthene by 8270D	Dibenz(a,h)anthracene by 8270D	Indeno(1,2,3-cd)pyrene by 8270D	Copper by 6010C	Arsenic by 6010C	Benzo(b/k)fluoranthene by 8270	SVOCs by 8270	PCBs by 8082	Metals by 6010/7174
EX03SS368B.2	X	X	X	X	X	X					
EX03B220A.2	X										
EX03 B220B.2	X										
EX02TA40BA.2						X	X				
~~EX03 BB367A.2~~											
EX03B367A.2						X	X				
EX03 B367B.2						X	X				
EX02B464B.2	X	X				X	~~X~~	X	NO Arsenic		
EX02 B464A.2	X	X				X		X			
EB.09062012											

EAM 9/6/12

EAM 9/6/12

Notes: Triple volume for EX02B464B.2 for MS/MSD

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	DATE:	TIME:		DATE:	TIME:

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C&T LOGIN # _____

Project No: CA0C0761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☑ RUSH 5 day ☐ Standard

Sampler: D Feucht / E Montes
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 647 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Aroclor 1260 by 8082	Copper by 6010C	Arsenic by 6010C	Benzo(a)pyrene by 8270D	Benzo(a)anthracene by 8270D	Benzo(b)fluoranthene by 8270D	Dibenz(a,h)anthracene by 8270D	Indeno(1,2,3-cd)pyrene by 8270D
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None								
✓	✓ EX36B139A.2	9/6/12	0835		X		1					X	X							
✓	✓ EX36B027A.2	9/6/12	0900		X		3					X		X						
✓	✓ EX05B104B.2	9/6/12	1010		X		1					X	X							
✓	✓ EX02B049DB.2	9/6/12	1050		X		1					X		X	X	X	X	X	X	X
✓	✓ EX02B049DC.2	9/6/12	1055		X		1					X		X	X	X	X	X	X	X
✓	✓ EX02B049DA.2	9/6/12	1100		X		1					X		X	X	X	X	X	X	X
✓	✓ EX03B345A.2	9/6/12	1108		X		1					X		X						
✓	✓ EX03B345B.2	9/6/12	1115		X		1					X		X						
✓	✓ EX03B344A.2	9/6/12	1123		X		1					X		X						
✓	✓ EX03B344C.2	9/6/12	1127		X		1					X		X						
✓	✓ EX03B344D.2	9/6/12	1135		X		2					X		X	X					
✓	✓ EX03B344B.2	9/6/12	1137		X		1					X		X						
✓	✓ EX03SS36A.2	9/6/12	1245		X		2					X		X	X	X	X	X	X	X

Notes: Triple volume for EX36B027A.2 is for MS/MSD

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Fax (510) 486-0532

C&T LOGIN # _____

Project No: ~~CA000761.0001~~ CA000761.0001 C#7 | Sampler: D Frucht / E Manter

Project Name: Hunters Point | Report To: Drew Frucht

Project P. O. No: | Company: ARCADIS

EDD Format: | Report Level ☐ II ☐ III ☒ IV | Telephone: 510 697 7738

Turnaround Time: ☒ RUSH 5 day ☐ Standard | Email: Drew.Frucht@Arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None	
✓	✓EX02GR93SWA.2	9/7/12	0835		X		1					X	X Copper
✓	✓EX02B493B.2	9/7/12	0840		X		1					X	X Aroclor-1260
✓	✓EX02B493C.2	9/7/12	0850		X		1					X	X
✓	✓EX02B468C.2	9/7/12	0955		X		2					X	X TPH g
✓	✓EX02B468B.2	9/7/12	1025		X		2					X	X TPH d
✓	✓EX02B505A.2	9/7/12	1035		X		1					X	X Benzo(a)pyrene
✓	✓EX02B506A.2	9/7/12	1050		X		1					X	X Benzo(b)fluoranthene
✓	✓EX02B506B.2	9/7/12	1055		X		1					X	X Benzo(a)anthracene
✓	✓EX02B505B.2	9/7/12	1115		X		1					X	X Dibenz(a,h)anthracene
✓	✓EX03SS368C.2	9/7/12	1245		X		2					X	X Indeno(1,2,3-cd)pyrene
✓	✓EX11SG022A.2	9/7/12	1310		X		1					X	X Lead
	~~EX11B023A.2~~	~~9/7/12~~	~~1320~~		~~X~~		~~1~~					~~X~~	X Aroclor-1254
✓	✓EX11B023A.2	9/7/12	1320		X		1					X	

Notes:

SAMPLE RECEIPT
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ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

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Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht/E Manter
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 647 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Copper	Lead	Benzo(a) Pyrene	Benzo(b) Fluoranthene	PCBs	SVOCs	TPH-D	TPH-g	Metals
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None									
	✓EX15B027A.2	9/7/12	1400		X			1					X	X	X							
	✓EX15B027B.2	9/7/12	1410		X			1					X	X	X							
	✓EX38B03A.2	9/7/12	1445		X			1					X			X	X					
	EB.09072012	9/7/12	1530	X				8	3		1		4					X	X	X	X	X
	Trip Blank																					
	Trip Blank			X				1	1											X		
	Temp Blank																					

Notes:

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Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 days ☐ Standard

Sampler: D Feucht/E Manla
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None	Arsenic - 1260 by 8082
—	EX04B011B.2	09/10/12	0855		X		2					X	X
—	EX56B021B.2	09/10/12	0940		X		1					X	
—	EX56B021C.2	09/10/12	1002		X		1					X	
—	EX56B021A.2	09/10/12	1025		X		3					X	
—	EX72SS23A.2	09/10/12	1105		X		1					X	
—	EX72SS23B.2	09/10/12	1130		X		1					X	
—	EX52SS02A.2	09/10/12	1352		X		2					X	
—	EX52SS02B.2	09/10/12	1405		X		2					X	
—	EX52SS02C.2	09/10/12	1415		X		2					X	
—	EX52SS06A.2	09/10/12	1438		X		1					X	X
—	EX52SS06B.2	09/10/12	1448		X		1					X	X
	EB, 09102012	09/10/12	1530	X			3	3		1		4	
	Trip Blank						3	X					

Notes: Triple Volume at EX56B021A.2 for MS/MSD

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C&T LOGIN # _____

Project No: CA000761,0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 days ☐ Standard

Sampler: D Feucht / E Manto
Report To: Drew Feucht
Company: ARCADIS
Telephone: 910 697 7730
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None	
	TEMP BLANK												

Notes:

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C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 Day ☐ Standard

Sampler: D Feucht / E Monk
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 547 7728
Email: Drew.Feucht@ARCADIS-US.COM

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Arsenic = 1260 by 8082A	Manganese by 6010C	Benzo(a) Pyrene by 8270D	Benzo(b) Fluoranthene by 8270D	Arsenic by 6010C	Lead by 6010C
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None						
-	EX02B100A.2	9/11/12	0830		X		1					X	X					
	EX02B401C.2	9/11/12	0840		X		1					X	X					
	EX02B403D.2	9/11/12	0855		X		1					X		X				
	EX02B403C.2	9/11/12	0905		X		1					X		X				
	EX02B403B.2	9/11/12	0910		X		1					X		X				
	EX02B403A.2	9/11/12	0920		X		1					X		X				
	EX02B401A.2	9/11/12	0935		X		1					X	X					
	EX02B401B.2	9/11/12	0950		X		1					X	X					
	EX02B461B.2	9/11/12	1029		X		1					X			X	X		
	EX02B461D.2	9/11/12	1034		X		1					X			X	X		
	EX02B461C.2	9/11/12	1045		X		1					X			X	X		
	EX02B461A.2	9/11/12	1100		X		1					X			X	X		
	EX02 [redacted]W144E.2	9/11/12	1118		X		4					X			X		X	X

Notes: Double volume for EX02 MW 144 E.2 for MS/MSD

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Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☑ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht / E Monter
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.COM

ANALYTICAL REQUEST

Lab No.	Sample ID.	Date Collected	Time Collected	Water	Solid			# of Containers	HCl	H2SO4	HNO3	NaOH	None	Aroclor-1260 by 8082A	Benzo(a)pyrene by 8270D	Benzo(a)fluoranthene by 8270D	Arsenic by 6010C	Lead by 6010C	Copper by 6010C	TPHg by 8015	TPHd by 8015	Metals by 6010/7174	SVOCs by 8270	PCBs by 8082	TPHg by 8015	TPHd by 8015			
	EX02MW149E.2	9/11/12	1130		X			2					X		X		X	X											
	EX02MW149B.2	9/11/12	1140		X			2					X		X		X	X											
	EX02MW149D.2	9/11/12	1150		X			2					X		X		X	X											
	EX02MW149C.2	9/11/12	1200		X			2					X		X		X	X											
	EX02MW149A.2	9/11/12	1310		X			2					X		X		X	X											
	EX02S320A.2	9/11/12	1320		X			1					X	X	X	X													
	EX02B369A.2	9/11/12	1425		X			3					X					X	X	X	X								
	EB,09112012	9/11/12	1520	X				8	3		1		4									X	X	X	X	X			
	Trip Blank			X				3	X																X				
	Temp Blank																												

Notes:

SAMPLE RECEIPT
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CHAIN OF CUSTODY

Page 1 of 2

Chain of Custody # _____

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht / E Manle
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	Date Collected	Time Collected	Water	Solid		# of Containers	HCl	H2SO4	HNO3	NaOH	None	Lead by 6010c	Aroclor-1260 by 8082A	Aroclor-1254 by 8082A	Copper by 6010c	Zinc by 6010c	Benzo(b)Fluoranthene by 8270D	Vanadium by 6010c	Benzo(a)Pyrene by 8270D
	EX12SS02A.2	9/12/12	0850		X		1					X	X							
	EX12SS02D.2	9/12/12	0900		X		1					X	X							
	EX12SS02C.2	9/12/12	0907		X		1					X	X							
	EX12SS02B.2	9/12/12	0915		X		1					X	X							
	EX01SS349A.2	9/12/12	0928		X		1					X		X						
	EX01SS349B.2	9/12/12	0935		X		1					X		X						
	EX01SS349C.2	9/12/12	0945		X		1					X		X						
	EX01SS349D.2	9/12/12	0955		X		1					X		X						
	EX12TA08A.2	9/12/12	1025		X		1					X		X	X					
	EX12TA08B.2	9/12/12	1030		X		1					X		X	X					
	EX12TA08C.2	9/12/12	1038		X		1					X		X	X					
	EX12TA08D.2	9/12/12	1058		X		1					X		X	X	X				
	EX12SS18A.2	9/12/12	1110		X		4					X			X	X				

Notes: Double volume at EX12SS18A.2 for MS/MSD

SAMPLE RECEIPT
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☐ Ambient

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In Business Since 1878

2323 Fifth Street
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Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA09761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht/E Mantz
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 647 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Lead by 6010c; Aroclor-1260 by 8082A; Aroclor-1254 by 8082A; Copper by 6010c; Zinc by 6010c; Benzo(b)Fluoranthene by 8270C; Vanadium by 6010c; Benzo(a)Pyrene by 8270C; Metals by 6010c/7174; SVOCs by 8270C; PCBs by 8082A
	EX12SS18A.2	9/12/12	1225		X			2						X X X X
	EX12SS17C.2	9/12/12	1235		X			2						X X X X
	EX12SS16D.2	9/12/12	1250		X			2						X X X X X
	EX12SS16B.2	9/12/12	1305		X			2						X X X X X
	EX02B412B.2	9/12/12	1335		X			1						X
	EX02GR71SWA.2	9/12/12	1344		X			1						X
	EX02B525A.2	9/12/12	1402		X			1						X
	EX02TA16AA.2	9/12/12	1410		X			1						X
	EB.09122012	9/12/12	1520	X				3				1	2	X X X
	Temp Blank													

Notes:

SAMPLE RECEIPT
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RELINQUISHED BY:
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Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000761
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht / E Manta
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@arcadis-us.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	Sampling: Date Collected	Sampling: Time Collected	Matrix: Water	Matrix: Solid	Matrix:	# of Containers	Chemical Preservative: HCl	H2SO4	HNO3	NaOH	None	Aroclor-1260 by 8082A	Arsenic by 6010C	Lead by 6010C	Benzo(a)pyrene by 8270D	Benzo(b)Fluoranthene by 8270D	TPHg by 8015D	TPHd by 8015D	Copper by 6010C	Benzo(a)Anthracene by 8270D	Zinc by 6010C
	EX02B415A.2	9/13/12	0835		X		2					X	X	X	X							
	EX02B415B.2	9/13/12	0845		X		2					X	X	X	X	X	X					
	EX02GR132BTA.2	9/13/12	0950		X		2					X	X					X	X			
	EX02GR132BTB.2	9/13/12	1000		X		3					X						X	X	X		
	EX02B428D.2	9/13/12	1025		X		2					X						X	X			
	EX02B428B.2	9/13/12	1035		X		2					X						X	X			
	EX02B428C.2	9/13/12	1050		X		2					X						X	X			
	EX02B428A.2	9/13/12	1100		X		2					X						X	X			
	EX02B122B.2	9/13/12	1130		X		3					X	X		X	X		X	X	X	X	X
	EX02B524D.2	9/13/12	1150		X		3					X	X	X	X	X		X	X	X	X	X
	EX02B398B.2	9/13/12	1310		X		1					X			X							
	EX02B398A.2	9/13/12	1320		X		3					X			X							
	EX02B256A.4	9/13/12	1330		X		1					X			X					X		X

Notes: Triple volume for EX02B398A.2 for MS/MSD

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Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht / E Manker
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Copper by 6010C	Lead by 6010C	Zinc by 6010C	PCBs by 8082A	Metals by 6010C/7174	SVOCs by 8270C	TPHg by 8015D	TPHd by 8015D
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None								
	EX02B256B.4	9/13/12	1335		X		1					X	X	X	X					
	EB.09132012	9/13/12	1430	X			8	3		1		4				X	X	X	X	X
	Trip Blank			X			3	X										X		
	Temp Blank																			

Notes:

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C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 3-day ☐ Standard

Sampler: D. Fencht
Report To: Drew Fencht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Fencht@arcadis-us.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	Copper by 6010C	Mercury by 7471B	Lead by 6010C	Zinc by 6010C	Aroclor 1260 by 8082A	TPHd by 8015D	TPHg by 8015D
	EX12TA13B.4	9/17/12	1255		X	1					X	X						
	EX12TA13A.4	9/17/12	1305		X	1					X	X						
	EX12TA13D.4	9/17/12	1315		X	1					X	X						
	EX12TA13C.4	9/17/12	1325		X	1					X	X						
	EX04B012A.7.5	9/17/12	1400		X	3					X	X	X	X	X	X	X	X
	EX04B012B.7.5	9/17/12	1415		X	3					X	X	X	X	X	X	X	X
	EX04B011A.2	9/17/12	1435		X	2					X	X		X		X		
	EX04B011C.2	9/17/12	1450		X	2					X	X		X		X		
	EB.09177012	9/17/12	1530	X		7	X		X			X	X	X	X	X	X	X
	Trip Blank	—	—			2	X											X
	Temp Blank	—	—			1												

Notes:

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Fax (510) 486-0532

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Project No: HCA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 2-day ☐ Standard

Sampler: D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	Sampling Date Collected	Sampling Time Collected	Matrix: Water	Matrix: Solid	# of Containers	Chemical Preservative: HCl	H2SO4	HNO3	NaOH	None	Aroclor 1260	Aroclor 1254	Pb	Zn	Cu	Vanadium	Bis(2-ethylhexyl)phthalate	TPH	Benzo(a)pyrene
	EX12MW18AA.4	9/18/12	825		X	1					X			X	X					
	EX12MW18AA.2	9/18/12	830		X	1					X		X							
	EX12MW18AA.7.5	9/18/12	835		X	1					X							X		
	EX12MW18AB.2	9/18/12	840		X	1					X		X							
	EX12MW18AB.4	9/18/12	845		X	1					X			X	X					
	EX12MW18AB.7.5	9/18/12	850		X	1					X							X		
	EX12TA10B.2	9/18/12	855		X	2					X	X	X			X	X			
	EX12TA10B.4	9/18/12	900		X	1					X			X	X					
	EX12TA10B.7.5	9/18/12	905		X	1					X							X		
	EX12TA10C.2	9/18/12	910		X	2					X	X				X	X			
	EX02B412A.2	9/18/12	930		X	1					X								~~X~~ DF	X
	EX02GR131SWA.7.5	9/18/12	1010		X	1					X								X	
	EX02GR131SWC.2	9/18/12	1025		X	2					X	X	X						X	

Notes:
Extra volume for EX12TA10C.2 for MS/MSD

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Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 2-day ☐ Standard

Sampler: D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: drew.feucht@arcadis-us

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST																		
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Lead	Zinc	Benzen(a)pyrene	TPH	Aroclor 1260	Aroclor 1254		Benzo(a)anthracene	Copper	Metals	PCB	SVOCs						
	EX02B420E.2	9/10/12	1030		X			1									X														
	EX02GR13SWB.7.5	9/10/12	1045		X			1									X	~~X~~	~~X~~	DF											
	EX02B478E.7.5	9/10/12	1035		X			1										X	X												
	EX02B289B.7.5	9/10/12	1100		X			2									X	X	X												
	EX02TA16AB.2	9/10/12	1150		X			1								X															
	EX02TA16AB.7.5	9/10/12	1155		X			2									X	X	X												
	EX02B172C.2	9/10/12	1320		X			2						X	X	X					X	X									
	EX02B172C.7.5	9/10/12	1335		X			2									X	X	X												
	EX02B172D.2	9/10/12	1405		X			3						X	X	X		X	X		X	X									
	EX02B172D.7.5	9/10/12	1425		X			1									X														
	EX02B208A.4	9/10/12	1445		X			1						X	X																
	EB.09182012	9/10/12	1530	X				8	X		X						X					X	X	X							
	Trip Blanks	—	—	X				2	X								X													

Notes:
- Temp blank included

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ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
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Phone (510) 486-0900
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C&T LOGIN # ______

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 2-day ☐ Standard

Sampler: D. Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510.697.7738
Email: drew.feucht@arcadis-us

Lab No.	Sample ID.	Date Collected	Time Collected	Water	Solid			# of Containers	HCl	H2SO4	HNO3	NaOH	None	TPH	Copper	Lead	benzo(a)pyrene	A-1260 (Aroclor)
	EX02GR935WA.7.5	9/19/12	735		X			3					X	X	X	X		
	EX02GR935WB.7.5	9/19/12	745		X			3					X	X	X	X		
	EX02GR715WB.2	9/19/12	805		X			1					X				X	
	EX04B034D.2	9/19/12	835		X			1					X					X
	EX04B034B.2	9/19/12	845		X			1					X					X
	EX04B034A.2	9/19/12	900		X			1					X					X
	EX04B034C.2	9/19/12	910		X			1					X					X
	EX02GP002A.7.5	9/19/12	940		X			2					X	X				
	EX02GP002B.7.5	9/19/12	1000		X			2					X	X				
	EX02GP002C.7.5	9/19/12	1020		X			2					X	X				
	EX02GP008C.7.5	9/19/12	1035		X			2					X	X				
	EX02GP008B.7.5	9/19/12	1045		X			2					X	X				
	EX02GP008A.7.5	9/19/12	~~1145~~ DF 1155		X			2					X	X				

Notes: use extra volume from EX04B034C.2 for MS/MSD

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Fax (510) 486-0532

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Project No: CA00761.0001
Project Name: Humbug Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 2-day ☐ Standard

Sampler: D. Faucht
Report To: D. Faucht
Company: ARCADIS
Telephone: 510.697.7738
Email:

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None
	EX02GP05NA.7.5	9/19/12	1325		X			2					X
	EX02GP040A.7.5	9/19/12	1345		X			2					X
	EX02GP040B.7.5	9/19/12	1355		X			2					X
	EX02GP05NAB.7.5	9/19/12	1415		X			2					X
	EX52B009D.2	9/19/12	1505		X			1					X
	EX52B009A.2	9/19/12	1525		X			1					X
	EX52B009B.2	9/19/12	1535		X			1					X
	EX52B009C.2	9/19/12	1555		X			1					X
	EB:09192012	9/19/12	1600	X				8	X		X		
	Trip Blank	—	—	X				2	X				

ANALYTICAL REQUEST

TPH	benzo(a) anthracene	benzo(a) pyrene	benzo(b) fluoranthene	benzo(k) fluoranthene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd) pyrene	PCBs	SVOCs	metals
X									
X									
X									
X									
	X	X	X	X	X	X			
	X	X	X	X	X	X			
	X	X	X	X	X	X			
	X	X	X	X	X	X			
X							X	X	X
X									

Notes:
~~Equipment~~ DF
Temp. blank included

SAMPLE RECEIPT
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RELINQUISHED BY:
DATE: 9/19/12 TIME: 1615
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DATE: TIME:

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DATE: 9/19/12 TIME: 1615
DATE: TIME:
DATE: TIME:

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In Business Since 1878

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Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☑ IV
Turnaround Time: ☐ RUSH 24 hr ☐ Standard

Sampler: E Manlac / D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: drew.feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST														
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Aroclor-1260	Aroclor-1254	Arsenic	Copper	Mercury	Zinc	Lead	Benzo(a) Pyrene	Benzo(b) Fluoranthene	Naphthalene						
	EX05B104A.2	9/25/12	0818		X			1					X	X															
	EX05MW85AB.2	9/25/12	0835		X			1					X		X	X													
	EX05MW85AB.4	9/25/12	0838		X			2					X				X	X					X						
	EX05MW85AA.2	9/25/12	0847		X			1					X		X	X													
	EX05MW85AA.4	9/25/12	0849		X			2					X				X	X					X						
	EX05B094C.2	9/25/12	0858		X			2					X	X															
	EX05B094A.2	9/25/12	0915		X			1					X	X															
	EX05B094B.2	9/25/12	0928		X			1					X	X															
	EX05B094D.2	9/25/12	0950		X			1					X	X															
	EX36B027B.2	9/25/12	1004		X											X													
	EX36B105A.2	9/25/12	1016		X			1					X	X															
	EX36B056A.2	9/25/12	1028		X			1					X							X									
	EX36B063A.7.5	9/25/12	1040		X			2					X			X	X			X		X							

Notes: Double volume for EX05B094C.2 for MS/MSD

SAMPLE RECEIPT
☑ Intact
☑ Cold
☑ On Ice
☐ Ambient

RELINQUISHED BY:
_____ DATE: 9/25/12 TIME: 1550
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RECEIVED BY:
_____ DATE: 9/25/12 TIME: 1550
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_____ DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 24 hr ☐ Standard

Sampler: E Munter / D Feucht
Report To: ~~DF~~ Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST															
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Aroclor - 1260	Aroclor - 1254	Arsenic	Copper	Mercury	Zinc	Lead	Benzo(a) Pyrene	Benzo(b) Fluoranthene	Naphthalene	Hexachloroethane	3,3'-dichlorobenzidine	TPH2	TPH1			
	EX36B063B.7.5	9/25/12	1058		X			2					X				X	X	X		X								
	EX36B062A.7.5	9/25/12	1125		X			2					X		X	X	X	X	X				X	X					
	EX36B062B.7.5	9/25/12	1142		X			2					X		X	X	X	X	X				X	X					
	EX36B208B.2	9/25/12	1152		X			1					X	X							X								
	EX36B136A.2	9/25/12	1320		X			1					X		X														
	EX36B208C.2	9/25/12	1328		X			1					X								X								
	EX36B136C.2	9/25/12	1536		X			1					X	X															
	EX36B136B.2	9/25/12	1345		X			1					X		X						X								
	EX36B208A.2	9/25/12	1353		X			1					X								X								
	EX13B007A.2	9/25/12	1424		X			1					X	X															
	EX02B364C.2	9/25/12	1450		X			3					X				X		X	X	X				X	X			
	Trip Blank			X				3	X																	X			
	Temp Blank			X																									

Notes: For 3,3'-dichlorobenzidine employ method 8270 with selective ion monitoring (SIM)

SAMPLE RECEIPT
☒ Intact
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☐ Ambient

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Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA0007G1.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 24 hr ☐ Standard

Sampler: E Manter / D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST						
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Metals	PCBs	SVOCs	TPHg	TPHd	Pesticides	
	EB.09252012	9/25/2012	1530	X				9	3		2		5	X	X	X	X	X	X	

Notes:

SAMPLE RECEIPT
☑ Intact
☑ Cold
☑ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/25/12 TIME: 1550
DATE: TIME:
DATE: TIME:

RECEIVED BY:
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Chain of Custody # _____

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 24 hr ☐ Standard

Sampler: E Mantor / D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	Sampling: Date Collected	Sampling: Time Collected	Matrix: Water	Matrix: Solid	# of Containers	Chemical Preservative: HCl	H2SO4	HNO3	NaOH	None	Aroclor-1260	Aroclor-1254	Copper	Vanadium	Zinc	Benzo(b)Fluoranthene	Benzo(a)Pyrene	TPHg	TPHd
	EX12TA10A.4	9/26/12	0802		X	2					X	X	X	X	X					
	EX12MW17AC.4	9/26/12	0837		X	2					X	X		X	X					
	EX12MW17AC.7.5	9/26/12	0841		X	1					X					X				
	EX12MW17AB.4	9/26/12	0850		X	1					X	X								
	EX12MW17AB.7.5	9/26/12	0858		X	1					X					X				
	EX12MW17AA.4	9/26/12	0906		X	1					X	X	X	X						
	EX12MW17AA.7.5	9/26/12	0918		X	1					X					X				
	EX12SS16A.4	9/26/12	0928		X	4					X	X		X		X	X			
	EX12SS16C.4	9/26/12	0938		X	2					X	X		X		X	X			
	EX12SS17B.4	9/26/12	0946		X	2					X	X		X		X	X			
	EX02B412C.7.5	9/26/12	1003		X	1					X							X		
	EX02B412D.7.5	9/26/12	1014		X	3					X			X		X		X	X	X
	EX02B250A.7.5	9/26/12	1043		X	2					X								X	X

Notes: MS/MSD at EX12SS16A.4

SAMPLE RECEIPT
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☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:
[signature] DATE: 9/26/12 TIME: 1617
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DATE: TIME:
DATE: TIME:

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C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 24 hr ☐ Standard

Sampler: E Meinke / D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.COM

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST																	
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	TPHg	TPHd	Aroclor-1260	Arsenic	Copper	Lead	Zinc	Benzo(a)Anthracene	Benzo(a)Pyrene	Aroclor-1254	Dieldrin								
	EX02B250C.7.5	9/26/12	1052		X			2					X	X	X																	
	EX02B250B.7.5	9/26/12	1150		X			2					X	X	X																	
	EX02GR117SWA7.5	9/26/12	1158		X			2					X	X	X	X																
	EX02B524A.7.5	9/26/12	1210		X			3					X	X	X	X	X	X	X													
	EX02B524C.7.5	9/26/12	1244		X			3					X	X	X	X	X	X	X	X	X											
	EX02B122A.7.5	9/26/12	1258		X			3					X	X	X		X	X	X	X	X											
	EX02B524B.7.5	9/26/12	1304		X			3					X	X	X	X	X	X	X			X	X									
	EX02GR735WA.7.5	9/26/12	1318		X			2					X					X	X			X	X									
	EX02GR735WB.7.5	9/26/12	1330		X			2					X					X	X			X	X									
	EX02B456B.7.5	9/26/12	1356		X			3					X	X	X			X	X													
	EX02B456A.7.5	9/26/12	1430		X			3					X	X	X			X	X													
	EX02B442C.7.5	9/26/12	1449		X			1					X			X																
	EX02B442B.7.5	9/26/12	1456		X			1					X			X																

Notes:

SAMPLE RECEIPT
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☐ Ambient

RELINQUISHED BY:
DATE: 9/26/12 TIME: 1617
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DATE: TIME:

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DATE: TIME:
DATE: TIME:

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Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 24 hrs ☐ Standard

Sampler: Drew Feucht / E Manta
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 647 7738
Email: Drew.Feucht@ARCADIS-US.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid			# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	Aroclor-1260	Zinc	Metals	TPHg	TPHd	PCBs	SVOCs	Pesticides
	EX02B442A.7.5	9/26/12	1504		X			1					X	X							
	EX02B442D.7.5	9/26/12	1510		X			1					X	X							
	EX02B405C.7.5	9/26/12	1518		X			1					X		X						
	EX02B405B.7.5	9/26/12	1525		X			2					X		X						
	EB.09262012	9/26/12	1540	X				9	3		1		5			X	X	X	X	X	X
	Trip Blank			X				3	3								X				
	Temp Blank																				
	EX02B405A.7.5	9/26/12	1530		X			1					X		X						

Notes: ~~Triple~~ Double volume at EX02B405B.7.5 for MS/MSD

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[signature] DATE: 9/26/12 TIME: 1617
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DATE: TIME:

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Chain of Custody # _____

C&T LOGIN # _____

Project No: CA000761.0001 | Sampler: D. Feucht

Project Name: Hunters Point Parcel E | Report To: Duell.Feucht@arcadis

Project P. O. No: | Company: ARCADIS US, Inc.

EDD Format: | Report Level ☐ II ☐ III ☒ IV | Telephone: 510.697.7738

Turnaround Time: ☒ RUSH 3-day ☐ Standard | Email:

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST																	
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None	Copper	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Mercury	Zinc	Aroclor 1260											
	EX13B003BA1.2	9/27/12	800		X		2					X	X	X	X	X	X	X											
	EX02B098DC1.2	9/27/12	920		X		1					X	X																
	EX03B344D1.2	9/27/12	930		X		1					X	X																
	EX03B344D2.2	9/27/12	940		X		1					X	X																
	EX03B344C1.2	9/27/12	945		X		1					X	X																
	EX02TA40BA1.2	9/27/12	1005		X		1					X	X																
	EX03B367A1.2	9/27/12	1015		X		1					X	X																
	EX02B401B1.2	9/27/12	1045		X		1					X							X										
	EX02B401C1.2	9/27/12	1100		X		1					X							X										
	EX05MW85AB1.4	9/27/12	1245		X		1					X					X												
	EX05B104A1.2	9/27/12	1300		X		1					X							X										
	EX05B094B1.7.5	9/27/12	1320		X		1					X							X										
	EX38SS01B.2	9/27/12	1350		X		1					X	X																

Notes:

Extra volume from EX 38SS01B.2 for MS/MSD

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:

DATE: 9/27/12 TIME: 1636

DATE: TIME:

DATE: TIME:

RECEIVED BY:

DATE: 9/27/12 TIME: 1636

DATE: TIME:

DATE: TIME:

CHAIN OF CUSTODY

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Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 3-day ☐ Standard

Sampler: D. Feucht
Report To: D. Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email:

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid			# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	Copper	SVOCs	PCBs	Metals
	EX385S01A.2	9/27/12	1405		X			1					X	X			
	EX385S01C.2	9/27/12	1410		X			1					X	X			
	EX15B027B1.2	9/27/12	1430		X			1					X	X			
	EB.09272012	9/27/12	1550	X				3							X	X	X
	Temp Blank																

Notes:

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:		RECEIVED BY:	
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	DATE: TIME:		DATE: TIME:
	DATE: TIME:		DATE: TIME:

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Chain of Custody # ____

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C&T LOGIN # ____

Project No: Hunters Point
Project Name: CA000761.0001
Project P. O. No:
EDD Format:
Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 3-day ☒ Standard

Sampler: D. Feucht
Report To: Drew.feucht@arcadis-us
Company: ARCADIS
Telephone: 510-697-7738
Email: See above

Lab No.	Sample ID.	Date Collected	Time Collected	Water	Solid	# of Containers	HCl	H2SO4	HNO3	NaOH	None	Aroclor 1260	Aroclor 1254	TPH	Lead	Zinc	Dieldrin	Copper	Benzo(a)pyrene	Benzo(a)anthracene
	EX02B401B2.2	10/8/12	850		X	1					X	X								
	*EX02B401B3.2	10/8/12	905		X	1					X	X								
	EX02B401C2.2	10/8/12	915		X	1					X	X								
	EX12TA10B1.2	10/8/12	1035		X	1					X	X	X							
	EX02B412D.2	10/8/12	1045		X	4					X			X						
	EX02B456A.2	10/8/12	1100		X	4					X			X						
	EX02GR73SWB1.7.5	10/8/12	1120		X	1					X				X	X				
	*EX02GR73SWB2.7.5	10/8/12	1130		X	1					X				X	X				
	EX02B524B1.7.5	10/8/12	1145		X	2					X		X		X	X	X	X		
	EX02TA16AB1.7.5	10/8/12	1330		X	1					X	X	X							
	*EX02B524B2.7.5	10/8/12	1200		X	2					X		X		X	X	X	X		
	*EX02TA16AB2.7.5	10/8/12	1340		X	1					X	X	X							
	*EX02B122C2.2	10/8/12	1350		X	2					X				X	X		X	X	X

Notes:
* – HOLD samples pending results
Temp blank included

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY: [signature] DATE: 10/8/12 TIME: 1412
DATE: TIME:
DATE: TIME:

RECEIVED BY: [signature] DATE: 10/8/12 TIME: 1412
DATE: TIME:
DATE: TIME:

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Page ____ of ____

Chain of Custody # _____

C&T LOGIN # _____

Project No: CA000761.0001 | Sampler: D. Feucht

Project Name: Hunters Point | Report To: Drew Feucht

Project P. O. No: | Company: ARCADIS

EDD Format: | Report Level ☐ II ☐ III ☒ IV | Telephone: 510-697-7738

Turnaround Time: ☒ RUSH 3-day ☐ Standard | Email: drew.feucht@arcadis-us

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Benzo(a)pyrene	Benzo(a)anthracene	Copper	Lead	Zinc	Aroclor 1254	Aroclor 1260	SVOCs	Metals	PCBs	TPH					
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None																
	EX02B122C1.2	10/8/12	1355		X			2					X	X	X	X	X	X											
	EX02B122B1.2	10/8/12	1400		X			2					X	X	X	X	X	X	X	X									
*	EX02B122B2.2	10/8/12	1405		X			2					X	X	X	X	X	X	X	X									
	EX02B288B1.4	10/8/12	1415		X			1					X			X	X												
	EX02GR93SWA1.7.5	10/8/12	1430		X			1					X			X	X												
*	EX02GR93SWA2.7.5	10/8/12	1440		X			1					X			X	X												
	EB.10082012	10/8/12	1550	X				8	3		1		4								X	X	X	X					
	Trip Blank	10/8/12	—	X				2	2															X					

Notes:
* Hold Samples pending results
Temp Blank included

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 10/8/12 TIME: 1412
DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: 10/8/12 TIME: 1412
DATE: TIME:
DATE: TIME:

1041

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Fax (510) 486-0532

C&T LOGIN # _____

Project No: CA0007C1.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 3 day ☐ Standard

Sampler: E Mantor / D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@arcadis-us.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid			# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	Copper	TPH$_d$ + TPH$_g$	Lead	Arsenic	Benzo (a) Pyrene
	EX03B344D3.2	10/9/12	0835		X			1					X	X				
	* EX03B344D4.2	10/9/12	0842		X			1					X	X				
	EX02GP016AA.7.5	10/9/12	0858		X			3					X	X	X			X
	EX02GP016AE.7.5	10/9/12	0920		X			3					X	X	X			
	EX02B098DC2.2	10/9/12	0950		X			1					X	X				
	EX02GP016AC.7.5	10/9/12	1004		X			3					X	X	X			
	EX02MW173AA.7.5	10/9/12	1025		X			3					X	X	X	X	X	
	EX02MW173AB.7.5	10/9/12	1045		X			3					X	X	X	X	X	
	EX02GP040F.7.5	10/9/12	1118		X			3					X		X			
	EX02GP038B.7.5	10/9/12	1126		X			3					X		X			
	EX02GP040E.7.5	10/9/12	1140		X			3					X		X			
	EX02TA40BA2.2	10/9/12	1322		X			1					X	X				
	EX02GP040AA.7.5	10/9/12	1332		X			2					X		X			

Notes: * Hold EX03B344D4.2

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:
[signature] DATE: 10/9/12 TIME: 1657
DATE: TIME:
DATE: TIME:

RECEIVED BY:
[signature] DATE: 10/9/12 TIME: 1657
DATE: TIME:
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # _____

Project No: CA0007E1.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 3 Day ☐ Standard

Sampler: E Manter / D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 647 7738
Email: Drew.Feucht@Arcadis-US.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	TPHd + TPHg	Metals	TPHg	TPHd	SVOCs	Copper
	EX02		1352		X												
	EX02GP038A7.5	10/9/12	1438		X	2					X	X					
	EX02GP016AF7.5	10/9/12	1458		X	2					X	X					X
	EB.1009a2012	10/9/12	1525	X		7	3		1		3		X	X	X	X	
	Trip Blank			X		3	3							X			
	Temp Blank																

EAN 10/9/12

Notes:

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 10/9/12 TIME: 1657
DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: 10/9/12 TIME: 1657
DATE: TIME:
DATE: TIME:

CHAIN OF CUSTODY

Chain of Custody # ____________

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # ____________

Project No: CA000761.0001
Project Name: Hunters Point Parcel E
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 3-day ☐ Standard

Sampler: D. Feucht
Report To: D. Feucht
Company: ARCADIS US, Inc
Telephone: 510-697-7738
Email: drew.feucht@arcadis-us

Lab No.	Sample ID.	SAMPLING: Date Collected	SAMPLING: Time Collected	MATRIX: Water	MATRIX: Solid	MATRIX	MATRIX	# of Containers	CHEMICAL PRESERVATIVE: HCl	H2SO4	HNO3	NaOH	None	ANALYTICAL REQUEST: TPH	Copper	Lead	Aroclor 1260	Metals	PCBs
	EX02B456B.2	10/10/12	825		X			4					X	X					
	EX02TA16AB2.7.5	10/10/12	835		X			4					X	X					
	EY02TA16AB1.7.5	10/10/12	845		X			4					X	X					
	EX02B369A.4	10/10/12	905		X			5					X	X	X	X			
	EX02B369B.4	10/10/12	920		X			5					X	X	X	X			
	EX02B355A.9.5	10/10/12	935		X			4					X	X					
	EX02B468D.9.5	10/10/12	945		X			4					X	X					
	EX02B415A1.2	10/10/12	1030		X			1					X				X		
	EB-10102012	10/10/12	1115	X				7	3		1		3	X				X	X
	Trip Blank	—	—	X				3	3					X					

Notes: Extra volume for EX02B415A1.2 for ms/msD

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY: [signature] DATE: 10/10/12 TIME: 1226
DATE: TIME:
DATE: TIME:

RECEIVED BY: [signature] DATE: 10/1. TIME: 1226
DATE: TIME:
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Page 1 of 1

Chain of Custody # _____

C&T LOGIN # _____

Project No: CA000761.0001.00004
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: D. Feucht
Report To: D. Feucht
Company: ARCADIS US, Inc
Telephone: 510-697-7738
Email: drew.feucht@arcadis-us

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST					
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	VOCs	SVOCs	TPH	PCBs	Metals	
	IDW. Soil. 10172012	10/17/12	1030		X			~~85~~					X	X	X	X	X	X	
	IDW. Water. 10172012	10/17/12	1035	X				8	3		1			X	X	X	X	X	

Notes:

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 10/17/12 TIME: 1210
DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: 10/17/12 TIME: 1210
DATE: TIME:
DATE: TIME:

Appendix E: Laboratory and Data Validation Reports (CD ROM)

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239404
ANALYTICAL REPORT
Semivolatile Organics by GC/MS
Matrix: Water

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
EB.09052012	239404-015

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
SEMIVOLATILE ORGANICS BY GC/MS (EPA 8270D)
WATER

Laboratory number:	**239404**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/05/12**
Samples Received:	**09/05/12**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 09/05/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Semivolatile Organics by GC/MS (EPA 8270D) Water:

No analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

239404

C&T LOGIN # _____

Chain of Custody # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht/E Mantar
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Arsenic by 6010	Copper by 6010	Mercury by 7471B	Benzo(a)pyrene by 8270D	Benzo(a)anthracene by 8270D	Benzo(b)fluoranthene by 8270D	Zinc by 6010	Aroclor-1260 by 8082
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None								
1	✓EX36B072A.2	9/5/12	0840		X		1					X	X	X						
2	✓EX36B072B.2	9/5/12	0855		X		1					X	X	X						
3	✓EX36B072C.2	9/5/12	0917		X		1					X	X	X	X					
4	✓EX36B078A.2	9/5/12	0955		X		1					X		X						
	~~EX36~~ EAM 9/5/12																			
5	✓EX13B010A.3	9/5/12	1020		X		1					X			X	X	X			
6	✓EX13B010B.2	9/5/12	1045		X		1					X			X	X	X			
7	✓EX13B004A.2	9/5/12	1110		X		1					X		X	X					
8	✓EX13B023A.2	9/5/12	1135		X		2					X		X	X	X	X	X		
9	✓EX13B023B.2	9/5/12	1155		X		2					X		X	X	X	X	X		
	~~EX13B003BA.2~~	9/5/12	1315		X		2					X		X						
10	✓EX13B003BA.2	9/5/12	1315		X		2					X		X			X		X	
11	✓EX13B021A.2	9/5/12	1330		X		1					X					X			

EAM 9/5/12

EAM 9/5/12

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 239404

Chain of Custody # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht / E Manter
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	Aroclor – ~~1254~~ 1260 DF by 8082	Copper by 6010 C	PCBs	TPHg	TPHd	SVOCs	Pesticides	Metals
12	✓EX36B180C.2	9/5/12	1420		X	2					X	X	X						
13	✓EX36B180B.2	9/5/12	1435		X	2					X	X	X						
14	✓EX36B180A.2	9/5/12	1445		X	2					X	X	X						
15	EB.09052012	9/5/12	1515	X		3			1		2			X			X		X

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9512 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9512 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239404 Date Received 9/5/12 Number of coolers 1
Client ARCADIS Project HUNTER'S POINT

Date Opened 9/5/12 By (print) AA (sign) [signature]
Date Logged in ↓ By (print) JG (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.0°C

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ (YES) NO N/A
17. Did you document your preservative check? _____ (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

_____

_____

_____

_____

_____

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239404

Sample	pH: <2	>9	>12	Other
-015a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: AA

Date: 9/6/12

Results & QC Summary

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8270D
Field ID:	EB.09052012	Sampled:	09/05/12
Matrix:	Water	Received:	09/05/12
Units:	ug/L	Prepared:	09/07/12
Diln Fac:	1.000	Analyzed:	09/10/12
Batch#:	190277		

Type: SAMPLE Lab ID: 239404-015

Analyte	Result	LOQ	DL
Naphthalene	2.4 U	9.4	1.8
3,3'-Dichlorobenzidine	2.4 U	19	0.99
Benzo(a)anthracene	2.4 U	9.4	1.5
bis(2-Ethylhexyl)phthalate	2.4 U	9.4	1.7
Benzo(b)fluoranthene	2.4 U	9.4	1.6
Benzo(k)fluoranthene	2.4 U	9.4	1.8
Benzo(a)pyrene	2.4 U	9.4	1.5
Indeno(1,2,3-cd)pyrene	2.4 U	9.4	1.7
Dibenz(a,h)anthracene	2.4 U	9.4	1.7

Surrogate	%REC	Limits
Nitrobenzene-d5	76	55-120
2-Fluorobiphenyl	69	51-120
Terphenyl-d14	73	23-120

Type: BLANK Lab ID: QC655235

Analyte	Result	LOQ	DL
Naphthalene	2.5 U	10	1.9
3,3'-Dichlorobenzidine	2.5 U	20	1.0
Benzo(a)anthracene	2.5 U	10	1.6
bis(2-Ethylhexyl)phthalate	2.5 U	10	1.8
Benzo(b)fluoranthene	2.5 U	10	1.7
Benzo(k)fluoranthene	2.5 U	10	2.0
Benzo(a)pyrene	2.5 U	10	1.6
Indeno(1,2,3-cd)pyrene	2.5 U	10	1.8
Dibenz(a,h)anthracene	2.5 U	10	1.8

Surrogate	%REC	Limits
Nitrobenzene-d5	70	55-120
2-Fluorobiphenyl	63	51-120
Terphenyl-d14	70	23-120

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8270D
Matrix:	Water	Batch#:	190277
Units:	ug/L	Prepared:	09/07/12
Diln Fac:	1.000	Analyzed:	09/10/12

Type: BS Lab ID: QC655236

Analyte	Spiked	Result	%REC	Limits
Naphthalene	30.00	25.16	84	61-120
3,3'-Dichlorobenzidine	80.00	63.02	79	47-120
Benzo(a)anthracene	30.00	29.79	99	65-120
bis(2-Ethylhexyl)phthalate	30.00	24.46	82	54-124
Benzo(b)fluoranthene	30.00	29.38	98	61-120
Benzo(k)fluoranthene	30.00	28.89	96	60-120
Benzo(a)pyrene	30.00	26.66	89	62-120
Indeno(1,2,3-cd)pyrene	30.00	30.13	100	58-120
Dibenz(a,h)anthracene	30.00	30.46	102	59-120

Surrogate	%REC	Limits
Nitrobenzene-d5	81	55-120
2-Fluorobiphenyl	81	51-120
Terphenyl-d14	102	23-120

Type: BSD Lab ID: QC655237

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	30.00	26.24	87	61-120	4	21
3,3'-Dichlorobenzidine	80.00	63.32	79	47-120	0	25
Benzo(a)anthracene	30.00	30.00	100	65-120	1	21
bis(2-Ethylhexyl)phthalate	30.00	30.61	102	54-124	22	33
Benzo(b)fluoranthene	30.00	29.66	99	61-120	1	30
Benzo(k)fluoranthene	30.00	28.77	96	60-120	0	29
Benzo(a)pyrene	30.00	26.58	89	62-120	0	20
Indeno(1,2,3-cd)pyrene	30.00	29.84	99	58-120	1	27
Dibenz(a,h)anthracene	30.00	30.22	101	59-120	1	28

Surrogate	%REC	Limits
Nitrobenzene-d5	85	55-120
2-Fluorobiphenyl	86	51-120
Terphenyl-d14	103	23-120

RPD= Relative Percent Difference

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Water
EPA 8270D

Inst : MSBNA09 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 582094282007 File : rc507 Time : 05-MAR-2012 13:16

Standards: S18710

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	153635	45.79	
68	< 2% of mass 69	2789	1.70	
69		164381	100.00	
70	< 2% of mass 69	652	0.40	
127	40% - 60% of mass 198	177834	53.00	
197	< 1% of mass 198	0	0.00	
198		335509	100.00	
199	5% - 9% of mass 198	22354	6.66	
275	10% - 30% of mass 198	78080	23.27	
365	> 1% of mass 198	7746	2.31	
441	Present, < mass 443	40000	75.25	
442	> 40% and < 100% of mass 198	277525	82.72	
443	17% - 23% of mass 442	53154	19.15	

Analyst: KMH Date: 03/05/12 Reviewer: LW Date: 03/06/12

PEM Report

File Name : G:\msbna09\030512\RC507.D
Date Acquired : 5 Mar 2012 1:16 pm
Sample Name : TUN,S18710
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA09 BNA DFTPP/PEM
Inst. Name : MSBNA09
AcquisitionMeth: DFTPP09.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.155	5.50	400557
Benzidine	1.099	7.36	3182657
4,4'-DDT		8.40	1337610
4,4'-DDE		7.60	3911
4,4'-DDD		8.02	120409

% Breakdown: 4,4'-DDT	LIMIT <=20%	9%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.2	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	1.1	PASS
	8270D <=2	1	PASS

Mon Mar 05 13:25:24 2012

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Water
EPA 8270D

Inst : MSBNA09 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 582366461001 File : ria01 Time : 10-SEP-2012 11:41

Standards: S20011

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	98303	46.27	
68	< 2% of mass 69	1612	1.56	
69		103089	100.00	
70	< 2% of mass 69	431	0.42	
127	40% - 60% of mass 198	115813	54.52	
197	< 1% of mass 198	0	0.00	
198		212437	100.00	
199	5% - 9% of mass 198	14126	6.65	
275	10% - 30% of mass 198	52976	24.94	
365	> 1% of mass 198	5572	2.62	
441	Present, < mass 443	28208	77.43	
442	> 40% and < 100% of mass 198	193386	91.03	
443	17% - 23% of mass 442	36429	18.84	

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

PEM Report

File Name : G:\msbna09\091012\RIA01.D
Date Acquired : 10 Sep 2012 11:41 am
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA09 BNA DFTPP/PEM
Inst. Name : MSBNA09
AcquisitionMeth: DFTPP09.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.798	4.68	229055
Benzidine	0.974	6.53	1898793
4,4'-DDT		7.55	935026
4,4'-DDE		6.76	4626
4,4'-DDD		7.17	32267

% Breakdown: 4,4'-DDT	LIMIT <=20%	4%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.8	PASS
	8270D <=2	2	PASS
Tailing: Benzidine	8270C <3.0	1.0	PASS
	8270D <=2	1	PASS

Mon Sep 10 11:52:32 2012

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 MSBNA Water: EPA 8270D

Inst : MSBNA09
Calnum : 582094282001
Units : ug/mL

Name : 6PTBNA9
Date : 05-MAR-2012 13:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	rc508	582094282008	ICAL	05-MAR-2012 13:32	S19015
L2	rc509	582094282009	ICAL	05-MAR-2012 14:02	S19016
L3	rc510	582094282010	ICAL	05-MAR-2012 14:32	S19017
L4	rc511	582094282011	ICAL	05-MAR-2012 15:02	S19018
L5	rc512	582094282012	ICAL	05-MAR-2012 15:32	S19019
L6	rc513	582094282013	ICAL	05-MAR-2012 16:02	S19020
L7	rc514	582094282014	ICAL	05-MAR-2012 16:32	S19021
L8	rc515	582094282015	ICAL	05-MAR-2012 17:01	S19022
L9	rc516	582094282016	ICAL	05-MAR-2012 17:32	S19023

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene	1.2492	1.2089	1.2426	1.2161	1.2056	1.1841	1.0878	1.0327	1.0237	AVRG		0.86118		1.1612	8	20	0.700	0.99	
3,3'-Dichlorobenzidine			0.3930	0.4029	0.4009	0.3966	0.3886	0.3866	0.3832	AVRG		2.54374		0.3931	2	20	0.010	0.99	
Benzo(a)anthracene	1.2159	1.1703	1.1796	1.1847	1.1822	1.1566	1.1148	1.1286	1.1456	AVRG		0.85891		1.1643	3	20	0.800	0.99	
bis(2-Ethylhexyl)phthalate			1.0264	1.0273	1.0157	0.9817	0.8796	0.7994	0.7225	AVRG		1.08485		0.9218	13	20	0.010	0.99	
Benzo(b)fluoranthene	1.0471	1.0706	1.1345	1.1704	1.1466	1.1730	1.1396	1.1950	1.2389	AVRG		0.87245		1.1462	5	20	0.700	0.99	
Benzo(k)fluoranthene	1.1532	1.1693	1.2108	1.2102	1.2256	1.2087	1.1939	1.1769	1.1847	AVRG		0.83851		1.1926	2	20	0.700	0.99	
Benzo(a)pyrene	0.8899	0.9223	0.9775	1.0115	1.0227	1.0229	1.0206	1.0309	1.0536	AVRG		1.00537		0.9947	5	20	0.700	0.99	
Indeno(1,2,3-cd)pyrene	0.9208	0.9126	1.0102	1.0784	1.0982	1.0879	1.0713	1.1083	1.1222	AVRG		0.95644		1.0455	8	20	0.500	0.99	
Dibenz(a,h)anthracene	0.7890	0.7951	0.8790	0.9373	0.9548	0.9477	0.9336	0.9584	0.9819	AVRG		1.10068		0.9085	8	20	0.400	0.99	
Nitrobenzene-d5	0.5341m	0.5341m	0.5807	0.5768	0.5806	0.5811	0.5552	0.5346	0.5377	AVRG		1.79472		0.5572	4	20	0.05	0.99	
2-Fluorobiphenyl	1.7842	1.6745	1.7040	1.6471	1.6379	1.5880	1.4493	1.3712	1.3426	AVRG		0.63386		1.5776	10	20	0.05	0.99	
Terphenyl-d14	0.9948	0.9620	0.9752	0.9639	0.9650	0.9406	0.9056	0.8937	0.8989	AVRG		1.05887		0.9444	4	20	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Naphthalene	2.0000	8	5.0000	4	10.000	7	16.000	5	20.000	4	25.000	2	40.000	-6	50.000	-11	60.000	-12
3,3'-Dichlorobenzidine					20.000	0	32.000	2	40.000	2	50.000	1	80.000	-1	100.00	-2	120.00	-3
Benzo(a)anthracene	2.0000	4	5.0000	1	10.000	1	16.000	2	20.000	2	25.000	-1	40.000	-4	50.000	-3	60.000	-2
bis(2-Ethylhexyl)phthalate					10.000	11	16.000	11	20.000	10	25.000	7	40.000	-5	50.000	-13	60.000	**-22**
Benzo(b)fluoranthene	2.0000	-9	5.0000	-7	10.000	-1	16.000	2	20.000	0	25.000	2	40.000	-1	50.000	4	60.000	8
Benzo(k)fluoranthene	2.0000	-3	5.0000	-2	10.000	2	16.000	1	20.000	3	25.000	1	40.000	0	50.000	-1	60.000	-1
Benzo(a)pyrene	2.0000	-11	5.0000	-7	10.000	-2	16.000	2	20.000	3	25.000	3	40.000	3	50.000	4	60.000	6
Indeno(1,2,3-cd)pyrene	2.0000	-12	5.0000	-13	10.000	-3	16.000	3	20.000	5	25.000	4	40.000	2	50.000	6	60.000	7
Dibenz(a,h)anthracene	2.0000	-13	5.0000	-12	10.000	-3	16.000	3	20.000	5	25.000	4	40.000	3	50.000	5	60.000	8
Nitrobenzene-d5	2.0000	-4	5.0000	-4	10.000	4	16.000	4	20.000	4	25.000	4	40.000	0	50.000	-4	60.000	-3
2-Fluorobiphenyl	2.0000	13	5.0000	6	10.000	8	16.000	4	20.000	4	25.000	1	40.000	-8	50.000	-13	60.000	-15
Terphenyl-d14	2.0000	5	5.0000	2	10.000	3	16.000	2	20.000	2	25.000	0	40.000	-4	50.000	-5	60.000	-5

KMH 03/06/12 [Aniline]: Picked or reassigned peak in all levels.

KMH 03/06/12 [Nitrobenzene-d5]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [Benzoic acid]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [Benzo(g,h,i)perylene]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline in ICAL (rc516).

LLH 04/18/12 : cut 2loops of column to get better peak resolution for 2,4-Dinitrophenol

LLH 04/18/12 : cut another loop, 2,4-Dinitrophenol pweak was still bad for LOD

KMH 04/23/12 : 3/8/12 cut 1 loop and primed, for failing low 2,4-Dinitrophenol, benzoic acid and pentachlorophenol

KMH 04/23/12 : 3/15/12 cut 1 loop and primed, for failing low 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, benzoic acid and pentachlorophenol

KMH 04/27/12 : 4/27/12 cut 1 loop, pentachlorophenol was failing low in the ccv

LLH 07/03/12 : cut about a loop of column...2,4-Dinitrophenol is still fails for LOD

LLH 07/12/12 : cut 2 loops of column...still no 2,4-Dinitrophenol at 2X RL for LOD...primed then baked out

LLH 09/13/12 : cut 2 loops of column then primed...CCV failed 24DNP min RF and PCP at -22%D

Analyst: KMH Date: 03/06/12 Reviewer: LW Date: 03/07/12

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

582094282001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 MSBNA Water
EPA 8270D

Inst : MSBNA09 Name : 6PTBNA9
Calnum : 582094282001 Cal Date : 05-MAR-2012

ICV 582094282017 (rc517 05-MAR-2012) stds: S19392

Analyte	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	40.00	35.71	ug/mL	-11	30	
3,3'-Dichlorobenzidine	60.00	59.59	ug/mL	-1	30	
Benzo(a)anthracene	40.00	38.25	ug/mL	-4	30	
bis(2-Ethylhexyl)phthalate	40.00	36.84	ug/mL	-8	30	
Benzo(b)fluoranthene	40.00	40.69	ug/mL	2	30	
Benzo(k)fluoranthene	40.00	38.21	ug/mL	-4	30	
Benzo(a)pyrene	40.00	43.59	ug/mL	9	30	
Indeno(1,2,3-cd)pyrene	40.00	40.79	ug/mL	2	30	
Dibenz(a,h)anthracene	40.00	39.07	ug/mL	-2	30	

Analyst: KMH Date: 03/06/12 Reviewer: LW Date: 03/07/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 MSBNA Water
EPA 8270D

Inst : MSBNA09 IDF : 1.0
Seqnum : 582366461002.1 File : ria02 Time : 10-SEP-2012 11:57
Cal : 582094282001 Caldate : 05-MAR-2012
Standards: S20249

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Naphthalene	1.1612	1.1318	20.00	19.49	ug/mL	-3	20	0.7000	i ***
3,3'-Dichlorobenzidine	0.3931	0.4225	40.00	42.99	ug/mL	7	20	0.0100	i ***
Benzo(a)anthracene	1.1643	1.0962	20.00	18.83	ug/mL	-6	20	0.8000	i ***
bis(2-Ethylhexyl)phthalate	0.9218	0.7575	20.00	16.44	ug/mL	-18	20	0.0100	i ***
Benzo(b)fluoranthene	1.1462	1.0997	20.00	19.19	ug/mL	-4	20	0.7000	i ***
Benzo(k)fluoranthene	1.1926	1.0998	20.00	18.44	ug/mL	-8	20	0.7000	i ***
Benzo(a)pyrene	0.9947	0.9488	20.00	19.08	ug/mL	-5	20	0.7000	i m ***
Indeno(1,2,3-cd)pyrene	1.0455	1.0856	20.00	20.77	ug/mL	4	20	0.5000	i ***
Dibenz(a,h)anthracene	0.9085	0.9273	20.00	20.41	ug/mL	2	20	0.4000	i ***
Nitrobenzene-d5	0.5572	0.5533	20.00	19.86	ug/mL	-1	20	0.0500	i ***
2-Fluorobiphenyl	1.5776	1.5289	20.00	19.38	ug/mL	-3	20	0.0500	i ***
Terphenyl-d14	0.9444	0.8739	20.00	18.51	ug/mL	-7	20	0.0500	i ***

ISTD (ICAL rc513)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
1,4-Dichlorobenzene-d4	378619	284294	-24.91	6.22	5.43	**-0.79 ***
Naphthalene-d8	1433957	1046042	-27.05	7.71	6.90	**-0.81 ***
Acenaphthene-d10	858429	606004	-29.41	9.87	9.03	**-0.84 ***
Phenanthrene-d10	1561563	1089116	-30.25	11.72	10.86	**-0.86 ***
Chrysene-d12	1416731	1080213	-23.75	15.16	14.13	**-1.03 ***
Perylene-d12	1178841	993497	-15.72	18.17	16.42	**-1.75 ***

LLH 09/10/12 [Aniline]: Picked or reassigned peak. [general version]

LLH 09/10/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 [Benzo(a)pyrene]: Corrected fronting or tailing peak integration. [general version]

LLH 09/10/12 : see ICAL narrations for IStd RT drfit

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

i=ISTD failure m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 582366461

Date : 09/10/12 Reference : rc513
Sequence : MSBNA09 ria Analyzed : 03/05/12 16:02

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		ICAL STD	378619	6.22	1433957	7.71	858429	9.87	1561563	11.72	1416731	15.16	1178841	18.17
		LOWER LIMIT	189310	5.72	716979	7.21	429215	9.37	780782	11.22	708366	14.66	589421	17.67
		UPPER LIMIT	757238	6.72	2867914	8.21	1716858	10.37	3123126	12.22	2833462	15.66	2357682	18.67
002	CCV		284294	5.43 *	1046042	6.90 *	606004	9.03 *	1089116	10.86 *	1080213	14.13 *	993497	16.42 *

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 582366461

Date : 09/10/12
Sequence : MSBNA09 ria

Reference : ria02
Analyzed : 09/10/12 11:57

#	Type	Sample ID	NAPHD8	RT	ACEND10	RT	CHYD12	RT	PERYD12	RT	DCBZ14D4	RT	PHEND10	RT
		CCV+CCV/BS+CCV/LCS+ICV+ICV/BS+ICV/CCV+ICV/LCS+RCCV STD	1046042	6.90	606004	9.03	1080213	14.13	993497	16.42	284294	5.43	1089116	10.86
		LOWER LIMIT	523021	6.40	303002	8.53	540107	13.63	496749	15.92	142147	4.93	544558	10.36
		UPPER LIMIT	2092084	7.40	1212008	9.53	2160426	14.63	1986994	16.92	568588	5.93	2178232	11.36
003	BLANK	QC655235	1246327	6.90	715610	9.03	1448209	14.13	1333696	16.42	322966	5.43	1300177	10.86
004	BS	QC655236	1184935	6.90	703700	9.03	1315395	14.14	1272490	16.43	313052	5.43	1356540	10.86
005	BSD	QC655237	1146412	6.90	678299	9.03	1255234	14.13	1205973	16.42	299219	5.43	1317836	10.86
006	SAMPLE	239328-005	1241338	6.90	691039	9.03	1455160	14.13	425321 *	16.40	326477	5.43	1308770	10.86
007	SAMPLE	239403-007	1240037	6.90	712713	9.03	1472180	14.13	1279788	16.42	324724	5.43	1291178	10.86
008	SAMPLE	239403-008	1225550	6.90	705092	9.03	1416179	14.13	1244057	16.42	314835	5.43	1259012	10.86
009	BS	QC655236	1011754	6.90	585407	9.03	1021379	14.13	960928	16.42	274699	5.43	1075465	10.86
010	BSD	QC655237	978875	6.90	553937	9.03	976104	14.13	921032	16.42	260457	5.43	1019717	10.86
011	SAMPLE	239404-015	1247756	6.90	709234	9.03	1444815	14.13	1239171	16.42	322809	5.43	1281468	10.86

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 582094282

Instrument : MSBNA09 Begun : 03/05/12 11:22
Method : EPA 8270D SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	rc501	TUN	DFTPP/PEM			03/05/12 11:22	1.0	1	t
002	rc502	TUN	DFTPP/PEM			03/05/12 11:44	1.0	1	t
003	rc503	TUN	DFTPP/PEM			03/05/12 12:02	1.0	1	t
004	rc504	TUN	DFTPP/PEM			03/05/12 12:17	1.0	1	t
005	rc505	TUN	DFTPP/PEM			03/05/12 12:31	1.0	1	
006	rc506	CCV	RTCHECK			03/05/12 12:47	1.0	2	
007	rc507	TUN	DFTPP/PEM			03/05/12 13:16	1.0	1	
008	rc508	ICAL	ICAL			03/05/12 13:32	1.0	3	
009	rc509	ICAL	ICAL			03/05/12 14:02	1.0	4	
010	rc510	ICAL	ICAL			03/05/12 14:32	1.0	5	
011	rc511	ICAL	ICAL			03/05/12 15:02	1.0	6	
012	rc512	ICAL	ICAL			03/05/12 15:32	1.0	2	
013	rc513	ICAL	ICAL			03/05/12 16:02	1.0	7	
014	rc514	ICAL	ICAL			03/05/12 16:32	1.0	8	
015	rc515	ICAL	ICAL			03/05/12 17:01	1.0	9	
016	rc516	ICAL	ICAL			03/05/12 17:32	1.0	10	
017	rc517	ICV	ICV			03/05/12 18:02	1.0	11	

KMH 03/06/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Standards used: 1=S18710 2=S19019 3=S19015 4=S19016 5=S19017 6=S19018 7=S19020 8=S19021 9=S19022 10=S19023 11=S19392
Flags used: t=tune failure
Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 582366461

Instrument : MSBNA09 Begun : 09/10/12 11:41
Method : EPA 8270D SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ria01	TUN	DFTPP/PEM			09/10/12 11:41	1.0	1	
002	ria02	CCV				09/10/12 11:57	1.0	2	
003	ria03	BLANK	QC655235	Water	190277	09/10/12 12:28	1.0	3	
004	ria04	BS	QC655236	Water	190277	09/10/12 12:59	1.0	3	
005	ria05	BSD	QC655237	Water	190277	09/10/12 13:30	1.0	3	
006	ria06	SAMPLE	239328-005	Water	190277	09/10/12 14:00	1.0	3	spk
007	ria07	SAMPLE	239403-007	Water	190277	09/10/12 14:30	1.0	3	
008	ria08	SAMPLE	239403-008	Water	190277	09/10/12 15:01	1.0	3	
009	ria09	BS	QC655236	Water	190277	09/10/12 15:31	1.0	3	
010	ria10	BSD	QC655237	Water	190277	09/10/12 16:01	1.0	3	
011	ria11	SAMPLE	239404-015	Water	190277	09/10/12 16:32	1.0	3	

LLH 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 011.

Standards used: 1=S20011 2=S20249 3=S18805

Flags used: spk=5% spike rule

SAMPLE PREPARATION SUMMARY

Batch # : 190277
Started By : TFB
Method : 3520C
Spike #1 ID : S20014
Prep Date : 07-SEP-2012 14:15
SOP Version : 8270_3520_rv16
Spike #2 ID : S20576
Analysis : 8270-1
Finished By : MAW
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239328-005		Water	1000	1	1	0.001	7	.4				8270-1	re-ex
239403-007		Water	1000	1	1	0.001	5	.4				8270-1	
239403-008		Water	1040	1	1	0.0009615	5	.4				8270-1	
239404-015		Water	1060	1	1	0.0009434	5	.4				8270-1	
QC655235	BLANK	Water	1000	1	1	0.001		.4				8270-1	
QC655236	BS	Water	1000	1	1	0.001		.4	1			8270-1	
QC655237	BSD	Water	1000	1	1	0.001		.4	1			8270-1	

LLH 09/10/12 : Matrix spikes were not performed for this analysis in batch 190277 due to insufficient sample amount.

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

BNA (8270 & 625) Water Prep Log

Curtis & Tompkins, Ltd.

LIMS Batch No: 190277 Extraction Method:
LIMS Analysis: 8270-1 ☒ EPA 3520c cont. L/L
Date Extracted: 9/7/12 ○ _____

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Confirmed pH <2	Comments
239328-005	I	1000	☒7 ☐	☒1.0 ☐	☒ ≤2	
239403-007	F	1000	☐7 ☒S	☒1.0 ☐	☒ ≤2	
↓ -008	B	1040	☐7 ☒S	☒1.0 ☐	☒ ≤2	
239404-015	B	1060	☐7 ☒S	☒1.0 ☐	☒ ≤2	
MB QC655235	NA	1000	☐7 ☒NA	☒1.0 ☐	☒ ≤2	
BS 6	↓	1000	☐7 ☒	☒1.0 ☐	☒ ≤2	
BSD 7	↓	1000	☐7 ☒	☒1.0 ☐	☒ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	JDE 9/10/12

	Lot# / LIMS # / Time	Date/ Initials
0.4 mL of surrogate solution was added to all samples	S20014A	TEB 9/7/12
1.0 mL of matrix spiking solution was added to all spikes	S20576C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS114779	
Cont. L/L extracted with 450mL of CH_2Cl_2	EM52160	
Extraction Start Time:	1415	
Extraction End Time:	0830	9/8/12
pH of all samples adjusted to pH ≥ 11 with 10 N NaOH	N/A	MAW 9/8/12
Extraction Start Time:	↓	
Extraction End Time:	↓	
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EMVB15H	
Concentrated to final volume at temperature (degrees C)	70	
Relinquished to BNA department	✓	

9/7/12
Extraction Chemist **Date**

Contined from Page _____
Continued on Page _____

9/10/12
Reviewed by **Date**

Case Narrative Addendum: Manual Integrations for 239404 MSBNA (Water)

For CCV (MSBNA09 ria02):
Aniline: Picked or reassigned peak.
bis(2-Chloroethyl)ether: Corrected automatically drawn baseline.
Benzo(a)pyrene: Corrected fronting or tailing peak integration.

For BSD QC655237 (MSBNA09 ria10):
Resorcinol: Corrected automatically drawn baseline for spike & dup.
Aniline: Picked or reassigned peak for spike & dup.
bis(2-Chloroethyl)ether: Corrected automatically drawn baseline for spike & dup.
Benzo(a)pyrene: Corrected fronting or tailing peak integration for spike & dup.
Pyridine: Corrected automatically drawn baseline for spike.

For Calibration MSBNA09 (582094282001):
Aniline: Picked or reassigned peak in all levels.
bis(2-Chloroethyl)ether: Corrected automatically drawn baseline in ICAL (rc516).
Benzoic acid: Corrected automatically drawn baseline in multiple levels.
Benzo(g,h,i)perylene: Corrected automatically drawn baseline in multiple levels.
Nitrobenzene-d5: Corrected automatically drawn baseline in multiple levels.

For ICV (MSBNA09 rc517):
Aniline: Picked or reassigned peak.

Sample Raw Data

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA09	Lab ID	: 239404-015	Client ID	: EB.09052012
Seqnum	: 582366461011	Matrix	: Water	Acct	: ARCSF (JG)
File	: ria11	Batch	: 190277	Time	: 10-SEP-2012 16:32
Cal	: 582094282001	Caldate	: 05-MAR-2012		
IDF	: 1.0	Raw Units	: ug/mL	Units	: ug/L

1060.00 mL --> 1.0 ml = 0.0009434 ml/ml PDF

Analyte	Raw	Result	RL	Blank	Flags
Naphthalene	0	ND	9.4		u
3,3'-Dichlorobenzidine	0	ND	19		u
Benzo(a)anthracene	0.09520	ND	9.4		u
bis(2-Ethylhexyl)phthalate	0.7743	ND	9.4		u
Benzo(b)fluoranthene	0	ND	9.4		u
Benzo(k)fluoranthene	0	ND	9.4		u
Benzo(a)pyrene	0.1183	ND	9.4		u
Indeno(1,2,3-cd)pyrene	0	ND	9.4		u
Dibenz(a,h)anthracene	0	ND	9.4		u

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	30.30	37.74	28.58	76	55-120	u
2-Fluorobiphenyl	27.77	37.74	26.20	69	51-120	u
Terphenyl-d14	29.32	37.74	27.66	73	23-120	u

ISTD (CCV ria02)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	1046042	1247756	19.28	6.90	6.90	0.00
Acenaphthene-d10	606004	709234	17.03	9.03	9.03	0.00
Chrysene-d12	1080213	1444815	33.75	14.13	14.13	0.00
Perylene-d12	993497	1239171	24.73	16.42	16.42	0.00

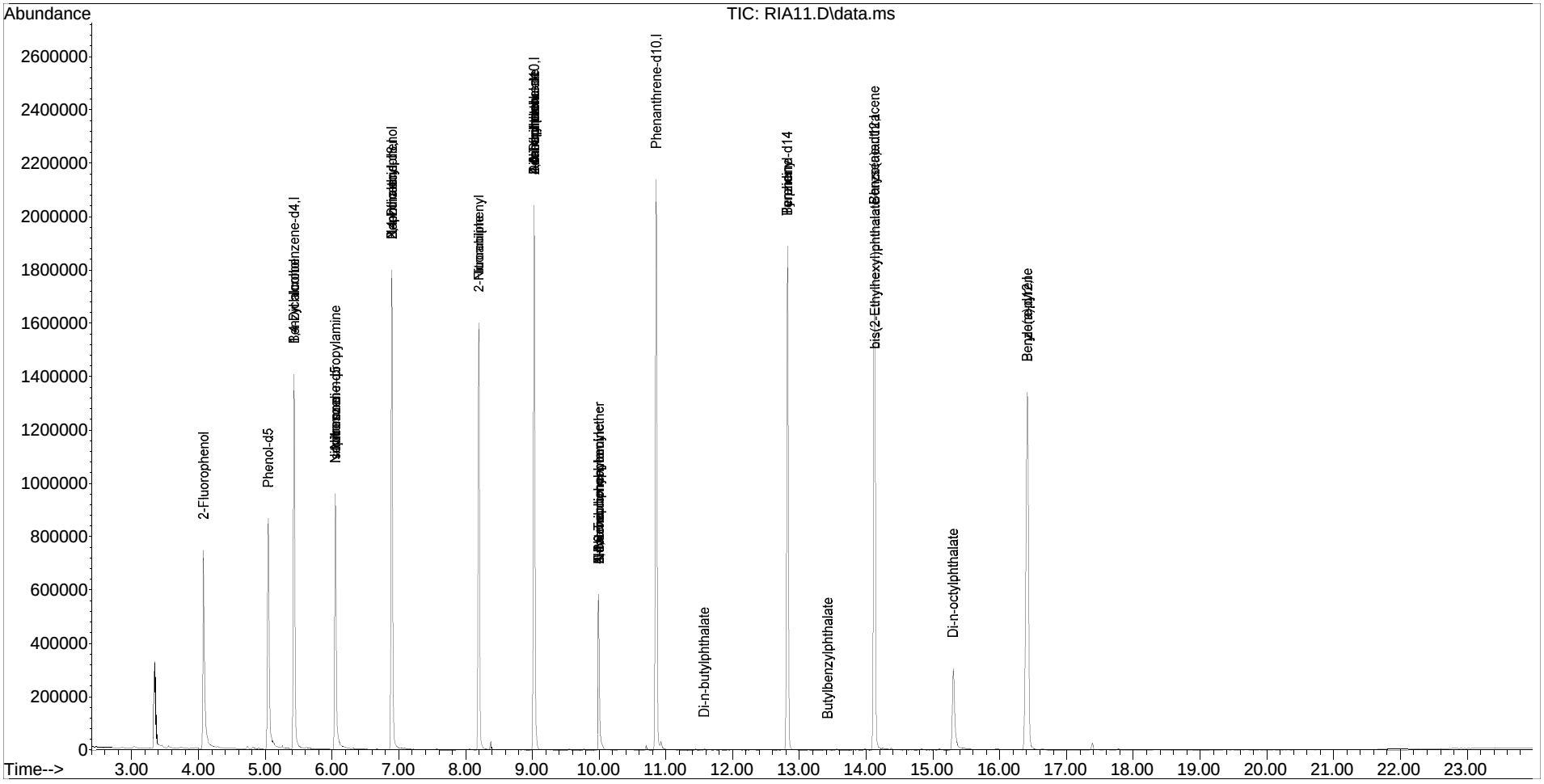
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

u=use

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA11.D
Acq On : 10 Sep 2012 4:32 pm
Operator :
Sample : S,239404-015
Misc : 190277,1,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 16:54:30 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA11.D
Acq On : 10 Sep 2012 4:32 pm
Operator :
Sample : S,239404-015
Misc : 190277,1,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 16:54:30 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	5.434	152	322809	40.0000	ug/mL	0.00
19) Naphthalene-d8	6.898	136	1247756	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.028	164	709234	40.0000	ug/mL	0.00
58) Phenanthrene-d10	10.857	188	1281468	40.0000	ug/mL	0.00
70) Chrysene-d12	14.127	240	1444815	40.0000	ug/mL	0.00
79) Perylene-d12	16.415	264	1239171	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	0.000	79	0	N.D.		
3) N-Nitrosodimethylamine	0.000	42	0	N.D.		
4) 2-Fluorophenol	4.081	112	414454	30.9989	ug/mL	81
5) Phenol-d5	5.045	99	557887	30.1675	ug/mL	80
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	5.434	108	1433	0.1545	ug/mL #	1
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.057	70	75089	7.2361	ug/mL #	67
18) Hexachloroethane	0.000	117	0	N.D.		
20) Nitrobenzene-d5	6.057	82	526617	30.2985	ug/mL #	79
21) Nitrobenzene	6.057	77	1744	0.1142	ug/mL #	41
22) Isophorone	6.057	82	531406	17.8931	ug/mL	66
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	6.898	107	8020	0.6337	ug/mL #	22
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	6.898	105	1409	37.4112	ug/mL #	1
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	0.000	128	0	N.D.		
30) 4-Chloroaniline	0.000	127	0	N.D.		
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	0.000	142	0	N.D.		
35) 1-Methylnaphthalene	0.000	142	0	N.D.		
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA11.D
Acq On : 10 Sep 2012 4:32 pm
Operator :
Sample : S,239404-015
Misc : 190277,1,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 16:54:30 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.204	172	776886	27.7730	ug/mL	97
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	8.204	65	1475	0.1677	ug/mL #	1
43) Dimethylphthalate	9.028	163	107828	4.2773	ug/mL #	1
44) 2,6-Dinitrotoluene	9.028	165	91626	15.3729	ug/mL #	16
45) Acenaphthylene	0.000	152	0	N.D.		
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.028	154	2259	0.0987	ug/mL #	7
48) 2,4-Dinitrophenol	0.000	184	0	N.D.		
49) 4-Nitrophenol	9.028	109	1497	0.3789	ug/mL #	37
50) Dibenzofuran	0.000	168	0	N.D.		
51) 2,4-Dinitrotoluene	9.028	165	91626	11.2826	ug/mL #	15
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	0.000	149	0	N.D.		
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.		
55) Fluorene	9.998	166	5178	0.2002	ug/mL #	67
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	9.998	330	81448	31.2675	ug/mL	91
59) 4,6-Dinitro-2-methylphenol	0.000	198	0	N.D.		
60) N-Nitrosodiphenylamine	9.998	169	3711	0.1868	ug/mL #	29
61) Azobenzene	0.000	77	0	N.D.		
62) 4-Bromophenyl-phenylether	9.998	248	6110	0.8956	ug/mL #	1
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	0.000	178	0	N.D.		
66) Anthracene	0.000	178	0	N.D.		
67) Carbazole	0.000	167	0	N.D.		
68) Di-n-butylphthalate	11.580	149	7346	0.1595	ug/mL	99
69) Fluoranthene	0.000	202	0	N.D.		
71) Benzidine	12.827	184	13288	0.6300	ug/mL #	1
72) Pyrene	12.827	202	3128	0.0647	ug/mL #	63
73) Terphenyl-d14	12.827	244	1000010	29.3152	ug/mL	99
74) Butylbenzylphthalate	13.427	149	1181	0.0481	ug/mL #	78
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.		
76) Benzo(a)anthracene	14.127	228	4005	0.0952	ug/mL	74
77) bis(2-Ethylhexyl)phthalate	14.139	149	25780	0.7743	ug/mL	99
78) Chrysene	14.127	228	4005	0.0980	ug/mL	77
80) Di-n-octylphthalate	15.310	149	1069	0.0178	ug/mL #	1
81) Benzo(b)fluoranthene	0.000	252	0	N.D.		
82) Benzo(k)fluoranthene	0.000	252	0	N.D.		
83) Benzo(a)pyrene	16.415	252	3644	0.1183	ug/mL	89
84) Indeno(1,2,3-cd)pyrene	0.000	276	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA11.D
Acq On : 10 Sep 2012 4:32 pm
Operator :
Sample : S,239404-015
Misc : 190277,1,
ALS Vial : 11 Sample Multiplier: 1

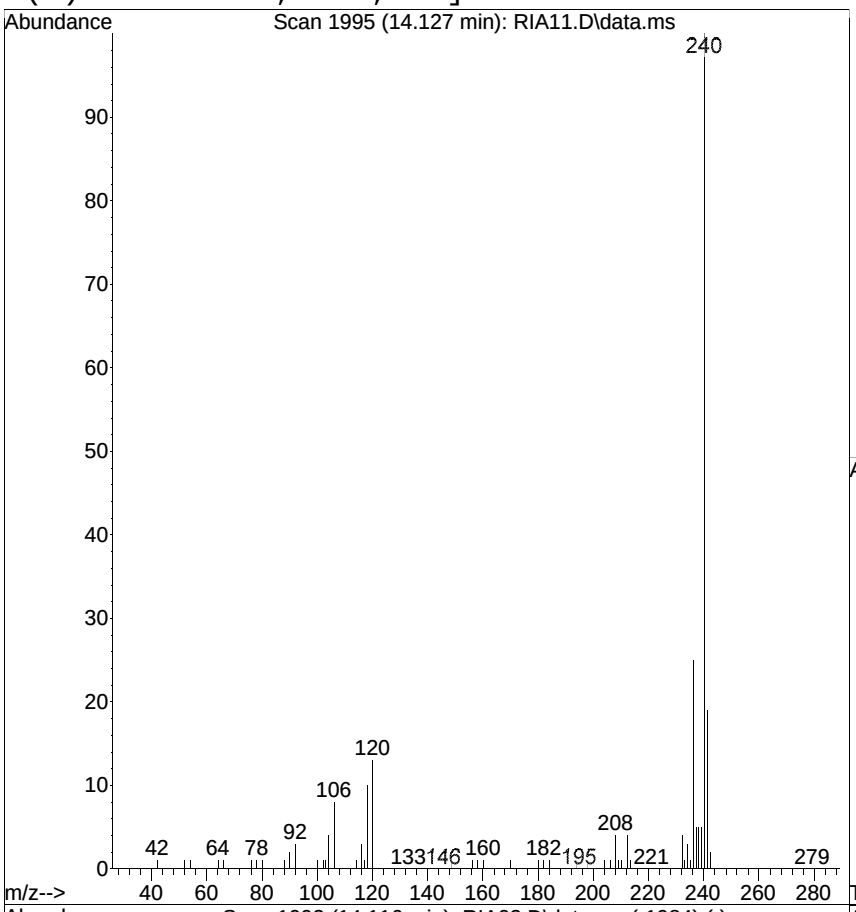
Quant Time: Sep 10 16:54:30 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	0.000	276	0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)anthracene; <RL; u]

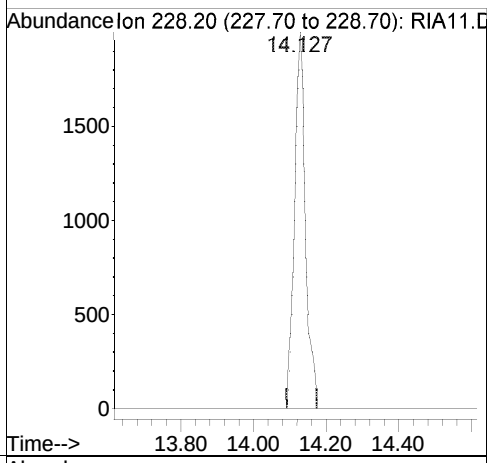
Raw



#76
Benzo(a)anthracene
Concen: 0.0952 ug/mL
RT: 14.127 min Scan# 1995
Delta R.T. 0.012 min
Lab File: RIA11.D
Acq: 10 Sep 2012 4:32 pm

Tgt Ion:228 Resp: 4005

Ion	Ratio	Lower	Upper
228	100		
229	26.6	0.0	40.0
226	10.0	8.0	48.0



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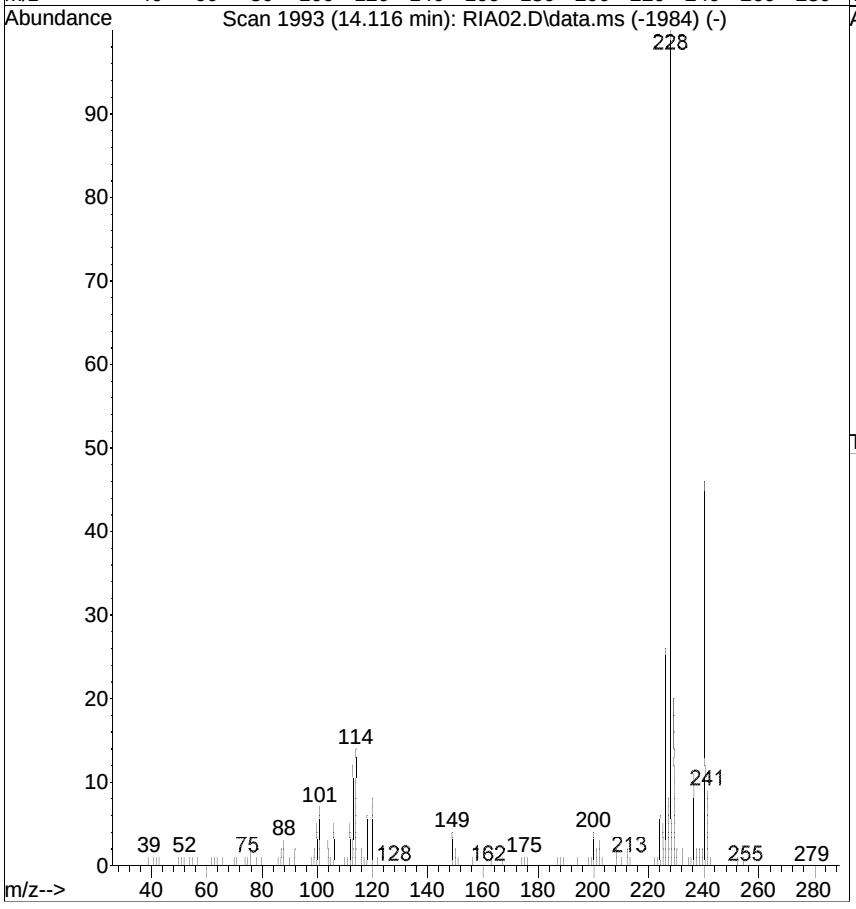
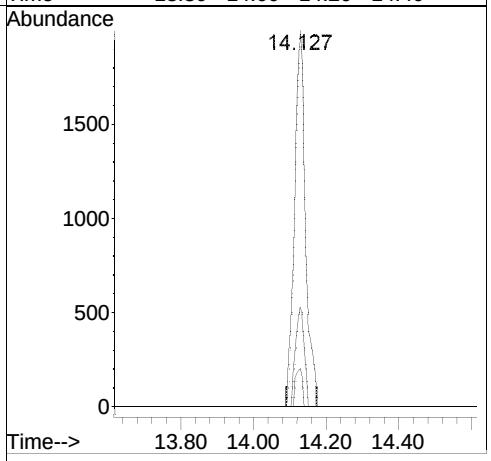
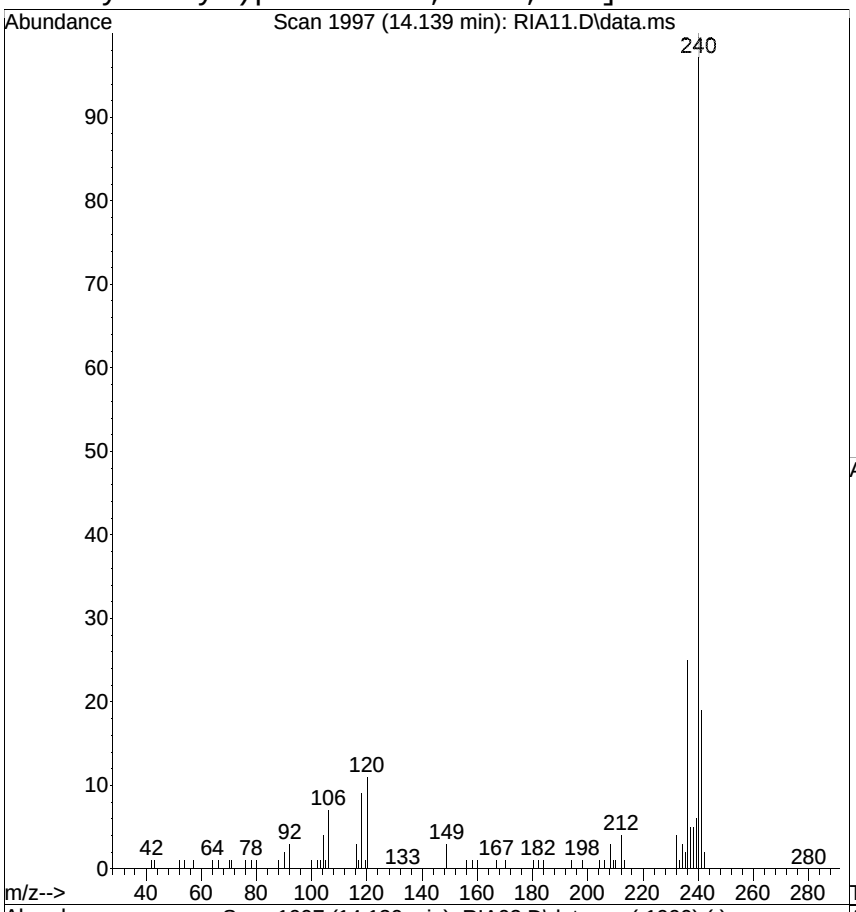




[bis(2-Ethylhexyl)phthalate; <RL; u]

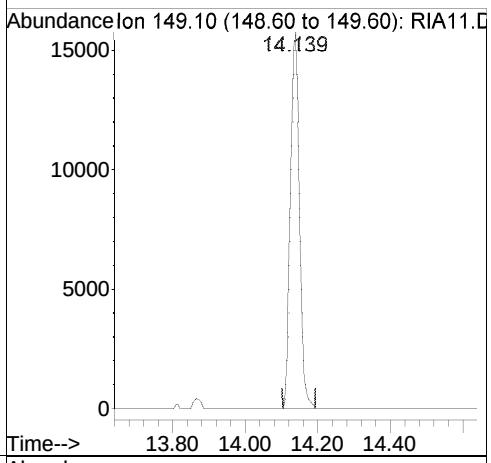
Raw



#77
bis(2-Ethylhexyl)phthalate
Concen: 0.7743 ug/mL
RT: 14.139 min Scan# 1997
Delta R.T. -0.000 min
Lab File: RIA11.D
Acq: 10 Sep 2012 4:32 pm

Tgt Ion:149 Resp: 25780

Ion	Ratio	Lower	Upper
149	100		
167	29.9	9.0	49.0
279	7.0	0.0	27.0



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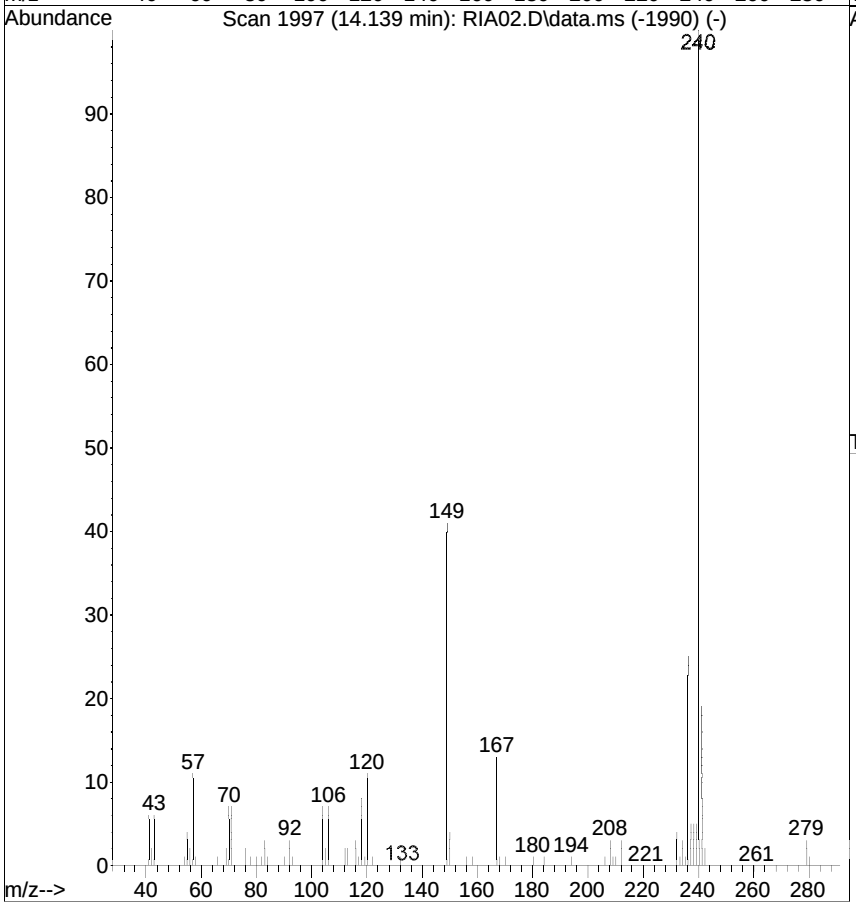
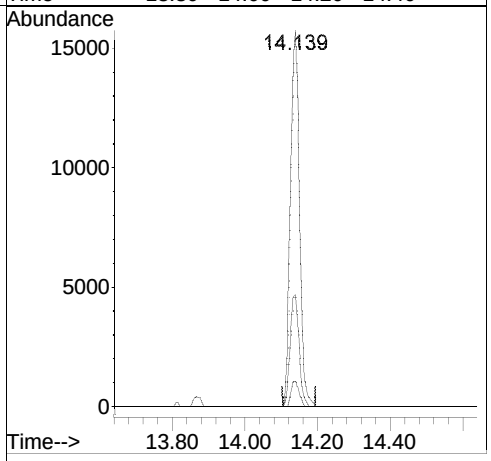
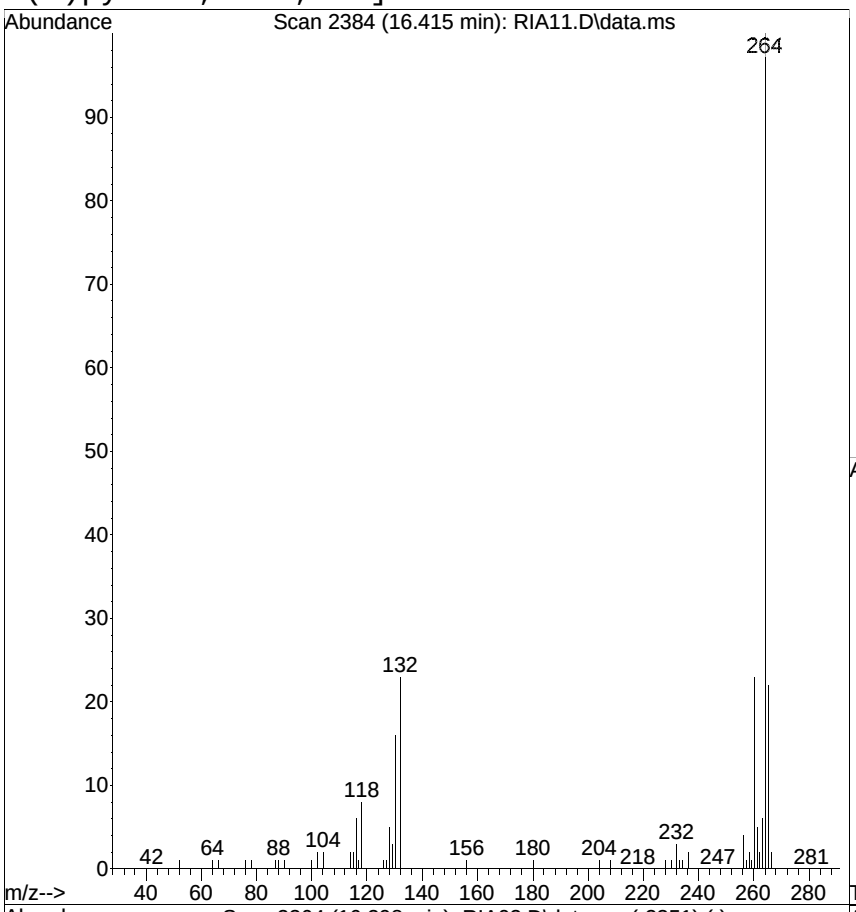




[Benzo(a)pyrene; <RL; u]

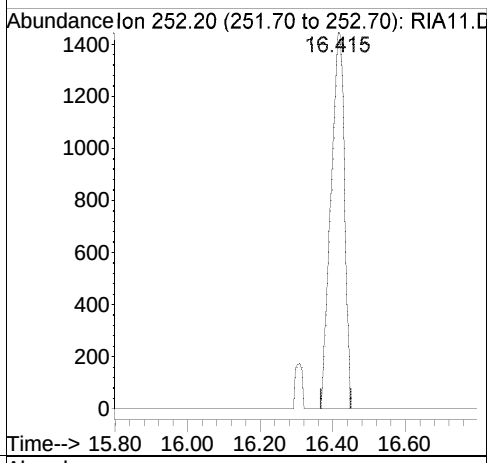
Raw



#83
Benzo(a)pyrene
Concen: 0.1183 ug/mL
RT: 16.415 min Scan# 2384
Delta R.T. 0.118 min
Lab File: RIA11.D
Acq: 10 Sep 2012 4:32 pm

Tgt Ion:252 Resp: 3644

Ion	Ratio	Lower	Upper
252	100		
253	27.8	2.6	42.6
125	22.0	0.0	36.8



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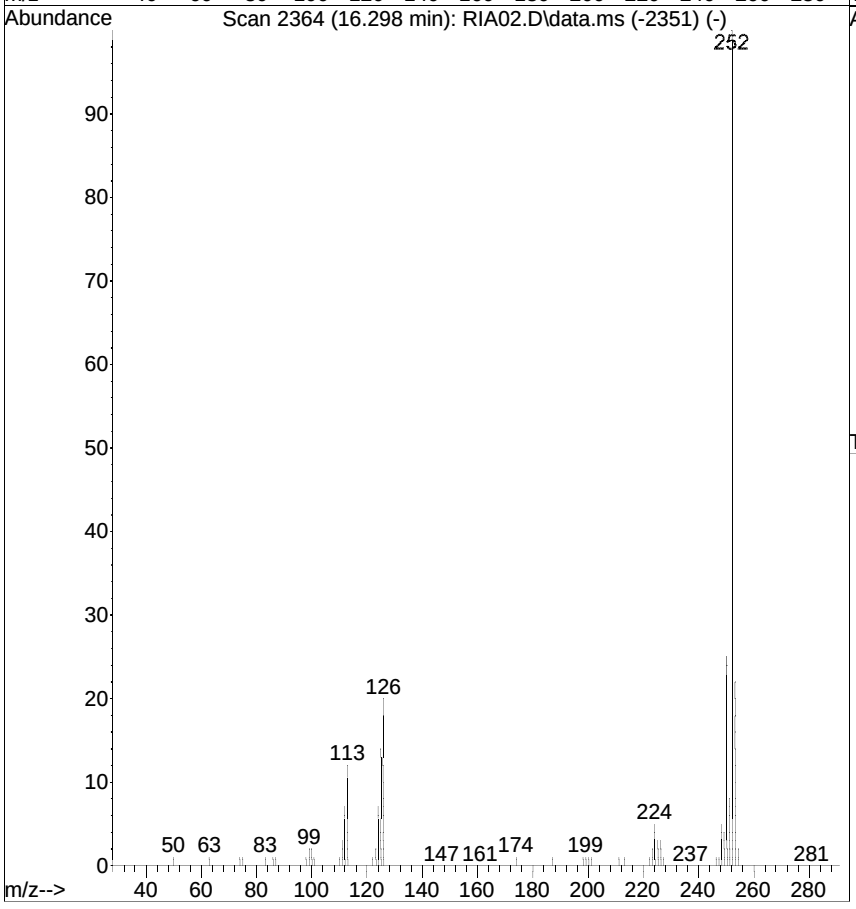
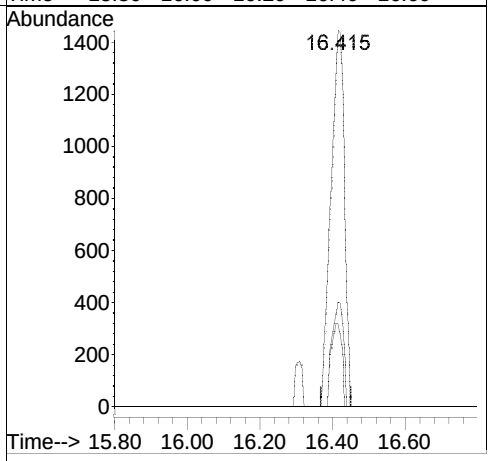




QC Raw Data

CURTIS & TOMPKINS BLANK USER REPORT FOR 239404 MSBNA Water
EPA 8270D

Inst : MSBNA09 Lab ID : QC655235
Seqnum : 582366461003.3 Matrix : Water
File : ria03 Batch : 190277 Time : 10-SEP-2012 12:28
Cal : 582094282001 Caldate : 05-MAR-2012
IDF : 1.0 Raw Units : ug/mL Units : ug/L

1000.00 mL --> 1.0 ml = 0.001 ml/ml PDF

Analyte	Raw	Result	RL	Flags
Naphthalene	0	ND	10	u
3,3'-Dichlorobenzidine	0	ND	20	u
Benzo(a)anthracene	0.07630	ND	10	u
bis(2-Ethylhexyl)phthalate	0.8548	ND	10	u
Benzo(b)fluoranthene	0	ND	10	u
Benzo(k)fluoranthene	0	ND	10	u
Benzo(a)pyrene	0.1154	ND	10	u
Indeno(1,2,3-cd)pyrene	0	ND	10	u
Dibenz(a,h)anthracene	0	ND	10	u

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	28.08	40.00	28.08	70	55-120	u
2-Fluorobiphenyl	25.21	40.00	25.21	63	51-120	u
Terphenyl-d14	27.84	40.00	27.84	70	23-120	u

ISTD (CCV ria02)	CCV Area	BLANK Area	%Drift	CCV RT	BLANK RT	Drift
Naphthalene-d8	1046042	1246327	19.15	6.90	6.90	0.00
Acenaphthene-d10	606004	715610	18.09	9.03	9.03	0.00
Chrysene-d12	1080213	1448209	34.07	14.13	14.13	0.00
Perylene-d12	993497	1333696	34.24	16.42	16.42	0.00

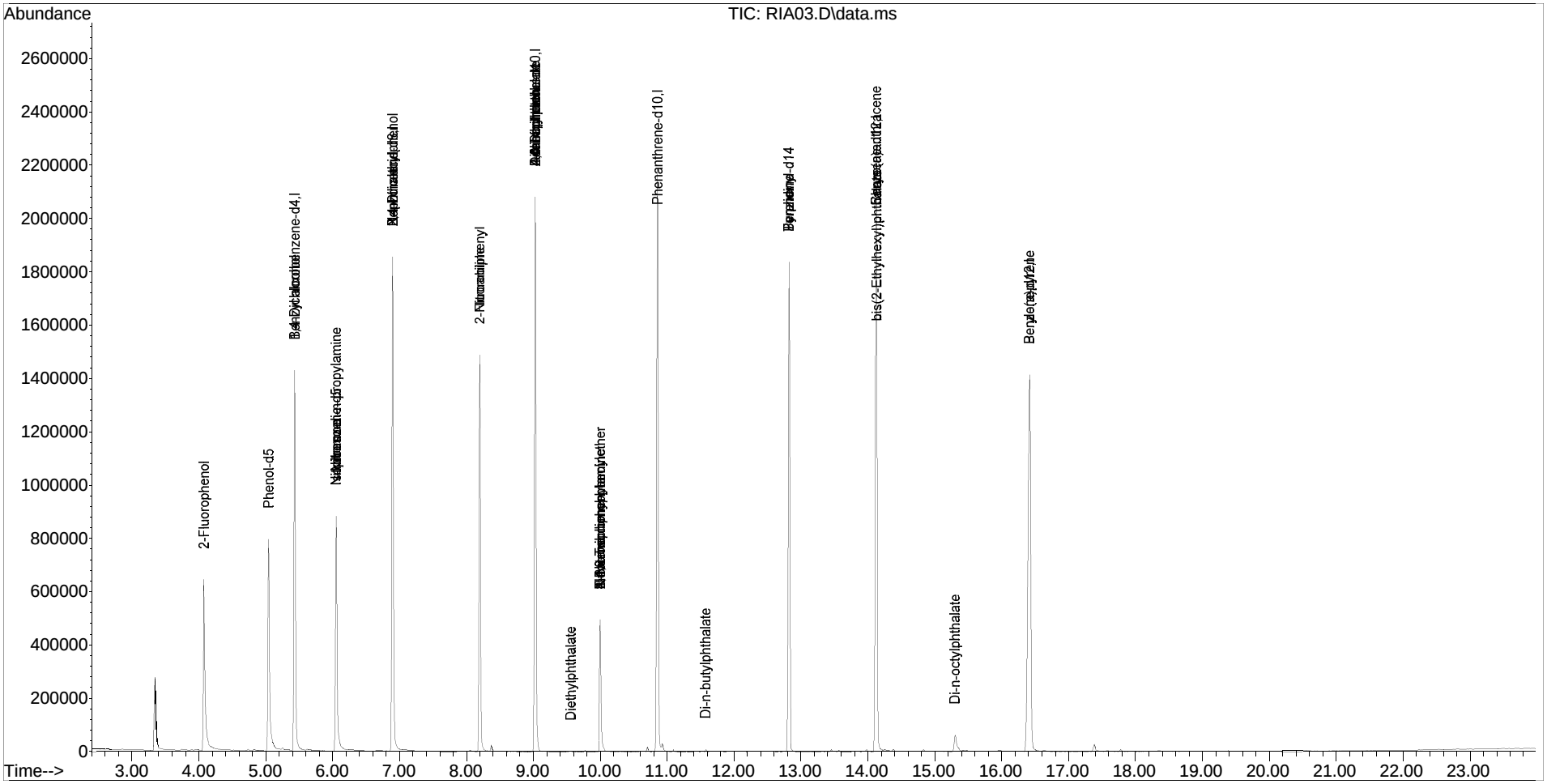
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

u=use

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA03.D
Acq On : 10 Sep 2012 12:28 pm
Operator :
Sample : MB,QC655235
Misc : 190277,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 12:50:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA03.D
Acq On : 10 Sep 2012 12:28 pm
Operator :
Sample : MB,QC655235
Misc : 190277,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 12:50:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	5.434	152	322966	40.0000	ug/mL	0.00
19) Naphthalene-d8	6.898	136	1246327	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.028	164	715610	40.0000	ug/mL	0.00
58) Phenanthrene-d10	10.857	188	1300177	40.0000	ug/mL	0.00
70) Chrysene-d12	14.127	240	1448209	40.0000	ug/mL	0.00
79) Perylene-d12	16.421	264	1333696	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	0.000	79	0	N.D.		
3) N-Nitrosodimethylamine	0.000	42	0	N.D.		
4) 2-Fluorophenol	4.081	112	365273	27.3071	ug/mL	82
5) Phenol-d5	5.046	99	509592	27.5426	ug/mL	80
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	5.434	108	1507	0.1624	ug/mL #	1
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.057	70	69438	6.6883	ug/mL #	67
18) Hexachloroethane	0.000	117	0	N.D.		
20) Nitrobenzene-d5	6.057	82	487532	28.0819	ug/mL #	79
21) Nitrobenzene	6.057	77	1623	0.1064	ug/mL #	44
22) Isophorone	6.057	82	487638	16.4382	ug/mL	66
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	6.898	107	8247	0.6524	ug/mL #	22
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	6.898	105	1473	37.4158	ug/mL #	1
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	0.000	128	0	N.D.		
30) 4-Chloroaniline	0.000	127	0	N.D.		
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	0.000	142	0	N.D.		
35) 1-Methylnaphthalene	0.000	142	0	N.D.		
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA03.D
Acq On : 10 Sep 2012 12:28 pm
Operator :
Sample : MB,QC655235
Misc : 190277,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 12:50:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.204	172	711510	25.2092	ug/mL	97
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	8.204	65	1350	0.1521	ug/mL #	1
43) Dimethylphthalate	9.028	163	108689	4.2731	ug/mL #	1
44) 2,6-Dinitrotoluene	9.028	165	91662	15.2419	ug/mL #	16
45) Acenaphthylene	0.000	152	0	N.D.		
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.028	154	2271	0.0984	ug/mL #	7
48) 2,4-Dinitrophenol	0.000	184	0	N.D.		
49) 4-Nitrophenol	9.028	109	1407	0.3529	ug/mL #	31
50) Dibenzofuran	0.000	168	0	N.D.		
51) 2,4-Dinitrotoluene	9.028	165	91662	11.1865	ug/mL #	15
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	9.569	149	1736	0.0622	ug/mL	89
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.		
55) Fluorene	9.998	166	4370	0.1675	ug/mL #	68
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	9.998	330	68495	26.0607	ug/mL	92
59) 4,6-Dinitro-2-methylphenol	0.000	198	0	N.D.		
60) N-Nitrosodiphenylamine	9.998	169	3085	0.1530	ug/mL #	30
61) Azobenzene	0.000	77	0	N.D.		
62) 4-Bromophenyl-phenylether	9.998	248	5093	0.7358	ug/mL #	1
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	0.000	178	0	N.D.		
66) Anthracene	0.000	178	0	N.D.		
67) Carbazole	0.000	167	0	N.D.		
68) Di-n-butylphthalate	11.580	149	8407	0.1799	ug/mL	98
69) Fluoranthene	0.000	202	0	N.D.		
71) Benzidine	12.827	184	13027	0.6162	ug/mL #	1
72) Pyrene	12.827	202	2965	0.0612	ug/mL #	56
73) Terphenyl-d14	12.827	244	951966	27.8414	ug/mL	98
74) Butylbenzylphthalate	0.000	149	0	N.D.		
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.		
76) Benzo(a)anthracene	14.127	228	3216	0.0763	ug/mL	74
77) bis(2-Ethylhexyl)phthalate	14.139	149	28529	0.8548	ug/mL	97
78) Chrysene	14.127	228	3216	0.0785	ug/mL	77
80) Di-n-octylphthalate	15.310	149	1124	0.0174	ug/mL #	1
81) Benzo(b)fluoranthene	0.000	252	0	N.D.		
82) Benzo(k)fluoranthene	0.000	252	0	N.D.		
83) Benzo(a)pyrene	16.421	252	3827	0.1154	ug/mL	87
84) Indeno(1,2,3-cd)pyrene	0.000	276	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA03.D
Acq On : 10 Sep 2012 12:28 pm
Operator :
Sample : MB,QC655235
Misc : 190277,1,
ALS Vial : 3 Sample Multiplier: 1

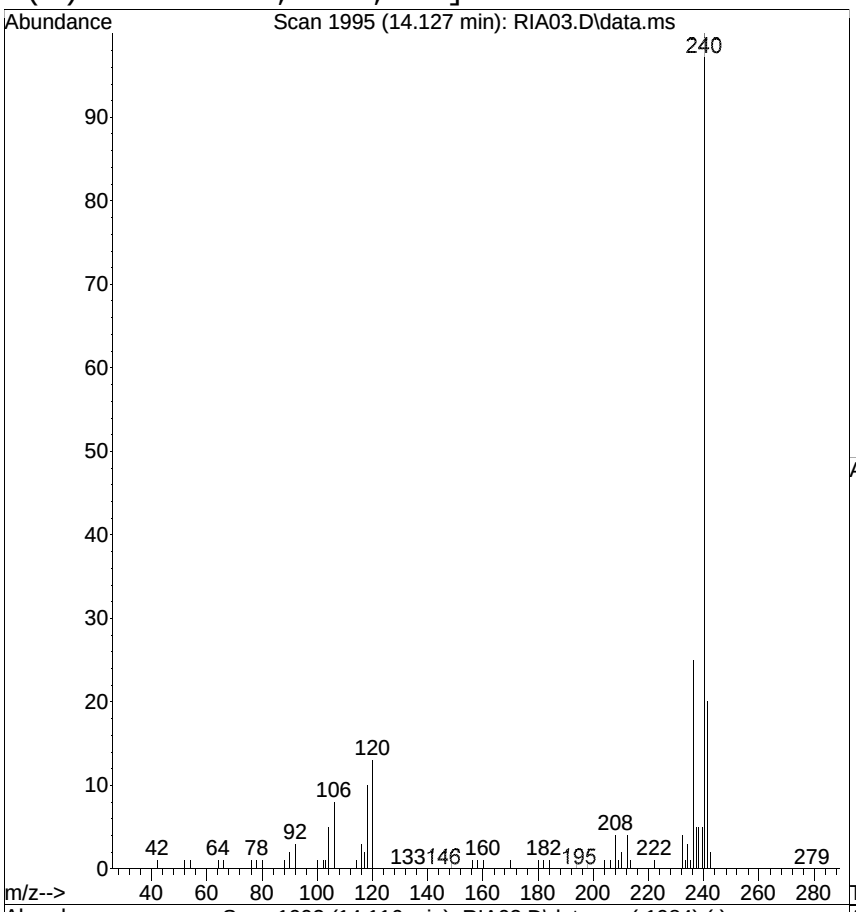
Quant Time: Sep 10 12:50:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	0.000	276	0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)anthracene; <RL; u]

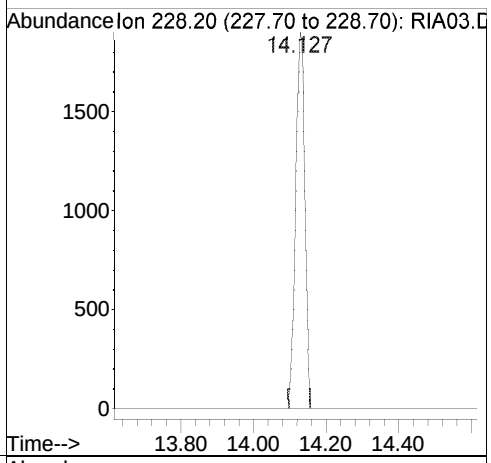
Raw



#76
Benzo(a)anthracene
Concen: 0.0763 ug/mL
RT: 14.127 min Scan# 1995
Delta R.T. 0.012 min
Lab File: RIA03.D
Acq: 10 Sep 2012 12:28 pm

Tgt Ion:228 Resp: 3216

Ion	Ratio	Lower	Upper
228	100		
229	24.3	0.0	40.0
226	8.3	8.0	48.0



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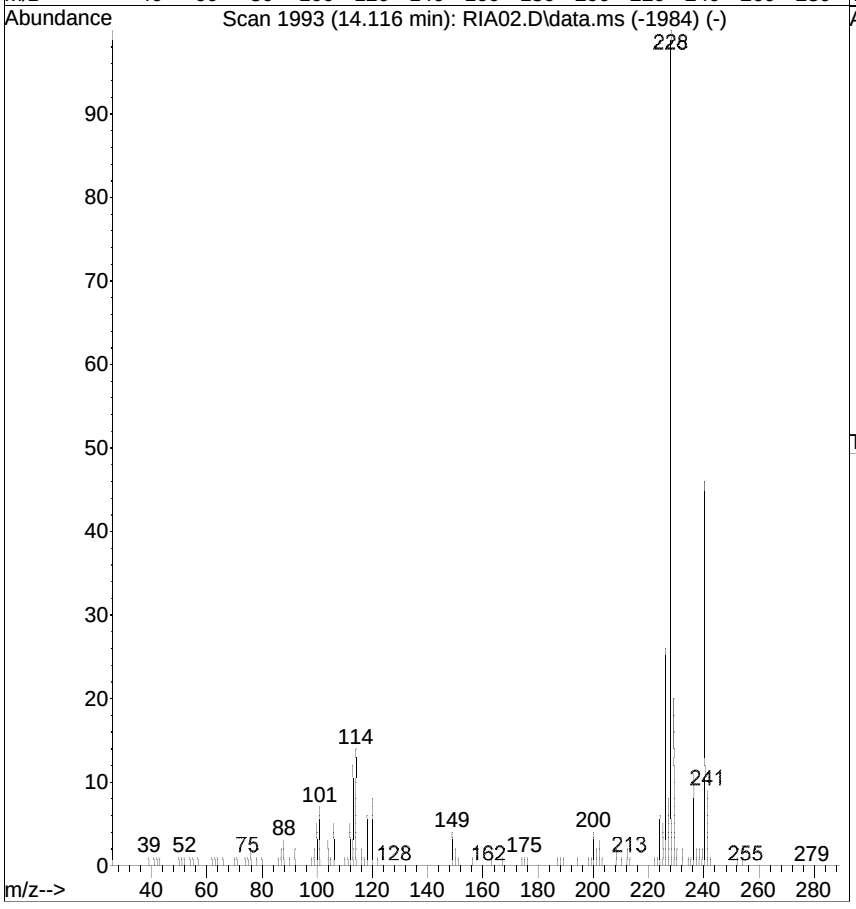
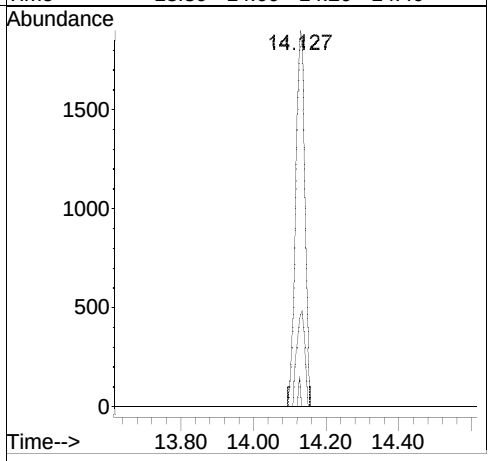
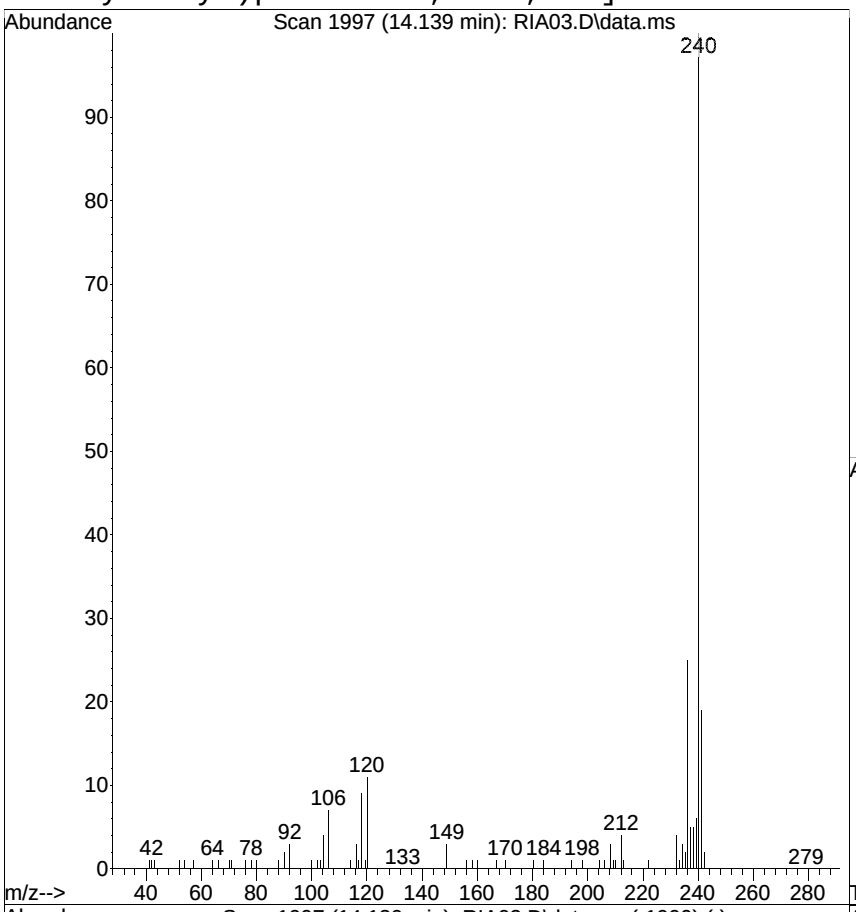




[bis(2-Ethylhexyl)phthalate; <RL; u]

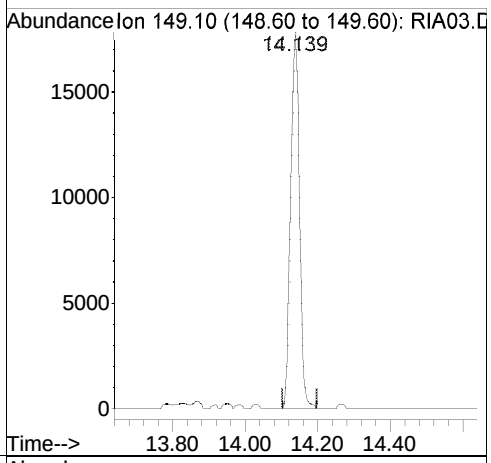
Raw



#77
bis(2-Ethylhexyl)phthalate
Concen: 0.8548 ug/mL
RT: 14.139 min Scan# 1997
Delta R.T. -0.000 min
Lab File: RIA03.D
Acq: 10 Sep 2012 12:28 pm

Tgt Ion:149 Resp: 28529

Ion	Ratio	Lower	Upper
149	100		
167	31.1	9.0	49.0
279	7.1	0.0	27.0



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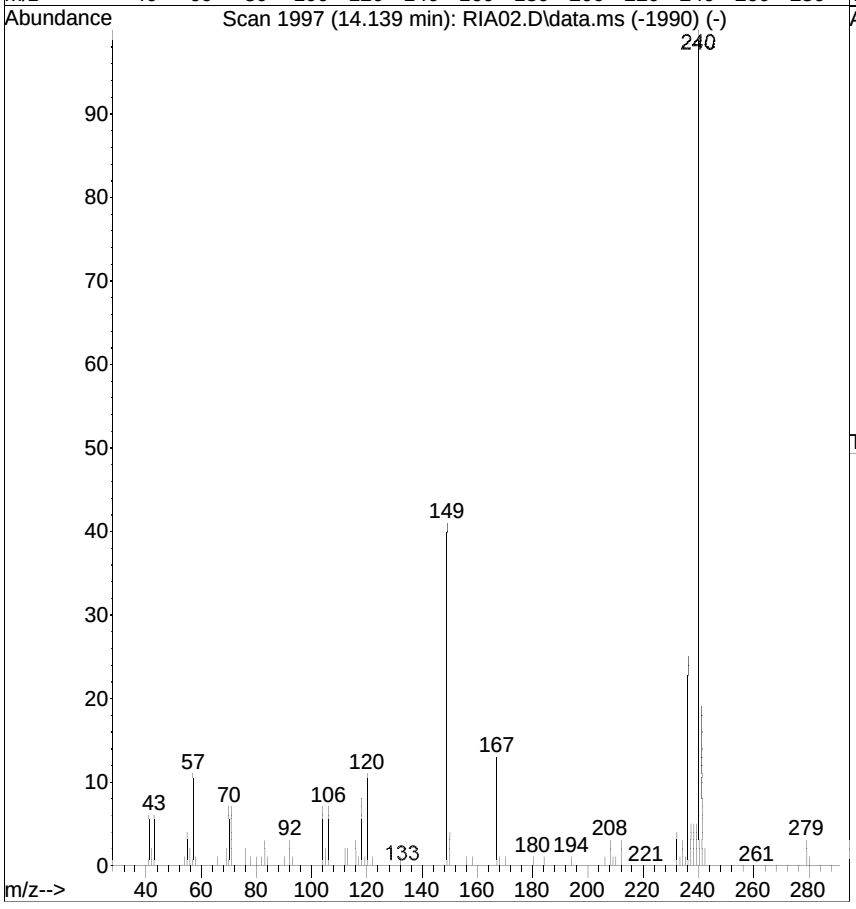
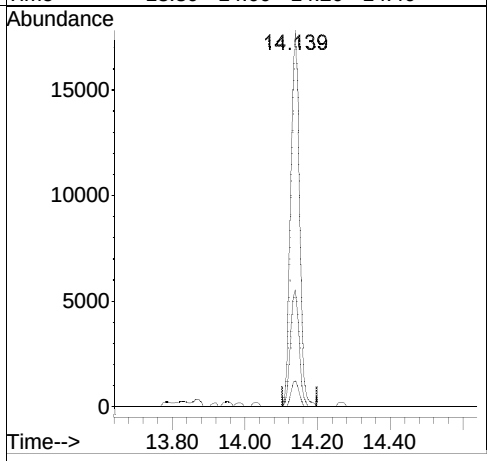
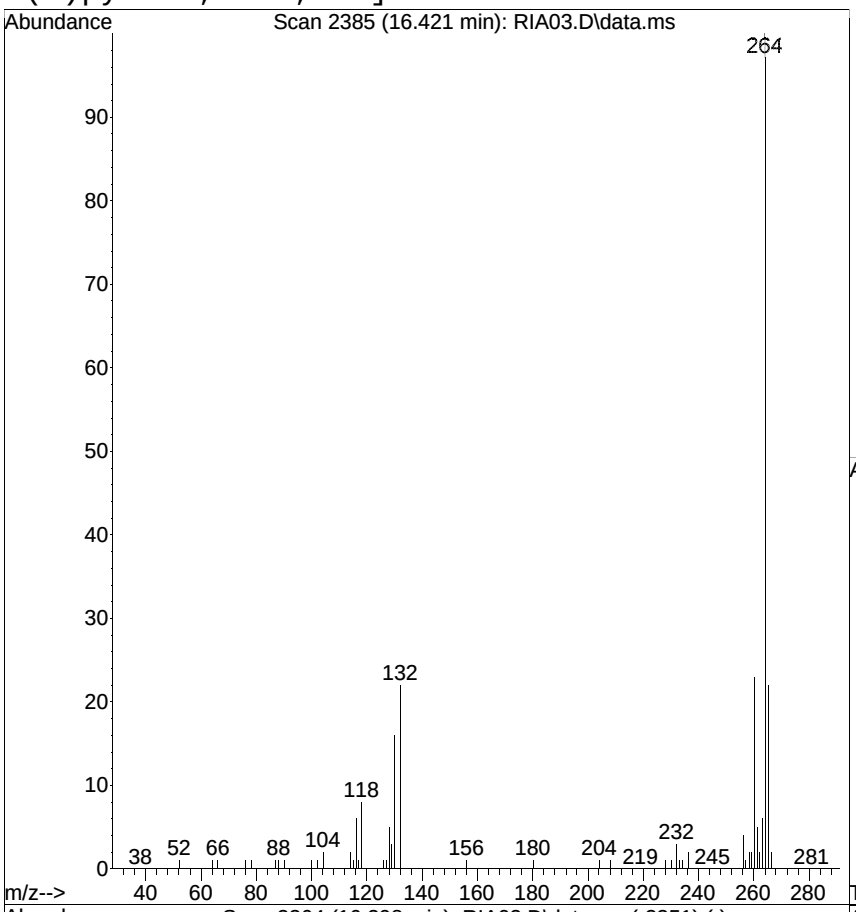




[Benzo(a)pyrene; <RL; u]

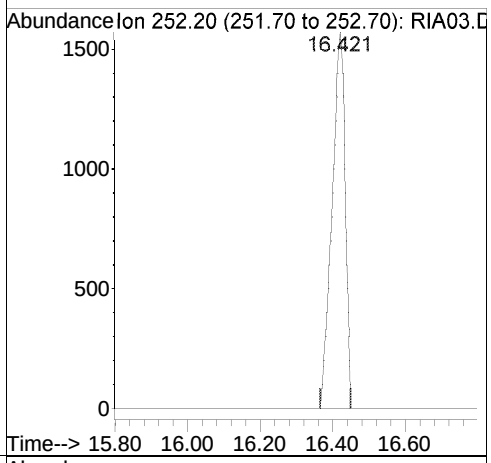
Raw



#83
Benzo(a)pyrene
Concen: 0.1154 ug/mL
RT: 16.421 min Scan# 2385
Delta R.T. 0.123 min
Lab File: RIA03.D
Acq: 10 Sep 2012 12:28 pm

Tgt Ion:252 Resp: 3827

Ion	Ratio	Lower	Upper
252	100		
253	26.8	2.6	42.6
125	24.5	0.0	36.8



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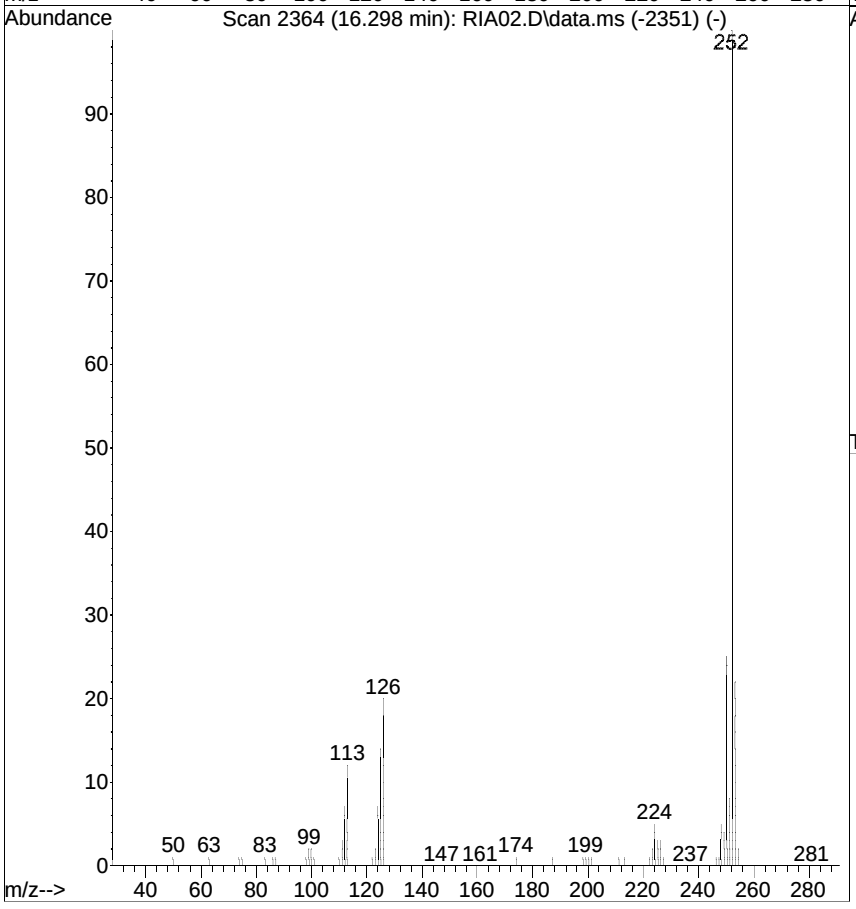
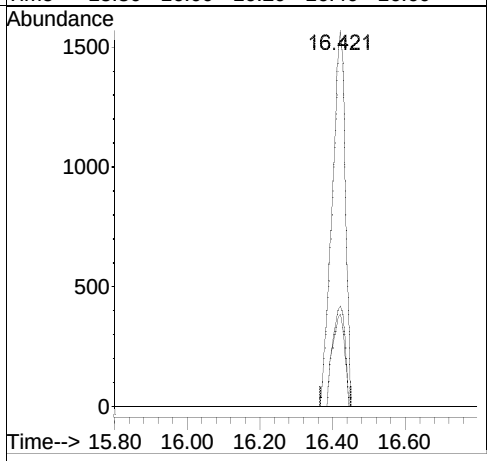




CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 MSBNA Water
EPA 8270D

Type : BS
Inst : MSBNA09
Seqnum : 582366461009.3
File : ria09
IDF : 1.0
Lab ID : QC655236
Matrix : Water
Batch : 190277
Time : 10-SEP-2012 15:31
Cal : 582094282001
Units : ug/L

Type : BSD
Inst : MSBNA09
Seqnum : 582366461010.3
File : ria10
IDF : 1.0
Lab ID : QC655237
Matrix : Water
Batch : 190277
Time : 10-SEP-2012 16:01
Cal : 582094282001

BS: 1000.00 mL --> 1.0 ml = 0.001 ml/ml PDF
BSD: 1000.00 mL --> 1.0 ml = 0.001 ml/ml PDF

Analyte	Spiked	BS Raw	BS Result	%Rec	BSD Raw	BSD Result	%Rec	Limits	RPD	Lim	Flags
Naphthalene	30.00	25.16	25.16	84	26.24	26.24	87	61-120	4	21	u
3,3'-Dichlorobenzidine	80.00	63.02	63.02	79	63.32	63.32	79	47-120	0	25	u
Benzo(a)anthracene	30.00	29.79	29.79	99	30.00	30.00	100	65-120	1	21	u
bis(2-Ethylhexyl)phthalate	30.00	24.46	24.46	82	30.61	30.61	102	54-124	22	33	u
Benzo(b)fluoranthene	30.00	29.38	29.38	98	29.66	29.66	99	61-120	1	30	u
Benzo(k)fluoranthene	30.00	28.89	28.89	96	28.77	28.77	96	60-120	0	29	u
Benzo(a)pyrene	30.00	26.66	26.66	89	26.58	26.58	89	62-120	0	20	m u
Indeno(1,2,3-cd)pyrene	30.00	30.13	30.13	100	29.84	29.84	99	58-120	1	27	u
Dibenz(a,h)anthracene	30.00	30.46	30.46	102	30.22	30.22	101	59-120	1	28	u
Nitrobenzene-d5	40.00	32.59	32.59	81	34.17	34.17	85	55-120			u
2-Fluorobiphenyl	40.00	32.54	32.54	81	34.36	34.36	86	51-120			u
Terphenyl-d14	40.00	40.70	40.70	102	41.16	41.16	103	23-120			u

ISTD (CCV ria02)	CCV Area	BS Area	%Drift	CCV RT	BS RT	Drift
Naphthalene-d8	1046042	1011754	-3.28	6.90	6.90	0.00
Acenaphthene-d10	606004	585407	-3.40	9.03	9.03	0.00
Chrysene-d12	1080213	1021379	-5.45	14.13	14.13	0.00
Perylene-d12	993497	960928	-3.28	16.42	16.42	0.00

ISTD (CCV ria02)	CCV Area	BSD Area	%Drift	CCV RT	BSD RT	Drift
Naphthalene-d8	1046042	978875	-6.42	6.90	6.90	0.00
Acenaphthene-d10	606004	553937	-8.59	9.03	9.03	0.00
Chrysene-d12	1080213	976104	-9.64	14.13	14.13	0.00
Perylene-d12	993497	921032	-7.29	16.42	16.42	0.00

LLH 09/10/12 [2,4,6-Tribromophenol]: surr out high in the BSD for job 239328 only, not reported from this batch [general version]

LLH 09/10/12 [Pyridine]: Corrected automatically drawn baseline for spike. [general version]

LLH 09/10/12 [Aniline]: Picked or reassigned peak for spike & dup. [general version]

LLH 09/10/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline for spike & dup. [general version]

LLH 09/10/12 [Resorcinol]: Corrected automatically drawn baseline for spike & dup. [general version]

LLH 09/10/12 [Benzo(a)pyrene]: Corrected fronting or tailing peak integration for spike & dup. [general version]

LLH 09/10/12 [Benzidine]: qdeleted due to no peak found at expected RT [general version]

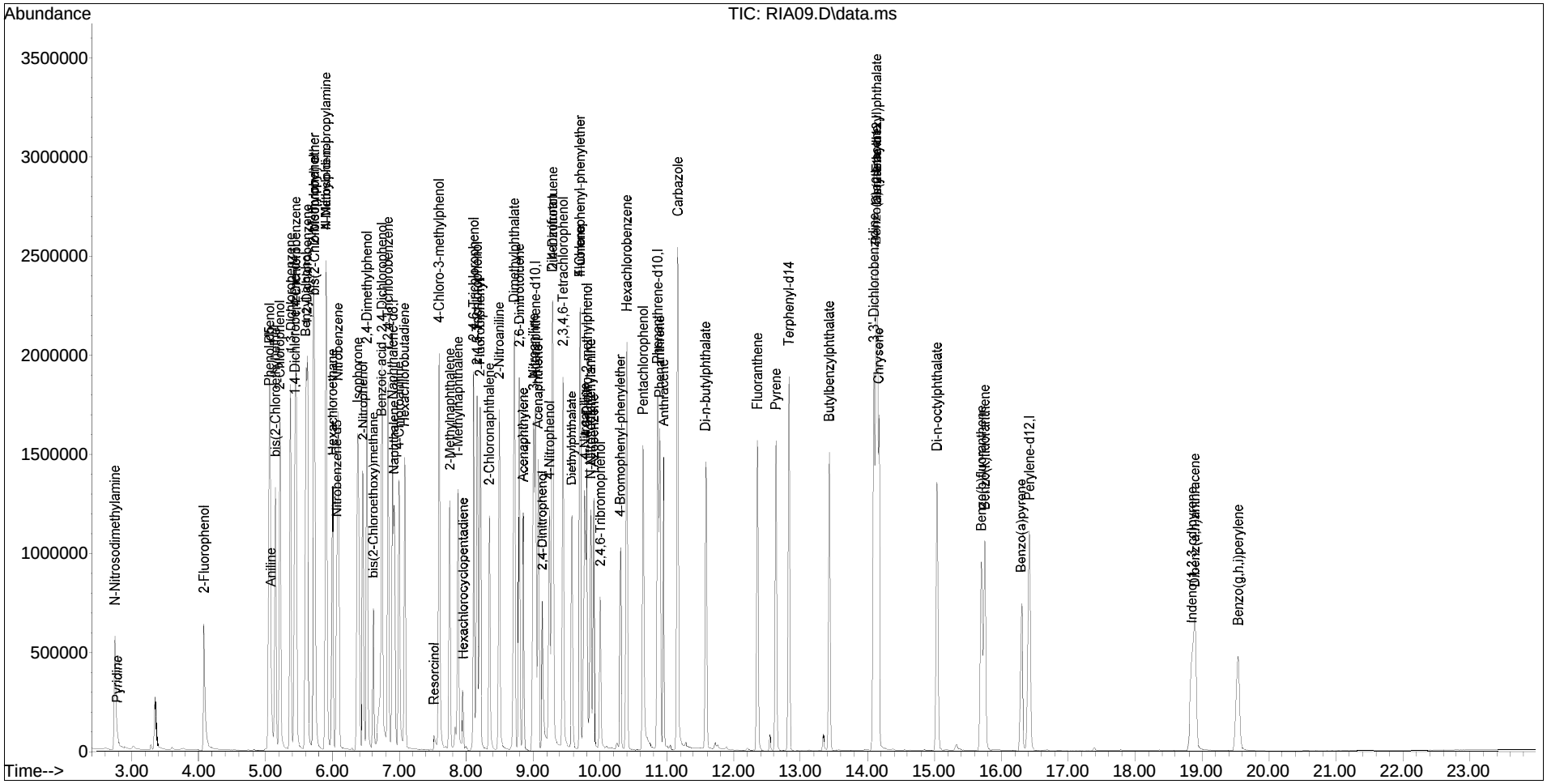
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

m=manual integration u=use

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA09.D
Acq On : 10 Sep 2012 3:31 pm
Operator :
Sample : BS,QC655236
Misc : 190277,1,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 10 16:11:32 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA09.D
Acq On : 10 Sep 2012 3:31 pm
Operator :
Sample : BS,QC655236
Misc : 190277,1,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 10 16:11:32 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	5.434	152	274699	40.0000	ug/mL		0.00
19) Naphthalene-d8	6.898	136	1011754	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.033	164	585407	40.0000	ug/mL		0.00
58) Phenanthrene-d10	10.857	188	1075465	40.0000	ug/mL		0.00
70) Chrysene-d12	14.133	240	1021379	40.0000	ug/mL		0.00
79) Perylene-d12	16.415	264	960928	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	2.793	79	3482m	0.2271	ug/mL		
3) N-Nitrosodimethylamine	2.751	42	400354	68.3950	ug/mL	#	62
4) 2-Fluorophenol	4.081	112	374706	32.9343	ug/mL		81
5) Phenol-d5	5.051	99	474357	30.1430	ug/mL		81
6) Phenol	5.069	94	872144	60.0424	ug/mL		74
7) Aniline	5.087	93	99750m	5.3624	ug/mL		
8) bis(2-Chloroethyl)ether	5.145	93	682830m	61.2592	ug/mL		
9) 2-Chlorophenol	5.216	128	682432	66.2903	ug/mL		96
10) 1,3-Dichlorobenzene	5.375	146	639836	61.2818	ug/mL		94
11) 1,4-Dichlorobenzene	5.451	146	646797	62.1620	ug/mL		90
12) Benzyl alcohol	5.604	108	479310	60.7319	ug/mL		97
13) 1,2-Dichlorobenzene	5.622	146	611314	60.8882	ug/mL		94
14) 2-Methylphenol	5.722	107	486980	56.5706	ug/mL		89
15) bis(2-Chloroisopropyl) ether	5.740	45	753610	44.6521	ug/mL		86
16) 4-Methylphenol	5.904	107	622945	48.0634	ug/mL		92
17) N-Nitroso-di-n-propylamine	5.898	70	447863	50.7179	ug/mL	#	78
18) Hexachloroethane	6.004	117	237911	55.8895	ug/mL		99
20) Nitrobenzene-d5	6.063	82	459253	32.5861	ug/mL	#	79
21) Nitrobenzene	6.087	77	803888	64.9247	ug/mL		96
22) Isophorone	6.375	82	1604842	66.6417	ug/mL		99
23) 2-Nitrophenol	6.457	139	370624	74.2525	ug/mL		94
24) 2,4-Dimethylphenol	6.516	107	591945	57.6854	ug/mL		94
25) bis(2-Chloroethoxy)methane	6.610	93	359507	26.4615	ug/mL		95
26) Benzoic acid	6.734	105	358488	68.8379	ug/mL		95
27) 2,4-Dichlorophenol	6.745	162	509956	67.0497	ug/mL		99
28) 1,2,4-Trichlorobenzene	6.834	180	497266	66.2827	ug/mL		95
29) Naphthalene	6.928	128	739002	25.1609	ug/mL		97
30) 4-Chloroaniline	6.998	127	605700	49.4465	ug/mL		89
31) Hexachlorobutadiene	7.075	225	240339	61.3132	ug/mL		98
32) Resorcinol	7.522	110	73755m	6.4648	ug/mL		
33) 4-Chloro-3-methylphenol	7.592	107	631087	66.3570	ug/mL		88
34) 2-Methylnaphthalene	7.757	142	515408	26.3846	ug/mL		94
35) 1-Methylnaphthalene	7.875	142	508810	26.6904	ug/mL		93
37) Hexachlorocyclopentadiene	7.951	237	55394	12.9417	ug/mL		98
38) 2,4,6-Trichlorophenol	8.116	196	385363	73.4545	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA09.D
Acq On : 10 Sep 2012 3:31 pm
Operator :
Sample : BS,QC655236
Misc : 190277,1,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 10 16:11:32 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.163	196	432400	76.8617	ug/mL		87
40) 2-Fluorobiphenyl	8.204	172	751284	32.5388	ug/mL		97
41) 2-Chloronaphthalene	8.351	162	485263	27.7756	ug/mL		96
42) 2-Nitroaniline	8.492	65	519389	71.5332	ug/mL		99
43) Dimethylphthalate	8.722	163	1543823	74.1940	ug/mL		99
44) 2,6-Dinitrotoluene	8.792	165	372015	75.6188	ug/mL		94
45) Acenaphthylene	8.851	152	790237	26.2018	ug/mL		99
46) 3-Nitroaniline	9.004	138	417154	70.3243	ug/mL	#	79
47) Acenaphthene	9.069	154	473142	25.0548	ug/mL		96
48) 2,4-Dinitrophenol	9.139	184	188719	89.0294	ug/mL	#	1
49) 4-Nitrophenol	9.245	109	264348	81.0528	ug/mL		99
50) Dibenzofuran	9.280	168	683624	26.3781	ug/mL		68
51) 2,4-Dinitrotoluene	9.298	165	497100	74.1593	ug/mL		95
52) 2,3,4,6-Tetrachlorophenol	9.451	232	358378	84.3391	ug/mL		88
53) Diethylphthalate	9.580	149	674130	29.5291	ug/mL		99
54) 4-Chlorophenyl-phenylether	9.704	204	263130	27.2337	ug/mL	#	72
55) Fluorene	9.704	166	558677	26.1740	ug/mL		89
56) 4-Nitroaniline	9.775	138	436150	74.6404	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.004	330	102563	47.7019	ug/mL		89
59) 4,6-Dinitro-2-methylphenol	9.804	198	291380	92.4875	ug/mL		91
60) N-Nitrosodiphenylamine	9.857	169	427443	25.6331	ug/mL		89
61) Azobenzene	9.904	77	786928	26.5489	ug/mL		97
62) 4-Bromophenyl-phenylether	10.304	248	165746	28.9479	ug/mL	#	75
63) Hexachlorobenzene	10.398	284	446956	86.9430	ug/mL		91
64) Pentachlorophenol	10.639	266	294283	87.8138	ug/mL		98
65) Phenanthrene	10.886	178	883714	27.8553	ug/mL		97
66) Anthracene	10.951	178	895089	27.5981	ug/mL		95
67) Carbazole	11.163	167	1983136	72.0435	ug/mL		86
68) Di-n-butylphthalate	11.580	149	1167489	30.2041	ug/mL		98
69) Fluoranthene	12.351	202	981656	30.1622	ug/mL		98
71) Benzidine	0.000	184	0m	N.D.			
72) Pyrene	12.633	202	987803	28.9226	ug/mL		93
73) Terphenyl-d14	12.827	244	981585	40.7044	ug/mL		99
74) Butylbenzylphthalate	13.427	149	521585	30.0305	ug/mL		89
75) 3,3'-Dichlorobenzidine	14.092	252	632594	63.0190	ug/mL		99
76) Benzo(a)anthracene	14.115	228	885635	29.7902	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.139	149	575743	24.4608	ug/mL		94
78) Chrysene	14.163	228	890989	30.8467	ug/mL		95
80) Di-n-octylphthalate	15.033	149	1280350	27.4420	ug/mL		95
81) Benzo(b)fluoranthene	15.704	252	809088	29.3837	ug/mL		96
82) Benzo(k)fluoranthene	15.757	252	827705	28.8903	ug/mL		93
83) Benzo(a)pyrene	16.298	252	636950m	26.6562	ug/mL		
84) Indeno(1,2,3-cd)pyrene	18.845	276	756718	30.1272	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA09.D
Acq On : 10 Sep 2012 3:31 pm
Operator :
Sample : BS,QC655236
Misc : 190277,1,
ALS Vial : 9 Sample Multiplier: 1

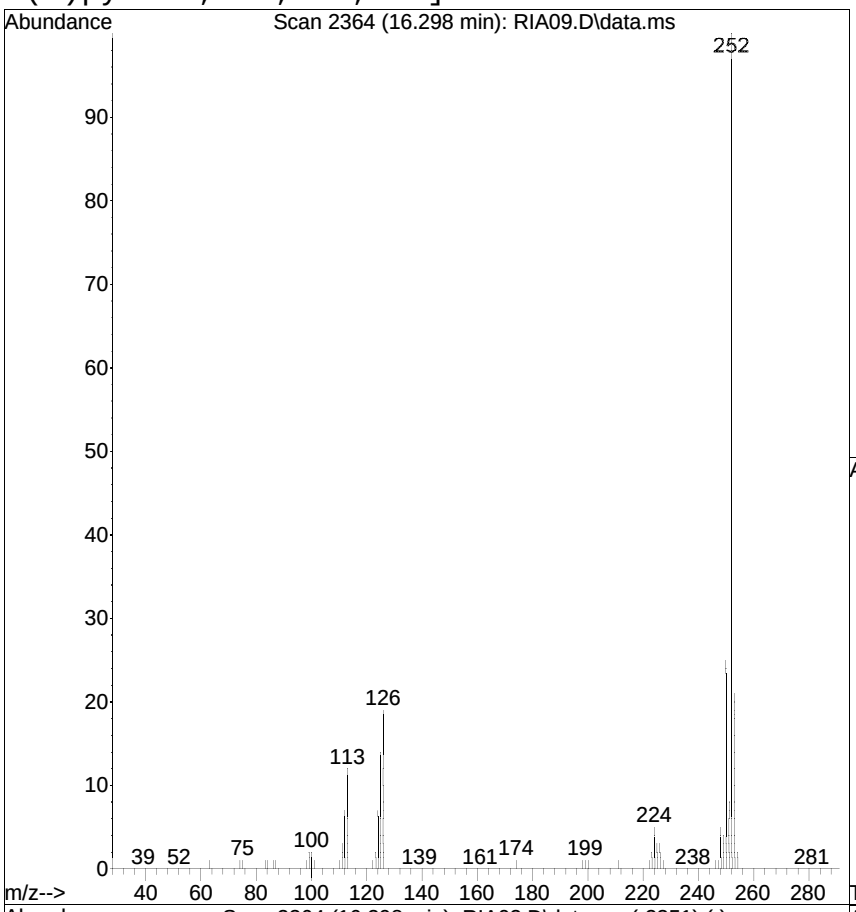
Quant Time: Sep 10 16:11:32 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	18.897	278	664828	30.4607	ug/mL	97
86) Benzo(g,h,i)perylene	19.539	276	640374	29.4178	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)pyrene; 27; MI; u]

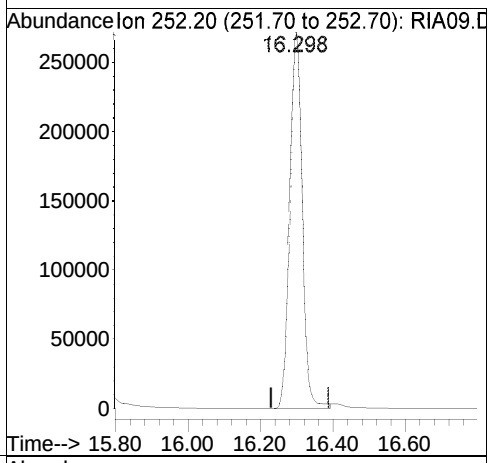
Raw



#83
Benzo(a)pyrene
Concen: 26.6562 ug/mL m
RT: 16.298 min Scan# 2364
Delta R.T. -0.000 min
Lab File: RIA09.D
Acq: 10 Sep 2012 3:31 pm

Tgt Ion:252 Resp: 636950

Ion	Ratio	Lower	Upper
252	100		
253	21.8	2.6	42.6
125	14.0	0.0	36.8



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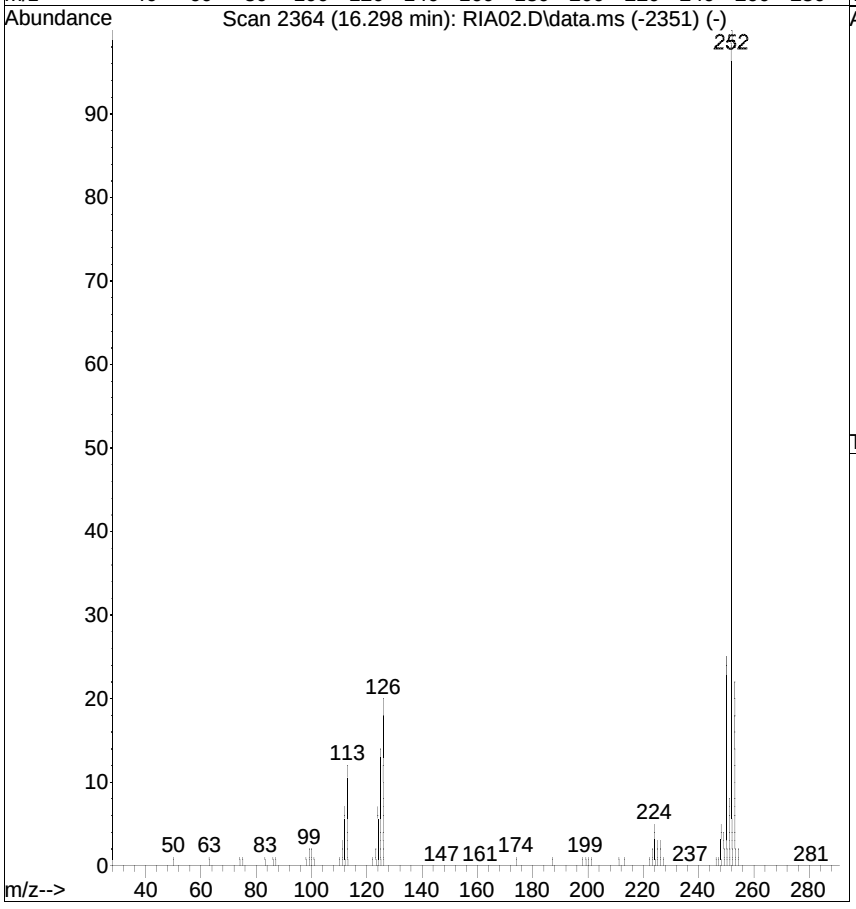
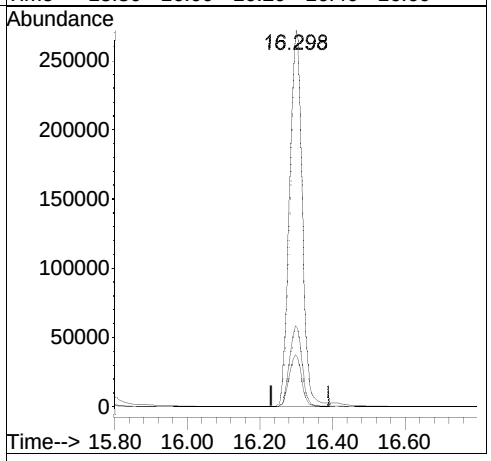
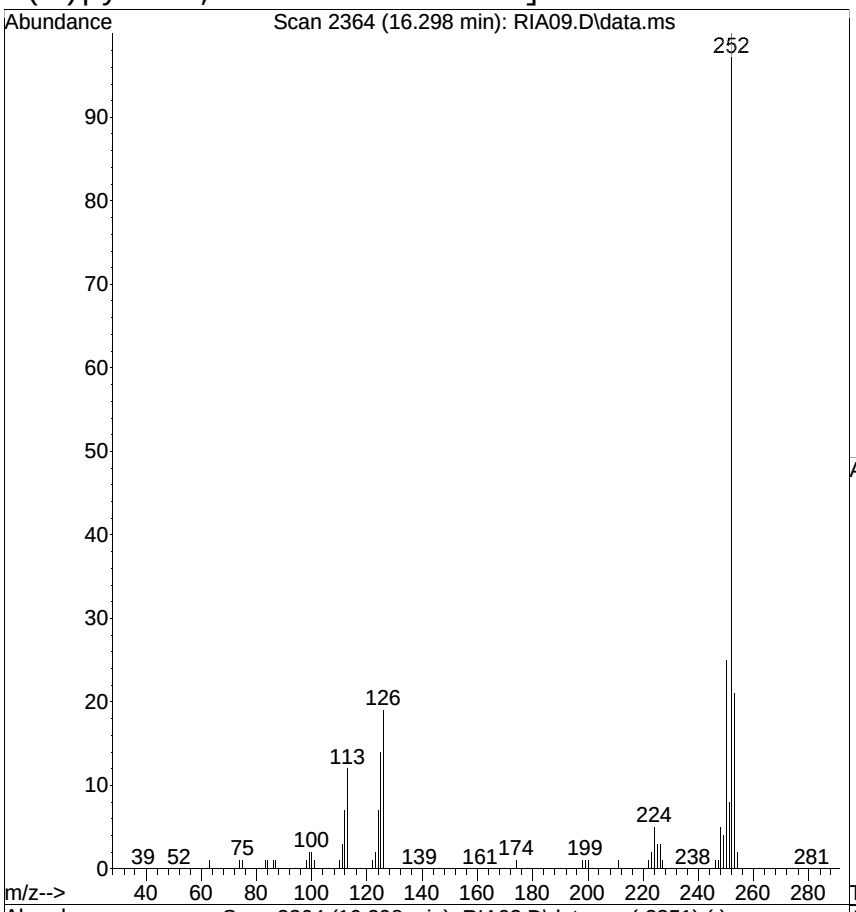




[Benzo(a)pyrene; before version]

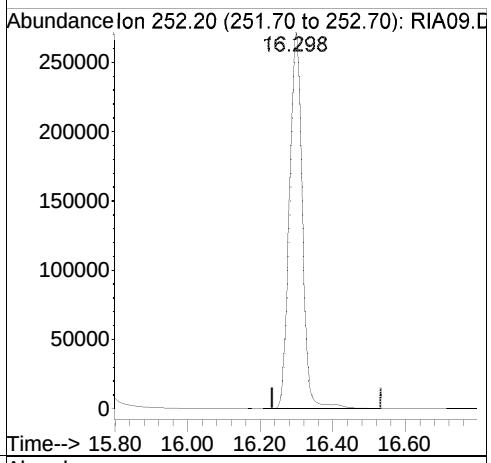
Raw



#83
Benzo(a)pyrene
Concen: 27.0425 ug/mL
RT: 16.298 min Scan# 2364
Delta R.T. -0.000 min
Lab File: RIA09.D
Acq: 10 Sep 2012 3:31 pm

Tgt Ion:252 Resp: 646179

Ion	Ratio	Lower	Upper
252	100		
253	21.5	2.6	42.6
125	13.8	0.0	36.8



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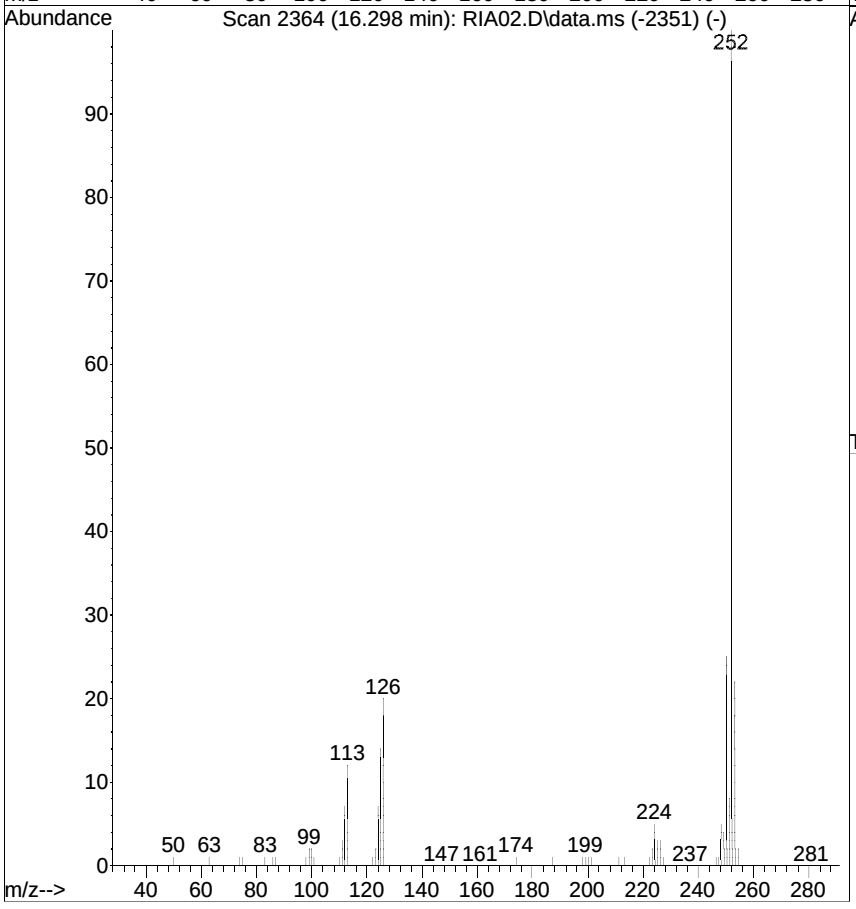
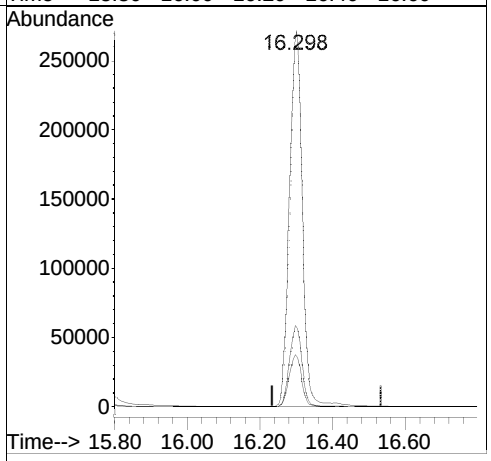
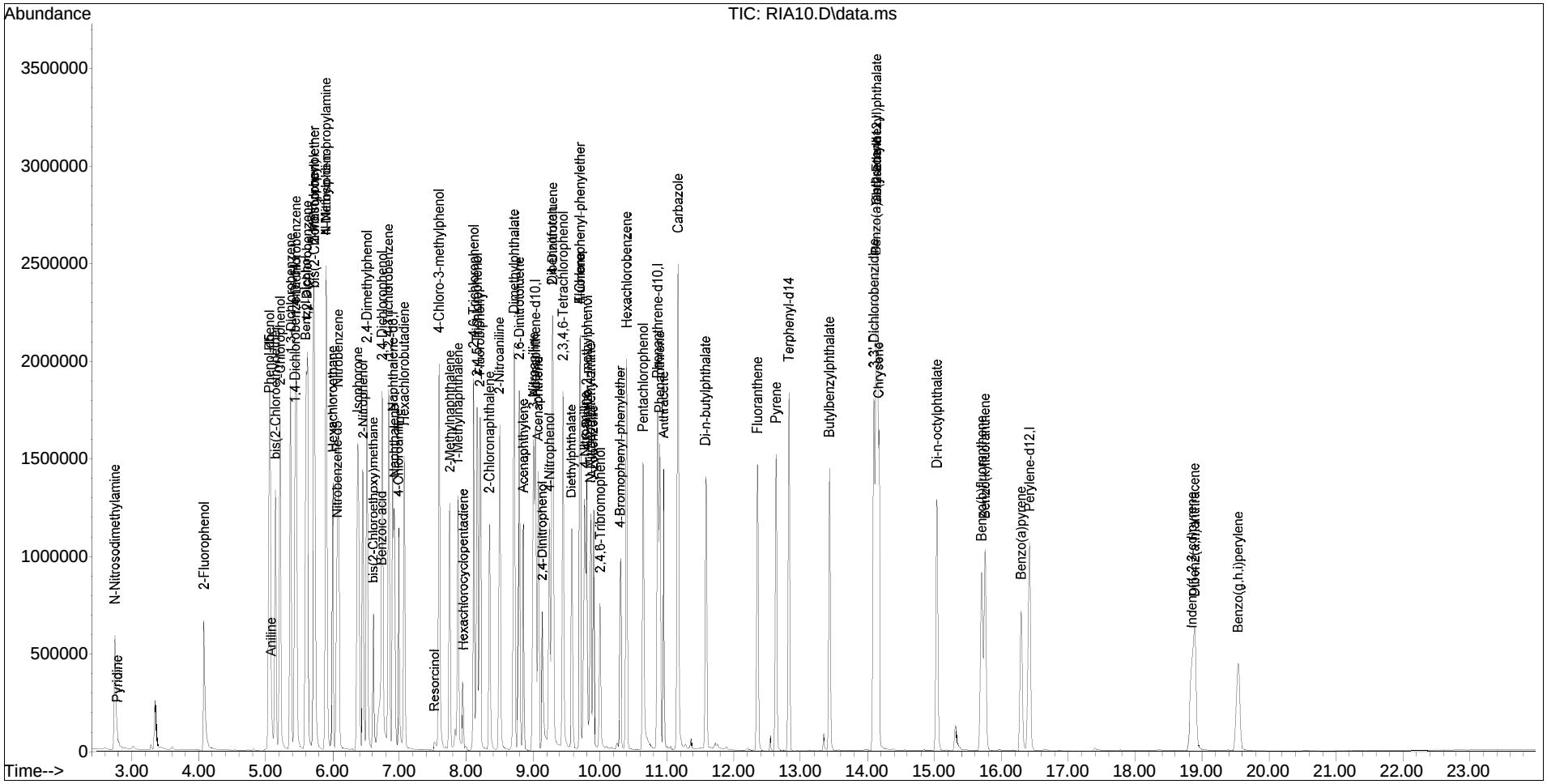




Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA10.D
Acq On : 10 Sep 2012 4:01 pm
Operator :
Sample : BSD,QC655237
Misc : 190277,1,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 10 16:30:03 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA10.D
Acq On : 10 Sep 2012 4:01 pm
Operator :
Sample : BSD,QC655237
Misc : 190277,1,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 10 16:30:03 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	5.434	152	260457	40.0000	ug/mL		0.00
19) Naphthalene-d8	6.898	136	978875	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.034	164	553937	40.0000	ug/mL		0.00
58) Phenanthrene-d10	10.857	188	1019717	40.0000	ug/mL		0.00
70) Chrysene-d12	14.133	240	976104	40.0000	ug/mL		0.00
79) Perylene-d12	16.415	264	921032	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	2.793	79	1549	0.1065	ug/mL		74
3) N-Nitrosodimethylamine	2.752	42	405290	73.0243	ug/mL	#	64
4) 2-Fluorophenol	4.081	112	388514	36.0152	ug/mL		81
5) Phenol-d5	5.051	99	483530	32.4061	ug/mL		81
6) Phenol	5.069	94	884876	64.2500	ug/mL		74
7) Aniline	5.093	93	74745m	4.2379	ug/mL		
8) bis(2-Chloroethyl)ether	5.146	93	696967m	65.9465	ug/mL		
9) 2-Chlorophenol	5.216	128	705187	72.2463	ug/mL		95
10) 1,3-Dichlorobenzene	5.375	146	658831	66.5515	ug/mL		94
11) 1,4-Dichlorobenzene	5.451	146	663349	67.2388	ug/mL		90
12) Benzyl alcohol	5.604	108	486576	65.0237	ug/mL		97
13) 1,2-Dichlorobenzene	5.628	146	627806	65.9500	ug/mL		95
14) 2-Methylphenol	5.722	107	494189	60.5472	ug/mL		88
15) bis(2-Chloroisopropyl) ether	5.740	45	763521	47.7130	ug/mL		86
16) 4-Methylphenol	5.904	107	627906	51.0953	ug/mL		92
17) N-Nitroso-di-n-propylamine	5.898	70	441592	52.7422	ug/mL	#	78
18) Hexachloroethane	6.004	117	241531	59.8425	ug/mL		99
20) Nitrobenzene-d5	6.063	82	465972	34.1734	ug/mL	#	79
21) Nitrobenzene	6.087	77	809418	67.5670	ug/mL		96
22) Isophorone	6.375	82	1567320	67.2696	ug/mL		99
23) 2-Nitrophenol	6.457	139	372454	77.1255	ug/mL		94
24) 2,4-Dimethylphenol	6.516	107	604266	60.8640	ug/mL		94
25) bis(2-Chloroethoxy)methane	6.610	93	348719	26.5296	ug/mL		96
26) Benzoic acid	6.728	105	314121	65.8640	ug/mL		94
27) 2,4-Dichlorophenol	6.745	162	518457	70.4571	ug/mL		99
28) 1,2,4-Trichlorobenzene	6.834	180	506329	69.7577	ug/mL		95
29) Naphthalene	6.928	128	745570	26.2372	ug/mL		97
30) 4-Chloroaniline	6.993	127	497512	41.9787	ug/mL		88
31) Hexachlorobutadiene	7.075	225	244489	64.4669	ug/mL		98
32) Resorcinol	7.528	110	47696m	4.3211	ug/mL		
33) 4-Chloro-3-methylphenol	7.592	107	632869	68.7795	ug/mL		87
34) 2-Methylnaphthalene	7.757	142	516638	27.3360	ug/mL		95
35) 1-Methylnaphthalene	7.875	142	503389	27.2930	ug/mL		93
37) Hexachlorocyclopentadiene	7.951	237	66662	16.4590	ug/mL		96
38) 2,4,6-Trichlorophenol	8.110	196	377469	76.0374	ug/mL		94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA10.D
Acq On : 10 Sep 2012 4:01 pm
Operator :
Sample : BSD,QC655237
Misc : 190277,1,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 10 16:30:03 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.163	196	422128	79.2987	ug/mL		86
40) 2-Fluorobiphenyl	8.204	172	750713	34.3612	ug/mL		97
41) 2-Chloronaphthalene	8.351	162	481507	29.1263	ug/mL		97
42) 2-Nitroaniline	8.492	65	505240	73.5377	ug/mL		100
43) Dimethylphthalate	8.716	163	1501868	76.2783	ug/mL		98
44) 2,6-Dinitrotoluene	8.792	165	363088	77.9971	ug/mL		94
45) Acenaphthylene	8.857	152	772543	27.0703	ug/mL		98
46) 3-Nitroaniline	9.004	138	402739	71.7514	ug/mL	#	79
47) Acenaphthene	9.069	154	465509	26.0510	ug/mL		96
48) 2,4-Dinitrophenol	9.139	184	175954	87.9442	ug/mL	#	1
49) 4-Nitrophenol	9.245	109	253870	82.2623	ug/mL		98
50) Dibenzofuran	9.281	168	664765	27.1077	ug/mL		70
51) 2,4-Dinitrotoluene	9.298	165	482751	76.1101	ug/mL		96
52) 2,3,4,6-Tetrachlorophenol	9.451	232	343371	85.3982	ug/mL		89
53) Diethylphthalate	9.581	149	654328	30.2901	ug/mL		99
54) 4-Chlorophenyl-phenylether	9.704	204	254046	27.7873	ug/mL	#	71
55) Fluorene	9.704	166	542656	26.8677	ug/mL		88
56) 4-Nitroaniline	9.775	138	415448	75.1367	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.004	330	99278	48.7973	ug/mL	#	88
59) 4,6-Dinitro-2-methylphenol	9.804	198	283698	94.9722	ug/mL		90
60) N-Nitrosodiphenylamine	9.857	169	417441	26.4019	ug/mL		89
61) Azobenzene	9.898	77	763959	27.1830	ug/mL		95
62) 4-Bromophenyl-phenylether	10.304	248	160781	29.6159	ug/mL	#	75
63) Hexachlorobenzene	10.398	284	433622	88.9607	ug/mL		91
64) Pentachlorophenol	10.645	266	280609	88.3112	ug/mL		98
65) Phenanthrene	10.886	178	859771	28.5822	ug/mL		97
66) Anthracene	10.951	178	850346	27.6519	ug/mL		95
67) Carbazole	11.163	167	1873105	71.7664	ug/mL		87
68) Di-n-butylphthalate	11.580	149	1125526	30.7104	ug/mL		98
69) Fluoranthene	12.357	202	951287	30.8271	ug/mL		97
71) Benzidine	0.000	184	0m	N.D.			
72) Pyrene	12.633	202	948335	29.0549	ug/mL		93
73) Terphenyl-d14	12.827	244	948624	41.1622	ug/mL		99
74) Butylbenzylphthalate	13.427	149	508671	30.6454	ug/mL		89
75) 3,3'-Dichlorobenzidine	14.092	252	607434	63.3193	ug/mL		99
76) Benzo(a)anthracene	14.116	228	852437	30.0035	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.139	149	688519	30.6090	ug/mL		94
78) Chrysene	14.163	228	843868	30.5705	ug/mL		95
80) Di-n-octylphthalate	15.033	149	1233502	27.5831	ug/mL		95
81) Benzo(b)fluoranthene	15.704	252	782729	29.6577	ug/mL		96
82) Benzo(k)fluoranthene	15.751	252	789926	28.7660	ug/mL		94
83) Benzo(a)pyrene	16.298	252	608818m	26.5826	ug/mL		
84) Indeno(1,2,3-cd)pyrene	18.845	276	718375	29.8396	ug/mL		96

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA10.D
Acq On : 10 Sep 2012 4:01 pm
Operator :
Sample : BSD,QC655237
Misc : 190277,1,
ALS Vial : 10 Sample Multiplier: 1

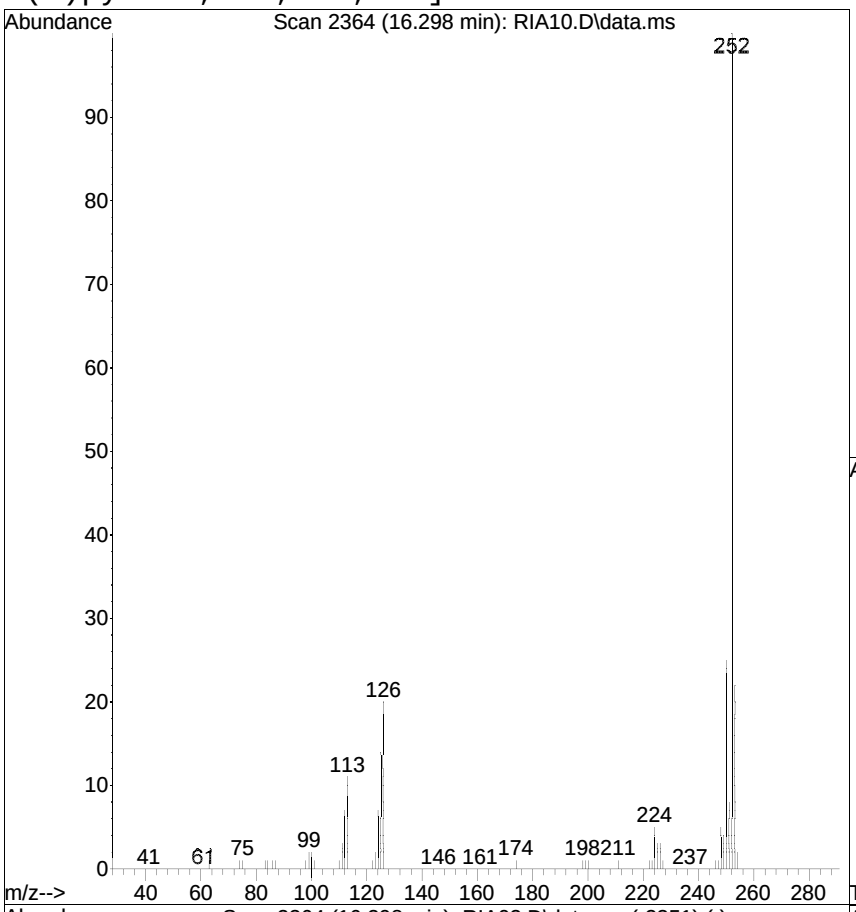
Quant Time: Sep 10 16:30:03 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	18.892	278	632194	30.2202	ug/mL	97
86) Benzo(g,h,i)perylene	19.533	276	608834	29.1804	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)pyrene; 27; MI; u]

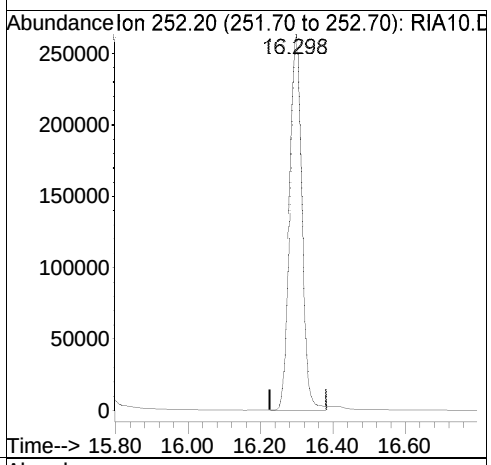
Raw



#83
Benzo(a)pyrene
Concen: 26.5826 ug/mL m
RT: 16.298 min Scan# 2364
Delta R.T. -0.000 min
Lab File: RIA10.D
Acq: 10 Sep 2012 4:01 pm

Tgt Ion:252 Resp: 608818

Ion	Ratio	Lower	Upper
252	100		
253	21.9	2.6	42.6
125	14.0	0.0	36.8



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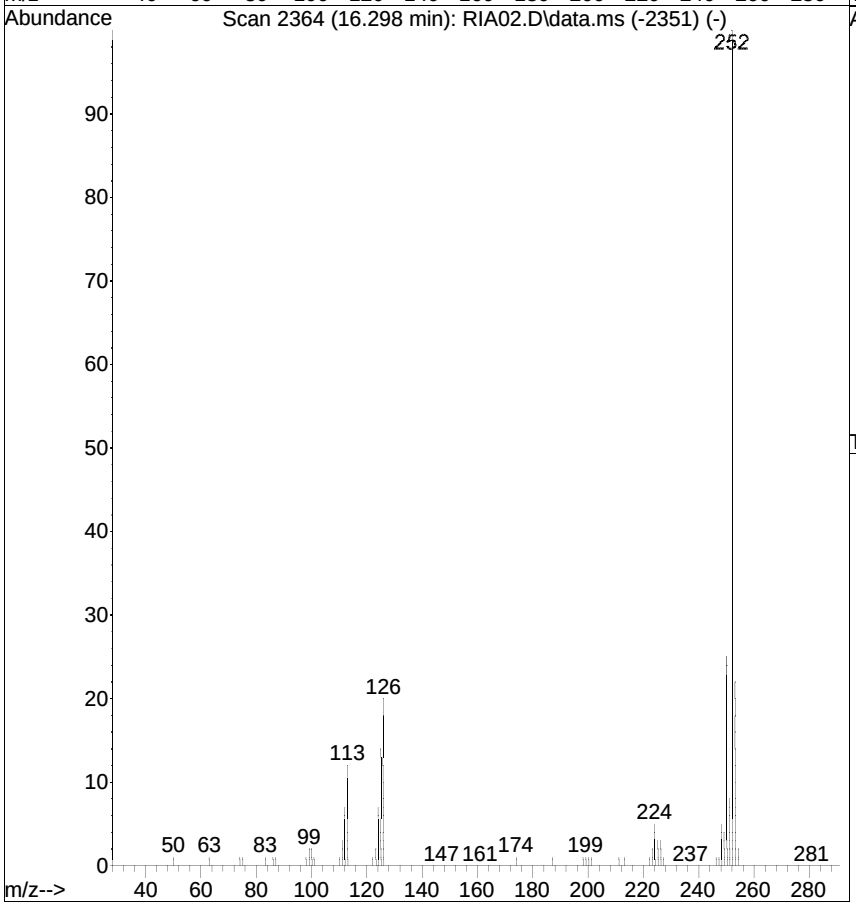
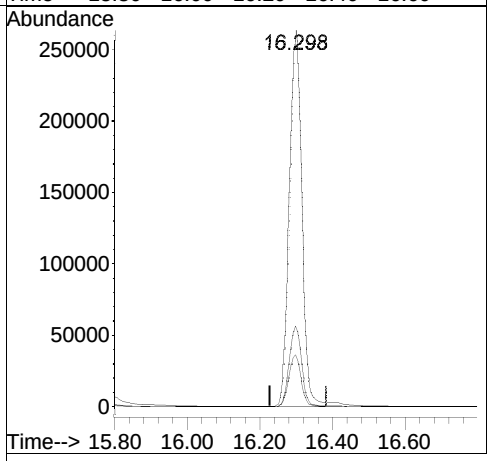
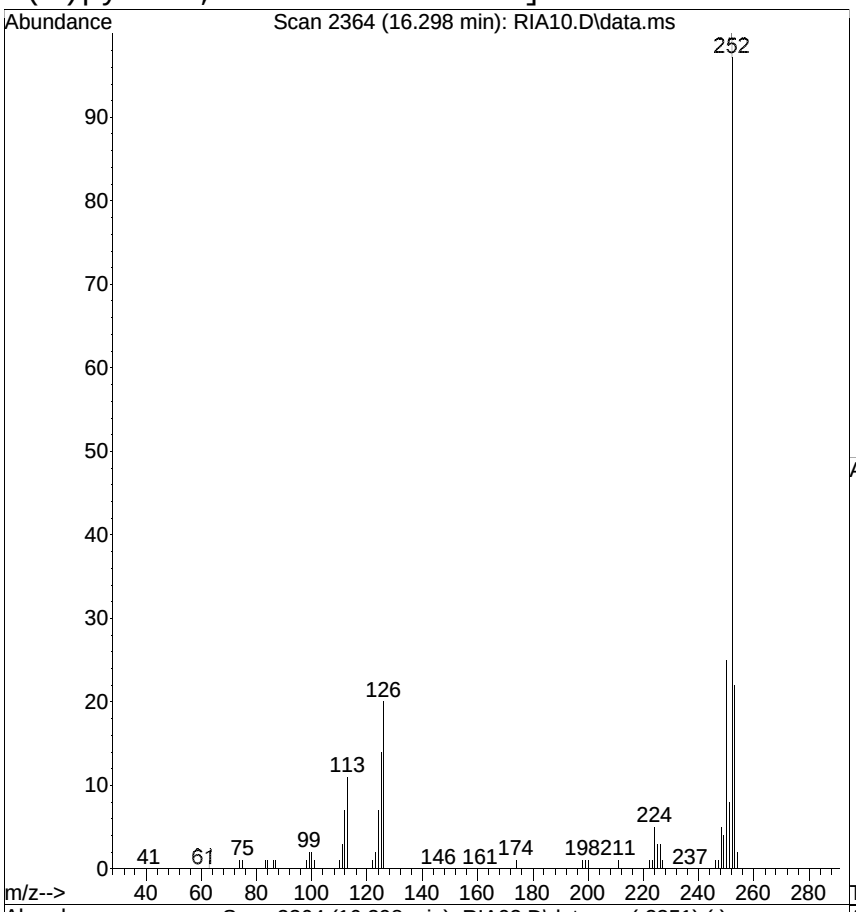




[Benzo(a)pyrene; before version]

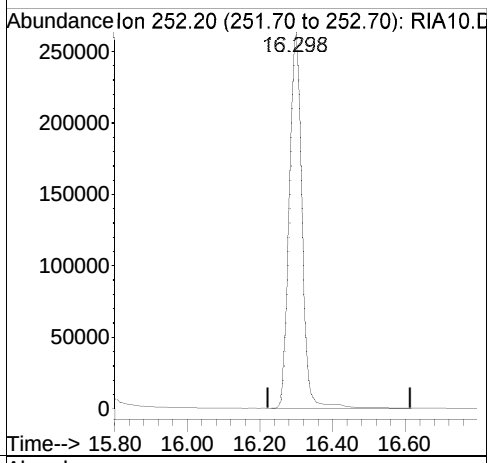
Raw



#83
Benzo(a)pyrene
Concen: 27.0446 ug/mL
RT: 16.298 min Scan# 2364
Delta R.T. -0.000 min
Lab File: RIA10.D
Acq: 10 Sep 2012 4:01 pm

Tgt Ion:252 Resp: 619400

Ion	Ratio	Lower	Upper
252	100		
253	21.5	2.6	42.6
125	13.7	0.0	36.8



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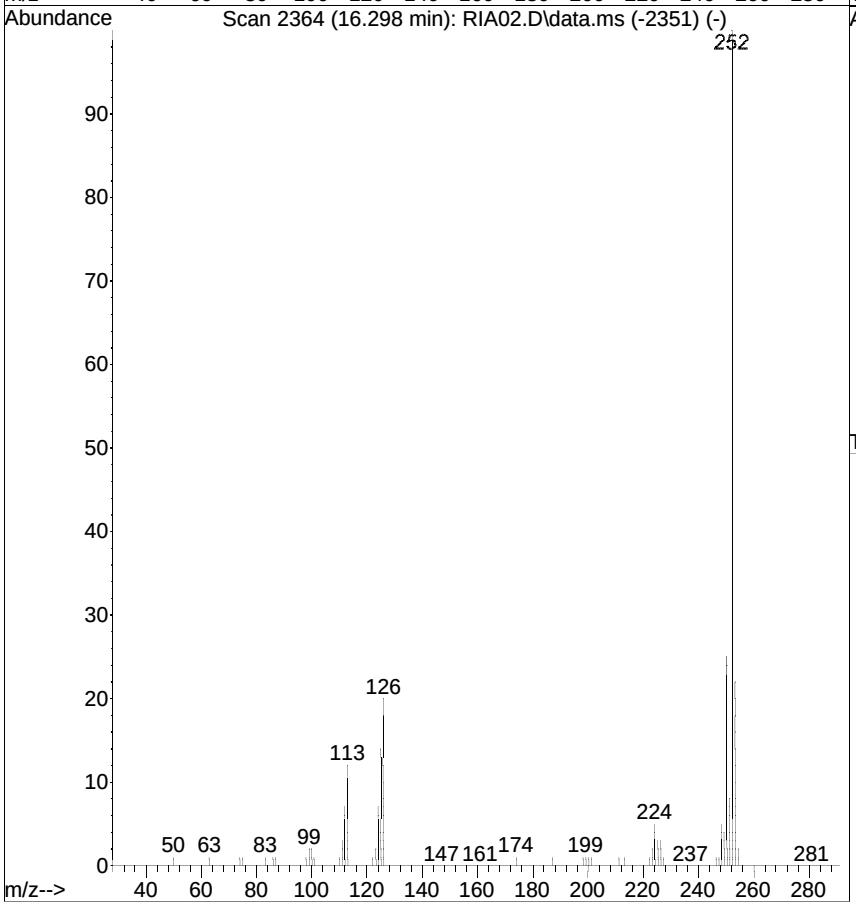
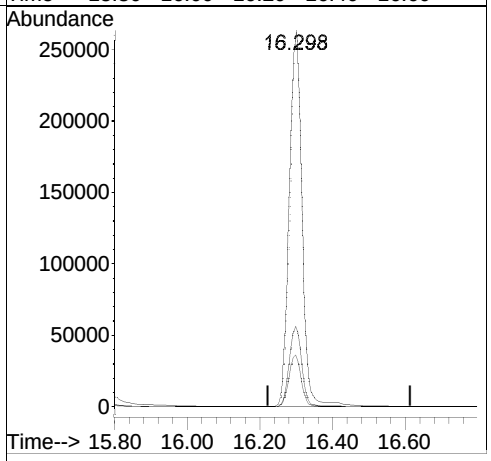




Initial Calibration Raw Data

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Water
EPA 8270D

Inst : MSBNA09 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 582094282007 File : rc507 Time : 05-MAR-2012 13:16

Standards: S18710

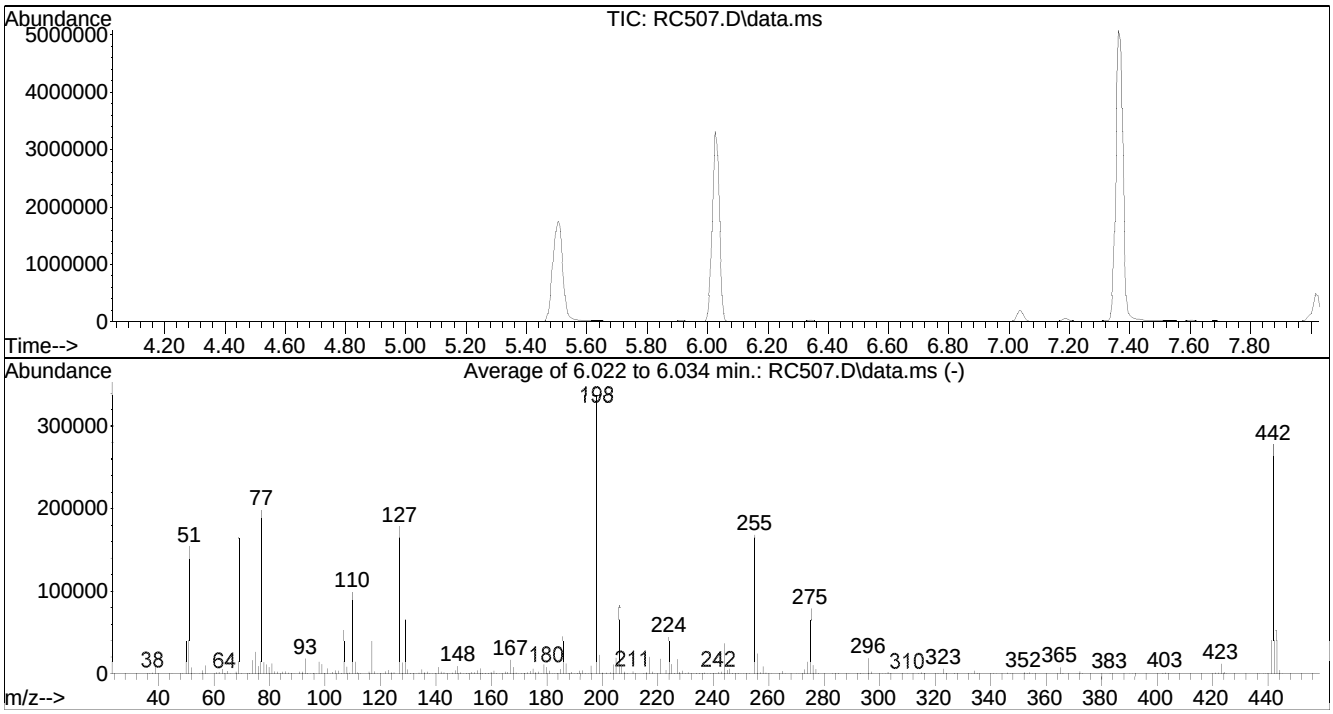
Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	153635	45.79	
68	< 2% of mass 69	2789	1.70	
69		164381	100.00	
70	< 2% of mass 69	652	0.40	
127	40% - 60% of mass 198	177834	53.00	
197	< 1% of mass 198	0	0.00	
198		335509	100.00	
199	5% - 9% of mass 198	22354	6.66	
275	10% - 30% of mass 198	78080	23.27	
365	> 1% of mass 198	7746	2.31	
441	Present, < mass 443	40000	75.25	
442	> 40% and < 100% of mass 198	277525	82.72	
443	17% - 23% of mass 442	53154	19.15	

Analyst: KMH Date: 03/05/12 Reviewer: LW Date: 03/06/12

Data Path : G:\msbna09\030512\
Data File : RC507.D
Acq On : 5 Mar 2012 1:16 pm
Operator :
Sample : TUN,S18710
Misc : DFTPP/PEM
ALS Vial : 3 Sample Multiplier: 1

Integration File: normal.p

Method : G:\msbna09\030512\DFTPP09.M
Title : MSBNA09 BNA DFTPP/PEM
Last Update : Mon Mar 05 11:53:20 2012



AutoFind: Scans 583, 584, 585; Background Corrected with Scan 576

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.8	153635	PASS
68	69	0.00	2	1.7	2789	PASS
69	198	0.00	100	49.0	164381	PASS
70	69	0.00	2	0.4	652	PASS
127	198	40	60	53.0	177834	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	335509	PASS
199	198	5	9	6.7	22354	PASS
275	198	10	30	23.3	78080	PASS
365	198	1	100	2.3	7746	PASS
441	443	0.01	100	75.3	40000	PASS
442	198	40	100	82.7	277525	PASS
443	442	17	23	19.2	53154	PASS

PEM Report

File Name : G:\msbna09\030512\RC507.D
Date Acquired : 5 Mar 2012 1:16 pm
Sample Name : TUN,S18710
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA09 BNA DFTPP/PEM
Inst. Name : MSBNA09
AcquisitionMeth: DFTPP09.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.155	5.50	400557
Benzidine	1.099	7.36	3182657
4,4'-DDT		8.40	1337610
4,4'-DDE		7.60	3911
4,4'-DDD		8.02	120409

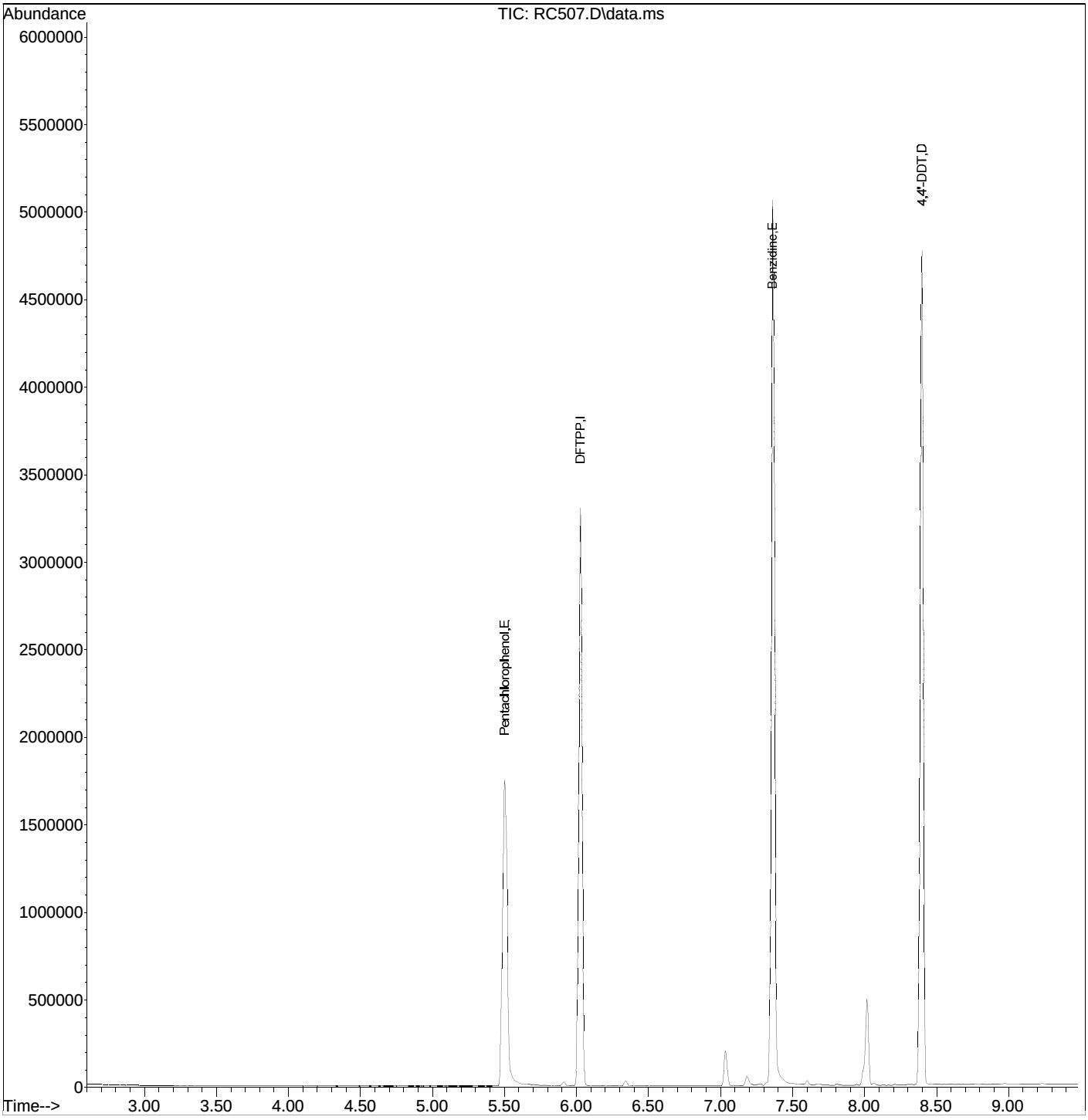
% Breakdown: 4,4'-DDT	LIMIT <=20%	9%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.2	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	1.1	PASS
	8270D <=2	1	PASS

Mon Mar 05 13:25:24 2012

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\030512\
Data File : RC507.D
Acq On : 5 Mar 2012 1:16 pm
Operator :
Sample : TUN,S18710
Misc : DFTPP/PEM
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 05 13:24:10 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP09.M
Quant Title : MSBNA09 BNA DFTPP/PEM
QLast Update : Mon Mar 05 11:53:20 2012
Response via : Continuing Cal File: G:\msbna09\030512\RC501.D



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\030512\
Data File : RC507.D
Acq On : 5 Mar 2012 1:16 pm
Operator :
Sample : TUN,S18710
Misc : DFTPP/PEM
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 05 13:24:10 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP09.M
Quant Title : MSBNA09 BNA DFTPP/PEM
QLast Update : Mon Mar 05 11:53:20 2012
Response via : Continuing Cal File: G:\msbna09\030512\RC501.D

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
2) DFTPP	6.028	198	599427	50.0000	ug/mL	0.00
4) 4,4'-DDT	8.398	235	1337610	50.0000	ug/mL	-0.01
Target Compounds						Qvalue
1) Pentachlorophenol	5.504	266	400557	60.5064	ug/mL	99
3) Benzidine	7.363	184	3182657	51.0116	ug/mL	96
5) 4,4'-DDE	7.604	246	3911	No CC lev		
6) 4,4'-DDD	8.016	235	120409	No CC lev		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Water
EPA 8270D

Inst : MSBNA09 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 582366461001 File : ria01 Time : 10-SEP-2012 11:41

Standards: S20011

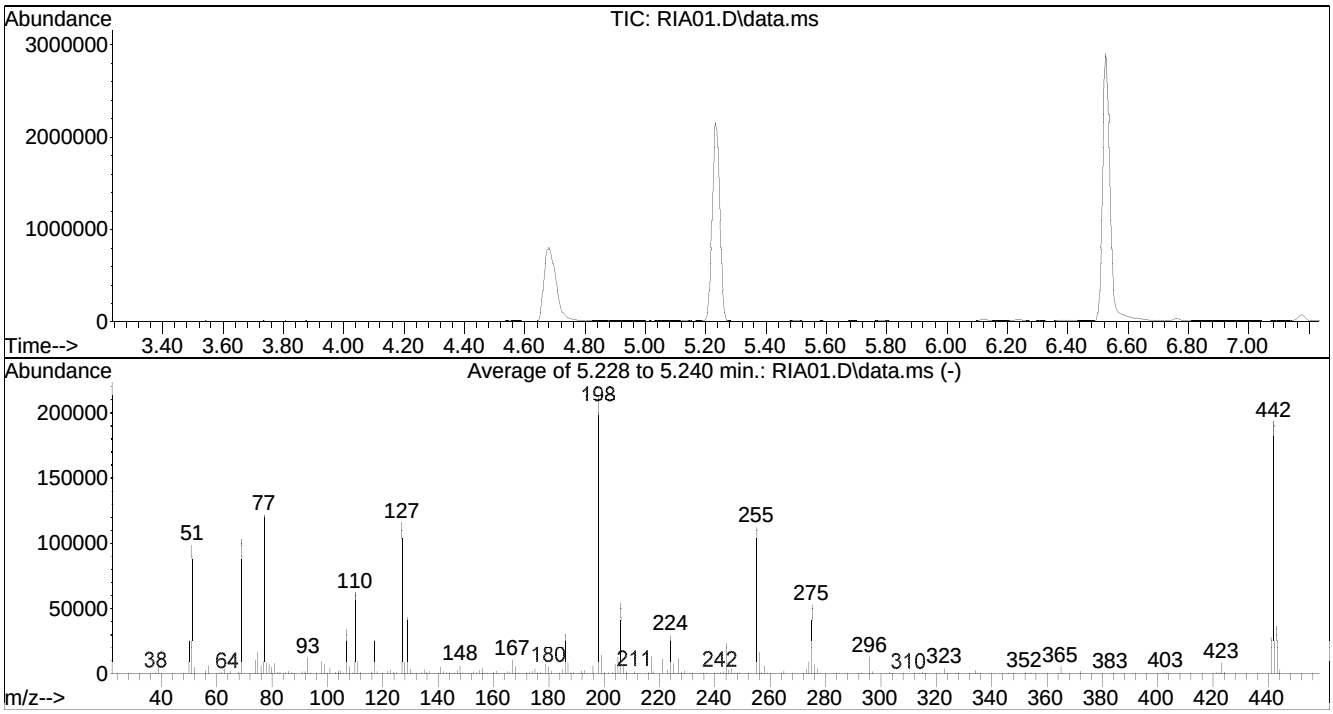
Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	98303	46.27	
68	< 2% of mass 69	1612	1.56	
69		103089	100.00	
70	< 2% of mass 69	431	0.42	
127	40% - 60% of mass 198	115813	54.52	
197	< 1% of mass 198	0	0.00	
198		212437	100.00	
199	5% - 9% of mass 198	14126	6.65	
275	10% - 30% of mass 198	52976	24.94	
365	> 1% of mass 198	5572	2.62	
441	Present, < mass 443	28208	77.43	
442	> 40% and < 100% of mass 198	193386	91.03	
443	17% - 23% of mass 442	36429	18.84	

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

Data Path : G:\msbna09\091012\
Data File : RIA01.D
Acq On : 10 Sep 2012 11:41 am
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Integration File: normal.p

Method : C:\msdchem\1\METHODS\DFTPP09.M
Title : MSBNA09 BNA DFTPP/PEM
Last Update : Fri Sep 07 15:46:36 2012



AutoFind: Scans 448, 449, 450; Background Corrected with Scan 441

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.3	98303	PASS
68	69	0.00	2	1.6	1612	PASS
69	198	0.00	100	48.5	103089	PASS
70	69	0.00	2	0.4	431	PASS
127	198	40	60	54.5	115813	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	212437	PASS
199	198	5	9	6.6	14126	PASS
275	198	10	30	24.9	52976	PASS
365	198	1	100	2.6	5572	PASS
441	443	0.01	100	77.4	28208	PASS
442	198	40	100	91.0	193386	PASS
443	442	17	23	18.8	36429	PASS

PEM Report

File Name : G:\msbna09\091012\RIA01.D
Date Acquired : 10 Sep 2012 11:41 am
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA09 BNA DFTPP/PEM
Inst. Name : MSBNA09
AcquisitionMeth: DFTPP09.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.798	4.68	229055
Benzidine	0.974	6.53	1898793
4,4'-DDT		7.55	935026
4,4'-DDE		6.76	4626
4,4'-DDD		7.17	32267

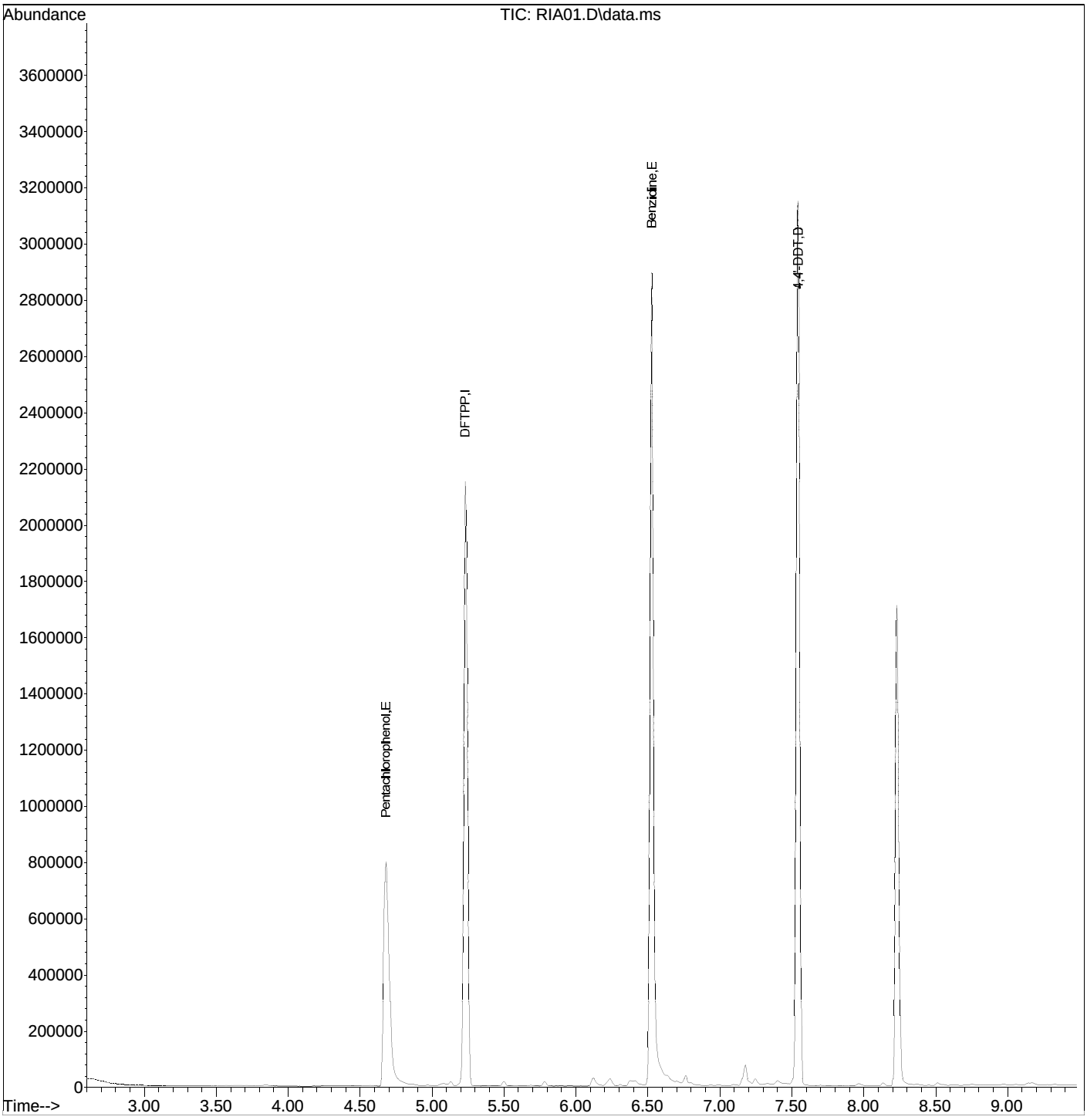
% Breakdown: 4,4'-DDT	LIMIT <=20%	4%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.8	PASS
	8270D <=2	2	PASS
Tailing: Benzidine	8270C <3.0	1.0	PASS
	8270D <=2	1	PASS

Mon Sep 10 11:52:32 2012

Quantitation Report (Not Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA01.D
Acq On : 10 Sep 2012 11:41 am
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 11:52:24 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP09.M
Quant Title : MSBNA09 BNA DFTPP/PEM
QLast Update : Mon Sep 10 11:52:15 2012
Response via : Continuing Cal File: G:\msbna09\091012\RIA01.D



Quantitation Report (Not Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA01.D
Acq On : 10 Sep 2012 11:41 am
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 11:52:24 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP09.M
Quant Title : MSBNA09 BNA DFTPP/PEM
QLast Update : Mon Sep 10 11:52:15 2012
Response via : Continuing Cal File: G:\msbna09\091012\RIA01.D

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
2) DFTPP	5.234	198	400257	50.0000	ug/mL	0.00
4) 4,4'-DDT	7.545	235	935026	50.0000	ug/mL	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	4.681	266	229055	50.0000	ug/mL	98
3) Benzidine	6.528	184	1898793	50.0000	ug/mL	98
5) 4,4'-DDE	6.763	246	4626	No CC lev		
6) 4,4'-DDD	7.175	235	32267	No CC lev		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 MSBNA Water: EPA 8270D

Inst : MSBNA09
Calnum : 582094282001
Units : ug/mL

Name : 6PTBNA9
Date : 05-MAR-2012 13:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	rc508	582094282008	ICAL	05-MAR-2012 13:32	S19015
L2	rc509	582094282009	ICAL	05-MAR-2012 14:02	S19016
L3	rc510	582094282010	ICAL	05-MAR-2012 14:32	S19017
L4	rc511	582094282011	ICAL	05-MAR-2012 15:02	S19018
L5	rc512	582094282012	ICAL	05-MAR-2012 15:32	S19019
L6	rc513	582094282013	ICAL	05-MAR-2012 16:02	S19020
L7	rc514	582094282014	ICAL	05-MAR-2012 16:32	S19021
L8	rc515	582094282015	ICAL	05-MAR-2012 17:01	S19022
L9	rc516	582094282016	ICAL	05-MAR-2012 17:32	S19023

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene	1.2492	1.2089	1.2426	1.2161	1.2056	1.1841	1.0878	1.0327	1.0237	AVRG		0.86118		1.1612	8	20	0.700	0.99	
3,3'-Dichlorobenzidine			0.3930	0.4029	0.4009	0.3966	0.3886	0.3866	0.3832	AVRG		2.54374		0.3931	2	20	0.010	0.99	
Benzo(a)anthracene	1.2159	1.1703	1.1796	1.1847	1.1822	1.1566	1.1148	1.1286	1.1456	AVRG		0.85891		1.1643	3	20	0.800	0.99	
bis(2-Ethylhexyl)phthalate			1.0264	1.0273	1.0157	0.9817	0.8796	0.7994	0.7225	AVRG		1.08485		0.9218	13	20	0.010	0.99	
Benzo(b)fluoranthene	1.0471	1.0706	1.1345	1.1704	1.1466	1.1730	1.1396	1.1950	1.2389	AVRG		0.87245		1.1462	5	20	0.700	0.99	
Benzo(k)fluoranthene	1.1532	1.1693	1.2108	1.2102	1.2256	1.2087	1.1939	1.1769	1.1847	AVRG		0.83851		1.1926	2	20	0.700	0.99	
Benzo(a)pyrene	0.8899	0.9223	0.9775	1.0115	1.0227	1.0229	1.0206	1.0309	1.0536	AVRG		1.00537		0.9947	5	20	0.700	0.99	
Indeno(1,2,3-cd)pyrene	0.9208	0.9126	1.0102	1.0784	1.0982	1.0879	1.0713	1.1083	1.1222	AVRG		0.95644		1.0455	8	20	0.500	0.99	
Dibenz(a,h)anthracene	0.7890	0.7951	0.8790	0.9373	0.9548	0.9477	0.9336	0.9584	0.9819	AVRG		1.10068		0.9085	8	20	0.400	0.99	
Nitrobenzene-d5	0.5341m	0.5341m	0.5807	0.5768	0.5806	0.5811	0.5552	0.5346	0.5377	AVRG		1.79472		0.5572	4	20	0.05	0.99	
2-Fluorobiphenyl	1.7842	1.6745	1.7040	1.6471	1.6379	1.5880	1.4493	1.3712	1.3426	AVRG		0.63386		1.5776	10	20	0.05	0.99	
Terphenyl-d14	0.9948	0.9620	0.9752	0.9639	0.9650	0.9406	0.9056	0.8937	0.8989	AVRG		1.05887		0.9444	4	20	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Naphthalene	2.0000	8	5.0000	4	10.000	7	16.000	5	20.000	4	25.000	2	40.000	-6	50.000	-11	60.000	-12
3,3'-Dichlorobenzidine					20.000	0	32.000	2	40.000	2	50.000	1	80.000	-1	100.00	-2	120.00	-3
Benzo(a)anthracene	2.0000	4	5.0000	1	10.000	1	16.000	2	20.000	2	25.000	-1	40.000	-4	50.000	-3	60.000	-2
bis(2-Ethylhexyl)phthalate					10.000	11	16.000	11	20.000	10	25.000	7	40.000	-5	50.000	-13	60.000	**-22**
Benzo(b)fluoranthene	2.0000	-9	5.0000	-7	10.000	-1	16.000	2	20.000	0	25.000	2	40.000	-1	50.000	4	60.000	8
Benzo(k)fluoranthene	2.0000	-3	5.0000	-2	10.000	2	16.000	1	20.000	3	25.000	1	40.000	0	50.000	-1	60.000	-1
Benzo(a)pyrene	2.0000	-11	5.0000	-7	10.000	-2	16.000	2	20.000	3	25.000	3	40.000	3	50.000	4	60.000	6
Indeno(1,2,3-cd)pyrene	2.0000	-12	5.0000	-13	10.000	-3	16.000	3	20.000	5	25.000	4	40.000	2	50.000	6	60.000	7
Dibenz(a,h)anthracene	2.0000	-13	5.0000	-12	10.000	-3	16.000	3	20.000	5	25.000	4	40.000	3	50.000	5	60.000	8
Nitrobenzene-d5	2.0000	-4	5.0000	-4	10.000	4	16.000	4	20.000	4	25.000	4	40.000	0	50.000	-4	60.000	-3
2-Fluorobiphenyl	2.0000	13	5.0000	6	10.000	8	16.000	4	20.000	4	25.000	1	40.000	-8	50.000	-13	60.000	-15
Terphenyl-d14	2.0000	5	5.0000	2	10.000	3	16.000	2	20.000	2	25.000	0	40.000	-4	50.000	-5	60.000	-5

KMH 03/06/12 [Aniline]: Picked or reassigned peak in all levels.

KMH 03/06/12 [Nitrobenzene-d5]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [Benzoic acid]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [Benzo(g,h,i)perylene]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline in ICAL (rc516).

LLH 04/18/12 : cut 2loops of column to get better peak resolution for 2,4-Dinitrophenol

LLH 04/18/12 : cut another loop, 2,4-Dinitrophenol pweak was still bad for LOD

KMH 04/23/12 : 3/8/12 cut 1 loop and primed, for failing low 2,4-Dinitrophenol, benzoic acid and pentachlorophenol

KMH 04/23/12 : 3/15/12 cut 1 loop and primed, for failing low 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, benzoic acid and pentachlorophenol

KMH 04/27/12 : 4/27/12 cut 1 loop, pentachlorophenol was failing low in the ccv

LLH 07/03/12 : cut about a loop of column...2,4-Dinitrophenol is still fails for LOD

LLH 07/12/12 : cut 2 loops of column...still no 2,4-Dinitrophenol at 2X RL for LOD...primed then baked out

LLH 09/13/12 : cut 2 loops of column then primed...CCV failed 24DNP min RF and PCP at -22%D

Analyst: KMH Date: 03/06/12 Reviewer: LW Date: 03/07/12

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

582094282001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 MSBNA Water
EPA 8270D

Inst : MSBNA09 Name : 6PTBNA9
Calnum : 582094282001 Cal Date : 05-MAR-2012

ICV 582094282017 (rc517 05-MAR-2012) stds: S19392

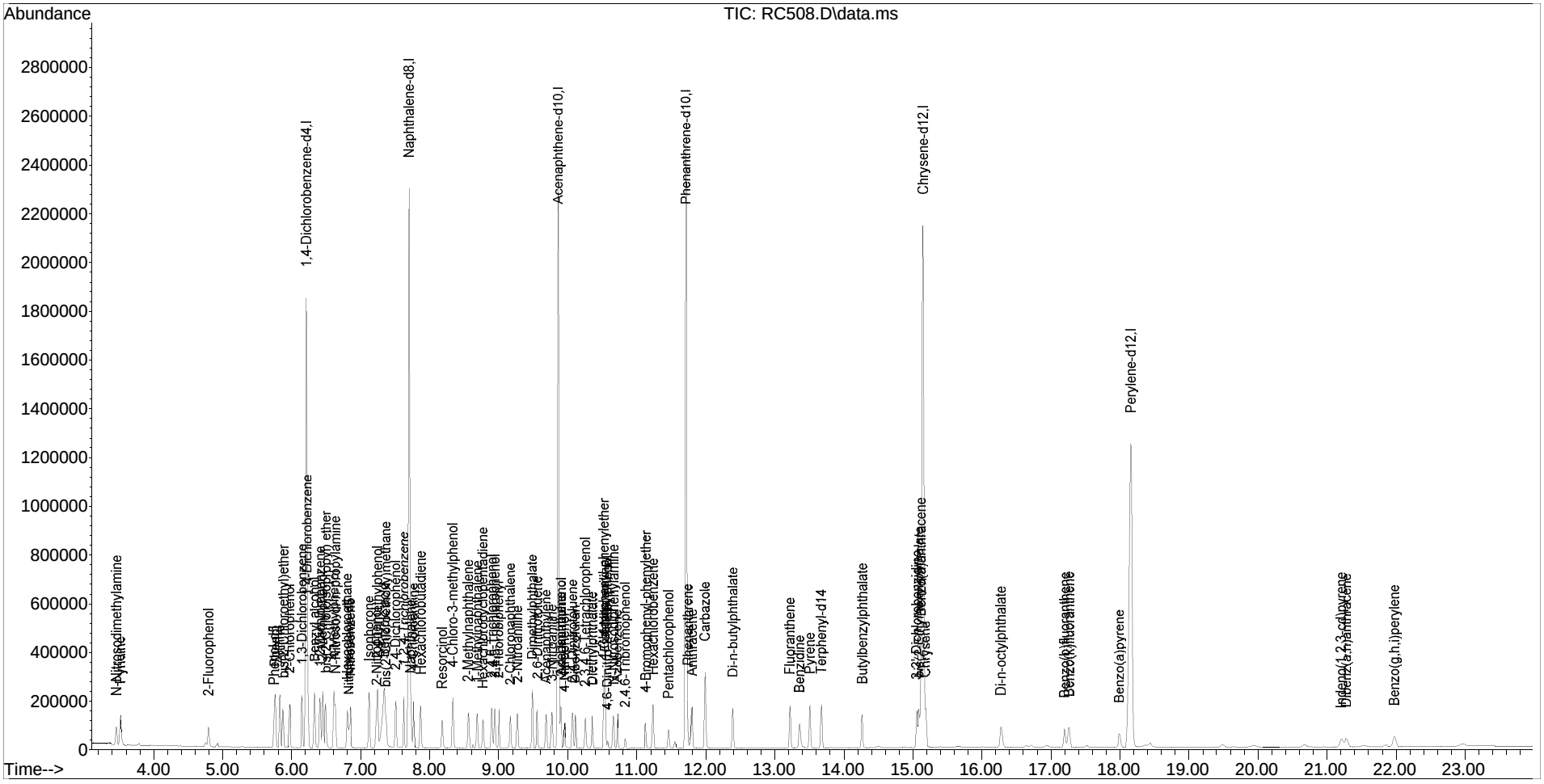
Analyte	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	40.00	35.71	ug/mL	-11	30	
3,3'-Dichlorobenzidine	60.00	59.59	ug/mL	-1	30	
Benzo(a)anthracene	40.00	38.25	ug/mL	-4	30	
bis(2-Ethylhexyl)phthalate	40.00	36.84	ug/mL	-8	30	
Benzo(b)fluoranthene	40.00	40.69	ug/mL	2	30	
Benzo(k)fluoranthene	40.00	38.21	ug/mL	-4	30	
Benzo(a)pyrene	40.00	43.59	ug/mL	9	30	
Indeno(1,2,3-cd)pyrene	40.00	40.79	ug/mL	2	30	
Dibenz(a,h)anthracene	40.00	39.07	ug/mL	-2	30	

Analyst: KMH Date: 03/06/12 Reviewer: LW Date: 03/07/12

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC508.D
Acq On : 5 Mar 2012 1:32 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 06 10:31:22 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC508.D
Acq On : 5 Mar 2012 1:32 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 06 10:31:22 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.210	152	374241	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.704	136	1393093	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.863	164	754473	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.716	188	1398048	40.0000	ug/mL	0.00
70) Chrysene-d12	15.151	240	1393187	40.0000	ug/mL	0.00
79) Perylene-d12	18.162	264	1196814	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.516	79	81129	3.4442	ug/mL	90
3) N-Nitrosodimethylamine	3.463	42	33837	3.6779	ug/mL	# 54
4) 2-Fluorophenol	4.798	112	30811	1.7132	ug/mL	87
5) Phenol-d5	5.745	99	43786	1.8344	ug/mL	78
6) Phenol	5.763	94	86593	3.9653	ug/mL	79
7) Aniline	5.834	93	107194m	3.7194	ug/mL	
8) bis(2-Chloroethyl)ether	5.881	93	69730	3.9809	ug/mL	95
9) 2-Chlorophenol	5.975	128	60781	3.9706	ug/mL	96
10) 1,3-Dichlorobenzene	6.151	146	66100	4.3484	ug/mL	94
11) 1,4-Dichlorobenzene	6.228	146	67140	4.1618	ug/mL	90
12) Benzyl alcohol	6.334	108	43892	3.6856	ug/mL	98
13) 1,2-Dichlorobenzene	6.410	146	63534	4.2038	ug/mL	95
14) 2-Methylphenol	6.445	107	51722	4.1083	ug/mL	92
15) bis(2-Chloroisopropyl) ether	6.493	45	111757	3.6831	ug/mL	91
16) 4-Methylphenol	6.616	107	74430	3.9596	ug/mL	93
17) N-Nitroso-di-n-propylamine	6.634	70	49241	3.6546	ug/mL	80
18) Hexachloroethane	6.804	117	26043	4.0611	ug/mL	88
20) Nitrobenzene-d5	6.834	82	37201m	1.8695	ug/mL	
21) Nitrobenzene	6.851	77	73233	4.0475	ug/mL	98
22) Isophorone	7.128	82	135776	3.8805	ug/mL	99
23) 2-Nitrophenol	7.234	139	23108	3.2018	ug/mL	96
24) 2,4-Dimethylphenol	7.251	107	62849	4.4787	ug/mL	91
25) bis(2-Chloroethoxy)methane	7.363	93	40479	1.9636	ug/mL	98
26) Benzoic acid	7.340	105	169827m	14.2624	ug/mL	
27) 2,4-Dichlorophenol	7.510	162	44842	4.1631	ug/mL	97
28) 1,2,4-Trichlorobenzene	7.628	180	48020	4.6097	ug/mL	97
29) Naphthalene	7.728	128	87012	1.9658	ug/mL	98
30) 4-Chloroaniline	7.769	127	68689	3.9408	ug/mL	88
31) Hexachlorobutadiene	7.875	225	24733	4.5668	ug/mL	97
32) Resorcinol	8.187	110	47936	3.1776	ug/mL	94
33) 4-Chloro-3-methylphenol	8.334	107	54183	4.1392	ug/mL	88
34) 2-Methylnaphthalene	8.563	142	57023	2.0001	ug/mL	96
35) 1-Methylnaphthalene	8.692	142	54777	1.9677	ug/mL	94
37) Hexachlorocyclopentadiene	8.769	237	21737	3.9276	ug/mL	97
38) 2,4,6-Trichlorophenol	8.904	196	28179	4.0486	ug/mL	93

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC508.D
Acq On : 5 Mar 2012 1:32 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 06 10:31:22 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	8.945	196	31987	4.2199	ug/mL #	84
40) 2-Fluorobiphenyl	9.004	172	67305	2.1929	ug/mL	96
41) 2-Chloronaphthalene	9.169	162	51012	2.1015	ug/mL	95
42) 2-Nitroaniline	9.275	65	35982	3.4706	ug/mL	94
43) Dimethylphthalate	9.486	163	123021	4.4055	ug/mL	98
44) 2,6-Dinitrotoluene	9.563	165	22691	3.4495	ug/mL	96
45) Acenaphthylene	9.686	152	82701	2.0381	ug/mL	97
46) 3-Nitroaniline	9.775	138	27175	3.3696	ug/mL	86
47) Acenaphthene	9.898	154	51872	2.0784	ug/mL	97
48) 2,4-Dinitrophenol	9.904	184	1413	0.5025	ug/mL #	1
49) 4-Nitrophenol	9.957	109	14747	3.4096	ug/mL #	85
50) Dibenzofuran	10.110	168	73875	2.1765	ug/mL	75
51) 2,4-Dinitrotoluene	10.069	165	30768	3.4579	ug/mL	97
52) 2,3,4,6-Tetrachlorophenol	10.257	232	18935	3.5588	ug/mL	88
53) Diethylphthalate	10.357	149	66564	2.2392	ug/mL	100
54) 4-Chlorophenyl-phenylether	10.522	204	27874	2.3473	ug/mL #	68
55) Fluorene	10.539	166	62546	2.2030	ug/mL	88
56) 4-Nitroaniline	10.533	138	29905	3.7330	ug/mL #	1
57) 2,4,6-Tribromophenol	10.833	330	4236	1.2433	ug/mL	98
59) 4,6-Dinitro-2-methylphenol	10.575	198	4796	0.9573	ug/mL	77
60) N-Nitrosodiphenylamine	10.663	169	45076	1.9527	ug/mL	89
61) Azobenzene	10.722	77	85160	1.9126	ug/mL	94
62) 4-Bromophenyl-phenylether	11.133	248	14770	1.8805	ug/mL #	74
63) Hexachlorobenzene	11.239	284	28137	3.5996	ug/mL #	67
64) Pentachlorophenol	11.469	266	10770	2.1457	ug/mL	99
65) Phenanthrene	11.739	178	93864	1.9304	ug/mL	97
66) Anthracene	11.804	178	94639	1.9626	ug/mL	96
67) Carbazole	11.986	167	178535	4.0283	ug/mL	88
68) Di-n-butylphthalate	12.392	149	119725	2.0387	ug/mL	98
69) Fluoranthene	13.221	202	96563	1.8858	ug/mL	98
71) Benzidine	13.363	184	66410	3.3961	ug/mL	92
72) Pyrene	13.510	202	99425	1.8770	ug/mL	94
73) Terphenyl-d14	13.674	244	69295	2.0273	ug/mL	90
74) Butylbenzylphthalate	14.268	149	45400	1.6291	ug/mL	89
75) 3,3'-Dichlorobenzidine	15.057	252	50039	3.0840	ug/mL	97
76) Benzo(a)anthracene	15.121	228	84701	1.8621	ug/mL	98
77) bis(2-Ethylhexyl)phthalate	15.092	149	65585	1.6058	ug/mL	96
78) Chrysene	15.186	228	83119	1.8597	ug/mL	95
80) Di-n-octylphthalate	16.280	149	86432	1.4322	ug/mL	87
81) Benzo(b)fluoranthene	17.204	252	62657	1.6780	ug/mL	99
82) Benzo(k)fluoranthene	17.268	252	69006	1.8482	ug/mL	96
83) Benzo(a)pyrene	17.992	252	53255	1.6448	ug/mL	98
84) Indeno(1,2,3-cd)pyrene	21.209	276	55104	1.5065	ug/mL	97

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC508.D
Acq On : 5 Mar 2012 1:32 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

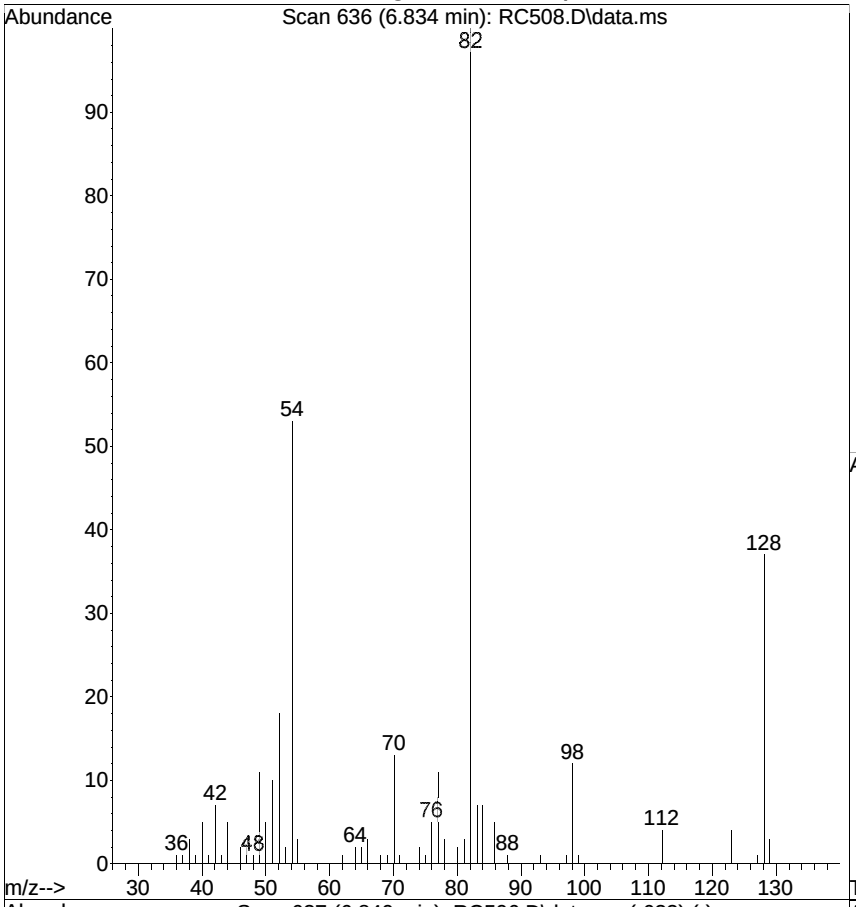
Quant Time: Mar 06 10:31:22 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.280	278	47216	1.4851	ug/mL	96
86) Benzo(g,h,i)perylene	21.980	276	50765	1.5879	ug/mL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Nitrobenzene-d5; 2.000 ug/mL; response=37201; MI]

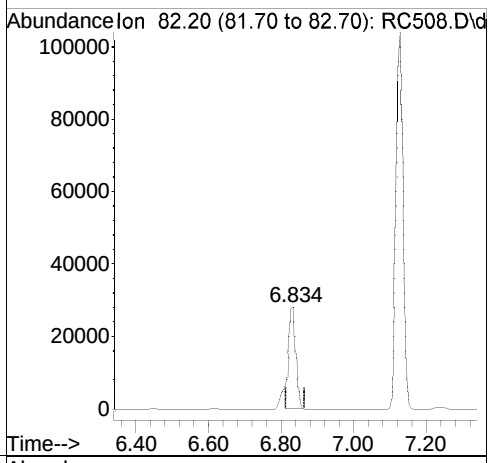
Raw



#20
Nitrobenzene-d5
Concen: 1.8695 ug/mL m
RT: 6.834 min Scan# 636
Delta R.T. -0.006 min
Lab File: RC508.D
Acq: 5 Mar 2012 1:32 pm

Tgt Ion: 82 Resp: 37201

Ion	Ratio	Lower	Upper
82	100		
128	36.9	15.0	55.0
54	53.2	56.0	96.0#



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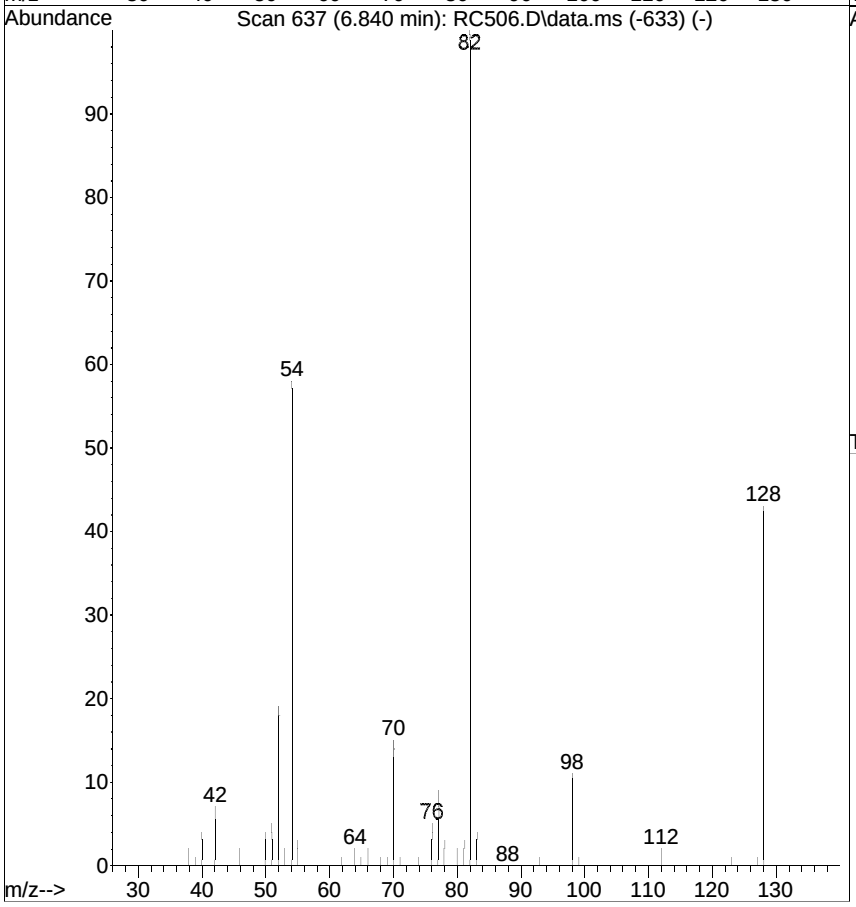
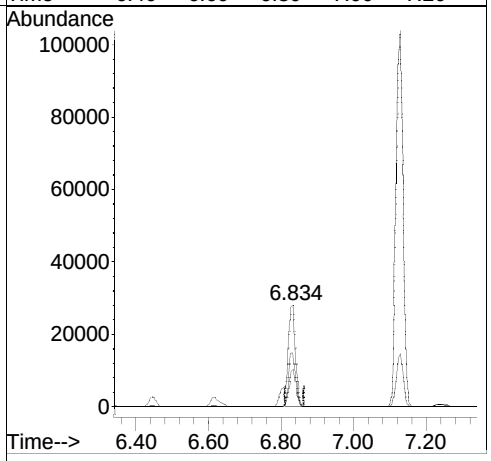
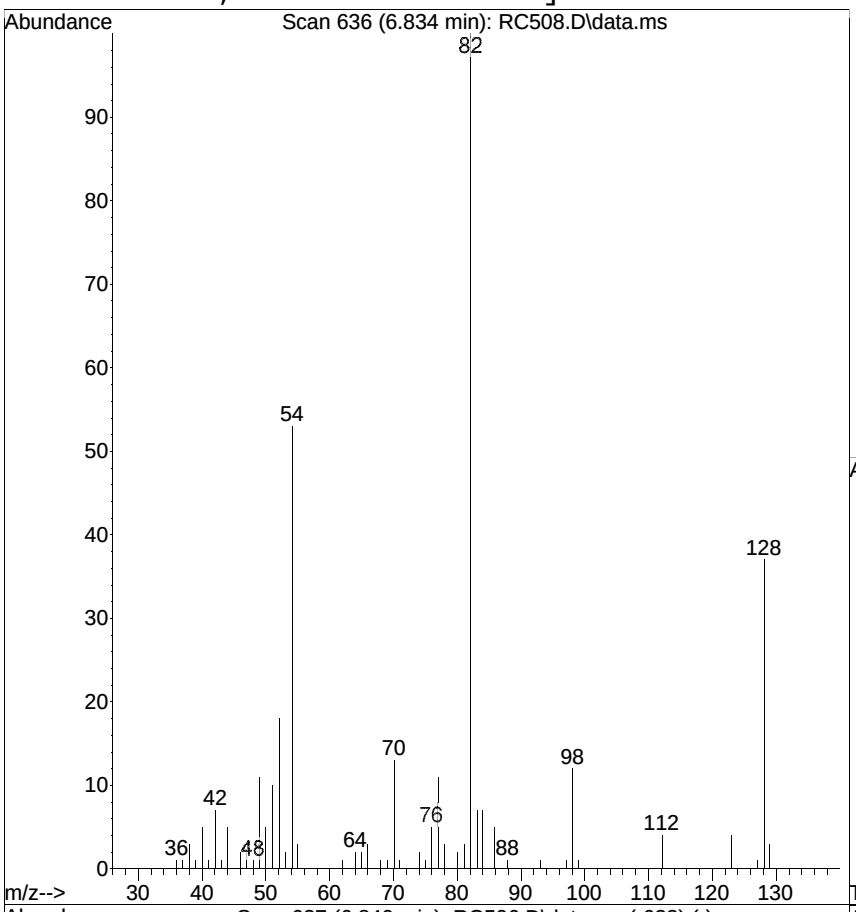




[Nitrobenzene-d5; before version]

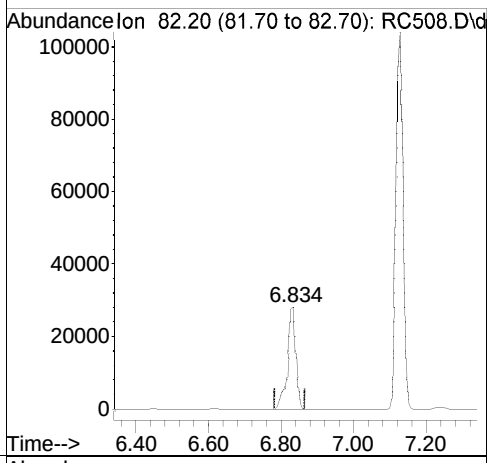
Raw



#20
Nitrobenzene-d5
Concen: 2.2114 ug/mL
RT: 6.834 min Scan# 636
Delta R.T. -0.006 min
Lab File: RC508.D
Acq: 5 Mar 2012 1:32 pm

Tgt Ion: 82 Resp: 44004

Ion	Ratio	Lower	Upper
82	100		
128	36.9	15.0	55.0
54	53.2	56.0	96.0#



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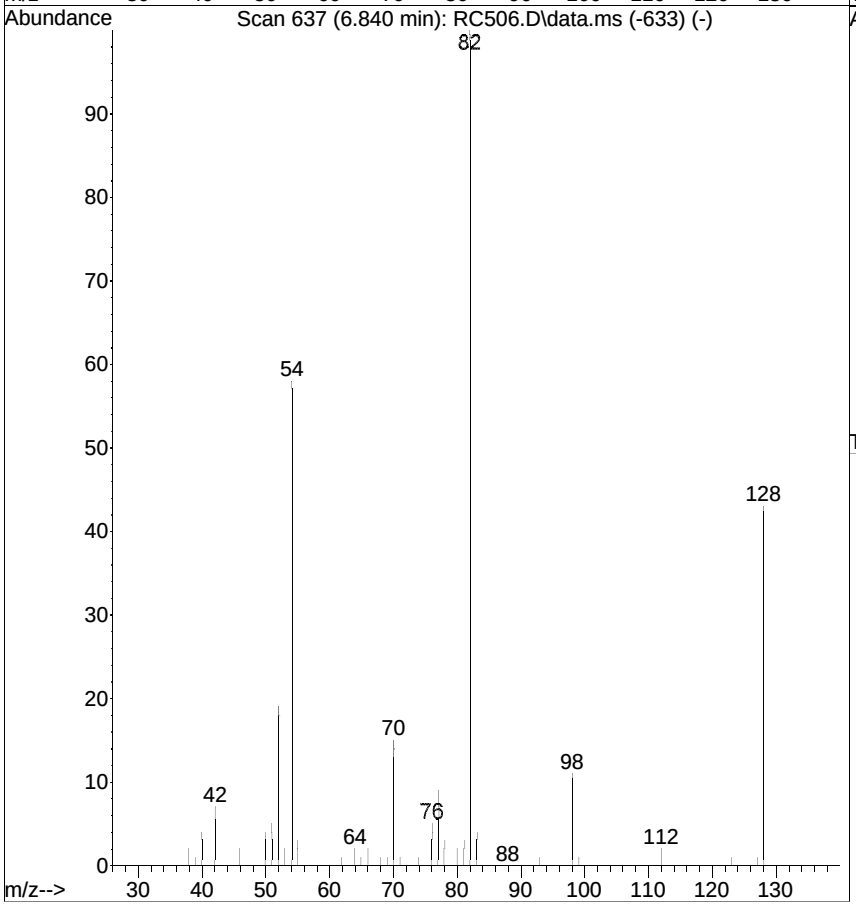
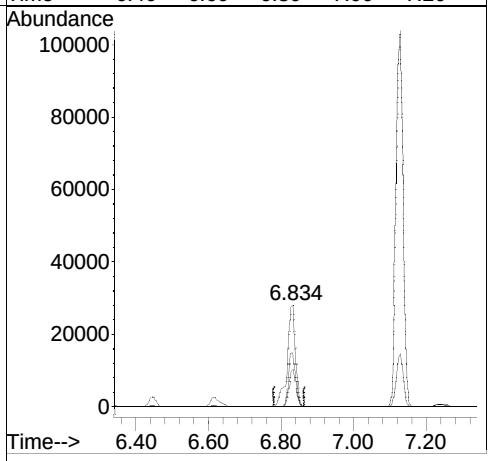
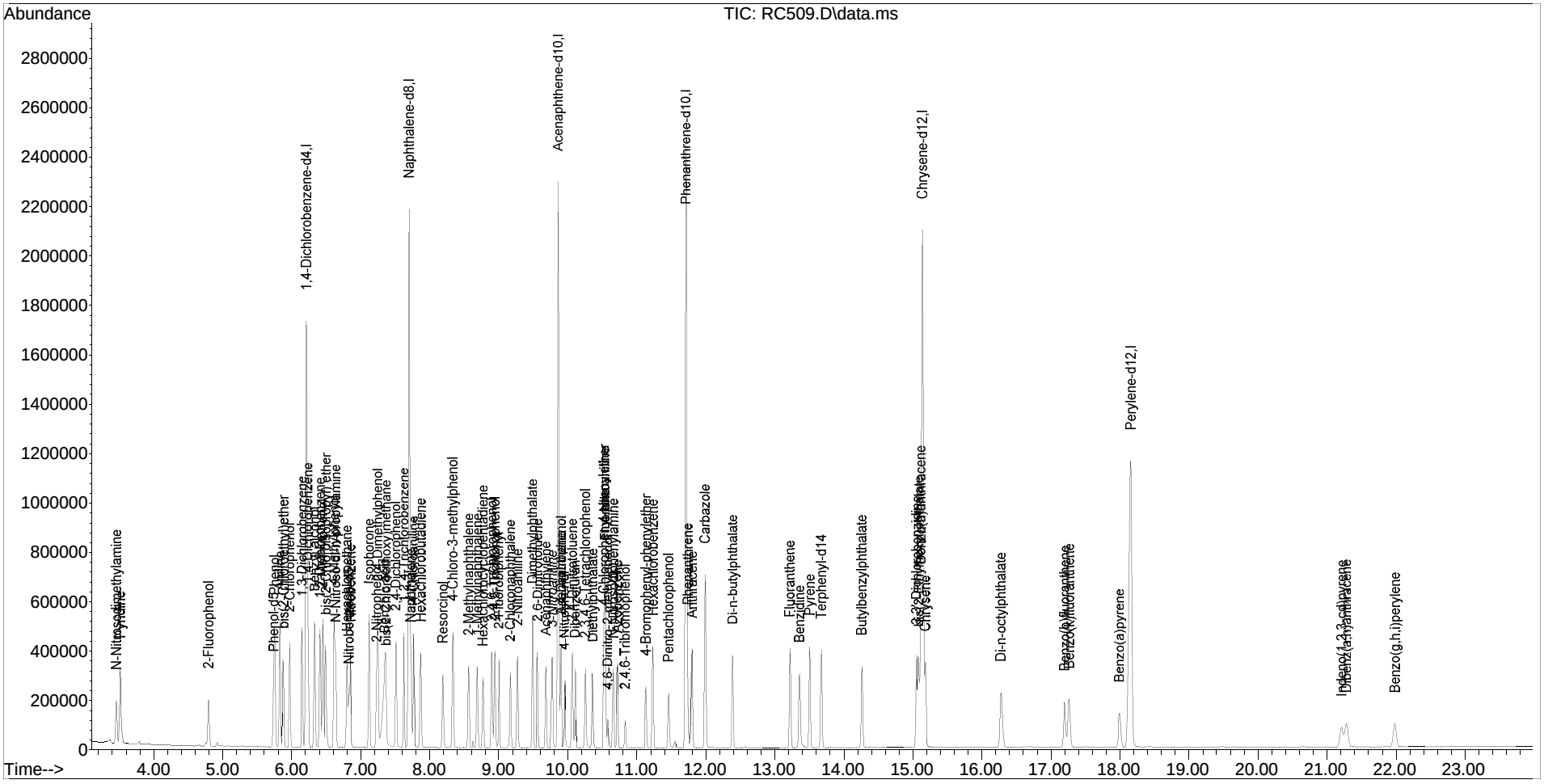




Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC509.D
Acq On : 5 Mar 2012 2:02 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 06 10:32:12 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC509.D
Acq On : 5 Mar 2012 2:02 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 06 10:32:12 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.210	152	354379	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.704	136	1332315	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.863	164	727952	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.716	188	1362943	40.0000	ug/mL	0.00
70) Chrysene-d12	15.145	240	1304208	40.0000	ug/mL	-0.01
79) Perylene-d12	18.162	264	1102857	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.516	79	196630	8.8154	ug/mL	90
3) N-Nitrosodimethylamine	3.463	42	76855	8.8220	ug/mL	# 52
4) 2-Fluorophenol	4.798	112	73312	4.3049	ug/mL	85
5) Phenol-d5	5.745	99	101676	4.4985	ug/mL	78
6) Phenol	5.763	94	198005	9.5753	ug/mL	78
7) Aniline	5.834	93	247160m	9.0566	ug/mL	
8) bis(2-Chloroethyl)ether	5.881	93	159016	9.5871	ug/mL	95
9) 2-Chlorophenol	5.975	128	140743	9.7096	ug/mL	96
10) 1,3-Dichlorobenzene	6.151	146	150499	10.4555	ug/mL	94
11) 1,4-Dichlorobenzene	6.234	146	152047	9.9532	ug/mL	90
12) Benzyl alcohol	6.334	108	101674	9.0160	ug/mL	99
13) 1,2-Dichlorobenzene	6.410	146	143748	10.0442	ug/mL	94
14) 2-Methylphenol	6.445	107	117267	9.8366	ug/mL	92
15) bis(2-Chloroisopropyl) ether	6.492	45	253108	8.8091	ug/mL	91
16) 4-Methylphenol	6.616	107	171708	9.6468	ug/mL	92
17) N-Nitroso-di-n-propylamine	6.640	70	113555	8.9002	ug/mL	79
18) Hexachloroethane	6.804	117	60620	9.9828	ug/mL	87
20) Nitrobenzene-d5	6.834	82	88942m	4.6736	ug/mL	
21) Nitrobenzene	6.857	77	170676	9.8633	ug/mL	98
22) Isophorone	7.128	82	315927	9.4413	ug/mL	98
23) 2-Nitrophenol	7.234	139	55785	8.0821	ug/mL	96
24) 2,4-Dimethylphenol	7.251	107	142920	10.6492	ug/mL	93
25) bis(2-Chloroethoxy)methane	7.369	93	91711	4.6518	ug/mL	98
26) Benzoic acid	7.351	105	216413m	19.0039	ug/mL	
27) 2,4-Dichlorophenol	7.510	162	103528	10.0499	ug/mL	97
28) 1,2,4-Trichlorobenzene	7.628	180	108479	10.8886	ug/mL	96
29) Naphthalene	7.728	128	201331	4.7561	ug/mL	98
30) 4-Chloroaniline	7.769	127	170178	10.2088	ug/mL	88
31) Hexachlorobutadiene	7.875	225	55708	10.7554	ug/mL	98
32) Resorcinol	8.192	110	124344	8.6187	ug/mL	94
33) 4-Chloro-3-methylphenol	8.334	107	128868	10.2936	ug/mL	87
34) 2-Methylnaphthalene	8.569	142	129657	4.7552	ug/mL	95
35) 1-Methylnaphthalene	8.692	142	125938	4.7304	ug/mL	93
37) Hexachlorocyclopentadiene	8.769	237	52189	9.7735	ug/mL	98
38) 2,4,6-Trichlorophenol	8.904	196	66543	9.9089	ug/mL	94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC509.D
Acq On : 5 Mar 2012 2:02 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 06 10:32:12 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	8.945	196	75228	10.2860	ug/mL #	83
40) 2-Fluorobiphenyl	9.004	172	152371	5.1454	ug/mL	98
41) 2-Chloronaphthalene	9.169	162	117101	4.9998	ug/mL	95
42) 2-Nitroaniline	9.275	65	90390	9.0362	ug/mL	94
43) Dimethylphthalate	9.486	163	289849	10.7578	ug/mL	98
44) 2,6-Dinitrotoluene	9.563	165	58921	9.2836	ug/mL	96
45) Acenaphthylene	9.686	152	195171	4.9850	ug/mL	98
46) 3-Nitroaniline	9.781	138	72253	9.2856	ug/mL #	81
47) Acenaphthene	9.904	154	121836	5.0595	ug/mL	95
48) 2,4-Dinitrophenol	9.904	184	5923	2.1831	ug/mL #	1
49) 4-Nitrophenol	9.957	109	38493	9.2242	ug/mL #	84
50) Dibenzofuran	10.110	168	172568	5.2694	ug/mL	76
51) 2,4-Dinitrotoluene	10.069	165	82742	9.6378	ug/mL	97
52) 2,3,4,6-Tetrachlorophenol	10.257	232	47986	9.3473	ug/mL	88
53) Diethylphthalate	10.363	149	156426	5.4539	ug/mL	99
54) 4-Chlorophenyl-phenylether	10.522	204	61844	5.3976	ug/mL #	66
55) Fluorene	10.539	166	144170	5.2630	ug/mL	89
56) 4-Nitroaniline	10.533	138	75234	9.7335	ug/mL #	1
57) 2,4,6-Tribromophenol	10.833	330	11419	3.4738	ug/mL	96
59) 4,6-Dinitro-2-methylphenol	10.580	198	18187	3.7236	ug/mL	92
60) N-Nitrosodiphenylamine	10.663	169	108079	4.8027	ug/mL	88
61) Azobenzene	10.722	77	200046	4.6087	ug/mL	94
62) 4-Bromophenyl-phenylether	11.133	248	34730	4.5357	ug/mL #	72
63) Hexachlorobenzene	11.239	284	64453	8.4579	ug/mL #	65
64) Pentachlorophenol	11.469	266	29466	6.0217	ug/mL	98
65) Phenanthrene	11.739	178	218365	4.6066	ug/mL	97
66) Anthracene	11.804	178	220690	4.6945	ug/mL	96
67) Carbazole	11.986	167	403531	9.3394	ug/mL	87
68) Di-n-butylphthalate	12.392	149	280411	4.8979	ug/mL	98
69) Fluoranthene	13.221	202	223346	4.4742	ug/mL	98
71) Benzidine	13.363	184	181262	9.9019	ug/mL	92
72) Pyrene	13.510	202	229235	4.6228	ug/mL	94
73) Terphenyl-d14	13.674	244	156826	4.9012	ug/mL	90
74) Butylbenzylphthalate	14.263	149	108708	4.1669	ug/mL	86
75) 3,3'-Dichlorobenzidine	15.057	252	121544	8.0020	ug/mL	98
76) Benzo(a)anthracene	15.121	228	190787	4.4805	ug/mL	98
77) bis(2-Ethylhexyl)phthalate	15.092	149	158612	4.1484	ug/mL	97
78) Chrysene	15.186	228	188610	4.5078	ug/mL	95
80) Di-n-octylphthalate	16.280	149	227091	4.0837	ug/mL	89
81) Benzo(b)fluoranthene	17.204	252	147593	4.2894	ug/mL	98
82) Benzo(k)fluoranthene	17.268	252	161201	4.6852	ug/mL	96
83) Benzo(a)pyrene	17.992	252	127149	4.2616	ug/mL	99
84) Indeno(1,2,3-cd)pyrene	21.215	276	125808	3.7326	ug/mL	95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC509.D
Acq On : 5 Mar 2012 2:02 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

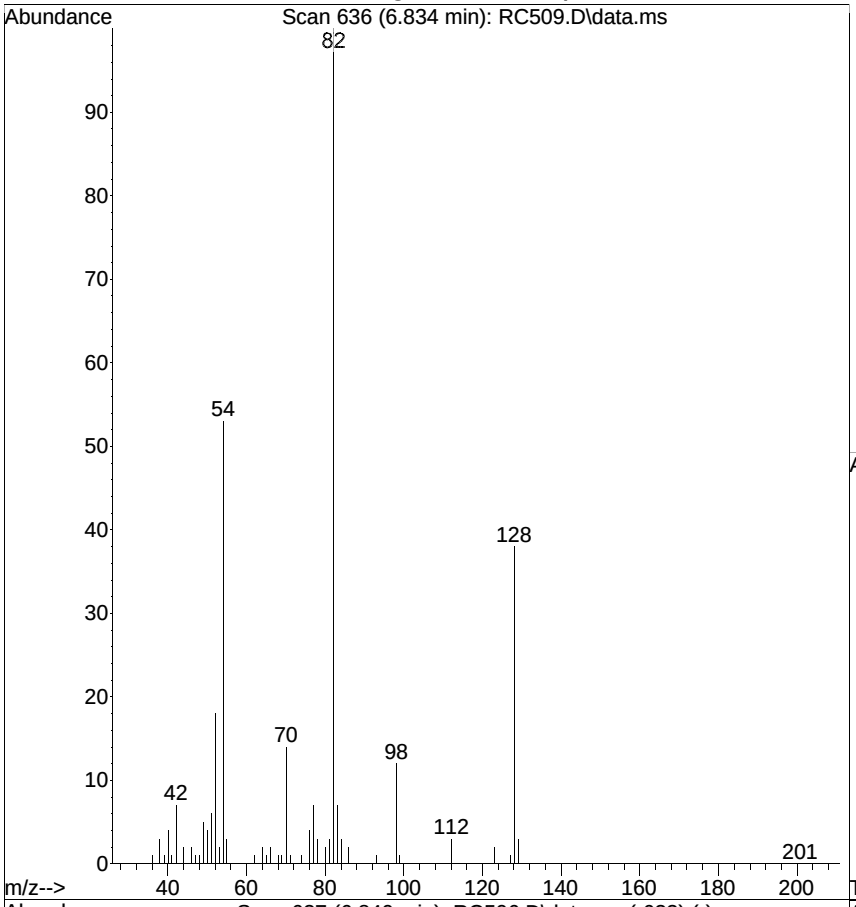
Quant Time: Mar 06 10:32:12 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.280	278	109609	3.7413	ug/mL	97
86) Benzo(g,h,i)perylene	21.986	276	112087	3.8048	ug/mL	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Nitrobenzene-d5; 5.000 ug/mL; response=88942; MI]

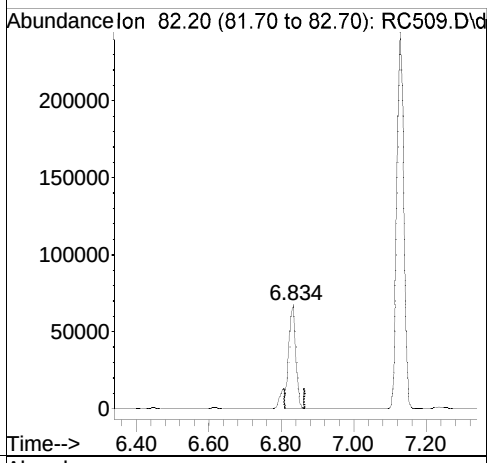
Raw



#20
Nitrobenzene-d5
Concen: 4.6736 ug/mL m
RT: 6.834 min Scan# 636
Delta R.T. -0.006 min
Lab File: RC509.D
Acq: 5 Mar 2012 2:02 pm

Tgt Ion: 82 Resp: 88942

Ion	Ratio	Lower	Upper
82	100		
128	38.2	15.0	55.0
54	53.5	56.0	96.0#



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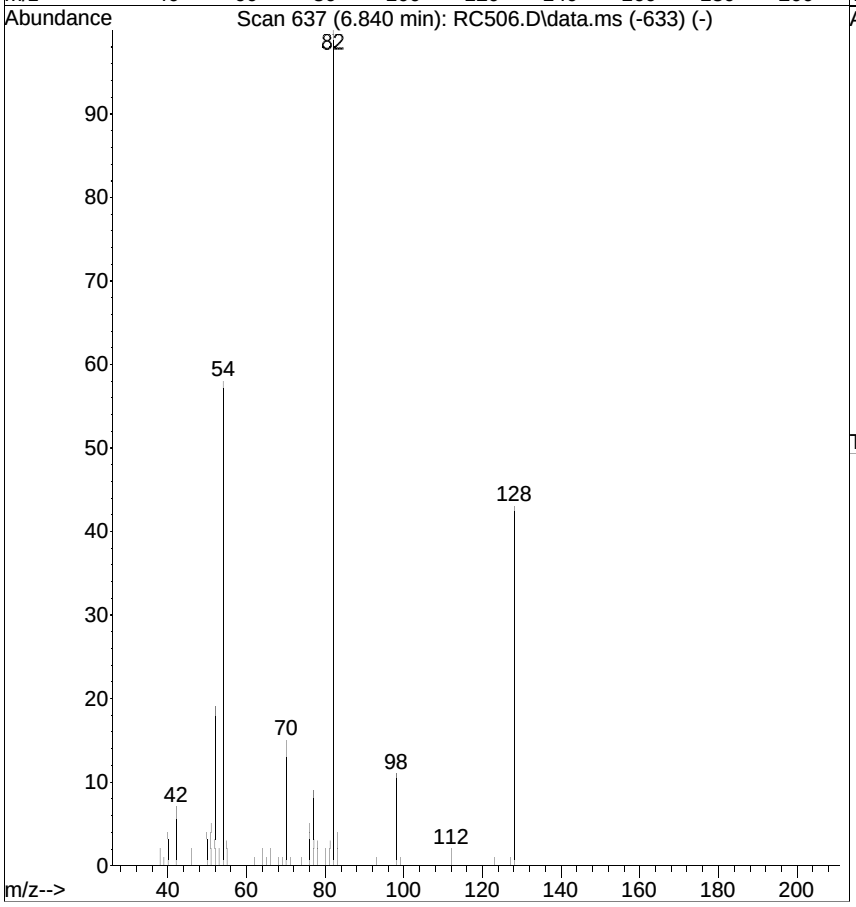
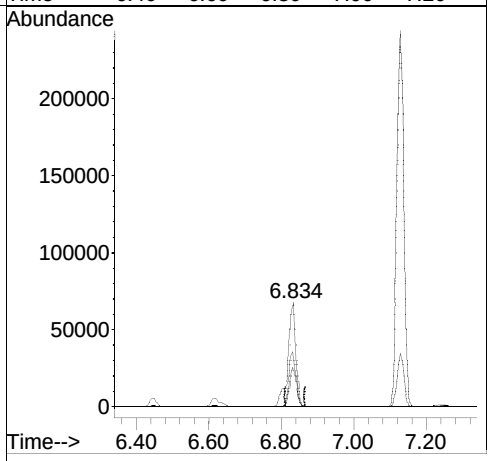
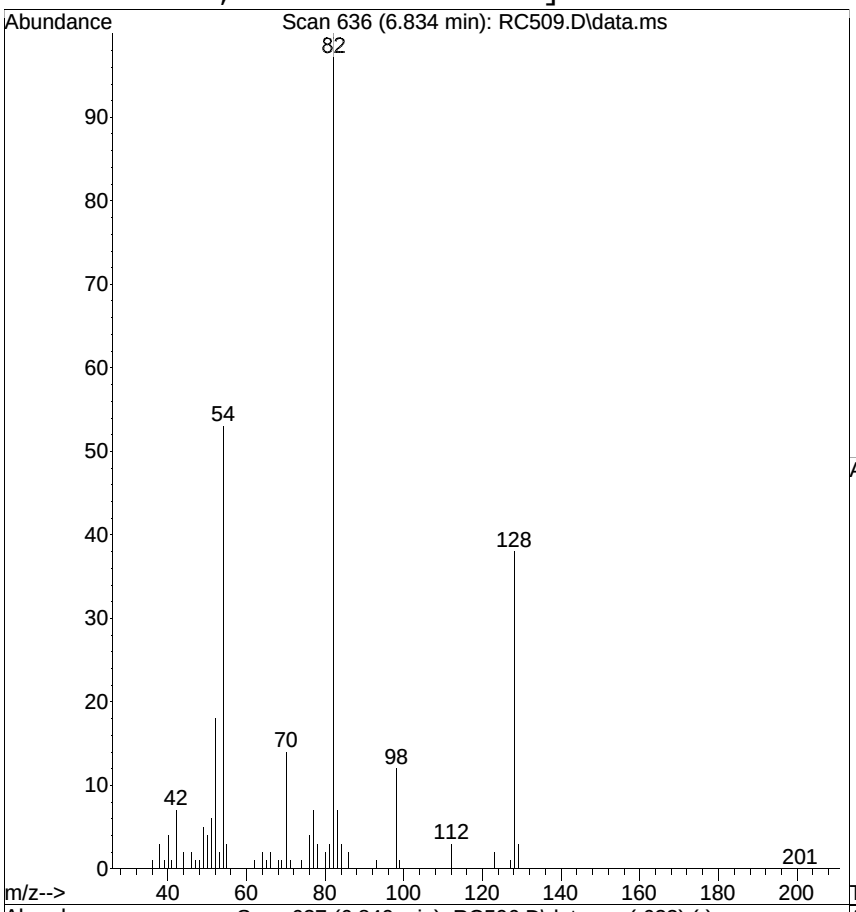




[Nitrobenzene-d5; before version]

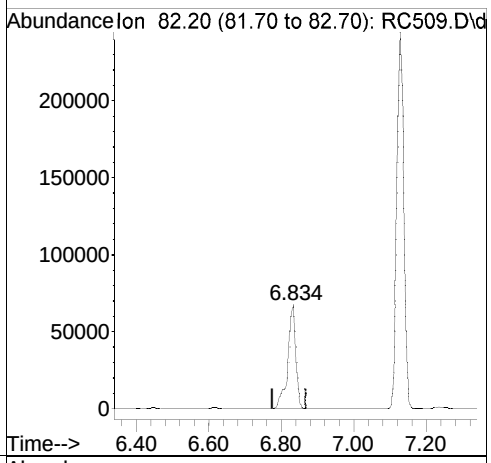
Raw



#20
Nitrobenzene-d5
Concen: 5.3897 ug/mL
RT: 6.834 min Scan# 636
Delta R.T. -0.006 min
Lab File: RC509.D
Acq: 5 Mar 2012 2:02 pm

Tgt Ion: 82 Resp: 102571

Ion	Ratio	Lower	Upper
82	100		
128	38.2	15.0	55.0
54	53.5	56.0	96.0#



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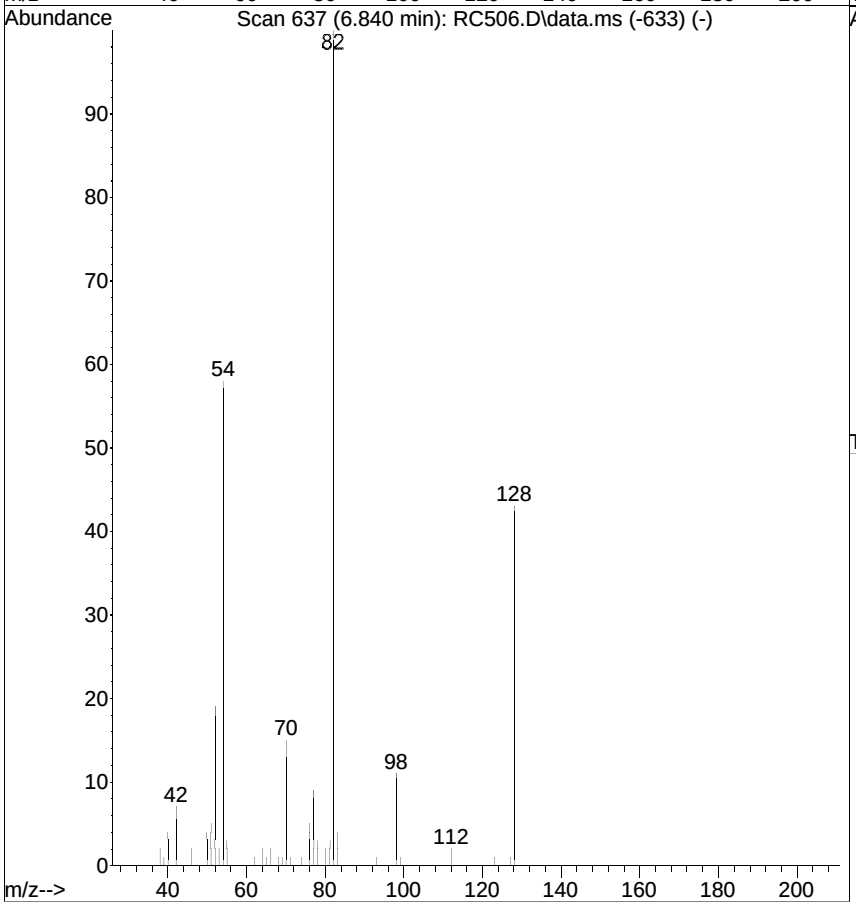
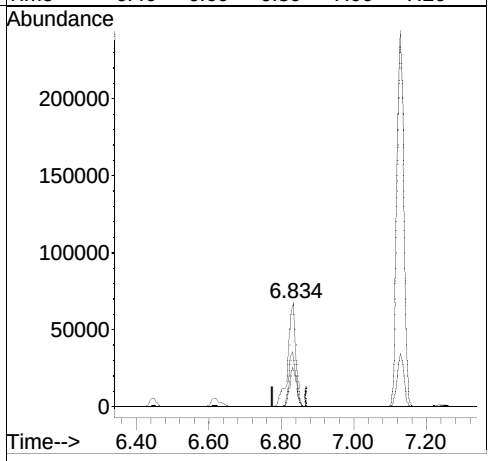
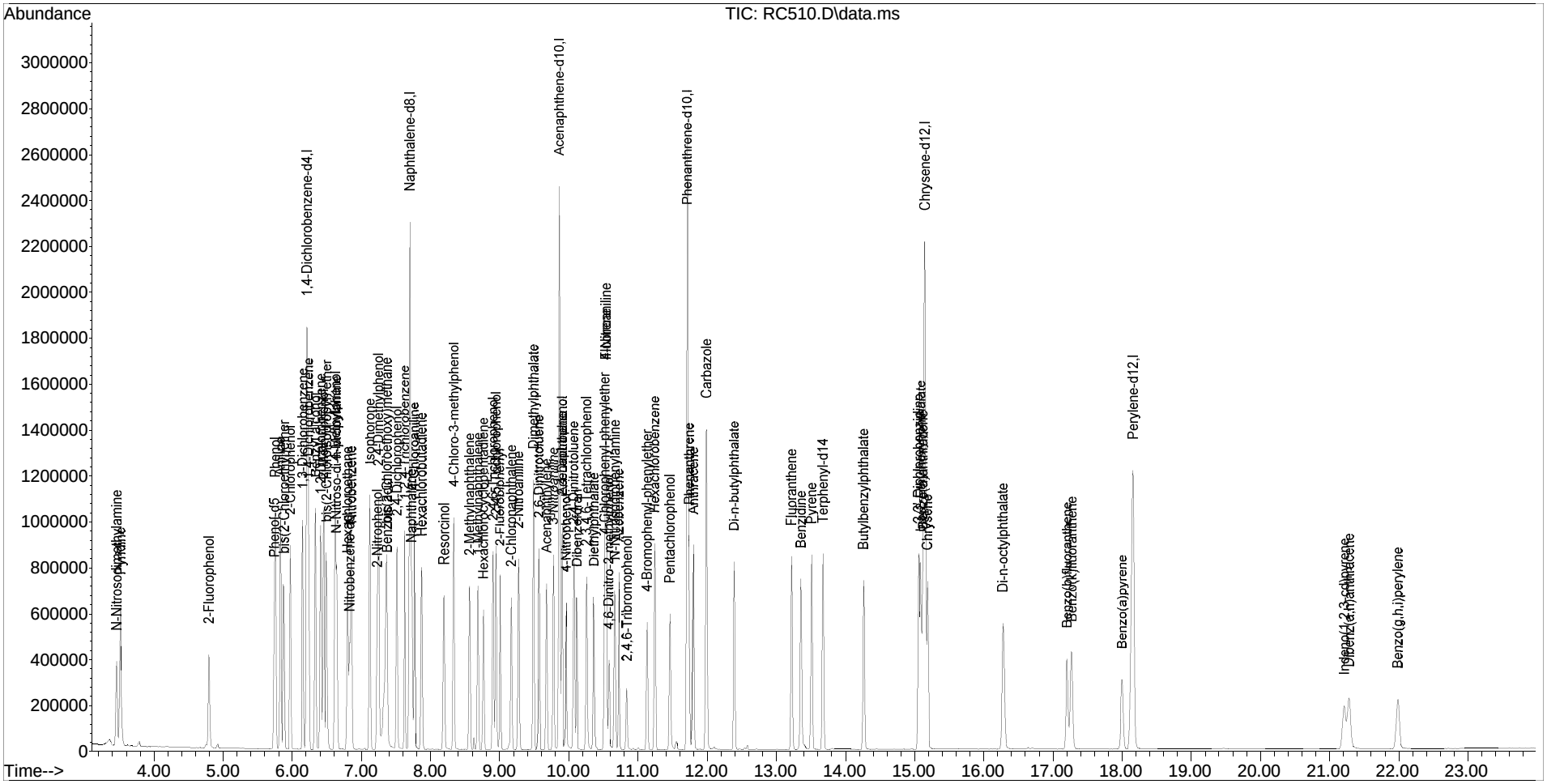




Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC510.D
Acq On : 5 Mar 2012 2:32 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 06 10:32:46 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC510.D
Acq On : 5 Mar 2012 2:32 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 06 10:32:46 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.210	152	374789	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.704	136	1391589	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.863	164	784860	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1463793	40.0000	ug/mL		0.00
70) Chrysene-d12	15.151	240	1364969	40.0000	ug/mL		0.00
79) Perylene-d12	18.162	264	1134992	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	422328	17.9030	ug/mL		90
3) N-Nitrosodimethylamine	3.463	42	164629	17.8683	ug/mL	#	50
4) 2-Fluorophenol	4.798	112	156760	8.7038	ug/mL		85
5) Phenol-d5	5.751	99	219829	9.1964	ug/mL		77
6) Phenol	5.763	94	422735	19.3298	ug/mL		77
7) Aniline	5.834	93	527700m	18.2832	ug/mL		
8) bis(2-Chloroethyl)ether	5.881	93	333715	19.0240	ug/mL		96
9) 2-Chlorophenol	5.975	128	298414	19.4660	ug/mL		96
10) 1,3-Dichlorobenzene	6.151	146	311937	20.4908	ug/mL		93
11) 1,4-Dichlorobenzene	6.234	146	311074	19.2543	ug/mL		89
12) Benzyl alcohol	6.340	108	216555	18.1574	ug/mL		97
13) 1,2-Dichlorobenzene	6.410	146	299977	19.8191	ug/mL		95
14) 2-Methylphenol	6.451	107	248919	19.7428	ug/mL		92
15) bis(2-Chloroisopropyl) ether	6.492	45	520763	17.1375	ug/mL		91
16) 4-Methylphenol	6.622	107	360643	19.1580	ug/mL		93
17) N-Nitroso-di-n-propylamine	6.640	70	247786	18.3632	ug/mL	#	79
18) Hexachloroethane	6.804	117	127937	19.9210	ug/mL		87
20) Nitrobenzene-d5	6.834	82	202022	10.1633	ug/mL	#	79
21) Nitrobenzene	6.857	77	371280	20.5422	ug/mL		98
22) Isophorone	7.134	82	690824	19.7654	ug/mL		99
23) 2-Nitrophenol	7.234	139	132352	18.3584	ug/mL		97
24) 2,4-Dimethylphenol	7.251	107	297002	21.1875	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.369	93	193635	9.4034	ug/mL		98
26) Benzoic acid	7.375	105	361970	30.4319	ug/mL		95
27) 2,4-Dichlorophenol	7.516	162	220746	20.5159	ug/mL		97
28) 1,2,4-Trichlorobenzene	7.628	180	226438	21.7607	ug/mL		96
29) Naphthalene	7.728	128	432299	9.7774	ug/mL		98
30) 4-Chloroaniline	7.769	127	364552	20.9376	ug/mL		88
31) Hexachlorobutadiene	7.875	225	117528	21.7243	ug/mL		97
32) Resorcinol	8.198	110	300842	19.9641	ug/mL		95
33) 4-Chloro-3-methylphenol	8.339	107	283515	21.6818	ug/mL		87
34) 2-Methylnaphthalene	8.569	142	279556	9.8162	ug/mL		94
35) 1-Methylnaphthalene	8.692	142	273358	9.8303	ug/mL		93
37) Hexachlorocyclopentadiene	8.769	237	116977	20.3180	ug/mL		96
38) 2,4,6-Trichlorophenol	8.904	196	147652	20.3926	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC510.D
Acq On : 5 Mar 2012 2:32 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 06 10:32:46 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.945	196	164314	20.8377	ug/mL	#	81
40) 2-Fluorobiphenyl	9.010	172	334356	10.4721	ug/mL		97
41) 2-Chloronaphthalene	9.169	162	253856	10.0528	ug/mL		95
42) 2-Nitroaniline	9.275	65	214239	19.8644	ug/mL		92
43) Dimethylphthalate	9.492	163	628461	21.6343	ug/mL		98
44) 2,6-Dinitrotoluene	9.569	165	140105	20.4743	ug/mL		95
45) Acenaphthylene	9.686	152	432312	10.2413	ug/mL		98
46) 3-Nitroaniline	9.780	138	166099	19.7985	ug/mL	#	84
47) Acenaphthene	9.904	154	268695	10.3490	ug/mL		94
48) 2,4-Dinitrophenol	9.904	184	24370	8.3310	ug/mL	#	1
49) 4-Nitrophenol	9.963	109	91303	20.2927	ug/mL	#	82
50) Dibenzofuran	10.116	168	377722	10.6976	ug/mL		77
51) 2,4-Dinitrotoluene	10.069	165	192691	20.8174	ug/mL		95
52) 2,3,4,6-Tetrachlorophenol	10.257	232	116879	21.1164	ug/mL		88
53) Diethylphthalate	10.363	149	345819	11.1831	ug/mL		100
54) 4-Chlorophenyl-phenylether	10.522	204	139911	11.3258	ug/mL	#	66
55) Fluorene	10.539	166	309414	10.4762	ug/mL		89
56) 4-Nitroaniline	10.539	138	166435	19.9714	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.839	330	28863	8.1438	ug/mL		91
59) 4,6-Dinitro-2-methylphenol	10.580	198	62323	11.8810	ug/mL		91
60) N-Nitrosodiphenylamine	10.663	169	241470	9.9909	ug/mL		88
61) Azobenzene	10.722	77	448088	9.6118	ug/mL		94
62) 4-Bromophenyl-phenylether	11.133	248	78805	9.5829	ug/mL	#	73
63) Hexachlorobenzene	11.239	284	140468	17.1630	ug/mL	#	67
64) Pentachlorophenol	11.469	266	78762	14.9868	ug/mL		98
65) Phenanthrene	11.739	178	467479	9.1824	ug/mL		97
66) Anthracene	11.804	178	478777	9.4828	ug/mL		96
67) Carbazole	11.992	167	859868	18.5299	ug/mL		88
68) Di-n-butylphthalate	12.392	149	596812	9.7062	ug/mL		97
69) Fluoranthene	13.221	202	474865	8.8574	ug/mL		98
71) Benzidine	13.363	184	423134	22.0858	ug/mL		93
72) Pyrene	13.510	202	483789	9.3220	ug/mL		93
73) Terphenyl-d14	13.674	244	332770	9.9370	ug/mL		90
74) Butylbenzylphthalate	14.263	149	243607	8.9221	ug/mL		86
75) 3,3'-Dichlorobenzidine	15.057	252	268230	16.8732	ug/mL		97
76) Benzo(a)anthracene	15.121	228	402540	9.0325	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.092	149	350238	8.7525	ug/mL		97
78) Chrysene	15.186	228	396542	9.0555	ug/mL		95
80) Di-n-octylphthalate	16.280	149	541816	9.4673	ug/mL		90
81) Benzo(b)fluoranthene	17.209	252	321911	9.0906	ug/mL		98
82) Benzo(k)fluoranthene	17.274	252	343553	9.7024	ug/mL		96
83) Benzo(a)pyrene	18.003	252	277357	9.0329	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.221	276	286651	8.2638	ug/mL		96

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC510.D
Acq On : 5 Mar 2012 2:32 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 06 10:32:46 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

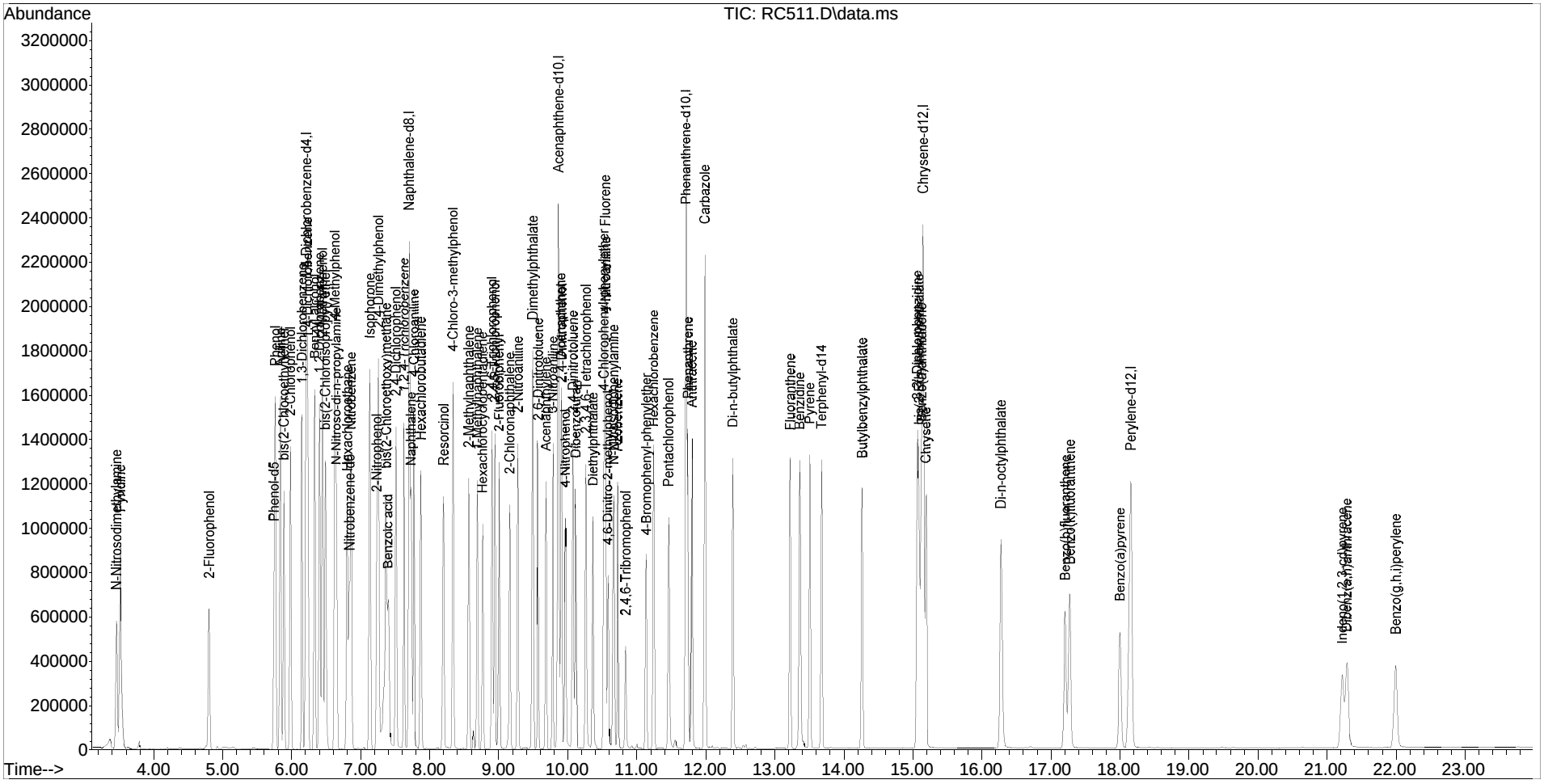
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.286	278	249407	8.2719	ug/mL	97
86) Benzo(g,h,i)perylene	21.991	276	251026	8.2798	ug/mL	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC511.D
Acq On : 5 Mar 2012 3:02 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 06 10:36:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC511.D
Acq On : 5 Mar 2012 3:02 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 06 10:36:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	379125	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.704	136	1426005	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.869	164	833316	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1531896	40.0000	ug/mL		0.00
70) Chrysene-d12	15.151	240	1406068	40.0000	ug/mL		0.00
79) Perylene-d12	18.162	264	1160385	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	689677	28.9018	ug/mL		92
3) N-Nitrosodimethylamine	3.463	42	268956	28.8578	ug/mL	#	50
4) 2-Fluorophenol	4.804	112	258525	14.1899	ug/mL		82
5) Phenol-d5	5.751	99	361304	14.9421	ug/mL		77
6) Phenol	5.769	94	682608	30.8556	ug/mL		79
7) Aniline	5.840	93	856972m	29.3520	ug/mL		
8) bis(2-Chloroethyl)ether	5.887	93	528046	29.7579	ug/mL		97
9) 2-Chlorophenol	5.975	128	477267	30.7767	ug/mL		96
10) 1,3-Dichlorobenzene	6.157	146	494578	32.1167	ug/mL		94
11) 1,4-Dichlorobenzene	6.234	146	499809	30.5825	ug/mL		90
12) Benzyl alcohol	6.340	108	355644	29.4784	ug/mL		98
13) 1,2-Dichlorobenzene	6.410	146	478484	31.2513	ug/mL		93
14) 2-Methylphenol	6.451	107	400975	31.4392	ug/mL		92
15) bis(2-Chloroisopropyl) ether	6.493	45	810064	26.3531	ug/mL		92
16) 4-Methylphenol	6.628	107	582392	30.5838	ug/mL		93
17) N-Nitroso-di-n-propylamine	6.651	70	412525	30.2223	ug/mL	#	76
18) Hexachloroethane	6.810	117	204848	31.5320	ug/mL		91
20) Nitrobenzene-d5	6.840	82	328980	16.1509	ug/mL	#	78
21) Nitrobenzene	6.863	77	604964	32.6636	ug/mL		97
22) Isophorone	7.140	82	1148967	32.0802	ug/mL		98
23) 2-Nitrophenol	7.234	139	229306	31.0391	ug/mL		97
24) 2,4-Dimethylphenol	7.257	107	493116	34.3288	ug/mL		94
25) bis(2-Chloroethoxy)methane	7.369	93	318995	15.1173	ug/mL		98
26) Benzoic acid	7.404	105	653824	53.6423	ug/mL		95
27) 2,4-Dichlorophenol	7.516	162	361464	32.7833	ug/mL		97
28) 1,2,4-Trichlorobenzene	7.634	180	362892	34.0322	ug/mL		95
29) Naphthalene	7.734	128	693670	15.3102	ug/mL		98
30) 4-Chloroaniline	7.775	127	599479	33.5994	ug/mL		88
31) Hexachlorobutadiene	7.881	225	191121	34.4748	ug/mL		97
32) Resorcinol	8.204	110	532004	34.4522	ug/mL		95
33) 4-Chloro-3-methylphenol	8.339	107	465223	34.7192	ug/mL		86
34) 2-Methylnaphthalene	8.569	142	464881	15.9296	ug/mL		95
35) 1-Methylnaphthalene	8.692	142	456559	16.0221	ug/mL		94
37) Hexachlorocyclopentadiene	8.769	237	202563	33.1377	ug/mL		98
38) 2,4,6-Trichlorophenol	8.904	196	249190	32.4150	ug/mL		94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC511.D
Acq On : 5 Mar 2012 3:02 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 06 10:36:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.945	196	268459	32.0654	ug/mL	#	81
40) 2-Fluorobiphenyl	9.010	172	549018	16.1955	ug/mL		97
41) 2-Chloronaphthalene	9.169	162	427480	15.9440	ug/mL		95
42) 2-Nitroaniline	9.281	65	363108	31.7098	ug/mL		95
43) Dimethylphthalate	9.498	163	1021629	33.1237	ug/mL		99
44) 2,6-Dinitrotoluene	9.575	165	236709	32.5801	ug/mL		94
45) Acenaphthylene	9.686	152	724943	16.1749	ug/mL		98
46) 3-Nitroaniline	9.786	138	283273	31.8018	ug/mL	#	83
47) Acenaphthene	9.904	154	446692	16.2043	ug/mL		94
48) 2,4-Dinitrophenol	9.910	184	59670	19.2123	ug/mL	#	1
49) 4-Nitrophenol	9.969	109	155052	32.4575	ug/mL	#	83
50) Dibenzofuran	10.116	168	638844	17.0409	ug/mL		76
51) 2,4-Dinitrotoluene	10.075	165	329069	33.4837	ug/mL		96
52) 2,3,4,6-Tetrachlorophenol	10.263	232	202819	34.5124	ug/mL		88
53) Diethylphthalate	10.363	149	570711	17.3824	ug/mL		99
54) 4-Chlorophenyl-phenylether	10.528	204	233399	17.7950	ug/mL	#	68
55) Fluorene	10.545	166	506156	16.1411	ug/mL		89
56) 4-Nitroaniline	10.551	138	275968	31.1893	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.839	330	50354	13.3814	ug/mL		93
59) 4,6-Dinitro-2-methylphenol	10.586	198	131603	23.9730	ug/mL		90
60) N-Nitrosodiphenylamine	10.669	169	400823	15.8469	ug/mL		88
61) Azobenzene	10.722	77	735793	15.0816	ug/mL		93
62) 4-Bromophenyl-phenylether	11.139	248	132336	15.3769	ug/mL	#	75
63) Hexachlorobenzene	11.245	284	237911	27.7767	ug/mL		75
64) Pentachlorophenol	11.469	266	145694	26.4902	ug/mL		98
65) Phenanthrene	11.745	178	752919	14.1317	ug/mL		97
66) Anthracene	11.804	178	773849	14.6456	ug/mL		96
67) Carbazole	11.992	167	1354483	27.8911	ug/mL		87
68) Di-n-butylphthalate	12.392	149	964535	14.9893	ug/mL		97
69) Fluoranthene	13.227	202	775520	13.8223	ug/mL		99
71) Benzidine	13.363	184	717135	36.3373	ug/mL		93
72) Pyrene	13.510	202	778771	14.5673	ug/mL		93
73) Terphenyl-d14	13.674	244	542130	15.7156	ug/mL		91
74) Butylbenzylphthalate	14.269	149	406469	14.4518	ug/mL		89
75) 3,3'-Dichlorobenzidine	15.063	252	453230	27.6774	ug/mL		98
76) Benzo(a)anthracene	15.127	228	666335	14.5147	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.092	149	577787	14.0170	ug/mL		97
78) Chrysene	15.192	228	647052	14.3442	ug/mL		95
80) Di-n-octylphthalate	16.280	149	930203	15.8980	ug/mL		92
81) Benzo(b)fluoranthene	17.215	252	543223	15.0046	ug/mL		98
82) Benzo(k)fluoranthene	17.280	252	561719	15.5166	ug/mL		96
83) Benzo(a)pyrene	18.004	252	469487	14.9556	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.227	276	500551	14.1145	ug/mL		97

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC511.D
Acq On : 5 Mar 2012 3:02 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 06 10:36:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

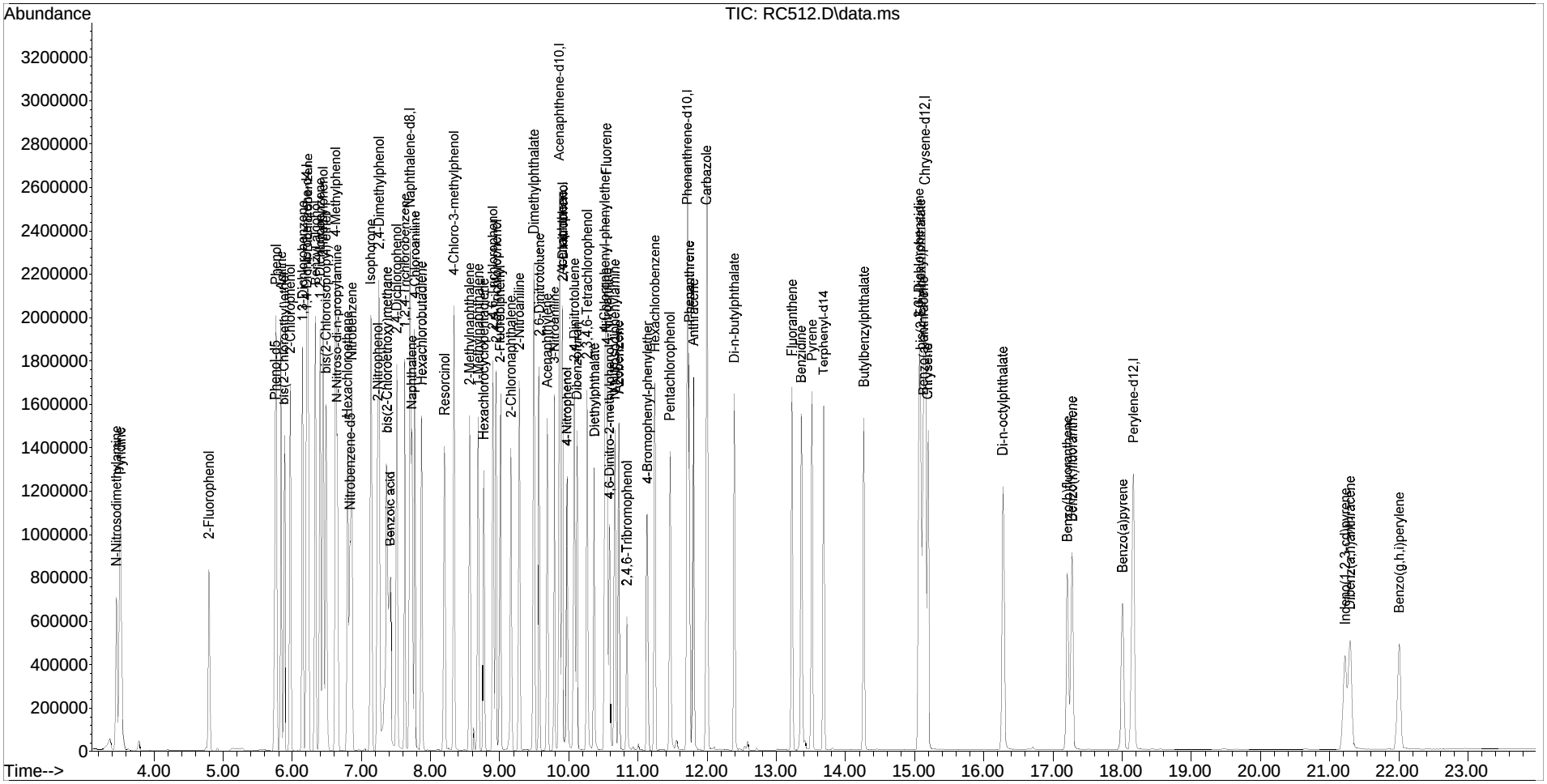
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.292	278	435044	14.1131	ug/mL	98
86) Benzo(g,h,i)perylene	22.003	276	432070m	13.9395	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC512.D
Acq On : 5 Mar 2012 3:32 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 06 10:36:16 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC512.D
Acq On : 5 Mar 2012 3:32 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 06 10:36:16 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.210	152	391906	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.704	136	1477367	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.863	164	863657	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1599553	40.0000	ug/mL		0.00
70) Chrysene-d12	15.151	240	1449090	40.0000	ug/mL		0.00
79) Perylene-d12	18.168	264	1212186	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	890731	36.1099	ug/mL		92
3) N-Nitrosodimethylamine	3.463	42	345580	35.8700	ug/mL	#	51
4) 2-Fluorophenol	4.799	112	334577	17.7653	ug/mL		85
5) Phenol-d5	5.757	99	465323	18.6163	ug/mL		76
6) Phenol	5.769	94	866302	37.8820	ug/mL		78
7) Aniline	5.840	93	1095137m	36.2860	ug/mL		
8) bis(2-Chloroethyl)ether	5.887	93	669439	36.4957	ug/mL		98
9) 2-Chlorophenol	5.975	128	610576	38.0891	ug/mL		97
10) 1,3-Dichlorobenzene	6.157	146	623931	39.1952	ug/mL		94
11) 1,4-Dichlorobenzene	6.234	146	624985	36.9947	ug/mL		89
12) Benzyl alcohol	6.346	108	455311	36.5088	ug/mL		96
13) 1,2-Dichlorobenzene	6.410	146	600673	37.9524	ug/mL		94
14) 2-Methylphenol	6.451	107	515556	39.1049	ug/mL		93
15) bis(2-Chloroisopropyl) ether	6.493	45	997500	31.3925	ug/mL		93
16) 4-Methylphenol	6.628	107	743442	37.7680	ug/mL		92
17) N-Nitroso-di-n-propylamine	6.651	70	528474	37.4542	ug/mL	#	76
18) Hexachloroethane	6.804	117	259489	38.6402	ug/mL		88
20) Nitrobenzene-d5	6.840	82	428852	20.3220	ug/mL	#	78
21) Nitrobenzene	6.863	77	766972	39.9712	ug/mL		97
22) Isophorone	7.140	82	1475930	39.7766	ug/mL		99
23) 2-Nitrophenol	7.240	139	300493	39.2610	ug/mL		95
24) 2,4-Dimethylphenol	7.257	107	626427	42.0933	ug/mL		94
25) bis(2-Chloroethoxy)methane	7.369	93	416831	19.0670	ug/mL		98
26) Benzoic acid	7.422	105	867316	68.6841	ug/mL		95
27) 2,4-Dichlorophenol	7.516	162	462741	40.5097	ug/mL		97
28) 1,2,4-Trichlorobenzene	7.634	180	458424	41.4967	ug/mL		95
29) Naphthalene	7.734	128	890535	18.9719	ug/mL		98
30) 4-Chloroaniline	7.775	127	762254	41.2372	ug/mL		89
31) Hexachlorobutadiene	7.881	225	242359	42.1974	ug/mL		97
32) Resorcinol	8.204	110	689627	43.1071	ug/mL		96
33) 4-Chloro-3-methylphenol	8.340	107	592802	42.7023	ug/mL		87
34) 2-Methylnaphthalene	8.569	142	598094	19.7818	ug/mL		94
35) 1-Methylnaphthalene	8.692	142	583543	19.7664	ug/mL		94
37) Hexachlorocyclopentadiene	8.769	237	264490	41.7484	ug/mL		98
38) 2,4,6-Trichlorophenol	8.904	196	325949	40.9104	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC512.D
Acq On : 5 Mar 2012 3:32 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 06 10:36:16 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	8.951	196	347609	40.0606	ug/mL #	83
40) 2-Fluorobiphenyl	9.010	172	707274	20.1310	ug/mL	97
41) 2-Chloronaphthalene	9.169	162	545945	19.6471	ug/mL	95
42) 2-Nitroaniline	9.281	65	465570	39.2294	ug/mL	95
43) Dimethylphthalate	9.498	163	1303225	40.7694	ug/mL	98
44) 2,6-Dinitrotoluene	9.575	165	309387	41.0873	ug/mL	94
45) Acenaphthylene	9.686	152	935142	20.1319	ug/mL	99
46) 3-Nitroaniline	9.792	138	368236	39.8879	ug/mL #	81
47) Acenaphthene	9.904	154	578985	20.2655	ug/mL	94
48) 2,4-Dinitrophenol	9.910	184	94861	29.4699	ug/mL #	5
49) 4-Nitrophenol	9.975	109	203251	41.0525	ug/mL	84
50) Dibenzofuran	10.116	168	811676	20.8905	ug/mL	76
51) 2,4-Dinitrotoluene	10.081	165	418275	41.0655	ug/mL	96
52) 2,3,4,6-Tetrachlorophenol	10.263	232	266314	43.7249	ug/mL	89
53) Diethylphthalate	10.369	149	730440	21.4658	ug/mL	99
54) 4-Chlorophenyl-phenylether	10.528	204	300559	22.1104	ug/mL #	69
55) Fluorene	10.545	166	654880	20.1501	ug/mL	88
56) 4-Nitroaniline	10.557	138	362653	39.5463	ug/mL #	1
57) 2,4,6-Tribromophenol	10.839	330	67723	17.3649	ug/mL	93
59) 4,6-Dinitro-2-methylphenol	10.592	198	188651	32.9113	ug/mL	88
60) N-Nitrosodiphenylamine	10.669	169	514580	19.4839	ug/mL	88
61) Azobenzene	10.722	77	936221	18.3781	ug/mL	94
62) 4-Bromophenyl-phenylether	11.139	248	171533	19.0884	ug/mL #	75
63) Hexachlorobenzene	11.245	284	309527	34.6095	ug/mL	78
64) Pentachlorophenol	11.469	266	197263	34.3494	ug/mL	98
65) Phenanthrene	11.745	178	958818	17.2351	ug/mL	97
66) Anthracene	11.804	178	985088	17.8549	ug/mL	95
67) Carbazole	11.992	167	1697116	33.4683	ug/mL	87
68) Di-n-butylphthalate	12.392	149	1220712	18.1680	ug/mL	98
69) Fluoranthene	13.227	202	976502	16.6683	ug/mL	99
71) Benzidine	13.363	184	889944	43.7548	ug/mL	92
72) Pyrene	13.516	202	982148	17.8261	ug/mL	93
73) Terphenyl-d14	13.680	244	699193	19.6669	ug/mL	94
74) Butylbenzylphthalate	14.269	149	514501	17.7498	ug/mL	88
75) 3,3'-Dichlorobenzidine	15.069	252	580941	34.4231	ug/mL	98
76) Benzo(a)anthracene	15.127	228	856558	18.1043	ug/mL	98
77) bis(2-Ethylhexyl)phthalate	15.092	149	735887	17.3225	ug/mL	98
78) Chrysene	15.192	228	829641	17.8459	ug/mL	95
80) Di-n-octylphthalate	16.280	149	1213362	19.8513	ug/mL	92
81) Benzo(b)fluoranthene	17.215	252	694962	18.3755	ug/mL	99
82) Benzo(k)fluoranthene	17.280	252	742824	19.6425	ug/mL	97
83) Benzo(a)pyrene	18.009	252	619870	18.9023	ug/mL	98
84) Indeno(1,2,3-cd)pyrene	21.233	276	665594	17.9663	ug/mL	97

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC512.D
Acq On : 5 Mar 2012 3:32 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 06 10:36:16 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

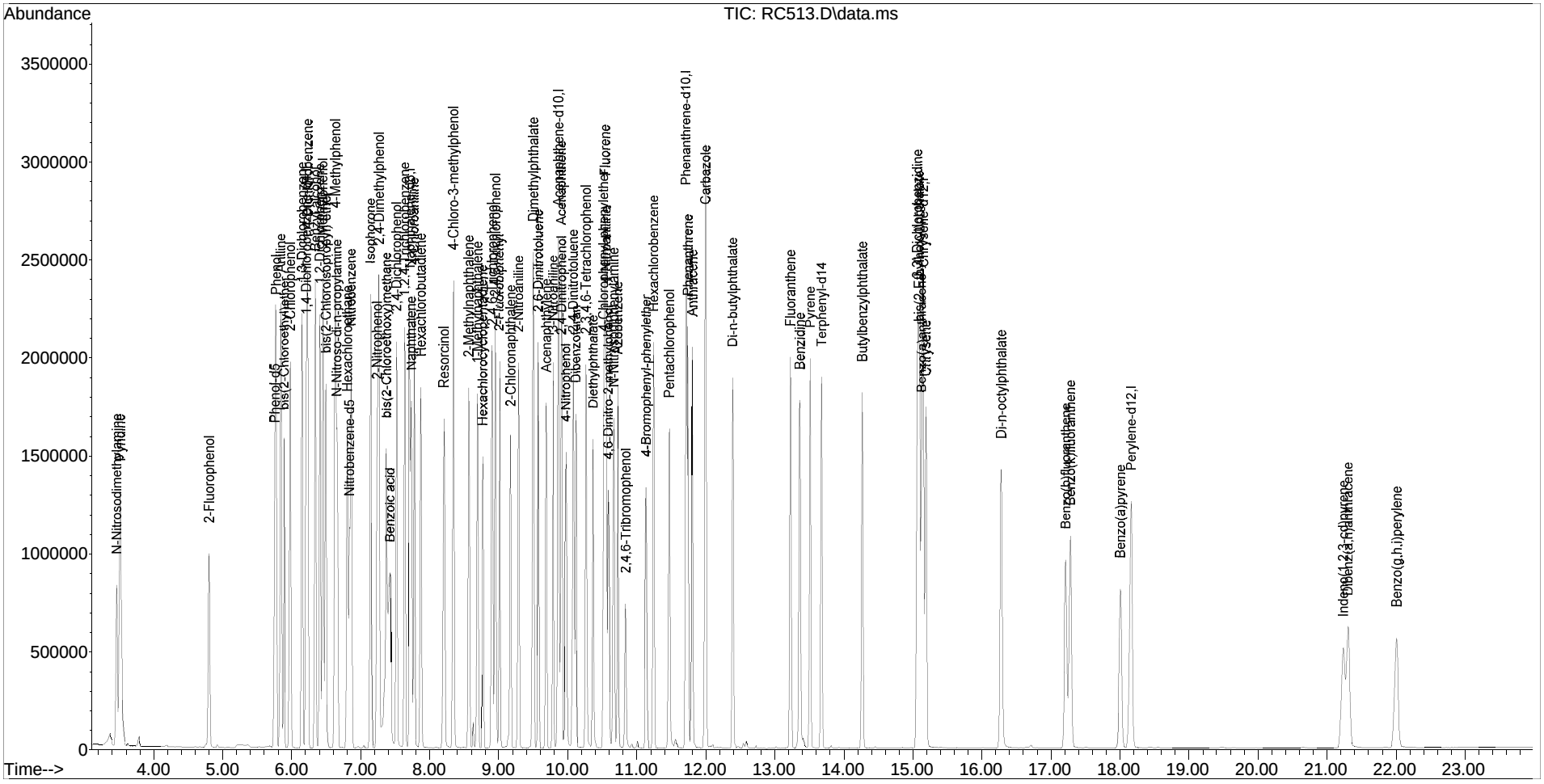
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.297	278	578711	17.9715	ug/mL	98
86) Benzo(g,h,i)perylene	22.009	276	572625m	17.6847	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC513.D
Acq On : 5 Mar 2012 4:02 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 06 10:38:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC513.D
Acq On : 5 Mar 2012 4:02 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 06 10:38:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	378619	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.710	136	1433957	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.869	164	858429	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1561563	40.0000	ug/mL		0.00
70) Chrysene-d12	15.157	240	1416731	40.0000	ug/mL		0.00
79) Perylene-d12	18.168	264	1178841	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	1064240	44.6580	ug/mL		93
3) N-Nitrosodimethylamine	3.469	42	409575	44.0043	ug/mL	#	48
4) 2-Fluorophenol	4.804	112	399515	21.9579	ug/mL		82
5) Phenol-d5	5.757	99	551994	22.8588	ug/mL		76
6) Phenol	5.775	94	1012924	45.8479	ug/mL		79
7) Aniline	5.840	93	1280964m	43.9327	ug/mL		
8) bis(2-Chloroethyl)ether	5.893	93	788731	44.5081	ug/mL		99
9) 2-Chlorophenol	5.981	128	727472	46.9740	ug/mL		100
10) 1,3-Dichlorobenzene	6.157	146	731320	47.5536	ug/mL		94
11) 1,4-Dichlorobenzene	6.234	146	735295	45.0516	ug/mL		90
12) Benzyl alcohol	6.345	108	547232	45.4193	ug/mL		96
13) 1,2-Dichlorobenzene	6.410	146	703930	46.0374	ug/mL		93
14) 2-Methylphenol	6.457	107	606790	47.6401	ug/mL		93
15) bis(2-Chloroisopropyl) ether	6.498	45	1134884	36.9695	ug/mL		94
16) 4-Methylphenol	6.634	107	882534	46.4075	ug/mL		93
17) N-Nitroso-di-n-propylamine	6.657	70	632911	46.4301	ug/mL	#	75
18) Hexachloroethane	6.810	117	306406	47.2278	ug/mL		91
20) Nitrobenzene-d5	6.840	82	520776	25.4251	ug/mL	#	78
21) Nitrobenzene	6.863	77	914281	49.0907	ug/mL		97
22) Isophorone	7.145	82	1769906	49.1433	ug/mL		99
23) 2-Nitrophenol	7.239	139	368167	49.5592	ug/mL		94
24) 2,4-Dimethylphenol	7.263	107	744382	51.5336	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.375	93	503069	23.7084	ug/mL		97
26) Benzoic acid	7.428	105	1009574	82.3701	ug/mL		95
27) 2,4-Dichlorophenol	7.522	162	555614	50.1125	ug/mL		98
28) 1,2,4-Trichlorobenzene	7.634	180	539909	50.3522	ug/mL		95
29) Naphthalene	7.734	128	1061212	23.2925	ug/mL		98
30) 4-Chloroaniline	7.775	127	895265	49.8992	ug/mL		89
31) Hexachlorobutadiene	7.881	225	285598	51.2311	ug/mL		98
32) Resorcinol	8.210	110	838326	53.9883	ug/mL		96
33) 4-Chloro-3-methylphenol	8.345	107	705506	52.3593	ug/mL		87
34) 2-Methylnaphthalene	8.569	142	718532	24.4847	ug/mL		95
35) 1-Methylnaphthalene	8.692	142	702109	24.5026	ug/mL		94
37) Hexachlorocyclopentadiene	8.769	237	319492	50.7374	ug/mL		97
38) 2,4,6-Trichlorophenol	8.910	196	388974	49.1181	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC513.D
Acq On : 5 Mar 2012 4:02 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 06 10:38:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.951	196	423685	49.1254	ug/mL	#	83
40) 2-Fluorobiphenyl	9.010	172	852015	24.3984	ug/mL		97
41) 2-Chloronaphthalene	9.175	162	654192	23.6860	ug/mL		96
42) 2-Nitroaniline	9.286	65	551310	46.7369	ug/mL		98
43) Dimethylphthalate	9.504	163	1538987	48.4380	ug/mL		99
44) 2,6-Dinitrotoluene	9.575	165	374231	50.0014	ug/mL		94
45) Acenaphthylene	9.692	152	1125865	24.3854	ug/mL		98
46) 3-Nitroaniline	9.792	138	446058	48.6120	ug/mL	#	81
47) Acenaphthene	9.910	154	698214	24.5876	ug/mL		91
48) 2,4-Dinitrophenol	9.916	184	126790	39.6290	ug/mL	#	88
49) 4-Nitrophenol	9.975	109	245234	49.8338	ug/mL	#	83
50) Dibenzofuran	10.116	168	982225	25.4340	ug/mL		76
51) 2,4-Dinitrotoluene	10.080	165	505314	49.9130	ug/mL		96
52) 2,3,4,6-Tetrachlorophenol	10.263	232	323341	53.4113	ug/mL		90
53) Diethylphthalate	10.369	149	864616	25.5637	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.528	204	360899	26.7110	ug/mL	#	68
55) Fluorene	10.545	166	778719	24.1065	ug/mL		89
56) 4-Nitroaniline	10.557	138	433271	47.5348	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.839	330	82991	21.4093	ug/mL		94
59) 4,6-Dinitro-2-methylphenol	10.592	198	238680	42.6522	ug/mL		89
60) N-Nitrosodiphenylamine	10.669	169	619765	24.0375	ug/mL		88
61) Azobenzene	10.727	77	1118011	22.4806	ug/mL		96
62) 4-Bromophenyl-phenylether	11.139	248	209537	23.8848	ug/mL	#	75
63) Hexachlorobenzene	11.245	284	379233	43.4352	ug/mL		79
64) Pentachlorophenol	11.475	266	247290	44.1082	ug/mL		98
65) Phenanthrene	11.745	178	1147045	21.1201	ug/mL		97
66) Anthracene	11.810	178	1180875	21.9243	ug/mL		95
67) Carbazole	11.998	167	1998551	40.3717	ug/mL		87
68) Di-n-butylphthalate	12.392	149	1434443	21.8684	ug/mL		97
69) Fluoranthene	13.227	202	1162046	20.3180	ug/mL		99
71) Benzidine	13.368	184	1049760	52.7911	ug/mL		92
72) Pyrene	13.516	202	1176731	21.8456	ug/mL		93
73) Terphenyl-d14	13.680	244	832859	23.9617	ug/mL		94
74) Butylbenzylphthalate	14.268	149	611936	21.5934	ug/mL		88
75) 3,3'-Dichlorobenzidine	15.068	252	702419	42.5718	ug/mL		99
76) Benzo(a)anthracene	15.127	228	1024150	22.1410	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.092	149	869272	20.9296	ug/mL		97
78) Chrysene	15.192	228	1001027	22.0243	ug/mL		95
80) Di-n-octylphthalate	16.286	149	1458409	24.5353	ug/mL		94
81) Benzo(b)fluoranthene	17.221	252	864250	23.4981	ug/mL		98
82) Benzo(k)fluoranthene	17.286	252	890522	24.2141	ug/mL		96
83) Benzo(a)pyrene	18.009	252	753673	23.6325	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.239	276	801556	22.2483	ug/mL		97

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC513.D
Acq On : 5 Mar 2012 4:02 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 06 10:38:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

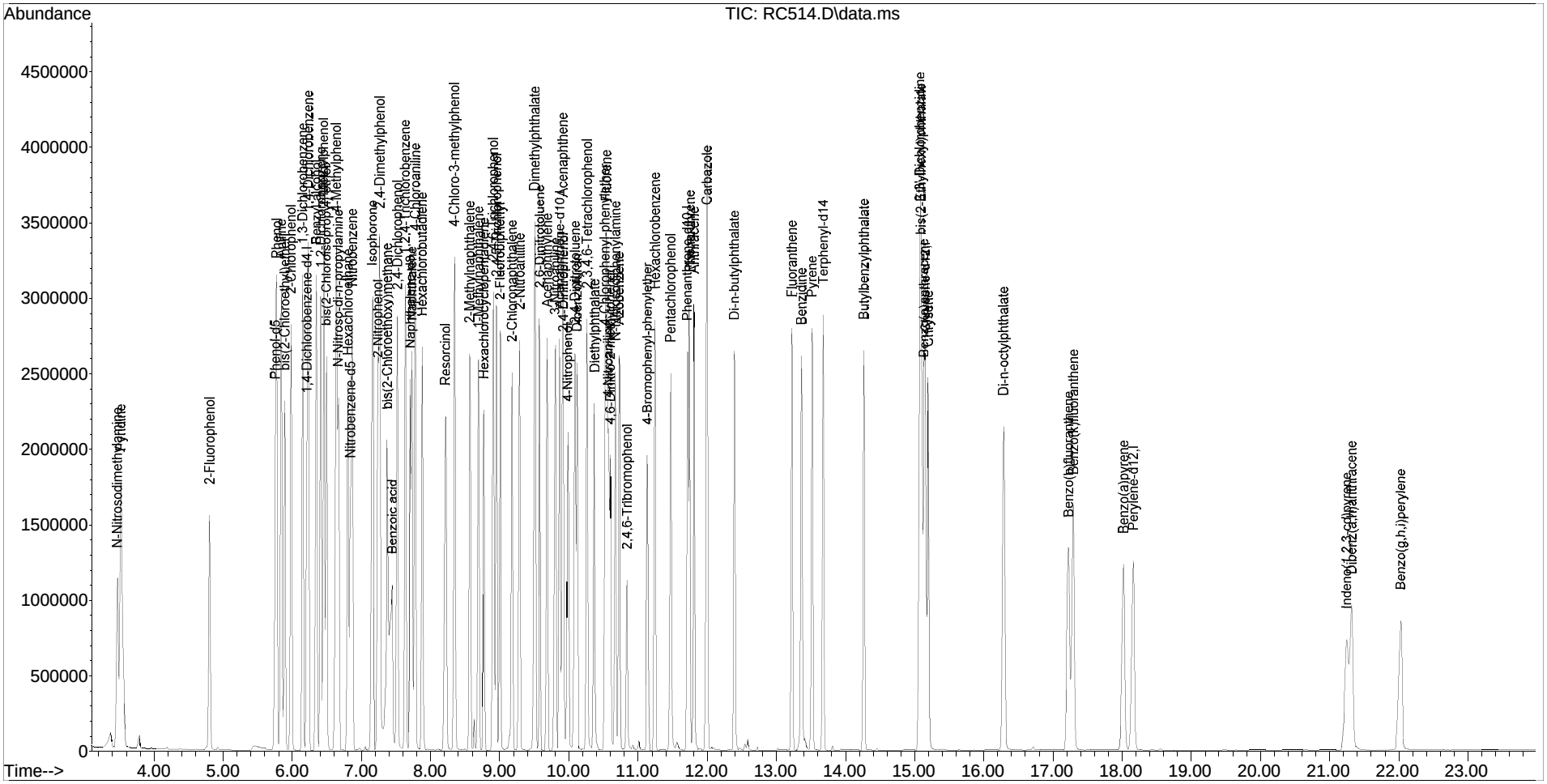
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.303	278	698224	22.2962	ug/mL	97
86) Benzo(g,h,i)perylene	22.015	276	683435m	21.7039	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC514.D
Acq On : 5 Mar 2012 4:32 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 06 10:39:19 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC514.D
Acq On : 5 Mar 2012 4:32 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 06 10:39:19 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	390419	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.710	136	1513638	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.869	164	899263	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1595684	40.0000	ug/mL		0.00
70) Chrysene-d12	15.157	240	1418851	40.0000	ug/mL		0.00
79) Perylene-d12	18.168	264	1181633	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	1698395	69.1146	ug/mL		95
3) N-Nitrosodimethylamine	3.469	42	638248	66.5002	ug/mL	#	48
4) 2-Fluorophenol	4.804	112	628965	33.5239	ug/mL		82
5) Phenol-d5	5.763	99	853058	34.2586	ug/mL		76
6) Phenol	5.781	94	1537532	67.4898	ug/mL		80
7) Aniline	5.846	93	1996795m	66.4134	ug/mL		
8) bis(2-Chloroethyl)ether	5.893	93	1154999	63.2067	ug/mL		99
9) 2-Chlorophenol	5.981	128	1094555	68.5409	ug/mL		99
10) 1,3-Dichlorobenzene	6.157	146	1083791	68.3429	ug/mL		94
11) 1,4-Dichlorobenzene	6.234	146	1073751	63.8005	ug/mL		90
12) Benzyl alcohol	6.351	108	865994	69.7036	ug/mL		96
13) 1,2-Dichlorobenzene	6.416	146	1047720	66.4504	ug/mL		95
14) 2-Methylphenol	6.457	107	913872	69.5811	ug/mL		93
15) bis(2-Chloroisopropyl) ether	6.498	45	1590867	50.2571	ug/mL		97
16) 4-Methylphenol	6.640	107	1398295	71.3061	ug/mL		93
17) N-Nitroso-di-n-propylamine	6.669	70	966702	68.7735	ug/mL	#	74
18) Hexachloroethane	6.810	117	439973	65.7654	ug/mL		96
20) Nitrobenzene-d5	6.845	82	840396	38.8695	ug/mL	#	76
21) Nitrobenzene	6.869	77	1380191	70.2058	ug/mL		95
22) Isophorone	7.163	82	2773759	72.9620	ug/mL		99
23) 2-Nitrophenol	7.240	139	590139	75.2571	ug/mL		94
24) 2,4-Dimethylphenol	7.269	107	1162174	76.2219	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.375	93	784379	35.0199	ug/mL		97
26) Benzoic acid	7.451	105	1360215	105.1364	ug/mL		95
27) 2,4-Dichlorophenol	7.528	162	862423	73.6898	ug/mL		99
28) 1,2,4-Trichlorobenzene	7.634	180	829171	73.2582	ug/mL		95
29) Naphthalene	7.734	128	1646529	34.2371	ug/mL		98
30) 4-Chloroaniline	7.781	127	1356245	71.6134	ug/mL		91
31) Hexachlorobutadiene	7.881	225	434427	73.8260	ug/mL		98
32) Resorcinol	8.222	110	1338202	81.6437	ug/mL		95
33) 4-Chloro-3-methylphenol	8.345	107	1057355	74.3410	ug/mL		87
34) 2-Methylnaphthalene	8.569	142	1100387	35.5228	ug/mL		95
35) 1-Methylnaphthalene	8.698	142	1079787	35.6993	ug/mL		93
37) Hexachlorocyclopentadiene	8.775	237	513931	77.9095	ug/mL		98
38) 2,4,6-Trichlorophenol	8.910	196	628403	75.7490	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC514.D
Acq On : 5 Mar 2012 4:32 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 06 10:39:19 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.957	196	646509	71.5576	ug/mL		87
40) 2-Fluorobiphenyl	9.010	172	1303260	35.6257	ug/mL		98
41) 2-Chloronaphthalene	9.175	162	1023073	35.3599	ug/mL		95
42) 2-Nitroaniline	9.292	65	840415	68.0104	ug/mL		97
43) Dimethylphthalate	9.510	163	2326293	69.8930	ug/mL		99
44) 2,6-Dinitrotoluene	9.581	165	582855	74.3397	ug/mL		94
45) Acenaphthylene	9.692	152	1727554	35.7185	ug/mL		99
46) 3-Nitroaniline	9.804	138	704139	73.2535	ug/mL	#	79
47) Acenaphthene	9.910	154	1097580	36.8962	ug/mL		94
48) 2,4-Dinitrophenol	9.922	184	243366	72.6115	ug/mL	#	56
49) 4-Nitrophenol	9.986	109	383730	74.4367	ug/mL		86
50) Dibenzofuran	10.122	168	1511025	37.3502	ug/mL		76
51) 2,4-Dinitrotoluene	10.092	165	786340	74.1447	ug/mL		93
52) 2,3,4,6-Tetrachlorophenol	10.269	232	518481	81.7565	ug/mL		89
53) Diethylphthalate	10.375	149	1306644	36.8786	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.528	204	563553	39.8159	ug/mL	#	69
55) Fluorene	10.545	166	1190534	35.1813	ug/mL		88
56) 4-Nitroaniline	10.575	138	696996	72.9961	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.845	330	138540	34.1166	ug/mL		90
59) 4,6-Dinitro-2-methylphenol	10.604	198	401896	70.2833	ug/mL		86
60) N-Nitrosodiphenylamine	10.675	169	940336	35.6909	ug/mL		88
61) Azobenzene	10.728	77	1650468	32.4774	ug/mL		96
62) 4-Bromophenyl-phenylether	11.139	248	333048	37.1519	ug/mL	#	76
63) Hexachlorobenzene	11.251	284	603870	67.6849	ug/mL		87
64) Pentachlorophenol	11.475	266	413797	72.2292	ug/mL		98
65) Phenanthrene	11.751	178	1708546	30.7861	ug/mL		97
66) Anthracene	11.810	178	1750031	31.7965	ug/mL		95
67) Carbazole	12.004	167	2903357	57.3951	ug/mL		87
68) Di-n-butylphthalate	12.392	149	2130993	31.7927	ug/mL		97
69) Fluoranthene	13.227	202	1751005	29.9611	ug/mL		99
71) Benzidine	13.369	184	1556108	78.1378	ug/mL		91
72) Pyrene	13.516	202	1771344	32.8353	ug/mL		93
73) Terphenyl-d14	13.680	244	1284973	36.9139	ug/mL		96
74) Butylbenzylphthalate	14.269	149	927817	32.6910	ug/mL		89
75) 3,3'-Dichlorobenzidine	15.074	252	1102750	66.7350	ug/mL		100
76) Benzo(a)anthracene	15.133	228	1581672	34.1429	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.092	149	1247952	30.0023	ug/mL		97
78) Chrysene	15.198	228	1531298	33.6409	ug/mL		95
80) Di-n-octylphthalate	16.286	149	2246500	37.7044	ug/mL		95
81) Benzo(b)fluoranthene	17.233	252	1346634	36.5271	ug/mL		98
82) Benzo(k)fluoranthene	17.298	252	1410810	38.2706	ug/mL		95
83) Benzo(a)pyrene	18.021	252	1205934	37.7245	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.250	276	1265867	35.0529	ug/mL		98

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC514.D
Acq On : 5 Mar 2012 4:32 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 06 10:39:19 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

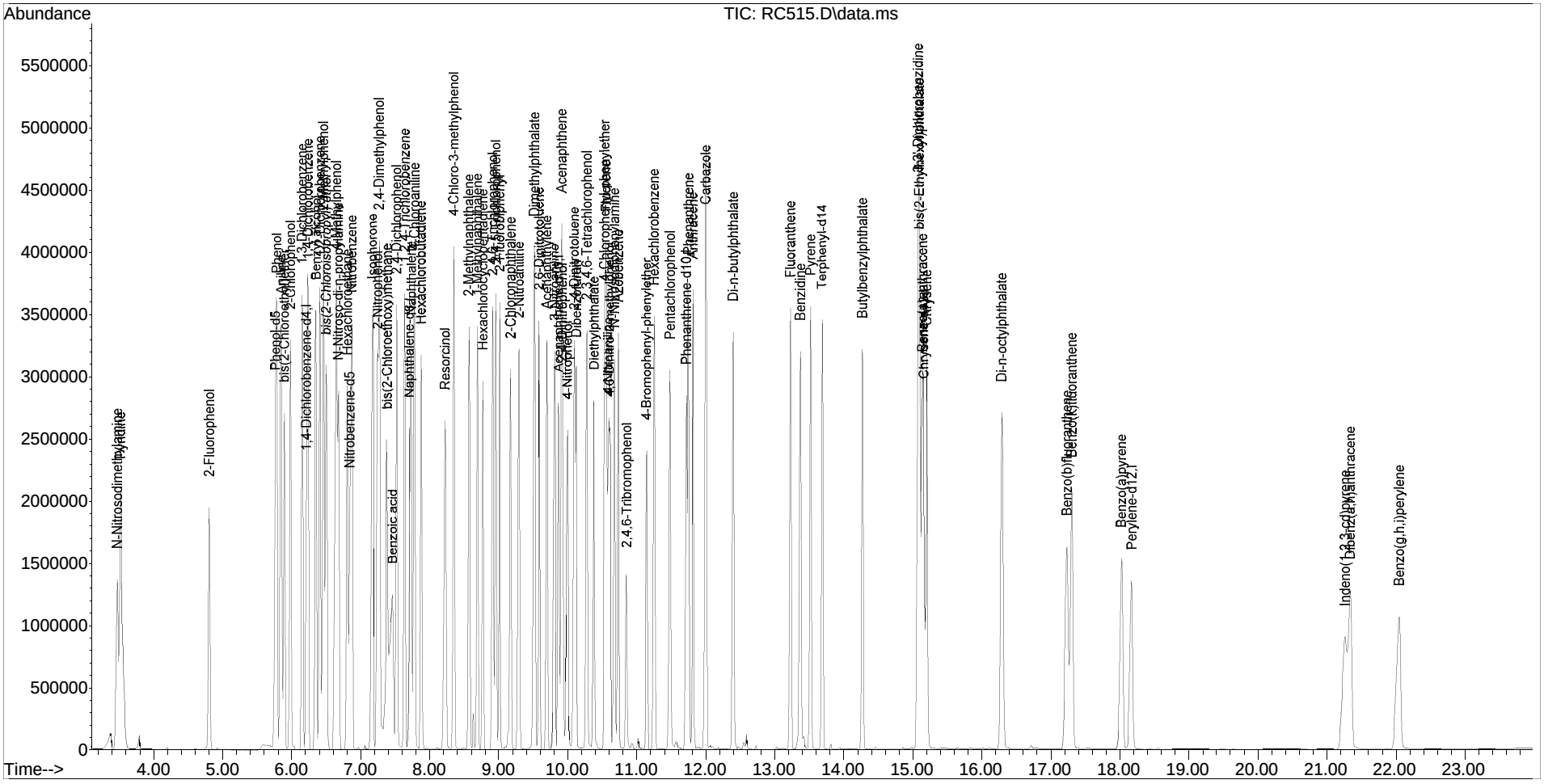
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.321	278	1103154	35.1435	ug/mL	97
86) Benzo(g,h,i)perylene	22.033	276	1076299m	34.0994	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC515.D
Acq On : 5 Mar 2012 5:01 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 06 10:39:50 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC515.D
Acq On : 5 Mar 2012 5:01 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 06 10:39:50 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	401220	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.710	136	1613643	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.869	164	970153	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.722	188	1687497	40.0000	ug/mL		0.00
70) Chrysene-d12	15.163	240	1494786	40.0000	ug/mL		0.00
79) Perylene-d12	18.174	264	1245024	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.522	79	2208323	87.4464	ug/mL		97
3) N-Nitrosodimethylamine	3.475	42	812931	82.4206	ug/mL	#	47
4) 2-Fluorophenol	4.805	112	808257	41.9205	ug/mL		81
5) Phenol-d5	5.769	99	1098052	42.9103	ug/mL		76
6) Phenol	5.787	94	1942875	82.9865	ug/mL		80
7) Aniline	5.851	93	2607693m	84.3970	ug/mL		
8) bis(2-Chloroethyl)ether	5.899	93	1412843	75.2357	ug/mL		97
9) 2-Chlorophenol	5.987	128	1376225	83.8591	ug/mL		97
10) 1,3-Dichlorobenzene	6.157	146	1344191	82.4816	ug/mL		94
11) 1,4-Dichlorobenzene	6.240	146	1311343	75.8202	ug/mL		90
12) Benzyl alcohol	6.363	108	1146935	89.8312	ug/mL		93
13) 1,2-Dichlorobenzene	6.416	146	1283616	79.2202	ug/mL		95
14) 2-Methylphenol	6.463	107	1148802	85.1137	ug/mL		94
15) bis(2-Chloroisopropyl) ether	6.504	45	1921619	59.0717	ug/mL		94
16) 4-Methylphenol	6.651	107	1881404	93.3595	ug/mL		92
17) N-Nitroso-di-n-propylamine	6.681	70	1215416	84.1398	ug/mL	#	72
18) Hexachloroethane	6.810	117	531648	77.3293	ug/mL		99
20) Nitrobenzene-d5	6.846	82	1078283	46.7814	ug/mL	#	76
21) Nitrobenzene	6.875	77	1744957	83.2594	ug/mL		94
22) Isophorone	7.175	82	3583429	88.4182	ug/mL		98
23) 2-Nitrophenol	7.246	139	776008	92.8269	ug/mL		90
24) 2,4-Dimethylphenol	7.269	107	1495456	92.0019	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.381	93	1015891	42.5452	ug/mL		98
26) Benzoic acid	7.469	105	1676158	121.5276	ug/mL		94
27) 2,4-Dichlorophenol	7.528	162	1111643	89.0978	ug/mL		99
28) 1,2,4-Trichlorobenzene	7.640	180	1050266	87.0415	ug/mL		95
29) Naphthalene	7.740	128	2083061	40.6297	ug/mL		97
30) 4-Chloroaniline	7.787	127	1727308	85.5540	ug/mL		92
31) Hexachlorobutadiene	7.881	225	549729	87.6306	ug/mL		98
32) Resorcinol	8.228	110	1781300	101.9419	ug/mL		95
33) 4-Chloro-3-methylphenol	8.351	107	1335819	88.0987	ug/mL		89
34) 2-Methylnaphthalene	8.575	142	1416273	42.8868	ug/mL		94
35) 1-Methylnaphthalene	8.698	142	1384033	42.9223	ug/mL		93
37) Hexachlorocyclopentadiene	8.775	237	683410	96.0314	ug/mL		98
38) 2,4,6-Trichlorophenol	8.916	196	800760	89.4720	ug/mL		96

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC515.D
Acq On : 5 Mar 2012 5:01 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 06 10:39:50 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.957	196	840129	86.1933	ug/mL		89
40) 2-Fluorobiphenyl	9.016	172	1662796	42.1325	ug/mL		98
41) 2-Chloronaphthalene	9.175	162	1323114	42.3885	ug/mL		96
42) 2-Nitroaniline	9.298	65	1069384	80.2161	ug/mL		94
43) Dimethylphthalate	9.516	163	2994290	83.3891	ug/mL		99
44) 2,6-Dinitrotoluene	9.587	165	759518	89.7935	ug/mL		92
45) Acenaphthylene	9.698	152	2229884	42.7357	ug/mL		99
46) 3-Nitroaniline	9.810	138	921913	88.9009	ug/mL	#	78
47) Acenaphthene	9.916	154	1425431	44.4158	ug/mL		94
48) 2,4-Dinitrophenol	9.928	184	357605	98.8998	ug/mL	#	27
49) 4-Nitrophenol	9.998	109	512198	92.0970	ug/mL		88
50) Dibenzofuran	10.128	168	1942081	44.4974	ug/mL		77
51) 2,4-Dinitrotoluene	10.098	165	1014407	88.6602	ug/mL		92
52) 2,3,4,6-Tetrachlorophenol	10.275	232	676614	98.8956	ug/mL		88
53) Diethylphthalate	10.381	149	1656260	43.3304	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.534	204	739474	48.4274	ug/mL	#	73
55) Fluorene	10.551	166	1542247	42.2446	ug/mL		88
56) 4-Nitroaniline	10.586	138	906812	88.0305	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.851	330	191444	43.6997	ug/mL	#	87
59) 4,6-Dinitro-2-methylphenol	10.610	198	543343	89.8496	ug/mL		86
60) N-Nitrosodiphenylamine	10.681	169	1224818	43.9592	ug/mL		88
61) Azobenzene	10.734	77	2083791	38.7733	ug/mL		99
62) 4-Bromophenyl-phenylether	11.145	248	441073	46.5252	ug/mL	#	78
63) Hexachlorobenzene	11.251	284	799615	84.7487	ug/mL		89
64) Pentachlorophenol	11.481	266	560720	92.5498	ug/mL		97
65) Phenanthrene	11.751	178	2181155	37.1637	ug/mL		97
66) Anthracene	11.816	178	2253941	38.7240	ug/mL		96
67) Carbazole	12.004	167	3694262	69.0567	ug/mL		87
68) Di-n-butylphthalate	12.398	149	2697106	38.0494	ug/mL		97
69) Fluoranthene	13.233	202	2280063	36.8911	ug/mL		97
71) Benzidine	13.375	184	2038702	97.1702	ug/mL		91
72) Pyrene	13.522	202	2303687	40.5339	ug/mL		93
73) Terphenyl-d14	13.680	244	1669908	45.5352	ug/mL		97
74) Butylbenzylphthalate	14.269	149	1187562	39.7173	ug/mL		89
75) 3,3'-Dichlorobenzidine	15.080	252	1444656	82.9849	ug/mL		99
76) Benzo(a)anthracene	15.139	228	2108818	43.2096	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.098	149	1493671	34.0855	ug/mL		96
78) Chrysene	15.204	228	2018162	42.0844	ug/mL		95
80) Di-n-octylphthalate	16.292	149	2922848	46.5582	ug/mL		97
81) Benzo(b)fluoranthene	17.239	252	1859792	47.8779	ug/mL		98
82) Benzo(k)fluoranthene	17.304	252	1831595	47.1554	ug/mL		96
83) Benzo(a)pyrene	18.027	252	1604311	47.6314	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.268	276	1724775	45.3286	ug/mL		97

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC515.D
Acq On : 5 Mar 2012 5:01 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 06 10:39:50 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

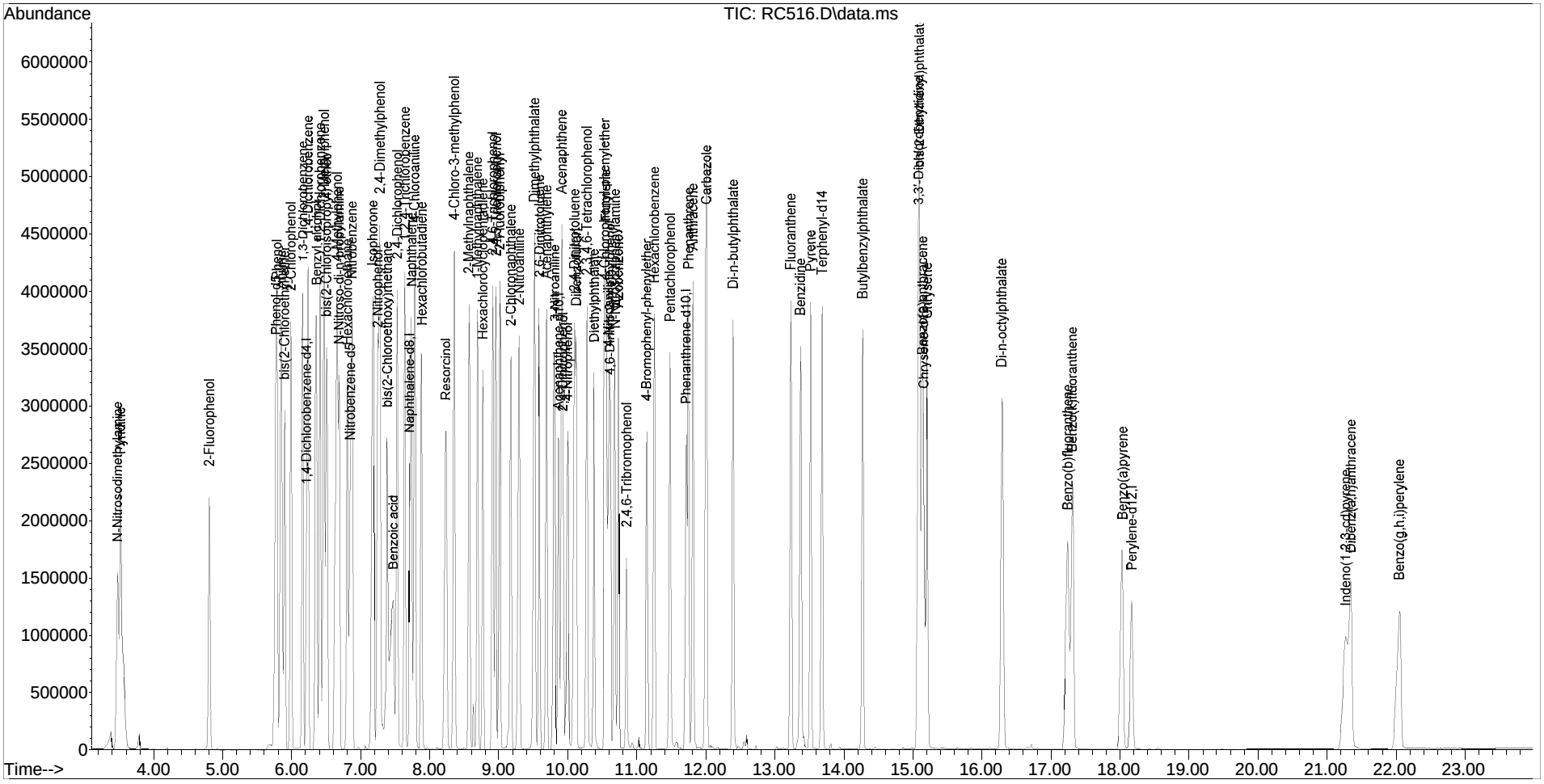
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.339	278	1491478	45.0952	ug/mL	98
86) Benzo(g,h,i)perylene	22.050	276	1475161	44.3566	ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC516.D
Acq On : 5 Mar 2012 5:32 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 06 10:42:18 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC516.D
Acq On : 5 Mar 2012 5:32 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 06 10:42:18 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	391057	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.710	136	1581791	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.875	164	957587	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.722	188	1633956	40.0000	ug/mL		0.00
70) Chrysene-d12	15.163	240	1423265	40.0000	ug/mL		0.00
79) Perylene-d12	18.174	264	1178448	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.522	79	2603314	105.7666	ug/mL		98
3) N-Nitrosodimethylamine	3.481	42	951502	98.9769	ug/mL	#	44
4) 2-Fluorophenol	4.804	112	945942	50.3366	ug/mL		81
5) Phenol-d5	5.775	99	1277514	51.2209	ug/mL		75
6) Phenol	5.793	94	2255654	98.8502	ug/mL		81
7) Aniline	5.851	93	3027102m	100.5171	ug/mL		
8) bis(2-Chloroethyl)ether	5.898	93	1649066m	90.0970	ug/mL		
9) 2-Chlorophenol	5.987	128	1605820	100.3922	ug/mL		96
10) 1,3-Dichlorobenzene	6.163	146	1529045	96.2629	ug/mL		95
11) 1,4-Dichlorobenzene	6.240	146	1485207	88.1045	ug/mL		91
12) Benzyl alcohol	6.369	108	1346062	108.1674	ug/mL		93
13) 1,2-Dichlorobenzene	6.416	146	1470199	93.0936	ug/mL		95
14) 2-Methylphenol	6.469	107	1338212	101.7236	ug/mL		94
15) bis(2-Chloroisopropyl) ether	6.504	45	2152292	67.8822	ug/mL		93
16) 4-Methylphenol	6.657	107	2261662	115.1454	ug/mL		93
17) N-Nitroso-di-n-propylamine	6.687	70	1392623	98.9129	ug/mL	#	72
18) Hexachloroethane	6.810	117	602334	89.8876	ug/mL		98
20) Nitrobenzene-d5	6.851	82	1275784	56.4645	ug/mL	#	75
21) Nitrobenzene	6.875	77	2003256	97.5087	ug/mL		94
22) Isophorone	7.181	82	4162141	104.7654	ug/mL		98
23) 2-Nitrophenol	7.245	139	920772	112.3617	ug/mL		90
24) 2,4-Dimethylphenol	7.275	107	1724781	108.2469	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.381	93	1178269	50.3392	ug/mL		97
26) Benzoic acid	7.475	105	1881751	139.1812	ug/mL		94
27) 2,4-Dichlorophenol	7.534	162	1314281	107.4604	ug/mL		99
28) 1,2,4-Trichlorobenzene	7.640	180	1223500	103.4402	ug/mL		96
29) Naphthalene	7.740	128	2429012	48.3315	ug/mL		97
30) 4-Chloroaniline	7.787	127	2004354	101.2753	ug/mL		92
31) Hexachlorobutadiene	7.887	225	630803	102.5792	ug/mL		97
32) Resorcinol	8.234	110	2090455	122.0435	ug/mL		94
33) 4-Chloro-3-methylphenol	8.357	107	1568644	105.5370	ug/mL		90
34) 2-Methylnaphthalene	8.575	142	1647563	50.8952	ug/mL		94
35) 1-Methylnaphthalene	8.698	142	1616755	51.1492	ug/mL		94
37) Hexachlorocyclopentadiene	8.775	237	786577	111.9787	ug/mL		98
38) 2,4,6-Trichlorophenol	8.916	196	955527	108.1658	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC516.D
Acq On : 5 Mar 2012 5:32 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 06 10:42:18 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.963	196	968692	100.6874	ug/mL		91
40) 2-Fluorobiphenyl	9.016	172	1928426	49.5044	ug/mL		99
41) 2-Chloronaphthalene	9.181	162	1533698	49.7798	ug/mL		95
42) 2-Nitroaniline	9.298	65	1209992	91.9544	ug/mL		95
43) Dimethylphthalate	9.522	163	3379432	95.3501	ug/mL		99
44) 2,6-Dinitrotoluene	9.592	165	888058	106.3678	ug/mL		87
45) Acenaphthylene	9.698	152	2596603	50.4169	ug/mL		99
46) 3-Nitroaniline	9.816	138	1078277	105.3437	ug/mL	#	76
47) Acenaphthene	9.916	154	1653867	52.2101	ug/mL		96
48) 2,4-Dinitrophenol	9.933	184	447629	125.4215	ug/mL	#	1
49) 4-Nitrophenol	10.004	109	592587	107.9498	ug/mL	#	87
50) Dibenzofuran	10.128	168	2243680	52.0823	ug/mL		78
51) 2,4-Dinitrotoluene	10.104	165	1189752	105.3501	ug/mL		90
52) 2,3,4,6-Tetrachlorophenol	10.275	232	804580	119.1427	ug/mL		88
53) Diethylphthalate	10.381	149	1900062	50.3609	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.533	204	865971	57.4557	ug/mL	#	73
55) Fluorene	10.551	166	1759092	48.8166	ug/mL		88
56) 4-Nitroaniline	10.598	138	1067785	105.0176	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.851	330	233874	54.0854	ug/mL	#	85
59) 4,6-Dinitro-2-methylphenol	10.616	198	650744	111.1361	ug/mL		85
60) N-Nitrosodiphenylamine	10.686	169	1419400	52.6121	ug/mL		88
61) Azobenzene	10.733	77	2336867	44.9071	ug/mL		99
62) 4-Bromophenyl-phenylether	11.145	248	520554	56.7083	ug/mL	#	79
63) Hexachlorobenzene	11.257	284	920849	100.7960	ug/mL		94
64) Pentachlorophenol	11.480	266	653983	111.4804	ug/mL		98
65) Phenanthrene	11.757	178	2475565	43.5621	ug/mL		97
66) Anthracene	11.816	178	2522587	44.7596	ug/mL		95
67) Carbazole	12.010	167	4195231	80.9910	ug/mL		86
68) Di-n-butylphthalate	12.398	149	3059638	44.5781	ug/mL		97
69) Fluoranthene	13.233	202	2570735	42.9570	ug/mL		98
71) Benzidine	13.374	184	2258904	113.0760	ug/mL		91
72) Pyrene	13.521	202	2639093	48.7689	ug/mL		93
73) Terphenyl-d14	13.686	244	1918988	54.9566	ug/mL		99
74) Butylbenzylphthalate	14.274	149	1353765	47.5510	ug/mL		93
75) 3,3'-Dichlorobenzidine	15.086	252	1636066	98.7026	ug/mL		99
76) Benzo(a)anthracene	15.139	228	2445783	52.6323	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.098	149	1542469	36.9679	ug/mL		95
78) Chrysene	15.210	228	2312373	50.6426	ug/mL		94
80) Di-n-octylphthalate	16.292	149	3395333	57.1399	ug/mL		97
81) Benzo(b)fluoranthene	17.245	252	2190000	59.5637	ug/mL		98
82) Benzo(k)fluoranthene	17.309	252	2094249	56.9636	ug/mL		96
83) Benzo(a)pyrene	18.039	252	1862480	58.4203	ug/mL		97
84) Indeno(1,2,3-cd)pyrene	21.274	276	1983671	55.0779	ug/mL		99

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC516.D
Acq On : 5 Mar 2012 5:32 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 06 10:42:18 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

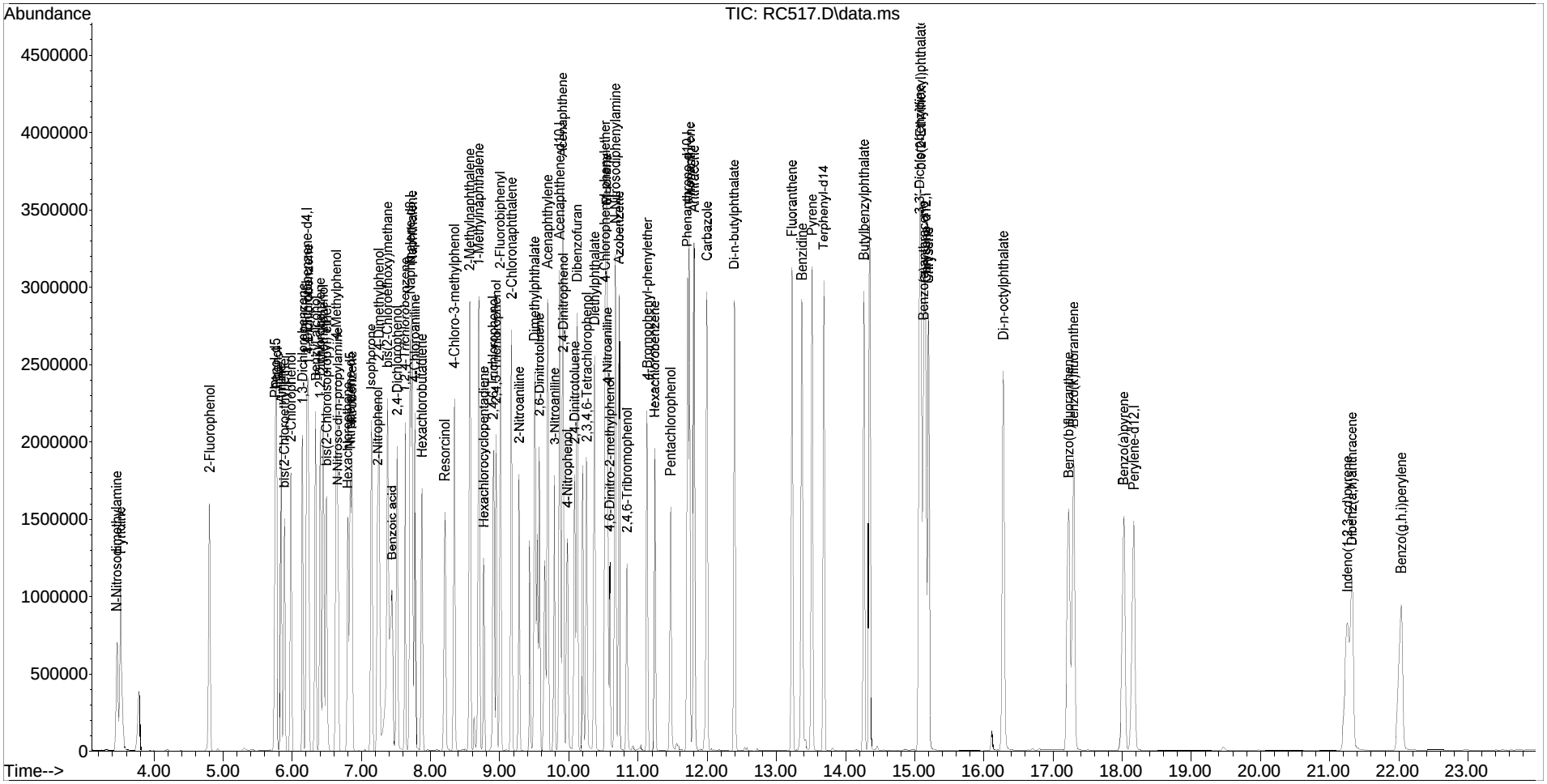
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.350	278	1735756	55.4459	ug/mL	99
86) Benzo(g,h,i)perylene	22.056	276	1674240	53.1868	ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC517.D
Acq On : 5 Mar 2012 6:02 pm
Operator :
Sample : ICV,S19392
Misc : ICV
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 06 11:06:05 2012
Quant Method : G:\msbna09\030512\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Tue Mar 06 11:01:02 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC517.D
Acq On : 5 Mar 2012 6:02 pm
Operator :
Sample : ICV,S19392
Misc : ICV
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 06 11:06:05 2012
Quant Method : G:\msbna09\030512\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Tue Mar 06 11:01:02 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	460144	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.710	136	1766548	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.869	164	1060873	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1888495	40.0000	ug/mL		0.00
70) Chrysene-d12	15.163	240	1683811	40.0000	ug/mL		0.00
79) Perylene-d12	18.174	264	1421462	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	973841	37.9105	ug/mL		94
3) N-Nitrosodimethylamine	3.463	42	363942	37.1173	ug/mL	#	48
4) 2-Fluorophenol	4.804	112	692614	36.3423	ug/mL		80
5) Phenol-d5	5.757	99	941606	35.7202	ug/mL		76
6) Phenol	5.775	94	928180	38.1474	ug/mL		79
7) Aniline	5.840	93	1169104m	37.5197	ug/mL		
8) bis(2-Chloroethyl)ether	5.887	93	731510	39.1780	ug/mL		99
9) 2-Chlorophenol	5.981	128	686788	39.8269	ug/mL		99
10) 1,3-Dichlorobenzene	6.157	146	694957	39.7360	ug/mL		94
11) 1,4-Dichlorobenzene	6.234	146	693738	39.8030	ug/mL		90
12) Benzyl alcohol	6.346	108	503715	38.1020	ug/mL		95
13) 1,2-Dichlorobenzene	6.410	146	664816	39.5306	ug/mL		94
14) 2-Methylphenol	6.451	107	567253	39.3387	ug/mL		93
15) bis(2-Chloroisopropyl) ether	6.498	45	1012353	35.8088	ug/mL		95
16) 4-Methylphenol	6.634	107	769066	35.4235	ug/mL		94
17) N-Nitroso-di-n-propylamine	6.657	70	580043	39.2139	ug/mL	#	75
18) Hexachloroethane	6.804	117	282765	39.6556	ug/mL		89
20) Nitrobenzene-d5	6.840	82	877772	35.6707	ug/mL	#	76
21) Nitrobenzene	6.863	77	824377	38.1320	ug/mL		96
22) Isophorone	7.145	82	1643669	39.0911	ug/mL		99
23) 2-Nitrophenol	7.240	139	359865	41.2921	ug/mL		93
24) 2,4-Dimethylphenol	7.257	107	704188	39.3027	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.375	93	865706	36.4945	ug/mL		97
26) Benzoic acid	7.445	105	1284857	102.0273	ug/mL		94
27) 2,4-Dichlorophenol	7.522	162	532356	40.0881	ug/mL		98
28) 1,2,4-Trichlorobenzene	7.634	180	546650	41.7321	ug/mL		95
29) Naphthalene	7.734	128	1831326	35.7105	ug/mL		97
30) 4-Chloroaniline	7.775	127	846903	39.5969	ug/mL		89
31) Hexachlorobutadiene	7.881	225	263629	38.5188	ug/mL		98
32) Resorcinol	8.210	110	789611	39.6392	ug/mL		95
33) 4-Chloro-3-methylphenol	8.345	107	671116	40.4152	ug/mL		88
34) 2-Methylnaphthalene	8.575	142	1249004	36.6196	ug/mL		94
35) 1-Methylnaphthalene	8.698	142	1203407	36.1544	ug/mL		93
37) Hexachlorocyclopentadiene	8.769	237	264831	34.1422	ug/mL		96
38) 2,4,6-Trichlorophenol	8.910	196	375629	39.5095	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC517.D
Acq On : 5 Mar 2012 6:02 pm
Operator :
Sample : ICV,S19392
Misc : ICV
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 06 11:06:05 2012
Quant Method : G:\msbna09\030512\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Tue Mar 06 11:01:02 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.951	196	407575	39.9785	ug/mL	#	84
40) 2-Fluorobiphenyl	9.010	172	1358671	32.4718	ug/mL		98
41) 2-Chloronaphthalene	9.175	162	1131850	35.7494	ug/mL		96
42) 2-Nitroaniline	9.286	65	501911	38.1449	ug/mL		99
43) Dimethylphthalate	9.510	163	1445141	38.3245	ug/mL		98
44) 2,6-Dinitrotoluene	9.581	165	355558	39.8817	ug/mL		93
45) Acenaphthylene	9.692	152	1948657	35.6536	ug/mL		99
46) 3-Nitroaniline	9.798	138	413956	38.5086	ug/mL	#	79
47) Acenaphthene	9.910	154	1174712	34.3262	ug/mL		95
48) 2,4-Dinitrophenol	9.922	184	131183	43.4329	ug/mL	#	32
49) 4-Nitrophenol	9.981	109	227272	38.4532	ug/mL	#	84
50) Dibenzofuran	10.122	168	1712738	36.4680	ug/mL		77
51) 2,4-Dinitrotoluene	10.086	165	471403	38.8069	ug/mL		95
52) 2,3,4,6-Tetrachlorophenol	10.269	232	323155	41.9656	ug/mL		89
53) Diethylphthalate	10.375	149	1445858	34.9484	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.528	204	631552	36.0695	ug/mL	#	69
55) Fluorene	10.551	166	1347547	34.8375	ug/mL		88
56) 4-Nitroaniline	10.563	138	383183	36.1858	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.845	330	154508	39.6543	ug/mL	#	88
59) 4,6-Dinitro-2-methylphenol	10.598	198	231210	41.7937	ug/mL		87
60) N-Nitrosodiphenylamine	10.675	169	1266594	43.2555	ug/mL		88
61) Azobenzene	10.728	77	1874468	36.0138	ug/mL		97
62) 4-Bromophenyl-phenylether	11.139	248	378421	37.6382	ug/mL	#	77
63) Hexachlorobenzene	11.245	284	350149	38.7885	ug/mL		78
64) Pentachlorophenol	11.475	266	235739	40.0599	ug/mL		98
65) Phenanthrene	11.751	178	1950107	35.0054	ug/mL		97
66) Anthracene	11.810	178	1998274	35.0871	ug/mL		96
67) Carbazole	11.998	167	1917924	39.6784	ug/mL		87
68) Di-n-butylphthalate	12.392	149	2383850	35.1215	ug/mL		97
69) Fluoranthene	13.227	202	2004925	35.0819	ug/mL		98
71) Benzidine	13.374	184	1826368	74.3028	ug/mL		91
72) Pyrene	13.522	202	2060396	36.5941	ug/mL		93
73) Terphenyl-d14	13.680	244	1372682	34.5285	ug/mL		96
74) Butylbenzylphthalate	14.269	149	1053769	36.8024	ug/mL		89
75) 3,3'-Dichlorobenzidine	15.074	252	986090	59.5877	ug/mL		100
76) Benzo(a)anthracene	15.133	228	1874583	38.2488	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.092	149	1429536	36.8410	ug/mL		97
78) Chrysene	15.204	228	1789905	37.5889	ug/mL		95
80) Di-n-octylphthalate	16.286	149	2598834	37.6548	ug/mL		96
81) Benzo(b)fluoranthene	17.233	252	1657385	40.6902	ug/mL		98
82) Benzo(k)fluoranthene	17.298	252	1619429	38.2115	ug/mL		96
83) Benzo(a)pyrene	18.027	252	1540626	43.5859	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.262	276	1515512	40.7887	ug/mL		99

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC517.D
Acq On : 5 Mar 2012 6:02 pm
Operator :
Sample : ICV,S19392
Misc : ICV
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 06 11:06:05 2012
Quant Method : G:\msbna09\030512\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Tue Mar 06 11:01:02 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.327	278	1261486	39.0722	ug/mL	98
86) Benzo(g,h,i)perylene	22.039	276	1231976	38.2590	ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Continuing Calibration Verification Raw Data

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 MSBNA Water
EPA 8270D

Inst : MSBNA09 IDF : 1.0
Seqnum : 582366461002.1 File : ria02 Time : 10-SEP-2012 11:57
Cal : 582094282001 Caldate : 05-MAR-2012
Standards: S20249

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Naphthalene	1.1612	1.1318	20.00	19.49	ug/mL	-3	20	0.7000	i ***
3,3'-Dichlorobenzidine	0.3931	0.4225	40.00	42.99	ug/mL	7	20	0.0100	i ***
Benzo(a)anthracene	1.1643	1.0962	20.00	18.83	ug/mL	-6	20	0.8000	i ***
bis(2-Ethylhexyl)phthalate	0.9218	0.7575	20.00	16.44	ug/mL	-18	20	0.0100	i ***
Benzo(b)fluoranthene	1.1462	1.0997	20.00	19.19	ug/mL	-4	20	0.7000	i ***
Benzo(k)fluoranthene	1.1926	1.0998	20.00	18.44	ug/mL	-8	20	0.7000	i ***
Benzo(a)pyrene	0.9947	0.9488	20.00	19.08	ug/mL	-5	20	0.7000	i m ***
Indeno(1,2,3-cd)pyrene	1.0455	1.0856	20.00	20.77	ug/mL	4	20	0.5000	i ***
Dibenz(a,h)anthracene	0.9085	0.9273	20.00	20.41	ug/mL	2	20	0.4000	i ***
Nitrobenzene-d5	0.5572	0.5533	20.00	19.86	ug/mL	-1	20	0.0500	i ***
2-Fluorobiphenyl	1.5776	1.5289	20.00	19.38	ug/mL	-3	20	0.0500	i ***
Terphenyl-d14	0.9444	0.8739	20.00	18.51	ug/mL	-7	20	0.0500	i ***

ISTD (ICAL rc513)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
1,4-Dichlorobenzene-d4	378619	284294	-24.91	6.22	5.43	**-0.79 ***
Naphthalene-d8	1433957	1046042	-27.05	7.71	6.90	**-0.81 ***
Acenaphthene-d10	858429	606004	-29.41	9.87	9.03	**-0.84 ***
Phenanthrene-d10	1561563	1089116	-30.25	11.72	10.86	**-0.86 ***
Chrysene-d12	1416731	1080213	-23.75	15.16	14.13	**-1.03 ***
Perylene-d12	1178841	993497	-15.72	18.17	16.42	**-1.75 ***

LLH 09/10/12 [Aniline]: Picked or reassigned peak. [general version]

LLH 09/10/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 [Benzo(a)pyrene]: Corrected fronting or tailing peak integration. [general version]

LLH 09/10/12 : see ICAL narrations for IStd RT drfit

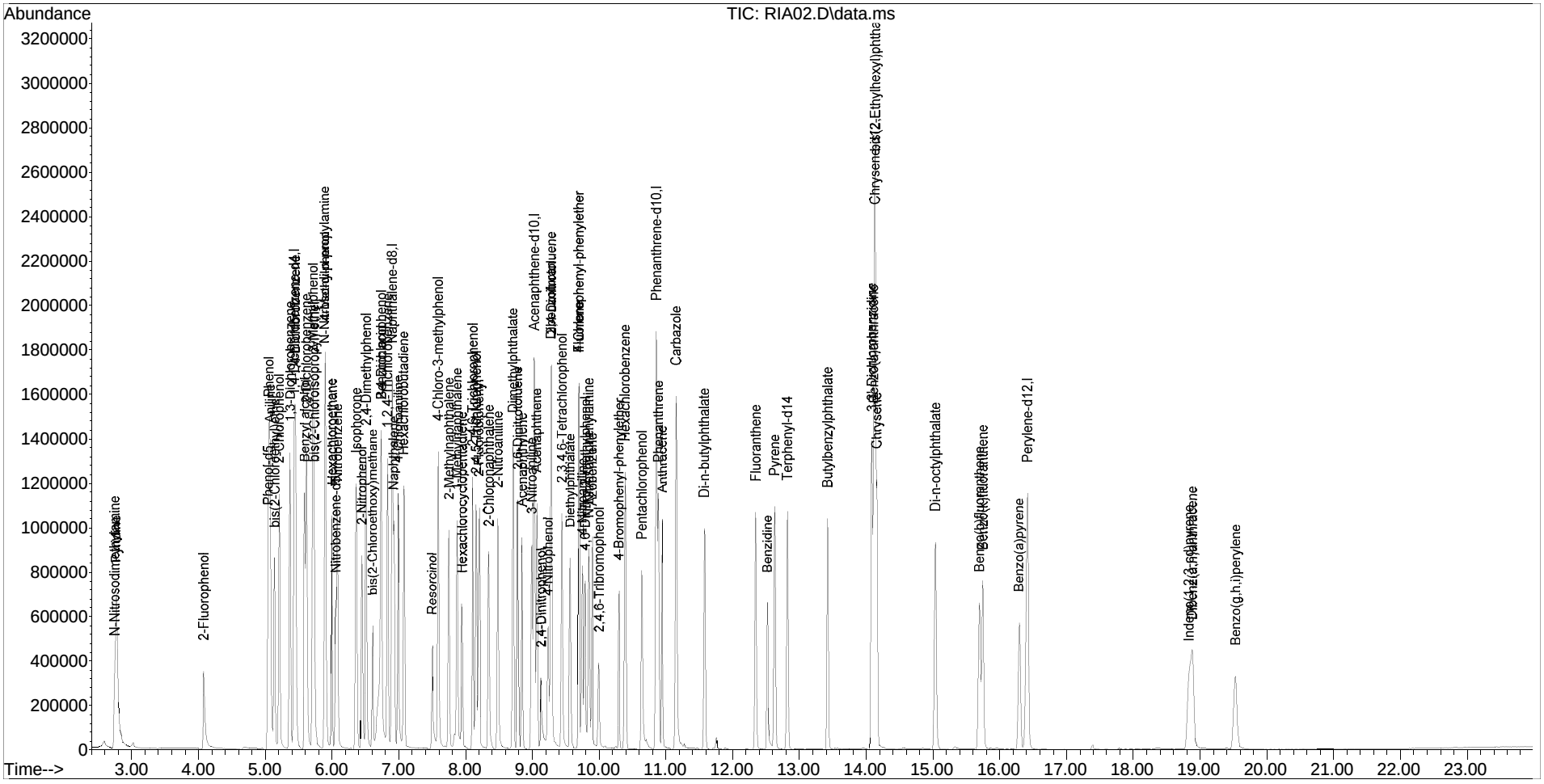
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

i=ISTD failure m=manual integration

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA02.D
Acq On : 10 Sep 2012 11:57 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 12:28:09 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA02.D
Acq On : 10 Sep 2012 11:57 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 12:28:09 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	5.434	152	284294	40.0000	ug/mL		0.00
19) Naphthalene-d8	6.898	136	1046042	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.034	164	606004	40.0000	ug/mL		0.00
58) Phenanthrene-d10	10.857	188	1089116	40.0000	ug/mL		0.00
70) Chrysene-d12	14.133	240	1080213	40.0000	ug/mL		0.00
79) Perylene-d12	16.421	264	993497	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	2.769	79	549993	34.6541	ug/mL		94
3) N-Nitrosodimethylamine	2.746	42	242936	40.1016	ug/mL	#	65
4) 2-Fluorophenol	4.087	112	224120	19.0339	ug/mL		81
5) Phenol-d5	5.051	99	287760	17.6686	ug/mL		82
6) Phenol	5.063	94	580258	38.5994	ug/mL	#	61
7) Aniline	5.081	93	648348m	33.6776	ug/mL		
8) bis(2-Chloroethyl)ether	5.146	93	453283m	39.2932	ug/mL		
9) 2-Chlorophenol	5.210	128	427790	40.1523	ug/mL		100
10) 1,3-Dichlorobenzene	5.375	146	446522	41.3233	ug/mL		94
11) 1,4-Dichlorobenzene	5.451	146	452980	42.0654	ug/mL		89
12) Benzyl alcohol	5.599	108	292724	35.8383	ug/mL		97
13) 1,2-Dichlorobenzene	5.622	146	426661	41.0621	ug/mL		94
14) 2-Methylphenol	5.722	107	336386	37.7578	ug/mL		88
15) bis(2-Chloroisopropyl) ether	5.740	45	536325	30.7052	ug/mL		92
16) 4-Methylphenol	5.898	107	446321	33.2738	ug/mL		92
17) N-Nitroso-di-n-propylamine	5.893	70	292728	32.0310	ug/mL	#	77
18) Hexachloroethane	6.004	117	185862	42.1886	ug/mL		95
20) Nitrobenzene-d5	6.063	82	289398	19.8611	ug/mL	#	79
21) Nitrobenzene	6.087	77	511092	39.9245	ug/mL		96
22) Isophorone	6.369	82	907952	36.4672	ug/mL		99
23) 2-Nitrophenol	6.451	139	225960	43.7860	ug/mL		98
24) 2,4-Dimethylphenol	6.510	107	407970	38.4537	ug/mL		95
25) bis(2-Chloroethoxy)methane	6.610	93	271981	19.3629	ug/mL		96
26) Benzoic acid	6.745	105	428193	73.7338	ug/mL		94
27) 2,4-Dichlorophenol	6.745	162	313117	39.8196	ug/mL		98
28) 1,2,4-Trichlorobenzene	6.834	180	327579	42.2331	ug/mL		95
29) Naphthalene	6.922	128	591941	19.4933	ug/mL		97
30) 4-Chloroaniline	6.993	127	493373	38.9564	ug/mL		88
31) Hexachlorobutadiene	7.075	225	187486	46.2620	ug/mL		97
32) Resorcinol	7.504	110	307053	26.0316	ug/mL		97
33) 4-Chloro-3-methylphenol	7.593	107	397643	40.4405	ug/mL		86
34) 2-Methylnaphthalene	7.757	142	397697	19.6915	ug/mL		94
35) 1-Methylnaphthalene	7.875	142	382001	19.3816	ug/mL		93
37) Hexachlorocyclopentadiene	7.951	237	131948	29.7792	ug/mL		97
38) 2,4,6-Trichlorophenol	8.110	196	215247	39.6340	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA02.D
Acq On : 10 Sep 2012 11:57 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 12:28:09 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.157	196	240398	41.2798	ug/mL	#	80
40) 2-Fluorobiphenyl	8.204	172	463255	19.3820	ug/mL		97
41) 2-Chloronaphthalene	8.351	162	366369	20.2575	ug/mL		97
42) 2-Nitroaniline	8.487	65	293863	39.0969	ug/mL		95
43) Dimethylphthalate	8.710	163	832699	38.6582	ug/mL		98
44) 2,6-Dinitrotoluene	8.787	165	197429	38.7670	ug/mL		94
45) Acenaphthylene	8.851	152	604025	19.3469	ug/mL		99
46) 3-Nitroaniline	8.998	138	222350	36.2100	ug/mL	#	80
47) Acenaphthene	9.069	154	349379	17.8722	ug/mL		96
48) 2,4-Dinitrophenol	9.134	184	84517	47.0607	ug/mL	#	1
49) 4-Nitrophenol	9.239	109	131514	38.9535	ug/mL		96
50) Dibenzofuran	9.281	168	495010	18.4511	ug/mL		69
51) 2,4-Dinitrotoluene	9.287	165	261704	37.7150	ug/mL		91
52) 2,3,4,6-Tetrachlorophenol	9.445	232	181846	41.3403	ug/mL		88
53) Diethylphthalate	9.575	149	459699	19.4519	ug/mL		100
54) 4-Chlorophenyl-phenylether	9.704	204	188780	18.8745	ug/mL	#	70
55) Fluorene	9.704	166	414034	18.7382	ug/mL		88
56) 4-Nitroaniline	9.757	138	229610	37.9587	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.004	330	47676	21.4204	ug/mL		92
59) 4,6-Dinitro-2-methylphenol	9.798	198	144468	45.2811	ug/mL		92
60) N-Nitrosodiphenylamine	9.851	169	315730	18.6966	ug/mL		89
61) Azobenzene	9.898	77	563775	18.7819	ug/mL		95
62) 4-Bromophenyl-phenylether	10.304	248	112069	19.3277	ug/mL	#	74
63) Hexachlorobenzene	10.392	284	224469	43.1170	ug/mL		77
64) Pentachlorophenol	10.639	266	134470	39.6228	ug/mL		99
65) Phenanthrene	10.886	178	607536	18.9100	ug/mL		97
66) Anthracene	10.951	178	624361	19.0095	ug/mL		96
67) Carbazole	11.157	167	1120109	40.1814	ug/mL		87
68) Di-n-butylphthalate	11.580	149	789843	20.1779	ug/mL		98
69) Fluoranthene	12.351	202	659159	19.9994	ug/mL		98
71) Benzidine	12.527	184	432391	27.4206	ug/mL		91
72) Pyrene	12.633	202	660165	18.2767	ug/mL		93
73) Terphenyl-d14	12.827	244	472003	18.5070	ug/mL		96
74) Butylbenzylphthalate	13.427	149	363573	19.7927	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.086	252	456355	42.9860	ug/mL		99
76) Benzo(a)anthracene	14.116	228	592082	18.8312	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.139	149	409125	16.4353	ug/mL		96
78) Chrysene	14.163	228	585231	19.1576	ug/mL		95
80) Di-n-octylphthalate	15.039	149	873925	18.1169	ug/mL		94
81) Benzo(b)fluoranthene	15.704	252	546252	19.1879	ug/mL		96
82) Benzo(k)fluoranthene	15.751	252	546312	18.4434	ug/mL		93
83) Benzo(a)pyrene	16.298	252	471303m	19.0773	ug/mL		
84) Indeno(1,2,3-cd)pyrene	18.839	276	539271	20.7662	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA02.D
Acq On : 10 Sep 2012 11:57 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

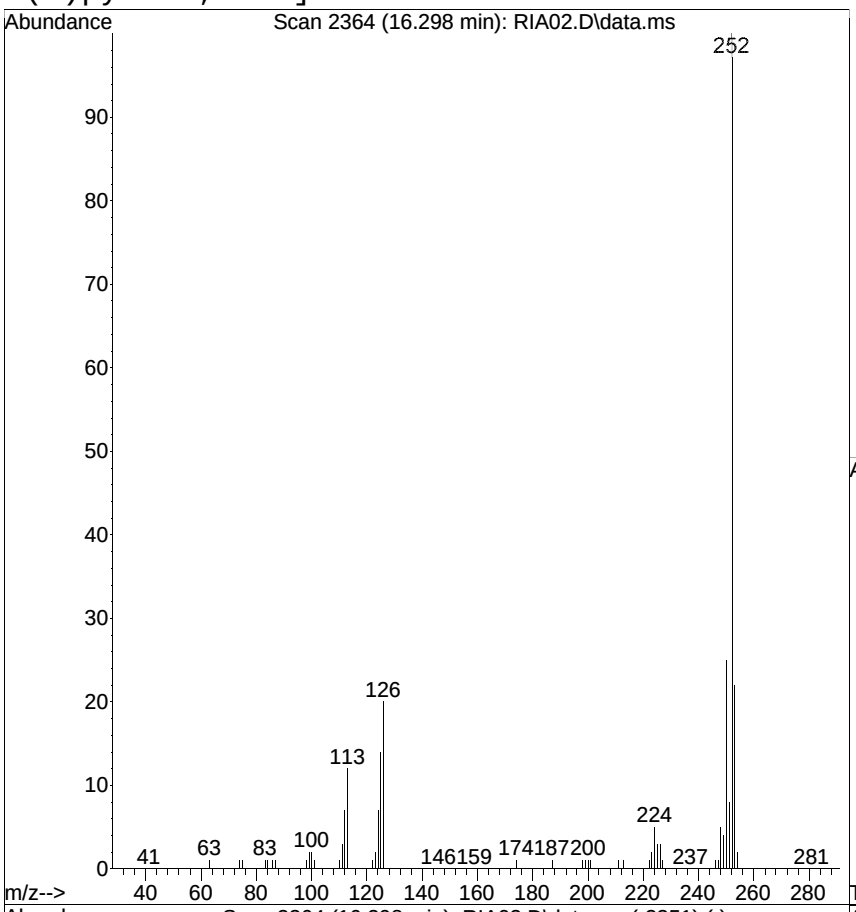
Quant Time: Sep 10 12:28:09 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	18.886	278	460646	20.4137	ug/mL	97
86) Benzo(g,h,i)perylene	19.533	276	448753	19.9392	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)pyrene; MI]

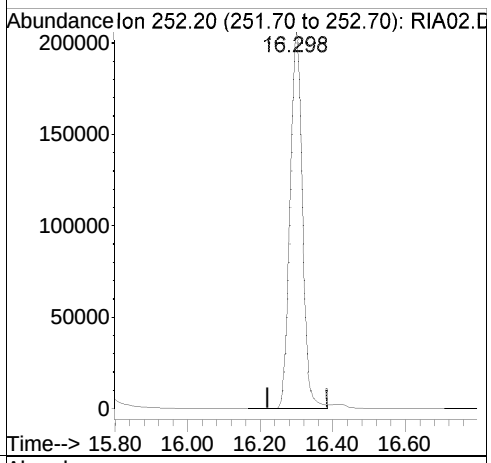
Raw



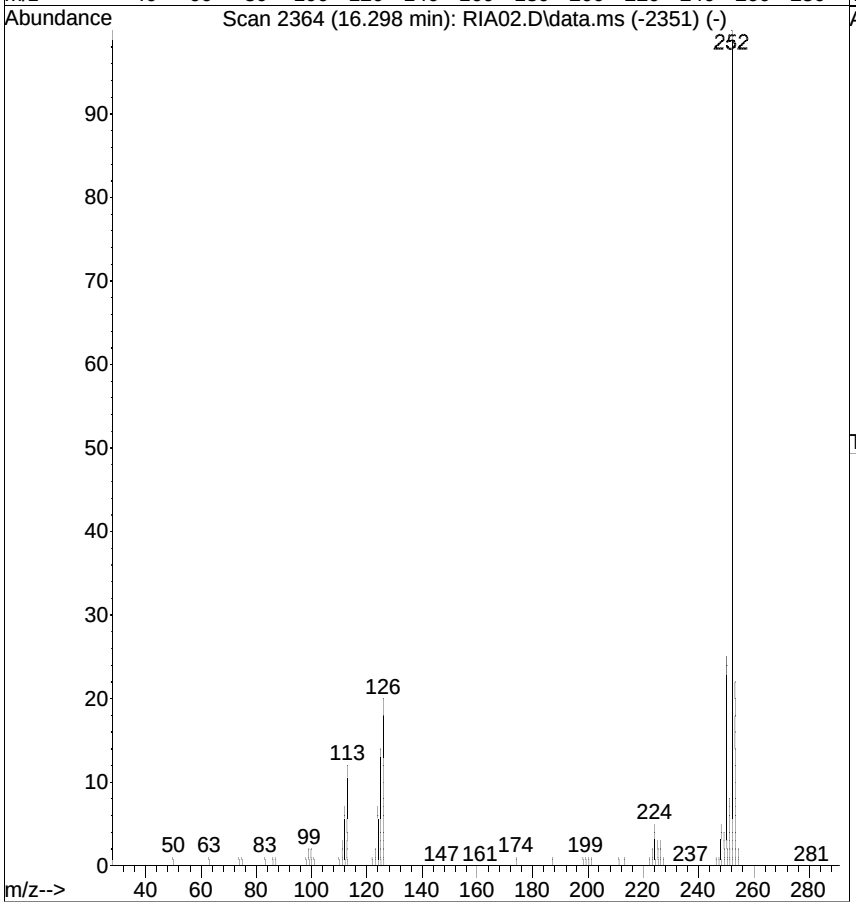
#83
Benzo(a)pyrene
Concen: 19.0773 ug/mL m
RT: 16.298 min Scan# 2364
Delta R.T. 0.000 min
Lab File: RIA02.D
Acq: 10 Sep 2012 11:57 am

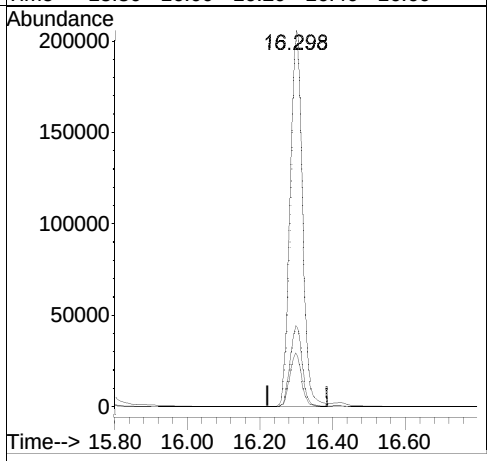
Tgt Ion:252 Resp: 471303

Ion	Ratio	Lower	Upper
252	100		
253	22.0	2.6	42.6
125	14.3	0.0	36.8



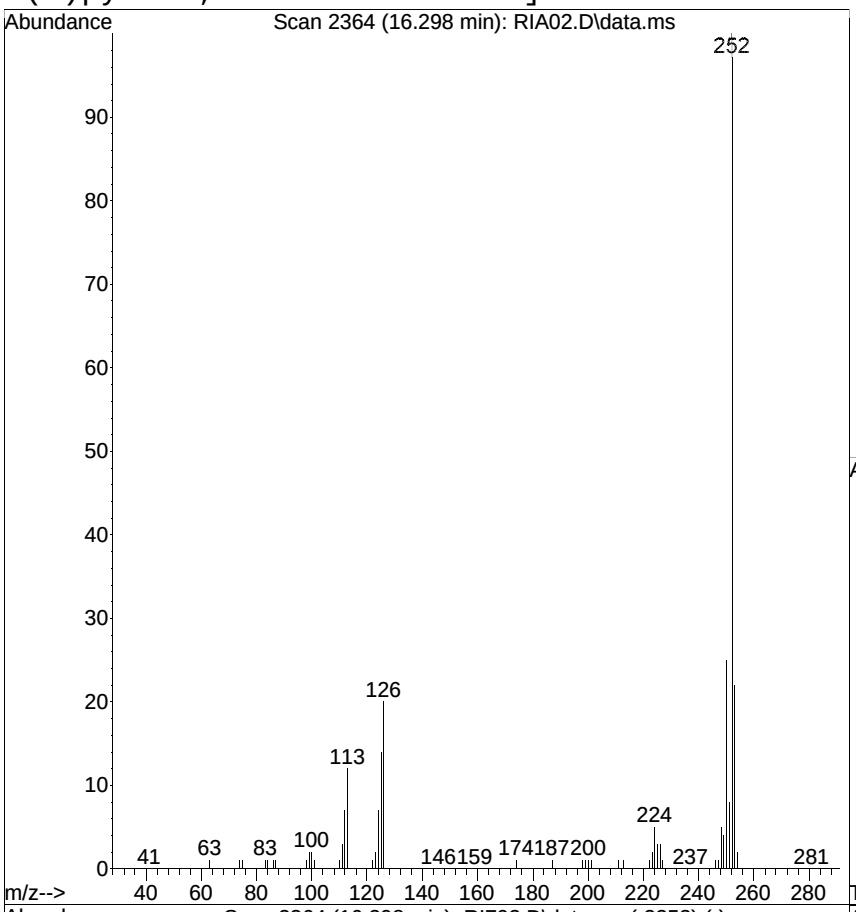
Ref





[Benzo(a)pyrene; before version]

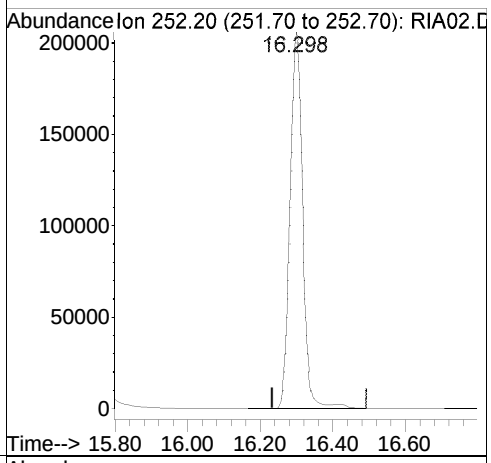
Raw



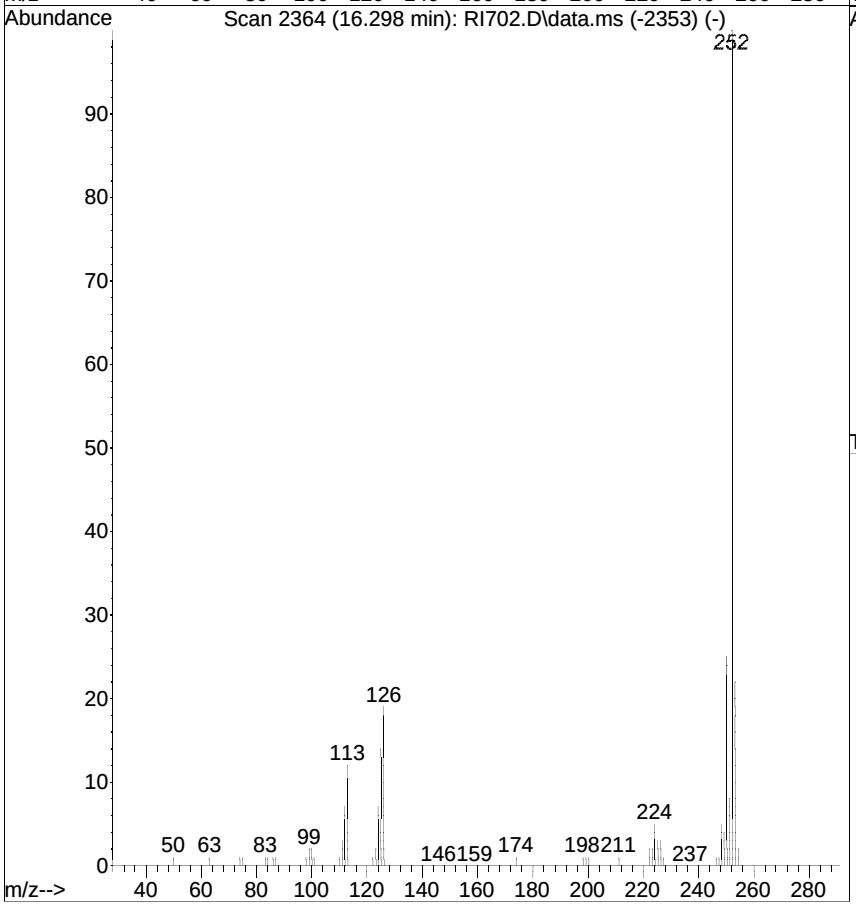
#83
Benzo(a)pyrene
Concen: 19.3909 ug/mL
RT: 16.298 min Scan# 2364
Delta R.T. 0.000 min
Lab File: RIA02.D
Acq: 10 Sep 2012 11:57 am

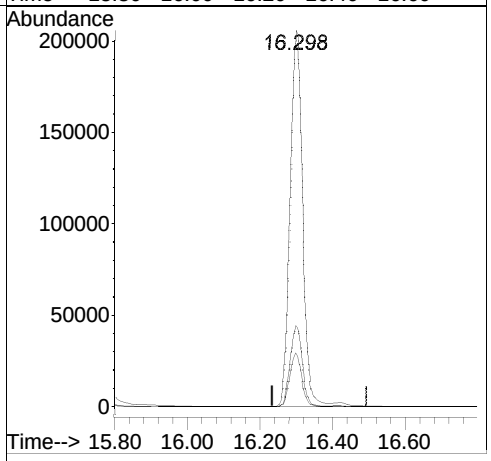
Tgt Ion:252 Resp: 479049

Ion	Ratio	Lower	Upper
252	100		
253	21.7	2.6	42.6
125	14.1	0.0	36.8



Ref





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239404
ANALYTICAL REPORT
Semivolatile Organics by GC/MS
Matrix: Soil

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
EX13B010A.3	239404-005
EX13B010B.2	239404-006
EX13B023A.2	239404-008
EX13B023B.2	239404-009
EX13B003BA.2	239404-010
EX13B021A.2	239404-011

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
SEMIVOLATILE ORGANICS BY GC/MS (EPA 8270D)
SOIL

Laboratory number:	**239404**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/05/12**
Samples Received:	**09/05/12**

This data package contains sample and QC results for six soil samples, requested for the above referenced project on 09/05/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Matrix spikes QC655183,QC655184 (batch 190266) were not reported because the parent sample required a dilution that would have diluted out the spikes.

Semivolatile Organics by GC/MS (EPA 8270D) Soil:

A number of samples were diluted due to the dark and viscous nature of the sample extracts.

No other analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

239404

C&T LOGIN # _____

Chain of Custody # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht/E Mantar
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Arsenic by 6010c	Copper by 6010c	Mercury by 7471B	Benzo(a)pyrene by 8270D	Benzo(a)anthracene by 8270D	Benzo(b)fluoranthene by 8270D	Zinc by 6010c	Aroclor-1260 by 8082
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None								
1	✓EX36B072A.2	9/5/12	0840		X		1					X	X	X						
2	✓EX36B072B.2	9/5/12	0855		X		1					X	X	X						
3	✓EX36B072C.2	9/5/12	0917		X		1					X	X	X	X					
4	✓EX36B078A.2	9/5/12	0955		X		1					X		X						
	~~EX36~~ EAM 9/5/12																			
5	✓EX13B010A.3	9/5/12	1020		X		1					X				X	X	X		
6	✓EX13B010B.2	9/5/12	1045		X		1					X				X	X	X		
7	✓EX13B004A.2	9/5/12	1110		X		1					X		X	X					
8	✓EX13B023A.2	9/5/12	1135		X		2					X		X	X	X	X	X	X	
9	✓EX13B023B.2	9/5/12	1155		X		2					X		X	X	X	X	X	X	
	~~EX13B003BA.2~~	9/5/12	1315		X		2					X		X						
10	✓EX13B003BA.2	9/5/12	1315		X		2					X		X				X		
11	✓EX13B021A.2	9/5/12	1330		X		1					X						X		

EAM 9/5/12

EAM 9/5/12

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 239404

Chain of Custody # ______

Project No:	CA000761.0001	Sampler:	D Feucht / E Monta
Project Name:	Hunters Point	Report To:	Drew Feucht
Project P. O. No:		Company:	ARCADIS
EDD Format:	Report Level ☐ II ☐ III ☒ IV	Telephone:	510 697 7738
Turnaround Time:	☒ RUSH 5 day ☐ Standard	Email:	Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING: Date Collected	SAMPLING: Time Collected	MATRIX: Water	MATRIX: Solid	# of Containers	CHEMICAL PRESERVATIVE: HCl	H2SO4	HNO3	NaOH	None	ANALYTICAL REQUEST: Aroclor - ~~1254~~ 1260 by 8082	Copper by 6010C	PCBs	TPHg	TPHd	SVOCs	Pesticides	Metals
12	✓EX36B180C.2	9/5/12	1420		X	2					X	X	X						
13	✓EX36B180B.2	9/5/12	1435		X	2					X	X	X						
14	✓EX36B180A.2	9/5/12	1445		X	2					X	X	X						
15	EB.09052012	9/5/12	1515	X		3			1		2			X			X		X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
[signature]	9/5/12	1539	[signature]	9/5/12	1539
[signature]	9/5/12	1725	[signature]	9/5/12	1725

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239404 Date Received 9/5/12 Number of coolers 1
Client ARCADIS Project HUNTER'S POINT

Date Opened 9/5/12 By (print) AA (sign) [signature]
Date Logged in ↓ By (print) JG (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.0°C

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ (YES) NO N/A
17. Did you document your preservative check? _____ (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

_____

_____

_____

_____

_____

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239404

Sample	pH: <2	>9	>12	Other
-015a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: AA

Date: 9/6/12

Results & QC Summary

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8270D
Matrix:	Soil	Sampled:	09/05/12
Units:	ug/Kg	Received:	09/05/12
Basis:	dry	Prepared:	09/07/12
Batch#:	190266		

Field ID:	EX13B010A.3	Moisture:	10%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	239404-005	Analyzed:	09/08/12

Analyte	Result	LOQ	DL
Benzo(a)anthracene	150	73	13
Benzo(b)fluoranthene	150	73	15
Benzo(a)pyrene	100	73	17

Surrogate	%REC	Limits
Nitrobenzene-d5	66	48-120
2-Fluorobiphenyl	69	50-120
Terphenyl-d14	64	40-120

Field ID:	EX13B010B.2	Moisture:	13%
Type:	SAMPLE	Diln Fac:	3.000
Lab ID:	239404-006	Analyzed:	09/08/12

Analyte	Result	LOQ	DL
Benzo(a)anthracene	110 U	230	41
Benzo(b)fluoranthene	110 U	230	48
Benzo(a)pyrene	110 U	230	53

Surrogate	%REC	Limits
Nitrobenzene-d5	76	48-120
2-Fluorobiphenyl	84	50-120
Terphenyl-d14	68	40-120

Field ID:	EX13B023A.2	Moisture:	6%
Type:	SAMPLE	Diln Fac:	10.00
Lab ID:	239404-008	Analyzed:	09/08/12

Analyte	Result	LOQ	DL
Benzo(a)anthracene	710 U	1,400	250
Benzo(b)fluoranthene	710 U	1,400	300
Benzo(a)pyrene	710 U	1,400	330

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	50-120
Terphenyl-d14	DO	40-120

J= Estimated value
U= Not Detected at or above DL
DL= Detection Limit
DO= Diluted Out
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8270D
Matrix:	Soil	Sampled:	09/05/12
Units:	ug/Kg	Received:	09/05/12
Basis:	dry	Prepared:	09/07/12
Batch#:	190266		

Field ID:	EX13B023B.2	Moisture:	12%
Type:	SAMPLE	Diln Fac:	2.000
Lab ID:	239404-009	Analyzed:	09/10/12

Analyte	Result	LOQ	DL
Benzo(a)anthracene	76 U	150	23
Benzo(b)fluoranthene	99 J	150	20
Benzo(a)pyrene	27 J	150	20

Surrogate	%REC	Limits
Nitrobenzene-d5	52	48-120
2-Fluorobiphenyl	67	50-120
Terphenyl-d14	66	40-120

Field ID:	EX13B003BA.2	Moisture:	4%
Type:	SAMPLE	Diln Fac:	10.00
Lab ID:	239404-010	Analyzed:	09/10/12

Analyte	Result	LOQ	DL
Benzo(b)fluoranthene	1,300 J	1,400	190

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	50-120
Terphenyl-d14	DO	40-120

Field ID:	EX13B021A.2	Moisture:	6%
Type:	SAMPLE	Diln Fac:	10.00
Lab ID:	239404-011	Analyzed:	09/10/12

Analyte	Result	LOQ	DL
Benzo(b)fluoranthene	940 J	1,400	190

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	50-120
Terphenyl-d14	DO	40-120

J= Estimated value
U= Not Detected at or above DL
DL= Detection Limit
DO= Diluted Out
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8270D
Matrix:	Soil	Sampled:	09/05/12
Units:	ug/Kg	Received:	09/05/12
Basis:	dry	Prepared:	09/07/12
Batch#:	190266		

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC655181	Analyzed:	09/07/12

Analyte	Result	LOQ	DL
Benzo(a)anthracene	33 U	67	12
Benzo(b)fluoranthene	33 U	67	14
Benzo(a)pyrene	33 U	67	15

Surrogate	%REC	Limits
Nitrobenzene-d5	57	48-120
2-Fluorobiphenyl	62	50-120
Terphenyl-d14	60	40-120

J= Estimated value
U= Not Detected at or above DL
DL= Detection Limit
DO= Diluted Out
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8270D
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC655182	Batch#:	190266
Matrix:	Soil	Prepared:	09/07/12
Units:	ug/Kg	Analyzed:	09/07/12

Analyte	Spiked	Result	%REC	Limits
Benzo(a)anthracene	997.3	657.5	66	58-120
Benzo(b)fluoranthene	997.3	658.8	66	54-120
Benzo(a)pyrene	997.3	659.6	66	57-120

Surrogate	%REC	Limits
Nitrobenzene-d5	62	48-120
2-Fluorobiphenyl	59	50-120
Terphenyl-d14	73	40-120

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA05 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 542247126001 File : xfj01 Time : 19-JUN-2012 14:46

Standards: S19354

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	174531	37.53	
68	< 2% of mass 69	0	0.00	
69		292053	100.00	
70	< 2% of mass 69	1259	0.43	
127	40% - 60% of mass 198	237909	51.16	
197	< 1% of mass 198	0	0.00	
198		465002	100.00	
199	5% - 9% of mass 198	32221	6.93	
275	10% - 30% of mass 198	123242	26.50	
365	> 1% of mass 198	12097	2.60	
441	Present, < mass 443	71698	81.46	
442	> 40% and < 100% of mass 198	453418	97.51	
443	17% - 23% of mass 442	88016	19.41	

Analyst: KMH Date: 06/20/12 Reviewer: LW Date: 06/21/12

PEM Report

File Name : G:\msbna05\061912\XFJ01.D
Date Acquired : 19 Jun 2012 2:46 pm
Sample Name : TUN,S19354
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA05 BNA DFTPP/PEM
Inst. Name : MSBNA05
AcquisitionMeth: DFTPP05.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	0.794	5.51	702902
Benzidine	0.751	7.37	2595485
4,4'-DDT		8.39	1610292
4,4'-DDE		7.60	9579
4,4'-DDD		8.01	219197

% Breakdown: 4,4'-DDT	LIMIT <=20%	12%	PASS
Tailing: Pentachlorophenol	8270C <5.0	0.8	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	0.8	PASS
	8270D <=2	1	PASS

Tue Jun 19 14:57:59 2012

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA05 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 542366451001 File : xia01 Time : 10-SEP-2012 11:31

Standards: S20011

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	115683	32.02	
68	< 2% of mass 69	0	0.00	
69		200984	100.00	
70	< 2% of mass 69	853	0.42	
127	40% - 60% of mass 198	173376	47.99	
197	< 1% of mass 198	0	0.00	
198		361280	100.00	
199	5% - 9% of mass 198	25170	6.97	
275	10% - 30% of mass 198	92680	25.65	
365	> 1% of mass 198	9077	2.51	
441	Present, < mass 443	50184	77.64	
442	> 40% and < 100% of mass 198	329642	91.24	
443	17% - 23% of mass 442	64637	19.61	

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

PEM Report

File Name : G:\msbna05\091012\XIA01.D
Date Acquired : 10 Sep 2012 11:31 am
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA05 BNA DFTPP/PEM
Inst. Name : MSBNA05
AcquisitionMeth: DFTPP05.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.628	5.03	379475
Benzidine	0.564	6.88	2616892
4,4'-DDT		7.90	1365982
4,4'-DDE		7.11	7324
4,4'-DDD		7.52	64637

% Breakdown: 4,4'-DDT	LIMIT <=20%	5%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.6	PASS
	8270D <=2	2	PASS
Tailing: Benzidine	8270C <3.0	0.6	PASS
	8270D <=2	1	PASS

Mon Sep 10 11:42:54 2012

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 552359297001 File : yi501 Time : 05-SEP-2012 12:17

Standards: S20011

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	146194	49.89	
68	< 2% of mass 69	0	0.00	
69		109057	100.00	
70	< 2% of mass 69	364	0.33	
127	40% - 60% of mass 198	123514	42.15	
197	< 1% of mass 198	0	0.00	
198		293034	100.00	
199	5% - 9% of mass 198	20365	6.95	
275	10% - 30% of mass 198	68464	23.36	
365	> 1% of mass 198	7883	2.69	
441	Present, < mass 443	16728	30.51	
442	> 40% and < 100% of mass 198	271850	92.77	
443	17% - 23% of mass 442	54824	20.17	

Analyst: LLH Date: 09/05/12 Reviewer: LW Date: 09/07/12

PEM Report

File Name : G:\csinput.net\DATA\090512\YI501.D
Date Acquired : 5 Sep 2012 12:17 pm
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA06 BNA DFTPP/PEM
Inst. Name : MSBNA06
AcquisitionMeth: DFTPP06.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.450	5.48	656508
Benzidine	0.608	7.36	2454857
4,4'-DDT		8.39	1096537
4,4'-DDE		7.60	6357
4,4'-DDD		8.01	151666

% Breakdown: 4,4'-DDT	LIMIT <=20%	13%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.5	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	0.6	PASS
	8270D <=2	1	PASS

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 552362420001 File : yi701 Time : 07-SEP-2012 16:20

Standards: S20011

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	143815	52.59	
68	< 2% of mass 69	0	0.00	
69		105229	100.00	
70	< 2% of mass 69	354	0.34	
127	40% - 60% of mass 198	116960	42.77	
197	< 1% of mass 198	0	0.00	
198		273450	100.00	
199	5% - 9% of mass 198	18880	6.90	
275	10% - 30% of mass 198	62941	23.02	
365	> 1% of mass 198	4859	1.78	
441	Present, < mass 443	23504	48.96	
442	> 40% and < 100% of mass 198	244650	89.47	
443	17% - 23% of mass 442	48008	19.62	

Analyst: LLH Date: 09/07/12 Reviewer: LW Date: 09/11/12

PEM Report

File Name : G:\msbna06\090712\YI701.D
Date Acquired : 7 Sep 2012 4:20 pm
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA06 BNA DFTPP/PEM
Inst. Name : MSBNA06
AcquisitionMeth: DFTPP06.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.313	5.48	682488
Benzidine	0.900	7.35	2217263
4,4'-DDT		8.39	1071849
4,4'-DDE		7.59	8081
4,4'-DDD		8.01	167142

% Breakdown: 4,4'-DDT	LIMIT <=20%	14%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.3	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	0.9	PASS
	8270D <=2	1	PASS

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 MSBNA Soil: EPA 8270D

Inst : MSBNA05
Calnum : 542247126001
Units : ug/mL

Name : 6PTBNA5
Date : 19-JUN-2012 15:29

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	xfj02	542247126002	ICAL1	19-JUN-2012 15:29	S19015
L2	xfj03	542247126003	ICAL2	19-JUN-2012 16:06	S19016
L3	xfj04	542247126004	ICAL3	19-JUN-2012 16:40	S19017
L4	xfj05	542247126005	ICAL4	19-JUN-2012 17:16	S19018
L5	xfj06	542247126006	ICAL5	19-JUN-2012 17:52	S19019
L6	xfj07	542247126007	ICAL6	19-JUN-2012 18:26	S19020
L7	xfj08	542247126008	ICAL7	19-JUN-2012 19:00	S19021
L8	xfj09	542247126009	ICAL8	19-JUN-2012 19:34	S19022
L9	xfj10	542247126010	ICAL9	19-JUN-2012 20:08	S19023

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene	1.1810	1.1595	1.1687	1.1595	1.1388	1.1002	0.9805	0.9478	0.9102	AVRG	R		0.92344		1.0829	10	20	0.700	0.99	
3,3'-Dichlorobenzidine			0.2191	0.3924	0.4045	0.4014	0.3659	0.3501		QUAD	A	-7.3761	0.68092	-0.00262	0.3555	0.995	20	0.010	0.99	
Benzo(a)anthracene	1.2777	1.2472	1.2562	1.2625	1.2490	1.2280	1.1617	1.1412	1.1211	AVRG	R		0.82232		1.2161	5	20	0.800	0.99	
bis(2-Ethylhexyl)phthalate			0.8200	0.8755	0.8713	0.8509	0.7434	0.7066	0.6781	AVRG	R		1.26221		0.7923	10	20	0.010	0.99	
Benzo(b)fluoranthene	1.0338	1.0772	1.1337	1.1568	1.1842	1.1824	1.1508	1.2239	1.2361	AVRG	R		0.86716		1.1532	6	20	0.700	0.99	
Benzo(k)fluoranthene	1.0698	1.1177	1.1621	1.1828	1.1734	1.1413	1.0464	1.0007	0.9979m	AVRG	R		0.90982		1.0991	7	20	0.700	0.99	
Benzo(a)pyrene	0.8505	0.9085	0.9789	1.0254	1.0390	1.0346	1.0078	1.0224	1.0266	AVRG	R		1.01196		0.9882	7	20	0.700	0.99	
Indeno(1,2,3-cd)pyrene	0.9449	1.0169	1.0823	1.1563	1.1893	1.1971	1.2099	1.2219	1.2478	AVRG	R		0.87665		1.1407	9	20	0.500	0.99	
Dibenz(a,h)anthracene	0.7984	0.8702	0.9372	0.9830	1.0144	1.0144	1.0086	1.0161	1.0281	AVRG	R		1.03801		0.9634	8	20	0.400	0.99	
Nitrobenzene-d5	0.5531	0.5735	0.5965	0.6164	0.6219	0.6184	0.5912	0.5973	0.5967	AVRG	R		1.67750		0.5961	4	20	0.05	0.99	
2-Fluorobiphenyl	1.6886	1.6677	1.6219	1.6591	1.5808	1.5496	1.3735	1.2784	1.2388	AVRG	R		0.65894		1.5176	11	20	0.05	0.99	
Terphenyl-d14	0.9488	0.9764	0.9822	0.9788	0.9627	0.9422	0.8464	0.7998	0.7740	AVRG	R		1.09605		0.9124	9	20	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Naphthalene	2.0000	9	5.0000	7	10.000	8	16.000	7	20.000	5	25.000	2	40.000	-9	50.000	-12	60.000	-16
3,3'-Dichlorobenzidine					20.000	-7	32.000	5	40.000	3	50.000	0	80.000	-5	100.00	4		
Benzo(a)anthracene	2.0000	5	5.0000	3	10.000	3	16.000	4	20.000	3	25.000	1	40.000	-4	50.000	-6	60.000	-8
bis(2-Ethylhexyl)phthalate					10.000	4	16.000	11	20.000	10	25.000	7	40.000	-6	50.000	-11	60.000	-14
Benzo(b)fluoranthene	2.0000	-10	5.0000	-7	10.000	-2	16.000	0	20.000	3	25.000	3	40.000	0	50.000	6	60.000	7
Benzo(k)fluoranthene	2.0000	-3	5.0000	2	10.000	6	16.000	8	20.000	7	25.000	4	40.000	-5	50.000	-9	60.000	-9
Benzo(a)pyrene	2.0000	-14	5.0000	-8	10.000	-1	16.000	4	20.000	5	25.000	5	40.000	2	50.000	3	60.000	4
Indeno(1,2,3-cd)pyrene	2.0000	-17	5.0000	-11	10.000	-5	16.000	1	20.000	4	25.000	5	40.000	6	50.000	7	60.000	9
Dibenz(a,h)anthracene	2.0000	-17	5.0000	-10	10.000	-3	16.000	2	20.000	5	25.000	5	40.000	5	50.000	5	60.000	7
Nitrobenzene-d5	2.0000	-7	5.0000	-4	10.000	0	16.000	3	20.000	4	25.000	4	40.000	-1	50.000	0	60.000	0
2-Fluorobiphenyl	2.0000	11	5.0000	10	10.000	7	16.000	9	20.000	4	25.000	2	40.000	-9	50.000	-16	60.000	-18
Terphenyl-d14	2.0000	4	5.0000	7	10.000	8	16.000	7	20.000	6	25.000	3	40.000	-7	50.000	-12	60.000	-15

KMH 06/20/12 [Aniline]: Picked or reassigned peak in all levels.

KMH 06/20/12 [2-Nitrophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [4-Chloroaniline]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [Phenanthrene]: Corrected automatically drawn baseline in ICAL1 (xfj02).

KMH 06/20/12 [Benzidine]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [Benzidine]: q-deleted in ICAL2

KMH 06/20/12 [3-Nitroaniline]: Picked or reassigned peak in multiple levels.

KMH 06/20/12 [Carbazole]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [2,4,5-Trichlorophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [2,4,5-Trichlorophenol]: Picked or reassigned peak in multiple levels.

KMH 06/20/12 [3-Nitroaniline]: Corrected automatically drawn baseline in ICAL7 (xfj08).

KMH 06/20/12 [Acenaphthene]: Corrected automatically drawn baseline in ICAL7 (xfj08).

KMH 06/20/12 [bis(2-Chloroisopropyl) ether]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [4-Methylphenol]: Combined split peak in multiple levels.

KMH 06/20/12 [Benzoic acid]: Corrected automatically drawn baseline in ICAL7 (xfj09).

KMH 06/20/12 [2,4-Dichlorophenol]: Corrected automatically drawn baseline in ICAL7 (xfj09).

KMH 06/20/12 [4-Chloroaniline]: Picked or reassigned peak in multiple levels.

KMH 06/20/12 [Chrysene]: Corrected automatically drawn baseline in ICAL7 (xfj09).

KMH 06/20/12 [Resorcinol]: Combined split peak in ICAL9 (xfj10).

KMH 06/20/12 [4-Nitrophenol]: Picked or reassigned peak in ICAL9 (xfj10).

KMH 06/20/12 [Anthracene]: Corrected automatically drawn baseline in ICAL9 (xfj10).

KMH 06/20/12 [Carbazole]: Picked or reassigned peak in ICAL9 (xfj10).

KMH 06/20/12 [Benzo(k)fluoranthene]: Picked or reassigned peak in ICAL9 (xfj10).

KMH 06/20/12 : files 8 & 9 are labeled "ICAL7", file 9 is ICAL8

LLH 07/26/12 : cut a loop of column to get better Benzoic acid, currently at -40%D

KMH 08/16/12 : 8/15 cut 1 loop to improve benzoic acid

KMH 08/23/12 : 8/23 cut 1 loop and primed to improve benzoic acid

LLH 08/24/12 : cut 2 more loops od column and conditioned with old diesel std, Benzoic acid still low at -60%D and PCP at -36%D

KMH 08/31/12 : 8/23 cut 1 loop and primed to improve benzoic acid

LLH 09/12/12 : cut 2 loops of column and primed to improve Benzoic acid and Pentachlorophenol

Analyst: KMH Date: 06/20/12 Reviewer: LW Date: 06/21/12

m=manual integration

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

542247126001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA05 Name : 6PTBNA5
Calnum : 542247126001 Cal Date : 19-JUN-2012

ICV 542247126011 (xfj11 19-JUN-2012) stds: S19910

Analyte	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	40.00	37.68	ug/mL	-6	30	
3,3'-Dichlorobenzidine	60.00	55.59	ug/mL	-7	30	
Benzo(a)anthracene	40.00	40.46	ug/mL	1	30	
bis(2-Ethylhexyl)phthalate	40.00	40.03	ug/mL	0	30	
Benzo(b)fluoranthene	40.00	44.70	ug/mL	12	30	
Benzo(k)fluoranthene	40.00	40.28	ug/mL	1	30	
Benzo(a)pyrene	40.00	47.73	ug/mL	19	30	
Indeno(1,2,3-cd)pyrene	40.00	45.71	ug/mL	14	30	
Dibenz(a,h)anthracene	40.00	43.29	ug/mL	8	30	

Analyst: KMH Date: 06/20/12 Reviewer: LW Date: 06/21/12

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 MSBNA Soil: EPA 8270D

Inst : MSBNA06
Calnum : 552359297001
Units : ug/mL

Name : 6PTBNA6
Date : 05-SEP-2012 12:37
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	yi502	552359297002	ICAL	05-SEP-2012 12:37	S20236
L2	yi503	552359297003	ICAL	05-SEP-2012 13:13	S20238
L3	yi504	552359297004	ICAL	05-SEP-2012 13:51	S20239
L4	yi505	552359297005	ICAL	05-SEP-2012 14:31	S20248
L5	yi506	552359297006	ICAL	05-SEP-2012 15:10	S20249
L6	yi507	552359297007	ICAL	05-SEP-2012 15:48	S20250
L7	yi508	552359297008	ICAL	05-SEP-2012 16:24	S20244
L8	yi509	552359297009	ICAL	05-SEP-2012 17:01	S20245
L9	yi510	552359297010	ICAL	05-SEP-2012 17:41	S20246

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene	1.0838	1.0707	1.0488	1.0305	0.9765	0.9326	0.9037	0.9091	0.8678m	AVRG		1.02001		0.9804	8	20	0.700	0.99	
3,3'-Dichlorobenzidine			0.4919	0.5149	0.5205	0.4941	0.5125	0.5110	0.5221	AVRG		1.96241		0.5096	2	20	0.010	0.99	
Benzo(a)anthracene	1.2401	1.2114	1.2115	1.1607m	1.1502	1.1045	1.0684	1.1214	1.0663	AVRG		0.87086		1.1483	6	20	0.800	0.99	
bis(2-Ethylhexyl)phthalate			0.9138	0.8784	0.8767	0.8150	0.7578	0.7136	0.6400	AVRG		1.25106		0.7993	13	20	0.010	0.99	
Benzo(b)fluoranthene	1.0923	1.1818	1.1558	1.1829	1.0888	1.1820	1.0974	1.1756m	1.2702	AVRG		0.86317		1.1585	5	20	0.700	0.99	
Benzo(k)fluoranthene	1.1778	1.1727	1.1759	1.1222	1.0484	1.0408	0.9994	0.9411m	0.9143m	AVRG		0.93822		1.0658	10	20	0.700	0.99	
Benzo(a)pyrene	0.9472	1.0121	1.0298	1.0507	1.0078	1.0108	0.9770	1.0166	1.0572	AVRG		0.98802		1.0121	3	20	0.700	0.99	
Indeno(1,2,3-cd)pyrene	0.9294	1.0555	1.1647m	1.2046m	1.1806m	1.1710	1.1542	1.1987	1.1870	AVRG		0.87841		1.1384	8	20	0.500	0.99	
Dibenz(a,h)anthracene	0.7493m	0.8737m	0.9489	0.9651	0.9581	0.9238	0.9013	0.9239	0.9232	AVRG		1.10197		0.9075	7	20	0.400	0.99	
Nitrobenzene-d5	0.4260	0.4497	0.4136	0.4401	0.3985	0.3970	0.3897m	0.4000	0.3957	AVRG		2.42569		0.4123	5	20	0.05	0.99	
2-Fluorobiphenyl	1.7886	1.7963	1.7265	1.6409	1.6230	1.4710	1.3335	1.3103	1.2618	AVRG		0.64508		1.5502	14	20	0.05	0.99	
Terphenyl-d14	0.9000	0.9750	0.9652	0.9218	0.9603	0.9496	0.9239	0.8621	0.9522	AVRG		1.07013		0.9345	4	20	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Naphthalene	2.0000	11	5.0000	9	10.000	7	16.000	5	20.000	0	25.000	-5	40.000	-8	50.000	-7	60.000	-11
3,3'-Dichlorobenzidine					20.000	-3	32.000	1	40.000	2	50.000	-3	80.000	1	100.00	0	120.00	2
Benzo(a)anthracene	2.0000	8	5.0000	5	10.000	6	16.000	1	20.000	0	25.000	-4	40.000	-7	50.000	-2	60.000	-7
bis(2-Ethylhexyl)phthalate					10.000	14	16.000	10	20.000	10	25.000	2	40.000	-5	50.000	-11	60.000	-20
Benzo(b)fluoranthene	2.0000	-6	5.0000	2	10.000	0	16.000	2	20.000	-6	25.000	2	40.000	-5	50.000	1	60.000	10
Benzo(k)fluoranthene	2.0000	11	5.0000	10	10.000	10	16.000	5	20.000	-2	25.000	-2	40.000	-6	50.000	-12	60.000	-14
Benzo(a)pyrene	2.0000	-6	5.0000	0	10.000	2	16.000	4	20.000	0	25.000	0	40.000	-3	50.000	0	60.000	4
Indeno(1,2,3-cd)pyrene	2.0000	-18	5.0000	-7	10.000	2	16.000	6	20.000	4	25.000	3	40.000	1	50.000	5	60.000	4
Dibenz(a,h)anthracene	2.0000	-17	5.0000	-4	10.000	5	16.000	6	20.000	6	25.000	2	40.000	-1	50.000	2	60.000	2
Nitrobenzene-d5	2.0000	3	5.0000	9	10.000	0	16.000	7	20.000	-3	25.000	-4	40.000	-5	50.000	-3	60.000	-4
2-Fluorobiphenyl	2.0000	15	5.0000	16	10.000	11	16.000	6	20.000	5	25.000	-5	40.000	-14	50.000	-15	60.000	-19
Terphenyl-d14	2.0000	-4	5.0000	4	10.000	3	16.000	-1	20.000	3	25.000	2	40.000	-1	50.000	-8	60.000	2

KMH 09/06/12 [1,4-Dichlorobenzene-d4]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [N-Nitrosodimethylamine]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Aniline]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [Benzoic acid]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [2,4,5-Trichlorophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [2,4-Dinitrophenol]: Picked or reassigned peak in ICAL (yi502).

KMH 09/06/12 [4-Nitroaniline]: Corrected automatically drawn baseline in ICAL (yi502).

KMH 09/06/12 [Dibenz(a,h)anthracene]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [N-Nitroso-di-n-propylamine]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [Indeno(1,2,3-cd)pyrene]: Combined split peak in multiple levels.

KMH 09/06/12 [Benzo(a)anthracene]: Corrected automatically drawn baseline in ICAL (yi505).

KMH 09/06/12 [4-Methylphenol]: Combined split peak in multiple levels.

KMH 09/06/12 [Nitrobenzene-d5]: Corrected automatically drawn baseline in ICAL (yi508).

KMH 09/06/12 [2,4-Dimethylphenol]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [2,4-Dichlorophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Aniline]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Isophorone]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [2-Nitrophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [4-Chloroaniline]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Anthracene]: Corrected automatically drawn baseline in ICAL (yi509).

KMH 09/06/12 [Benzo(b)fluoranthene]: Corrected automatically drawn baseline in ICAL (yi509).

KMH 09/06/12 [Benzo(k)fluoranthene]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [N-Nitroso-di-n-propylamine]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Naphthalene]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Hexachlorobutadiene]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Resorcinol]: Combined split peak in ICAL (yi510).

Analyst: KMH Date: 09/06/12 Reviewer: LW Date: 09/07/12

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

552359297001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Name : 6PTBNA6
Calnum : 552359297001 Cal Date : 05-SEP-2012

ICV 552359297011 (yi511 05-SEP-2012) stds: S19910

Analyte	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	40.00	38.28	ug/mL	-4	30	
3,3'-Dichlorobenzidine	60.00	63.28	ug/mL	5	30	
Benzo(a)anthracene	40.00	42.55	ug/mL	6	30	
bis(2-Ethylhexyl)phthalate	40.00	42.58	ug/mL	6	30	
Benzo(b)fluoranthene	40.00	43.39	ug/mL	8	30	
Benzo(k)fluoranthene	40.00	40.32	ug/mL	1	30	m
Benzo(a)pyrene	40.00	47.78	ug/mL	19	30	
Indeno(1,2,3-cd)pyrene	40.00	45.05	ug/mL	13	30	
Dibenz(a,h)anthracene	40.00	43.55	ug/mL	9	30	

Analyst: KMH Date: 09/06/12 Reviewer: LW Date: 09/07/12

m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA05 IDF : 1.0
Seqnum : 542366451002.1 File : xia02 Time : 10-SEP-2012 11:52
Cal : 542247126001 Caldate : 19-JUN-2012
Standards: S20249

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Naphthalene	1.0829	1.0943	20.00	20.21	ug/mL	1	20	0.7000	
3,3'-Dichlorobenzidine	0.3555	0.4379	40.00	44.03	ug/mL	10	20	0.0100	i ***
Benzo(a)anthracene	1.2161	1.1899	20.00	19.57	ug/mL	-2	20	0.8000	i ***
bis(2-Ethylhexyl)phthalate	0.7923	0.8081	20.00	20.40	ug/mL	2	20	0.0100	i ***
Benzo(b)fluoranthene	1.1532	1.0945	20.00	18.98	ug/mL	-5	20	0.7000	i ***
Benzo(k)fluoranthene	1.0991	1.1037	20.00	20.08	ug/mL	0	20	0.7000	i ***
Benzo(a)pyrene	0.9882	0.9670	20.00	19.57	ug/mL	-2	20	0.7000	i ***
Indeno(1,2,3-cd)pyrene	1.1407	1.2044	20.00	21.12	ug/mL	6	20	0.5000	i ***
Dibenz(a,h)anthracene	0.9634	1.0373	20.00	21.53	ug/mL	8	20	0.4000	i ***
Nitrobenzene-d5	0.5961	0.5030	20.00	16.88	ug/mL	-16	20	0.0500	
2-Fluorobiphenyl	1.5176	1.4956	20.00	19.71	ug/mL	-1	20	0.0500	
Terphenyl-d14	0.9124	0.9183	20.00	20.13	ug/mL	1	20	0.0500	i ***

ISTD (ICAL xfj07)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
1,4-Dichlorobenzene-d4	1250318	873477	-30.14	6.23	5.77	-0.46
Naphthalene-d8	3884992	2782377	-28.38	7.73	7.25	-0.48
Acenaphthene-d10	2443786	1714307	-29.85	9.89	9.39	-0.50
Phenanthrene-d10	4074585	3080850	-24.39	11.73	11.23	-0.50
Chrysene-d12	4348886	3339435	-23.21	15.18	14.54	**-0.64 ***
Perylene-d12	4473002	3529169	-21.10	18.24	17.15	**-1.09 ***

LLH 09/10/12 [Aniline]: Picked or reassigned peak. [general version]

LLH 09/10/12 [4-Nitroaniline]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 : see ICAL narration for Istd RT drift

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

i=ISTD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA06 IDF : 1.0
Seqnum : 552362420002.1 File : yi702 Time : 07-SEP-2012 16:37
Cal : 552359297001 Caldate : 05-SEP-2012
Standards: S20248

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Naphthalene	0.9804	1.0011	16.00	16.34	ug/mL	2	20	0.7000	
3,3'-Dichlorobenzidine	0.5096	0.5408	32.00	33.96	ug/mL	6	20	0.0100	
Benzo(a)anthracene	1.1483	1.1796	16.00	16.44	ug/mL	3	20	0.8000	
bis(2-Ethylhexyl)phthalate	0.7993	0.8911	16.00	17.84	ug/mL	11	20	0.0100	
Benzo(b)fluoranthene	1.1585	1.1930	16.00	16.48	ug/mL	3	20	0.7000	
Benzo(k)fluoranthene	1.0658	1.0715	16.00	16.09	ug/mL	1	20	0.7000	
Benzo(a)pyrene	1.0121	1.0823	16.00	17.11	ug/mL	7	20	0.7000	
Indeno(1,2,3-cd)pyrene	1.1384	1.2362	16.00	17.37	ug/mL	9	20	0.5000	
Dibenz(a,h)anthracene	0.9075	1.0072	16.00	17.76	ug/mL	11	20	0.4000	
Nitrobenzene-d5	0.4123	0.4393	16.00	17.05	ug/mL	7	20	0.0500	
2-Fluorobiphenyl	1.5502	1.6849	16.00	17.39	ug/mL	9	20	0.0500	
Terphenyl-d14	0.9345	1.0020	16.00	17.16	ug/mL	7	20	0.0500	

ISTD (ICAL yi507)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
1,4-Dichlorobenzene-d4	198812	223394	12.36	6.09	6.09	0.00
Naphthalene-d8	672821	743711	10.54	7.59	7.59	0.00
Acenaphthene-d10	377811	427044	13.03	9.75	9.74	-0.01
Phenanthrene-d10	744787	851335	14.31	11.60	11.60	0.01
Chrysene-d12	659674	784348	18.90	15.00	15.00	0.01
Perylene-d12	780304	923802	18.39	17.89	17.89	0.01

LLH 09/07/12 [Aniline]: Picked or reassigned peak. [general version]

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 542366451

Date : 09/10/12 Reference : xfj07
Sequence : MSBNA05 xia Analyzed : 06/19/12 18:26

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		ICAL STD	1250318	6.23	3884992	7.73	2443786	9.89	4074585	11.73	4348886	15.18	4473002	18.24
		LOWER LIMIT	625159	5.73	1942496	7.23	1221893	9.39	2037293	11.23	2174443	14.68	2236501	17.74
		UPPER LIMIT	2500636	6.73	7769984	8.23	4887572	10.39	8149170	12.23	8697772	15.68	8946004	18.74
002	CCV		873477	5.77	2782377	7.25	1714307	9.39	3080850	11.23	3339435	14.54 *	3529169	17.15 *

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 542366451

Date : 09/10/12 Reference : xia02
Sequence : MSBNA05 xia Analyzed : 09/10/12 11:52

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		CCV+CCV/BS+CCV/LCS+ICV+ICV/BS+ICV/CCV+ICV/LCS+RCCV STD	873477	5.77	2782377	7.25	1714307	9.39	3080850	11.23	3339435	14.54	3529169	17.15
		LOWER LIMIT	436739	5.27	1391189	6.75	857154	8.89	1540425	10.73	1669718	14.04	1764585	16.65
		UPPER LIMIT	1746954	6.27	5564754	7.75	3428614	9.89	6161700	11.73	6678870	15.04	7058338	17.65
003	SAMPLE	239416-001	998824	5.78	3290515	7.25	2081623	9.39	3667938	11.23	3956460	14.54	3982683	17.15
004	SAMPLE	239404-009	930627	5.77	3043217	7.25	1865536	9.39	3481325	11.23	3796221	14.55	3908563	17.21
006	SAMPLE	239404-010	942557	5.77	3101871	7.25	1929020	9.40	3364602	11.24	3334658	14.58	3525696	17.23
007	SAMPLE	239404-011	1015266	5.77	3302505	7.25	2006953	9.40	3524509	11.24	3612313	14.58	3710685	17.23
008	BLANK	QC655441	1181594	5.78	3654661	7.26	2295047	9.40	3848627	11.24	3969198	14.56	4239923	17.19
009	LCS	QC655442	923620	5.79	2775057	7.26	1719827	9.41	2923499	11.24	2925336	14.56	3107027	17.18
010	LCS	QC655442	918743	5.78	2806903	7.26	1721179	9.40	2928299	11.24	2994905	14.56	3061673	17.17
011	SAMPLE	239458-005	1118449	5.78	3546407	7.26	2207178	9.40	3734524	11.24	3872960	14.55	3965555	17.19
012	SAMPLE	239458-010	1138264	5.78	3614693	7.26	2211869	9.40	3739734	11.24	3886358	14.56	3953784	17.19
013	SAMPLE	239458-015	1050660	5.77	3472943	7.25	2152499	9.40	3644079	11.24	3804654	14.56	3865598	17.18
014	MSS	239458-020	1091398	5.77	3533372	7.25	2184083	9.40	3717207	11.24	3876769	14.55	3654968	17.19
015	SAMPLE	239410-013	1044053	5.78	3427378	7.26	2138349	9.40	3653260	11.24	3835956	14.56	3547281	17.19
016	SAMPLE	239410-014	1093176	5.78	3506387	7.26	2171303	9.40	3751229	11.24	3795430	14.56	3407196	17.20
017	SAMPLE	239410-016	1070501	5.78	3461844	7.26	2142555	9.40	3688376	11.24	3881238	14.55	3457473	17.18
018	SAMPLE	239410-020	1027626	5.77	3329705	7.25	2087071	9.40	3562797	11.24	3808342	14.56	3323957	17.18
019	SAMPLE	239410-021	1028928	5.78	3374551	7.26	2113026	9.40	3624190	11.24	3670141	14.57	3098601	17.21
020	SAMPLE	239425-003	971743	5.78	3250565	7.26	1981186	9.40	3487229	11.24	3592797	14.56	2818693	17.20
021	SAMPLE	239425-006	1139633	5.78	3576143	7.26	2201628	9.40	3826671	11.24	3864720	14.56	2809192	17.20

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 552362420

Date : 09/07/12 Reference : yi507
Sequence : MSBNA06 yi7 Analyzed : 09/05/12 15:48

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		ICAL STD	198812	6.09	672821	7.59	377811	9.75	744787	11.60	659674	15.00	780304	17.89
		LOWER LIMIT	99406	5.59	336411	7.09	188906	9.25	372394	11.10	329837	14.50	390152	17.39
		UPPER LIMIT	397624	6.59	1345642	8.09	755622	10.25	1489574	12.10	1319348	15.50	1560608	18.39
002	CCV		223394	6.09	743711	7.59	427044	9.74	851335	11.60	784348	15.00	923802	17.89

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 552362420

Date : 09/07/12 Reference : yi702
Sequence : MSBNA06 yi7 Analyzed : 09/07/12 16:37

#	Type	Sample ID	NAPHD8	RT	ACEND10	RT	CHYD12	RT	PERYD12	RT	DCBZ14D4	RT	PHEND10	RT
		CCV+CCV/BS+CCV/LCS+ICV+ICV/BS+ICV/CCV+ICV/LCS+RCCV STD	743711	7.59	427044	9.74	784348	15.00	923802	17.89	223394	6.09	851335	11.60
		LOWER LIMIT	371856	7.09	213522	9.24	392174	14.50	461901	17.39	111697	5.59	425668	11.10
		UPPER LIMIT	1487422	8.09	854088	10.24	1568696	15.50	1847604	18.39	446788	6.59	1702670	12.10
003	BLANK	QC655181	824019	7.58	470081	9.74	910488	14.99	944393	17.88	233318	6.10	865346	11.59
004	LCS	QC655182	666881	7.59	417745	9.74	774652	15.00	936262	17.89	200168	6.10	836823	11.59
005	LCS	QC655182	655104	7.59	390783	9.74	764781	14.99	892102	17.88	203762	6.10	815860	11.59
006	SAMPLE	239416-001	784968	7.58	471900	9.74	881248	14.99	916380	17.88	240276	6.10	859187	11.59
007	SAMPLE	239403-004	800815	7.59	468564	9.74	915801	14.99	1001884	17.89	1258 *	6.27	897350	11.59
008	SAMPLE	239403-002	825366	7.58	474899	9.74	855206	14.99	874582	17.89	1127 *	6.27	876269	11.59
009	SAMPLE	239403-001	764789	7.58	439279	9.74	804063	14.99	727594	17.89	1048 *	6.27	821593	11.59
010	MSS	239403-003	880978	7.58	497328	9.74	854845	14.99	763163	17.88	265539	6.09	910362	11.59
011	SAMPLE	239404-005	833914	7.59	462247	9.74	744848	15.00	478997	17.90	1149 *	6.27	821011	11.59
012	SAMPLE	239404-006	817696	7.58	408686	9.74	709501	15.00	464592	17.89	1105 *	6.27	725437	11.60
013	SAMPLE	239404-008	876534	7.58	460513	9.74	755320	14.99	526692	17.88	1090 *	6.27	800930	11.59
014	SAMPLE	239404-009	767167	7.58	436220	9.74	609041	15.01	302155 *	17.91	229902	6.09	758547	11.59
015	SAMPLE	239404-010	727254	7.58	416933	9.74	635906	15.01	364209 *	17.90	1216 *	6.27	791662	11.59
016	SAMPLE	239404-011	782436	7.58	387779	9.74	661197	15.02	361035 *	17.90	246166	6.09	751319	11.60
017	SAMPLE	239425-003	788113	7.58	406516	9.74	709661	15.00	377376 *	17.89	201621	6.10	768002	11.60
018	SAMPLE	239425-006	797764	7.58	443293	9.74	670526	15.00	290387 *	17.88	218744	6.10	829682	11.60
019	SAMPLE	239410-020	838538	7.58	495656	9.74	763006	14.99	361359 *	17.86	1122 *	6.27	932884	11.59
020	SAMPLE	239410-021	802341	7.59	459861	9.74	586397	15.00	265916 *	17.89	239138	6.10	802994	11.59

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 542247126

Instrument : MSBNA05 Begun : 06/19/12 14:46
Method : EPA 8270D SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	xfj01	TUN	DFTPP/PEM			06/19/12 14:46	1.0	1	
002	xfj02	ICAL	ICAL1			06/19/12 15:29	1.0	2	
003	xfj03	ICAL	ICAL2			06/19/12 16:06	1.0	3	
004	xfj04	ICAL	ICAL3			06/19/12 16:40	1.0	4	
005	xfj05	ICAL	ICAL4			06/19/12 17:16	1.0	5	
006	xfj06	ICAL	ICAL5			06/19/12 17:52	1.0	6	
007	xfj07	ICAL	ICAL6			06/19/12 18:26	1.0	7	
008	xfj08	ICAL	ICAL7			06/19/12 19:00	1.0	8	
009	xfj09	ICAL	ICAL8			06/19/12 19:34	1.0	9	
010	xfj10	ICAL	ICAL9			06/19/12 20:08	1.0	10	
011	xfj11	ICV	ICAL			06/19/12 20:43	1.0	11	

KMH 06/20/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 11.

Standards used: 1=S19354 2=S19015 3=S19016 4=S19017 5=S19018 6=S19019 7=S19020 8=S19021 9=S19022 10=S19023 11=S19910

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 542366451

Instrument : MSBNA05 Begun : 09/10/12 11:31
Method : EPA 8270D SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	xia01	TUN	DFTPP/PEM			09/10/12 11:31	1.0	1	
002	xia02	CCV				09/10/12 11:52	1.0	2	
003	xia03	SAMPLE	239416-001	Soil	190266	09/10/12 12:31	1.0	3	
004	xia04	SAMPLE	239404-009	Soil	190266	09/10/12 13:09	2.0	3	
005	xia05	SAMPLE	239404-010	Soil	190266	09/10/12 13:45	10.0	3	
006	xia06	SAMPLE	239404-010	Soil	190266	09/10/12 14:21	10.0	3	
007	xia07	SAMPLE	239404-011	Soil	190266	09/10/12 14:59	10.0	3	
008	xia08	BLANK	QC655441	Soil	190321	09/10/12 15:37	1.0	3	
009	xia09	LCS	QC655442	Soil	190321	09/10/12 16:15	1.0	3	3:13BZDIOL=96
010	xia10	LCS	QC655442	Soil	190321	09/10/12 16:51	2.0	3	
011	xia11	SAMPLE	239458-005	Soil	190321	09/10/12 17:27	3.0	3	
012	xia12	SAMPLE	239458-010	Soil	190321	09/10/12 18:06	2.0	3	
013	xia13	SAMPLE	239458-015	Soil	190321	09/10/12 18:45	25.0	3	
014	xia14	MSS	239458-020	Soil	190321	09/10/12 19:24	10.0	3	
015	xia15	SAMPLE	239410-013	Soil	190266	09/10/12 20:08	1.0	3	
016	xia16	SAMPLE	239410-014	Soil	190266	09/10/12 20:52	1.0	3	
017	xia17	SAMPLE	239410-016	Soil	190266	09/10/12 21:34	1.0	3	
018	xia18	SAMPLE	239410-020	Soil	190266	09/10/12 22:17	16.0	3	
019	xia19	SAMPLE	239410-021	Soil	190266	09/10/12 23:01	1.0	3	
020	xia20	SAMPLE	239425-003	Soil	190266	09/10/12 23:44	3.0	3	<<t
021	xia21	SAMPLE	239425-006	Soil	190266	09/11/12 00:26	1.0	3	<<t

LLH 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 010.

KMH 09/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 21.

Standards used: 1=S20011 2=S20249 3=S18805

Flags used: <<t=out of clock

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 552359297

Instrument : MSBNA06 Begun : 09/05/12 12:17
Method : EPA 8270D SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	yi501	TUN	DFTPP/PEM			09/05/12 12:17	1.0	1	
002	yi502	ICAL	ICAL			09/05/12 12:37	1.0	2	
003	yi503	ICAL	ICAL			09/05/12 13:13	1.0	3	
004	yi504	ICAL	ICAL			09/05/12 13:51	1.0	4	
005	yi505	ICAL	ICAL			09/05/12 14:31	1.0	5	
006	yi506	ICAL	ICAL			09/05/12 15:10	1.0	6	
007	yi507	ICAL	ICAL			09/05/12 15:48	1.0	7	
008	yi508	ICAL	ICAL			09/05/12 16:24	1.0	8	
009	yi509	ICAL	ICAL			09/05/12 17:01	1.0	9	
010	yi510	ICAL	ICAL			09/05/12 17:41	1.0	10	
011	yi511	ICV	ICV			09/05/12 18:20	1.0	11	
012	yi512	ICV	ICV			09/05/12 19:02	1.0	12 13	

KMH 09/06/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

Standards used: 1=S20011 2=S20236 3=S20238 4=S20239 5=S20248 6=S20249 7=S20250 8=S20244 9=S20245 10=S20246 11=S19910 12=S19898 13=S18805

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 552362420

Instrument : MSBNA06 Begun : 09/07/12 16:20
Method : EPA 8270D SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	yi701	TUN	DFTPP/PEM			09/07/12 16:20	1.0	1	
002	yi702	CCV				09/07/12 16:37	1.0	2	
003	yi703	BLANK	QC655181	Soil	190266	09/07/12 19:18	1.0	3	
004	yi704	LCS	QC655182	Soil	190266	09/07/12 19:55	1.0	3	1:MEPH4=50
005	yi705	LCS	QC655182	Soil	190266	09/07/12 20:33	2.0	3	
006	yi706	SAMPLE	239416-001	Soil	190266	09/07/12 21:14	1.0	3	
007	yi707	SAMPLE	239403-004	Soil	190266	09/07/12 21:54	1.0	3	2:PHENOLD5=4400
008	yi708	SAMPLE	239403-002	Soil	190266	09/07/12 22:34	1.0	3	3:PHENOLD5=4900
009	yi709	SAMPLE	239403-001	Soil	190266	09/07/12 23:15	2.0	3	4:PHENOLD5=2900
010	yi710	MSS	239403-003	Soil	190266	09/07/12 23:54	20.0	3	
011	yi711	SAMPLE	239404-005	Soil	190266	09/08/12 00:31	1.0	3	3:PHENOLD5=5100
012	yi712	SAMPLE	239404-006	Soil	190266	09/08/12 01:09	3.0	3	3:PHENOLD5=2000
013	yi713	SAMPLE	239404-008	Soil	190266	09/08/12 01:45	10.0	3	2:PHENOLD5=370
014	yi714	SAMPLE	239404-009	Soil	190266	09/08/12 02:26	2.0	3	
015	yi715	SAMPLE	239404-010	Soil	190266	09/08/12 03:05	10.0	3	6:PHENOL=2500
016	yi716	SAMPLE	239404-011	Soil	190266	09/08/12 03:46	10.0	3	
017	yi717	SAMPLE	239425-003	Soil	190266	09/08/12 04:24	3.0	3	<<t
018	yi718	SAMPLE	239425-006	Soil	190266	09/08/12 05:02	1.0	3	<<t
019	yi719	SAMPLE	239410-020	Soil	190266	09/08/12 05:38	25.0	3	<<t , 2:PH2F=140
020	yi720	SAMPLE	239410-021	Soil	190266	09/08/12 06:15	1.0	3	<<t

LLH 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 020.

Standards used: 1=S20011 2=S20248 3=S18805

Flags used: <<t=out of clock

SAMPLE PREPARATION SUMMARY

Batch # : 190266
Started By : ICK
Method : 3550B
Spike #1 ID : S20014
Prep Date : 07-SEP-2012 11:15
SOP Version : 8270_3550_rv11
Spike #2 ID : S20576
Analysis : 8270
Finished By : ICK
Units : g

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239403-001		Soil	30.15	1	1	0.03317		.4				8270	
239403-002		Soil	30.35	1	1	0.03295		.4				8270	
239403-003		Soil	30.24	1	1	0.03307		.4				8270	MSS
239403-004		Soil	30.14	1	1	0.03318		.4				8270	
239404-005		Soil	30.31	1	1	0.03299		.4				8270	
239404-006		Soil	30.06	1	1	0.03327		.4				8270	
239404-008		Soil	30.08	2	1	0.06649		.4				8270	Wouldn't Concentrate
239404-009		Soil	30	1	1	0.03333		.4				8270	
239404-010		Soil	30.12	2	1	0.0664		.4				8270	See comment 1 below
239404-011		Soil	30.41	2	1	0.06577		.4				8270	See comment 1 below
239410-011		Soil	30	1	1	0.03333		.4				8270	
239410-013		Soil	30.3	1	1	0.033		.4				8270	
239410-014		Soil	30.21	1	1	0.0331		.4				8270	
239410-015		Soil	30.06	1	1	0.03327		.4				8270	
239410-016		Soil	30.01	1	1	0.03332		.4				8270	
239410-020		Soil	30.17	2	1	0.06629		.4				8270	Wouldn't Concentrate
239410-021		Soil	30.07	1	1	0.03326		.4				8270	
239416-001		Soil	30.23	1	1	0.03308		.4				(rebatched)	
239425-003		Soil	30.3	1	1	0.033		.4				8270	
239425-006		Soil	30.3	1	1	0.033		.4				8270	
QC655181	BLANK	Soil	30.03	1	1	0.0333		.4				8270	
QC655182	LCS	Soil	30.08	1	1	0.03324		.4	1			8270	
QC655183	MS	Soil	30.09	1	1	0.03323		.4	1			8270	
QC655184	MSD	Soil	30.42	1	1	0.03287		.4	1			8270	

Comment 1: Heavy Sediment; Wouldn't Concentrate

LLH 09/10/12 : Matrix spikes QC655183,QC655184 (batch 190266) were not reported because the parent sample required a dilution that would have diluted out the spikes.

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

BNA Soil Prep Log

Curtis & Tompkins, Ltd.

Page: 75 **BK 3326**

LIMS Batch No: 190266
LIMS Analysis 8270
Date Extracted: 9/7/12

Extraction Method:
☒ EPA 3550b Sonication
☐ Other _____

Cleanup Method (if necessary):
☐ EPA 3640a GPC
☐ Other _____

	Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Cleanup (x if needed)	Comments
	239403-001	A	30.15	☒1.0 ☐		
	2		30.35	☒1.0 ☐		
	3		30.24	☒1.0 ☐		MSS
	4		30.14	☒1.0 ☐		
5	239404-005		30.31	☒1.0 ☐		
	6	↓	30.06	☒1.0 ☐		
	8	B	30.08	☐1.0 ☒2.0		Wouldn't conc.
	9		30.00	☒1.0 ☐		
	10	↓	30.12	☐1.0 ☒2.0		Heavy Sediment, Wouldn't conc.
10	11	A	30.41	☐1.0 ☒2.0		↓ ↓
	239410-011	B	30.00	☒1.0 ☐		
	13		30.30	☒1.0 ☐		
	14	↓	30.21	☒1.0 ☐		
	15	A	30.06	☒1.0 ☐		
15	16	↓	30.01	☒1.0 ☐		
	20	F	30.17	☐1.0 ☒2.0		Wouldn't Conc.
	21	B	30.07	☒1.0 ☐		
	239416-001		30.23	☒1.0 ☐		
	239425-003	↓	30.30	☒1.0 ☐		
20	6	↓	30.30	☒1.0 ☐		
	MB QC655181	N/A	30.03	☒1.0 ☐		
	LCS 2		30.08	☒1.0 ☐		
	MS 3		30.09	☒1.0 ☐		
	MSD 4	↓	30.42	☒1.0 ☐		
			TFB 9/10/12			

	Mfg & Lot # / LIMS # / Time	Date/Initials
Baked, CH_2Cl_2-rinsed granular Na_2SO_4 used for QC & to dry samples	EMVB15H	ICK 9/7/12
0.4 mL of surrogate solution was added to all samples	S20014A	
1.0 mL of matrix spiking solution was added to all spikes	S20576C	
≥100mL 1:1 CH_2Cl_2:Acetone was added to all: CH_2Cl_2	EMS2160	
Acetone	EMS2038	
Solvent was added at (time)	11:15	
☒ sonicated 3 times w/ ≥100mL ☐ soxhlet extractors on at:	✓	
soxhlets off at:	N/A	
Extracts filtered through baked, CH_2Cl_2-rinsed powdered Na_2SO_4	EM30416024	
Concentrated to final volume at temperature (degrees C)	70	
Relinquished to BNA department	✓	

9/7/12
Extraction Chemist / Date

Continued from page _____
Continued on page 1

TFB 9/10/12
Reviewed by / Date

TITLE PROJECT DATE

Continued from page

Sample ID	Weight(g)	Analysis	Batch #	Comments
239403-001A	30.15	8270	1902666	
2	30.35			
3	30.24			MSS
4	30.14			
239404-005	30.31			
6	30.06			
8B	30.08			
9	30.00			
10	30.12			
11A	30.41			
239410-011B	30.00			Rocky
13	30.30			
14	30.21			Rocky
15A	30.06			
16	30.01			
20F	30.17			
21B	30.07			
239416-001B	30.23			Wet Rocky
239425-003B	30.30			
6	30.30			
MB	30.03			EMVB15H
LCS	30.08			
MS	30.09			239403-003A
MSD	30.42			

ICK 9/7/12

Continued to page

SIGNATURE DATE

DISCLOSED TO AND UNDERSTOOD BY DATE

PROPRIETARY INFORMATION

Dilutions for 239404 MSBNA Soil
Curtis & Tompkins Laboratories

Type	Sample ID	IDFs
SAMPLE	239404-006	3X
SAMPLE	239404-008	10X
SAMPLE	239404-009	2X
SAMPLE	239404-010	10X
SAMPLE	239404-011	10X

Case Narrative Addendum: Manual Integrations for 239404 MSBNA (Soil)

For CCV (MSBNA05 xia02):
Aniline: Picked or reassigned peak.
4-Nitroaniline: Corrected automatically drawn baseline.

For CCV (MSBNA06 yi702):
Aniline: Picked or reassigned peak.

For SAMPLE 239404-005 (MSBNA06 yi711):
Benzo(a)anthracene: Corrected automatically drawn baseline.
Benzo(b)fluoranthene: Corrected automatically drawn baseline.
Benzo(k)fluoranthene: Picked or reassigned peak.
Dibenz(a,h)anthracene: Corrected automatically drawn baseline.

For SAMPLE 239404-009 (MSBNA05 xia04):
Benzo(a)anthracene: Corrected automatically drawn baseline.
Benzo(a)pyrene: Corrected automatically drawn baseline.

For SAMPLE 239404-010 (MSBNA05 xia06):
bis(2-Ethylhexyl)phthalate: Picked or reassigned peak.
Benzo(a)anthracene: Corrected automatically drawn baseline.
Benzo(a)pyrene: Picked or reassigned peak.
Benzo(b)fluoranthene: Separated from coeluting peak.
Benzo(k)fluoranthene: Separated from coeluting peak.
Dibenz(a,h)anthracene: Picked or reassigned peak.

For SAMPLE 239404-011 (MSBNA05 xia07):
Benzo(a)anthracene: Corrected automatically drawn baseline.
Benzo(a)pyrene: Picked or reassigned peak.
Benzo(b)fluoranthene: Separated from coeluting peak.
Benzo(k)fluoranthene: Separated from coeluting peak.

For BLANK QC655181 (MSBNA06 yi703):
1,4-Dichlorobenzene-d4: Picked or reassigned peak.

For LCS QC655182 (MSBNA06 yi704):
Aniline: Picked or reassigned peak.
Benzoic acid: Corrected automatically drawn baseline.
4-Chloroaniline: Corrected automatically drawn baseline.
2,4-Dinitrotoluene: Corrected automatically drawn baseline.
N-Nitroso-di-n-propylamine: Combined split peak.
2,4,5-Trichlorophenol: Corrected automatically drawn baseline.

For Calibration MSBNA05 (542247126001):
Resorcinol: Combined split peak in ICAL9 (xfj10).
Acenaphthene: Corrected automatically drawn baseline in ICAL7 (xfj08).
Aniline: Picked or reassigned peak in all levels.
Anthracene: Corrected automatically drawn baseline in ICAL9 (xfj10).
bis(2-Chloroisopropyl) ether: Corrected automatically drawn baseline in multiple levels.
Benzoic acid: Corrected automatically drawn baseline in ICAL7 (xfj09).
Benzidine: Corrected automatically drawn baseline in multiple levels.
Benzo(k)fluoranthene: Picked or reassigned peak in ICAL9 (xfj10).
Chrysene: Corrected automatically drawn baseline in ICAL7 (xfj09).
4-Chloroaniline: Corrected automatically drawn baseline in multiple levels.

4-Chloroaniline: Picked or reassigned peak in multiple levels.
Carbazole: Corrected automatically drawn baseline in multiple levels.
Carbazole: Picked or reassigned peak in ICAL9 (xfj10).
2,4-Dichlorophenol: Corrected automatically drawn baseline in ICAL7 (xfj09).
4-Methylphenol: Combined split peak in multiple levels.
3-Nitroaniline: Picked or reassigned peak in multiple levels.
3-Nitroaniline: Corrected automatically drawn baseline in ICAL7 (xfj08).
2-Nitrophenol: Corrected automatically drawn baseline in multiple levels.
4-Nitrophenol: Picked or reassigned peak in ICAL9 (xfj10).
Phenanthrene: Corrected automatically drawn baseline in ICAL1 (xfj02).
2,4,5-Trichlorophenol: Corrected automatically drawn baseline in multiple levels.
2,4,5-Trichlorophenol: Picked or reassigned peak in multiple levels.

For ICV ICAL (MSBNA05 xfj11):
Aniline: Picked or reassigned peak.
Chrysene: Corrected automatically drawn baseline.
3-Nitroaniline: Picked or reassigned peak.

For Calibration MSBNA06 (552359297001):
Resorcinol: Combined split peak in ICAL (yi510).
Aniline: Picked or reassigned peak in multiple levels.
Aniline: Corrected automatically drawn baseline in multiple levels.
Anthracene: Corrected automatically drawn baseline in ICAL (yi509).
bis(2-Chloroethyl)ether: Corrected automatically drawn baseline in multiple levels.
Benzo(a)anthracene: Corrected automatically drawn baseline in ICAL (yi505).
Benzoic acid: Corrected automatically drawn baseline in multiple levels.
Benzo(b)fluoranthene: Corrected automatically drawn baseline in ICAL (yi509).
Benzo(k)fluoranthene: Picked or reassigned peak in multiple levels.
4-Chloroaniline: Corrected automatically drawn baseline in multiple levels.
Dibenz(a,h)anthracene: Corrected automatically drawn baseline in multiple levels.
1,4-Dichlorobenzene-d4: Picked or reassigned peak in multiple levels.
2,4-Dichlorophenol: Corrected automatically drawn baseline in multiple levels.
2,4-Dimethylphenol: Picked or reassigned peak in multiple levels.
2,4-Dinitrophenol: Picked or reassigned peak in ICAL (yi502).
Hexachlorobutadiene: Corrected automatically drawn baseline in ICAL (yi510).
Indeno(1,2,3-cd)pyrene: Combined split peak in multiple levels.
Isophorone: Picked or reassigned peak in multiple levels.
4-Methylphenol: Combined split peak in multiple levels.
Naphthalene: Corrected automatically drawn baseline in ICAL (yi510).
N-Nitrosodimethylamine: Corrected automatically drawn baseline in multiple levels.
N-Nitroso-di-n-propylamine: Picked or reassigned peak in multiple levels.
N-Nitroso-di-n-propylamine: Corrected automatically drawn baseline in ICAL (yi510).
4-Nitroaniline: Corrected automatically drawn baseline in ICAL (yi502).
Nitrobenzene-d5: Corrected automatically drawn baseline in ICAL (yi508).
2-Nitrophenol: Corrected automatically drawn baseline in multiple levels.
2,4,5-Trichlorophenol: Corrected automatically drawn baseline in multiple levels.

For ICV (MSBNA06 yi511):
Aniline: Picked or reassigned peak.
Benzo(k)fluoranthene: Corrected automatically drawn baseline.

Sample Raw Data

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA06	Lab ID	: 239404-005	Client ID	: EX13B010A.3
Seqnum	: 552362420011.1	Matrix	: Soil	Acct	: ARCSF (JG)
File	: yi711	Batch	: 190266	Time	: 08-SEP-2012 00:31
Cal	: 552359297001	Caldate	: 05-SEP-2012		
IDF	: 1.0	Raw Units	: ug/mL	Units	: ug/Kg

30.31 g --> 1.0 ml = 0.03299 ml/g PDF

Analyte	Raw	Result	RL	Blank	Flags
Naphthalene	0.4013	13 J	66		
3,3'-Dichlorobenzidine	0.1271	ND	660		
Benzo(a)anthracene	4.065	130	66		m u
bis(2-Ethylhexyl)phthalate	0.3090	ND	330		
Benzo(b)fluoranthene	4.176	140	66		m u
Benzo(k)fluoranthene	1.466	48 J	66		m
Benzo(a)pyrene	2.730	90	66		u
Indeno(1,2,3-cd)pyrene	0.9579	32 J	66		
Dibenz(a,h)anthracene	0.4489	15 J	66		m

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	26.49	1320	874.0	66	48-120	u
2-Fluorobiphenyl	27.73	1320	914.9	69	50-120	u
Terphenyl-d14	25.53	1320	842.4	64	40-120	u

ISTD (CCV yi702)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	743711	833914	12.13	7.59	7.59	0.00
Acenaphthene-d10	427044	462247	8.24	9.74	9.74	0.00
Chrysene-d12	784348	744848	-5.04	15.00	15.00	0.01
Perylene-d12	923802	478997	-48.15	17.89	17.90	0.02

09/08/12 : AMBER.

LLH 09/10/12 : High chromatographic background.

LLH 09/10/12 [Benzo(a)anthracene]: Corrected automatically drawn baseline.

LLH 09/10/12 [Benzo(b)fluoranthene]: Corrected automatically drawn baseline.

LLH 09/10/12 [Benzo(k)fluoranthene]: Picked or reassigned peak.

LLH 09/10/12 : Corrected automatically drawn baseline for Chrysene.

LLH 09/12/12 [Dibenz(a,h)anthracene]: Corrected automatically drawn baseline.

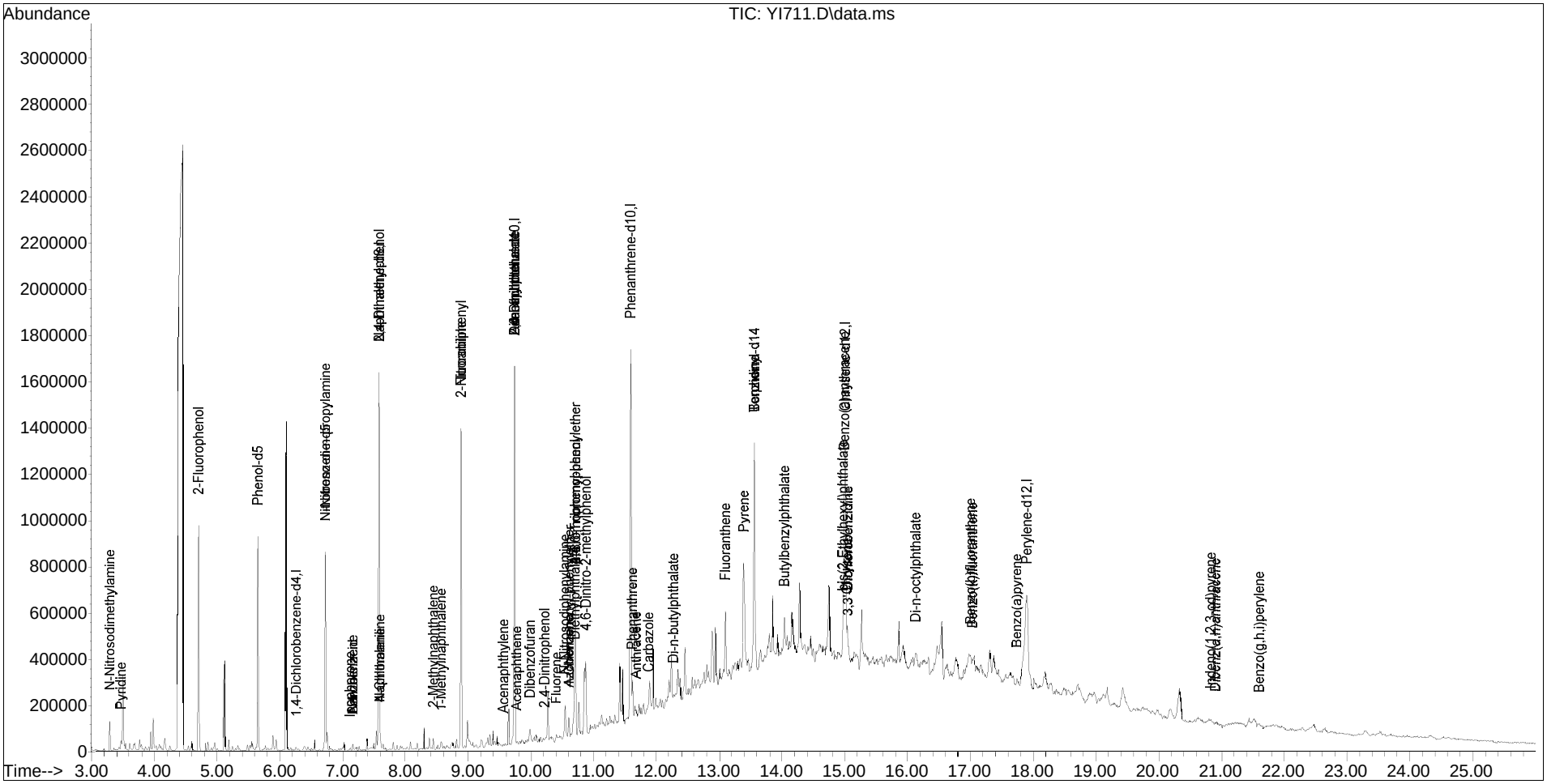
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

m=manual integration u=use

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI711.D
Acq On : 8 Sep 2012 12:31 am
Operator :
Sample : S,239404-005
Misc : 190266,1, //AMBER.
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 15:23:51 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI711.D
Acq On : 8 Sep 2012 12:31 am
Operator :
Sample : S,239404-005
Misc : 190266,1, //AMBER.
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 15:23:51 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.272	152	1149	40.0000	ug/mL	0.18
19) Naphthalene-d8	7.585	136	833914	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.739	164	462247	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	821011	40.0000	ug/mL	0.00
70) Chrysene-d12	15.000	240	744848	40.0000	ug/mL	0.00
79) Perylene-d12	17.900	264	478997	40.0000	ug/mL	0.01
Target Compounds						Qvalue
2) Pyridine	3.468	79	1535	29.2389	ug/mL	# 19
3) N-Nitrosodimethylamine	3.285	42	2204	54.7576	ug/mL	# 22
4) 2-Fluorophenol	4.709	112	227236	4601.2058	ug/mL	84
5) Phenol-d5	5.651	99	292278	5068.7235	ug/mL	80
6) Phenol	5.661	94	1989	38.8866	ug/mL	# 1
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	0.000	108	0	N.D.		
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.724	70	31987	1402.6867	ug/mL	92
18) Hexachloroethane	0.000	117	0	N.D.		
20) Nitrobenzene-d5	6.724	82	227685	26.4917	ug/mL	81
21) Nitrobenzene	7.166	77	1168	0.1609	ug/mL	# 70
22) Isophorone	7.118	82	1018	0.0716	ug/mL	58
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	7.589	107	2176	0.3269	ug/mL	# 21
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	7.171	105	1601	0.2910	ug/mL	85
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	7.609	128	8202	0.4013	ug/mL	96
30) 4-Chloroaniline	7.609	127	1110	0.1300	ug/mL	# 49
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	8.441	142	12197	0.7835	ug/mL	98
35) 1-Methylnaphthalene	8.566	142	7520	0.5024	ug/mL	95
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI711.D
Acq On : 8 Sep 2012 12:31 am
Operator :
Sample : S,239404-005
Misc : 190266,1, //AMBER.
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 15:23:51 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.888	172	496785	27.7310	ug/mL	100
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	8.888	65	1339	0.2725	ug/mL #	20
43) Dimethylphthalate	9.739	163	74900	4.7535	ug/mL #	1
44) 2,6-Dinitrotoluene	9.739	165	59794	17.0651	ug/mL #	15
45) Acenaphthylene	9.556	152	1995	0.0890	ug/mL	71
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.773	154	1130	0.0883	ug/mL #	55
48) 2,4-Dinitrophenol	10.215	184	2077	13.3710	ug/mL #	1
49) 4-Nitrophenol	0.000	109	0	N.D.		
50) Dibenzofuran	9.984	168	13170	0.7442	ug/mL	82
51) 2,4-Dinitrotoluene	9.739	165	59794	13.4054	ug/mL #	14
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	10.691	149	1004	0.0633	ug/mL #	75
54) 4-Chlorophenyl-phenylether	10.609	204	1720	0.2128	ug/mL #	63
55) Fluorene	10.412	166	3951	0.2603	ug/mL #	78
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	10.715	330	77378	26.9814	ug/mL #	78
59) 4,6-Dinitro-2-methylphenol	10.864	198	1413	0.6352	ug/mL #	79
60) N-Nitrosodiphenylamine	10.552	169	1332	0.1332	ug/mL #	60
61) Azobenzene	10.609	77	1734	0.1378	ug/mL #	1
62) 4-Bromophenyl-phenylether	10.710	248	4400	0.8788	ug/mL #	1
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	11.614	178	59692	2.9997	ug/mL	96
66) Anthracene	11.672	178	10962	0.5416	ug/mL	88
67) Carbazole	11.864	167	5523	0.3241	ug/mL	62
68) Di-n-butylphthalate	12.278	149	3123	0.1216	ug/mL #	59
69) Fluoranthene	13.096	202	151882	5.6691	ug/mL	96
71) Benzidine	13.562	184	5435	0.5286	ug/mL #	1
72) Pyrene	13.384	202	222682	8.5699	ug/mL	91
73) Terphenyl-d14	13.562	244	444304	25.5335	ug/mL	98
74) Butylbenzylphthalate	14.038	149	1346	0.1088	ug/mL #	1
75) 3,3'-Dichlorobenzidine	15.053	252	1206	0.1271	ug/mL #	9
76) Benzo(a)anthracene	14.981	228	86915m	4.0647	ug/mL	
77) bis(2-Ethylhexyl)phthalate	14.957	149	4599	0.3090	ug/mL	99
78) Chrysene	15.034	228	92920m	4.6957	ug/mL	
80) Di-n-octylphthalate	16.135	149	4444	0.2613	ug/mL #	1
81) Benzo(b)fluoranthene	16.996	252	57936m	4.1761	ug/mL	
82) Benzo(k)fluoranthene	17.029	252	18716m	1.4664	ug/mL	
83) Benzo(a)pyrene	17.746	252	33084	2.7297	ug/mL	83
84) Indeno(1,2,3-cd)pyrene	20.828	276	13059	0.9579	ug/mL	97

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI711.D
Acq On : 8 Sep 2012 12:31 am
Operator :
Sample : S,239404-005
Misc : 190266,1, //AMBER.
ALS Vial : 11 Sample Multiplier: 1

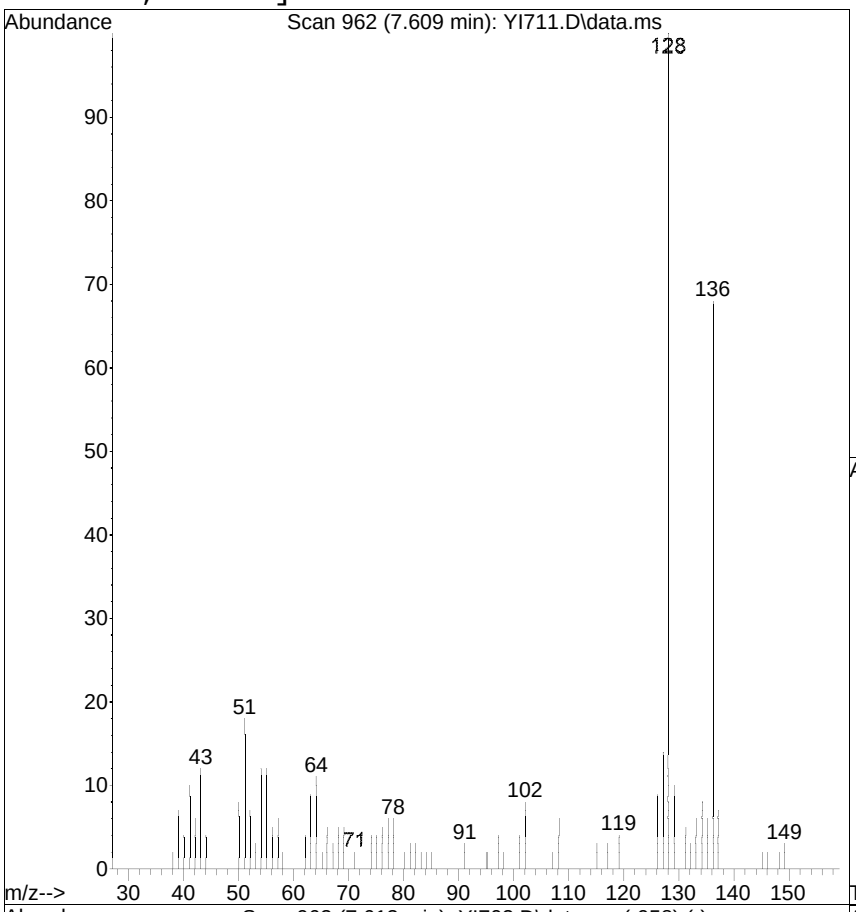
Quant Time: Sep 10 15:23:51 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.905	278	4878m	0.4489	ug/mL	
86) Benzo(g,h,i)perylene	21.607	276	12928	1.1408	ug/mL	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Naphthalene; 13 J]

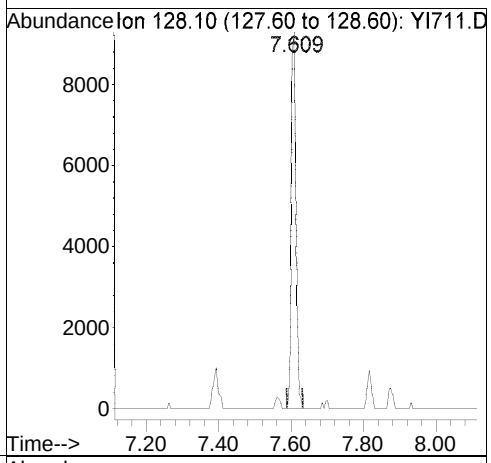
Raw



#29
Naphthalene
Concen: 0.4013 ug/mL
RT: 7.609 min Scan# 962
Delta R.T. -0.005 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:128 Resp: 8202

Ion	Ratio	Lower	Upper
128	100		
129	10.4	0.0	30.0
127	14.4	0.0	32.0



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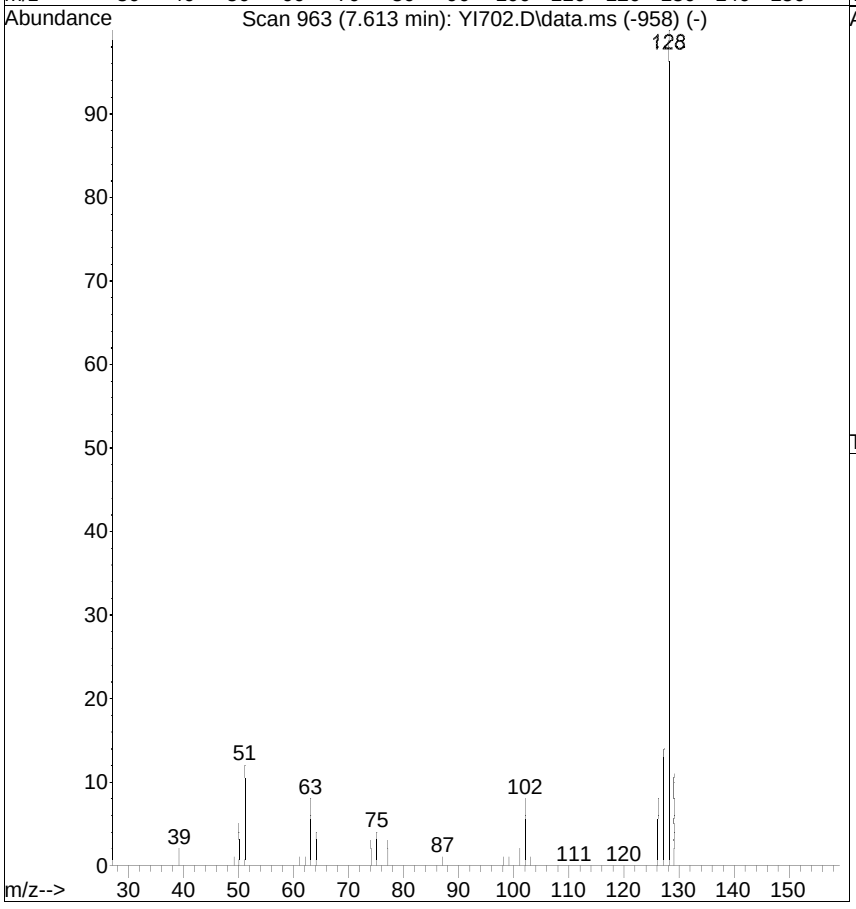
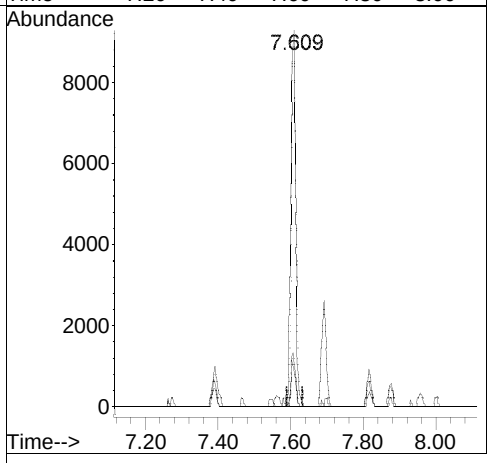
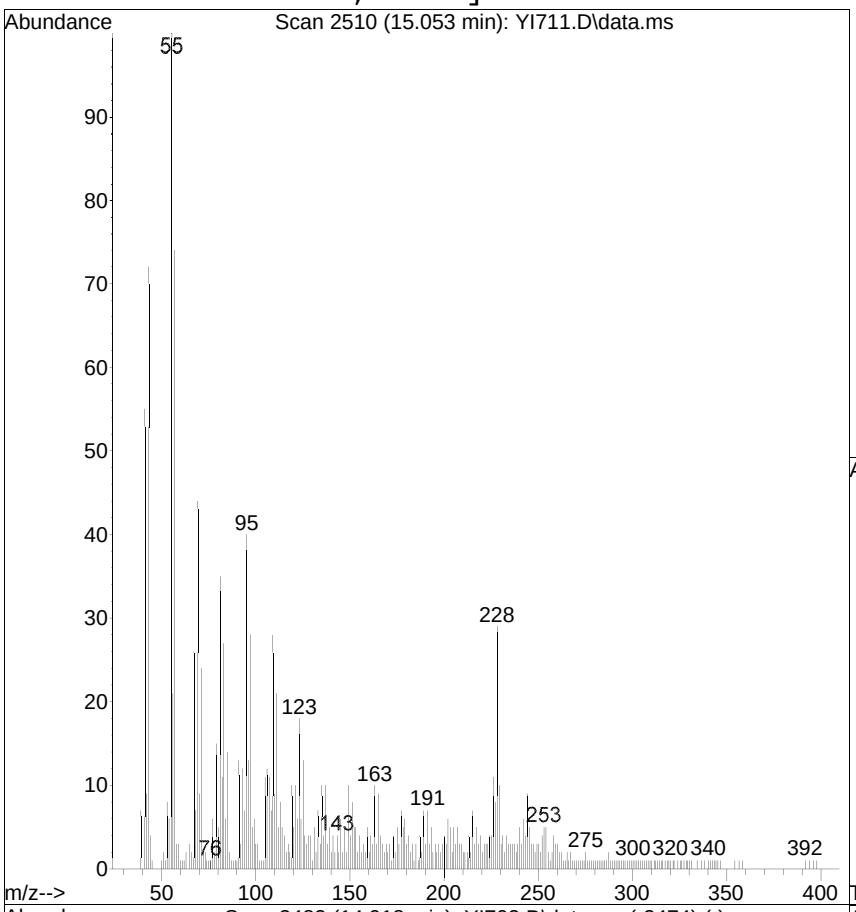




[3,3'-Dichlorobenzidine; <RL]

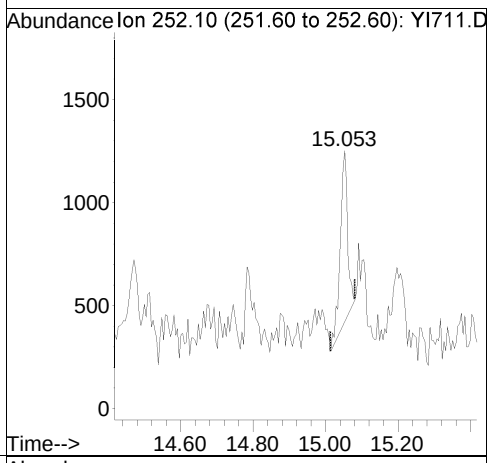
Raw



#75
3,3'-Dichlorobenzidine
Concen: 0.1271 ug/mL
RT: 15.053 min Scan# 2510
Delta R.T. 0.135 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:252 Resp: 1206

Ion	Ratio	Lower	Upper
252	100		
254	120.9	44.0	84.0#
126	83.9	0.0	34.0#



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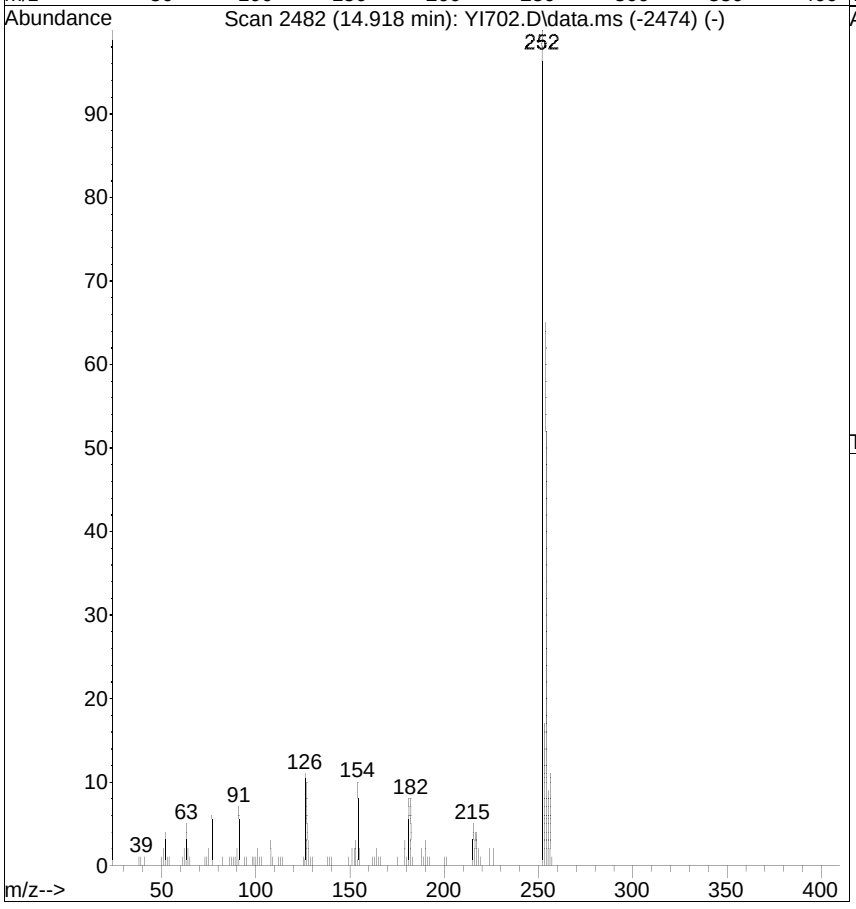
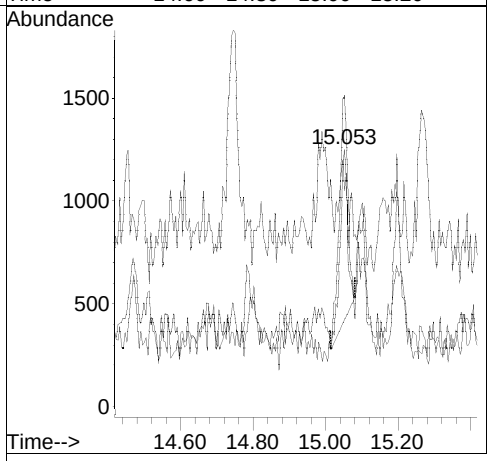
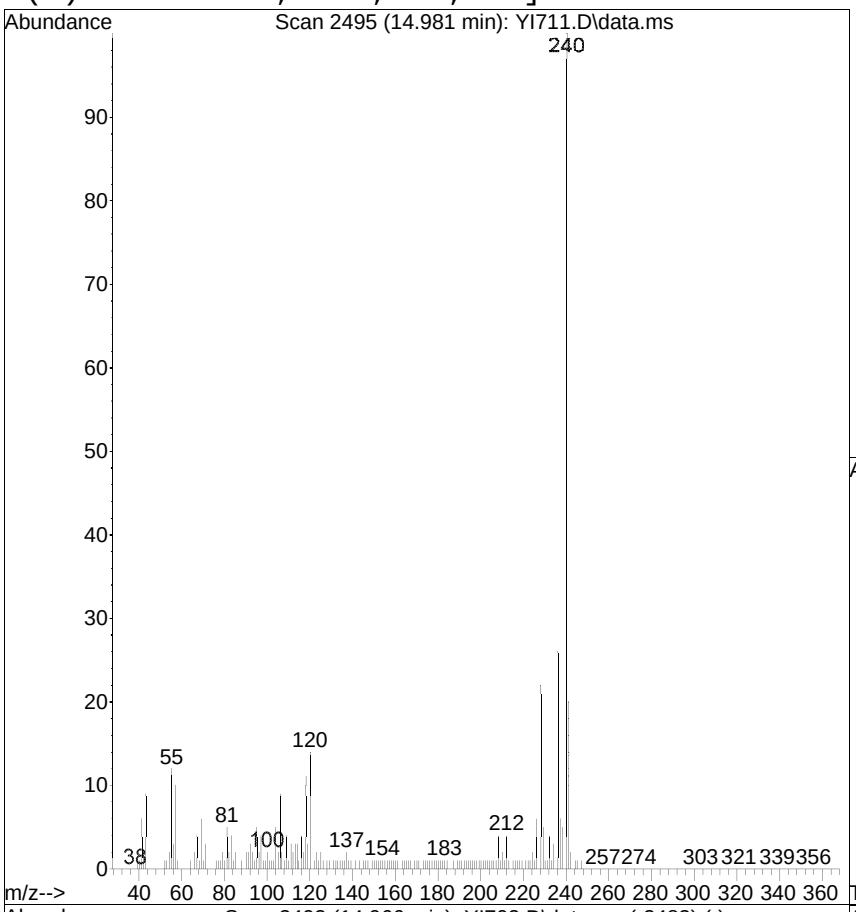




[Benzo(a)anthracene; 130; MI; u]

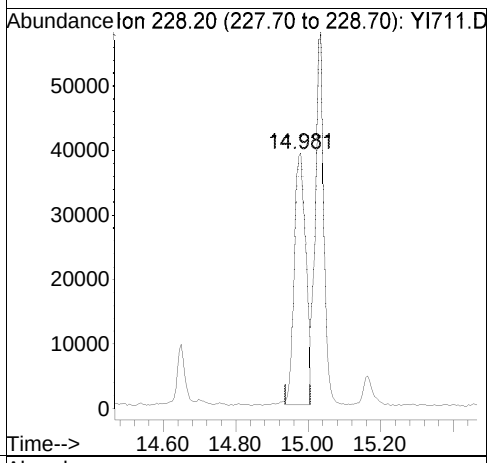
Raw



#76
Benzo(a)anthracene
Concen: 4.0647 ug/mL m
RT: 14.981 min Scan# 2495
Delta R.T. 0.015 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:228 Resp: 86915

Ion	Ratio	Lower	Upper
228	100		
229	16.0	0.0	40.0
226	20.6	8.0	48.0



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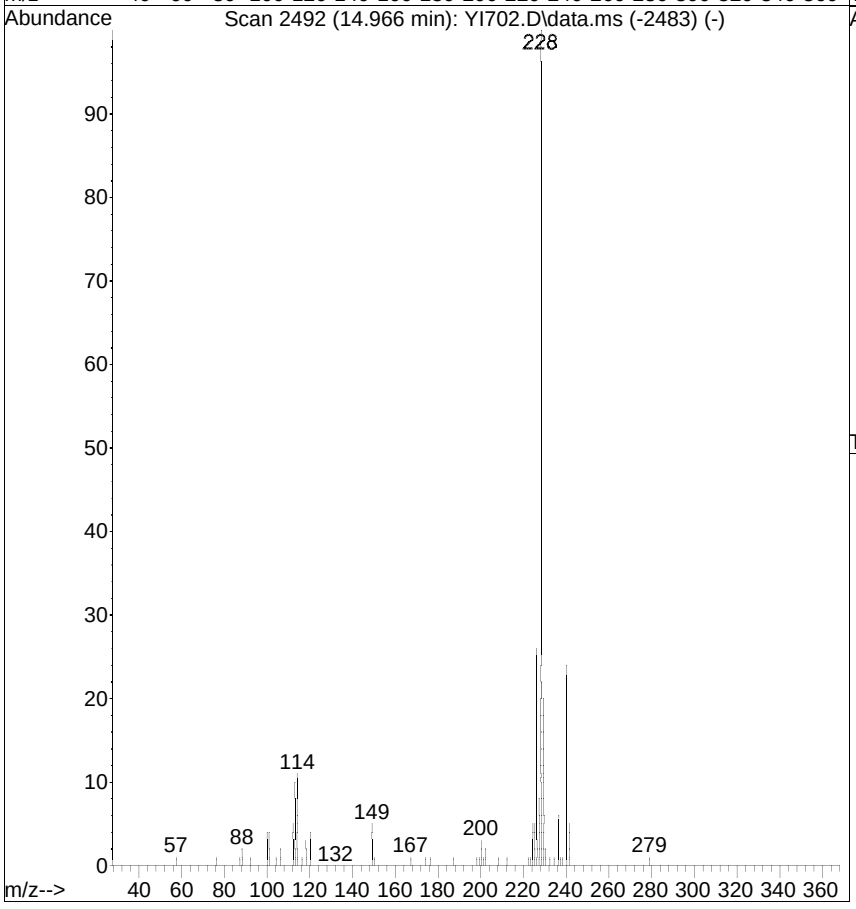
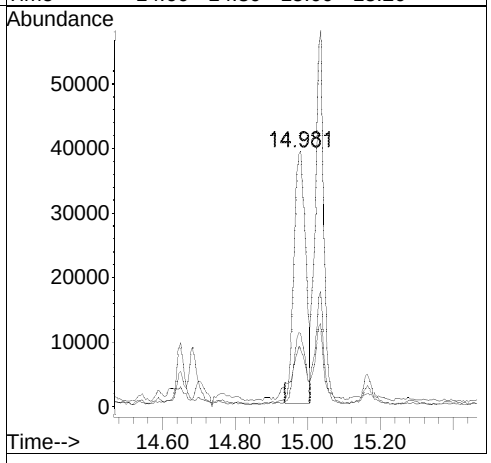
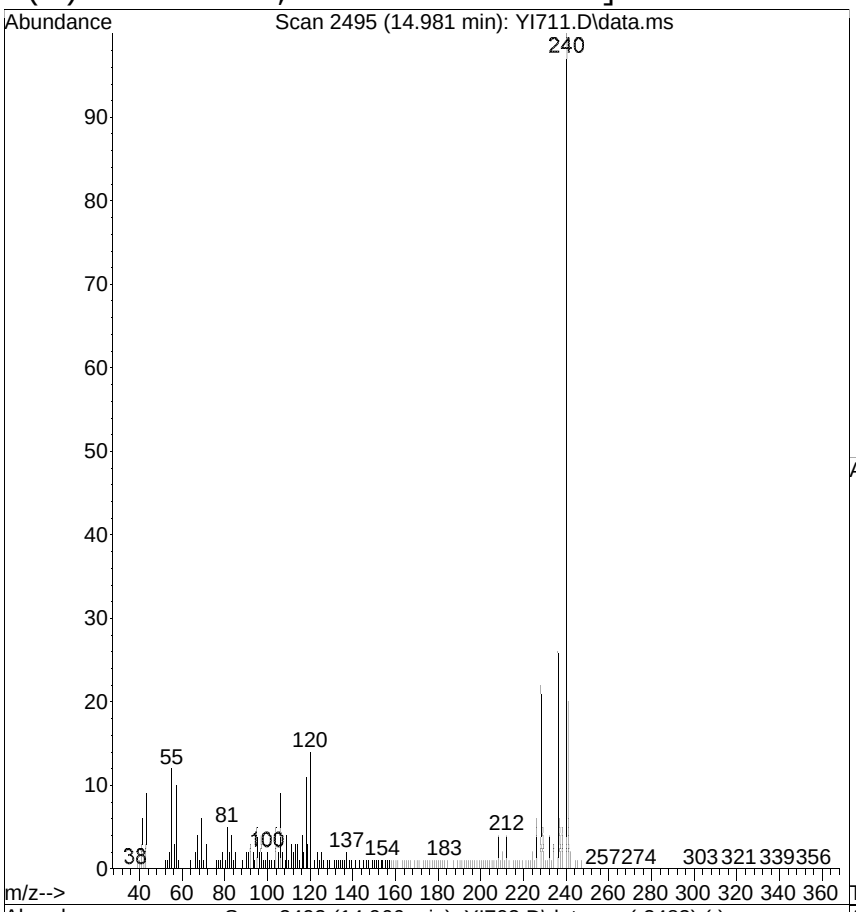




[Benzo(a)anthracene; before version]

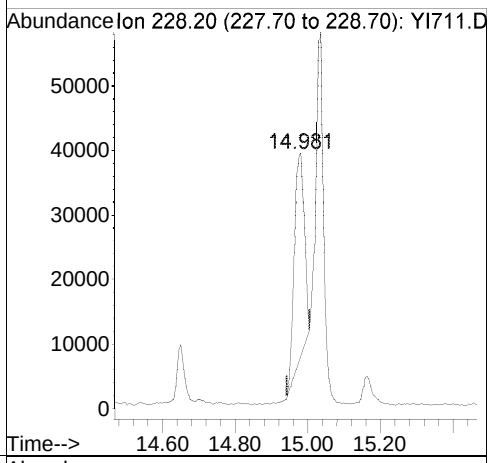
Raw



#76
Benzo(a)anthracene
Concen: 2.9270 ug/mL
RT: 14.981 min Scan# 2495
Delta R.T. 0.015 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:228 Resp: 62588

Ion	Ratio	Lower	Upper
228	100		
229	22.2	0.0	40.0
226	28.6	8.0	48.0



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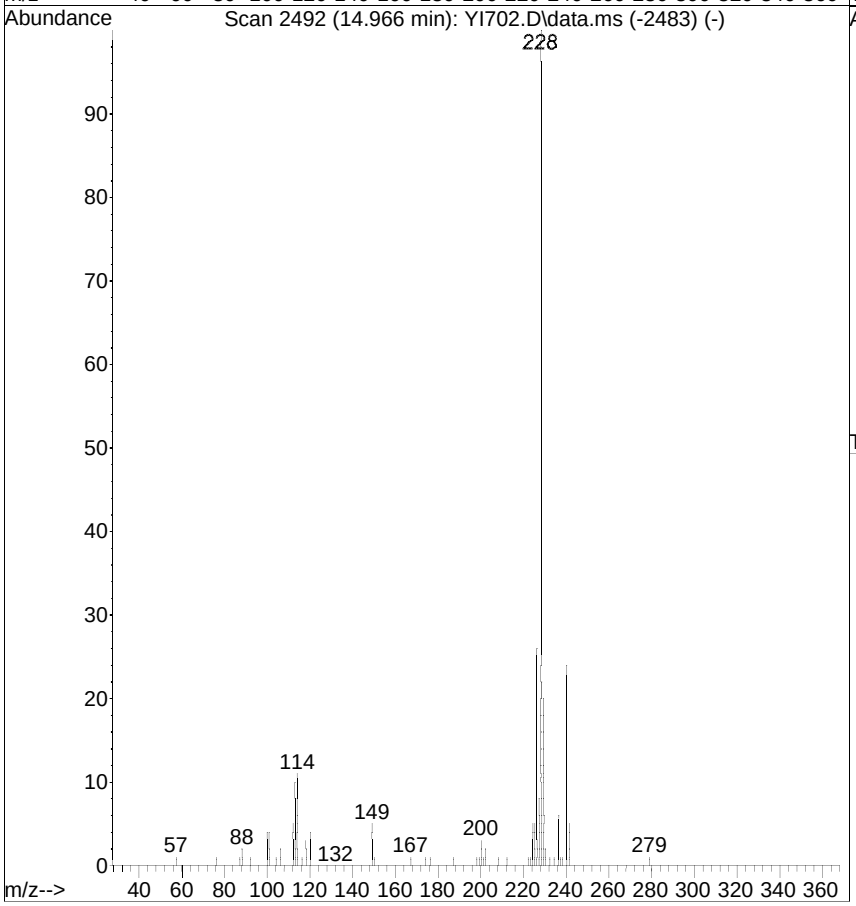
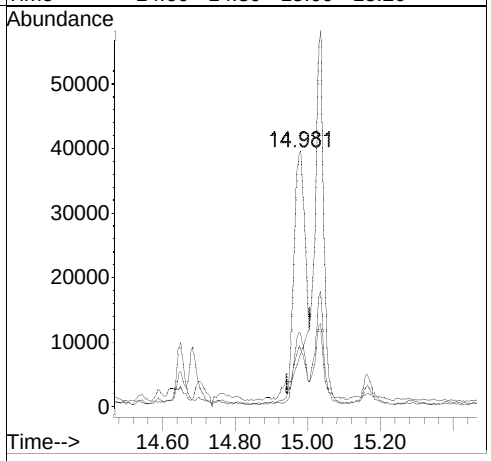
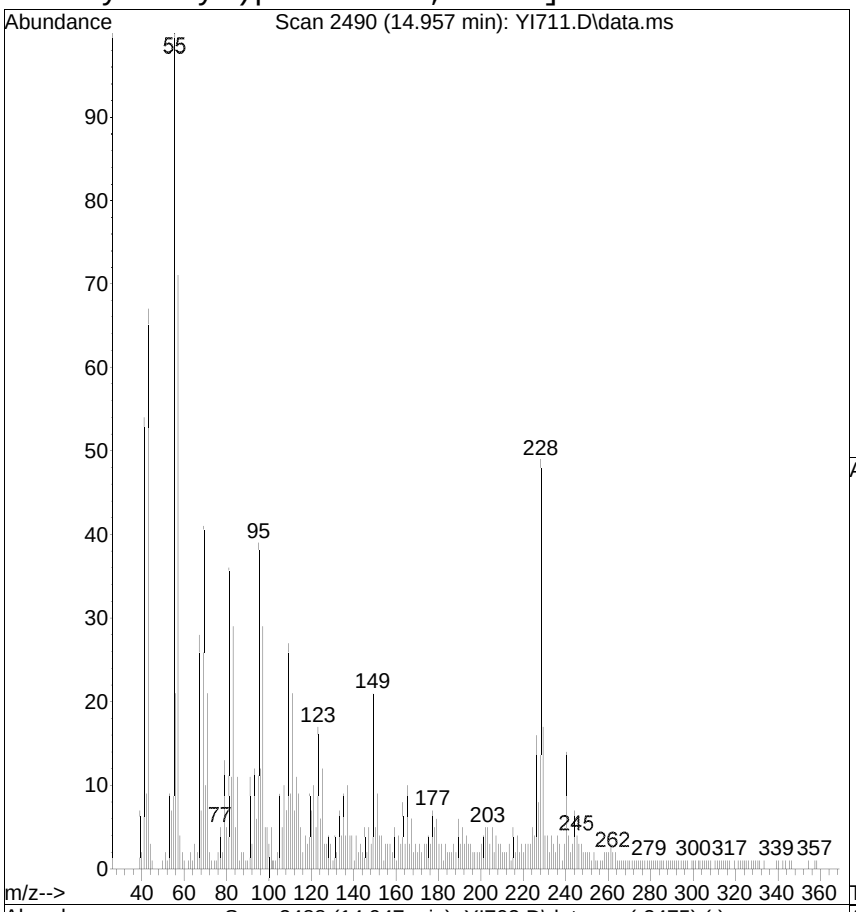




[bis(2-Ethylhexyl)phthalate; <RL]

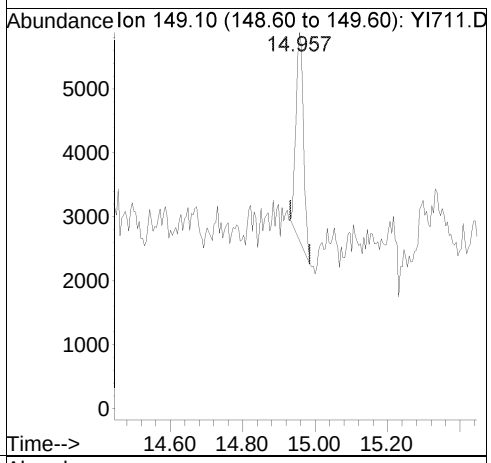
Raw



#77
bis(2-Ethylhexyl)phthalate
Concen: 0.3090 ug/mL
RT: 14.957 min Scan# 2490
Delta R.T. 0.010 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:149 Resp: 4599

Ion	Ratio	Lower	Upper
149	100		
167	28.8	9.0	49.0
279	6.4	0.0	27.0



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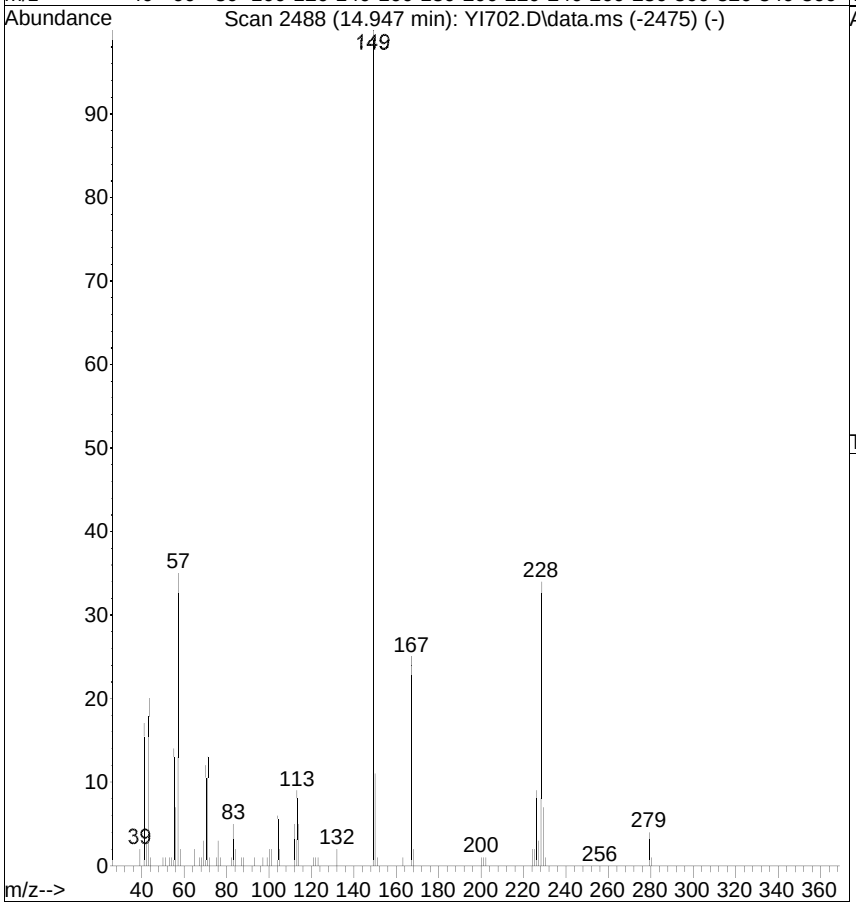
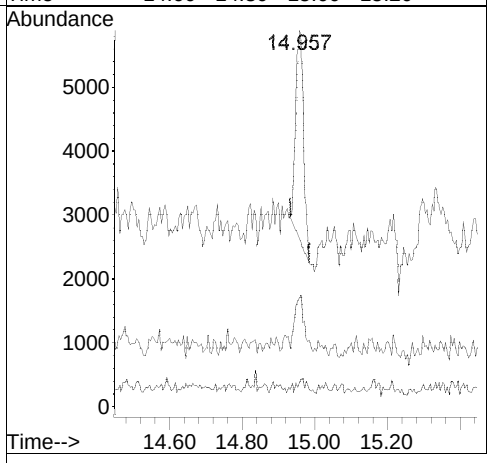
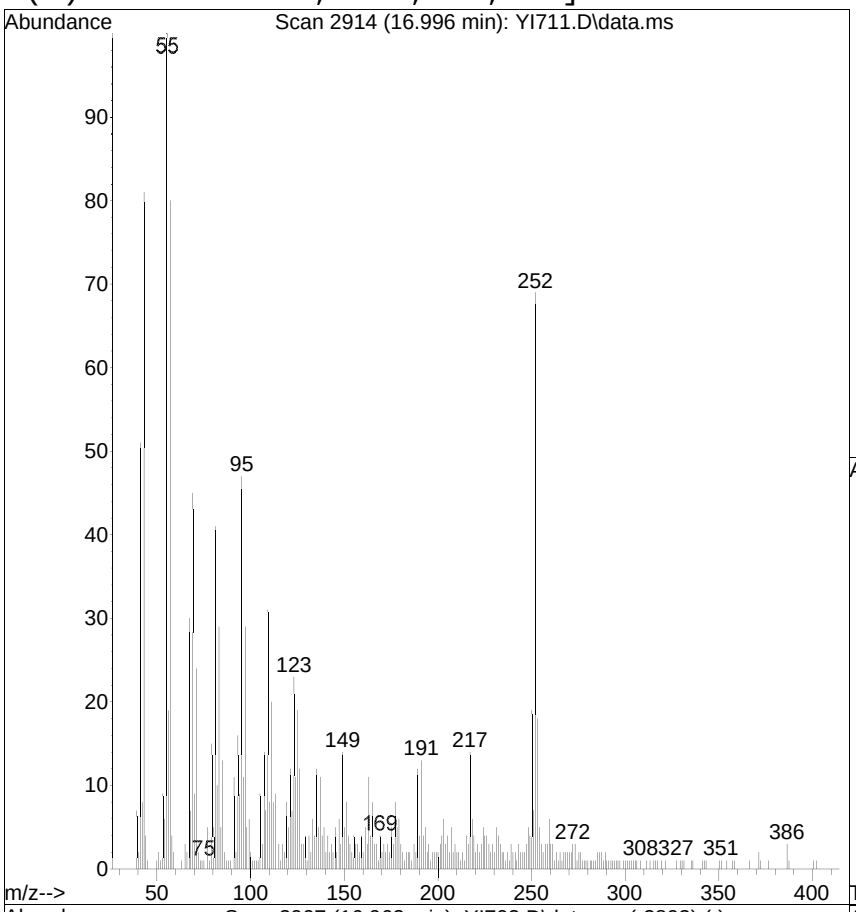




[Benzo(b)fluoranthene; 140; MI; u]

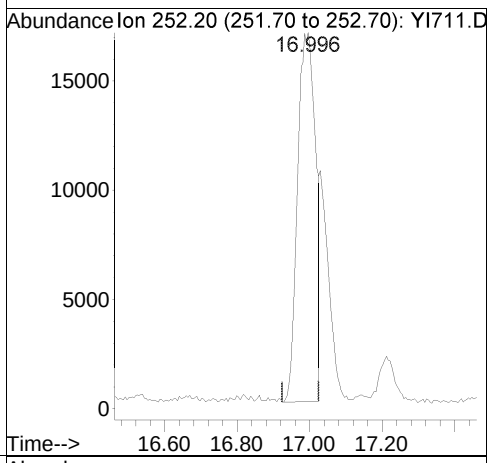
Raw



#81
Benzo(b)fluoranthene
Concen: 4.1761 ug/mL m
RT: 16.996 min Scan# 2914
Delta R.T. 0.034 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:252 Resp: 57936

Ion	Ratio	Lower	Upper
252	100		
253	14.1	2.7	42.7
125	13.3	0.0	35.2



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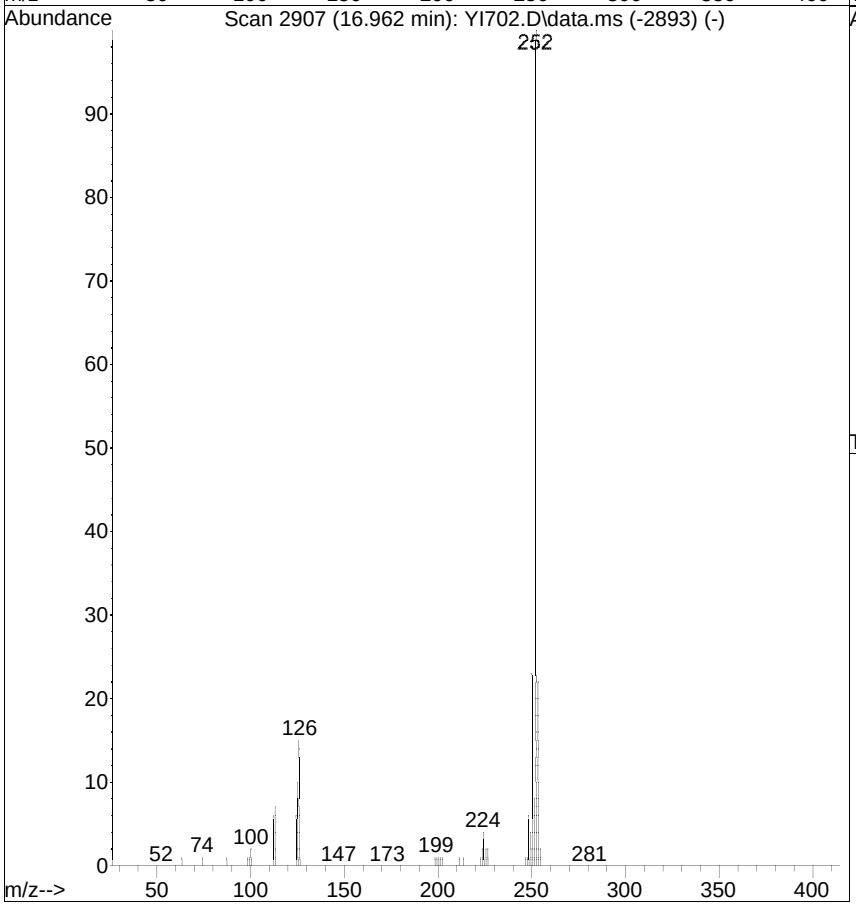
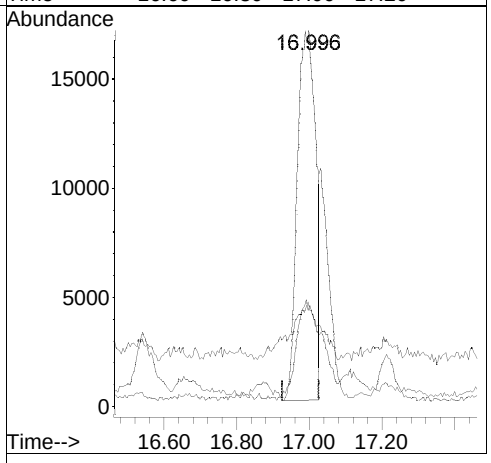
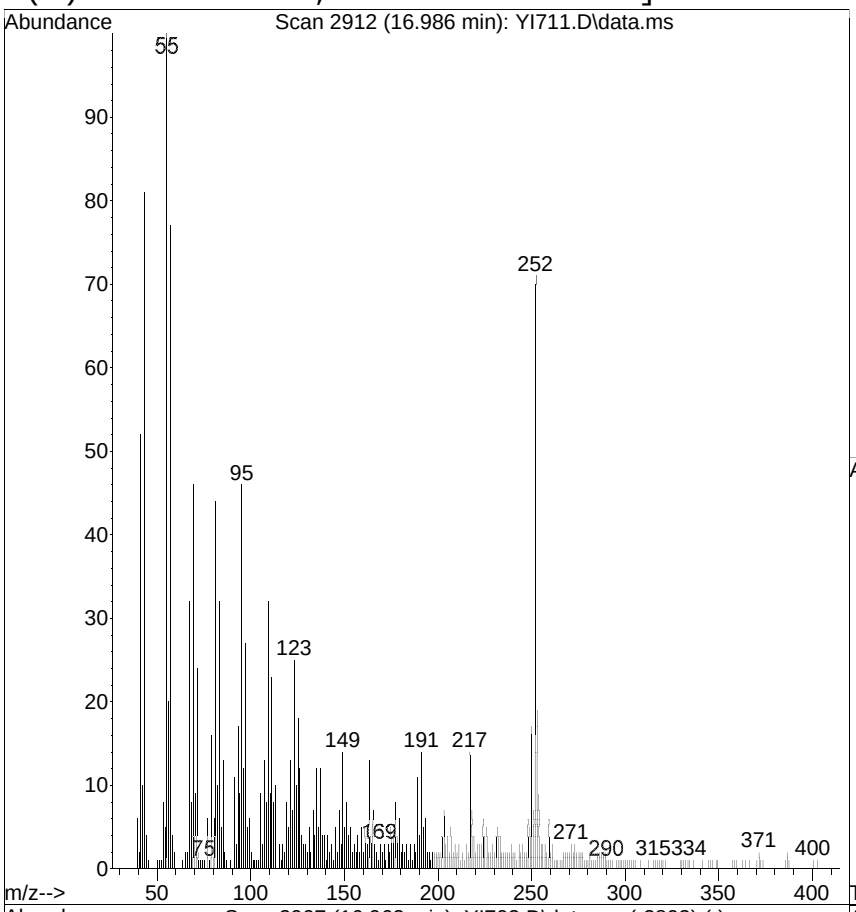




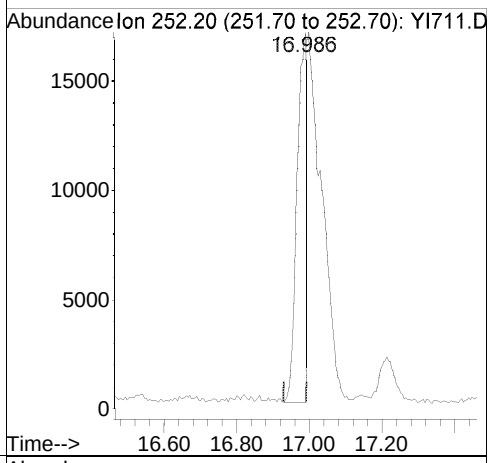
Raw



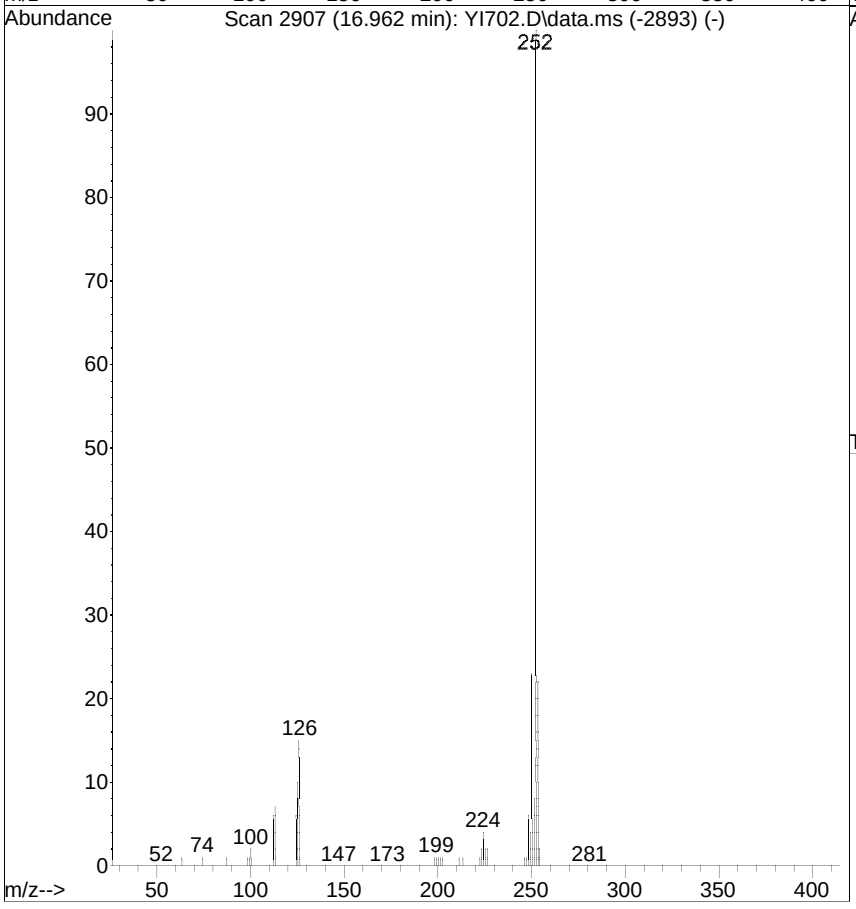
#81
Benzo(b)fluoranthene
Concen: 2.2095 ug/mL
RT: 16.986 min Scan# 2912
Delta R.T. 0.024 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

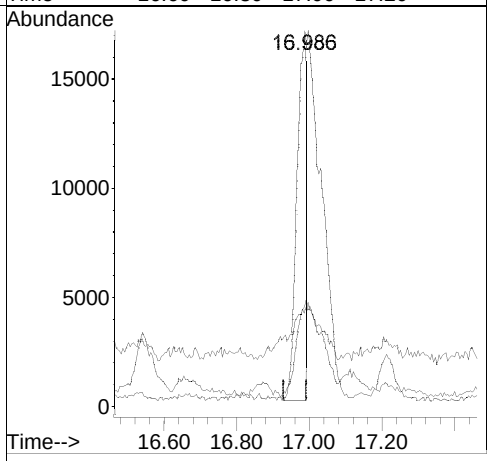
Tgt Ion:252 Resp: 30653

Ion	Ratio	Lower	Upper
252	100		
253	26.7	2.7	42.7
125	25.1	0.0	35.2



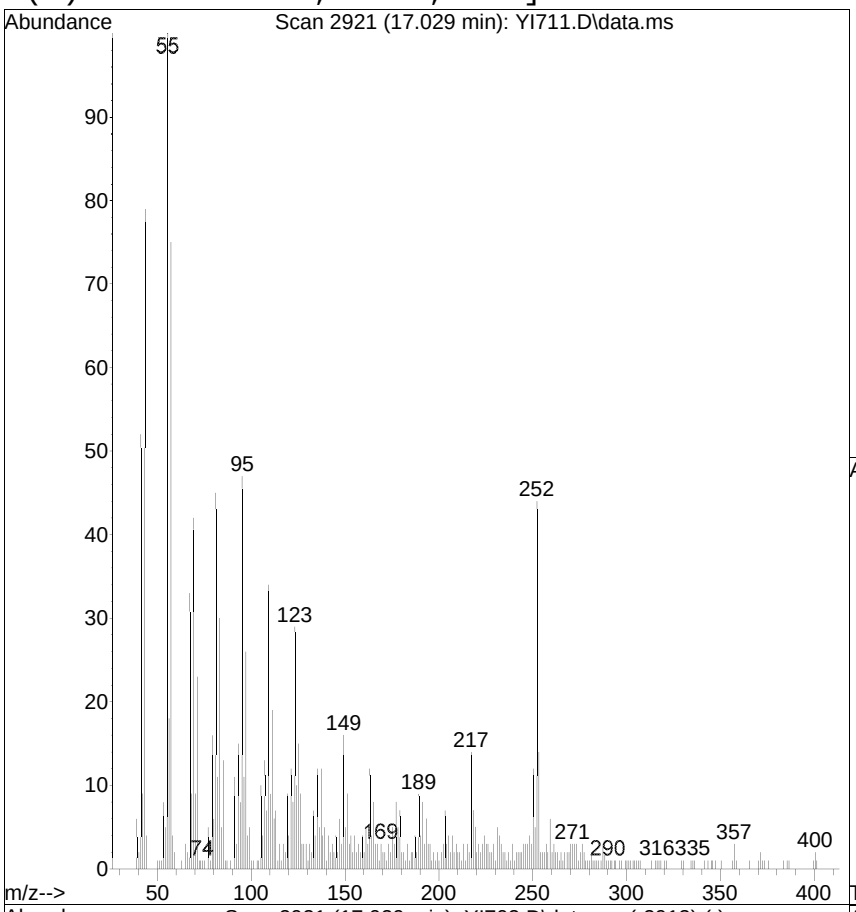
Ref





[Benzo(k)fluoranthene; 48 J; MI]

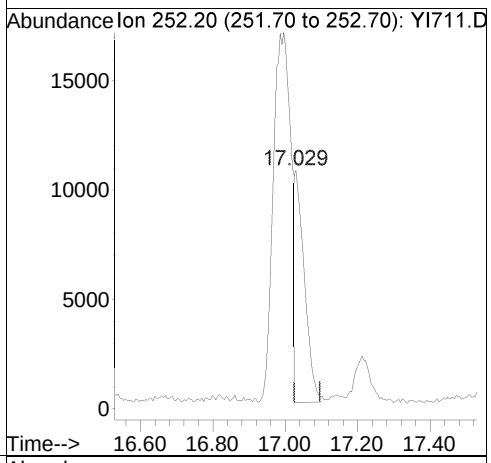
Raw



#82
Benzo(k)fluoranthene
Concen: 1.4664 ug/mL m
RT: 17.029 min Scan# 2921
Delta R.T. 0.000 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:252 Resp: 18716

Ion	Ratio	Lower	Upper
252	100		
253	43.8	3.0	43.0#
125	41.1	0.0	37.0#



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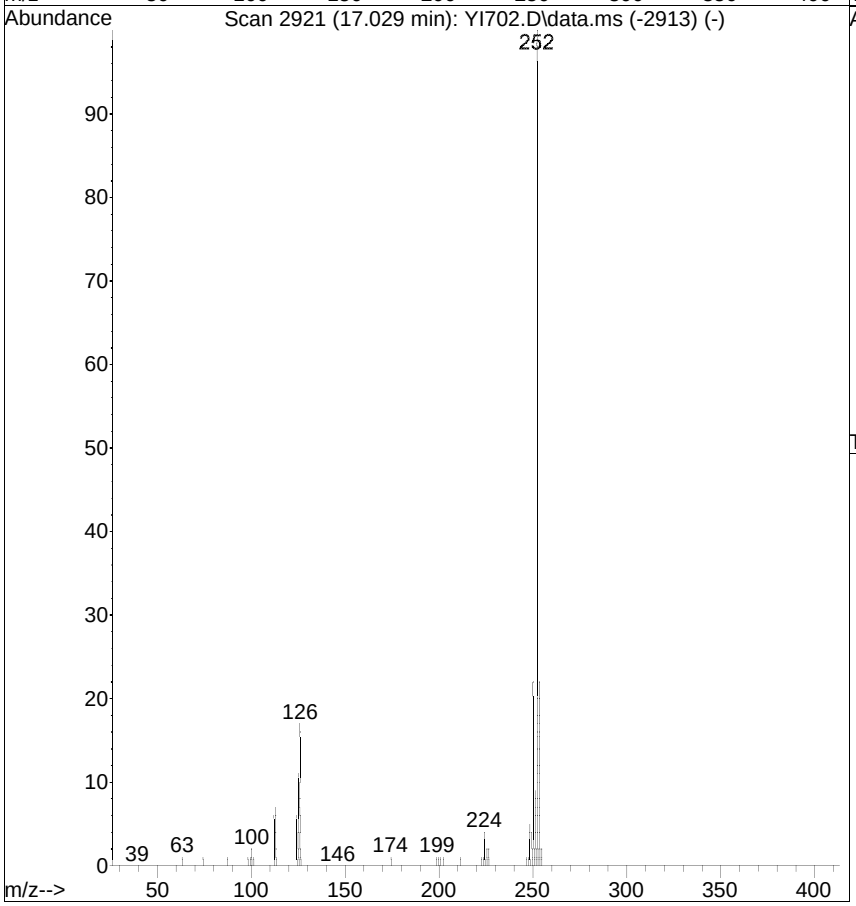
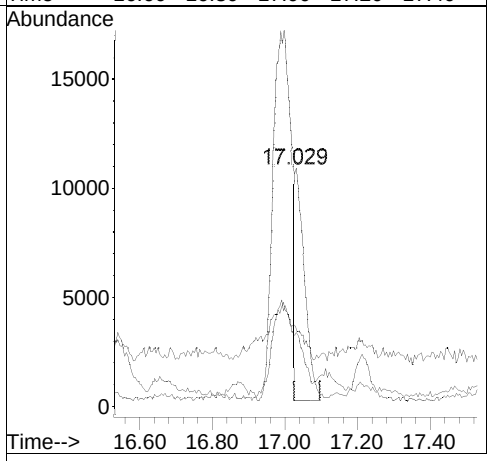
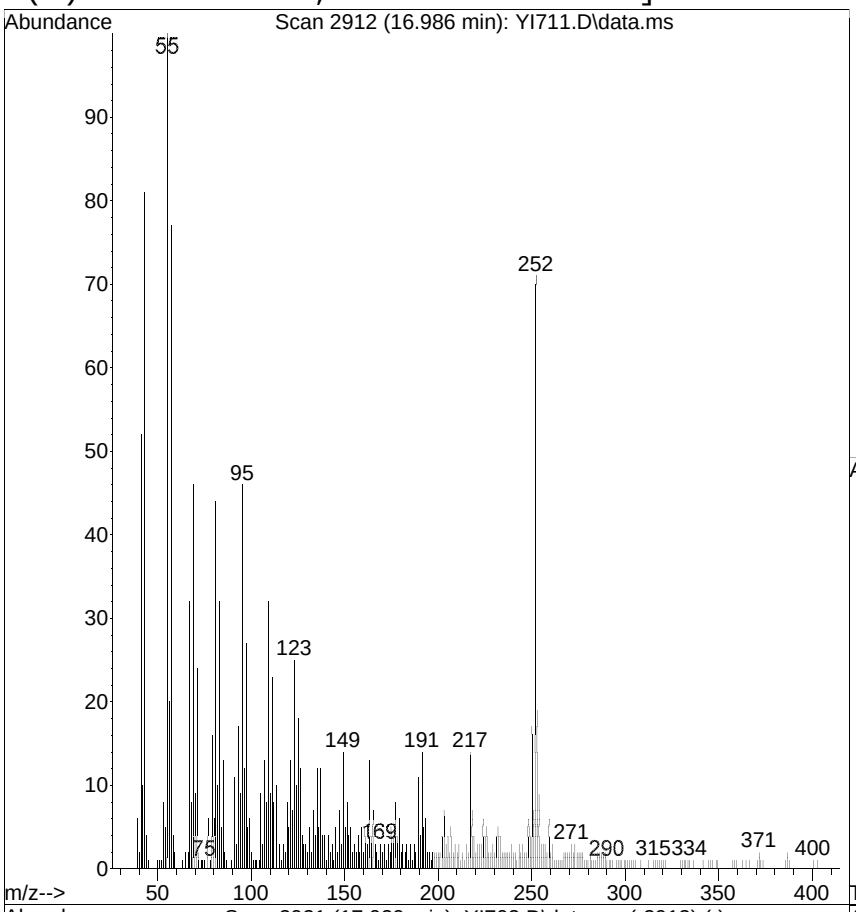




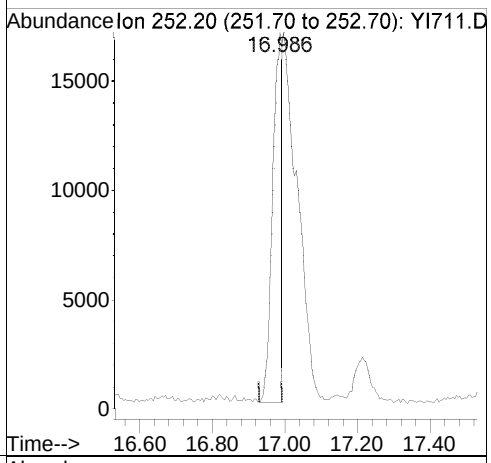
Raw



#82
Benzo(k)fluoranthene
Concen: 2.4016 ug/mL
RT: 16.986 min Scan# 2912
Delta R.T. -0.043 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:252 Resp: 30653

Ion	Ratio	Lower	Upper
252	100		
253	26.7	3.0	43.0
125	25.1	0.0	37.0



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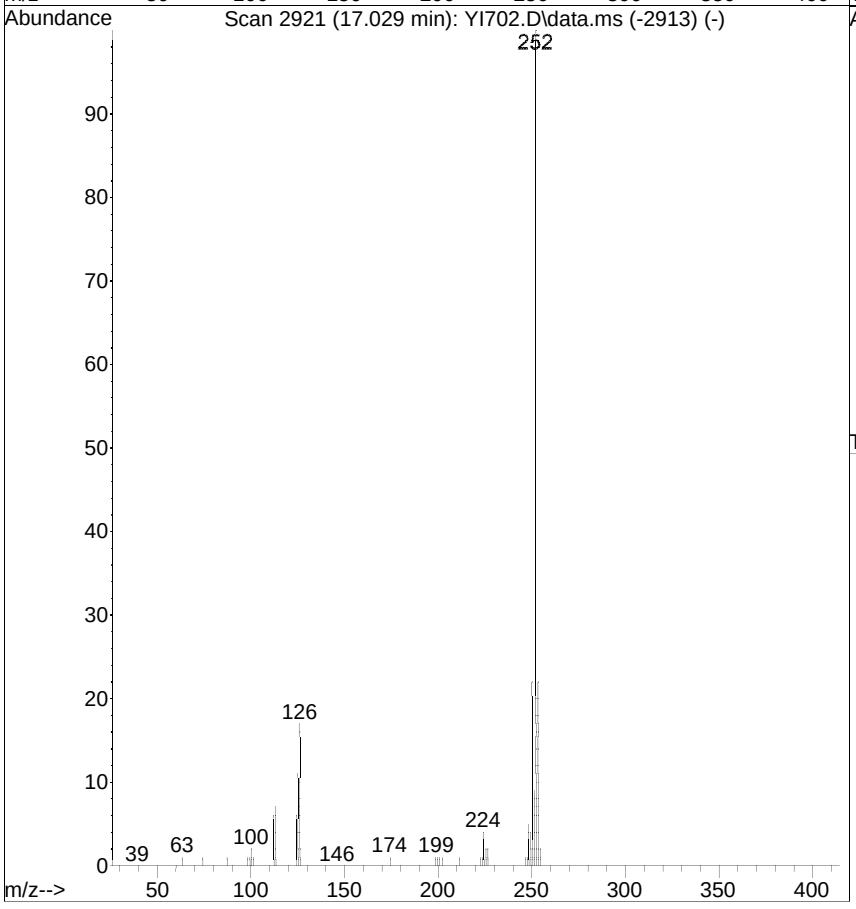
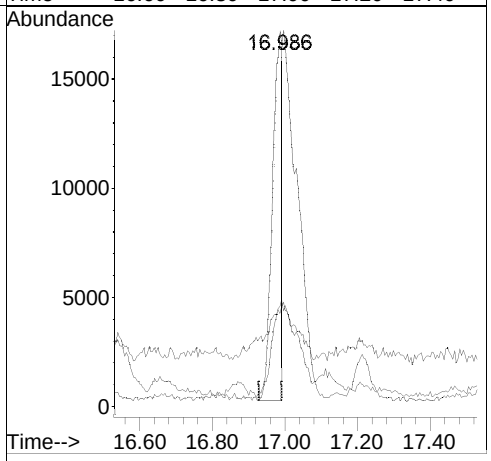
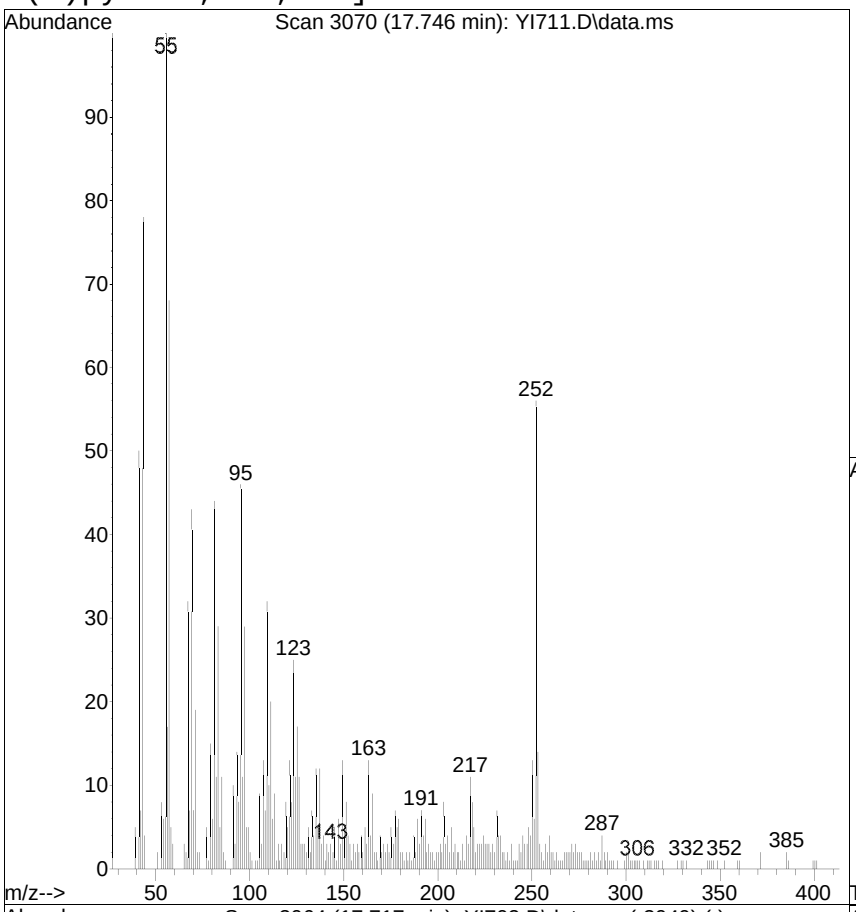




[Benzo(a)pyrene; 90; u]

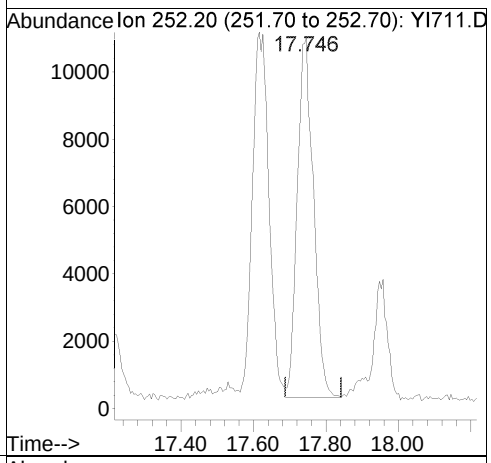
Raw



#83
Benzo(a)pyrene
Concen: 2.7297 ug/mL
RT: 17.746 min Scan# 3070
Delta R.T. 0.029 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:252 Resp: 33084

Ion	Ratio	Lower	Upper
252	100		
253	25.7	2.6	42.6
125	30.4	0.0	36.8



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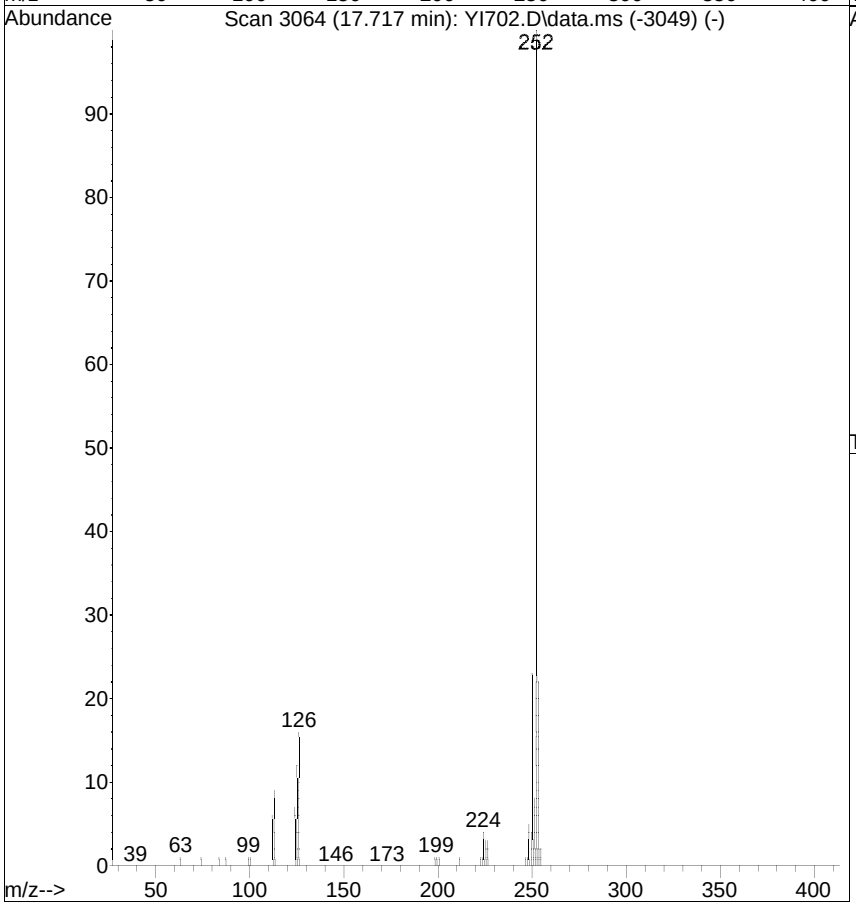
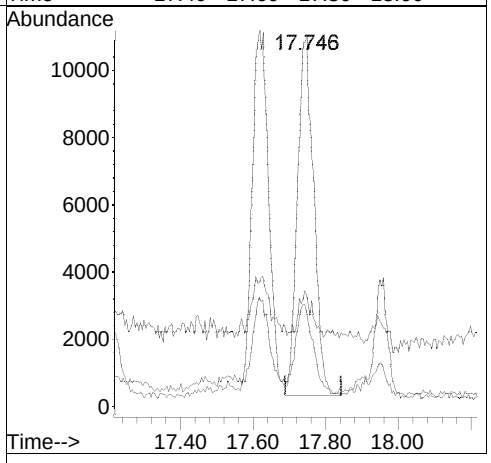
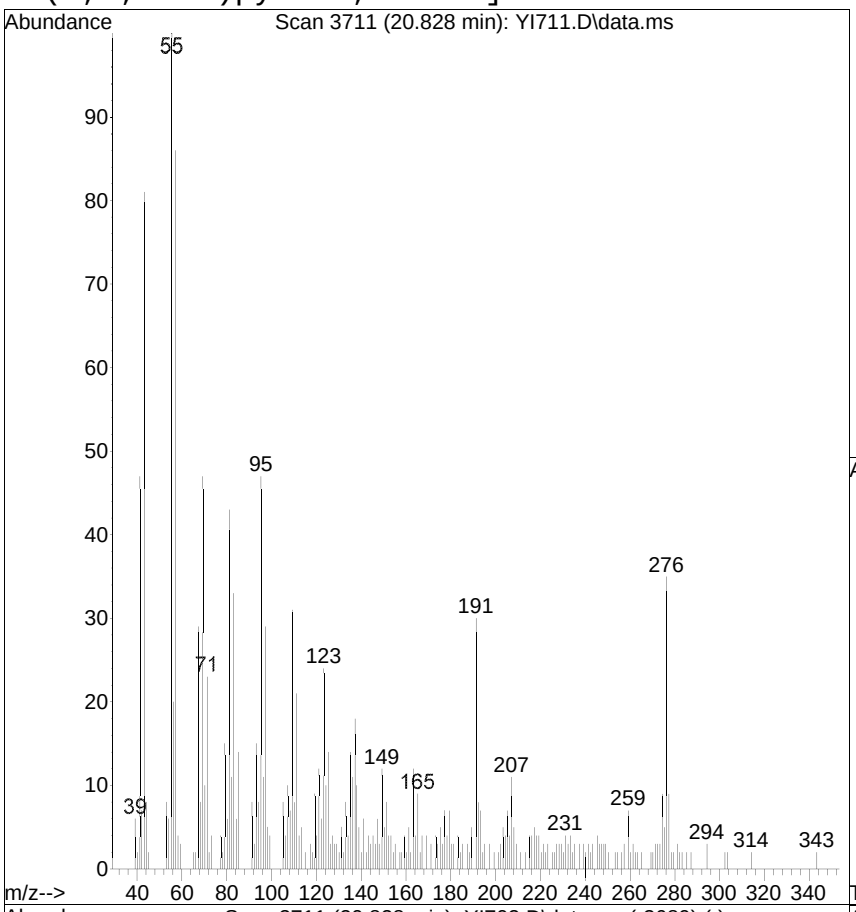




[Indeno(1,2,3-cd)pyrene; 32 J]

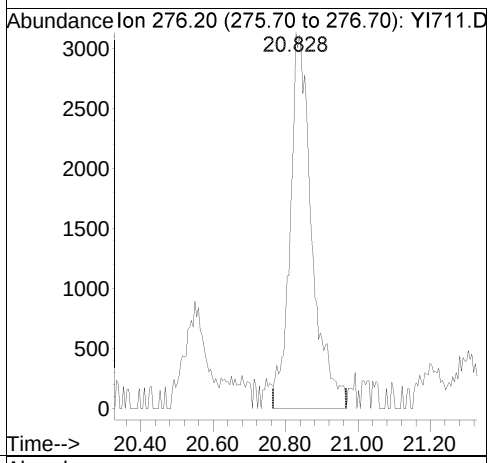
Raw



#84
Indeno(1,2,3-cd)pyrene
Concen: 0.9579 ug/mL
RT: 20.828 min Scan# 3711
Delta R.T. 0.000 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:276 Resp: 13059

Ion	Ratio	Lower	Upper
276	100		
138	29.5	11.1	51.1
227	7.8	0.0	20.1



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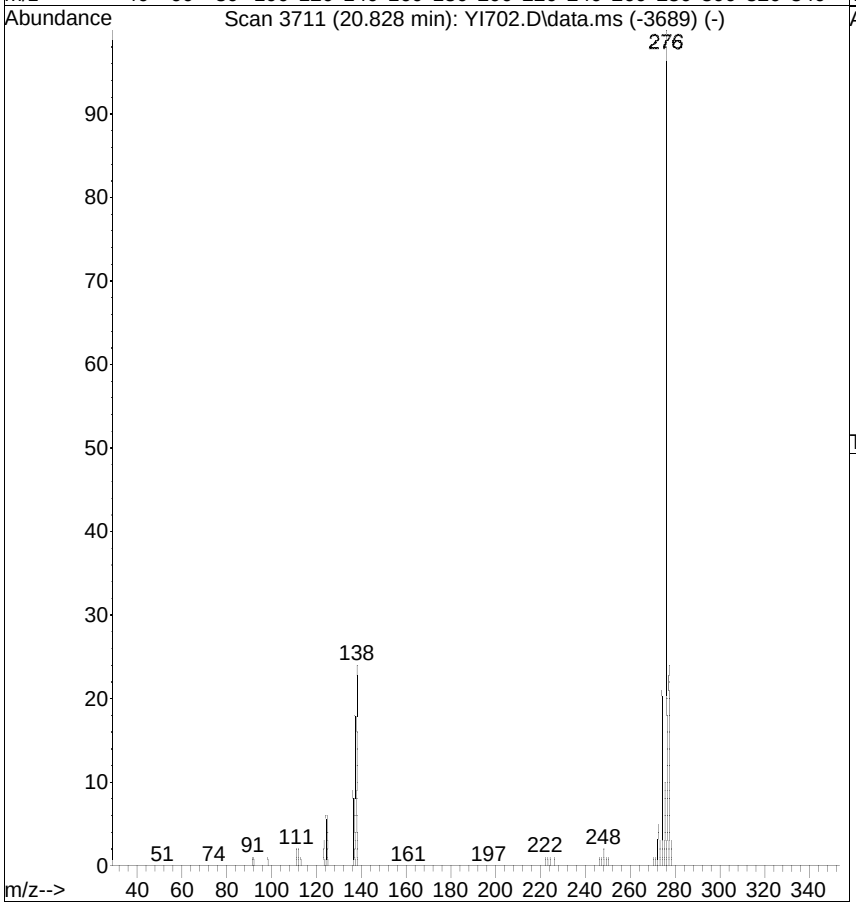
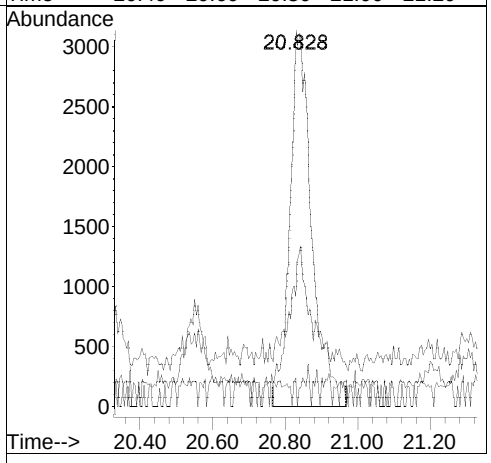
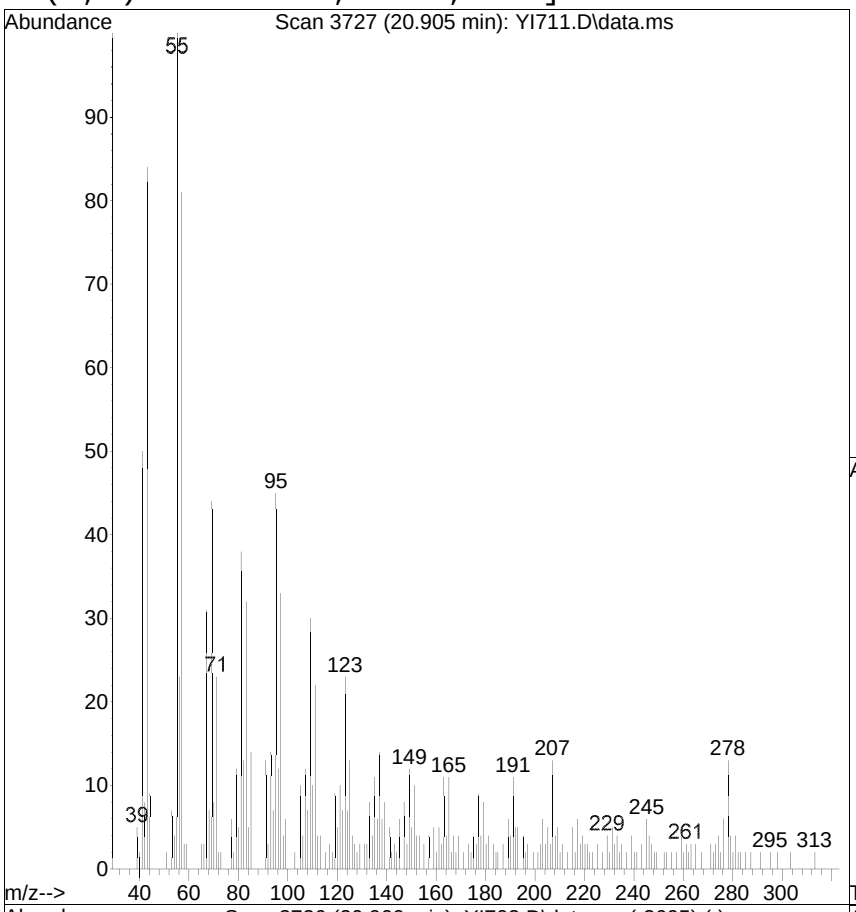




[Dibenz(a,h)anthracene; 15 J; MI]

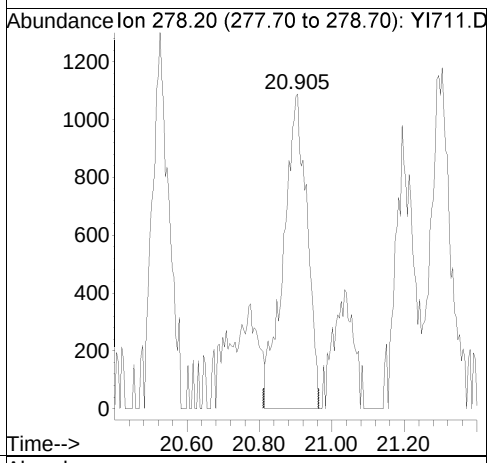
Raw



#85
Dibenz(a,h)anthracene
Concen: 0.4489 ug/mL m
RT: 20.905 min Scan# 3727
Delta R.T. 0.005 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:278 Resp: 4878

Ion	Ratio	Lower	Upper
278	100		
139	36.5	4.9	44.9
279	28.3	4.1	44.1



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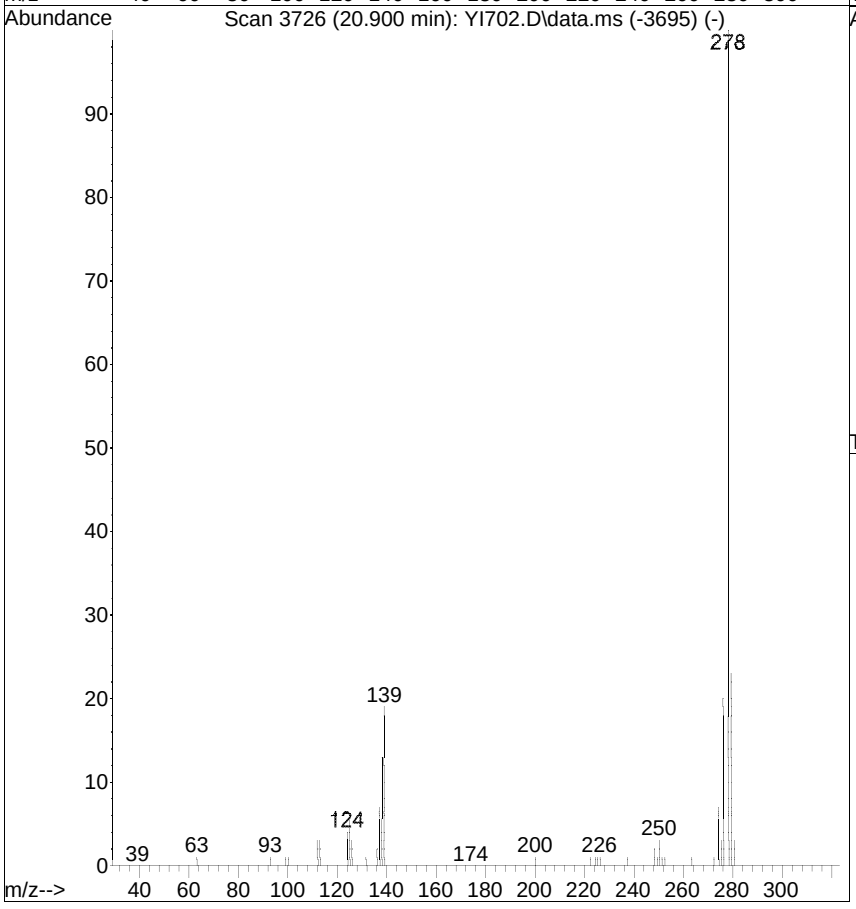
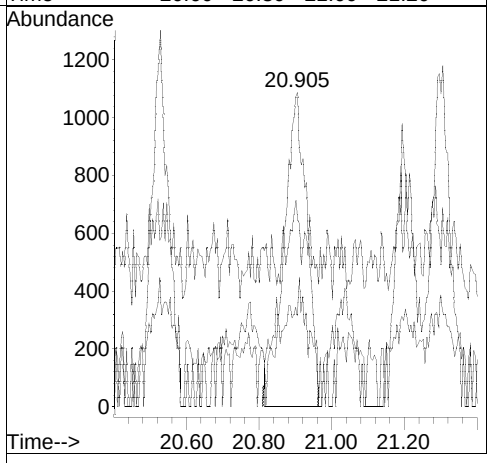
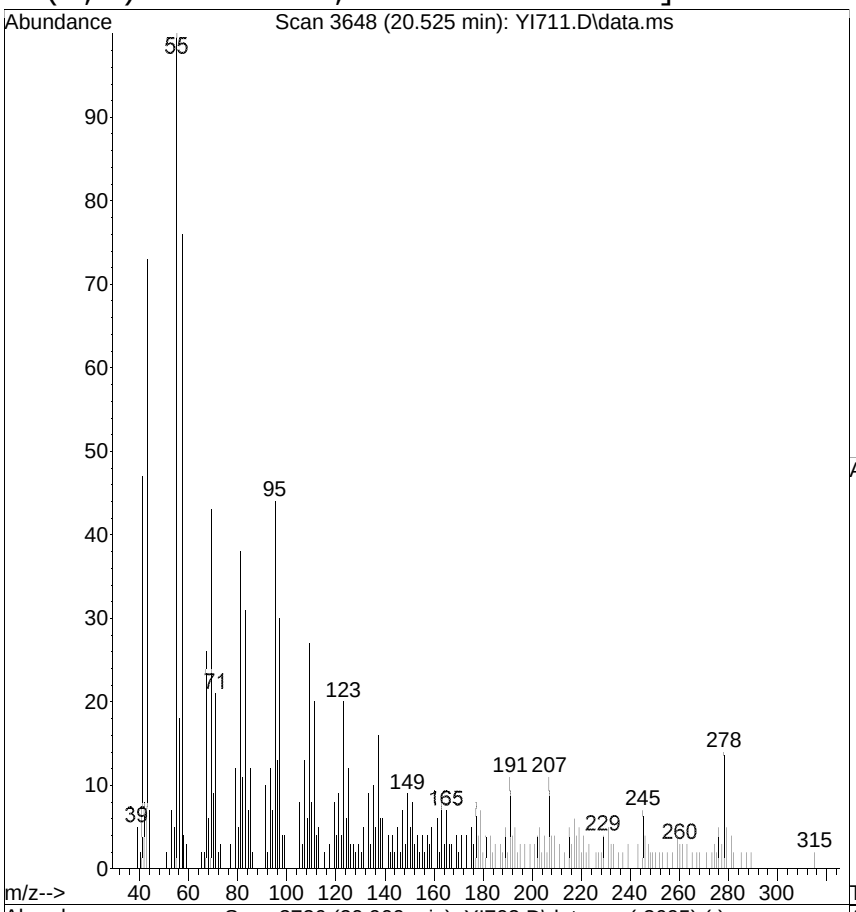




[Dibenz(a,h)anthracene; before version]

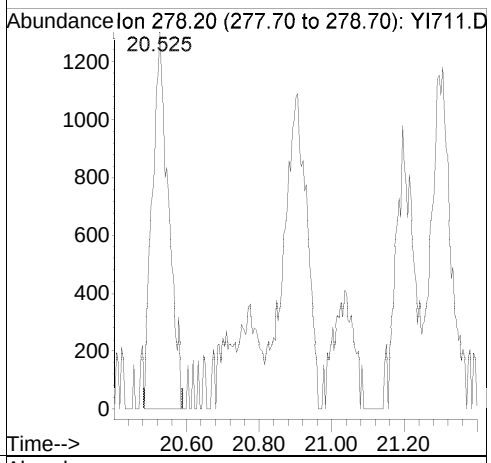
Raw



#85
Dibenz(a,h)anthracene
Concen: 0.3702 ug/mL
RT: 20.525 min Scan# 3648
Delta R.T. -0.375 min
Lab File: YI711.D
Acq: 8 Sep 2012 12:31 am

Tgt Ion:278 Resp: 4023

Ion	Ratio	Lower	Upper
278	100		
139	44.3	4.9	44.9
279	34.4	4.1	44.1



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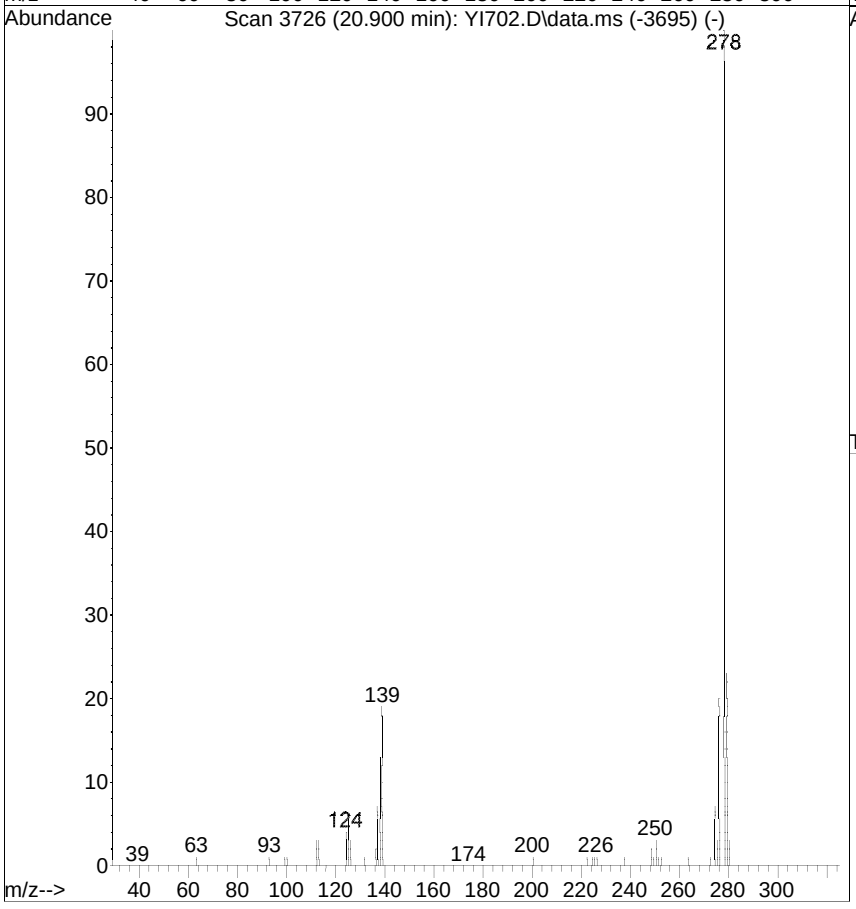
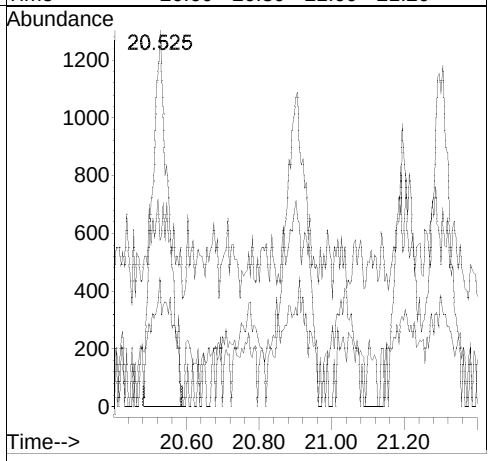




CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA06	Lab ID	: 239404-006	Client ID	: EX13B010B.2
Seqnum	: 552362420012.1	Matrix	: Soil	Acct	: ARCSF (JG)
File	: yi712	Batch	: 190266	Time	: 08-SEP-2012 01:09
Cal	: 552359297001	Caldate	: 05-SEP-2012		
IDF	: 3.0	Raw Units	: ug/mL	Units	: ug/Kg

30.06 g --> 1.0 ml = 0.03327 ml/g PDF

Analyte	Raw	Result	RL	Blank	Flags
Naphthalene	0.1033	ND	200		
3,3'-Dichlorobenzidine	0	ND	2000		
Benzo(a)anthracene	0	ND	200		u
bis(2-Ethylhexyl)phthalate	0.09510	ND	1000		
Benzo(b)fluoranthene	0	ND	200		u
Benzo(k)fluoranthene	0	ND	200		
Benzo(a)pyrene	0	ND	200		u
Indeno(1,2,3-cd)pyrene	0	ND	200		
Dibenz(a,h)anthracene	0	ND	200		

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	10.13	1331	1011	76	48-120	u
2-Fluorobiphenyl	11.25	1331	1123	84	50-120	u
Terphenyl-d14	9.002	1331	898.4	68	40-120	u

ISTD (CCV yi702)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	743711	817696	9.95	7.59	7.58	-0.01
Acenaphthene-d10	427044	408686	-4.30	9.74	9.74	0.00
Chrysene-d12	784348	709501	-9.54	15.00	15.00	0.01
Perylene-d12	923802	464592	-49.71	17.89	17.89	0.01

09/08/12 : Was diluted due to the dark and viscous nature of the sample extract.

LLH 09/10/12 : High chromatographic background.

(not in upper half)

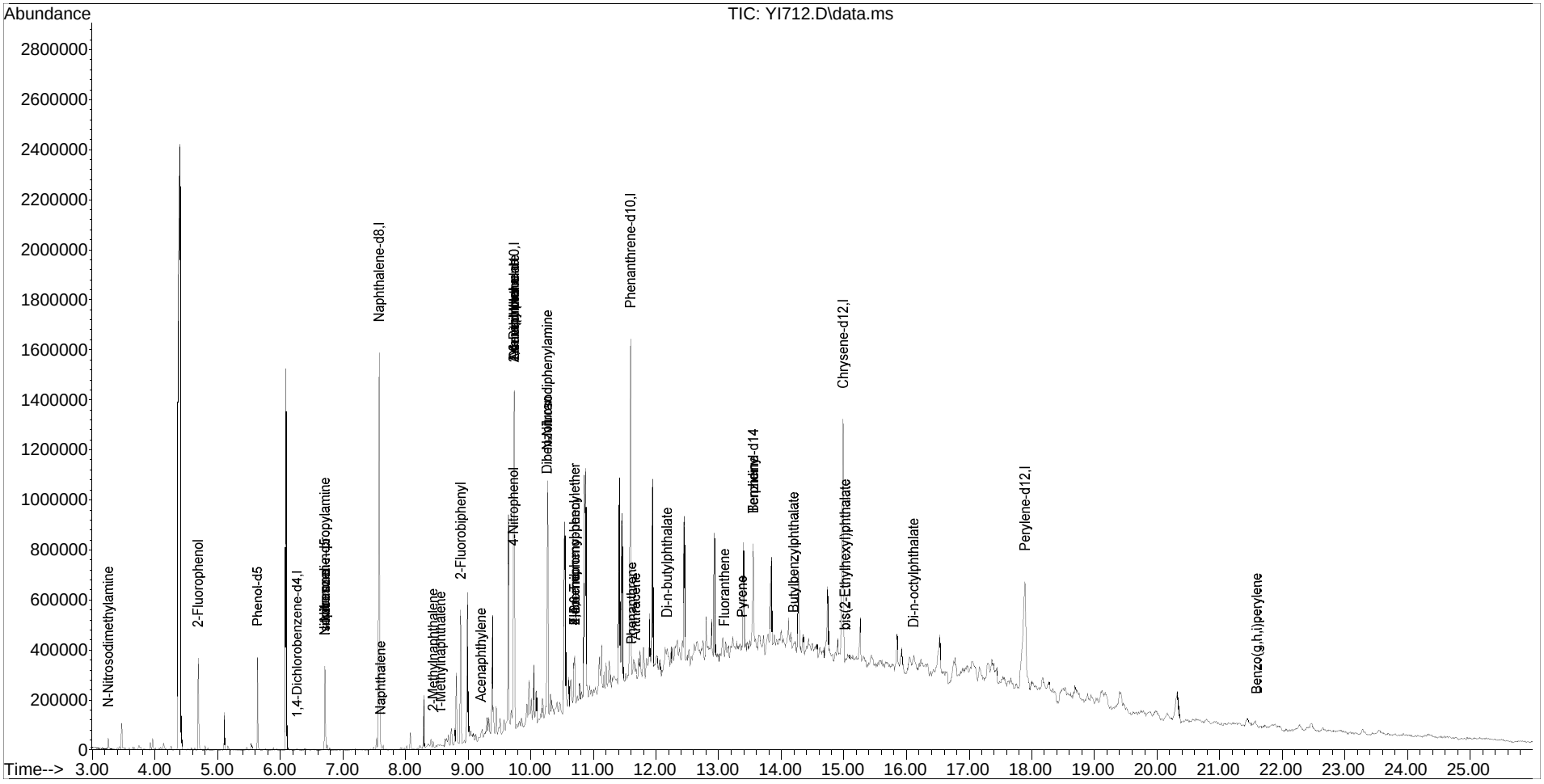
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

u=use

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI712.D
Acq On : 8 Sep 2012 1:09 am
Operator :
Sample : S,239404-006
Misc : 190266,3, //DV
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 01:36:04 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI712.D
Acq On : 8 Sep 2012 1:09 am
Operator :
Sample : S,239404-006
Misc : 190266,3, //DV
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 01:36:04 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.271	152	1105	40.0000	ug/mL	0.18
19) Naphthalene-d8	7.584	136	817696	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.744	164	408686	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.595	188	725437	40.0000	ug/mL	0.00
70) Chrysene-d12	14.995	240	709501	40.0000	ug/mL	0.00
79) Perylene-d12	17.890	264	464592	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	0.000	79	0	N.D.		
3) N-Nitrosodimethylamine	3.256	42	1005	25.9631	ug/mL	# 16
4) 2-Fluorophenol	4.689	112	82915	1745.7634	ug/mL	90
5) Phenol-d5	5.642	99	109487	1974.3438	ug/mL	82
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	0.000	108	0	N.D.		
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.714	70	11780	537.1433	ug/mL	80
18) Hexachloroethane	0.000	117	0	N.D.		
20) Nitrobenzene-d5	6.714	82	85343	10.1268	ug/mL	# 78
21) Nitrobenzene	0.000	77	0	N.D.		
22) Isophorone	6.714	82	85343	6.1192	ug/mL	66
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	0.000	107	0	N.D.		
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	0.000	105	0	N.D.		
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	7.608	128	2071	0.1033	ug/mL	95
30) 4-Chloroaniline	0.000	127	0	N.D.		
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	8.440	142	6568	0.4303	ug/mL	94
35) 1-Methylnaphthalene	8.565	142	1936	0.1319	ug/mL	86
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI712.D
Acq On : 8 Sep 2012 1:09 am
Operator :
Sample : S,239404-006
Misc : 190266,3, //DV
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 01:36:04 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.888	172	178239	11.2534	ug/mL	99
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	0.000	65	0	N.D.		
43) Dimethylphthalate	9.744	163	67818	4.8682	ug/mL #	1
44) 2,6-Dinitrotoluene	9.739	165	53803	17.3677	ug/mL #	15
45) Acenaphthylene	9.210	152	1266	0.0639	ug/mL #	1
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.739	154	1498	0.1324	ug/mL #	19
48) 2,4-Dinitrophenol	0.000	184	0	N.D.		
49) 4-Nitrophenol	9.729	109	1485	0.8959	ug/mL #	13
50) Dibenzofuran	10.268	168	1206	0.0771	ug/mL	64
51) 2,4-Dinitrotoluene	9.739	165	53803	13.6430	ug/mL #	14
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	0.000	149	0	N.D.		
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.		
55) Fluorene	10.710	166	1541	0.1148	ug/mL #	57
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	10.710	330	23777	9.3775	ug/mL #	81
59) 4,6-Dinitro-2-methylphenol	0.000	198	0	N.D.		
60) N-Nitrosodiphenylamine	10.273	169	1364	0.1544	ug/mL	94
61) Azobenzene	0.000	77	0	N.D.		
62) 4-Bromophenyl-phenylether	10.710	248	1385	0.3131	ug/mL #	1
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	11.614	178	4105	0.2335	ug/mL #	64
66) Anthracene	11.677	178	1153	0.0645	ug/mL #	17
67) Carbazole	0.000	167	0	N.D.		
68) Di-n-butylphthalate	12.182	149	1049	0.0462	ug/mL #	27
69) Fluoranthene	13.095	202	1432	0.0605	ug/mL #	19
71) Benzidine	13.557	184	2299	0.2348	ug/mL #	1
72) Pyrene	13.379	202	2195	0.0887	ug/mL #	32
73) Terphenyl-d14	13.557	244	149213	9.0023	ug/mL	99
74) Butylbenzylphthalate	14.201	149	1831	0.1554	ug/mL #	62
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.		
76) Benzo(a)anthracene	0.000	228	0	N.D.		
77) bis(2-Ethylhexyl)phthalate	15.024	149	1348	0.0951	ug/mL	99
78) Chrysene	0.000	228	0	N.D.		
80) Di-n-octylphthalate	16.115	149	2954	0.1791	ug/mL #	1
81) Benzo(b)fluoranthene	0.000	252	0	N.D.		
82) Benzo(k)fluoranthene	0.000	252	0	N.D.		
83) Benzo(a)pyrene	0.000	252	0	N.D.		
84) Indeno(1,2,3-cd)pyrene	0.000	276	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI712.D
Acq On : 8 Sep 2012 1:09 am
Operator :
Sample : S,239404-006
Misc : 190266,3, //DV
ALS Vial : 12 Sample Multiplier: 1

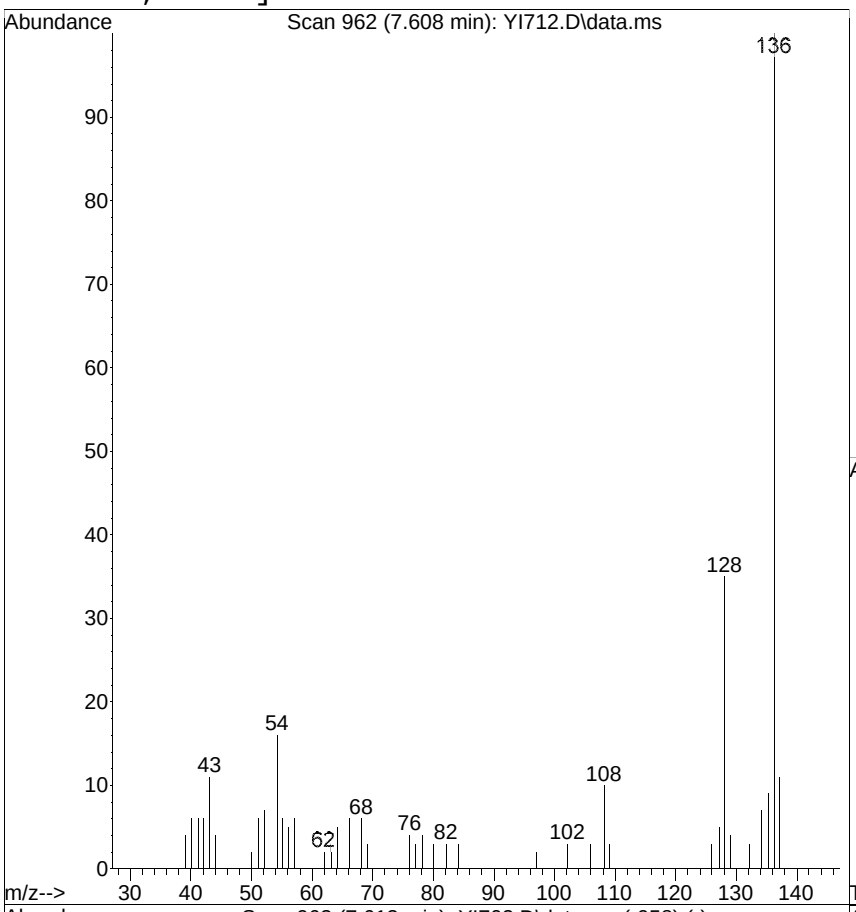
Quant Time: Sep 08 01:36:04 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	21.597	276	1403	0.1276	ug/mL #	34

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Naphthalene; <RL]

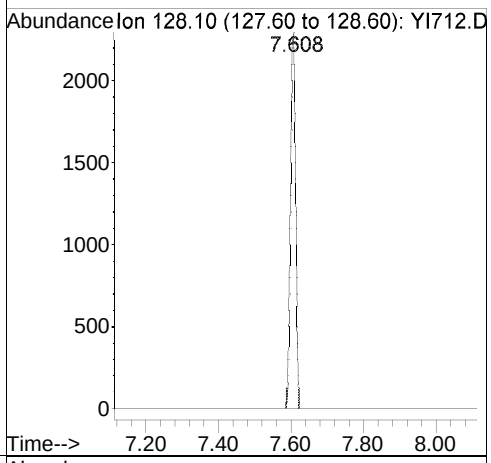
Raw



#29
Naphthalene
Concen: 0.1033 ug/mL
RT: 7.608 min Scan# 962
Delta R.T. -0.005 min
Lab File: YI712.D
Acq: 8 Sep 2012 1:09 am

Tgt Ion:128 Resp: 2071

Ion	Ratio	Lower	Upper
128	100		
129	11.7	0.0	30.0
127	13.7	0.0	32.0



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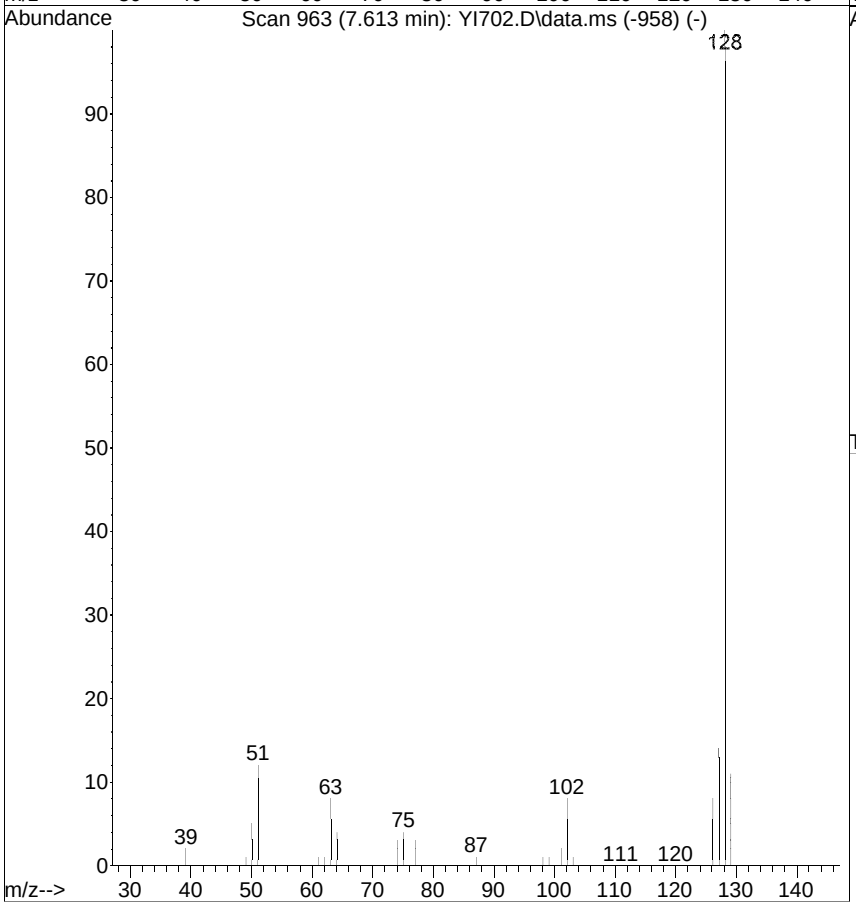
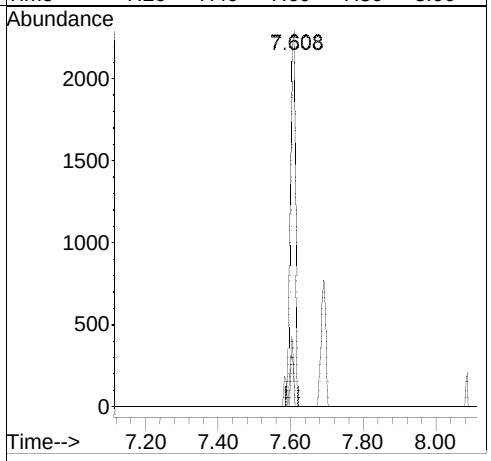
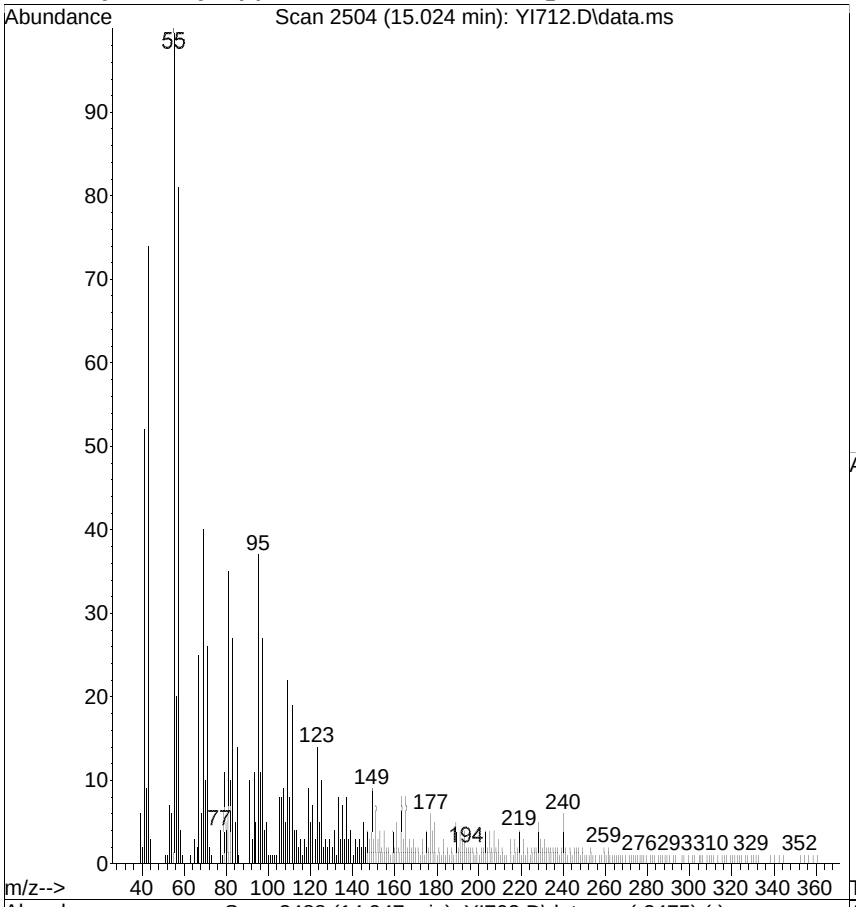




[bis(2-Ethylhexyl)phthalate; <RL]

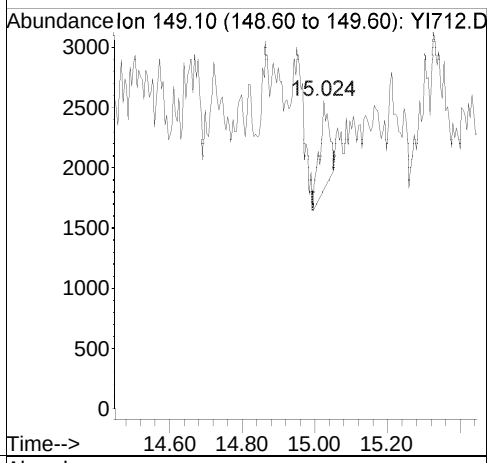
Raw



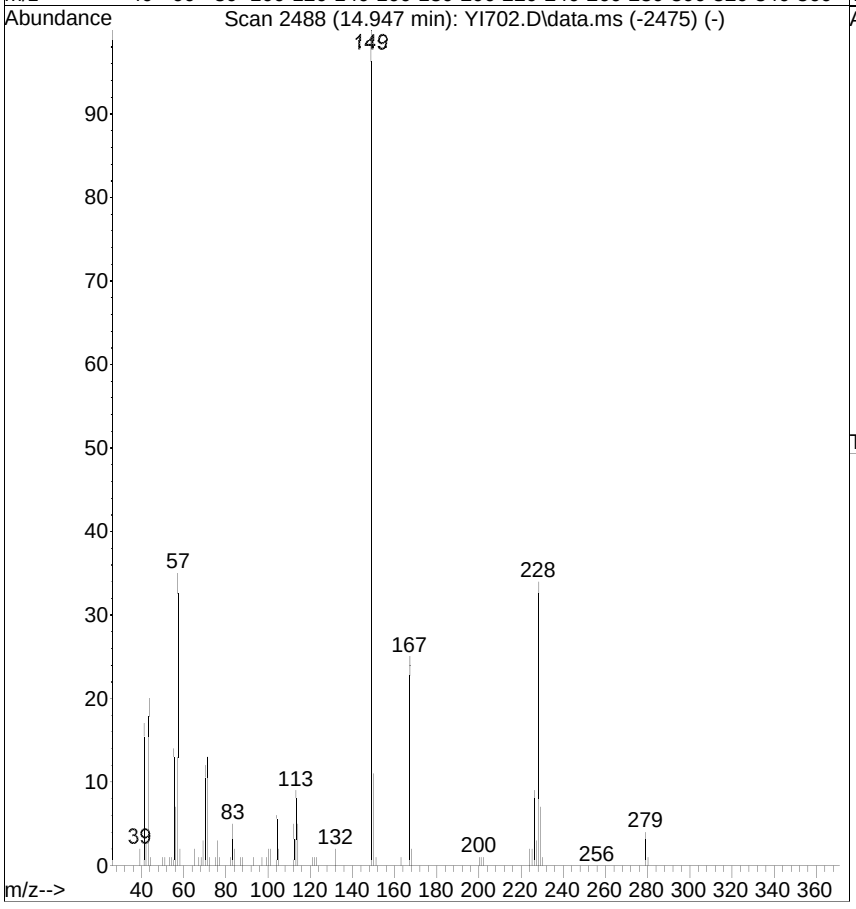
#77
bis(2-Ethylhexyl)phthalate
Concen: 0.0951 ug/mL
RT: 15.024 min Scan# 2504
Delta R.T. 0.077 min
Lab File: YI712.D
Acq: 8 Sep 2012 1:09 am

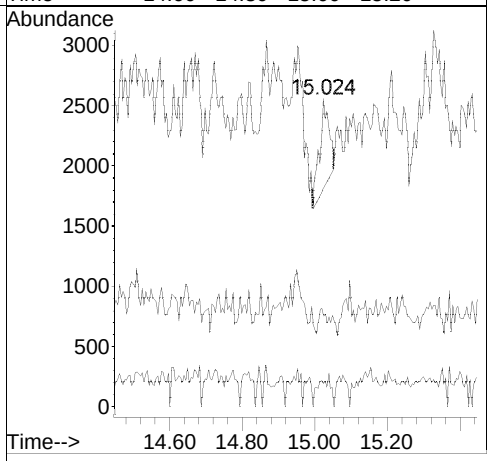
Tgt Ion:149 Resp: 1348

Ion	Ratio	Lower	Upper
149	100		
167	29.4	9.0	49.0
279	7.5	0.0	27.0



Ref





CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA06	Lab ID	: 239404-008	Client ID	: EX13B023A.2
Seqnum	: 552362420013.1	Matrix	: Soil	Acct	: ARCSF (JG)
File	: yi713	Batch	: 190266	Time	: 08-SEP-2012 01:45
Cal	: 552359297001	Caldate	: 05-SEP-2012		
IDF	: 10.0	Raw Units	: ug/mL	Units	: ug/Kg

30.08 g --> 2.0 ml = 0.06649 ml/g PDF

Analyte	Raw	Result	RL	Blank	Flags
Naphthalene	0.04670	ND	1300		
3,3'-Dichlorobenzidine	0	ND	13000		
Benzo(a)anthracene	0.05350	ND	1300		u
bis(2-Ethylhexyl)phthalate	0.1522	ND	6600		
Benzo(b)fluoranthene	0	ND	1300		u
Benzo(k)fluoranthene	0	ND	1300		
Benzo(a)pyrene	0.1045	ND	1300		u
Indeno(1,2,3-cd)pyrene	0	ND	1300		
Dibenz(a,h)anthracene	0	ND	1300		

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	1.514	1330	1007	DO	48-120	u
2-Fluorobiphenyl	1.798	1330	1196	DO	50-120	u
Terphenyl-d14	1.732	1330	1152	DO	40-120	u

ISTD (CCV yi702)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	743711	876534	17.86	7.59	7.58	-0.01
Acenaphthene-d10	427044	460513	7.84	9.74	9.74	0.00
Chrysene-d12	784348	755320	-3.70	15.00	14.99	-0.01
Perylene-d12	923802	526692	-42.99	17.89	17.88	-0.01

09/08/12 : Was diluted due to the dark and viscous nature of the sample extract.

(not in upper half)

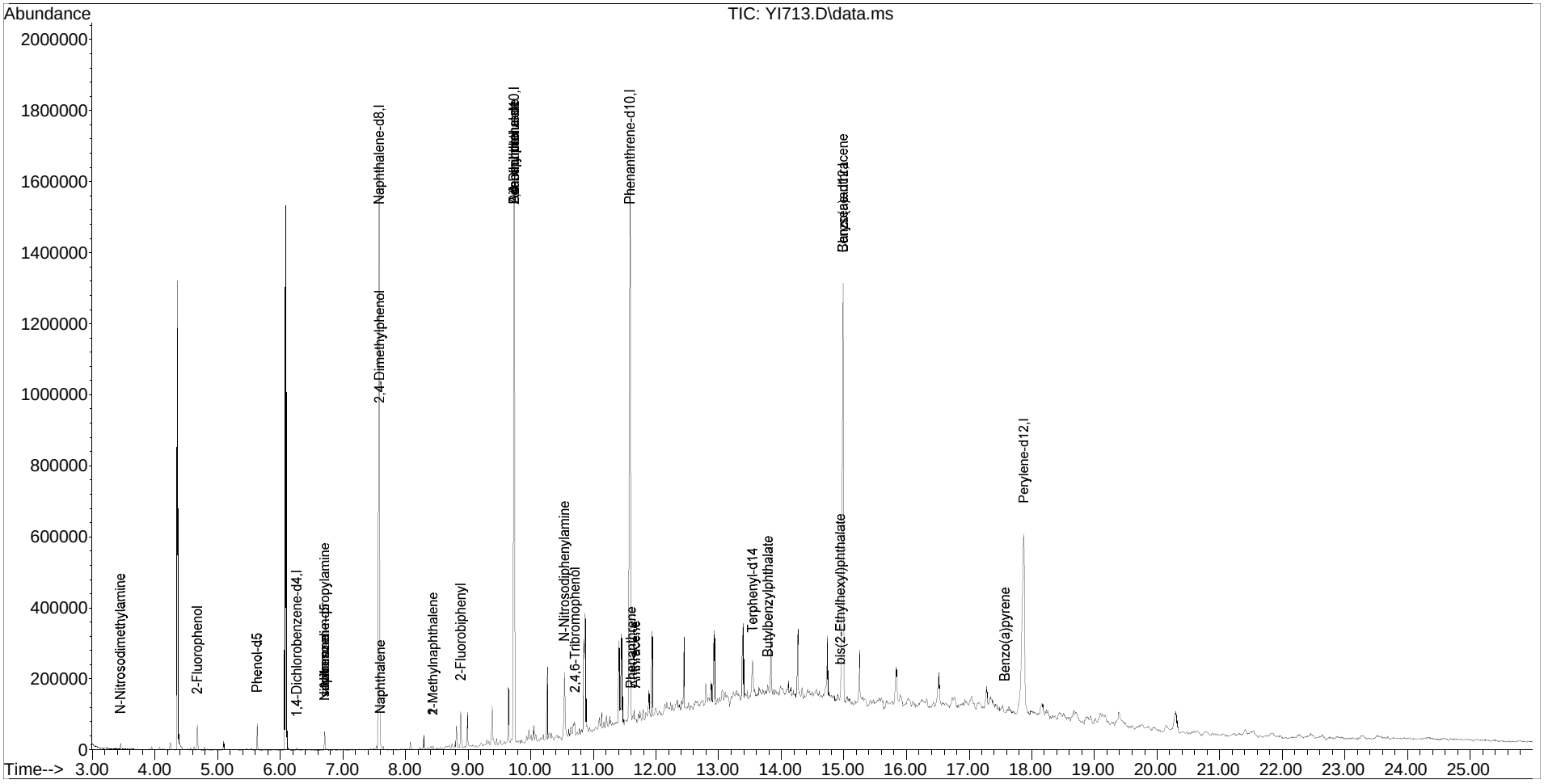
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

u=use

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI713.D
Acq On : 8 Sep 2012 1:45 am
Operator :
Sample : S,239404-008
Misc : 190266,10, //DV
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 02:12:36 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI713.D
Acq On : 8 Sep 2012 1:45 am
Operator :
Sample : S,239404-008
Misc : 190266,10, //DV
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 02:12:36 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.267	152	1090	40.0000	ug/mL	0.17
19) Naphthalene-d8	7.584	136	876534	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.739	164	460513	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	800930	40.0000	ug/mL	0.00
70) Chrysene-d12	14.990	240	755320	40.0000	ug/mL	0.00
79) Perylene-d12	17.875	264	526692	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	0.000	79	0	N.D.		
3) N-Nitrosodimethylamine	3.453	42	1597	41.8246	ug/mL	# 23
4) 2-Fluorophenol	4.675	112	15254	325.5906	ug/mL	91
5) Phenol-d5	5.632	99	19985	365.3425	ug/mL	84
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	0.000	108	0	N.D.		
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.709	70	1895	87.5971	ug/mL	91
18) Hexachloroethane	0.000	117	0	N.D.		
20) Nitrobenzene-d5	6.709	82	13680	1.5143	ug/mL	# 78
21) Nitrobenzene	0.000	77	0	N.D.		
22) Isophorone	6.709	82	13680	0.9150	ug/mL	66
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	7.589	107	1269	0.1814	ug/mL	# 19
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	0.000	105	0	N.D.		
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	7.604	128	1003	0.0467	ug/mL	79
30) 4-Chloroaniline	0.000	127	0	N.D.		
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	8.440	142	2962	0.1810	ug/mL	82
35) 1-Methylnaphthalene	8.440	142	2962	0.1883	ug/mL	85
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI713.D
Acq On : 8 Sep 2012 1:45 am
Operator :
Sample : S,239404-008
Misc : 190266,10, //DV
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 02:12:36 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.883	172	32096	1.7984	ug/mL	99
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	0.000	65	0	N.D.		
43) Dimethylphthalate	9.739	163	76429	4.8688	ug/mL #	1
44) 2,6-Dinitrotoluene	9.739	165	59964	17.1781	ug/mL #	14
45) Acenaphthylene	0.000	152	0	N.D.		
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.739	154	1607	0.1261	ug/mL #	7
48) 2,4-Dinitrophenol	0.000	184	0	N.D.		
49) 4-Nitrophenol	0.000	109	0	N.D.		
50) Dibenzofuran	0.000	168	0	N.D.		
51) 2,4-Dinitrotoluene	9.739	165	59964	13.4941	ug/mL #	14
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	0.000	149	0	N.D.		
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.		
55) Fluorene	0.000	166	0	N.D.		
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	10.710	330	4325	1.5138	ug/mL #	74
59) 4,6-Dinitro-2-methylphenol	0.000	198	0	N.D.		
60) N-Nitrosodiphenylamine	10.542	169	1579	0.1619	ug/mL #	61
61) Azobenzene	0.000	77	0	N.D.		
62) 4-Bromophenyl-phenylether	0.000	248	0	N.D.		
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	11.609	178	1755	0.0904	ug/mL #	58
66) Anthracene	11.672	178	1087	0.0550	ug/mL #	43
67) Carbazole	0.000	167	0	N.D.		
68) Di-n-butylphthalate	0.000	149	0	N.D.		
69) Fluoranthene	0.000	202	0	N.D.		
71) Benzidine	0.000	184	0	N.D.		
72) Pyrene	0.000	202	0	N.D.		
73) Terphenyl-d14	13.552	244	30561	1.7319	ug/mL	97
74) Butylbenzylphthalate	13.793	149	2389	0.1904	ug/mL	85
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.		
76) Benzo(a)anthracene	14.990	228	1159	0.0535	ug/mL #	45
77) bis(2-Ethylhexyl)phthalate	14.947	149	2297	0.1522	ug/mL	94
78) Chrysene	14.990	228	1159	0.0578	ug/mL #	47
80) Di-n-octylphthalate	0.000	149	0	N.D.		
81) Benzo(b)fluoranthene	0.000	252	0	N.D.		
82) Benzo(k)fluoranthene	0.000	252	0	N.D.		
83) Benzo(a)pyrene	17.577	252	1393	0.1045	ug/mL #	1
84) Indeno(1,2,3-cd)pyrene	0.000	276	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI713.D
Acq On : 8 Sep 2012 1:45 am
Operator :
Sample : S,239404-008
Misc : 190266,10, //DV
ALS Vial : 13 Sample Multiplier: 1

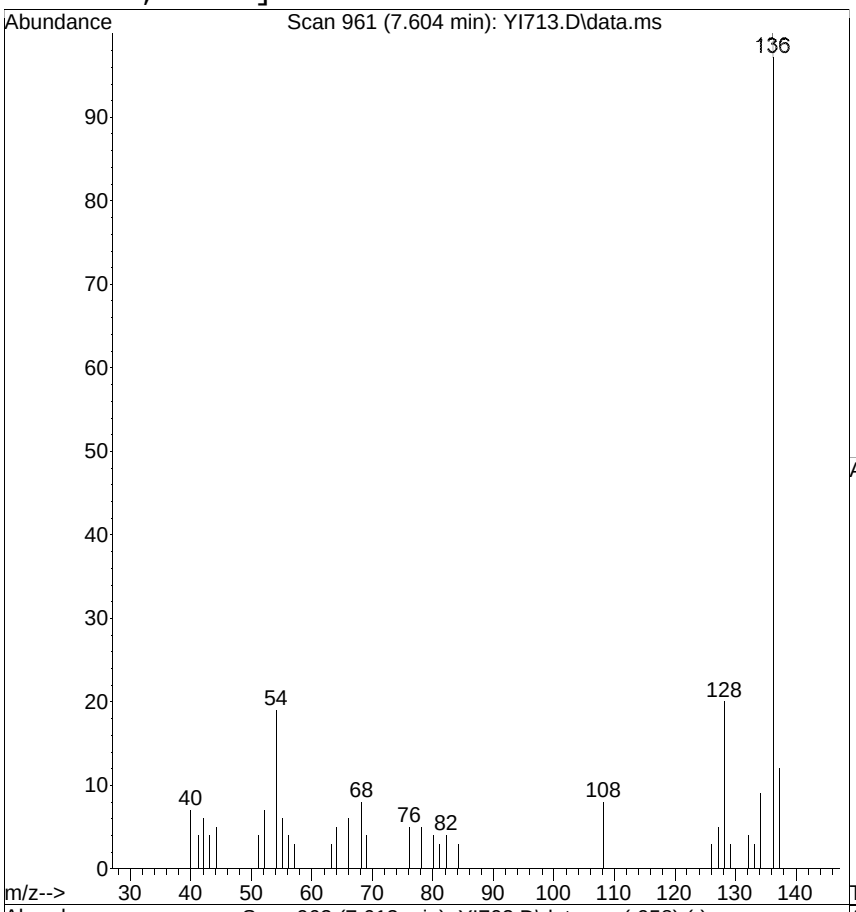
Quant Time: Sep 08 02:12:36 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	0.000	276	0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Naphthalene; <RL]

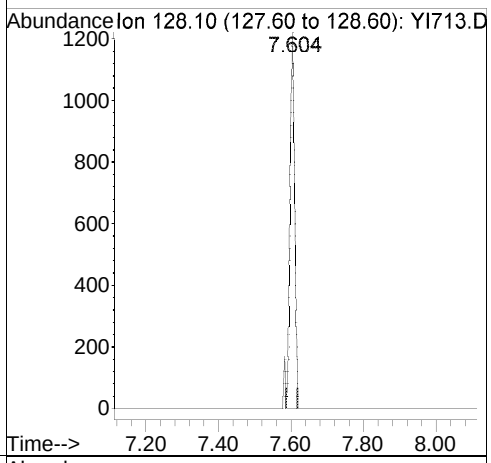
Raw



#29
Naphthalene
Concen: 0.0467 ug/mL
RT: 7.604 min Scan# 961
Delta R.T. -0.010 min
Lab File: YI713.D
Acq: 8 Sep 2012 1:45 am

Tgt Ion:128 Resp: 1003

Ion	Ratio	Lower	Upper
128	100		
129	14.0	0.0	30.0
127	23.1	0.0	32.0



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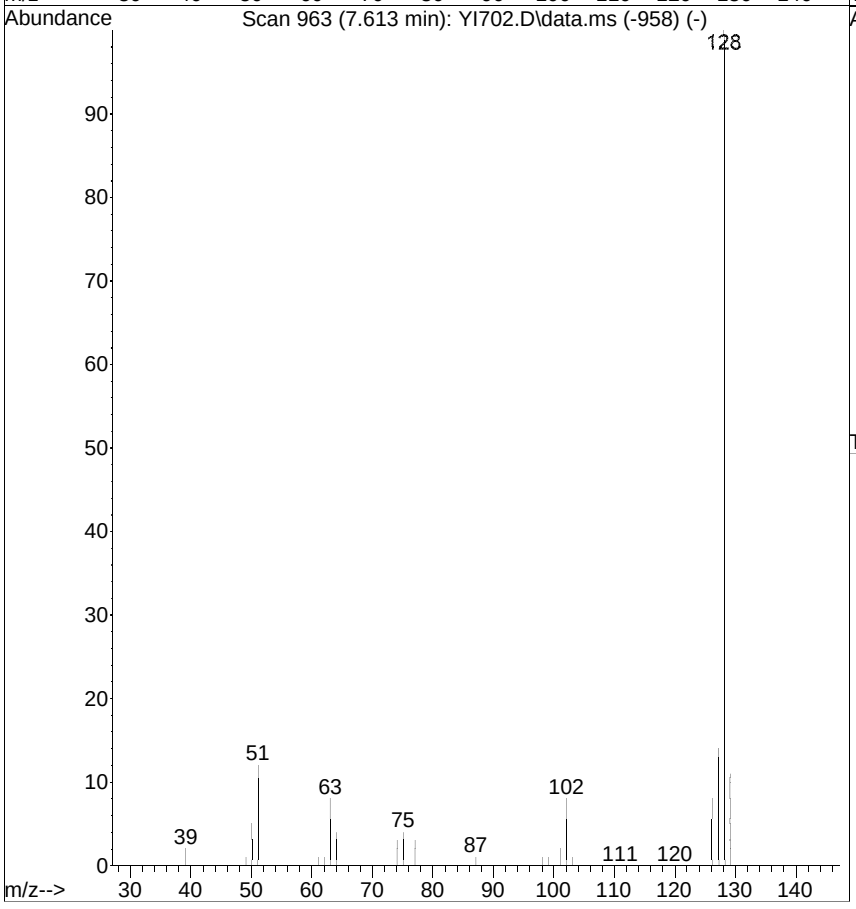
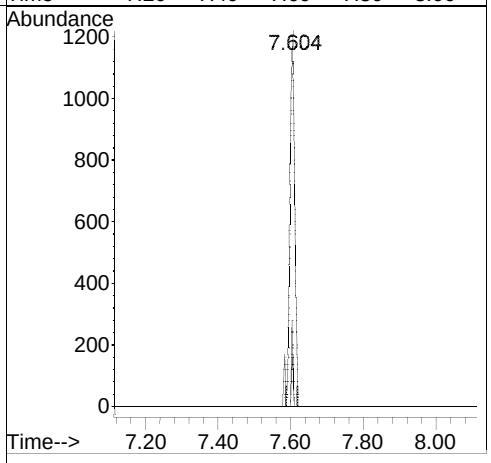
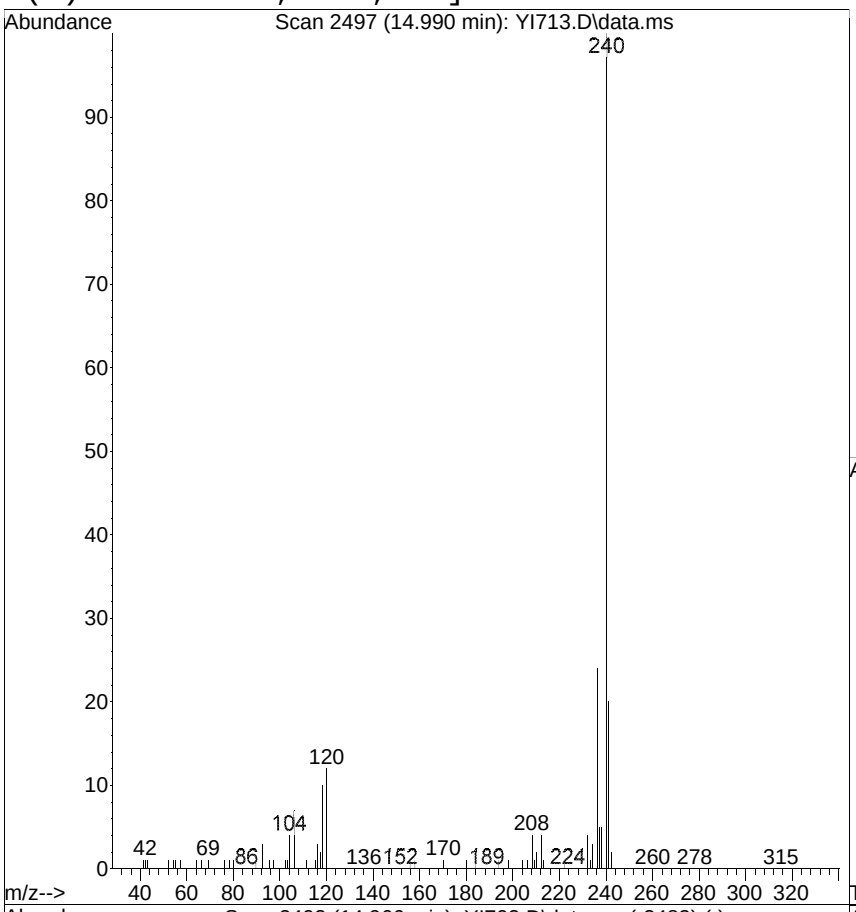




[Benzo(a)anthracene; <RL; u]

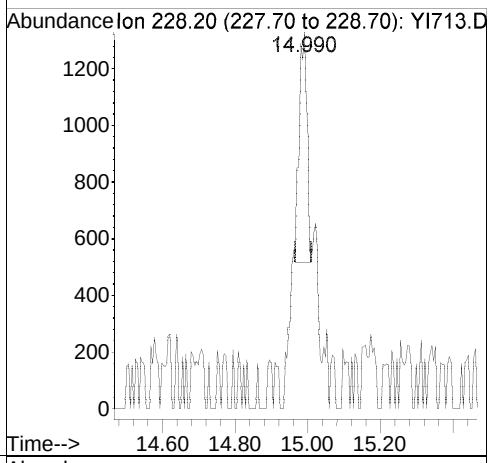
Raw



#76
Benzo(a)anthracene
Concen: 0.0535 ug/mL
RT: 14.990 min Scan# 2497
Delta R.T. 0.024 min
Lab File: YI713.D
Acq: 8 Sep 2012 1:45 am

Tgt Ion:228 Resp: 1159

Ion	Ratio	Lower	Upper
228	100		
229	46.3	0.0	40.0#
226	0.0	8.0	48.0#



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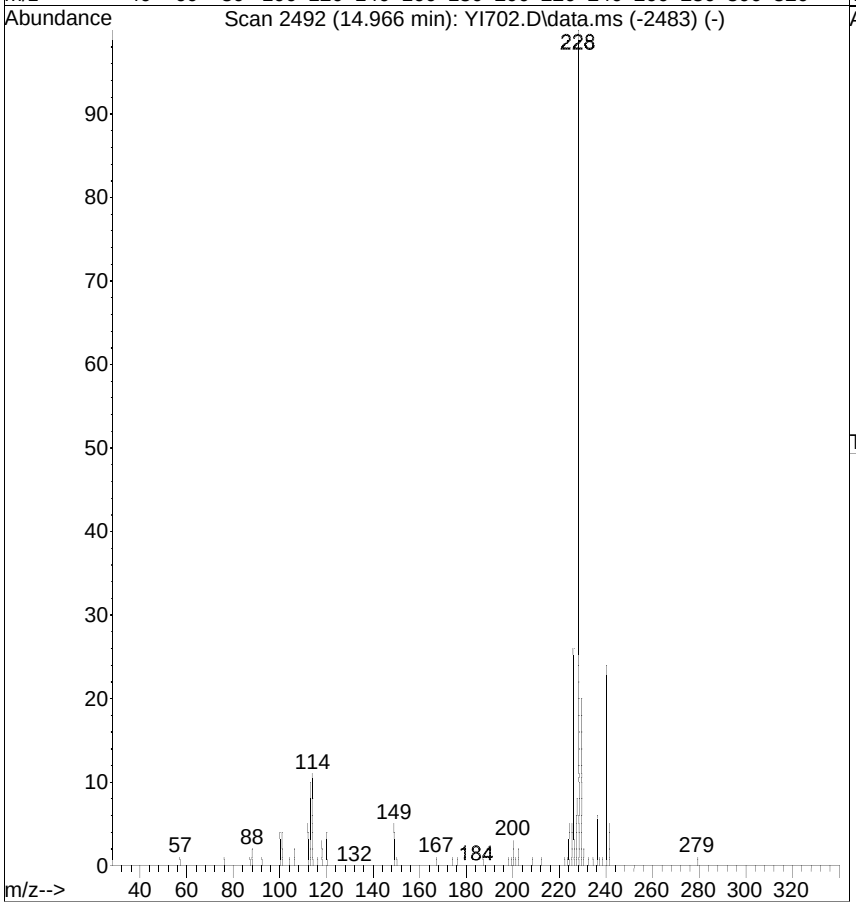
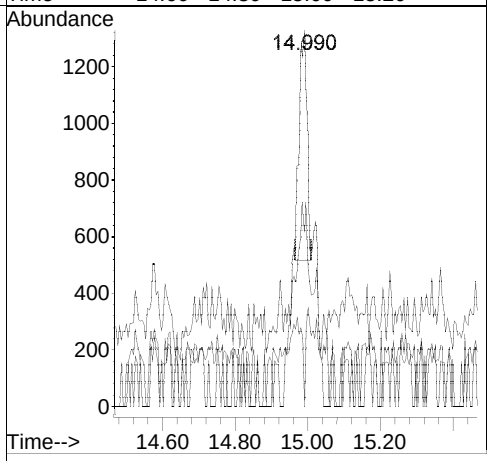
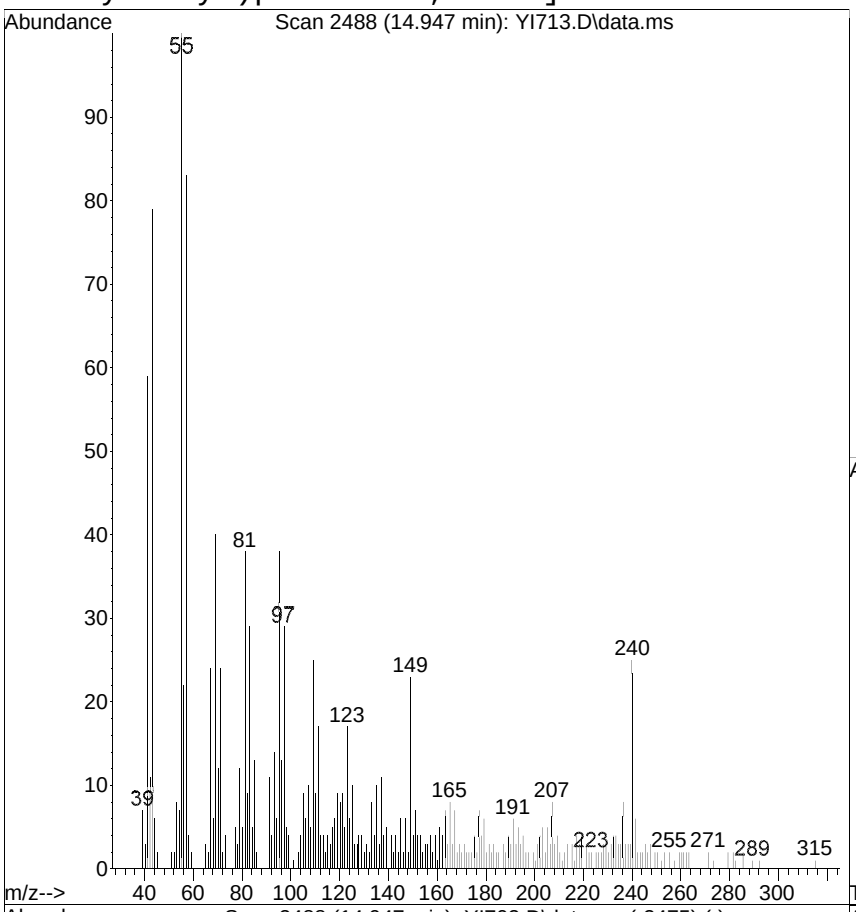




[bis(2-Ethylhexyl)phthalate; <RL]

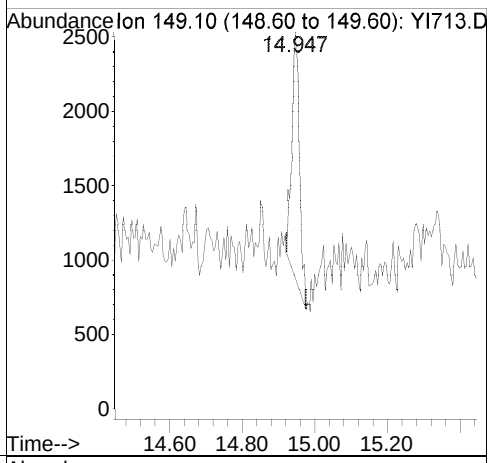
Raw



#77
bis(2-Ethylhexyl)phthalate
Concen: 0.1522 ug/mL
RT: 14.947 min Scan# 2488
Delta R.T. -0.000 min
Lab File: YI713.D
Acq: 8 Sep 2012 1:45 am

Tgt Ion:149 Resp: 2297

Ion	Ratio	Lower	Upper
149	100		
167	31.8	9.0	49.0
279	10.2	0.0	27.0



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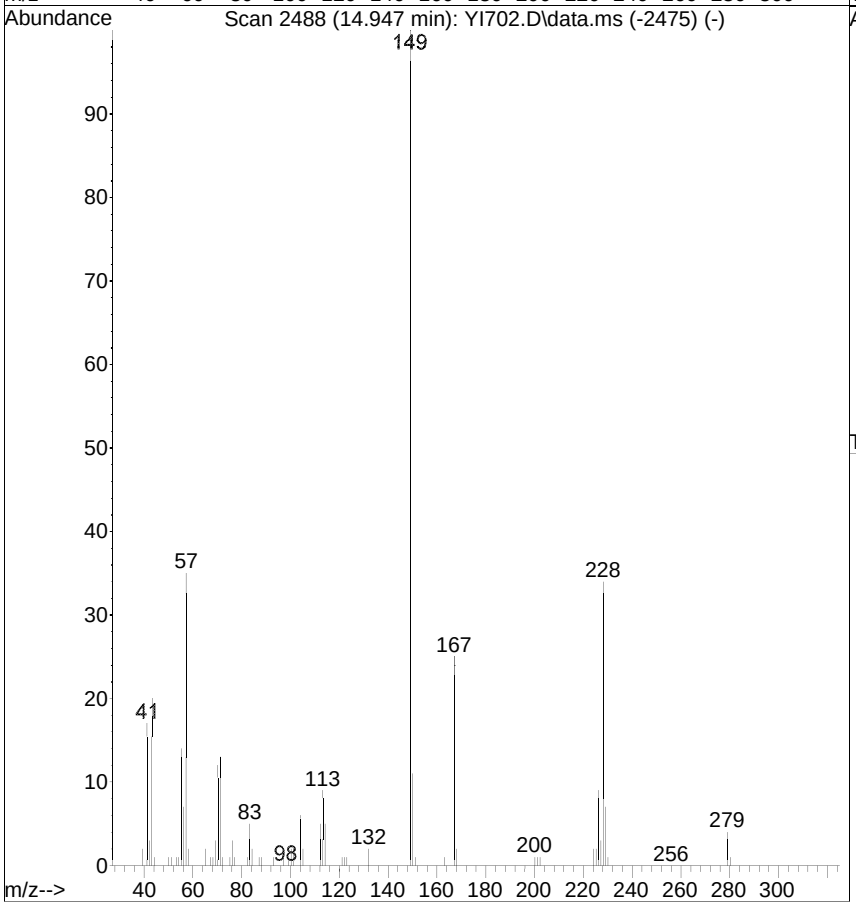
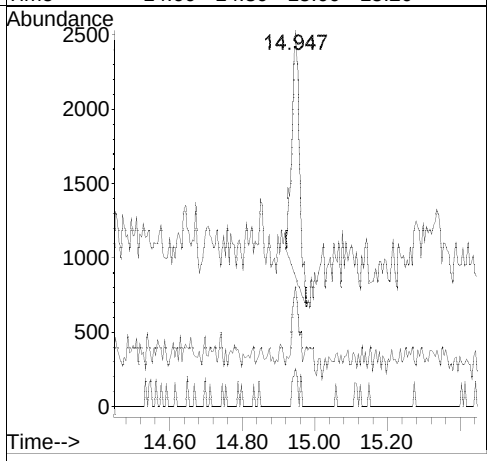
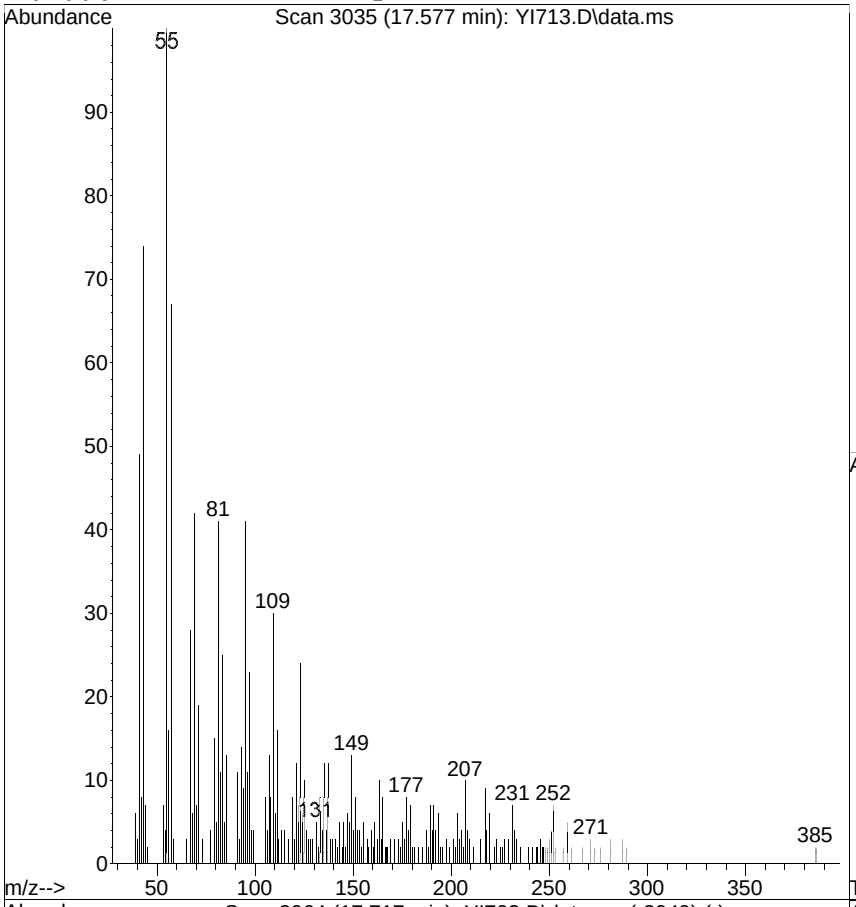




[Benzo(a)pyrene; <RL; u]

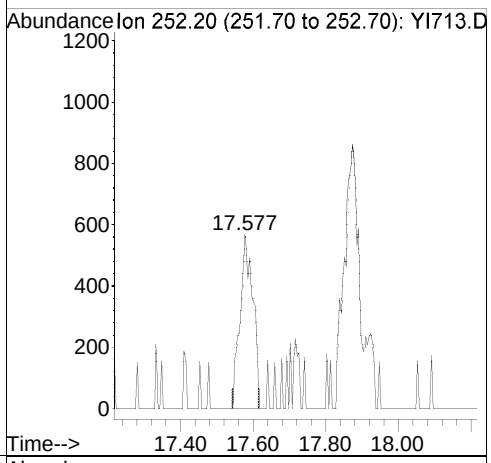
Raw



#83
Benzo(a)pyrene
Concen: 0.1045 ug/mL
RT: 17.577 min Scan# 3035
Delta R.T. -0.139 min
Lab File: YI713.D
Acq: 8 Sep 2012 1:45 am

Tgt Ion:252 Resp: 1393

Ion	Ratio	Lower	Upper
252	100		
253	34.6	2.6	42.6
125	145.1	0.0	36.8#



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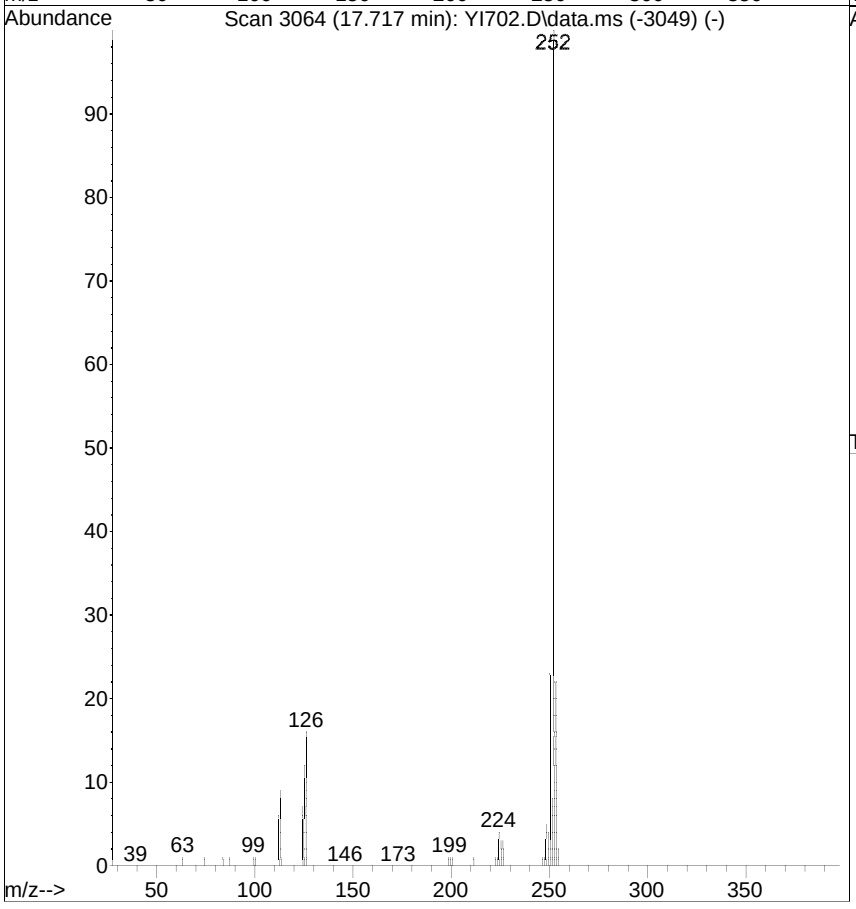
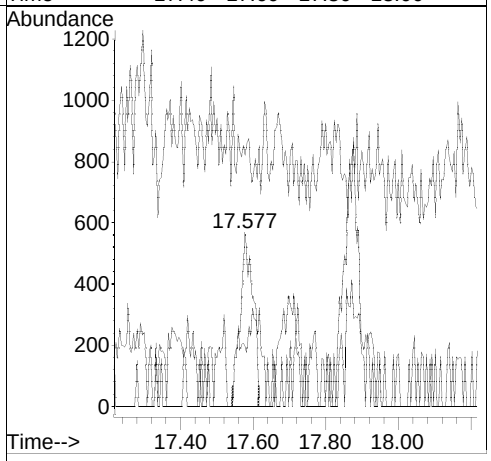




CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA05	Lab ID	: 239404-009	Client ID	: EX13B023B.2
Seqnum	: 542366451004.1	Matrix	: Soil	Acct	: ARCSF (JG)
File	: xia04	Batch	: 190266	Time	: 10-SEP-2012 13:09
Cal	: 542247126001	Caldate	: 19-JUN-2012		
IDF	: 2.0	Raw Units	: ug/mL	Units	: ug/Kg

30.00 g --> 1.0 ml = 0.03333 ml/g PDF

Analyte	Raw	Result	RL	Blank	Flags
Naphthalene	5.934	400	130		
3,3'-Dichlorobenzidine	11.35	760 J	1300		?curve+ x
Benzo(a)anthracene	0.2752	ND	130		m u
bis(2-Ethylhexyl)phthalate	0.5782	39 J	670		
Benzo(b)fluoranthene	1.303	87 J	130		u
Benzo(k)fluoranthene	1.367	91 J	130		
Benzo(a)pyrene	0.3551	24 J	130		m u
Indeno(1,2,3-cd)pyrene	0.4775	32 J	130		
Dibenz(a,h)anthracene	0.1599	ND	130		

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	10.49	1333	699.3	52	48-120	u
2-Fluorobiphenyl	13.41	1333	894.2	67	50-120	u
Terphenyl-d14	13.18	1333	878.4	66	40-120	u

ISTD (CCV xia02)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	2782377	3043217	9.37	7.25	7.25	0.00
Acenaphthene-d10	1714307	1865536	8.82	9.39	9.39	0.00
Chrysene-d12	3339435	3796221	13.68	14.54	14.55	0.01
Perylene-d12	3529169	3908563	10.75	17.15	17.21	0.06

09/10/12 : Was diluted due to the dark and viscous nature of the sample extract.

LLH 09/10/12 : High chromatographic background.

LLH 09/10/12 [Benzo(a)anthracene]: Corrected automatically drawn baseline.

LLH 09/10/12 [Benzo(a)pyrene]: Corrected automatically drawn baseline.

LLH 09/10/12 : Corrected automatically drawn baseline for Chrysene.

LW 09/12/12 [Benzo(k)fluoranthene]: currently NT but this is also picking the benzo(b) peak

(not in upper half)

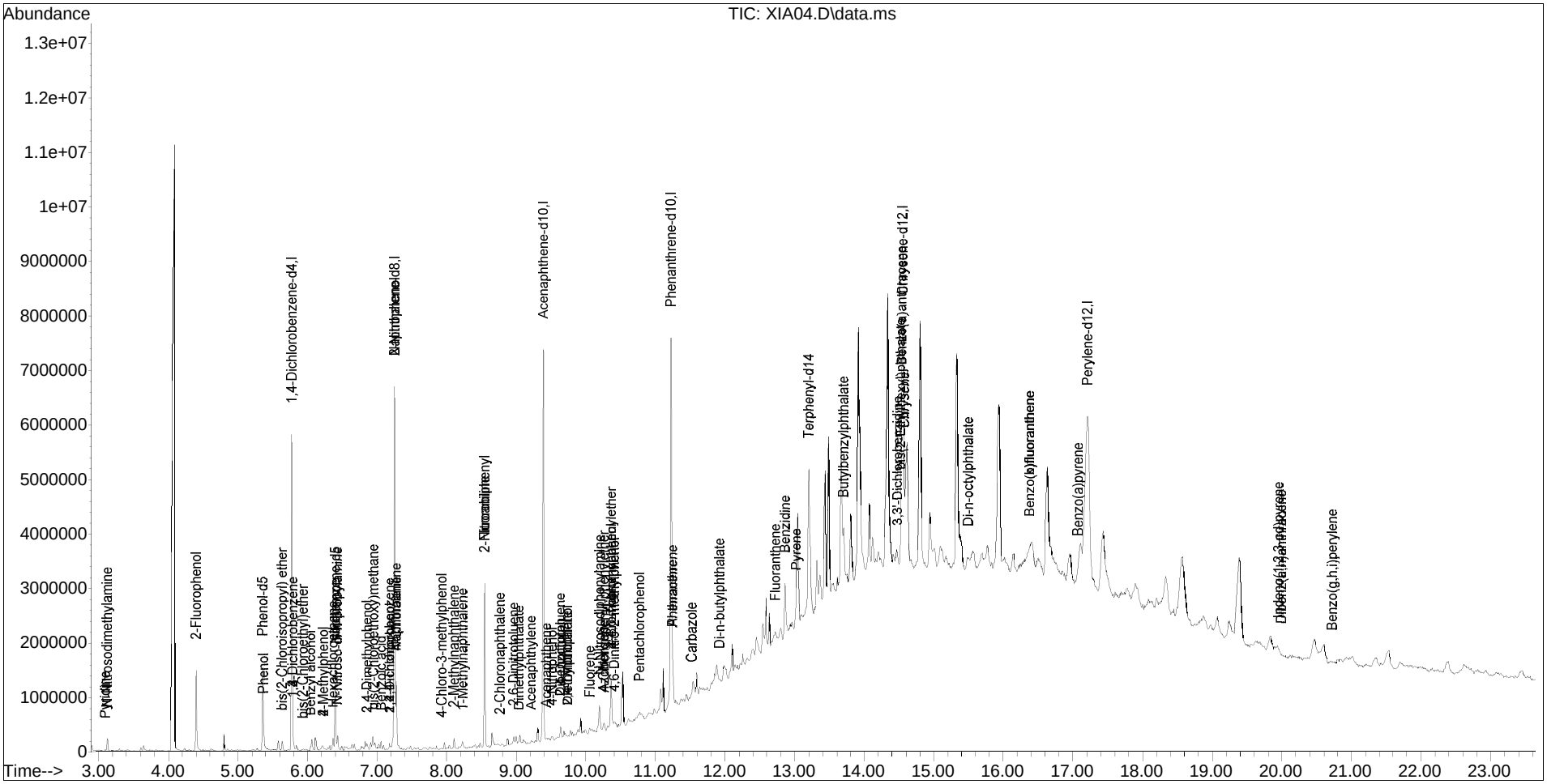
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

+=high bias ?curve=check curve m=manual integration u=use x=false positive

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA04.D
Acq On : 10 Sep 2012 1:09 pm
Operator :
Sample : S,239404-009
Misc : 190266,2, //DV
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 16:56:52 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA04.D
Acq On : 10 Sep 2012 1:09 pm
Operator :
Sample : S,239404-009
Misc : 190266,2, //DV
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 16:56:52 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	5.772	152	930627	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.252	136	3043217	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.394	164	1865536	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.232	188	3481325	40.0000	ug/mL	0.00
70) Chrysene-d12	14.549	240	3796221	40.0000	ug/mL	0.00
79) Perylene-d12	17.210	264	3908563	40.0000	ug/mL	0.06
Target Compounds						Qvalue
2) Pyridine	3.095	79	2647	0.0620	ug/mL	# 29
3) N-Nitrosodimethylamine	3.122	42	15379	1.0815	ug/mL	# 22
4) 2-Fluorophenol	4.399	112	408220	12.3121	ug/mL	# 72
5) Phenol-d5	5.361	99	541396	11.9575	ug/mL	78
6) Phenol	5.377	94	88920	2.0602	ug/mL	74
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	5.927	93	1200	0.0367	ug/mL	# 28
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	5.793	146	1133	0.0329	ug/mL	# 62
11) 1,4-Dichlorobenzene	5.793	146	1133	0.0339	ug/mL	# 54
12) Benzyl alcohol	6.050	108	3876	0.1707	ug/mL	# 56
13) 1,2-Dichlorobenzene	5.793	146	1133	0.0352	ug/mL	# 64
14) 2-Methylphenol	6.231	107	10672	0.4001	ug/mL	79
15) bis(2-Chloroisopropyl) ether	5.633	45	2607	0.0802	ug/mL	# 65
16) 4-Methylphenol	6.231	107	10672	0.2738	ug/mL	# 83
17) N-Nitroso-di-n-propylamine	6.429	70	5821	0.2555	ug/mL	89
18) Hexachloroethane	6.370	117	15281	1.0440	ug/mL	# 15
20) Nitrobenzene-d5	6.397	82	475706	10.4888	ug/mL	# 67
21) Nitrobenzene	6.397	77	2247	0.0565	ug/mL	# 39
22) Isophorone	6.397	82	475706	6.6035	ug/mL	67
23) 2-Nitrophenol	7.246	139	1471	0.0793	ug/mL	# 1
24) 2,4-Dimethylphenol	6.851	107	14566	0.4619	ug/mL	88
25) bis(2-Chloroethoxy)methane	6.953	93	1524	0.0365	ug/mL	# 25
26) Benzoic acid	7.059	105	1555	0.0631	ug/mL	# 47
27) 2,4-Dichlorophenol	7.188	162	1850	0.0693	ug/mL	# 48
28) 1,2,4-Trichlorobenzene	7.182	180	15044	0.5362	ug/mL	94
29) Naphthalene	7.273	128	488907	5.9342	ug/mL	94
30) 4-Chloroaniline	7.273	127	68758	7.8110	ug/mL	# 29
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	7.925	107	1632	0.0557	ug/mL	# 47
34) 2-Methylnaphthalene	8.106	142	59494	0.9885	ug/mL	91
35) 1-Methylnaphthalene	8.229	142	31437	0.5353	ug/mL	89
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA04.D
Acq On : 10 Sep 2012 1:09 pm
Operator :
Sample : S,239404-009
Misc : 190266,2, //DV
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 16:56:52 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.550	172	949345	13.4129	ug/mL	95
41) 2-Chloronaphthalene	8.764	162	1942	0.0355	ug/mL	78
42) 2-Nitroaniline	8.550	65	1561	0.0719	ug/mL #	1
43) Dimethylphthalate	9.036	163	1291	0.0221	ug/mL #	45
44) 2,6-Dinitrotoluene	8.961	165	1045	0.0666	ug/mL #	39
45) Acenaphthylene	9.212	152	8366	0.1020	ug/mL	75
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.426	154	2336	0.0416	ug/mL #	80
48) 2,4-Dinitrophenol	9.731	184	1021	13.3259	ug/mL #	1
49) 4-Nitrophenol	9.517	109	1078	0.1234	ug/mL #	18
50) Dibenzofuran	9.640	168	24524	0.3335	ug/mL	73
51) 2,4-Dinitrotoluene	9.640	165	1412	0.0699	ug/mL #	40
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	9.731	149	1193	0.0200	ug/mL #	31
54) 4-Chlorophenyl-phenylether	10.254	204	1404	0.0434	ug/mL #	1
55) Fluorene	10.062	166	10675	0.1680	ug/mL #	65
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	10.361	330	147273	14.5778	ug/mL #	81
59) 4,6-Dinitro-2-methylphenol	10.398	198	2840	0.2064	ug/mL #	3
60) N-Nitrosodiphenylamine	10.206	169	15317	0.3000	ug/mL #	47
61) Azobenzene	10.259	77	3689	0.0427	ug/mL #	1
62) 4-Bromophenyl-phenylether	10.361	248	8007	0.3555	ug/mL #	1
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	10.778	266	1776	0.1141	ug/mL #	27
65) Phenanthrene	11.253	178	197646	2.0779	ug/mL	94
66) Anthracene	11.253	178	197646	2.0318	ug/mL	90
67) Carbazole	11.515	167	16099	0.2186	ug/mL #	23
68) Di-n-butylphthalate	11.926	149	5279	0.0473	ug/mL #	30
69) Fluoranthene	12.733	202	127402	1.1292	ug/mL	91
71) Benzidine	12.861	184	40514	19.3019	ug/mL #	43
72) Pyrene	13.016	202	210412	1.8461	ug/mL	84
73) Terphenyl-d14	13.198	244	1140855	13.1756	ug/mL	95
74) Butylbenzylphthalate	13.700	149	2068	0.0357	ug/mL #	1
75) 3,3'-Dichlorobenzidine	14.485	252	1620	11.3546	ug/mL #	40
76) Benzo(a)anthracene	14.533	228	31760m	0.2752	ug/mL	
77) bis(2-Ethylhexyl)phthalate	14.523	149	43478	0.5782	ug/mL	84
78) Chrysene	14.581	228	197232m	1.8767	ug/mL	
80) Di-n-octylphthalate	15.489	149	1541	0.0117	ug/mL #	1
81) Benzo(b)fluoranthene	16.371	252	146820	1.3029	ug/mL #	1
82) Benzo(k)fluoranthene	16.371	252	146820	1.3670	ug/mL #	1
83) Benzo(a)pyrene	17.065	252	34290m	0.3551	ug/mL	
84) Indeno(1,2,3-cd)pyrene	19.961	276	53225	0.4775	ug/mL #	54

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA04.D
Acq On : 10 Sep 2012 1:09 pm
Operator :
Sample : S,239404-009
Misc : 190266,2, //DV
ALS Vial : 4 Sample Multiplier: 1

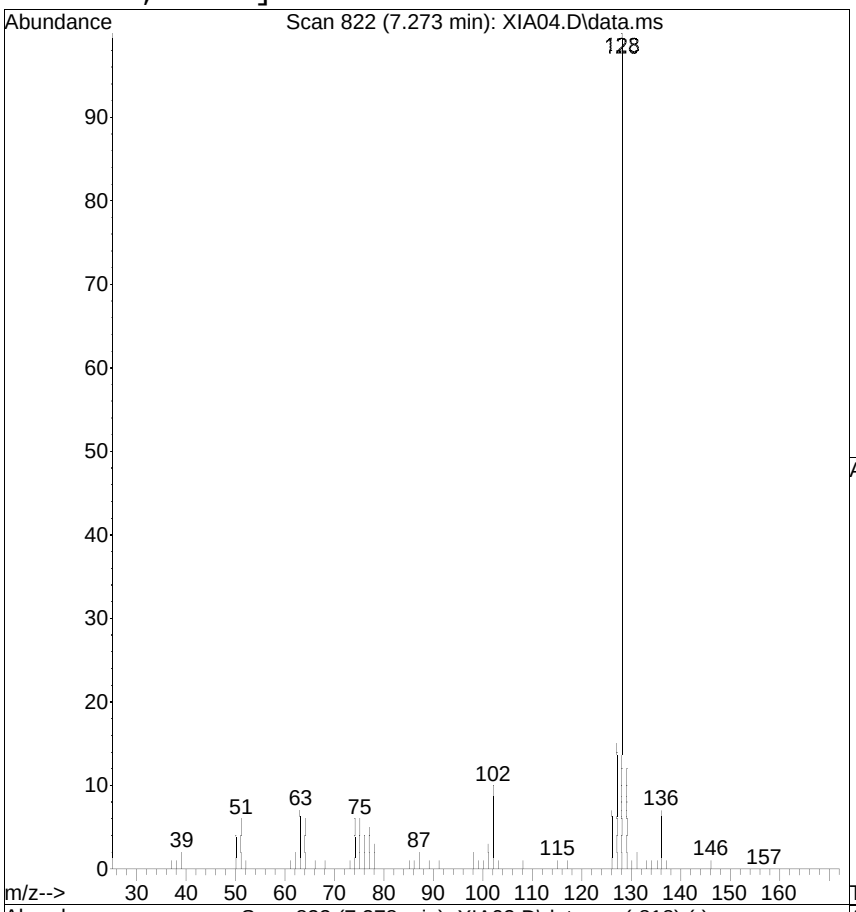
Quant Time: Sep 10 16:56:52 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	19.998	278	15054	0.1599	ug/mL #	1
86) Benzo(g,h,i)perylene	20.725	276	58485	0.6426	ug/mL	71

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Naphthalene; 400]

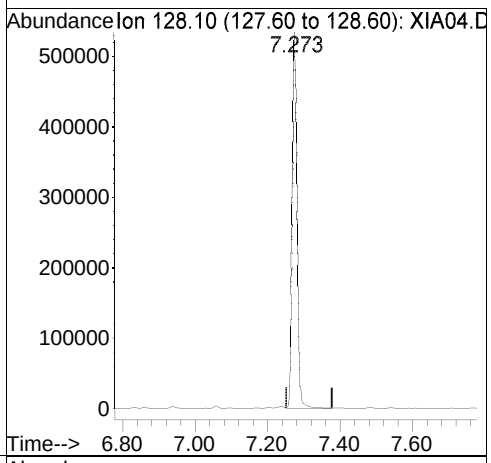
Raw



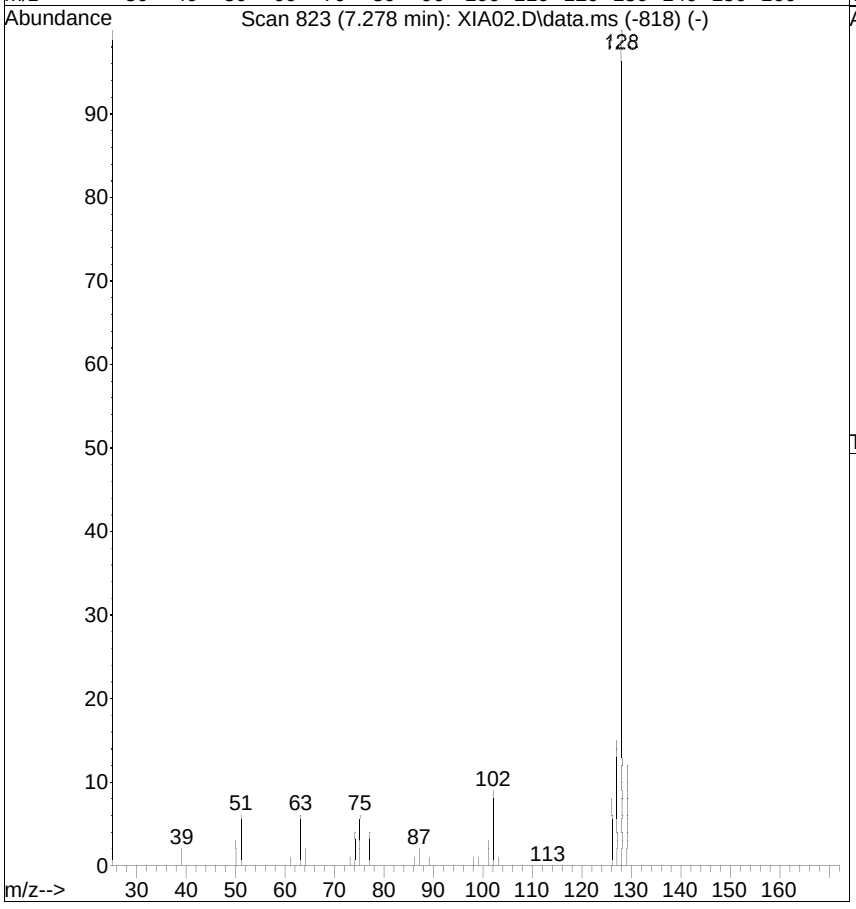
#29
Naphthalene
Concen: 5.9342 ug/mL
RT: 7.273 min Scan# 822
Delta R.T. -0.005 min
Lab File: XIA04.D
Acq: 10 Sep 2012 1:09 pm

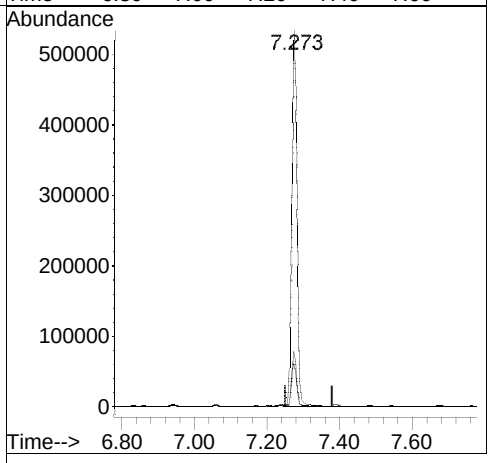
Tgt Ion:128 Resp: 488907

Ion	Ratio	Lower	Upper
128	100		
129	11.7	0.0	30.0
127	14.7	0.0	32.0



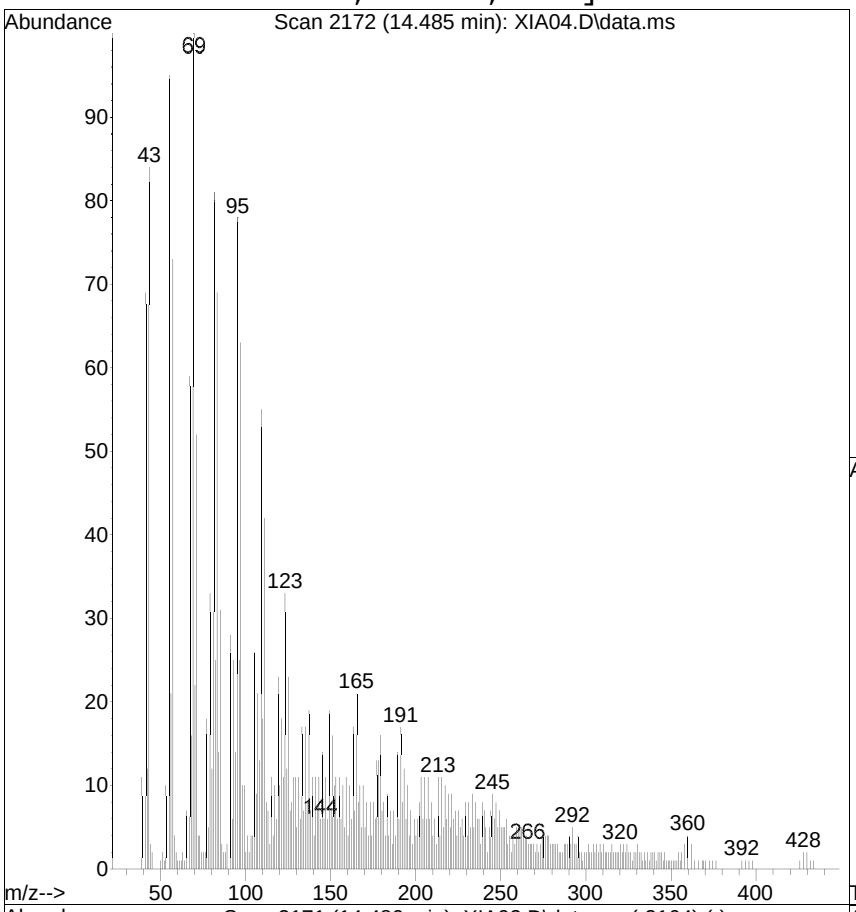
Ref





[3,3'-Dichlorobenzidine; 760 J; FP]

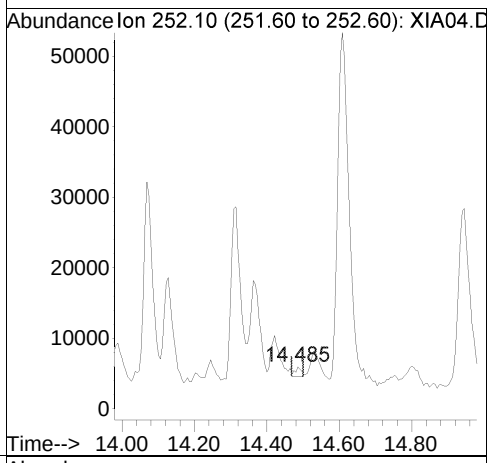
Raw



#75
3,3'-Dichlorobenzidine
Concen: 11.3546 ug/mL
RT: 14.485 min Scan# 2172
Delta R.T. 0.005 min
Lab File: XIA04.D
Acq: 10 Sep 2012 1:09 pm

Tgt Ion:252 Resp: 1620

Ion	Ratio	Lower	Upper
252	100		
254	68.3	44.0	84.0
126	139.4	0.0	34.0#



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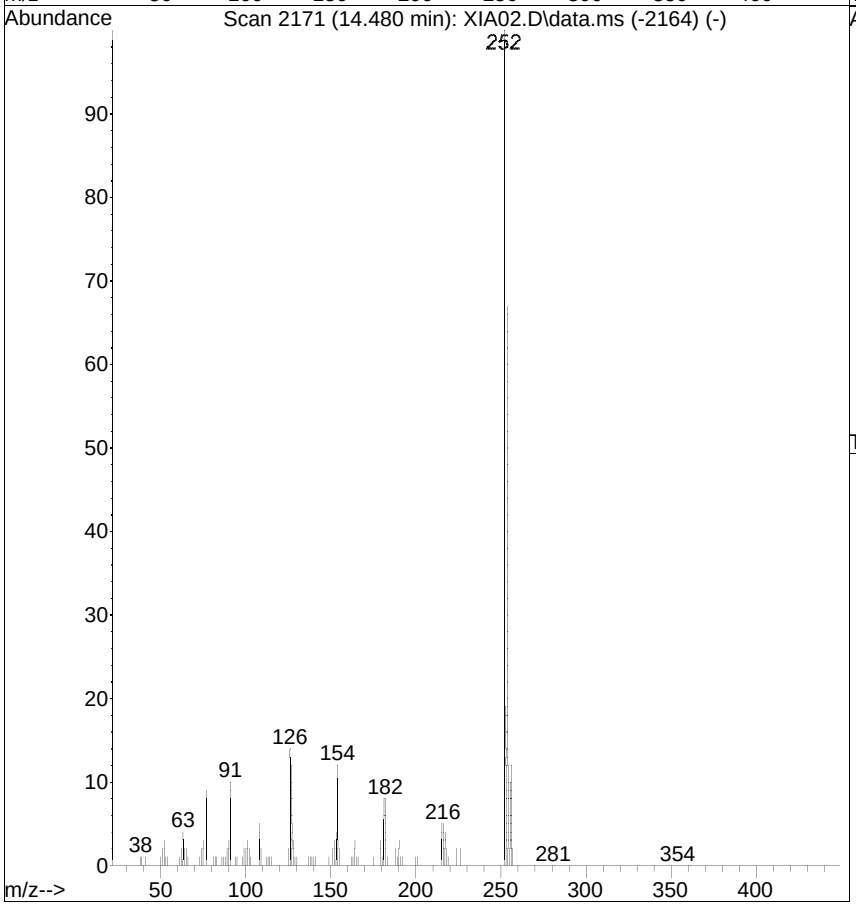
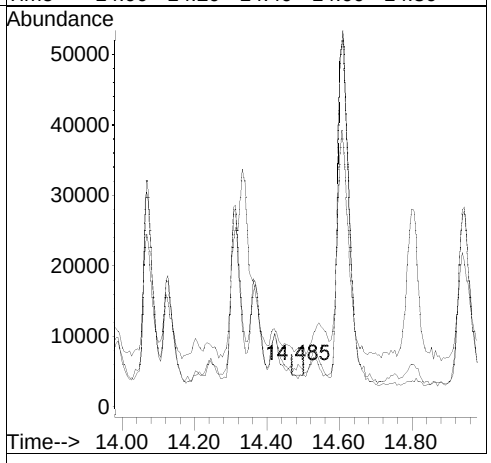
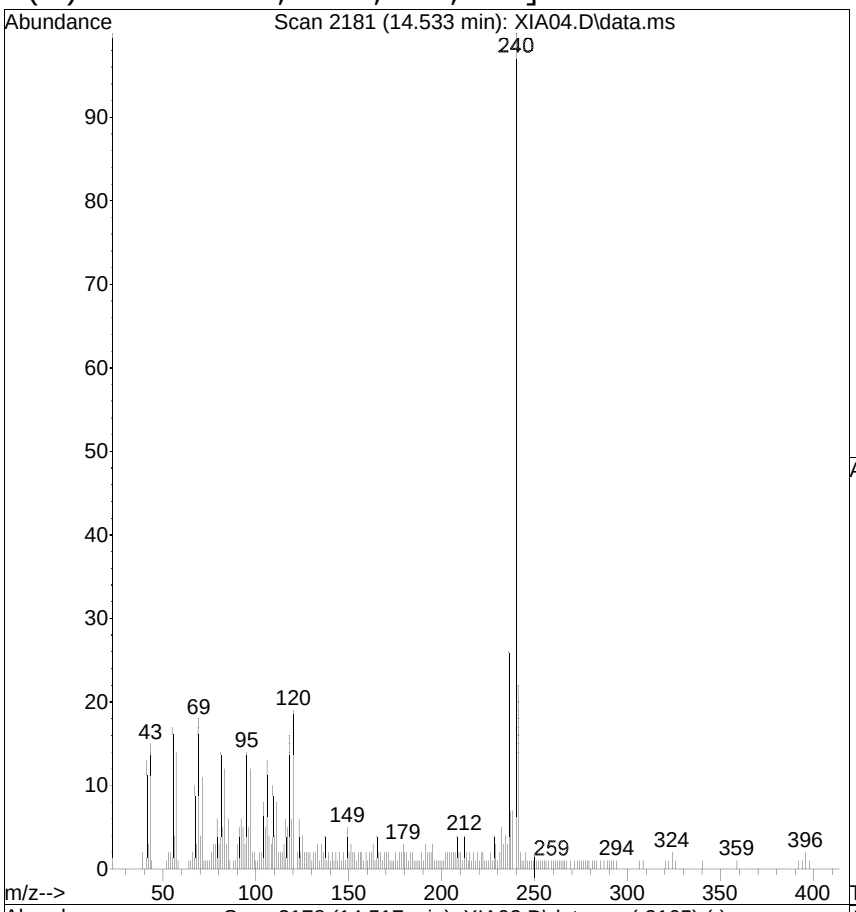




[Benzo(a)anthracene; <RL; MI; u]

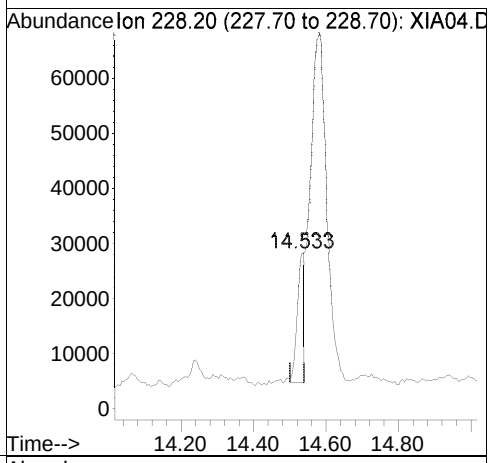
Raw



#76
Benzo(a)anthracene
Concen: 0.2752 ug/mL m
RT: 14.533 min Scan# 2181
Delta R.T. 0.016 min
Lab File: XIA04.D
Acq: 10 Sep 2012 1:09 pm

Tgt Ion:228 Resp: 31760

Ion	Ratio	Lower	Upper
228	100		
229	237.3	0.0	40.0#
226	253.7	8.0	48.0#



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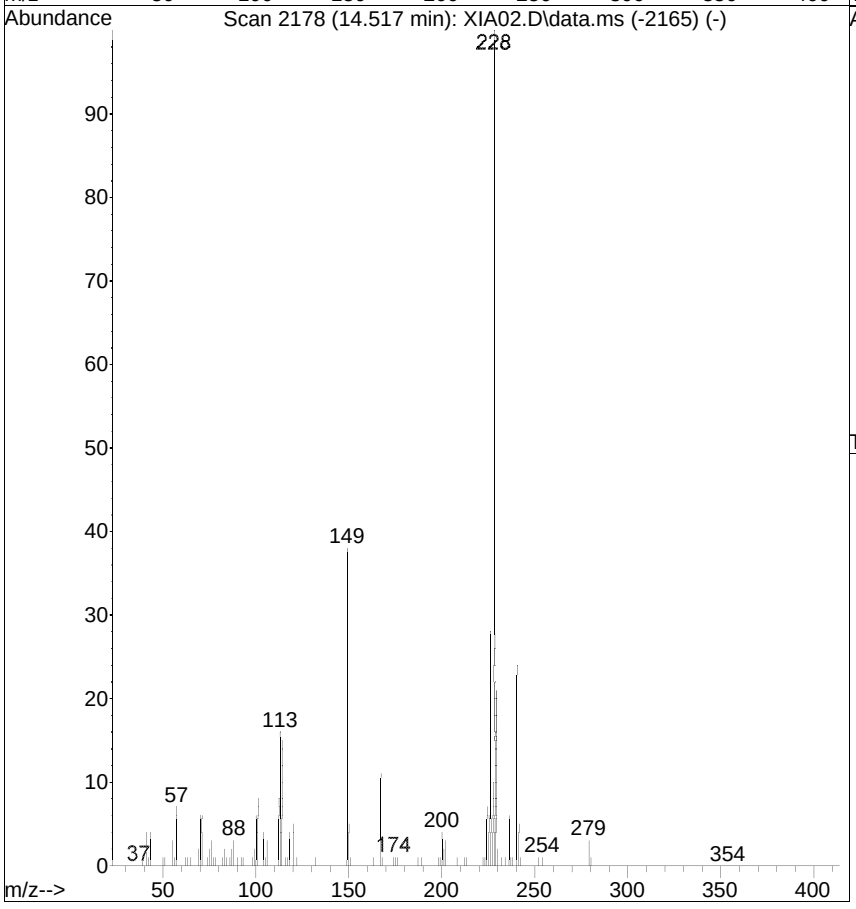
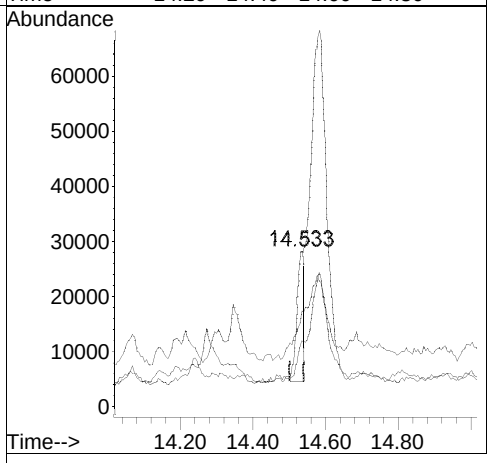
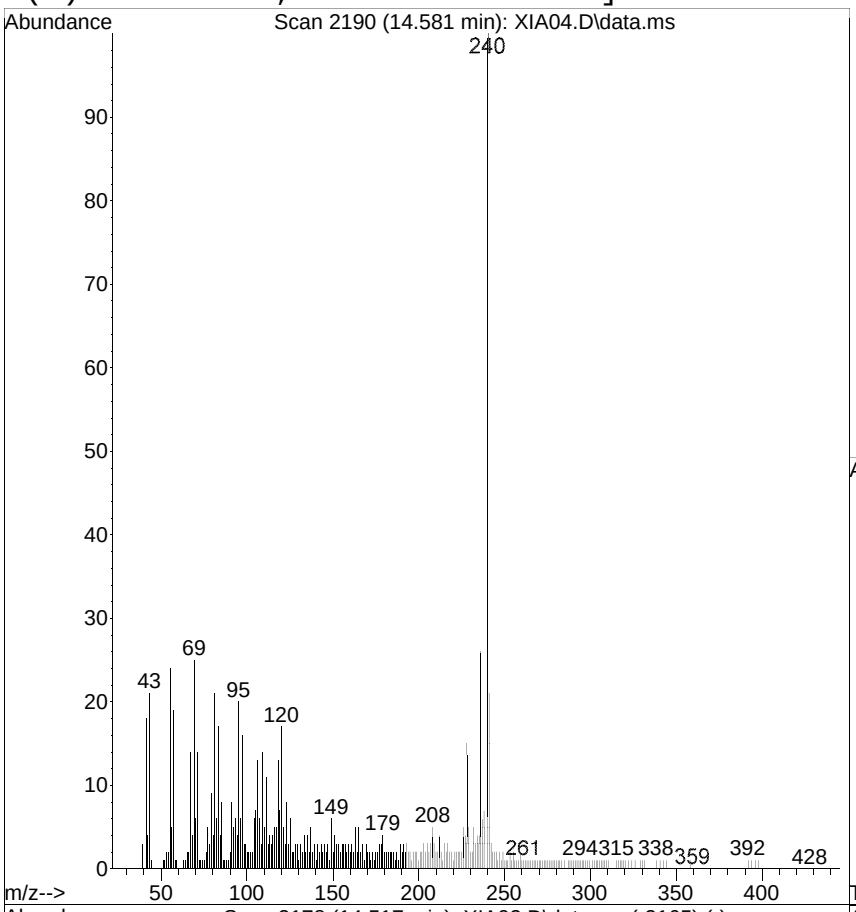




[Benzo(a)anthracene; before version]

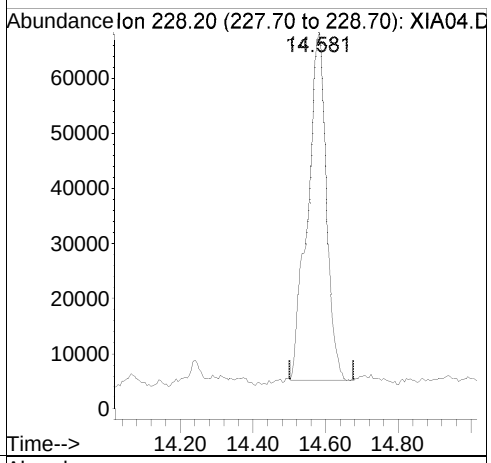
Raw



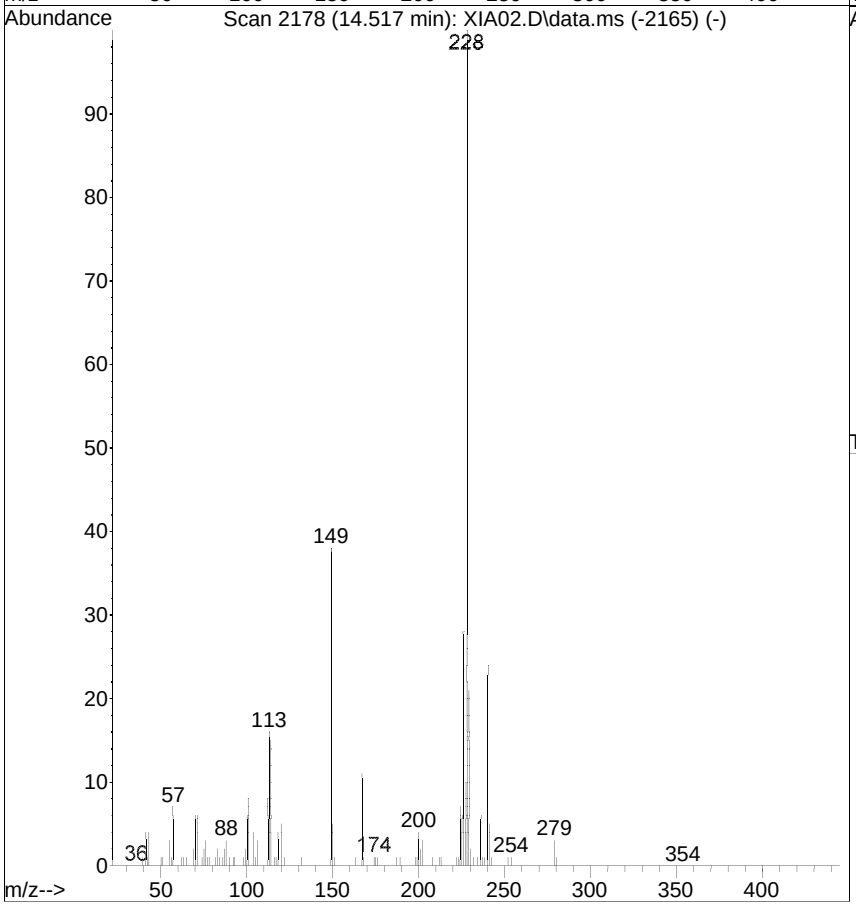
#76
Benzo(a)anthracene
Concen: 1.9505 ug/mL
RT: 14.581 min Scan# 2190
Delta R.T. 0.064 min
Lab File: XIA04.D
Acq: 10 Sep 2012 1:09 pm

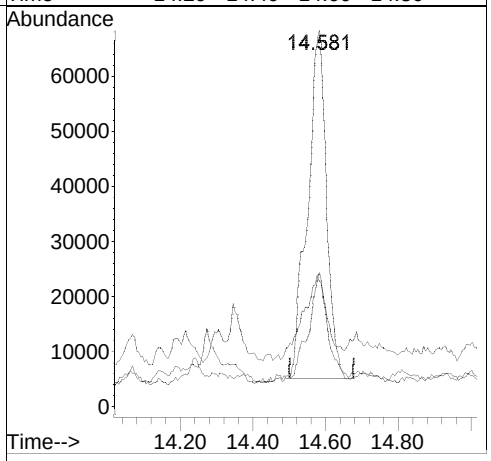
Tgt Ion:228 Resp: 225104

Ion	Ratio	Lower	Upper
228	100		
229	33.5	0.0	40.0
226	35.8	8.0	48.0



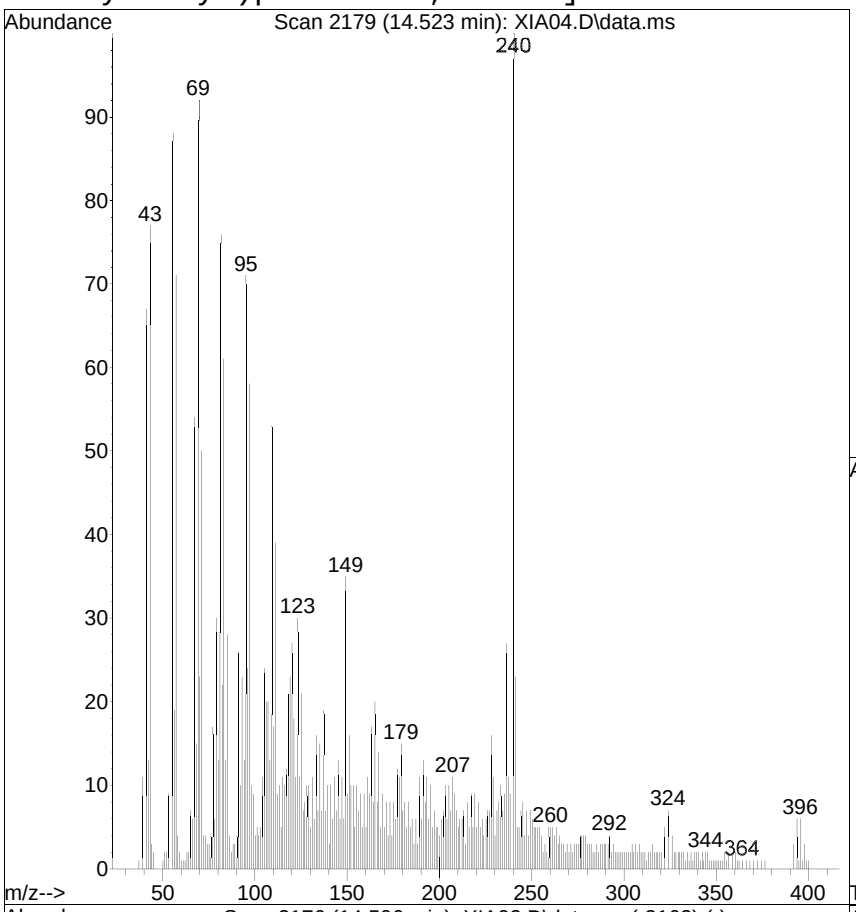
Ref





[bis(2-Ethylhexyl)phthalate; 39 J]

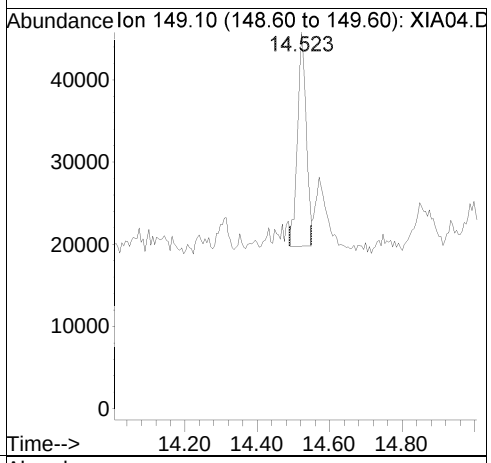
Raw



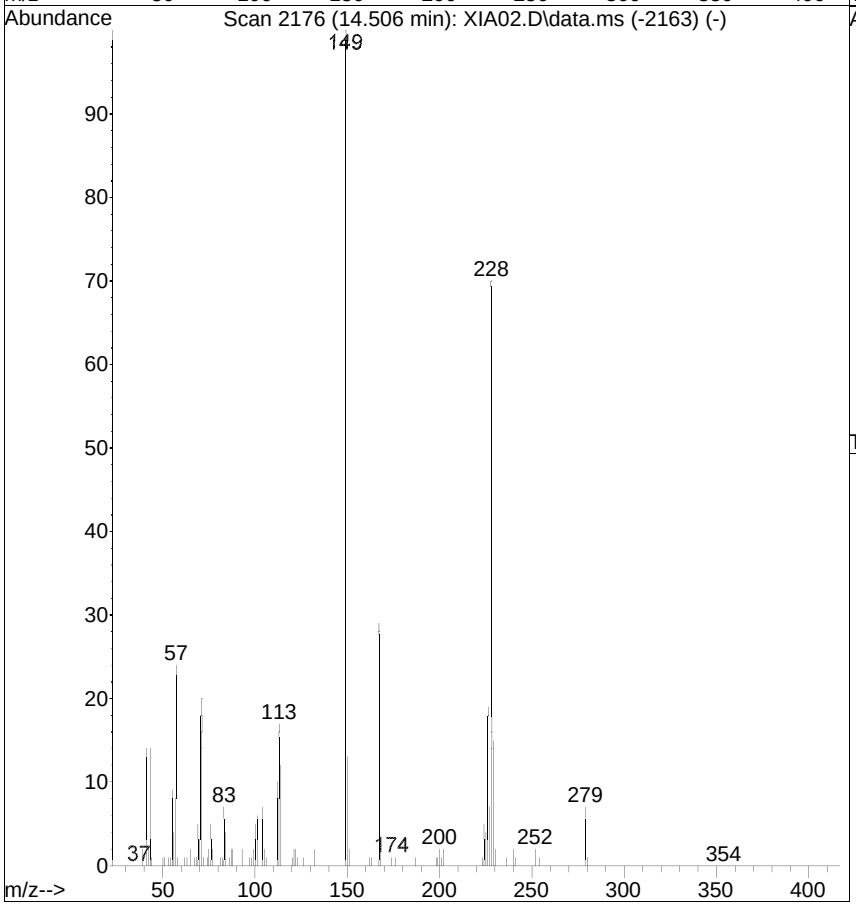
#77
bis(2-Ethylhexyl)phthalate
Concen: 0.5782 ug/mL
RT: 14.523 min Scan# 2179
Delta R.T. 0.016 min
Lab File: XIA04.D
Acq: 10 Sep 2012 1:09 pm

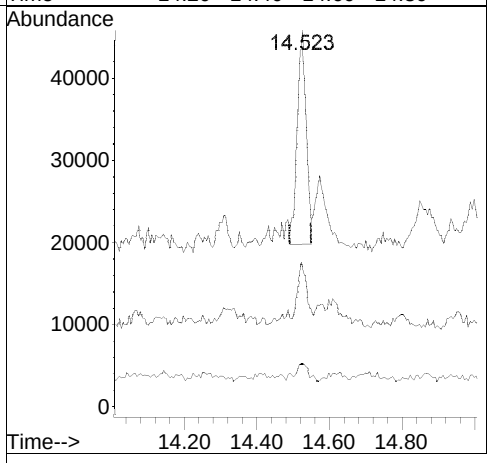
Tgt Ion:149 Resp: 43478

Ion	Ratio	Lower	Upper
149	100		
167	38.2	9.0	49.0
279	11.4	0.0	27.0



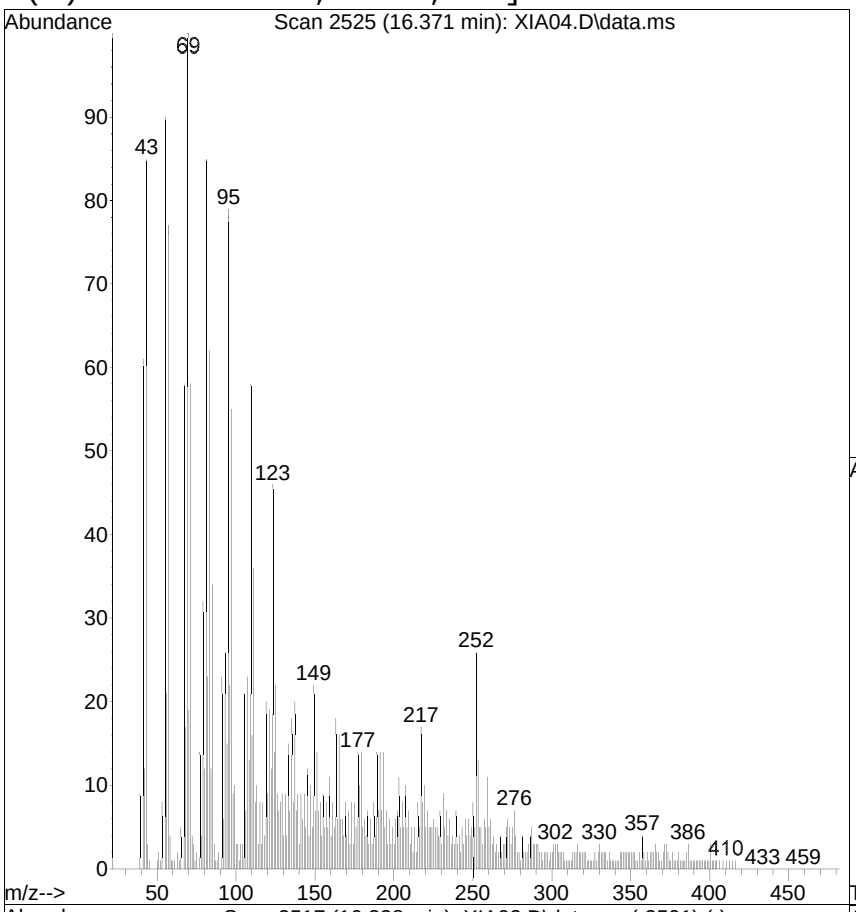
Ref





[Benzo(b)fluoranthene; 87 J; u]

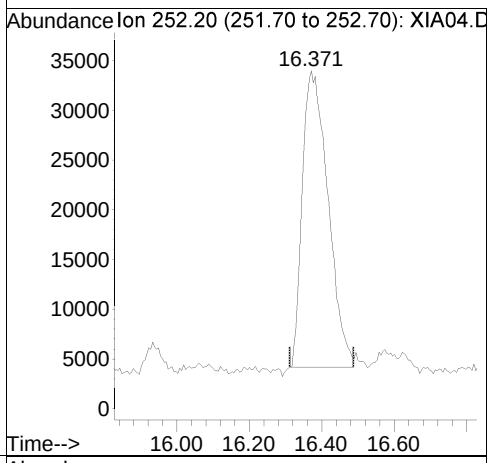
Raw



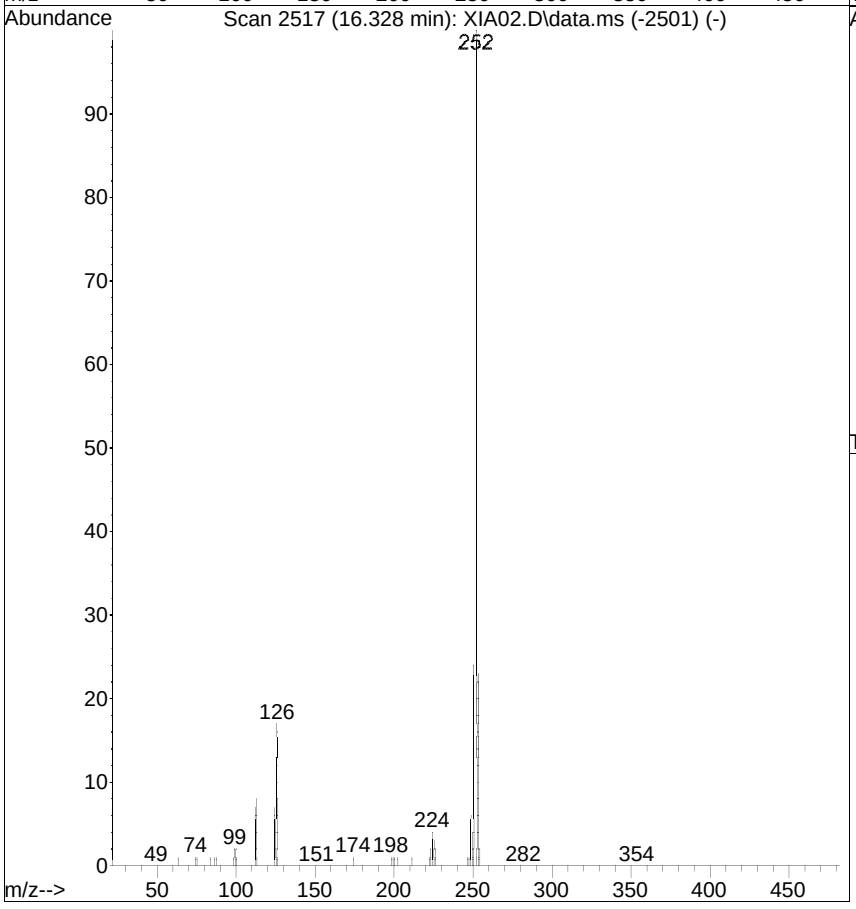
#81
Benzo(b)fluoranthene
Concen: 1.3029 ug/mL
RT: 16.371 min Scan# 2525
Delta R.T. 0.043 min
Lab File: XIA04.D
Acq: 10 Sep 2012 1:09 pm

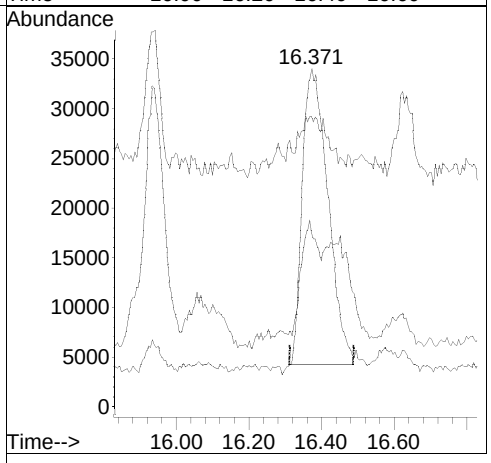
Tgt Ion:252 Resp: 146820

Ion	Ratio	Lower	Upper
252	100		
253	51.5	2.7	42.7#
125	86.0	0.0	35.2#



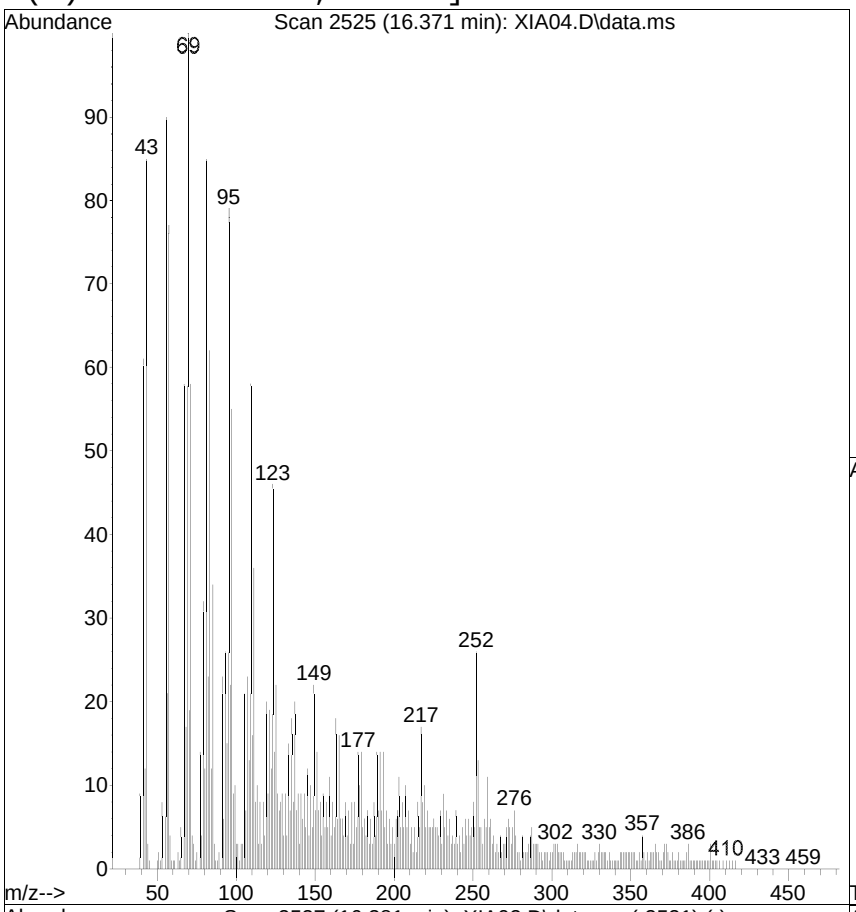
Ref





[Benzo(k)fluoranthene; 91 J]

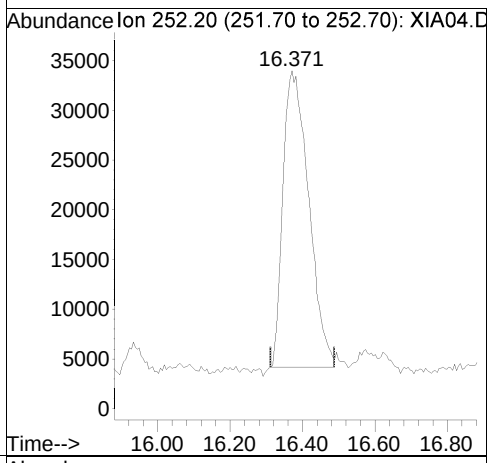
Raw



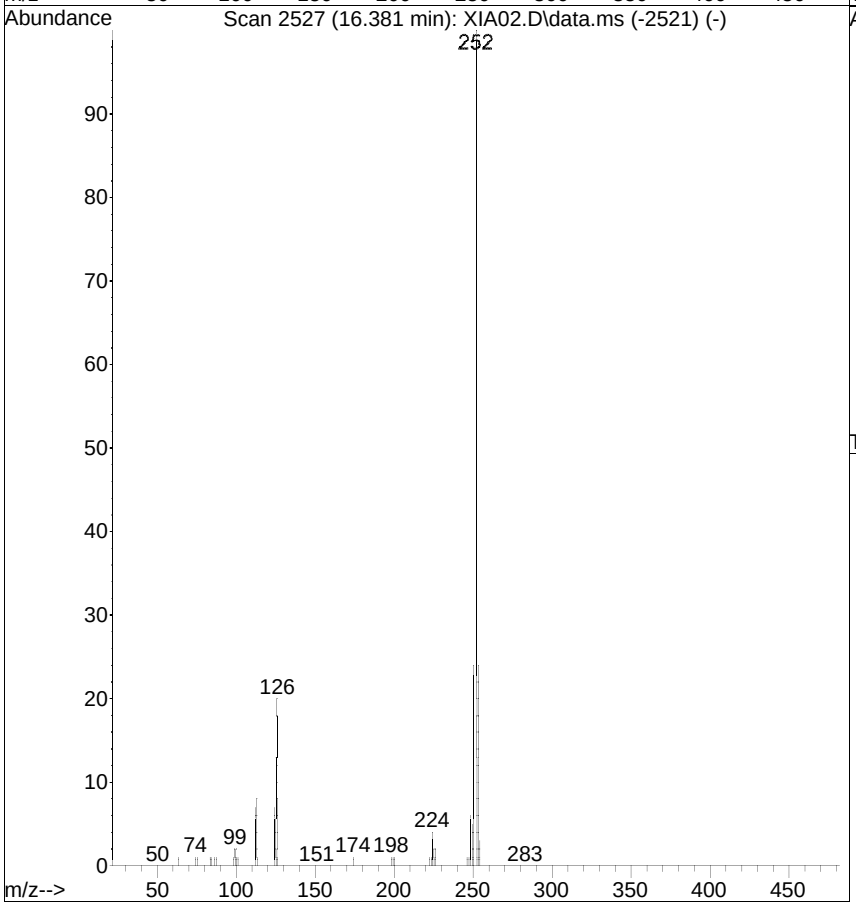
#82
Benzo(k)fluoranthene
Concen: 1.3670 ug/mL
RT: 16.371 min Scan# 2525
Delta R.T. -0.011 min
Lab File: XIA04.D
Acq: 10 Sep 2012 1:09 pm

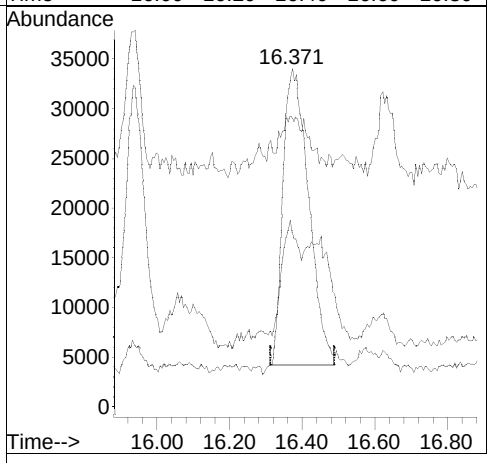
Tgt Ion:252 Resp: 146820

Ion	Ratio	Lower	Upper
252	100		
253	51.5	3.0	43.0#
125	86.0	0.0	37.0#



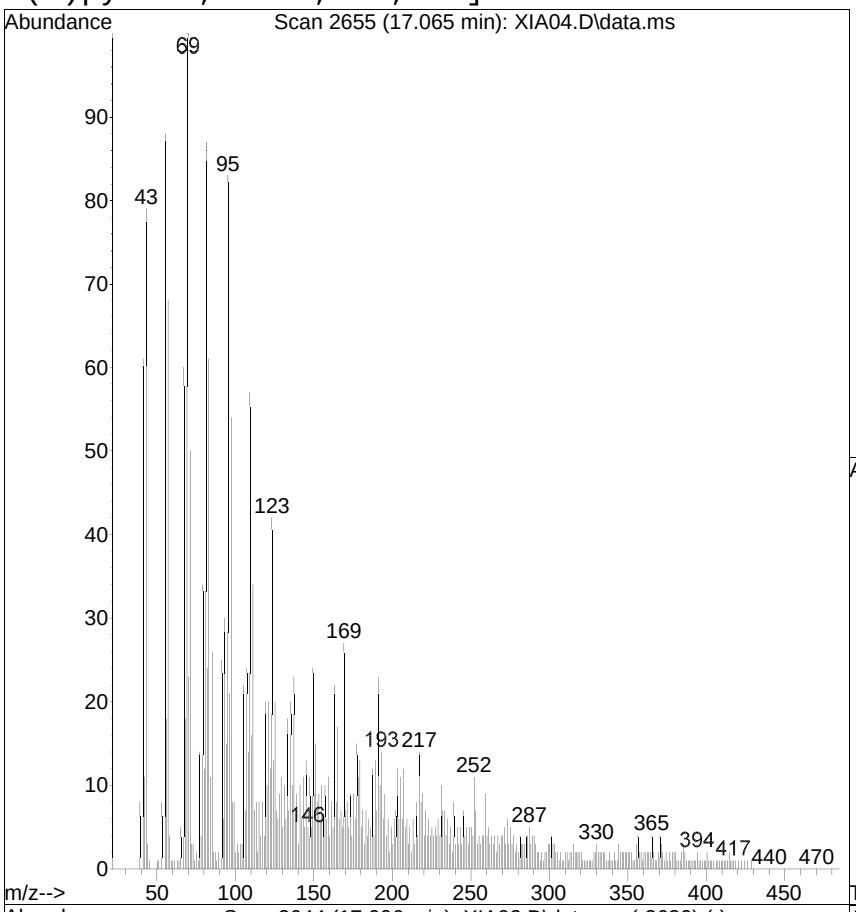
Ref





[Benzo(a)pyrene; 24 J; MI; u]

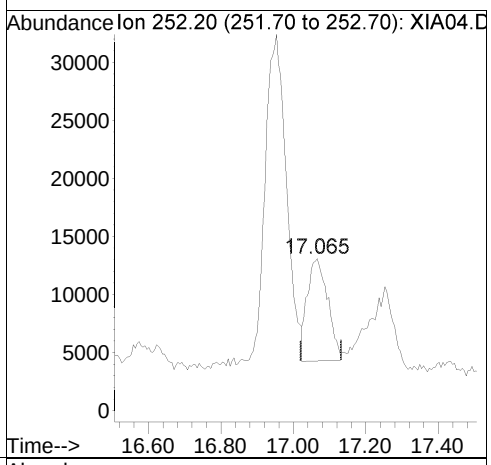
Raw



#83
Benzo(a)pyrene
Concen: 0.3551 ug/mL m
RT: 17.065 min Scan# 2655
Delta R.T. 0.059 min
Lab File: XIA04.D
Acq: 10 Sep 2012 1:09 pm

Tgt Ion:252 Resp: 34290

Ion	Ratio	Lower	Upper
252	100		
253	130.9	2.6	42.6#
125	281.9	0.0	36.8#



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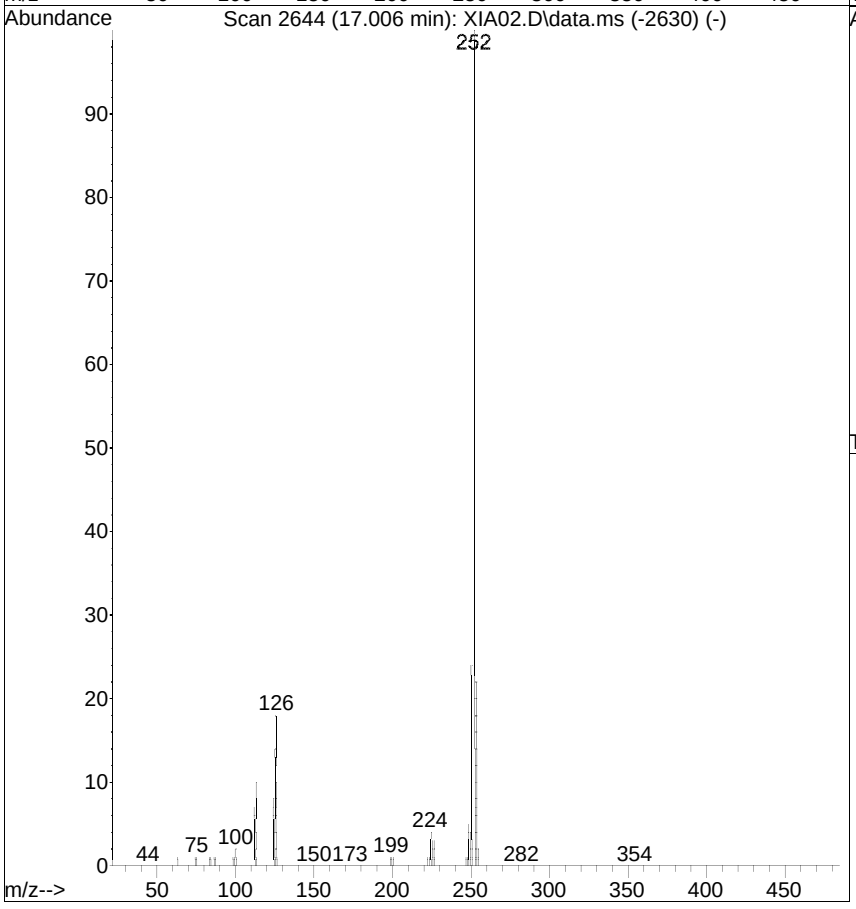
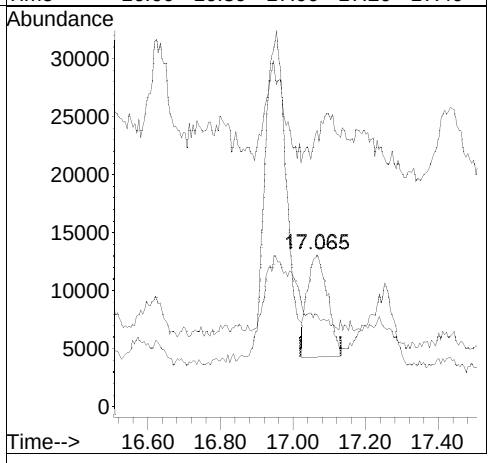
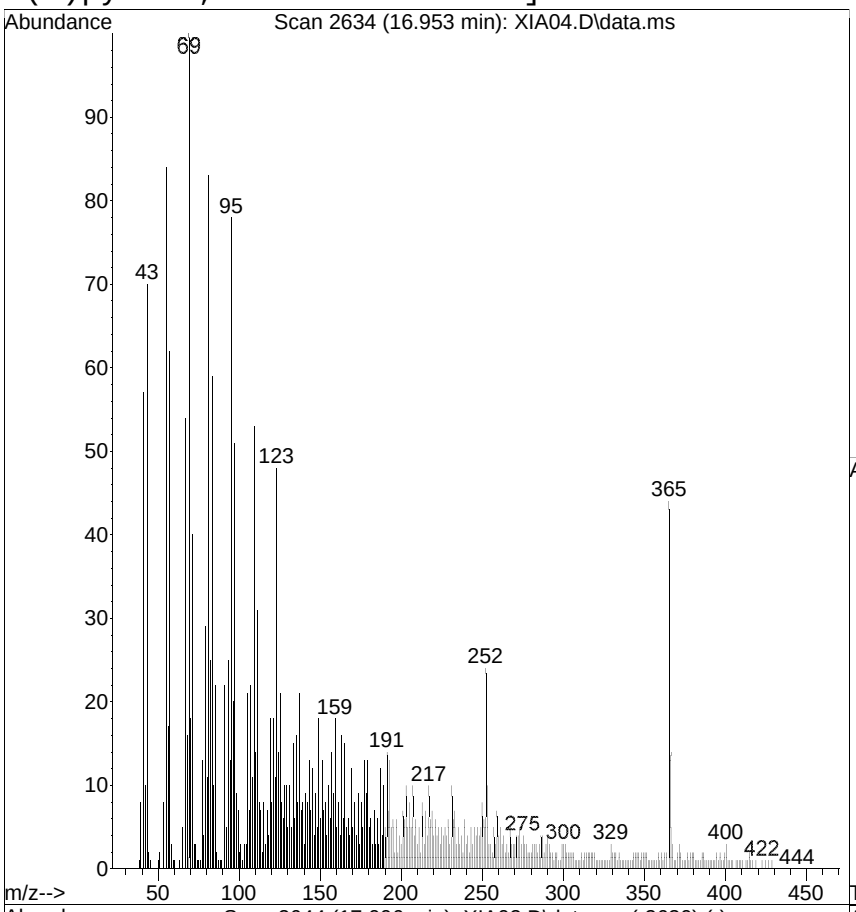




[Benzo(a)pyrene; before version]

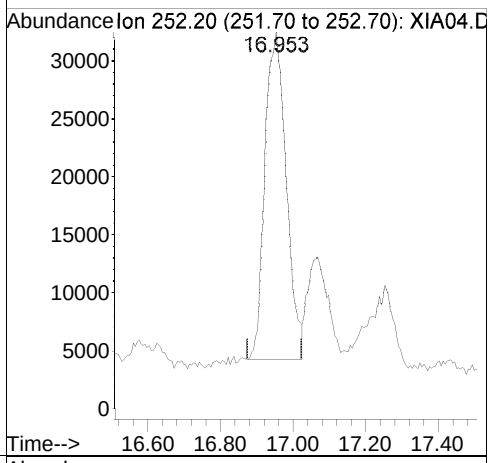
Raw



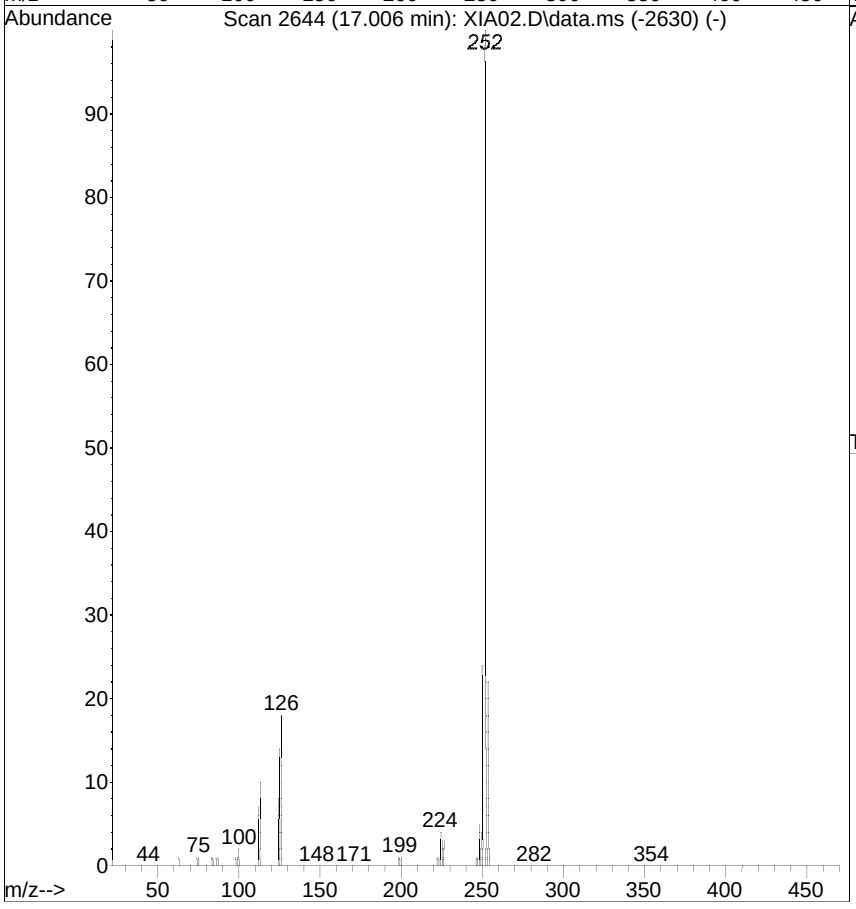
#83
Benzo(a)pyrene
Concen: 1.1704 ug/mL
RT: 16.953 min Scan# 2634
Delta R.T. -0.053 min
Lab File: XIA04.D
Acq: 10 Sep 2012 1:09 pm

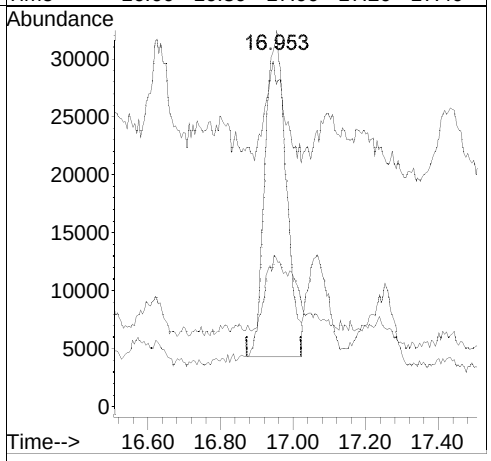
Tgt Ion:252 Resp: 113012

Ion	Ratio	Lower	Upper
252	100		
253	39.7	2.6	42.6
125	85.5	0.0	36.8#



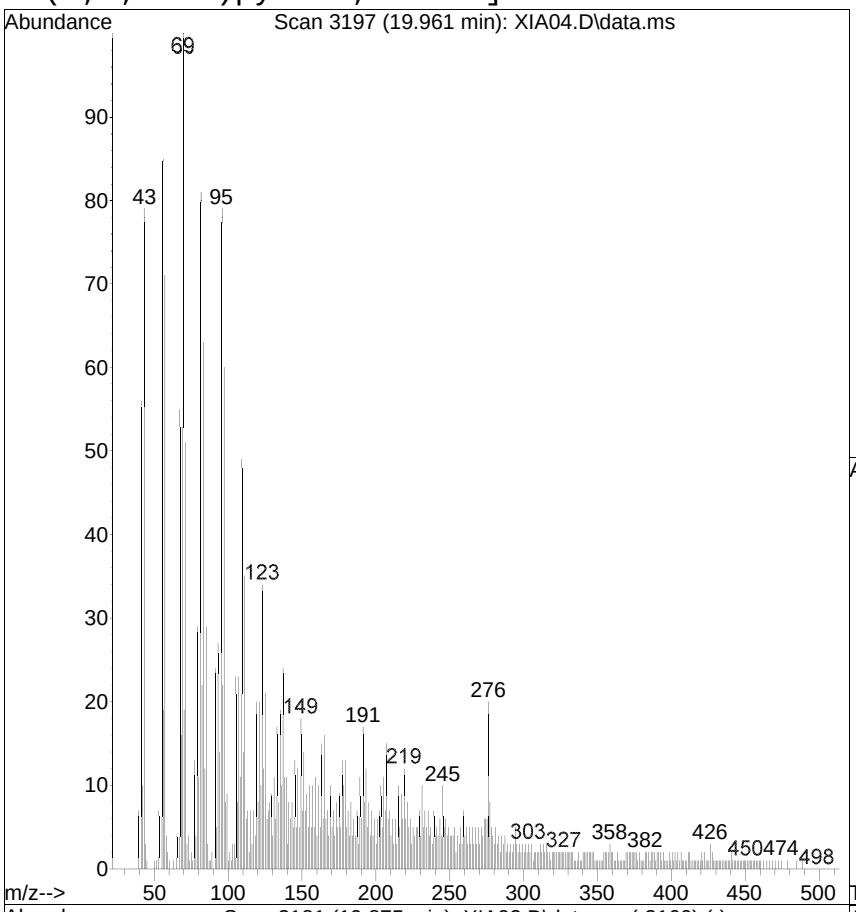
Ref





[Indeno(1,2,3-cd)pyrene; 32 J]

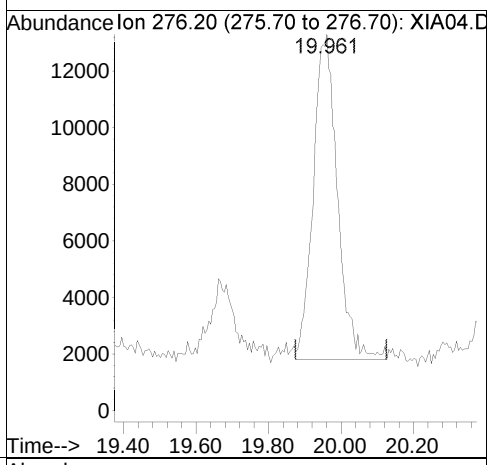
Raw



#84
Indeno(1,2,3-cd)pyrene
Concen: 0.4775 ug/mL
RT: 19.961 min Scan# 3197
Delta R.T. 0.086 min
Lab File: XIA04.D
Acq: 10 Sep 2012 1:09 pm

Tgt Ion:276 Resp: 53225

Ion	Ratio	Lower	Upper
276	100		
138	56.6	11.1	51.1#
227	26.7	0.0	20.1#



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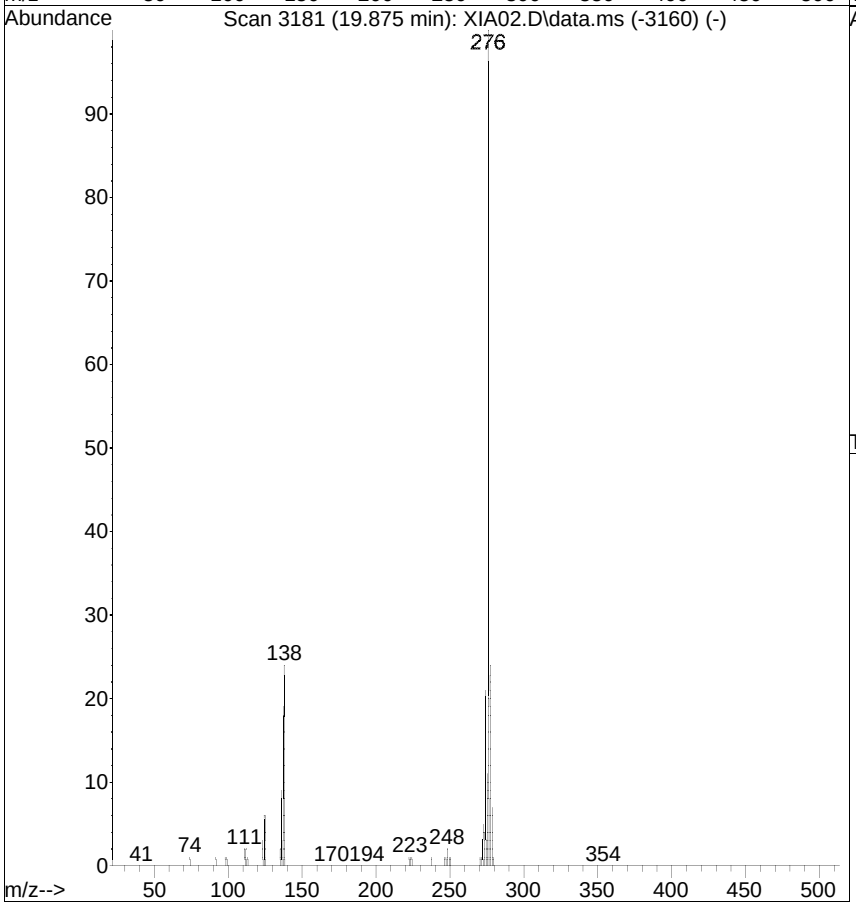
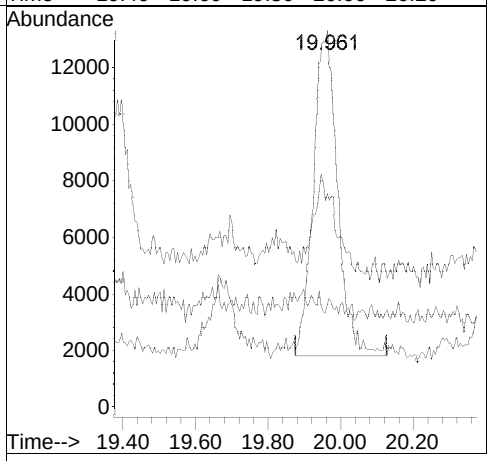
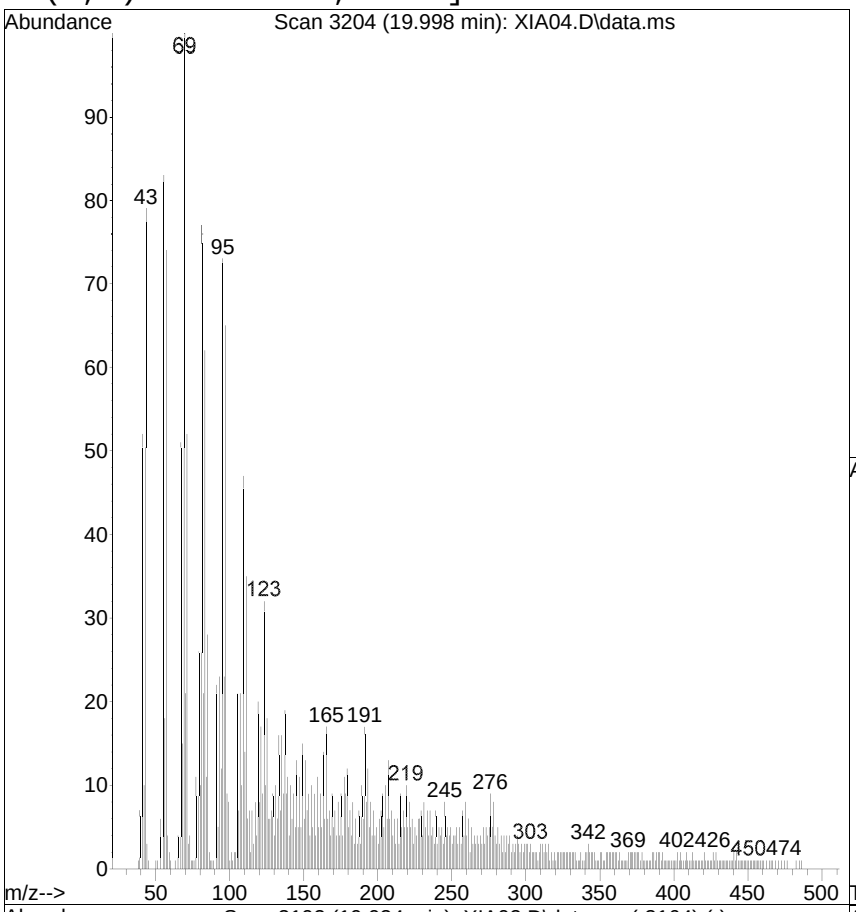




[Dibenz(a,h)anthracene; <RL]

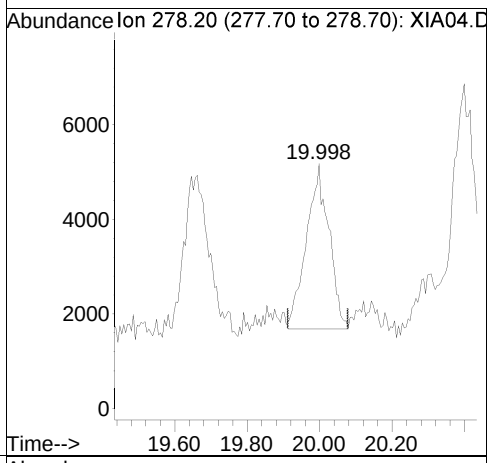
Raw



#85
Dibenz(a,h)anthracene
Concen: 0.1599 ug/mL
RT: 19.998 min Scan# 3204
Delta R.T. 0.064 min
Lab File: XIA04.D
Acq: 10 Sep 2012 1:09 pm

Tgt Ion:278 Resp: 15054

Ion	Ratio	Lower	Upper
278	100		
139	132.9	4.9	44.9#
279	52.9	4.1	44.1#



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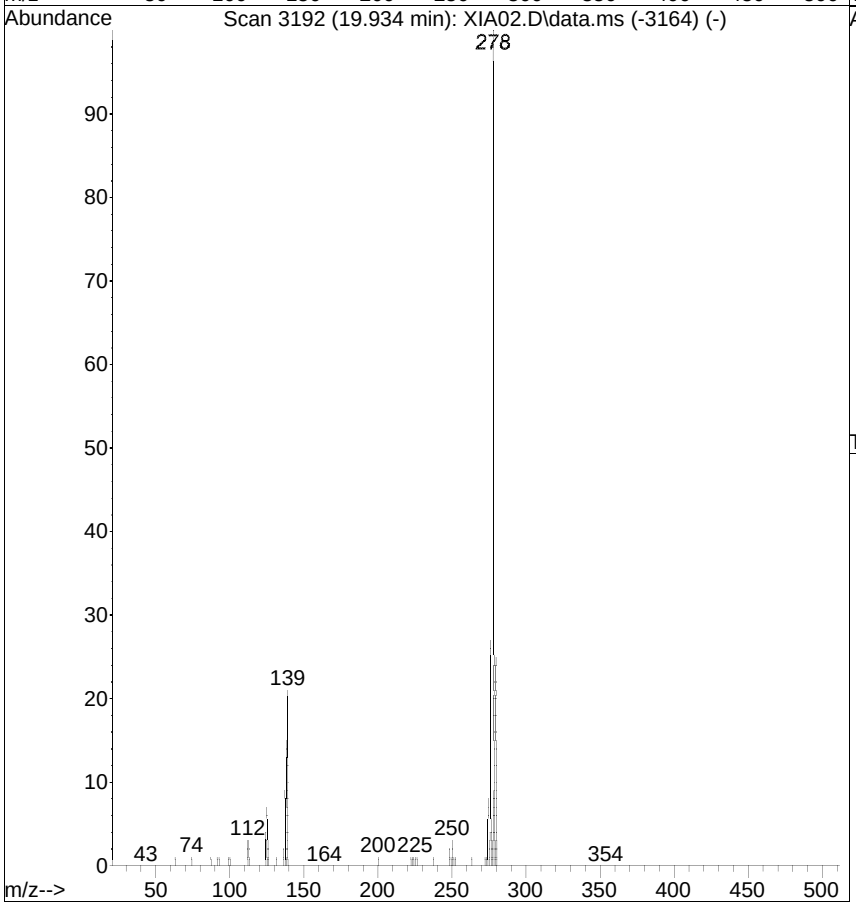
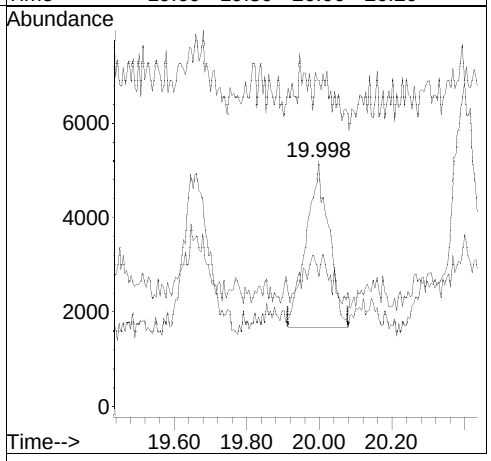




CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA05	Lab ID	: 239404-010	Client ID	: EX13B003BA.2
Seqnum	: 542366451006.1	Matrix	: Soil	Acct	: ARCSF (JG)
File	: xia06	Batch	: 190266	Time	: 10-SEP-2012 14:21
Cal	: 542247126001	Caldate	: 19-JUN-2012		
IDF	: 10.0	Raw Units	: ug/mL	Units	: ug/Kg

30.12 g --> 2.0 ml = 0.0664 ml/g PDF

Analyte	Raw	Result	RL	Blank	Flags
Naphthalene	0.1334	ND	1300		
3,3'-Dichlorobenzidine	11.36	7500 J	13000		?curve+ x
Benzo(a)anthracene	1.366	910 J	1300		m
bis(2-Ethylhexyl)phthalate	0.4976	330 J	6600		m
Benzo(b)fluoranthene	1.949	1300 J	1300		m u
Benzo(k)fluoranthene	0.6868	460 J	1300		m
Benzo(a)pyrene	0.8652	570 J	1300		m
Indeno(1,2,3-cd)pyrene	0.6706	450 J	1300		
Dibenz(a,h)anthracene	0.2305	ND	1300		m

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	1.259	1328	835.9	DO	48-120	u
2-Fluorobiphenyl	1.564	1328	1039	DO	50-120	u
Terphenyl-d14	1.745	1328	1159	DO	40-120	u

ISTD (CCV xia02)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	2782377	3101871	11.48	7.25	7.25	0.00
Acenaphthene-d10	1714307	1929020	12.52	9.39	9.40	0.01
Chrysene-d12	3339435	3334658	-0.14	14.54	14.58	0.04
Perylene-d12	3529169	3525696	-0.10	17.15	17.23	0.08

09/10/12 : Was diluted due to the dark and viscous nature of the sample extract.

LLH 09/10/12 : High chromatographic background.

LLH 09/10/12 [Benzo(a)anthracene]: Corrected automatically drawn baseline.

LLH 09/10/12 [bis(2-Ethylhexyl)phthalate]: Picked or reassigned peak.

LLH 09/10/12 [Benzo(b)fluoranthene]: Separated from coeluting peak.

LLH 09/10/12 [Benzo(k)fluoranthene]: Separated from coeluting peak.

LLH 09/10/12 [Benzo(a)pyrene]: Picked or reassigned peak.

LLH 09/10/12 [Dibenz(a,h)anthracene]: Picked or reassigned peak.

LLH 09/10/12 : Corrected automatically drawn baseline for Chrysene.

(not in upper half)

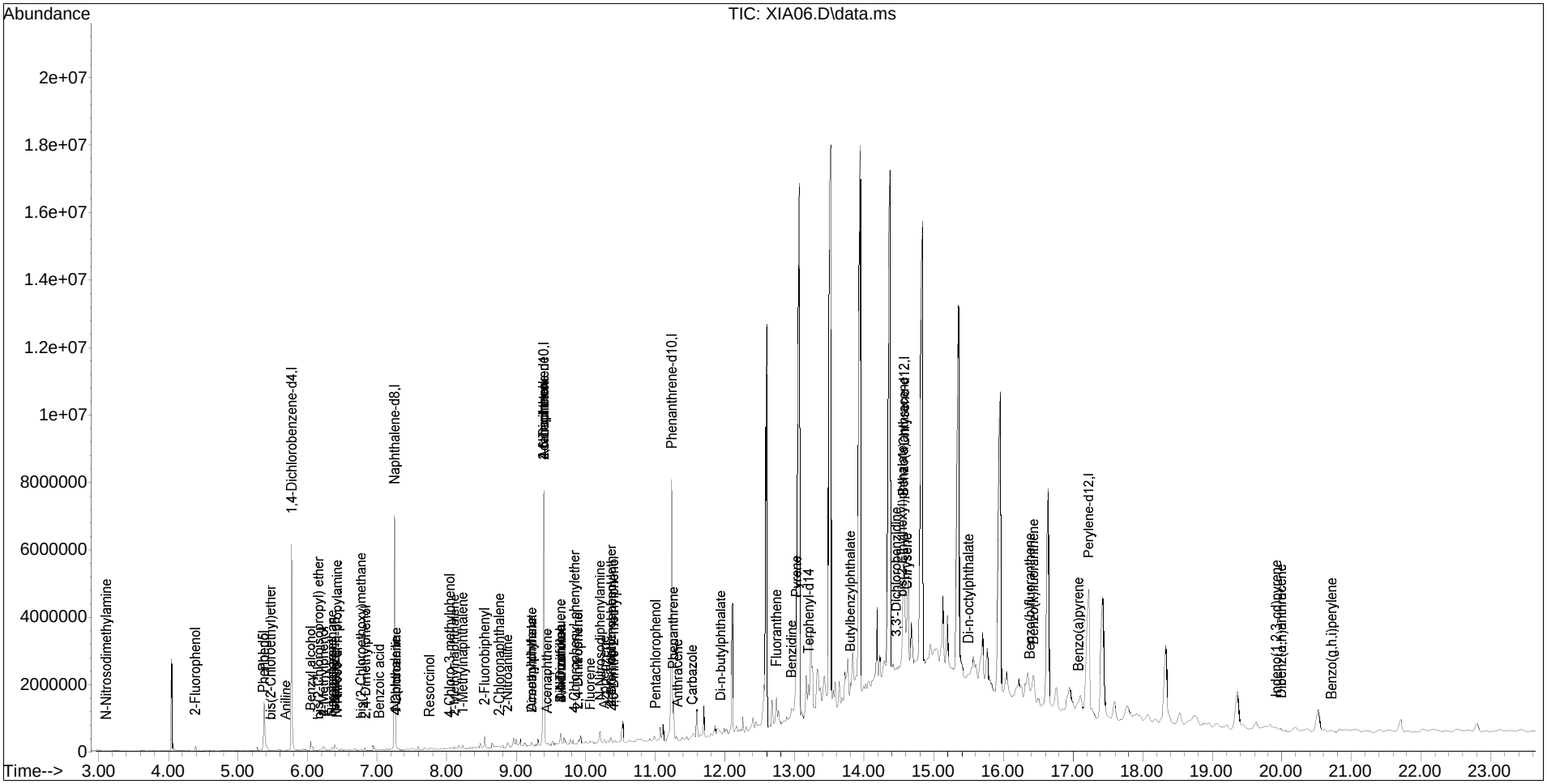
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

+=high bias ?curve=check curve m=manual integration u=use x=false positive

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA06.D
Acq On : 10 Sep 2012 2:21 pm
Operator :
Sample : S,239404-010
Misc : 190266,10, //DV
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 10 16:58:21 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA06.D
Acq On : 10 Sep 2012 2:21 pm
Operator :
Sample : S,239404-010
Misc : 190266,10, //DV
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 10 16:58:21 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	5.772	152	942557	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.252	136	3101871	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.399	164	1929020	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.237	188	3364602	40.0000	ug/mL	0.00
70) Chrysene-d12	14.576	240	3334658	40.0000	ug/mL	0.03
79) Perylene-d12	17.226	264	3525696	40.0000	ug/mL	0.07
Target Compounds						Qvalue
2) Pyridine	0.000	79	0	N.D.		
3) N-Nitrosodimethylamine	3.111	42	1839	0.1277	ug/mL	# 16
4) 2-Fluorophenol	4.394	112	50321	1.4985	ug/mL	# 73
5) Phenol-d5	5.366	99	67699	1.4763	ug/mL	77
6) Phenol	5.377	94	619100	14.1627	ug/mL	77
7) Aniline	5.692	93	1018	2.3390	ug/mL	85
8) bis(2-Chloroethyl)ether	5.462	93	1046	0.0316	ug/mL	# 56
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	6.050	108	4648	0.2021	ug/mL	# 49
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	6.231	107	38930	1.4412	ug/mL	92
15) bis(2-Chloroisopropyl) ether	6.151	45	1237	0.0376	ug/mL	# 18
16) 4-Methylphenol	6.231	107	38930	0.9861	ug/mL	87
17) N-Nitroso-di-n-propylamine	6.429	70	1336	0.0579	ug/mL	80
18) Hexachloroethane	6.365	117	1038	0.0700	ug/mL	# 15
20) Nitrobenzene-d5	6.397	82	58197	1.2589	ug/mL	# 69
21) Nitrobenzene	6.360	77	1297	0.0320	ug/mL	# 40
22) Isophorone	6.397	82	57229	0.7794	ug/mL	72
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	6.840	107	5971	0.1858	ug/mL	91
25) bis(2-Chloroethoxy)methane	6.771	93	1357	0.0319	ug/mL	# 1
26) Benzoic acid	7.033	105	2983	0.1188	ug/mL	# 61
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	7.273	128	11201	0.1334	ug/mL	87
30) 4-Chloroaniline	7.278	127	1582	6.3975	ug/mL	# 33
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	7.749	110	2254	18.8228	ug/mL	# 47
33) 4-Chloro-3-methylphenol	8.048	107	1012	0.0339	ug/mL	# 18
34) 2-Methylnaphthalene	8.106	142	20451	0.3334	ug/mL	85
35) 1-Methylnaphthalene	8.229	142	26523	0.4431	ug/mL	84
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA06.D
Acq On : 10 Sep 2012 2:21 pm
Operator :
Sample : S,239404-010
Misc : 190266,10, //DV
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 10 16:58:21 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.			
40) 2-Fluorobiphenyl	8.550	172	114467	1.5640	ug/mL		99
41) 2-Chloronaphthalene	8.764	162	2623	0.0463	ug/mL		73
42) 2-Nitroaniline	8.876	65	1040	0.0463	ug/mL	#	33
43) Dimethylphthalate	9.228	163	1144	0.0189	ug/mL	#	13
44) 2,6-Dinitrotoluene	9.394	165	276590	17.0589	ug/mL	#	15
45) Acenaphthylene	9.218	152	26894	0.3170	ug/mL		91
46) 3-Nitroaniline	9.640	138	1250	9.7372	ug/mL	#	75
47) Acenaphthene	9.431	154	3025	0.0521	ug/mL	#	79
48) 2,4-Dinitrophenol	9.885	184	2755	13.4762	ug/mL	#	21
49) 4-Nitrophenol	9.394	109	4229	0.4680	ug/mL	#	1
50) Dibenzofuran	9.640	168	52758	0.6937	ug/mL		71
51) 2,4-Dinitrotoluene	9.640	165	2076	0.0994	ug/mL	#	14
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.			
53) Diethylphthalate	0.000	149	0	N.D.			
54) 4-Chlorophenyl-phenylether	9.837	204	1127	0.0337	ug/mL	#	1
55) Fluorene	10.067	166	4347	0.0661	ug/mL	#	55
56) 4-Nitroaniline	9.640	138	1250	0.0819	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.372	330	14947	1.4308	ug/mL		89
59) 4,6-Dinitro-2-methylphenol	10.398	198	1315	0.0989	ug/mL	#	1
60) N-Nitrosodiphenylamine	10.206	169	17316	0.3509	ug/mL	#	51
61) Azobenzene	10.270	77	3551	0.0426	ug/mL	#	1
62) 4-Bromophenyl-phenylether	10.366	248	1084	0.0498	ug/mL	#	1
63) Hexachlorobenzene	0.000	284	0	N.D.			
64) Pentachlorophenol	11.007	266	1024	0.0681	ug/mL		84
65) Phenanthrene	11.258	178	439491	4.7807	ug/mL		97
66) Anthracene	11.322	178	26353	0.2803	ug/mL		85
67) Carbazole	11.525	167	21888	0.3075	ug/mL		68
68) Di-n-butylphthalate	11.932	149	7754	0.0719	ug/mL		60
69) Fluoranthene	12.738	202	422436	3.8739	ug/mL		98
71) Benzidine	12.963	184	1668	18.4435	ug/mL	#	1
72) Pyrene	13.021	202	588325	5.8764	ug/mL		89
73) Terphenyl-d14	13.203	244	132719	1.7449	ug/mL		92
74) Butylbenzylphthalate	13.796	149	1412	0.0278	ug/mL	#	1
75) 3,3'-Dichlorobenzidine	14.469	252	1655	11.3591	ug/mL	#	32
76) Benzo(a)anthracene	14.560	228	138453m	1.3657	ug/mL		
77) bis(2-Ethylhexyl)phthalate	14.544	149	32864m	0.4976	ug/mL		
78) Chrysene	14.608	228	269289m	2.9170	ug/mL		
80) Di-n-octylphthalate	15.489	149	1313	0.0110	ug/mL	#	1
81) Benzo(b)fluoranthene	16.387	252	198079m	1.9487	ug/mL		
82) Benzo(k)fluoranthene	16.424	252	66537m	0.6868	ug/mL		
83) Benzo(a)pyrene	17.071	252	75363m	0.8652	ug/mL		
84) Indeno(1,2,3-cd)pyrene	19.929	276	67425	0.6706	ug/mL		98

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA06.D
Acq On : 10 Sep 2012 2:21 pm
Operator :
Sample : S,239404-010
Misc : 190266,10, //DV
ALS Vial : 6 Sample Multiplier: 1

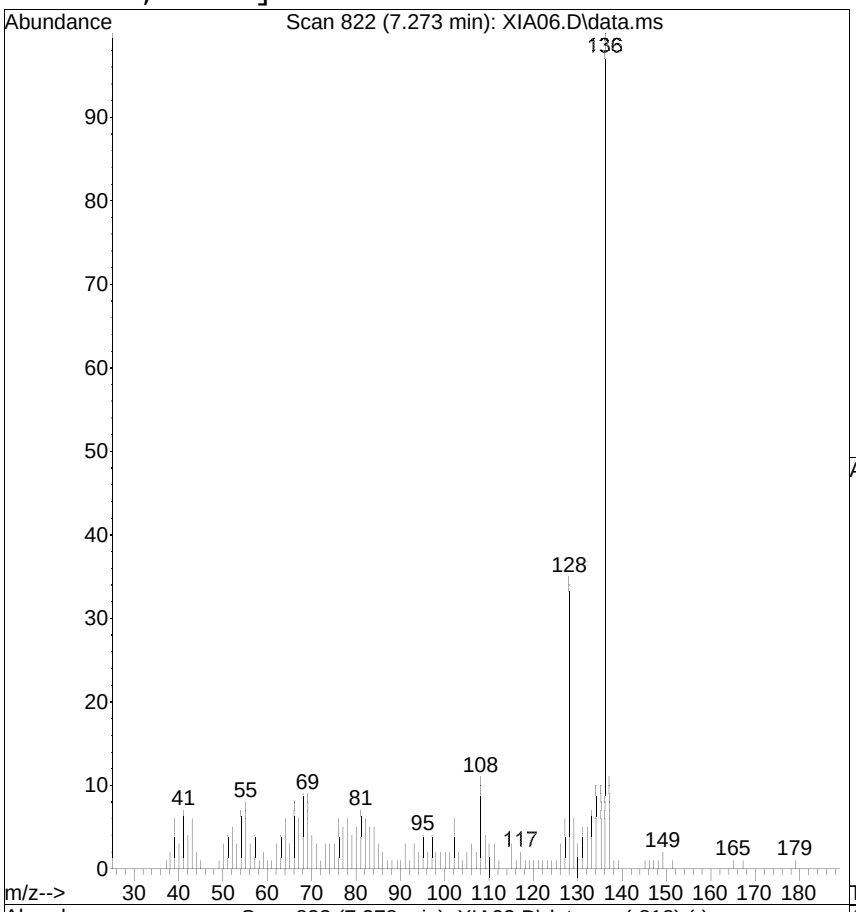
Quant Time: Sep 10 16:58:21 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	19.988	278	19575m	0.2305	ug/mL	
86) Benzo(g,h,i)perylene	20.714	276	68695	0.8368	ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Naphthalene; <RL]

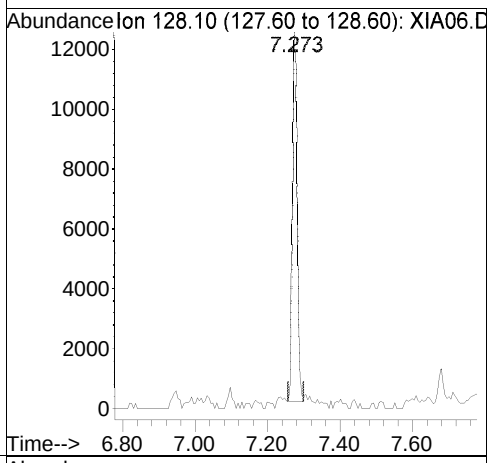
Raw



#29
Naphthalene
Concen: 0.1334 ug/mL
RT: 7.273 min Scan# 822
Delta R.T. -0.005 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

Tgt Ion:128 Resp: 11201

Ion	Ratio	Lower	Upper
128	100		
129	15.8	0.0	30.0
127	16.4	0.0	32.0



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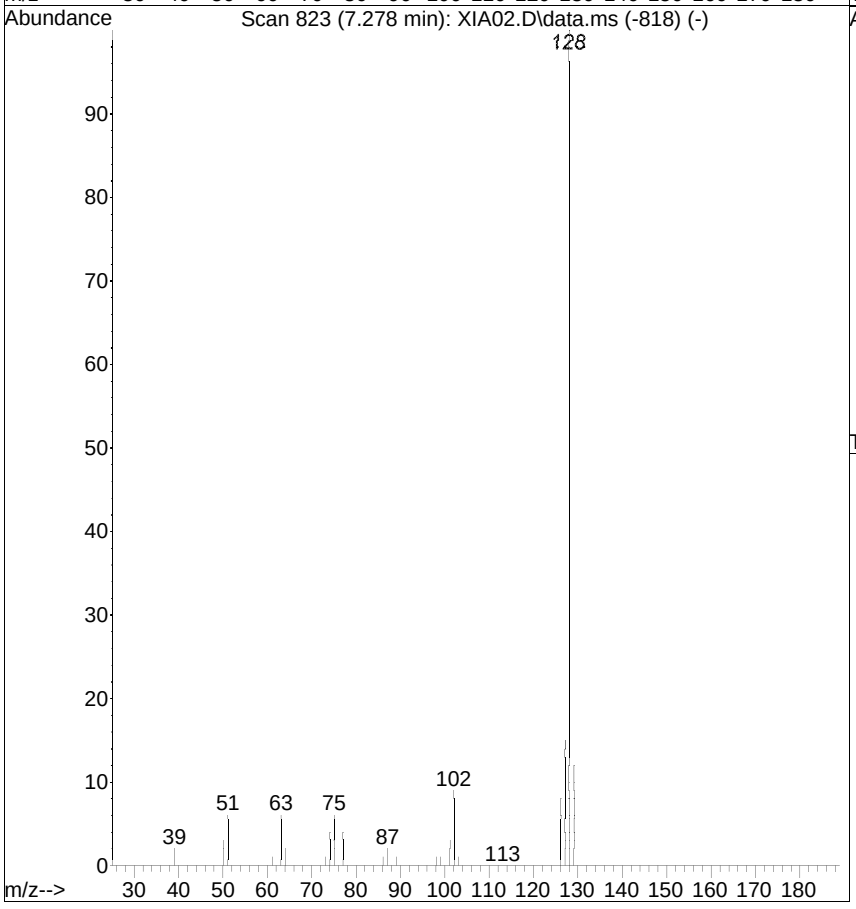
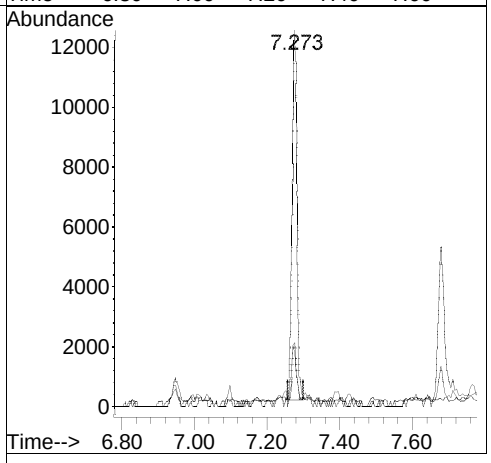
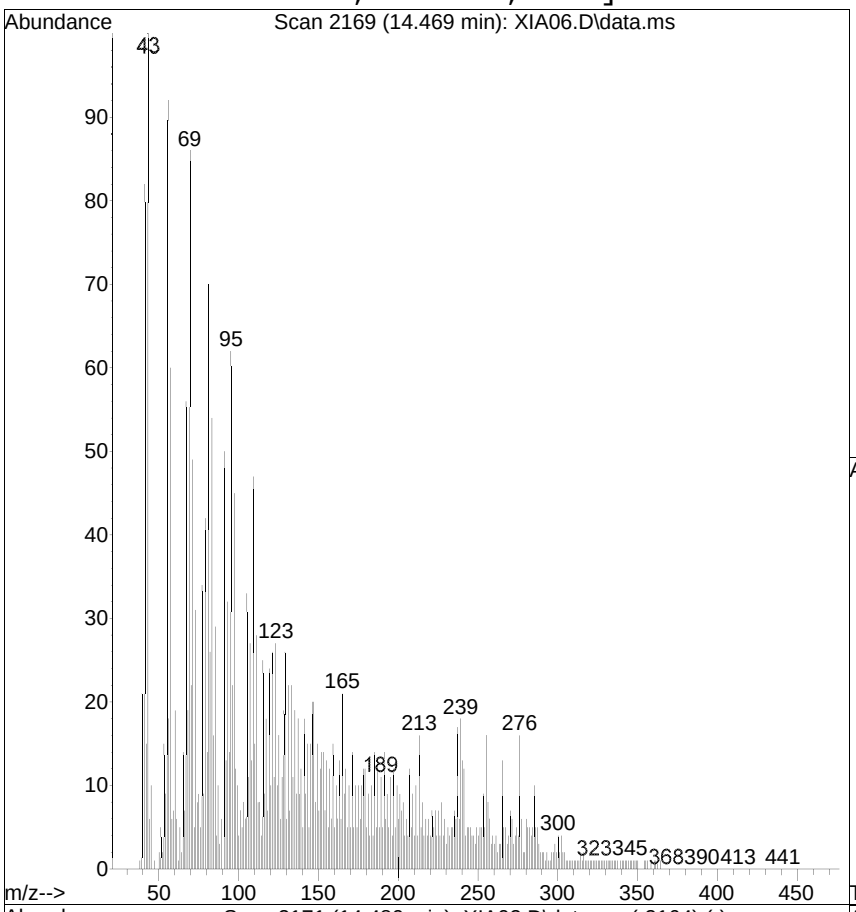




[3,3'-Dichlorobenzidine; 7500 J; FP]

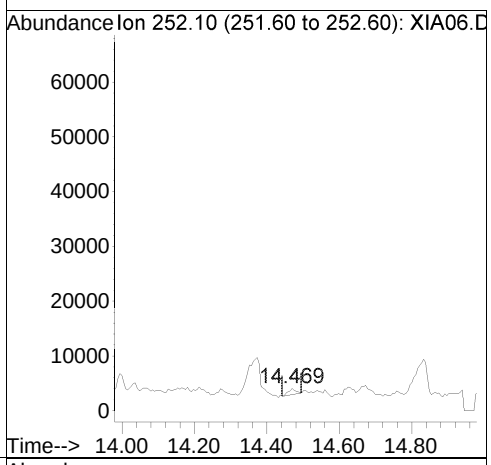
Raw



#75
3,3'-Dichlorobenzidine
Concen: 11.3591 ug/mL
RT: 14.469 min Scan# 2169
Delta R.T. -0.011 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

Tgt Ion:252 Resp: 1655

Ion	Ratio	Lower	Upper
252	100		
254	89.1	44.0	84.0#
126	109.0	0.0	34.0#



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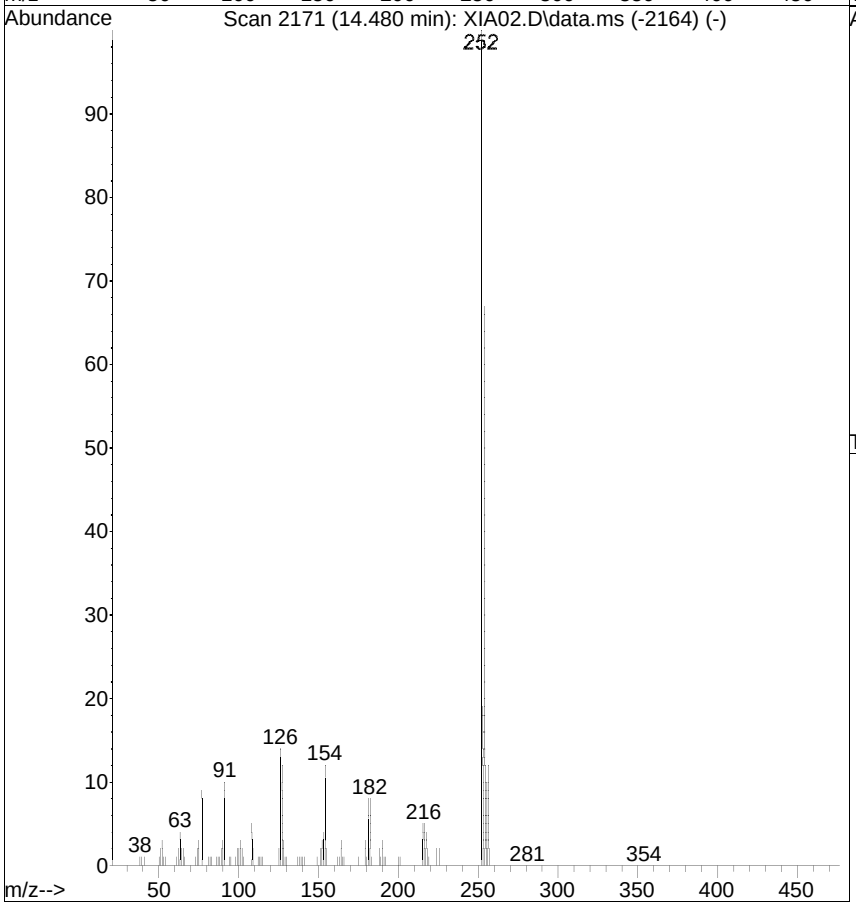
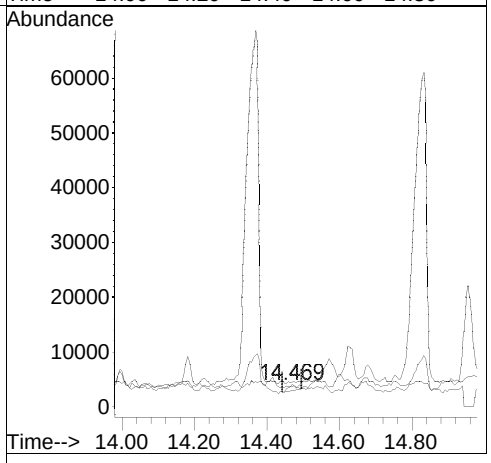
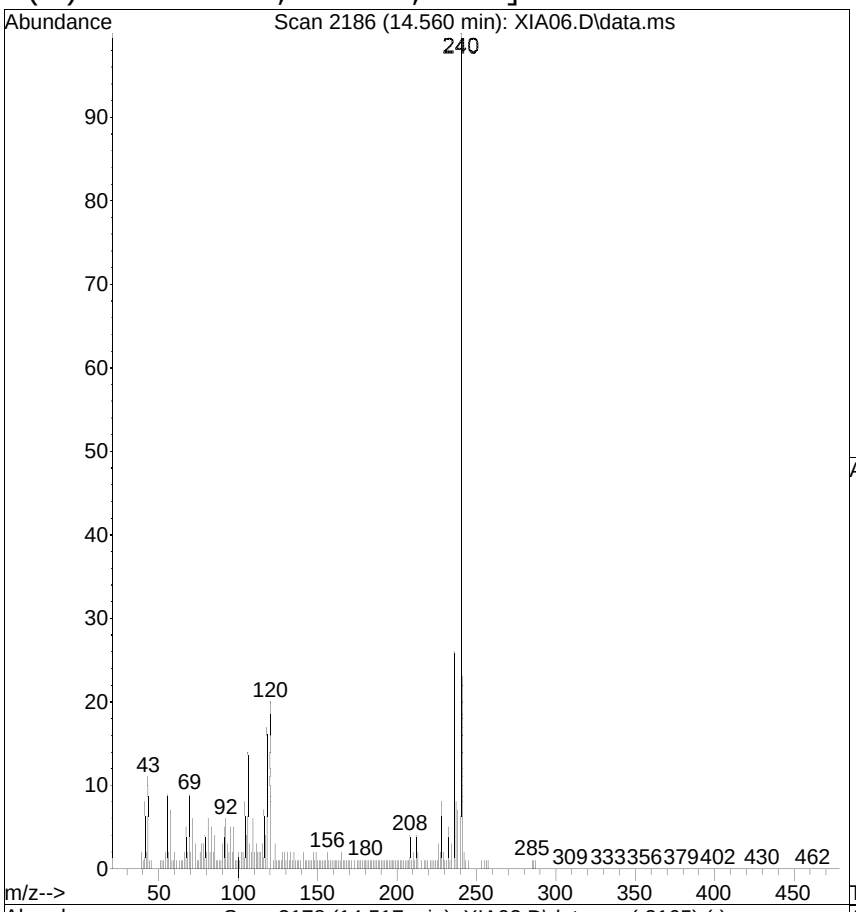




[Benzo(a)anthracene; 910 J; MI]

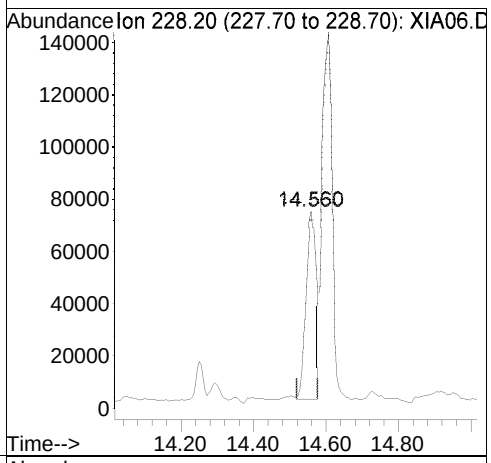
Raw



#76
Benzo(a)anthracene
Concen: 1.3657 ug/mL m
RT: 14.560 min Scan# 2186
Delta R.T. 0.043 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

Tgt Ion:228 Resp: 138453

Ion	Ratio	Lower	Upper
228	100		
229	15.6	0.0	40.0
226	16.9	8.0	48.0



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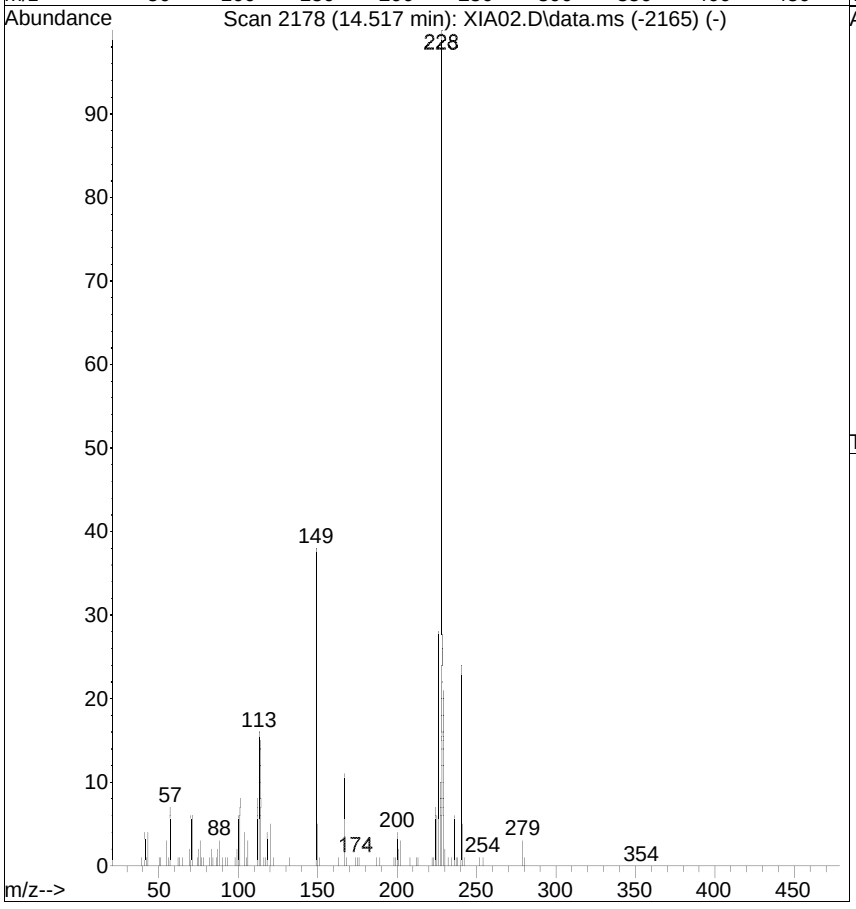
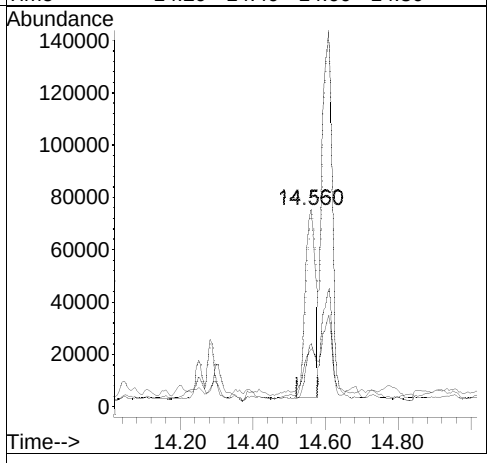
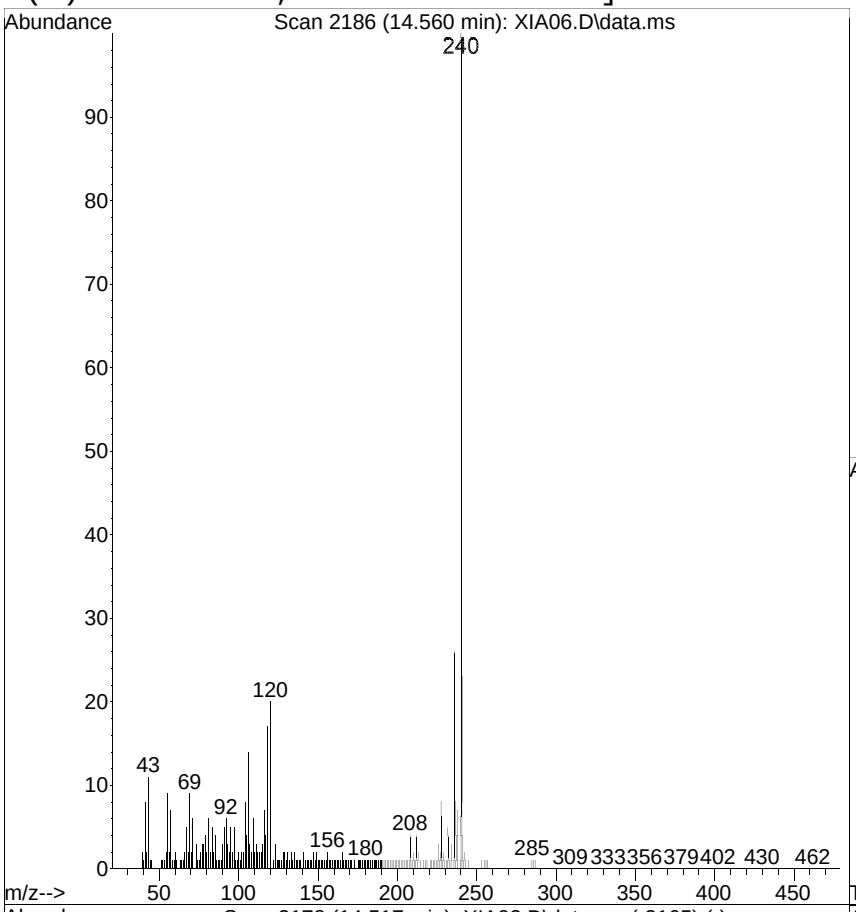




[Benzo(a)anthracene; before version]

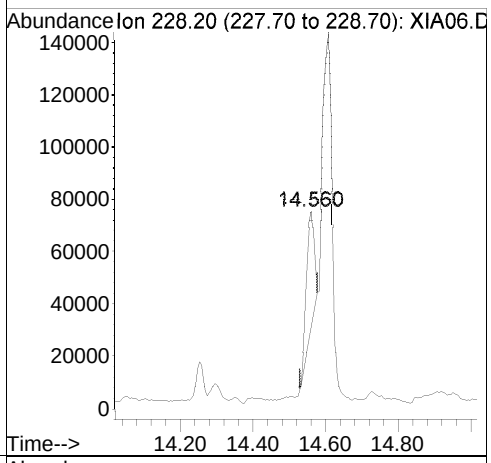
Raw



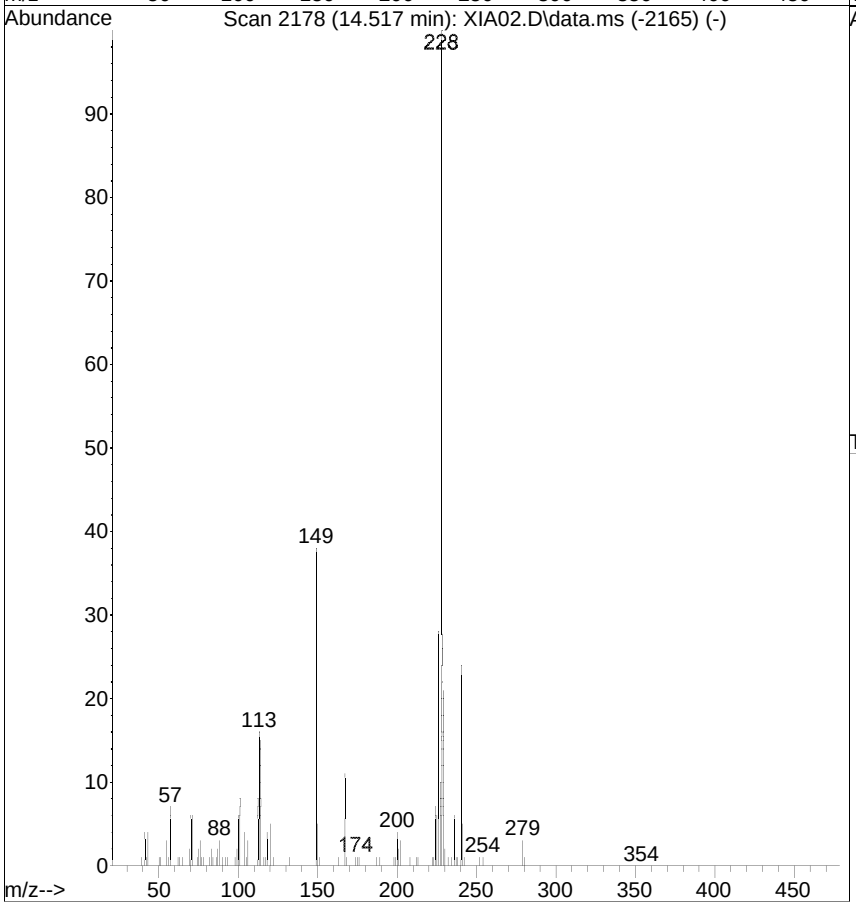
#76
Benzo(a)anthracene
Concen: 0.7275 ug/mL
RT: 14.560 min Scan# 2186
Delta R.T. 0.043 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

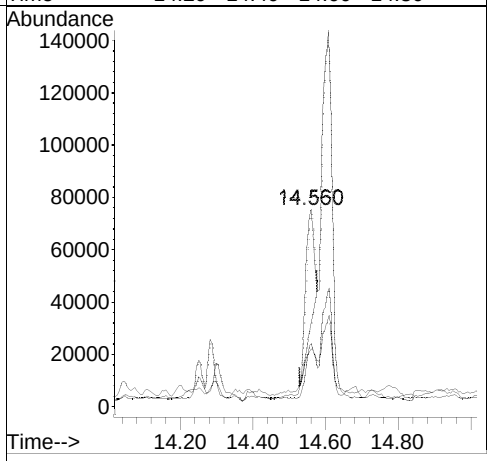
Tgt Ion:228 Resp: 73756

Ion	Ratio	Lower	Upper
228	100		
229	29.3	0.0	40.0
226	31.8	8.0	48.0



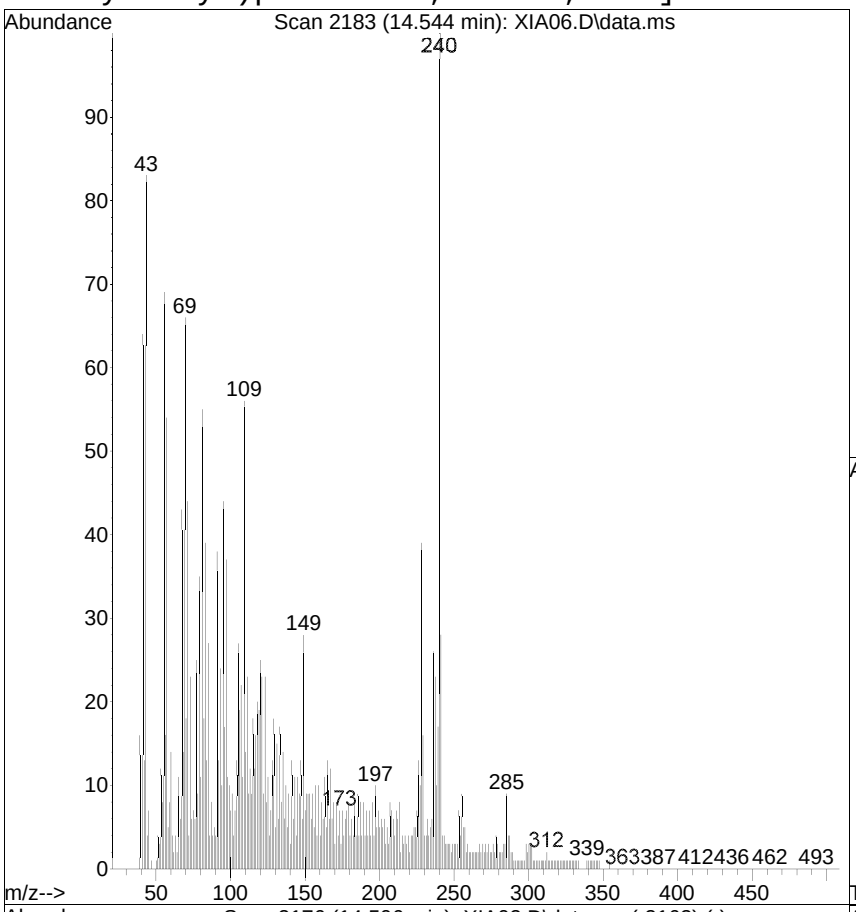
Ref





[bis(2-Ethylhexyl)phthalate; 330 J; MI]

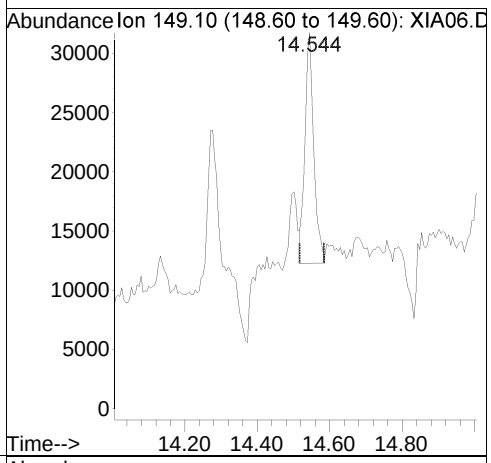
Raw



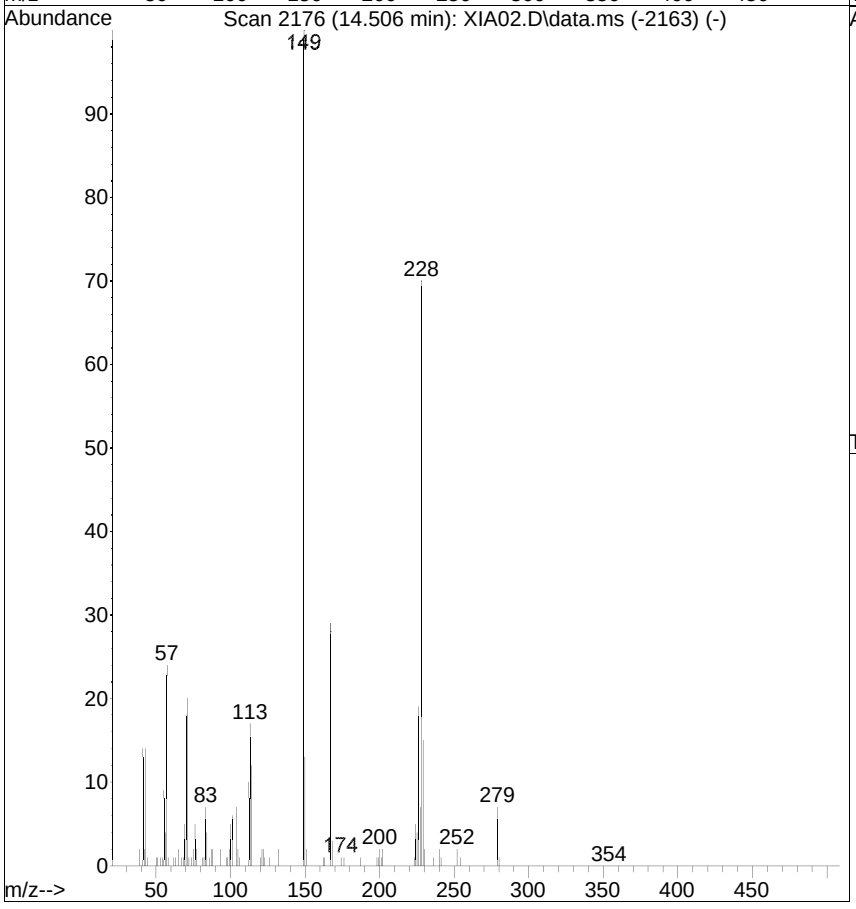
#77
bis(2-Ethylhexyl)phthalate
Concen: 0.4976 ug/mL m
RT: 14.544 min Scan# 2183
Delta R.T. 0.038 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

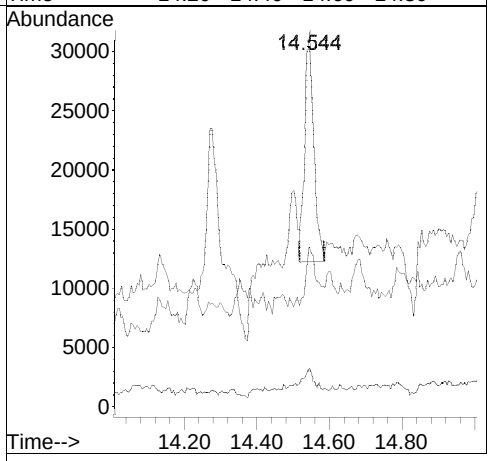
Tgt Ion:149 Resp: 32864

Ion	Ratio	Lower	Upper
149	100		
167	7.7	9.0	49.0#
279	1.6	0.0	27.0



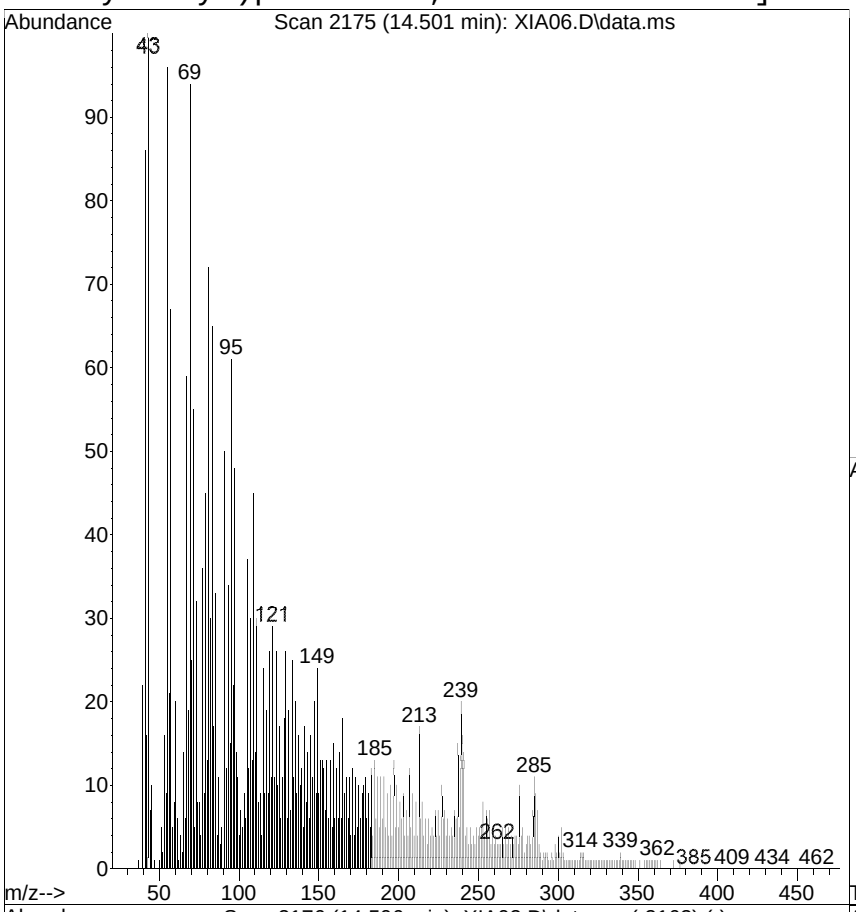
Ref





[bis(2-Ethylhexyl)phthalate; before version]

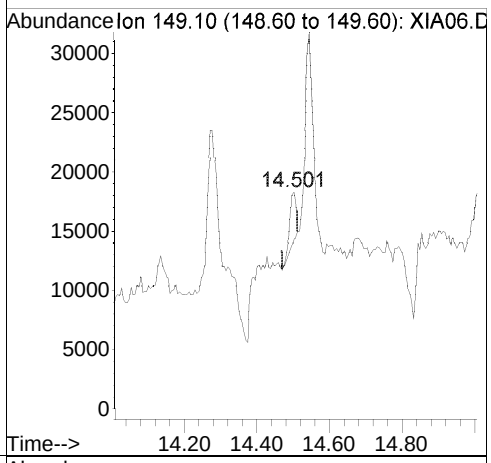
Raw



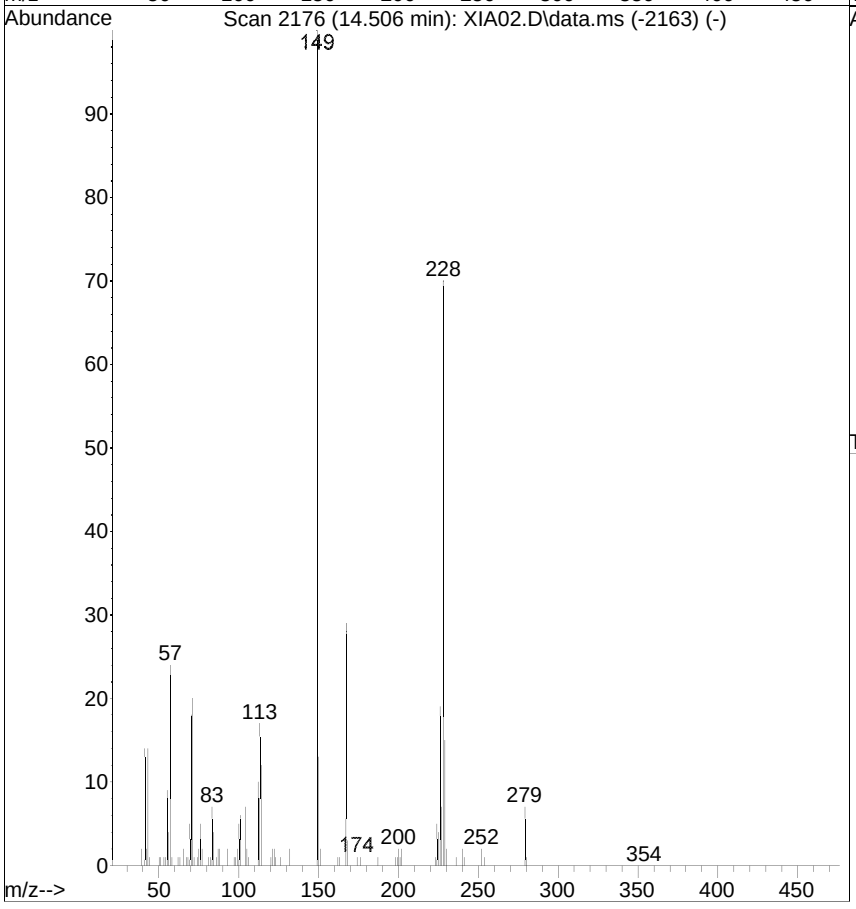
#77
bis(2-Ethylhexyl)phthalate
Concen: 0.0826 ug/mL
RT: 14.501 min Scan# 2175
Delta R.T. -0.005 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

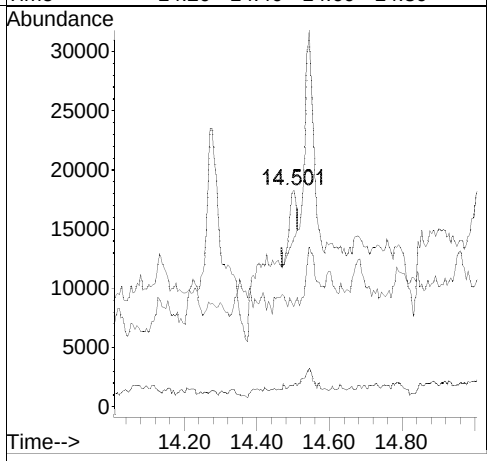
Tgt Ion:149 Resp: 5454

Ion	Ratio	Lower	Upper
149	100		
167	46.3	9.0	49.0
279	9.9	0.0	27.0



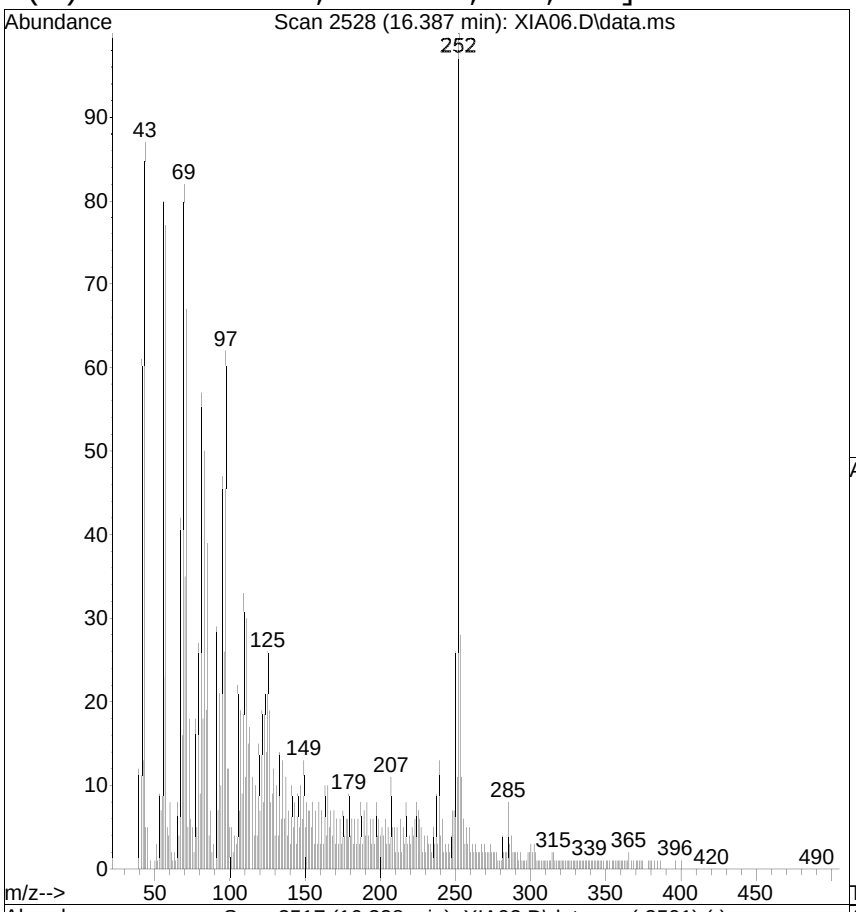
Ref





[Benzo(b)fluoranthene; 1300 J; MI; u]

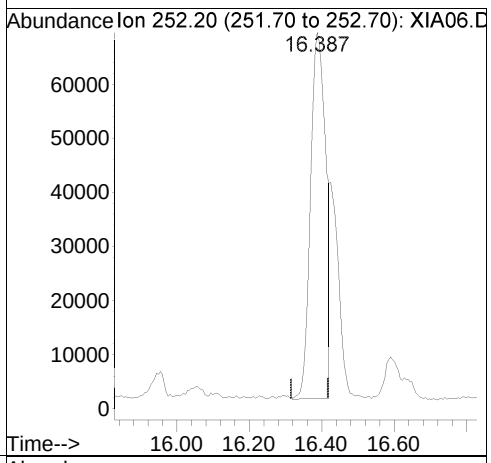
Raw



#81
Benzo(b)fluoranthene
Concen: 1.9487 ug/mL m
RT: 16.387 min Scan# 2528
Delta R.T. 0.059 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

Tgt Ion:252 Resp: 198079

Ion	Ratio	Lower	Upper
252	100		
253	37.1	2.7	42.7
125	34.7	0.0	35.2



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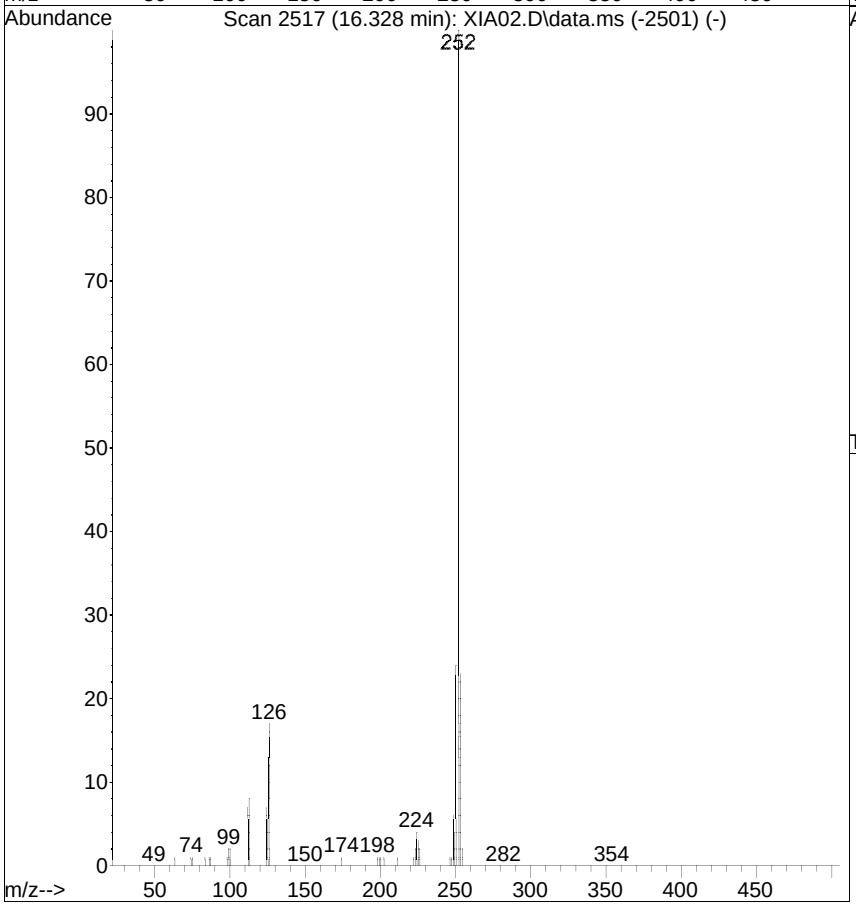
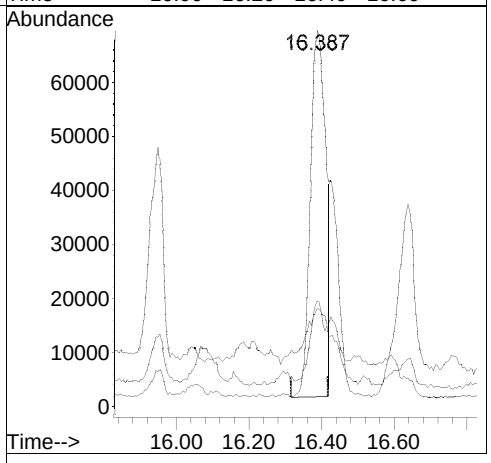
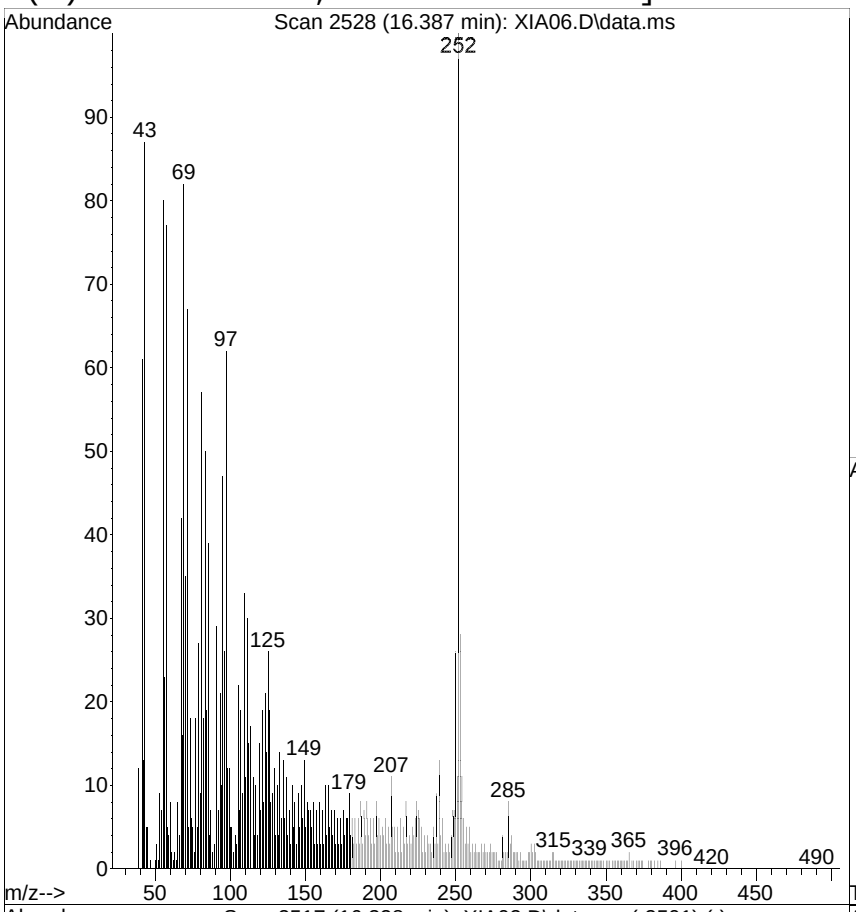




[Benzo(b)fluoranthene; before version]

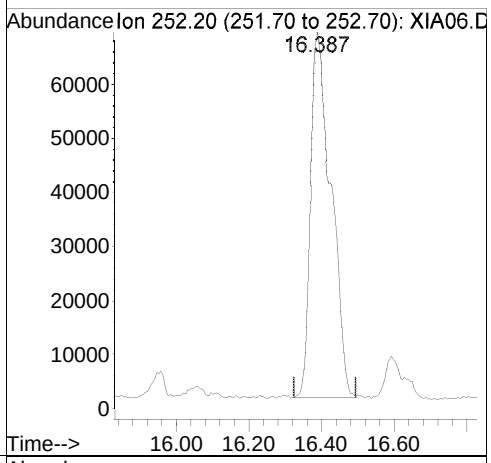
Raw



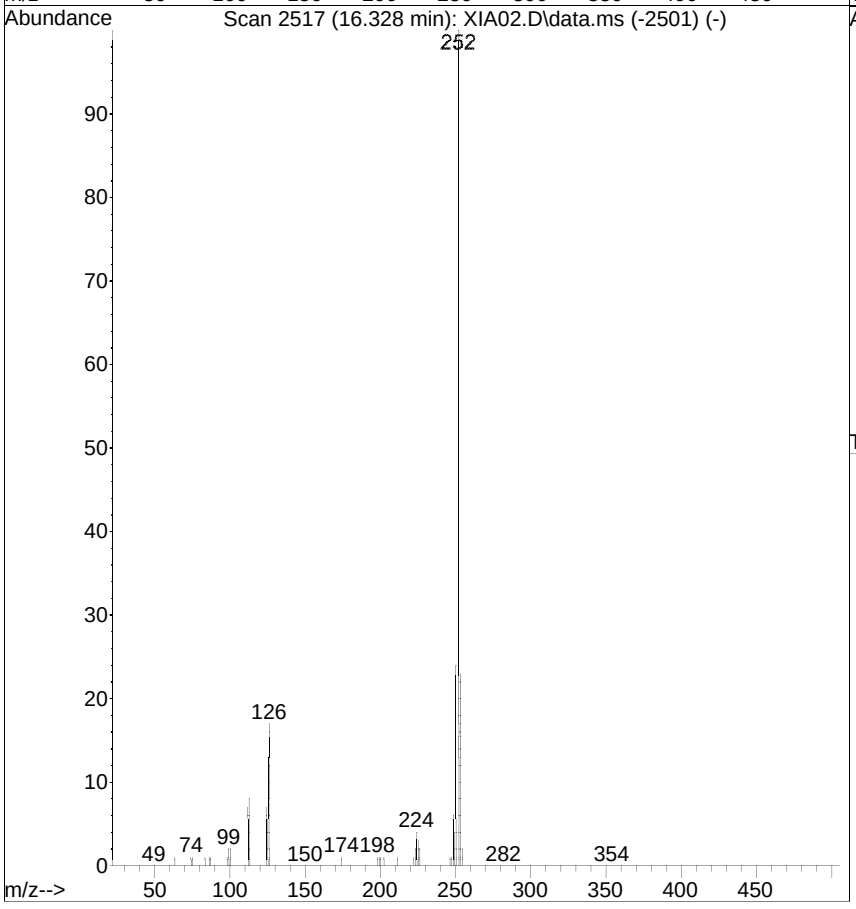
#81
Benzo(b)fluoranthene
Concen: 2.5913 ug/mL
RT: 16.387 min Scan# 2528
Delta R.T. 0.059 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

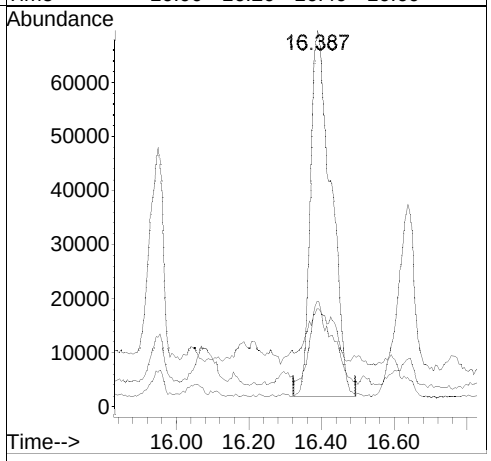
Tgt Ion:252 Resp: 263394

Ion	Ratio	Lower	Upper
252	100		
253	27.9	2.7	42.7
125	26.1	0.0	35.2



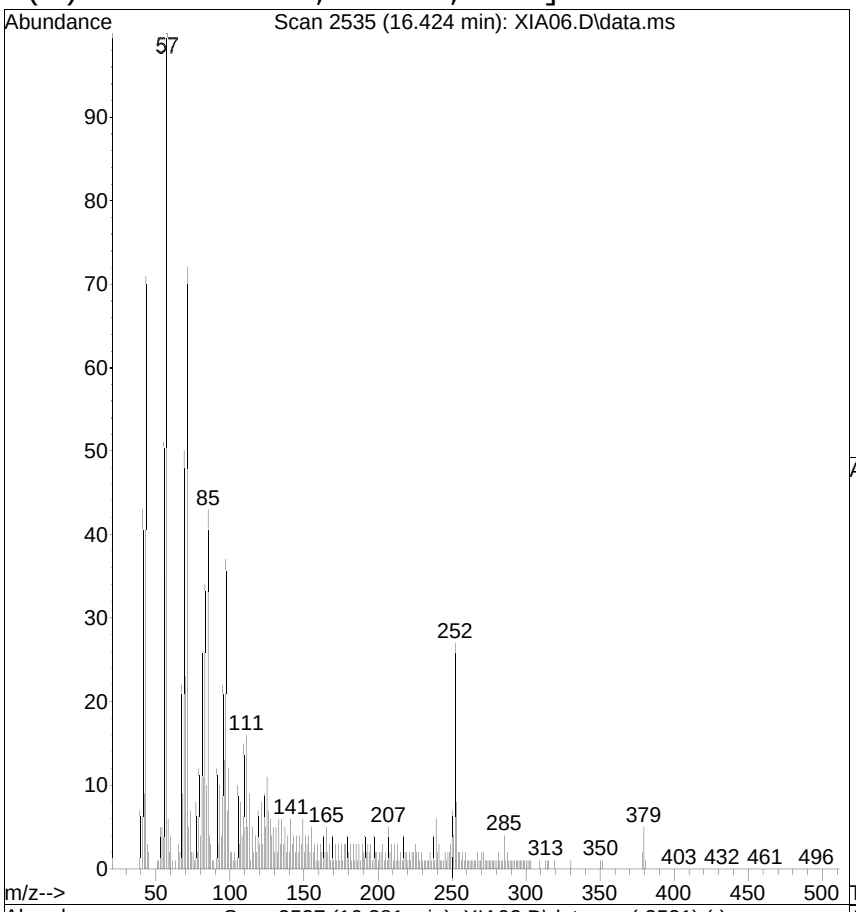
Ref





[Benzo(k)fluoranthene; 460 J; MI]

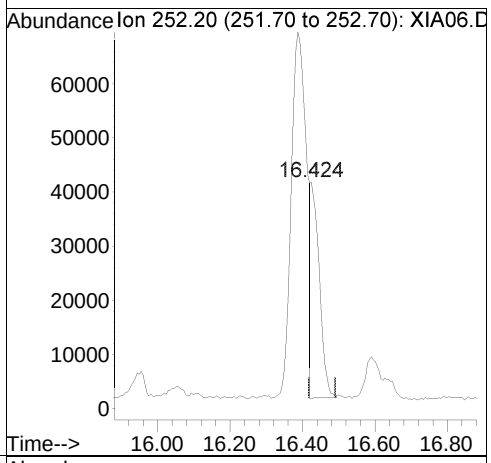
Raw



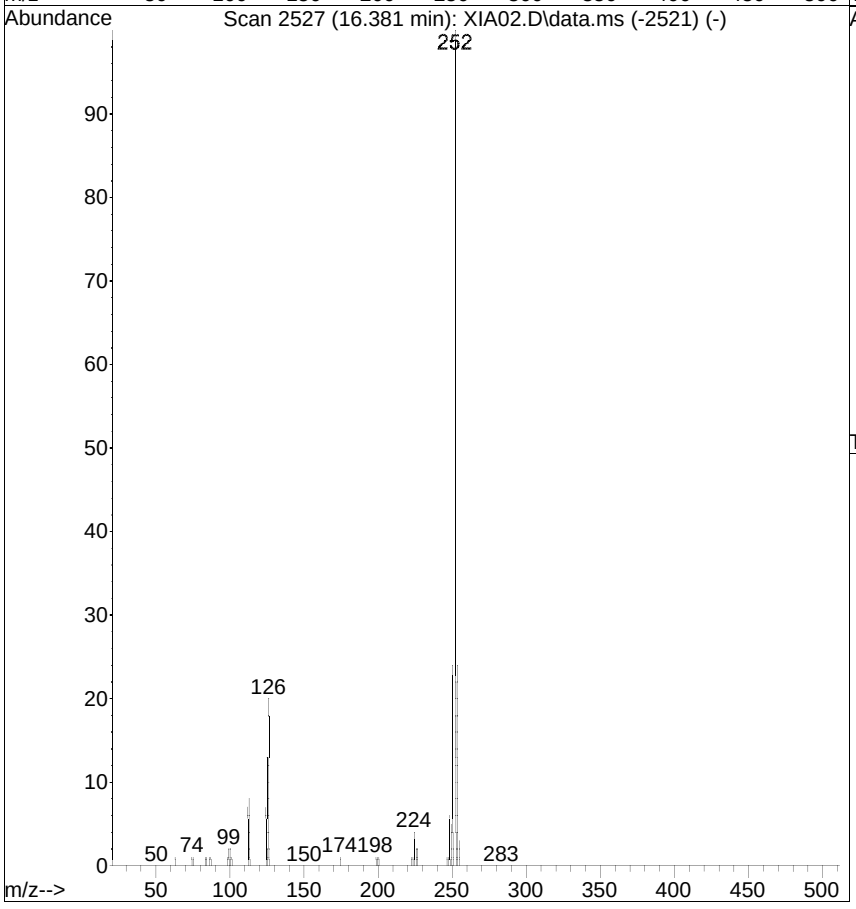
#82
Benzo(k)fluoranthene
Concen: 0.6868 ug/mL m
RT: 16.424 min Scan# 2535
Delta R.T. 0.043 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

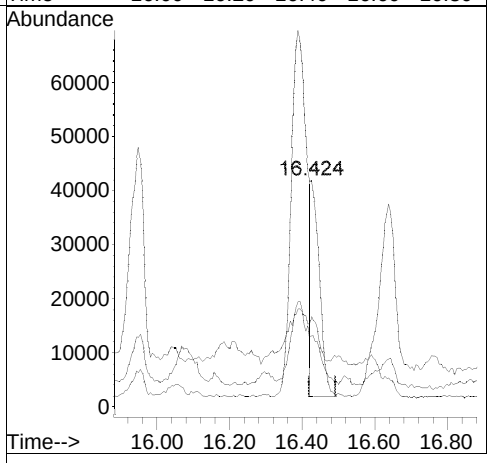
Tgt Ion:252 Resp: 66537

Ion	Ratio	Lower	Upper
252	100		
253	110.6	3.0	43.0#
125	103.3	0.0	37.0#



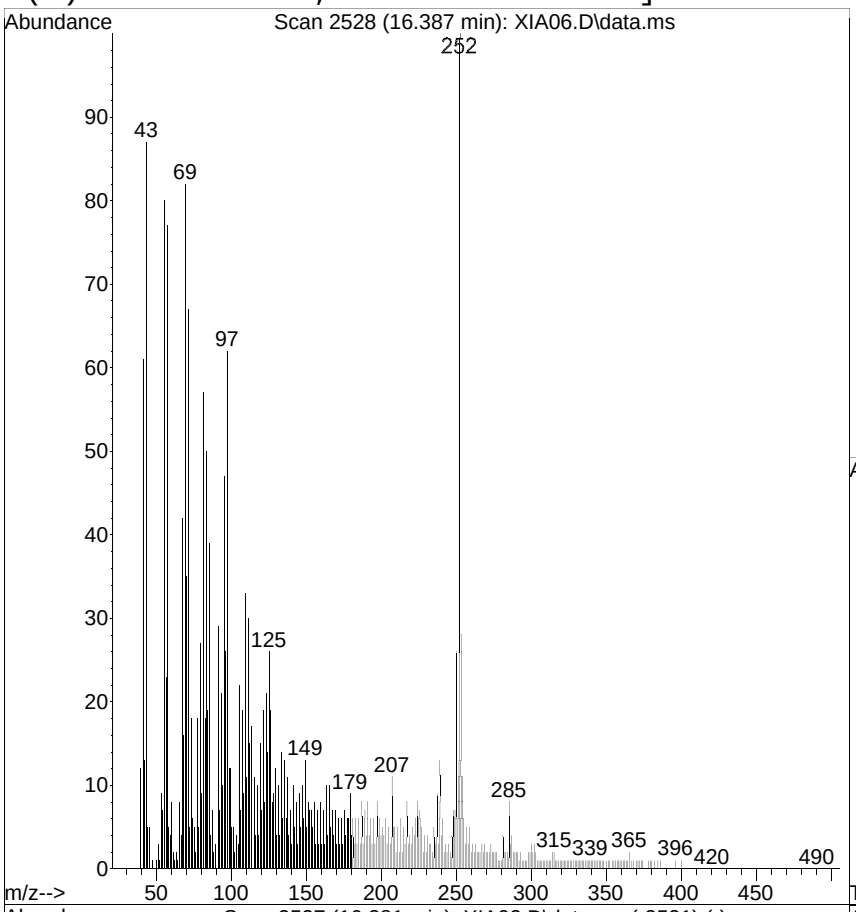
Ref





[Benzo(k)fluoranthene; before version]

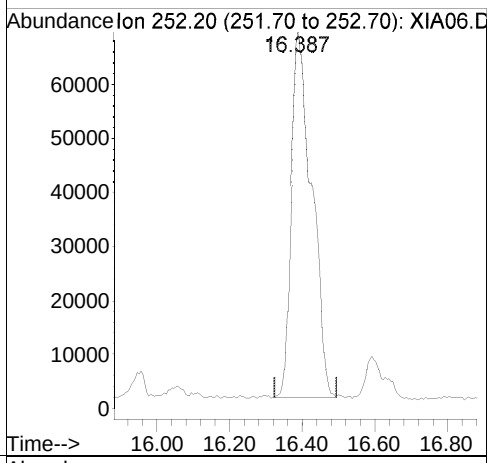
Raw



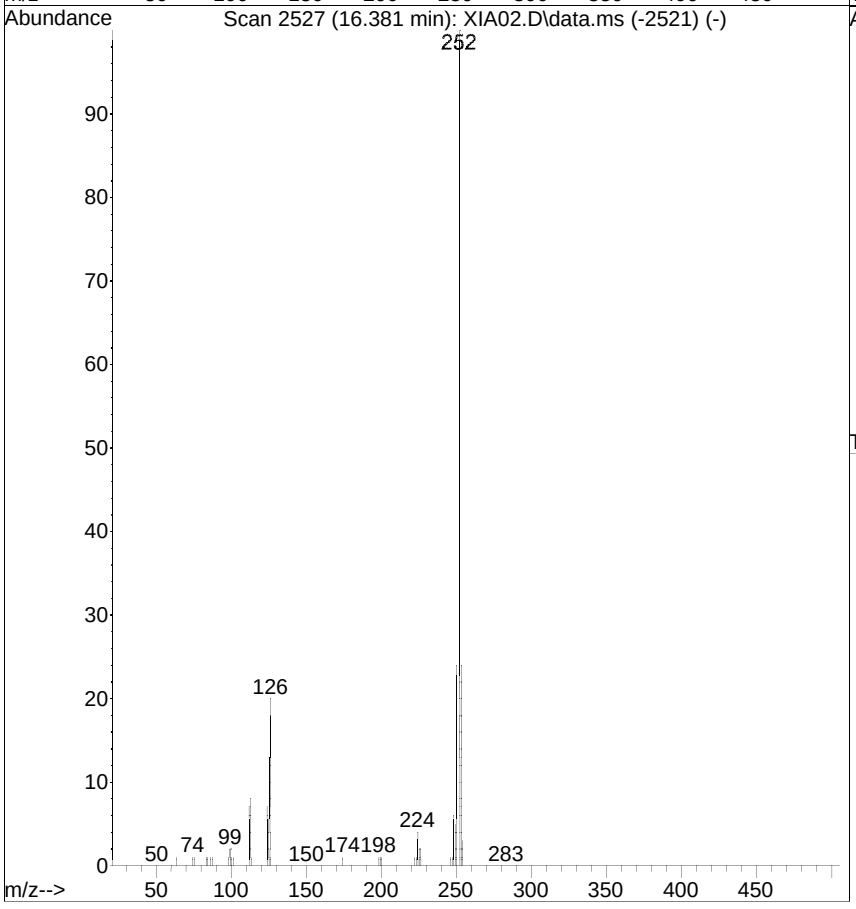
#82
Benzo(k)fluoranthene
Concen: 2.7188 ug/mL
RT: 16.387 min Scan# 2528
Delta R.T. 0.005 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

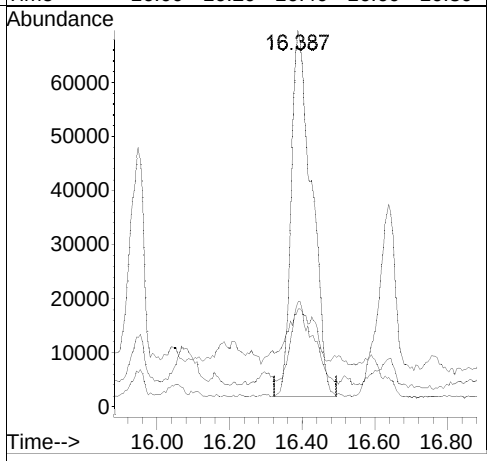
Tgt Ion:252 Resp: 263394

Ion	Ratio	Lower	Upper
252	100		
253	27.9	3.0	43.0
125	26.1	0.0	37.0



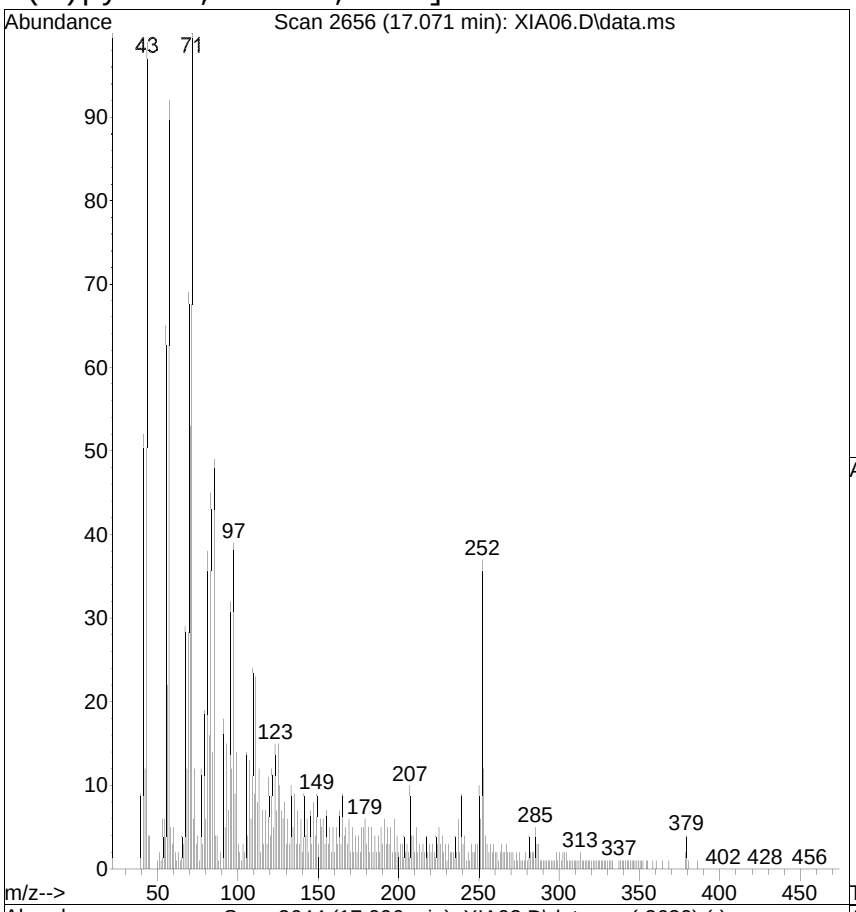
Ref





[Benzo(a)pyrene; 570 J; MI]

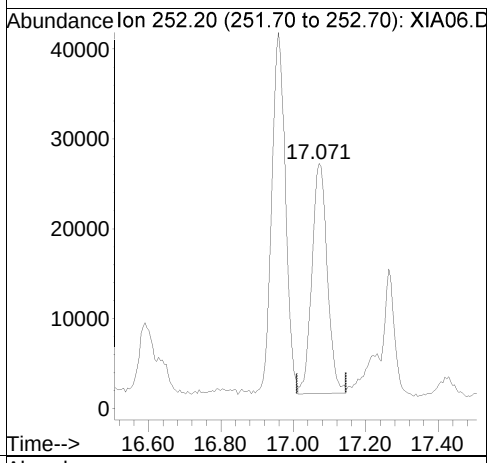
Raw



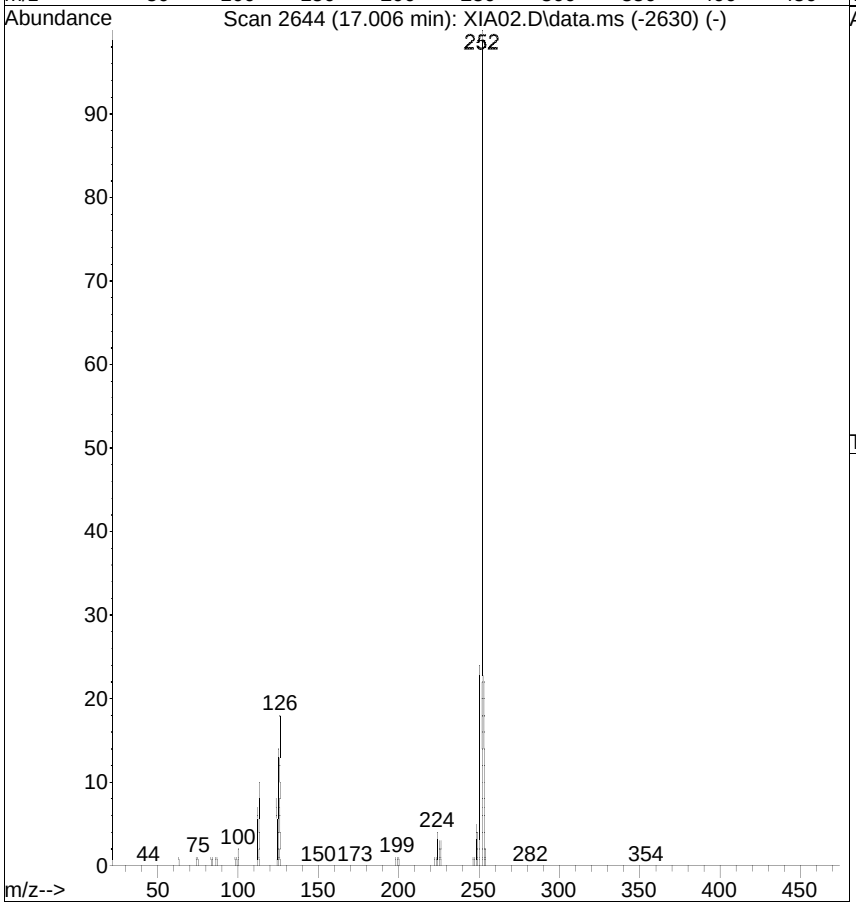
#83
Benzo(a)pyrene
Concen: 0.8652 ug/mL m
RT: 17.071 min Scan# 2656
Delta R.T. 0.064 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

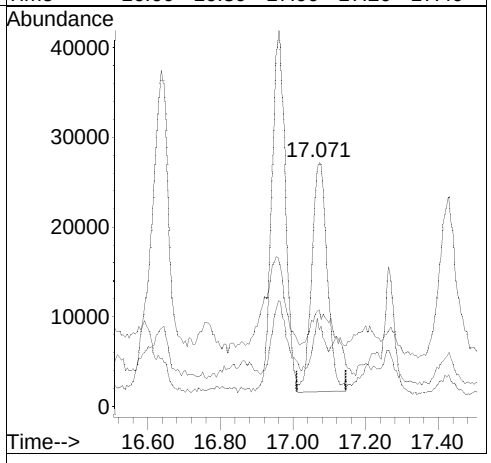
Tgt Ion:252 Resp: 75363

Ion	Ratio	Lower	Upper
252	100		
253	39.1	2.6	42.6
125	55.2	0.0	36.8#



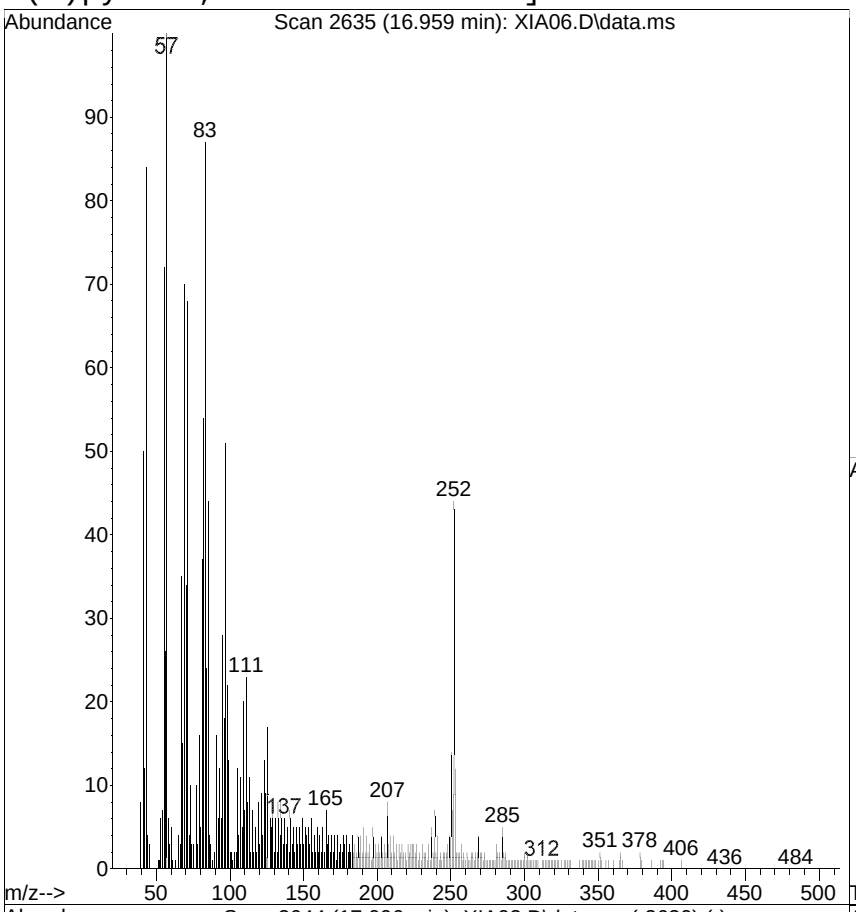
Ref





[Benzo(a)pyrene; before version]

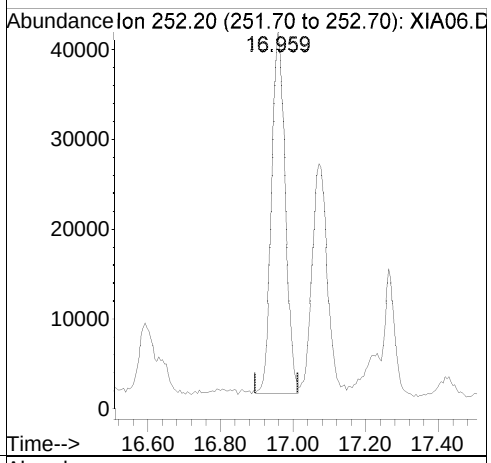
Raw



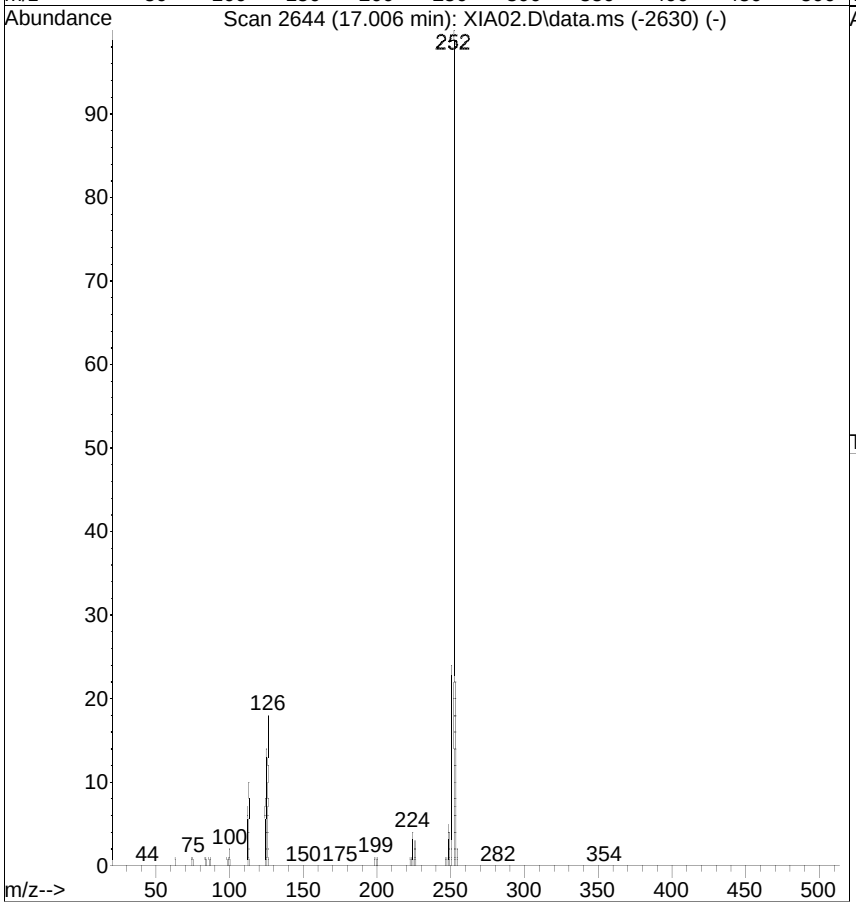
#83
Benzo(a)pyrene
Concen: 1.2058 ug/mL
RT: 16.959 min Scan# 2635
Delta R.T. -0.048 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

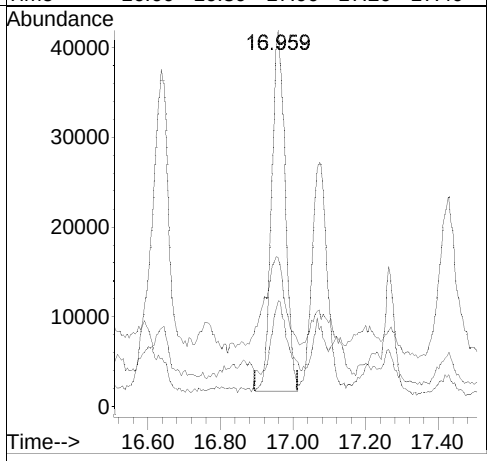
Tgt Ion:252 Resp: 105024

Ion	Ratio	Lower	Upper
252	100		
253	28.1	2.6	42.6
125	39.6	0.0	36.8#



Ref





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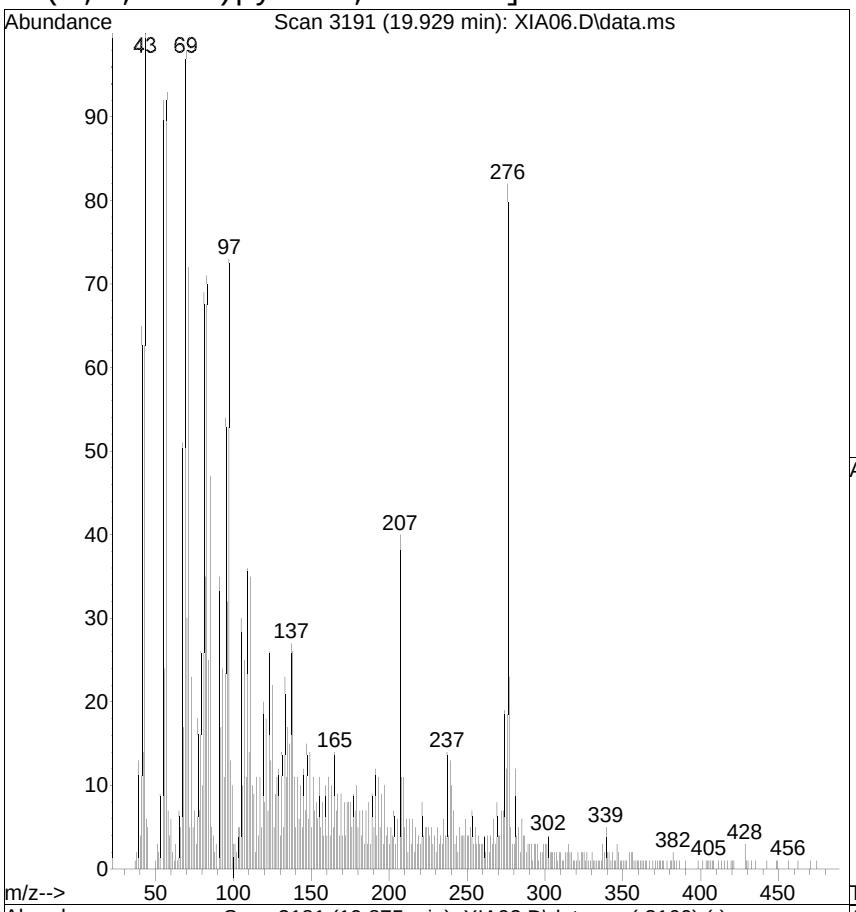
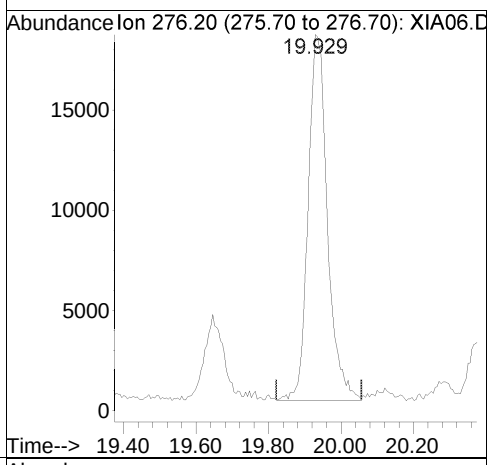


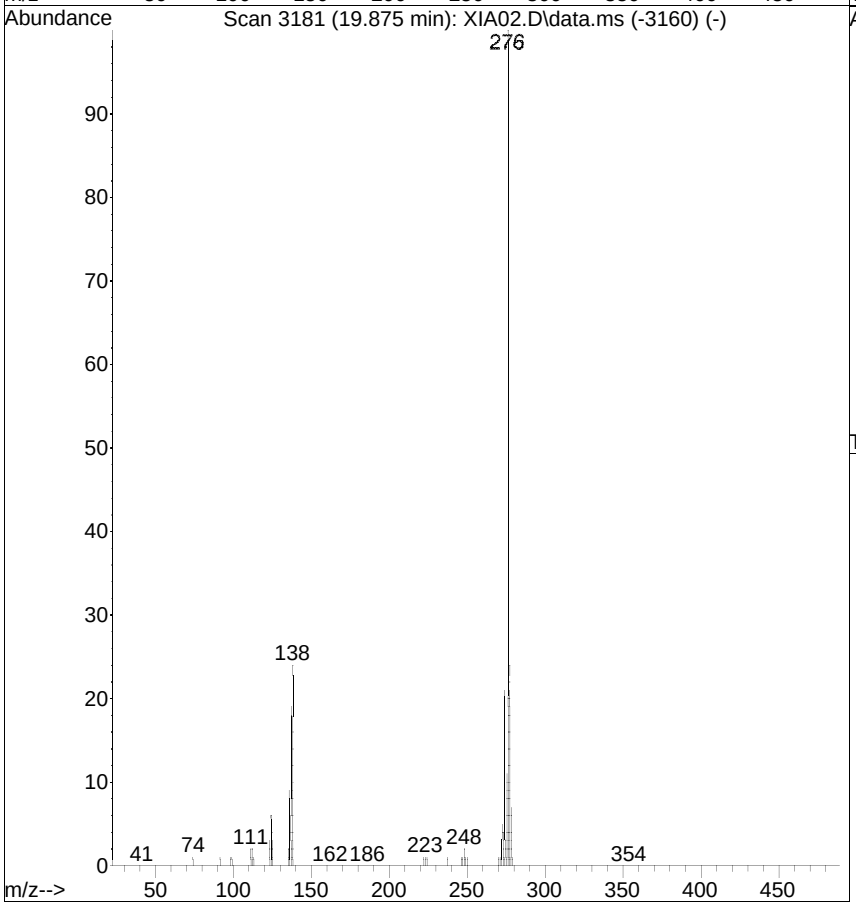
#84
Indeno(1,2,3-cd)pyrene
Concen: 0.6706 ug/mL
RT: 19.929 min Scan# 3191
Delta R.T. 0.054 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

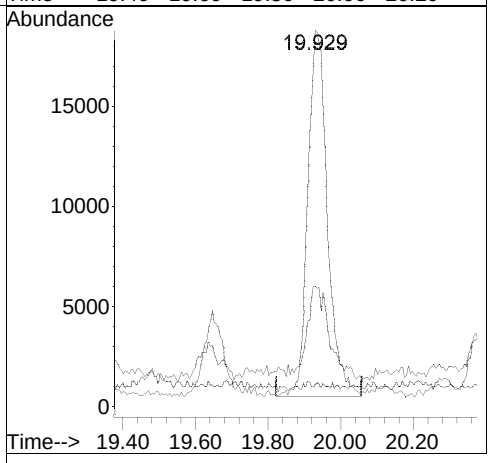
Tgt Ion:276 Resp: 67425

Ion	Ratio	Lower	Upper
276	100		
138	32.0	11.1	51.1
227	6.0	0.0	20.1



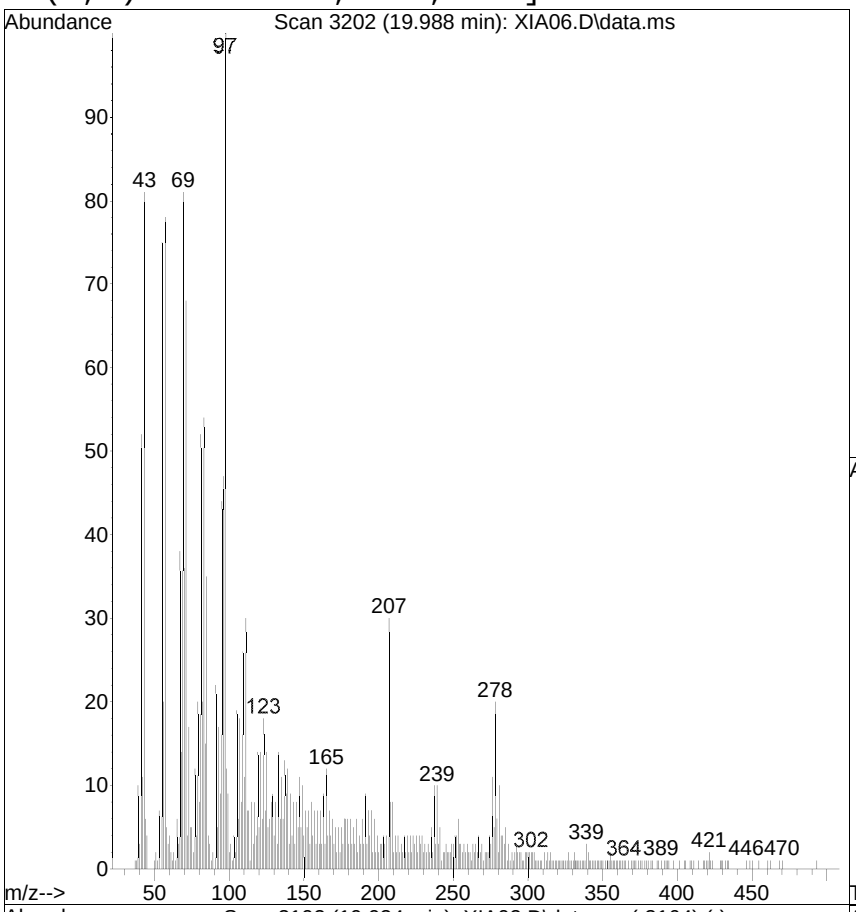
Ref





[Dibenz(a,h)anthracene; <RL; MI]

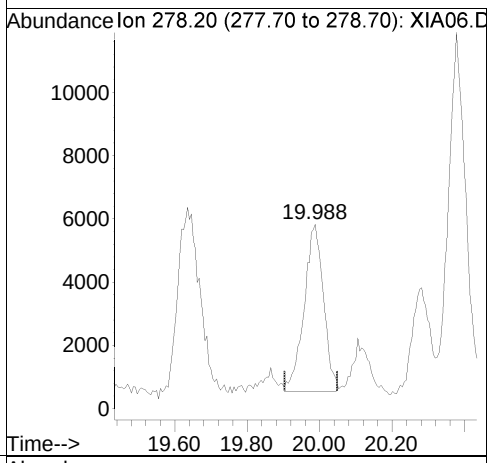
Raw



#85
Dibenz(a,h)anthracene
Concen: 0.2305 ug/mL m
RT: 19.988 min Scan# 3202
Delta R.T. 0.054 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

Tgt Ion:278 Resp: 19575

Ion	Ratio	Lower	Upper
278	100		
139	51.0	4.9	44.9#
279	38.8	4.1	44.1



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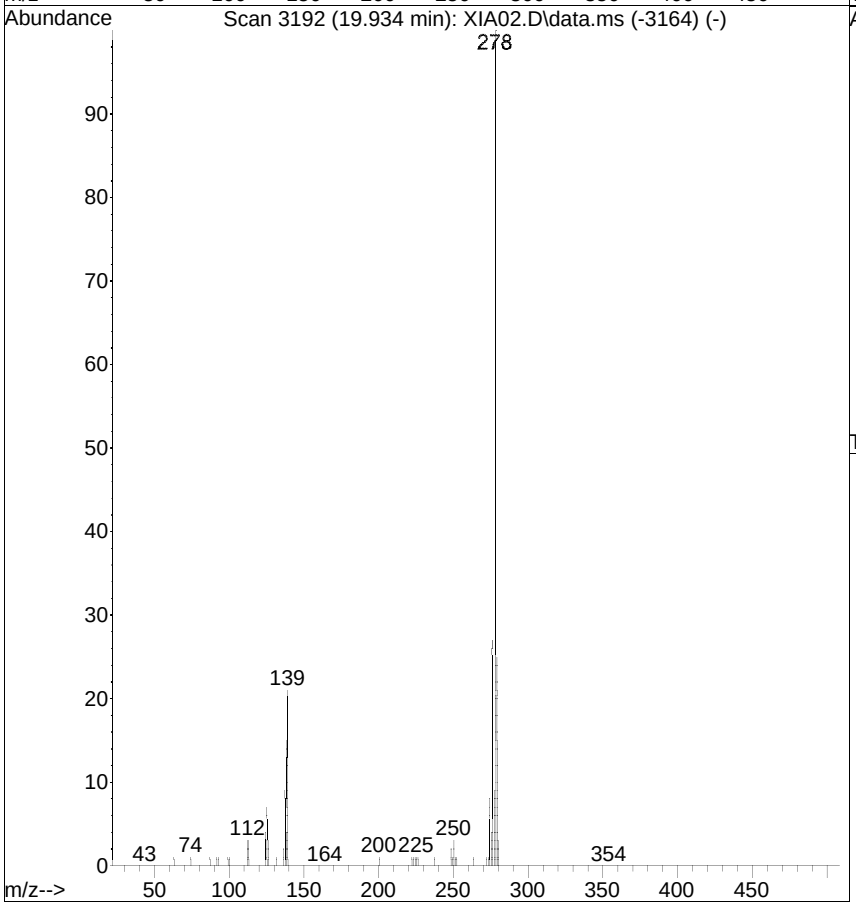
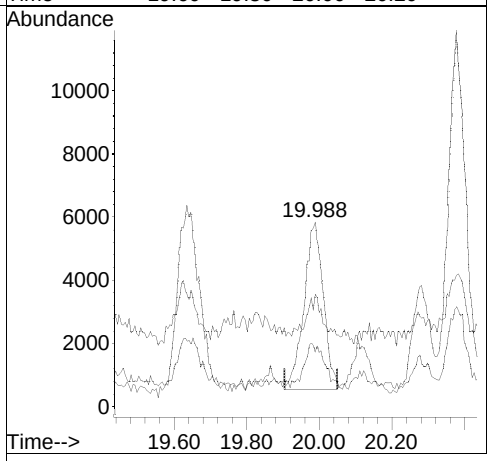
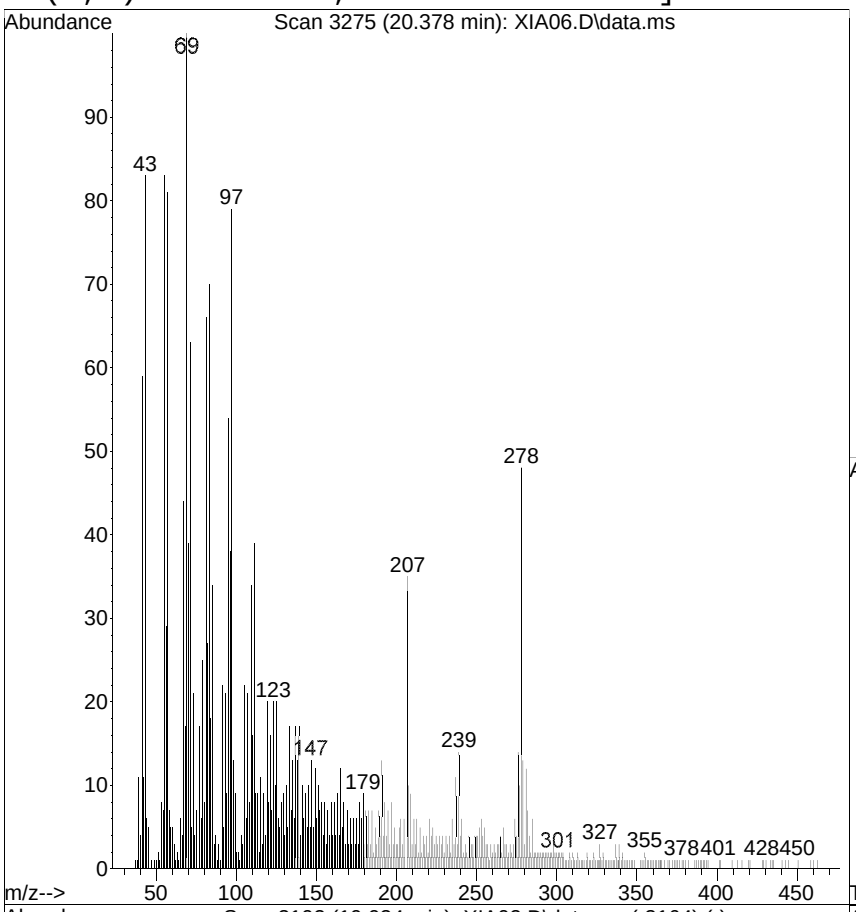




[Dibenz(a,h)anthracene; before version]

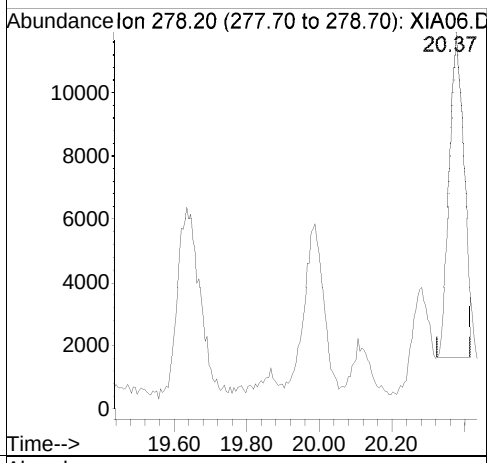
Raw



#85
Dibenz(a,h)anthracene
Concen: 0.3373 ug/mL
RT: 20.378 min Scan# 3275
Delta R.T. 0.444 min
Lab File: XIA06.D
Acq: 10 Sep 2012 2:21 pm

Tgt Ion:278 Resp: 28641

Ion	Ratio	Lower	Upper
278	100		
139	34.9	4.9	44.9
279	26.5	4.1	44.1



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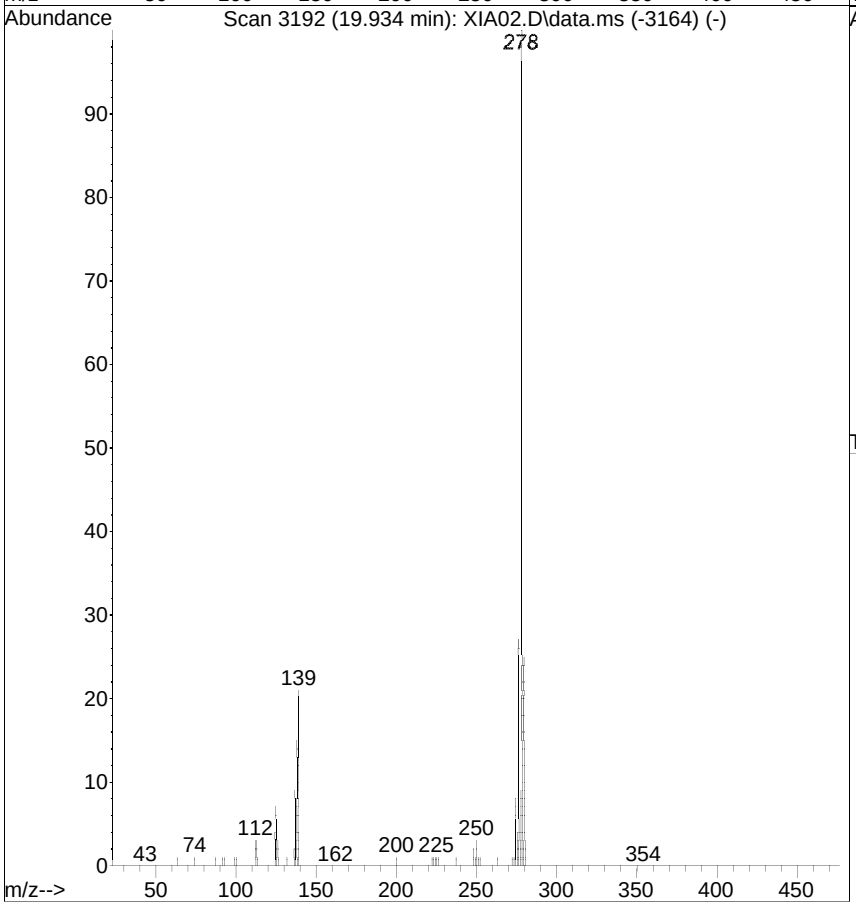
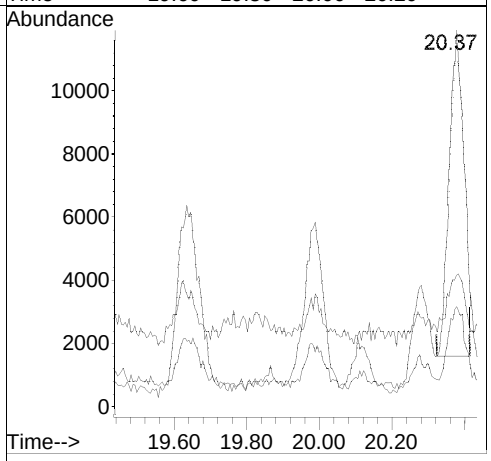




CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA05	Lab ID	: 239404-011	Client ID	: EX13B021A.2
Seqnum	: 542366451007.1	Matrix	: Soil	Acct	: ARCSF (JG)
File	: xia07	Batch	: 190266	Time	: 10-SEP-2012 14:59
Cal	: 542247126001	Caldate	: 19-JUN-2012		
IDF	: 10.0	Raw Units	: ug/mL	Units	: ug/Kg

30.41 g --> 2.0 ml = 0.06577 ml/g PDF

Analyte	Raw	Result	RL	Blank	Flags
Naphthalene	0.1493	ND	1300		
3,3'-Dichlorobenzidine	11.39	7500 J	13000		?curve+ x
Benzo(a)anthracene	1.134	750 J	1300		m
bis(2-Ethylhexyl)phthalate	0.3103	ND	6600		
Benzo(b)fluoranthene	1.350	890 J	1300		m u
Benzo(k)fluoranthene	0.5043	330 J	1300		m
Benzo(a)pyrene	0.5622	370 J	1300		m
Indeno(1,2,3-cd)pyrene	0.4639	310 J	1300		
Dibenz(a,h)anthracene	0.1715	ND	1300		

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	1.086	1315	714.0	DO	48-120	u
2-Fluorobiphenyl	1.405	1315	924.3	DO	50-120	u
Terphenyl-d14	1.512	1315	994.5	DO	40-120	u

ISTD (CCV xia02)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	2782377	3302505	18.69	7.25	7.25	0.00
Acenaphthene-d10	1714307	2006953	17.07	9.39	9.40	0.01
Chrysene-d12	3339435	3612313	8.17	14.54	14.58	0.04
Perylene-d12	3529169	3710685	5.14	17.15	17.23	0.08

09/10/12 : Was diluted due to the dark and viscous nature of the sample extract.

LLH 09/10/12 : High chromatographic background.

LLH 09/10/12 [Benzo(a)anthracene]: Corrected automatically drawn baseline.

LLH 09/10/12 [Benzo(b)fluoranthene]: Separated from coeluting peak.

LLH 09/10/12 [Benzo(k)fluoranthene]: Separated from coeluting peak.

LLH 09/10/12 [Benzo(a)pyrene]: Picked or reassigned peak.

LLH 09/10/12 : Corrected automatically drawn baseline for Chrysene.

(not in upper half)

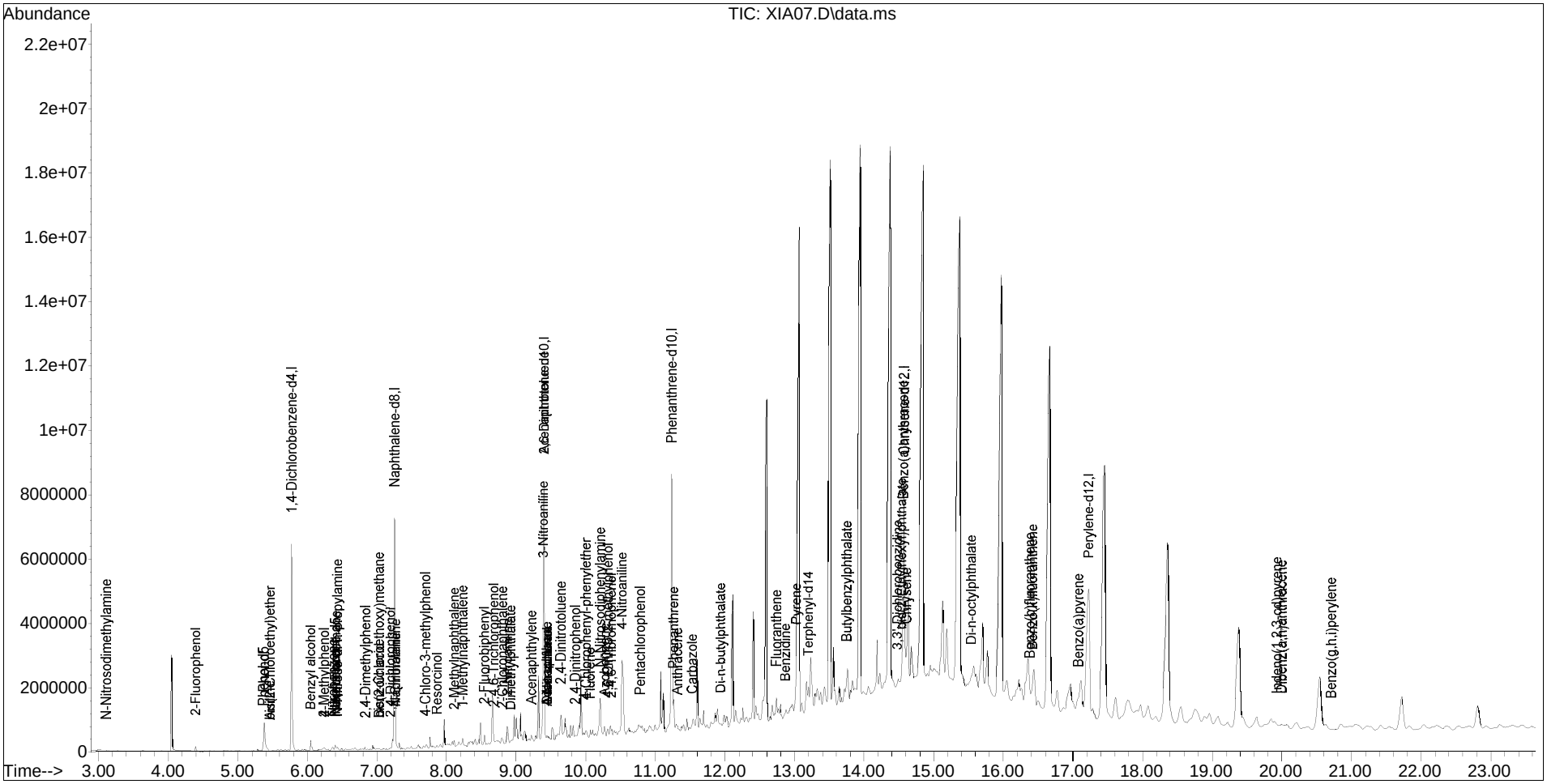
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

+=high bias ?curve=check curve m=manual integration u=use x=false positive

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA07.D
Acq On : 10 Sep 2012 2:59 pm
Operator :
Sample : S,239404-011
Misc : 190266,10, //DV
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 10 17:00:47 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA07.D
Acq On : 10 Sep 2012 2:59 pm
Operator :
Sample : S,239404-011
Misc : 190266,10, //DV
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 10 17:00:47 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	5.772	152	1015266	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.252	136	3302505	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.399	164	2006953	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.237	188	3524509	40.0000	ug/mL	0.00
70) Chrysene-d12	14.576	240	3612313	40.0000	ug/mL	0.03
79) Perylene-d12	17.226	264	3710685	40.0000	ug/mL	0.07
Target Compounds						Qvalue
2) Pyridine	0.000	79	0	N.D.		
3) N-Nitrosodimethylamine	3.111	42	1107	0.0714	ug/mL	# 17
4) 2-Fluorophenol	4.394	112	47065	1.3012	ug/mL	# 71
5) Phenol-d5	5.366	99	64269	1.3011	ug/mL	78
6) Phenol	5.382	94	418635	8.8909	ug/mL	78
7) Aniline	5.462	93	2046	2.3558	ug/mL	# 1
8) bis(2-Chloroethyl)ether	5.462	93	2046	0.0574	ug/mL	# 59
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	6.050	108	4315	0.1742	ug/mL	# 47
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	6.231	107	22113	0.7600	ug/mL	88
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	6.231	107	22113	0.5200	ug/mL	92
17) N-Nitroso-di-n-propylamine	6.429	70	2095	0.0843	ug/mL	83
18) Hexachloroethane	6.413	117	1398	0.0875	ug/mL	# 15
20) Nitrobenzene-d5	6.397	82	53432	1.0856	ug/mL	# 70
21) Nitrobenzene	6.370	77	1682	0.0390	ug/mL	# 67
22) Isophorone	6.397	82	53432	0.6835	ug/mL	71
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	6.840	107	4803	0.1403	ug/mL	98
25) bis(2-Chloroethoxy)methane	7.022	93	1205	0.0266	ug/mL	# 1
26) Benzoic acid	7.033	105	6372	0.2384	ug/mL	# 37
27) 2,4-Dichlorophenol	7.188	162	1660	0.0573	ug/mL	# 17
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	7.273	128	13352	0.1493	ug/mL	84
30) 4-Chloroaniline	7.273	127	2133	6.4062	ug/mL	# 1
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	7.855	110	1039	18.7777	ug/mL	# 1
33) 4-Chloro-3-methylphenol	7.684	107	1736	0.0546	ug/mL	# 18
34) 2-Methylnaphthalene	8.112	142	62979	0.9643	ug/mL	88
35) 1-Methylnaphthalene	8.229	142	61017	0.9574	ug/mL	90
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	8.683	196	1053	0.0513	ug/mL	# 15

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA07.D
Acq On : 10 Sep 2012 2:59 pm
Operator :
Sample : S,239404-011
Misc : 190266,10, //DV
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 10 17:00:47 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.683	196	1053	0.0492	ug/mL	#	1
40) 2-Fluorobiphenyl	8.555	172	107016	1.4054	ug/mL		99
41) 2-Chloronaphthalene	8.812	162	4148	0.0704	ug/mL		77
42) 2-Nitroaniline	8.881	65	3483	0.1492	ug/mL	#	35
43) Dimethylphthalate	8.924	163	1034	0.0165	ug/mL	#	1
44) 2,6-Dinitrotoluene	9.399	165	295754	17.5325	ug/mL	#	14
45) Acenaphthylene	9.218	152	21813	0.2471	ug/mL	#	69
46) 3-Nitroaniline	9.383	138	2306	9.7857	ug/mL	#	1
47) Acenaphthene	9.431	154	4188	0.0693	ug/mL	#	73
48) 2,4-Dinitrophenol	9.848	184	2136	13.4141	ug/mL	#	1
49) 4-Nitrophenol	9.453	109	1436	0.1527	ug/mL	#	11
50) Dibenzofuran	9.442	168	8106	0.1025	ug/mL		86
51) 2,4-Dinitrotoluene	9.645	165	7347	0.3380	ug/mL	#	48
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.			
53) Diethylphthalate	0.000	149	0	N.D.			
54) 4-Chlorophenyl-phenylether	9.992	204	1231	0.0353	ug/mL	#	1
55) Fluorene	10.067	166	7221	0.1056	ug/mL	#	16
56) 4-Nitroaniline	10.521	138	1147	0.0723	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.372	330	14481	1.3324	ug/mL		97
59) 4,6-Dinitro-2-methylphenol	10.313	198	1246	0.0894	ug/mL	#	1
60) N-Nitrosodiphenylamine	10.211	169	54361	1.0516	ug/mL	#	44
61) Azobenzene	10.275	77	4867	0.0557	ug/mL	#	1
62) 4-Bromophenyl-phenylether	0.000	248	0	N.D.			
63) Hexachlorobenzene	0.000	284	0	N.D.			
64) Pentachlorophenol	10.783	266	1659	0.1053	ug/mL	#	28
65) Phenanthrene	11.264	178	355245	3.6890	ug/mL		96
66) Anthracene	11.322	178	28522	0.2896	ug/mL		78
67) Carbazole	11.525	167	22722	0.3047	ug/mL	#	51
68) Di-n-butylphthalate	11.931	149	6136	0.0543	ug/mL	#	35
69) Fluoranthene	12.738	202	321230	2.8122	ug/mL		97
71) Benzidine	12.866	184	2473	18.4591	ug/mL	#	1
72) Pyrene	13.021	202	395889	3.6503	ug/mL		89
73) Terphenyl-d14	13.203	244	124591	1.5121	ug/mL		91
74) Butylbenzylphthalate	13.748	149	2411	0.0438	ug/mL	#	1
75) 3,3'-Dichlorobenzidine	14.474	252	3506	11.3896	ug/mL	#	63
76) Benzo(a)anthracene	14.560	228	124548m	1.1341	ug/mL		
77) bis(2-Ethylhexyl)phthalate	14.538	149	22199	0.3103	ug/mL		75
78) Chrysene	14.603	228	221420m	2.2141	ug/mL		
80) Di-n-octylphthalate	15.537	149	2127	0.0169	ug/mL	#	1
81) Benzo(b)fluoranthene	16.387	252	144434m	1.3501	ug/mL		
82) Benzo(k)fluoranthene	16.414	252	51417m	0.5043	ug/mL		
83) Benzo(a)pyrene	17.071	252	51536m	0.5622	ug/mL		
84) Indeno(1,2,3-cd)pyrene	19.939	276	49087	0.4639	ug/mL		94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA07.D
Acq On : 10 Sep 2012 2:59 pm
Operator :
Sample : S,239404-011
Misc : 190266,10, //DV
ALS Vial : 7 Sample Multiplier: 1

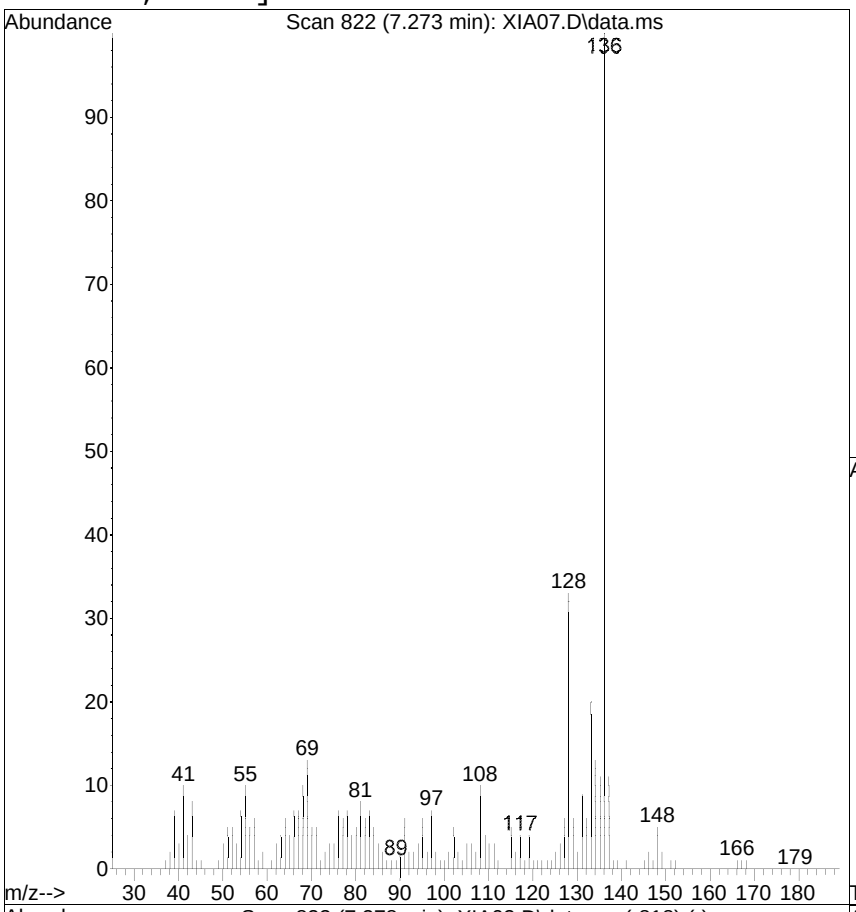
Quant Time: Sep 10 17:00:47 2012
Quant Method : G:\msbna05\091012\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	19.998	278	15329	0.1715	ug/mL #	34
86) Benzo(g,h,i)perylene	20.714	276	52811	0.6112	ug/mL	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Naphthalene; <RL]

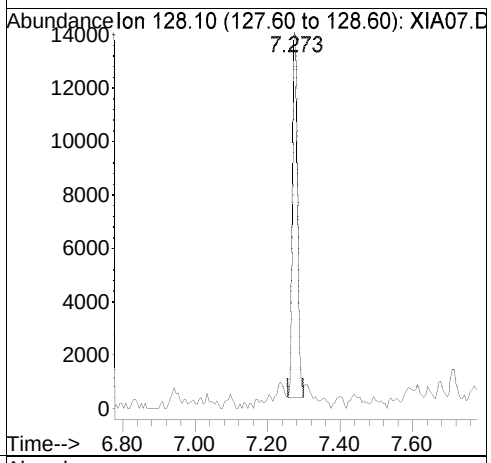
Raw



#29
Naphthalene
Concen: 0.1493 ug/mL
RT: 7.273 min Scan# 822
Delta R.T. -0.005 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:128 Resp: 13352

Ion	Ratio	Lower	Upper
128	100		
129	17.7	0.0	30.0
127	16.9	0.0	32.0



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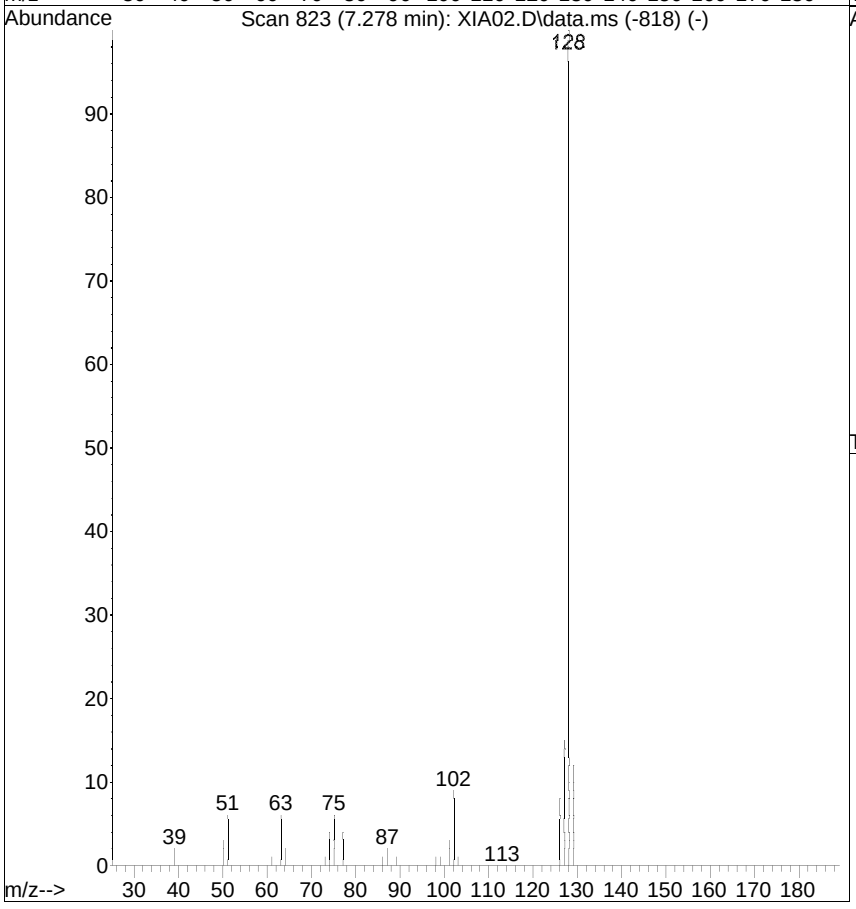
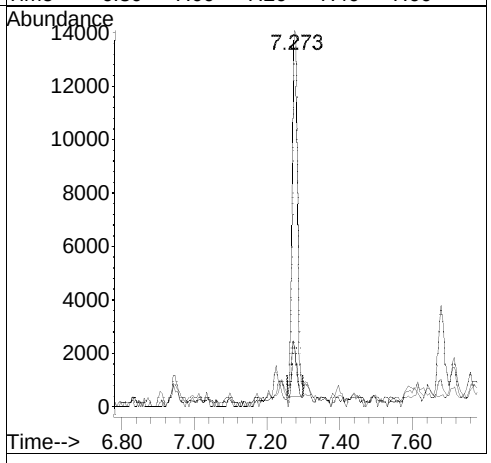
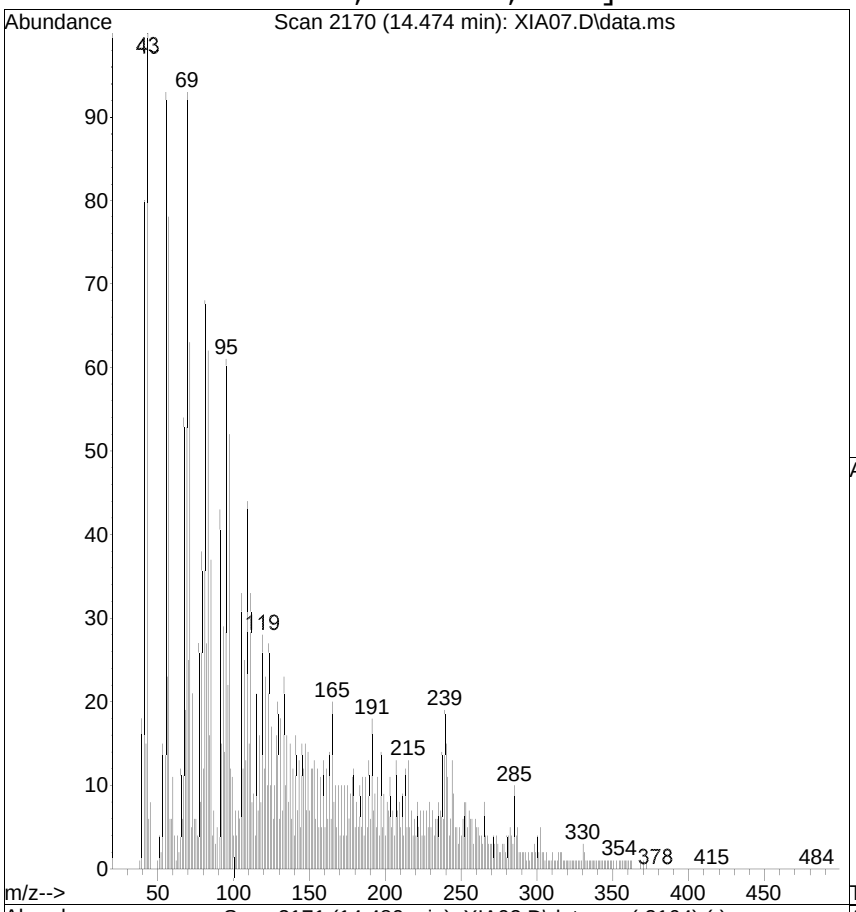




[3,3'-Dichlorobenzidine; 7500 J; FP]

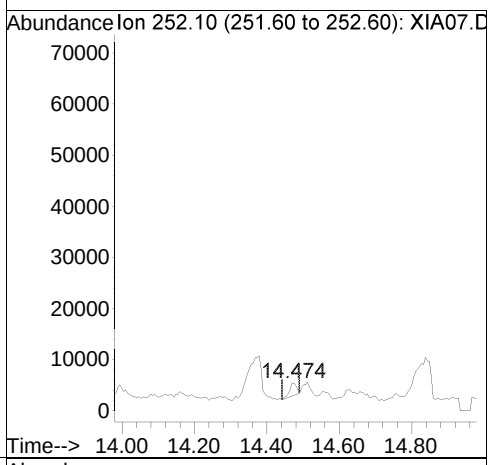
Raw



#75
3,3'-Dichlorobenzidine
Concen: 11.3896 ug/mL
RT: 14.474 min Scan# 2170
Delta R.T. -0.005 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:252 Resp: 3506

Ion	Ratio	Lower	Upper
252	100		
254	57.6	44.0	84.0
126	82.0	0.0	34.0#



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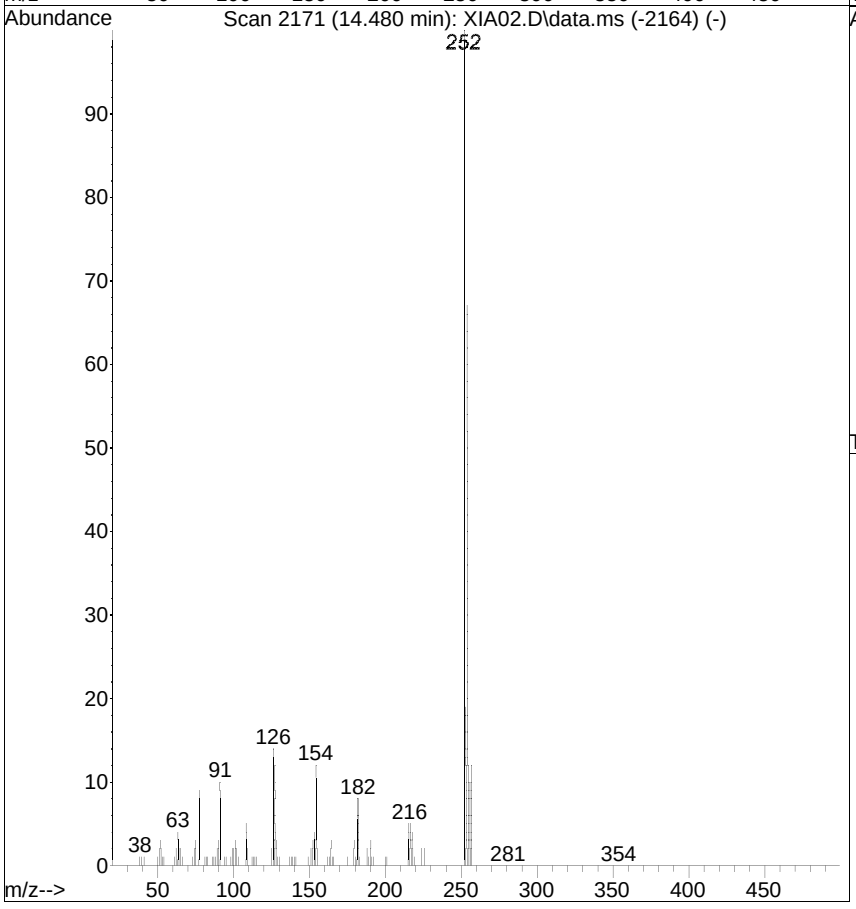
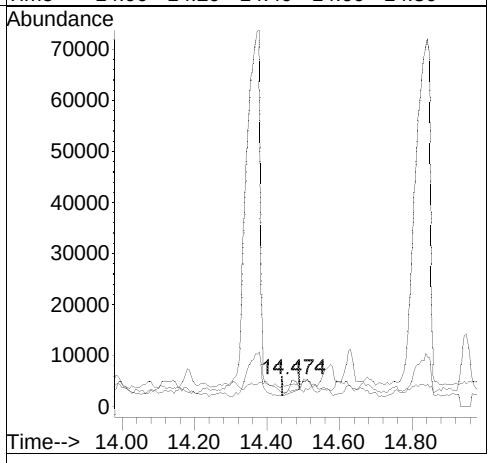
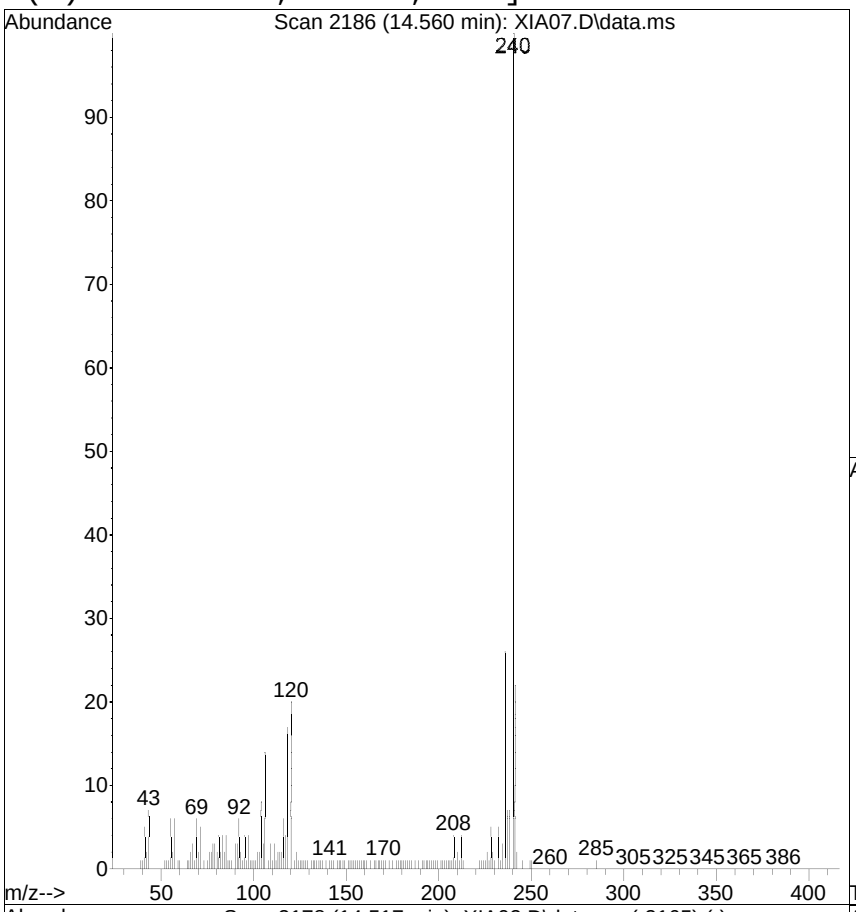




[Benzo(a)anthracene; 750 J; MI]

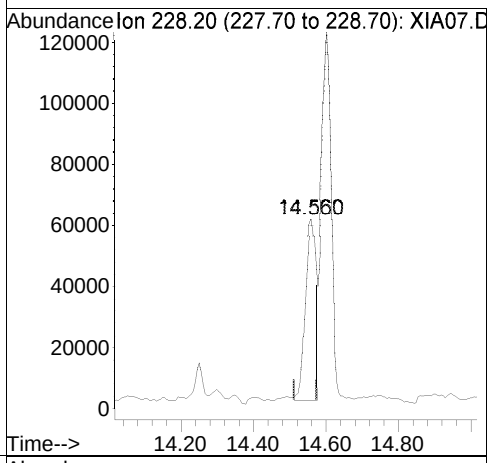
Raw



#76
Benzo(a)anthracene
Concen: 1.1341 ug/mL m
RT: 14.560 min Scan# 2186
Delta R.T. 0.043 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:228 Resp: 124548

Ion	Ratio	Lower	Upper
228	100		
229	15.3	0.0	40.0
226	15.9	8.0	48.0



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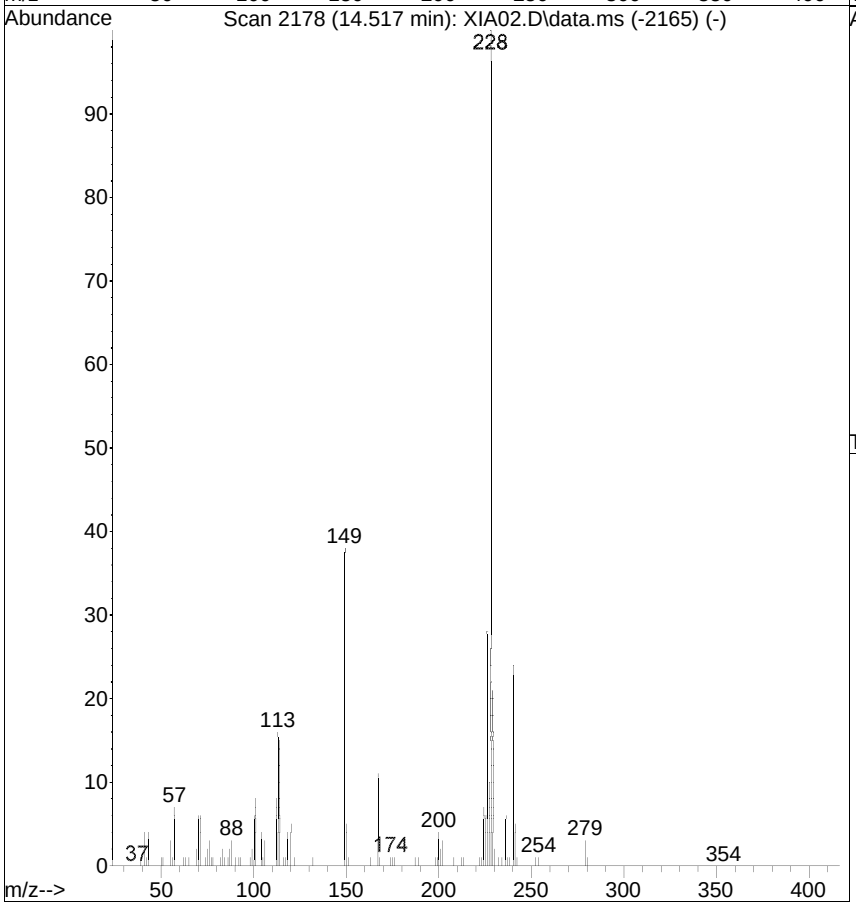
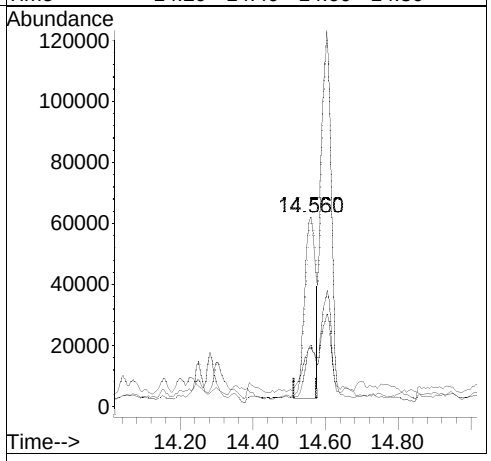
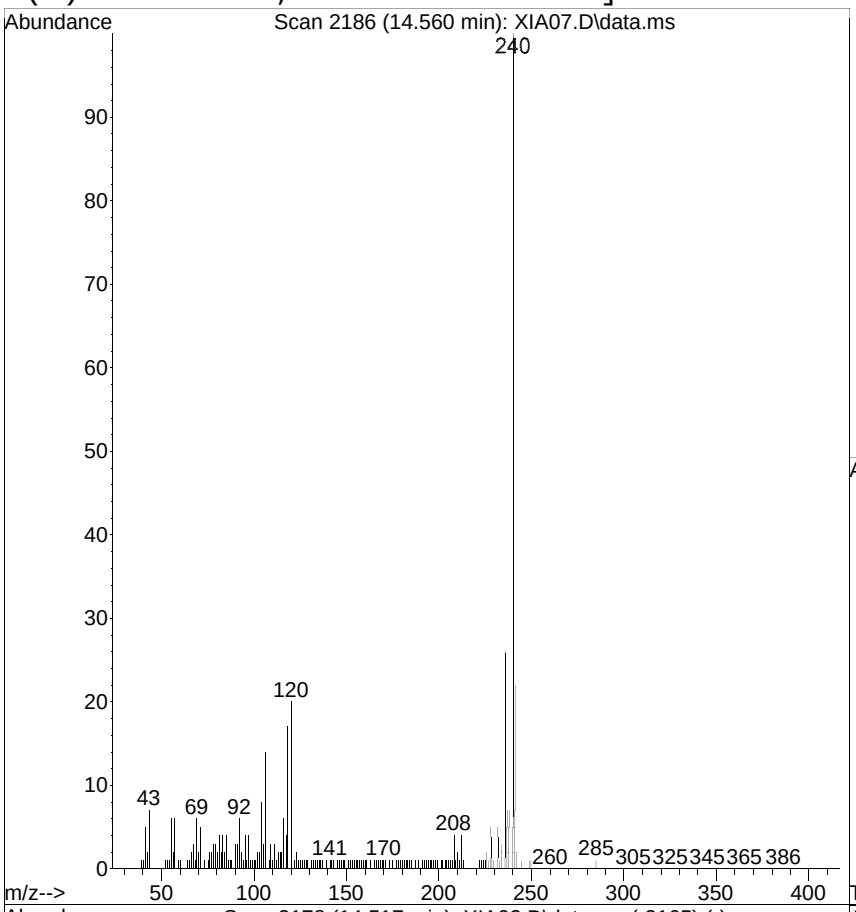




[Benzo(a)anthracene; before version]

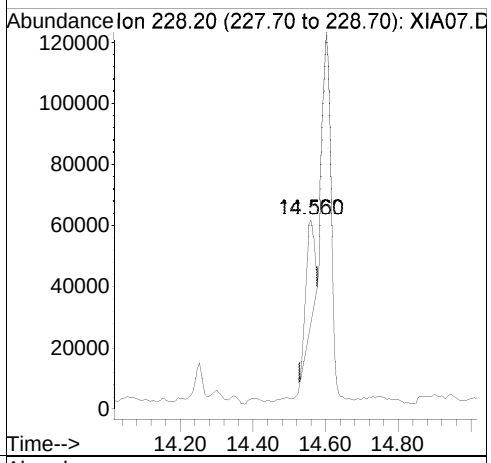
Raw



#76
Benzo(a)anthracene
Concen: 0.5567 ug/mL
RT: 14.560 min Scan# 2186
Delta R.T. 0.043 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:228 Resp: 61142

Ion	Ratio	Lower	Upper
228	100		
229	31.1	0.0	40.0
226	32.4	8.0	48.0



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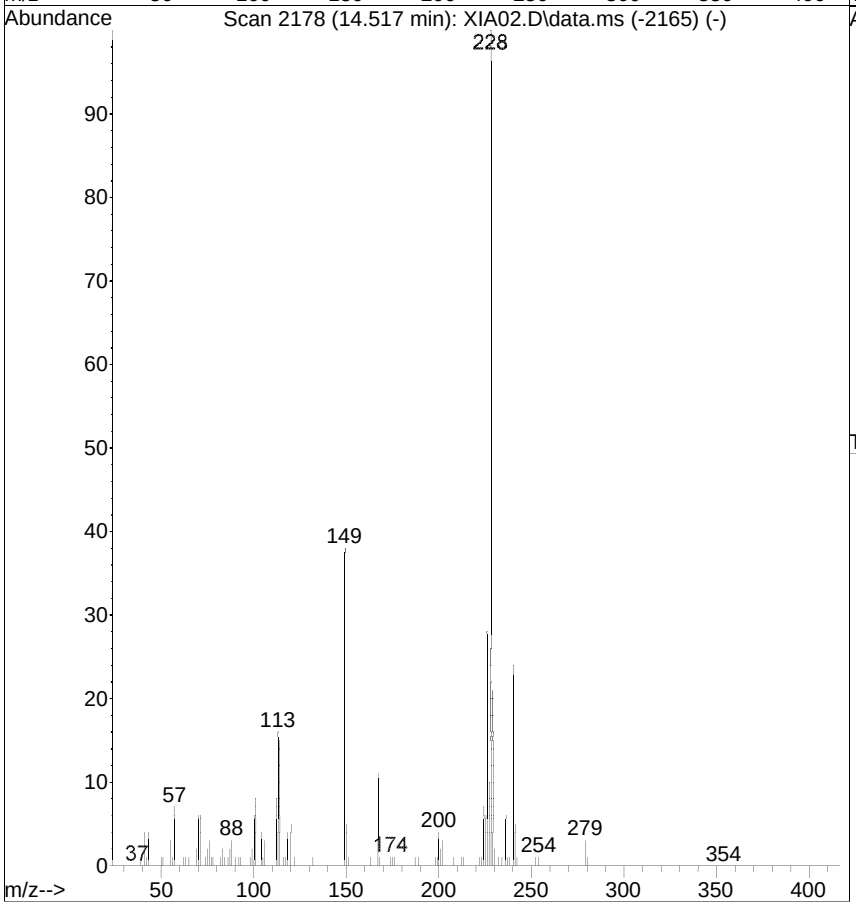
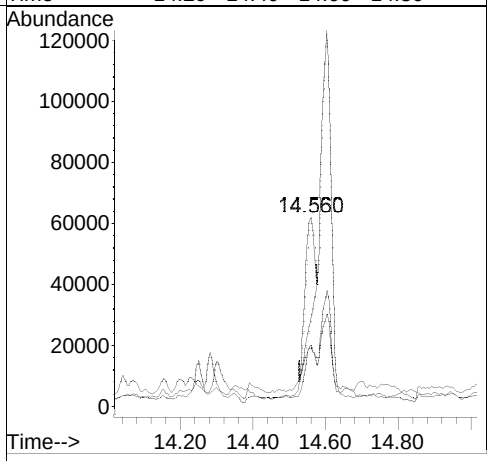
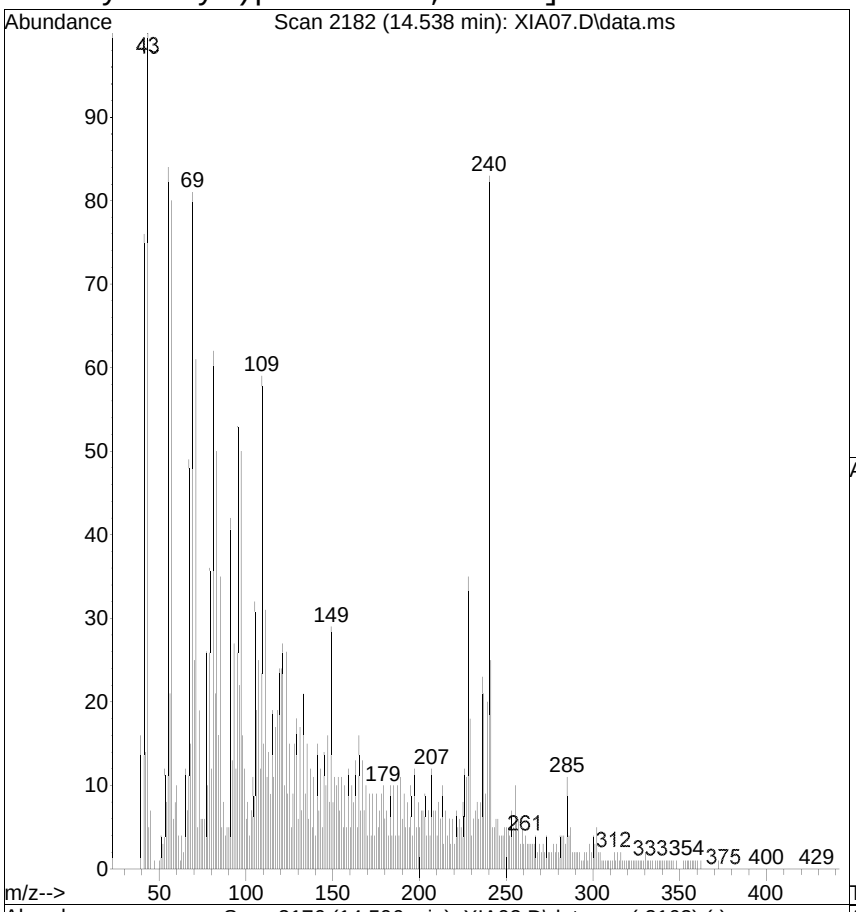




[bis(2-Ethylhexyl)phthalate; <RL]

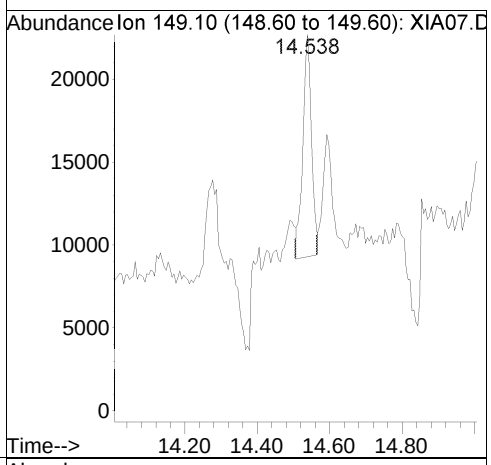
Raw



#77
bis(2-Ethylhexyl)phthalate
Concen: 0.3103 ug/mL
RT: 14.538 min Scan# 2182
Delta R.T. 0.032 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:149 Resp: 22199

Ion	Ratio	Lower	Upper
149	100		
167	44.5	9.0	49.0
279	9.7	0.0	27.0



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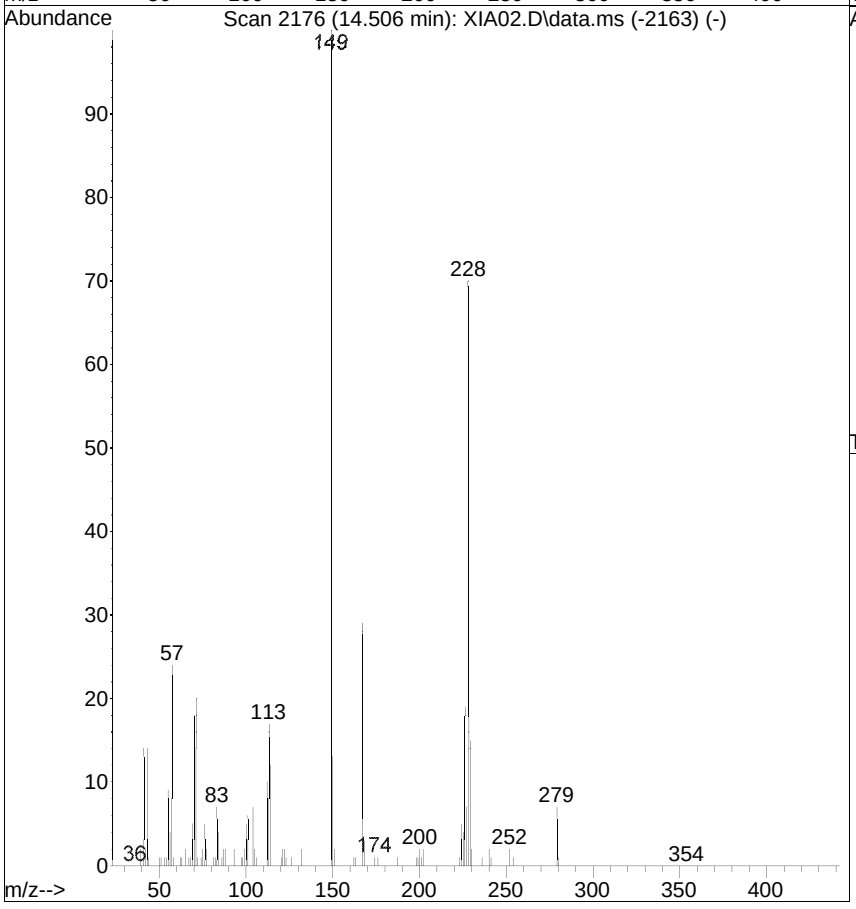
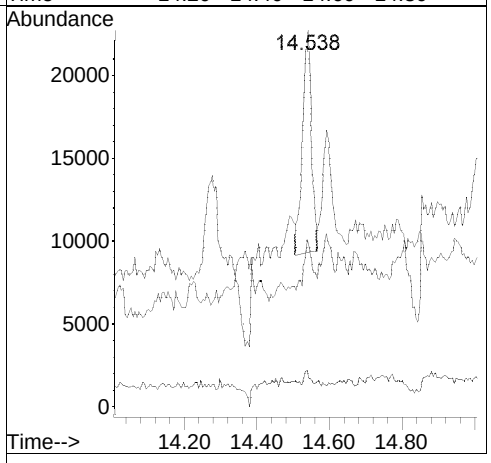
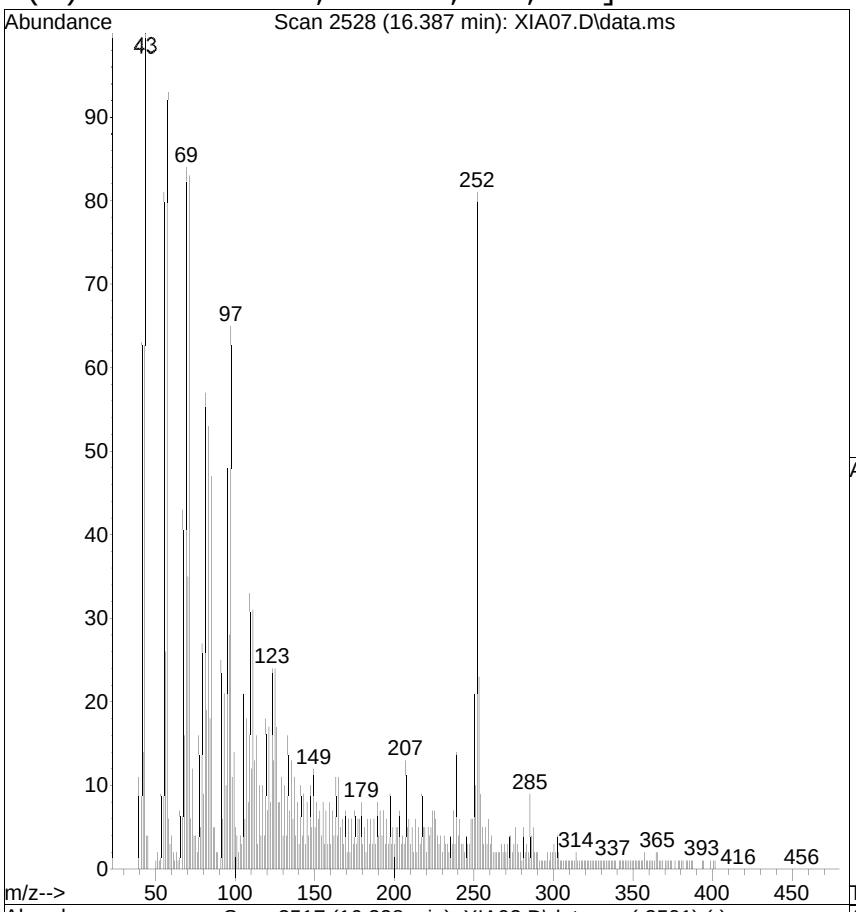




[Benzo(b)fluoranthene; 890 J; MI; u]

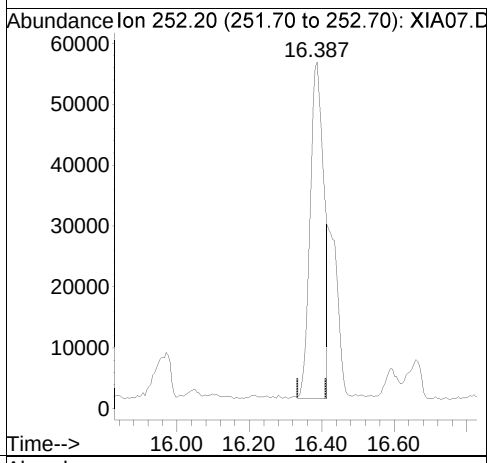
Raw



#81
Benzo(b)fluoranthene
Concen: 1.3501 ug/mL m
RT: 16.387 min Scan# 2528
Delta R.T. 0.059 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:252 Resp: 144434

Ion	Ratio	Lower	Upper
252	100		
253	38.7	2.7	42.7
125	40.0	0.0	35.2#



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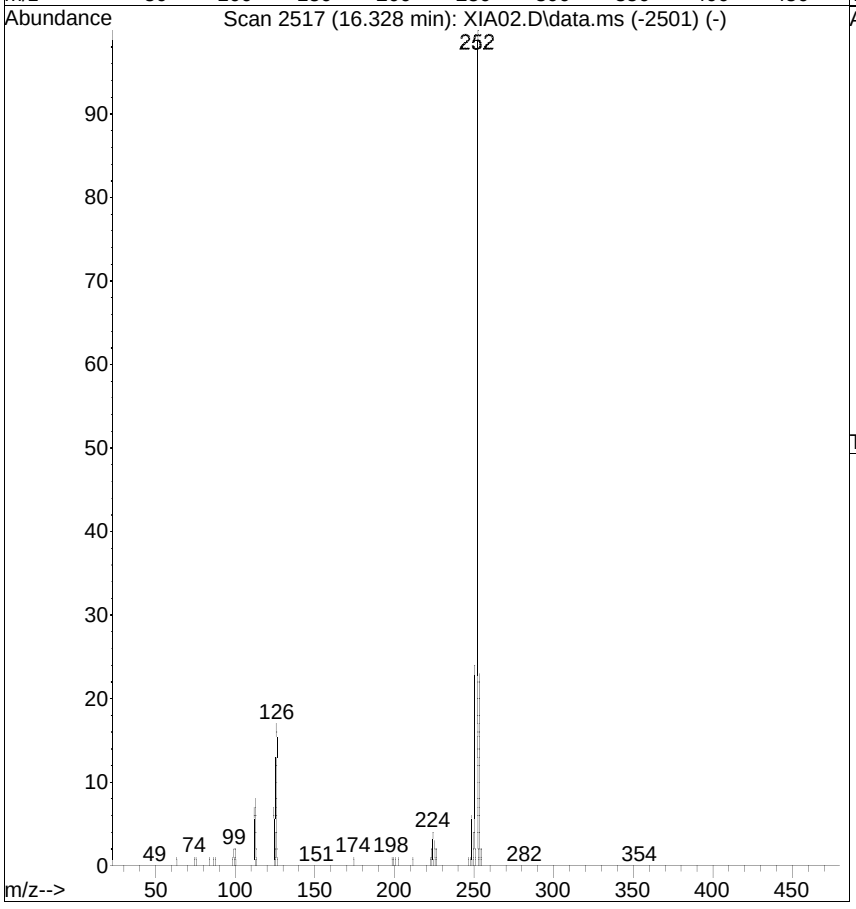
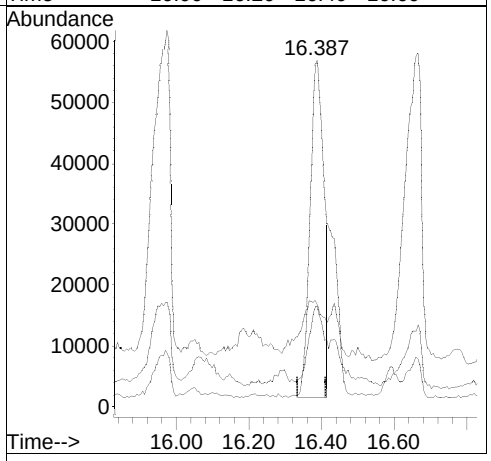
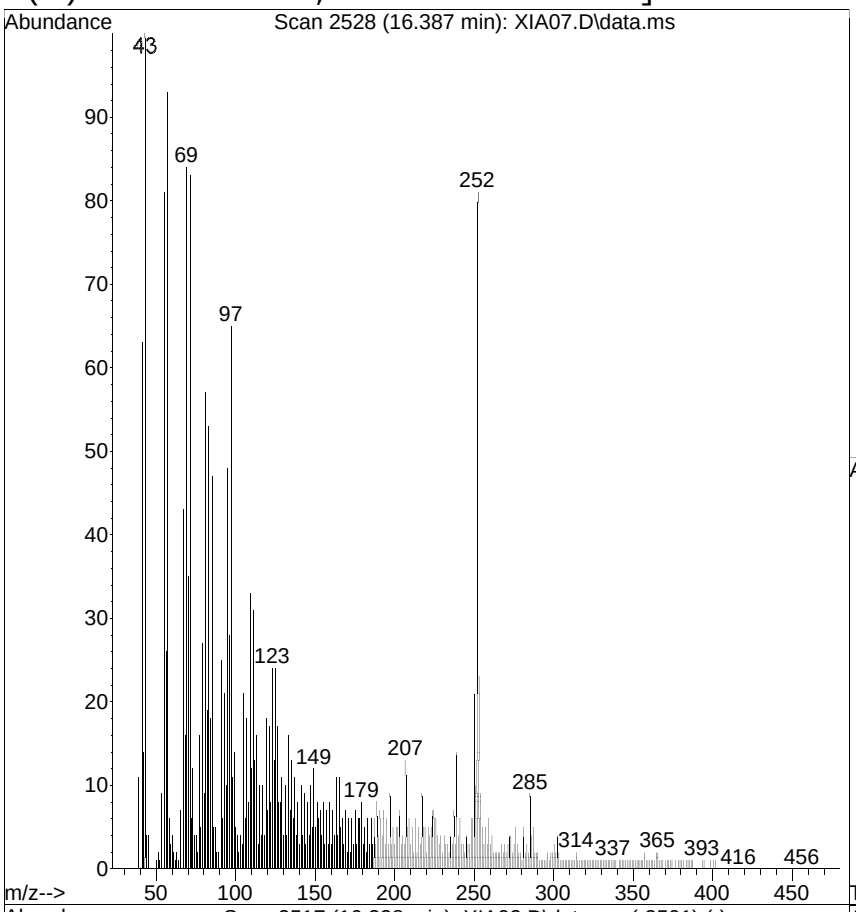




[Benzo(b)fluoranthene; before version]

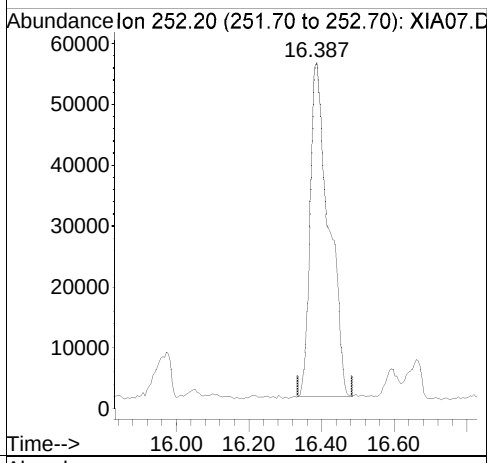
Raw



#81
Benzo(b)fluoranthene
Concen: 1.8115 ug/mL
RT: 16.387 min Scan# 2528
Delta R.T. 0.059 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:252 Resp: 193789

Ion	Ratio	Lower	Upper
252	100		
253	28.8	2.7	42.7
125	29.8	0.0	35.2



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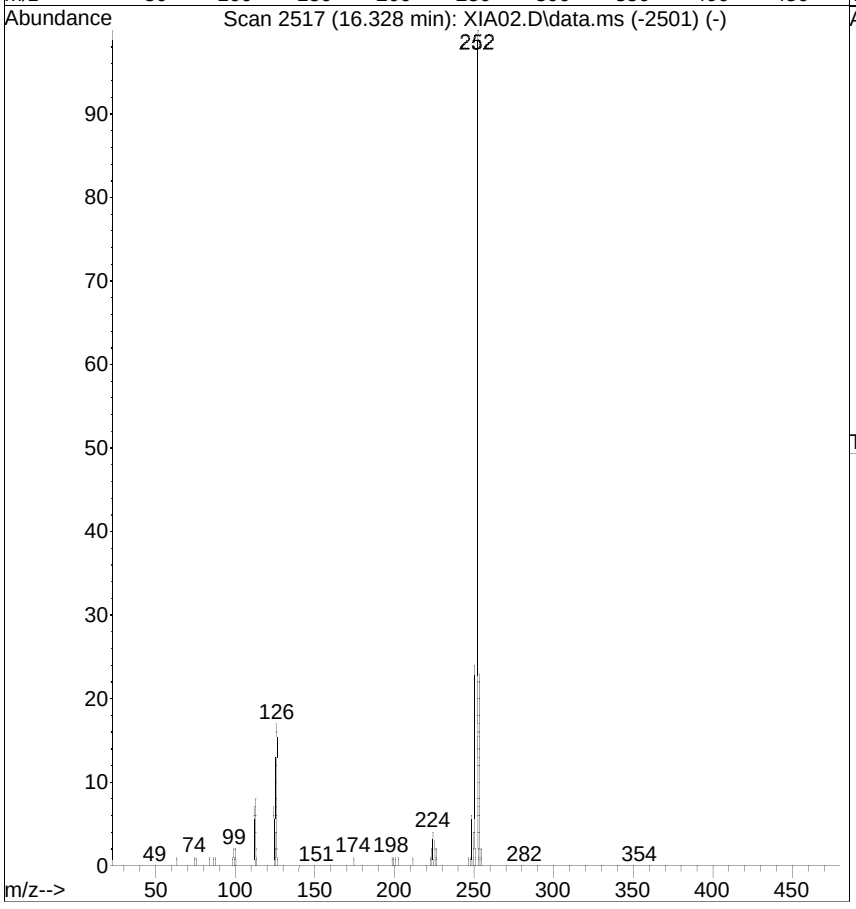
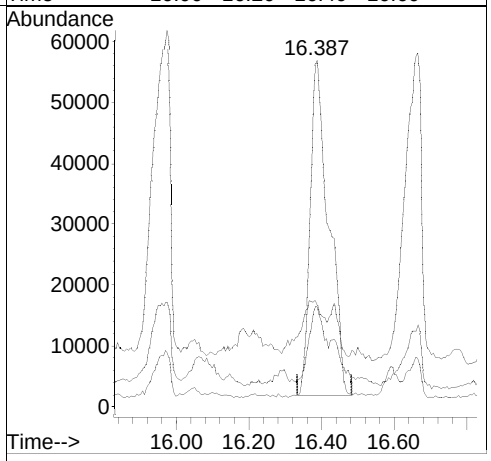
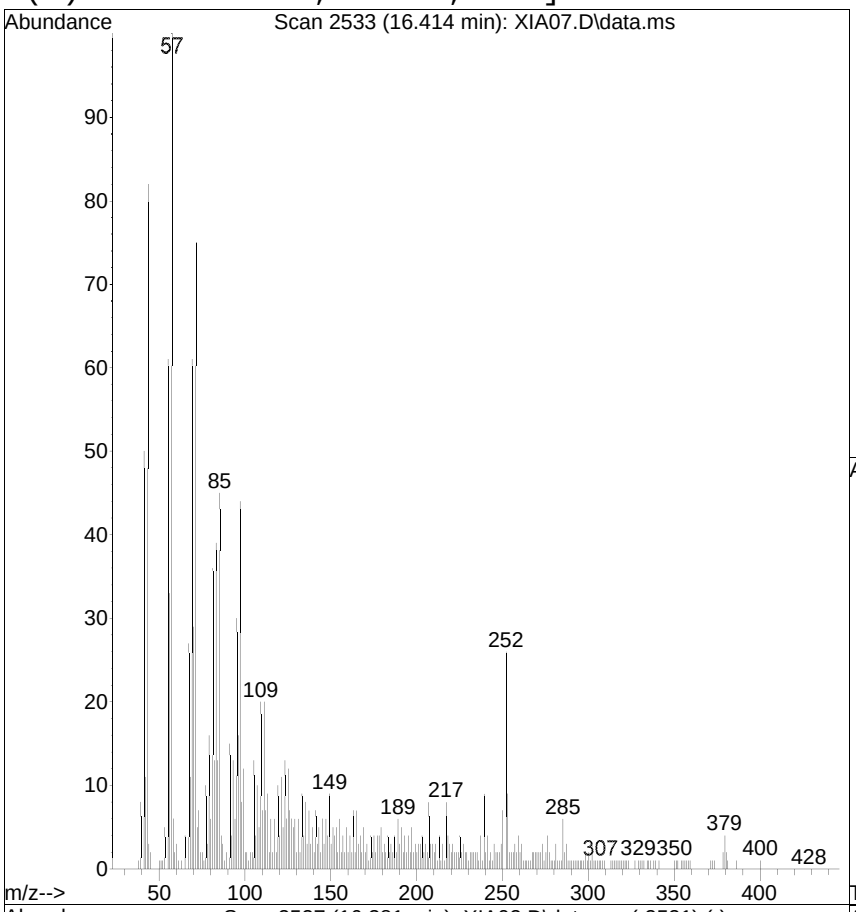




[Benzo(k)fluoranthene; 330 J; MI]

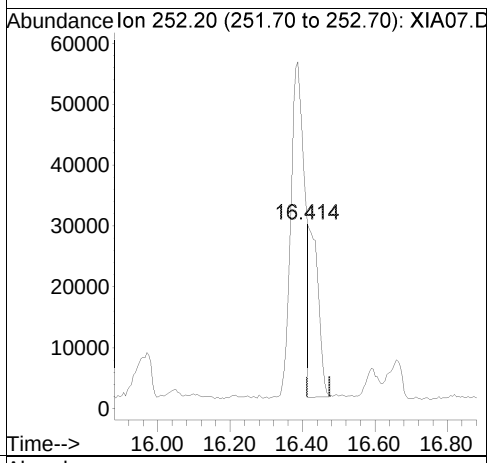
Raw



#82
Benzo(k)fluoranthene
Concen: 0.5043 ug/mL m
RT: 16.414 min Scan# 2533
Delta R.T. 0.032 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:252 Resp: 51417

Ion	Ratio	Lower	Upper
252	100		
253	108.6	3.0	43.0#
125	112.3	0.0	37.0#



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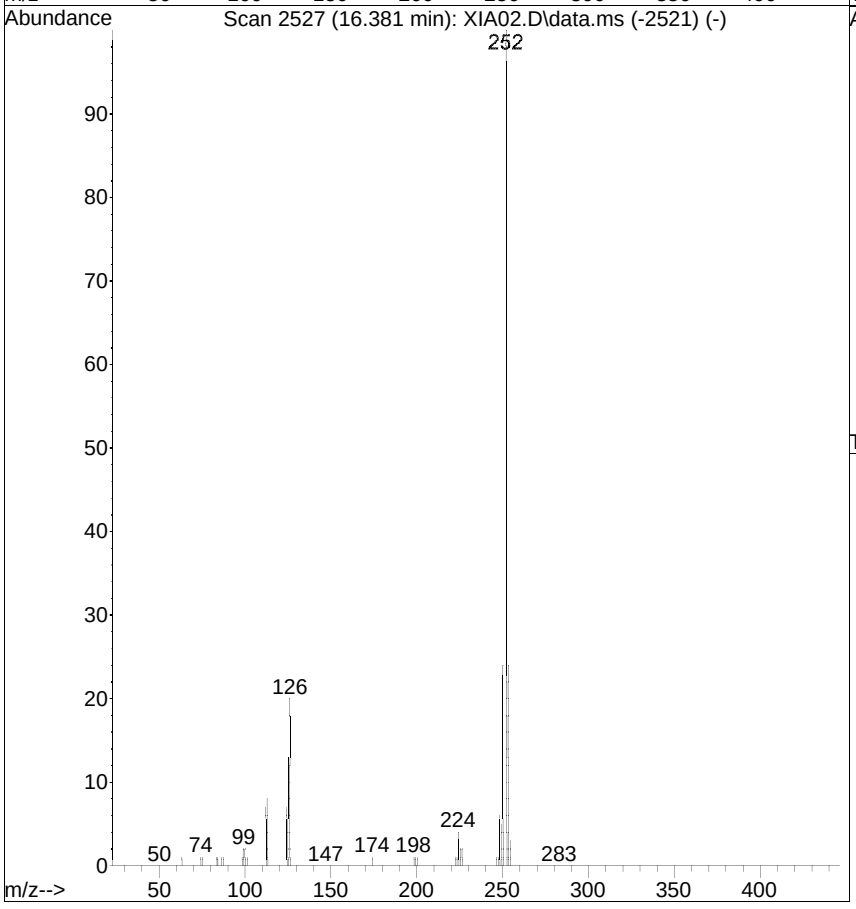
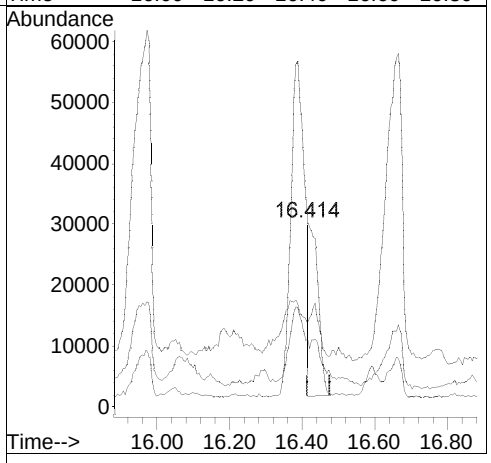
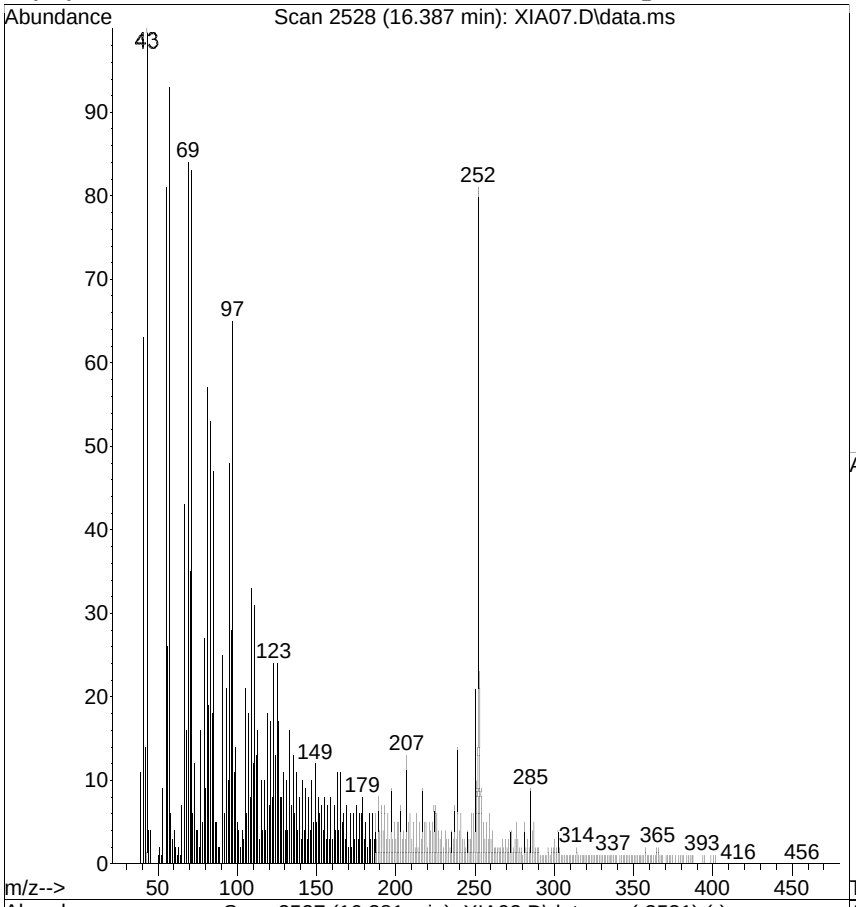




[Benzo(k)fluoranthene; before version]

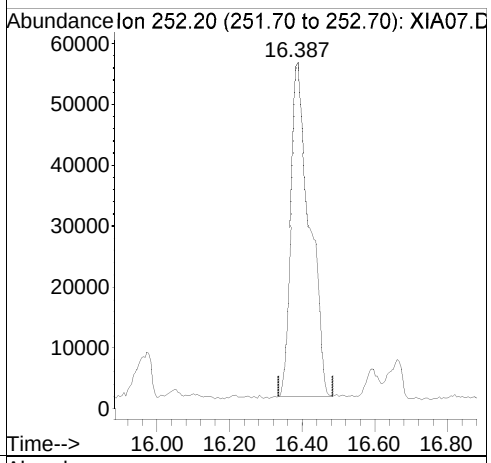
Raw



#82
Benzo(k)fluoranthene
Concen: 1.9006 ug/mL
RT: 16.387 min Scan# 2528
Delta R.T. 0.005 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:252 Resp: 193789

Ion	Ratio	Lower	Upper
252	100		
253	28.8	3.0	43.0
125	29.8	0.0	37.0



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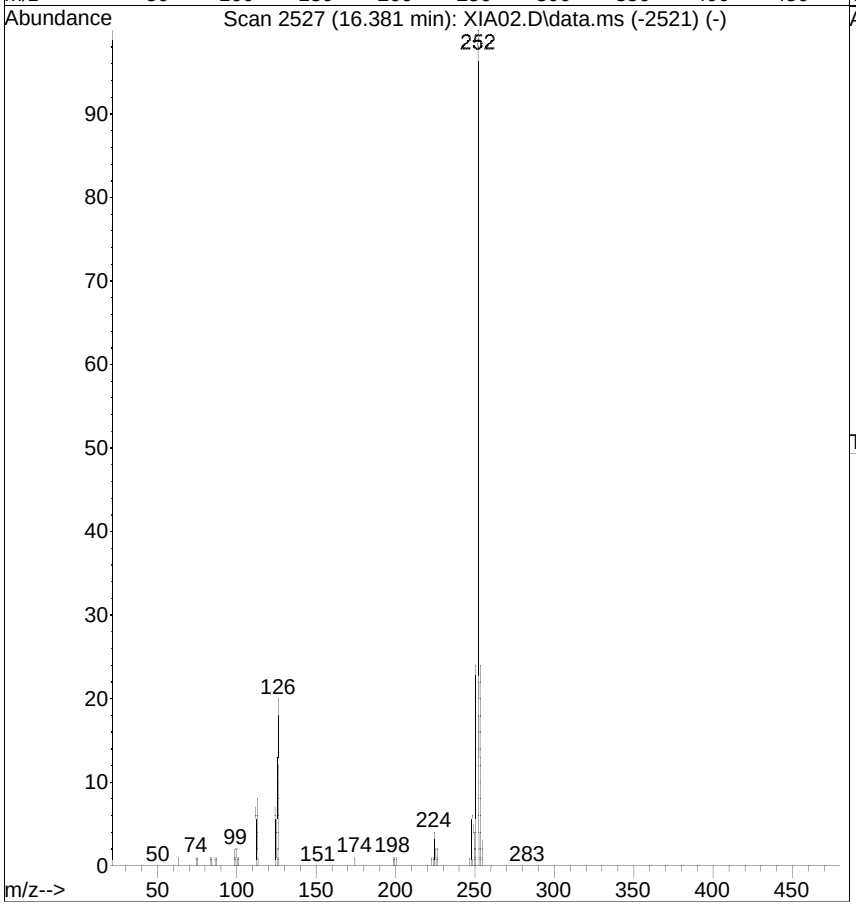
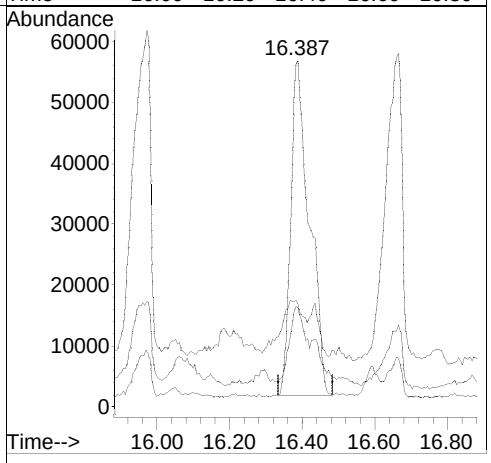
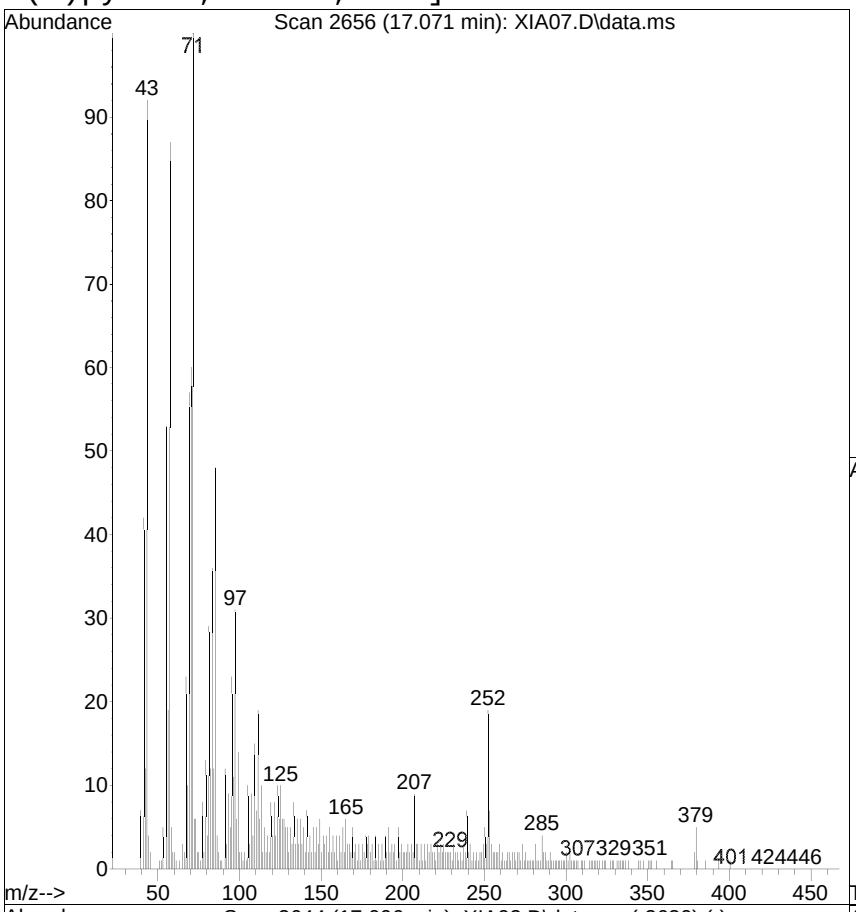




[Benzo(a)pyrene; 370 J; MI]

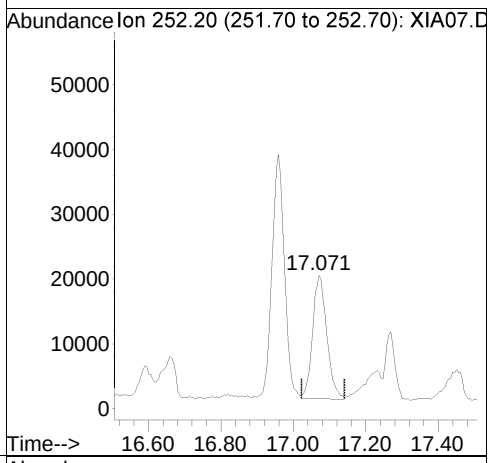
Raw



#83
Benzo(a)pyrene
Concen: 0.5622 ug/mL m
RT: 17.071 min Scan# 2656
Delta R.T. 0.064 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:252 Resp: 51536

Ion	Ratio	Lower	Upper
252	100		
253	47.7	2.6	42.6#
125	77.1	0.0	36.8#



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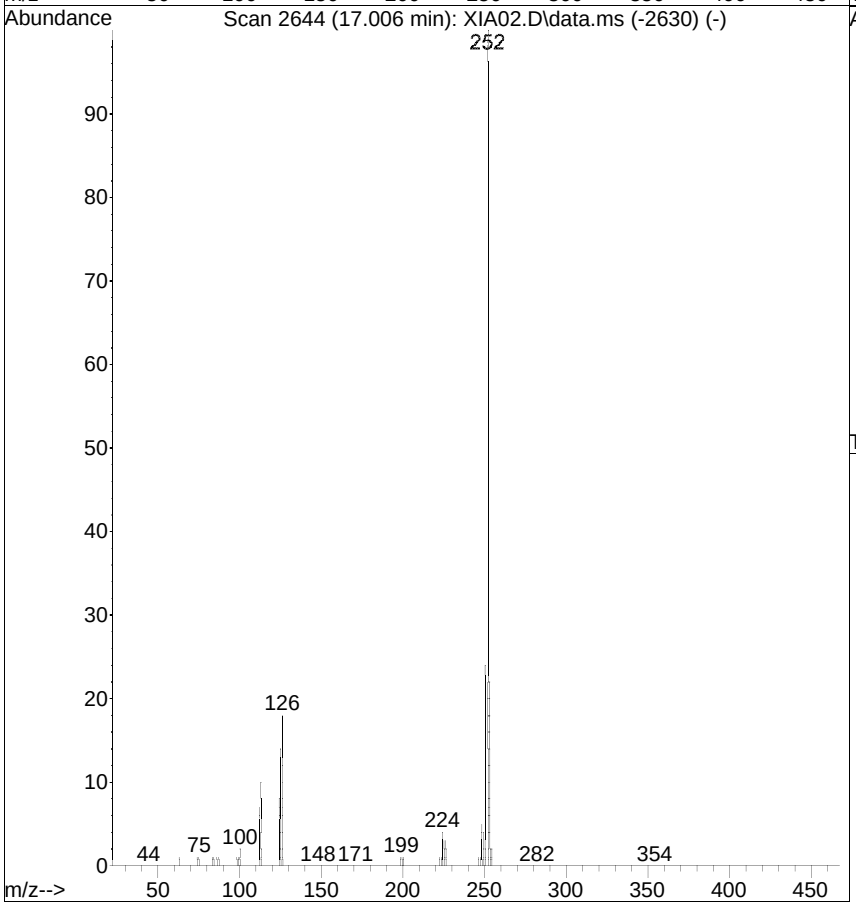
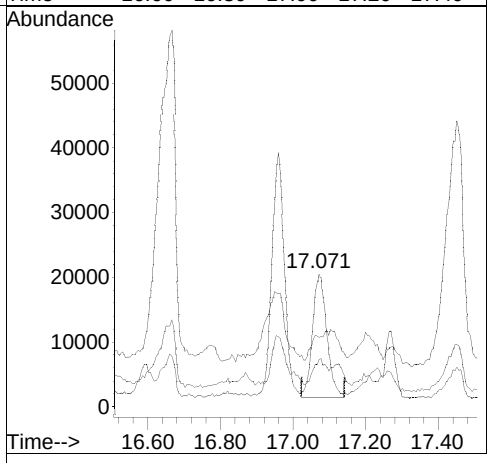
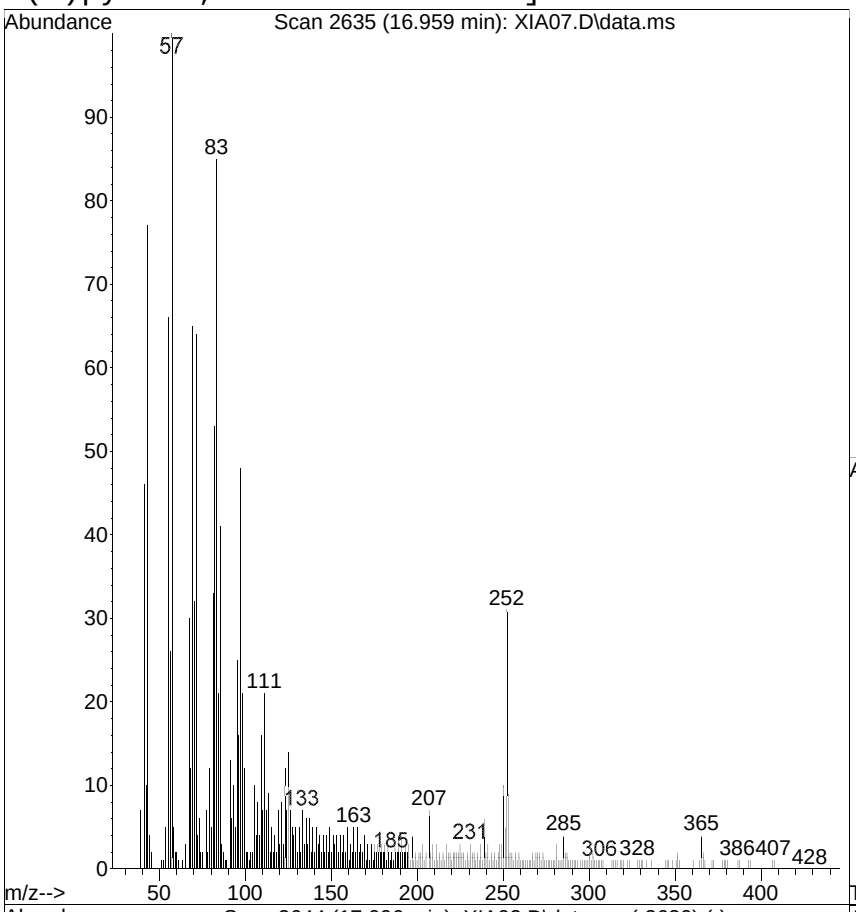




[Benzo(a)pyrene; before version]

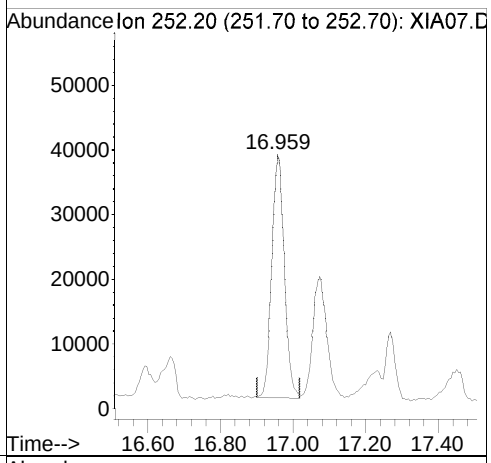
Raw



#83
Benzo(a)pyrene
Concen: 0.9727 ug/mL
RT: 16.959 min Scan# 2635
Delta R.T. -0.048 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:252 Resp: 89169

Ion	Ratio	Lower	Upper
252	100		
253	27.6	2.6	42.6
125	44.5	0.0	36.8#



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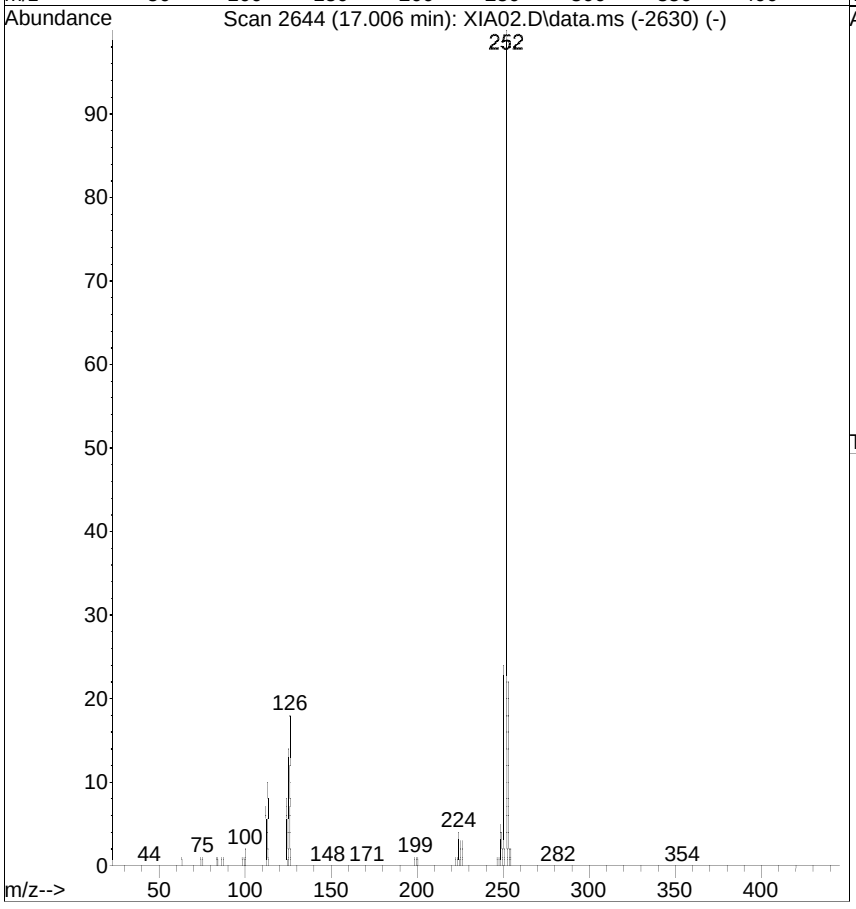
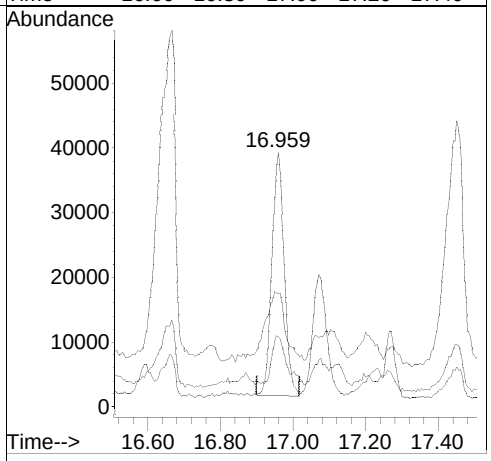
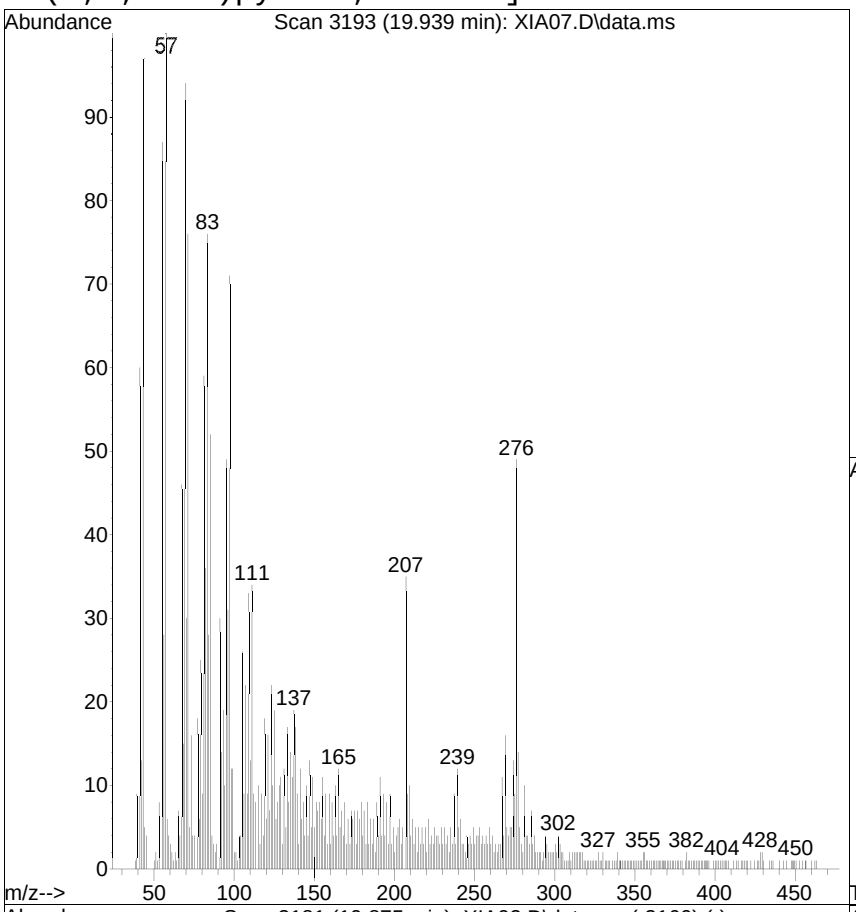




[Indeno(1,2,3-cd)pyrene; 310 J]

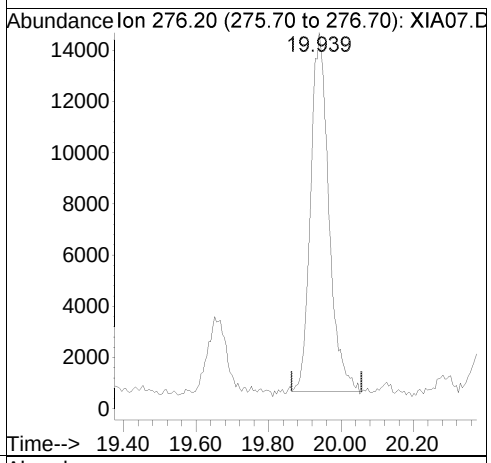
Raw



#84
Indeno(1,2,3-cd)pyrene
Concen: 0.4639 ug/mL
RT: 19.939 min Scan# 3193
Delta R.T. 0.064 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:276 Resp: 49087

Ion	Ratio	Lower	Upper
276	100		
138	34.6	11.1	51.1
227	8.9	0.0	20.1



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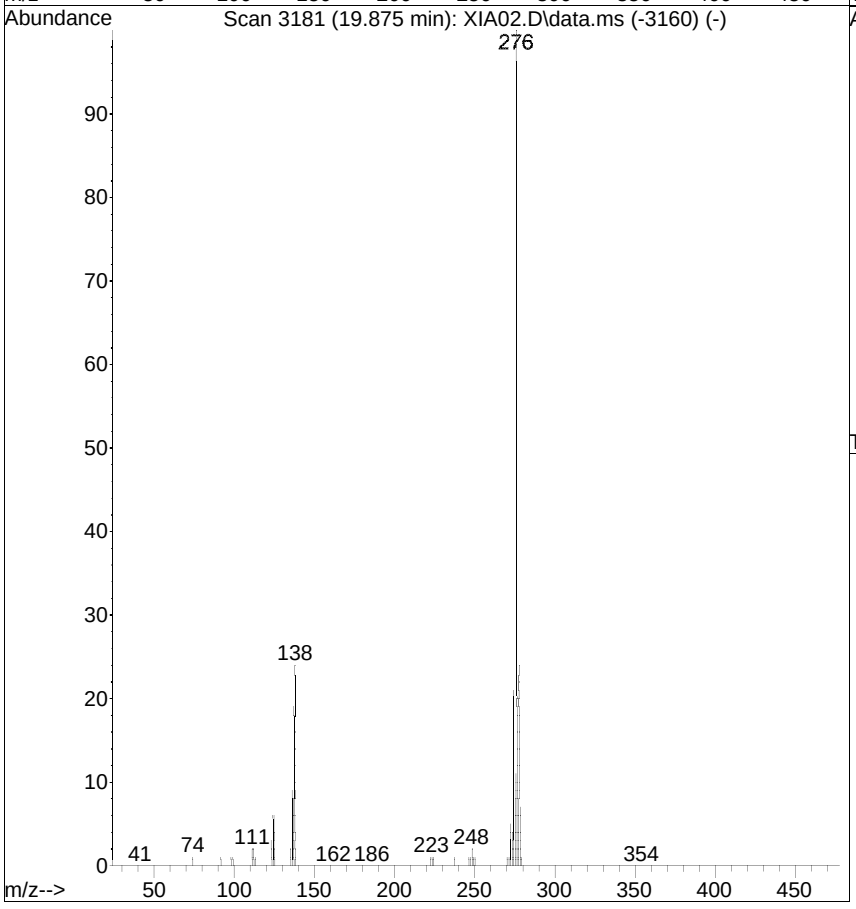
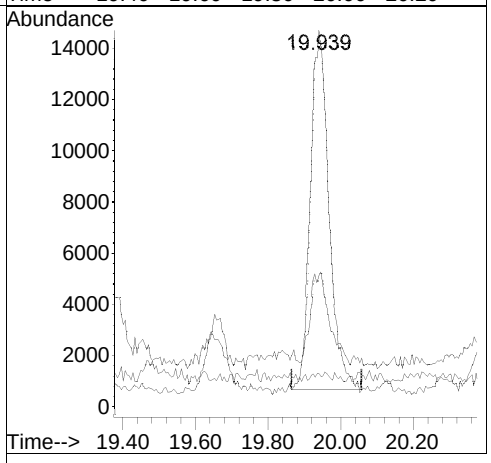
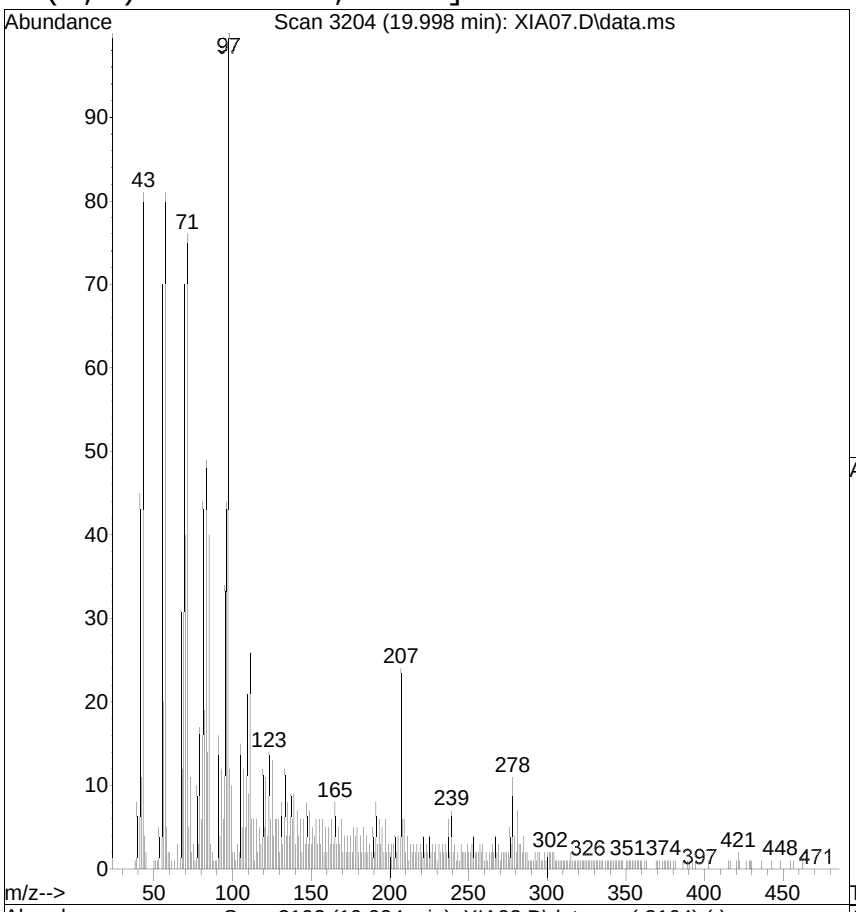




[Dibenz(a,h)anthracene; <RL]

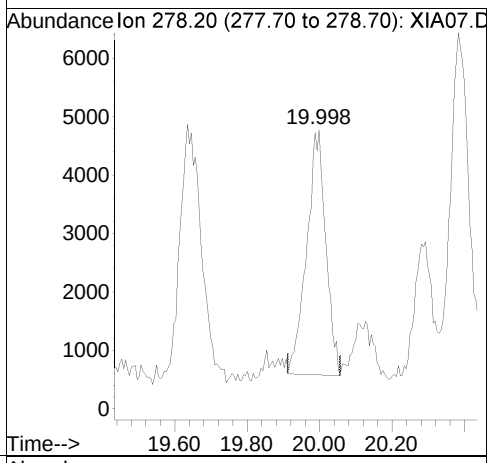
Raw



#85
Dibenz(a,h)anthracene
Concen: 0.1715 ug/mL
RT: 19.998 min Scan# 3204
Delta R.T. 0.064 min
Lab File: XIA07.D
Acq: 10 Sep 2012 2:59 pm

Tgt Ion:278 Resp: 15329

Ion	Ratio	Lower	Upper
278	100		
139	80.5	4.9	44.9#
279	33.6	4.1	44.1



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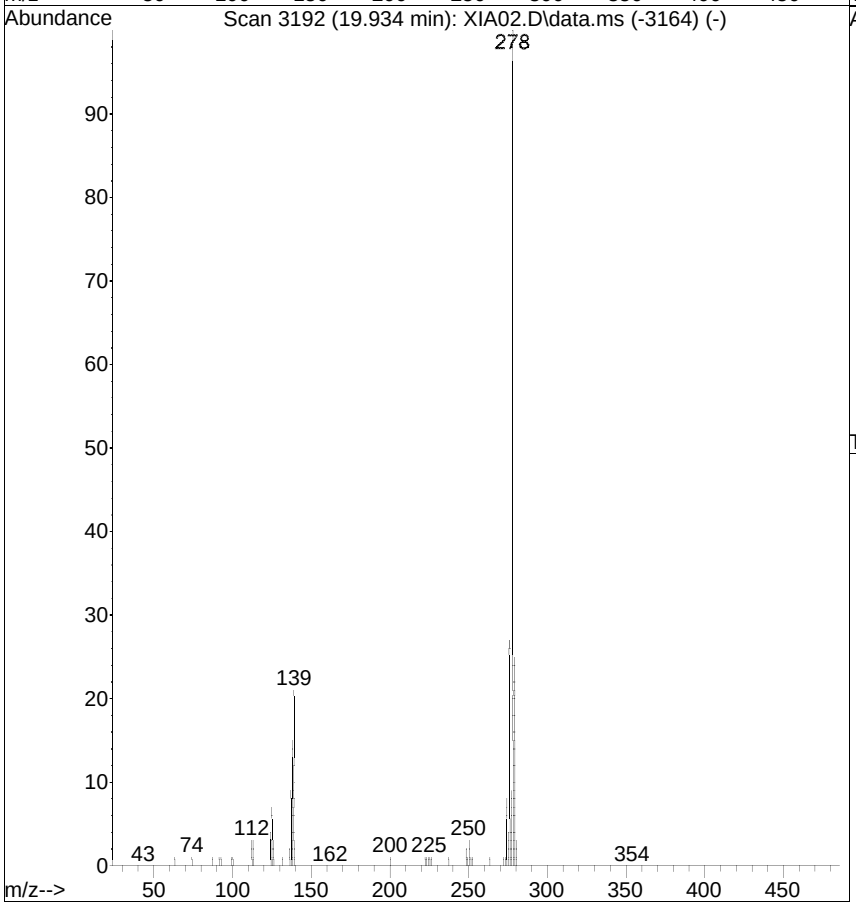
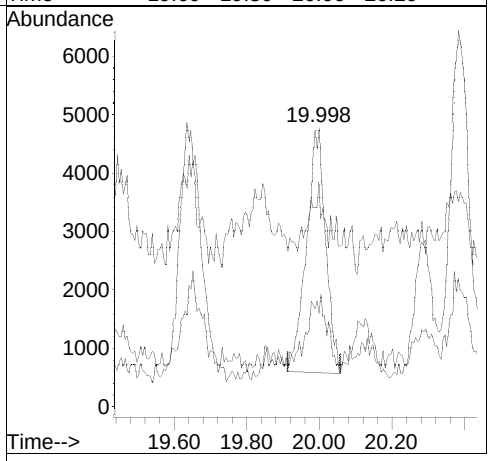




QC Raw Data

CURTIS & TOMPKINS BLANK USER REPORT FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Lab ID : QC655181
Seqnum : 552362420003.9 Matrix : Soil
File : yi703 Batch : 190266 Time : 07-SEP-2012 19:18
Cal : 552359297001 Caldate : 05-SEP-2012
IDF : 1.0 Raw Units : ug/mL Units : ug/Kg

30.03 g --> 1.0 ml = 0.0333 ml/g PDF

Analyte	Raw	Result	RL	Flags
Naphthalene	0	ND	67	
3,3'-Dichlorobenzidine	0	ND	670	
Benzo(a)anthracene	0.08170	ND	67	u
bis(2-Ethylhexyl)phthalate	0.09210	ND	330	
Benzo(b)fluoranthene	0	ND	67	u
Benzo(k)fluoranthene	0	ND	67	
Benzo(a)pyrene	0	ND	67	u
Indeno(1,2,3-cd)pyrene	0	ND	67	
Dibenz(a,h)anthracene	0	ND	67	

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	22.67	1332	754.9	57	48-120	u
2-Fluorobiphenyl	24.65	1332	820.8	62	50-120	u
Terphenyl-d14	23.82	1332	793.3	60	40-120	u

ISTD (CCV yi702)	CCV Area	BLANK Area	%Drift	CCV RT	BLANK RT	Drift
Naphthalene-d8	743711	824019	10.80	7.59	7.58	-0.01
Acenaphthene-d10	427044	470081	10.08	9.74	9.74	0.00
Chrysene-d12	784348	910488	16.08	15.00	14.99	-0.01
Perylene-d12	923802	944393	2.23	17.89	17.88	-0.01

LLH 09/10/12 [1,4-Dichlorobenzene-d4]: Picked or reassigned peak. [general version]

Analyst: LLH Date: 09/10/12 * Reviewer: LW Date: 09/12/12 *

u=use

Library Search Compound Report

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

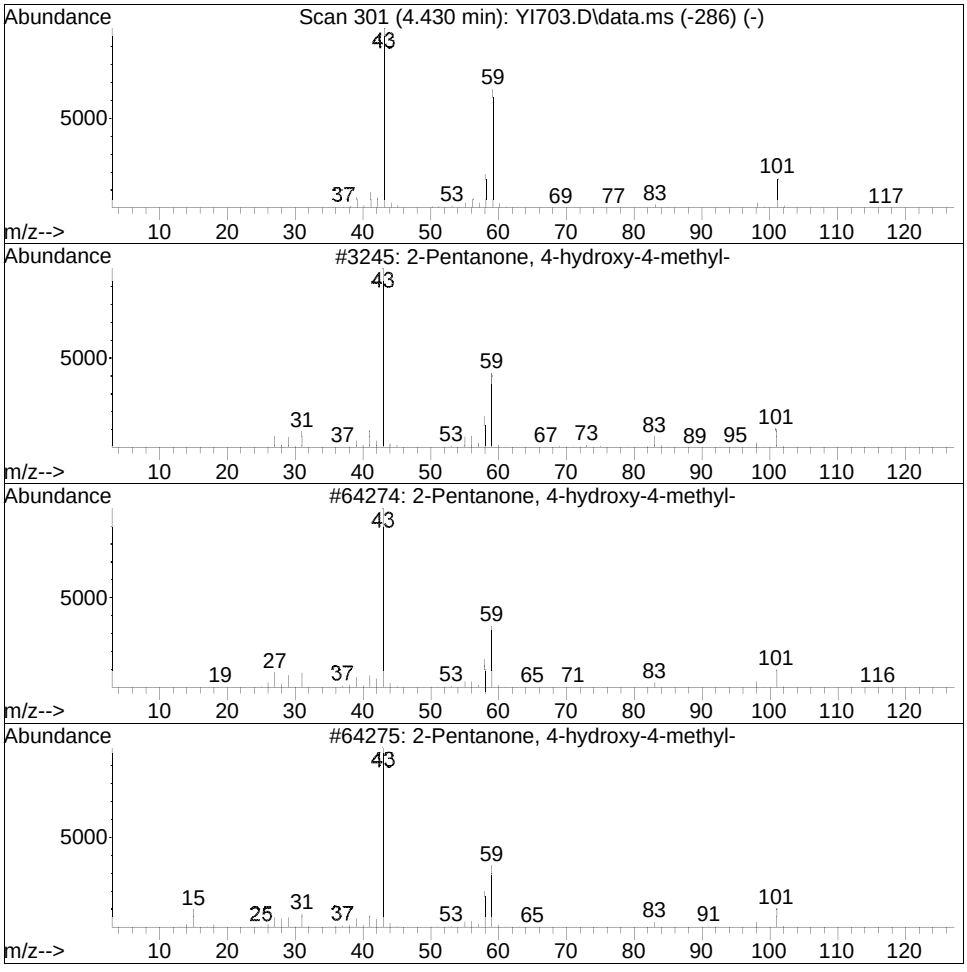
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA

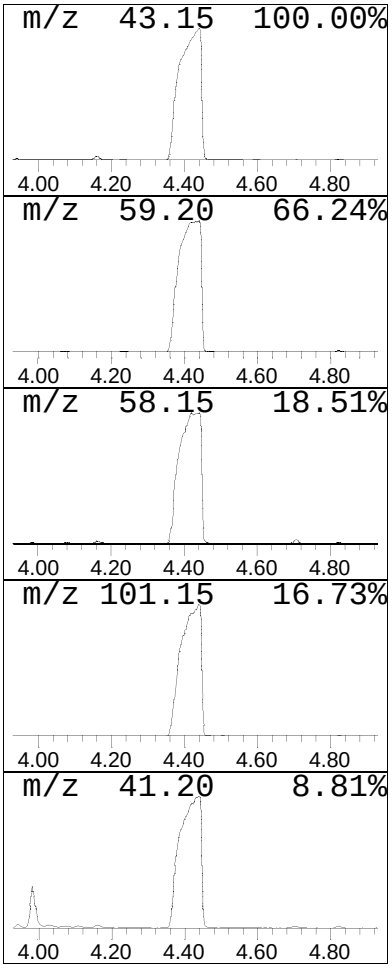
TIC Library : G:\bna\LIBRARY\nbs75k.l
TIC Integration Parameters: normal.p

ID: 2-Pentanone, 4-hydroxy-4-methyl-

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.430	84.86 ug/mL	2934320	1,4-Dichlorobenzene-d4	6.098

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
4	Propane, 2-methyl-2-(1-methyleth...	116	C7H16O	017348-59-3	36
5	3-Octanol	130	C8H18O	000589-98-0	33





Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

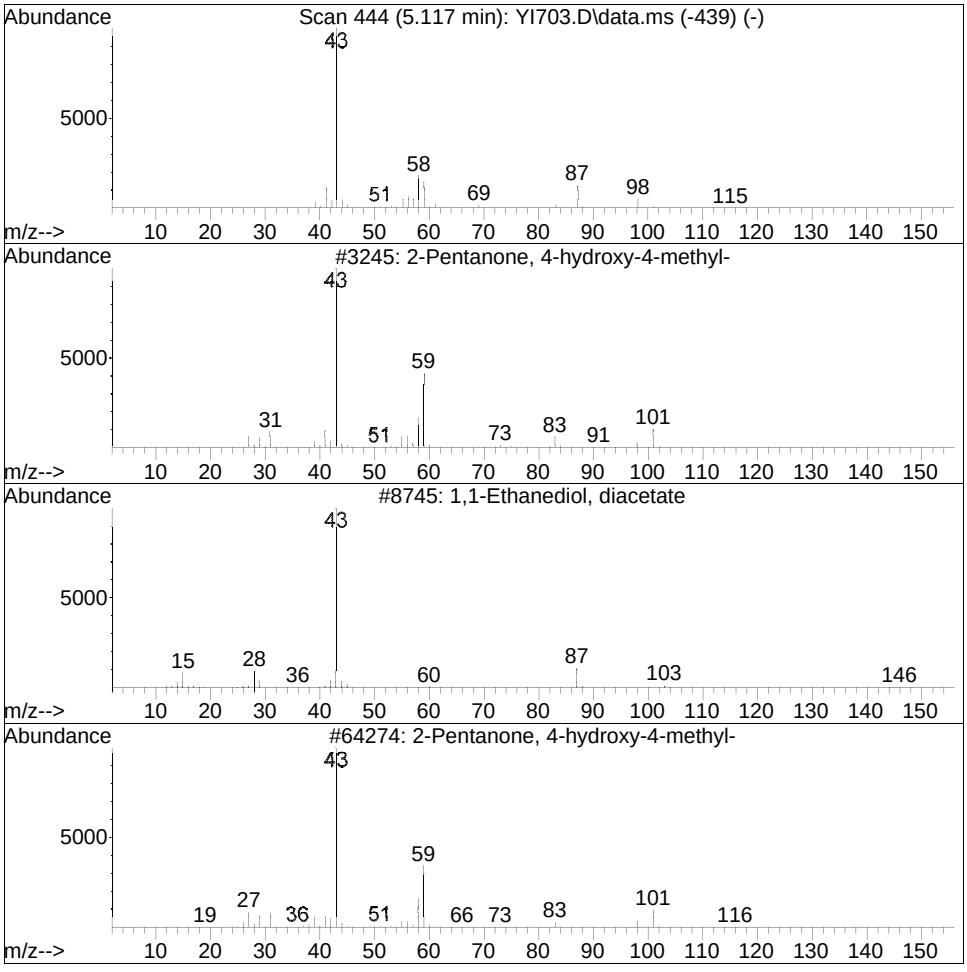
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA

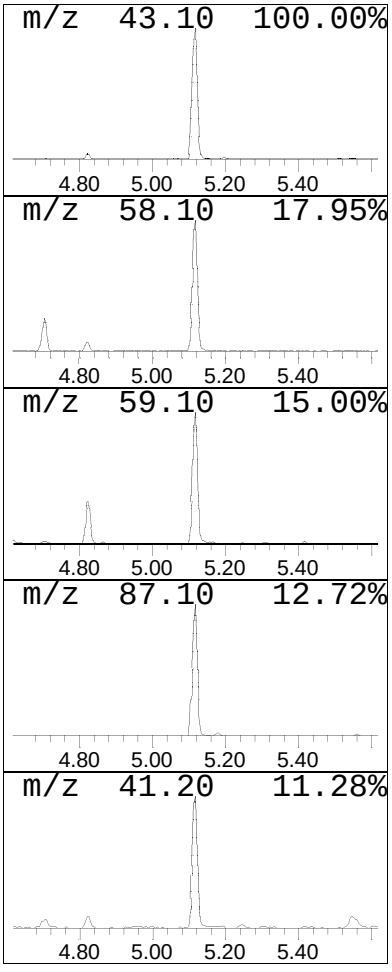
TIC Library : G:\bna\LIBRARY\nbs75k.l
TIC Integration Parameters: normal.p

ID: 2-Pentanone, 4-hydroxy-4-methyl-

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.117	8.87 ug/mL	306710	1,4-Dichlorobenzene-d4	6.098

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	1,1-Ethanediol, diacetate	146	C6H10O4	000542-10-9	17
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	9
4	Acetic acid, 1-methylpropyl ester	116	C6H12O2	000105-46-4	9
5	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	9





Tentatively Identified Compound (LSC) summary

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA

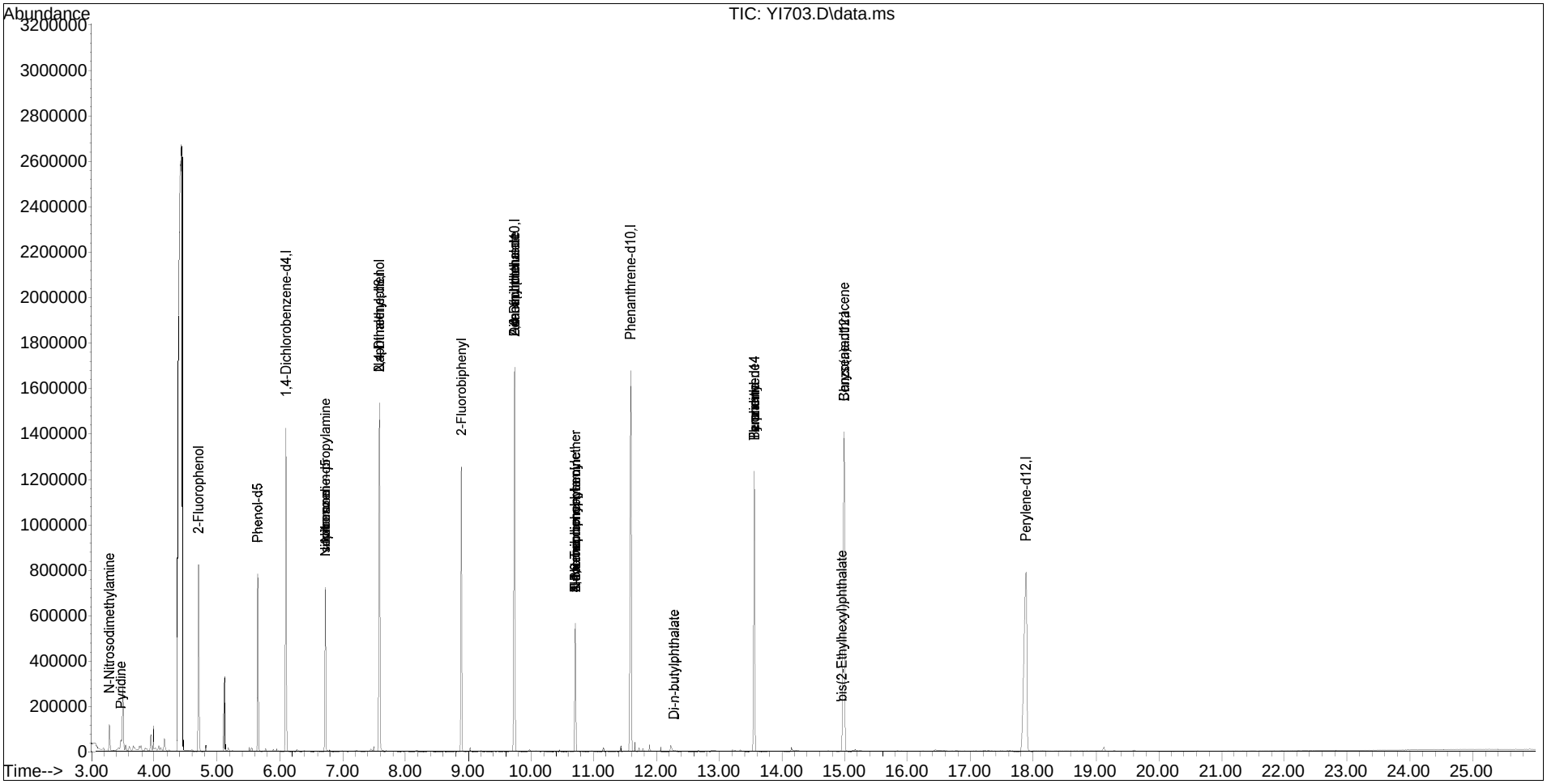
TIC Library : G:\bna\LIBRARY\nbs75k.l
TIC Integration Parameters: normal.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	4.430	84.9	ug/mL	2934320	1	6.098	1383070	40.0
2-Pentanone, 4-...	5.117	8.9	ug/mL	306710	1	6.098	1383070	40.0

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 10:40:58 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 10:40:58 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.098	152	233318m	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.584	136	824019	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.744	164	470081	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	865346	40.0000	ug/mL	0.00
70) Chrysene-d12	14.990	240	910488	40.0000	ug/mL	0.00
79) Perylene-d12	17.880	264	944393	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.463	79	1302	0.1221	ug/mL	# 36
3) N-Nitrosodimethylamine	3.285	42	2153	0.2634	ug/mL	# 21
4) 2-Fluorophenol	4.704	112	196370	19.5813	ug/mL	85
5) Phenol-d5	5.651	99	257179	21.9639	ug/mL	79
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	0.000	108	0	N.D.		
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.724	70	27284	5.8921	ug/mL	90
18) Hexachloroethane	0.000	117	0	N.D.		
20) Nitrobenzene-d5	6.724	82	192527	22.6700	ug/mL	81
21) Nitrobenzene	0.000	77	0	N.D.		
22) Isophorone	6.724	82	192527	13.6985	ug/mL	66
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	7.589	107	2252	0.3424	ug/mL	# 22
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	0.000	105	0	N.D.		
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	0.000	128	0	N.D.		
30) 4-Chloroaniline	0.000	127	0	N.D.		
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	0.000	142	0	N.D.		
35) 1-Methylnaphthalene	0.000	142	0	N.D.		
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 10:40:58 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.892	172	449040	24.6481	ug/mL	99
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	0.000	65	0	N.D.		
43) Dimethylphthalate	9.744	163	76117	4.7503	ug/mL #	1
44) 2,6-Dinitrotoluene	9.744	165	62256	17.4717	ug/mL #	14
45) Acenaphthylene	0.000	152	0	N.D.		
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.744	154	1550	0.1191	ug/mL #	7
48) 2,4-Dinitrophenol	0.000	184	0	N.D.		
49) 4-Nitrophenol	0.000	109	0	N.D.		
50) Dibenzofuran	0.000	168	0	N.D.		
51) 2,4-Dinitrotoluene	9.744	165	62256	13.7247	ug/mL #	14
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	0.000	149	0	N.D.		
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.		
55) Fluorene	10.710	166	3971	0.2573	ug/mL #	80
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	10.710	330	67889	23.2781	ug/mL #	81
59) 4,6-Dinitro-2-methylphenol	0.000	198	0	N.D.		
60) N-Nitrosodiphenylamine	10.710	169	2249	0.2134	ug/mL #	8
61) Azobenzene	0.000	77	0	N.D.		
62) 4-Bromophenyl-phenylether	10.710	248	4096	0.7762	ug/mL #	1
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	0.000	178	0	N.D.		
66) Anthracene	0.000	178	0	N.D.		
67) Carbazole	0.000	167	0	N.D.		
68) Di-n-butylphthalate	12.278	149	2726	0.1007	ug/mL	92
69) Fluoranthene	13.557	202	1335	0.0473	ug/mL	84
71) Benzidine	13.557	184	6462	0.5142	ug/mL #	1
72) Pyrene	13.557	202	1335	0.0420	ug/mL #	40
73) Terphenyl-d14	13.557	244	506721	23.8228	ug/mL	99
74) Butylbenzylphthalate	0.000	149	0	N.D.		
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.		
76) Benzo(a)anthracene	14.990	228	2135	0.0817	ug/mL #	55
77) bis(2-Ethylhexyl)phthalate	14.947	149	1676	0.0921	ug/mL	95
78) Chrysene	14.990	228	2135	0.0883	ug/mL #	58
80) Di-n-octylphthalate	0.000	149	0	N.D.		
81) Benzo(b)fluoranthene	0.000	252	0	N.D.		
82) Benzo(k)fluoranthene	0.000	252	0	N.D.		
83) Benzo(a)pyrene	0.000	252	0	N.D.		
84) Indeno(1,2,3-cd)pyrene	0.000	276	0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

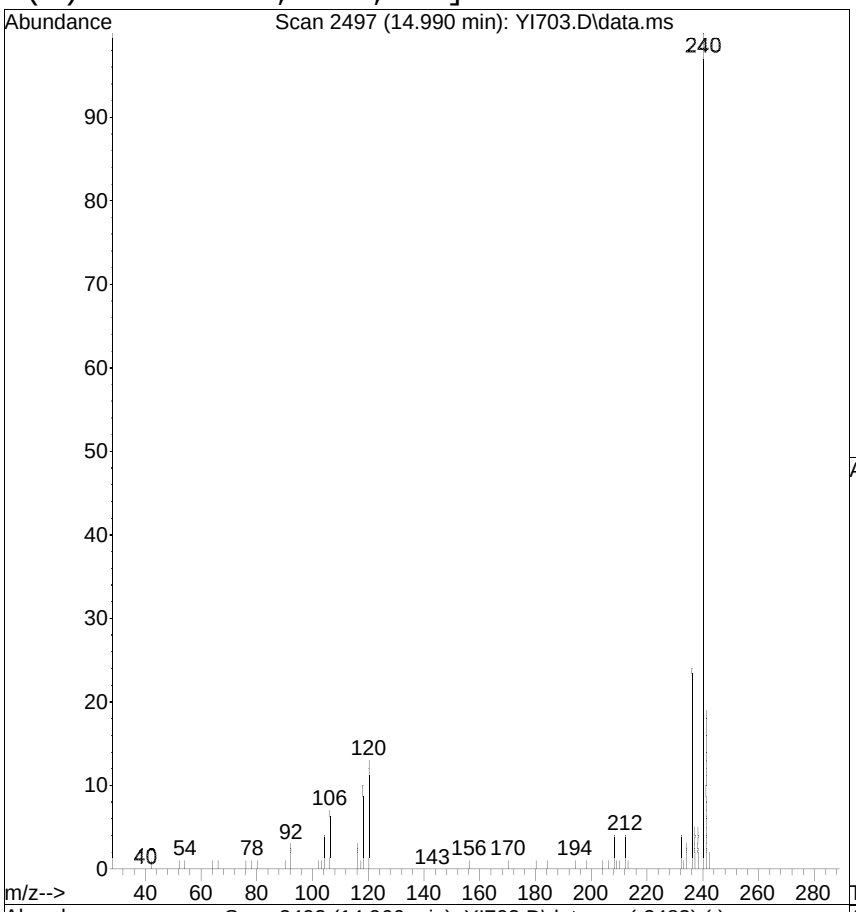
Quant Time: Sep 10 10:40:58 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	0.000	276	0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)anthracene; <RL; u]

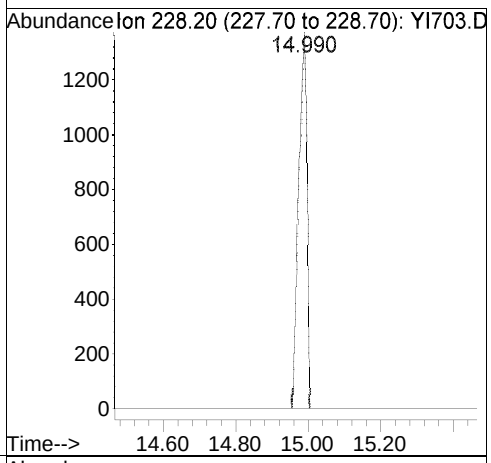
Raw



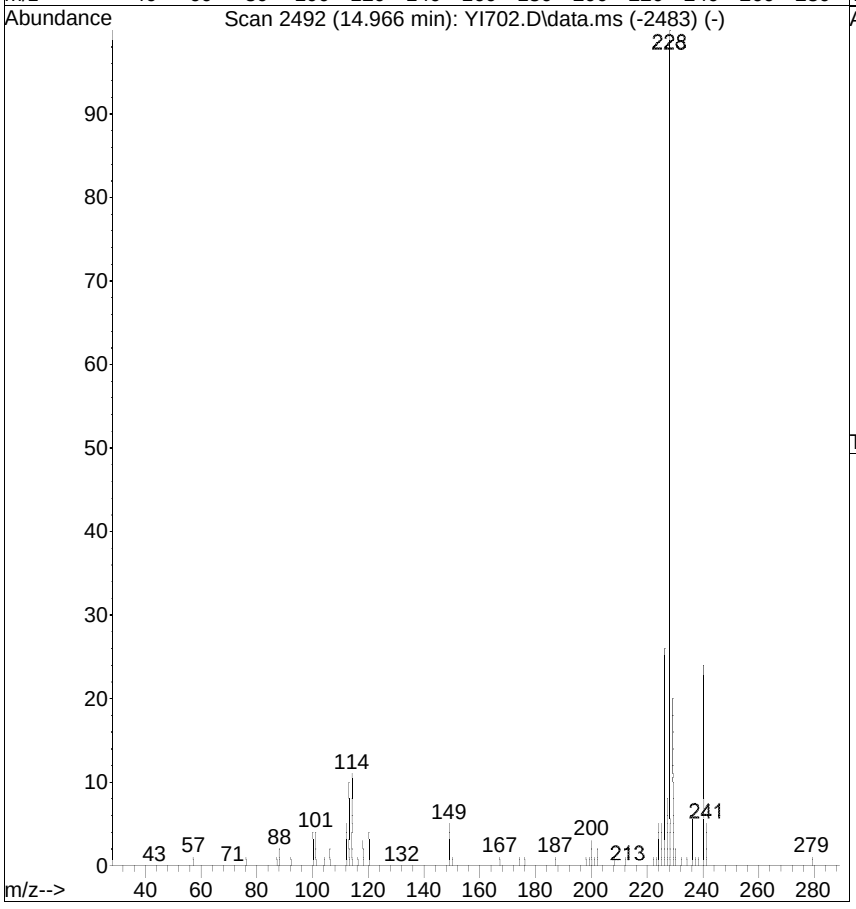
#76
Benzo(a)anthracene
Concen: 0.0817 ug/mL
RT: 14.990 min Scan# 2497
Delta R.T. 0.024 min
Lab File: YI703.D
Acq: 7 Sep 2012 7:18 pm

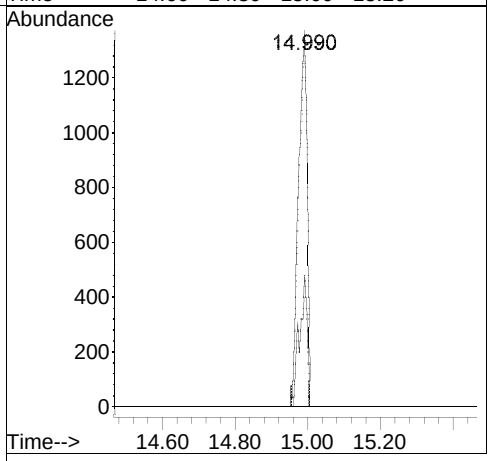
Tgt Ion:228 Resp: 2135

Ion	Ratio	Lower	Upper
228	100		
229	35.3	0.0	40.0
226	0.0	8.0	48.0#



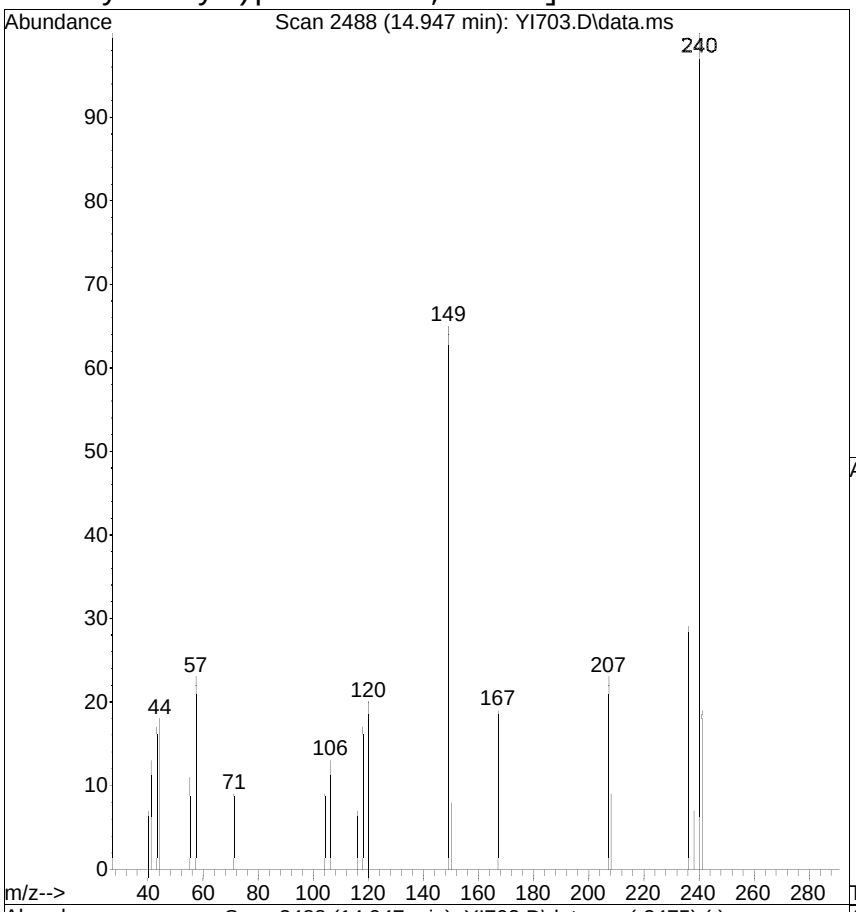
Ref





[bis(2-Ethylhexyl)phthalate; <RL]

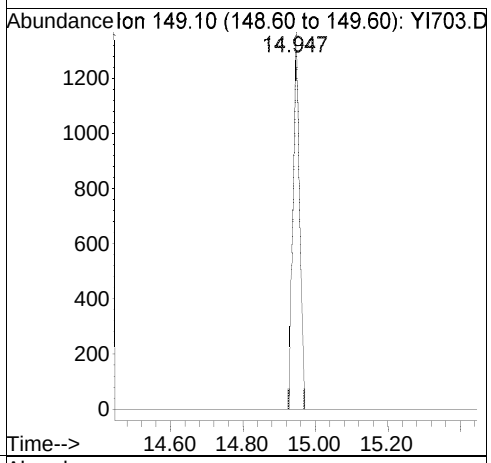
Raw



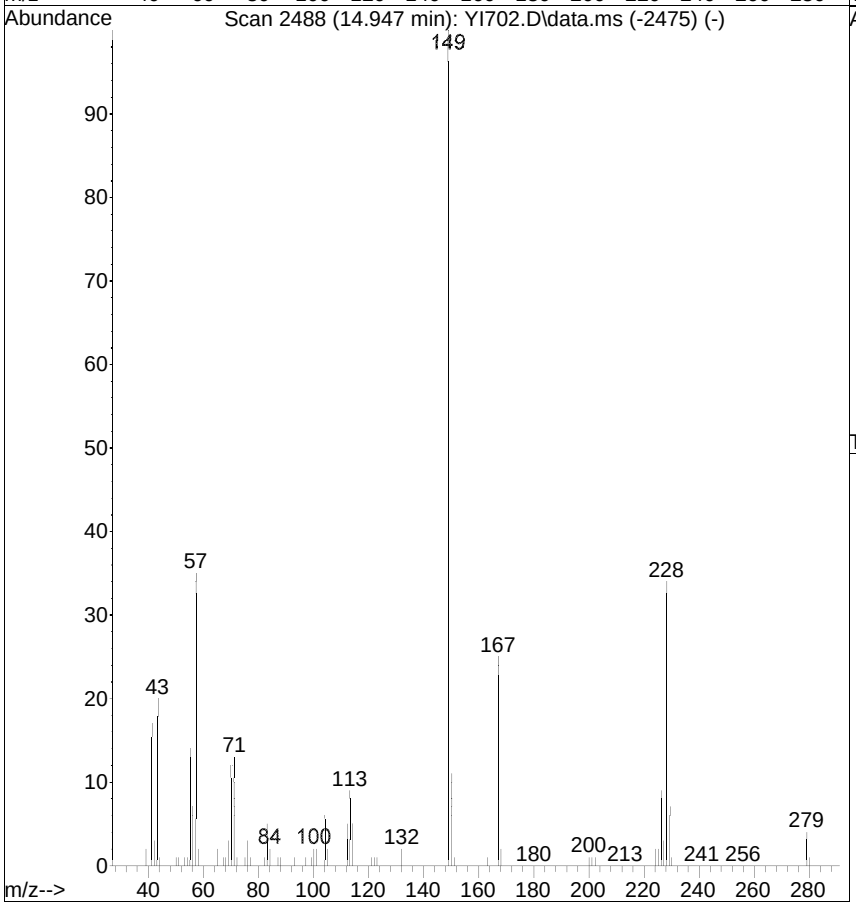
#77
bis(2-Ethylhexyl)phthalate
Concen: 0.0921 ug/mL
RT: 14.947 min Scan# 2488
Delta R.T. 0.000 min
Lab File: YI703.D
Acq: 7 Sep 2012 7:18 pm

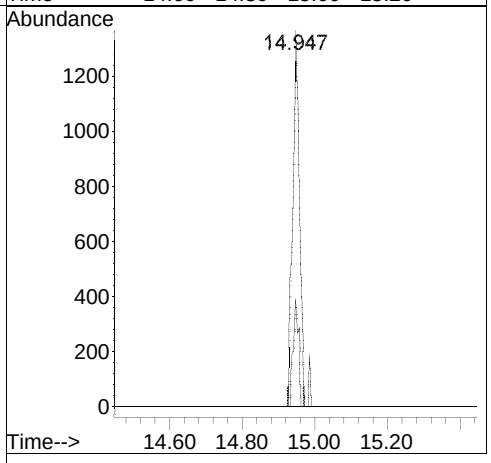
Tgt Ion:149 Resp: 1676

Ion	Ratio	Lower	Upper
149	100		
167	28.6	9.0	49.0
279	0.0	0.0	27.0



Ref





CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 MSBNA Soil
EPA 8270D

Type : LCS
Inst : MSBNA06
Seqnum : 552362420004.6
File : yi704
IDF : 1.0
Lab ID : QC655182
Matrix : Soil
Batch : 190266
Time : 07-SEP-2012 19:55
Cal : 552359297001
Units : ug/Kg

LCS: 30.08 g --> 1.0 ml = 0.03324 ml/g PDF

Analyte	Spiked	Raw	LCS	%Rec	Limits	Flags
Naphthalene	997.3	19.94	663.0	66	59-120	
3,3'-Dichlorobenzidine	2660	31.69	1054	40	29-120	
Benzo(a)anthracene	997.3	19.78	657.5	66	58-120	u
bis(2-Ethylhexyl)phthalate	997.3	21.73	722.5	72	52-120	
Benzo(b)fluoranthene	997.3	19.82	658.8	66	54-120	u
Benzo(k)fluoranthene	997.3	19.61	651.8	65	55-120	
Benzo(a)pyrene	997.3	19.84	659.6	66	57-120	u
Indeno(1,2,3-cd)pyrene	997.3	21.96	730.0	73	51-120	
Dibenz(a,h)anthracene	997.3	21.56	716.8	72	51-120	
Nitrobenzene-d5	1330	24.82	825.2	62	48-120	u
2-Fluorobiphenyl	1330	23.58	784.0	59	50-120	u
Terphenyl-d14	1330	29.11	967.8	73	40-120	u

ISTD (CCV yi702)	CCV Area	LCS Area	%Drift	CCV RT	LCS RT	Drift
Naphthalene-d8	743711	666881	-10.33	7.59	7.59	0.00
Acenaphthene-d10	427044	417745	-2.18	9.74	9.74	0.00
Chrysene-d12	784348	774652	-1.24	15.00	15.00	0.01
Perylene-d12	923802	936262	1.35	17.89	17.89	0.01

LLH 09/10/12 [Aniline]: Picked or reassigned peak. [general version]

LLH 09/10/12 [N-Nitroso-di-n-propylamine]: Combined split peak. [general version]

LLH 09/10/12 [Benzoic acid]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 [4-Chloroaniline]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 [2,4,5-Trichlorophenol]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 [2,4-Dinitrotoluene]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 : combine runs [general version]

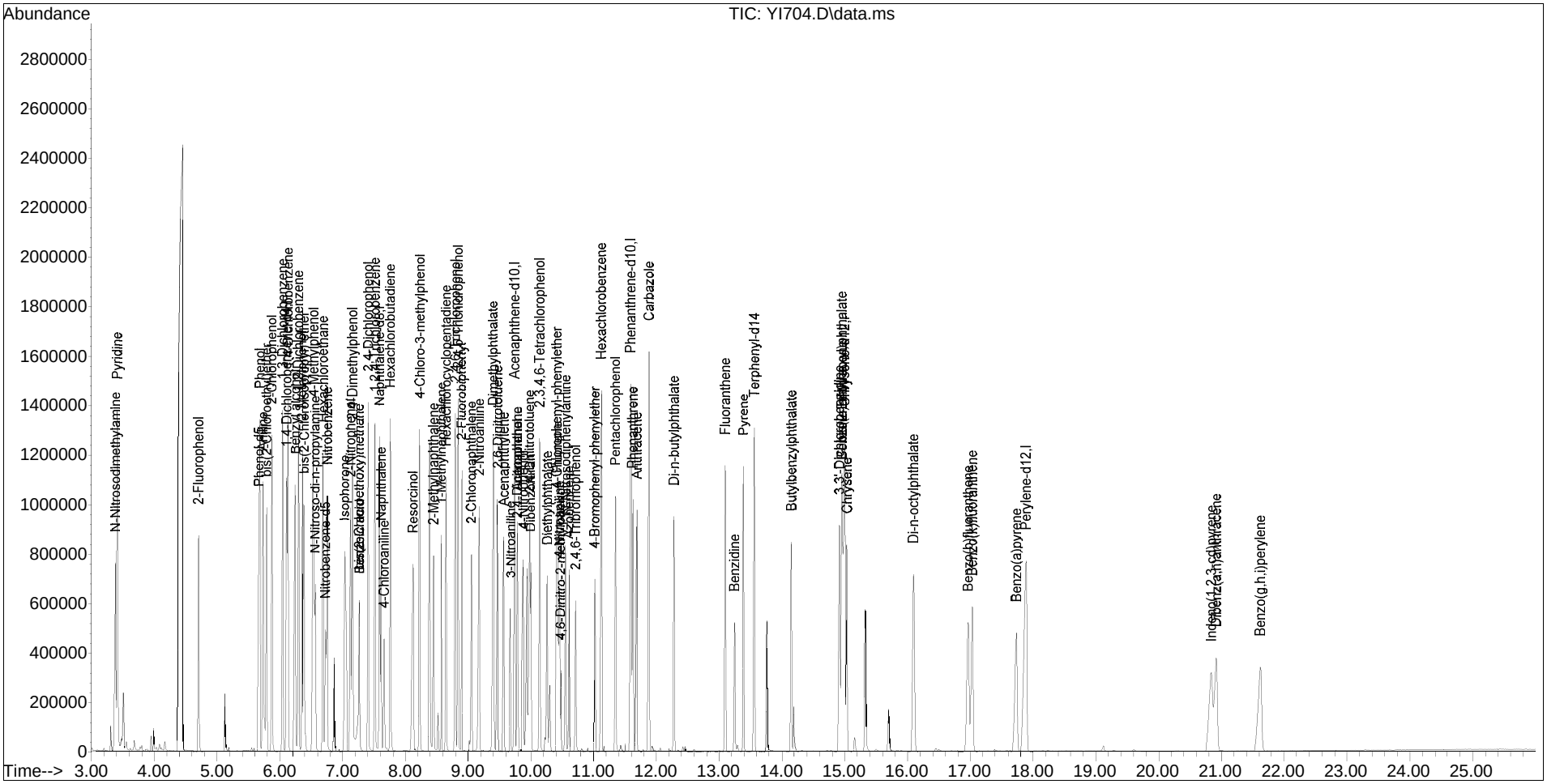
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

u=use

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI704.D
Acq On : 7 Sep 2012 7:55 pm
Operator :
Sample : LCS,QC655182
Misc : 190266,1,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 14:23:46 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI704.D
Acq On : 7 Sep 2012 7:55 pm
Operator :
Sample : LCS,QC655182
Misc : 190266,1,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 14:23:46 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.104	152	200168	40.0000	ug/mL	0.01
19) Naphthalene-d8	7.590	136	666881	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.744	164	417745	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.591	188	836823	40.0000	ug/mL	0.00
70) Chrysene-d12	14.995	240	774652	40.0000	ug/mL	0.00
79) Perylene-d12	17.890	264	936262	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.411	79	405551	44.3429	ug/mL	# 21
3) N-Nitrosodimethylamine	3.387	42	353719	50.4449	ug/mL	86
4) 2-Fluorophenol	4.709	112	202888	23.5818	ug/mL	84
5) Phenol-d5	5.661	99	263241	26.2048	ug/mL	82
6) Phenol	5.685	94	448866	50.3742	ug/mL	74
7) Aniline	5.738	93	469602m	43.9780	ug/mL	
8) bis(2-Chloroethyl)ether	5.791	93	312913	52.3617	ug/mL	# 66
9) 2-Chlorophenol	5.873	128	348653	50.2668	ug/mL	97
10) 1,3-Dichlorobenzene	6.041	146	383274	48.8655	ug/mL	98
11) 1,4-Dichlorobenzene	6.123	146	345707	49.3788	ug/mL	94
12) Benzyl alcohol	6.248	108	218185	54.3169	ug/mL	# 85
13) 1,2-Dichlorobenzene	6.296	146	358813	52.2673	ug/mL	99
14) 2-Methylphenol	6.354	107	221486	51.1849	ug/mL	92
15) bis(2-Chloroisopropyl) ether	6.387	45	640891	43.3488	ug/mL	80
16) 4-Methylphenol	6.536	107	341834	50.1575	ug/mL	96
17) N-Nitroso-di-n-propylamine	6.565	70	214696m	54.0426	ug/mL	
18) Hexachloroethane	6.685	117	156918	53.3630	ug/mL	87
20) Nitrobenzene-d5	6.729	82	170609	24.8227	ug/mL	81
21) Nitrobenzene	6.758	77	297884	51.3016	ug/mL	86
22) Isophorone	7.037	82	626851	55.1106	ug/mL	98
23) 2-Nitrophenol	7.128	139	187358	54.2899	ug/mL	85
24) 2,4-Dimethylphenol	7.157	107	297528	55.8953	ug/mL	83
25) bis(2-Chloroethoxy)methane	7.263	93	146311	20.9677	ug/mL	95
26) Benzoic acid	7.277	105	113508m	25.7948	ug/mL	
27) 2,4-Dichlorophenol	7.412	162	308049	55.6983	ug/mL	93
28) 1,2,4-Trichlorobenzene	7.517	180	307202	50.0032	ug/mL	95
29) Naphthalene	7.614	128	325975	19.9434	ug/mL	96
30) 4-Chloroaniline	7.662	127	148609m	21.7595	ug/mL	
31) Hexachlorobutadiene	7.758	225	193054	52.3797	ug/mL	97
32) Resorcinol	8.123	110	383198	61.9903	ug/mL	83
33) 4-Chloro-3-methylphenol	8.234	107	284655	58.2310	ug/mL	90
34) 2-Methylnaphthalene	8.450	142	235484	18.9165	ug/mL	93
35) 1-Methylnaphthalene	8.571	142	250381	20.9172	ug/mL	94
37) Hexachlorocyclopentadiene	8.648	237	216549	49.4852	ug/mL	97
38) 2,4,6-Trichlorophenol	8.792	196	259090	52.3265	ug/mL	95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI704.D
Acq On : 7 Sep 2012 7:55 pm
Operator :
Sample : LCS,QC655182
Misc : 190266,1,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 14:23:46 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.835	196	264879m	52.4488	ug/mL		
40) 2-Fluorobiphenyl	8.893	172	381778	23.5814	ug/mL		99
41) 2-Chloronaphthalene	9.051	162	268125	20.7543	ug/mL		88
42) 2-Nitroaniline	9.177	65	237675	53.5308	ug/mL		92
43) Dimethylphthalate	9.398	163	771563	54.1838	ug/mL		97
44) 2,6-Dinitrotoluene	9.470	165	173654	54.8403	ug/mL		87
45) Acenaphthylene	9.566	152	400450	19.7750	ug/mL		98
46) 3-Nitroaniline	9.681	138	103018	27.8837	ug/mL	#	57
47) Acenaphthene	9.782	154	225856	19.5295	ug/mL		96
48) 2,4-Dinitrophenol	9.797	184	11093	18.2904	ug/mL	#	30
49) 4-Nitrophenol	9.879	109	94398	55.7152	ug/mL	#	71
50) Dibenzofuran	9.994	168	333196	20.8342	ug/mL		83
51) 2,4-Dinitrotoluene	9.980	165	218911m	54.3064	ug/mL		
52) 2,3,4,6-Tetrachlorophenol	10.143	232	211859	54.6121	ug/mL		88
53) Diethylphthalate	10.259	149	310020	21.6255	ug/mL		99
54) 4-Chlorophenyl-phenylether	10.408	204	156336	21.4038	ug/mL		85
55) Fluorene	10.422	166	278609	20.3128	ug/mL		86
56) 4-Nitroaniline	10.451	138	167934	51.3271	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.720	330	74065	28.5774	ug/mL	#	76
59) 4,6-Dinitro-2-methylphenol	10.475	198	43794	19.3154	ug/mL		92
60) N-Nitrosodiphenylamine	10.552	169	229445	22.5171	ug/mL		86
61) Azobenzene	10.605	77	285225	22.2420	ug/mL		96
62) 4-Bromophenyl-phenylether	11.018	248	106344	20.8394	ug/mL	#	87
63) Hexachlorobenzene	11.119	284	288599	54.5681	ug/mL		95
64) Pentachlorophenol	11.350	266	161601	45.4129	ug/mL		98
65) Phenanthrene	11.619	178	421821	20.7969	ug/mL		96
66) Anthracene	11.682	178	431199	20.9006	ug/mL		94
67) Carbazole	11.879	167	971053	55.9140	ug/mL		87
68) Di-n-butylphthalate	12.278	149	574098	21.9386	ug/mL		96
69) Fluoranthene	13.096	202	584925	21.4202	ug/mL		95
71) Benzidine	13.245	184	241816	22.6158	ug/mL		88
72) Pyrene	13.384	202	575173	21.2838	ug/mL		92
73) Terphenyl-d14	13.557	244	526846	29.1122	ug/mL		97
74) Butylbenzylphthalate	14.149	149	270700	21.0384	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.918	252	312740	31.6903	ug/mL		97
76) Benzo(a)anthracene	14.966	228	439850	19.7790	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.952	149	336413	21.7322	ug/mL		94
78) Chrysene	15.034	228	425824	20.6908	ug/mL		94
80) Di-n-octylphthalate	16.097	149	697925	20.9942	ug/mL		92
81) Benzo(b)fluoranthene	16.972	252	537404	19.8180	ug/mL		94
82) Benzo(k)fluoranthene	17.034	252	489124	19.6059	ug/mL		92
83) Benzo(a)pyrene	17.727	252	470051	19.8414	ug/mL		93
84) Indeno(1,2,3-cd)pyrene	20.838	276	585117	21.9585	ug/mL		85

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI704.D
Acq On : 7 Sep 2012 7:55 pm
Operator :
Sample : LCS,QC655182
Misc : 190266,1,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 14:23:46 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.910	278	457945	21.5599	ug/mL	93
86) Benzo(g,h,i)perylene	21.612	276	477468	21.5555	ug/mL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Initial Calibration Raw Data

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA05 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 542247126001 File : xfj01 Time : 19-JUN-2012 14:46

Standards: S19354

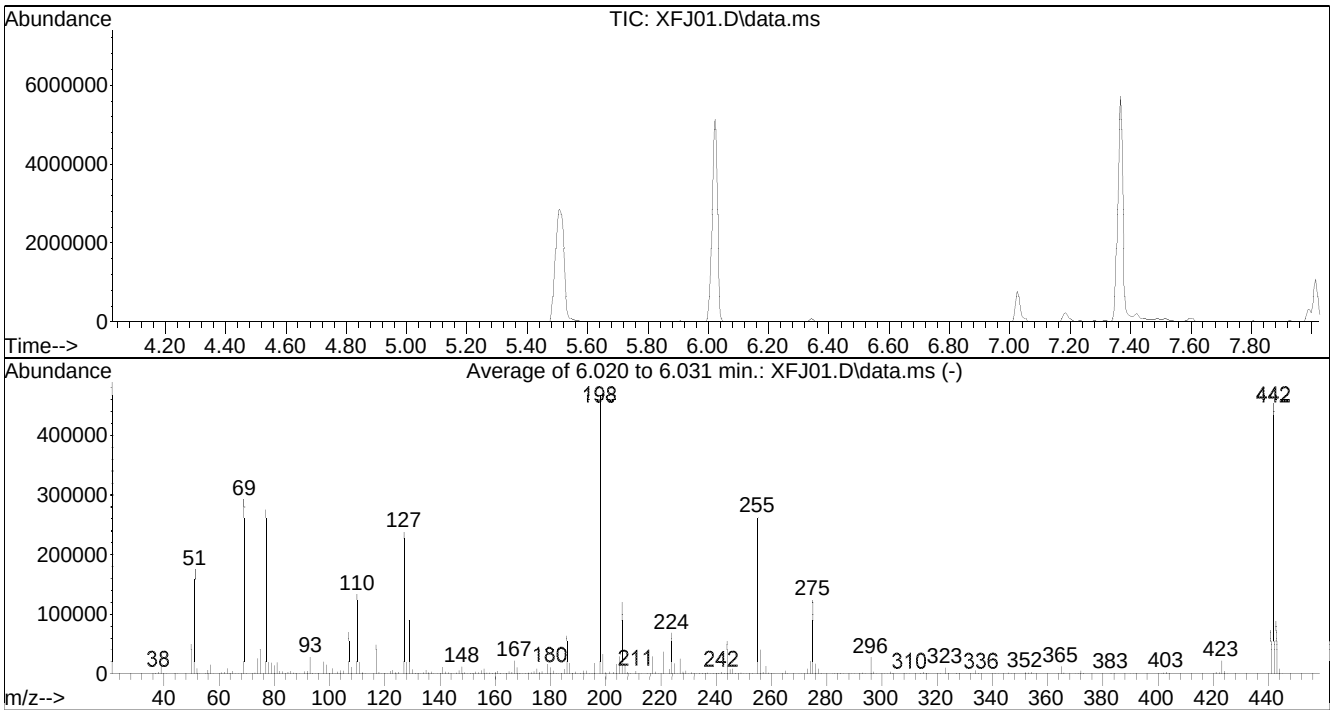
Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	174531	37.53	
68	< 2% of mass 69	0	0.00	
69		292053	100.00	
70	< 2% of mass 69	1259	0.43	
127	40% - 60% of mass 198	237909	51.16	
197	< 1% of mass 198	0	0.00	
198		465002	100.00	
199	5% - 9% of mass 198	32221	6.93	
275	10% - 30% of mass 198	123242	26.50	
365	> 1% of mass 198	12097	2.60	
441	Present, < mass 443	71698	81.46	
442	> 40% and < 100% of mass 198	453418	97.51	
443	17% - 23% of mass 442	88016	19.41	

Analyst: KMH Date: 06/20/12 Reviewer: LW Date: 06/21/12

Data Path : G:\msbna05\061912\
Data File : XFJ01.D
Acq On : 19 Jun 2012 2:46 pm
Operator :
Sample : TUN,S19354
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Integration File: normal.p

Method : C:\msdchem\1\METHODS\DFTPP05.M
Title : MSBNA05 BNA DFTPP/PEM
Last Update : Mon Jun 18 15:36:02 2012



AutoFind: Scans 550, 551, 552; Background Corrected with Scan 543

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.5	174531	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	62.8	292053	PASS
70	69	0.00	2	0.4	1259	PASS
127	198	40	60	51.2	237909	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	465002	PASS
199	198	5	9	6.9	32221	PASS
275	198	10	30	26.5	123242	PASS
365	198	1	100	2.6	12097	PASS
441	443	0.01	100	81.5	71698	PASS
442	198	40	100	97.5	453418	PASS
443	442	17	23	19.4	88016	PASS

PEM Report

File Name : G:\msbna05\061912\XFJ01.D
Date Acquired : 19 Jun 2012 2:46 pm
Sample Name : TUN,S19354
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA05 BNA DFTPP/PEM
Inst. Name : MSBNA05
AcquisitionMeth: DFTPP05.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	0.794	5.51	702902
Benzidine	0.751	7.37	2595485
4,4'-DDT		8.39	1610292
4,4'-DDE		7.60	9579
4,4'-DDD		8.01	219197

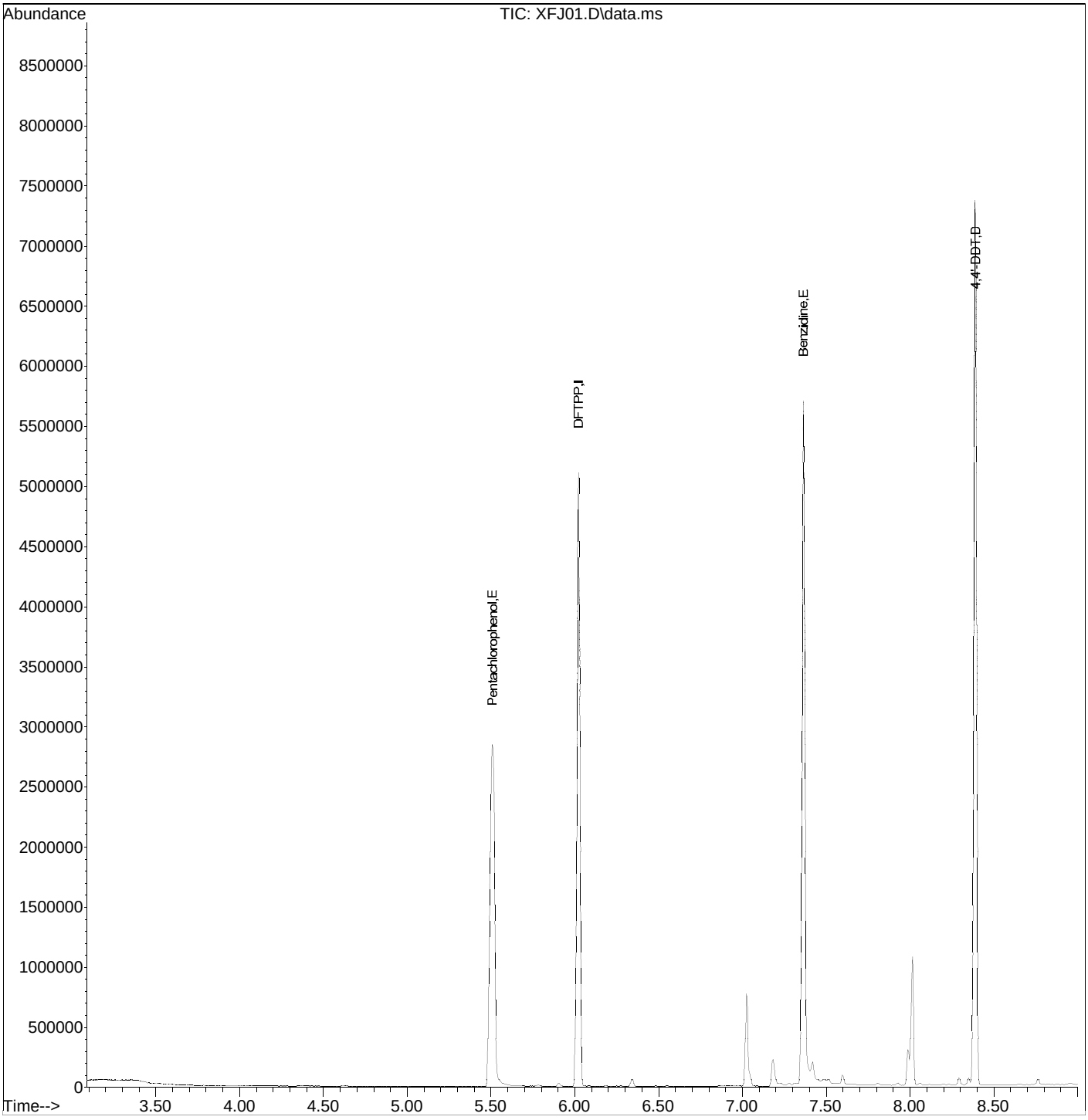
% Breakdown: 4,4'-DDT	LIMIT <=20%	12%	PASS
Tailing: Pentachlorophenol	8270C <5.0	0.8	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	0.8	PASS
	8270D <=2	1	PASS

Tue Jun 19 14:57:59 2012

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\061912\
Data File : XFJ01.D
Acq On : 19 Jun 2012 2:46 pm
Operator :
Sample : TUN,S19354
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 19 14:55:55 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP05.M
Quant Title : MSBNA05 BNA DFTPP/PEM
QLast Update : Mon Jun 18 15:36:02 2012
Response via : Continuing Cal File: G:\msbna05\061812\XFI01.D



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\061912\
Data File : XFJ01.D
Acq On : 19 Jun 2012 2:46 pm
Operator :
Sample : TUN,S19354
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 19 14:55:55 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP05.M
Quant Title : MSBNA05 BNA DFTPP/PEM
QLast Update : Mon Jun 18 15:36:02 2012
Response via : Continuing Cal File: G:\msbna05\061812\XFI01.D

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
2) DFTPP	6.025	198	662256	50.0000	ug/mL	-0.04
4) 4,4'-DDT	8.392	235	1610292	50.0000	ug/mL	-0.05
Target Compounds						Qvalue
1) Pentachlorophenol	5.513	266	702902	59.7376	ug/mL	98
3) Benzidine	7.366	184	2595485	38.3312	ug/mL	93
5) 4,4'-DDE	7.596	246	9579	No CC lev	#	
6) 4,4'-DDD	8.013	235	219197	No CC lev		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA05 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 542366451001 File : xia01 Time : 10-SEP-2012 11:31

Standards: S20011

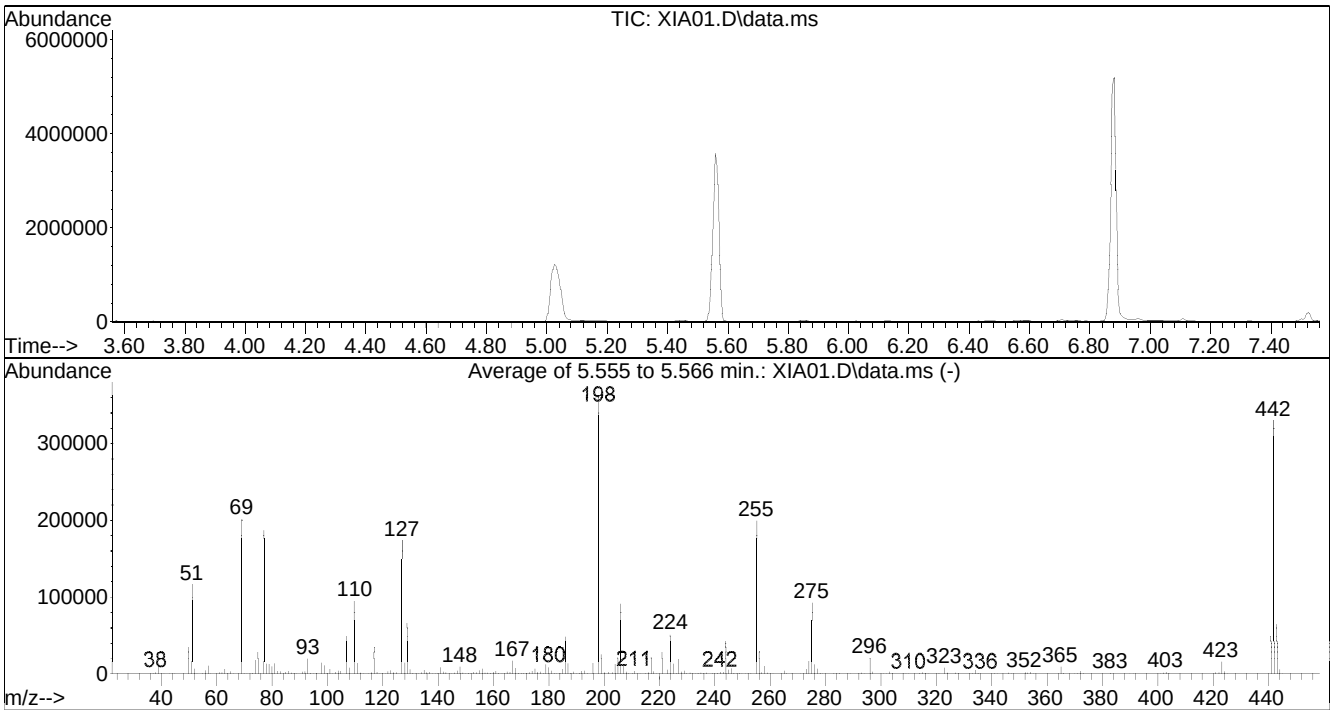
Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	115683	32.02	
68	< 2% of mass 69	0	0.00	
69		200984	100.00	
70	< 2% of mass 69	853	0.42	
127	40% - 60% of mass 198	173376	47.99	
197	< 1% of mass 198	0	0.00	
198		361280	100.00	
199	5% - 9% of mass 198	25170	6.97	
275	10% - 30% of mass 198	92680	25.65	
365	> 1% of mass 198	9077	2.51	
441	Present, < mass 443	50184	77.64	
442	> 40% and < 100% of mass 198	329642	91.24	
443	17% - 23% of mass 442	64637	19.61	

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

Data Path : G:\msbna05\091012\
Data File : XIA01.D
Acq On : 10 Sep 2012 11:31 am
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Integration File: normal.p

Method : C:\msdchem\1\METHODS\DFTPP05.M
Title : MSBNA05 BNA DFTPP/PEM
Last Update : Fri Sep 07 16:53:38 2012



AutoFind: Scans 463, 464, 465; Background Corrected with Scan 456

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.0	115683	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	55.6	200984	PASS
70	69	0.00	2	0.4	853	PASS
127	198	40	60	48.0	173376	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	361280	PASS
199	198	5	9	7.0	25170	PASS
275	198	10	30	25.7	92680	PASS
365	198	1	100	2.5	9077	PASS
441	443	0.01	100	77.6	50184	PASS
442	198	40	100	91.2	329642	PASS
443	442	17	23	19.6	64637	PASS

PEM Report

File Name : G:\msbna05\091012\XIA01.D
Date Acquired : 10 Sep 2012 11:31 am
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA05 BNA DFTPP/PEM
Inst. Name : MSBNA05
AcquisitionMeth: DFTPP05.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.628	5.03	379475
Benzidine	0.564	6.88	2616892
4,4'-DDT		7.90	1365982
4,4'-DDE		7.11	7324
4,4'-DDD		7.52	64637

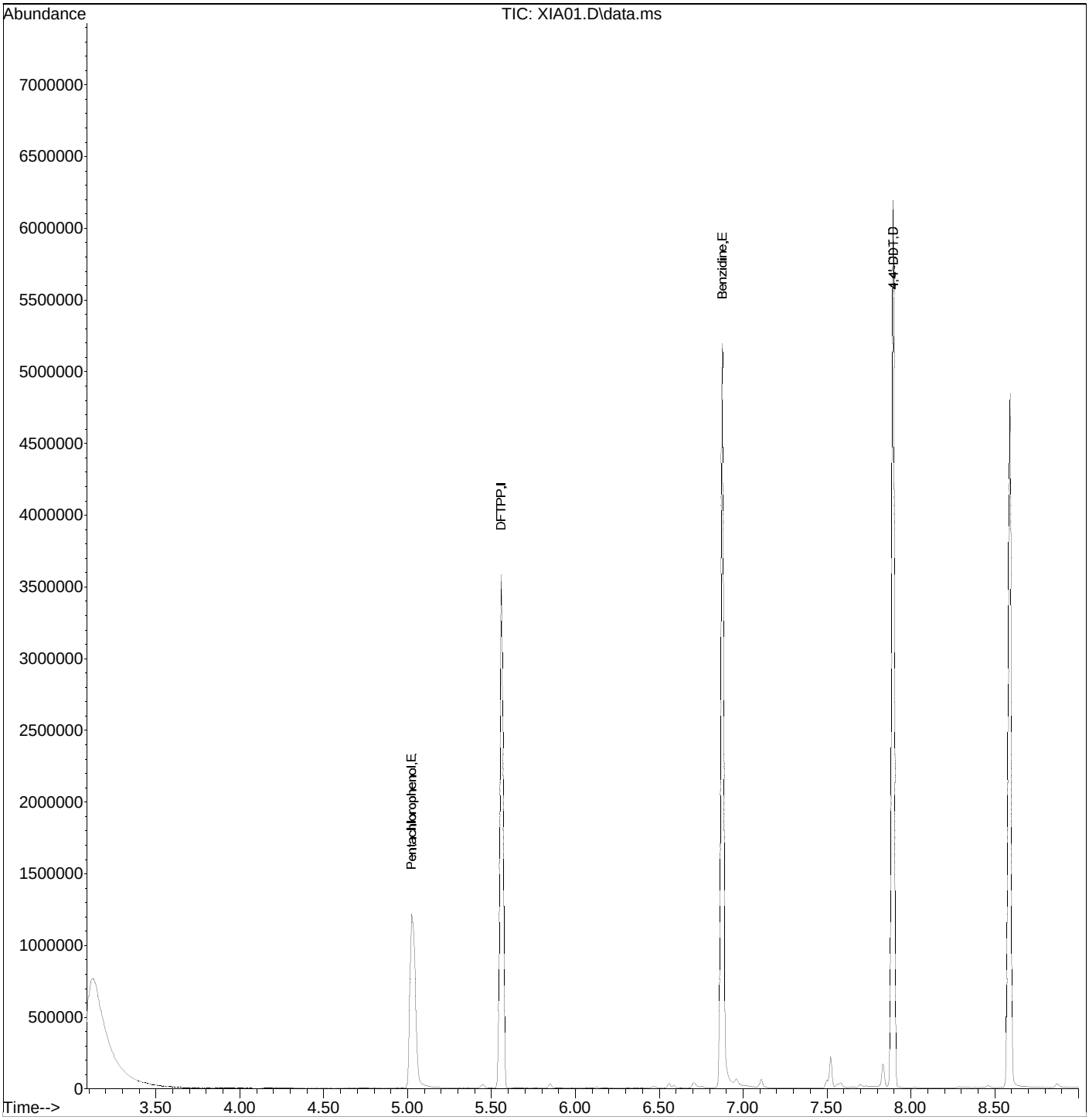
% Breakdown: 4,4'-DDT	LIMIT <=20%	5%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.6	PASS
	8270D <=2	2	PASS
Tailing: Benzidine	8270C <3.0	0.6	PASS
	8270D <=2	1	PASS

Mon Sep 10 11:42:54 2012

Quantitation Report (Not Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA01.D
Acq On : 10 Sep 2012 11:31 am
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 11:42:49 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP05.M
Quant Title : MSBNA05 BNA DFTPP/PEM
QLast Update : Mon Sep 10 11:42:39 2012
Response via : Continuing Cal File: G:\msbna05\091012\XIA01.D



Quantitation Report (Not Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA01.D
Acq On : 10 Sep 2012 11:31 am
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 11:42:49 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP05.M
Quant Title : MSBNA05 BNA DFTPP/PEM
QLast Update : Mon Sep 10 11:42:39 2012
Response via : Continuing Cal File: G:\msbna05\091012\XIA01.D

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
2) DFTPP	5.561	198	541456	50.0000	ug/mL	0.00
4) 4,4'-DDT	7.895	235	1365982	50.0000	ug/mL	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	5.026	266	379475	49.9859	ug/mL	97
3) Benzidine	6.880	184	2616892	50.0000	ug/mL	95
5) 4,4'-DDE	7.110	246	7324	No CC lev	#	
6) 4,4'-DDD	7.521	235	64637	No CC lev		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 552359297001 File : yi501 Time : 05-SEP-2012 12:17

Standards: S20011

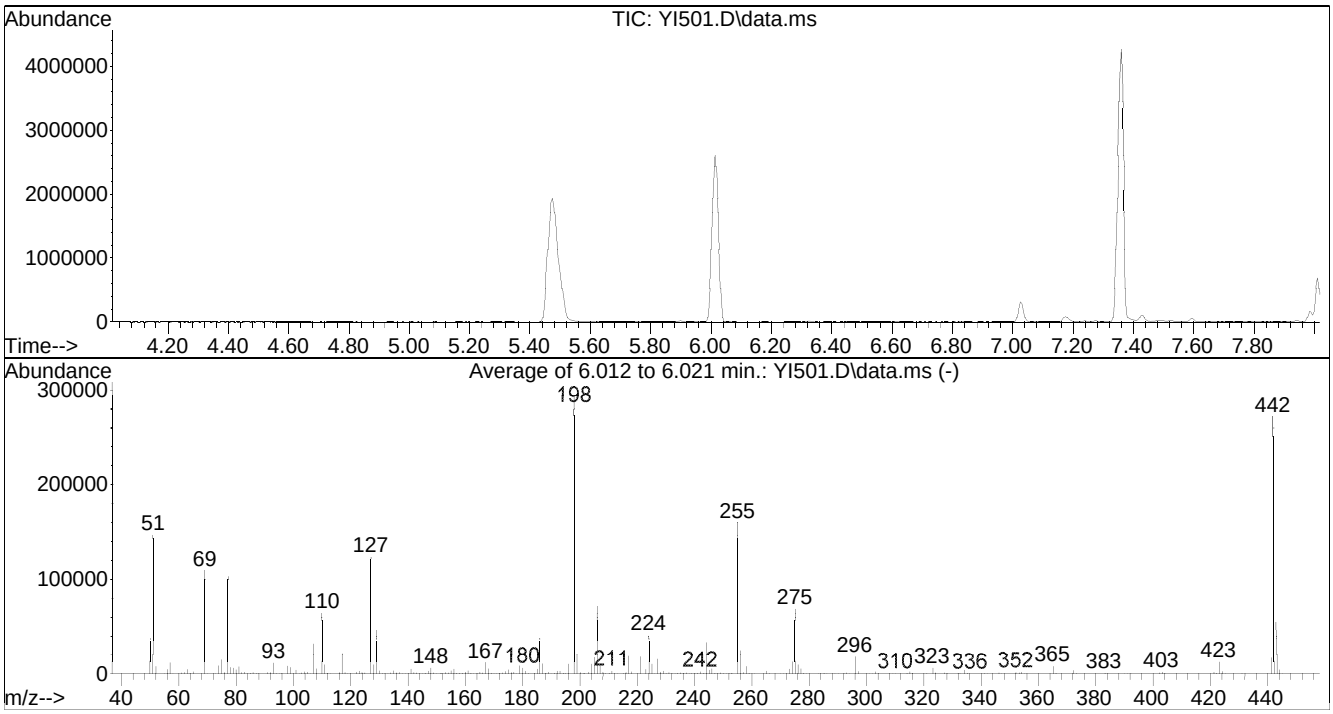
Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	146194	49.89	
68	< 2% of mass 69	0	0.00	
69		109057	100.00	
70	< 2% of mass 69	364	0.33	
127	40% - 60% of mass 198	123514	42.15	
197	< 1% of mass 198	0	0.00	
198		293034	100.00	
199	5% - 9% of mass 198	20365	6.95	
275	10% - 30% of mass 198	68464	23.36	
365	> 1% of mass 198	7883	2.69	
441	Present, < mass 443	16728	30.51	
442	> 40% and < 100% of mass 198	271850	92.77	
443	17% - 23% of mass 442	54824	20.17	

Analyst: LLH Date: 09/05/12 Reviewer: LW Date: 09/07/12

Data Path : G:\msbna06\090512\
Data File : YI501.D
Acq On : 5 Sep 2012 12:17 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Integration File: DDD.p

Method : C:\msdchem\1\METHODS\DFTPP06.M
Title : MSBNA06 BNA DFTPP/PEM
Last Update : Tue Sep 04 10:31:41 2012



AutoFind: Scans 630, 631, 632; Background Corrected with Scan 621

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.9	146194	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.2	109057	PASS
70	69	0.00	2	0.3	364	PASS
127	198	40	60	42.2	123514	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	293034	PASS
199	198	5	9	6.9	20365	PASS
275	198	10	30	23.4	68464	PASS
365	198	1	100	2.7	7883	PASS
441	443	0.01	100	30.5	16728	PASS
442	198	40	100	92.8	271850	PASS
443	442	17	23	20.2	54824	PASS

PEM Report

File Name : G:\csinput.net\DATA\090512\YI501.D
Date Acquired : 5 Sep 2012 12:17 pm
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA06 BNA DFTPP/PEM
Inst. Name : MSBNA06
AcquisitionMeth: DFTPP06.M

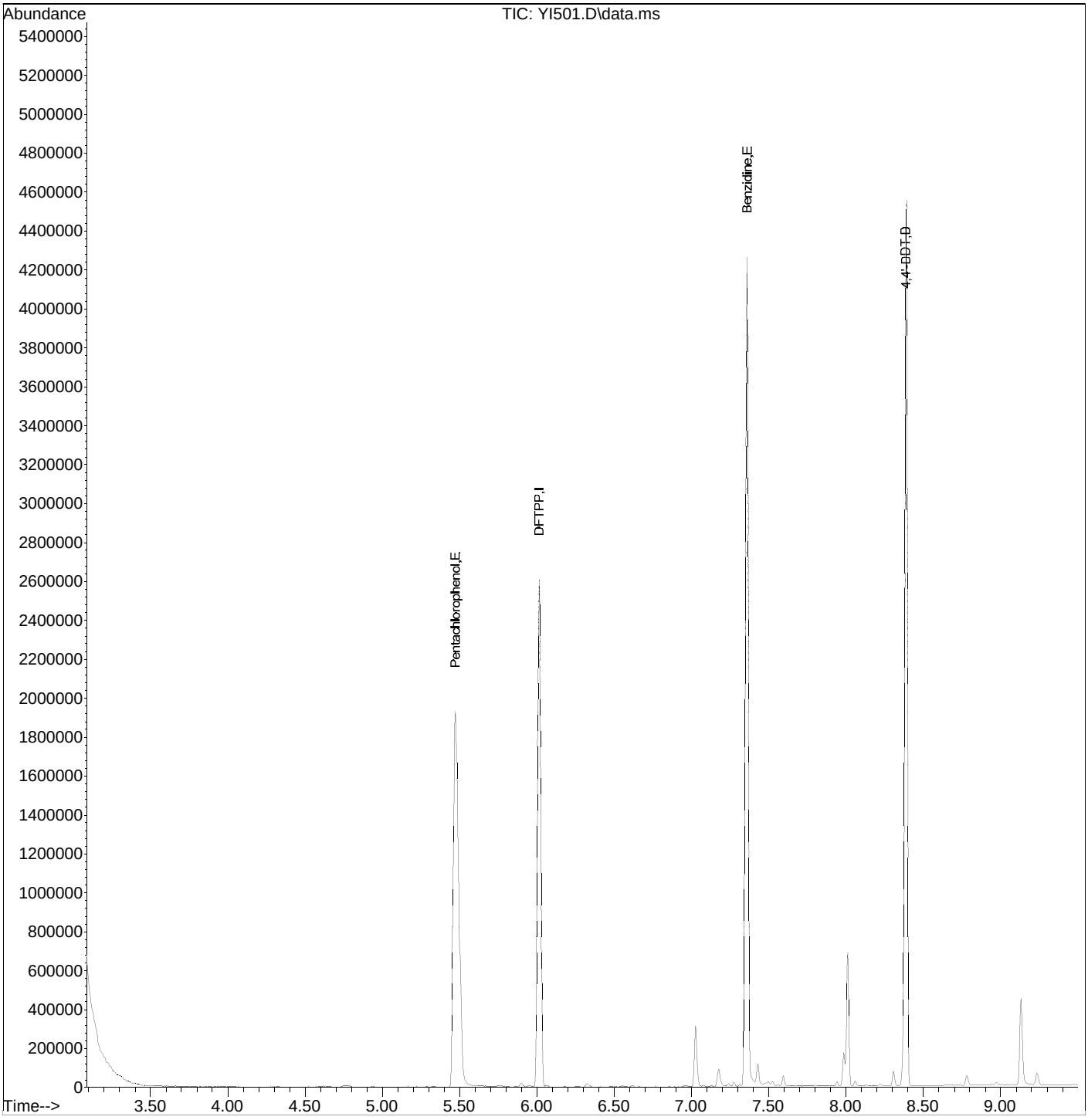
Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.450	5.48	656508
Benzidine	0.608	7.36	2454857
4,4'-DDT		8.39	1096537
4,4'-DDE		7.60	6357
4,4'-DDD		8.01	151666

% Breakdown: 4,4'-DDT	LIMIT <=20%	13%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.5	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	0.6	PASS
	8270D <=2	1	PASS

Quantitation Report (Not Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI501.D
Acq On : 5 Sep 2012 12:17 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 12:29:33 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP06.M
Quant Title : MSBNA06 BNA DFTPP/PEM
QLast Update : Wed Sep 05 12:29:24 2012
Response via : Continuing Cal File: G:\msbna06\090512\YI501.D



Quantitation Report (Not Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI501.D
Acq On : 5 Sep 2012 12:17 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 12:29:33 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP06.M
Quant Title : MSBNA06 BNA DFTPP/PEM
QLast Update : Wed Sep 05 12:29:24 2012
Response via : Continuing Cal File: G:\msbna06\090512\YI501.D

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
2) DFTPP	6.016	198	472733	50.0000	ug/mL	0.00
4) 4,4'-DDT	8.387	235	1096537	50.0000	ug/mL	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	5.477	266	656508	50.0000	ug/mL	97
3) Benzidine	7.360	184	2454857	50.0000	ug/mL	96
5) 4,4'-DDE	7.597	246	6357	No CC lev		
6) 4,4'-DDD	8.011	235	151666	No CC lev		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS DFTPP TUNE FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 552362420001 File : yi701 Time : 07-SEP-2012 16:20

Standards: S20011

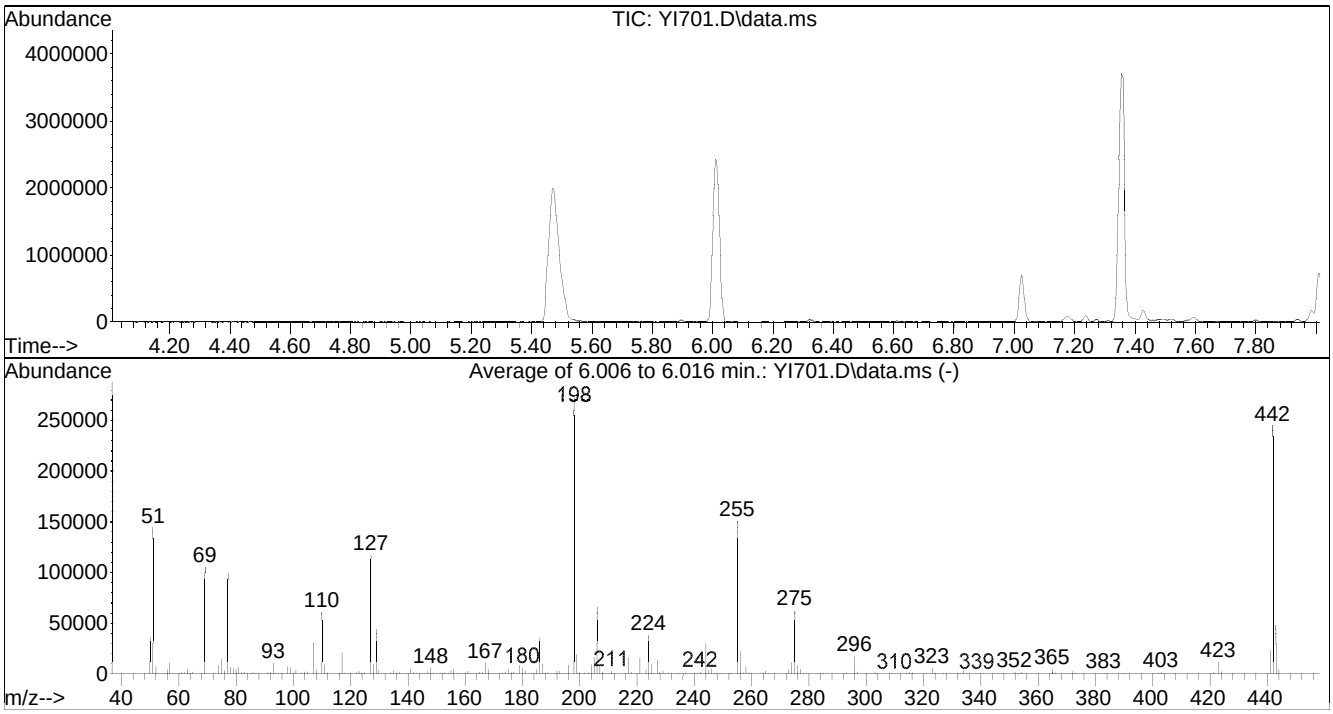
Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	143815	52.59	
68	< 2% of mass 69	0	0.00	
69		105229	100.00	
70	< 2% of mass 69	354	0.34	
127	40% - 60% of mass 198	116960	42.77	
197	< 1% of mass 198	0	0.00	
198		273450	100.00	
199	5% - 9% of mass 198	18880	6.90	
275	10% - 30% of mass 198	62941	23.02	
365	> 1% of mass 198	4859	1.78	
441	Present, < mass 443	23504	48.96	
442	> 40% and < 100% of mass 198	244650	89.47	
443	17% - 23% of mass 442	48008	19.62	

Analyst: LLH Date: 09/07/12 Reviewer: LW Date: 09/11/12

Data Path : G:\msbna06\090712\
Data File : YI701.D
Acq On : 7 Sep 2012 4:20 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Integration File: DDD.p

Method : C:\msdchem\1\METHODS\DFTPP06.M
Title : MSBNA06 BNA DFTPP/PEM
Last Update : Thu Sep 06 12:51:46 2012



AutoFind: Scans 629, 630, 631; Background Corrected with Scan 621

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	52.6	143815	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.5	105229	PASS
70	69	0.00	2	0.3	354	PASS
127	198	40	60	42.8	116960	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	273450	PASS
199	198	5	9	6.9	18880	PASS
275	198	10	30	23.0	62941	PASS
365	198	1	100	1.8	4859	PASS
441	443	0.01	100	49.0	23504	PASS
442	198	40	100	89.5	244650	PASS
443	442	17	23	19.6	48008	PASS

PEM Report

File Name : G:\msbna06\090712\YI701.D
Date Acquired : 7 Sep 2012 4:20 pm
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA06 BNA DFTPP/PEM
Inst. Name : MSBNA06
AcquisitionMeth: DFTPP06.M

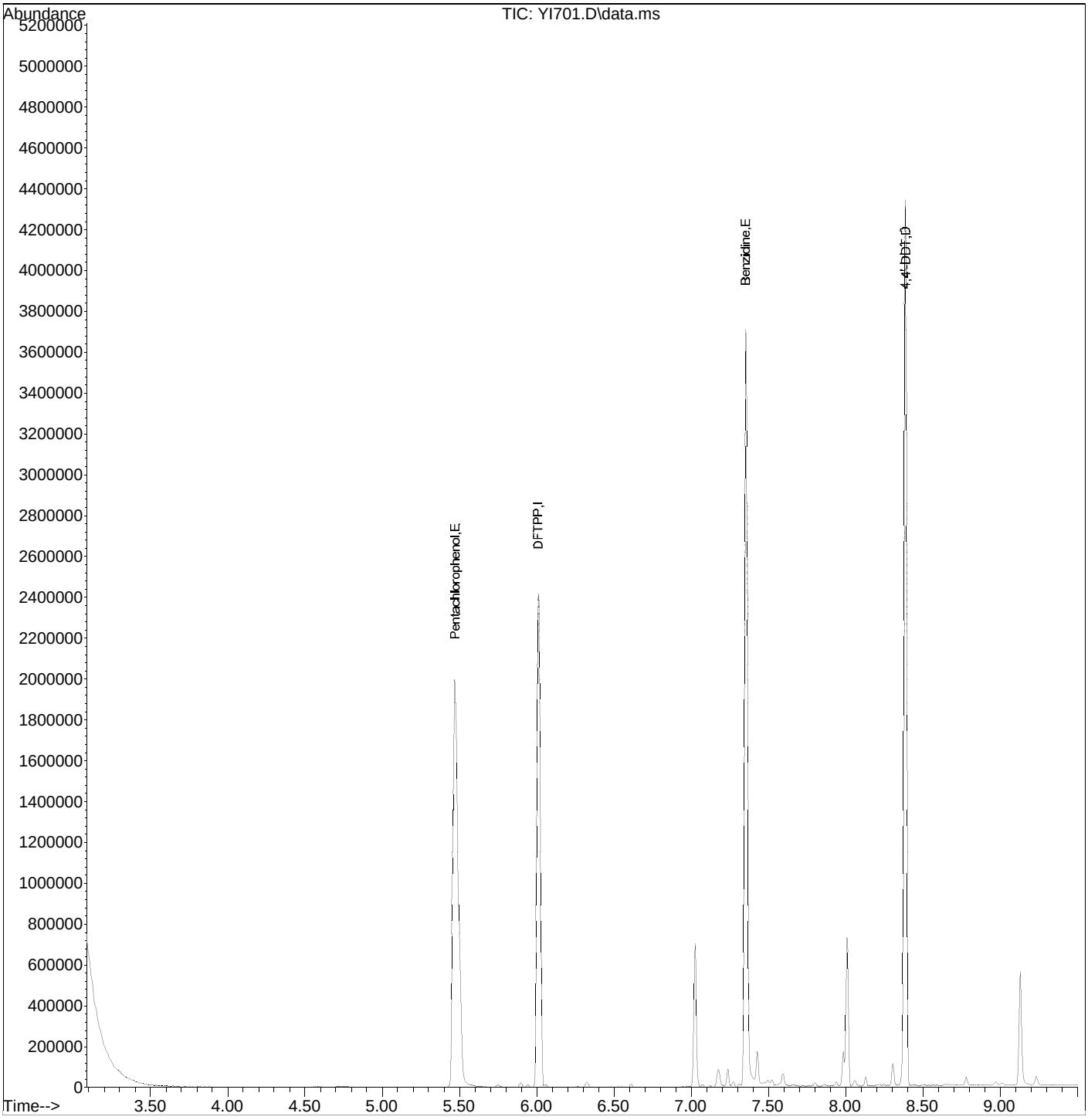
Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.313	5.48	682488
Benzidine	0.900	7.35	2217263
4,4'-DDT		8.39	1071849
4,4'-DDE		7.59	8081
4,4'-DDD		8.01	167142

% Breakdown: 4,4'-DDT	LIMIT <=20%	14%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.3	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	0.9	PASS
	8270D <=2	1	PASS

Quantitation Report (Not Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI701.D
Acq On : 7 Sep 2012 4:20 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 16:34:36 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP06.M
Quant Title : MSBNA06 BNA DFTPP/PEM
QLast Update : Fri Sep 07 16:34:24 2012
Response via : Continuing Cal File: G:\msbna06\090712\YI701.D



Quantitation Report (Not Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI701.D
Acq On : 7 Sep 2012 4:20 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 16:34:36 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP06.M
Quant Title : MSBNA06 BNA DFTPP/PEM
QLast Update : Fri Sep 07 16:34:24 2012
Response via : Continuing Cal File: G:\msbna06\090712\YI701.D

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
2) DFTPP	6.011	198	450633	50.0000	ug/mL	0.00
4) 4,4'-DDT	8.387	235	1071849	50.0000	ug/mL	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	5.476	266	682488	50.0000	ug/mL	97
3) Benzidine	7.355	184	2217263	49.9842	ug/mL	96
5) 4,4'-DDE	7.592	246	8081	No CC lev		
6) 4,4'-DDD	8.010	235	167142	No CC lev		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 MSBNA Soil: EPA 8270D

Inst : MSBNA05
Calnum : 542247126001
Units : ug/mL

Name : 6PTBNA5
Date : 19-JUN-2012 15:29

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	xfj02	542247126002	ICAL1	19-JUN-2012 15:29	S19015
L2	xfj03	542247126003	ICAL2	19-JUN-2012 16:06	S19016
L3	xfj04	542247126004	ICAL3	19-JUN-2012 16:40	S19017
L4	xfj05	542247126005	ICAL4	19-JUN-2012 17:16	S19018
L5	xfj06	542247126006	ICAL5	19-JUN-2012 17:52	S19019
L6	xfj07	542247126007	ICAL6	19-JUN-2012 18:26	S19020
L7	xfj08	542247126008	ICAL7	19-JUN-2012 19:00	S19021
L8	xfj09	542247126009	ICAL8	19-JUN-2012 19:34	S19022
L9	xfj10	542247126010	ICAL9	19-JUN-2012 20:08	S19023

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene	1.1810	1.1595	1.1687	1.1595	1.1388	1.1002	0.9805	0.9478	0.9102	AVRG	R		0.92344		1.0829	10	20	0.700	0.99	
3,3'-Dichlorobenzidine			0.2191	0.3924	0.4045	0.4014	0.3659	0.3501		QUAD	A	-7.3761	0.68092	-0.00262	0.3555	0.995	20	0.010	0.99	
Benzo(a)anthracene	1.2777	1.2472	1.2562	1.2625	1.2490	1.2280	1.1617	1.1412	1.1211	AVRG	R		0.82232		1.2161	5	20	0.800	0.99	
bis(2-Ethylhexyl)phthalate			0.8200	0.8755	0.8713	0.8509	0.7434	0.7066	0.6781	AVRG	R		1.26221		0.7923	10	20	0.010	0.99	
Benzo(b)fluoranthene	1.0338	1.0772	1.1337	1.1568	1.1842	1.1824	1.1508	1.2239	1.2361	AVRG	R		0.86716		1.1532	6	20	0.700	0.99	
Benzo(k)fluoranthene	1.0698	1.1177	1.1621	1.1828	1.1734	1.1413	1.0464	1.0007	0.9979m	AVRG	R		0.90982		1.0991	7	20	0.700	0.99	
Benzo(a)pyrene	0.8505	0.9085	0.9789	1.0254	1.0390	1.0346	1.0078	1.0224	1.0266	AVRG	R		1.01196		0.9882	7	20	0.700	0.99	
Indeno(1,2,3-cd)pyrene	0.9449	1.0169	1.0823	1.1563	1.1893	1.1971	1.2099	1.2219	1.2478	AVRG	R		0.87665		1.1407	9	20	0.500	0.99	
Dibenz(a,h)anthracene	0.7984	0.8702	0.9372	0.9830	1.0144	1.0144	1.0086	1.0161	1.0281	AVRG	R		1.03801		0.9634	8	20	0.400	0.99	
Nitrobenzene-d5	0.5531	0.5735	0.5965	0.6164	0.6219	0.6184	0.5912	0.5973	0.5967	AVRG	R		1.67750		0.5961	4	20	0.05	0.99	
2-Fluorobiphenyl	1.6886	1.6677	1.6219	1.6591	1.5808	1.5496	1.3735	1.2784	1.2388	AVRG	R		0.65894		1.5176	11	20	0.05	0.99	
Terphenyl-d14	0.9488	0.9764	0.9822	0.9788	0.9627	0.9422	0.8464	0.7998	0.7740	AVRG	R		1.09605		0.9124	9	20	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Naphthalene	2.0000	9	5.0000	7	10.000	8	16.000	7	20.000	5	25.000	2	40.000	-9	50.000	-12	60.000	-16
3,3'-Dichlorobenzidine					20.000	-7	32.000	5	40.000	3	50.000	0	80.000	-5	100.00	4		
Benzo(a)anthracene	2.0000	5	5.0000	3	10.000	3	16.000	4	20.000	3	25.000	1	40.000	-4	50.000	-6	60.000	-8
bis(2-Ethylhexyl)phthalate					10.000	4	16.000	11	20.000	10	25.000	7	40.000	-6	50.000	-11	60.000	-14
Benzo(b)fluoranthene	2.0000	-10	5.0000	-7	10.000	-2	16.000	0	20.000	3	25.000	3	40.000	0	50.000	6	60.000	7
Benzo(k)fluoranthene	2.0000	-3	5.0000	2	10.000	6	16.000	8	20.000	7	25.000	4	40.000	-5	50.000	-9	60.000	-9
Benzo(a)pyrene	2.0000	-14	5.0000	-8	10.000	-1	16.000	4	20.000	5	25.000	5	40.000	2	50.000	3	60.000	4
Indeno(1,2,3-cd)pyrene	2.0000	-17	5.0000	-11	10.000	-5	16.000	1	20.000	4	25.000	5	40.000	6	50.000	7	60.000	9
Dibenz(a,h)anthracene	2.0000	-17	5.0000	-10	10.000	-3	16.000	2	20.000	5	25.000	5	40.000	5	50.000	5	60.000	7
Nitrobenzene-d5	2.0000	-7	5.0000	-4	10.000	0	16.000	3	20.000	4	25.000	4	40.000	-1	50.000	0	60.000	0
2-Fluorobiphenyl	2.0000	11	5.0000	10	10.000	7	16.000	9	20.000	4	25.000	2	40.000	-9	50.000	-16	60.000	-18
Terphenyl-d14	2.0000	4	5.0000	7	10.000	8	16.000	7	20.000	6	25.000	3	40.000	-7	50.000	-12	60.000	-15

KMH 06/20/12 [Aniline]: Picked or reassigned peak in all levels.

KMH 06/20/12 [2-Nitrophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [4-Chloroaniline]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [Phenanthrene]: Corrected automatically drawn baseline in ICAL1 (xfj02).

KMH 06/20/12 [Benzidine]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [Benzidine]: q-deleted in ICAL2

KMH 06/20/12 [3-Nitroaniline]: Picked or reassigned peak in multiple levels.

KMH 06/20/12 [Carbazole]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [2,4,5-Trichlorophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [2,4,5-Trichlorophenol]: Picked or reassigned peak in multiple levels.

KMH 06/20/12 [3-Nitroaniline]: Corrected automatically drawn baseline in ICAL7 (xfj08).

KMH 06/20/12 [Acenaphthene]: Corrected automatically drawn baseline in ICAL7 (xfj08).

KMH 06/20/12 [bis(2-Chloroisopropyl) ether]: Corrected automatically drawn baseline in multiple levels.

KMH 06/20/12 [4-Methylphenol]: Combined split peak in multiple levels.

KMH 06/20/12 [Benzoic acid]: Corrected automatically drawn baseline in ICAL7 (xfj09).

KMH 06/20/12 [2,4-Dichlorophenol]: Corrected automatically drawn baseline in ICAL7 (xfj09).

KMH 06/20/12 [4-Chloroaniline]: Picked or reassigned peak in multiple levels.

KMH 06/20/12 [Chrysene]: Corrected automatically drawn baseline in ICAL7 (xfj09).

KMH 06/20/12 [Resorcinol]: Combined split peak in ICAL9 (xfj10).

KMH 06/20/12 [4-Nitrophenol]: Picked or reassigned peak in ICAL9 (xfj10).

KMH 06/20/12 [Anthracene]: Corrected automatically drawn baseline in ICAL9 (xfj10).

KMH 06/20/12 [Carbazole]: Picked or reassigned peak in ICAL9 (xfj10).

KMH 06/20/12 [Benzo(k)fluoranthene]: Picked or reassigned peak in ICAL9 (xfj10).

KMH 06/20/12 : files 8 & 9 are labeled "ICAL7", file 9 is ICAL8

LLH 07/26/12 : cut a loop of column to get better Benzoic acid, currently at -40%D

KMH 08/16/12 : 8/15 cut 1 loop to improve benzoic acid

KMH 08/23/12 : 8/23 cut 1 loop and primed to improve benzoic acid

LLH 08/24/12 : cut 2 more loops od column and conditioned with old diesel std, Benzoic acid still low at -60%D and PCP at -36%D

KMH 08/31/12 : 8/23 cut 1 loop and primed to improve benzoic acid

LLH 09/12/12 : cut 2 loops of column and primed to improve Benzoic acid and Pentachlorophenol

Analyst: KMH Date: 06/20/12 Reviewer: LW Date: 06/21/12

m=manual integration

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

542247126001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA05 Name : 6PTBNA5
Calnum : 542247126001 Cal Date : 19-JUN-2012

ICV 542247126011 (xfj11 19-JUN-2012) stds: S19910

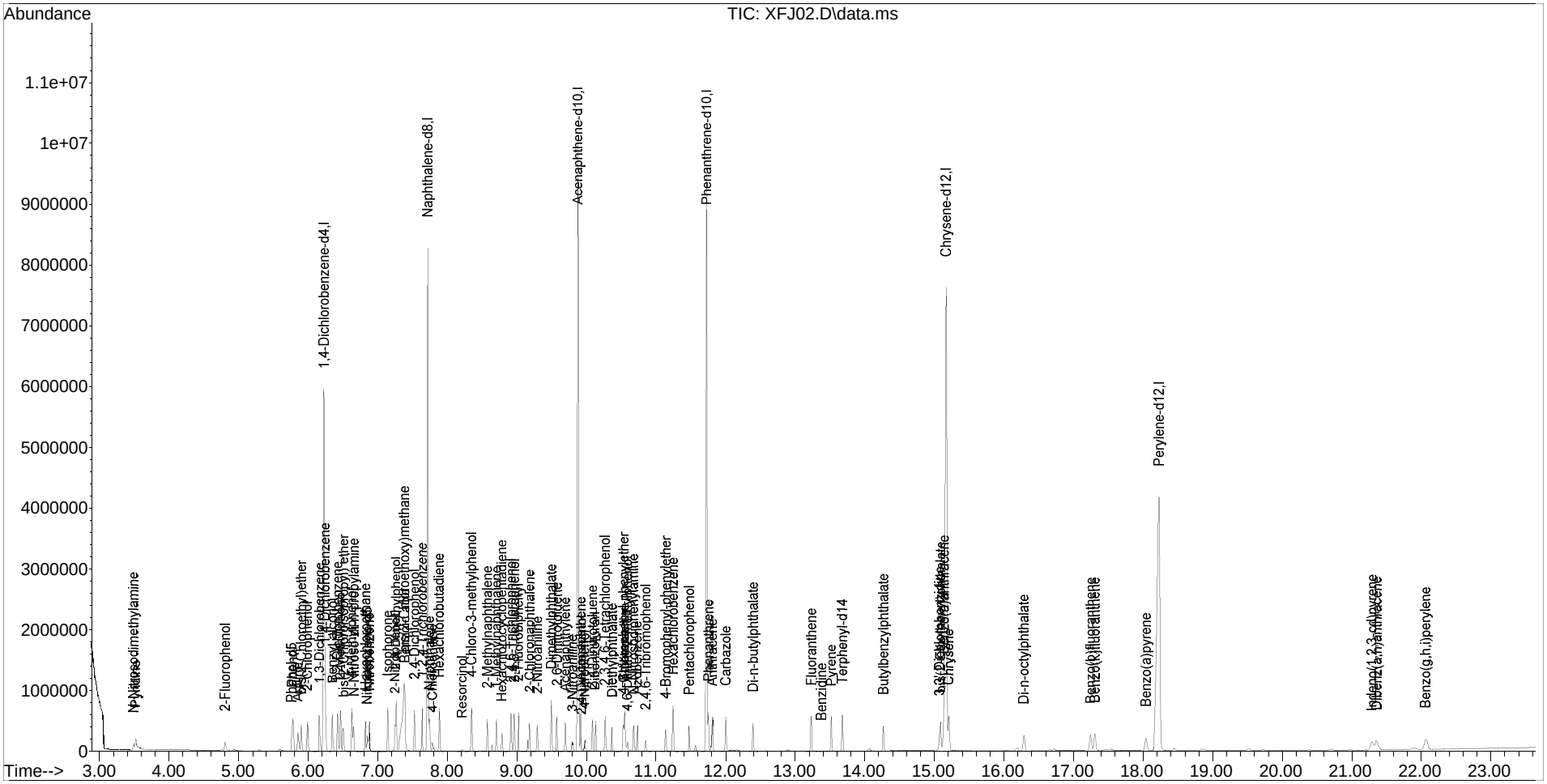
Analyte	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	40.00	37.68	ug/mL	-6	30	
3,3'-Dichlorobenzidine	60.00	55.59	ug/mL	-7	30	
Benzo(a)anthracene	40.00	40.46	ug/mL	1	30	
bis(2-Ethylhexyl)phthalate	40.00	40.03	ug/mL	0	30	
Benzo(b)fluoranthene	40.00	44.70	ug/mL	12	30	
Benzo(k)fluoranthene	40.00	40.28	ug/mL	1	30	
Benzo(a)pyrene	40.00	47.73	ug/mL	19	30	
Indeno(1,2,3-cd)pyrene	40.00	45.71	ug/mL	14	30	
Dibenz(a,h)anthracene	40.00	43.29	ug/mL	8	30	

Analyst: KMH Date: 06/20/12 Reviewer: LW Date: 06/21/12

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ02.D
Acq On : 19 Jun 2012 3:29 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 10:37:32 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ02.D
Acq On : 19 Jun 2012 3:29 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 10:37:32 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.231	152	1139645	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.722	136	3580469	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.880	164	2201771	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.728	188	3660308	40.0000	ug/mL		0.00
70) Chrysene-d12	15.169	240	4164328	40.0000	ug/mL		-0.01
79) Perylene-d12	18.235	264	4149796	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.523	79	182864	4.1317	ug/mL		78
3) N-Nitrosodimethylamine	3.491	42	57789	2.5933	ug/mL	#	37
4) 2-Fluorophenol	4.810	112	72466	1.7166	ug/mL		79
5) Phenol-d5	5.766	99	99641	1.8967	ug/mL		80
6) Phenol	5.777	94	200696	4.3296	ug/mL		71
7) Aniline	5.852	93	141902m	2.5592	ug/mL		
8) bis(2-Chloroethyl)ether	5.900	93	168852	4.7178	ug/mL		99
9) 2-Chlorophenol	5.991	128	147830	3.6988	ug/mL		97
10) 1,3-Dichlorobenzene	6.167	146	179745	4.3843	ug/mL		95
11) 1,4-Dichlorobenzene	6.247	146	178683	4.4488	ug/mL		91
12) Benzyl alcohol	6.354	108	97982	3.6520	ug/mL		93
13) 1,2-Dichlorobenzene	6.424	146	169214	4.4024	ug/mL		95
14) 2-Methylphenol	6.466	107	125931	4.2057	ug/mL		94
15) bis(2-Chloroisopropyl) ether	6.509	45	158464	3.3409	ug/mL		86
16) 4-Methylphenol	6.632	107	180586	3.9816	ug/mL		89
17) N-Nitroso-di-n-propylamine	6.659	70	106703	4.4622	ug/mL	#	66
18) Hexachloroethane	6.824	117	68934	4.0190	ug/mL		96
20) Nitrobenzene-d5	6.851	82	99021	2.2189	ug/mL	#	71
21) Nitrobenzene	6.878	77	190712	5.1760	ug/mL		97
22) Isophorone	7.145	82	324820	4.8429	ug/mL		95
23) 2-Nitrophenol	7.252	139	78008m	3.5023	ug/mL		
24) 2,4-Dimethylphenol	7.268	107	153241	4.4003	ug/mL		92
25) bis(2-Chloroethoxy)methane	7.385	93	97337	2.2004	ug/mL		94
26) Benzoic acid	7.396	105	746901	27.2371	ug/mL		97
27) 2,4-Dichlorophenol	7.529	162	124576	3.9988	ug/mL		98
28) 1,2,4-Trichlorobenzene	7.647	180	139568	4.3407	ug/mL		97
29) Naphthalene	7.748	128	211434	1.9879	ug/mL		95
30) 4-Chloroaniline	7.791	127	61604m	1.3781	ug/mL		
31) Hexachlorobutadiene	7.887	225	84596	4.7428	ug/mL		97
32) Resorcinol	8.213	110	17991	0.5355	ug/mL		98
33) 4-Chloro-3-methylphenol	8.352	107	134291	4.2672	ug/mL		90
34) 2-Methylnaphthalene	8.582	142	145353	1.9552	ug/mL		89
35) 1-Methylnaphthalene	8.705	142	145153	2.0072	ug/mL		91
37) Hexachlorocyclopentadiene	8.779	237	49584	2.5938	ug/mL		95
38) 2,4,6-Trichlorophenol	8.918	196	87896	3.9114	ug/mL		89

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ02.D
Acq On : 19 Jun 2012 3:29 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 10:37:32 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.961	196	94087	4.0504	ug/mL		86
40) 2-Fluorobiphenyl	9.020	172	185897	2.1417	ug/mL		97
41) 2-Chloronaphthalene	9.180	162	138066	2.0772	ug/mL		93
42) 2-Nitroaniline	9.292	65	88370	4.2333	ug/mL		96
43) Dimethylphthalate	9.501	163	311169	4.3701	ug/mL		97
44) 2,6-Dinitrotoluene	9.581	165	68242	3.4826	ug/mL		92
45) Acenaphthylene	9.698	152	206235	1.9211	ug/mL		97
46) 3-Nitroaniline	9.800	138	28869	1.2549	ug/mL	#	77
47) Acenaphthene	9.917	154	132033	1.9059	ug/mL		93
48) 2,4-Dinitrophenol	9.928	184	2755	10.1479	ug/mL	#	1
49) 4-Nitrophenol	9.976	109	21510	2.3225	ug/mL	#	85
50) Dibenzofuran	10.126	168	197729	2.2855	ug/mL		81
51) 2,4-Dinitrotoluene	10.083	165	83682	3.3687	ug/mL		98
52) 2,3,4,6-Tetrachlorophenol	10.270	232	72439	3.9319	ug/mL		88
53) Diethylphthalate	10.371	149	151716	2.1093	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.537	204	78667	2.0988	ug/mL	#	78
55) Fluorene	10.553	166	160710	2.0841	ug/mL		86
56) 4-Nitroaniline	10.553	138	37528	1.6953	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.852	330	20767	1.6668	ug/mL	#	82
59) 4,6-Dinitro-2-methylphenol	10.590	198	19882	1.4249	ug/mL		82
60) N-Nitrosodiphenylamine	10.676	169	109836	1.9496	ug/mL		91
61) Azobenzene	10.729	77	194278	2.5435	ug/mL		90
62) 4-Bromophenyl-phenylether	11.146	248	46410	1.9471	ug/mL	#	81
63) Hexachlorobenzene	11.248	284	100402	4.1150	ug/mL		87
64) Pentachlorophenol	11.483	266	54413	3.3467	ug/mL		99
65) Phenanthrene	11.755	178	229499m	2.2036	ug/mL		
66) Anthracene	11.814	178	224961	2.1336	ug/mL		95
67) Carbazole	12.001	167	273794	3.1921	ug/mL		85
68) Di-n-butylphthalate	12.396	149	243104	1.9931	ug/mL		97
69) Fluoranthene	13.235	202	257098	2.1564	ug/mL		96
71) Benzidine	13.379	184	2750m	0.0509	ug/mL		
72) Pyrene	13.523	202	261612	1.9299	ug/mL		93
73) Terphenyl-d14	13.684	244	197563	1.9681	ug/mL		99
74) Butylbenzylphthalate	14.271	149	103821	1.3923	ug/mL		93
75) 3,3'-Dichlorobenzidine	15.078	252	95082	2.0479	ug/mL		96
76) Benzo(a)anthracene	15.142	228	266045	2.0969	ug/mL		97
77) bis(2-Ethylhexyl)phthalate	15.094	149	150948	1.5297	ug/mL		98
78) Chrysene	15.206	228	241107	2.1280	ug/mL		96
80) Di-n-octylphthalate	16.291	149	211144	1.3010	ug/mL		97
81) Benzo(b)fluoranthene	17.247	252	214493	1.7795	ug/mL		97
82) Benzo(k)fluoranthene	17.311	252	221980	1.9696	ug/mL		93
83) Benzo(a)pyrene	18.048	252	176466	1.7063	ug/mL		96
84) Indeno(1,2,3-cd)pyrene	21.296	276	196058	1.5130	ug/mL		87

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ02.D
Acq On : 19 Jun 2012 3:29 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 10:37:32 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

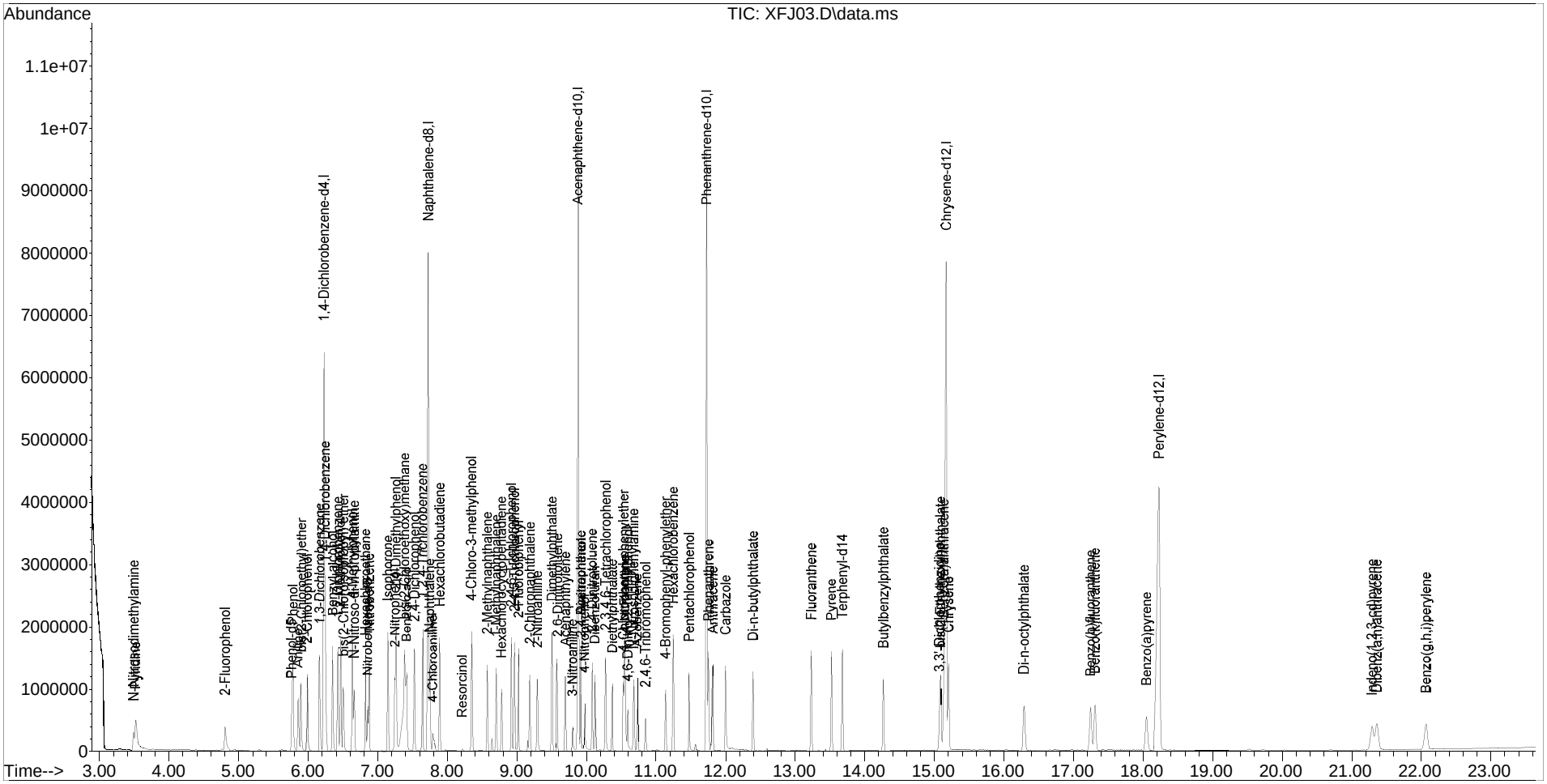
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.360	278	165663	1.5242	ug/mL	95
86) Benzo(g,h,i)perylene	22.066	276	184152	1.6949	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ03.D
Acq On : 19 Jun 2012 4:06 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL2
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 20 10:39:16 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ03.D
Acq On : 19 Jun 2012 4:06 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL2
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 20 10:39:16 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.231	152	1167642	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.727	136	3674107	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.880	164	2262466	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.728	188	3752686	40.0000	ug/mL		0.00
70) Chrysene-d12	15.174	240	4222999	40.0000	ug/mL		0.00
79) Perylene-d12	18.235	264	4259660	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.523	79	482098	10.6316	ug/mL		75
3) N-Nitrosodimethylamine	3.496	42	157668	6.9059	ug/mL	#	36
4) 2-Fluorophenol	4.810	112	190918	4.4141	ug/mL		79
5) Phenol-d5	5.767	99	259724	4.8254	ug/mL		81
6) Phenol	5.783	94	525138	11.0571	ug/mL		73
7) Aniline	5.857	93	375672m	6.6127	ug/mL		
8) bis(2-Chloroethyl)ether	5.905	93	449356	12.2541	ug/mL		98
9) 2-Chlorophenol	5.991	128	383406	9.3631	ug/mL		97
10) 1,3-Dichlorobenzene	6.173	146	448982	10.6889	ug/mL		97
11) 1,4-Dichlorobenzene	6.247	146	453312	11.0158	ug/mL		89
12) Benzyl alcohol	6.360	108	259061	9.4242	ug/mL		96
13) 1,2-Dichlorobenzene	6.429	146	430221	10.9245	ug/mL		96
14) 2-Methylphenol	6.466	107	326755	10.6510	ug/mL		96
15) bis(2-Chloroisopropyl) ether	6.509	45	395458	8.1376	ug/mL		87
16) 4-Methylphenol	6.637	107	468707	10.0863	ug/mL		89
17) N-Nitroso-di-n-propylamine	6.659	70	269365	10.9943	ug/mL	#	68
18) Hexachloroethane	6.824	117	179460	10.2121	ug/mL		96
20) Nitrobenzene-d5	6.856	82	263387	5.7516	ug/mL	#	69
21) Nitrobenzene	6.878	77	491984	13.0124	ug/mL		97
22) Isophorone	7.150	82	850174	12.3527	ug/mL		97
23) 2-Nitrophenol	7.252	139	232730m	10.1825	ug/mL		
24) 2,4-Dimethylphenol	7.268	107	391257	10.9486	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.385	93	245067	5.3987	ug/mL		97
26) Benzoic acid	7.417	105	1117499	39.7130	ug/mL		96
27) 2,4-Dichlorophenol	7.535	162	321464	10.0559	ug/mL		96
28) 1,2,4-Trichlorobenzene	7.647	180	359669	10.9010	ug/mL		97
29) Naphthalene	7.748	128	532518	4.8792	ug/mL		94
30) 4-Chloroaniline	7.791	127	163201m	3.5577	ug/mL		
31) Hexachlorobutadiene	7.893	225	214802	11.7358	ug/mL		97
32) Resorcinol	8.213	110	18665	0.5414	ug/mL		97
33) 4-Chloro-3-methylphenol	8.352	107	355329	11.0032	ug/mL		88
34) 2-Methylnaphthalene	8.582	142	369321	4.8413	ug/mL		89
35) 1-Methylnaphthalene	8.705	142	361593	4.8727	ug/mL		88
37) Hexachlorocyclopentadiene	8.780	237	161032	8.1978	ug/mL		96
38) 2,4,6-Trichlorophenol	8.918	196	233587	10.1159	ug/mL		90

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ03.D
Acq On : 19 Jun 2012 4:06 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL2
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 20 10:39:16 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.961	196	251808	10.5494	ug/mL		85
40) 2-Fluorobiphenyl	9.020	172	471644	5.2879	ug/mL		94
41) 2-Chloronaphthalene	9.186	162	347027	5.0809	ug/mL		92
42) 2-Nitroaniline	9.292	65	245133	11.4278	ug/mL		93
43) Dimethylphthalate	9.506	163	784322	10.7197	ug/mL		98
44) 2,6-Dinitrotoluene	9.586	165	182560	9.0666	ug/mL		86
45) Acenaphthylene	9.704	152	531147	4.8149	ug/mL		97
46) 3-Nitroaniline	9.800	138	69103	2.9232	ug/mL	#	83
47) Acenaphthene	9.917	154	341152	4.7924	ug/mL		94
48) 2,4-Dinitrophenol	9.923	184	27195	12.0690	ug/mL	#	1
49) 4-Nitrophenol	9.976	109	80260	8.4335	ug/mL	#	84
50) Dibenzofuran	10.126	168	495005	5.5682	ug/mL		81
51) 2,4-Dinitrotoluene	10.083	165	236327	9.2584	ug/mL		98
52) 2,3,4,6-Tetrachlorophenol	10.275	232	202294	10.6858	ug/mL		90
53) Diethylphthalate	10.372	149	385850	5.2204	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.537	204	203402	5.2811	ug/mL	#	80
55) Fluorene	10.553	166	409571	5.1687	ug/mL		85
56) 4-Nitroaniline	10.559	138	120486	5.2968	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.852	330	58531	4.5717	ug/mL	#	82
59) 4,6-Dinitro-2-methylphenol	10.596	198	95600	6.6827	ug/mL	#	76
60) N-Nitrosodiphenylamine	10.676	169	284438	4.9246	ug/mL		92
61) Azobenzene	10.735	77	510239	6.5156	ug/mL		92
62) 4-Bromophenyl-phenylether	11.146	248	121323	4.9646	ug/mL	#	82
63) Hexachlorobenzene	11.248	284	257787	10.3054	ug/mL		84
64) Pentachlorophenol	11.483	266	156243	9.3734	ug/mL		96
65) Phenanthrene	11.755	178	563843	5.2807	ug/mL		96
66) Anthracene	11.819	178	572865	5.2994	ug/mL		94
67) Carbazole	12.001	167	780012	8.8700	ug/mL		84
68) Di-n-butylphthalate	12.396	149	652463	5.2176	ug/mL		97
69) Fluoranthene	13.235	202	660102	5.4003	ug/mL		98
71) Benzidine	0.000	184	0m	N.D.	d		
72) Pyrene	13.523	202	673342	4.8982	ug/mL		92
73) Terphenyl-d14	13.684	244	515403	5.0631	ug/mL		99
74) Butylbenzylphthalate	14.271	149	287851	3.8066	ug/mL		91
75) 3,3'-Dichlorobenzidine	15.078	252	180593	3.8355	ug/mL		99
76) Benzo(a)anthracene	15.142	228	658389	5.1172	ug/mL		99
77) bis(2-Ethylhexyl)phthalate	15.094	149	405745	4.0547	ug/mL		99
78) Chrysene	15.206	228	610242	5.3112	ug/mL		95
80) Di-n-octylphthalate	16.291	149	621106	3.7285	ug/mL		97
81) Benzo(b)fluoranthene	17.247	252	573538	4.6355	ug/mL		98
82) Benzo(k)fluoranthene	17.311	252	595143	5.1445	ug/mL		95
83) Benzo(a)pyrene	18.054	252	483719	4.5566	ug/mL		95
84) Indeno(1,2,3-cd)pyrene	21.296	276	541440	4.0705	ug/mL		90

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ03.D
Acq On : 19 Jun 2012 4:06 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL2
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 20 10:39:16 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

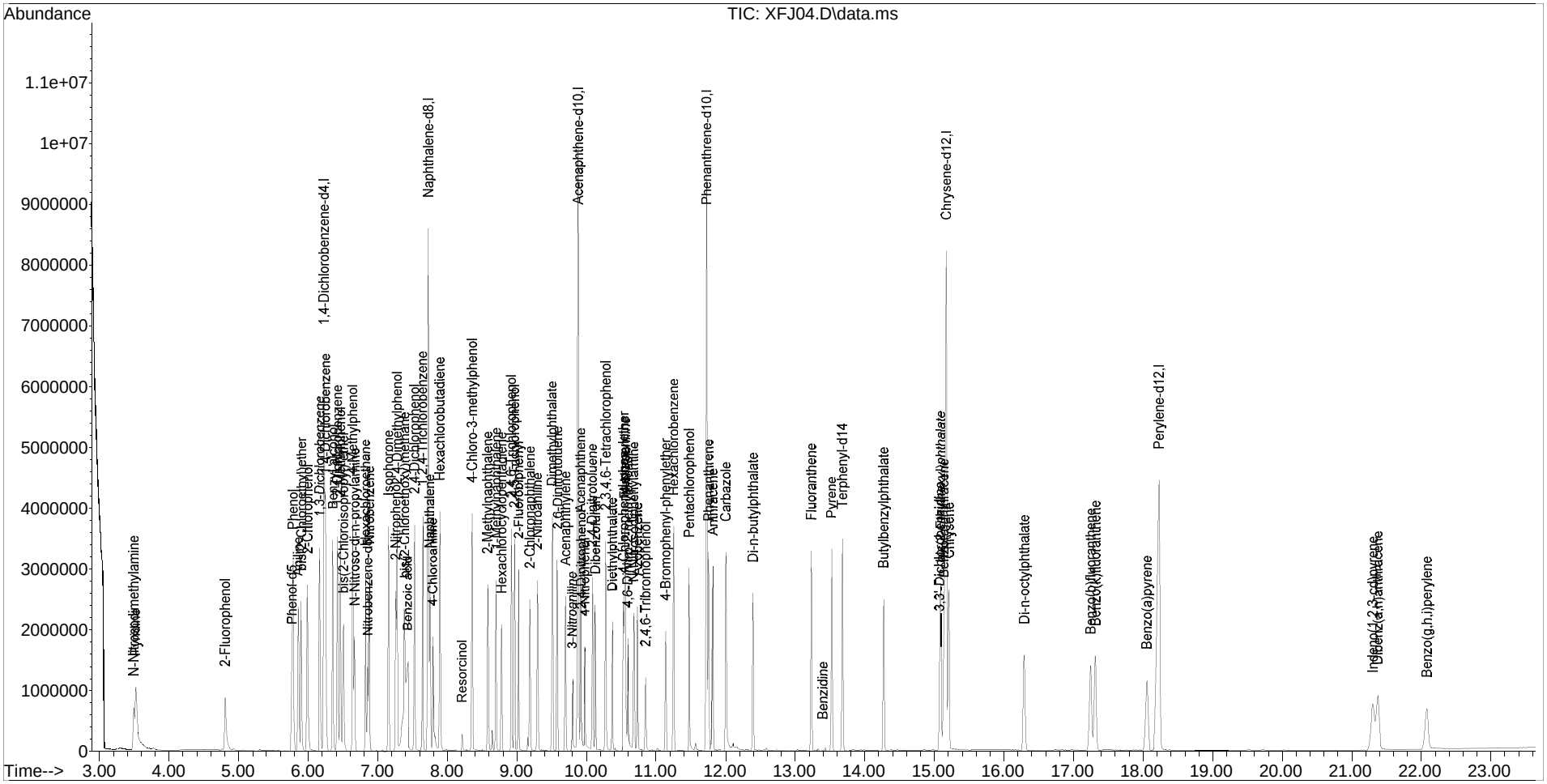
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.361	278	463338	4.1532	ug/mL	95
86) Benzo(g,h,i)perylene	22.071	276	462260	4.1447	ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ04.D
Acq On : 19 Jun 2012 4:40 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL3
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 10:40:38 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ04.D
Acq On : 19 Jun 2012 4:40 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL3
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 10:40:38 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.231	152	1188675	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.727	136	3667624	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.885	164	2295987	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.728	188	3810434	40.0000	ug/mL		0.00
70) Chrysene-d12	15.174	240	4164584	40.0000	ug/mL		0.00
79) Perylene-d12	18.235	264	4209665	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.523	79	1029836	22.3089	ug/mL		74
3) N-Nitrosodimethylamine	3.496	42	343158	14.7644	ug/mL	#	38
4) 2-Fluorophenol	4.810	112	409506	9.3003	ug/mL		81
5) Phenol-d5	5.772	99	561603	10.2493	ug/mL		82
6) Phenol	5.788	94	1118132	23.1263	ug/mL		73
7) Aniline	5.857	93	1106614m	19.1343	ug/mL		
8) bis(2-Chloroethyl)ether	5.905	93	874975	23.4386	ug/mL		99
9) 2-Chlorophenol	5.996	128	807681	19.3751	ug/mL		99
10) 1,3-Dichlorobenzene	6.172	146	930964	21.7714	ug/mL		95
11) 1,4-Dichlorobenzene	6.253	146	930876	22.2206	ug/mL		89
12) Benzyl alcohol	6.365	108	553054	19.7632	ug/mL		96
13) 1,2-Dichlorobenzene	6.429	146	883085	22.0272	ug/mL		96
14) 2-Methylphenol	6.472	107	681155	21.8103	ug/mL		97
15) bis(2-Chloroisopropyl) ether	6.514	45	814370	16.4613	ug/mL		86
16) 4-Methylphenol	6.643	107	979620	20.7079	ug/mL		89
17) N-Nitroso-di-n-propylamine	6.669	70	575608	23.0782	ug/mL	#	67
18) Hexachloroethane	6.824	117	376521	21.0466	ug/mL		97
20) Nitrobenzene-d5	6.856	82	546957	11.9651	ug/mL	#	70
21) Nitrobenzene	6.883	77	1011829	26.8090	ug/mL		98
22) Isophorone	7.155	82	1730067	25.1816	ug/mL		97
23) 2-Nitrophenol	7.257	139	438750	19.2304	ug/mL		91
24) 2,4-Dimethylphenol	7.273	107	715057	20.0449	ug/mL		91
25) bis(2-Chloroethoxy)methane	7.385	93	499751	11.0288	ug/mL		96
26) Benzoic acid	7.433	105	1470943	52.3659	ug/mL		95
27) 2,4-Dichlorophenol	7.535	162	678119	21.2500	ug/mL		98
28) 1,2,4-Trichlorobenzene	7.647	180	728931	22.1318	ug/mL		96
29) Naphthalene	7.748	128	1071546	9.8354	ug/mL		93
30) 4-Chloroaniline	7.791	127	684201	14.9418	ug/mL		87
31) Hexachlorobutadiene	7.893	225	439259	24.0416	ug/mL		99
32) Resorcinol	8.213	110	100042	2.9068	ug/mL		97
33) 4-Chloro-3-methylphenol	8.357	107	741159	22.9915	ug/mL		89
34) 2-Methylnaphthalene	8.582	142	757087	9.9419	ug/mL		88
35) 1-Methylnaphthalene	8.710	142	740317	9.9939	ug/mL		88
37) Hexachlorocyclopentadiene	8.785	237	346121	17.3631	ug/mL		97
38) 2,4,6-Trichlorophenol	8.918	196	485374	20.7131	ug/mL		91

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ04.D
Acq On : 19 Jun 2012 4:40 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL3
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 10:40:38 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.961	196	525520	21.6950	ug/mL		84
40) 2-Fluorobiphenyl	9.025	172	930978	10.2855	ug/mL		93
41) 2-Chloronaphthalene	9.185	162	705288	10.1755	ug/mL		94
42) 2-Nitroaniline	9.298	65	513759	23.6011	ug/mL		96
43) Dimethylphthalate	9.506	163	1578564	21.2600	ug/mL		96
44) 2,6-Dinitrotoluene	9.586	165	382991	18.7430	ug/mL		94
45) Acenaphthylene	9.704	152	1069580	9.5544	ug/mL		95
46) 3-Nitroaniline	9.800	138	210665	8.7816	ug/mL	#	83
47) Acenaphthene	9.917	154	716877	9.9234	ug/mL		94
48) 2,4-Dinitrophenol	9.928	184	108108	18.3245	ug/mL	#	65
49) 4-Nitrophenol	9.981	109	187193	19.3824	ug/mL	#	78
50) Dibenzofuran	10.131	168	992853	11.0054	ug/mL		80
51) 2,4-Dinitrotoluene	10.088	165	490414	18.9320	ug/mL		97
52) 2,3,4,6-Tetrachlorophenol	10.275	232	431800	22.4761	ug/mL		87
53) Diethylphthalate	10.371	149	783382	10.4442	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.537	204	413683	10.5840	ug/mL	#	78
55) Fluorene	10.553	166	825681	10.2679	ug/mL		86
56) 4-Nitroaniline	10.558	138	313230	13.5690	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.852	330	123867	9.5336	ug/mL	#	81
59) 4,6-Dinitro-2-methylphenol	10.596	198	249595	17.1829	ug/mL	#	80
60) N-Nitrosodiphenylamine	10.681	169	580662	9.9009	ug/mL		92
61) Azobenzene	10.735	77	1015362	12.7693	ug/mL		92
62) 4-Bromophenyl-phenylether	11.146	248	247900	9.9905	ug/mL	#	80
63) Hexachlorobenzene	11.253	284	518451	20.4117	ug/mL		88
64) Pentachlorophenol	11.483	266	339271	20.0451	ug/mL		97
65) Phenanthrene	11.755	178	1130914	10.4311	ug/mL		95
66) Anthracene	11.819	178	1144324	10.4253	ug/mL		93
67) Carbazole	12.006	167	1745393	19.5471	ug/mL		82
68) Di-n-butylphthalate	12.396	149	1341110	10.5620	ug/mL		97
69) Fluoranthene	13.235	202	1328513	10.7039	ug/mL		98
71) Benzidine	13.400	184	5904m	0.1093	ug/mL		
72) Pyrene	13.523	202	1331287	9.8203	ug/mL		89
73) Terphenyl-d14	13.684	244	1022613	10.1867	ug/mL		95
74) Butylbenzylphthalate	14.271	149	612180	8.2092	ug/mL		91
75) 3,3'-Dichlorobenzidine	15.078	252	456204	9.8250	ug/mL		100
76) Benzo(a)anthracene	15.142	228	1307837	10.3075	ug/mL		99
77) bis(2-Ethylhexyl)phthalate	15.094	149	853743	8.6513	ug/mL		98
78) Chrysene	15.212	228	1203875	10.6249	ug/mL		92
80) Di-n-octylphthalate	16.296	149	1374568	8.3494	ug/mL		98
81) Benzo(b)fluoranthene	17.258	252	1193088	9.7574	ug/mL		97
82) Benzo(k)fluoranthene	17.322	252	1222977	10.6972	ug/mL		96
83) Benzo(a)pyrene	18.059	252	1030182	9.8194	ug/mL		97
84) Indeno(1,2,3-cd)pyrene	21.307	276	1138992	8.6645	ug/mL		89

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ04.D
Acq On : 19 Jun 2012 4:40 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL3
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 10:40:38 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

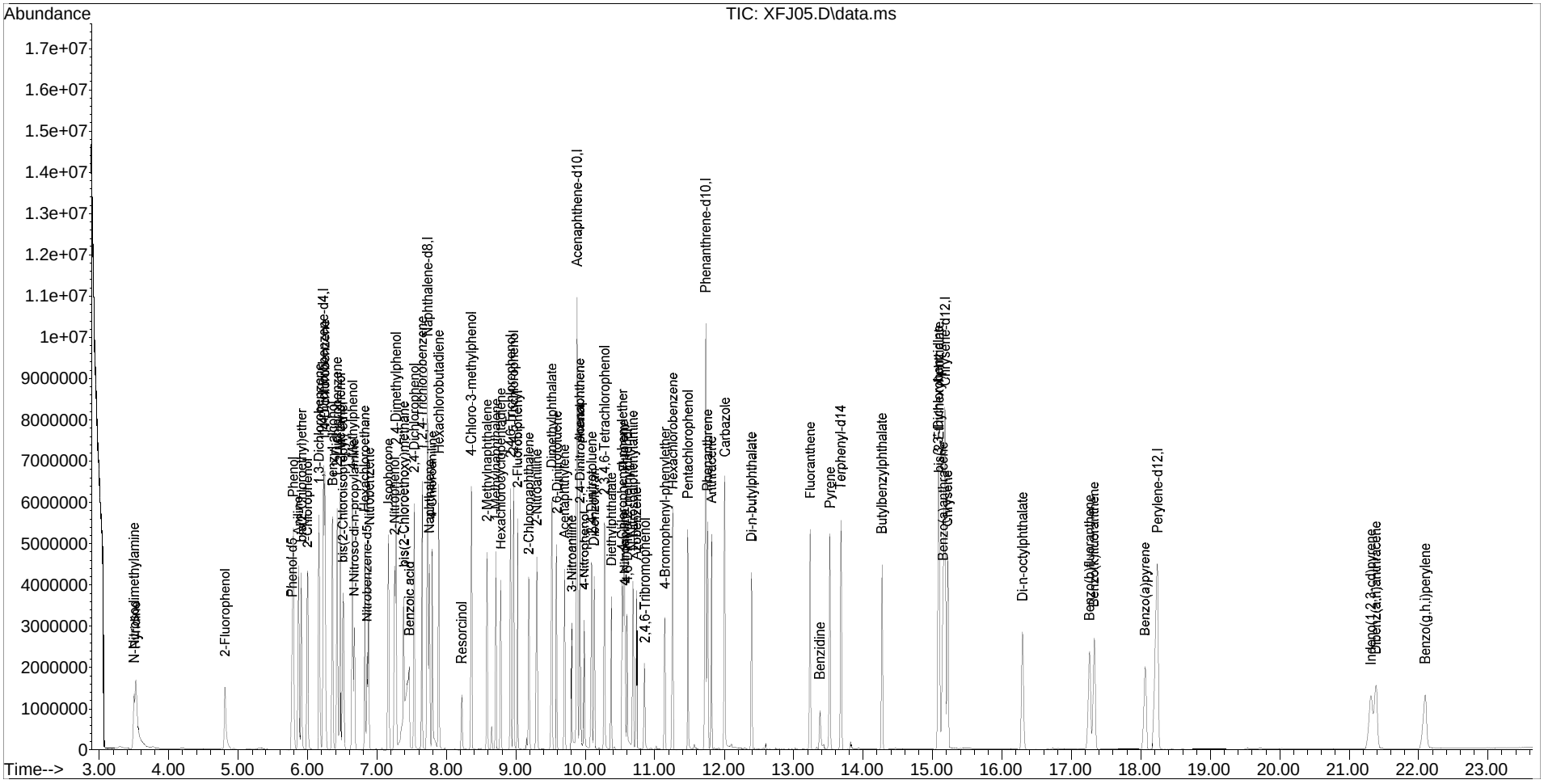
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.376	278	986373	8.9464	ug/mL	96
86) Benzo(g,h,i)perylene	22.082	276	856623	7.7719	ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ05.D
Acq On : 19 Jun 2012 5:16 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 20 10:41:34 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ05.D
Acq On : 19 Jun 2012 5:16 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 20 10:41:34 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.231	152	1263148	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.727	136	3875484	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.886	164	2405922	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.734	188	4044911	40.0000	ug/mL		0.00
70) Chrysene-d12	15.180	240	4347949	40.0000	ug/mL		0.00
79) Perylene-d12	18.241	264	4478000	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.523	79	1851307	37.7397	ug/mL		75
3) N-Nitrosodimethylamine	3.502	42	617767	25.0124	ug/mL	#	32
4) 2-Fluorophenol	4.816	112	735878	15.7273	ug/mL	#	76
5) Phenol-d5	5.777	99	1001765	17.2044	ug/mL		82
6) Phenol	5.793	94	1942645	37.8107	ug/mL		72
7) Aniline	5.863	93	2171333m	35.3307	ug/mL		
8) bis(2-Chloroethyl)ether	5.911	93	1512459	38.1267	ug/mL		97
9) 2-Chlorophenol	6.002	128	1384928	31.2638	ug/mL		98
10) 1,3-Dichlorobenzene	6.173	146	1594055	35.0804	ug/mL		94
11) 1,4-Dichlorobenzene	6.253	146	1583590	35.5727	ug/mL		87
12) Benzyl alcohol	6.370	108	988800	33.2512	ug/mL		95
13) 1,2-Dichlorobenzene	6.429	146	1502524	35.2686	ug/mL		95
14) 2-Methylphenol	6.472	107	1202222	36.2251	ug/mL		95
15) bis(2-Chloroisopropyl) ether	6.515	45	1428459	27.1718	ug/mL		86
16) 4-Methylphenol	6.653	107	1715231	34.1201	ug/mL		90
17) N-Nitroso-di-n-propylamine	6.680	70	1000085	37.7329	ug/mL	#	67
18) Hexachloroethane	6.824	117	662290	34.8377	ug/mL		99
20) Nitrobenzene-d5	6.862	82	955572	19.7826	ug/mL	#	69
21) Nitrobenzene	6.889	77	1726702	43.2962	ug/mL		95
22) Isophorone	7.166	82	2958752	40.7557	ug/mL		99
23) 2-Nitrophenol	7.257	139	781453	32.4140	ug/mL		94
24) 2,4-Dimethylphenol	7.279	107	1348426	35.7724	ug/mL		88
25) bis(2-Chloroethoxy)methane	7.391	93	873852	18.2503	ug/mL		96
26) Benzoic acid	7.471	105	2431510	81.9195	ug/mL		96
27) 2,4-Dichlorophenol	7.540	162	1174758	34.8386	ug/mL		97
28) 1,2,4-Trichlorobenzene	7.652	180	1254392	36.0431	ug/mL		96
29) Naphthalene	7.754	128	1797430	15.6132	ug/mL		90
30) 4-Chloroaniline	7.797	127	1566336	32.3714	ug/mL		85
31) Hexachlorobutadiene	7.893	225	752052	38.9537	ug/mL		99
32) Resorcinol	8.224	110	430537	11.8387	ug/mL		95
33) 4-Chloro-3-methylphenol	8.358	107	1271393	37.3246	ug/mL		87
34) 2-Methylnaphthalene	8.587	142	1307493	16.2487	ug/mL		88
35) 1-Methylnaphthalene	8.710	142	1263753	16.1451	ug/mL		89
37) Hexachlorocyclopentadiene	8.785	237	677767	32.4466	ug/mL		98
38) 2,4,6-Trichlorophenol	8.924	196	840935	34.2468	ug/mL		91

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ05.D
Acq On : 19 Jun 2012 5:16 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 20 10:41:34 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.967	196	897359	35.3528	ug/mL		85
40) 2-Fluorobiphenyl	9.025	172	1596658	16.8339	ug/mL		91
41) 2-Chloronaphthalene	9.191	162	1211449	16.6795	ug/mL		91
42) 2-Nitroaniline	9.303	65	911758	39.9706	ug/mL		97
43) Dimethylphthalate	9.517	163	2635360	33.8711	ug/mL		96
44) 2,6-Dinitrotoluene	9.592	165	668721	31.2309	ug/mL		95
45) Acenaphthylene	9.704	152	1811295	15.4407	ug/mL		93
46) 3-Nitroaniline	9.811	138	541333m	21.5344	ug/mL		
47) Acenaphthene	9.923	154	1259265	16.6349	ug/mL		97
48) 2,4-Dinitrophenol	9.928	184	265901	29.6407	ug/mL		94
49) 4-Nitrophenol	9.992	109	354826	35.0608	ug/mL	#	78
50) Dibenzofuran	10.131	168	1664287	17.6050	ug/mL		77
51) 2,4-Dinitrotoluene	10.099	165	874512	32.2172	ug/mL		92
52) 2,3,4,6-Tetrachlorophenol	10.281	232	747054	37.1089	ug/mL		90
53) Diethylphthalate	10.377	149	1329219	16.9116	ug/mL		95
54) 4-Chlorophenyl-phenylether	10.537	204	719764	17.5736	ug/mL	#	77
55) Fluorene	10.559	166	1408123	16.7108	ug/mL		84
56) 4-Nitroaniline	10.569	138	497673	20.5739	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.858	330	220938	16.2279	ug/mL	#	80
59) 4,6-Dinitro-2-methylphenol	10.607	198	491144	31.8518	ug/mL	#	78
60) N-Nitrosodiphenylamine	10.682	169	990105	15.9037	ug/mL		90
61) Azobenzene	10.740	77	1720521	20.3831	ug/mL		96
62) 4-Bromophenyl-phenylether	11.152	248	438910	16.6630	ug/mL	#	85
63) Hexachlorobenzene	11.258	284	867091	32.1589	ug/mL		88
64) Pentachlorophenol	11.483	266	625304	34.8032	ug/mL		98
65) Phenanthrene	11.761	178	1866349	16.2166	ug/mL		91
66) Anthracene	11.819	178	1948867	16.7258	ug/mL		89
67) Carbazole	12.012	167	3068146	32.3692	ug/mL		77
68) Di-n-butylphthalate	12.396	149	2271449	16.8519	ug/mL		95
69) Fluoranthene	13.240	202	2260627	17.1581	ug/mL		96
71) Benzidine	13.379	184	486486	8.6244	ug/mL		91
72) Pyrene	13.529	202	2232515	15.7737	ug/mL		87
73) Terphenyl-d14	13.684	244	1702275	16.2419	ug/mL		89
74) Butylbenzylphthalate	14.272	149	1078900	13.8577	ug/mL		87
75) 3,3'-Dichlorobenzidine	15.084	252	1364786	28.1531	ug/mL		97
76) Benzo(a)anthracene	15.148	228	2195639	16.5748	ug/mL		99
77) bis(2-Ethylhexyl)phthalate	15.094	149	1522693	14.7794	ug/mL		99
78) Chrysene	15.217	228	2031406	17.1722	ug/mL		90
80) Di-n-octylphthalate	16.296	149	2465653	14.0795	ug/mL		97
81) Benzo(b)fluoranthene	17.263	252	2072115	15.9309	ug/mL		98
82) Benzo(k)fluoranthene	17.327	252	2118551	17.4202	ug/mL		97
83) Benzo(a)pyrene	18.064	252	1836770	16.4585	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.318	276	2071252	14.8122	ug/mL		91

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ05.D
Acq On : 19 Jun 2012 5:16 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 20 10:41:34 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

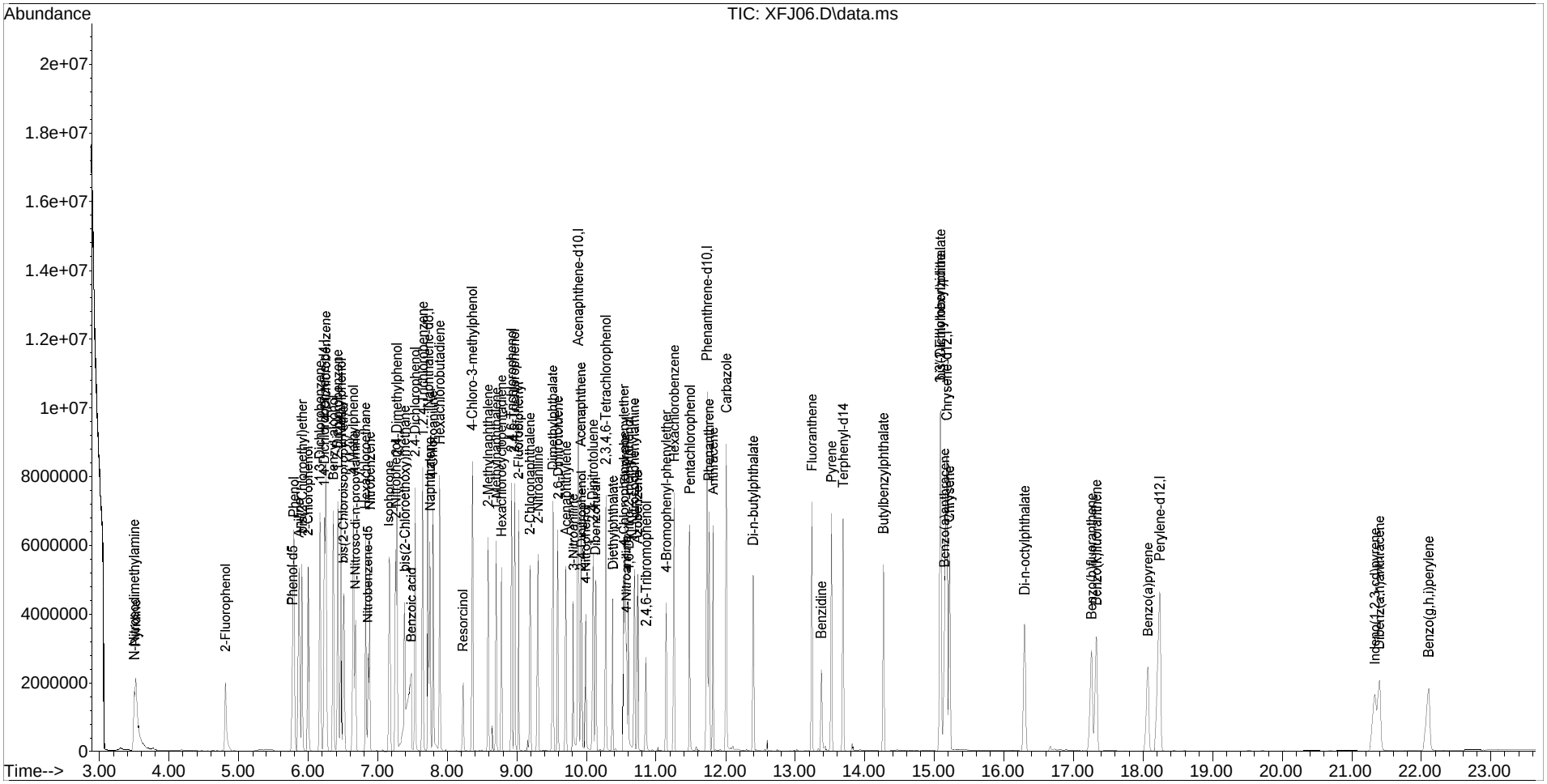
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.387	278	1760825	15.0137	ug/mL	97
86) Benzo(g,h,i)perylene	22.098	276	1583523	13.5059	ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ06.D
Acq On : 19 Jun 2012 5:52 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 10:43:02 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ06.D
Acq On : 19 Jun 2012 5:52 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 10:43:02 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.231	152	1274410	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.727	136	3926840	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.886	164	2482608	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.734	188	4146161	40.0000	ug/mL		0.00
70) Chrysene-d12	15.180	240	4415192	40.0000	ug/mL		0.00
79) Perylene-d12	18.241	264	4537549	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.523	79	2363040	47.7459	ug/mL		75
3) N-Nitrosodimethylamine	3.502	42	799667	32.0911	ug/mL	#	33
4) 2-Fluorophenol	4.816	112	940413	19.9210	ug/mL		79
5) Phenol-d5	5.777	99	1286041	21.8914	ug/mL		83
6) Phenol	5.799	94	2444833	47.1646	ug/mL		72
7) Aniline	5.868	93	2787672m	44.9586	ug/mL		
8) bis(2-Chloroethyl)ether	5.911	93	1897346	47.4064	ug/mL		95
9) 2-Chlorophenol	6.002	128	1741876	38.9741	ug/mL		96
10) 1,3-Dichlorobenzene	6.173	146	1988765	43.3801	ug/mL		94
11) 1,4-Dichlorobenzene	6.253	146	1942021	43.2387	ug/mL		85
12) Benzyl alcohol	6.370	108	1274281	42.4726	ug/mL		95
13) 1,2-Dichlorobenzene	6.429	146	1882741	43.8028	ug/mL		93
14) 2-Methylphenol	6.477	107	1519036	45.3667	ug/mL		97
15) bis(2-Chloroisopropyl) ether	6.515	45	1814420	34.2085	ug/mL		86
16) 4-Methylphenol	6.653	107	2181488	43.0116	ug/mL		90
17) N-Nitroso-di-n-propylamine	6.686	70	1287171	48.1354	ug/mL	#	68
18) Hexachloroethane	6.824	117	843075	43.9555	ug/mL		99
20) Nitrobenzene-d5	6.862	82	1221083	24.9487	ug/mL	#	69
21) Nitrobenzene	6.889	77	2141356	52.9913	ug/mL		96
22) Isophorone	7.166	82	3769399	51.2430	ug/mL		99
23) 2-Nitrophenol	7.262	139	997163	40.8205	ug/mL		91
24) 2,4-Dimethylphenol	7.279	107	1680346	43.9950	ug/mL		88
25) bis(2-Chloroethoxy)methane	7.391	93	1118051	23.0450	ug/mL		95
26) Benzoic acid	7.487	105	2959909	98.4175	ug/mL		96
27) 2,4-Dichlorophenol	7.540	162	1473610	43.1299	ug/mL		97
28) 1,2,4-Trichlorobenzene	7.652	180	1564495	44.3655	ug/mL		97
29) Naphthalene	7.754	128	2235901	19.1680	ug/mL		88
30) 4-Chloroaniline	7.797	127	1989750	40.5843	ug/mL		80
31) Hexachlorobutadiene	7.893	225	927279	47.4017	ug/mL		98
32) Resorcinol	8.229	110	732251	19.8717	ug/mL		94
33) 4-Chloro-3-methylphenol	8.363	107	1610949	46.6745	ug/mL		90
34) 2-Methylnaphthalene	8.587	142	1635544	20.0597	ug/mL		88
35) 1-Methylnaphthalene	8.710	142	1595760	20.1200	ug/mL		87
37) Hexachlorocyclopentadiene	8.785	237	867188	40.2323	ug/mL		99
38) 2,4,6-Trichlorophenol	8.924	196	1075707	42.4546	ug/mL		91

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ06.D
Acq On : 19 Jun 2012 5:52 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 10:43:02 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.967	196	1126227	42.9989	ug/mL		84
40) 2-Fluorobiphenyl	9.025	172	1962200	20.0489	ug/mL		88
41) 2-Chloronaphthalene	9.191	162	1527082	20.3758	ug/mL		91
42) 2-Nitroaniline	9.309	65	1179338	50.1041	ug/mL		98
43) Dimethylphthalate	9.517	163	3280061	40.8550	ug/mL		95
44) 2,6-Dinitrotoluene	9.597	165	861980	39.0130	ug/mL		94
45) Acenaphthylene	9.709	152	2275686	18.8002	ug/mL		92
46) 3-Nitroaniline	9.816	138	813496m	31.3615	ug/mL		
47) Acenaphthene	9.923	154	1620997	20.7519	ug/mL		96
48) 2,4-Dinitrophenol	9.934	184	385565	37.6304	ug/mL	#	18
49) 4-Nitrophenol	9.998	109	473766	45.3674	ug/mL	#	76
50) Dibenzofuran	10.137	168	2106921	21.5987	ug/mL		79
51) 2,4-Dinitrotoluene	10.099	165	1128597	40.2934	ug/mL		98
52) 2,3,4,6-Tetrachlorophenol	10.281	232	951442	45.8017	ug/mL		91
53) Diethylphthalate	10.382	149	1670155	20.5929	ug/mL		94
54) 4-Chlorophenyl-phenylether	10.543	204	914388	21.6359	ug/mL	#	80
55) Fluorene	10.559	166	1762656	20.2720	ug/mL		85
56) 4-Nitroaniline	10.580	138	708223	28.3738	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.858	330	286703	20.4078	ug/mL	#	83
59) 4,6-Dinitro-2-methylphenol	10.612	198	668554	42.2985	ug/mL	#	76
60) N-Nitrosodiphenylamine	10.687	169	1278311	20.0317	ug/mL		90
61) Azobenzene	10.740	77	2176175	25.1517	ug/mL		96
62) 4-Bromophenyl-phenylether	11.152	248	556679	20.6179	ug/mL	#	84
63) Hexachlorobenzene	11.258	284	1075298	38.9070	ug/mL		83
64) Pentachlorophenol	11.488	266	795422	43.1905	ug/mL		98
65) Phenanthrene	11.761	178	2350100	19.9213	ug/mL		90
66) Anthracene	11.825	178	2436847	20.4031	ug/mL		87
67) Carbazole	12.012	167	3668738m	37.7603	ug/mL		
68) Di-n-butylphthalate	12.402	149	2879379	20.8404	ug/mL		95
69) Fluoranthene	13.240	202	2821800	20.8944	ug/mL		91
71) Benzidine	13.379	184	1091274	19.0514	ug/mL		91
72) Pyrene	13.529	202	2815147	19.5873	ug/mL		84
73) Terphenyl-d14	13.689	244	2125298	19.9693	ug/mL		91
74) Butylbenzylphthalate	14.271	149	1384634	17.5137	ug/mL		86
75) 3,3'-Dichlorobenzidine	15.089	252	1785918	36.2792	ug/mL		95
76) Benzo(a)anthracene	15.148	228	2757368	20.4982	ug/mL		97
77) bis(2-Ethylhexyl)phthalate	15.094	149	1923567	18.3859	ug/mL		100
78) Chrysene	15.217	228	2541063	21.1534	ug/mL		88
80) Di-n-octylphthalate	16.302	149	3193558	17.9967	ug/mL		96
81) Benzo(b)fluoranthene	17.268	252	2686614	20.3842	ug/mL		99
82) Benzo(k)fluoranthene	17.333	252	2662229	21.6034	ug/mL		98
83) Benzo(a)pyrene	18.075	252	2357196	20.8446	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.334	276	2698233	19.0428	ug/mL		91

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ06.D
Acq On : 19 Jun 2012 5:52 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 10:43:02 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

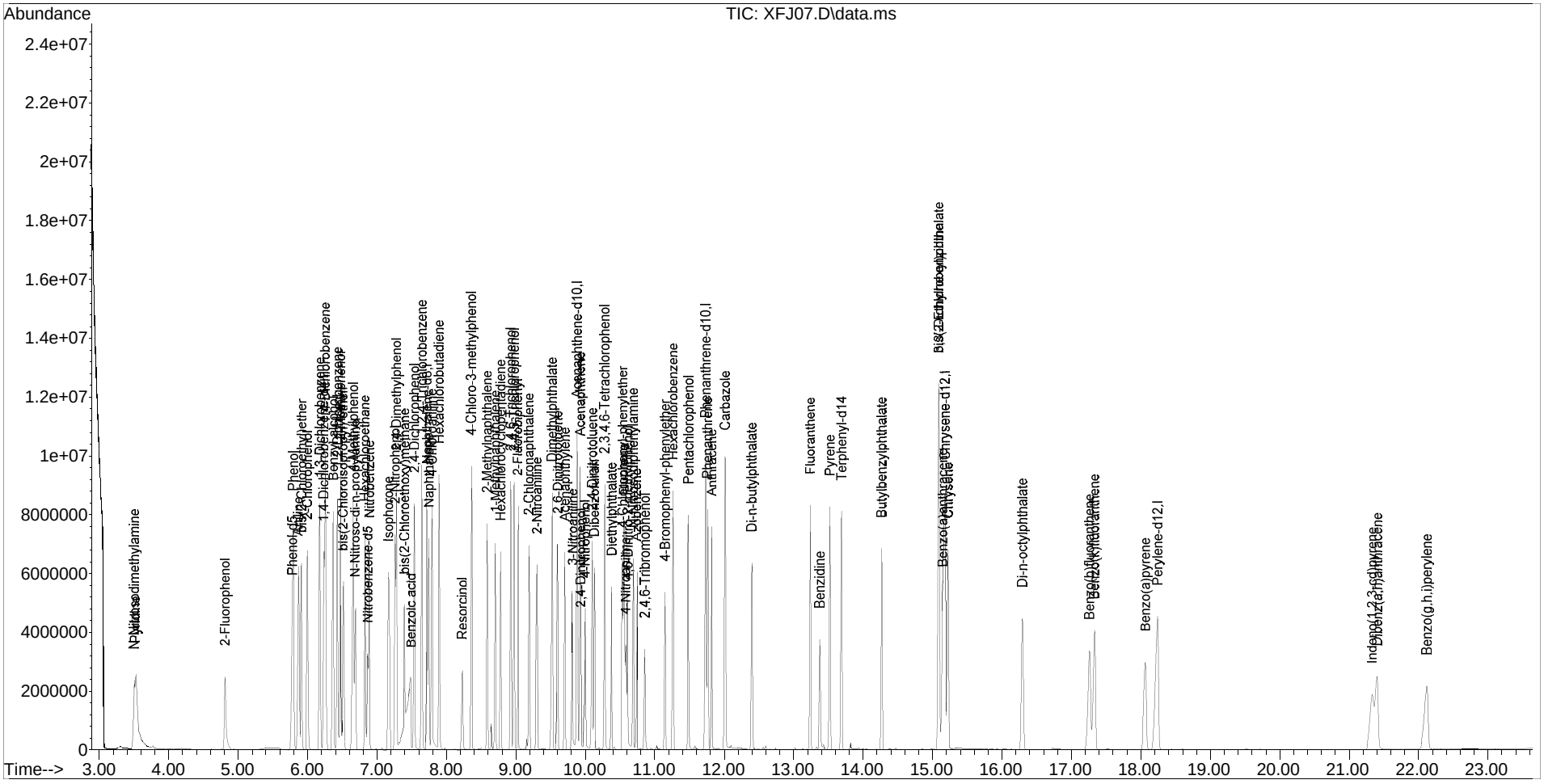
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.398	278	2301414	19.3656	ug/mL	98
86) Benzo(g,h,i)perylene	22.114	276	2192601	18.4553	ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ07.D
Acq On : 19 Jun 2012 6:26 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL6
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 10:44:30 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ07.D
Acq On : 19 Jun 2012 6:26 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL6
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 10:44:30 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.232	152	1250318	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.727	136	3884992	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.886	164	2443786	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.734	188	4074585	40.0000	ug/mL		0.00
70) Chrysene-d12	15.180	240	4348886	40.0000	ug/mL		0.00
79) Perylene-d12	18.241	264	4473002	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.523	79	2942190	60.5933	ug/mL		76
3) N-Nitrosodimethylamine	3.507	42	979260	40.0556	ug/mL	#	30
4) 2-Fluorophenol	4.816	112	1158735	25.0188	ug/mL		79
5) Phenol-d5	5.783	99	1587465	27.5430	ug/mL		81
6) Phenol	5.799	94	2997030	58.9314	ug/mL		69
7) Aniline	5.868	93	3439714m	56.5435	ug/mL		
8) bis(2-Chloroethyl)ether	5.916	93	2258232	57.5106	ug/mL		97
9) 2-Chlorophenol	6.002	128	2140479	48.8156	ug/mL		93
10) 1,3-Dichlorobenzene	6.178	146	2415333	53.6998	ug/mL		93
11) 1,4-Dichlorobenzene	6.253	146	2353781	53.4162	ug/mL		83
12) Benzyl alcohol	6.376	108	1573564	53.4585	ug/mL		94
13) 1,2-Dichlorobenzene	6.435	146	2264937	53.7102	ug/mL		93
14) 2-Methylphenol	6.477	107	1865082	56.7749	ug/mL		96
15) bis(2-Chloroisopropyl) ether	6.520	45	2254776	43.3300	ug/mL		84
16) 4-Methylphenol	6.659	107	2678487	53.8283	ug/mL		90
17) N-Nitroso-di-n-propylamine	6.691	70	1571755	59.9103	ug/mL	#	68
18) Hexachloroethane	6.825	117	1025231	54.4825	ug/mL		98
20) Nitrobenzene-d5	6.867	82	1501512	31.0088	ug/mL	#	68
21) Nitrobenzene	6.889	77	2600722	65.0523	ug/mL		96
22) Isophorone	7.172	82	4618885	63.4677	ug/mL		98
23) 2-Nitrophenol	7.263	139	1229715	50.8827	ug/mL		93
24) 2,4-Dimethylphenol	7.284	107	2074450	54.8985	ug/mL		86
25) bis(2-Chloroethoxy)methane	7.396	93	1351889	28.1649	ug/mL		94
26) Benzoic acid	7.498	105	3334213	112.0574	ug/mL		96
27) 2,4-Dichlorophenol	7.546	162	1782584	52.7350	ug/mL		95
28) 1,2,4-Trichlorobenzene	7.653	180	1878592	53.8465	ug/mL		97
29) Naphthalene	7.754	128	2671397	23.1481	ug/mL		86
30) 4-Chloroaniline	7.797	127	2435182m	50.2047	ug/mL		
31) Hexachlorobutadiene	7.893	225	1117807	57.7569	ug/mL		98
32) Resorcinol	8.235	110	1093670	29.9995	ug/mL		95
33) 4-Chloro-3-methylphenol	8.363	107	1943600	56.9191	ug/mL		89
34) 2-Methylnaphthalene	8.588	142	1997035	24.7572	ug/mL		88
35) 1-Methylnaphthalene	8.710	142	1939436	24.7166	ug/mL		87
37) Hexachlorocyclopentadiene	8.785	237	1060389	49.9772	ug/mL		98
38) 2,4,6-Trichlorophenol	8.924	196	1300320	52.1346	ug/mL		89

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ07.D
Acq On : 19 Jun 2012 6:26 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL6
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 10:44:30 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.972	196	1359407m	52.7261	ug/mL		
40) 2-Fluorobiphenyl	9.026	172	2366839	24.5674	ug/mL		88
41) 2-Chloronaphthalene	9.191	162	1861415	25.2313	ug/mL		92
42) 2-Nitroaniline	9.309	65	1456563	62.8650	ug/mL		97
43) Dimethylphthalate	9.522	163	3934026	49.7789	ug/mL		95
44) 2,6-Dinitrotoluene	9.603	165	1057411	48.6185	ug/mL		88
45) Acenaphthylene	9.709	152	2759955	23.1631	ug/mL		90
46) 3-Nitroaniline	9.822	138	1053137m	41.2450	ug/mL		
47) Acenaphthene	9.928	154	1970519	25.6272	ug/mL		97
48) 2,4-Dinitrophenol	9.939	184	522593	48.0734	ug/mL	#	1
49) 4-Nitrophenol	10.003	109	577642	56.1932	ug/mL	#	74
50) Dibenzofuran	10.137	168	2494503	25.9782	ug/mL		74
51) 2,4-Dinitrotoluene	10.105	165	1371913	49.7584	ug/mL		98
52) 2,3,4,6-Tetrachlorophenol	10.281	232	1135464	55.5287	ug/mL		91
53) Diethylphthalate	10.383	149	2029080	25.4159	ug/mL		93
54) 4-Chlorophenyl-phenylether	10.543	204	1106112	26.5882	ug/mL	#	78
55) Fluorene	10.559	166	2131133	24.8992	ug/mL		85
56) 4-Nitroaniline	10.586	138	1047082	42.6160	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.858	330	350098	25.3162	ug/mL	#	85
59) 4,6-Dinitro-2-methylphenol	10.618	198	834523	53.7266	ug/mL	#	75
60) N-Nitrosodiphenylamine	10.687	169	1545156	24.6386	ug/mL		89
61) Azobenzene	10.741	77	2623769	30.8576	ug/mL		96
62) 4-Bromophenyl-phenylether	11.152	248	681549	25.6862	ug/mL	#	83
63) Hexachlorobenzene	11.259	284	1269567	46.7431	ug/mL		80
64) Pentachlorophenol	11.488	266	972471	53.7316	ug/mL		97
65) Phenanthrene	11.761	178	2788351	24.0514	ug/mL		89
66) Anthracene	11.825	178	2894130	24.6575	ug/mL		85
67) Carbazole	12.017	167	4463017m	46.7423	ug/mL		
68) Di-n-butylphthalate	12.402	149	3438396	25.3237	ug/mL		93
69) Fluoranthene	13.241	202	3381404	25.4779	ug/mL		89
71) Benzidine	13.380	184	1577758	27.9644	ug/mL		92
72) Pyrene	13.529	202	3317459	23.4343	ug/mL		82
73) Terphenyl-d14	13.689	244	2560866	24.4287	ug/mL		89
74) Butylbenzylphthalate	14.272	149	1707405	21.9256	ug/mL		86
75) 3,3'-Dichlorobenzidine	15.094	252	2181829	44.9975	ug/mL		95
76) Benzo(a)anthracene	15.148	228	3337685	25.1906	ug/mL		95
77) bis(2-Ethylhexyl)phthalate	15.094	149	2312769	22.4430	ug/mL		99
78) Chrysene	15.223	228	3054045	25.8114	ug/mL		87
80) Di-n-octylphthalate	16.296	149	3929392	22.4628	ug/mL		94
81) Benzo(b)fluoranthene	17.269	252	3305521	25.4419	ug/mL		99
82) Benzo(k)fluoranthene	17.338	252	3190743	26.2658	ug/mL		97
83) Benzo(a)pyrene	18.075	252	2892222	25.9449	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.334	276	3346519	23.9589	ug/mL		94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ07.D
Acq On : 19 Jun 2012 6:26 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL6
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 10:44:30 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

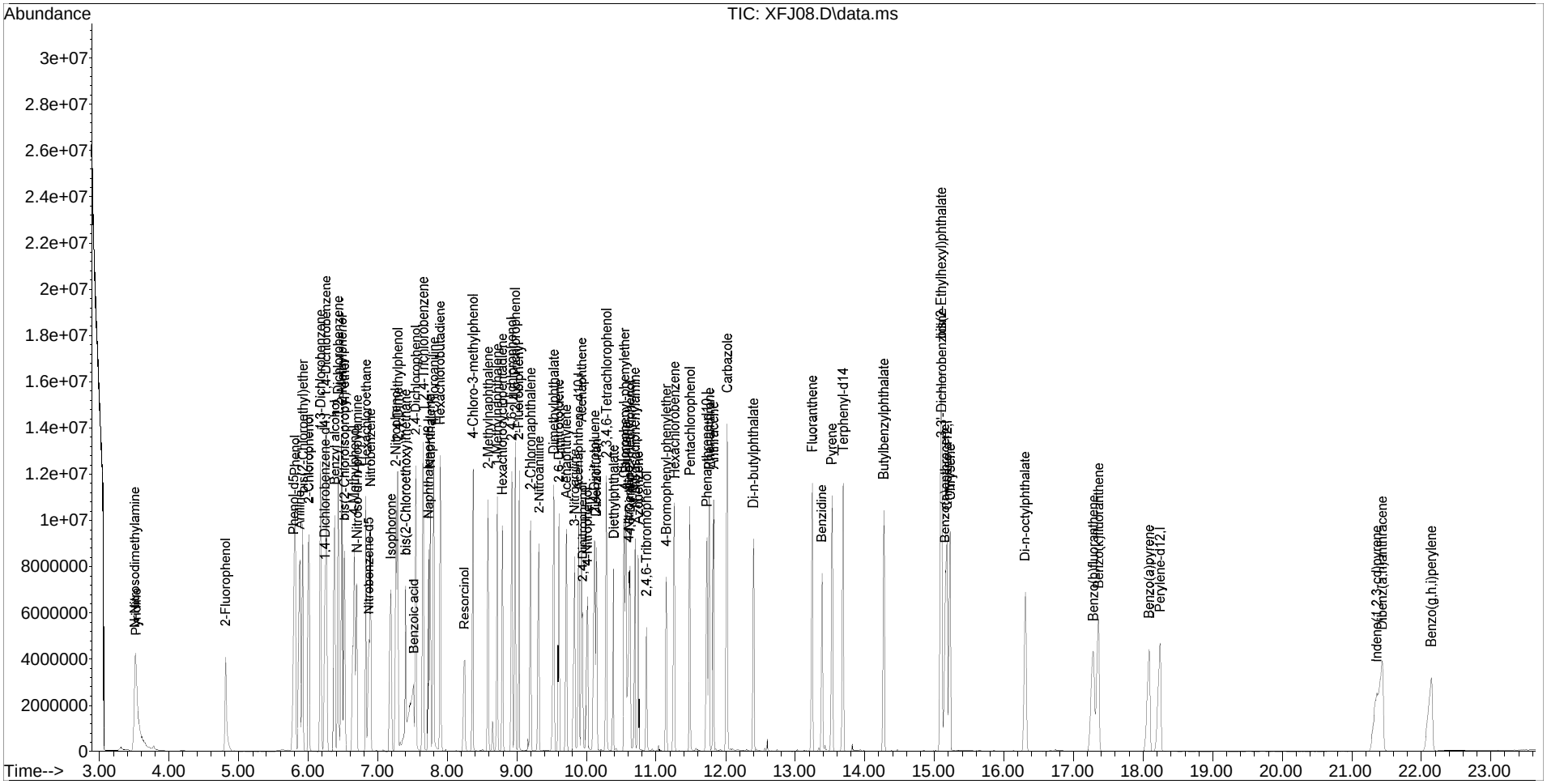
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.409	278	2835993	24.2082	ug/mL	97
86) Benzo(g,h,i)perylene	22.119	276	2732661	23.3329	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ08.D
Acq On : 19 Jun 2012 7:00 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL7
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 10:51:03 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ08.D
Acq On : 19 Jun 2012 7:00 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL7
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 10:51:03 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.237	152	1270101	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.732	136	3964877	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.891	164	2487907	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.739	188	4152456	40.0000	ug/mL		0.00
70) Chrysene-d12	15.185	240	4308913	40.0000	ug/mL		0.00
79) Perylene-d12	18.246	264	4482523	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.528	79	4756405	96.4306	ug/mL		76
3) N-Nitrosodimethylamine	3.512	42	1593673	64.1721	ug/mL	#	31
4) 2-Fluorophenol	4.816	112	1857380	39.4789	ug/mL		81
5) Phenol-d5	5.793	99	2547408	43.5098	ug/mL		82
6) Phenol	5.809	94	4625283	89.5315	ug/mL		66
7) Aniline	5.879	93	5404117m	87.4515	ug/mL		
8) bis(2-Chloroethyl)ether	5.921	93	3372100	84.5400	ug/mL		88
9) 2-Chlorophenol	6.007	128	3333688	74.8437	ug/mL		91
10) 1,3-Dichlorobenzene	6.178	146	3559249	77.8997	ug/mL		88
11) 1,4-Dichlorobenzene	6.258	146	3391964	75.7776	ug/mL	#	81
12) Benzyl alcohol	6.386	108	2513493	84.0606	ug/mL		93
13) 1,2-Dichlorobenzene	6.434	146	3302493	77.0947	ug/mL		88
14) 2-Methylphenol	6.488	107	2876936	86.2126	ug/mL		96
15) bis(2-Chloroisopropyl) ether	6.525	45	3516945	66.5324	ug/mL		83
16) 4-Methylphenol	6.669	107	4283644	84.7455	ug/mL		90
17) N-Nitroso-di-n-propylamine	6.707	70	2482115	93.1367	ug/mL	#	69
18) Hexachloroethane	6.830	117	1578519	82.5786	ug/mL		98
20) Nitrobenzene-d5	6.872	82	2344050	47.4334	ug/mL	#	69
21) Nitrobenzene	6.899	77	3915252	95.9597	ug/mL		92
22) Isophorone	7.198	82	7132954	96.0385	ug/mL		98
23) 2-Nitrophenol	7.268	139	1907425	77.3345	ug/mL		95
24) 2,4-Dimethylphenol	7.294	107	3263491	84.6253	ug/mL		85
25) bis(2-Chloroethoxy)methane	7.401	93	2131425	43.5109	ug/mL		93
26) Benzoic acid	7.519	105	4139898	136.3318	ug/mL		97
27) 2,4-Dichlorophenol	7.551	162	2648690	76.7786	ug/mL		91
28) 1,2,4-Trichlorobenzene	7.658	180	2721756	76.4424	ug/mL		96
29) Naphthalene	7.759	128	3887409	33.0063	ug/mL		80
30) 4-Chloroaniline	7.807	127	3592604m	72.5743	ug/mL		
31) Hexachlorobutadiene	7.898	225	1559591	78.9601	ug/mL		97
32) Resorcinol	8.251	110	2250072	60.4763	ug/mL		95
33) 4-Chloro-3-methylphenol	8.374	107	2912955	83.5882	ug/mL		90
34) 2-Methylnaphthalene	8.593	142	2988426	36.3011	ug/mL		87
35) 1-Methylnaphthalene	8.715	142	2900043	36.2141	ug/mL		88
37) Hexachlorocyclopentadiene	8.785	237	1645378	76.1730	ug/mL		97
38) 2,4,6-Trichlorophenol	8.929	196	1952793	76.9061	ug/mL		92

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ08.D
Acq On : 19 Jun 2012 7:00 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL7
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 10:51:03 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.977	196	1986037m	75.6646	ug/mL		
40) 2-Fluorobiphenyl	9.031	172	3417119	34.8402	ug/mL		83
41) 2-Chloronaphthalene	9.196	162	2819926	37.5460	ug/mL		92
42) 2-Nitroaniline	9.319	65	2294570	97.2770	ug/mL		96
43) Dimethylphthalate	9.533	163	5683254	70.6373	ug/mL		92
44) 2,6-Dinitrotoluene	9.608	165	1653813	74.6918	ug/mL		95
45) Acenaphthylene	9.714	152	4058448	33.4568	ug/mL		85
46) 3-Nitroaniline	9.832	138	1818204m	69.9452	ug/mL		
47) Acenaphthene	9.934	154	2826853m	36.1121	ug/mL		
48) 2,4-Dinitrophenol	9.950	184	938943	77.2509	ug/mL	#	1
49) 4-Nitrophenol	10.019	109	953627	91.1240	ug/mL	#	73
50) Dibenzofuran	10.142	168	3699433	37.8433	ug/mL		69
51) 2,4-Dinitrotoluene	10.120	165	2134690	76.0508	ug/mL		94
52) 2,3,4,6-Tetrachlorophenol	10.291	232	1690381	81.2003	ug/mL		92
53) Diethylphthalate	10.393	149	3047765	37.4987	ug/mL		90
54) 4-Chlorophenyl-phenylether	10.548	204	1666853	39.3565	ug/mL	#	75
55) Fluorene	10.569	166	3134348	35.9708	ug/mL		85
56) 4-Nitroaniline	10.612	138	1740061	69.5641	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.863	330	550279	39.0860	ug/mL	#	85
59) 4,6-Dinitro-2-methylphenol	10.628	198	1362470	86.0709	ug/mL	#	79
60) N-Nitrosodiphenylamine	10.697	169	2353862	36.8301	ug/mL		85
61) Azobenzene	10.746	77	3902865	45.0400	ug/mL		98
62) 4-Bromophenyl-phenylether	11.157	248	1050311	38.8418	ug/mL	#	82
63) Hexachlorobenzene	11.269	284	1832312	66.1972	ug/mL		82
64) Pentachlorophenol	11.493	266	1432514	77.6659	ug/mL		97
65) Phenanthrene	11.771	178	4068032	34.4315	ug/mL		84
66) Anthracene	11.830	178	4178327	34.9311	ug/mL		80
67) Carbazole	12.022	167	6647028	68.3104	ug/mL		63
68) Di-n-butylphthalate	12.402	149	4973412	35.9421	ug/mL		89
69) Fluoranthene	13.246	202	4922404	36.3933	ug/mL		82
71) Benzidine	13.385	184	3245419	58.0559	ug/mL		94
72) Pyrene	13.534	202	4795624	34.1902	ug/mL		78
73) Terphenyl-d14	13.694	244	3647240	35.1147	ug/mL		83
74) Butylbenzylphthalate	14.277	149	2623596	34.0034	ug/mL		86
75) 3,3'-Dichlorobenzidine	15.110	252	3152933	65.6285	ug/mL		94
76) Benzo(a)anthracene	15.158	228	5005654	38.1297	ug/mL		92
77) bis(2-Ethylhexyl)phthalate	15.099	149	3203057	31.3707	ug/mL		97
78) Chrysene	15.233	228	4524297	38.5920	ug/mL		84
80) Di-n-octylphthalate	16.307	149	5993527	34.1899	ug/mL		92
81) Benzo(b)fluoranthene	17.290	252	5158580	39.6202	ug/mL		98
82) Benzo(k)fluoranthene	17.359	252	4690326	38.5281	ug/mL		97
83) Benzo(a)pyrene	18.091	252	4517483	40.4384	ug/mL		97
84) Indeno(1,2,3-cd)pyrene	21.361	276	5423383	38.7453	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ08.D
Acq On : 19 Jun 2012 7:00 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL7
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 10:51:03 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

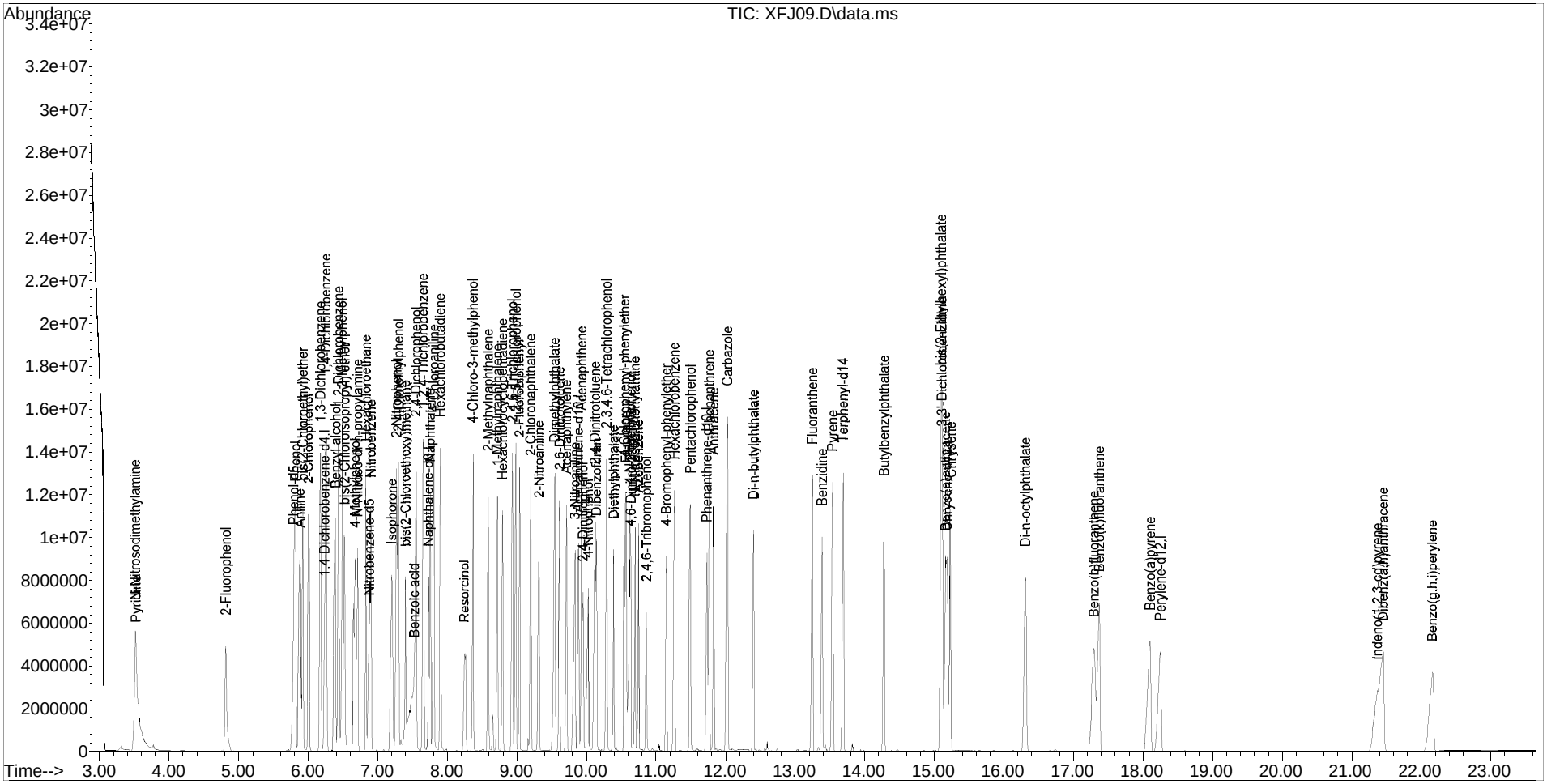
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.435	278	4521001	38.5096	ug/mL	96
86) Benzo(g,h,i)perylene	22.146	276	4403037	37.5156	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ09.D
Acq On : 19 Jun 2012 7:34 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL7
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 20 10:47:54 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ09.D
Acq On : 19 Jun 2012 7:34 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL7
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 20 10:47:54 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.237	152	1254415	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.733	136	3923705	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.891	164	2484523	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.739	188	4119827	40.0000	ug/mL		0.00
70) Chrysene-d12	15.190	240	4244290	40.0000	ug/mL		0.01
79) Perylene-d12	18.251	264	4399026	40.0000	ug/mL		0.01
Target Compounds							Qvalue
2) Pyridine	3.528	79	5961571	122.3753	ug/mL		76
3) N-Nitrosodimethylamine	3.518	42	1973132	80.4452	ug/mL	#	27
4) 2-Fluorophenol	4.821	112	2321067	49.9515	ug/mL		79
5) Phenol-d5	5.799	99	3152198	54.5129	ug/mL		82
6) Phenol	5.820	94	5610906	109.9683	ug/mL		66
7) Aniline	5.884	93	6704082m	109.8446	ug/mL		
8) bis(2-Chloroethyl)ether	5.927	93	3959518m	100.5081	ug/mL		
9) 2-Chlorophenol	6.007	128	4066613	92.4400	ug/mL		88
10) 1,3-Dichlorobenzene	6.183	146	4226475	93.6597	ug/mL		87
11) 1,4-Dichlorobenzene	6.258	146	3916330	88.5862	ug/mL	#	77
12) Benzyl alcohol	6.397	108	3135461	106.1728	ug/mL		92
13) 1,2-Dichlorobenzene	6.440	146	3844265	90.8642	ug/mL		87
14) 2-Methylphenol	6.493	107	3469992	105.2848	ug/mL		95
15) bis(2-Chloroisopropyl) ether	6.525	45	4371907	83.7404	ug/mL		84
16) 4-Methylphenol	6.680	107	5384629m	107.8590	ug/mL		
17) N-Nitroso-di-n-propylamine	6.712	70	3074715	116.8157	ug/mL	#	72
18) Hexachloroethane	6.830	117	1889736	100.0958	ug/mL		97
20) Nitrobenzene-d5	6.878	82	2929622	59.9048	ug/mL	#	68
21) Nitrobenzene	6.904	77	4789185	118.6107	ug/mL		90
22) Isophorone	7.209	82	8803640	119.7765	ug/mL		96
23) 2-Nitrophenol	7.273	139	2306350	94.4897	ug/mL		95
24) 2,4-Dimethylphenol	7.300	107	3954997	103.6328	ug/mL		84
25) bis(2-Chloroethoxy)methane	7.401	93	2627303	54.1965	ug/mL		91
26) Benzoic acid	7.530	105	4641343m	154.4488	ug/mL		
27) 2,4-Dichlorophenol	7.556	162	3162198m	92.6257	ug/mL		
28) 1,2,4-Trichlorobenzene	7.658	180	3172049	90.0240	ug/mL		95
29) Naphthalene	7.759	128	4648770	39.8849	ug/mL		78
30) 4-Chloroaniline	7.813	127	4462586m	91.0948	ug/mL		
31) Hexachlorobutadiene	7.898	225	1788507	91.5000	ug/mL		98
32) Resorcinol	8.251	110	3100195	84.1998	ug/mL		95
33) 4-Chloro-3-methylphenol	8.374	107	3502515	101.5604	ug/mL		90
34) 2-Methylnaphthalene	8.593	142	3578656	43.9268	ug/mL		85
35) 1-Methylnaphthalene	8.721	142	3453857	43.5824	ug/mL		85
37) Hexachlorocyclopentadiene	8.790	237	1957687	90.7549	ug/mL		99
38) 2,4,6-Trichlorophenol	8.935	196	2363273	93.1986	ug/mL		91

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ09.D
Acq On : 19 Jun 2012 7:34 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL7
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 20 10:47:54 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.983	196	2346223m	89.5089	ug/mL		
40) 2-Fluorobiphenyl	9.036	172	3970289	40.5353	ug/mL		81
41) 2-Chloronaphthalene	9.196	162	3378600	45.0457	ug/mL		94
42) 2-Nitroaniline	9.325	65	2841948	120.6469	ug/mL		96
43) Dimethylphthalate	9.544	163	6725740	83.7082	ug/mL		91
44) 2,6-Dinitrotoluene	9.613	165	2054099	92.8964	ug/mL		95
45) Acenaphthylene	9.715	152	4818955	39.7803	ug/mL		81
46) 3-Nitroaniline	9.843	138	2275373m	87.6514	ug/mL		
47) Acenaphthene	9.934	154	3409778	43.6182	ug/mL		98
48) 2,4-Dinitrophenol	9.955	184	1264514	100.7193	ug/mL	#	1
49) 4-Nitrophenol	10.030	109	1201322	114.9489	ug/mL	#	72
50) Dibenzofuran	10.147	168	4419446	45.2703	ug/mL		68
51) 2,4-Dinitrotoluene	10.126	165	2626265	93.6912	ug/mL		98
52) 2,3,4,6-Tetrachlorophenol	10.291	232	1985873	95.5247	ug/mL		91
53) Diethylphthalate	10.393	149	3662503	45.1236	ug/mL		89
54) 4-Chlorophenyl-phenylether	10.548	204	2000774	47.3051	ug/mL	#	71
55) Fluorene	10.569	166	3767190	43.2924	ug/mL		84
56) 4-Nitroaniline	10.628	138	2168615	86.8149	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.868	330	667929	47.5072	ug/mL	#	85
59) 4,6-Dinitro-2-methylphenol	10.639	198	1726311	109.9194	ug/mL	#	79
60) N-Nitrosodiphenylamine	10.703	169	2830934	44.6455	ug/mL		84
61) Azobenzene	10.751	77	4672611	54.3501	ug/mL		98
62) 4-Bromophenyl-phenylether	11.157	248	1274843	47.5186	ug/mL	#	81
63) Hexachlorobenzene	11.269	284	2133355	77.6836	ug/mL		78
64) Pentachlorophenol	11.499	266	1722610	94.1336	ug/mL		97
65) Phenanthrene	11.771	178	4797867	40.9304	ug/mL		82
66) Anthracene	11.835	178	4971791	41.8937	ug/mL		78
67) Carbazole	12.028	167	7881150	81.6348	ug/mL		60
68) Di-n-butylphthalate	12.407	149	5894032	42.9327	ug/mL		88
69) Fluoranthene	13.251	202	5757465	42.9044	ug/mL		80
71) Benzidine	13.390	184	4229531	76.8122	ug/mL		94
72) Pyrene	13.540	202	5668928	41.0317	ug/mL		75
73) Terphenyl-d14	13.695	244	4243168	41.4742	ug/mL		79
74) Butylbenzylphthalate	14.282	149	3193738	42.0231	ug/mL		87
75) 3,3'-Dichlorobenzidine	15.116	252	3714372	78.4921	ug/mL		92
76) Benzo(a)anthracene	15.164	228	6054301	46.8198	ug/mL		91
77) bis(2-Ethylhexyl)phthalate	15.100	149	3748877	37.2755	ug/mL		96
78) Chrysene	15.238	228	5414870m	46.8918	ug/mL		
80) Di-n-octylphthalate	16.312	149	7307505	42.4767	ug/mL		91
81) Benzo(b)fluoranthene	17.295	252	6729809	52.6690	ug/mL		95
82) Benzo(k)fluoranthene	17.370	252	5502601	46.0584	ug/mL		93
83) Benzo(a)pyrene	18.107	252	5622223	51.2827	ug/mL		96
84) Indeno(1,2,3-cd)pyrene	21.377	276	6718932	48.9120	ug/mL		99

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ09.D
Acq On : 19 Jun 2012 7:34 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL7
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 20 10:47:54 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

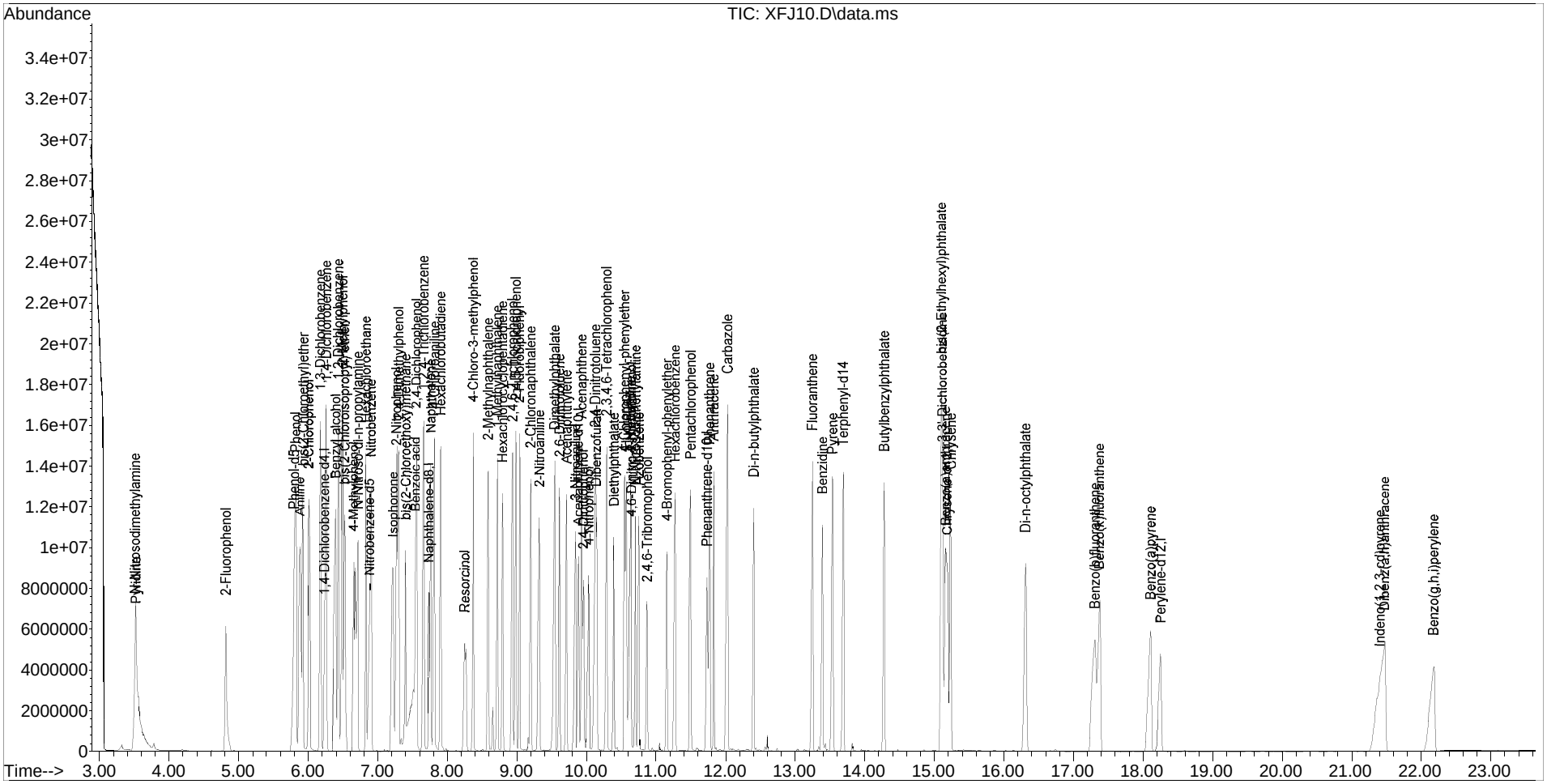
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.457	278	5587109	48.4939	ug/mL	95
86) Benzo(g,h,i)perylene	22.162	276	5462789	47.4286	ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ10.D
Acq On : 19 Jun 2012 8:08 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL9
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 20 10:50:12 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ10.D
Acq On : 19 Jun 2012 8:08 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL9
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 20 10:50:12 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.237	152	1246446	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.738	136	3936309	40.0000	ug/mL		0.01
36) Acenaphthene-d10	9.891	164	2445248	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.739	188	4085005	40.0000	ug/mL		0.00
70) Chrysene-d12	15.190	240	4138609	40.0000	ug/mL		0.01
79) Perylene-d12	18.251	264	4295295	40.0000	ug/mL		0.01
Target Compounds							Qvalue
2) Pyridine	3.528	79	7277425	150.3413	ug/mL		77
3) N-Nitrosodimethylamine	3.518	42	2430858	99.7405	ug/mL	#	28
4) 2-Fluorophenol	4.821	112	2823953	61.1626	ug/mL		81
5) Phenol-d5	5.804	99	3829839	66.6552	ug/mL		82
6) Phenol	5.825	94	6701287	132.1784	ug/mL		62
7) Aniline	5.884	93	8193159m	135.1010	ug/mL		
8) bis(2-Chloroethyl)ether	5.932	93	4510530m	115.2270	ug/mL		
9) 2-Chlorophenol	6.012	128	4874799	111.5197	ug/mL		86
10) 1,3-Dichlorobenzene	6.183	146	4834139	107.8106	ug/mL		85
11) 1,4-Dichlorobenzene	6.263	146	4433016	100.9145	ug/mL	#	76
12) Benzyl alcohol	6.402	108	3801657	129.5545	ug/mL		93
13) 1,2-Dichlorobenzene	6.440	146	4358965	103.6885	ug/mL		85
14) 2-Methylphenol	6.499	107	4081313	124.6250	ug/mL		94
15) bis(2-Chloroisopropyl) ether	6.531	45	5233970	100.8935	ug/mL		84
16) 4-Methylphenol	6.659	107	6523767m	131.5124	ug/mL		
17) N-Nitroso-di-n-propylamine	6.723	70	3657979	139.8637	ug/mL	#	72
18) Hexachloroethane	6.830	117	2198185	117.1782	ug/mL		95
20) Nitrobenzene-d5	6.883	82	3523482	71.8174	ug/mL	#	68
21) Nitrobenzene	6.910	77	5617878	138.6890	ug/mL		88
22) Isophorone	7.225	82	10298563	139.6667	ug/mL		95
23) 2-Nitrophenol	7.273	139	2753511m	112.4484	ug/mL		
24) 2,4-Dimethylphenol	7.305	107	4670479	121.9887	ug/mL		85
25) bis(2-Chloroethoxy)methane	7.407	93	3137515	64.5140	ug/mL		91
26) Benzoic acid	7.546	105	5163648	171.2792	ug/mL		98
27) 2,4-Dichlorophenol	7.562	162	3666027	107.0398	ug/mL		88
28) 1,2,4-Trichlorobenzene	7.663	180	3595384	101.7117	ug/mL		95
29) Naphthalene	7.765	128	5374227	45.9614	ug/mL		75
30) 4-Chloroaniline	7.818	127	5153222m	104.8559	ug/mL		
31) Hexachlorobutadiene	7.904	225	2030800	103.5631	ug/mL		97
32) Resorcinol	8.256	110	3925026m	106.2604	ug/mL		
33) 4-Chloro-3-methylphenol	8.379	107	4077137	117.8439	ug/mL		89
34) 2-Methylnaphthalene	8.598	142	4107708	50.2593	ug/mL		86
35) 1-Methylnaphthalene	8.721	142	4010779	50.4479	ug/mL		85
37) Hexachlorocyclopentadiene	8.790	237	2210542	104.1227	ug/mL		97
38) 2,4,6-Trichlorophenol	8.940	196	2688817	107.7400	ug/mL		91

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ10.D
Acq On : 19 Jun 2012 8:08 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL9
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 20 10:50:12 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.983	196	2681139m	103.9289	ug/mL		
40) 2-Fluorobiphenyl	9.036	172	4543664	47.1344	ug/mL		78
41) 2-Chloronaphthalene	9.202	162	3889478	52.6900	ug/mL		93
42) 2-Nitroaniline	9.330	65	3415852	147.3395	ug/mL		95
43) Dimethylphthalate	9.549	163	7742192	97.9066	ug/mL		90
44) 2,6-Dinitrotoluene	9.618	165	2416561	111.0441	ug/mL		95
45) Acenaphthylene	9.720	152	5557004	46.6097	ug/mL		79
46) 3-Nitroaniline	9.848	138	2798316m	109.5275	ug/mL		
47) Acenaphthene	9.934	154	3835809	49.8561	ug/mL		96
48) 2,4-Dinitrophenol	9.960	184	1551492	123.1141	ug/mL	#	1
49) 4-Nitrophenol	10.040	109	1461641m	142.1040	ug/mL		
50) Dibenzofuran	10.147	168	4911146	51.1150	ug/mL		63
51) 2,4-Dinitrotoluene	10.131	165	3017892	109.3916	ug/mL		93
52) 2,3,4,6-Tetrachlorophenol	10.297	232	2272715	111.0783	ug/mL		92
53) Diethylphthalate	10.398	149	4214458	52.7580	ug/mL		87
54) 4-Chlorophenyl-phenylether	10.548	204	2259461	54.2794	ug/mL	#	70
55) Fluorene	10.575	166	4281056	49.9880	ug/mL		82
56) 4-Nitroaniline	10.639	138	2609874	106.1577	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.874	330	778000	56.2249	ug/mL	#	81
59) 4,6-Dinitro-2-methylphenol	10.649	198	2048410	131.5403	ug/mL	#	79
60) N-Nitrosodiphenylamine	10.708	169	3342129	53.1566	ug/mL		85
61) Azobenzene	10.756	77	5434699	63.7533	ug/mL		95
62) 4-Bromophenyl-phenylether	11.162	248	1492634	56.1109	ug/mL	#	81
63) Hexachlorobenzene	11.274	284	2427636	89.1531	ug/mL		76
64) Pentachlorophenol	11.499	266	1941109	106.9779	ug/mL		97
65) Phenanthrene	11.777	178	5511999	47.4234	ug/mL		82
66) Anthracene	11.835	178	5634797m	47.8851	ug/mL		
67) Carbazole	12.033	167	9171211m	95.8073	ug/mL		
68) Di-n-butylphthalate	12.407	149	6657025	48.9037	ug/mL		85
69) Fluoranthene	13.251	202	6564766	49.3374	ug/mL		77
71) Benzidine	13.395	184	4849118m	90.3133	ug/mL		
72) Pyrene	13.545	202	6436282	47.7754	ug/mL		74
73) Terphenyl-d14	13.695	244	4804772	48.1627	ug/mL		79
74) Butylbenzylphthalate	14.282	149	3696042	49.8742	ug/mL		84
75) 3,3'-Dichlorobenzidine	15.121	252	4287586	92.9189	ug/mL		91
76) Benzo(a)anthracene	15.164	228	6959888	55.1974	ug/mL		89
77) bis(2-Ethylhexyl)phthalate	15.105	149	4209523	42.9246	ug/mL		94
78) Chrysene	15.244	228	6099512	54.1694	ug/mL		80
80) Di-n-octylphthalate	16.312	149	8445848	50.2792	ug/mL		88
81) Benzo(b)fluoranthene	17.311	252	7963821	63.8319	ug/mL		95
82) Benzo(k)fluoranthene	17.375	252	6429560m	55.1170	ug/mL		
83) Benzo(a)pyrene	18.113	252	6614376	61.7896	ug/mL		93
84) Indeno(1,2,3-cd)pyrene	21.403	276	8039342	59.9376	ug/mL		94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ10.D
Acq On : 19 Jun 2012 8:08 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL9
ALS Vial : 10 Sample Multiplier: 1

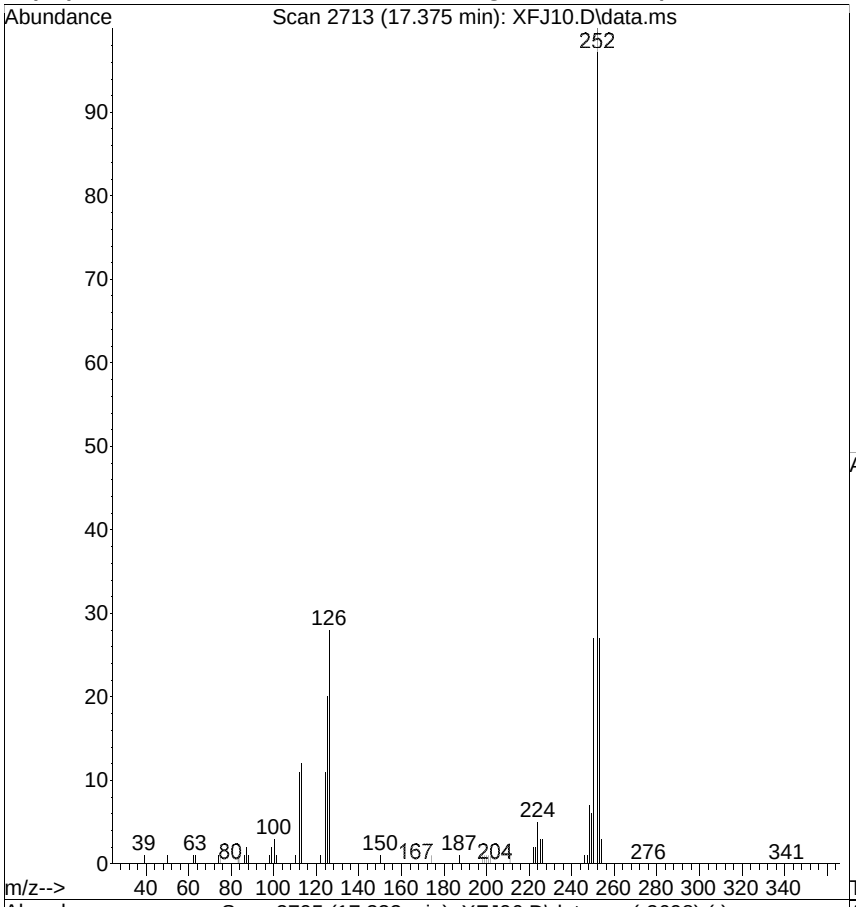
Quant Time: Jun 20 10:50:12 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 10:27:23 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.473	278	6623972	58.8820	ug/mL	94
86) Benzo(g,h,i)perylene	22.178	276	6503299	57.8260	ug/mL	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(k)fluoranthene; 60.00 ug/mL; response=6429560; MI]

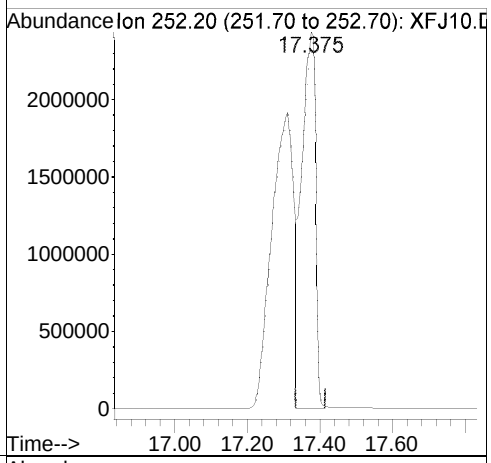
Raw



#82
Benzo(k)fluoranthene
Concen: 55.1170 ug/mL m
RT: 17.375 min Scan# 2713
Delta R.T. 0.043 min
Lab File: XFJ10.D
Acq: 19 Jun 2012 8:08 pm

Tgt Ion:252 Resp: 6429560

Ion	Ratio	Lower	Upper
252	100		
253	26.8	3.0	43.0
125	20.2	0.0	37.0



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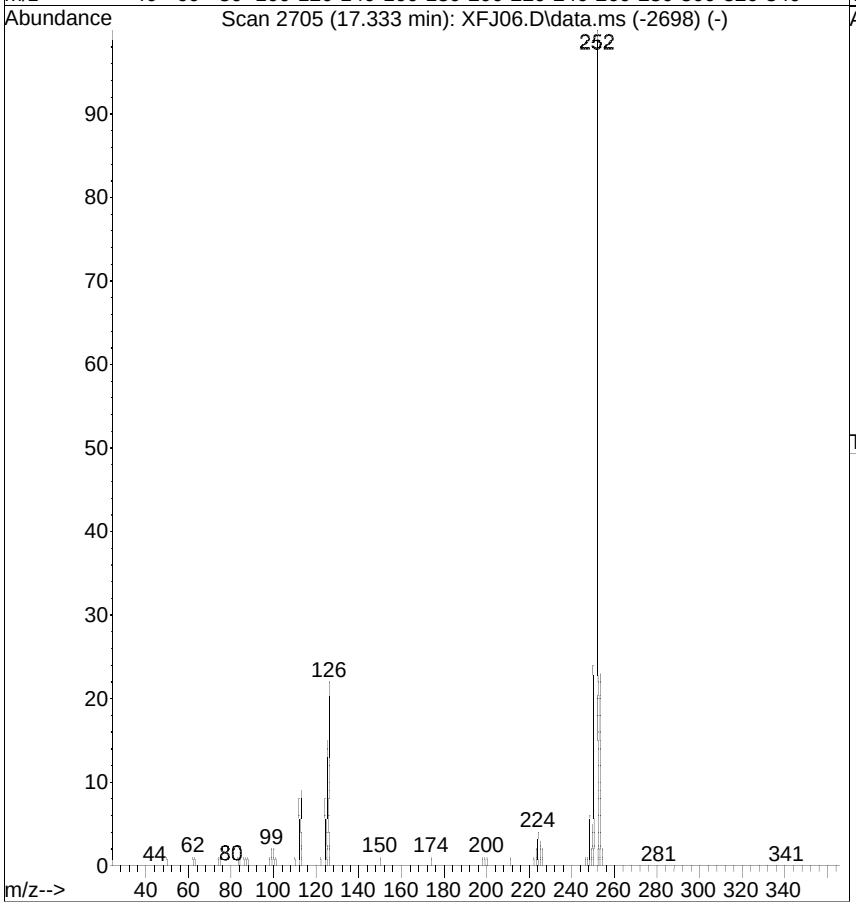
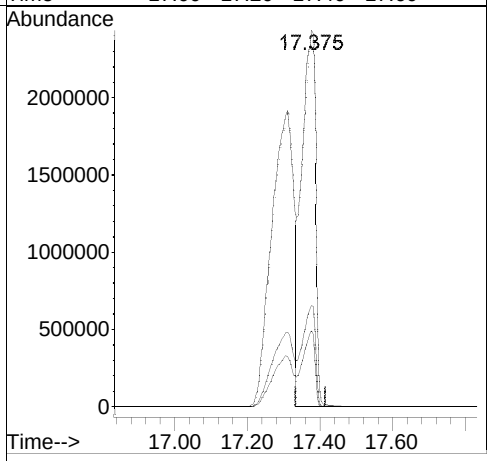
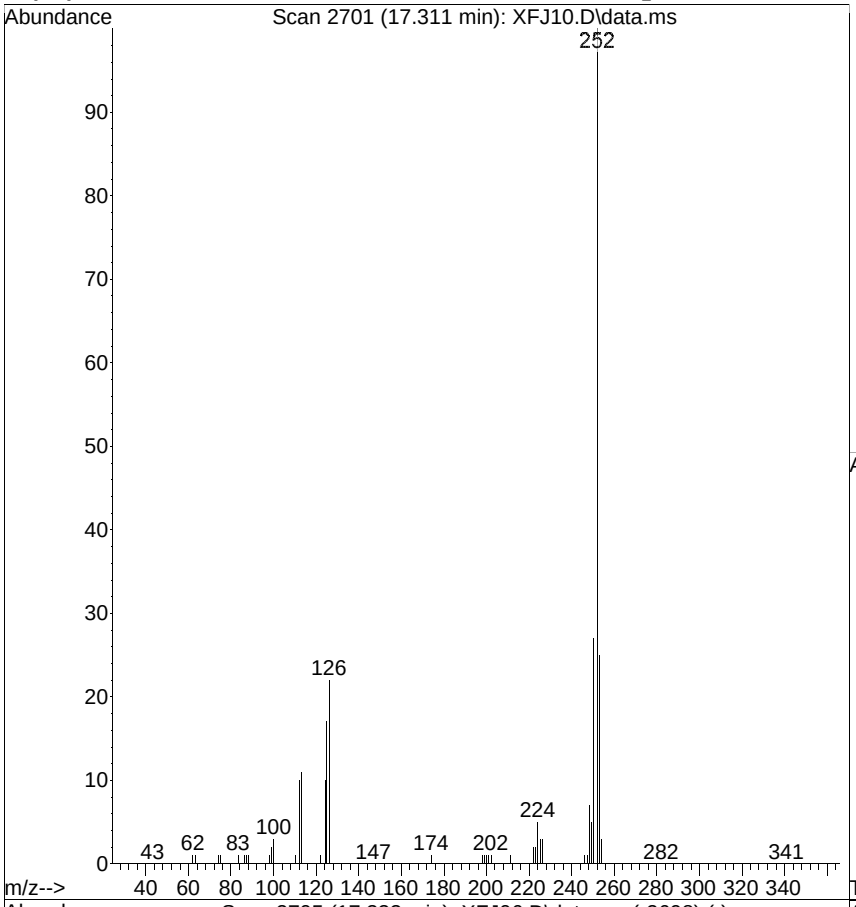




[Benzo(k)fluoranthene; before version]

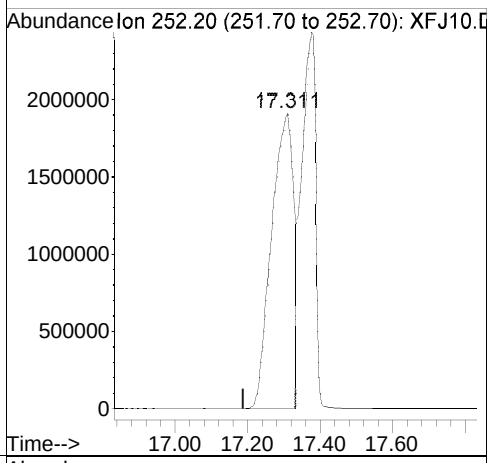
Raw



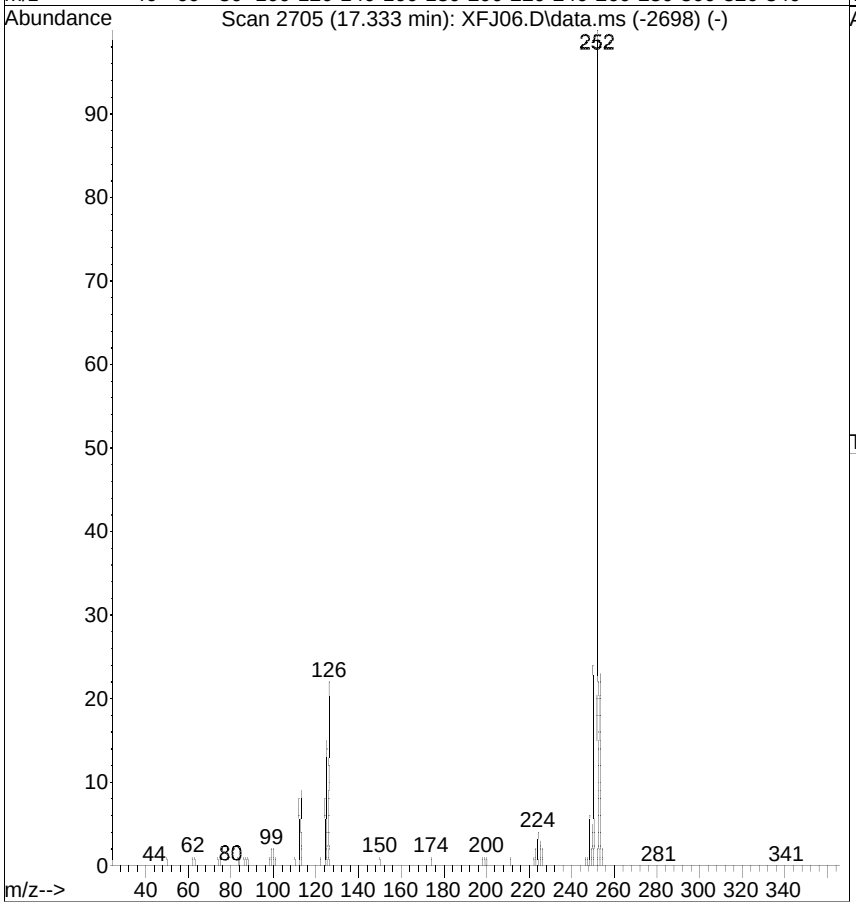
#82
Benzo(k)fluoranthene
Concen: 68.2694 ug/mL
RT: 17.311 min Scan# 2701
Delta R.T. -0.021 min
Lab File: XFJ10.D
Acq: 19 Jun 2012 8:08 pm

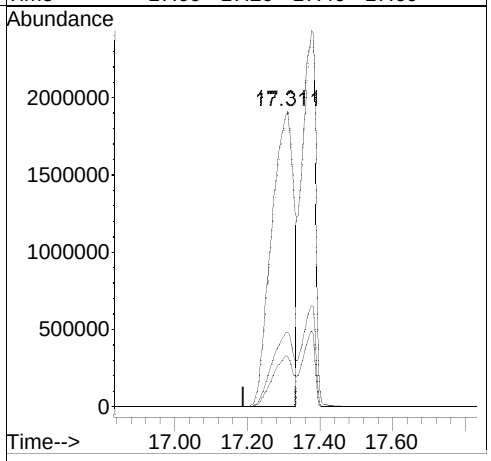
Tgt Ion:252 Resp: 7963821

Ion	Ratio	Lower	Upper
252	100		
253	25.1	3.0	43.0
125	17.1	0.0	37.0



Ref

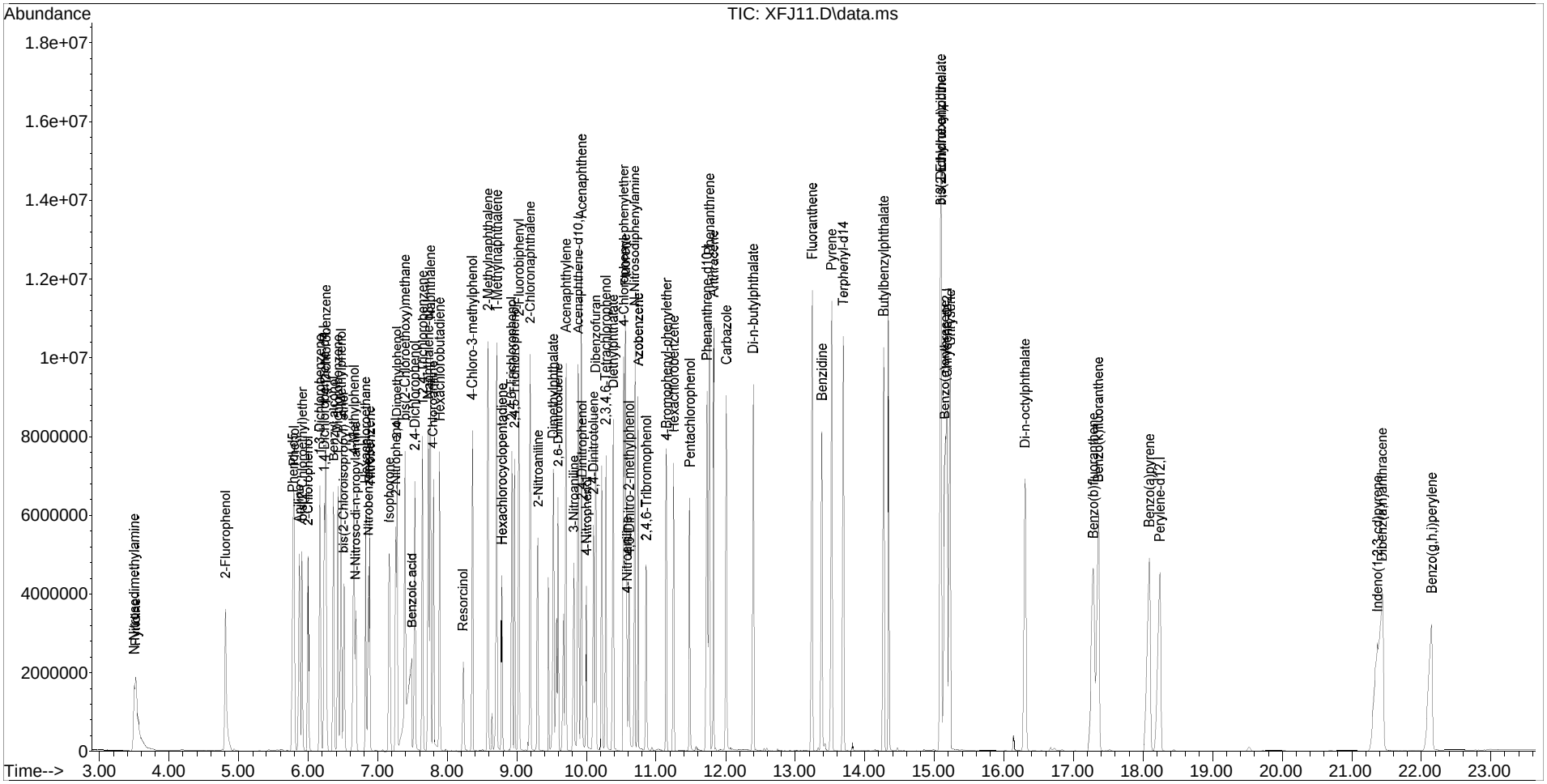




Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ11.D
Acq On : 19 Jun 2012 8:43 pm
Operator :
Sample : ICV,S19910
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 20 11:18:16 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 11:15:34 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ11.D
Acq On : 19 Jun 2012 8:43 pm
Operator :
Sample : ICV,S19910
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 20 11:18:16 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 11:15:34 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.231	152	1195305	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.727	136	3840004	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.885	164	2408615	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.734	188	4058002	40.0000	ug/mL		0.00
70) Chrysene-d12	15.185	240	4166855	40.0000	ug/mL		0.00
79) Perylene-d12	18.246	264	4334427	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.523	79	2336400	42.6294	ug/mL		76
3) N-Nitrosodimethylamine	3.501	42	774294	42.3946	ug/mL	#	33
4) 2-Fluorophenol	4.816	112	1676716	39.3726	ug/mL		79
5) Phenol-d5	5.782	99	2249525	38.6823	ug/mL		82
6) Phenol	5.799	94	2347962	42.3550	ug/mL		71
7) Aniline	5.868	93	2704266m	43.0387	ug/mL		
8) bis(2-Chloroethyl)ether	5.911	93	1746497	41.6044	ug/mL		94
9) 2-Chlorophenol	6.002	128	1656396	41.4739	ug/mL		96
10) 1,3-Dichlorobenzene	6.172	146	1910307	43.2321	ug/mL		93
11) 1,4-Dichlorobenzene	6.253	146	1872123	43.6360	ug/mL		86
12) Benzyl alcohol	6.370	108	1212939	41.5818	ug/mL		95
13) 1,2-Dichlorobenzene	6.429	146	1778672	43.0356	ug/mL		94
14) 2-Methylphenol	6.477	107	1474713	43.0491	ug/mL		97
15) bis(2-Chloroisopropyl) ether	6.514	45	1746454	41.8081	ug/mL		87
16) 4-Methylphenol	6.659	107	1955220	39.0541	ug/mL		93
17) N-Nitroso-di-n-propylamine	6.685	70	1246379	42.6015	ug/mL	#	69
18) Hexachloroethane	6.824	117	821458	43.6942	ug/mL		98
20) Nitrobenzene-d5	6.867	82	2118310	37.0152	ug/mL	#	69
21) Nitrobenzene	6.888	77	2092041	41.6786	ug/mL		98
22) Isophorone	7.171	82	3727129	41.0026	ug/mL		99
23) 2-Nitrophenol	7.262	139	984050	42.0276	ug/mL		90
24) 2,4-Dimethylphenol	7.284	107	1688705	42.4364	ug/mL		87
25) bis(2-Chloroethoxy)methane	7.396	93	2147074	40.7745	ug/mL		93
26) Benzoic acid	7.497	105	3321630	106.8934	ug/mL		96
27) 2,4-Dichlorophenol	7.540	162	1404776	41.6920	ug/mL		96
28) 1,2,4-Trichlorobenzene	7.652	180	1587372	44.8413	ug/mL		96
29) Naphthalene	7.754	128	3916689	37.6753	ug/mL		82
30) 4-Chloroaniline	7.797	127	1952786	41.8172	ug/mL		81
31) Hexachlorobutadiene	7.893	225	879127	42.2677	ug/mL		98
32) Resorcinol	8.229	110	963603	46.1668	ug/mL		95
33) 4-Chloro-3-methylphenol	8.363	107	1563307	42.2805	ug/mL		89
34) 2-Methylnaphthalene	8.593	142	3028206	39.8741	ug/mL		88
35) 1-Methylnaphthalene	8.715	142	2801025	37.7990	ug/mL		87
37) Hexachlorocyclopentadiene	8.785	237	730707	36.9762	ug/mL		98
38) 2,4,6-Trichlorophenol	8.924	196	1040959	42.2784	ug/mL		91

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ11.D
Acq On : 19 Jun 2012 8:43 pm
Operator :
Sample : ICV,S19910
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 20 11:18:16 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 11:15:34 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.966	196	1111261	43.2929	ug/mL		84
40) 2-Fluorobiphenyl	9.031	172	3140163	34.3627	ug/mL		85
41) 2-Chloronaphthalene	9.191	162	2796929	39.5634	ug/mL		94
42) 2-Nitroaniline	9.308	65	1150953	41.0746	ug/mL		99
43) Dimethylphthalate	9.527	163	3178155	42.1379	ug/mL		95
44) 2,6-Dinitrotoluene	9.602	165	829142	40.9555	ug/mL		95
45) Acenaphthylene	9.714	152	4050260	38.2289	ug/mL		85
46) 3-Nitroaniline	9.821	138	819860m	42.6248	ug/mL		
47) Acenaphthene	9.928	154	2798070	38.5836	ug/mL		98
48) 2,4-Dinitrophenol	9.939	184	425485	43.3736	ug/mL	#	34
49) 4-Nitrophenol	10.003	109	469399	41.6020	ug/mL	#	76
50) Dibenzofuran	10.136	168	3704031	39.0078	ug/mL		69
51) 2,4-Dinitrotoluene	10.104	165	1100984	42.1984	ug/mL		98
52) 2,3,4,6-Tetrachlorophenol	10.281	232	945339	44.1283	ug/mL		90
53) Diethylphthalate	10.388	149	3064378	39.6991	ug/mL		90
54) 4-Chlorophenyl-phenylether	10.542	204	1652492	39.5296	ug/mL	#	72
55) Fluorene	10.564	166	3137407	38.2329	ug/mL		84
56) 4-Nitroaniline	10.585	138	831521	43.6586	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.863	330	506228	38.8108	ug/mL	#	83
59) 4,6-Dinitro-2-methylphenol	10.617	198	668477	41.6778	ug/mL	#	77
60) N-Nitrosodiphenylamine	10.692	169	2751930	46.2351	ug/mL		85
61) Azobenzene	10.745	77	3917706	38.9316	ug/mL		99
62) 4-Bromophenyl-phenylether	11.157	248	1050772	40.0181	ug/mL	#	84
63) Hexachlorobenzene	11.258	284	1018707	41.2101	ug/mL		83
64) Pentachlorophenol	11.488	266	789508	43.5030	ug/mL		98
65) Phenanthrene	11.766	178	4069133	36.7002	ug/mL		84
66) Anthracene	11.830	178	4195602	37.0009	ug/mL		81
67) Carbazole	12.012	167	3823990	44.5368	ug/mL		71
68) Di-n-butylphthalate	12.402	149	4990459	38.3473	ug/mL		88
69) Fluoranthene	13.246	202	4918607	37.3984	ug/mL		81
71) Benzidine	13.390	184	3502385	89.3300	ug/mL		93
72) Pyrene	13.534	202	4933708	39.4374	ug/mL		77
73) Terphenyl-d14	13.689	244	3400267	35.7764	ug/mL		83
74) Butylbenzylphthalate	14.277	149	2640248	41.5500	ug/mL		85
75) 3,3'-Dichlorobenzidine	15.099	252	2329982	55.5925	ug/mL		95
76) Benzo(a)anthracene	15.158	228	5124813	40.4551	ug/mL		92
77) bis(2-Ethylhexyl)phthalate	15.099	149	3303650	40.0293	ug/mL		97
78) Chrysene	15.233	228	4479804m	38.8352	ug/mL		
80) Di-n-octylphthalate	16.307	149	6061593	41.3371	ug/mL		92
81) Benzo(b)fluoranthene	17.290	252	5585187	44.6957	ug/mL		96
82) Benzo(k)fluoranthene	17.359	252	4796922	40.2758	ug/mL		95
83) Benzo(a)pyrene	18.096	252	5110750	47.7283	ug/mL		95
84) Indeno(1,2,3-cd)pyrene	21.371	276	5649990	45.7093	ug/mL		98

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\061912\
Data File : XFJ11.D
Acq On : 19 Jun 2012 8:43 pm
Operator :
Sample : ICV,S19910
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 20 11:18:16 2012
Quant Method : G:\msbna05\061912\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Wed Jun 20 11:15:34 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.435	278	4519260	43.2908	ug/mL	96
86) Benzo(g,h,i)perylene	22.151	276	4322565	42.8281	ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 MSBNA Soil: EPA 8270D

Inst : MSBNA06
Calnum : 552359297001
Units : ug/mL

Name : 6PTBNA6
Date : 05-SEP-2012 12:37
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	yi502	552359297002	ICAL	05-SEP-2012 12:37	S20236
L2	yi503	552359297003	ICAL	05-SEP-2012 13:13	S20238
L3	yi504	552359297004	ICAL	05-SEP-2012 13:51	S20239
L4	yi505	552359297005	ICAL	05-SEP-2012 14:31	S20248
L5	yi506	552359297006	ICAL	05-SEP-2012 15:10	S20249
L6	yi507	552359297007	ICAL	05-SEP-2012 15:48	S20250
L7	yi508	552359297008	ICAL	05-SEP-2012 16:24	S20244
L8	yi509	552359297009	ICAL	05-SEP-2012 17:01	S20245
L9	yi510	552359297010	ICAL	05-SEP-2012 17:41	S20246

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene	1.0838	1.0707	1.0488	1.0305	0.9765	0.9326	0.9037	0.9091	0.8678m	AVRG		1.02001		0.9804	8	20	0.700	0.99	
3,3'-Dichlorobenzidine			0.4919	0.5149	0.5205	0.4941	0.5125	0.5110	0.5221	AVRG		1.96241		0.5096	2	20	0.010	0.99	
Benzo(a)anthracene	1.2401	1.2114	1.2115	1.1607m	1.1502	1.1045	1.0684	1.1214	1.0663	AVRG		0.87086		1.1483	6	20	0.800	0.99	
bis(2-Ethylhexyl)phthalate			0.9138	0.8784	0.8767	0.8150	0.7578	0.7136	0.6400	AVRG		1.25106		0.7993	13	20	0.010	0.99	
Benzo(b)fluoranthene	1.0923	1.1818	1.1558	1.1829	1.0888	1.1820	1.0974	1.1756m	1.2702	AVRG		0.86317		1.1585	5	20	0.700	0.99	
Benzo(k)fluoranthene	1.1778	1.1727	1.1759	1.1222	1.0484	1.0408	0.9994	0.9411m	0.9143m	AVRG		0.93822		1.0658	10	20	0.700	0.99	
Benzo(a)pyrene	0.9472	1.0121	1.0298	1.0507	1.0078	1.0108	0.9770	1.0166	1.0572	AVRG		0.98802		1.0121	3	20	0.700	0.99	
Indeno(1,2,3-cd)pyrene	0.9294	1.0555	1.1647m	1.2046m	1.1806m	1.1710	1.1542	1.1987	1.1870	AVRG		0.87841		1.1384	8	20	0.500	0.99	
Dibenz(a,h)anthracene	0.7493m	0.8737m	0.9489	0.9651	0.9581	0.9238	0.9013	0.9239	0.9232	AVRG		1.10197		0.9075	7	20	0.400	0.99	
Nitrobenzene-d5	0.4260	0.4497	0.4136	0.4401	0.3985	0.3970	0.3897m	0.4000	0.3957	AVRG		2.42569		0.4123	5	20	0.05	0.99	
2-Fluorobiphenyl	1.7886	1.7963	1.7265	1.6409	1.6230	1.4710	1.3335	1.3103	1.2618	AVRG		0.64508		1.5502	14	20	0.05	0.99	
Terphenyl-d14	0.9000	0.9750	0.9652	0.9218	0.9603	0.9496	0.9239	0.8621	0.9522	AVRG		1.07013		0.9345	4	20	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Naphthalene	2.0000	11	5.0000	9	10.000	7	16.000	5	20.000	0	25.000	-5	40.000	-8	50.000	-7	60.000	-11
3,3'-Dichlorobenzidine					20.000	-3	32.000	1	40.000	2	50.000	-3	80.000	1	100.00	0	120.00	2
Benzo(a)anthracene	2.0000	8	5.0000	5	10.000	6	16.000	1	20.000	0	25.000	-4	40.000	-7	50.000	-2	60.000	-7
bis(2-Ethylhexyl)phthalate					10.000	14	16.000	10	20.000	10	25.000	2	40.000	-5	50.000	-11	60.000	-20
Benzo(b)fluoranthene	2.0000	-6	5.0000	2	10.000	0	16.000	2	20.000	-6	25.000	2	40.000	-5	50.000	1	60.000	10
Benzo(k)fluoranthene	2.0000	11	5.0000	10	10.000	10	16.000	5	20.000	-2	25.000	-2	40.000	-6	50.000	-12	60.000	-14
Benzo(a)pyrene	2.0000	-6	5.0000	0	10.000	2	16.000	4	20.000	0	25.000	0	40.000	-3	50.000	0	60.000	4
Indeno(1,2,3-cd)pyrene	2.0000	-18	5.0000	-7	10.000	2	16.000	6	20.000	4	25.000	3	40.000	1	50.000	5	60.000	4
Dibenz(a,h)anthracene	2.0000	-17	5.0000	-4	10.000	5	16.000	6	20.000	6	25.000	2	40.000	-1	50.000	2	60.000	2
Nitrobenzene-d5	2.0000	3	5.0000	9	10.000	0	16.000	7	20.000	-3	25.000	-4	40.000	-5	50.000	-3	60.000	-4
2-Fluorobiphenyl	2.0000	15	5.0000	16	10.000	11	16.000	6	20.000	5	25.000	-5	40.000	-14	50.000	-15	60.000	-19
Terphenyl-d14	2.0000	-4	5.0000	4	10.000	3	16.000	-1	20.000	3	25.000	2	40.000	-1	50.000	-8	60.000	2

KMH 09/06/12 [1,4-Dichlorobenzene-d4]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [N-Nitrosodimethylamine]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Aniline]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [Benzoic acid]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [2,4,5-Trichlorophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [2,4-Dinitrophenol]: Picked or reassigned peak in ICAL (yi502).

KMH 09/06/12 [4-Nitroaniline]: Corrected automatically drawn baseline in ICAL (yi502).

KMH 09/06/12 [Dibenz(a,h)anthracene]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [N-Nitroso-di-n-propylamine]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [Indeno(1,2,3-cd)pyrene]: Combined split peak in multiple levels.

KMH 09/06/12 [Benzo(a)anthracene]: Corrected automatically drawn baseline in ICAL (yi505).

KMH 09/06/12 [4-Methylphenol]: Combined split peak in multiple levels.

KMH 09/06/12 [Nitrobenzene-d5]: Corrected automatically drawn baseline in ICAL (yi508).

KMH 09/06/12 [2,4-Dimethylphenol]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [2,4-Dichlorophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Aniline]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Isophorone]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [2-Nitrophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [4-Chloroaniline]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Anthracene]: Corrected automatically drawn baseline in ICAL (yi509).

KMH 09/06/12 [Benzo(b)fluoranthene]: Corrected automatically drawn baseline in ICAL (yi509).

KMH 09/06/12 [Benzo(k)fluoranthene]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [N-Nitroso-di-n-propylamine]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Naphthalene]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Hexachlorobutadiene]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Resorcinol]: Combined split peak in ICAL (yi510).

Analyst: KMH Date: 09/06/12 Reviewer: LW Date: 09/07/12

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

552359297001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Name : 6PTBNA6
Calnum : 552359297001 Cal Date : 05-SEP-2012

ICV 552359297011 (yi511 05-SEP-2012) stds: S19910

Analyte	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	40.00	38.28	ug/mL	-4	30	
3,3'-Dichlorobenzidine	60.00	63.28	ug/mL	5	30	
Benzo(a)anthracene	40.00	42.55	ug/mL	6	30	
bis(2-Ethylhexyl)phthalate	40.00	42.58	ug/mL	6	30	
Benzo(b)fluoranthene	40.00	43.39	ug/mL	8	30	
Benzo(k)fluoranthene	40.00	40.32	ug/mL	1	30	m
Benzo(a)pyrene	40.00	47.78	ug/mL	19	30	
Indeno(1,2,3-cd)pyrene	40.00	45.05	ug/mL	13	30	
Dibenz(a,h)anthracene	40.00	43.55	ug/mL	9	30	

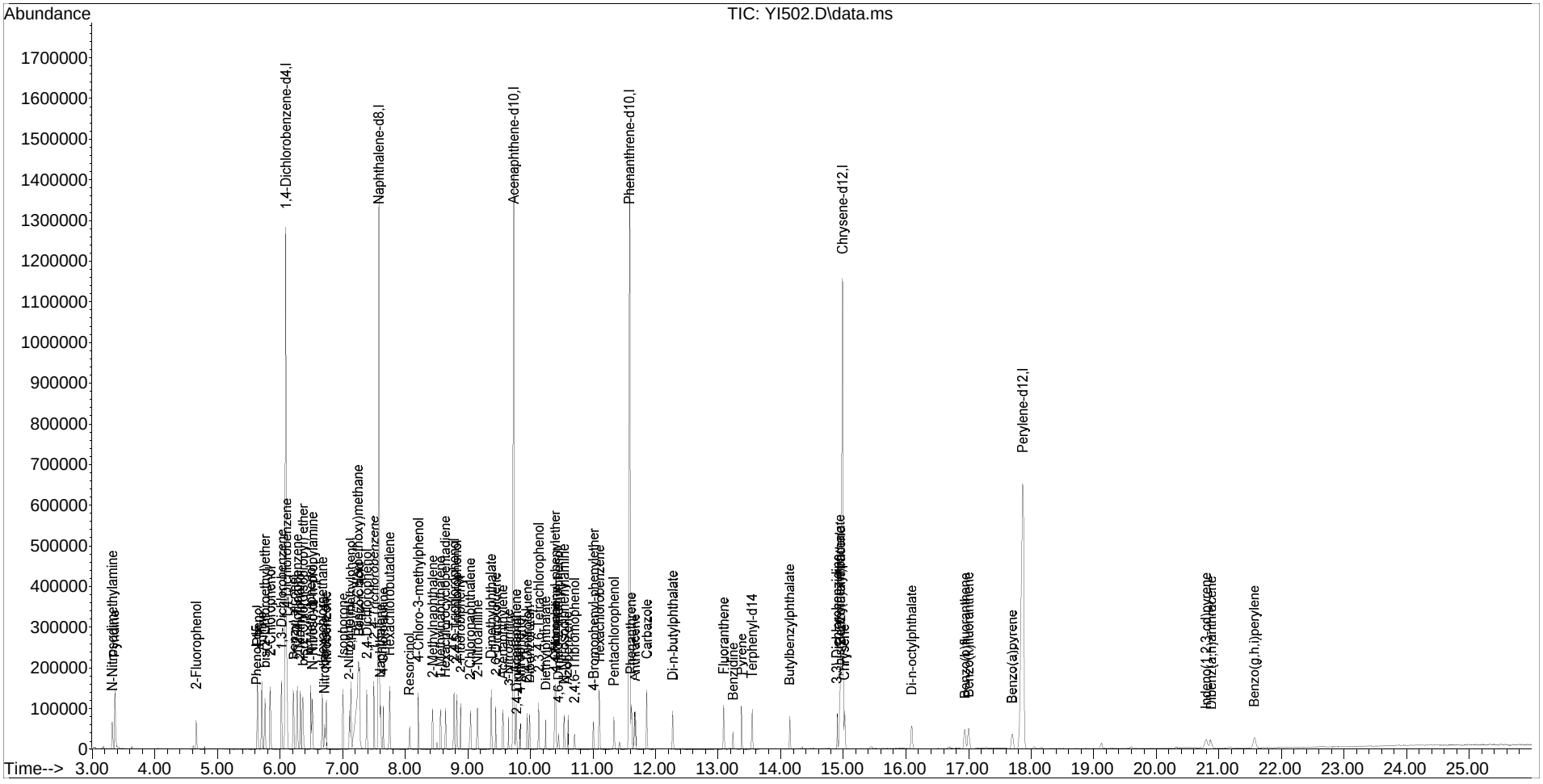
Analyst: KMH Date: 09/06/12 Reviewer: LW Date: 09/07/12

m=manual integration

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI502.D
Acq On : 5 Sep 2012 12:37 pm
Operator :
Sample : ICAL,S20236
Misc : ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 06 11:55:54 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI502.D
Acq On : 5 Sep 2012 12:37 pm
Operator :
Sample : ICAL,S20236
Misc : ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 06 11:55:54 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	231638m	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.584	136	713923	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.744	164	403539	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	720328	40.0000	ug/mL	0.00
70) Chrysene-d12	14.990	240	728355	40.0000	ug/mL	0.00
79) Perylene-d12	17.871	264	733762	40.0000	ug/mL	-0.01
Target Compounds						Qvalue
2) Pyridine	3.357	79	35706	4.2689	ug/mL	# 1
3) N-Nitrosodimethylamine	3.324	42	25988m	4.1107	ug/mL	
4) 2-Fluorophenol	4.670	112	17537	1.9238	ug/mL	86
5) Phenol-d5	5.632	99	22052	1.9899	ug/mL	80
6) Phenol	5.646	94	44277	4.4136	ug/mL	74
7) Aniline	5.714	93	49739m	4.2104	ug/mL	
8) bis(2-Chloroethyl)ether	5.767	93	32394	4.7495	ug/mL	# 66
9) 2-Chlorophenol	5.848	128	37008	4.7204	ug/mL	93
10) 1,3-Dichlorobenzene	6.031	146	42495	4.6688	ug/mL	97
11) 1,4-Dichlorobenzene	6.108	146	38710	4.7502	ug/mL	90
12) Benzyl alcohol	6.219	108	20065	4.3473	ug/mL	# 85
13) 1,2-Dichlorobenzene	6.286	146	37647	4.6835	ug/mL	99
14) 2-Methylphenol	6.329	107	21994	4.3063	ug/mL	97
15) bis(2-Chloroisopropyl) ether	6.377	45	76241	4.1589	ug/mL	76
16) 4-Methylphenol	6.502	107	32649	4.1518	ug/mL	95
17) N-Nitroso-di-n-propylamine	6.526	70	19721	4.3326	ug/mL	83
18) Hexachloroethane	6.680	117	15939	4.6031	ug/mL	87
20) Nitrobenzene-d5	6.714	82	15207	2.2354	ug/mL	82
21) Nitrobenzene	6.738	77	29159	4.8166	ug/mL	85
22) Isophorone	7.012	82	51909	4.3456	ug/mL	100
23) 2-Nitrophenol	7.113	139	14644	4.2051	ug/mL	86
24) 2,4-Dimethylphenol	7.137	107	28851	5.0603	ug/mL	85
25) bis(2-Chloroethoxy)methane	7.253	93	16828	2.2406	ug/mL	97
26) Benzoic acid	7.272	105	151352m	38.0276	ug/mL	
27) 2,4-Dichlorophenol	7.392	162	27016	4.5733	ug/mL	91
28) 1,2,4-Trichlorobenzene	7.507	180	32440	4.9465	ug/mL	95
29) Naphthalene	7.608	128	38689	2.2554	ug/mL	97
30) 4-Chloroaniline	7.652	127	27412	3.6919	ug/mL	90
31) Hexachlorobutadiene	7.753	225	18725	4.6951	ug/mL	95
32) Resorcinol	8.080	110	16281	2.4912	ug/mL	85
33) 4-Chloro-3-methylphenol	8.219	107	22907	4.4728	ug/mL	95
34) 2-Methylnaphthalene	8.445	142	28517	2.1680	ug/mL	93
35) 1-Methylnaphthalene	8.565	142	27369	2.1656	ug/mL	95
37) Hexachlorocyclopentadiene	8.642	237	16678	3.8875	ug/mL	97
38) 2,4,6-Trichlorophenol	8.782	196	20973	4.5149	ug/mL	94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI502.D
Acq On : 5 Sep 2012 12:37 pm
Operator :
Sample : ICAL,S20236
Misc : ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 06 11:55:54 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.820	196	21975m	4.6500	ug/mL		
40) 2-Fluorobiphenyl	8.888	172	36088	2.4220	ug/mL		98
41) 2-Chloronaphthalene	9.042	162	28128	2.3156	ug/mL		88
42) 2-Nitroaniline	9.157	65	17634	4.3455	ug/mL		87
43) Dimethylphthalate	9.373	163	62542	4.6584	ug/mL		96
44) 2,6-Dinitrotoluene	9.450	165	11839	4.1615	ug/mL		85
45) Acenaphthylene	9.561	152	43051	2.2990	ug/mL		97
46) 3-Nitroaniline	9.662	138	11828	3.5850	ug/mL	#	58
47) Acenaphthene	9.777	154	24127	2.2612	ug/mL		95
48) 2,4-Dinitrophenol	9.792	184	864m	13.8517	ug/mL		
49) 4-Nitrophenol	9.840	109	4751	3.0295	ug/mL	#	68
50) Dibenzofuran	9.989	168	36925	2.4335	ug/mL		87
51) 2,4-Dinitrotoluene	9.950	165	15143	4.1692	ug/mL	#	81
52) 2,3,4,6-Tetrachlorophenol	10.133	232	15029	4.1126	ug/mL		87
53) Diethylphthalate	10.249	149	29841	2.2322	ug/mL		96
54) 4-Chlorophenyl-phenylether	10.402	204	15822	2.2644	ug/mL		84
55) Fluorene	10.412	166	30205	2.3364	ug/mL		90
56) 4-Nitroaniline	10.417	138	10309m	3.4303	ug/mL		
57) 2,4,6-Tribromophenol	10.710	330	4828	2.0178	ug/mL	#	76
59) 4,6-Dinitro-2-methylphenol	10.455	198	3560	2.0149	ug/mL		87
60) N-Nitrosodiphenylamine	10.542	169	21941	2.5300	ug/mL		88
61) Azobenzene	10.600	77	28639	2.6177	ug/mL		96
62) 4-Bromophenyl-phenylether	11.013	248	9916	2.3648	ug/mL	#	85
63) Hexachlorobenzene	11.109	284	22721	5.0091	ug/mL		95
64) Pentachlorophenol	11.340	266	10870	3.6344	ug/mL		98
65) Phenanthrene	11.614	178	40556	2.3488	ug/mL		97
66) Anthracene	11.677	178	40599	2.3249	ug/mL		95
67) Carbazole	11.864	167	67108	4.6006	ug/mL		89
68) Di-n-butylphthalate	12.278	149	51251	2.2576	ug/mL		96
69) Fluoranthene	13.091	202	50834	2.2068	ug/mL		95
71) Benzidine	13.240	184	19539	1.9376	ug/mL		88
72) Pyrene	13.379	202	52231	2.0068	ug/mL		93
73) Terphenyl-d14	13.552	244	32776	1.9408	ug/mL		98
74) Butylbenzylphthalate	14.144	149	21367	1.7155	ug/mL		90
75) 3,3'-Dichlorobenzidine	14.904	252	28594	3.0369	ug/mL		98
76) Benzo(a)anthracene	14.956	228	45163	2.1623	ug/mL		97
77) bis(2-Ethylhexyl)phthalate	14.947	149	31606	2.1140	ug/mL		93
78) Chrysene	15.019	228	40511	2.1174	ug/mL		94
80) Di-n-octylphthalate	16.096	149	49696	1.8934	ug/mL		91
81) Benzo(b)fluoranthene	16.952	252	40075	1.8897	ug/mL		92
82) Benzo(k)fluoranthene	17.010	252	43212	2.2306	ug/mL		92
83) Benzo(a)pyrene	17.702	252	34750	1.8711	ug/mL		93
84) Indeno(1,2,3-cd)pyrene	20.804	276	34099	1.5681	ug/mL		87

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI502.D
Acq On : 5 Sep 2012 12:37 pm
Operator :
Sample : ICAL,S20236
Misc : ICAL
ALS Vial : 2 Sample Multiplier: 1

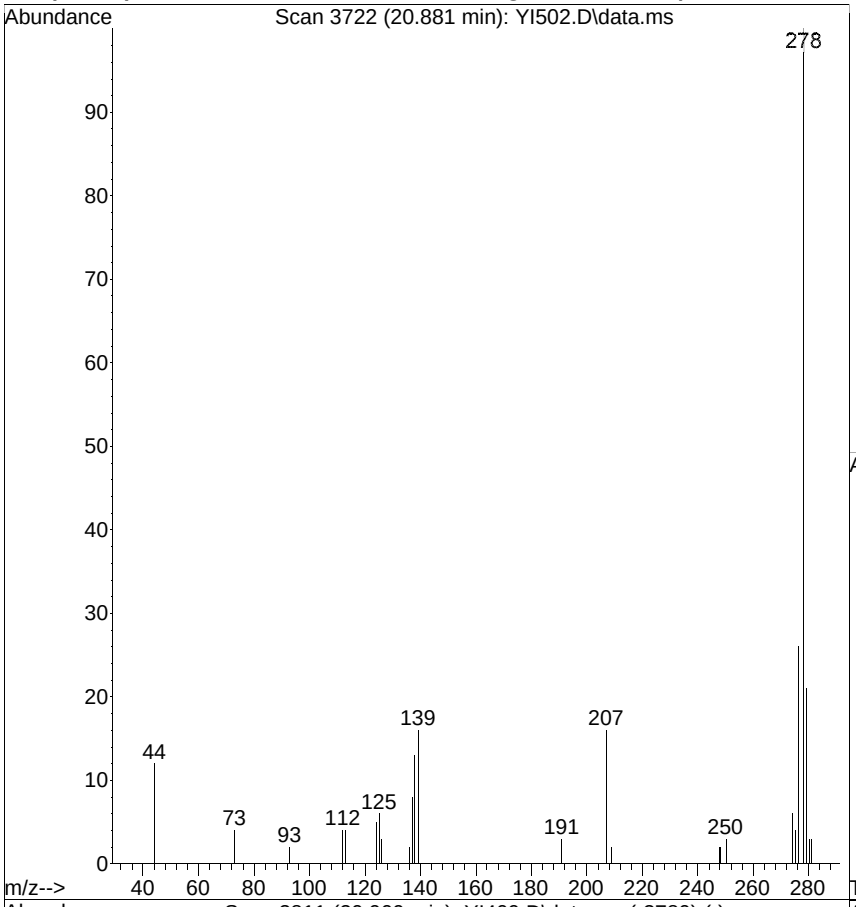
Quant Time: Sep 06 11:55:54 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.881	278	27490m	1.5746	ug/mL	
86) Benzo(g,h,i)perylene	21.569	276	31964	1.7662	ug/mL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Dibenz(a,h)anthracene; 2.000 ug/mL; response=27490; MI]

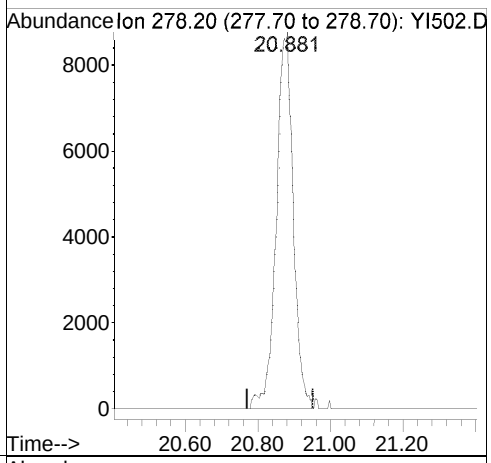
Raw



#85
Dibenz(a,h)anthracene
Concen: 1.5746 ug/mL m
RT: 20.881 min Scan# 3722
Delta R.T. -0.023 min
Lab File: YI502.D
Acq: 5 Sep 2012 12:37 pm

Tgt Ion:278 Resp: 27490

Ion	Ratio	Lower	Upper
278	100		
139	16.3	4.9	44.9
279	21.4	4.1	44.1



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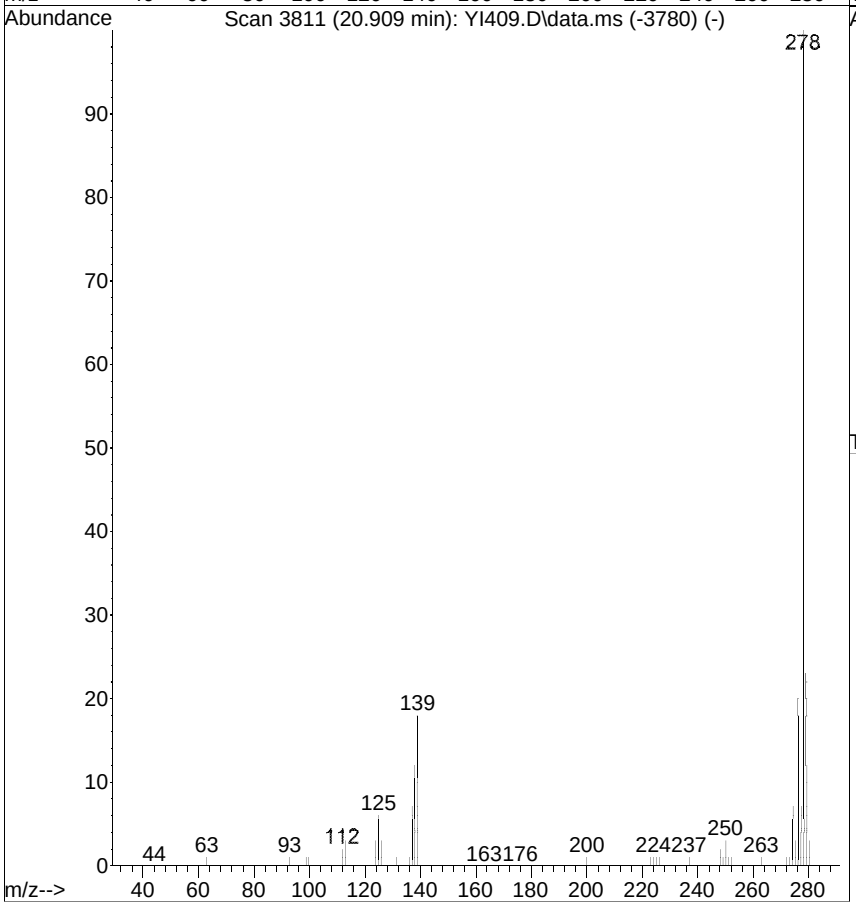
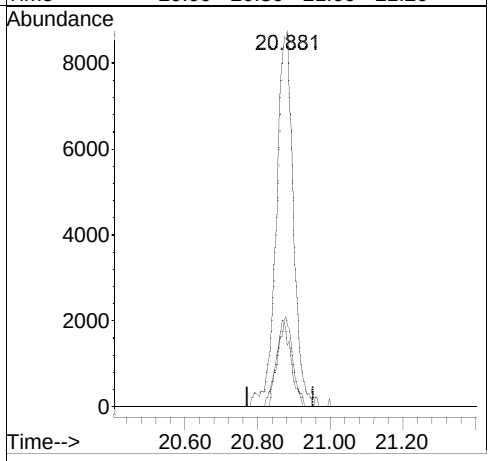
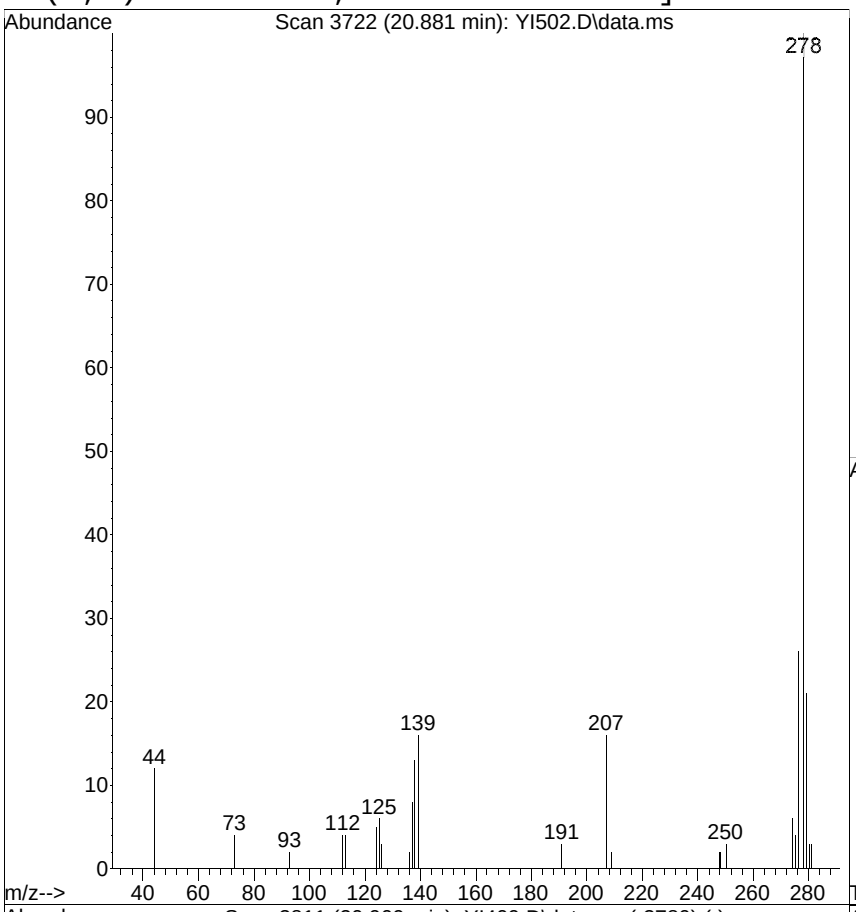




[Dibenz(a,h)anthracene; before version]

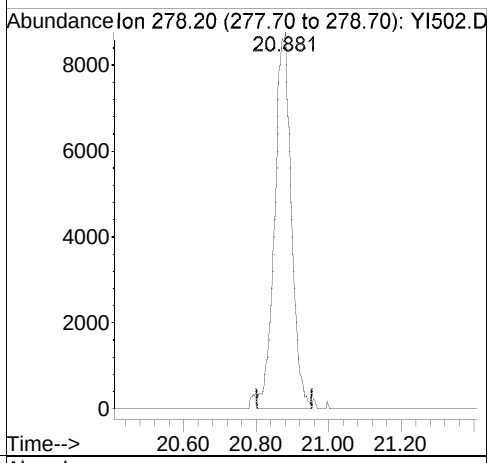
Raw



#85
Dibenz(a,h)anthracene
Concen: 1.4146 ug/mL
RT: 20.881 min Scan# 3722
Delta R.T. -0.028 min
Lab File: YI502.D
Acq: 5 Sep 2012 12:37 pm

Tgt Ion:278 Resp: 27100

Ion	Ratio	Lower	Upper
278	100		
139	16.3	4.9	44.9
279	21.4	4.1	44.1



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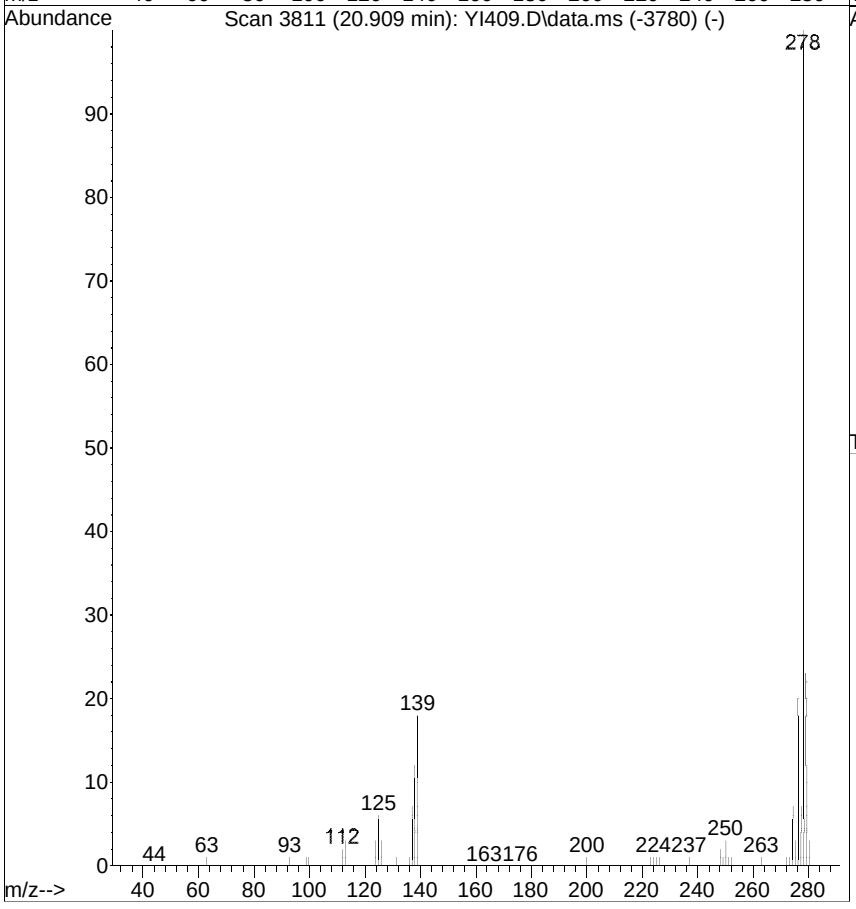
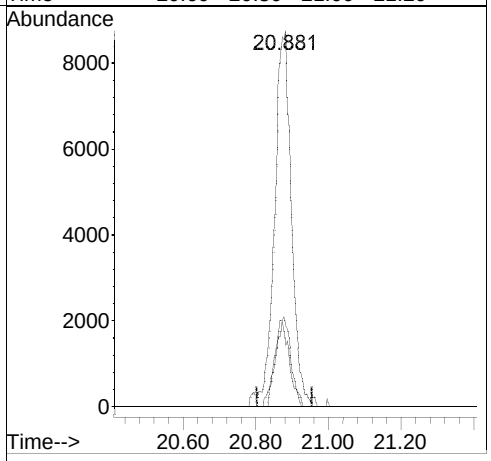
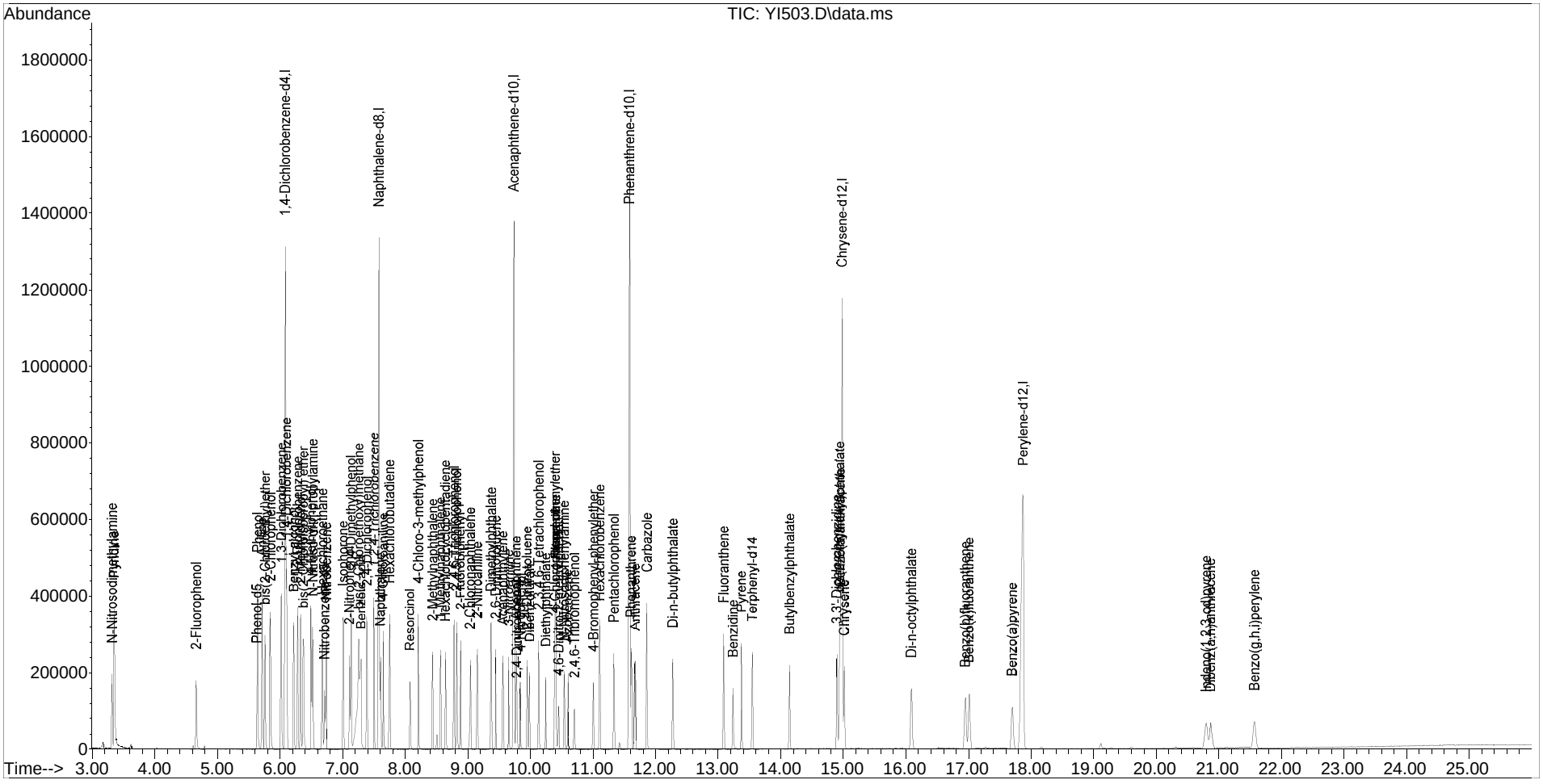




Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI503.D
Acq On : 5 Sep 2012 1:13 pm
Operator :
Sample : ICAL,S20238
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 06 12:00:09 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI503.D
Acq On : 5 Sep 2012 1:13 pm
Operator :
Sample : ICAL,S20238
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 06 12:00:09 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.089	152	227995m	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.584	136	683476	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.739	164	396434	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	760120	40.0000	ug/mL	0.00
70) Chrysene-d12	14.985	240	716367	40.0000	ug/mL	0.00
79) Perylene-d12	17.875	264	764995	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.353	79	99021	12.0279	ug/mL	# 1
3) N-Nitrosodimethylamine	3.319	42	72672	11.6788	ug/mL	83
4) 2-Fluorophenol	4.670	112	46094	5.1373	ug/mL	85
5) Phenol-d5	5.632	99	55628	5.0999	ug/mL	82
6) Phenol	5.646	94	111684	11.3107	ug/mL	72
7) Aniline	5.714	93	130185m	11.1963	ug/mL	
8) bis(2-Chloroethyl)ether	5.767	93	77891	11.6026	ug/mL	# 64
9) 2-Chlorophenol	5.848	128	89631	11.6152	ug/mL	93
10) 1,3-Dichlorobenzene	6.031	146	103053	11.5032	ug/mL	98
11) 1,4-Dichlorobenzene	6.108	146	91021	11.3479	ug/mL	93
12) Benzyl alcohol	6.223	108	46692	10.2779	ug/mL	# 84
13) 1,2-Dichlorobenzene	6.286	146	88865	11.2320	ug/mL	99
14) 2-Methylphenol	6.334	107	54729	10.8868	ug/mL	93
15) bis(2-Chloroisopropyl) ether	6.377	45	186540	10.3383	ug/mL	75
16) 4-Methylphenol	6.502	107	81397	10.5161	ug/mL	94
17) N-Nitroso-di-n-propylamine	6.526	70	50274m	11.2214	ug/mL	
18) Hexachloroethane	6.680	117	38397	11.2661	ug/mL	87
20) Nitrobenzene-d5	6.714	82	38417	5.8988	ug/mL	80
21) Nitrobenzene	6.738	77	70978	12.2467	ug/mL	86
22) Isophorone	7.012	82	129660	11.3381	ug/mL	99
23) 2-Nitrophenol	7.113	139	37967	11.3880	ug/mL	87
24) 2,4-Dimethylphenol	7.137	107	66210	12.1302	ug/mL	84
25) bis(2-Chloroethoxy)methane	7.257	93	41120	5.7190	ug/mL	97
26) Benzoic acid	7.296	105	198028m	51.9716	ug/mL	
27) 2,4-Dichlorophenol	7.392	162	67468	11.9297	ug/mL	93
28) 1,2,4-Trichlorobenzene	7.507	180	77593	12.3585	ug/mL	97
29) Naphthalene	7.608	128	91477	5.5701	ug/mL	98
30) 4-Chloroaniline	7.652	127	74880	10.5341	ug/mL	90
31) Hexachlorobutadiene	7.753	225	44914	11.7633	ug/mL	98
32) Resorcinol	8.085	110	50952	8.1435	ug/mL	85
33) 4-Chloro-3-methylphenol	8.219	107	58312	11.8933	ug/mL	93
34) 2-Methylnaphthalene	8.445	142	71189	5.6532	ug/mL	93
35) 1-Methylnaphthalene	8.565	142	69034	5.7057	ug/mL	91
37) Hexachlorocyclopentadiene	8.642	237	42758	10.1452	ug/mL	97
38) 2,4,6-Trichlorophenol	8.782	196	50728	11.1160	ug/mL	90

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI503.D
Acq On : 5 Sep 2012 1:13 pm
Operator :
Sample : ICAL,S20238
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 06 12:00:09 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.820	196	54779	11.7991	ug/mL		98
40) 2-Fluorobiphenyl	8.888	172	89015	6.0811	ug/mL		99
41) 2-Chloronaphthalene	9.042	162	69788	5.8482	ug/mL		88
42) 2-Nitroaniline	9.157	65	43776	10.9810	ug/mL		92
43) Dimethylphthalate	9.378	163	148450	11.2555	ug/mL		96
44) 2,6-Dinitrotoluene	9.450	165	30948	11.0735	ug/mL		89
45) Acenaphthylene	9.561	152	109200	5.9360	ug/mL		98
46) 3-Nitroaniline	9.662	138	33458	10.3227	ug/mL	#	60
47) Acenaphthene	9.777	154	58885	5.6175	ug/mL		97
48) 2,4-Dinitrophenol	9.787	184	4989	16.7039	ug/mL	#	90
49) 4-Nitrophenol	9.845	109	14109	9.1578	ug/mL	#	74
50) Dibenzofuran	9.989	168	84263	5.6528	ug/mL		82
51) 2,4-Dinitrotoluene	9.950	165	39682	11.1211	ug/mL		86
52) 2,3,4,6-Tetrachlorophenol	10.133	232	37246	10.3747	ug/mL		87
53) Diethylphthalate	10.249	149	76562	5.8298	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.402	204	39731	5.7882	ug/mL		86
55) Fluorene	10.412	166	73694	5.8025	ug/mL		86
56) 4-Nitroaniline	10.417	138	30139	10.2083	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.710	330	12218	5.1978	ug/mL	#	79
59) 4,6-Dinitro-2-methylphenol	10.460	198	14492	7.7730	ug/mL		95
60) N-Nitrosodiphenylamine	10.542	169	52895	5.7801	ug/mL		86
61) Azobenzene	10.600	77	68078	5.8968	ug/mL		97
62) 4-Bromophenyl-phenylether	11.013	248	24632	5.5668	ug/mL	#	87
63) Hexachlorobenzene	11.109	284	52819	11.0350	ug/mL		97
64) Pentachlorophenol	11.340	266	31897	10.1066	ug/mL		97
65) Phenanthrene	11.614	178	100131	5.4955	ug/mL		97
66) Anthracene	11.677	178	101737	5.5210	ug/mL		95
67) Carbazole	11.864	167	169662	11.0224	ug/mL		88
68) Di-n-butylphthalate	12.278	149	131038	5.4701	ug/mL		96
69) Fluoranthene	13.091	202	131455	5.4081	ug/mL		94
71) Benzidine	13.240	184	69387	6.9958	ug/mL		89
72) Pyrene	13.379	202	132226	5.1653	ug/mL		93
73) Terphenyl-d14	13.552	244	87311	5.2565	ug/mL		99
74) Butylbenzylphthalate	14.144	149	59429	4.8513	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.904	252	82409	8.8988	ug/mL		97
76) Benzo(a)anthracene	14.956	228	108477	5.2805	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.947	149	80359	5.4648	ug/mL		93
78) Chrysene	15.019	228	98774	5.2491	ug/mL		95
80) Di-n-octylphthalate	16.091	149	133571	4.8812	ug/mL		86
81) Benzo(b)fluoranthene	16.947	252	113012	5.1113	ug/mL		95
82) Benzo(k)fluoranthene	17.010	252	112140	5.5524	ug/mL		94
83) Benzo(a)pyrene	17.698	252	96781	4.9984	ug/mL		93
84) Indeno(1,2,3-cd)pyrene	20.799	276	100934	4.4521	ug/mL		85

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI503.D
Acq On : 5 Sep 2012 1:13 pm
Operator :
Sample : ICAL,S20238
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

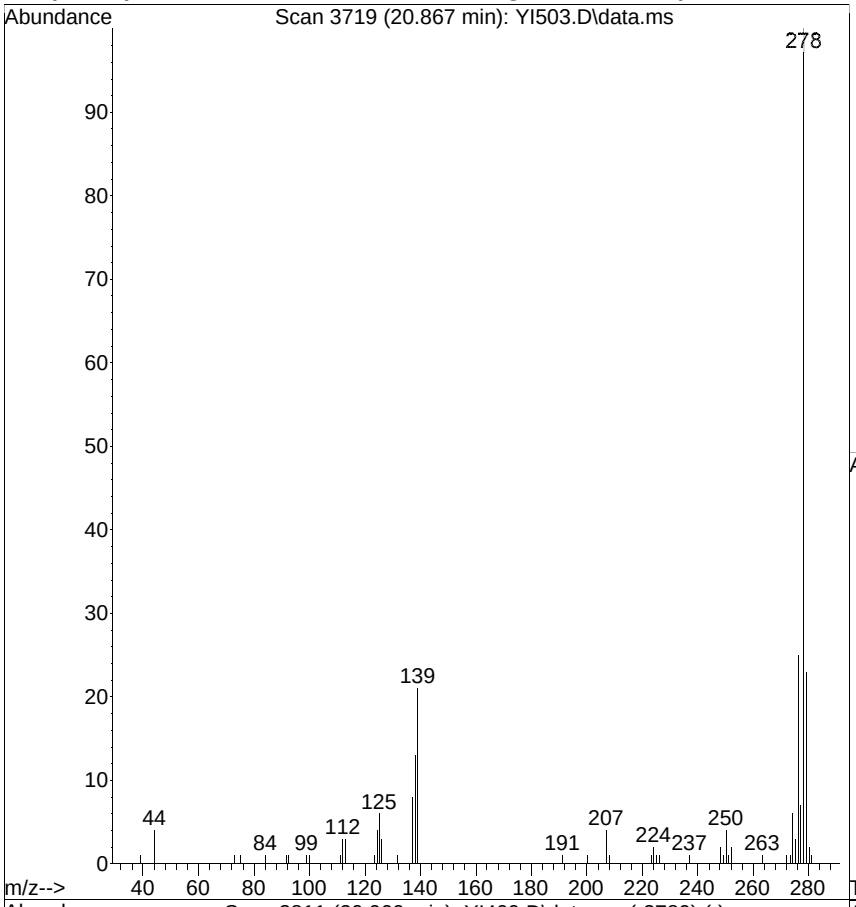
Quant Time: Sep 06 12:00:09 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.867	278	83548m	4.5903	ug/mL	
86) Benzo(g,h,i)perylene	21.574	276	84189	4.4619	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Dibenz(a,h)anthracene; 5.000 ug/mL; response=83548; MI]

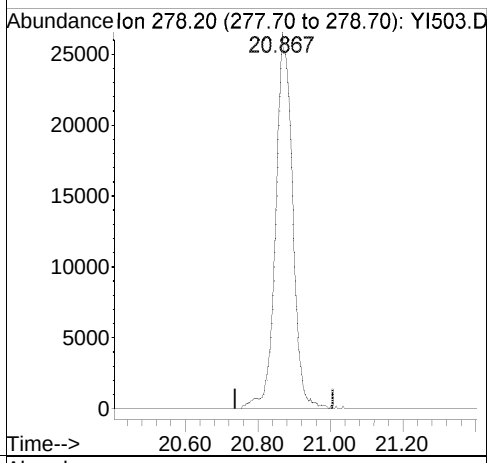
Raw



#85
Dibenz(a,h)anthracene
Concen: 4.5903 ug/mL m
RT: 20.867 min Scan# 3719
Delta R.T. -0.038 min
Lab File: YI503.D
Acq: 5 Sep 2012 1:13 pm

Tgt Ion:278 Resp: 83548

Ion	Ratio	Lower	Upper
278	100		
139	20.7	4.9	44.9
279	23.3	4.1	44.1



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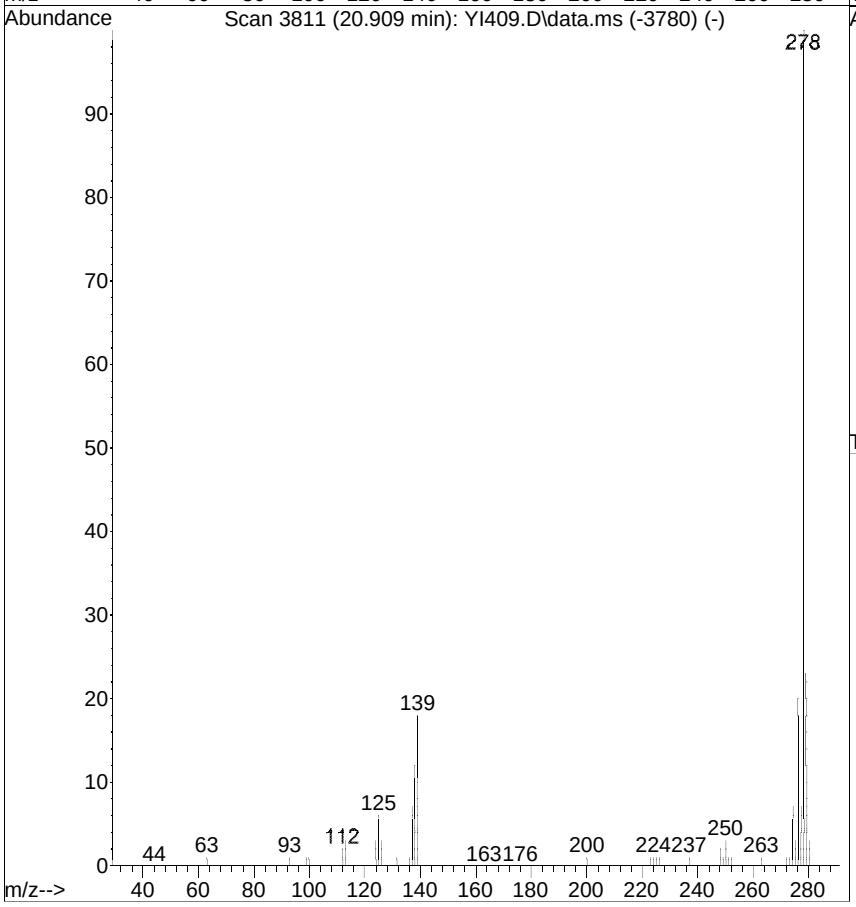
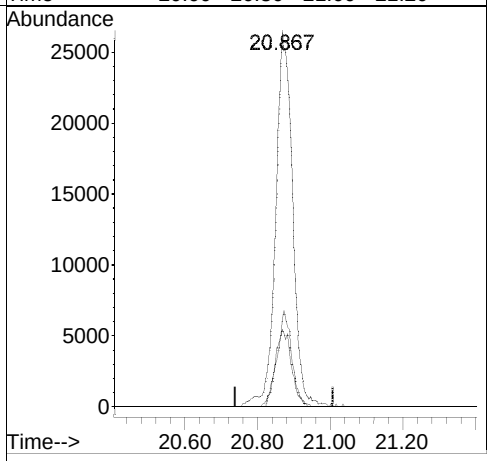
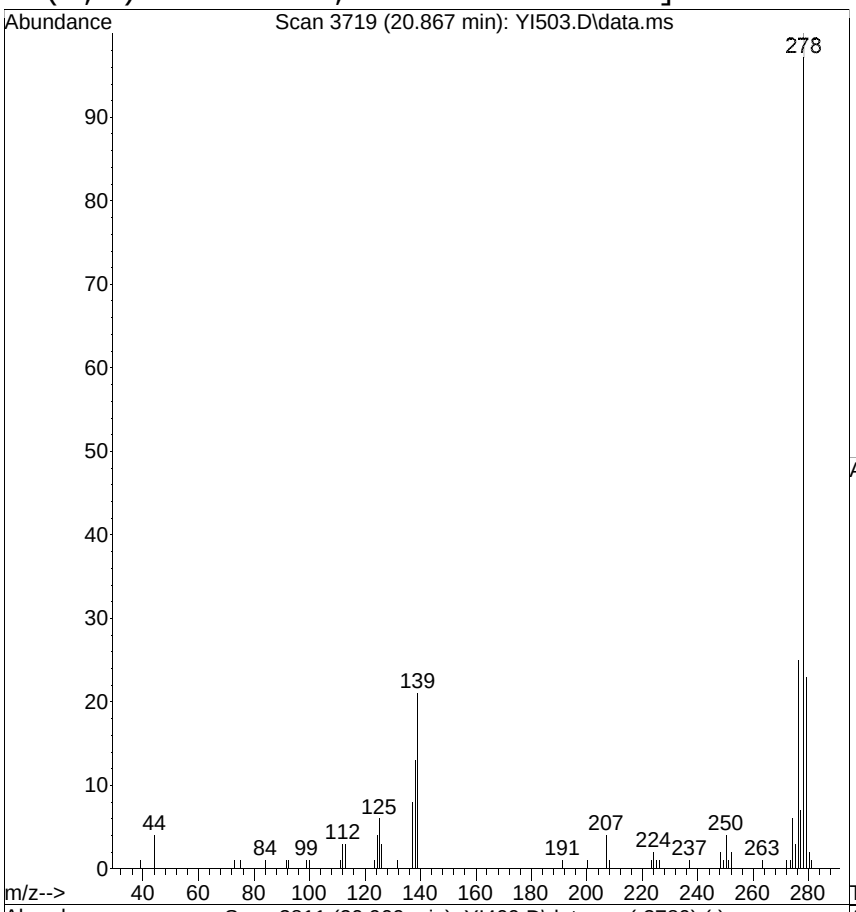




[Dibenz(a,h)anthracene; before version]

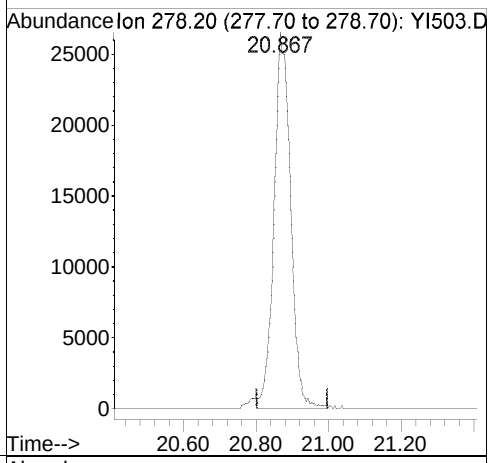
Raw



#85
Dibenz(a,h)anthracene
Concen: 4.1047 ug/mL
RT: 20.867 min Scan# 3719
Delta R.T. -0.043 min
Lab File: YI503.D
Acq: 5 Sep 2012 1:13 pm

Tgt Ion:278 Resp: 81981

Ion	Ratio	Lower	Upper
278	100		
139	20.7	4.9	44.9
279	23.3	4.1	44.1



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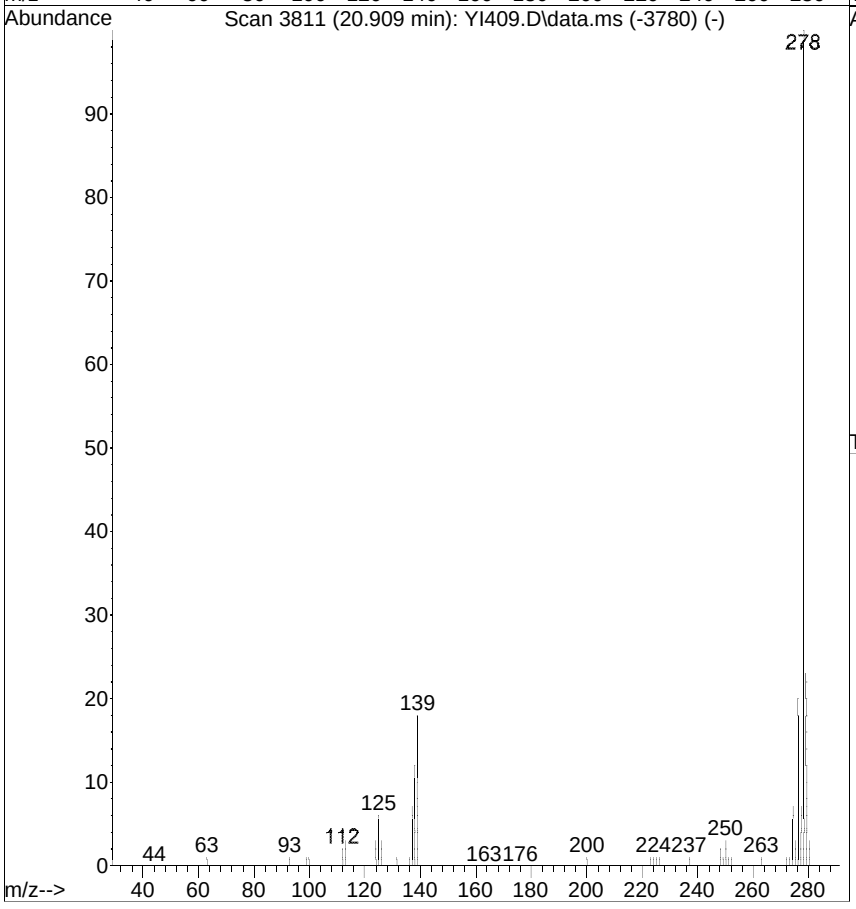
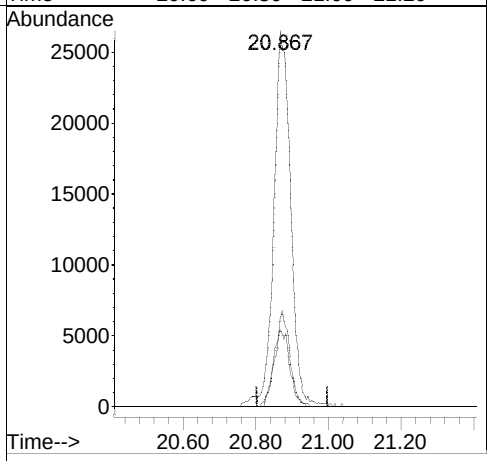
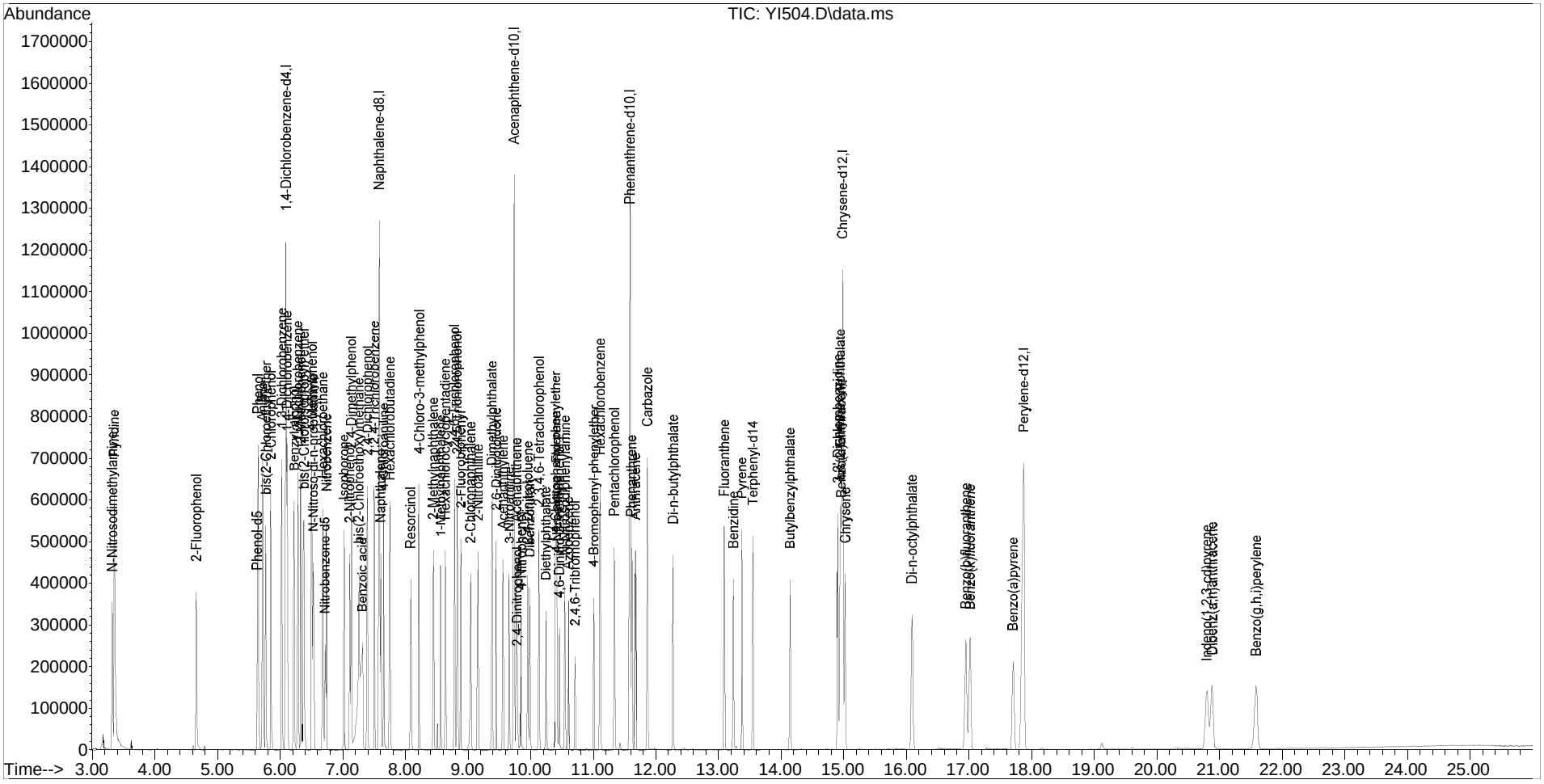




Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI504.D
Acq On : 5 Sep 2012 1:51 pm
Operator :
Sample : ICAL,S20239
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 06 12:00:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI504.D
Acq On : 5 Sep 2012 1:51 pm
Operator :
Sample : ICAL,S20239
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 06 12:00:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	218135	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.585	136	669302	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.744	164	374030	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.591	188	718704	40.0000	ug/mL	0.00
70) Chrysene-d12	14.986	240	701990	40.0000	ug/mL	0.00
79) Perylene-d12	17.876	264	768797	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.348	79	189573	14.9175	ug/mL	# 3
3) N-Nitrosodimethylamine	3.319	42	147508	17.9317	ug/mL	83
4) 2-Fluorophenol	4.671	112	96963	8.4272	ug/mL	82
5) Phenol-d5	5.637	99	110297	8.7014	ug/mL	81
6) Phenol	5.652	94	204449	20.5442	ug/mL	70
7) Aniline	5.719	93	241178m	20.4974	ug/mL	
8) bis(2-Chloroethyl)ether	5.772	93	140882	18.1873	ug/mL	# 62
9) 2-Chlorophenol	5.854	128	157944	17.7173	ug/mL	97
10) 1,3-Dichlorobenzene	6.031	146	179330	19.0752	ug/mL	99
11) 1,4-Dichlorobenzene	6.113	146	171666	21.9374	ug/mL	94
12) Benzyl alcohol	6.229	108	89759	17.7242	ug/mL	# 85
13) 1,2-Dichlorobenzene	6.286	146	161363	19.4282	ug/mL	99
14) 2-Methylphenol	6.334	107	105721	20.2601	ug/mL	91
15) bis(2-Chloroisopropyl) ether	6.383	45	348656	22.5451	ug/mL	76
16) 4-Methylphenol	6.512	107	144207	16.6325	ug/mL	97
17) N-Nitroso-di-n-propylamine	6.536	70	91614m	23.9290	ug/mL	
18) Hexachloroethane	6.681	117	69260	20.2711	ug/mL	88
20) Nitrobenzene-d5	6.719	82	69204	10.1756	ug/mL	81
21) Nitrobenzene	6.743	77	129005	24.1126	ug/mL	86
22) Isophorone	7.022	82	228403	19.6350	ug/mL	99
23) 2-Nitrophenol	7.118	139	75946	20.6410	ug/mL	84
24) 2,4-Dimethylphenol	7.142	107	116957	20.4691	ug/mL	85
25) bis(2-Chloroethoxy)methane	7.258	93	76208	11.4783	ug/mL	95
26) Benzoic acid	7.315	105	240120m	48.6576	ug/mL	
27) 2,4-Dichlorophenol	7.397	162	125124	22.3316	ug/mL	94
28) 1,2,4-Trichlorobenzene	7.508	180	135774	21.7111	ug/mL	94
29) Naphthalene	7.609	128	175485	9.4378	ug/mL	95
30) 4-Chloroaniline	7.657	127	150237	21.4478	ug/mL	91
31) Hexachlorobutadiene	7.758	225	81261	24.2132	ug/mL	98
32) Resorcinol	8.090	110	119212	25.0430	ug/mL	83
33) 4-Chloro-3-methylphenol	8.224	107	106211	20.5237	ug/mL	92
34) 2-Methylnaphthalene	8.446	142	132270	9.1727	ug/mL	93
35) 1-Methylnaphthalene	8.571	142	130198	8.5654	ug/mL	93
37) Hexachlorocyclopentadiene	8.643	237	82273	22.2426	ug/mL	97
38) 2,4,6-Trichlorophenol	8.782	196	99185	25.4535	ug/mL	95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI504.D
Acq On : 5 Sep 2012 1:51 pm
Operator :
Sample : ICAL,S20239
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 06 12:00:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.825	196	105190	26.8948	ug/mL		93
40) 2-Fluorobiphenyl	8.888	172	161442	9.3818	ug/mL		100
41) 2-Chloronaphthalene	9.047	162	129822	10.6046	ug/mL		89
42) 2-Nitroaniline	9.162	65	84520	24.2794	ug/mL		91
43) Dimethylphthalate	9.383	163	282648	19.7314	ug/mL		97
44) 2,6-Dinitrotoluene	9.455	165	60598	19.6563	ug/mL		91
45) Acenaphthylene	9.561	152	202759	9.9460	ug/mL		98
46) 3-Nitroaniline	9.667	138	67818	17.2108	ug/mL	#	60
47) Acenaphthene	9.778	154	111988	9.4273	ug/mL		96
48) 2,4-Dinitrophenol	9.792	184	16236	22.4224	ug/mL	#	2
49) 4-Nitrophenol	9.855	109	30720	17.7520	ug/mL	#	73
50) Dibenzofuran	9.989	168	166626	7.5239	ug/mL		83
51) 2,4-Dinitrotoluene	9.956	165	75358	19.1685	ug/mL		85
52) 2,3,4,6-Tetrachlorophenol	10.138	232	75871	21.9979	ug/mL		89
53) Diethylphthalate	10.249	149	144397	10.1702	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.403	204	71464	10.5889	ug/mL	#	82
55) Fluorene	10.417	166	131429	8.7758	ug/mL		86
56) 4-Nitroaniline	10.427	138	60652	17.6624	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.711	330	24881	9.9866	ug/mL	#	83
59) 4,6-Dinitro-2-methylphenol	10.465	198	37463	18.6502	ug/mL		94
60) N-Nitrosodiphenylamine	10.547	169	100511	10.4266	ug/mL		86
61) Azobenzene	10.600	77	134563	11.3884	ug/mL		97
62) 4-Bromophenyl-phenylether	11.014	248	49697	10.8435	ug/mL	#	85
63) Hexachlorobenzene	11.110	284	101887	22.3738	ug/mL		94
64) Pentachlorophenol	11.341	266	63214	20.3052	ug/mL		97
65) Phenanthrene	11.615	178	188565	9.0943	ug/mL		96
66) Anthracene	11.677	178	198201	8.9999	ug/mL		96
67) Carbazole	11.865	167	331419	19.7751	ug/mL		87
68) Di-n-butylphthalate	12.278	149	258158	9.5845	ug/mL		96
69) Fluoranthene	13.096	202	262886	9.4330	ug/mL		93
71) Benzidine	13.240	184	179019	18.2863	ug/mL		89
72) Pyrene	13.379	202	249519	9.4777	ug/mL		93
73) Terphenyl-d14	13.553	244	169395	9.0610	ug/mL		98
74) Butylbenzylphthalate	14.144	149	116981	8.4965	ug/mL		88
75) 3,3'-Dichlorobenzidine	14.909	252	172640	18.7164	ug/mL		98
76) Benzo(a)anthracene	14.962	228	212620	9.4845	ug/mL		97
77) bis(2-Ethylhexyl)phthalate	14.947	149	160375	9.3826	ug/mL		95
78) Chrysene	15.024	228	190289	9.5154	ug/mL		95
80) Di-n-octylphthalate	16.092	149	274996	8.5904	ug/mL		89
81) Benzo(b)fluoranthene	16.953	252	222140	8.8849	ug/mL		96
82) Benzo(k)fluoranthene	17.020	252	226006	9.9925	ug/mL		91
83) Benzo(a)pyrene	17.708	252	197933	9.1307	ug/mL		96
84) Indeno(1,2,3-cd)pyrene	20.804	276	223856m	8.6488	ug/mL		

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI504.D
Acq On : 5 Sep 2012 1:51 pm
Operator :
Sample : ICAL,S20239
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

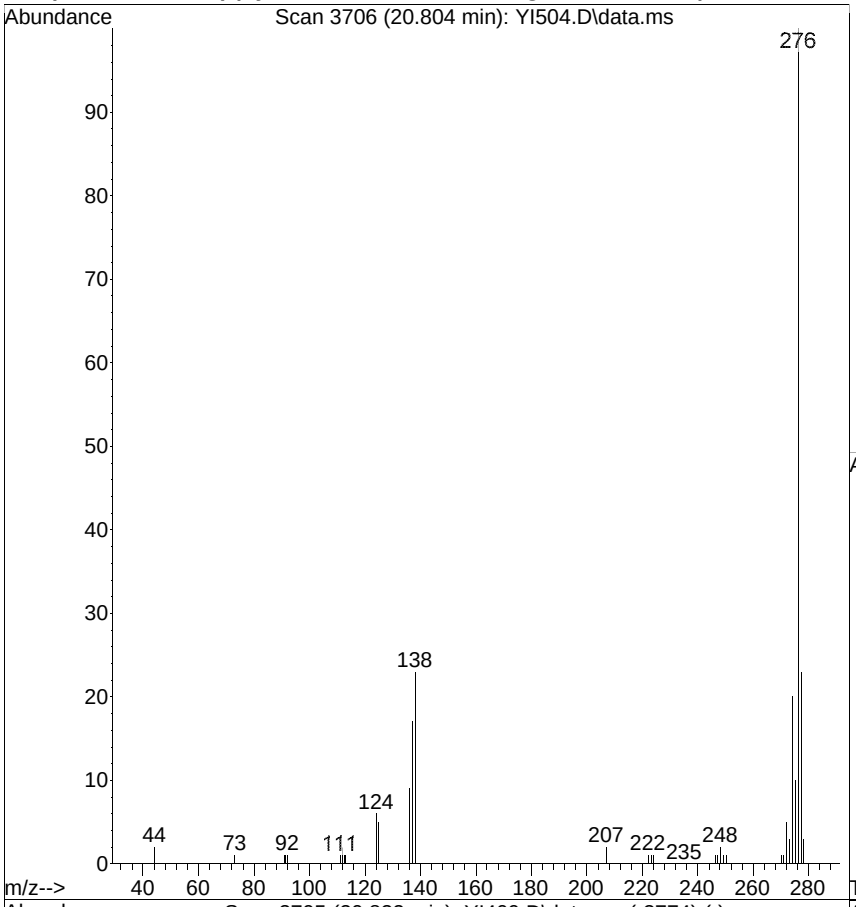
Quant Time: Sep 06 12:00:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.886	278	182369	9.0859	ug/mL	93
86) Benzo(g,h,i)perylene	21.588	276	183614	8.4823	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Indeno(1,2,3-cd)pyrene; 10.00 ug/mL; response=223856; MI]

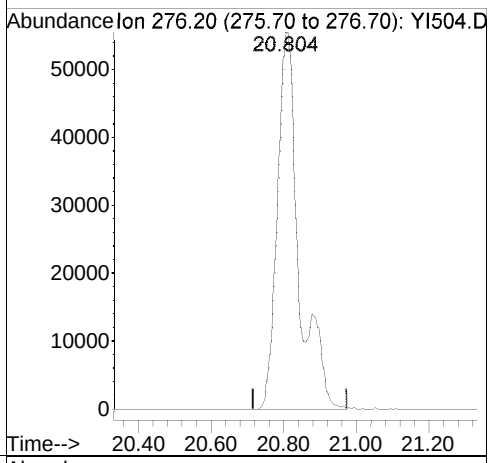
Raw



#84
Indeno(1,2,3-cd)pyrene
Concen: 8.6488 ug/mL m
RT: 20.804 min Scan# 3706
Delta R.T. -0.028 min
Lab File: YI504.D
Acq: 5 Sep 2012 1:51 pm

Tgt Ion:276 Resp: 223856

Ion	Ratio	Lower	Upper
276	100		
138	23.3	11.1	51.1
227	0.0	0.0	20.1



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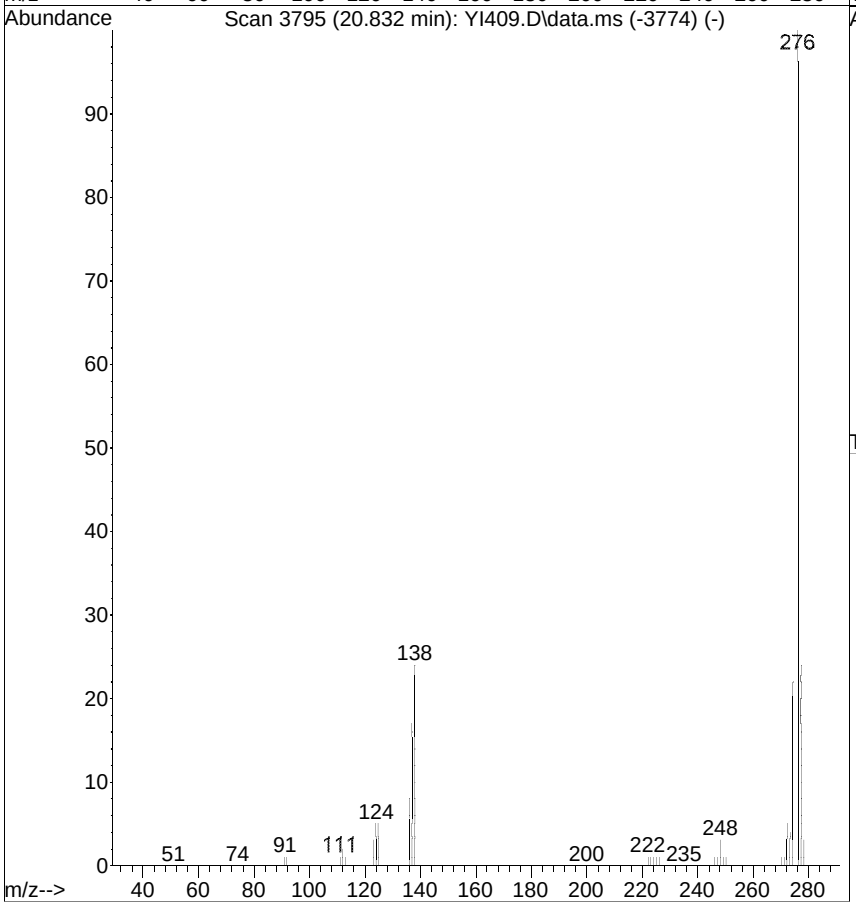
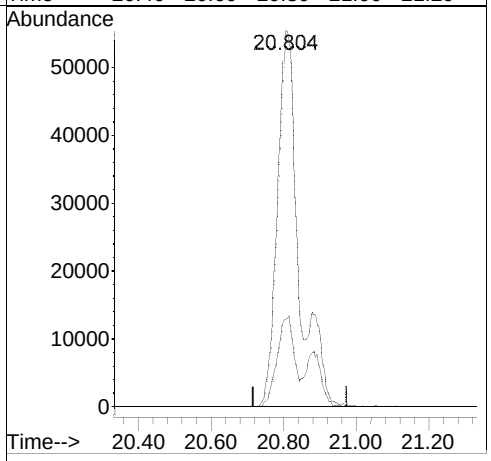
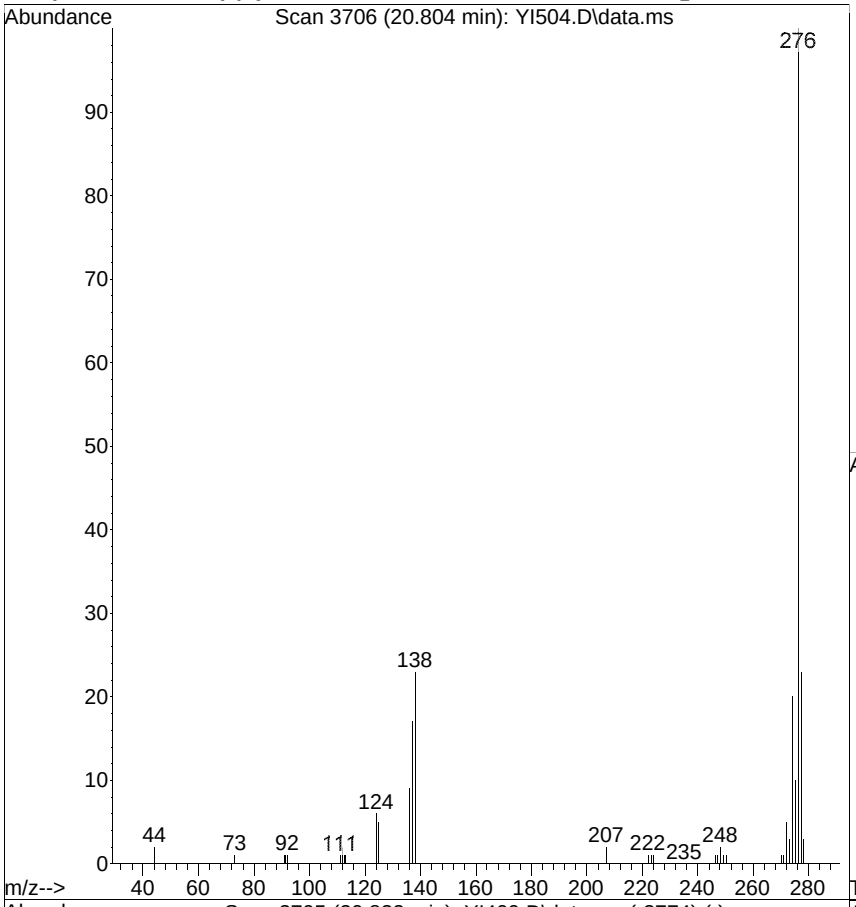




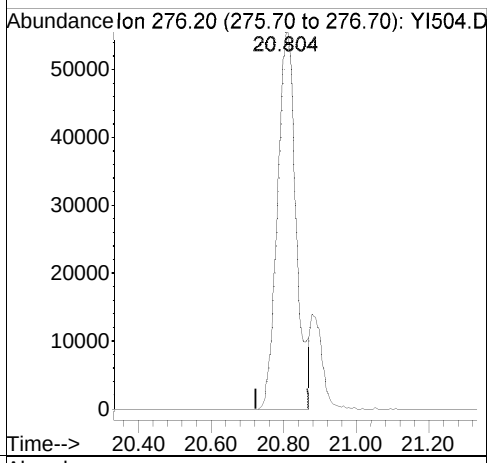
Raw



#84
Indeno(1,2,3-cd)pyrene
Concen: 7.4122 ug/mL
RT: 20.804 min Scan# 3706
Delta R.T. -0.028 min
Lab File: YI504.D
Acq: 5 Sep 2012 1:51 pm

Tgt Ion:276 Resp: 191847

Ion	Ratio	Lower	Upper
276	100		
138	23.3	11.1	51.1
227	0.0	0.0	20.1



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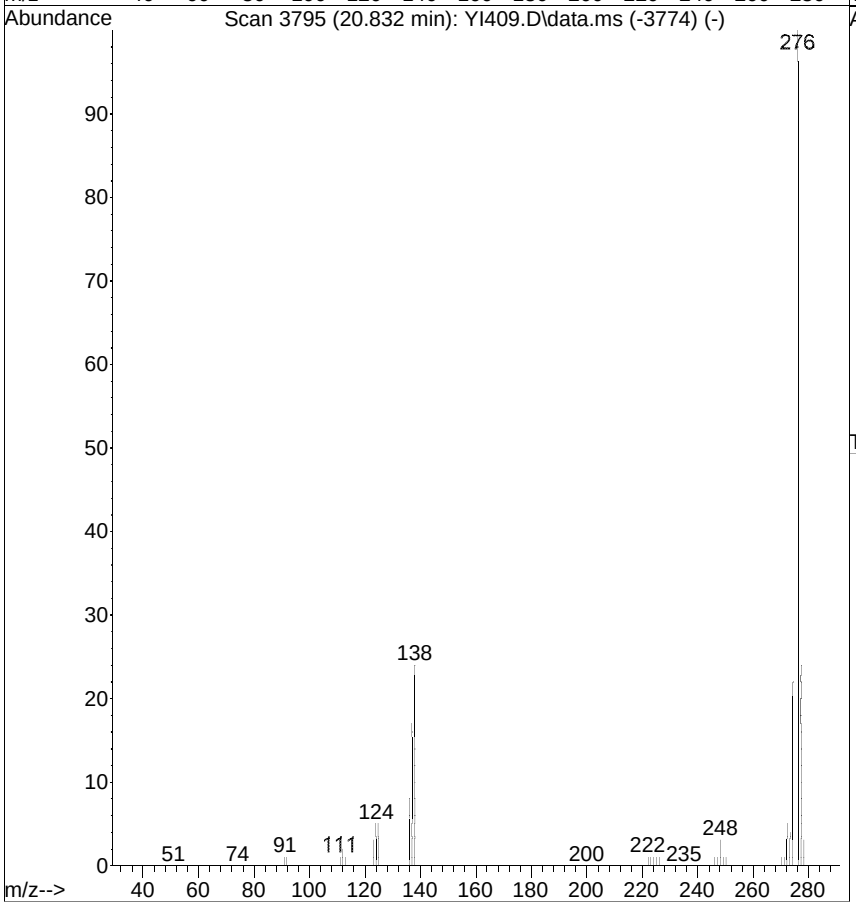
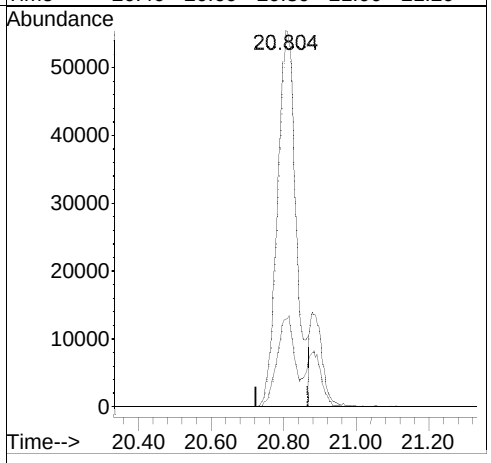
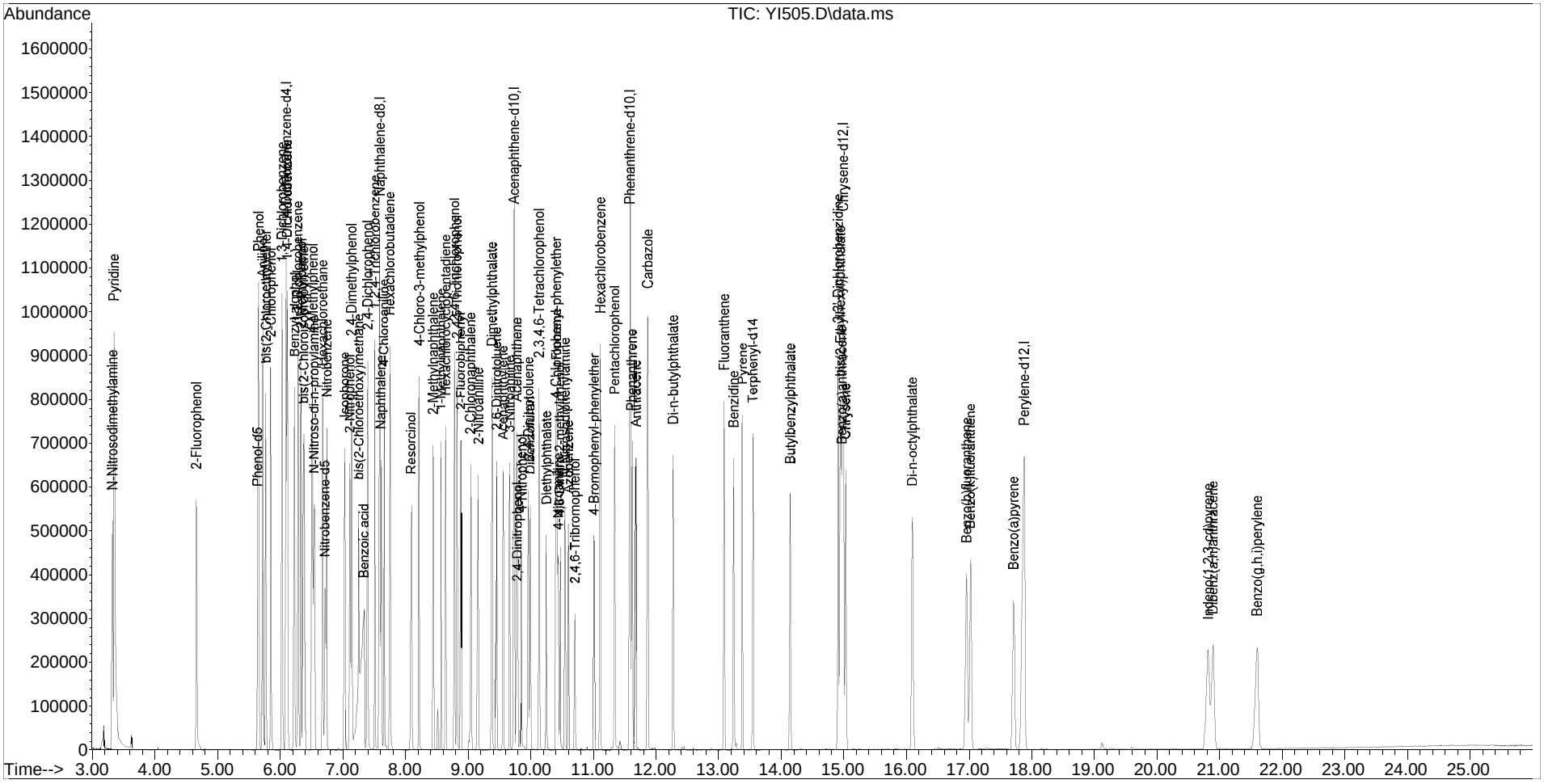




Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI505.D
Acq On : 5 Sep 2012 2:31 pm
Operator :
Sample : ICAL,S20248
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 06 11:25:25 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI505.D
Acq On : 5 Sep 2012 2:31 pm
Operator :
Sample : ICAL,S20248
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 06 11:25:25 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	193358	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.589	136	646177	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.744	164	375729	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	706326	40.0000	ug/mL	0.00
70) Chrysene-d12	14.990	240	687574	40.0000	ug/mL	0.00
79) Perylene-d12	17.880	264	762464	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.353	79	308445	27.3817	ug/mL	# 6
3) N-Nitrosodimethylamine	3.329	42	237537	32.5762	ug/mL	85
4) 2-Fluorophenol	4.670	112	147902	14.5016	ug/mL	91
5) Phenol-d5	5.642	99	170633	15.1864	ug/mL	83
6) Phenol	5.661	94	312116	35.3821	ug/mL	74
7) Aniline	5.723	93	366978m	35.1855	ug/mL	
8) bis(2-Chloroethyl)ether	5.776	93	214257	31.2040	ug/mL	# 66
9) 2-Chlorophenol	5.858	128	239724	30.3368	ug/mL	98
10) 1,3-Dichlorobenzene	6.031	146	273754	32.8504	ug/mL	98
11) 1,4-Dichlorobenzene	6.113	146	233649	33.6843	ug/mL	93
12) Benzyl alcohol	6.233	108	133243	29.6823	ug/mL	87
13) 1,2-Dichlorobenzene	6.286	146	236521	32.1264	ug/mL	98
14) 2-Methylphenol	6.339	107	147625	31.9157	ug/mL	92
15) bis(2-Chloroisopropyl) ether	6.382	45	458268	33.4301	ug/mL	78
16) 4-Methylphenol	6.522	107	217497	28.3001	ug/mL	95
17) N-Nitroso-di-n-propylamine	6.546	70	135521	39.9331	ug/mL	79
18) Hexachloroethane	6.680	117	104772	34.5943	ug/mL	88
20) Nitrobenzene-d5	6.719	82	113744	17.3233	ug/mL	# 78
21) Nitrobenzene	6.748	77	183183	35.4645	ug/mL	86
22) Isophorone	7.031	82	356840	31.7742	ug/mL	99
23) 2-Nitrophenol	7.118	139	112561	31.6872	ug/mL	88
24) 2,4-Dimethylphenol	7.147	107	174515	31.6356	ug/mL	85
25) bis(2-Chloroethoxy)methane	7.262	93	111287	17.3618	ug/mL	95
26) Benzoic acid	7.344	105	333807	70.0630	ug/mL	91
27) 2,4-Dichlorophenol	7.402	162	184468	34.1013	ug/mL	93
28) 1,2,4-Trichlorobenzene	7.512	180	201491	33.3727	ug/mL	95
29) Naphthalene	7.609	128	266358	14.8378	ug/mL	96
30) 4-Chloroaniline	7.657	127	224298	33.1666	ug/mL	87
31) Hexachlorobutadiene	7.758	225	122940	37.9432	ug/mL	97
32) Resorcinol	8.099	110	194776	36.7004	ug/mL	83
33) 4-Chloro-3-methylphenol	8.229	107	154299	30.8831	ug/mL	91
34) 2-Methylnaphthalene	8.445	142	199948	14.3623	ug/mL	96
35) 1-Methylnaphthalene	8.570	142	189778	13.6749	ug/mL	92
37) Hexachlorocyclopentadiene	8.647	237	134340	36.1547	ug/mL	98
38) 2,4,6-Trichlorophenol	8.787	196	147625	37.7132	ug/mL	94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI505.D
Acq On : 5 Sep 2012 2:31 pm
Operator :
Sample : ICAL,S20248
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 06 11:25:25 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.825	196	151903	38.6627	ug/mL		95
40) 2-Fluorobiphenyl	8.893	172	246608	16.5020	ug/mL		99
41) 2-Chloronaphthalene	9.046	162	199166	16.1954	ug/mL		89
42) 2-Nitroaniline	9.167	65	128282	36.6840	ug/mL		93
43) Dimethylphthalate	9.388	163	424564	29.5043	ug/mL		97
44) 2,6-Dinitrotoluene	9.460	165	92065	29.7283	ug/mL		91
45) Acenaphthylene	9.566	152	303704	14.8303	ug/mL		98
46) 3-Nitroaniline	9.676	138	107720	27.2135	ug/mL	#	61
47) Acenaphthene	9.782	154	174335	14.6094	ug/mL		96
48) 2,4-Dinitrophenol	9.797	184	34401	33.3835	ug/mL	#	1
49) 4-Nitrophenol	9.859	109	48265	27.7645	ug/mL	#	70
50) Dibenzofuran	9.994	168	244390	13.4955	ug/mL		83
51) 2,4-Dinitrotoluene	9.965	165	116844	29.5867	ug/mL	#	85
52) 2,3,4,6-Tetrachlorophenol	10.138	232	115086	33.2169	ug/mL		89
53) Diethylphthalate	10.253	149	217707	15.2642	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.407	204	107752	15.8936	ug/mL		84
55) Fluorene	10.417	166	199615	14.0683	ug/mL		86
56) 4-Nitroaniline	10.441	138	95369	27.6467	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.715	330	35505	14.1864	ug/mL	#	81
59) 4,6-Dinitro-2-methylphenol	10.470	198	63942	32.3901	ug/mL		90
60) N-Nitrosodiphenylamine	10.552	169	151331	15.9736	ug/mL		88
61) Azobenzene	10.604	77	187017	16.1051	ug/mL		97
62) 4-Bromophenyl-phenylether	11.018	248	71320	15.8342	ug/mL	#	88
63) Hexachlorobenzene	11.114	284	151184	33.7810	ug/mL		96
64) Pentachlorophenol	11.345	266	101567	33.1964	ug/mL		97
65) Phenanthrene	11.619	178	278503	13.6673	ug/mL		96
66) Anthracene	11.682	178	292658	13.5218	ug/mL		95
67) Carbazole	11.874	167	504941	30.6568	ug/mL		87
68) Di-n-butylphthalate	12.278	149	388859	14.6900	ug/mL		96
69) Fluoranthene	13.095	202	375075	13.6945	ug/mL		96
71) Benzidine	13.245	184	290313	30.2765	ug/mL		88
72) Pyrene	13.384	202	381717	14.8032	ug/mL		93
73) Terphenyl-d14	13.552	244	253512	13.8447	ug/mL		97
74) Butylbenzylphthalate	14.149	149	178864	13.2636	ug/mL		86
75) 3,3'-Dichlorobenzidine	14.913	252	283236	31.3503	ug/mL		98
76) Benzo(a)anthracene	14.966	228	319224m	14.5384	ug/mL		
77) bis(2-Ethylhexyl)phthalate	14.947	149	241573	14.4293	ug/mL		95
78) Chrysene	15.029	228	292343	14.9251	ug/mL		95
80) Di-n-octylphthalate	16.096	149	463569	14.6013	ug/mL		89
81) Benzo(b)fluoranthene	16.962	252	360754	14.5489	ug/mL		95
82) Benzo(k)fluoranthene	17.024	252	342240	15.2574	ug/mL		93
83) Benzo(a)pyrene	17.712	252	320441	14.9049	ug/mL		94
84) Indeno(1,2,3-cd)pyrene	20.823	276	367389m	14.3123	ug/mL		

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI505.D
Acq On : 5 Sep 2012 2:31 pm
Operator :
Sample : ICAL,S20248
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

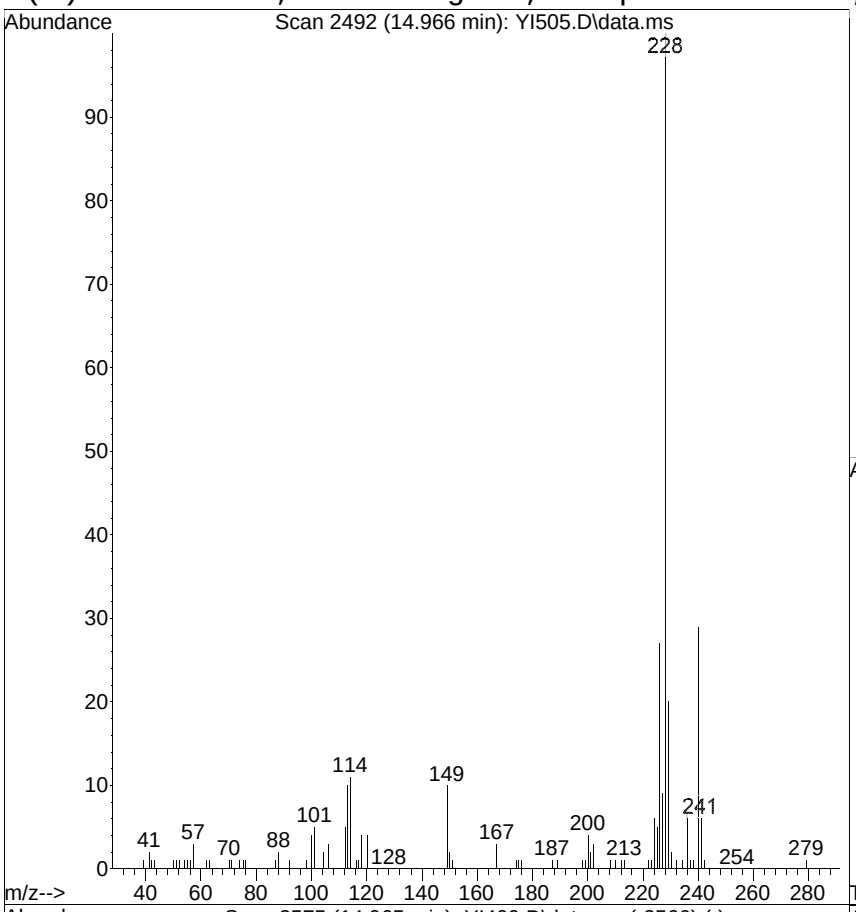
Quant Time: Sep 06 11:25:25 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.896	278	294348	14.7867	ug/mL	96
86) Benzo(g,h,i)perylene	21.602	276	303023	14.1149	ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)anthracene; 16.00 ug/mL; response=319224; MI]

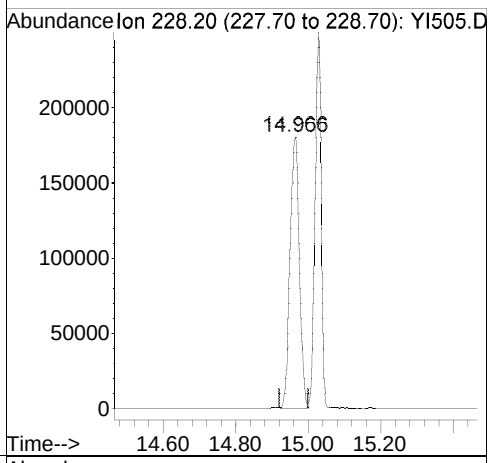
Raw



#76
Benzo(a)anthracene
Concen: 14.5384 ug/mL m
RT: 14.966 min Scan# 2492
Delta R.T. 0.001 min
Lab File: YI505.D
Acq: 5 Sep 2012 2:31 pm

Tgt Ion:228 Resp: 319224

Ion	Ratio	Lower	Upper
228	100		
229	20.0	0.0	40.0
226	26.7	8.0	48.0



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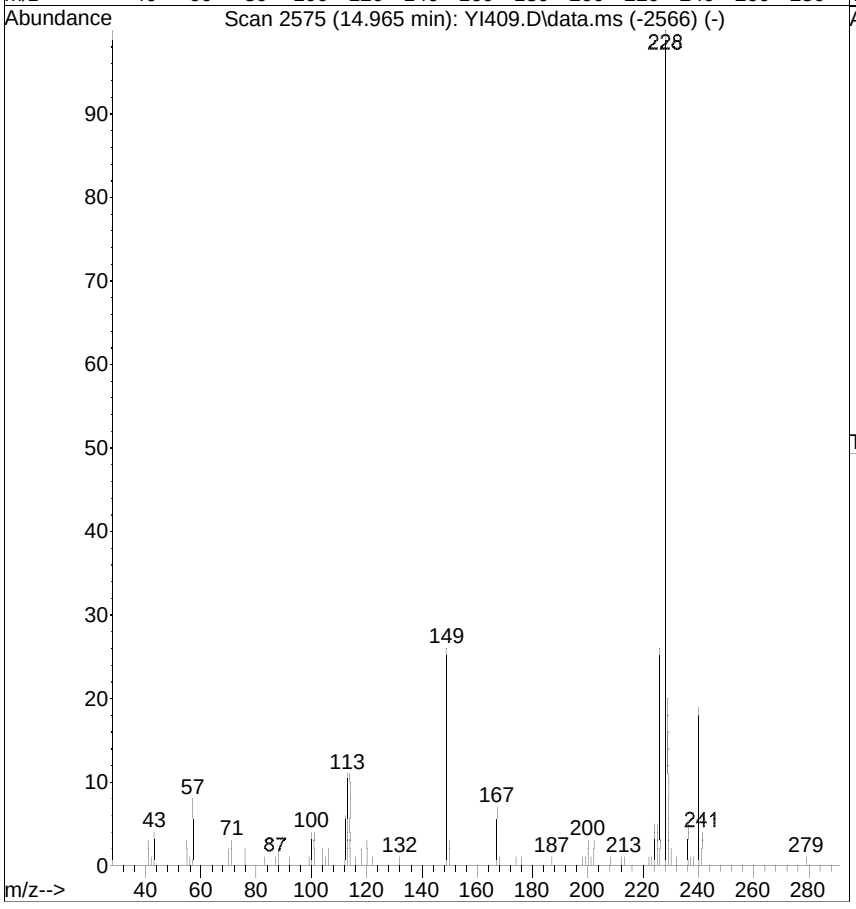
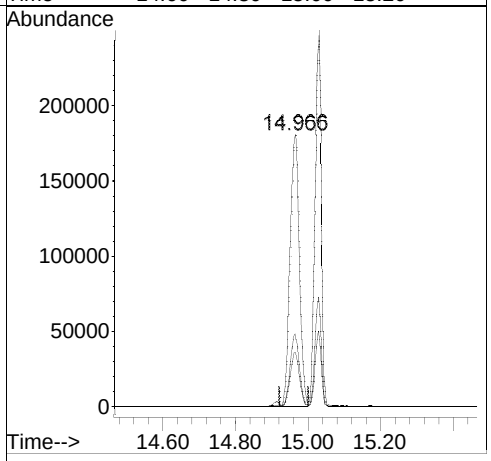
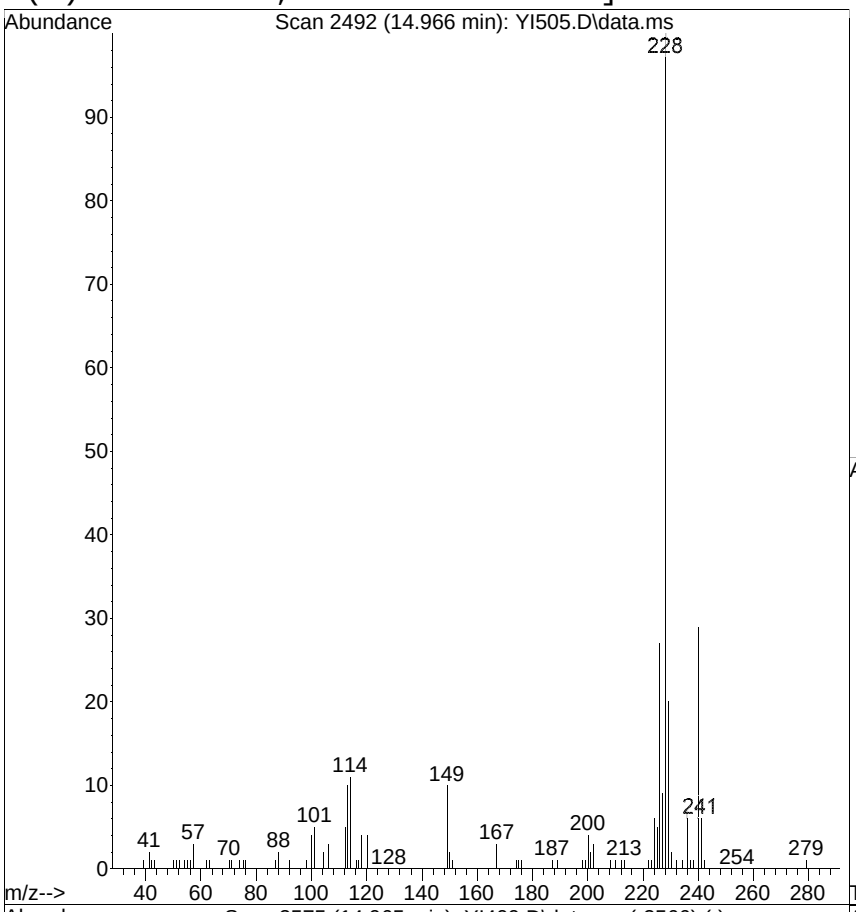




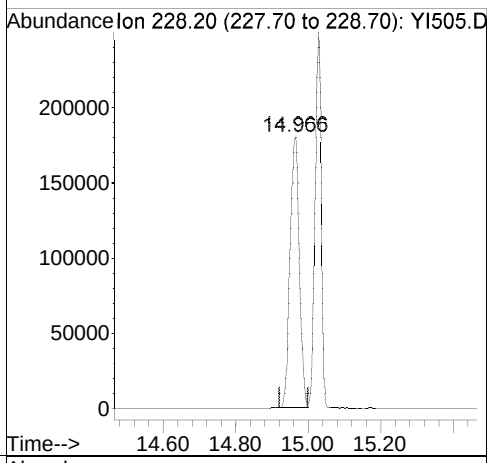
Raw



#76
Benzo(a)anthracene
Concen: 14.4588 ug/mL
RT: 14.966 min Scan# 2492
Delta R.T. 0.001 min
Lab File: YI505.D
Acq: 5 Sep 2012 2:31 pm

Tgt Ion:228 Resp: 317477

Ion	Ratio	Lower	Upper
228	100		
229	20.0	0.0	40.0
226	26.7	8.0	48.0



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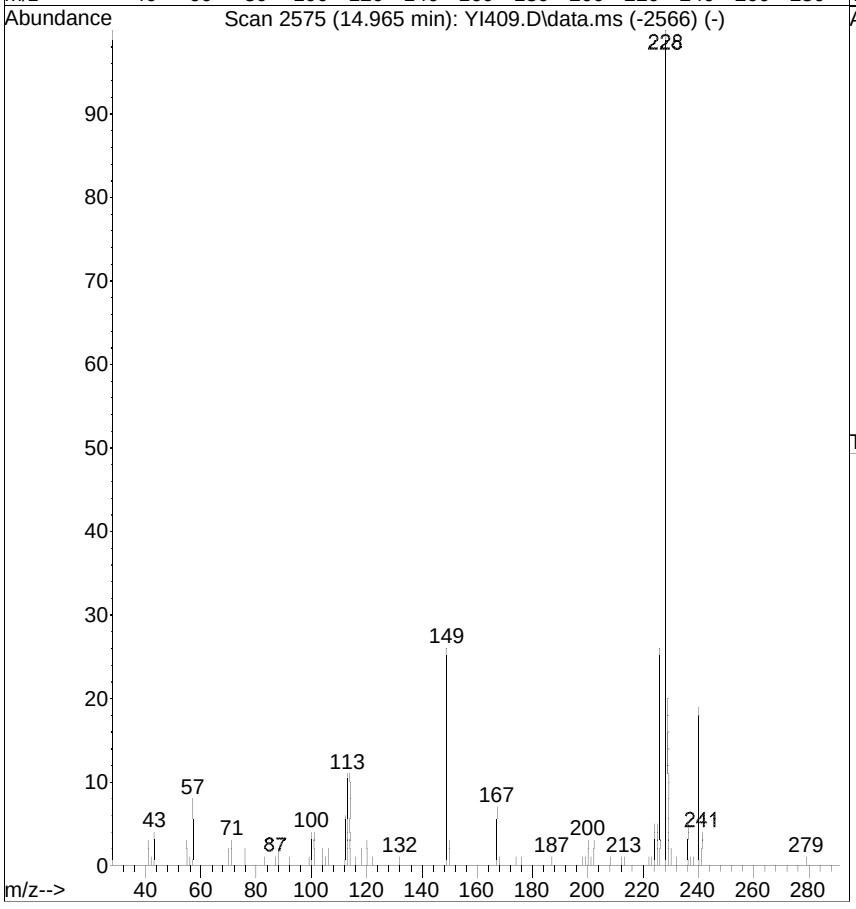
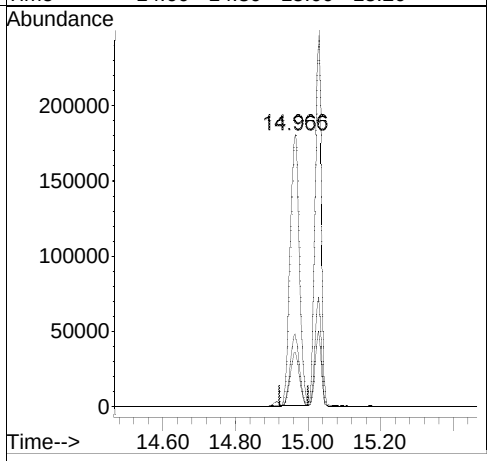
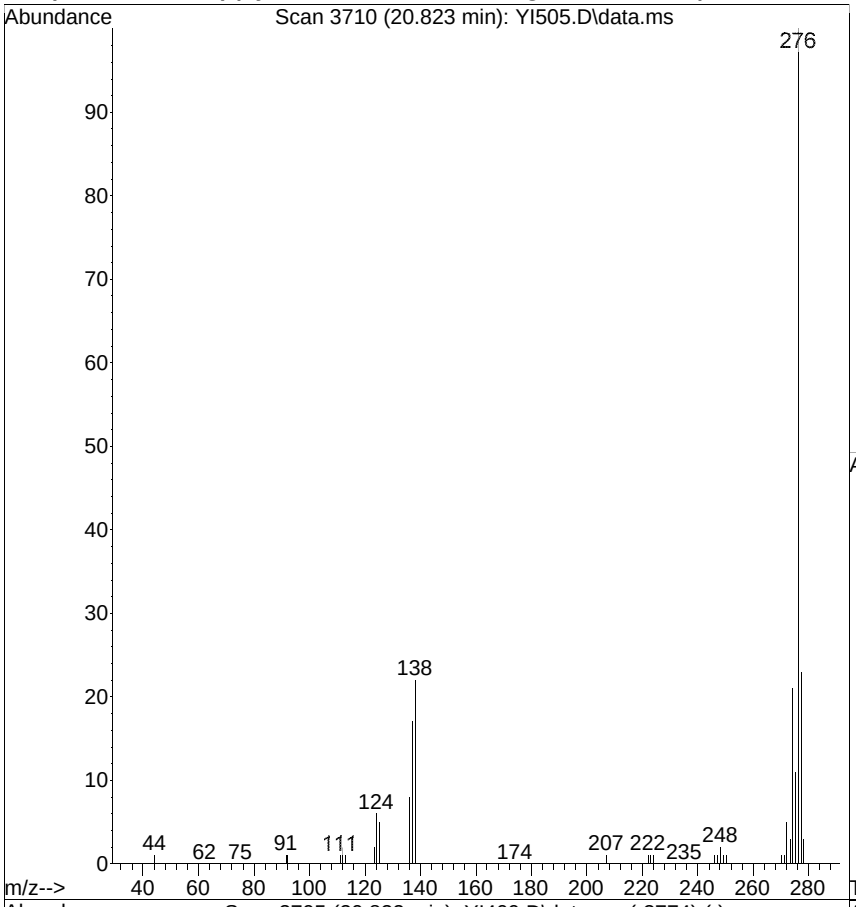




[Indeno(1,2,3-cd)pyrene; 16.00 ug/mL; response=367389; MI]

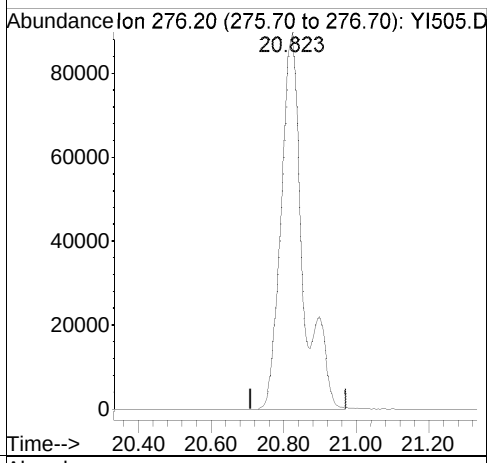
Raw



#84
Indeno(1,2,3-cd)pyrene
Concen: 14.3123 ug/mL m
RT: 20.823 min Scan# 3710
Delta R.T. -0.009 min
Lab File: YI505.D
Acq: 5 Sep 2012 2:31 pm

Tgt Ion:276 Resp: 367389

Ion	Ratio	Lower	Upper
276	100		
138	21.8	11.1	51.1
227	0.0	0.0	20.1



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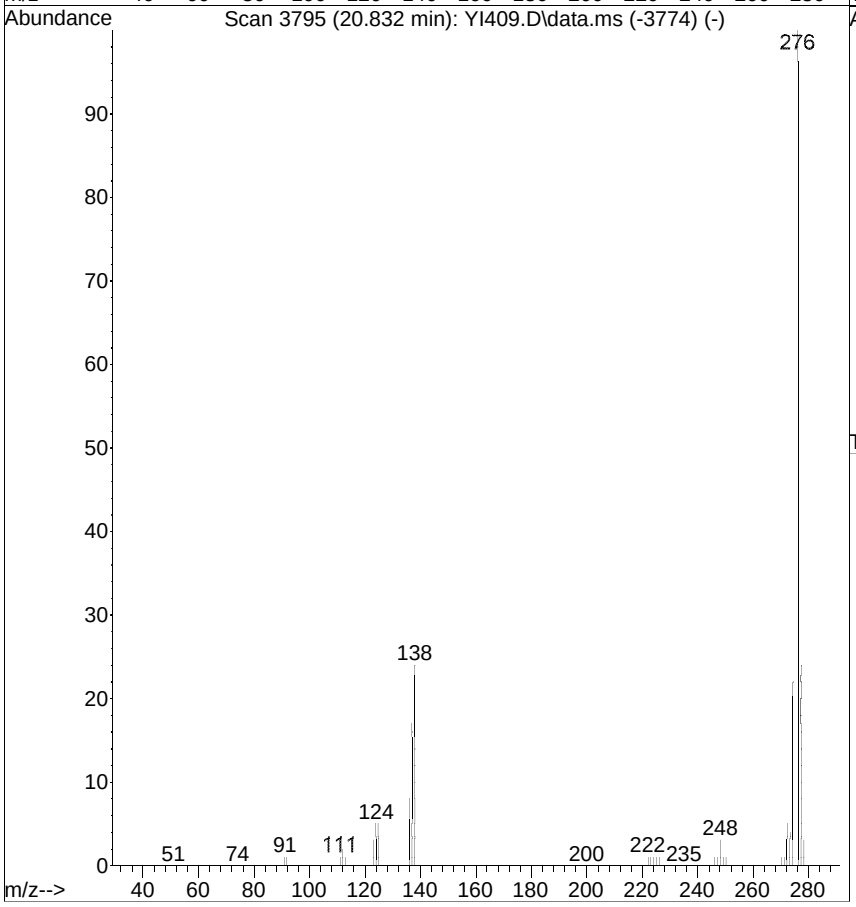
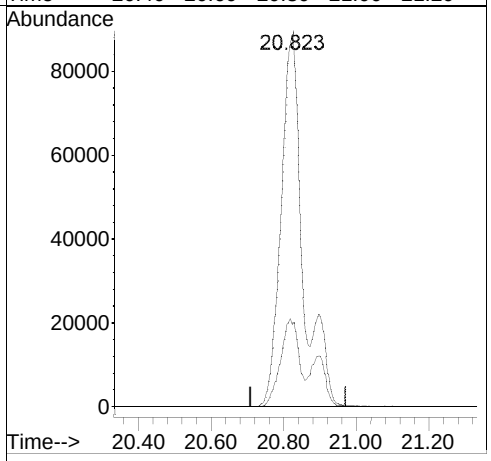
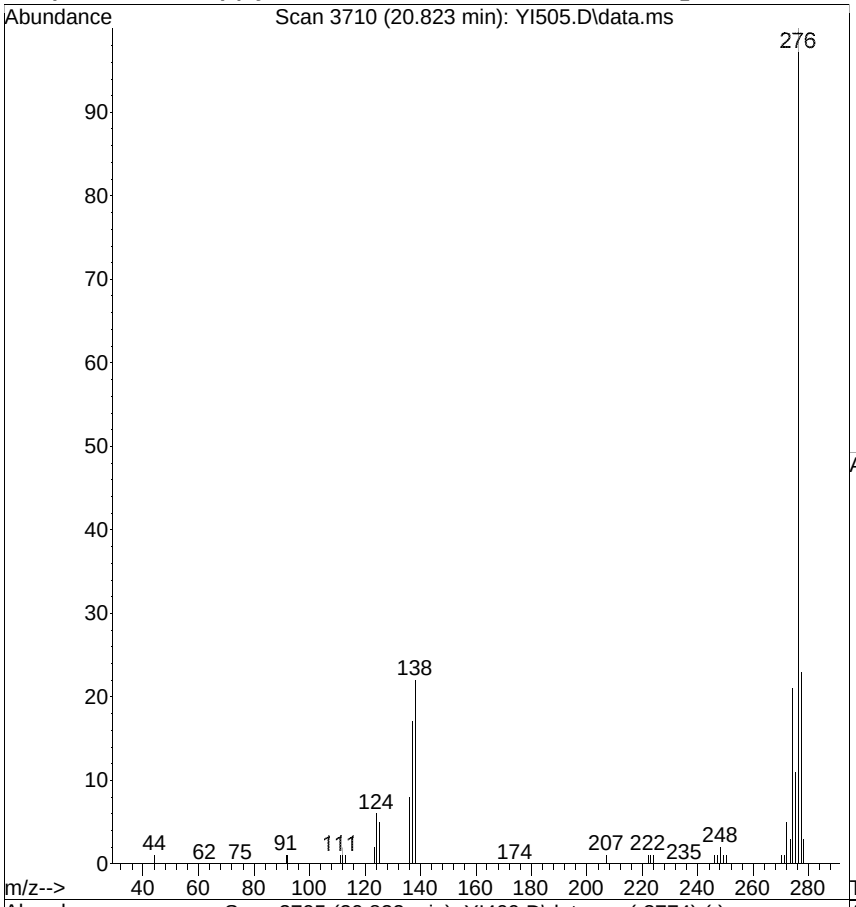




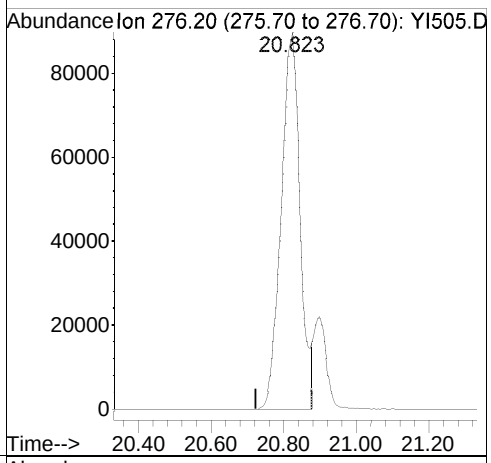
Raw



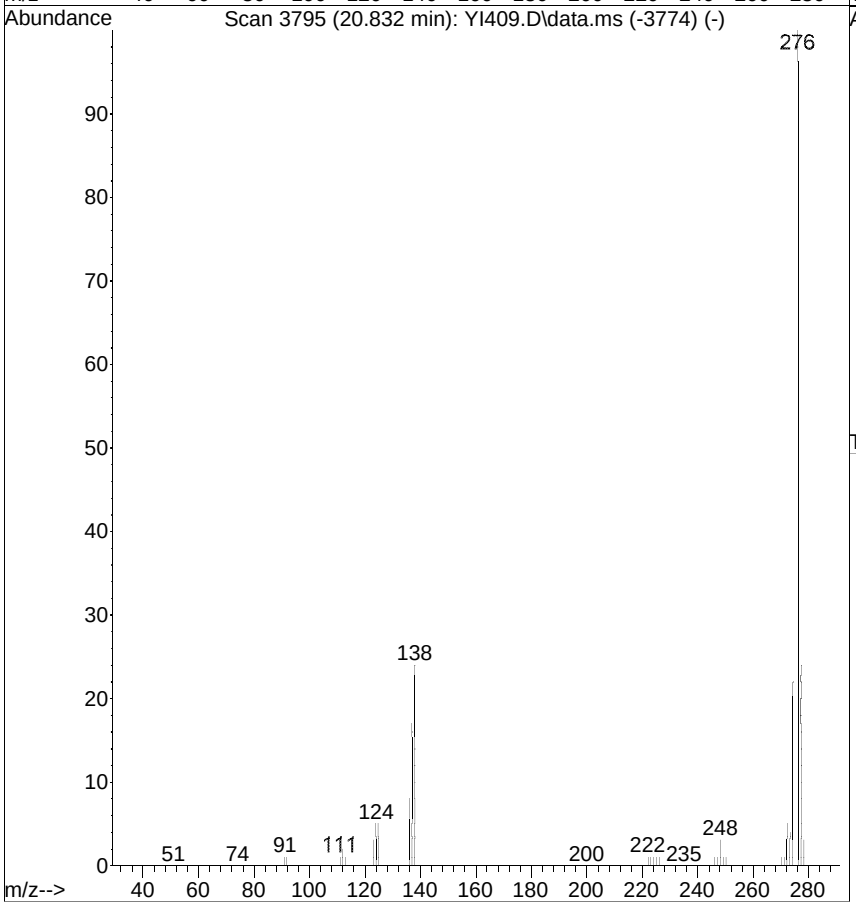
#84
Indeno(1,2,3-cd)pyrene
Concen: 12.3109 ug/mL
RT: 20.823 min Scan# 3710
Delta R.T. -0.009 min
Lab File: YI505.D
Acq: 5 Sep 2012 2:31 pm

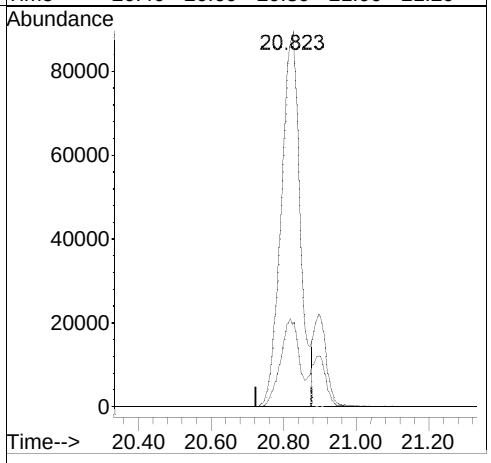
Tgt Ion:276 Resp: 316016

Ion	Ratio	Lower	Upper
276	100		
138	21.8	11.1	51.1
227	0.0	0.0	20.1



Ref

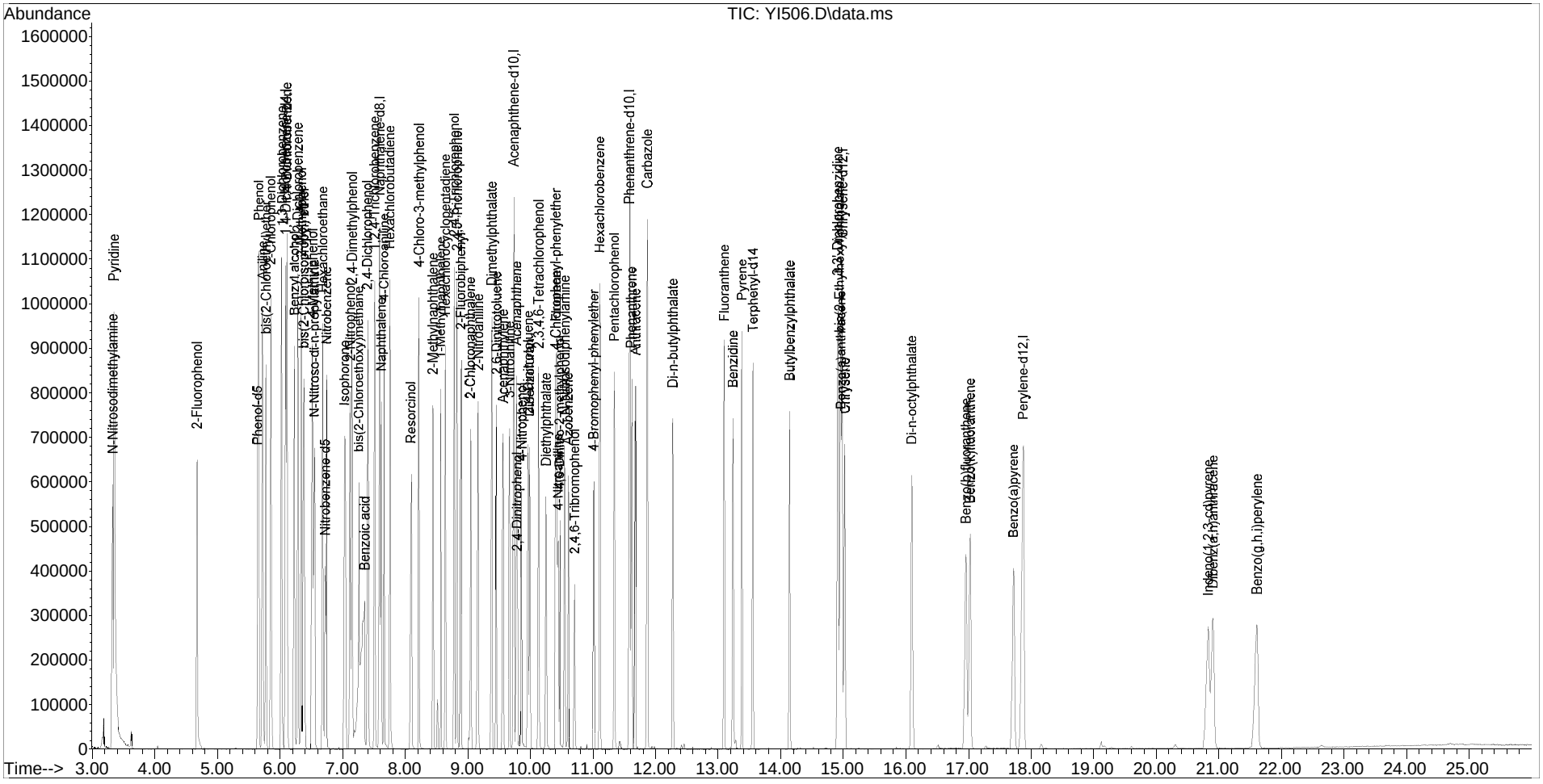




Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI506.D
Acq On : 5 Sep 2012 3:10 pm
Operator :
Sample : ICAL,S20249
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 06 11:26:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI506.D
Acq On : 5 Sep 2012 3:10 pm
Operator :
Sample : ICAL,S20249
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 06 11:26:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	191972	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.589	136	633026	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.743	164	355418	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	699201	40.0000	ug/mL	0.00
70) Chrysene-d12	14.995	240	647001	40.0000	ug/mL	0.00
79) Perylene-d12	17.875	264	757873	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.352	79	359625	32.1557	ug/mL	# 7
3) N-Nitrosodimethylamine	3.333	42	288967	39.9155	ug/mL	84
4) 2-Fluorophenol	4.675	112	175440	17.3259	ug/mL	83
5) Phenol-d5	5.646	99	202018	18.1094	ug/mL	82
6) Phenol	5.666	94	356359	40.6892	ug/mL	73
7) Aniline	5.728	93	411699m	39.7583	ug/mL	
8) bis(2-Chloroethyl)ether	5.781	93	243880	35.7746	ug/mL	# 68
9) 2-Chlorophenol	5.858	128	280948	35.8103	ug/mL	96
10) 1,3-Dichlorobenzene	6.036	146	310554	37.5354	ug/mL	100
11) 1,4-Dichlorobenzene	6.113	146	278462	40.4346	ug/mL	93
12) Benzyl alcohol	6.238	108	156070	35.0184	ug/mL	87
13) 1,2-Dichlorobenzene	6.291	146	278157	38.0545	ug/mL	100
14) 2-Methylphenol	6.344	107	175578	38.2330	ug/mL	94
15) bis(2-Chloroisopropyl) ether	6.382	45	529053	38.8724	ug/mL	79
16) 4-Methylphenol	6.522	107	256492	33.6149	ug/mL	95
17) N-Nitroso-di-n-propylamine	6.555	70	157097	46.6249	ug/mL	82
18) Hexachloroethane	6.685	117	120035	39.9200	ug/mL	80
20) Nitrobenzene-d5	6.724	82	126118	19.6069	ug/mL	79
21) Nitrobenzene	6.748	77	223882	44.2443	ug/mL	88
22) Isophorone	7.036	82	432707	39.3301	ug/mL	99
23) 2-Nitrophenol	7.123	139	136069	39.1007	ug/mL	86
24) 2,4-Dimethylphenol	7.152	107	206035	38.1253	ug/mL	84
25) bis(2-Chloroethoxy)methane	7.262	93	133711	21.2935	ug/mL	94
26) Benzoic acid	7.353	105	384921	82.4698	ug/mL	92
27) 2,4-Dichlorophenol	7.402	162	210932	39.8035	ug/mL	93
28) 1,2,4-Trichlorobenzene	7.512	180	234037	39.5685	ug/mL	95
29) Naphthalene	7.613	128	309083	17.5755	ug/mL	96
30) 4-Chloroaniline	7.661	127	264316	39.8960	ug/mL	89
31) Hexachlorobutadiene	7.757	225	141033	44.4315	ug/mL	98
32) Resorcinol	8.104	110	226421	42.0182	ug/mL	83
33) 4-Chloro-3-methylphenol	8.229	107	186134	38.0288	ug/mL	94
34) 2-Methylnaphthalene	8.445	142	230935	16.9327	ug/mL	94
35) 1-Methylnaphthalene	8.570	142	231237	17.5694	ug/mL	96
37) Hexachlorocyclopentadiene	8.647	237	165793	47.1695	ug/mL	97
38) 2,4,6-Trichlorophenol	8.787	196	179772	48.5501	ug/mL	93

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI506.D
Acq On : 5 Sep 2012 3:10 pm
Operator :
Sample : ICAL,S20249
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 06 11:26:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.830	196	181652m	48.8766	ug/mL		
40) 2-Fluorobiphenyl	8.892	172	288427	21.5823	ug/mL		100
41) 2-Chloronaphthalene	9.046	162	234638	20.1702	ug/mL		89
42) 2-Nitroaniline	9.171	65	163369	49.3873	ug/mL		92
43) Dimethylphthalate	9.392	163	510588	37.5101	ug/mL		96
44) 2,6-Dinitrotoluene	9.465	165	110017	37.5552	ug/mL		87
45) Acenaphthylene	9.566	152	335638	17.3263	ug/mL		98
46) 3-Nitroaniline	9.681	138	131366	35.0838	ug/mL	#	59
47) Acenaphthene	9.782	154	203584	18.0354	ug/mL		96
48) 2,4-Dinitrophenol	9.796	184	43221	40.2239	ug/mL	#	1
49) 4-Nitrophenol	9.864	109	60457	36.7655	ug/mL	#	74
50) Dibenzofuran	9.994	168	290648	18.5960	ug/mL		83
51) 2,4-Dinitrotoluene	9.965	165	144864	38.7781	ug/mL		86
52) 2,3,4,6-Tetrachlorophenol	10.143	232	133788	40.8215	ug/mL		89
53) Diethylphthalate	10.253	149	252869	18.7427	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.407	204	130104	20.2872	ug/mL		85
55) Fluorene	10.422	166	238750	18.5183	ug/mL		86
56) 4-Nitroaniline	10.446	138	112289	34.4119	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.715	330	43792	18.4975	ug/mL	#	80
59) 4,6-Dinitro-2-methylphenol	10.474	198	74715	38.2328	ug/mL		94
60) N-Nitrosodiphenylamine	10.551	169	181204	19.3217	ug/mL		87
61) Azobenzene	10.604	77	227046	19.7515	ug/mL		97
62) 4-Bromophenyl-phenylether	11.018	248	87999	19.7363	ug/mL	#	87
63) Hexachlorobenzene	11.114	284	182583	41.2126	ug/mL		96
64) Pentachlorophenol	11.345	266	119011	39.2942	ug/mL		99
65) Phenanthrene	11.619	178	332200	16.4685	ug/mL		97
66) Anthracene	11.682	178	344320	16.0709	ug/mL		95
67) Carbazole	11.874	167	601290	36.8785	ug/mL		87
68) Di-n-butylphthalate	12.283	149	452954	17.2857	ug/mL		96
69) Fluoranthene	13.100	202	453439	16.7244	ug/mL		92
71) Benzidine	13.244	184	340200	37.7040	ug/mL		89
72) Pyrene	13.384	202	449439	18.5224	ug/mL		93
73) Terphenyl-d14	13.557	244	310653	18.0292	ug/mL		97
74) Butylbenzylphthalate	14.148	149	221502	17.4554	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.918	252	336793	39.6160	ug/mL		98
76) Benzo(a)anthracene	14.966	228	372083	18.0084	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.947	149	283620	18.0031	ug/mL		93
78) Chrysene	15.028	228	333932	18.1174	ug/mL		96
80) Di-n-octylphthalate	16.096	149	544931	17.2680	ug/mL		89
81) Benzo(b)fluoranthene	16.966	252	412593	16.7403	ug/mL		95
82) Benzo(k)fluoranthene	17.029	252	397274	17.8181	ug/mL		92
83) Benzo(a)pyrene	17.721	252	381888	17.8706	ug/mL		93
84) Indeno(1,2,3-cd)pyrene	20.833	276	447379m	17.5340	ug/mL		

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI506.D
Acq On : 5 Sep 2012 3:10 pm
Operator :
Sample : ICAL,S20249
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

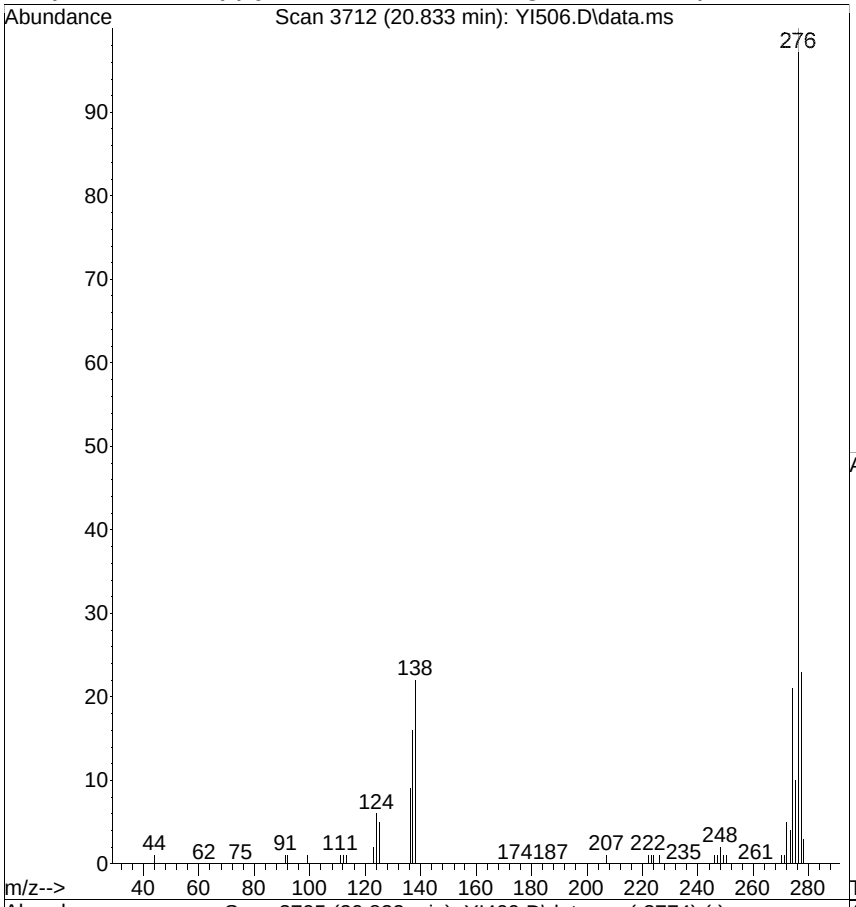
Quant Time: Sep 06 11:26:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.905	278	363056	18.3488	ug/mL	93
86) Benzo(g,h,i)perylene	21.612	276	373008	17.4800	ug/mL	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Indeno(1,2,3-cd)pyrene; 20.00 ug/mL; response=447379; MI]

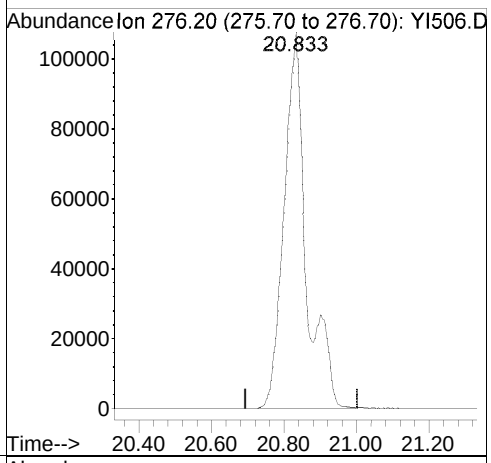
Raw



#84
Indeno(1,2,3-cd)pyrene
Concen: 17.5340 ug/mL m
RT: 20.833 min Scan# 3712
Delta R.T. 0.001 min
Lab File: YI506.D
Acq: 5 Sep 2012 3:10 pm

Tgt Ion:276 Resp: 447379

Ion	Ratio	Lower	Upper
276	100		
138	21.7	11.1	51.1
227	0.0	0.0	20.1



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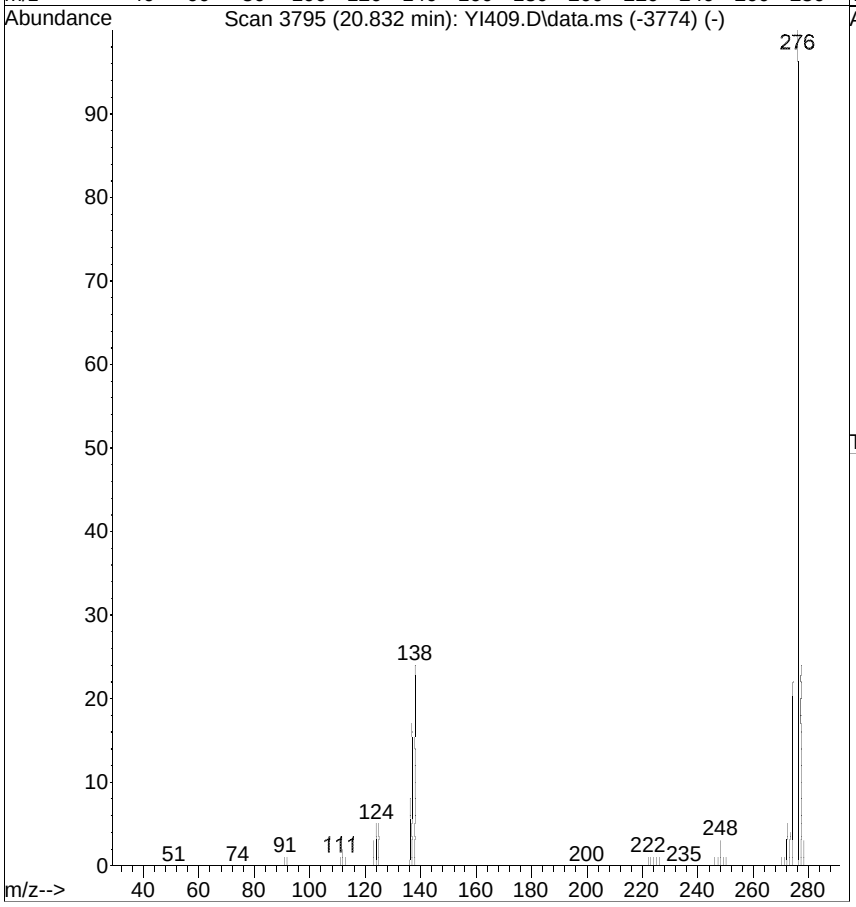
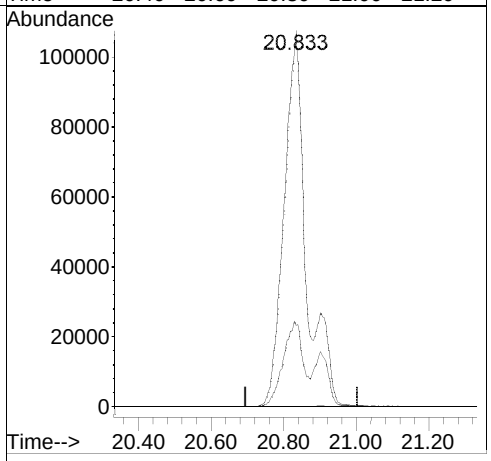
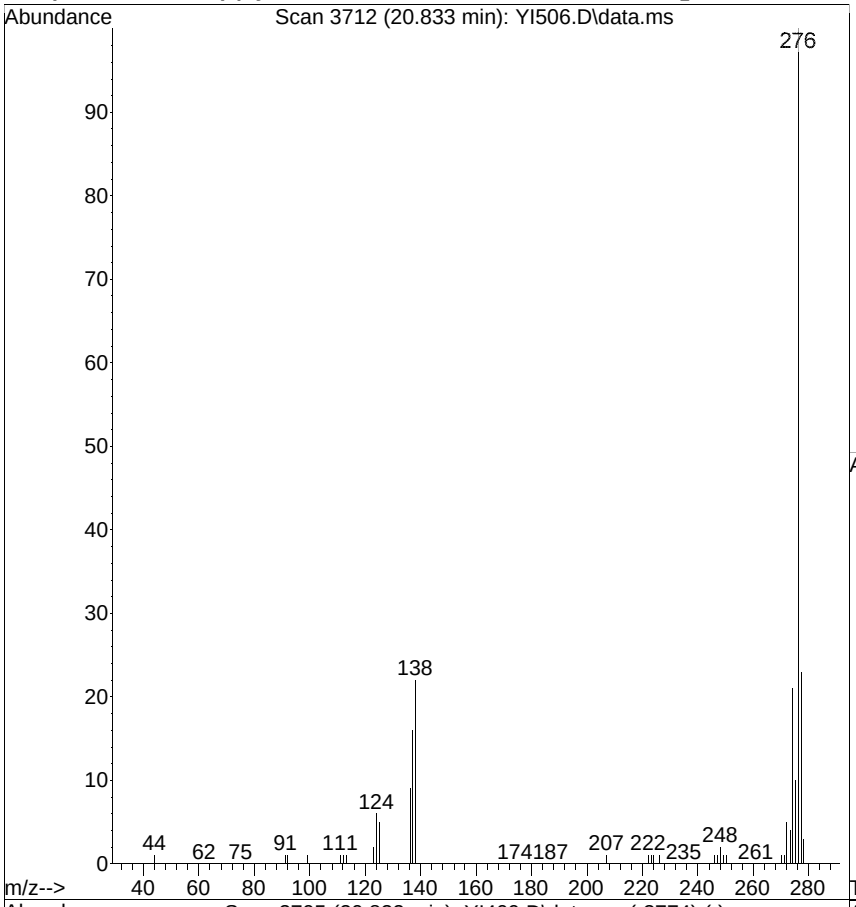




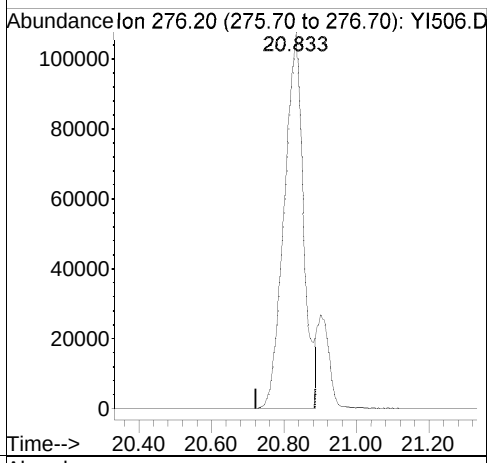
Raw



#84
Indeno(1,2,3-cd)pyrene
Concen: 15.1252 ug/mL
RT: 20.833 min Scan# 3712
Delta R.T. 0.001 min
Lab File: YI506.D
Acq: 5 Sep 2012 3:10 pm

Tgt Ion:276 Resp: 385920

Ion	Ratio	Lower	Upper
276	100		
138	21.7	11.1	51.1
227	0.0	0.0	20.1



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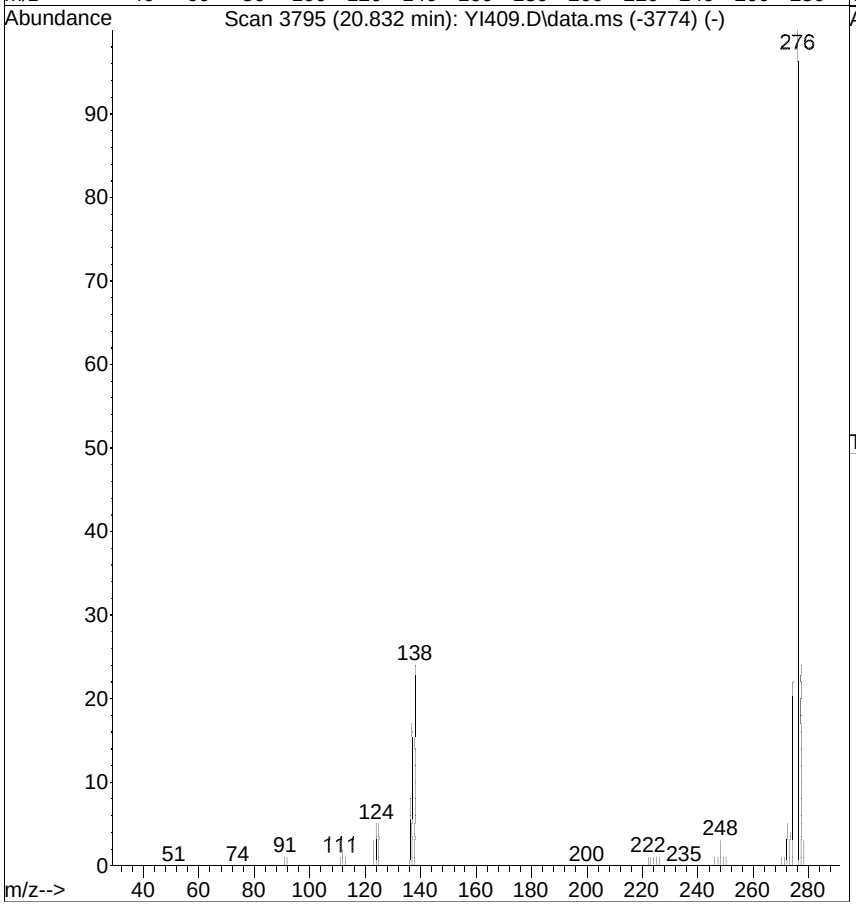
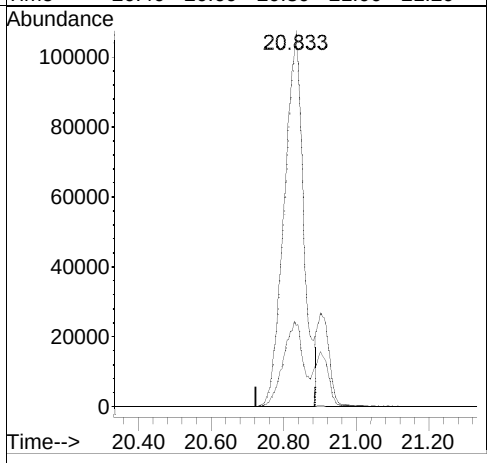
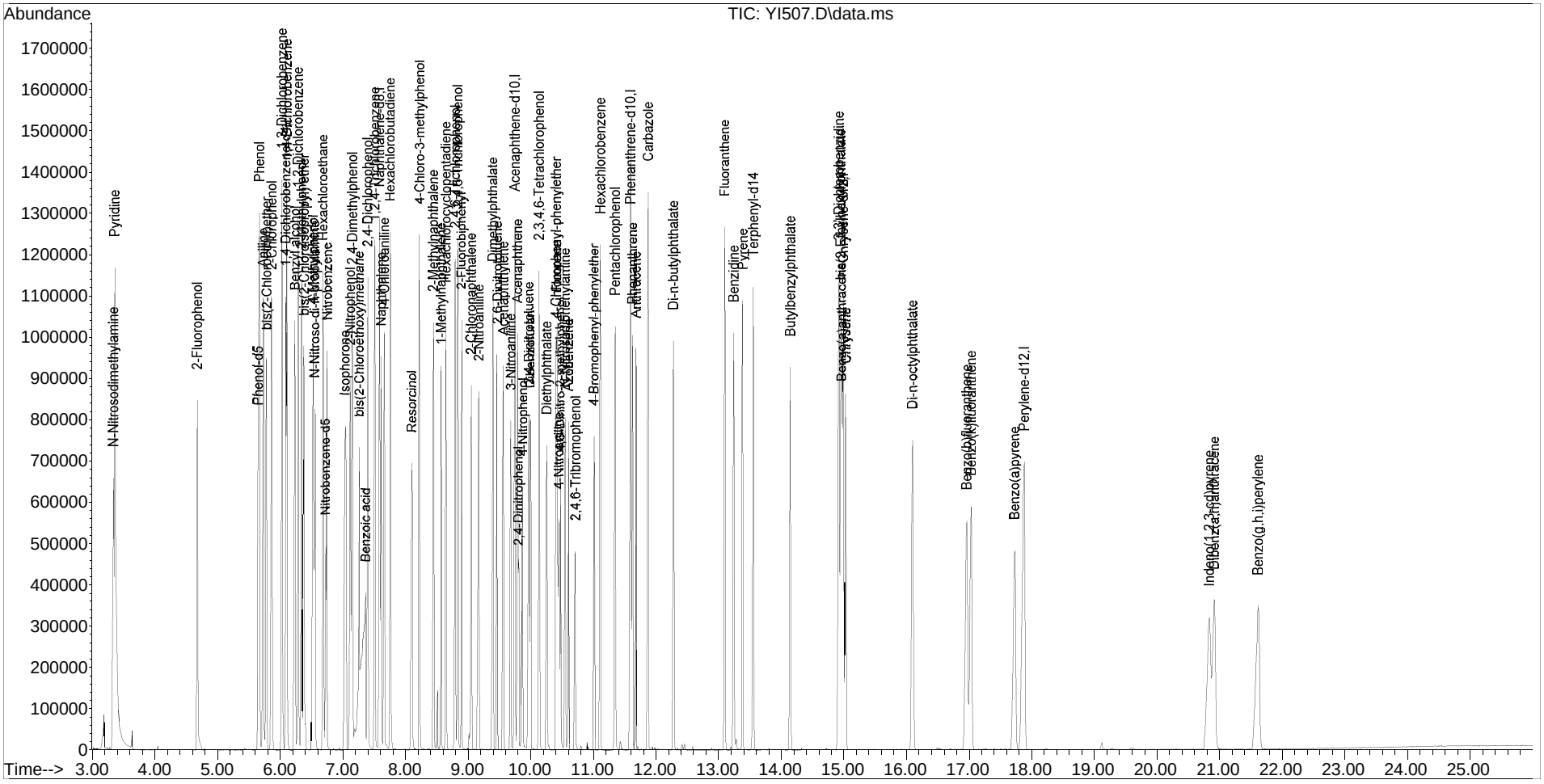




Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI507.D
Acq On : 5 Sep 2012 3:48 pm
Operator :
Sample : ICAL,S20250
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 06 11:28:21 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI507.D
Acq On : 5 Sep 2012 3:48 pm
Operator :
Sample : ICAL,S20250
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 06 11:28:21 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.093	152	198812	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.589	136	672821	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.748	164	377811	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.595	188	744787	40.0000	ug/mL	0.00
70) Chrysene-d12	14.995	240	659674	40.0000	ug/mL	0.00
79) Perylene-d12	17.885	264	780304	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.357	79	448308	38.7061	ug/mL	# 16
3) N-Nitrosodimethylamine	3.338	42	351461	46.8776	ug/mL	85
4) 2-Fluorophenol	4.675	112	219014	20.8850	ug/mL	84
5) Phenol-d5	5.651	99	250203	21.6572	ug/mL	82
6) Phenol	5.670	94	431752	47.6016	ug/mL	73
7) Aniline	5.728	93	515589m	48.0781	ug/mL	
8) bis(2-Chloroethyl)ether	5.786	93	287488	40.7206	ug/mL	# 67
9) 2-Chlorophenol	5.863	128	334472	41.1658	ug/mL	97
10) 1,3-Dichlorobenzene	6.036	146	373357	43.5736	ug/mL	100
11) 1,4-Dichlorobenzene	6.118	146	346955	48.6470	ug/mL	94
12) Benzyl alcohol	6.243	108	200481	43.4356	ug/mL	86
13) 1,2-Dichlorobenzene	6.291	146	341229	45.0772	ug/mL	99
14) 2-Methylphenol	6.348	107	209492	44.0485	ug/mL	92
15) bis(2-Chloroisopropyl) ether	6.387	45	642223	45.5642	ug/mL	80
16) 4-Methylphenol	6.531	107	327324	41.4220	ug/mL	94
17) N-Nitroso-di-n-propylamine	6.560	70	190303	54.5370	ug/mL	82
18) Hexachloroethane	6.685	117	142504	45.7620	ug/mL	79
20) Nitrobenzene-d5	6.728	82	166951	24.4198	ug/mL	81
21) Nitrobenzene	6.752	77	275499	51.2248	ug/mL	88
22) Isophorone	7.046	82	539349	46.1235	ug/mL	99
23) 2-Nitrophenol	7.123	139	170454	46.0845	ug/mL	87
24) 2,4-Dimethylphenol	7.156	107	263110	45.8070	ug/mL	# 81
25) bis(2-Chloroethoxy)methane	7.267	93	172281	25.8130	ug/mL	95
26) Benzoic acid	7.373	105	431805	87.0428	ug/mL	91
27) 2,4-Dichlorophenol	7.406	162	264471	46.9547	ug/mL	93
28) 1,2,4-Trichlorobenzene	7.517	180	292120	46.4674	ug/mL	95
29) Naphthalene	7.613	128	392159	20.9806	ug/mL	95
30) 4-Chloroaniline	7.666	127	323537	45.9465	ug/mL	91
31) Hexachlorobutadiene	7.757	225	177762	52.6904	ug/mL	98
32) Resorcinol	8.108	110	301343	50.5451	ug/mL	83
33) 4-Chloro-3-methylphenol	8.233	107	238093	45.7674	ug/mL	90
34) 2-Methylnaphthalene	8.450	142	302634	20.8774	ug/mL	94
35) 1-Methylnaphthalene	8.575	142	282650	20.6861	ug/mL	93
37) Hexachlorocyclopentadiene	8.647	237	197362	52.8231	ug/mL	97
38) 2,4,6-Trichlorophenol	8.791	196	220494	56.0183	ug/mL	93

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI507.D
Acq On : 5 Sep 2012 3:48 pm
Operator :
Sample : ICAL,S20250
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 06 11:28:21 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.830	196	222430	56.3014	ug/mL		95
40) 2-Fluorobiphenyl	8.892	172	347342	25.1988	ug/mL		99
41) 2-Chloronaphthalene	9.051	162	279604	22.6110	ug/mL		88
42) 2-Nitroaniline	9.176	65	202248	57.5168	ug/mL		91
43) Dimethylphthalate	9.397	163	621122	42.9259	ug/mL		96
44) 2,6-Dinitrotoluene	9.469	165	147953	47.5115	ug/mL		87
45) Acenaphthylene	9.566	152	431027	20.9317	ug/mL		98
46) 3-Nitroaniline	9.686	138	160126	40.2301	ug/mL	#	60
47) Acenaphthene	9.787	154	265835	22.1544	ug/mL		95
48) 2,4-Dinitrophenol	9.806	184	60406	48.9378	ug/mL	#	1
49) 4-Nitrophenol	9.873	109	75431	43.1527	ug/mL	#	74
50) Dibenzofuran	9.998	168	373726	24.0628	ug/mL		84
51) 2,4-Dinitrotoluene	9.974	165	186373	46.9325	ug/mL	#	84
52) 2,3,4,6-Tetrachlorophenol	10.143	232	177067	50.8246	ug/mL		89
53) Diethylphthalate	10.258	149	325436	22.6917	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.407	204	166903	24.4827	ug/mL		83
55) Fluorene	10.422	166	296916	22.3879	ug/mL		88
56) 4-Nitroaniline	10.450	138	151379	43.6417	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.720	330	58890	23.4004	ug/mL	#	78
59) 4,6-Dinitro-2-methylphenol	10.479	198	102622	49.2991	ug/mL		93
60) N-Nitrosodiphenylamine	10.556	169	226439	22.6673	ug/mL		87
61) Azobenzene	10.609	77	287171	23.4529	ug/mL		95
62) 4-Bromophenyl-phenylether	11.018	248	112919	23.7752	ug/mL	#	86
63) Hexachlorobenzene	11.119	284	226219	47.9367	ug/mL		94
64) Pentachlorophenol	11.350	266	157334	48.7679	ug/mL		97
65) Phenanthrene	11.624	178	429672	19.9969	ug/mL		96
66) Anthracene	11.681	178	432306	18.9426	ug/mL		94
67) Carbazole	11.879	167	737583	42.4688	ug/mL		86
68) Di-n-butylphthalate	12.283	149	577086	20.6749	ug/mL		96
69) Fluoranthene	13.100	202	599498	20.7582	ug/mL		93
71) Benzidine	13.249	184	471989	51.3051	ug/mL		89
72) Pyrene	13.389	202	573431	23.1784	ug/mL		93
73) Terphenyl-d14	13.557	244	391525	22.2861	ug/mL		99
74) Butylbenzylphthalate	14.148	149	274179	21.1915	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.923	252	407412	47.0020	ug/mL		98
76) Benzo(a)anthracene	14.966	228	455401	21.6174	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.951	149	336019	20.9194	ug/mL		94
78) Chrysene	15.033	228	428792	22.8171	ug/mL		95
80) Di-n-octylphthalate	16.101	149	693699	21.3503	ug/mL		92
81) Benzo(b)fluoranthene	16.971	252	576465	22.7169	ug/mL		95
82) Benzo(k)fluoranthene	17.039	252	507606	22.1121	ug/mL		92
83) Benzo(a)pyrene	17.726	252	492957	22.4050	ug/mL		94
84) Indeno(1,2,3-cd)pyrene	20.838	276	571064	21.7381	ug/mL		87

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI507.D
Acq On : 5 Sep 2012 3:48 pm
Operator :
Sample : ICAL,S20250
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 06 11:28:21 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

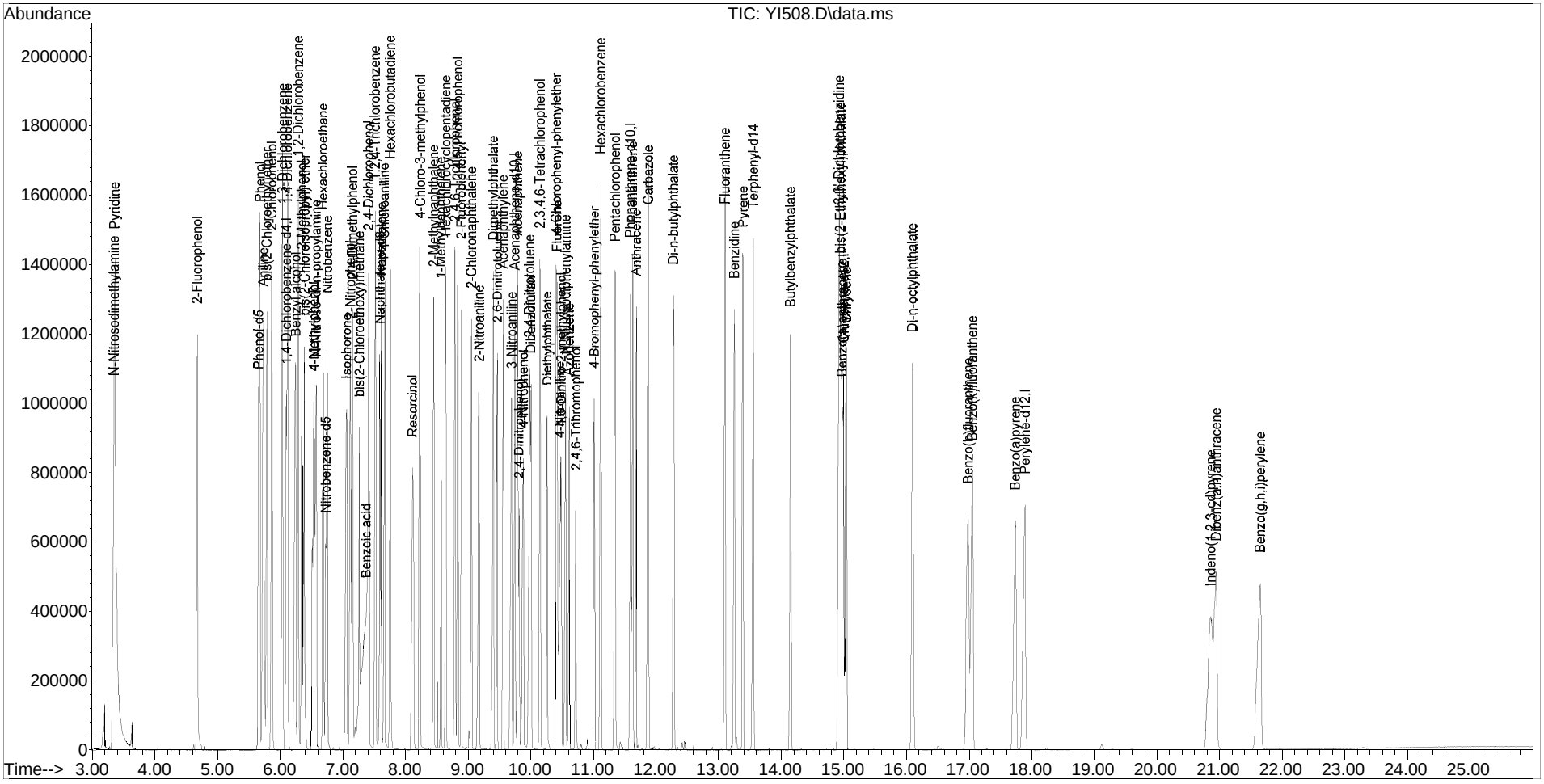
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.915	278	450517	22.1145	ug/mL	94
86) Benzo(g,h,i)perylene	21.617	276	479444	21.8220	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI508.D
Acq On : 5 Sep 2012 4:24 pm
Operator :
Sample : ICAL,S20244
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 06 12:05:59 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI508.D
Acq On : 5 Sep 2012 4:24 pm
Operator :
Sample : ICAL,S20244
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 06 12:05:59 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.098	152	188713	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.594	136	614544	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.748	164	369508	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.595	188	737908	40.0000	ug/mL		0.00
70) Chrysene-d12	15.000	240	614656	40.0000	ug/mL		0.00
79) Perylene-d12	17.890	264	771291	40.0000	ug/mL		0.01
Target Compounds							Qvalue
2) Pyridine	3.362	79	673021	61.2170	ug/mL	#	21
3) N-Nitrosodimethylamine	3.348	42	513793m	72.1967	ug/mL		
4) 2-Fluorophenol	4.680	112	329967	33.1492	ug/mL		84
5) Phenol-d5	5.661	99	360946	32.9149	ug/mL		81
6) Phenol	5.685	94	607249	70.5334	ug/mL		76
7) Aniline	5.738	93	731285m	71.8408	ug/mL		
8) bis(2-Chloroethyl)ether	5.791	93	396279	59.1339	ug/mL	#	68
9) 2-Chlorophenol	5.868	128	473165	61.3523	ug/mL		99
10) 1,3-Dichlorobenzene	6.041	146	539022	66.2745	ug/mL		99
11) 1,4-Dichlorobenzene	6.118	146	470985	69.5714	ug/mL		94
12) Benzyl alcohol	6.257	108	279983	63.9065	ug/mL	#	84
13) 1,2-Dichlorobenzene	6.296	146	461321	64.2030	ug/mL		98
14) 2-Methylphenol	6.353	107	278982	61.7989	ug/mL		92
15) bis(2-Chloroisopropyl) ether	6.392	45	774352	57.8785	ug/mL		83
16) 4-Methylphenol	6.541	107	493440m	65.7853	ug/mL		
17) N-Nitroso-di-n-propylamine	6.579	70	273121	82.4597	ug/mL		92
18) Hexachloroethane	6.685	117	193889	65.5952	ug/mL	#	78
20) Nitrobenzene-d5	6.733	82	239488m	38.3516	ug/mL		
21) Nitrobenzene	6.762	77	394037	80.2129	ug/mL		85
22) Isophorone	7.070	82	802252	75.1121	ug/mL		98
23) 2-Nitrophenol	7.132	139	240016	71.0452	ug/mL		83
24) 2,4-Dimethylphenol	7.161	107	350585m	66.8243	ug/mL		
25) bis(2-Chloroethoxy)methane	7.272	93	248512	40.7657	ug/mL		94
26) Benzoic acid	7.382	105	529937m	116.9543	ug/mL		
27) 2,4-Dichlorophenol	7.416	162	370526m	72.0222	ug/mL		
28) 1,2,4-Trichlorobenzene	7.517	180	406485	70.7911	ug/mL		94
29) Naphthalene	7.618	128	555347	32.5286	ug/mL		95
30) 4-Chloroaniline	7.671	127	465670	72.4024	ug/mL		91
31) Hexachlorobutadiene	7.762	225	242894	78.8235	ug/mL		97
32) Resorcinol	8.118	110	470341	80.5569	ug/mL		84
33) 4-Chloro-3-methylphenol	8.243	107	343895	72.3739	ug/mL		88
34) 2-Methylnaphthalene	8.455	142	437668	33.0560	ug/mL		95
35) 1-Methylnaphthalene	8.575	142	393989	34.8345	ug/mL		93
37) Hexachlorocyclopentadiene	8.652	237	286125	78.3009	ug/mL		97
38) 2,4,6-Trichlorophenol	8.796	196	312469	81.1691	ug/mL		94

Data Path : G:\msbna06\090512\
Data File : YI508.D
Acq On : 5 Sep 2012 4:24 pm
Operator :
Sample : ICAL,S20244
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 06 12:05:59 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.840	196	312990m	81.0041	ug/mL		
40) 2-Fluorobiphenyl	8.897	172	492742	39.8347	ug/mL		98
41) 2-Chloronaphthalene	9.056	162	421791	34.8759	ug/mL		87
42) 2-Nitroaniline	9.181	65	290688	84.5256	ug/mL		92
43) Dimethylphthalate	9.407	163	887504	62.7139	ug/mL		96
44) 2,6-Dinitrotoluene	9.479	165	207743	68.2107	ug/mL	#	81
45) Acenaphthylene	9.570	152	655441	32.5450	ug/mL		97
46) 3-Nitroaniline	9.700	138	251906	64.7110	ug/mL	#	57
47) Acenaphthene	9.792	154	363220	30.9505	ug/mL		96
48) 2,4-Dinitrophenol	9.816	184	106236	77.9907	ug/mL	#	1
49) 4-Nitrophenol	9.888	109	116956	68.4119	ug/mL	#	75
50) Dibenzofuran	10.003	168	519400	38.6170	ug/mL		85
51) 2,4-Dinitrotoluene	9.984	165	273478	70.4148	ug/mL	#	84
52) 2,3,4,6-Tetrachlorophenol	10.148	232	255764	75.0631	ug/mL		88
53) Diethylphthalate	10.268	149	480864	34.2827	ug/mL		99
54) 4-Chlorophenyl-phenylether	10.412	204	246331	36.9458	ug/mL		87
55) Fluorene	10.426	166	423855	36.8759	ug/mL		86
56) 4-Nitroaniline	10.475	138	219915	64.8248	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.725	330	88675	36.0275	ug/mL	#	78
59) 4,6-Dinitro-2-methylphenol	10.494	198	157117	76.1819	ug/mL		90
60) N-Nitrosodiphenylamine	10.561	169	332583	33.6030	ug/mL		87
61) Azobenzene	10.614	77	400923	33.0481	ug/mL		94
62) 4-Bromophenyl-phenylether	11.023	248	167687	35.6358	ug/mL	#	86
63) Hexachlorobenzene	11.124	284	340230	72.7683	ug/mL		94
64) Pentachlorophenol	11.355	266	242203	75.7742	ug/mL		96
65) Phenanthrene	11.624	178	656628	30.8443	ug/mL		97
66) Anthracene	11.686	178	656359	29.0282	ug/mL		95
67) Carbazole	11.884	167	1124402	65.3447	ug/mL		86
68) Di-n-butylphthalate	12.283	149	837571	30.2868	ug/mL		95
69) Fluoranthene	13.105	202	882717	30.8499	ug/mL		94
71) Benzidine	13.254	184	680850	79.4287	ug/mL		88
72) Pyrene	13.394	202	830342	36.0211	ug/mL		92
73) Terphenyl-d14	13.562	244	567886	34.6924	ug/mL		97
74) Butylbenzylphthalate	14.153	149	401111	33.2729	ug/mL		85
75) 3,3'-Dichlorobenzidine	14.932	252	630059	78.0120	ug/mL		97
76) Benzo(a)anthracene	14.976	228	656685	33.4553	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.952	149	465775	31.1214	ug/mL		94
78) Chrysene	15.043	228	633575	36.1834	ug/mL		95
80) Di-n-octylphthalate	16.101	149	1063853	33.1253	ug/mL		92
81) Benzo(b)fluoranthene	16.986	252	846385	33.7434	ug/mL		95
82) Benzo(k)fluoranthene	17.048	252	770806	33.9699	ug/mL		93
83) Benzo(a)pyrene	17.741	252	753536	34.6486	ug/mL		94
84) Indeno(1,2,3-cd)pyrene	20.862	276	890235	34.2837	ug/mL		86

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI508.D
Acq On : 5 Sep 2012 4:24 pm
Operator :
Sample : ICAL,S20244
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

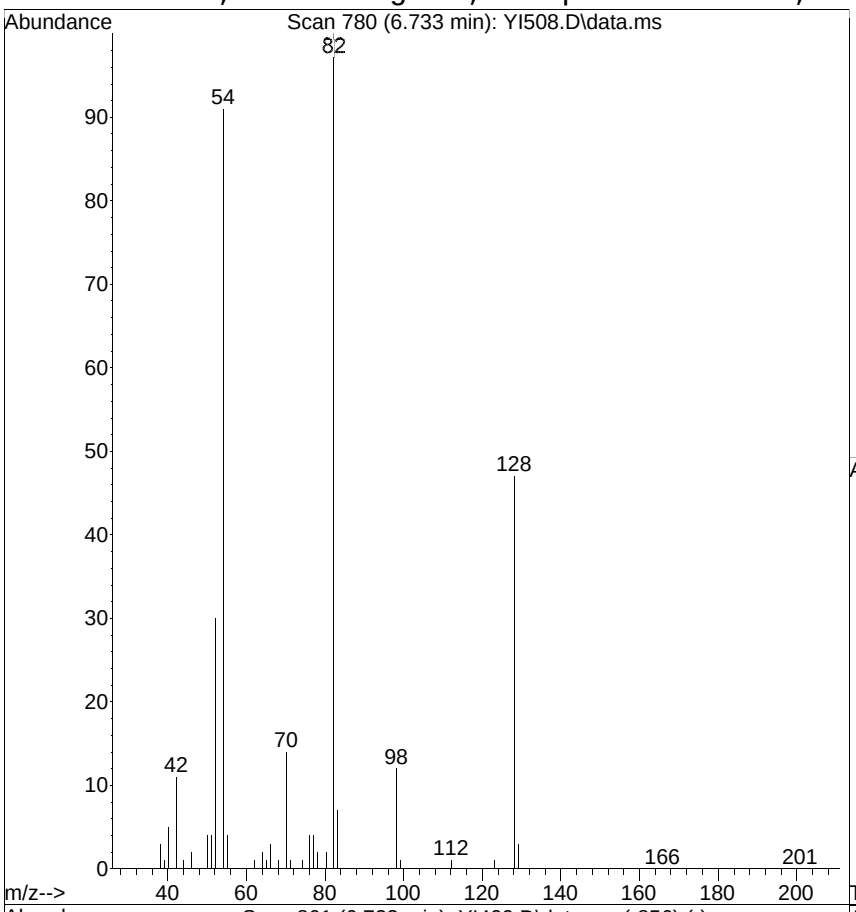
Quant Time: Sep 06 12:05:59 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.944	278	695127	34.5205	ug/mL	93
86) Benzo(g,h,i)perylene	21.650	276	734099	33.8031	ug/mL	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Nitrobenzene-d5; 40.00 ug/mL; response=239488; MI]

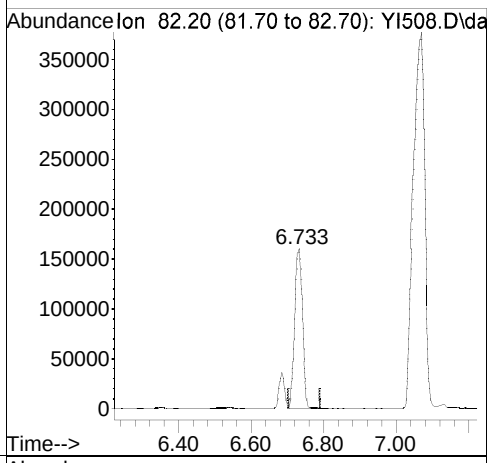
Raw



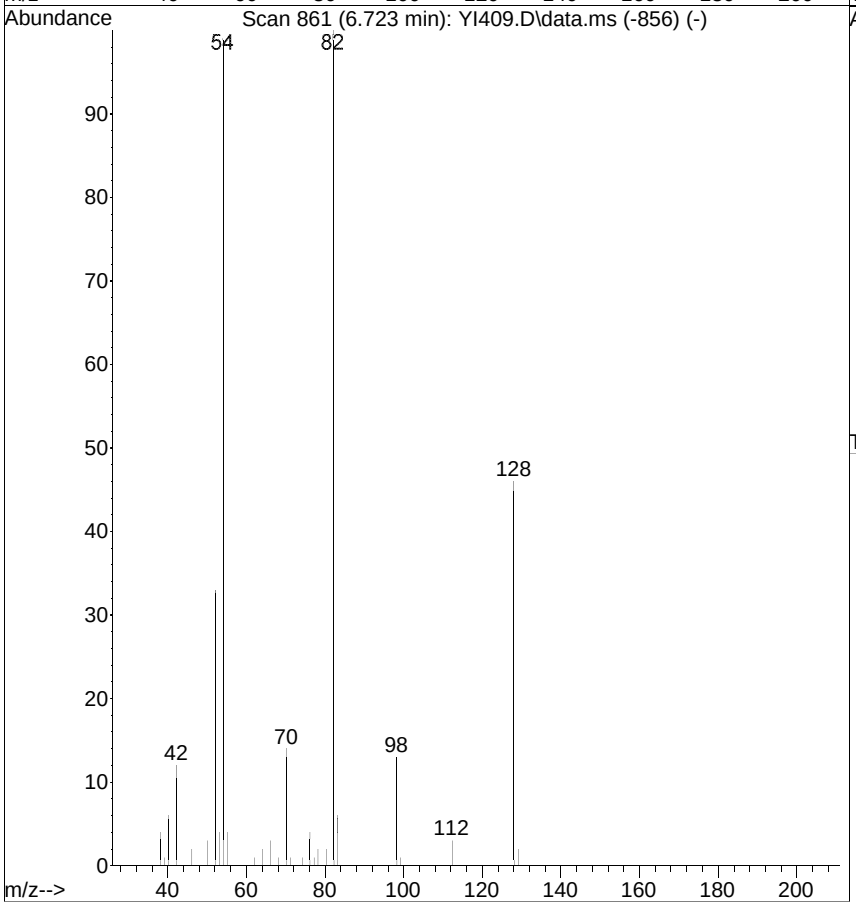
#20
Nitrobenzene-d5
Concen: 38.3516 ug/mL m
RT: 6.733 min Scan# 780
Delta R.T. 0.010 min
Lab File: YI508.D
Acq: 5 Sep 2012 4:24 pm

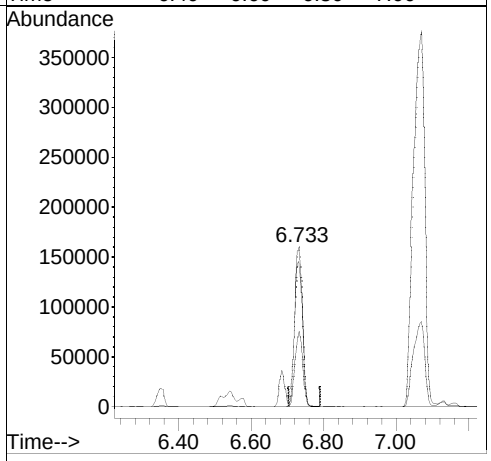
Tgt Ion: 82 Resp: 239488

Ion	Ratio	Lower	Upper
82	100		
128	47.2	15.0	55.0
54	91.2	56.0	96.0



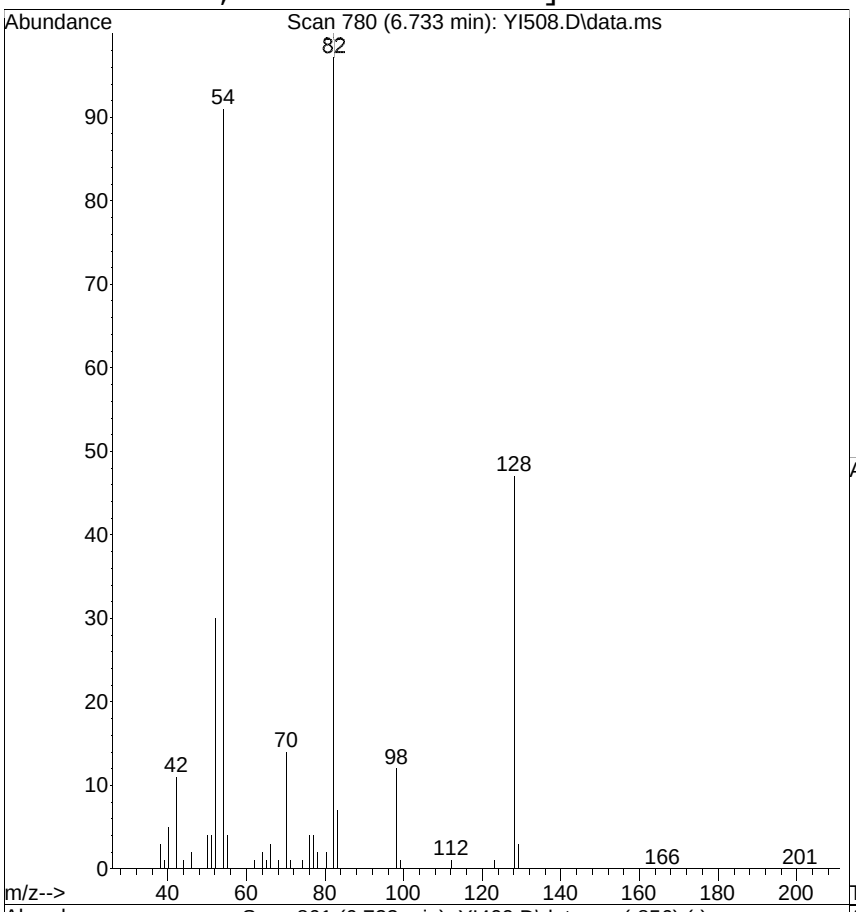
Ref





[Nitrobenzene-d5; before version]

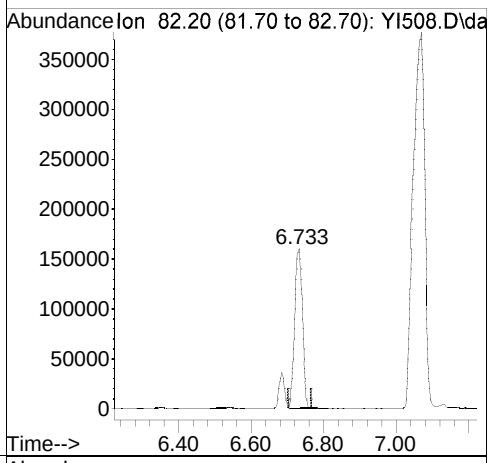
Raw



#20
Nitrobenzene-d5
Concen: 37.9557 ug/mL
RT: 6.733 min Scan# 780
Delta R.T. 0.010 min
Lab File: YI508.D
Acq: 5 Sep 2012 4:24 pm

Tgt Ion: 82 Resp: 237016

Ion	Ratio	Lower	Upper
82	100		
128	47.2	15.0	55.0
54	91.2	56.0	96.0



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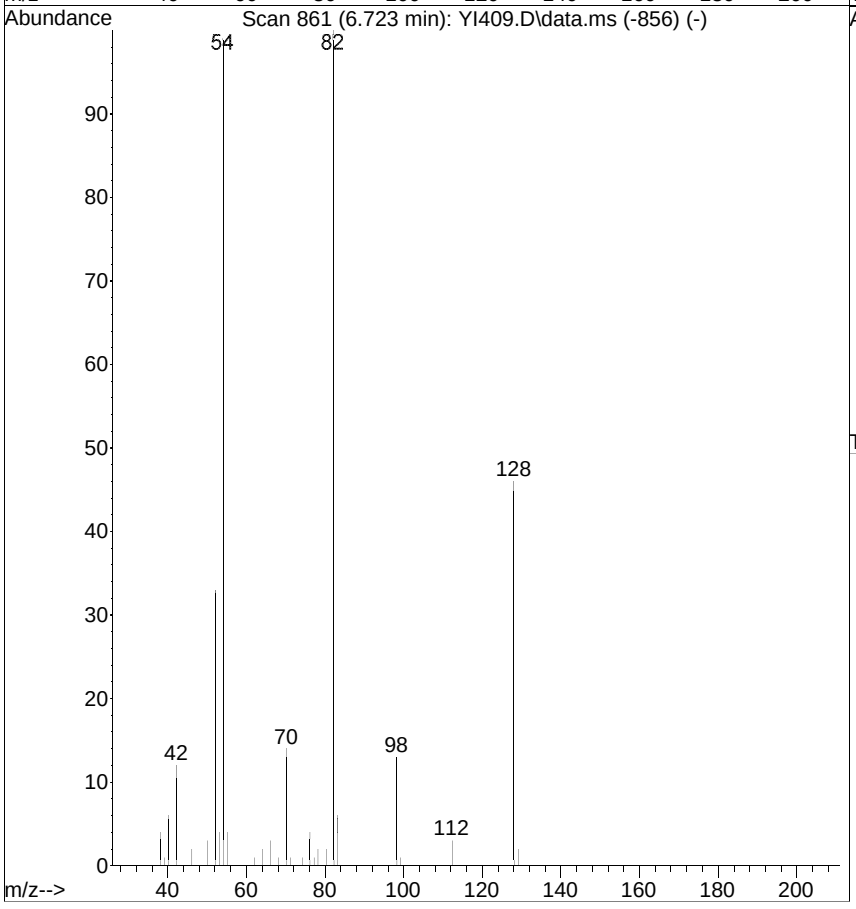
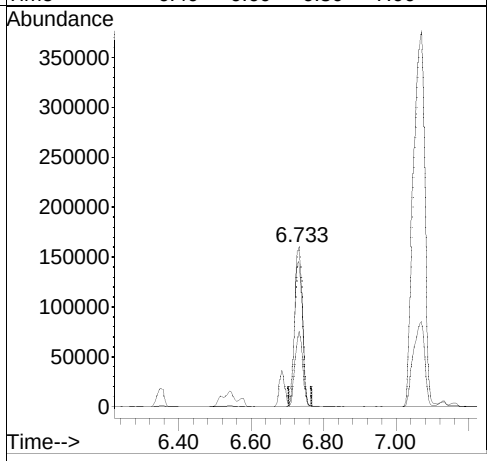
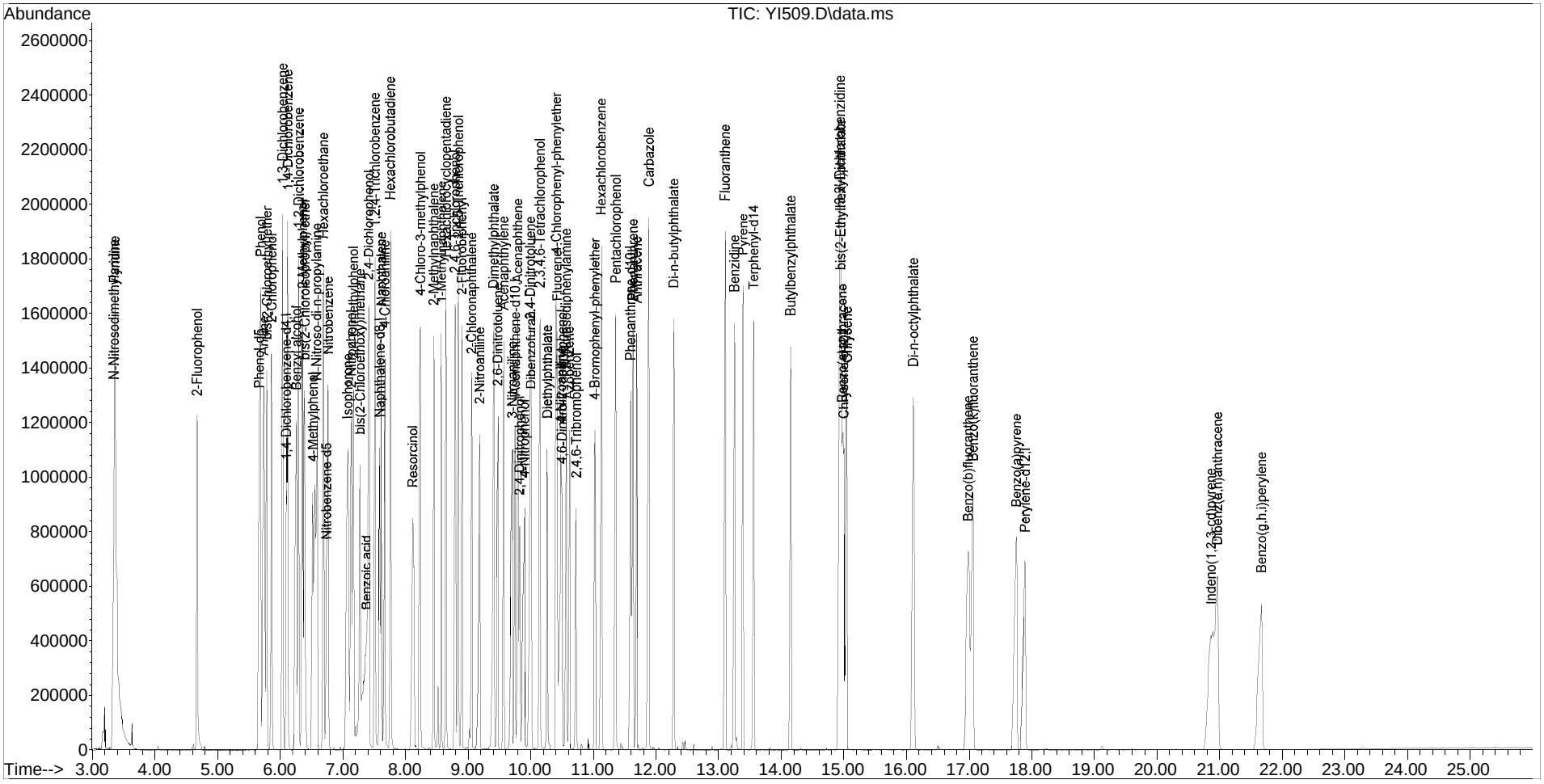




Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI509.D
Acq On : 5 Sep 2012 5:01 pm
Operator :
Sample : ICAL,S20245
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 06 11:51:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI509.D
Acq On : 5 Sep 2012 5:01 pm
Operator :
Sample : ICAL,S20245
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 06 11:51:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.098	152	180941	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.594	136	602072	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.753	164	361458	40.0000	ug/mL	0.01
58) Phenanthrene-d10	11.600	188	744739	40.0000	ug/mL	0.00
70) Chrysene-d12	15.005	240	620596	40.0000	ug/mL	0.01
79) Perylene-d12	17.899	264	776045	40.0000	ug/mL	0.02
Target Compounds						Qvalue
2) Pyridine	3.362	79	838625	79.5566	ug/mL	# 24
3) N-Nitrosodimethylamine	3.353	42	632538m	92.7002	ug/mL	
4) 2-Fluorophenol	4.685	112	366015	38.3501	ug/mL	80
5) Phenol-d5	5.670	99	449951	42.7938	ug/mL	80
6) Phenol	5.694	94	722314	87.5021	ug/mL	75
7) Aniline	5.743	93	925943m	94.8710	ug/mL	
8) bis(2-Chloroethyl)ether	5.795	93	486337m	75.6898	ug/mL	
9) 2-Chlorophenol	5.872	128	563492	76.2027	ug/mL	98
10) 1,3-Dichlorobenzene	6.041	146	634027	81.3041	ug/mL	99
11) 1,4-Dichlorobenzene	6.122	146	558113	85.9826	ug/mL	93
12) Benzyl alcohol	6.267	108	354344	84.3535	ug/mL	# 83
13) 1,2-Dichlorobenzene	6.300	146	550489	79.9035	ug/mL	99
14) 2-Methylphenol	6.363	107	351973	81.3165	ug/mL	90
15) bis(2-Chloroisopropyl) ether	6.397	45	910831	71.0038	ug/mL	85
16) 4-Methylphenol	6.526	107	615715m	85.6128	ug/mL	
17) N-Nitroso-di-n-propylamine	6.589	70	333266m	104.9403	ug/mL	
18) Hexachloroethane	6.690	117	232808	82.1451	ug/mL	# 68
20) Nitrobenzene-d5	6.738	82	301067	49.2116	ug/mL	83
21) Nitrobenzene	6.767	77	481218	99.9893	ug/mL	85
22) Isophorone	7.084	82	1039256m	99.3176	ug/mL	
23) 2-Nitrophenol	7.137	139	296102m	89.4623	ug/mL	
24) 2,4-Dimethylphenol	7.171	107	417543m	81.2357	ug/mL	
25) bis(2-Chloroethoxy)methane	7.277	93	304656	51.0108	ug/mL	94
26) Benzoic acid	7.382	105	557804m	125.6545	ug/mL	
27) 2,4-Dichlorophenol	7.421	162	445968m	88.4822	ug/mL	
28) 1,2,4-Trichlorobenzene	7.522	180	489848	87.0763	ug/mL	96
29) Naphthalene	7.623	128	684164	40.9040	ug/mL	96
30) 4-Chloroaniline	7.676	127	589948m	93.6252	ug/mL	
31) Hexachlorobutadiene	7.762	225	302482	100.1944	ug/mL	98
32) Resorcinol	8.123	110	591509	101.0808	ug/mL	84
33) 4-Chloro-3-methylphenol	8.248	107	412212	88.5485	ug/mL	84
34) 2-Methylnaphthalene	8.455	142	517730	39.9129	ug/mL	93
35) 1-Methylnaphthalene	8.580	142	500252	50.3296	ug/mL	93
37) Hexachlorocyclopentadiene	8.652	237	357856	100.1117	ug/mL	97
38) 2,4,6-Trichlorophenol	8.796	196	395151	104.9332	ug/mL	96

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI509.D
Acq On : 5 Sep 2012 5:01 pm
Operator :
Sample : ICAL,S20245
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 06 11:51:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.844	196	387410m	102.4975	ug/mL		
40) 2-Fluorobiphenyl	8.902	172	592006	51.4920	ug/mL		97
41) 2-Chloronaphthalene	9.061	162	516328	43.6435	ug/mL		87
42) 2-Nitroaniline	9.191	65	371380	110.3941	ug/mL		89
43) Dimethylphthalate	9.417	163	1155734	83.4868	ug/mL		96
44) 2,6-Dinitrotoluene	9.484	165	264146	88.6617	ug/mL	#	83
45) Acenaphthylene	9.575	152	783227	39.7561	ug/mL		97
46) 3-Nitroaniline	9.710	138	320258	84.1019	ug/mL	#	57
47) Acenaphthene	9.796	154	450887	39.2764	ug/mL		96
48) 2,4-Dinitrophenol	9.825	184	145817	104.3765	ug/mL	#	1
49) 4-Nitrophenol	9.902	109	143100	85.5686	ug/mL	#	75
50) Dibenzofuran	10.008	168	623061	51.4076	ug/mL		86
51) 2,4-Dinitrotoluene	9.994	165	336849	88.6631	ug/mL	#	82
52) 2,3,4,6-Tetrachlorophenol	10.157	232	322236	96.6779	ug/mL		89
53) Diethylphthalate	10.273	149	563385	41.0605	ug/mL		99
54) 4-Chlorophenyl-phenylether	10.417	204	301322	46.2002	ug/mL		89
55) Fluorene	10.431	166	540640	58.8593	ug/mL		87
56) 4-Nitroaniline	10.494	138	274769	82.7981	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.729	330	115124	47.8151	ug/mL	#	77
59) 4,6-Dinitro-2-methylphenol	10.508	198	201258	96.6896	ug/mL		86
60) N-Nitrosodiphenylamine	10.571	169	407830	40.8277	ug/mL		88
61) Azobenzene	10.619	77	502162	41.0136	ug/mL		93
62) 4-Bromophenyl-phenylether	11.028	248	212740	44.7955	ug/mL	#	87
63) Hexachlorobenzene	11.129	284	430199	91.1668	ug/mL		94
64) Pentachlorophenol	11.359	266	308856	95.7405	ug/mL		97
65) Phenanthrene	11.633	178	806843	37.5528	ug/mL		97
66) Anthracene	11.696	178	815972m	35.7562	ug/mL		
67) Carbazole	11.893	167	1405072	80.9069	ug/mL		87
68) Di-n-butylphthalate	12.287	149	1063820	38.1152	ug/mL		95
69) Fluoranthene	13.110	202	1101849	38.1551	ug/mL		94
71) Benzidine	13.259	184	883234	102.0528	ug/mL		88
72) Pyrene	13.394	202	1018465	43.7592	ug/mL		92
73) Terphenyl-d14	13.562	244	668807	40.4666	ug/mL		98
74) Butylbenzylphthalate	14.153	149	507443	41.6904	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.942	252	792878	97.2321	ug/mL		97
76) Benzo(a)anthracene	14.980	228	869959	43.8964	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.956	149	553550	36.6322	ug/mL		95
78) Chrysene	15.053	228	808680	45.7416	ug/mL		95
80) Di-n-octylphthalate	16.111	149	1333229	41.2586	ug/mL		94
81) Benzo(b)fluoranthene	16.991	252	1140354m	45.1847	ug/mL		
82) Benzo(k)fluoranthene	17.068	252	912921m	39.9866	ug/mL		
83) Benzo(a)pyrene	17.760	252	986161	45.0672	ug/mL		93
84) Indeno(1,2,3-cd)pyrene	20.871	276	1162834	44.5074	ug/mL		84

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI509.D
Acq On : 5 Sep 2012 5:01 pm
Operator :
Sample : ICAL,S20245
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

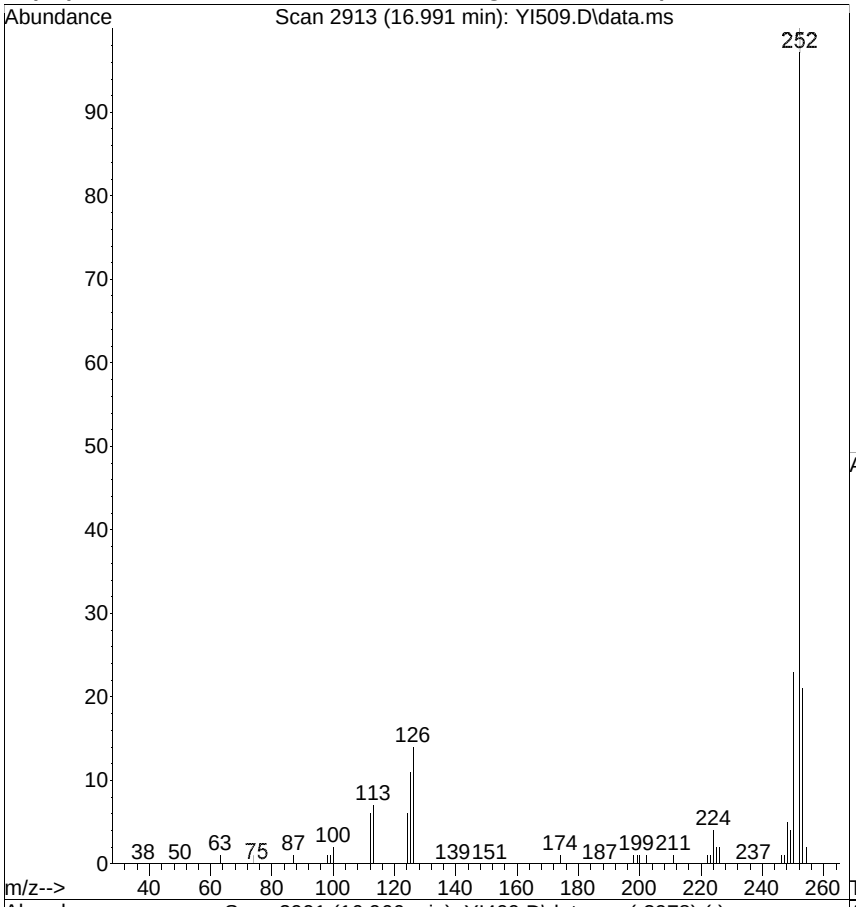
Quant Time: Sep 06 11:51:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.968	278	896211	44.2338	ug/mL	93
86) Benzo(g,h,i)perylene	21.670	276	913260	41.7953	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(b)fluoranthene; 50.00 ug/mL; response=1140354; MI]

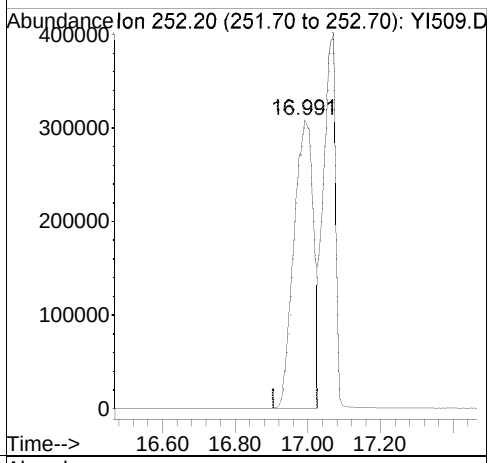
Raw



#81
Benzo(b)fluoranthene
Concen: 45.1847 ug/mL m
RT: 16.991 min Scan# 2913
Delta R.T. 0.025 min
Lab File: YI509.D
Acq: 5 Sep 2012 5:01 pm

Tgt Ion:252 Resp: 1140354

Ion	Ratio	Lower	Upper
252	100		
253	20.9	2.7	42.7
125	10.5	0.0	35.2



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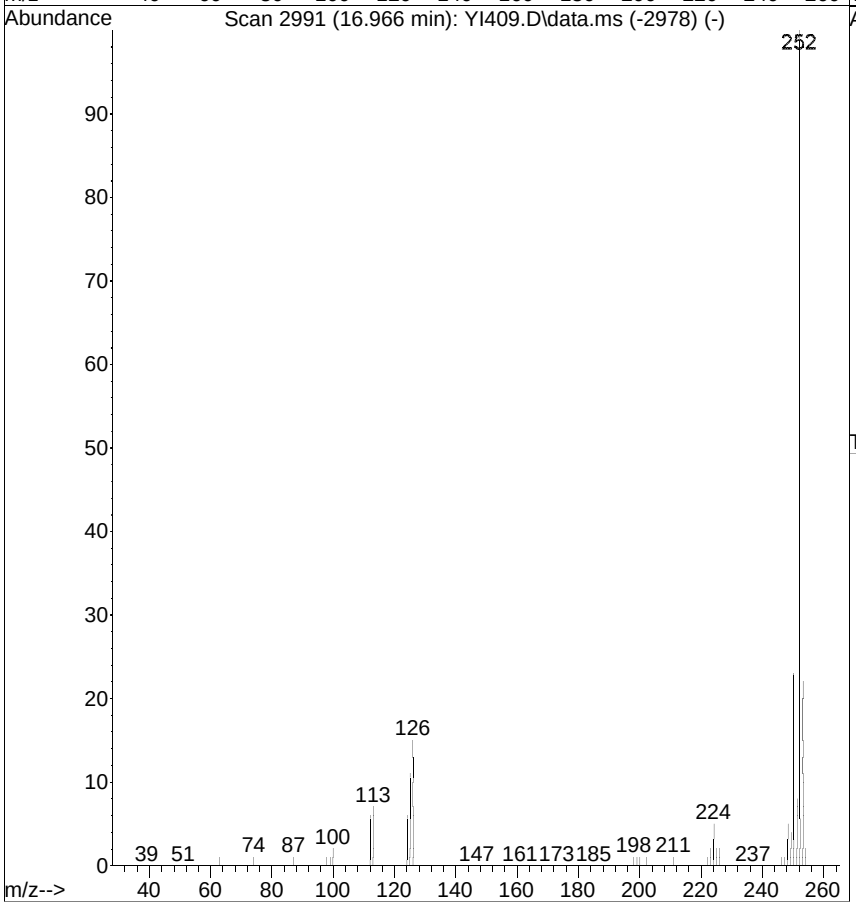
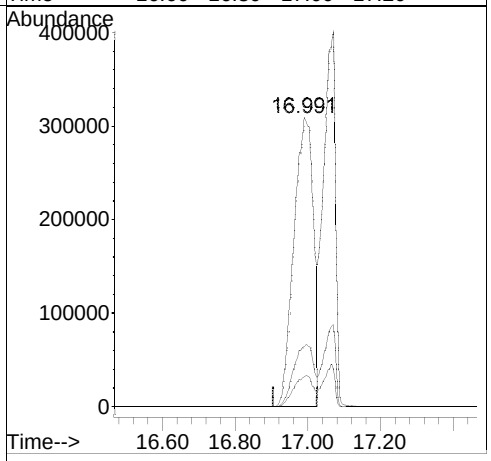
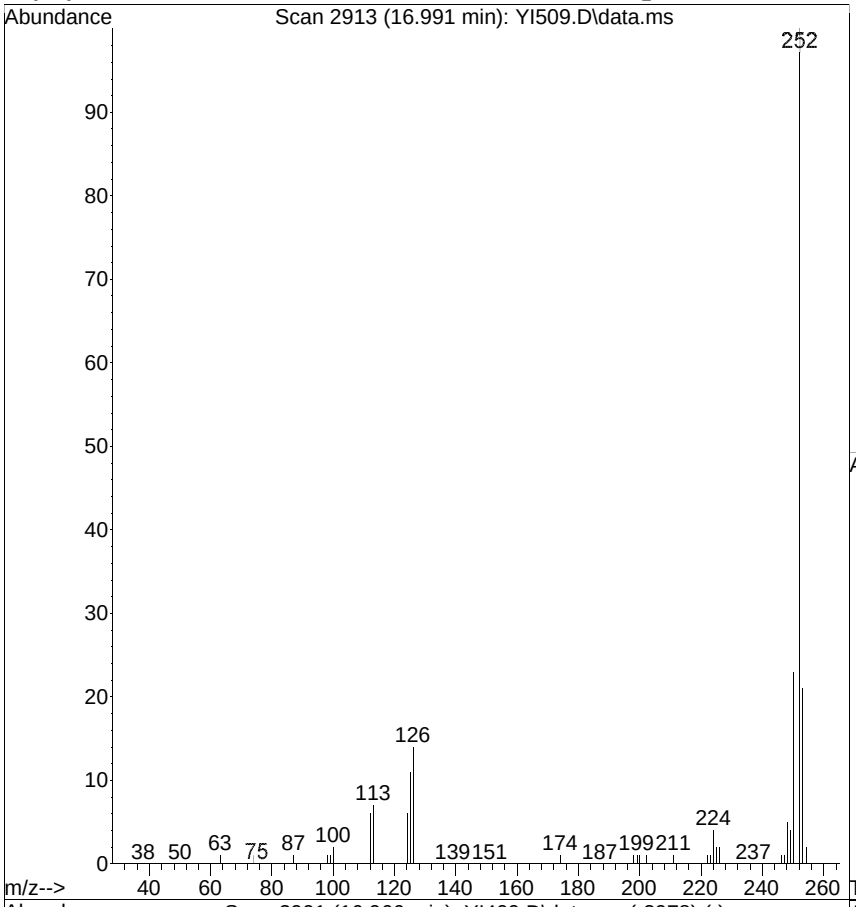




[Benzo(b)fluoranthene; before version]

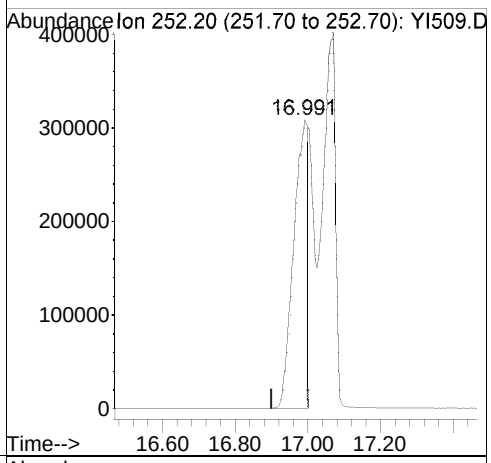
Raw



#81
Benzo(b)fluoranthene
Concen: 33.0621 ug/mL
RT: 16.991 min Scan# 2913
Delta R.T. 0.025 min
Lab File: YI509.D
Acq: 5 Sep 2012 5:01 pm

Tgt Ion:252 Resp: 834407

Ion	Ratio	Lower	Upper
252	100		
253	20.9	2.7	42.7
125	10.5	0.0	35.2



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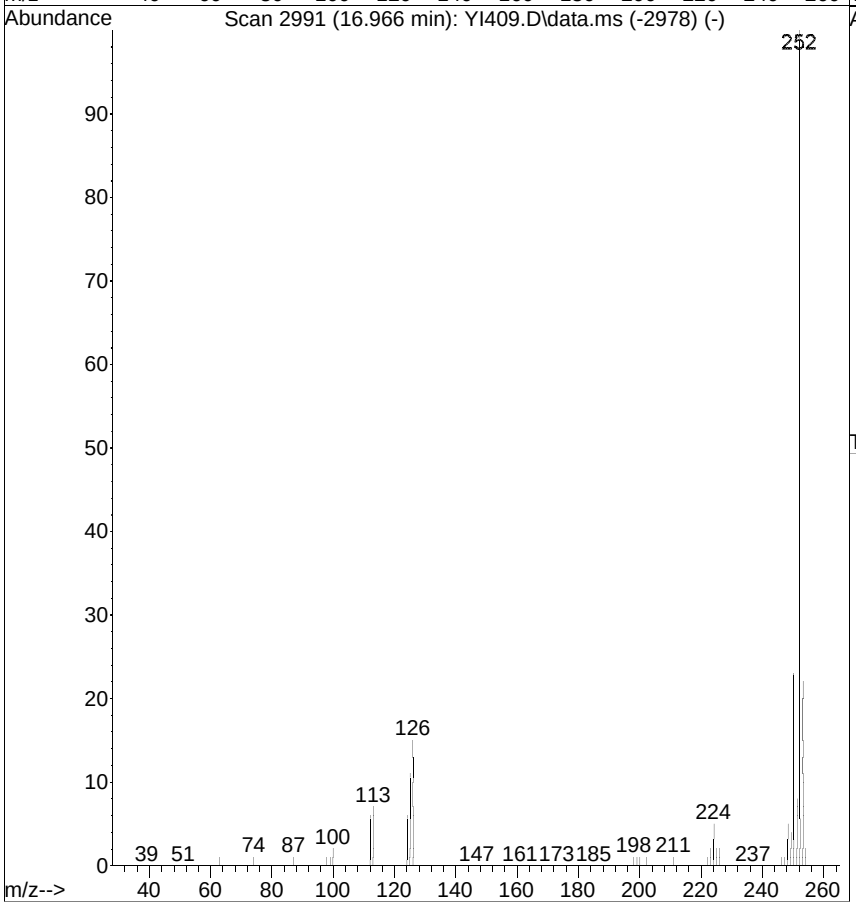
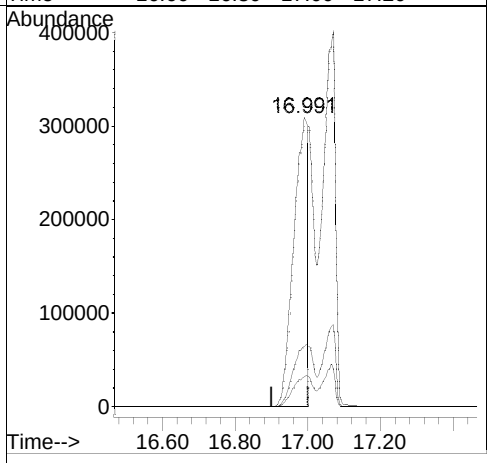
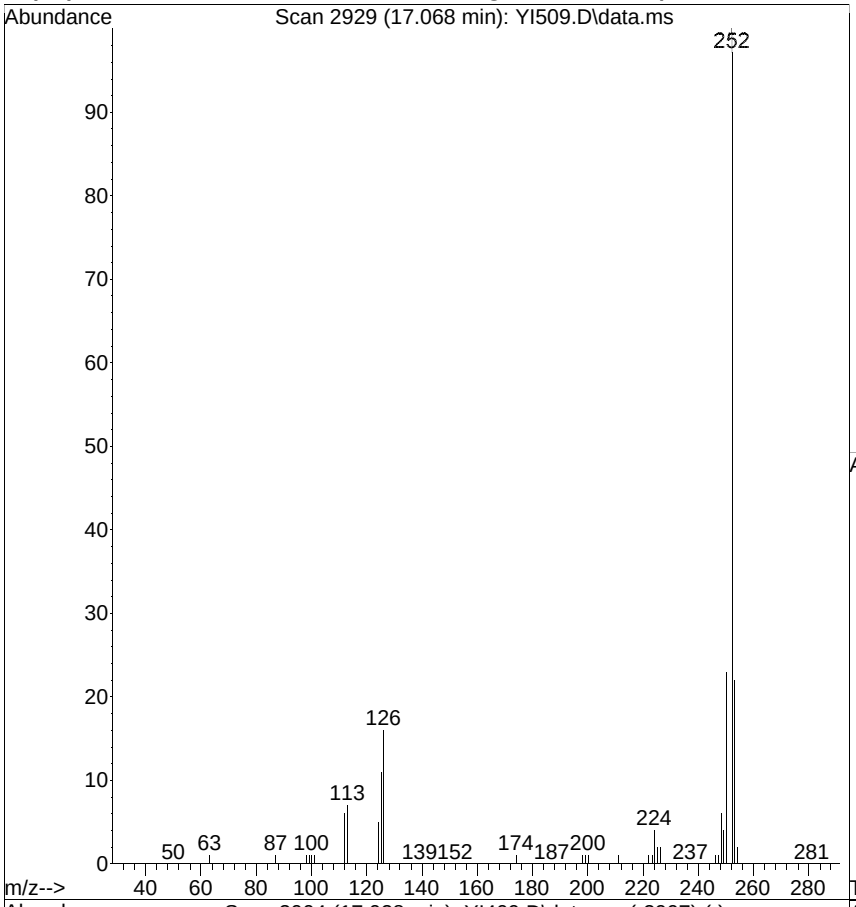




[Benzo(k)fluoranthene; 50.00 ug/mL; response=912921; MI]

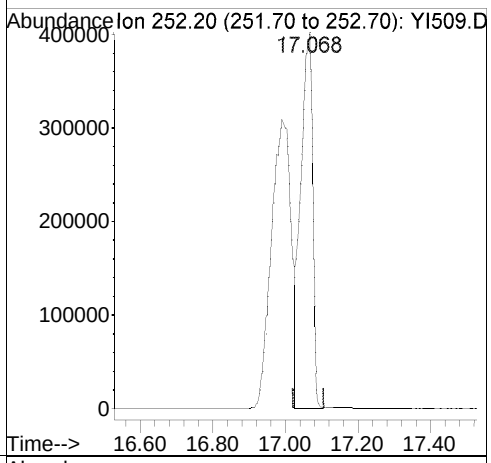
Raw



#82
Benzo(k)fluoranthene
Concen: 39.9866 ug/mL m
RT: 17.068 min Scan# 2929
Delta R.T. 0.039 min
Lab File: YI509.D
Acq: 5 Sep 2012 5:01 pm

Tgt Ion:252 Resp: 912921

Ion	Ratio	Lower	Upper
252	100		
253	22.0	3.0	43.0
125	10.5	0.0	37.0



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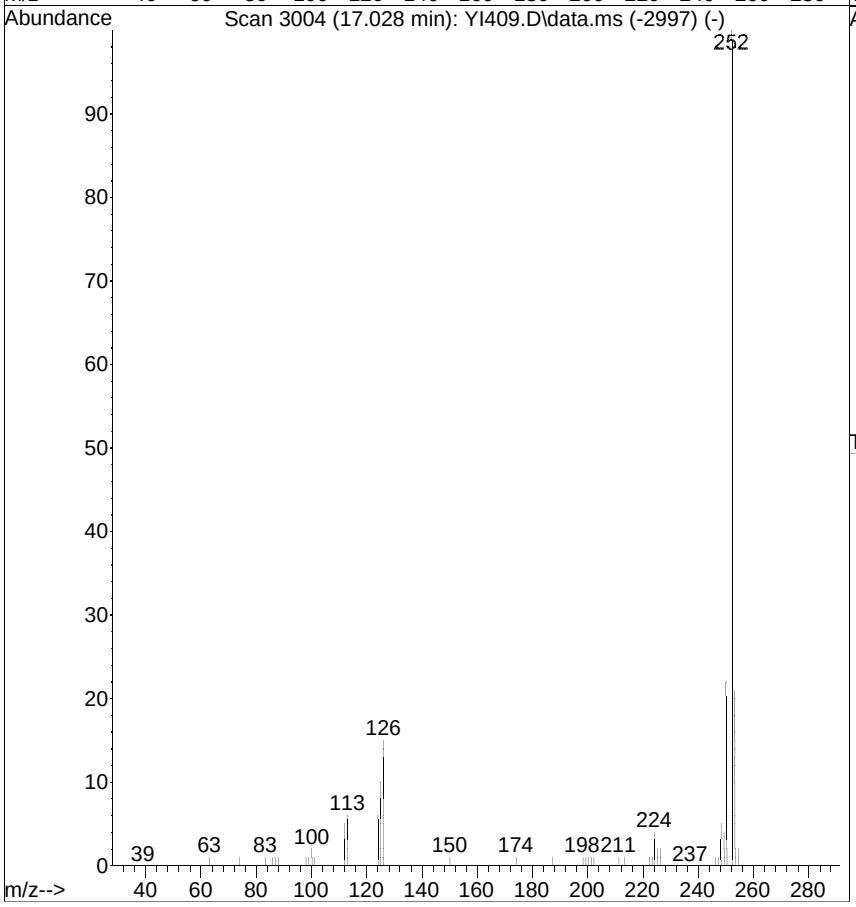
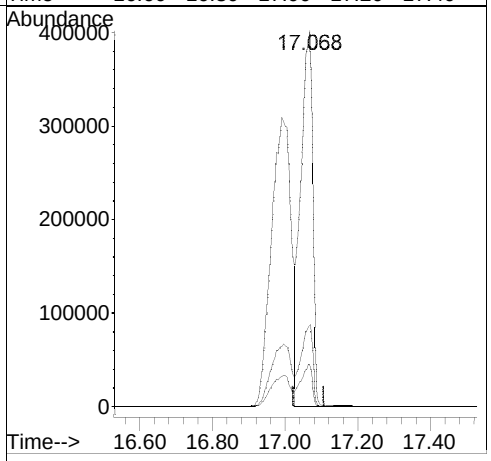
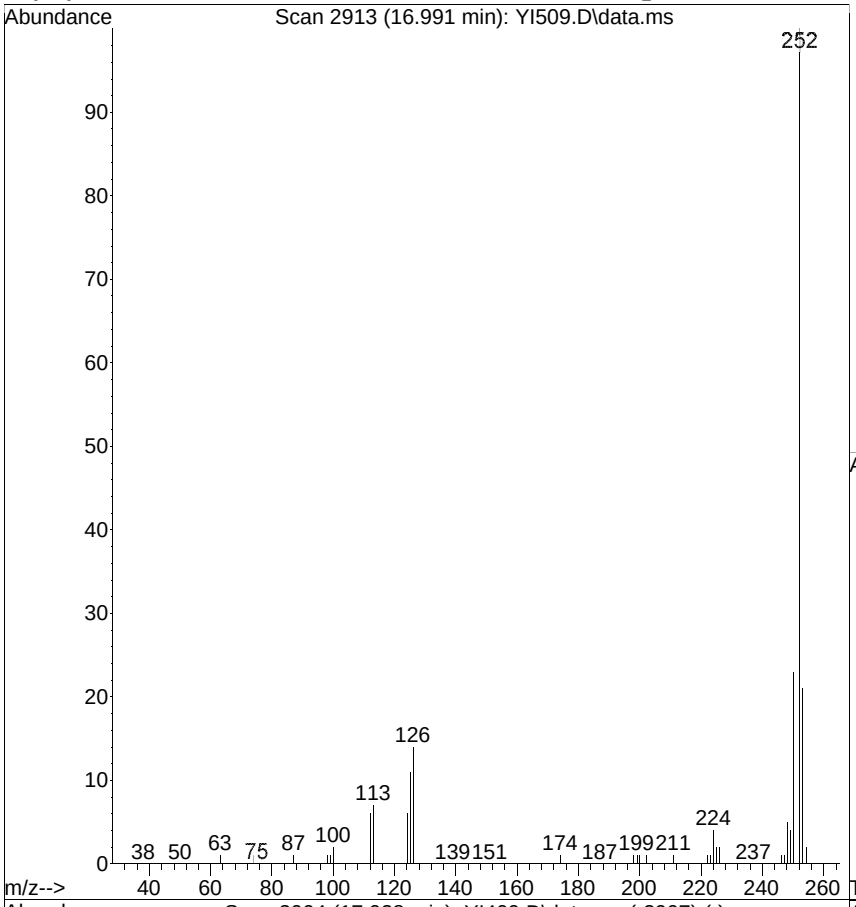




[Benzo(k)fluoranthene; before version]

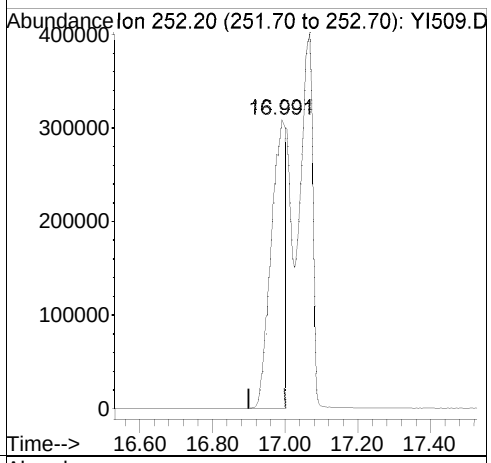
Raw



#82
Benzo(k)fluoranthene
Concen: 36.5476 ug/mL
RT: 16.991 min Scan# 2913
Delta R.T. -0.038 min
Lab File: YI509.D
Acq: 5 Sep 2012 5:01 pm

Tgt Ion:252 Resp: 834407

Ion	Ratio	Lower	Upper
252	100		
253	20.9	3.0	43.0
125	10.5	0.0	37.0



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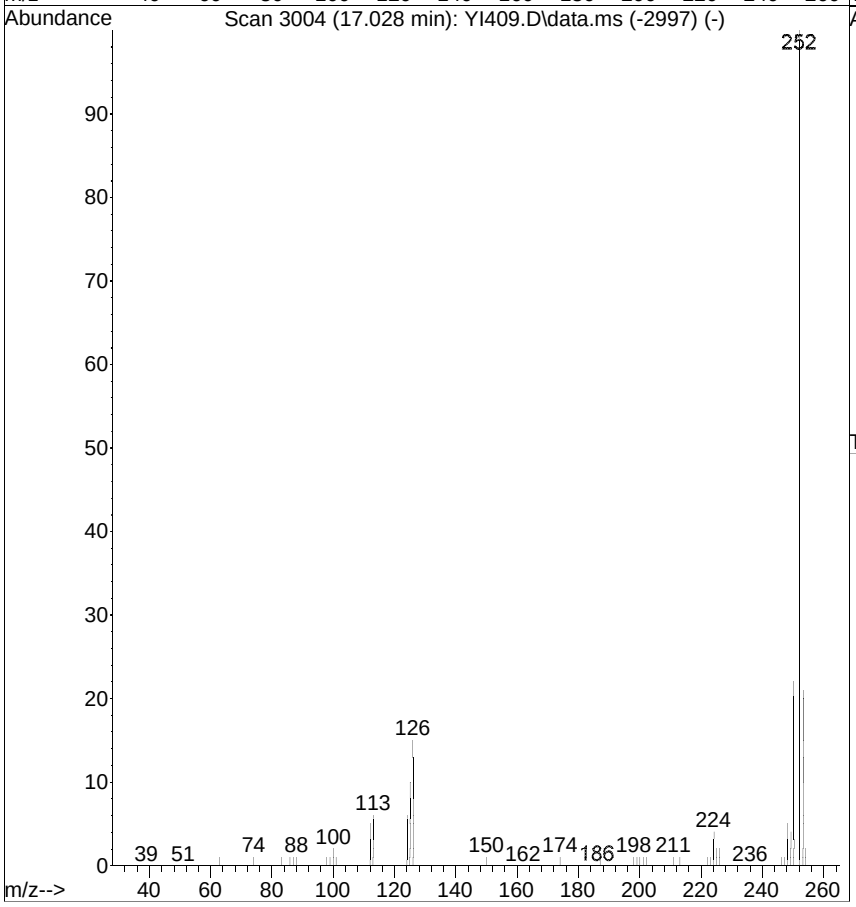
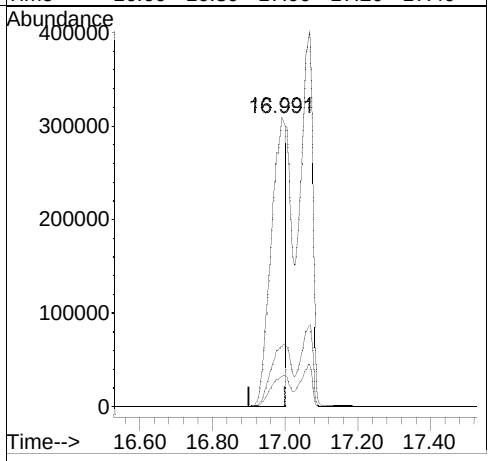
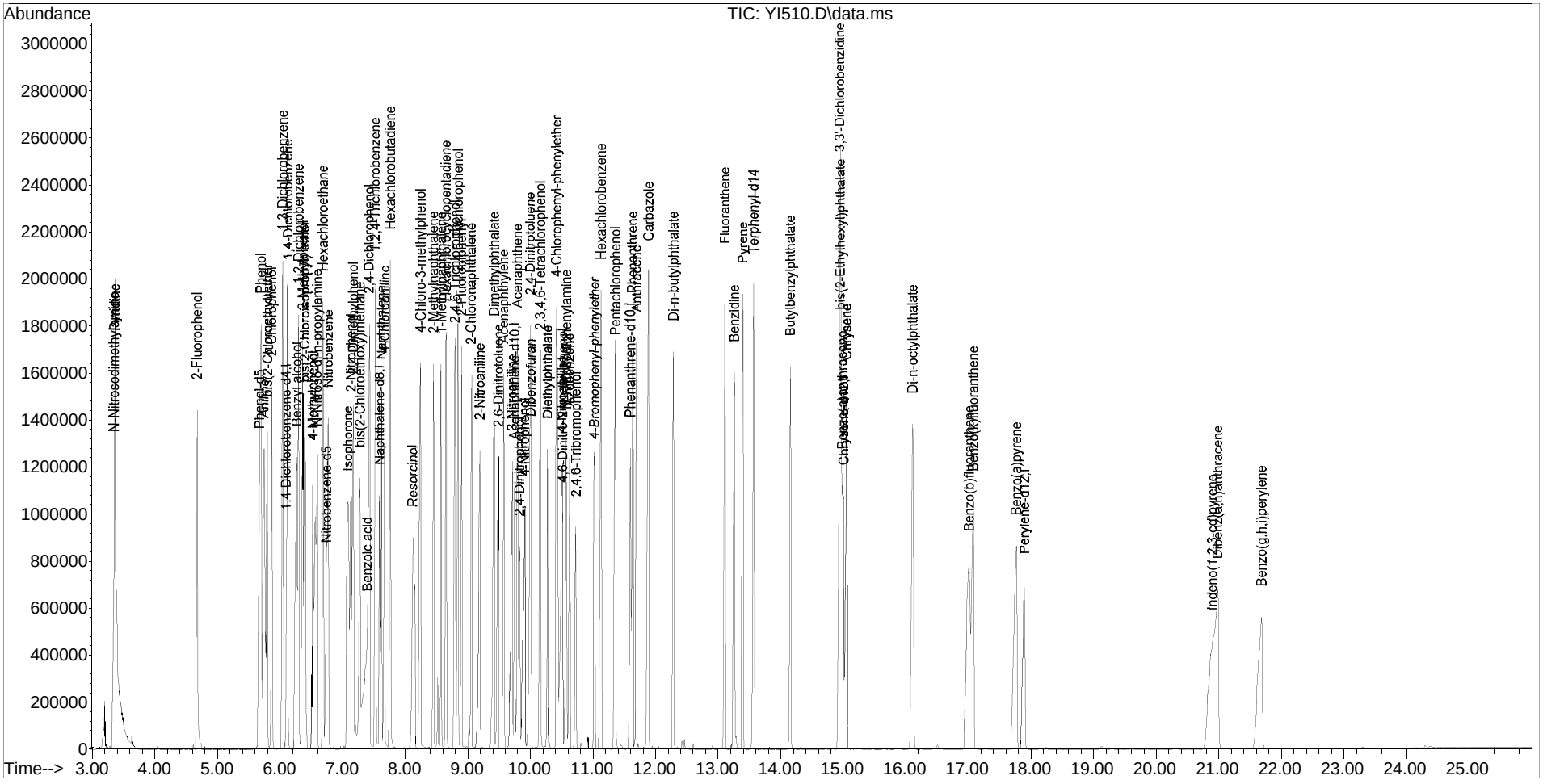




Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI510.D
Acq On : 5 Sep 2012 5:41 pm
Operator :
Sample : ICAL,S20246
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 06 12:10:43 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI510.D
Acq On : 5 Sep 2012 5:41 pm
Operator :
Sample : ICAL,S20246
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 06 12:10:43 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.098	152	175465	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.594	136	583773	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.753	164	351713	40.0000	ug/mL		0.01
58) Phenanthrene-d10	11.600	188	720946	40.0000	ug/mL		0.00
70) Chrysene-d12	15.009	240	586434	40.0000	ug/mL		0.02
79) Perylene-d12	17.899	264	740417	40.0000	ug/mL		0.02
Target Compounds							Qvalue
2) Pyridine	3.367	79	967113	94.6089	ug/mL	#	31
3) N-Nitrosodimethylamine	3.352	42	719903	108.7964	ug/mL		87
4) 2-Fluorophenol	4.685	112	445984	48.1873	ug/mL		82
5) Phenol-d5	5.675	99	516345	50.6410	ug/mL		80
6) Phenol	5.699	94	839097	104.8217	ug/mL		76
7) Aniline	5.747	93	1052378m	111.1905	ug/mL		
8) bis(2-Chloroethyl)ether	5.800	93	504248m	80.9265	ug/mL		
9) 2-Chlorophenol	5.872	128	636554	88.7697	ug/mL		98
10) 1,3-Dichlorobenzene	6.045	146	719691	95.1694	ug/mL		99
11) 1,4-Dichlorobenzene	6.127	146	622590	98.9093	ug/mL		94
12) Benzyl alcohol	6.271	108	407034	99.9207	ug/mL	#	84
13) 1,2-Dichlorobenzene	6.300	146	603190	90.2854	ug/mL		99
14) 2-Methylphenol	6.368	107	399522	95.1823	ug/mL		91
15) bis(2-Chloroisopropyl) ether	6.401	45	1001925	80.5425	ug/mL		86
16) 4-Methylphenol	6.531	107	725473m	104.0224	ug/mL		
17) N-Nitroso-di-n-propylamine	6.598	70	372919m	121.0911	ug/mL		
18) Hexachloroethane	6.690	117	256839	93.4526	ug/mL	#	73
20) Nitrobenzene-d5	6.743	82	346520	58.4167	ug/mL		84
21) Nitrobenzene	6.776	77	541935	116.1351	ug/mL		83
22) Isophorone	7.089	82	1152908m	113.6326	ug/mL		
23) 2-Nitrophenol	7.142	139	340931m	106.2355	ug/mL		
24) 2,4-Dimethylphenol	7.176	107	488028m	97.9253	ug/mL		
25) bis(2-Chloroethoxy)methane	7.281	93	352407	60.8557	ug/mL		94
26) Benzoic acid	7.397	105	577796m	134.2379	ug/mL		
27) 2,4-Dichlorophenol	7.426	162	495364m	101.3634	ug/mL		
28) 1,2,4-Trichlorobenzene	7.527	180	569513	104.4111	ug/mL		97
29) Naphthalene	7.628	128	759885m	46.8552	ug/mL		
30) 4-Chloroaniline	7.680	127	670841m	109.8002	ug/mL		
31) Hexachlorobutadiene	7.767	225	336802m	115.0596	ug/mL		
32) Resorcinol	8.128	110	685509m	119.2142	ug/mL		
33) 4-Chloro-3-methylphenol	8.253	107	451387	100.0032	ug/mL		84
34) 2-Methylnaphthalene	8.460	142	590608	46.9584	ug/mL		94
35) 1-Methylnaphthalene	8.585	142	583290	71.0345	ug/mL		93
37) Hexachlorocyclopentadiene	8.657	237	399564	114.8768	ug/mL		97
38) 2,4,6-Trichlorophenol	8.806	196	450274	122.8842	ug/mL		93

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI510.D
Acq On : 5 Sep 2012 5:41 pm
Operator :
Sample : ICAL,S20246
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 06 12:10:43 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.849	196	436516m	118.6895	ug/mL		
40) 2-Fluorobiphenyl	8.902	172	665693	61.9995	ug/mL		98
41) 2-Chloronaphthalene	9.061	162	610337	53.0191	ug/mL		87
42) 2-Nitroaniline	9.195	65	427338	130.5474	ug/mL		89
43) Dimethylphthalate	9.426	163	1323688	98.2686	ug/mL		97
44) 2,6-Dinitrotoluene	9.493	165	302613	104.3876	ug/mL	#	78
45) Acenaphthylene	9.580	152	898606	46.8765	ug/mL		97
46) 3-Nitroaniline	9.715	138	370759	100.0615	ug/mL	#	58
47) Acenaphthene	9.796	154	512948	45.9205	ug/mL		96
48) 2,4-Dinitrophenol	9.830	184	171111	123.2926	ug/mL	#	1
49) 4-Nitrophenol	9.912	109	173412	106.5672	ug/mL	#	71
50) Dibenzofuran	10.013	168	690296	62.4678	ug/mL		87
51) 2,4-Dinitrotoluene	10.003	165	370068	100.1056	ug/mL	#	78
52) 2,3,4,6-Tetrachlorophenol	10.162	232	372697	114.9155	ug/mL		88
53) Diethylphthalate	10.277	149	668229	50.0511	ug/mL		99
54) 4-Chlorophenyl-phenylether	10.422	204	338704	53.3706	ug/mL		91
55) Fluorene	10.436	166	610691	Below	Cal		87
56) 4-Nitroaniline	10.508	138	287425	89.0116	ug/mL	#	2
57) 2,4,6-Tribromophenol	10.734	330	134378	57.3584	ug/mL	#	76
59) 4,6-Dinitro-2-methylphenol	10.518	198	237011	117.6242	ug/mL		83
60) N-Nitrosodiphenylamine	10.575	169	455164	47.0701	ug/mL		88
61) Azobenzene	10.624	77	574054	48.4326	ug/mL		93
62) 4-Bromophenyl-phenylether	11.032	248	246973	53.7200	ug/mL	#	89
63) Hexachlorobenzene	11.133	284	492418	107.7960	ug/mL		93
64) Pentachlorophenol	11.364	266	358597	114.8280	ug/mL		96
65) Phenanthrene	11.633	178	952414	45.7911	ug/mL		97
66) Anthracene	11.696	178	928803	42.0437	ug/mL		94
67) Carbazole	11.898	167	1651565	98.2391	ug/mL		86
68) Di-n-butylphthalate	12.292	149	1221547	45.2107	ug/mL		95
69) Fluoranthene	13.115	202	1294609	46.3096	ug/mL		93
71) Benzidine	13.264	184	991454	121.2304	ug/mL		88
72) Pyrene	13.398	202	1226462	55.7657	ug/mL		92
73) Terphenyl-d14	13.567	244	837577	53.6303	ug/mL		96
74) Butylbenzylphthalate	14.158	149	595929	51.8123	ug/mL		85
75) 3,3'-Dichlorobenzidine	14.947	252	918480	119.1963	ug/mL		96
76) Benzo(a)anthracene	14.985	228	938010	50.0873	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.961	149	562979	39.4265	ug/mL		95
78) Chrysene	15.057	228	928925	55.6039	ug/mL		95
80) Di-n-octylphthalate	16.115	149	1529300	49.6035	ug/mL		94
81) Benzo(b)fluoranthene	17.015	252	1410663	58.5849	ug/mL		95
82) Benzo(k)fluoranthene	17.077	252	1015482m	46.6191	ug/mL		
83) Benzo(a)pyrene	17.770	252	1174150	56.2402	ug/mL		94
84) Indeno(1,2,3-cd)pyrene	20.900	276	1318299	52.8858	ug/mL		87

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI510.D
Acq On : 5 Sep 2012 5:41 pm
Operator :
Sample : ICAL,S20246
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

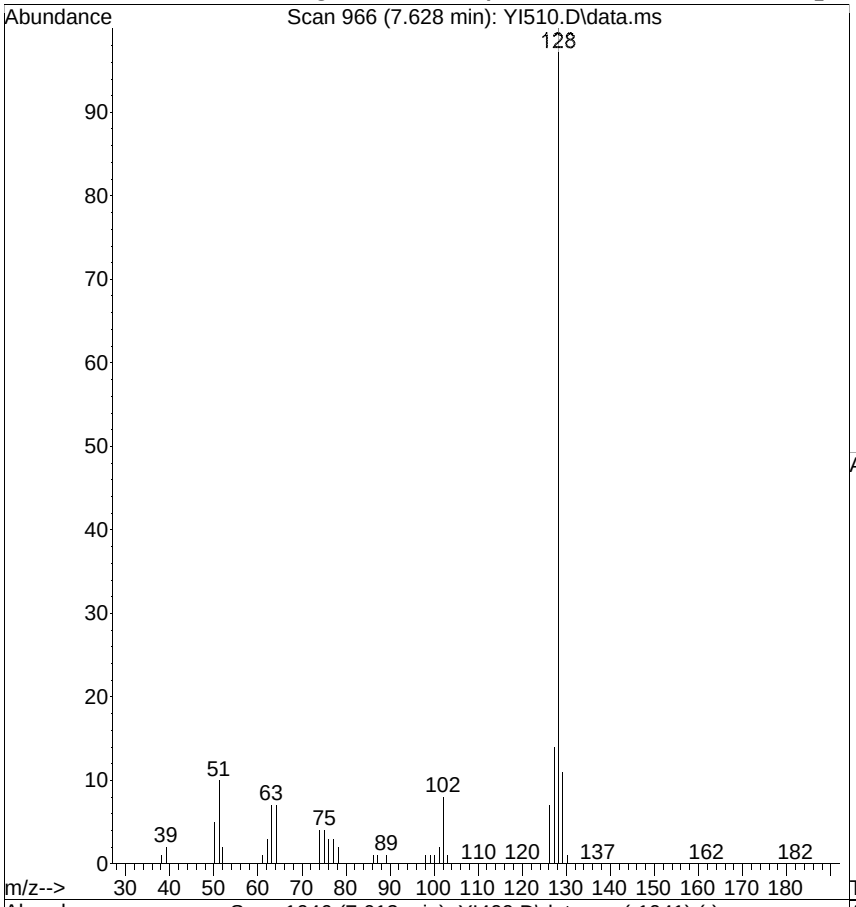
Quant Time: Sep 06 12:10:43 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.987	278	1025324	53.0414	ug/mL	93
86) Benzo(g,h,i)perylene	21.689	276	1061592	50.9215	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Naphthalene; 60.00 ug/mL; response=759885; MI]

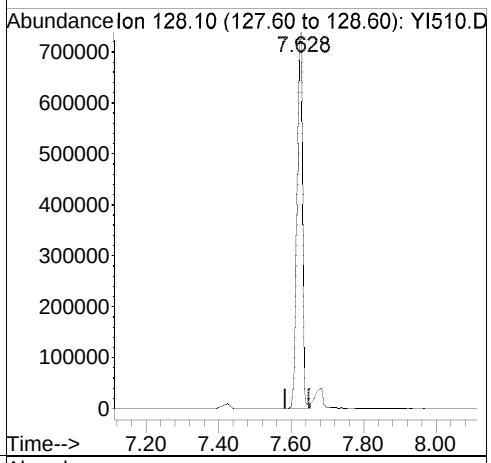
Raw



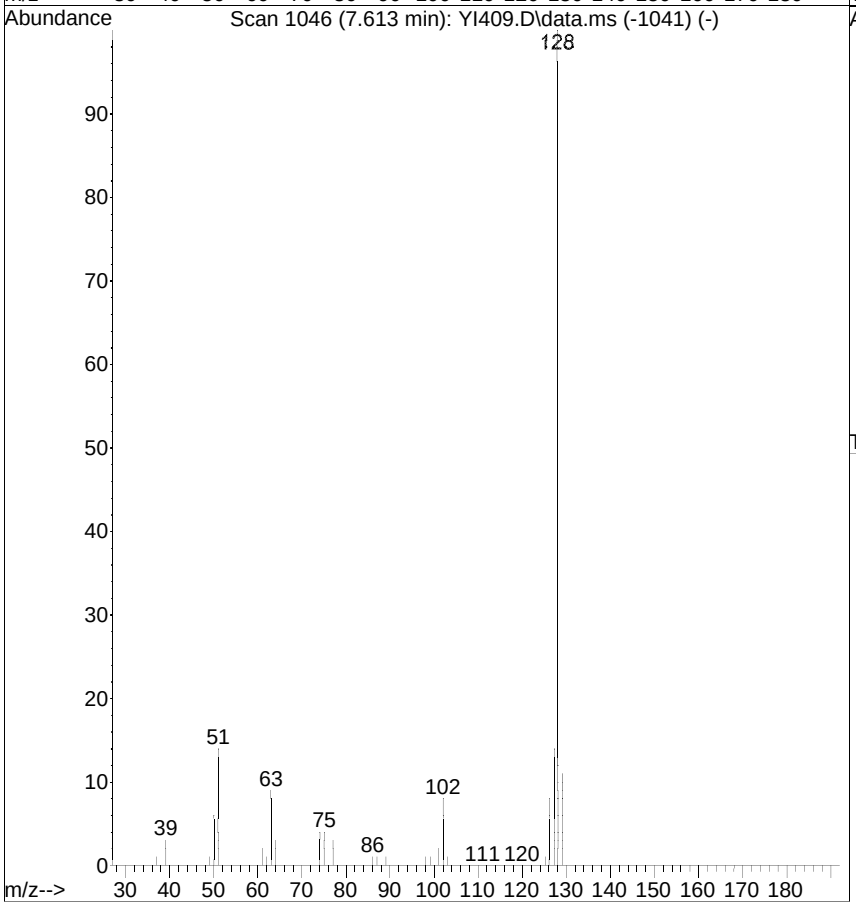
#29
Naphthalene
Concen: 46.8552 ug/mL m
RT: 7.628 min Scan# 966
Delta R.T. 0.015 min
Lab File: YI510.D
Acq: 5 Sep 2012 5:41 pm

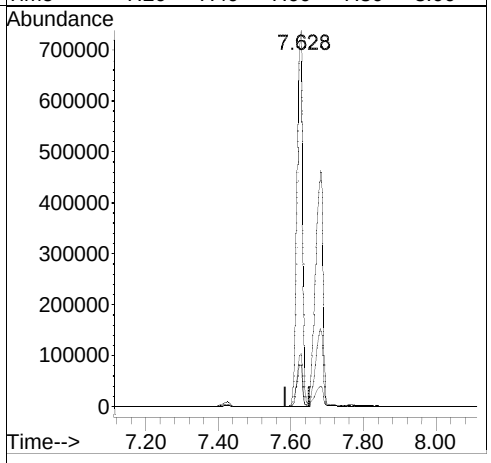
Tgt Ion:128 Resp: 759885

Ion	Ratio	Lower	Upper
128	100		
129	11.0	0.0	30.0
127	14.3	0.0	32.0



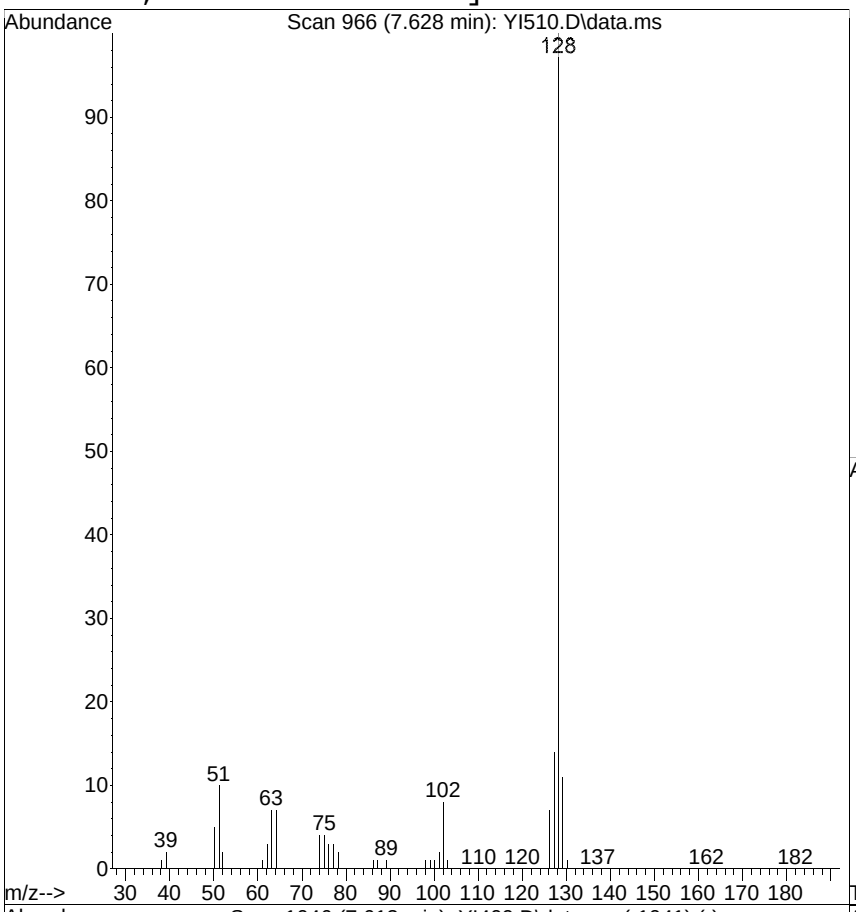
Ref





[Naphthalene; before version]

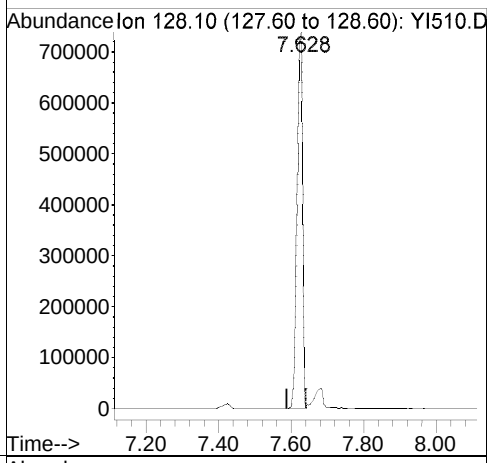
Raw



#29
Naphthalene
Concen: 46.5847 ug/mL
RT: 7.628 min Scan# 966
Delta R.T. 0.015 min
Lab File: YI510.D
Acq: 5 Sep 2012 5:41 pm

Tgt Ion:128 Resp: 755497

Ion	Ratio	Lower	Upper
128	100		
129	11.0	0.0	30.0
127	14.3	0.0	32.0



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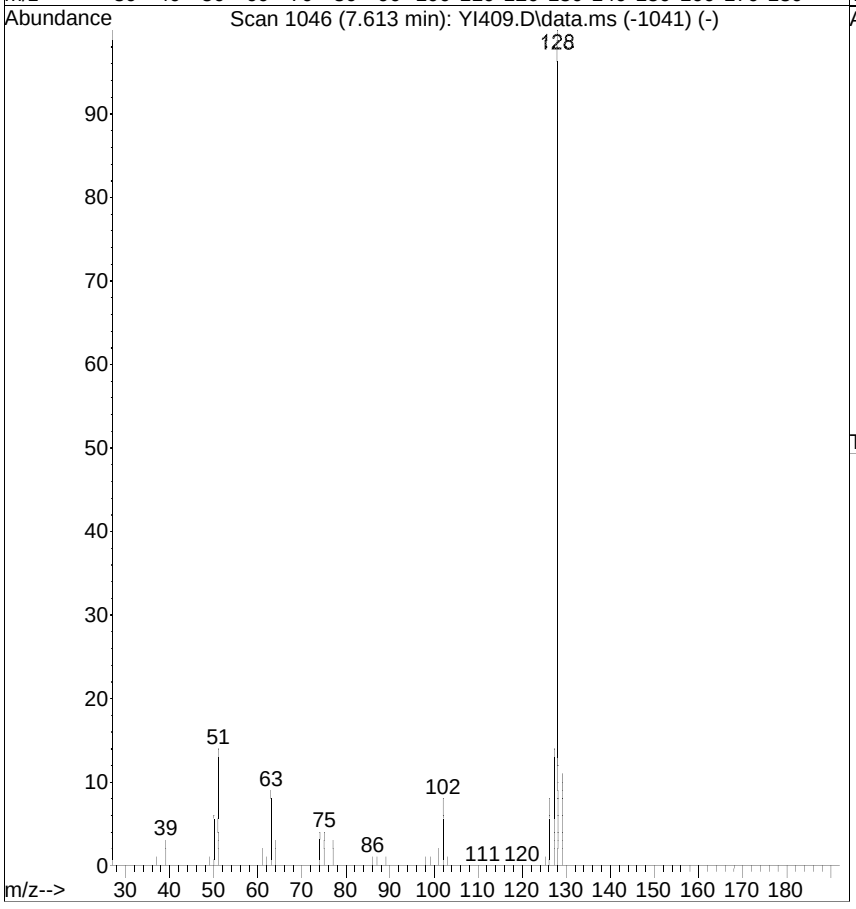
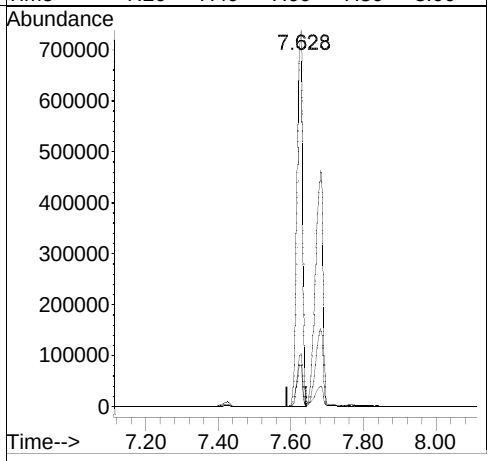
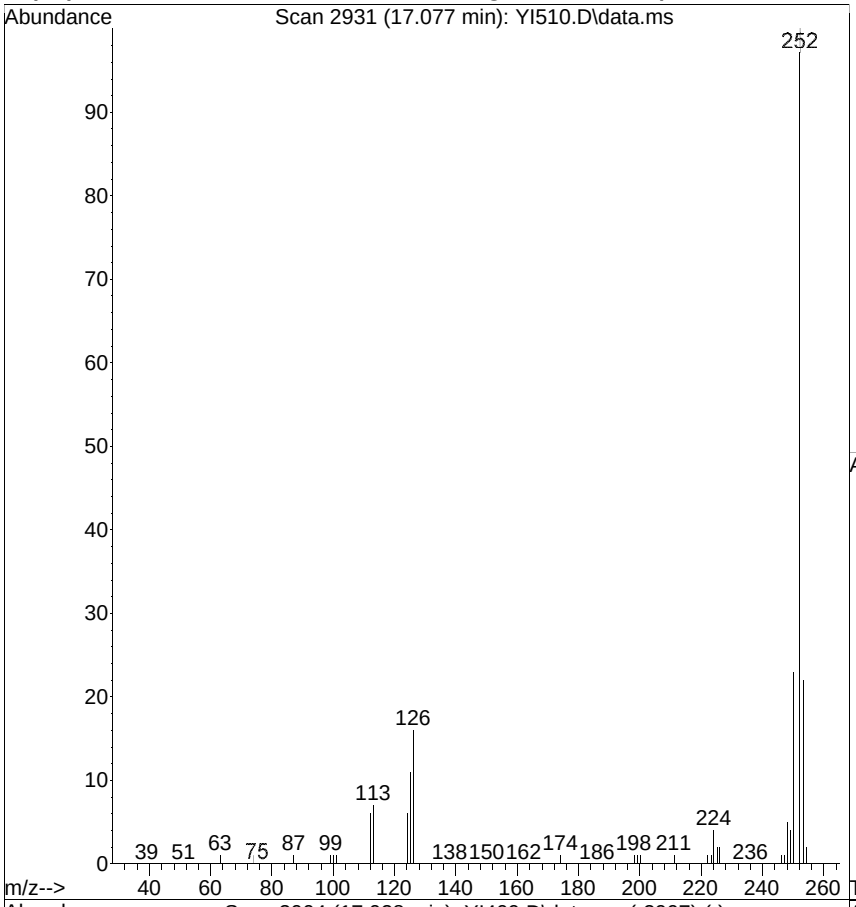




[Benzo(k)fluoranthene; 60.00 ug/mL; response=1015482; MI]

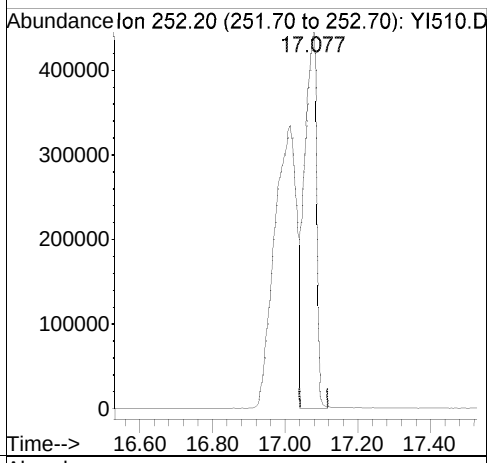
Raw



#82
Benzo(k)fluoranthene
Concen: 46.6191 ug/mL m
RT: 17.077 min Scan# 2931
Delta R.T. 0.049 min
Lab File: YI510.D
Acq: 5 Sep 2012 5:41 pm

Tgt Ion:252 Resp: 1015482

Ion	Ratio	Lower	Upper
252	100		
253	22.1	3.0	43.0
125	10.9	0.0	37.0



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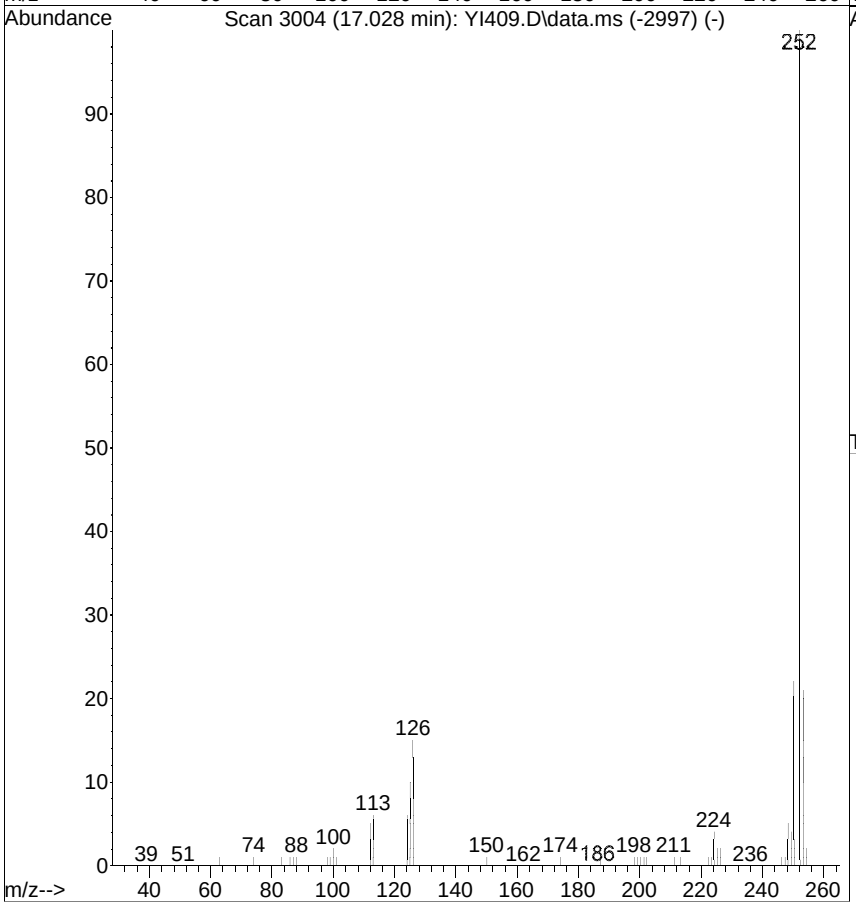
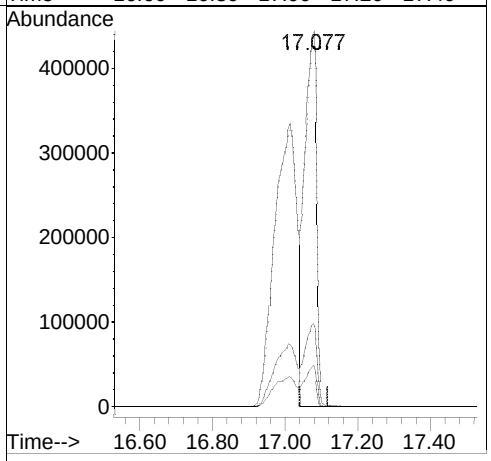
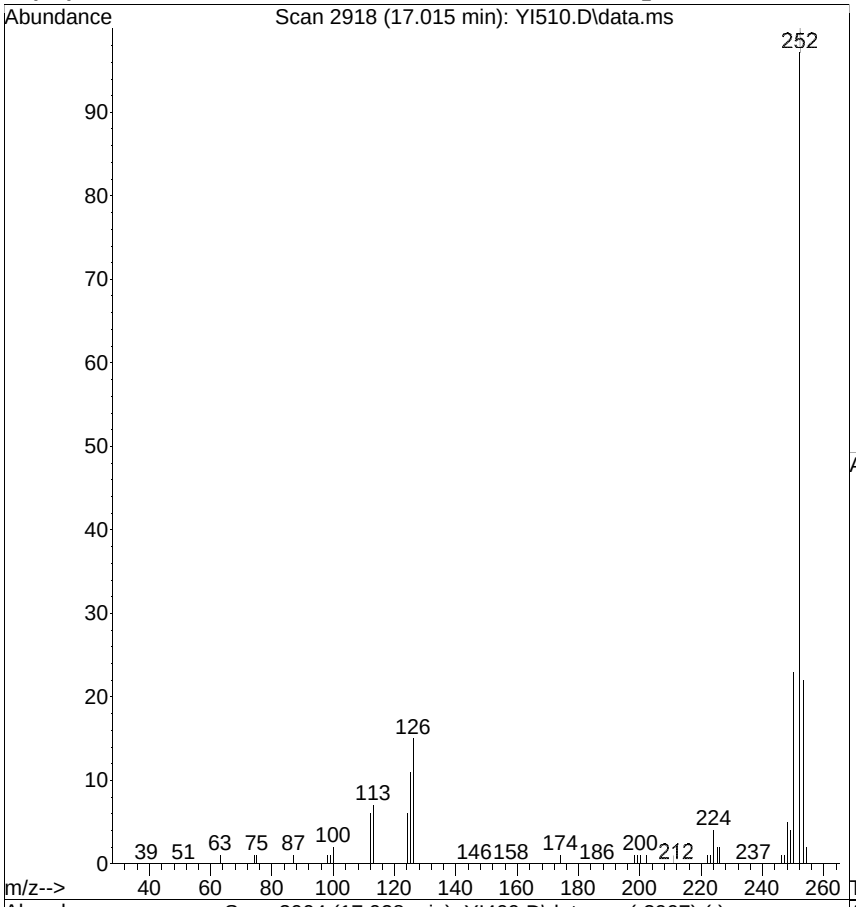




[Benzo(k)fluoranthene; before version]

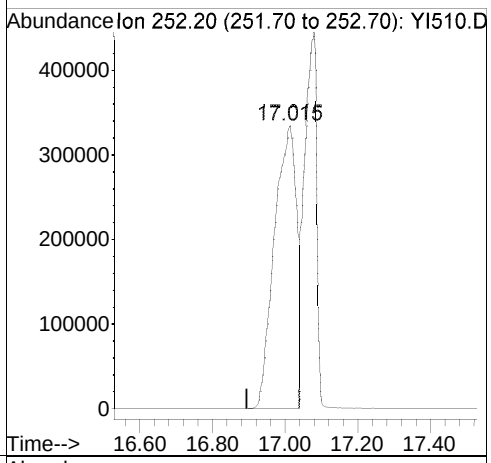
Raw



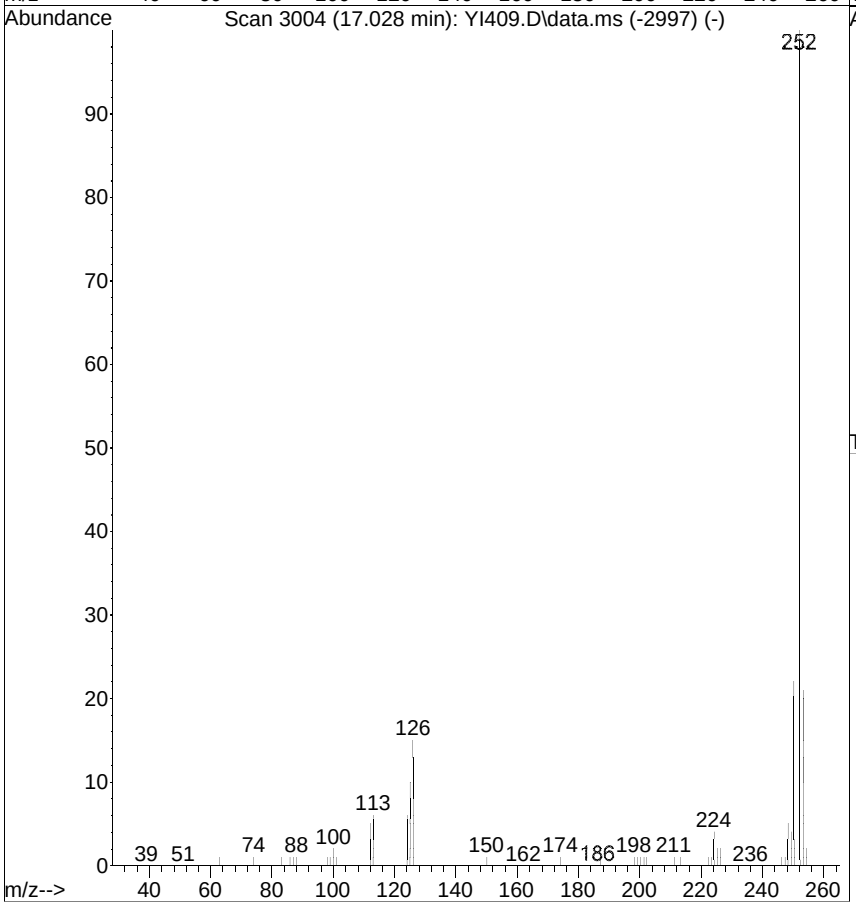
#82
Benzo(k)fluoranthene
Concen: 64.7612 ug/mL
RT: 17.015 min Scan# 2918
Delta R.T. -0.014 min
Lab File: YI510.D
Acq: 5 Sep 2012 5:41 pm

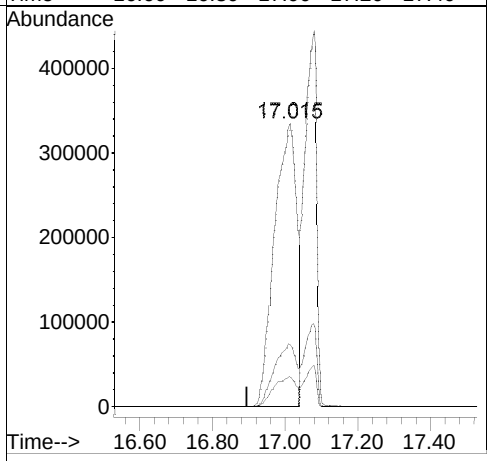
Tgt Ion:252 Resp: 1410663

Ion	Ratio	Lower	Upper
252	100		
253	21.9	3.0	43.0
125	10.6	0.0	37.0



Ref

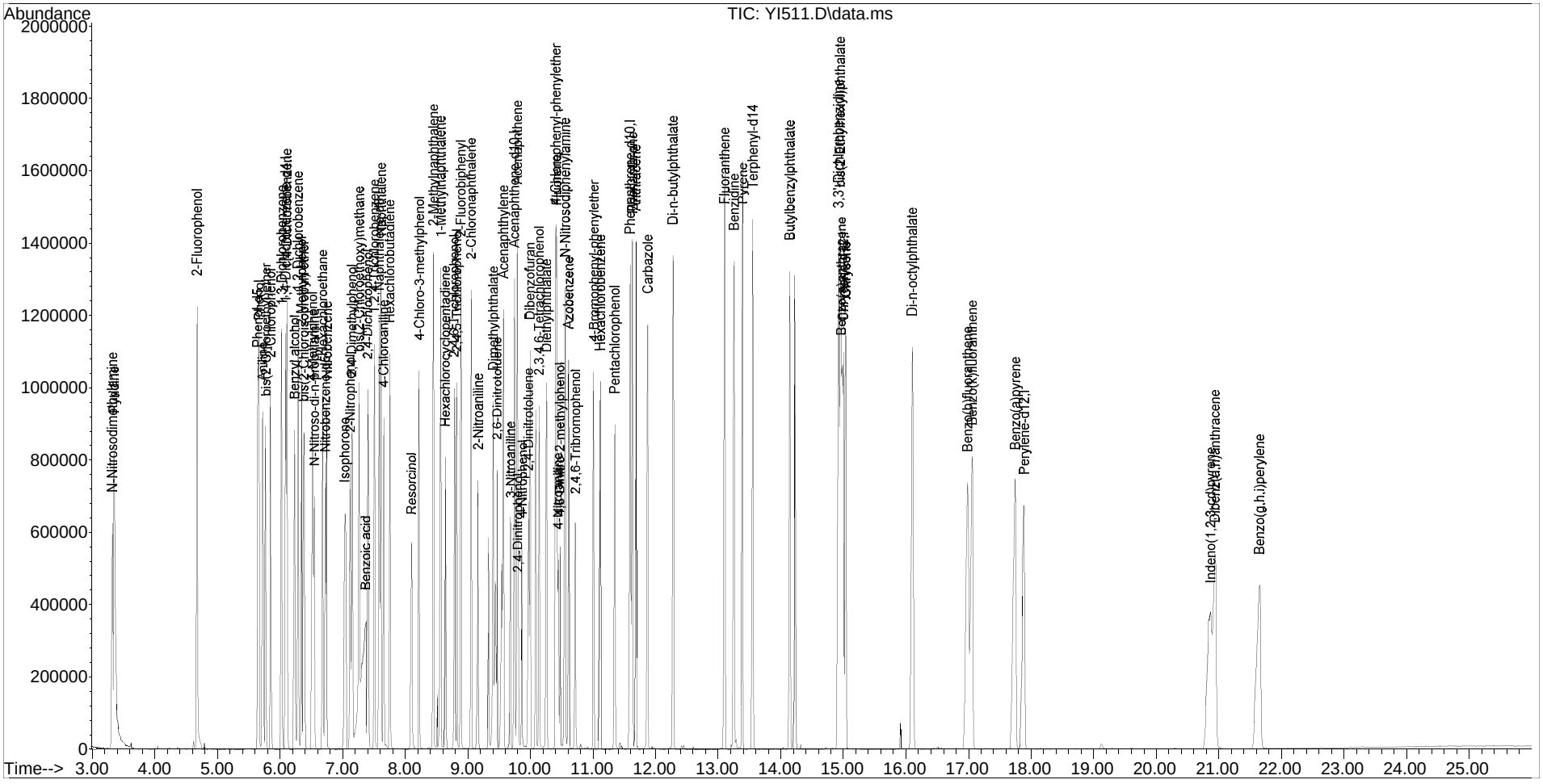




Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI511.D
Acq On : 5 Sep 2012 6:20 pm
Operator :
Sample : ICV,S19910
Misc : ICV
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 06 13:21:23 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Thu Sep 06 13:19:30 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI511.D
Acq On : 5 Sep 2012 6:20 pm
Operator :
Sample : ICV,S19910
Misc : ICV
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 06 13:21:23 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Thu Sep 06 13:19:30 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	196630	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.589	136	629861	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.748	164	375741	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.595	188	718521	40.0000	ug/mL	0.00
70) Chrysene-d12	15.000	240	600926	40.0000	ug/mL	0.00
79) Perylene-d12	17.895	264	741119	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.353	79	383463	42.6822	ug/mL	# 1
3) N-Nitrosodimethylamine	3.328	42	307769	44.6815	ug/mL	82
4) 2-Fluorophenol	4.675	112	324214	38.3616	ug/mL	84
5) Phenol-d5	5.651	99	380663	38.5757	ug/mL	81
6) Phenol	5.670	94	347071	39.6510	ug/mL	72
7) Aniline	5.728	93	419096m	39.9543	ug/mL	
8) bis(2-Chloroethyl)ether	5.781	93	247335	42.1328	ug/mL	# 66
9) 2-Chlorophenol	5.858	128	280126	41.1136	ug/mL	96
10) 1,3-Dichlorobenzene	6.036	146	332490	43.1536	ug/mL	99
11) 1,4-Dichlorobenzene	6.113	146	292261	42.4960	ug/mL	93
12) Benzyl alcohol	6.238	108	163491	41.4333	ug/mL	88
13) 1,2-Dichlorobenzene	6.291	146	298019	44.1927	ug/mL	99
14) 2-Methylphenol	6.344	107	181301	42.6521	ug/mL	93
15) bis(2-Chloroisopropyl) ether	6.382	45	566745	39.0235	ug/mL	78
16) 4-Methylphenol	6.531	107	252890	37.7744	ug/mL	93
17) N-Nitroso-di-n-propylamine	6.560	70	164725	42.2102	ug/mL	80
18) Hexachloroethane	6.685	117	127257	44.0549	ug/mL	80
20) Nitrobenzene-d5	6.728	82	257857	39.7219	ug/mL	81
21) Nitrobenzene	6.752	77	238371	43.4651	ug/mL	87
22) Isophorone	7.041	82	457232	42.5609	ug/mL	99
23) 2-Nitrophenol	7.123	139	140554	43.1215	ug/mL	86
24) 2,4-Dimethylphenol	7.152	107	209824	41.7355	ug/mL	84
25) bis(2-Chloroethoxy)methane	7.267	93	271240	41.1557	ug/mL	93
26) Benzoic acid	7.373	105	439590	105.7688	ug/mL	92
27) 2,4-Dichlorophenol	7.406	162	219674	42.0537	ug/mL	93
28) 1,2,4-Trichlorobenzene	7.512	180	259278	44.6831	ug/mL	95
29) Naphthalene	7.618	128	590963	38.2805	ug/mL	95
30) 4-Chloroaniline	7.661	127	259918	40.2943	ug/mL	89
31) Hexachlorobutadiene	7.757	225	149283	42.8843	ug/mL	97
32) Resorcinol	8.108	110	248803	42.6147	ug/mL	82
33) 4-Chloro-3-methylphenol	8.234	107	197535	42.7842	ug/mL	89
34) 2-Methylnaphthalene	8.455	142	453884	38.6035	ug/mL	94
35) 1-Methylnaphthalene	8.575	142	400701	35.4427	ug/mL	93
37) Hexachlorocyclopentadiene	8.647	237	144146	36.6222	ug/mL	98
38) 2,4,6-Trichlorophenol	8.787	196	178447	40.0685	ug/mL	94

Data Path : G:\msbna06\090512\
Data File : YI511.D
Acq On : 5 Sep 2012 6:20 pm
Operator :
Sample : ICV,S19910
Misc : ICV
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 06 13:21:23 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Thu Sep 06 13:19:30 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.830	196	178554	39.3079	ug/mL		95
40) 2-Fluorobiphenyl	8.897	172	490252	33.6668	ug/mL		99
41) 2-Chloronaphthalene	9.056	162	445207	38.3139	ug/mL		87
42) 2-Nitroaniline	9.171	65	165794	41.5156	ug/mL		93
43) Dimethylphthalate	9.407	163	507704	39.6398	ug/mL		97
44) 2,6-Dinitrotoluene	9.474	165	117395	41.2180	ug/mL		85
45) Acenaphthylene	9.575	152	642151	35.2556	ug/mL		97
46) 3-Nitroaniline	9.691	138	127304	38.3092	ug/mL	#	57
47) Acenaphthene	9.792	154	387328	37.2358	ug/mL		97
48) 2,4-Dinitrophenol	9.806	184	49882	41.9721	ug/mL	#	1
49) 4-Nitrophenol	9.873	109	60951	39.9958	ug/mL	#	74
50) Dibenzofuran	9.998	168	542639	37.7234	ug/mL		84
51) 2,4-Dinitrotoluene	9.974	165	146938	40.5266	ug/mL	#	85
52) 2,3,4,6-Tetrachlorophenol	10.143	232	143825	41.2192	ug/mL		88
53) Diethylphthalate	10.263	149	478729	37.1269	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.412	204	250096	38.0680	ug/mL		87
55) Fluorene	10.426	166	456965	37.0408	ug/mL		86
56) 4-Nitroaniline	10.450	138	118978	40.4294	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.725	330	85039	36.4796	ug/mL	#	76
59) 4,6-Dinitro-2-methylphenol	10.484	198	85656	43.9989	ug/mL		91
60) N-Nitrosodiphenylamine	10.561	169	415639	47.5056	ug/mL		88
61) Azobenzene	10.614	77	421403	38.2717	ug/mL		94
62) 4-Bromophenyl-phenylether	11.023	248	168278	38.4055	ug/mL	#	87
63) Hexachlorobenzene	11.119	284	184462	40.6205	ug/mL		96
64) Pentachlorophenol	11.350	266	134065	43.8778	ug/mL		99
65) Phenanthrene	11.629	178	675038	38.7609	ug/mL		96
66) Anthracene	11.691	178	668867	37.7585	ug/mL		95
67) Carbazole	11.879	167	627672	42.0925	ug/mL		87
68) Di-n-butylphthalate	12.283	149	893282	39.7563	ug/mL		95
69) Fluoranthene	13.105	202	907657	38.7115	ug/mL		95
71) Benzidine	13.259	184	743726	89.6656	ug/mL		88
72) Pyrene	13.394	202	909390	43.3797	ug/mL		92
73) Terphenyl-d14	13.562	244	554593	39.5049	ug/mL		97
74) Butylbenzylphthalate	14.153	149	425712	42.6506	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.932	252	484445	63.2810	ug/mL		96
76) Benzo(a)anthracene	14.976	228	733988	42.5475	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.956	149	511339	42.5820	ug/mL		95
78) Chrysene	15.043	228	649723	40.6969	ug/mL		95
80) Di-n-octylphthalate	16.106	149	1092939	41.5333	ug/mL		91
81) Benzo(b)fluoranthene	16.986	252	931360	43.3896	ug/mL		96
82) Benzo(k)fluoranthene	17.058	252	796163m	40.3162	ug/mL		
83) Benzo(a)pyrene	17.755	252	896055	47.7828	ug/mL		94
84) Indeno(1,2,3-cd)pyrene	20.876	276	950163	45.0472	ug/mL		86

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI511.D
Acq On : 5 Sep 2012 6:20 pm
Operator :
Sample : ICV,S19910
Misc : ICV
ALS Vial : 11 Sample Multiplier: 1

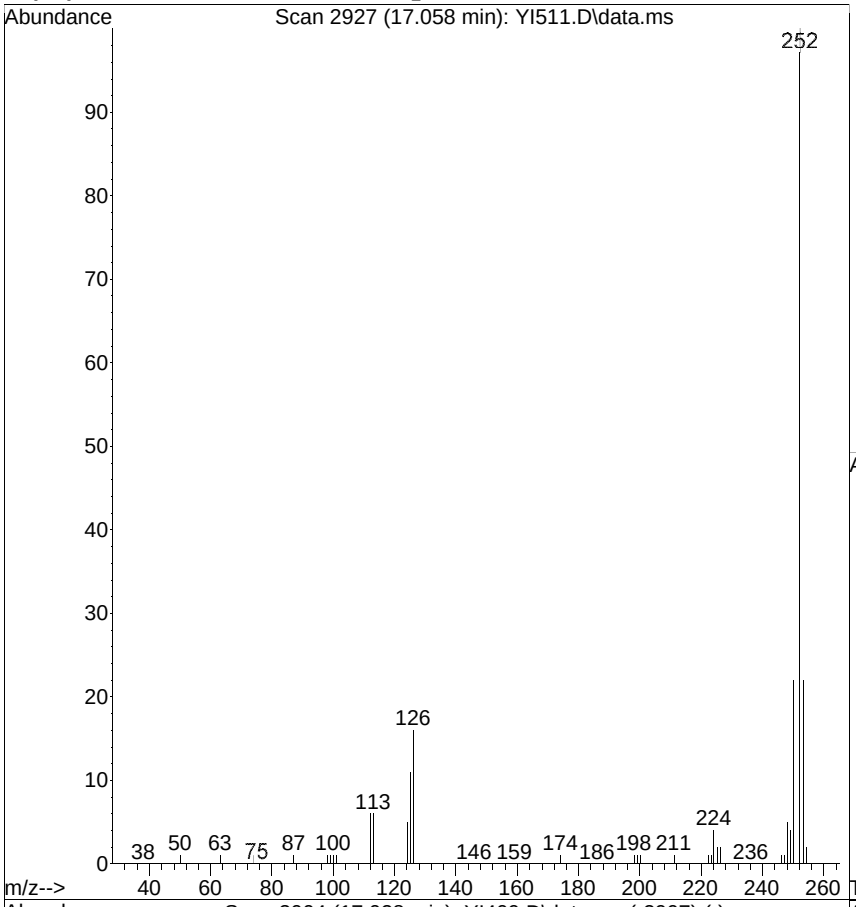
Quant Time: Sep 06 13:21:23 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Thu Sep 06 13:19:30 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.943	278	732230	43.5503	ug/mL	93
86) Benzo(g,h,i)perylene	21.655	276	721048	41.1233	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(k)fluoranthene; MI]

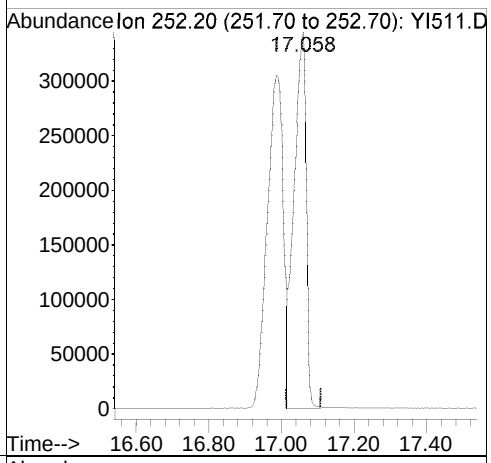
Raw



#82
Benzo(k)fluoranthene
Concen: 40.3162 ug/mL m
RT: 17.058 min Scan# 2927
Delta R.T. 0.019 min
Lab File: YI511.D
Acq: 5 Sep 2012 6:20 pm

Tgt Ion:252 Resp: 796163

Ion	Ratio	Lower	Upper
252	100		
253	22.0	3.0	43.0
125	11.0	0.0	37.0



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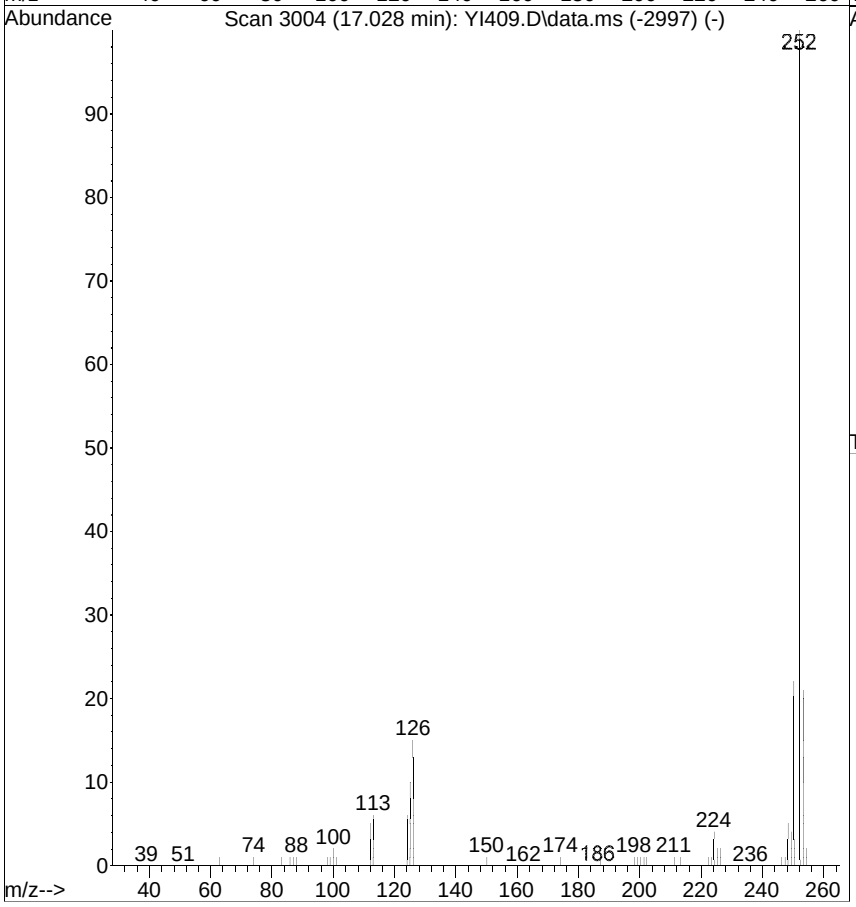
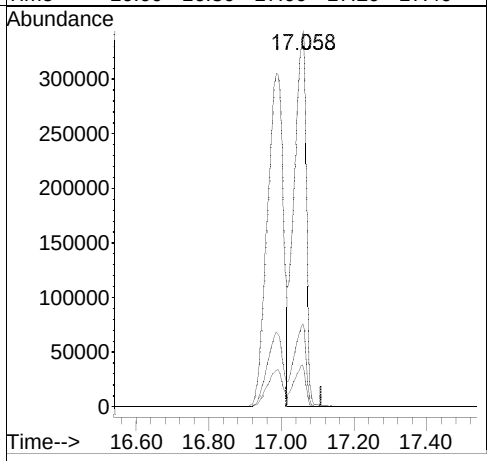
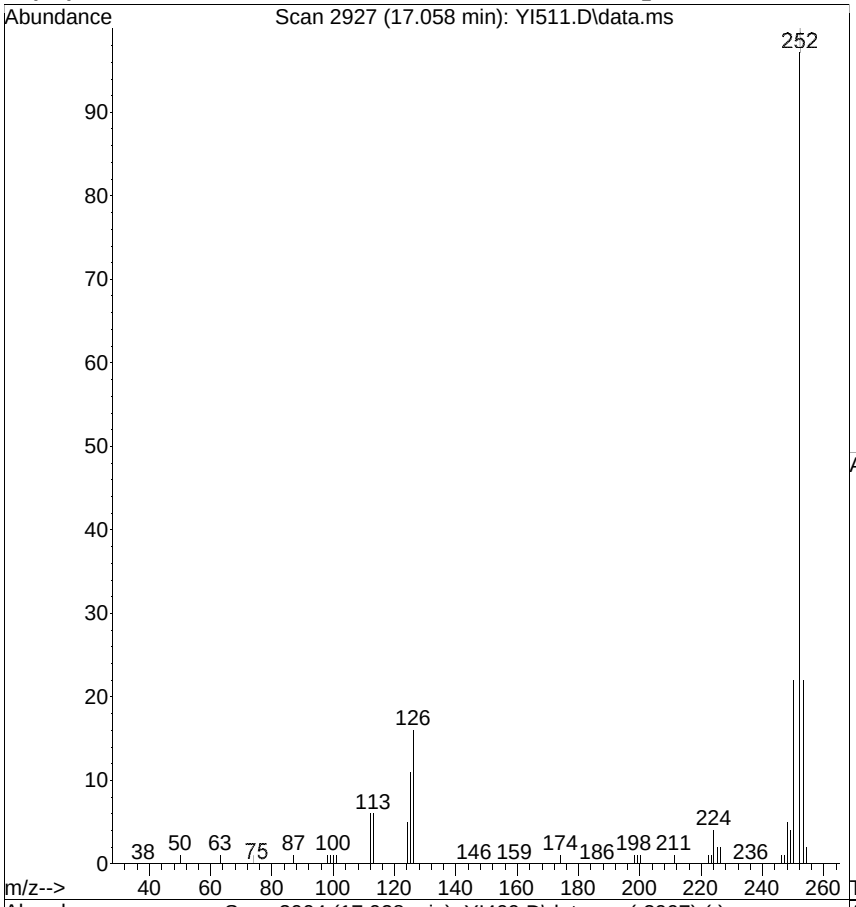




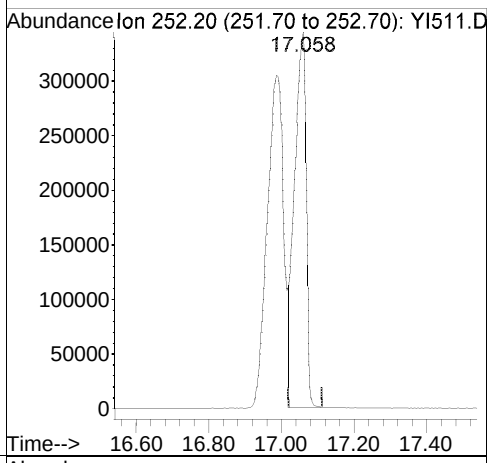
Raw



#82
Benzo(k)fluoranthene
Concen: 38.4768 ug/mL
RT: 17.058 min Scan# 2927
Delta R.T. 0.019 min
Lab File: YI511.D
Acq: 5 Sep 2012 6:20 pm

Tgt Ion:252 Resp: 759839

Ion	Ratio	Lower	Upper
252	100		
253	22.0	3.0	43.0
125	11.0	0.0	37.0



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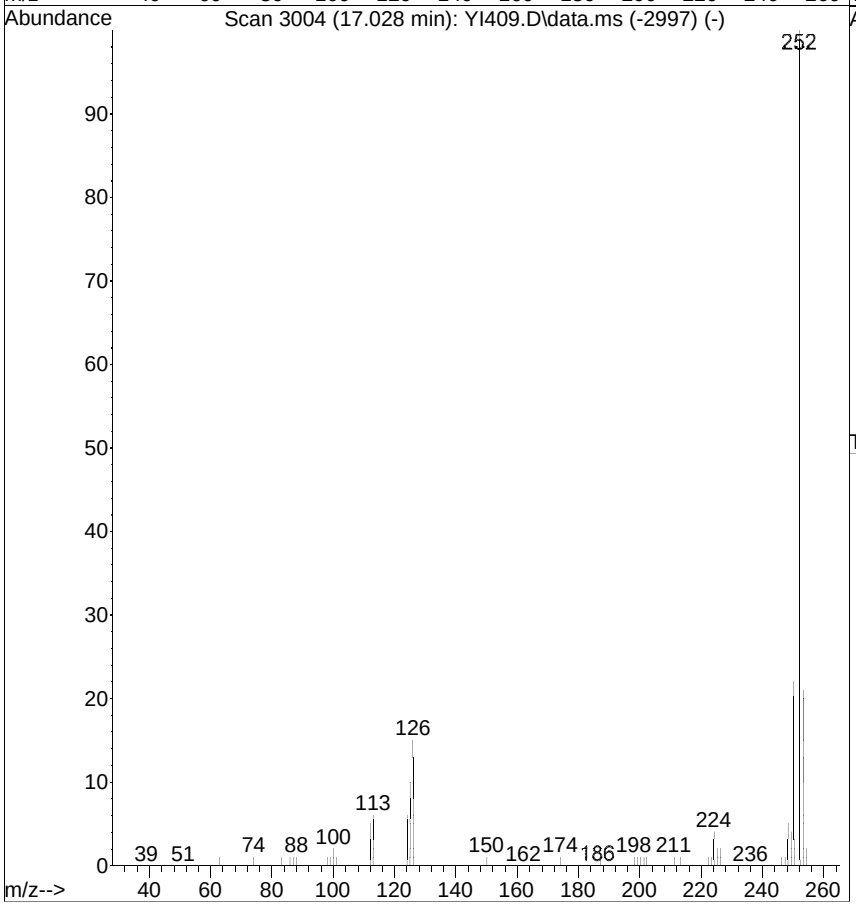
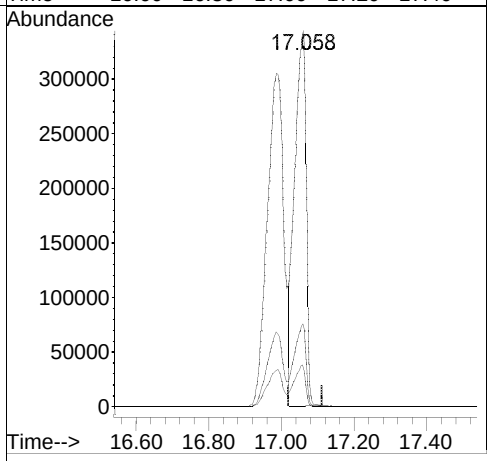




Continuing Calibration Verification Raw Data

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA05 IDF : 1.0
Seqnum : 542366451002.1 File : xia02 Time : 10-SEP-2012 11:52
Cal : 542247126001 Caldate : 19-JUN-2012
Standards: S20249

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Naphthalene	1.0829	1.0943	20.00	20.21	ug/mL	1	20	0.7000	
3,3'-Dichlorobenzidine	0.3555	0.4379	40.00	44.03	ug/mL	10	20	0.0100	i ***
Benzo(a)anthracene	1.2161	1.1899	20.00	19.57	ug/mL	-2	20	0.8000	i ***
bis(2-Ethylhexyl)phthalate	0.7923	0.8081	20.00	20.40	ug/mL	2	20	0.0100	i ***
Benzo(b)fluoranthene	1.1532	1.0945	20.00	18.98	ug/mL	-5	20	0.7000	i ***
Benzo(k)fluoranthene	1.0991	1.1037	20.00	20.08	ug/mL	0	20	0.7000	i ***
Benzo(a)pyrene	0.9882	0.9670	20.00	19.57	ug/mL	-2	20	0.7000	i ***
Indeno(1,2,3-cd)pyrene	1.1407	1.2044	20.00	21.12	ug/mL	6	20	0.5000	i ***
Dibenz(a,h)anthracene	0.9634	1.0373	20.00	21.53	ug/mL	8	20	0.4000	i ***
Nitrobenzene-d5	0.5961	0.5030	20.00	16.88	ug/mL	-16	20	0.0500	
2-Fluorobiphenyl	1.5176	1.4956	20.00	19.71	ug/mL	-1	20	0.0500	
Terphenyl-d14	0.9124	0.9183	20.00	20.13	ug/mL	1	20	0.0500	i ***

ISTD (ICAL xfj07)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
1,4-Dichlorobenzene-d4	1250318	873477	-30.14	6.23	5.77	-0.46
Naphthalene-d8	3884992	2782377	-28.38	7.73	7.25	-0.48
Acenaphthene-d10	2443786	1714307	-29.85	9.89	9.39	-0.50
Phenanthrene-d10	4074585	3080850	-24.39	11.73	11.23	-0.50
Chrysene-d12	4348886	3339435	-23.21	15.18	14.54	**-0.64 ***
Perylene-d12	4473002	3529169	-21.10	18.24	17.15	**-1.09 ***

LLH 09/10/12 [Aniline]: Picked or reassigned peak. [general version]

LLH 09/10/12 [4-Nitroaniline]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 : see ICAL narration for Istd RT drift

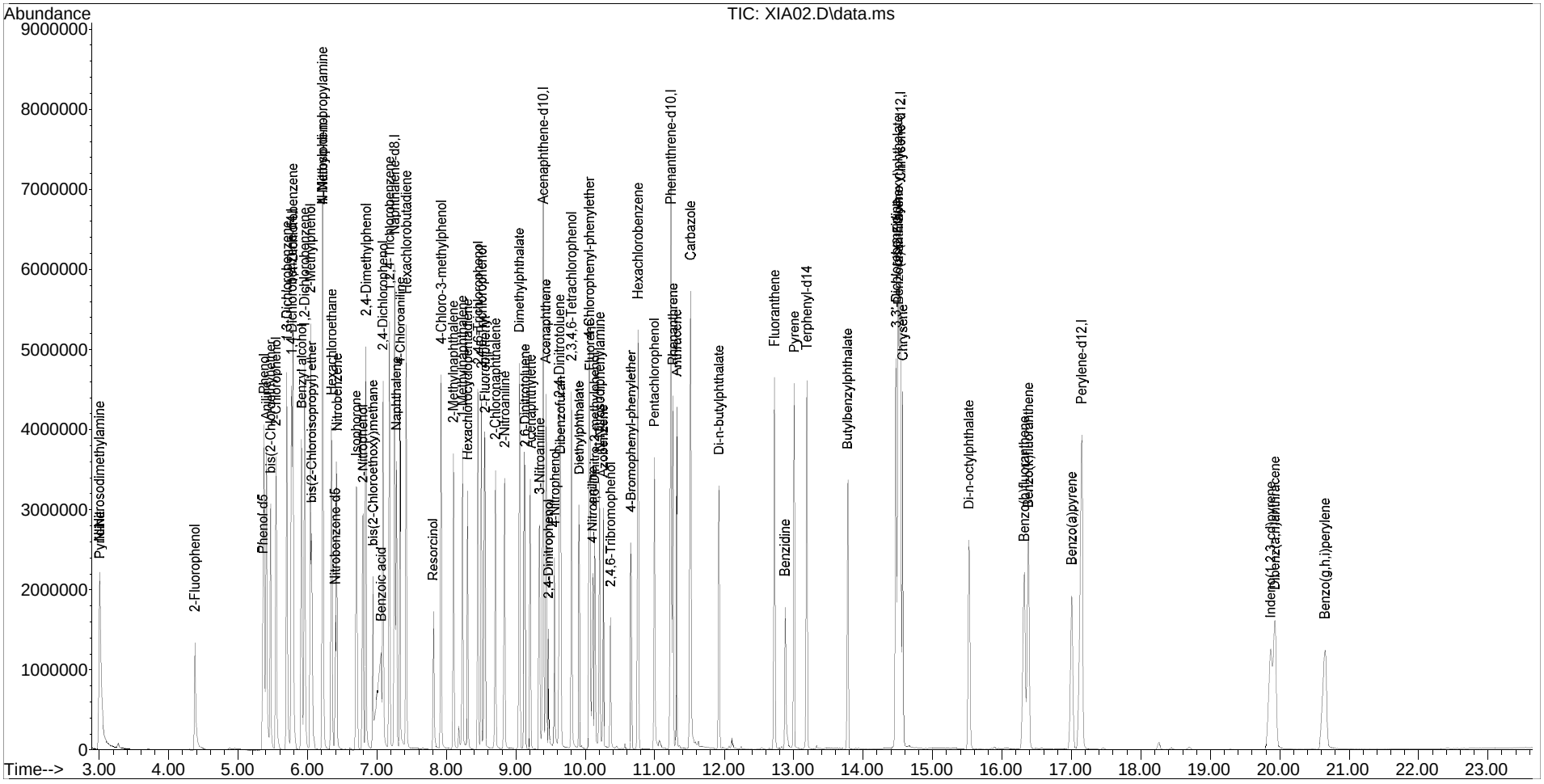
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/12/12

i=ISTD failure

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA02.D
Acq On : 10 Sep 2012 11:52 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 12:26:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA02.D
Acq On : 10 Sep 2012 11:52 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 12:26:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	5.772	152	873477	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.252	136	2782377	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.394	164	1714307	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.232	188	3080850	40.0000	ug/mL		0.00
70) Chrysene-d12	14.544	240	3339435	40.0000	ug/mL		0.00
79) Perylene-d12	17.151	264	3529169	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.010	79	1439414	35.9397	ug/mL		78
3) N-Nitrosodimethylamine	3.004	42	484875	36.3297	ug/mL	#	24
4) 2-Fluorophenol	4.377	112	575184	18.4828	ug/mL	#	73
5) Phenol-d5	5.360	99	759080	17.8622	ug/mL		78
6) Phenol	5.376	94	1481366	36.5681	ug/mL		78
7) Aniline	5.408	93	1711838m	37.5923	ug/mL		
8) bis(2-Chloroethyl)ether	5.467	93	1123377	36.6205	ug/mL		99
9) 2-Chlorophenol	5.542	128	1159701	39.7360	ug/mL		96
10) 1,3-Dichlorobenzene	5.708	146	1324795	41.0279	ug/mL		96
11) 1,4-Dichlorobenzene	5.788	146	1331678	42.4753	ug/mL		89
12) Benzyl alcohol	5.921	108	777156	36.4586	ug/mL		95
13) 1,2-Dichlorobenzene	5.964	146	1259005	41.6857	ug/mL		96
14) 2-Methylphenol	6.044	107	926308	37.0032	ug/mL		96
15) bis(2-Chloroisopropyl) ether	6.066	45	1107097	36.2674	ug/mL		86
16) 4-Methylphenol	6.221	107	1299096	35.5091	ug/mL		92
17) N-Nitroso-di-n-propylamine	6.221	70	829103	38.7802	ug/mL	#	69
18) Hexachloroethane	6.349	117	533720	38.8490	ug/mL		92
20) Nitrobenzene-d5	6.402	82	699740	16.8750	ug/mL	#	66
21) Nitrobenzene	6.424	77	1274805	35.0512	ug/mL		93
22) Isophorone	6.701	82	2159067	32.7808	ug/mL		99
23) 2-Nitrophenol	6.797	139	643857	37.9509	ug/mL		80
24) 2,4-Dimethylphenol	6.840	107	1049399	36.3950	ug/mL		87
25) bis(2-Chloroethoxy)methane	6.942	93	669097	17.5367	ug/mL		95
26) Benzoic acid	7.059	105	1434668	63.7187	ug/mL		96
27) 2,4-Dichlorophenol	7.086	162	982135	40.2284	ug/mL		96
28) 1,2,4-Trichlorobenzene	7.182	180	1058084	41.2511	ug/mL		98
29) Naphthalene	7.278	128	1522431	20.2112	ug/mL		93
30) 4-Chloroaniline	7.337	127	1306461	38.8456	ug/mL		88
31) Hexachlorobutadiene	7.423	225	642692	42.6458	ug/mL		98
32) Resorcinol	7.813	110	664726	44.8519	ug/mL		91
33) 4-Chloro-3-methylphenol	7.925	107	978813	36.5352	ug/mL		94
34) 2-Methylnaphthalene	8.106	142	1096860	19.9330	ug/mL		90
35) 1-Methylnaphthalene	8.229	142	1069796	19.9241	ug/mL		90
37) Hexachlorocyclopentadiene	8.304	237	531517	37.7899	ug/mL		99
38) 2,4,6-Trichlorophenol	8.459	196	709865	40.5078	ug/mL		91

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA02.D
Acq On : 10 Sep 2012 11:52 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 12:26:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.507	196	771294	42.2182	ug/mL		91
40) 2-Fluorobiphenyl	8.555	172	1281980	19.7104	ug/mL		94
41) 2-Chloronaphthalene	8.705	162	1036975	20.6091	ug/mL		91
42) 2-Nitroaniline	8.838	65	671154	33.6525	ug/mL		87
43) Dimethylphthalate	9.052	163	2226665	41.4793	ug/mL		96
44) 2,6-Dinitrotoluene	9.132	165	575511	39.9407	ug/mL	#	75
45) Acenaphthylene	9.218	152	1529840	20.2878	ug/mL		95
46) 3-Nitroaniline	9.346	138	594754	43.2588	ug/mL	#	68
47) Acenaphthene	9.431	154	966048	18.7164	ug/mL		95
48) 2,4-Dinitrophenol	9.469	184	260636	39.1736	ug/mL	#	1
49) 4-Nitrophenol	9.565	109	268581	33.4446	ug/mL	#	77
50) Dibenzofuran	9.645	168	1455085	21.5300	ug/mL		82
51) 2,4-Dinitrotoluene	9.629	165	748042	40.2828	ug/mL		91
52) 2,3,4,6-Tetrachlorophenol	9.800	232	652993	42.8269	ug/mL		89
53) Diethylphthalate	9.912	149	1140094	20.7519	ug/mL		96
54) 4-Chlorophenyl-phenylether	10.056	204	629326	21.1513	ug/mL	#	82
55) Fluorene	10.067	166	1205266	20.6361	ug/mL		85
56) 4-Nitroaniline	10.104	138	550648m	40.6209	ug/mL		
57) 2,4,6-Tribromophenol	10.366	330	210222	22.6445	ug/mL	#	78
59) 4,6-Dinitro-2-methylphenol	10.136	198	463768	38.0856	ug/mL	#	75
60) N-Nitrosodiphenylamine	10.206	169	883876	19.5599	ug/mL		92
61) Azobenzene	10.254	77	1305458	17.0873	ug/mL		97
62) 4-Bromophenyl-phenylether	10.660	248	400906	20.1109	ug/mL	#	85
63) Hexachlorobenzene	10.756	284	840556	44.7881	ug/mL		90
64) Pentachlorophenol	10.996	266	497945	36.1398	ug/mL		98
65) Phenanthrene	11.258	178	1687868	20.0515	ug/mL		93
66) Anthracene	11.317	178	1732572	20.1257	ug/mL		91
67) Carbazole	11.520	167	2929093	44.9342	ug/mL		79
68) Di-n-butylphthalate	11.926	149	1986069	20.1016	ug/mL		95
69) Fluoranthene	12.727	202	2038345	20.4141	ug/mL		97
71) Benzidine	12.882	184	865673	40.2762	ug/mL		91
72) Pyrene	13.011	202	2039800	20.3450	ug/mL		87
73) Terphenyl-d14	13.187	244	1533230	20.1292	ug/mL		93
74) Butylbenzylphthalate	13.780	149	943694	18.5307	ug/mL		97
75) 3,3'-Dichlorobenzidine	14.480	252	1462268	44.0263	ug/mL		97
76) Benzo(a)anthracene	14.517	228	1986740	19.5691	ug/mL		99
77) bis(2-Ethylhexyl)phthalate	14.506	149	1349267	20.3994	ug/mL		99
78) Chrysene	14.576	228	1830398	19.7992	ug/mL		90
80) Di-n-octylphthalate	15.527	149	2247366	18.8229	ug/mL		99
81) Benzo(b)fluoranthene	16.328	252	1931311	18.9819	ug/mL		97
82) Benzo(k)fluoranthene	16.381	252	1947529	20.0828	ug/mL		95
83) Benzo(a)pyrene	17.006	252	1706282	19.5705	ug/mL		97
84) Indeno(1,2,3-cd)pyrene	19.875	276	2125308	21.1173	ug/mL		87

Quantitation Report (QT Reviewed)

Data Path : G:\msbna05\091012\
Data File : XIA02.D
Acq On : 10 Sep 2012 11:52 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 12:26:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA5.M
Quant Title : MSBNA05 BNA
QLast Update : Mon Sep 10 12:25:54 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	19.934	278	1830356	21.5339	ug/mL	95
86) Benzo(g,h,i)perylene	20.655	276	1784105	21.7104	ug/mL	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 MSBNA Soil
EPA 8270D

Inst : MSBNA06 IDF : 1.0
Seqnum : 552362420002.1 File : yi702 Time : 07-SEP-2012 16:37
Cal : 552359297001 Caldate : 05-SEP-2012
Standards: S20248

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Naphthalene	0.9804	1.0011	16.00	16.34	ug/mL	2	20	0.7000	
3,3'-Dichlorobenzidine	0.5096	0.5408	32.00	33.96	ug/mL	6	20	0.0100	
Benzo(a)anthracene	1.1483	1.1796	16.00	16.44	ug/mL	3	20	0.8000	
bis(2-Ethylhexyl)phthalate	0.7993	0.8911	16.00	17.84	ug/mL	11	20	0.0100	
Benzo(b)fluoranthene	1.1585	1.1930	16.00	16.48	ug/mL	3	20	0.7000	
Benzo(k)fluoranthene	1.0658	1.0715	16.00	16.09	ug/mL	1	20	0.7000	
Benzo(a)pyrene	1.0121	1.0823	16.00	17.11	ug/mL	7	20	0.7000	
Indeno(1,2,3-cd)pyrene	1.1384	1.2362	16.00	17.37	ug/mL	9	20	0.5000	
Dibenz(a,h)anthracene	0.9075	1.0072	16.00	17.76	ug/mL	11	20	0.4000	
Nitrobenzene-d5	0.4123	0.4393	16.00	17.05	ug/mL	7	20	0.0500	
2-Fluorobiphenyl	1.5502	1.6849	16.00	17.39	ug/mL	9	20	0.0500	
Terphenyl-d14	0.9345	1.0020	16.00	17.16	ug/mL	7	20	0.0500	

ISTD (ICAL yi507)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
1,4-Dichlorobenzene-d4	198812	223394	12.36	6.09	6.09	0.00
Naphthalene-d8	672821	743711	10.54	7.59	7.59	0.00
Acenaphthene-d10	377811	427044	13.03	9.75	9.74	-0.01
Phenanthrene-d10	744787	851335	14.31	11.60	11.60	0.01
Chrysene-d12	659674	784348	18.90	15.00	15.00	0.01
Perylene-d12	780304	923802	18.39	17.89	17.89	0.01

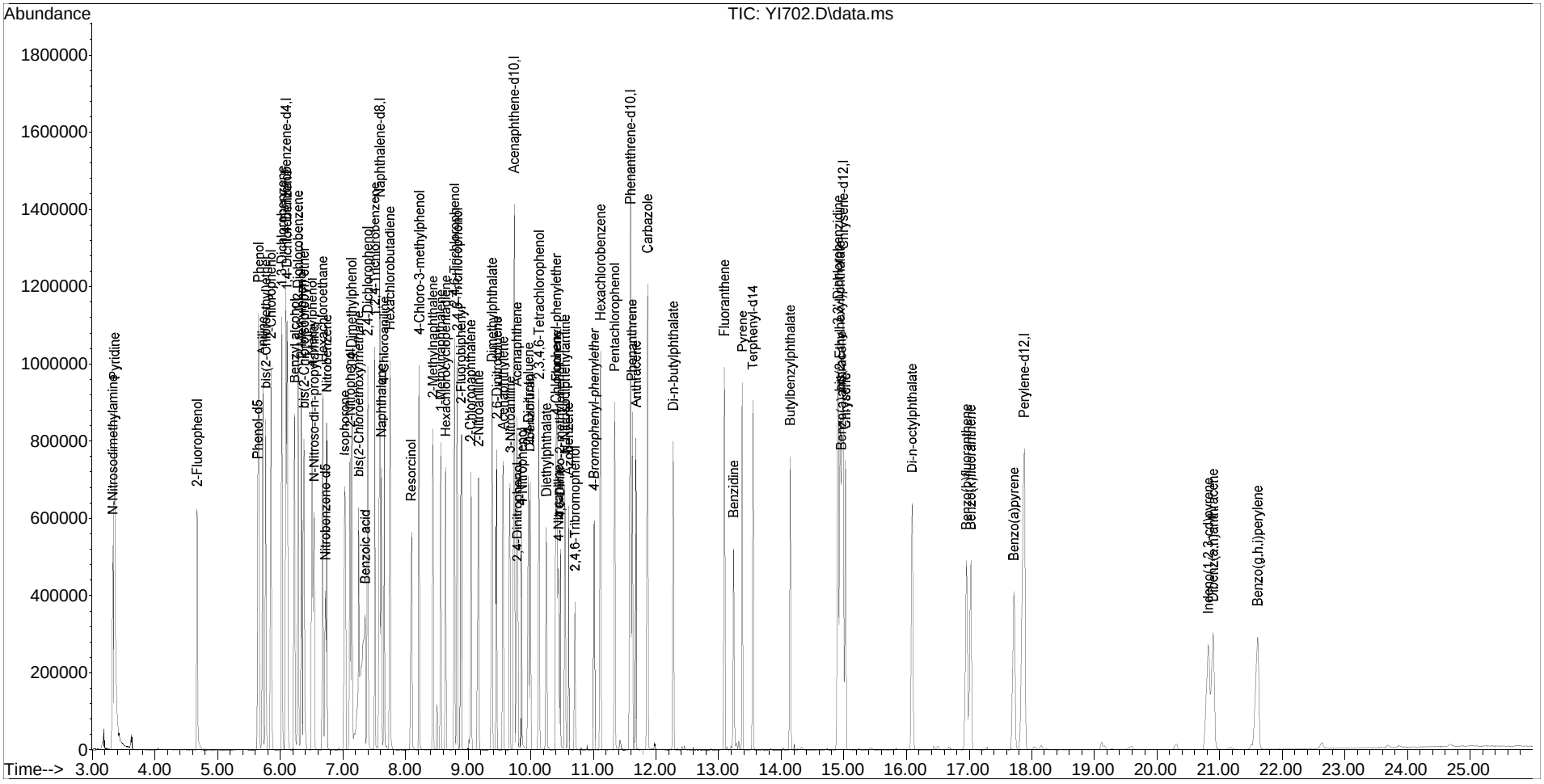
LLH 09/07/12 [Aniline]: Picked or reassigned peak. [general version]

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI702.D
Acq On : 7 Sep 2012 4:37 pm
Operator :
Sample : CCV,S20248
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 07 17:08:27 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI702.D
Acq On : 7 Sep 2012 4:37 pm
Operator :
Sample : CCV,S20248
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 07 17:08:27 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	223394	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.589	136	743711	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.743	164	427044	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.595	188	851335	40.0000	ug/mL	0.00
70) Chrysene-d12	14.995	240	784348	40.0000	ug/mL	0.00
79) Perylene-d12	17.885	264	923802	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.357	79	329770	32.3082	ug/mL	# 16
3) N-Nitrosodimethylamine	3.333	42	251452	32.1319	ug/mL	84
4) 2-Fluorophenol	4.675	112	167427	17.4369	ug/mL	82
5) Phenol-d5	5.646	99	200966	17.9256	ug/mL	81
6) Phenol	5.661	94	356646	35.8634	ug/mL	71
7) Aniline	5.723	93	398029m	33.3997	ug/mL	
8) bis(2-Chloroethyl)ether	5.776	93	238101	35.7005	ug/mL	# 66
9) 2-Chlorophenol	5.858	128	272399	35.1897	ug/mL	97
10) 1,3-Dichlorobenzene	6.031	146	310993	35.5277	ug/mL	98
11) 1,4-Dichlorobenzene	6.113	146	258397	33.0707	ug/mL	94
12) Benzyl alcohol	6.238	108	159628	35.6076	ug/mL	# 86
13) 1,2-Dichlorobenzene	6.291	146	280814	36.6525	ug/mL	98
14) 2-Methylphenol	6.344	107	172901	35.8028	ug/mL	92
15) bis(2-Chloroisopropyl) ether	6.382	45	497523	30.1529	ug/mL	80
16) 4-Methylphenol	6.522	107	247337	32.5187	ug/mL	95
17) N-Nitroso-di-n-propylamine	6.550	70	152995	34.5075	ug/mL	82
18) Hexachloroethane	6.680	117	118455	36.0947	ug/mL	88
20) Nitrobenzene-d5	6.723	82	130682	17.0493	ug/mL	83
21) Nitrobenzene	6.748	77	221710	34.2384	ug/mL	86
22) Isophorone	7.036	82	426930	33.6567	ug/mL	98
23) 2-Nitrophenol	7.123	139	139133	36.1511	ug/mL	83
24) 2,4-Dimethylphenol	7.147	107	192485	32.4256	ug/mL	85
25) bis(2-Chloroethoxy)methane	7.262	93	134737	17.3143	ug/mL	94
26) Benzoic acid	7.363	105	427814	87.1777	ug/mL	91
27) 2,4-Dichlorophenol	7.402	162	216019	35.0234	ug/mL	94
28) 1,2,4-Trichlorobenzene	7.512	180	238210	34.7678	ug/mL	95
29) Naphthalene	7.613	128	297804	16.3376	ug/mL	96
30) 4-Chloroaniline	7.661	127	255078	33.4904	ug/mL	90
31) Hexachlorobutadiene	7.757	225	140010	34.0633	ug/mL	97
32) Resorcinol	8.104	110	216614	31.4218	ug/mL	84
33) 4-Chloro-3-methylphenol	8.229	107	189513	34.7631	ug/mL	89
34) 2-Methylnaphthalene	8.445	142	238408	17.1729	ug/mL	92
35) 1-Methylnaphthalene	8.570	142	232713	17.4328	ug/mL	93
37) Hexachlorocyclopentadiene	8.647	237	137075	30.6419	ug/mL	97
38) 2,4,6-Trichlorophenol	8.787	196	181914	35.9398	ug/mL	94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI702.D
Acq On : 7 Sep 2012 4:37 pm
Operator :
Sample : CCV,S20248
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 07 17:08:27 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.830	196	184736	35.7831	ug/mL		92
40) 2-Fluorobiphenyl	8.892	172	287804	17.3898	ug/mL		99
41) 2-Chloronaphthalene	9.046	162	227378	17.2170	ug/mL		88
42) 2-Nitroaniline	9.166	65	157458	34.6915	ug/mL		94
43) Dimethylphthalate	9.392	163	516107	35.4549	ug/mL		97
44) 2,6-Dinitrotoluene	9.465	165	115112	35.5610	ug/mL		83
45) Acenaphthylene	9.566	152	358217	17.3043	ug/mL		98
46) 3-Nitroaniline	9.681	138	131140	34.7226	ug/mL	#	59
47) Acenaphthene	9.782	154	213761	18.0811	ug/mL		96
48) 2,4-Dinitrophenol	9.796	184	48290	37.5844	ug/mL	#	1
49) 4-Nitrophenol	9.864	109	59324	34.2515	ug/mL	#	71
50) Dibenzofuran	9.994	168	300010	18.3506	ug/mL		83
51) 2,4-Dinitrotoluene	9.965	165	153351	37.2142	ug/mL	#	86
52) 2,3,4,6-Tetrachlorophenol	10.143	232	147732	37.2525	ug/mL		88
53) Diethylphthalate	10.253	149	259543	17.7102	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.407	204	124263	16.6422	ug/mL		84
55) Fluorene	10.417	166	231343	16.4994	ug/mL		88
56) 4-Nitroaniline	10.446	138	116425	34.8091	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.715	330	45226	17.0701	ug/mL	#	81
59) 4,6-Dinitro-2-methylphenol	10.474	198	82688	35.8480	ug/mL		89
60) N-Nitrosodiphenylamine	10.551	169	187382	18.0757	ug/mL		85
61) Azobenzene	10.604	77	230161	17.6421	ug/mL		96
62) 4-Bromophenyl-phenylether	11.018	248	89289	17.1990	ug/mL	#	88
63) Hexachlorobenzene	11.114	284	179747	33.4071	ug/mL		96
64) Pentachlorophenol	11.345	266	127514	35.2230	ug/mL		97
65) Phenanthrene	11.619	178	340457	16.4993	ug/mL		97
66) Anthracene	11.681	178	355761	16.9501	ug/mL		95
67) Carbazole	11.874	167	609382	34.4906	ug/mL		87
68) Di-n-butylphthalate	12.278	149	474374	17.8188	ug/mL		96
69) Fluoranthene	13.095	202	479483	17.2596	ug/mL		96
71) Benzidine	13.244	184	247944	22.9023	ug/mL		88
72) Pyrene	13.384	202	459261	16.7845	ug/mL		94
73) Terphenyl-d14	13.552	244	314372	17.1567	ug/mL		97
74) Butylbenzylphthalate	14.144	149	228463	17.5363	ug/mL		88
75) 3,3'-Dichlorobenzidine	14.918	252	339369	33.9635	ug/mL		97
76) Benzo(a)anthracene	14.966	228	370073	16.4356	ug/mL		99
77) bis(2-Ethylhexyl)phthalate	14.947	149	279566	17.8367	ug/mL		92
78) Chrysene	15.028	228	356303	17.0988	ug/mL		95
80) Di-n-octylphthalate	16.096	149	576114	17.5638	ug/mL		90
81) Benzo(b)fluoranthene	16.962	252	440854	16.4767	ug/mL		95
82) Benzo(k)fluoranthene	17.029	252	395956	16.0855	ug/mL		93
83) Benzo(a)pyrene	17.717	252	399921	17.1088	ug/mL		95
84) Indeno(1,2,3-cd)pyrene	20.828	276	456809	17.3745	ug/mL		87

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI702.D
Acq On : 7 Sep 2012 4:37 pm
Operator :
Sample : CCV,S20248
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 07 17:08:27 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.900	278	372177	17.7583	ug/mL	93
86) Benzo(g,h,i)perylene	21.607	276	392236	17.9465	ug/mL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239404
ANALYTICAL REPORT
PCBs
Matrix: Water

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
EB.09052012	239404-015

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
PCBS (EPA 8082A)
WATER

Laboratory number:	**239404**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/05/12**
Samples Received:	**09/05/12**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 09/05/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

PCBs (EPA 8082A) Water:

All samples underwent sulfuric acid cleanup using EPA Method 3665A.

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B.

No analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

239404

C&T LOGIN # _____

Chain of Custody # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht/E Mantar
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Arsenic by 6010	Copper by 6010	Mercury by 7471B	Benzo(a)pyrene by 8270D	Benzo(a)anthracene by 8270D	Benzo(b)fluoranthene by 8270D	Zinc by 6010	Aroclor-1260 by 8082
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None								
1	✓EX36B072A.2	9/5/12	0840		X		1					X	X	X						
2	✓EX36B072B.2	9/5/12	0855		X		1					X	X	X						
3	✓EX36B072C.2	9/5/12	0917		X		1					X	X	X	X					
4	✓EX36B078A.2	9/5/12	0955		X		1					X		X						
	~~EX36~~ EAM 9/5/12																			
5	✓EX13B010A.3	9/5/12	1020		X		1					X			X	X	X			
6	✓EX13B010B.2	9/5/12	1045		X		1					X			X	X	X			
7	✓EX13B004A.2	9/5/12	1110		X		1					X		X	X					
8	✓EX13B023A.2	9/5/12	1135		X		2					X		X	X	X	X	X		
9	✓EX13B023B.2	9/5/12	1155		X		2					X		X	X	X	X	X		
	~~EX13B003BA.2~~	9/5/12	1315		X		2					X		X						
10	✓EX13B003BA.2	9/5/12	1315		X		2					X		X			X		X	
11	✓EX13B021A.2	9/5/12	1330		X		1					X					X			

EAM 9/5/12

EAM 9/5/12

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

239404

C&T LOGIN # _____

Chain of Custody # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht / E Manter
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	Aroclor – ~~1254~~ 1260 DF by 8082	Copper by 6010C	PCBs	TPHg	TPHd	SVOCs	Pesticides	Metals
12	✓EX36B180C.2	9/5/12	1420		X	2					X	X	X						
13	✓EX36B180B.2	9/5/12	1435		X	2					X	X	X						
14	✓EX36B180A.2	9/5/12	1445		X	2					X	X	X						
15	EB.09052012	9/5/12	1515	X		3			1		2			X			X		X

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239404 Date Received 9/5/12 Number of coolers 1
Client ARCADIS Project HUNTER'S POINT

Date Opened 9/5/12 By (print) AA (sign) [signature]
Date Logged in ↓ By (print) JG (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.0°C

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ (YES) NO N/A
17. Did you document your preservative check? _____ (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239404

Sample	pH: <2	>9	>12	Other
-015a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: AA

Date: 9/6/12

Results & QC Summary

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8082A
Field ID:	EB.09052012	Sampled:	09/05/12
Matrix:	Water	Received:	09/05/12
Units:	ug/L	Prepared:	09/06/12
Diln Fac:	1.000	Analyzed:	09/08/12
Batch#:	190234		

Type: SAMPLE Lab ID: 239404-015

Analyte	Result	LOQ	DL
Aroclor-1254	0.19 U	0.47	0.11
Aroclor-1260	0.19 U	0.47	0.093

Surrogate	%REC	Limits
TCMX	92	39-120
Decachlorobiphenyl	77	24-120

Type: BLANK Lab ID: QC655035

Analyte	Result	LOQ	DL
Aroclor-1254	0.20 U	0.50	0.12
Aroclor-1260	0.20 U	0.50	0.10

Surrogate	%REC	Limits
TCMX	81	39-120
Decachlorobiphenyl	92	24-120

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8082A
Matrix:	Water	Batch#:	190234
Units:	ug/L	Prepared:	09/06/12
Diln Fac:	1.000	Analyzed:	09/10/12

Type: BS Lab ID: QC655036

Analyte	Spiked	Result	%REC	Limits
Aroclor-1260	5.000	4.311	86	58-131

Surrogate	%REC	Limits
TCMX	95	39-120
Decachlorobiphenyl	85	24-120

Type: BSD Lab ID: QC655037

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1260	5.000	4.954	99	58-131	14	20

Surrogate	%REC	Limits
TCMX	101	39-120
Decachlorobiphenyl	83	24-120

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 PCBS Water: EPA 8082A

Inst : GC06
Calnum : 202360551001
Units : pg/uL

Name : AR1660_250
Date : 06-SEP-2012 16:49

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	250_008	202360551008	PCB10_2	06-SEP-2012 16:49	S19975
L2	250_009	202360551009	PCB25_5	06-SEP-2012 17:53	S19976
L3	250_010	202360551010	PCB100_20	06-SEP-2012 18:21	S19977
L4	250_011	202360551011	PCB250_50	06-SEP-2012 18:49	S19978
L5	250_012	202360551012	PCB500_100	06-SEP-2012 19:16	S19979
L6	250_013	202360551013	PCB750_150	06-SEP-2012 19:44	S19980
L7	250_014	202360551014	PCB1000_200	06-SEP-2012 20:11	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	977.50	867.00	809.57	733.00	642.90	572.49		AVRG	R		0.00130		767.08	19	.99	20	
Aroclor-1260 Peak # 2	A	636.20	645.28	605.17	591.27	519.42	473.96	475.94	AVRG	R		0.00177		563.89	13	.99	20	
Aroclor-1260 Peak # 3	A	618.80	500.24	451.97	419.33	372.34			AVRG	R		0.00212		472.54	20	.99	20	
Aroclor-1260 Peak # 4	A	1017.8	1084.9	1023.1	964.77	859.73	781.83	774.13	AVRG	R		0.00108		929.46	13	.99	20	
Aroclor-1260 Peak # 5	A	396.50	438.52	438.93	410.76	371.41	335.84	345.47	AVRG	R		0.00256		391.06	11	.99	20	
TCMX	A	7935.0	7919.0	7022.0	6505.6	5961.7	5524.8	5380.5	AVRG	R		1.51E-4		6606.9	16	.99	20	
Decachlorobiphenyl	A	9631.0	10236	8546.9	7706.8	6649.9			AVRG	R		1.17E-4		8554.0	17	.99	20	
Aroclor-1260 Peak # 1	B	2729.3	3301.2	2645.9	2303.9	1981.0	1729.9	1695.0	LINR	R	-49.479	6.04E-4		2340.9	0.991	.99	20	
Aroclor-1260 Peak # 2	B	2380.8	2230.8	2241.2	1901.8	1754.7	1545.4	1482.5	AVRG	R		5.17E-4		1933.9	19	.99	20	
Aroclor-1260 Peak # 3	B	2148.9	2011.4	1730.7	1584.4	1364.0	1285.0		AVRG	R		5.93E-4		1687.4	20	.99	20	
Aroclor-1260 Peak # 4	B	4938.5	4697.8	4098.2	3630.0	3080.2	2740.6	2634.3	LINR	R	-49.347	3.86E-4		3688.5	0.991	.99	20	
Aroclor-1260 Peak # 5	B	2595.9	1546.7	1663.5	1747.5	1514.5	1303.6	1337.7	LINR	R	-32.273	7.65E-4		1672.8	0.992	.99	20	
TCMX	B	23332	20443	16814	16552	16902	15096	14060	AVRG	R		5.68E-5		17600	18	.99	20	
Decachlorobiphenyl	B	33114	33066	25782	21904	18200	15398	14918	QUAD	A	85306.8	20048.7	-29.2621	23197	0.996	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**27**	25.000	13	100.00	6	250.00	-4	500.00	-16	750.00	**-25**		
Aroclor-1260 Peak # 2	A	10.000	13	25.000	14	100.00	7	250.00	5	500.00	-8	750.00	-16	1000.0	-16
Aroclor-1260 Peak # 3	A	10.000	**31**	25.000	6	100.00	-4	250.00	-11	500.00	**-21**				
Aroclor-1260 Peak # 4	A	10.000	10	25.000	17	100.00	10	250.00	4	500.00	-8	750.00	-16	1000.0	-17
Aroclor-1260 Peak # 5	A	10.000	1	25.000	12	100.00	12	250.00	5	500.00	-5	750.00	-14	1000.0	-12
TCMX	A	2.0000	20	5.0000	20	20.000	6	50.000	-2	100.00	-10	150.00	-16	200.00	-19
Decachlorobiphenyl	A	2.0000	13	5.0000	20	20.000	0	50.000	-10	100.00	**-22**				
Aroclor-1260 Peak # 1	B	10.000	**-430**	25.000	**-98**	100.00	10	250.00	19	500.00	10	750.00	-2	1000.0	-3
Aroclor-1260 Peak # 2	B	10.000	**23**	25.000	15	100.00	16	250.00	-2	500.00	-9	750.00	-20	1000.0	**-23**
Aroclor-1260 Peak # 3	B	10.000	**27**	25.000	19	100.00	3	250.00	-6	500.00	-19	750.00	**-24**		
Aroclor-1260 Peak # 4	B	10.000	**-403**	25.000	**-116**	100.00	9	250.00	**21**	500.00	9	750.00	-1	1000.0	-3
Aroclor-1260 Peak # 5	B	10.000	**-224**	25.000	**-111**	100.00	-5	250.00	**21**	500.00	9	750.00	-5	1000.0	-1
TCMX	B	2.0000	**33**	5.0000	16	20.000	-4	50.000	-6	100.00	-4	150.00	-14	200.00	-20
Decachlorobiphenyl	B	2.0000	**-148**	5.0000	-20	20.000	11	50.000	9	100.00	2	150.00	-7	200.00	4

PML 09/07/12 : Corrected automatically drawn baseline in all levels.

PML 09/07/12 : dropped various points and changed fit types for various peaks for better r^2 %RSD recovery

PML 09/07/12 : RTs updated in the integrated version of ICAL

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 PCBS Water
EPA 8082A

Inst : GC06 Name : AR1660_250
Calnum : 202360551001 Cal Date : 06-SEP-2012

ICV 202360551016 (250_016 06-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	241.7	pg/uL	-3	20	
Aroclor-1260	B	250.0	261.4	pg/uL	5	20	

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 PCBS Water: EPA 8082A

Inst : GC16
Calnum : 232358946001
Units : pg/ul

Name : AR1660_249A
Date : 05-SEP-2012 18:41

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	249_011	232358946011	PCB10_2	05-SEP-2012 18:41	S19975
L2	249_012	232358946012	PCB25_5	05-SEP-2012 19:09	S19976
L3	249_013	232358946013	PCB100_20	05-SEP-2012 19:37	S19977
L4	249_014	232358946014	PCB250_50	05-SEP-2012 20:05	S19978
L5	249_015	232358946015	PCB500_100	05-SEP-2012 20:33	S19979
L6	249_016	232358946016	PCB750_150	05-SEP-2012 21:00	S19980
L7	249_017	232358946017	PCB1000_200	05-SEP-2012 21:28	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	2903.7	2645.1	2043.0	1737.6	1402.8	1280.3	1106.0	QUAD	A	26125.9	1714.03	-0.63519	1874.1	0.999	.99	20	
Aroclor-1260 Peak # 2	A	2014.6	2233.6	1766.6	1721.8	1453.3	1305.8		AVRG	R		5.72E-4		1749.3	20	.99	20	
Aroclor-1260 Peak # 3	A	1771.7	1496.8	1264.0	1095.8	936.53	843.23		LINR	R	-38.896	0.00120		1234.7	0.990	.99	20	
Aroclor-1260 Peak # 4	A	3727.3	3500.8	2817.0	2358.5	1983.1			LINR	R	-28.596	5.17E-4		2877.3	0.990	.99	20	
Aroclor-1260 Peak # 5	A	1374.7	1851.5	1420.5	1250.3	1105.9			AVRG	R		7.14E-4		1400.6	20	.99	20	
TCMX	A	25623	23507	19325	16224	13450	12341		LINR	R	-8.5129	8.29E-5		18411	0.990	.99	20	
Decachlorobiphenyl	A	19026	17296	15334	12347	10199	8511.2	7607.0	QUAD	A	39971.0	12237.7	-24.6931	12903	0.998	.99	20	
Aroclor-1260 Peak # 1	B	737.60	685.28	610.78	566.71	523.53	511.21	462.17	AVRG	R		0.00171		585.32	17	.99	20	
Aroclor-1260 Peak # 2	B	482.10	512.84	461.15	427.77	386.81	373.66	335.02	AVRG	R		0.00235		425.62	15	.99	20	
Aroclor-1260 Peak # 3	B	452.10	448.84	396.59	370.66	342.93	328.44	298.96	AVRG	R		0.00265		376.93	16	.99	20	
Aroclor-1260 Peak # 4	B	1098.3	1073.3	903.13	850.18	809.19	768.62	711.59	AVRG	R		0.00113		887.76	17	.99	20	
Aroclor-1260 Peak # 5	B	468.10	474.00	402.01	386.37	373.42	351.19	330.73	AVRG	R		0.00251		397.97	14	.99	20	
TCMX	B	7732.0	7094.6	6965.0	6979.1	6744.6	7130.1	6405.6	AVRG	R		1.43E-4		7007.3	6	.99	20	
Decachlorobiphenyl	B	11072	10605	8542.8	7613.2	7438.3			AVRG	R		1.10E-4		9054.2	19	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**-83**	25.000	-6	100.00	8	250.00	6	500.00	-4	750.00	1	1000.0	0
Aroclor-1260 Peak # 2	A	10.000	15	25.000	**28**	100.00	1	250.00	-2	500.00	-17	750.00	**-25**		
Aroclor-1260 Peak # 3	A	10.000	**-276**	25.000	**-76**	100.00	13	250.00	16	500.00	5	750.00	-4		
Aroclor-1260 Peak # 4	A	10.000	**-193**	25.000	**-33**	100.00	17	250.00	11	500.00	-3				
Aroclor-1260 Peak # 5	A	10.000	-2	25.000	**32**	100.00	1	250.00	-11	500.00	**-21**				
TCMX	A	2.0000	**-313**	5.0000	**-75**	20.000	18	50.000	17	100.00	3	150.00	-3		
Decachlorobiphenyl	A	2.0000	**-108**	5.0000	**-23**	20.000	14	50.000	6	100.00	0	150.00	-6	200.00	5
Aroclor-1260 Peak # 1	B	10.000	**26**	25.000	17	100.00	4	250.00	-3	500.00	-11	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 2	B	10.000	13	25.000	20	100.00	8	250.00	1	500.00	-9	750.00	-12	1000.0	**-21**
Aroclor-1260 Peak # 3	B	10.000	20	25.000	19	100.00	5	250.00	-2	500.00	-9	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 4	B	10.000	**24**	25.000	**21**	100.00	2	250.00	-4	500.00	-9	750.00	-13	1000.0	-20
Aroclor-1260 Peak # 5	B	10.000	18	25.000	19	100.00	1	250.00	-3	500.00	-6	750.00	-12	1000.0	-17
TCMX	B	2.0000	10	5.0000	1	20.000	-1	50.000	0	100.00	-4	150.00	2	200.00	-9
Decachlorobiphenyl	B	2.0000	**22**	5.0000	17	20.000	-6	50.000	-16	100.00	-18				

PML 09/06/12 : Corrected automatically drawn baseline in all levels.

PML 09/06/12 : changed fit types and dropped various points for better r^2 %RSD recovery

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

232358946001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 PCBS Water
EPA 8082A

Inst : GC16 Name : AR1660_249A
Calnum : 232358946001 Cal Date : 05-SEP-2012

ICV 232358946019 (249_019 05-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	268.7	pg/ul	7	20	
Aroclor-1260	B	250.0	265.0	pg/ul	6	20	

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 PCBS Water: EPA 8082A

Inst : GC22
Calnum : 252360400001
Units : pg/uL

Name : AR1660_250
Date : 06-SEP-2012 16:48
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	250_014	252360400014	PCB10_2	06-SEP-2012 16:48	S19975
L2	250_015	252360400015	PCB25_5	06-SEP-2012 17:53	S19976
L3	250_016	252360400016	PCB100_20	06-SEP-2012 18:20	S19977
L4	250_017	252360400017	PCB250_50	06-SEP-2012 18:46	S19978
L5	250_018	252360400018	PCB500_100	06-SEP-2012 19:12	S19979
L6	250_019	252360400019	PCB750_150	06-SEP-2012 19:38	S19980
L7	250_020	252360400020	PCB1000_200	06-SEP-2012 20:05	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	151.40	134.80	124.30	122.69	92.478	107.45	114.27	AVRG		0.00826		121.06	16	.99	20	
Aroclor-1260 Peak # 2	A	111.90	103.04	94.520	94.380	69.118	78.705	84.031	AVRG		0.01101		90.813	16	.99	20	
Aroclor-1260 Peak # 3	A	93.000	82.960	75.600	74.020	53.782	60.959	64.024	AVRG		0.01388		72.049	19	.99	20	
Aroclor-1260 Peak # 4	A	204.50	188.08	182.61	190.02	141.79	180.17	199.01	AVRG		0.00544		183.74	11	.99	20	
Aroclor-1260 Peak # 5	A	99.200	85.520	83.070	81.892	58.002	67.717	72.273	AVRG		0.01278		78.239	17	.99	20	
TCMX	A	1412.5	1470.4	1308.5	1350.6	1164.4	1291.3	1284.1	AVRG		7.54E-4		1326.0	7	.99	20	
Decachlorobiphenyl	A	1356.5	1230.6	1214.6	1260.7	936.36	1268.6	1408.8	AVRG		8.07E-4		1239.5	12	.99	20	
Aroclor-1260 Peak # 1	B	719.70	813.96	846.53	1168.3	1739.6	1236.6	1103.0	AVRG		9.18E-4		1089.7	**32**	.99	20	rsd ***
Aroclor-1260 Peak # 2	B	620.90	638.52	691.37	796.50	1697.3	1203.3	1192.2	AVRG		0.00102		977.16	**41**	.99	20	rsd ***
Aroclor-1260 Peak # 3	B	535.00	559.36	521.42	562.50	1281.3	904.19	934.48	AVRG		0.00132		756.89	**39**	.99	20	rsd ***
Aroclor-1260 Peak # 4	B	1156.4	1486.0	1580.9	2281.1	2764.7	1902.6	1503.0	AVRG		5.52E-4		1810.7	**30**	.99	20	rsd ***
Aroclor-1260 Peak # 5	B	494.30	536.00	484.59	467.08	1216.7	834.70	974.18	AVRG		0.00140		715.36	**41**	.99	20	rsd ***
TCMX	B	1311.5	6299.6	18129	21391	18864			LINR	1.25420	5.09E-5		13199	0.993	.99	20	
Decachlorobiphenyl	B	7605.5	9273.8	12559	16473	14363			LINR	0.77699	6.73E-5		12055	0.992	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**25**	25.000	11	100.00	3	250.00	1	500.00	**-24**	750.00	-11	1000.0	-6
Aroclor-1260 Peak # 2	A	10.000	**23**	25.000	13	100.00	4	250.00	4	500.00	**-24**	750.00	-13	1000.0	-7
Aroclor-1260 Peak # 3	A	10.000	**29**	25.000	15	100.00	5	250.00	3	500.00	**-25**	750.00	-15	1000.0	-11
Aroclor-1260 Peak # 4	A	10.000	11	25.000	2	100.00	-1	250.00	3	500.00	**-23**	750.00	-2	1000.0	8
Aroclor-1260 Peak # 5	A	10.000	**27**	25.000	9	100.00	6	250.00	5	500.00	**-26**	750.00	-13	1000.0	-8
TCMX	A	2.0000	7	5.0000	11	20.000	-1	50.000	2	100.00	-12	150.00	-3	200.00	-3
Decachlorobiphenyl	A	2.0000	9	5.0000	-1	20.000	-2	50.000	2	100.00	**-24**	150.00	2	200.00	14
Aroclor-1260 Peak # 1	B	10.000	**-34**	25.000	**-25**	100.00	**-22**	250.00	7	500.00	**60**	750.00	13	1000.0	1
Aroclor-1260 Peak # 2	B	10.000	**-36**	25.000	**-35**	100.00	**-29**	250.00	-18	500.00	**74**	750.00	**23**	1000.0	**22**
Aroclor-1260 Peak # 3	B	10.000	**-29**	25.000	**-26**	100.00	**-31**	250.00	**-26**	500.00	**69**	750.00	19	1000.0	**23**
Aroclor-1260 Peak # 4	B	10.000	**-36**	25.000	-18	100.00	-13	250.00	**26**	500.00	**53**	750.00	5	1000.0	-17
Aroclor-1260 Peak # 5	B	10.000	**-31**	25.000	**-25**	100.00	**-32**	250.00	**-35**	500.00	**70**	750.00	17	1000.0	**36**
TCMX	B	2.0000	**-31**	5.0000	**-43**	20.000	-1	50.000	11	100.00	-3				
Decachlorobiphenyl	B	2.0000	-10	5.0000	**-22**	20.000	-12	50.000	12	100.00	-3				

PML 09/07/12 : Corrected automatically drawn baseline in all levels.

PML 09/07/12 : ICAL fails for AR1016 and AR1260 on Ch. B; will only use said channel for confirm and report only from Ch. A

PML 09/07/12 : changed fit types and dropped various peaks for TCMX and DCB on Ch. B for better recovery

PML 09/07/12 : RTs updated in the integrated version of ICAL and integrated version of ICV

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression

252360400001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 PCBS Water
EPA 8082A

Inst : GC22 Name : AR1660_250
Calnum : 252360400001 Cal Date : 06-SEP-2012

ICV 252360400023 (250_023 06-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	223.0	pg/uL	-11	20	
Aroclor-1260	B	250.0	246.6	pg/uL	-1	20	

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC06 Run Name : PCB100_20 IDF : 1.0
Seqnum : 202366165024.1 File : 254_024 Time : 10-SEP-2012 21:27
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	123.5	pg/uL	**23**	20	c+ ***
TCMX	A	6606.9	7827.3	20.00	23.69	pg/uL	18	20	
Decachlorobiphenyl	A	8554.0	8552.0	20.00	20.00	pg/uL	0	20	
Aroclor-1260	B			100.0	143.2	pg/uL	**43**	20	c+ ***
TCMX	B	17600	23007	20.00	26.14	pg/uL	**31**	20	c+
Decachlorobiphenyl	B	23197	28582	20.00	25.18	pg/uL	**26**	20	c+

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC06 Run Name : PCB250_50 IDF : 1.0
Seqnum : 202366165040.1 File : 254_040 Time : 11-SEP-2012 04:48
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	275.9	pg/uL	10	20	
TCMX	A	6606.9	6823.8	50.00	51.64	pg/uL	3	20	
Decachlorobiphenyl	A	8554.0	7425.1	50.00	43.40	pg/uL	-13	20	
Aroclor-1260	B			250.0	304.5	pg/uL	**22**	20	c+ ***
TCMX	B	17600	16760	50.00	47.61	pg/uL	-5	20	
Decachlorobiphenyl	B	23197	22226	50.00	55.70	pg/uL	11	20	

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC16 Run Name : PCB250_50 IDF : 1.0
Seqnum : 232366165009.2 File : 254_009 Time : 10-SEP-2012 16:22
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	355.1	pg/ul	**42**	20	c+ ***
TCMX	A	18411	31025	50.00	120.0	pg/ul	**140**	20	c+
Decachlorobiphenyl	A	12903	12067	50.00	51.36	pg/ul	3	20	
Aroclor-1260	B			250.0	231.7	pg/ul	-7	20	
TCMX	B	7007.3	7673.7	50.00	54.75	pg/ul	10	20	
Decachlorobiphenyl	B	9054.2	5534.6	50.00	30.56	pg/ul	**-39**	20	c-

WSR 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC16 Run Name : PCB100_20 IDF : 1.0
Seqnum : 232366165014.1 File : 254_014 Time : 10-SEP-2012 19:52
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	158.4	pg/ul	**58**	20	c+ ***
TCMX	A	18411	40195	20.00	58.10	pg/ul	**191**	20	c+
Decachlorobiphenyl	A	12903	12762	20.00	18.26	pg/ul	-9	20	
Aroclor-1260	B			100.0	90.33	pg/ul	-10	20	
TCMX	B	7007.3	7041.9	20.00	20.10	pg/ul	0	20	
Decachlorobiphenyl	B	9054.2	5009.2	20.00	11.06	pg/ul	**-45**	20	c-

WSR 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC22 Run Name : PCB100_20 IDF : 1.0
Seqnum : 252360400074.2 File : 250_074 Time : 08-SEP-2012 00:42
Cal : 252360400001 Caldate : 06-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	82.71	pg/uL	-17	20	
TCMX	A	1326.0	1171.4	20.00	17.67	pg/uL	-12	20	
Decachlorobiphenyl	A	1239.5	949.45	20.00	15.32	pg/uL	**-23**	20	c-
Aroclor-1260	B			100.0	63.84	pg/uL	**-36**	20	c- rsd ***
TCMX	B	13199	14393	20.00	15.91	pg/uL	-20	20	
Decachlorobiphenyl	B	12055	11471	20.00	16.21	pg/uL	-19	20	

TKB 09/09/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC22 Run Name : PCB250_50 IDF : 1.0
Seqnum : 252360400089.2 File : 250_089 Time : 08-SEP-2012 07:17
Cal : 252360400001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	222.4	pg/uL	-11	20	
TCMX	A	1326.0	1281.9	50.00	48.34	pg/uL	-3	20	
Decachlorobiphenyl	A	1239.5	1085.6	50.00	43.79	pg/uL	-12	20	
Aroclor-1260	B			250.0	278.1	pg/uL	11	20	rsd ***
TCMX	B	13199	23077	50.00	60.01	pg/uL	20	20	
Decachlorobiphenyl	B	12055	17829	50.00	60.76	pg/uL	**22**	20	c+

TKB 09/09/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202360551

Instrument : GC06
Method : EPA 8082A
Begun : 09/06/12 09:11
SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	250_001	X	PRIMER			09/06/12 09:11	1.0		
002	250_002	X	HEX			09/06/12 09:39	1.0		
003	250_003	CCV	TEST			09/06/12 10:06	1.0	1	
004	250_004	X	HEX			09/06/12 10:34	1.0		
005	250_005	X	PRIMER			09/06/12 14:04	1.0		
006	250_006	X	HEX			09/06/12 14:31	1.0		
007	250_007	IB	CAL			09/06/12 14:59	1.0		
008	250_008	ICAL	PCB10_2			09/06/12 16:49	1.0	2	
009	250_009	ICAL	PCB25_5			09/06/12 17:53	1.0	3	
010	250_010	ICAL	PCB100_20			09/06/12 18:21	1.0	1	
011	250_011	ICAL	PCB250_50			09/06/12 18:49	1.0	4	
012	250_012	ICAL	PCB500_100			09/06/12 19:16	1.0	5	
013	250_013	ICAL	PCB750_150			09/06/12 19:44	1.0	6	
014	250_014	ICAL	PCB1000_200			09/06/12 20:11	1.0	7	
015	250_015	X	HEX			09/06/12 20:39	1.0		
016	250_016	ICV	ULTRA_1660			09/06/12 21:06	1.0	8	
017	250_017	X	ICV			09/06/12 21:34	1.0	8	
018	250_018	IB	CAL			09/06/12 22:02	1.0		
019	250_019	ICAL	AR2154_10			09/06/12 22:29	1.0	9	
020	250_020	ICAL	AR2154_100			09/06/12 22:57	1.0	10	
021	250_021	ICAL	AR2154_250			09/06/12 23:24	1.0	11	
022	250_022	ICAL	AR2154_500			09/06/12 23:52	1.0	12	
023	250_023	ICAL	AR2154_1000			09/07/12 00:19	1.0	13	
024	250_024	X	HEX			09/07/12 00:47	1.0		
025	250_025	CCV	PCB250_50			09/07/12 01:14	1.0	4	
026	250_026	CCV	AR1254			09/07/12 01:42	1.0	11	
027	250_027	CCV	PCB250_50			09/07/12 02:09	1.0	4	
028	250_028	X	XCCV			09/07/12 02:37	1.0	11	
029	250_029	BLANK	QC654597	Water	190132	09/07/12 03:04	1.0		
030	250_030	BS	QC654598	Water	190132	09/07/12 03:32	1.0		
031	250_031	BSD	QC654599	Water	190132	09/07/12 03:59	1.0		
032	250_032	SAMPLE	239237-001	Water	190132	09/07/12 04:27	1.0		
033	250_033	SAMPLE	239333-001	Water	190132	09/07/12 04:54	1.0		
034	250_034	SAMPLE	239334-001	Water	190132	09/07/12 05:22	20.0		
035	250_035	SAMPLE	239335-001	Water	190132	09/07/12 05:50	1.0		
036	250_036	SAMPLE	239362-001	Water	190132	09/07/12 06:17	1.0		
037	250_037	MSS	239378-001	Soil	190194	09/07/12 06:45	1.0		
038	250_038	SAMPLE	239397-001	Soil	190194	09/07/12 07:12	1.0		
039	250_039	SAMPLE	239397-002	Soil	190194	09/07/12 07:40	1.0		
040	250_040	MS	QC654880	Soil	190194	09/07/12 08:07	1.0		
041	250_041	MSD	QC654881	Soil	190194	09/07/12 08:35	1.0		
042	250_042	X	PCB100_20			09/07/12 09:02	1.0	1	
043	250_043	CCV	AR1254			09/07/12 09:30	1.0	11	
044	250_044	CCV	PCB100_20			09/07/12 09:58	1.0	1	
045	250_045	CCV	AR1268			09/07/12 11:26	1.0	14	
046	250_046	SAMPLE	239265-013	Soil	190127	09/07/12 11:54	1.0		
047	250_047	SAMPLE	239265-014	Soil	190127	09/07/12 12:21	1.0		
048	250_048	CCV	PCB250_50			09/07/12 12:56	1.0	4	
049	250_049	CCV	AR1268			09/07/12 13:24	1.0	14	
050	250_050	SAMPLE	239260-021	Soil	190022	09/07/12 16:03	3.0		
051	250_051	SAMPLE	239260-022	Soil	190022	09/07/12 16:31	1.0		
052	250_052	SAMPLE	239260-023	Soil	190022	09/07/12 16:58	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202360551

Instrument : GC06 Begun : 09/06/12 09:11
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	250_053	CCV	PCB500_100			09/07/12 19:06	1.0	5	
054	250_054	CCV	AR1254			09/07/12 20:38	1.0	11	
055	250_055	CCV	AR1268			09/07/12 21:06	1.0	14	
056	250_056	IB	ICAL			09/07/12 21:33	1.0		
057	250_057	ICAL	AR1248_10			09/07/12 22:01	1.0	15	
058	250_058	ICAL	AR1248_100			09/07/12 22:28	1.0	16	
059	250_059	ICAL	AR1248_250			09/07/12 22:56	1.0	17	
060	250_060	ICAL	AR1248_500			09/07/12 23:23	1.0	18	
061	250_061	ICAL	AR1248_1000			09/07/12 23:51	1.0	19	
062	250_062	X	HEX			09/08/12 00:18	1.0		
063	250_063	CCV	PCB100_20			09/08/12 00:46	1.0	1	
064	250_064	CCV	AR1254			09/08/12 01:13	1.0	11	
065	250_065	CCV	AR1268			09/08/12 01:41	1.0	14	
066	250_066	CCV	AR1248_250			09/08/12 02:08	1.0	17	
067	250_067	SAMPLE	239260-015	Soil	190051	09/08/12 02:36	1.0		4:PCB1248#5=1400
068	250_068	SAMPLE	239260-016	Soil	190051	09/08/12 03:04	1.0		
069	250_069	SAMPLE	239260-017	Soil	190051	09/08/12 03:31	1.0		4:PCB1248#5=1300
070	250_070	SAMPLE	239211-003	Soil	189927	09/08/12 03:59	100.0		
071	250_071	SAMPLE	239211-004	Soil	189927	09/08/12 04:26	100.0		
072	250_072	SAMPLE	239211-005	Soil	189927	09/08/12 04:54	100.0		
073	250_073	SAMPLE	239211-006	Soil	189927	09/08/12 05:21	100.0		
074	250_074	SAMPLE	239211-007	Soil	189927	09/08/12 05:49	10.0		
075	250_075	SAMPLE	239211-008	Soil	189927	09/08/12 06:16	100.0		
076	250_076	SAMPLE	239211-009	Soil	189927	09/08/12 06:44	50.0		
077	250_077	CCV	PCB250_50			09/08/12 07:12	1.0	4	
078	250_078	CCV	AR1254			09/08/12 07:39	1.0	11	
079	250_079	CCV	AR1268			09/08/12 08:07	1.0	14	
080	250_080	CCV	AR1248_250			09/08/12 08:34	1.0	17	
081	250_081	BLANK	QC655166	Soil	190263	09/08/12 09:02	1.0		
082	250_082	LCS	QC655167	Soil	190263	09/08/12 09:30	1.0		
083	250_083	SAMPLE	239220-006	Soil	190263	09/08/12 09:57	1.0		
084	250_084	SAMPLE	239452-001	Soil	190263	09/08/12 10:25	1.0		
085	250_085	SAMPLE	239361-001	Soil	190186	09/08/12 10:52	5.0		
086	250_086	SAMPLE	239361-002	Soil	190186	09/08/12 11:20	2.0		
087	250_087	SAMPLE	239211-010	Soil	189927	09/08/12 11:47	50.0		
088	250_088	SAMPLE	239211-011	Soil	189927	09/08/12 12:15	100.0		
089	250_089	SAMPLE	239211-012	Soil	189927	09/08/12 12:43	100.0		
090	250_090	SAMPLE	239211-013	Soil	189927	09/08/12 13:10	100.0		
091	250_091	SAMPLE	239211-014	Soil	189927	09/08/12 13:38	100.0		
092	250_092	CCV	PCB500_100			09/08/12 14:05	1.0	5	
093	250_093	CCV	AR1254			09/08/12 14:33	1.0	11	
094	250_094	CCV	AR1268			09/08/12 15:00	1.0	14	

PML 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 044.

PML 09/07/12 : run_042 CCV processed and worked up; x'd out due to passes DOD/QSMV4 limits only

WSR 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 45 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202360551

Instrument : GC06 Begun : 09/06/12 09:11
Method : EPA 8082A SOP Version : pcb_rv.7

PML 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 050 through 094.

Standards used: 1=S19977 2=S19975 3=S19976 4=S19978 5=S19979 6=S19980 7=S19981 8=S20431 9=S20598 10=S20599 11=S20600 12=S20601 13=S20602 14=S19990 15=S20293 16=S20294 17=S20295 18=S20296 19=S20297

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202366165

Instrument : GC06 Begun : 09/10/12 06:45
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	254_001	X	HEX			09/10/12 06:45	1.0		
002	254_002	X	PCB100_20			09/10/12 07:12	1.0	1	
003	254_003	CCV	PCB100_20			09/10/12 08:22	1.0	1	
004	254_004	CCV	AR1254			09/10/12 09:06	1.0	2	
005	254_005	CCV	AR1268			09/10/12 09:33	1.0	3	
008	254_008	X	HEX			09/10/12 11:00	1.0		
009	254_009	SAMPLE	239304-011	Soil	190127	09/10/12 11:28	100.0		6:PCB1260#1=3700
010	254_010	SAMPLE	239304-012	Soil	190127	09/10/12 11:55	100.0		5:PCB1260#1=1300
011	254_011	SAMPLE	239304-011	Soil	190127	09/10/12 12:30	500.0		
012	254_012	SAMPLE	239304-012	Soil	190127	09/10/12 12:57	200.0		6:PCB1260#1=2100
013	254_013	SAMPLE	239304-012	Soil	190127	09/10/12 13:50	500.0		
014	254_014	SAMPLE	239304-009	Soil	190127	09/10/12 14:17	1.0		8:PCB1260#5=42000
015	254_015	SAMPLE	239304-009	Soil	190127	09/10/12 14:47	100.0		1:PCB1260#1=1200
016	254_016	SAMPLE	239260-028	Soil	190065	09/10/12 15:14	100.0		
017	254_017	CCV	PCB250_50			09/10/12 15:42	1.0	4	
018	254_018	CCV	AR1268			09/10/12 16:22	1.0	3	
019	254_019	CCV	AR1254			09/10/12 17:04	1.0	2	
020	254_020	BLANK	QC655500	Oil	190337	09/10/12 18:27	1.0		
021	254_021	BS	QC655501	Oil	190337	09/10/12 18:54	1.0		
022	254_022	BSD	QC655502	Oil	190337	09/10/12 19:22	1.0		
023	254_023	SAMPLE	239483-001	Oil	190337	09/10/12 19:50	1.0		
024	254_024	CCV	PCB100_20			09/10/12 21:27	1.0	1	
025	254_025	CCV	AR1254			09/10/12 21:55	1.0	2	
026	254_026	BS	QC655036	Water	190234	09/10/12 22:22	1.0		
027	254_027	BSD	QC655037	Water	190234	09/10/12 22:50	1.0		
028	254_028	BLANK	QC655478	Soil	190332	09/10/12 23:17	1.0		
029	254_029	LCS	QC655479	Soil	190332	09/10/12 23:45	1.0		
030	254_030	SAMPLE	239404-010	Soil	190332	09/11/12 00:13	10.0		
031	254_031	SAMPLE	239404-012	Soil	190332	09/11/12 00:40	1.0		
032	254_032	SAMPLE	239404-013	Soil	190332	09/11/12 01:08	1.0		
033	254_033	SAMPLE	239404-014	Soil	190332	09/11/12 01:35	5.0		
034	254_034	SAMPLE	239410-001	Soil	190332	09/11/12 02:03	5.0		
035	254_035	SAMPLE	239410-003	Soil	190332	09/11/12 02:30	5.0		
036	254_036	SAMPLE	239455-001	Soil	190332	09/11/12 02:58	1.0		11:PCB1260#1=2300
037	254_037	SAMPLE	239455-002	Soil	190332	09/11/12 03:25	1.0		11:PCB1260#1=2300
038	254_038	SAMPLE	239455-003	Soil	190332	09/11/12 03:53	1.0		11:PCB1260#1=2000
039	254_039	SAMPLE	239455-004	Soil	190332	09/11/12 04:20	1.0		
040	254_040	CCV	PCB250_50			09/11/12 04:48	1.0	4	
041	254_041	CCV	AR1254			09/11/12 05:16	1.0	2	

PML 09/10/12 : run_006 and run_007 did not/cannot send to LIMS due to range

WSR 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 18.

KMH 09/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 19 through 41.

Standards used: 1=S19977 2=S20600 3=S19990 4=S19978

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232358946

Instrument : GC16
Method : EPA 8082A
Begun : 09/05/12 06:26
SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	249_001	X	HEX			09/05/12 06:26	1.0		
002	249_002	CCV	PCB250_50			09/05/12 06:54	1.0	1	
003	249_003	CCV	PCB100_20			09/05/12 12:45	1.0	2	
005	249_005	CCV	PCB250_50			09/05/12 14:32	1.0	1	
006	249_006	CCV	PCB250_50			09/05/12 15:19	1.0	1	
007	249_007	IB	CAL			09/05/12 16:49	1.0		
008	249_008	X	PRIME			09/05/12 17:17	1.0		
009	249_009	X	HEX			09/05/12 17:45	1.0		
010	249_010	IB	CAL			09/05/12 18:13	1.0		
011	249_011	ICAL	PCB10_2			09/05/12 18:41	1.0	3	
012	249_012	ICAL	PCB25_5			09/05/12 19:09	1.0	4	
013	249_013	ICAL	PCB100_20			09/05/12 19:37	1.0	2	
014	249_014	ICAL	PCB250_50			09/05/12 20:05	1.0	1	
015	249_015	ICAL	PCB500_100			09/05/12 20:33	1.0	5	
016	249_016	ICAL	PCB750_150			09/05/12 21:00	1.0	6	
017	249_017	ICAL	PCB1000_200			09/05/12 21:28	1.0	7	
018	249_018	X	HEX			09/05/12 21:56	1.0		
019	249_019	ICV	ULTRA_1660			09/05/12 22:24	1.0	8	
020	249_020	X	ICV			09/05/12 22:52	1.0	8	
021	249_021	X	HEX			09/05/12 23:20	1.0		
022	249_022	CCV	PCB250_50			09/05/12 23:47	1.0	1	
023	249_023	CCV	AR1268			09/06/12 00:15	1.0	9	
024	249_024	BLANK	QC654831	Soil	190186	09/06/12 00:43	1.0		
025	249_025	LCS	QC654832	Soil	190186	09/06/12 01:11	1.0		
026	249_026	SAMPLE	239361-001	Soil	190186	09/06/12 01:39	1.0		6:PCB1260#1=3400
027	249_027	LCS	QC654358	Soil	190065	09/06/12 02:07	1.0		
028	249_028	SAMPLE	239261-012	Soil	189968	09/06/12 02:35	1.0		
029	249_029	SAMPLE	239261-019	Soil	190061	09/06/12 03:03	1.0		
030	249_030	SAMPLE	239261-029	Soil	190061	09/06/12 03:31	1.0		
031	249_031	SAMPLE	239263-002	Soil	190061	09/06/12 03:59	1.0		
032	249_032	CCV	PCB100_20			09/06/12 04:27	1.0	2	
033	249_033	CCV	AR1268			09/06/12 04:55	1.0	9	
034	249_034	SAMPLE	239361-002	Soil	190186	09/06/12 05:23	1.0		
035	249_035	SAMPLE	239364-001	Soil	190186	09/06/12 05:51	1.0		2:PCB1016#4=17000
036	249_036	SAMPLE	239364-002	Soil	190186	09/06/12 06:19	1.0		
037	249_037	SAMPLE	239364-003	Soil	190186	09/06/12 06:47	1.0		2:PCB1016#4=1400
038	249_038	SAMPLE	239364-004	Soil	190186	09/06/12 07:15	1.0		6:PCB1260#1=7900
039	249_039	SAMPLE	239364-005	Soil	190186	09/06/12 07:43	1.0		7:PCB1260#1=15000
040	249_040	SAMPLE	239364-006	Soil	190186	09/06/12 08:11	1.0		
041	249_041	MSS	239364-007	Soil	190186	09/06/12 08:39	1.0		6:PCB1260#1=5500
042	249_042	MS	QC654833	Soil	190186	09/06/12 09:07	1.0		2:PCB1260#1=1400
043	249_043	MSD	QC654834	Soil	190186	09/06/12 09:35	1.0		2:PCB1260#1=1900
044	249_044	CCV	PCB250_50			09/06/12 10:03	1.0	1	
045	249_045	CCV	AR1268			09/06/12 10:31	1.0	9	
046	249_046	CCV	AR1254			09/06/12 10:59	1.0	10	
047	249_047	SAMPLE	239364-002	Soil	190186	09/06/12 11:27	1.0		
048	249_048	SAMPLE	239364-006	Soil	190186	09/06/12 11:55	1.0		
049	249_049	SAMPLE	239364-001	Soil	190186	09/06/12 12:23	50.0		10:PCB1016#4=3300
050	249_050	SAMPLE	239364-003	Soil	190186	09/06/12 12:51	5.0		
051	249_051	SAMPLE	239364-004	Soil	190186	09/06/12 13:19	25.0		
052	249_052	SAMPLE	239364-005	Soil	190186	09/06/12 13:47	50.0		
053	249_053	MSS	239364-007	Soil	190186	09/06/12 14:15	5.0		9:PCB1254#5=1600

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232358946

Instrument : GC16
Method : EPA 8082A
Begun : 09/05/12 06:26
SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
054	249_054	SAMPLE	239364-001	Soil	190186	09/06/12 14:56	500.0		
055	249_055	MSS	239364-007	Soil	190186	09/06/12 15:28	50.0		
056	249_056	CCV	PCB100_20			09/06/12 16:07	1.0	2	
057	249_057	CCV	AR1254			09/06/12 16:35	1.0	10	
058	249_058	BLANK	QC654875	Soil	190194	09/06/12 18:07	1.0		
059	249_059	LCS	QC654879	Soil	190194	09/06/12 18:35	1.0		
060	249_060	MSS	239378-001	Soil	190194	09/06/12 19:03	1.0		
061	249_061	BLANK	QC654284	Soil	190051	09/06/12 20:04	1.0		
062	249_062	LCS	QC654285	Soil	190051	09/06/12 20:32	1.0		
063	249_063	MSS	239260-001	Soil	190051	09/06/12 21:00	50.0		
064	249_064	SAMPLE	239260-002	Soil	190051	09/06/12 21:28	50.0		
065	249_065	SAMPLE	239260-003	Soil	190051	09/06/12 21:56	50.0		
066	249_066	SAMPLE	239260-004	Soil	190051	09/06/12 22:24	50.0		
067	249_067	SAMPLE	239260-005	Soil	190051	09/06/12 22:52	50.0		
068	249_068	SAMPLE	239260-006	Soil	190051	09/06/12 23:20	100.0		
069	249_069	SAMPLE	239260-007	Soil	190051	09/06/12 23:48	50.0		
070	249_070	SAMPLE	239260-008	Soil	190051	09/07/12 00:16	50.0		
071	249_071	SAMPLE	239260-009	Soil	190051	09/07/12 00:44	50.0		
072	249_072	CCV	PCB250_50			09/07/12 01:12	1.0	1	
073	249_073	CCV	AR1268			09/07/12 01:40	1.0	9	
074	249_074	SAMPLE	239260-010	Soil	190051	09/07/12 02:08	50.0		
075	249_075	SAMPLE	239260-011	Soil	190051	09/07/12 02:36	50.0		
076	249_076	SAMPLE	239260-012	Soil	190051	09/07/12 03:05	50.0		
077	249_077	SAMPLE	239260-013	Soil	190051	09/07/12 03:33	50.0		
078	249_078	SAMPLE	239260-014	Soil	190051	09/07/12 04:01	50.0		
079	249_079	SAMPLE	239260-015	Soil	190051	09/07/12 04:29	50.0		
080	249_080	SAMPLE	239260-016	Soil	190051	09/07/12 04:57	50.0		
081	249_081	SAMPLE	239260-017	Soil	190051	09/07/12 05:25	50.0		
082	249_082	SAMPLE	239260-018	Soil	190051	09/07/12 05:53	50.0		
083	249_083	SAMPLE	239260-019	Soil	190051	09/07/12 06:21	50.0		
084	249_084	CCV	PCB100_20			09/07/12 06:49	1.0	2	
085	249_085	CCV	AR1268			09/07/12 07:18	1.0	9	
086	249_086	CCV	AR1254			09/07/12 07:59	1.0	10	
087	249_087	BLANK	QC654578	Soil	190127	09/07/12 11:26	1.0		
088	249_088	LCS	QC654579	Soil	190127	09/07/12 11:54	1.0		
089	249_089	MSS	239265-004	Soil	190065	09/07/12 12:26	1.0		
090	249_090	SAMPLE	239265-011	Soil	190127	09/07/12 12:58	200.0		
091	249_091	CCV	PCB250_50			09/07/12 13:51	1.0	1	
092	249_092	CCV	AR1268			09/07/12 14:18	1.0	9	
093	249_093	SAMPLE	239260-024	Soil	190022	09/07/12 15:59	1.0		
094	249_094	SAMPLE	239260-025	Soil	190022	09/07/12 16:27	1.0		
095	249_095	SAMPLE	239260-026	Soil	190022	09/07/12 16:55	1.0		
096	249_096	SAMPLE	239304-013	Soil	190127	09/07/12 17:29	3.0		4:PCB1260#1=1500
097	249_097	SAMPLE	239304-014	Soil	190127	09/07/12 17:56	3.0		4:PCB1260#5=2300
098	249_098	SAMPLE	239304-015	Soil	190127	09/07/12 18:24	3.0		4:PCB1260#1=2800
099	249_099	SAMPLE	239304-004	Soil	190127	09/07/12 19:58	1.0		
100	249_100	SAMPLE	239304-005	Soil	190127	09/07/12 20:26	50.0		
101	249_101	SAMPLE	239304-007	Soil	190127	09/07/12 20:54	1.0		
102	249_102	SAMPLE	239304-008	Soil	190127	09/07/12 21:22	1.0		
103	249_103	CCV	PCB100_20			09/07/12 21:50	1.0	2	
104	249_104	CCV	AR1268			09/07/12 22:18	1.0	9	
105	249_105	SAMPLE	239304-009	Soil	190127	09/07/12 22:46	50.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232358946

Instrument : GC16 Begun : 09/05/12 06:26
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
106	249_106	SAMPLE	239304-010	Soil	190127	09/07/12 23:14	1.0		4:PCB1260#5=50000
109	249_109	SAMPLE	239304-013	Soil	190127	09/08/12 00:38	50.0		
110	249_110	SAMPLE	239304-014	Soil	190127	09/08/12 01:07	50.0		
111	249_111	SAMPLE	239304-015	Soil	190127	09/08/12 01:35	100.0		
112	249_112	SAMPLE	239304-016	Soil	190127	09/08/12 02:03	1.0		4:PCB1260#5=26000
113	249_113	SAMPLE	239304-017	Soil	190096	09/08/12 02:31	1.0		4:PCB1260#5=22000
114	249_114	SAMPLE	239304-018	Soil	190096	09/08/12 02:59	1.0		
115	249_115	CCV	PCB250_50			09/08/12 03:27	1.0	1	
116	249_116	CCV	AR1268			09/08/12 03:55	1.0	9	
117	249_117	SAMPLE	239304-019	Soil	190096	09/08/12 04:23	1.0		
118	249_118	SAMPLE	239304-020	Soil	190096	09/08/12 04:52	1.0		
119	249_119	SAMPLE	239304-021	Soil	190096	09/08/12 05:20	1.0		4:PCB1260#5=1700
120	249_120	SAMPLE	239304-022	Soil	190096	09/08/12 05:48	1.0		4:PCB1260#5=1500
121	249_121	MS	QC654359	Soil	190065	09/08/12 06:16	1.0		
122	249_122	MSD	QC654360	Soil	190065	09/08/12 06:44	1.0		
123	249_123	MS	QC653943	Soil	189968	09/08/12 07:12	1.0		
124	249_124	MSD	QC653944	Soil	189968	09/08/12 07:40	1.0		
125	249_125	MS	QC654334	Soil	190061	09/08/12 08:08	1.0		
126	249_126	MSD	QC654335	Soil	190061	09/08/12 08:36	1.0		
127	249_127	CCV	PCB100_20			09/08/12 09:04	1.0	2	
128	249_128	CCV	AR1268			09/08/12 09:32	1.0	9	

PML 09/06/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 046.

WSR 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 47 through 92.

WSR 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 93 through 128.

Standards used: 1=S19978 2=S19977 3=S19975 4=S19976 5=S19979 6=S19980 7=S19981 8=S20431 9=S19990 10=S20600

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232366165

Instrument : GC16 Begun : 09/10/12 06:45
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	254_001	X	HEX			09/10/12 06:45	1.0		
002	254_002	X	PCB100_20			09/10/12 07:13	1.0	1	
003	254_003	CCV	PCB100_20			09/10/12 08:22	1.0	1	
004	254_004	CCV	AR1254			09/10/12 09:07	1.0	2	
005	254_005	CCV	AR1268			09/10/12 09:35	1.0	3	
006	254_006	SAMPLE	239304-011	Soil	190127	09/10/12 12:39	1000		
007	254_007	SAMPLE	239260-027	Soil	190065	09/10/12 15:03	100.0		
008	254_008	SAMPLE	239260-024	Soil	190022	09/10/12 15:36	1.0		
009	254_009	CCV	PCB250_50			09/10/12 16:22	1.0	4	
010	254_010	CCV	AR1268			09/10/12 16:50	1.0	3	
011	254_011	CCV	AR1254			09/10/12 17:25	1.0	2	
012	254_012	BS	QC655036	Water	190234	09/10/12 18:25	1.0		
013	254_013	BSD	QC655037	Water	190234	09/10/12 18:53	1.0		
014	254_014	CCV	PCB100_20			09/10/12 19:52	1.0	1	
015	254_015	CCV	AR1254			09/10/12 21:22	1.0	2	1:PCB1016#4=900
016	254_016	BLANK	QC655349	Miscell.	190303	09/10/12 21:50	1.0		
017	254_017	BS	QC655350	Miscell.	190303	09/10/12 22:18	1.0		
018	254_018	BSD	QC655351	Miscell.	190303	09/10/12 22:46	1.0		
019	254_019	SAMPLE	239441-001	Miscell.	190303	09/10/12 23:14	20.0		
020	254_020	SAMPLE	239441-002	Miscell.	190303	09/10/12 23:42	20.0		
021	254_021	CCV	PCB250_50			09/11/12 00:11	1.0	4	
022	254_022	CCV	AR1254			09/11/12 00:39	1.0	2	

WSR 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 10.

WSR 09/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 11 through 22.

Standards used: 1=S19977 2=S20600 3=S19990 4=S19978

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 252360400

Instrument : GC22
Method : EPA 8082A
Begun : 09/06/12 06:40
SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	250_001	X	HEX			09/06/12 06:40	1.0		
002	250_002	CCV	PCB250_50			09/06/12 07:06	1.0	1	No Quant
004	250_004	CCV	TEST			09/06/12 10:06	1.0	2	
005	250_005	CCV	TEST			09/06/12 10:56	1.0	2	
006	250_006	CCV	TEST			09/06/12 11:23	1.0	2	
007	250_007	X	HEX			09/06/12 11:49	1.0		
008	250_008	X	HEX			09/06/12 12:15	1.0		
009	250_009	CCV	PCB250_50			09/06/12 12:41	1.0	1	
010	250_010	CCV	PCB250_50			09/06/12 13:32	1.0	1	
011	250_011	X	PRIMER			09/06/12 14:13	1.0		
012	250_012	X	HEX			09/06/12 14:56	1.0		
013	250_013	IB	CAL			09/06/12 15:22	1.0		No Quant
014	250_014	ICAL	PCB10_2			09/06/12 16:48	1.0	3	
015	250_015	ICAL	PCB25_5			09/06/12 17:53	1.0	4	
016	250_016	ICAL	PCB100_20			09/06/12 18:20	1.0	2	
017	250_017	ICAL	PCB250_50			09/06/12 18:46	1.0	1	
018	250_018	ICAL	PCB500_100			09/06/12 19:12	1.0	5	
019	250_019	ICAL	PCB750_150			09/06/12 19:38	1.0	6	
020	250_020	ICAL	PCB1000_200			09/06/12 20:05	1.0	7	
021	250_021	X	HEX			09/06/12 20:31	1.0		
022	250_022	X	ULTRA_1660			09/06/12 20:57	1.0	8	
023	250_023	ICV	ICV			09/06/12 21:24	1.0	8	
024	250_024	X	HEX			09/06/12 21:50	1.0		
025	250_025	ICAL	AR2154_10			09/06/12 22:16	1.0	9	
026	250_026	ICAL	AR2154_100			09/06/12 22:42	1.0	10	
027	250_027	ICAL	AR2154_250			09/06/12 23:09	1.0	11	
028	250_028	ICAL	AR2154_500			09/06/12 23:35	1.0	12	
029	250_029	ICAL	AR2154_1000			09/07/12 00:01	1.0	13	
030	250_030	X	HEX			09/07/12 00:28	1.0		
031	250_031	CCV	PCB250_50			09/07/12 00:54	1.0	1	
032	250_032	CCV	AR1254			09/07/12 01:21	1.0	11	
033	250_033	ICAL	AR1268			09/07/12 01:47	1.0	14	
034	250_034	BLANK	QC654578	Soil	190127	09/07/12 02:13	1.0		
035	250_035	LCS	QC654579	Soil	190127	09/07/12 02:40	1.0		
036	250_036	SAMPLE	239265-011	Soil	190127	09/07/12 03:06	50.0		4:PCB1260#4=2100
037	250_037	SAMPLE	239265-012	Soil	190127	09/07/12 03:32	50.0		
038	250_038	SAMPLE	239265-013	Soil	190127	09/07/12 03:59	50.0		
039	250_039	SAMPLE	239265-014	Soil	190127	09/07/12 04:25	50.0		
040	250_040	SAMPLE	239260-020	Soil	190051	09/07/12 04:51	50.0		
041	250_041	MSS	239265-004	Soil	190065	09/07/12 05:17	1.0		
042	250_042	MS	QC654359	Soil	190065	09/07/12 05:44	1.0		
043	250_043	MSD	QC654360	Soil	190065	09/07/12 06:10	1.0		
044	250_044	MS	QC653943	Soil	189968	09/07/12 06:36	1.0		
045	250_045	MSD	QC653944	Soil	189968	09/07/12 07:03	1.0		
046	250_046	CCV	PCB100_20			09/07/12 07:29	1.0	2	
047	250_047	CCV	AR1254			09/07/12 07:55	1.0	11	
048	250_048	CCV	AR1268			09/07/12 08:22	1.0	14	
049	250_049	X	HEX			09/07/12 11:35	1.0		
051	250_051	X	MISINJECT	Soil	190051	09/07/12 12:41	1.0		
052	250_052	X	HEX			09/07/12 12:59	1.0		
053	250_053	MSS	239260-001	Soil	190051	09/07/12 13:25	1.0		
054	250_054	SAMPLE	239260-002	Soil	190051	09/07/12 13:54	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 252360400

Instrument : GC22 Begun : 09/06/12 06:40
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
055	250_055	SAMPLE	239260-003	Soil	190051	09/07/12 14:20	1.0		
056	250_056	MSS	239304-001	Soil	190127	09/07/12 16:23	1.0		
057	250_057	SAMPLE	239304-002	Soil	190127	09/07/12 16:49	1.0		
058	250_058	SAMPLE	239304-003	Soil	190127	09/07/12 17:16	1.0		
059	250_059	SAMPLE	239304-005	Soil	190127	09/07/12 17:42	5.0		6:PCB1260#5=3100
060	250_060	SAMPLE	239304-006	Soil	190127	09/07/12 18:08	5.0		
061	250_061	CCV	PCB250_50			09/07/12 18:34	1.0	1	
062	250_062	CCV	AR1254			09/07/12 19:17	1.0	11	
063	250_063	CCV	AR1268			09/07/12 19:43	1.0	14	
064	250_064	SAMPLE	239260-004	Soil	190051	09/07/12 20:19	1.0		
065	250_065	SAMPLE	239260-005	Soil	190051	09/07/12 20:45	1.0		
066	250_066	SAMPLE	239260-006	Soil	190051	09/07/12 21:11	1.0		
067	250_067	SAMPLE	239260-007	Soil	190051	09/07/12 21:38	1.0		
068	250_068	SAMPLE	239260-008	Soil	190051	09/07/12 22:04	1.0		
069	250_069	SAMPLE	239260-009	Soil	190051	09/07/12 22:30	1.0		
070	250_070	SAMPLE	239260-010	Soil	190051	09/07/12 22:56	1.0		
071	250_071	SAMPLE	239260-011	Soil	190051	09/07/12 23:23	1.0		
072	250_072	SAMPLE	239260-012	Soil	190051	09/07/12 23:49	1.0		
073	250_073	SAMPLE	239260-013	Soil	190051	09/08/12 00:15	1.0		
074	250_074	CCV	PCB100_20			09/08/12 00:42	1.0	2	
075	250_075	CCV	AR1254			09/08/12 01:08	1.0	11	
076	250_076	CCV	AR1268			09/08/12 01:34	1.0	14	
077	250_077	BLANK	QC655035	Water	190234	09/08/12 02:01	1.0		
078	250_078	BS	QC655036	Water	190234	09/08/12 02:27	1.0		
079	250_079	BSD	QC655037	Water	190234	09/08/12 02:53	1.0		
080	250_080	SAMPLE	239260-014	Soil	190051	09/08/12 03:20	1.0		
081	250_081	SAMPLE	239260-018	Soil	190051	09/08/12 03:46	1.0		
082	250_082	SAMPLE	239260-019	Soil	190051	09/08/12 04:12	1.0		
083	250_083	SAMPLE	239260-020	Soil	190051	09/08/12 04:39	1.0		
084	250_084	SAMPLE	239375-001	Water	190234	09/08/12 05:05	1.0		
085	250_085	SAMPLE	239376-001	Water	190234	09/08/12 05:31	1.0		
086	250_086	SAMPLE	239377-001	Water	190234	09/08/12 05:58	1.0		
087	250_087	SAMPLE	239403-007	Water	190234	09/08/12 06:24	1.0		
088	250_088	SAMPLE	239404-015	Water	190234	09/08/12 06:50	1.0		
089	250_089	CCV	PCB250_50			09/08/12 07:17	1.0	1	
090	250_090	CCV	AR1254			09/08/12 07:43	1.0	11	
091	250_091	CCV	AR1268			09/08/12 08:10	1.0	14	

PML 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 048.

WSR 09/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 49 through 91.

Standards used: 1=S19978 2=S19977 3=S19975 4=S19976 5=S19979 6=S19980 7=S19981 8=S20431 9=S20598 10=S20599 11=S20600 12=S20601 13=S20602 14=S19990

Flags used: No Quant=Aroclor-1016 Peak # 3 not quantifiable

SAMPLE PREPARATION SUMMARY

Batch # : 190234
Started By : RDG
Method : 3520C
Spike #1 ID : S20518
Prep Date : 06-SEP-2012 16:50
SOP Version : PCB_3520_rv9
Spike #2 ID : S20514
Analysis : PCB
Finished By : ICK
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239375-001		Water	1060	25	1	0.02358	7	1				PCB	
239376-001		Water	1060	25	1	0.02358	7	1				PCB	
239377-001		Water	1060	25	1	0.02358	7	1				PCB	
239403-007		Water	1070	25	1	0.02336	7	1				PCB	Prepped 06-SEP-2012 18:15
239404-015		Water	1070	25	1	0.02336	7	1				PCB	Prepped 06-SEP-2012 18:15
QC655035	BLANK	Water	1000	25	1	0.025		1				PCB	
QC655036	BS	Water	1000	25	1	0.025		1	1			PCB	
QC655037	BSD	Water	1000	25	1	0.025		1	1			PCB	

WSR 09/11/12 : Matrix spikes were not performed for this analysis in batch 190234 because they are not required by the method.

EAH 09/11/12 : Needs to complete the verification of GC22 250.

WSR 09/11/12 : SEQUENCE VERIFIED

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

PCB Water Prep Log

Curtis & Tompkins, Ltd.

LIMS Batch No: 190234
LIMS Analysis: PCB
Date Extracted: 9-6-12

Extraction Method:
☒ EPA 3520c cont. L/L
☐ _____

BK3282
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Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
239375-001	C	1060	☒7 ☐	☒25.0 ☐	
239376-001	B	1060	☒7 ☐	☒25.0 ☐	
239377-001	B	1060	☒7 ☐	☒25.0 ☐	
MB QC655035		1000	☐7 ☐	☒25.0 ☐	
BS ↓ 36		1000	☐7 ☐	☒25.0 ☐	
BSD ↓ 37		1000	☐7 ☐	☒25.0 ☐	
239403-007	H	1070	☒7 ☐	☒25.0 ☐	added @ 18:15
239404-015	G	1070	☒7 ☐	☒25.0 ☐	↓
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	

WSR 9/11/12

	Lot# / LIMS # / Time	Date/ Initials
1.0 mL of surrogate solution was added to all samples	S20518B	09/06/12 PDH
1.0 mL of matrix spiking solution was added to all spikes	S20514B	
☒ 3520c: Samples were continuously extracted with about 450 mL CH_2Cl_2	EM52460	
Extraction Start Time:	16:50/18:15	↓
Extraction End Time:	1220	DDC 9/7/12
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	ICK 9/7/12
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EMVB15H	
Solvent exchanged 2x w/ Hexane lot#	JTBL08E17	
Concentrated to final volume at temperature (degrees C)	100	
EPA 3665A Clean-up: Vortexed w/ H_2SO_4 lot #	FS120450	
Centrifuged for 1min; 5mL transferred to labelled vial	✓	
Relinquished to PCB group	✓	↓

Raquel de Cruz 09/06/12
Extraction Chemist **Date**

Contined from Page 1
Continued on Page _____

WSR 9/11/12
Reviewed by **Date**

REPORTING SUMMARY FOR 239404 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
239404-015	Aroclor-1254	GC22	A	09/08/12 06:50
239404-015	Aroclor-1260	GC22	A	09/08/12 06:50
239404-015	TCMX	GC22	A	09/08/12 06:50
239404-015	Decachlorobiphenyl	GC22	A	09/08/12 06:50
QC655035	Aroclor-1254	GC22	A	09/08/12 02:01
QC655035	Aroclor-1260	GC22	A	09/08/12 02:01
QC655035	TCMX	GC22	A	09/08/12 02:01
QC655035	Decachlorobiphenyl	GC22	A	09/08/12 02:01
QC655036	Aroclor-1260	GC16	B	09/10/12 18:25
QC655036	TCMX	GC16	B	09/10/12 18:25
QC655036	Decachlorobiphenyl	GC06	A	09/10/12 22:22
QC655037	Aroclor-1260	GC16	B	09/10/12 18:53
QC655037	TCMX	GC16	B	09/10/12 18:53
QC655037	Decachlorobiphenyl	GC06	A	09/10/12 22:50

Case Narrative Addendum: Manual Integrations for 239404 PCBS (Water)

For CCV PCB100_20 (GC06 254_024):
Corrected automatically drawn baseline.

For CCV PCB100_20 (GC16 254_014):
Corrected automatically drawn baseline.

For CCV PCB100_20 (GC22 250_074):
Corrected automatically drawn baseline.

For CCV PCB250_50 (GC16 254_009):
Corrected automatically drawn baseline.

For CCV PCB250_50 (GC22 250_089):
Corrected automatically drawn baseline.

For CCV PCB250_50 (GC06 254_040):
Corrected automatically drawn baseline.

For BSD QC655037 (GC16 254_013):
Corrected automatically drawn baseline.

For BSD QC655037 (GC06 254_027):
Corrected automatically drawn baseline.

For Calibration GC16 (232358946001):
Corrected automatically drawn baseline in all levels.

For Calibration GC22 (252360400001):
Corrected automatically drawn baseline in all levels.

For ICV (GC22 250_023):
Corrected automatically drawn baseline.

For Calibration GC06 (202360551001):
Corrected automatically drawn baseline in all levels.

For ICV ULTRA_1660 (GC06 250_016):
Corrected automatically drawn baseline.

Sample Raw Data

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8082A

Inst	: GC22	Lab ID	: 239404-015	Client ID	: EB.09052012
Seqnum	: 252360400088	Matrix	: Water	Acct	: ARCSF (JG)
File	: 250_088	Batch	: 190234	Time	: 08-SEP-2012 06:50
Cal	: 252360400001	Caldate	: 06-SEP-2012		
IDF	: 1.0	Raw Units	: pg/uL	Units	: ug/L

1070.00 mL --> 25.0 ml = 0.02336 ml/ml PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Blank	Flags
Aroclor-1254	A		ND			0.47		u
Aroclor-1260	A	0.7677	ND	ND	80%	0.47		u
Aroclor-1260 Peak # 1	A	0.6774	0.02	0.01	40%			
Aroclor-1260 Peak # 2	A	0.8919	0.02	0.01	49%			
Aroclor-1260 Peak # 3	A	1.790	0.04	ND				
Aroclor-1260 Peak # 4	A	0.4789	0.01	0.00	164%			
Aroclor-1260 Peak # 5	A	0	ND	0.01				

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	36.65	0.9346	0.8564	92	39-120	u
Decachlorobiphenyl	A	30.86	0.9346	0.7210	77	24-120	<c- u

KMH 09/12/12 [Decachlorobiphenyl A]: Recovery well within limits despite instrument bias

Analyst: PML Date: 09/10/12 Reviewer: EAH Date: 09/12/12

-=low bias <=opening c=CCV u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-088**
Sample Name: **239404-015,190234**
Instrument: GC22 (Offline) Vial: 88 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 6:50:55 AM
Analysis Date: 9/10/2012 1:38:43 PM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.457	4.463	48600	36.653
PCB1016#1		6.613		0.000 BDL
PCB1016#2	7.203	7.227	489	8.303
PCB1016#3		7.523		0.000 BDL
PCB1016#4		7.970		0.000 BDL
PCB1016#5	8.487	8.473	145	5.509
PCB1260#1	11.887	11.907	82	0.677
PCB1260#2	12.513	12.527	81	0.892
PCB1260#3	13.330	13.347	129	1.790
PCB1260#4	14.040	14.053	88	0.479
PCB1260#5		14.680		0.000 BDL
Decachlorobiphenyl	17.143	17.163	38248	30.859

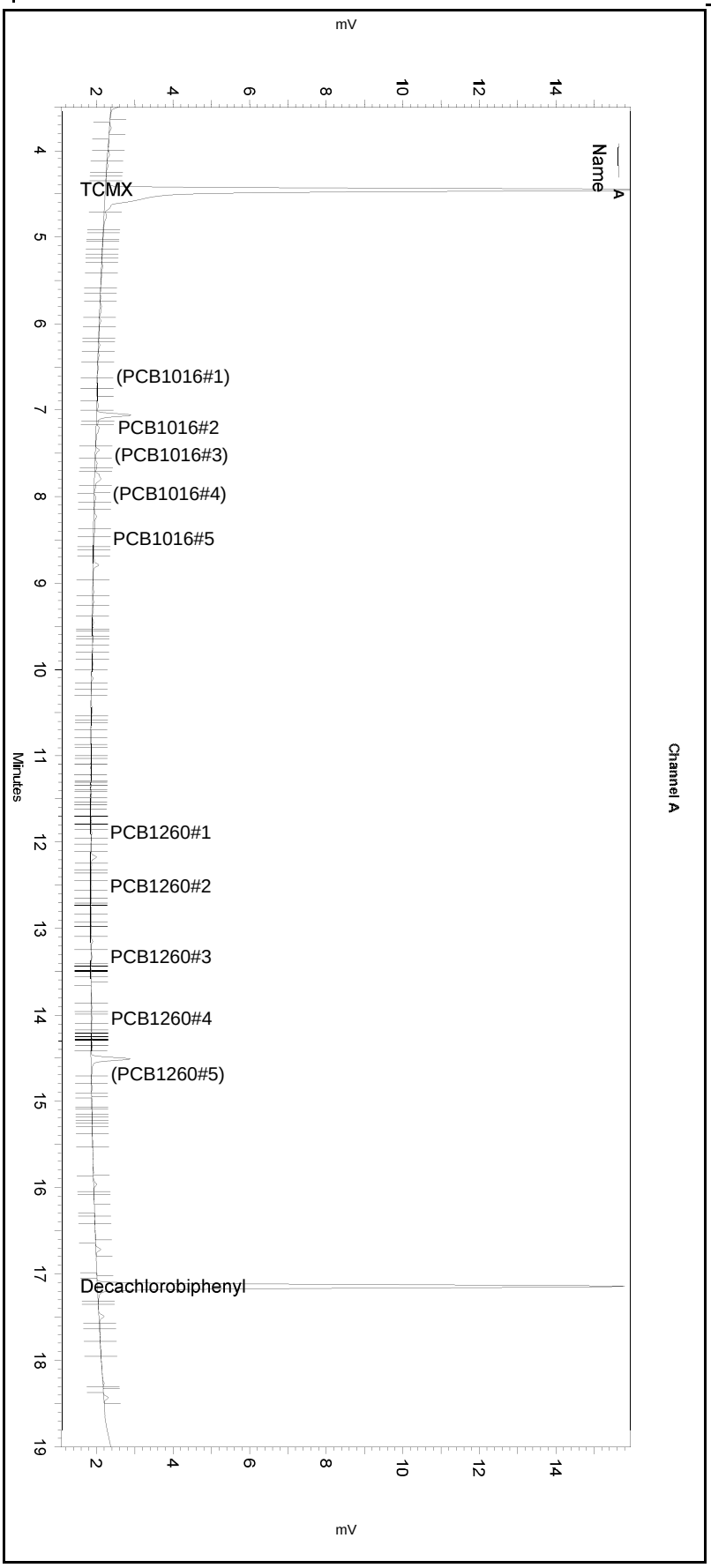
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	573265	30.447
PCB1016#1	6.403	6.410	5712	26.296
PCB1016#2	6.977	6.977	1380	1.581
PCB1016#3	7.167	7.187	12769	39.831
PCB1016#4	7.717	7.720	33912	315.806
PCB1016#5	8.187	8.170	47500	315.976
PCB1260#1	11.560	11.570	494	0.453
PCB1260#2	12.170	12.187	526	0.538
PCB1260#3		13.087		0.000 BDL
PCB1260#4	13.730	13.710	87	0.048
PCB1260#5	14.357	14.360	432	0.604
Decachlorobiphenyl	17.197	17.210	707225	48.365

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-088**
Sample Name: **239404-015,190234**
Instrument: GC22 (Offline) Vial: 88 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 6:50:55 AM
Analysis Date: 9/10/2012 1:38:43 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

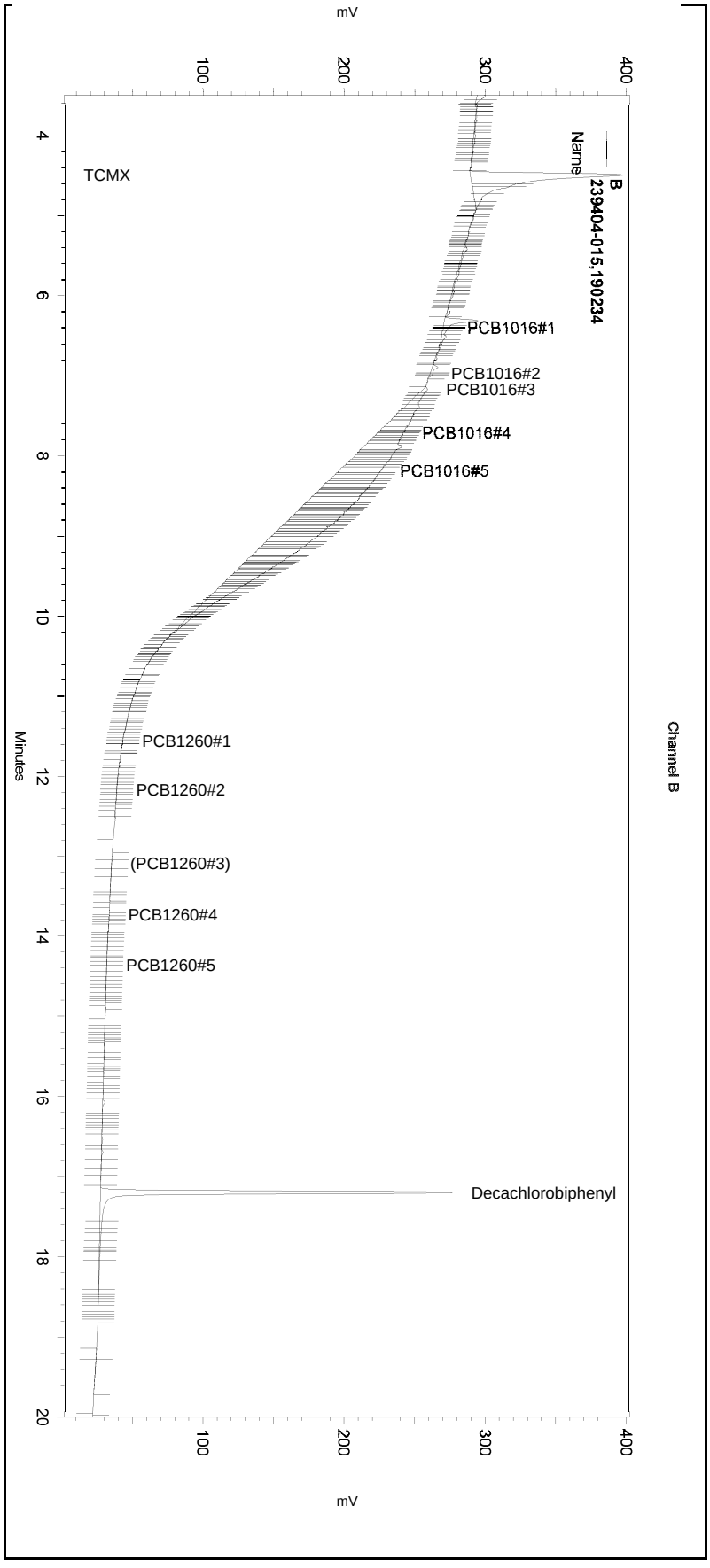
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-088

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-088**
Sample Name: **239404-015,190234**
Instrument: GC22 (Offline) Vial: 88 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 6:50:55 AM
Analysis Date: 9/10/2012 1:38:43 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-088

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

QC Raw Data

CURTIS & TOMPKINS BLANK USER REPORT FOR 239404 PCBS Water
EPA 8082A

Inst : GC22 Lab ID : QC655035
Seqnum : 252360400077.2 Matrix : Water
File : 250_077 Batch : 190234 Time : 08-SEP-2012 02:01
Cal : 252360400001 Caldate : 06-SEP-2012
IDF : 1.0 Raw Units : pg/uL Units : ug/L

1000.00 mL --> 25.0 ml = 0.025 ml/ml PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Flags
Aroclor-1254	A		ND			0.50	u
Aroclor-1260	A	0.9023	ND	ND	30%	0.50	u

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	32.25	1.000	0.8063	81	39-120	u
Decachlorobiphenyl	A	36.83	1.000	0.9209	92	24-120	<c- u

PML 09/10/12 : opening CCV for AR1260 @ -17, all associated jobs in batch are either QSMV4 or DOD jobs, which passes requirements [general version]

KMH 09/12/12 [Decachlorobiphenyl A]: Recovery well within limits despite instrument bias

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/12/12

-=low bias <=opening c=CCV u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-077**
Sample Name: **mb,QC655035,190234**
Instrument: GC22 (Offline) Vial: 77 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 2:01:13 AM
Analysis Date: 9/10/2012 1:17:49 PM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.453	4.463	42765	32.252
PCB1016#1		6.613		0.000 BDL
PCB1016#2	7.213	7.227	289	4.907
PCB1016#3		7.523		0.000 BDL
PCB1016#4		7.970		0.000 BDL
PCB1016#5	8.490	8.473	14	0.532
PCB1260#1	11.897	11.907	47	0.388
PCB1260#2	12.547	12.527	140	1.542
PCB1260#3	13.327	13.347	116	1.610
PCB1260#4	14.037	14.053	101	0.550
PCB1260#5	14.677	14.680	33	0.422
Decachlorobiphenyl	17.143	17.163	45654	36.834

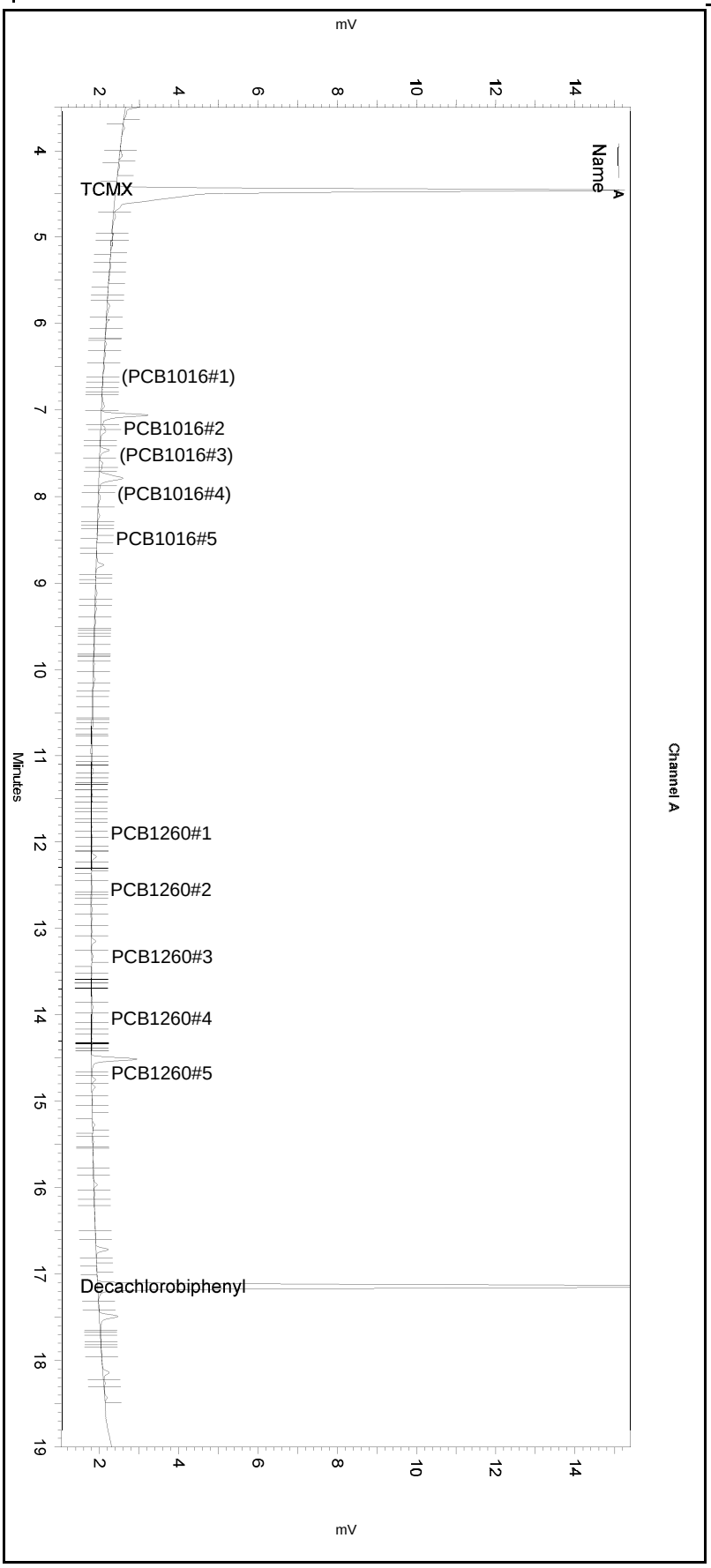
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	557119	29.625
PCB1016#1	6.390	6.410	11661	53.683
PCB1016#2	6.997	6.977	27365	31.350
PCB1016#3	7.170	7.187	98119	306.064
PCB1016#4	7.707	7.720	35311	328.834
PCB1016#5	8.177	8.170	5652	37.598
PCB1260#1	11.563	11.570	320	0.294
PCB1260#2	12.210	12.187	2170	2.221
PCB1260#3	13.083	13.087	484	0.639
PCB1260#4		13.710		0.000 BDL
PCB1260#5	14.383	14.360	131	0.183
Decachlorobiphenyl	17.197	17.210	765332	52.275

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-077**
Sample Name: **mb,QC655035,190234**
Instrument: GC22 (Offline) Vial: 77 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 2:01:13 AM
Analysis Date: 9/10/2012 1:17:49 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

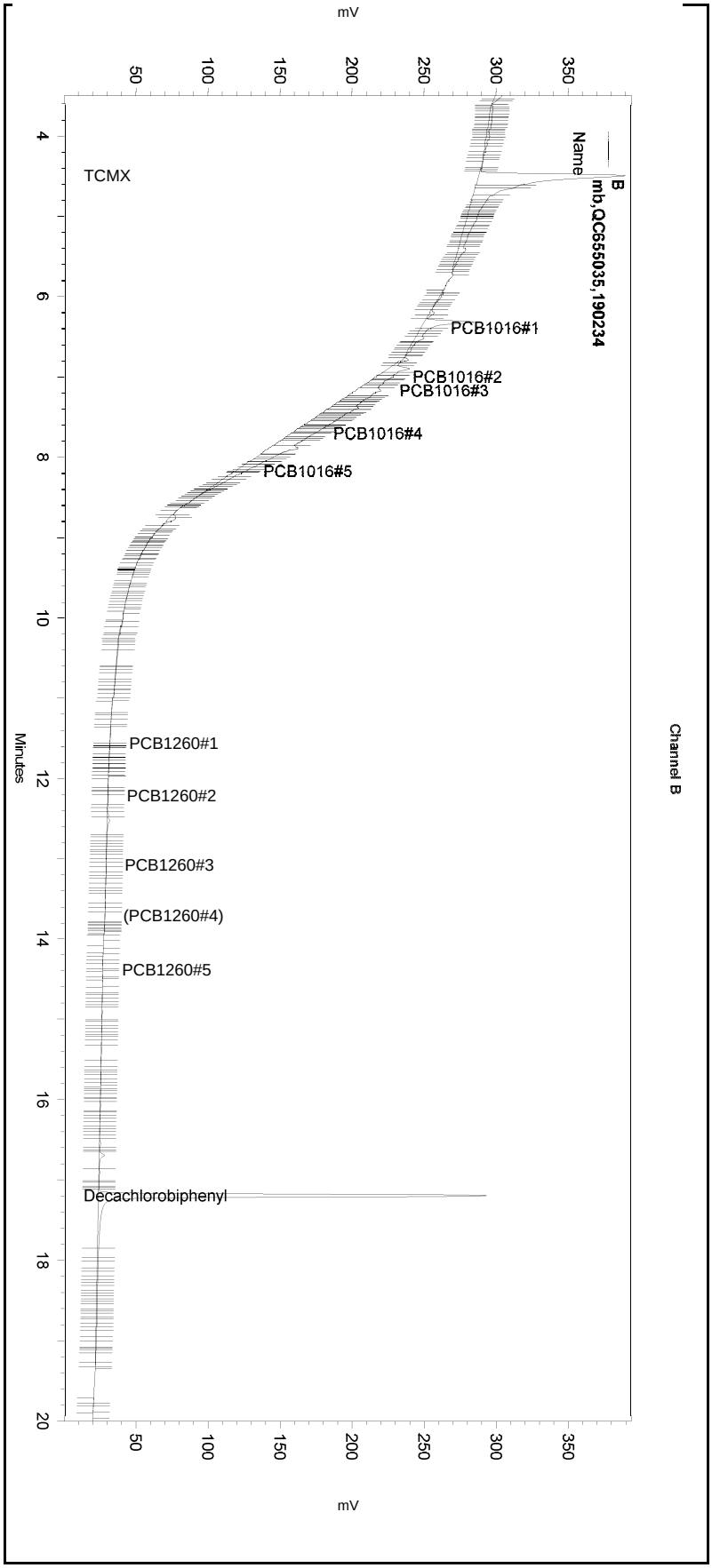
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-077

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-077**
Sample Name: **mb,QC655035,190234**
Instrument: GC22 (Offline) Vial: 77 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 2:01:13 AM
Analysis Date: 9/10/2012 1:17:49 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-077

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 PCBS Water
EPA 8082A

Type : BS	Type : BSD
Inst : GC16	Inst : GC16
Seqnum : 232366165012.3	Seqnum : 232366165013.2
File : 254_012	File : 254_013
IDF : 1.0	IDF : 1.0
Lab ID : QC655036	Lab ID : QC655037
Matrix : Water	Matrix : Water
Batch : 190234	Batch : 190234
Time : 10-SEP-2012 18:25	Time : 10-SEP-2012 18:53
Cal : 232358946001	Cal : 232358946001
Units : ug/L	

BS: 1000.00 mL --> 25.0 ml = 0.025 ml/ml PDF
BSD: 1000.00 mL --> 25.0 ml = 0.025 ml/ml PDF

Analyte	Spiked	BS Raw	BS Result	Ch	%Rec	BSD Raw	BSD Result	Ch	%Rec	Limits	RPD	Lim	Flags
Aroclor-1260	5.000	172.4	4.311	B	86	198.2	4.954	B	99	58-131	14	20	u
Aroclor-1260 Peak # 1		207.5	5.186	B		229.4	5.735	B					
Aroclor-1260 Peak # 2		169.3	4.232	B		188.6	4.716	B					
Aroclor-1260 Peak # 3		167.4	4.185	B		189.5	4.738	B					
Aroclor-1260 Peak # 4		156.4	3.911	B		186.4	4.659	B					
Aroclor-1260 Peak # 5		161.6	4.039	B		196.9	4.923	B					
TCMX	1.000	37.93	0.9483	B	95	40.33	1.008	B	101	39-120			u
Decachlorobiphenyl	1.000	24.45	0.6113	B	61	32.91	0.8227	B	82	24-120			<c- >c-

CP 09/11/12 : report DCB from gc06 for passing ccv [general version]

WSR 09/11/12 : Corrected automatically drawn baseline. [general version]

WSR 09/11/12 : CHANNEL B FOR CCV [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/12/12

-=low bias <=opening >=closing c=CCV u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 7:23:25 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.123	4.103	1189342	90.043
PCB1016#1	6.213	6.197	112443	300.539
PCB1016#2	6.830	6.810	410286	391.910
PCB1016#3	7.130	7.110	239647	370.484
PCB1016#4	7.590	7.570	124396	389.145
PCB1016#5	8.097	8.077	193563	353.871
PCB1260#1	11.653	11.640	550989	352.181
PCB1260#2	12.303	12.290	536091	306.461
PCB1260#3	13.160	13.150	280078	297.372
PCB1260#4	13.907	13.897	592602	277.889
PCB1260#5	14.557	14.550	301953	215.591
Decachlorobiphenyl	17.170	17.167	512621	42.219

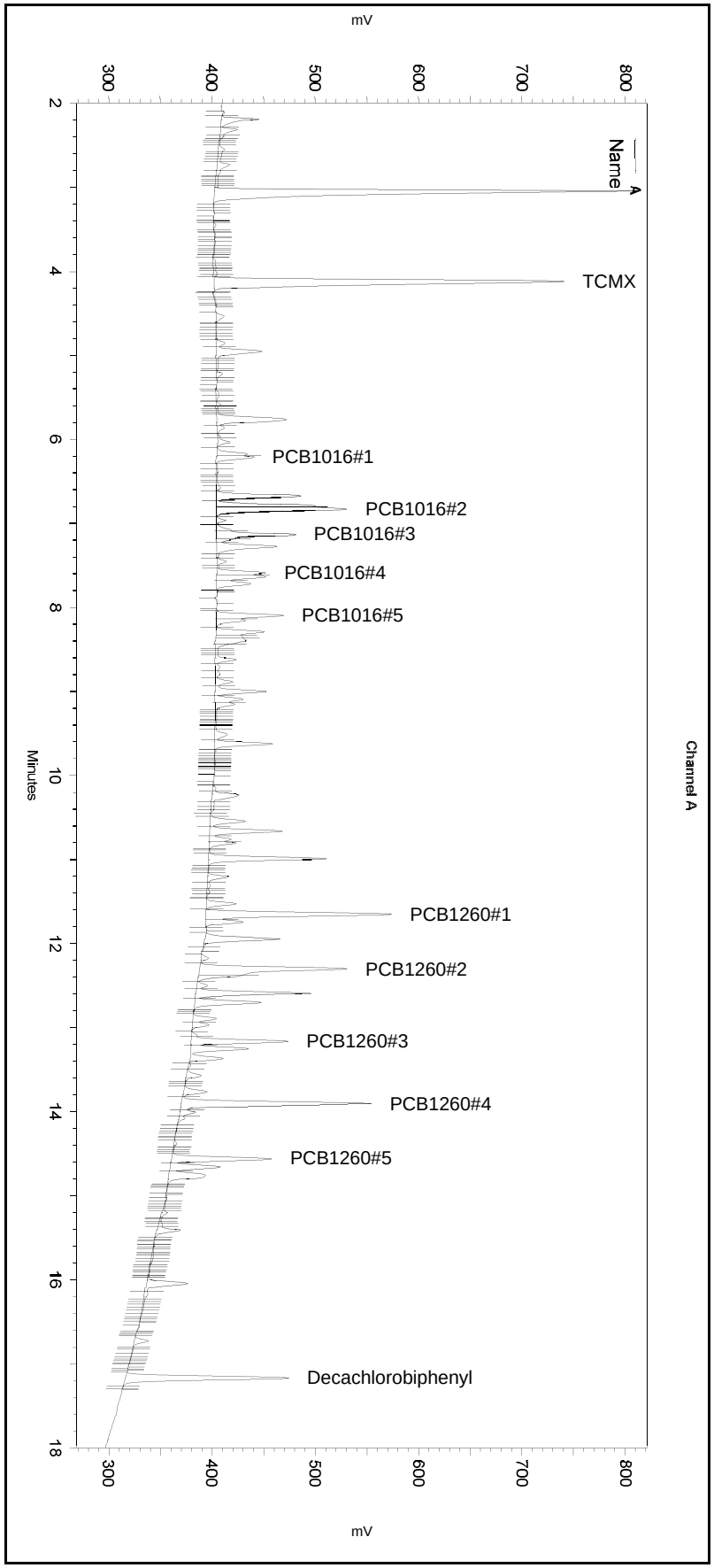
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	265793	37.931
PCB1016#1	5.207	5.207	44145	207.957
PCB1016#2	5.770	5.770	116526	219.657
PCB1016#3	5.987	5.987	55033	224.288
PCB1016#4	6.537	6.537	34491	205.647
PCB1016#5	6.990	6.990	40209	209.399
PCB1260#1	11.153	11.153	121428	207.454
PCB1260#2	11.557	11.560	72055	169.293
PCB1260#3	12.097	12.100	63104	167.415
PCB1260#4	12.753	12.757	138868	156.425
PCB1260#5	13.427	13.430	64303	161.576
Decachlorobiphenyl	16.420	16.423	221397	24.452

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 7:23:25 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

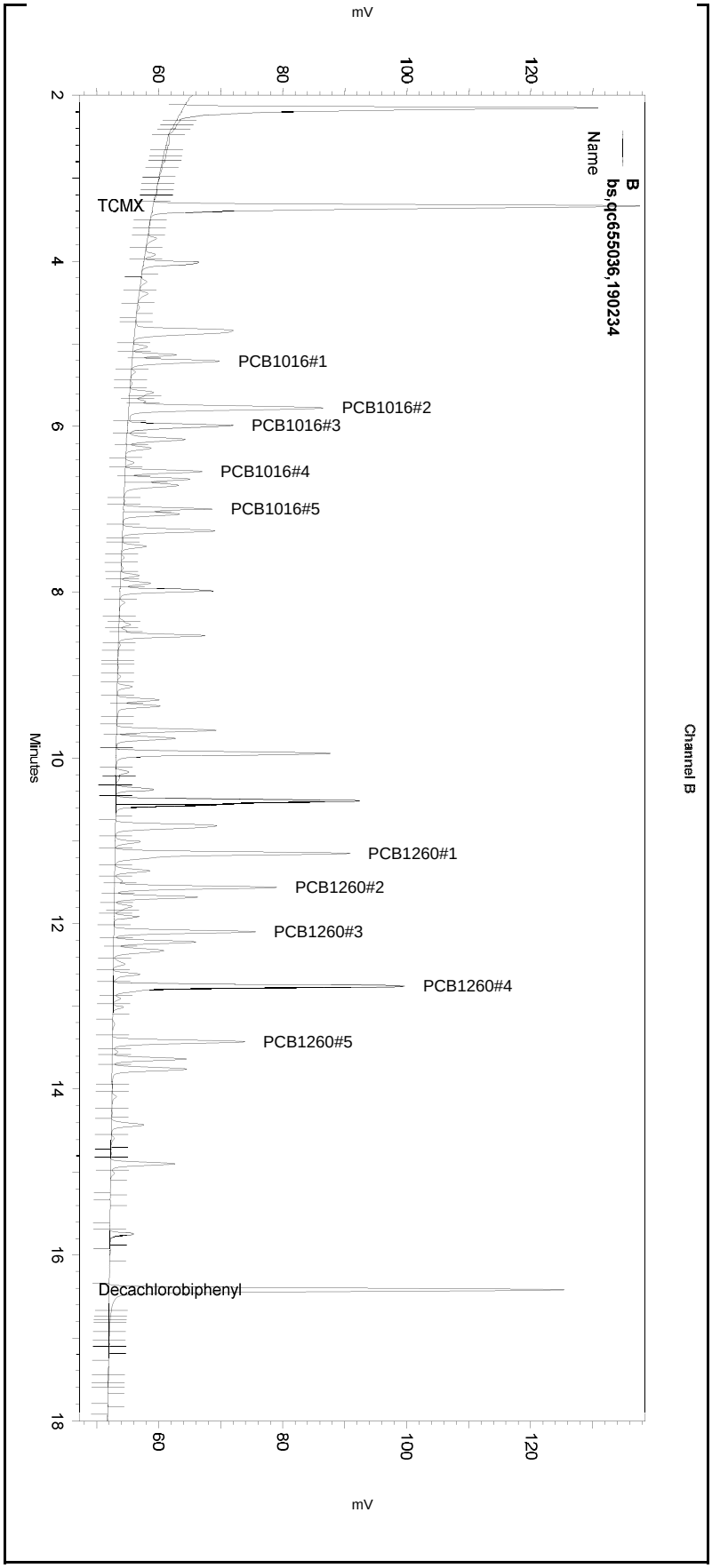
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	4.066	4.248	0
Yes	Reset Baseline	6.083	0	0
Yes	Reset Baseline	7.815	0	0
Yes	Reset Baseline	7.948	0	0
Yes	Manual Peak	13.041	13.435	0
Yes	Split Peak	13.105	0	0
Yes	Split Peak	13.209	0	0
Yes	Reset Baseline	17.313	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 7:23:25 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 6:49:29 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.123	4.103	1205111	91.349
PCB1016#1	6.213	6.197	119824	320.267
PCB1016#2	6.830	6.810	417858	399.143
PCB1016#3	7.130	7.110	247109	382.020
PCB1016#4	7.590	7.570	133285	418.502
PCB1016#5	8.097	8.077	199778	365.233
PCB1260#1	11.653	11.640	550989	352.181
PCB1260#2	12.303	12.290	536091	306.461
PCB1260#3	13.160	13.150	255171	267.468
PCB1260#4	13.907	13.897	592602	277.889
PCB1260#5	14.557	14.550	301953	215.591
Decachlorobiphenyl	17.170	17.167	521546	43.100

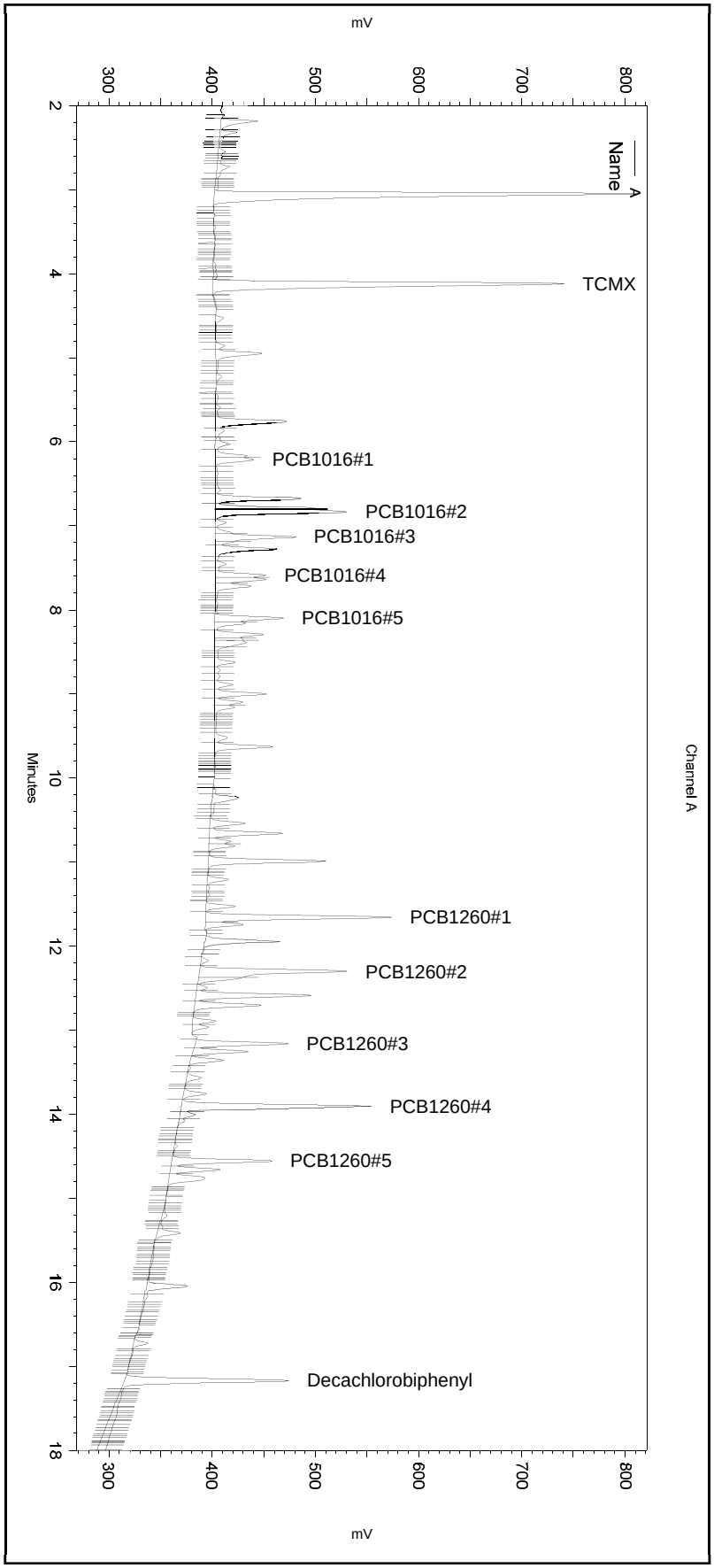
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	265793	37.931
PCB1016#1	5.207	5.207	44145	207.957
PCB1016#2	5.770	5.770	116526	219.657
PCB1016#3	5.987	5.987	55033	224.288
PCB1016#4	6.537	6.537	34491	205.647
PCB1016#5	6.990	6.990	40209	209.399
PCB1260#1	11.153	11.153	121428	207.454
PCB1260#2	11.557	11.560	72055	169.293
PCB1260#3	12.097	12.100	63104	167.415
PCB1260#4	12.753	12.757	138868	156.425
PCB1260#5	13.427	13.430	64303	161.576
Decachlorobiphenyl	16.420	16.423	221397	24.452

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 6:49:29 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

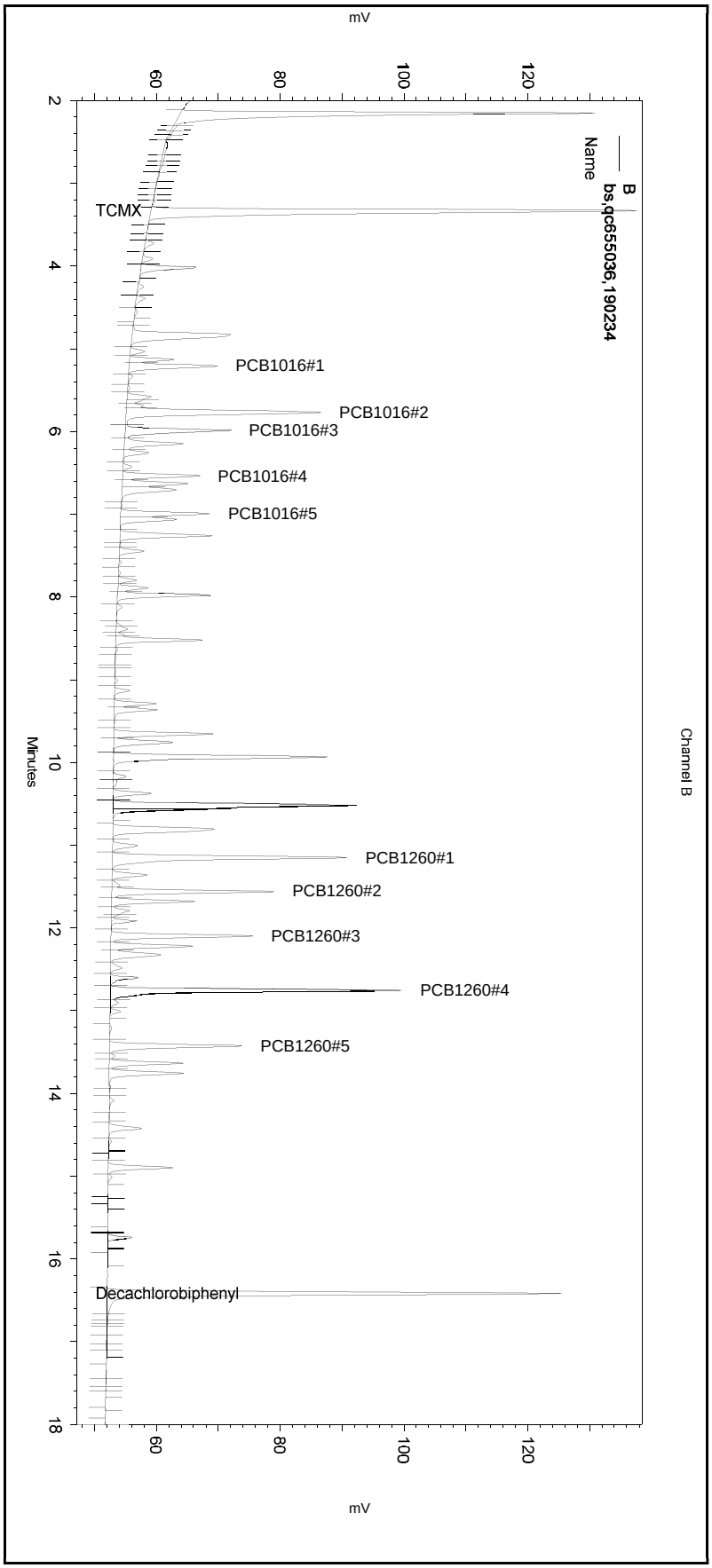
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes
==========
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-012_5DCE.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 6:49:29 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-012_5DCE.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 8:24:19 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	671513	47.132
PCB1016#1	6.197	6.197	74295	198.577
PCB1016#2	6.810	6.810	244154	233.219
PCB1016#3	7.113	7.110	155210	239.948
PCB1016#4	7.567	7.570	85653	261.191
PCB1016#5	8.077	8.077	128246	234.459
PCB1260#1	11.640	11.640	417696	251.981
PCB1260#2	12.290	12.290	393428	224.907
PCB1260#3	13.150	13.150	224156	230.231
PCB1260#4	13.893	13.897	507874	234.069
PCB1260#5	14.547	14.550	283856	202.670
Decachlorobiphenyl	17.160	17.167	552413	46.176

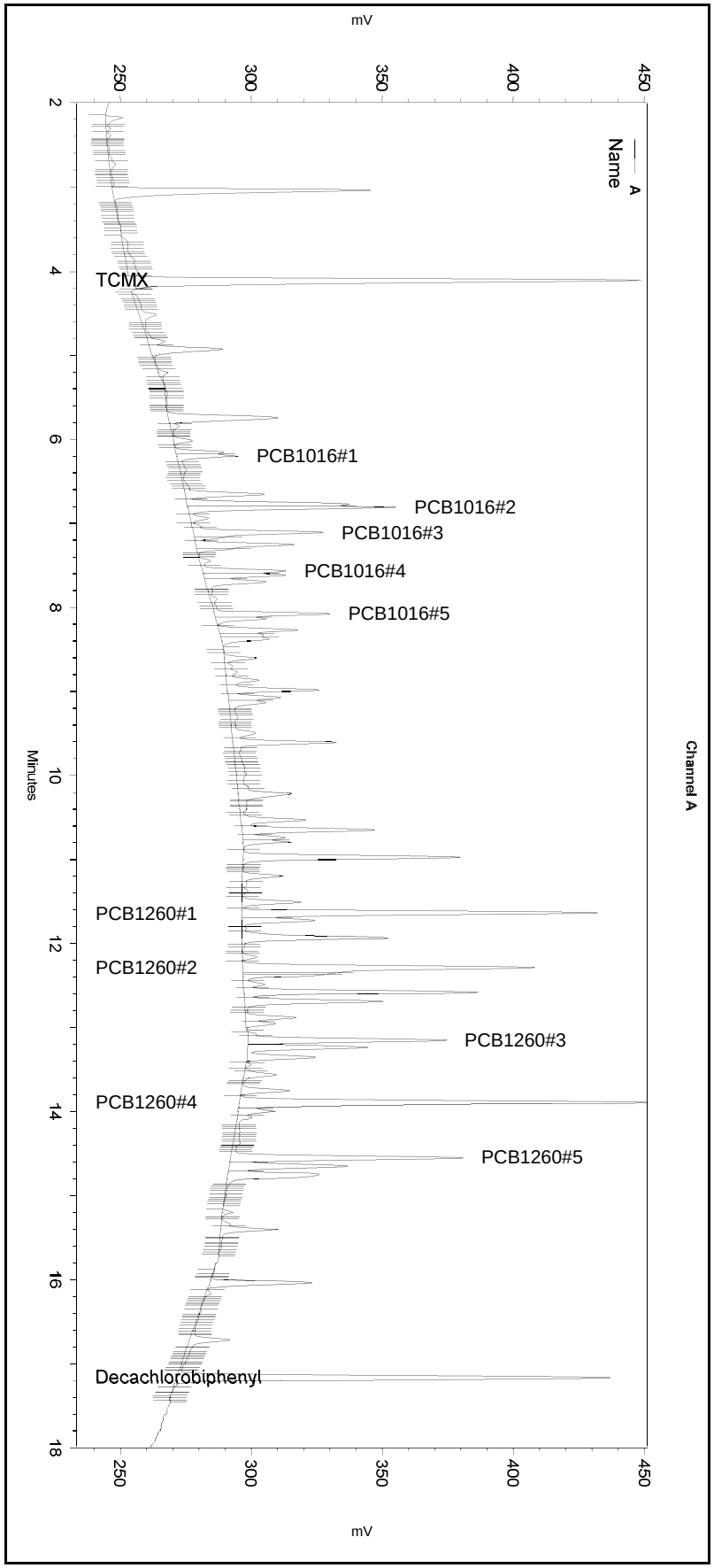
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	282631	40.334
PCB1016#1	5.207	5.207	44494	209.601
PCB1016#2	5.767	5.770	114975	216.734
PCB1016#3	5.983	5.987	52385	213.496
PCB1016#4	6.533	6.537	34862	207.859
PCB1016#5	6.987	6.990	40519	211.014
PCB1260#1	11.150	11.153	134280	229.411
PCB1260#2	11.553	11.560	80293	188.649
PCB1260#3	12.093	12.100	71442	189.536
PCB1260#4	12.750	12.757	165459	186.378
PCB1260#5	13.423	13.430	78364	196.907
Decachlorobiphenyl	16.417	16.423	297962	32.909

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 8:24:19 PM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

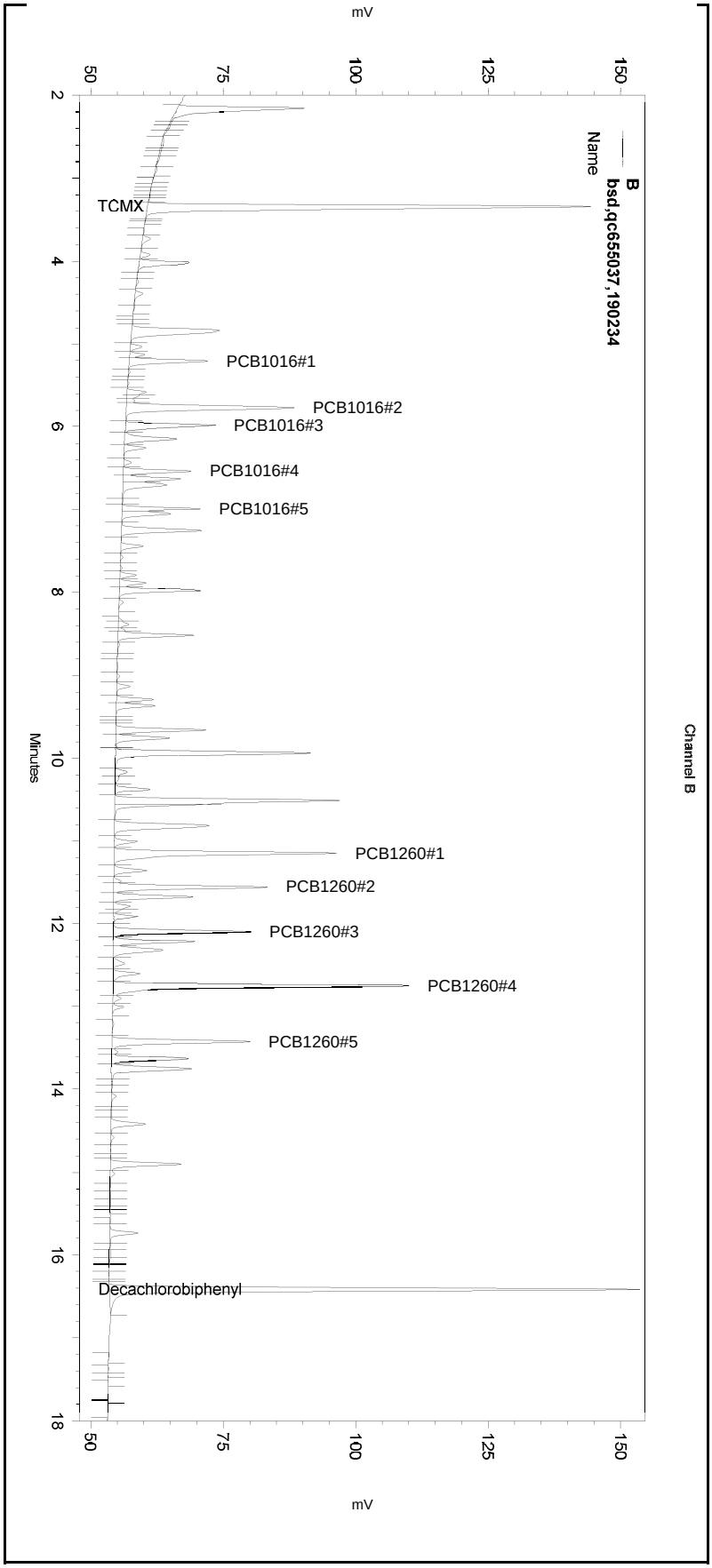
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	4.039	4.225	0
Yes	Reset Baseline	8.465	0	0
Yes	Reset Baseline	10.876	0	0
Yes	Manual Peak	13.05	13.424	0
Yes	Split Peak	13.093	0	0
Yes	Split Peak	13.199	0	0
Yes	Reset Baseline	17.461	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 8:24:19 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	16.724	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 7:17:18 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	695045	49.082
PCB1016#1	6.197	6.197	84554	225.997
PCB1016#2	6.810	6.810	266546	254.608
PCB1016#3	7.113	7.110	183395	283.521
PCB1016#4	7.567	7.570	116307	362.430
PCB1016#5	8.077	8.077	180506	330.000
PCB1260#1	11.640	11.640	446604	272.919
PCB1260#2	12.290	12.290	406370	232.305
PCB1260#3	13.150	13.150	209180	212.250
PCB1260#4	13.893	13.897	507874	234.069
PCB1260#5	14.547	14.550	283856	202.670
Decachlorobiphenyl	17.160	17.167	692921	60.819

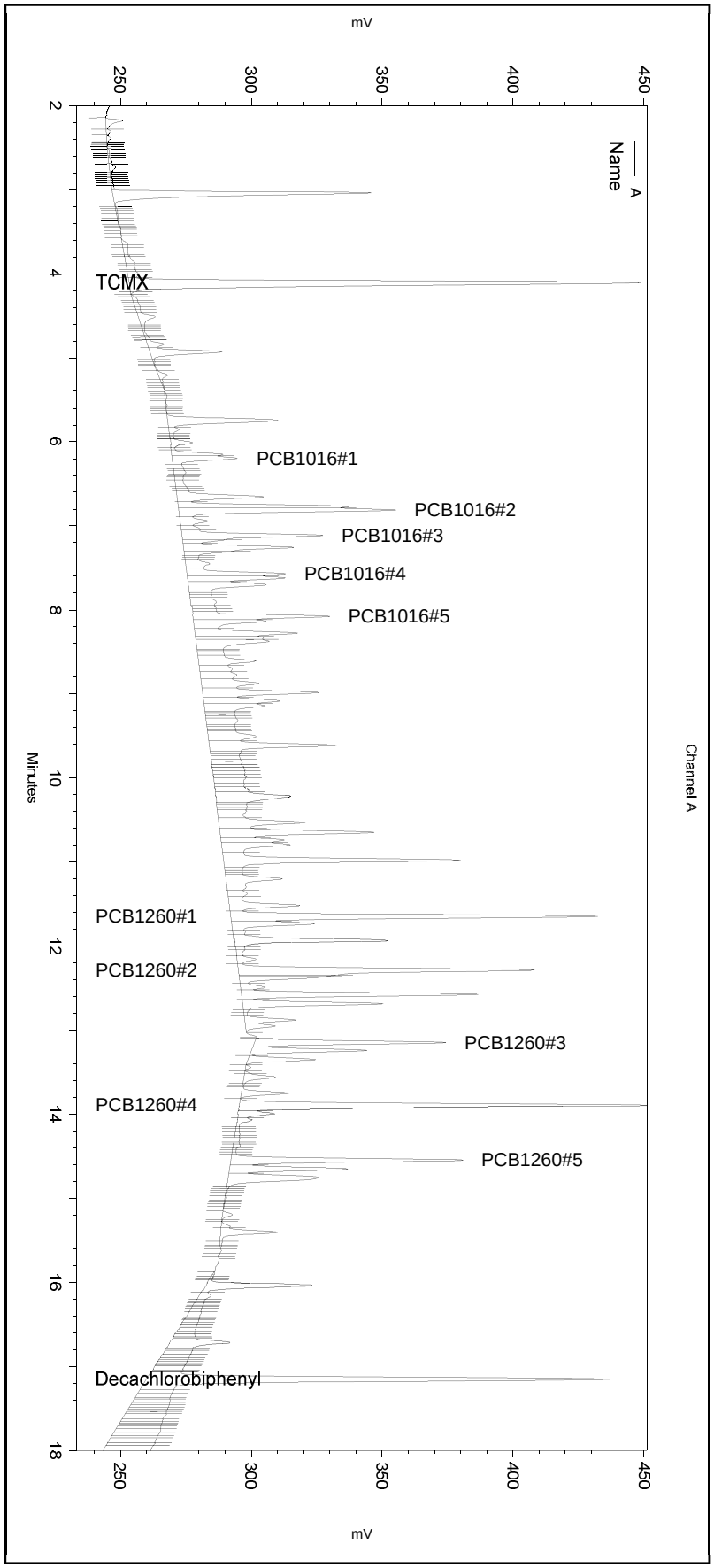
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	282631	40.334
PCB1016#1	5.207	5.207	44494	209.601
PCB1016#2	5.767	5.770	114975	216.734
PCB1016#3	5.983	5.987	52385	213.496
PCB1016#4	6.533	6.537	34862	207.859
PCB1016#5	6.987	6.990	40519	211.014
PCB1260#1	11.150	11.153	134280	229.411
PCB1260#2	11.553	11.560	80293	188.649
PCB1260#3	12.093	12.100	71442	189.536
PCB1260#4	12.750	12.757	165459	186.378
PCB1260#5	13.423	13.430	78364	196.907
Decachlorobiphenyl	16.417	16.423	299149	33.040

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 7:17:18 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

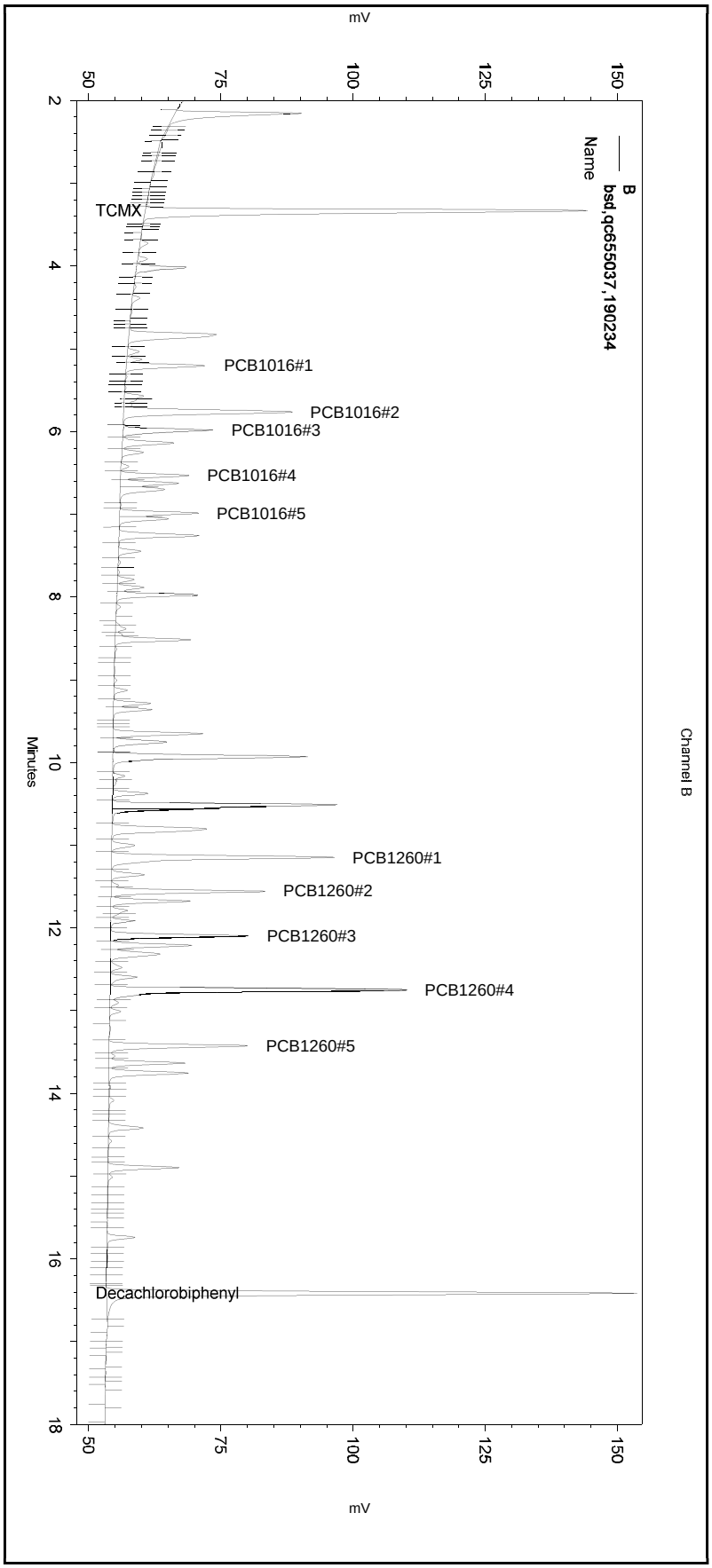
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-013_5DCF.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 7:17:18 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-013_5DCF.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 PCBS Water
EPA 8082A

Type	: BS	Type	: BSD
Inst	: GC06	Inst	: GC06
Seqnum	: 202366165026.3	Seqnum	: 202366165027.2
File	: 254_026	File	: 254_027
IDF	: 1.0	IDF	: 1.0
Lab ID	: QC655036	Lab ID	: QC655037
Matrix	: Water	Matrix	: Water
Batch	: 190234	Batch	: 190234
Time	: 10-SEP-2012 22:22	Time	: 10-SEP-2012 22:50
Cal	: 202360551001	Cal	: 202360551001
Units	: ug/L		

BS: 1000.00 mL --> 25.0 ml = 0.025 ml/ml PDF
BSD: 1000.00 mL --> 25.0 ml = 0.025 ml/ml PDF

Analyte	Spiked	BS Raw	BS Result	Ch	%Rec	BSD Raw	BSD Result	Ch	%Rec	Limits	RPD	Lim	Flags
Aroclor-1260	5.000	193.5	4.837	A	97	194.3	4.856	A	97	58-131	0	20	<c+ **b***
Aroclor-1260 Peak # 1		200.7	5.018	A		203.0	5.074	A					
Aroclor-1260 Peak # 2		218.9	5.472	A		223.9	5.598	A					
Aroclor-1260 Peak # 3		161.0	4.024	A		162.1	4.053	A					
Aroclor-1260 Peak # 4		186.3	4.659	A		186.2	4.656	A					
Aroclor-1260 Peak # 5		200.6	5.015	A		196.0	4.901	A					
TCMX	1.000	35.02	0.8755	A	88	35.73	0.8933	A	89	39-120			
Decachlorobiphenyl	1.000	33.82	0.8454	A	85	33.37	0.8342	A	83	24-120			u

WSR 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/12/12

+=high bias <=opening b=noncompliant c=CCV u=use

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/10/2012 10:46:43 PM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.770	4.763	231366	35.019
PCB1016#1	6.997	7.004	28317	206.950
PCB1016#2	7.630	7.638	91242	212.126
PCB1016#3	7.943	7.951	57022	247.379
PCB1016#4	8.413	8.410	29962	244.426
PCB1016#5	8.940	8.937	44247	227.678
PCB1260#1	12.550	12.550	153958	200.708
PCB1260#2	13.210	13.210	123434	218.897
PCB1260#3	14.073	14.077	76058	160.957
PCB1260#4	14.817	14.820	173200	186.344
PCB1260#5	15.480	15.483	78442	200.588
Decachlorobiphenyl	18.100	18.103	289268	33.817

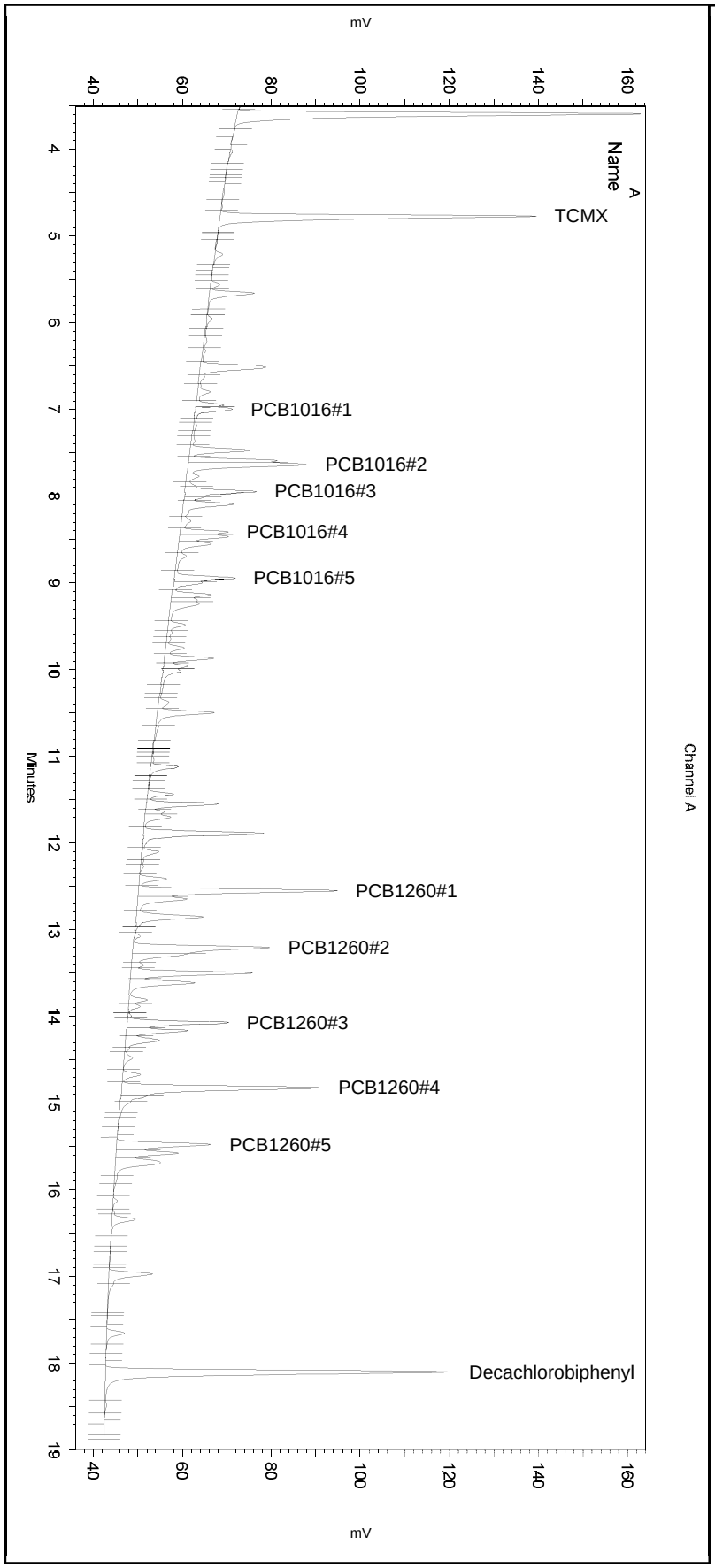
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.973	3.970	708868	40.277
PCB1016#1	5.987	5.983	102775	194.257
PCB1016#2	6.583	6.580	389588	215.310
PCB1016#3	6.807	6.803	160610	208.101
PCB1016#4	7.377	7.377	89617	218.513
PCB1016#5	7.847	7.847	107304	195.859
PCB1260#1	12.083	12.087	525809	268.284
PCB1260#2	12.490	12.497	378090	195.508
PCB1260#3	13.037	13.043	320792	190.111
PCB1260#4	13.693	13.700	720353	228.972
PCB1260#5	14.373	14.380	357582	241.224
Decachlorobiphenyl	17.383	17.390	885202	42.539

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/10/2012 10:46:43 PM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

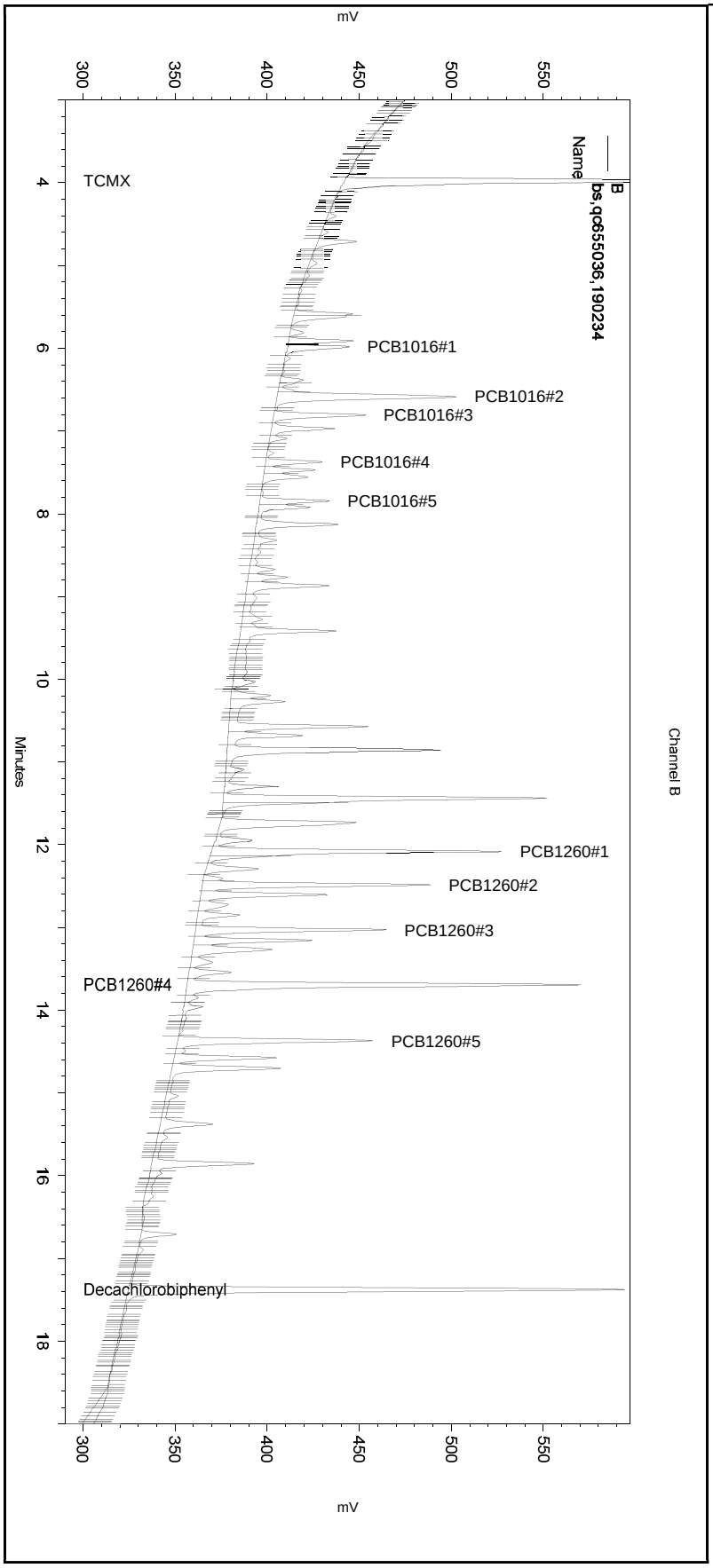
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10091\254-026_2450.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/10/2012 10:46:43 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10091\254-026_2450.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/11/2012 10:36:37 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.770	4.775	231366	35.019
PCB1016#1	6.997	7.002	28317	206.950
PCB1016#2	7.630	7.637	91242	212.126
PCB1016#3	7.943	7.950	57022	247.379
PCB1016#4	8.413	8.420	29962	244.426
PCB1016#5	8.940	8.947	44247	227.678
PCB1260#1	12.550	12.555	153958	200.708
PCB1260#2	13.210	13.214	123434	218.897
PCB1260#3	14.073	14.077	76058	160.957
PCB1260#4	14.817	14.820	173200	186.344
PCB1260#5	15.480	15.482	78442	200.588
Decachlorobiphenyl	18.100	18.102	289268	33.817

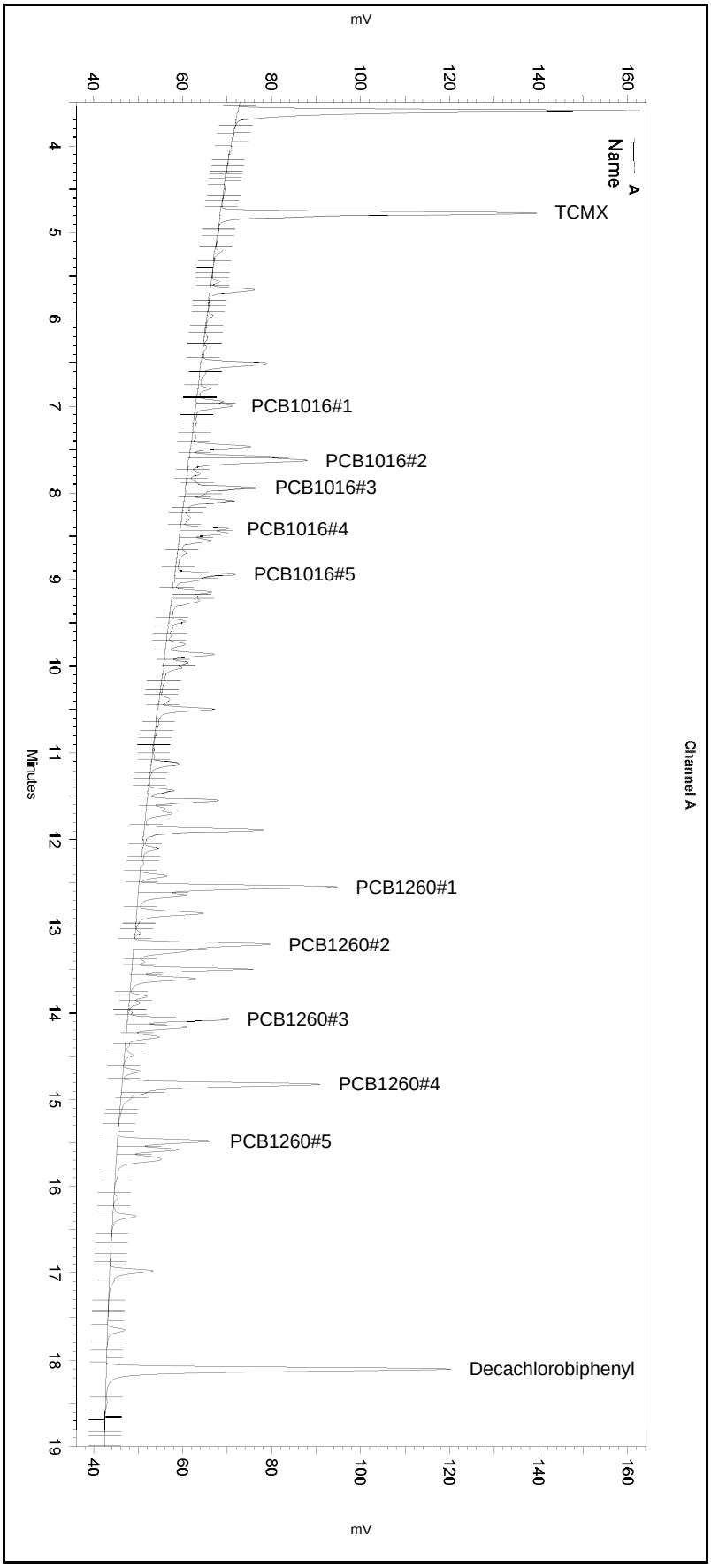
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.973	3.962	708868	40.277
PCB1016#1	5.987	5.979	102775	194.257
PCB1016#2	6.583	6.574	389588	215.310
PCB1016#3	6.807	6.799	160610	208.101
PCB1016#4	7.377	7.369	89617	218.513
PCB1016#5	7.847	7.839	107304	195.859
PCB1260#1	12.083	12.078	525809	268.284
PCB1260#2	12.490	12.475	378090	195.508
PCB1260#3	13.037	13.032	320792	190.111
PCB1260#4	13.693	13.688	720353	228.972
PCB1260#5	14.373	14.370	357582	241.224
Decachlorobiphenyl	17.383	17.378	885202	42.539

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/11/2012 10:36:37 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

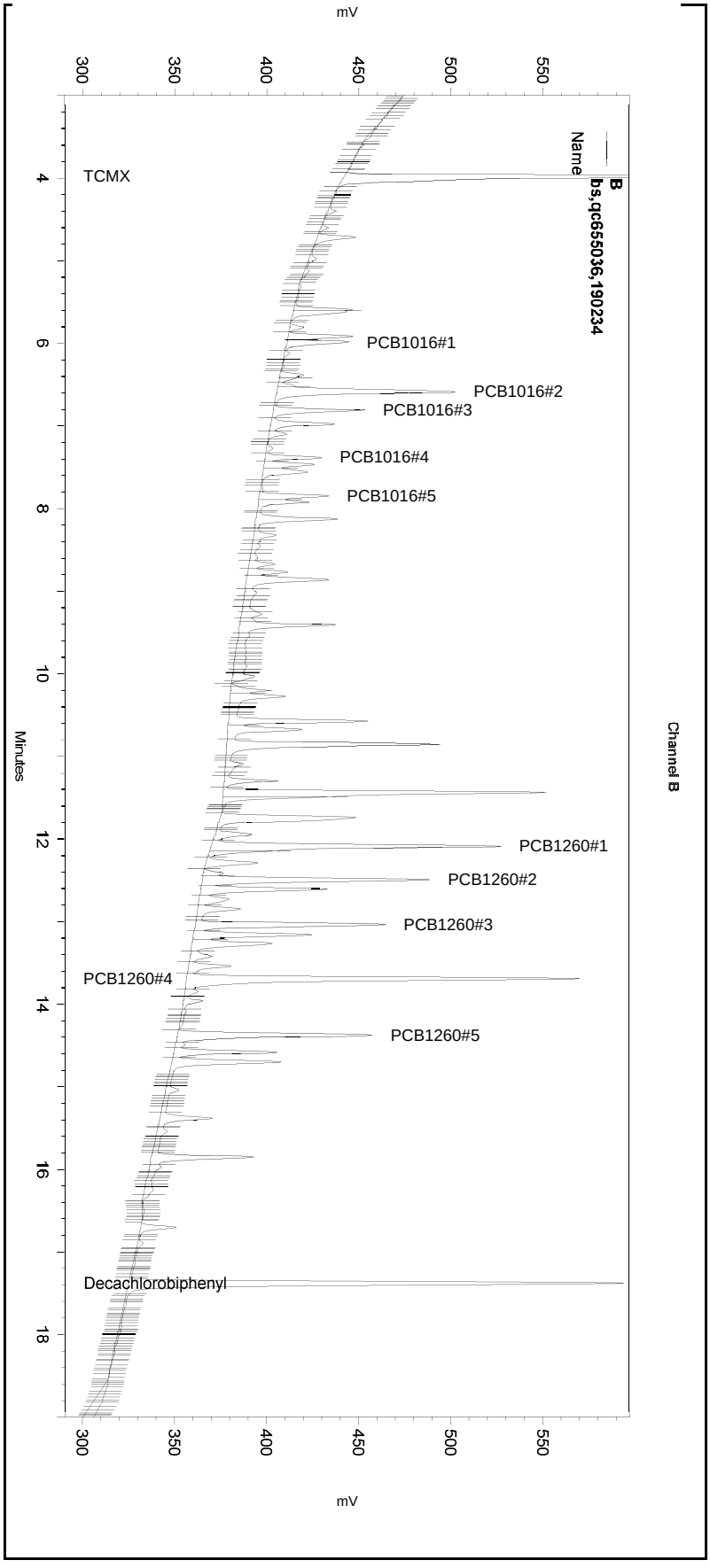
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/11/2012 10:36:37 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 (Offline) Vial: 27 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 12:50:27 PM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.783	4.775	236078	35.732
PCB1016#1	7.007	7.002	25016	182.825
PCB1016#2	7.643	7.637	88164	204.970
PCB1016#3	7.957	7.950	51026	221.366
PCB1016#4	8.427	8.420	28123	227.338
PCB1016#5	8.953	8.947	42020	216.219
PCB1260#1	12.563	12.555	155690	202.965
PCB1260#2	13.220	13.214	126267	223.921
PCB1260#3	14.087	14.077	76606	162.117
PCB1260#4	14.830	14.820	173110	186.247
PCB1260#5	15.493	15.482	76662	196.036
Decachlorobiphenyl	18.113	18.102	285441	33.369

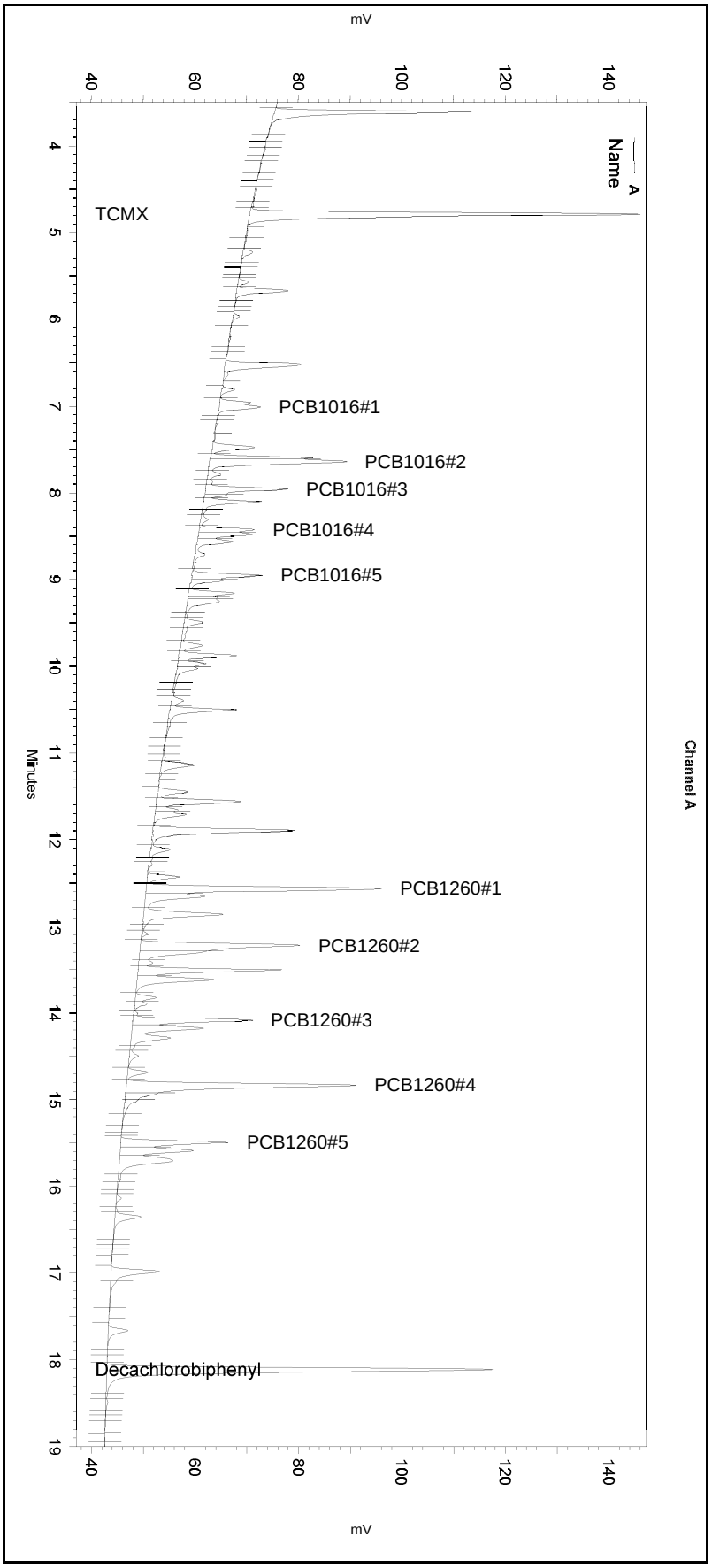
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.987	3.962	708670	40.266
PCB1016#1	6.000	5.979	96701	180.835
PCB1016#2	6.597	6.574	352005	194.539
PCB1016#3	6.820	6.799	144597	187.353
PCB1016#4	7.387	7.369	87141	211.645
PCB1016#5	7.860	7.839	102196	186.536
PCB1260#1	12.093	12.078	567877	293.708
PCB1260#2	12.503	12.475	400568	207.131
PCB1260#3	13.047	13.032	343335	203.471
PCB1260#4	13.703	13.688	752222	241.285
PCB1260#5	14.387	14.370	385127	262.292
Decachlorobiphenyl	17.393	17.378	853196	40.721

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 (Offline) Vial: 27 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 12:50:27 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

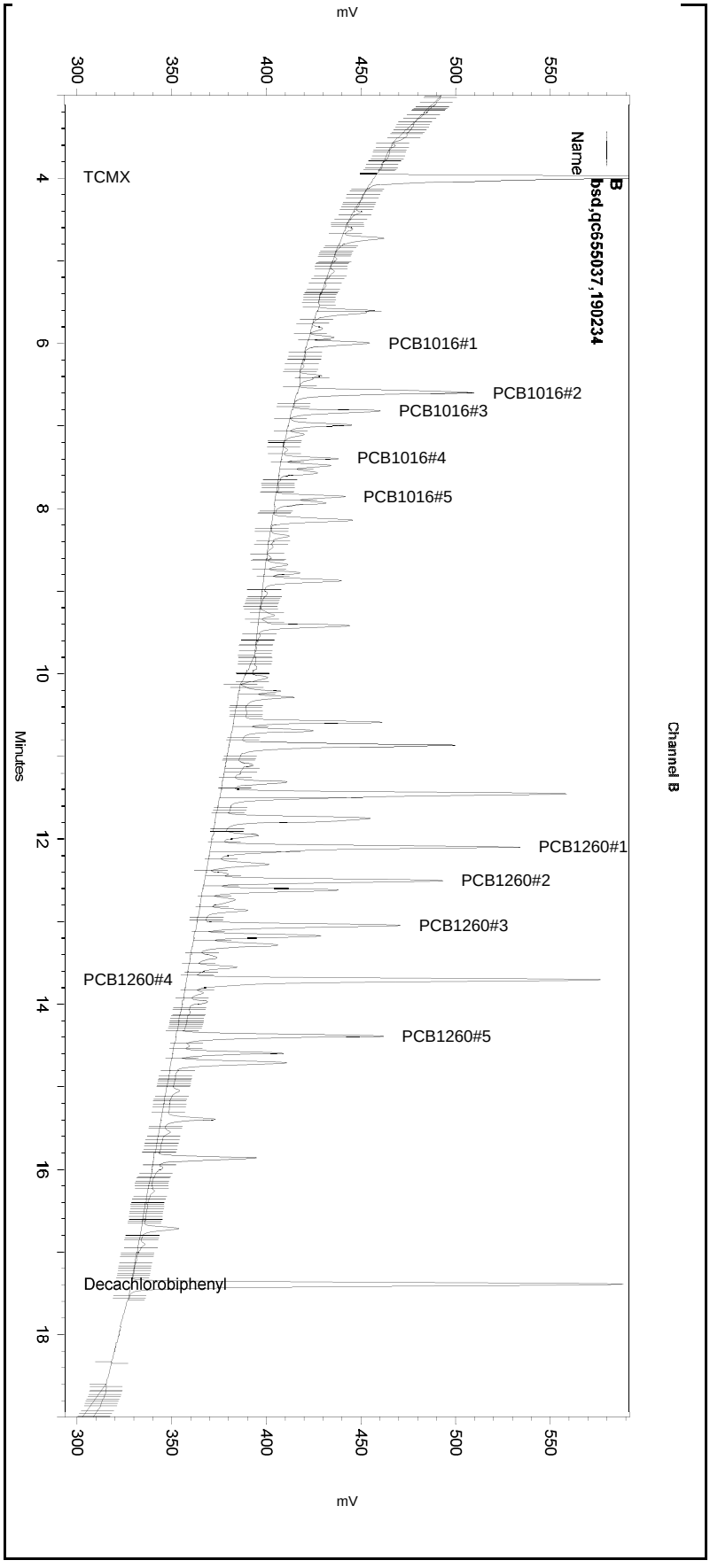
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 (Offline) Vial: 27 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 12:50:27 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	17.588	0	0

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 27 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 10:36:44 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.783	4.775	236078	35.732
PCB1016#1	7.007	7.002	25016	182.825
PCB1016#2	7.643	7.637	88164	204.970
PCB1016#3	7.957	7.950	51026	221.366
PCB1016#4	8.427	8.420	28123	227.338
PCB1016#5	8.953	8.947	42020	216.219
PCB1260#1	12.563	12.555	155690	202.965
PCB1260#2	13.220	13.214	126267	223.921
PCB1260#3	14.087	14.077	76606	162.117
PCB1260#4	14.830	14.820	173110	186.247
PCB1260#5	15.493	15.482	76662	196.036
Decachlorobiphenyl	18.113	18.102	285441	33.369

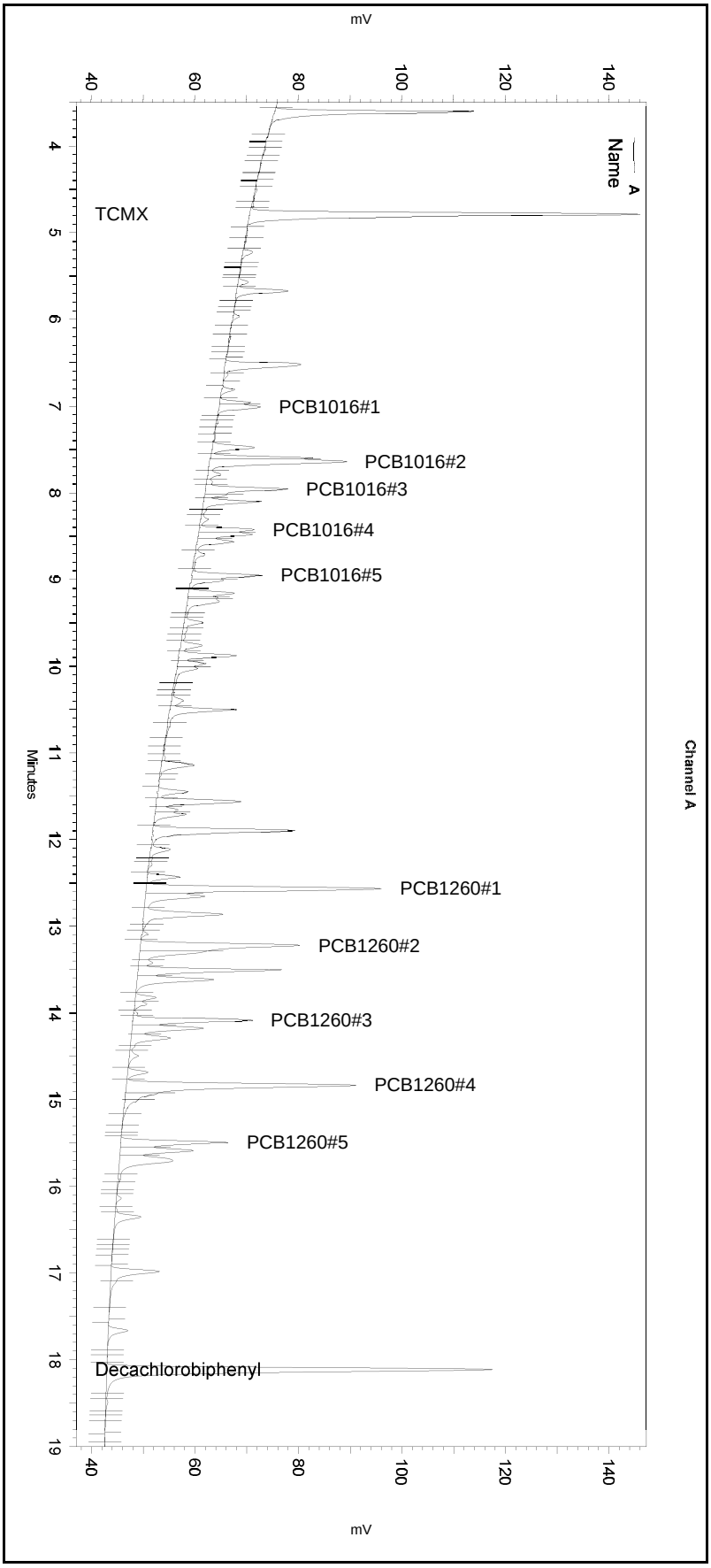
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.987	3.962	708670	40.266
PCB1016#1	6.000	5.979	96701	180.835
PCB1016#2	6.597	6.574	352005	194.539
PCB1016#3	6.820	6.799	144597	187.353
PCB1016#4	7.387	7.369	87141	211.645
PCB1016#5	7.860	7.839	102196	186.536
PCB1260#1	12.093	12.078	573000	296.804
PCB1260#2	12.503	12.475	406779	210.343
PCB1260#3	13.047	13.032	352442	208.868
PCB1260#4	13.703	13.688	766595	246.838
PCB1260#5	14.387	14.370	399061	272.949
Decachlorobiphenyl	17.393	17.378	887568	42.673

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 27 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 10:36:44 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

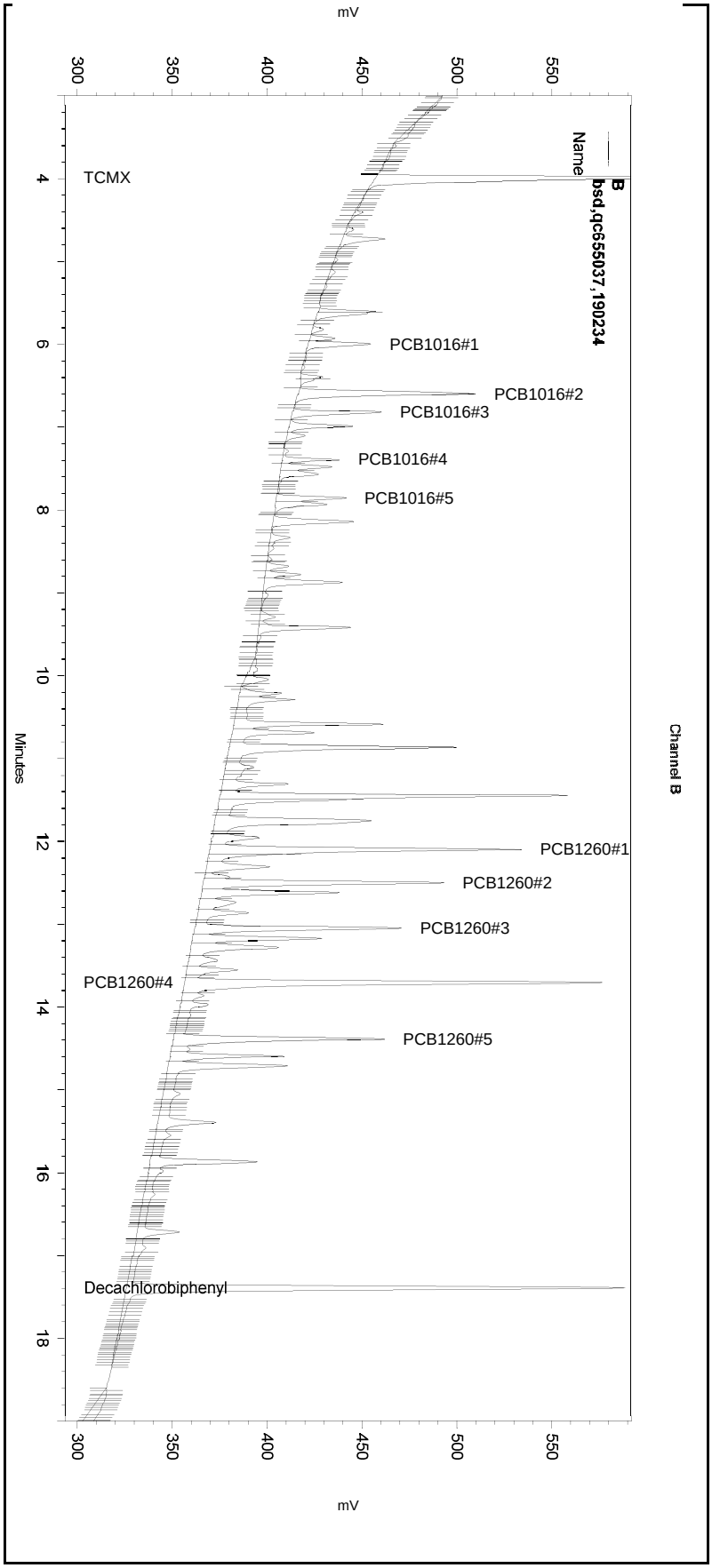
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 27 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 10:36:44 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Initial Calibration Raw Data

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 PCBS Water: EPA 8082A

Inst : GC06
Calnum : 202360551001
Units : pg/uL

Name : AR1660_250
Date : 06-SEP-2012 16:49

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	250_008	202360551008	PCB10_2	06-SEP-2012 16:49	S19975
L2	250_009	202360551009	PCB25_5	06-SEP-2012 17:53	S19976
L3	250_010	202360551010	PCB100_20	06-SEP-2012 18:21	S19977
L4	250_011	202360551011	PCB250_50	06-SEP-2012 18:49	S19978
L5	250_012	202360551012	PCB500_100	06-SEP-2012 19:16	S19979
L6	250_013	202360551013	PCB750_150	06-SEP-2012 19:44	S19980
L7	250_014	202360551014	PCB1000_200	06-SEP-2012 20:11	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	977.50	867.00	809.57	733.00	642.90	572.49		AVRG	R		0.00130		767.08	19	.99	20	
Aroclor-1260 Peak # 2	A	636.20	645.28	605.17	591.27	519.42	473.96	475.94	AVRG	R		0.00177		563.89	13	.99	20	
Aroclor-1260 Peak # 3	A	618.80	500.24	451.97	419.33	372.34			AVRG	R		0.00212		472.54	20	.99	20	
Aroclor-1260 Peak # 4	A	1017.8	1084.9	1023.1	964.77	859.73	781.83	774.13	AVRG	R		0.00108		929.46	13	.99	20	
Aroclor-1260 Peak # 5	A	396.50	438.52	438.93	410.76	371.41	335.84	345.47	AVRG	R		0.00256		391.06	11	.99	20	
TCMX	A	7935.0	7919.0	7022.0	6505.6	5961.7	5524.8	5380.5	AVRG	R		1.51E-4		6606.9	16	.99	20	
Decachlorobiphenyl	A	9631.0	10236	8546.9	7706.8	6649.9			AVRG	R		1.17E-4		8554.0	17	.99	20	
Aroclor-1260 Peak # 1	B	2729.3	3301.2	2645.9	2303.9	1981.0	1729.9	1695.0	LINR	R	-49.479	6.04E-4		2340.9	0.991	.99	20	
Aroclor-1260 Peak # 2	B	2380.8	2230.8	2241.2	1901.8	1754.7	1545.4	1482.5	AVRG	R		5.17E-4		1933.9	19	.99	20	
Aroclor-1260 Peak # 3	B	2148.9	2011.4	1730.7	1584.4	1364.0	1285.0		AVRG	R		5.93E-4		1687.4	20	.99	20	
Aroclor-1260 Peak # 4	B	4938.5	4697.8	4098.2	3630.0	3080.2	2740.6	2634.3	LINR	R	-49.347	3.86E-4		3688.5	0.991	.99	20	
Aroclor-1260 Peak # 5	B	2595.9	1546.7	1663.5	1747.5	1514.5	1303.6	1337.7	LINR	R	-32.273	7.65E-4		1672.8	0.992	.99	20	
TCMX	B	23332	20443	16814	16552	16902	15096	14060	AVRG	R		5.68E-5		17600	18	.99	20	
Decachlorobiphenyl	B	33114	33066	25782	21904	18200	15398	14918	QUAD	A	85306.8	20048.7	-29.2621	23197	0.996	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**27**	25.000	13	100.00	6	250.00	-4	500.00	-16	750.00	**-25**		
Aroclor-1260 Peak # 2	A	10.000	13	25.000	14	100.00	7	250.00	5	500.00	-8	750.00	-16	1000.0	-16
Aroclor-1260 Peak # 3	A	10.000	**31**	25.000	6	100.00	-4	250.00	-11	500.00	**-21**				
Aroclor-1260 Peak # 4	A	10.000	10	25.000	17	100.00	10	250.00	4	500.00	-8	750.00	-16	1000.0	-17
Aroclor-1260 Peak # 5	A	10.000	1	25.000	12	100.00	12	250.00	5	500.00	-5	750.00	-14	1000.0	-12
TCMX	A	2.0000	20	5.0000	20	20.000	6	50.000	-2	100.00	-10	150.00	-16	200.00	-19
Decachlorobiphenyl	A	2.0000	13	5.0000	20	20.000	0	50.000	-10	100.00	**-22**				
Aroclor-1260 Peak # 1	B	10.000	**-430**	25.000	**-98**	100.00	10	250.00	19	500.00	10	750.00	-2	1000.0	-3
Aroclor-1260 Peak # 2	B	10.000	**23**	25.000	15	100.00	16	250.00	-2	500.00	-9	750.00	-20	1000.0	**-23**
Aroclor-1260 Peak # 3	B	10.000	**27**	25.000	19	100.00	3	250.00	-6	500.00	-19	750.00	**-24**		
Aroclor-1260 Peak # 4	B	10.000	**-403**	25.000	**-116**	100.00	9	250.00	**21**	500.00	9	750.00	-1	1000.0	-3
Aroclor-1260 Peak # 5	B	10.000	**-224**	25.000	**-111**	100.00	-5	250.00	**21**	500.00	9	750.00	-5	1000.0	-1
TCMX	B	2.0000	**33**	5.0000	16	20.000	-4	50.000	-6	100.00	-4	150.00	-14	200.00	-20
Decachlorobiphenyl	B	2.0000	**-148**	5.0000	-20	20.000	11	50.000	9	100.00	2	150.00	-7	200.00	4

PML 09/07/12 : Corrected automatically drawn baseline in all levels.

PML 09/07/12 : dropped various points and changed fit types for various peaks for better r^2 %RSD recovery

PML 09/07/12 : RTs updated in the integrated version of ICAL

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 PCBS Water
EPA 8082A

Inst : GC06 Name : AR1660_250
Calnum : 202360551001 Cal Date : 06-SEP-2012

ICV 202360551016 (250_016 06-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	241.7	pg/uL	-3	20	
Aroclor-1260	B	250.0	261.4	pg/uL	5	20	

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:40:22 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.777	4.763	15870	2.000 CAL
PCB1016#1	7.003	7.004	1656	10.000 CAL
PCB1016#2	7.640	7.638	5307	10.000 CAL
PCB1016#3	7.953	7.951	2195	10.000 CAL
PCB1016#4	8.423	8.410	2172	10.000 CAL
PCB1016#5	8.950	8.937	2049	10.000 CAL
PCB1260#1	12.560	12.550	9775	10.000 CAL
PCB1260#2	13.220	13.210	6362	10.000 CAL
PCB1260#3	14.083	14.077	6188	10.000 CAL
PCB1260#4	14.827	14.820	10178	10.000 CAL
PCB1260#5	15.487	15.483	3965	10.000 CAL
Decachlorobiphenyl	18.110	18.103	19262	2.000 CAL

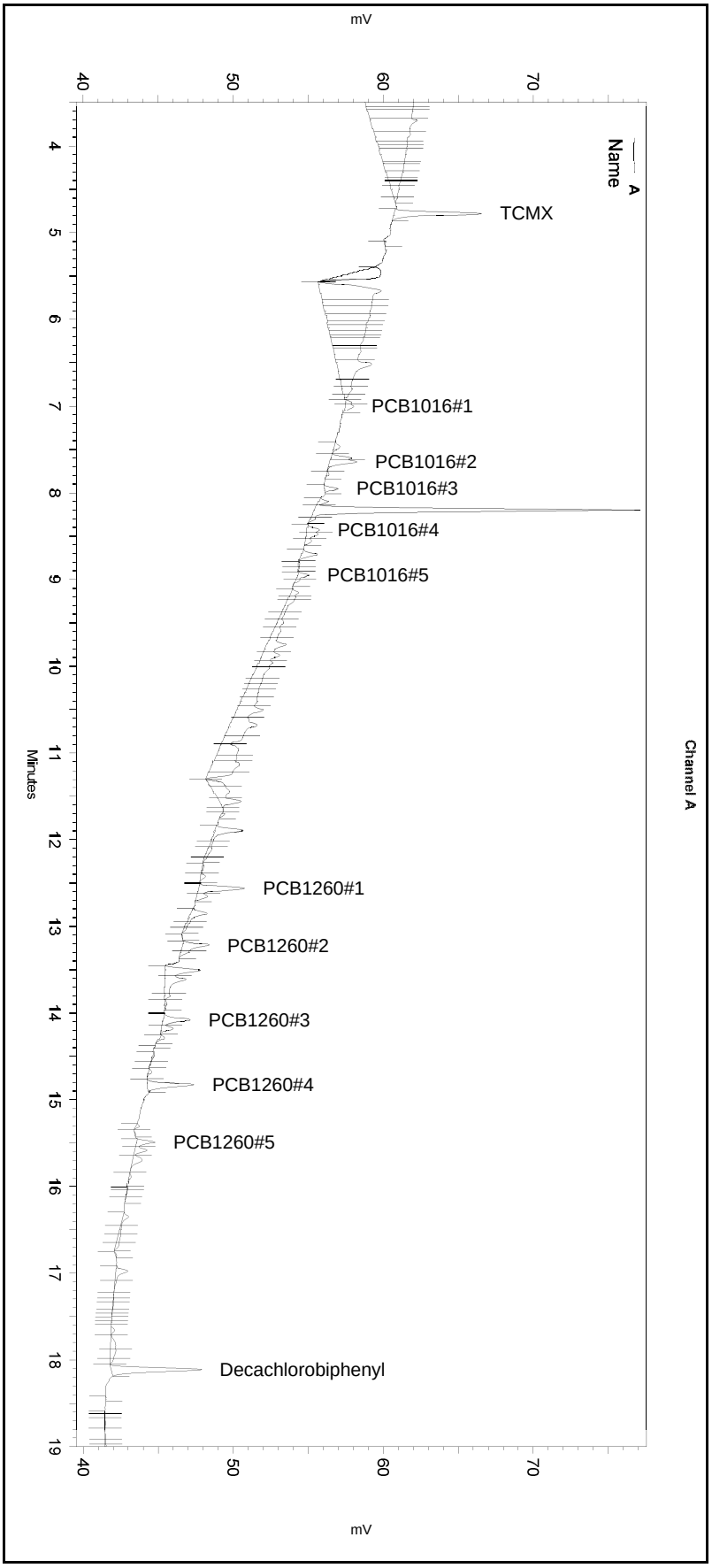
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.953	3.970	46663	2.000 CAL
PCB1016#1	5.970	5.983	5599	10.000 CAL
PCB1016#2	6.563	6.580	19739	10.000 CAL
PCB1016#3	6.790	6.803	9951	10.000 CAL
PCB1016#4	7.363	7.377	7511	10.000 CAL
PCB1016#5	7.833	7.847	6922	10.000 CAL
PCB1260#1	12.080	12.087	27293	10.000 CAL
PCB1260#2	12.487	12.497	23808	10.000 CAL
PCB1260#3	13.033	13.043	21489	10.000 CAL
PCB1260#4	13.693	13.700	49385	10.000 CAL
PCB1260#5	14.373	14.380	25959	10.000 CAL
Decachlorobiphenyl	17.387	17.390	66227	2.000 CAL

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:40:22 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

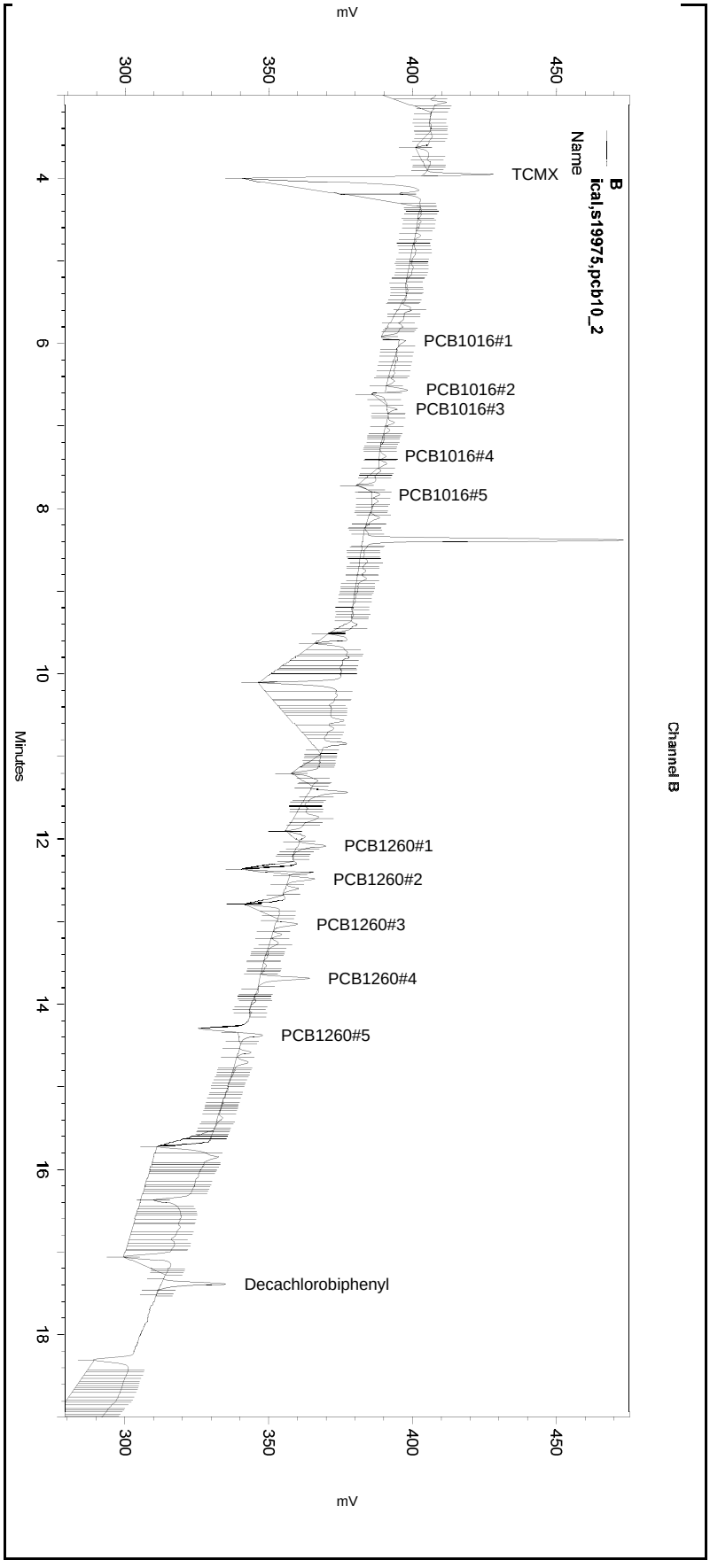
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.867	0	0
Yes	Reset Baseline	5.186	0	0
Yes	Reset Baseline	6.916	0	0
Yes	Reset Baseline	7.07	0	0
Yes	Reset Baseline	7.853	0	0
Yes	Reset Baseline	8.008	0	0
Yes	Reset Baseline	8.609	0	0
Yes	Reset Baseline	8.905	0	0
Yes	Reset Baseline	9.098	0	0
Yes	Reset Baseline	12.489	0	0
Yes	Reset Baseline	12.722	0	0
Yes	Reset Baseline	13.165	0	0
Yes	Reset Baseline	13.384	0	0
Yes	Reset Baseline	13.962	0	0
Yes	Reset Baseline	14.243	0	0
Yes	Reset Baseline	14.909	0	0
Yes	Reset Baseline	15.436	0	0
Yes	Reset Baseline	18.184	0	0

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:40:22 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.904	0	0
Yes	Move BL Stop	4	3.972	0
Yes	Move BL Start	5.92	5.953	0
Yes	Reset Baseline	6.03	0	0
Yes	Reset Baseline	6.591	0	0
Yes	Reset Baseline	6.746	0	0
Yes	Reset Baseline	7.418	0	0
Yes	Reset Baseline	7.788	0	0
Yes	Reset Baseline	7.976	0	0
Yes	Reset Baseline	12.033	0	0
Yes	Split Peak	12.119	0	0
Yes	Reset Baseline	12.26	0	0
Yes	Reset Baseline	12.437	0	0
Yes	Reset Baseline	12.675	0	0
Yes	Reset Baseline	12.974	0	0
Yes	Reset Baseline	13.786	0	0
Yes	Reset Baseline	14.16	0	0
Yes	Reset Baseline	14.341	0	0
Yes	Reset Baseline	14.473	0	0
Yes	Reset Baseline	17.273	0	0
Yes	Reset Baseline	17.548	0	0

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:08:07 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.777	4.763	20301	2.000 CAL
PCB1016#1	7.003	6.990	27824	10.000 CAL
PCB1016#2	7.640	7.627	33882	10.000 CAL
PCB1016#3	7.953	7.940	37352	10.000 CAL
PCB1016#4	8.423	8.410	17751	10.000 CAL
PCB1016#5	8.950	8.937	18533	10.000 CAL
PCB1260#1		12.530		0.000 BDL
PCB1260#2	13.220	13.210	11480	10.000 CAL
PCB1260#3	14.083	14.077	10620	10.000 CAL
PCB1260#4	14.827	14.820	13726	10.000 CAL
PCB1260#5	15.487	15.483	5885	10.000 CAL
Decachlorobiphenyl	18.110	18.103	22262	2.000 CAL

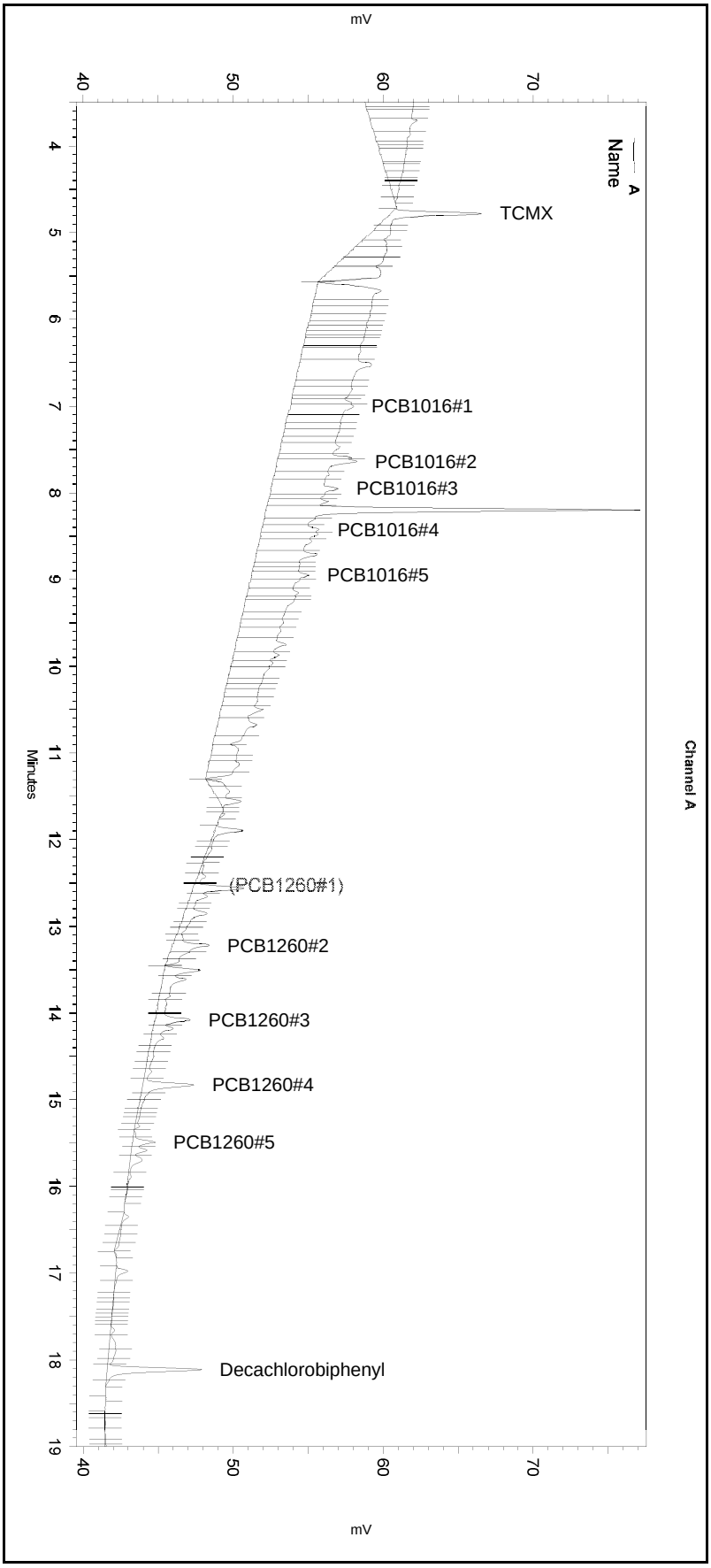
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.953	3.970	331451	2.000 CAL
PCB1016#1	5.970	5.983	38614	10.000 CAL
PCB1016#2	6.563	6.580	43604	10.000 CAL
PCB1016#3	6.790	6.803	18453	10.000 CAL
PCB1016#4	7.363	7.377	15266	10.000 CAL
PCB1016#5	7.833	7.847	28121	10.000 CAL
PCB1260#1	12.080	12.087	132212	10.000 CAL
PCB1260#2	12.487	12.497	135326	10.000 CAL
PCB1260#3	13.033	13.043	161807	10.000 CAL
PCB1260#4	13.693	13.700	217595	10.000 CAL
PCB1260#5	14.373	14.380	104386	10.000 CAL
Decachlorobiphenyl	17.387	17.390	273733	2.000 CAL

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:08:07 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

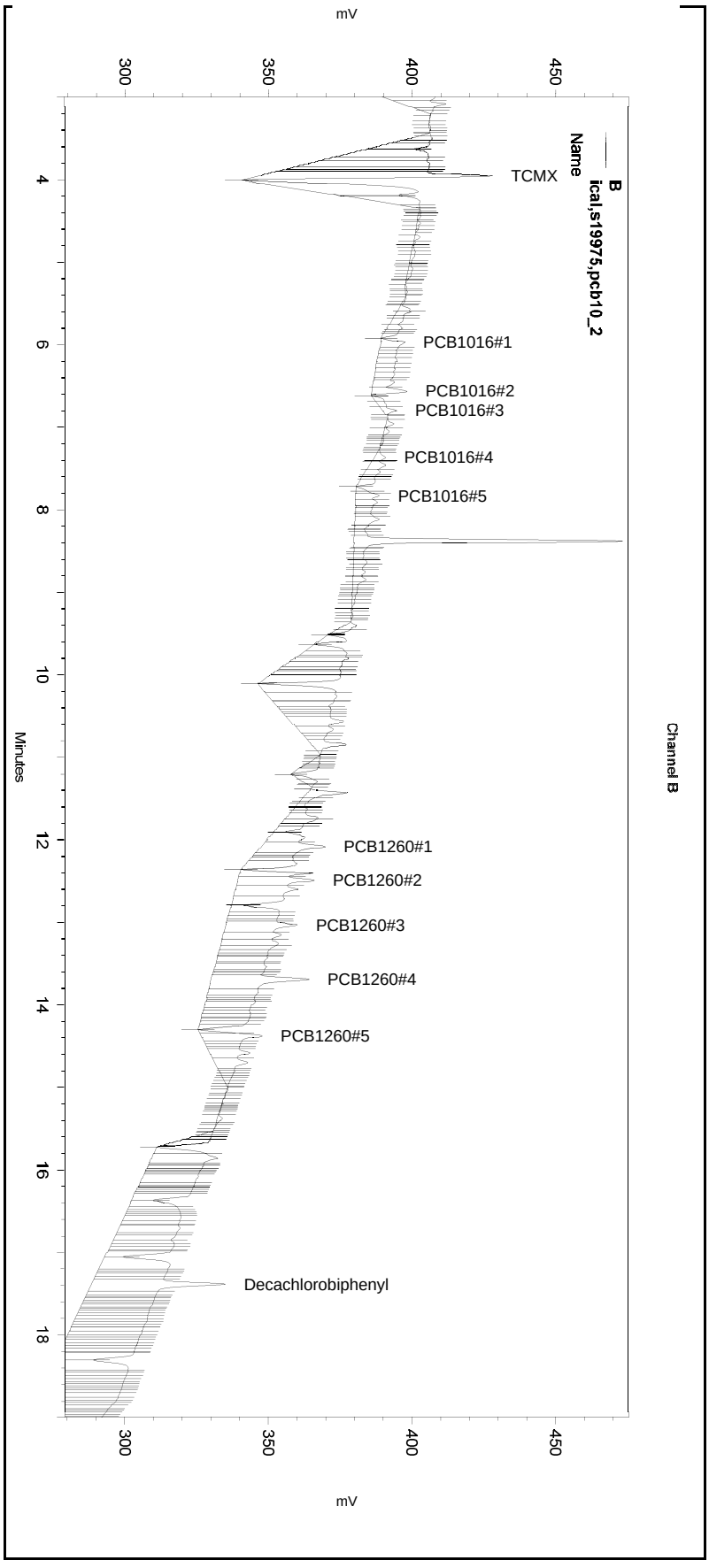
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:08:07 AM
Sample Amount: 1



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No items selected for this section

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Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:40:27 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.787	4.763	39595	5.000 CAL
PCB1016#1	7.017	7.004	3772	25.000 CAL
PCB1016#2	7.650	7.638	12921	25.000 CAL
PCB1016#3	7.963	7.951	6905	25.000 CAL
PCB1016#4	8.433	8.410	4228	25.000 CAL
PCB1016#5	8.960	8.937	5829	25.000 CAL
PCB1260#1	12.570	12.550	21675	25.000 CAL
PCB1260#2	13.230	13.210	16132	25.000 CAL
PCB1260#3	14.093	14.077	12506	25.000 CAL
PCB1260#4	14.837	14.820	27123	25.000 CAL
PCB1260#5	15.500	15.483	10963	25.000 CAL
Decachlorobiphenyl	18.123	18.103	51178	5.000 CAL

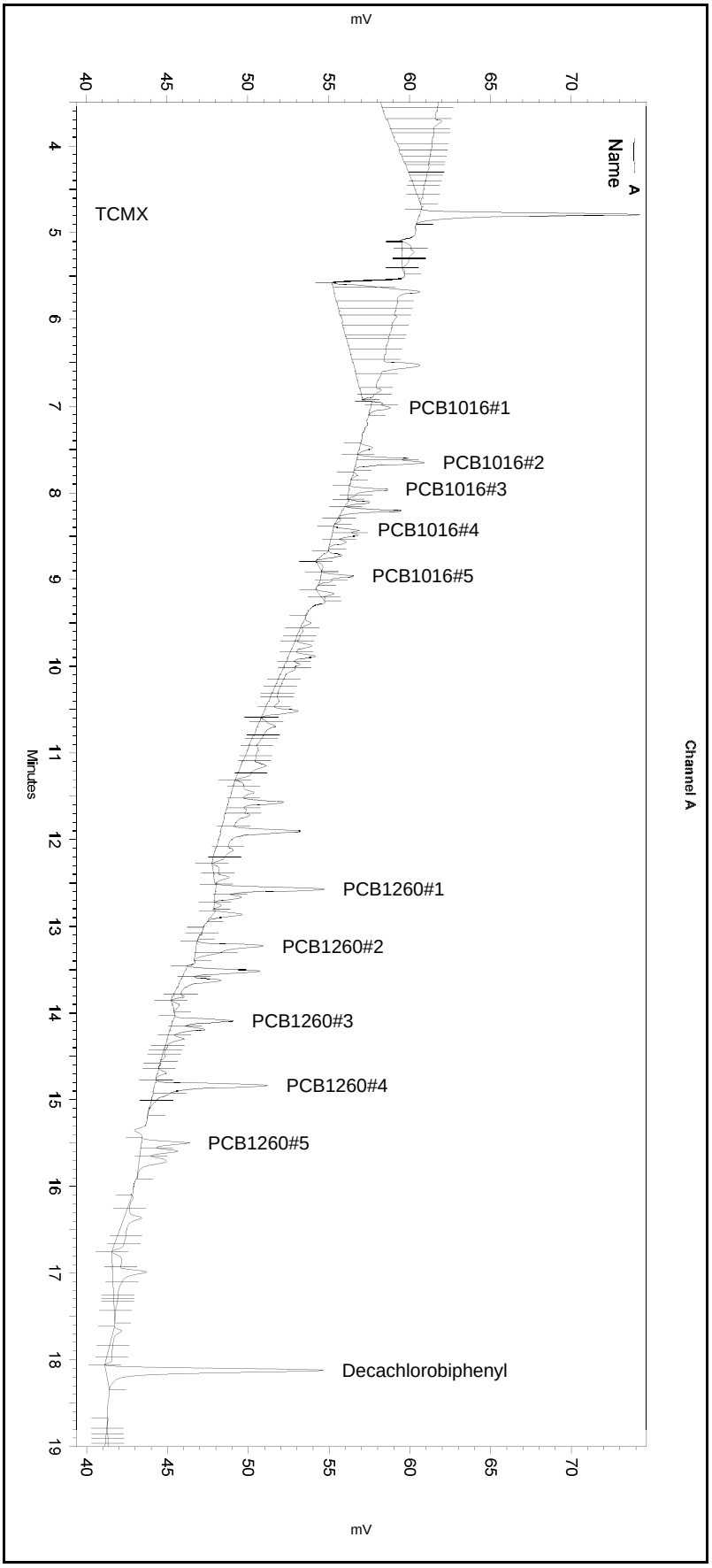
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.970	102216	5.000 CAL
PCB1016#1	5.990	5.983	9272	25.000 CAL
PCB1016#2	6.577	6.580	56063	25.000 CAL
PCB1016#3	6.800	6.803	21302	25.000 CAL
PCB1016#4	7.373	7.377	13052	25.000 CAL
PCB1016#5	7.843	7.847	17168	25.000 CAL
PCB1260#1	12.090	12.087	82531	25.000 CAL
PCB1260#2	12.497	12.497	55771	25.000 CAL
PCB1260#3	13.043	13.043	50285	25.000 CAL
PCB1260#4	13.703	13.700	117444	25.000 CAL
PCB1260#5	14.387	14.380	38667	25.000 CAL
Decachlorobiphenyl	17.397	17.390	165331	5.000 CAL

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:40:27 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

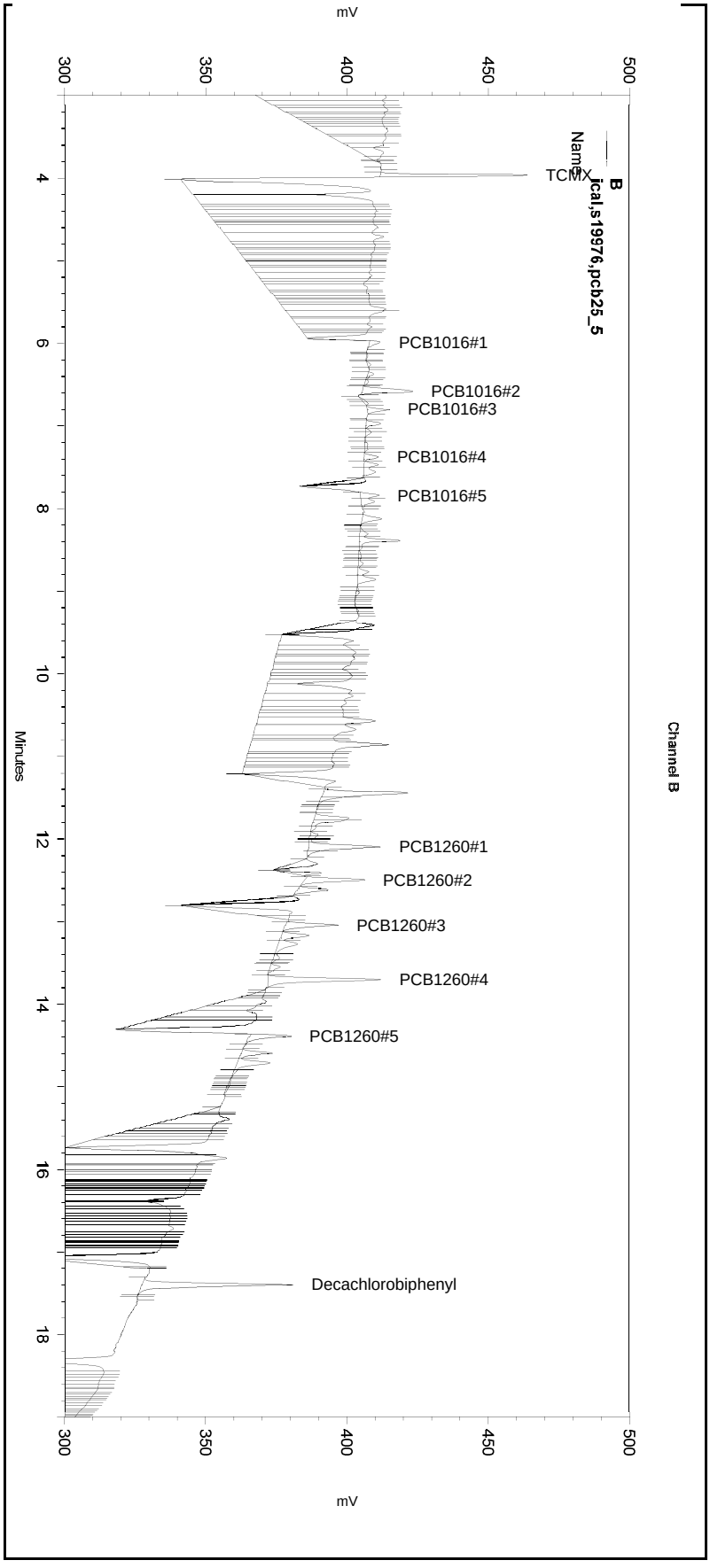
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.895	0	0
Yes	Reset Baseline	6.921	0	0
Yes	Reset Baseline	6.94	0	0
Yes	Reset Baseline	7.118	0	0
Yes	Reset Baseline	7.739	0	0
Yes	Reset Baseline	8.071	0	0
Yes	Reset Baseline	8.648	0	0
Yes	Reset Baseline	8.906	0	0
Yes	Reset Baseline	9.062	0	0
Yes	Reset Baseline	12.509	0	0
Yes	Reset Baseline	12.815	0	0
Yes	Reset Baseline	13.156	0	0
Yes	Reset Baseline	13.397	0	0
Yes	Reset Baseline	14.018	0	0
Yes	Reset Baseline	15.208	0	0
Yes	Reset Baseline	15.424	0	0
Yes	Reset Baseline	15.907	0	0
Yes	Reset Baseline	18.347	0	0

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:40:27 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.906	0	0
Yes	Reset Baseline	3.918	0	0
Yes	Move BL Stop	4.01	3.987	0
Yes	Move BL Start	5.933	5.972	0
Yes	Reset Baseline	6.072	0	0
Yes	Reset Baseline	6.62	0	0
Yes	Reset Baseline	6.746	0	0
Yes	Reset Baseline	6.857	0	0
Yes	Reset Baseline	7.619	0	0
Yes	Reset Baseline	7.804	0	0
Yes	Reset Baseline	8.015	0	0
Yes	Reset Baseline	12.217	0	0
Yes	Reset Baseline	12.456	0	0
Yes	Reset Baseline	12.683	0	0
Yes	Reset Baseline	12.694	0	0
Yes	Reset Baseline	12.975	0	0
Yes	Reset Baseline	13.793	0	0
Yes	Move BL Start	14.313	14.362	0
Yes	Reset Baseline	14.539	0	0
Yes	Reset Baseline	17.577	0	0

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:08:12 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.787	4.763	42143	5.000 CAL
PCB1016#1	6.967	6.990	11253	25.000 CAL
PCB1016#2	7.607	7.627	16378	25.000 CAL
PCB1016#3	7.963	7.940	24358	25.000 CAL
PCB1016#4	8.433	8.410	8733	25.000 CAL
PCB1016#5	8.960	8.937	7767	25.000 CAL
PCB1260#1		12.530		0.000 BDL
PCB1260#2	13.230	13.210	21006	25.000 CAL
PCB1260#3	14.093	14.077	17267	25.000 CAL
PCB1260#4	14.837	14.820	31800	25.000 CAL
PCB1260#5	15.500	15.483	15485	25.000 CAL
Decachlorobiphenyl	18.123	18.103	54704	5.000 CAL

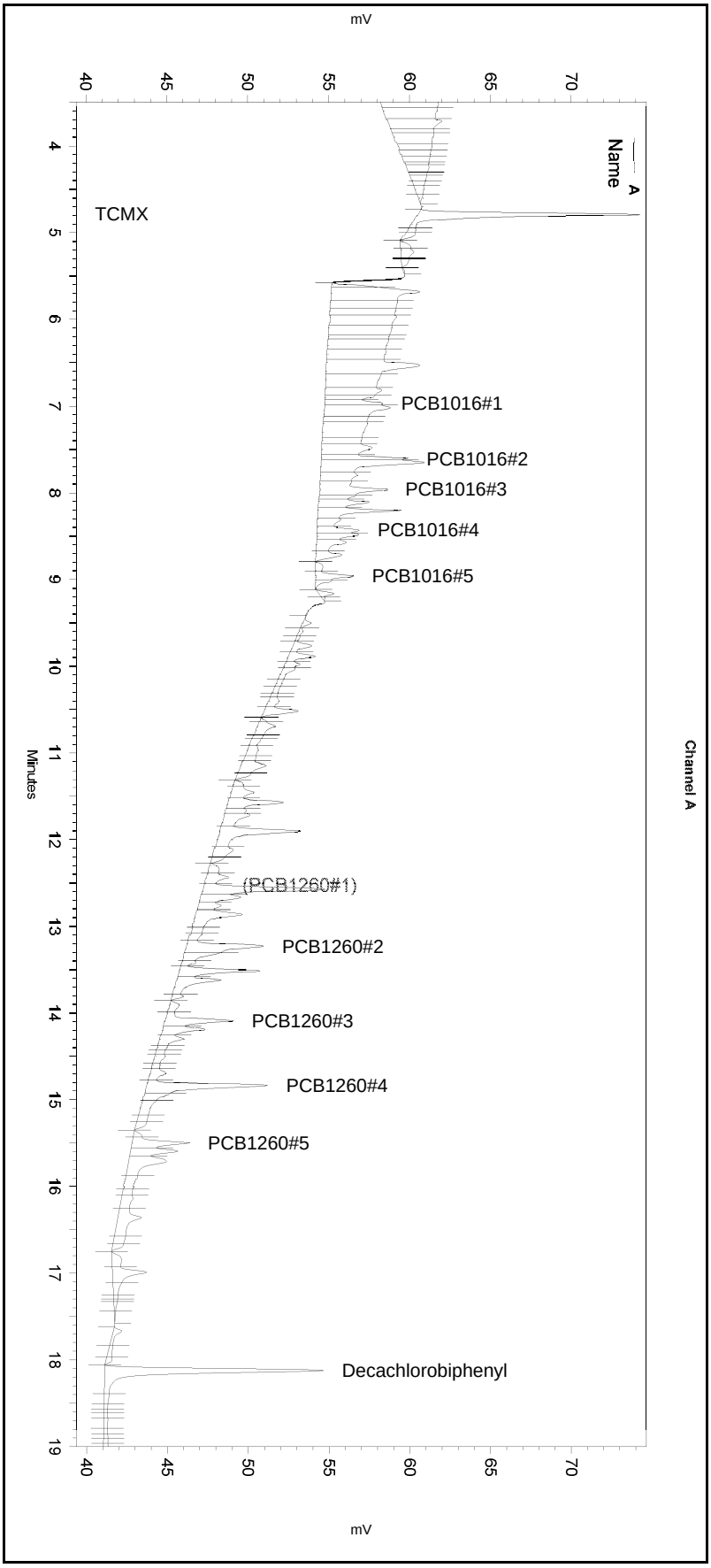
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.970	299430	5.000 CAL
PCB1016#1	5.990	5.983	127203	25.000 CAL
PCB1016#2	6.577	6.580	70837	25.000 CAL
PCB1016#3	6.800	6.803	79155	25.000 CAL
PCB1016#4	7.373	7.377	112142	25.000 CAL
PCB1016#5	7.843	7.847	102914	25.000 CAL
PCB1260#1	12.090	12.087	187843	25.000 CAL
PCB1260#2	12.497	12.497	279229	25.000 CAL
PCB1260#3	13.043	13.043	376067	25.000 CAL
PCB1260#4	13.703	13.700	520050	25.000 CAL
PCB1260#5	14.387	14.380	395564	25.000 CAL
Decachlorobiphenyl	17.397	17.390	214959	5.000 CAL

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:08:12 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

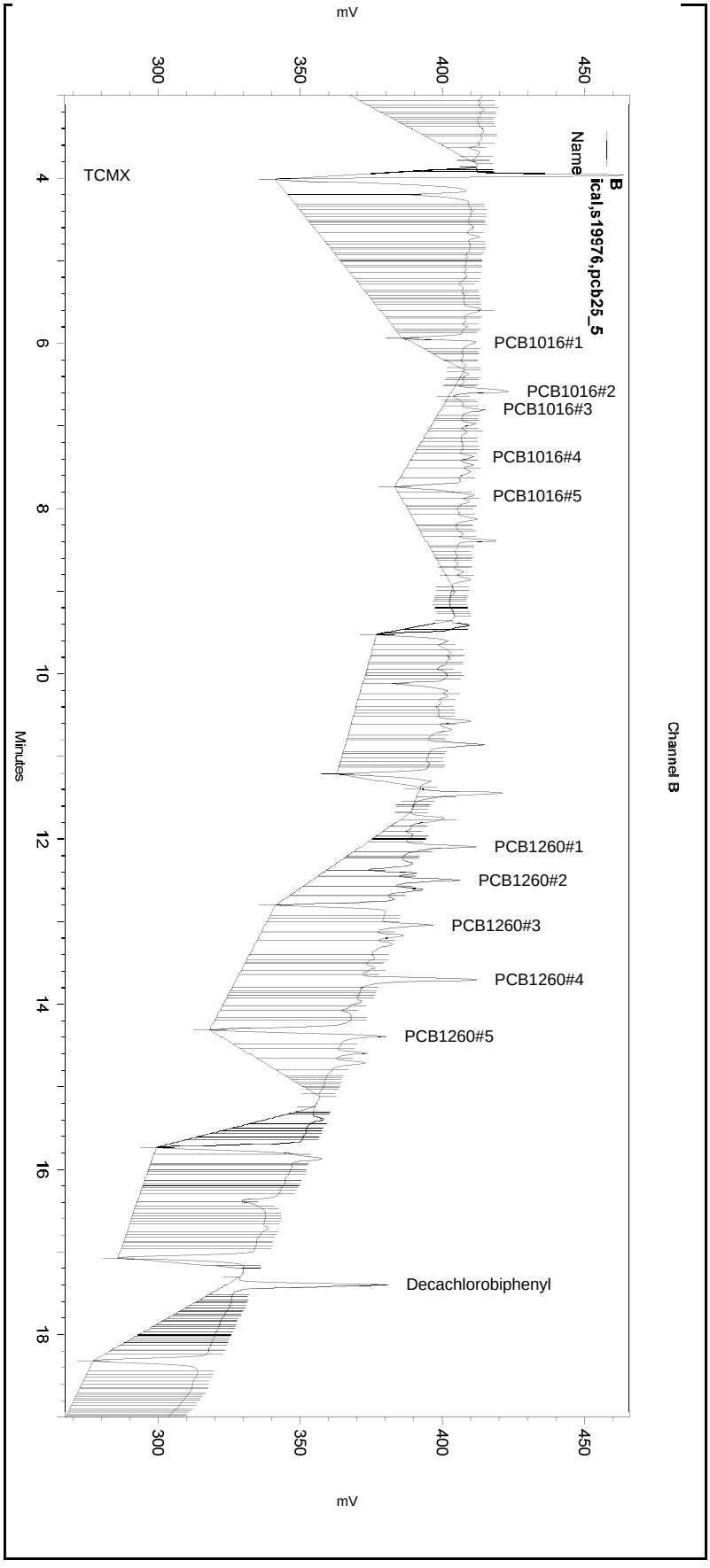
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:08:12 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:40:33 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	140440	20.000 CAL
PCB1016#1	6.990	7.004	14405	100.000 CAL
PCB1016#2	7.627	7.638	45883	100.000 CAL
PCB1016#3	7.940	7.951	24460	100.000 CAL
PCB1016#4	8.410	8.410	14798	100.000 CAL
PCB1016#5	8.937	8.937	21394	100.000 CAL
PCB1260#1	12.550	12.550	80957	100.000 CAL
PCB1260#2	13.210	13.210	60517	100.000 CAL
PCB1260#3	14.077	14.077	45197	100.000 CAL
PCB1260#4	14.820	14.820	102306	100.000 CAL
PCB1260#5	15.480	15.483	43893	100.000 CAL
Decachlorobiphenyl	18.103	18.103	170938	20.000 CAL

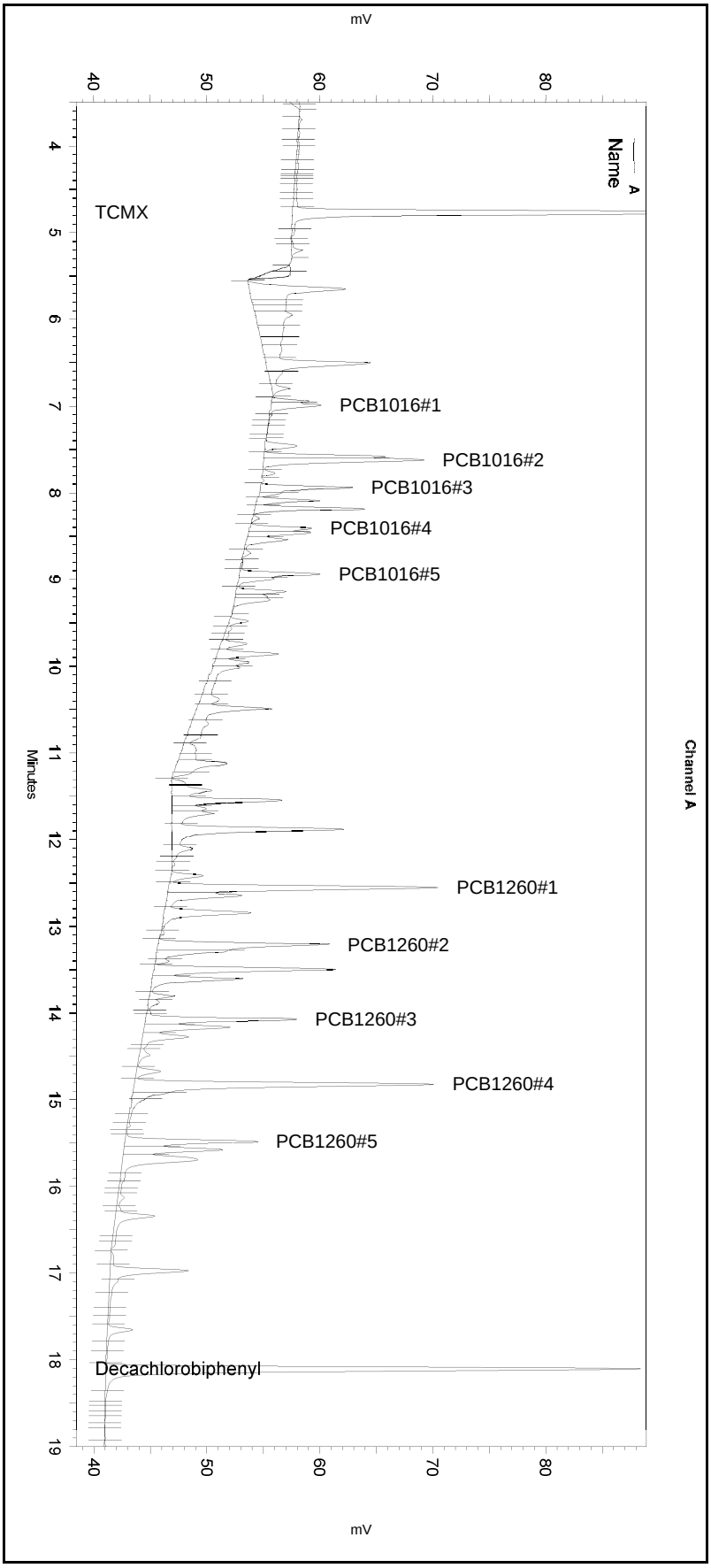
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	336272	20.000 CAL
PCB1016#1	5.983	5.983	74765	100.000 CAL
PCB1016#2	6.580	6.580	203994	100.000 CAL
PCB1016#3	6.800	6.803	80681	100.000 CAL
PCB1016#4	7.373	7.377	44204	100.000 CAL
PCB1016#5	7.843	7.847	57333	100.000 CAL
PCB1260#1	12.087	12.087	264593	100.000 CAL
PCB1260#2	12.493	12.497	224117	100.000 CAL
PCB1260#3	13.040	13.043	173068	100.000 CAL
PCB1260#4	13.697	13.700	409823	100.000 CAL
PCB1260#5	14.380	14.380	166353	100.000 CAL
Decachlorobiphenyl	17.390	17.390	515630	20.000 CAL

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:40:33 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

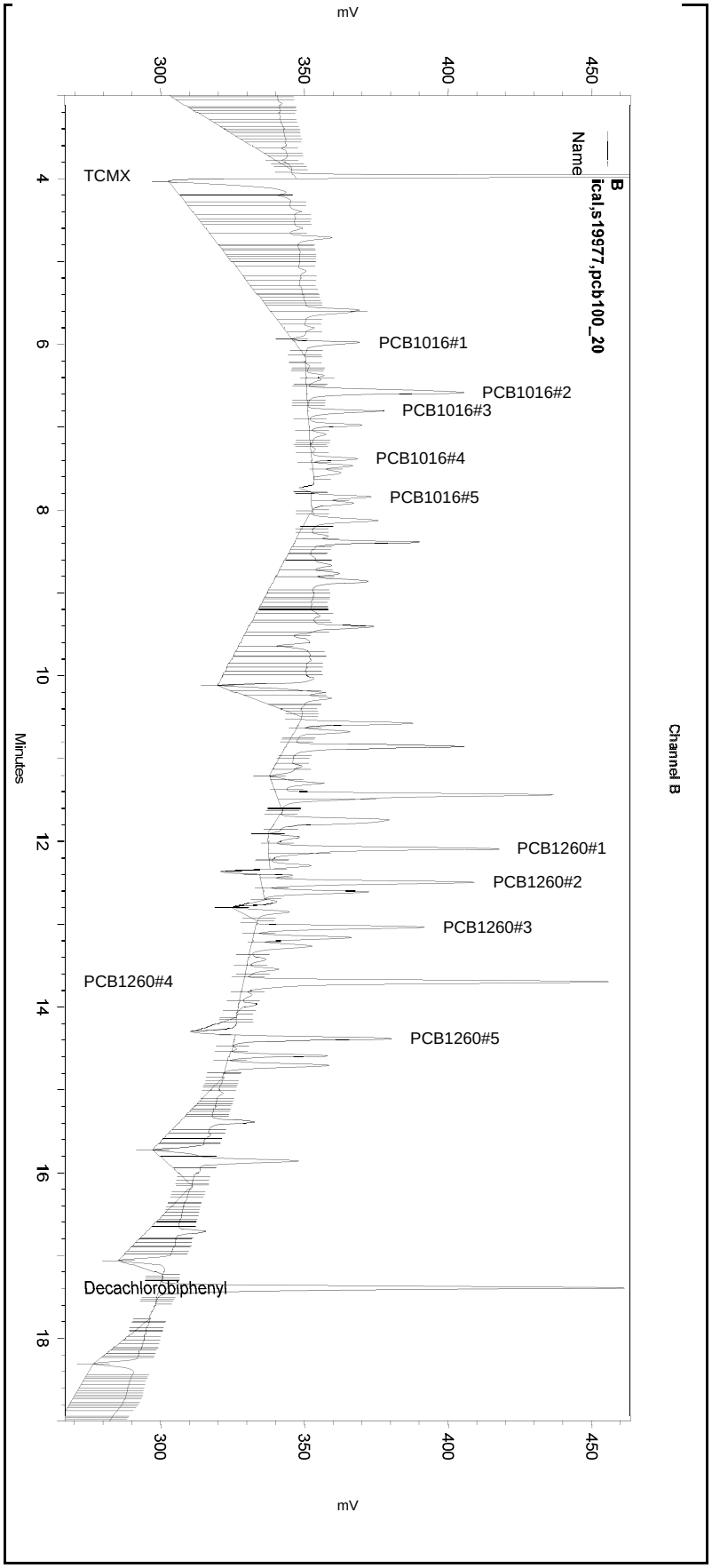
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.276	0	0
Yes	Reset Baseline	6.874	0	0
Yes	Reset Baseline	7.846	0	0
Yes	Reset Baseline	12.344	0	0

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:40:33 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.893	0	0
Yes	Move BL Stop	4.023	4.001	0
Yes	Reset Baseline	5.929	0	0
Yes	Reset Baseline	6.163	0	0
Yes	Reset Baseline	7.647	0	0
Yes	Reset Baseline	7.791	0	0
Yes	Reset Baseline	8.003	0	0
Yes	Reset Baseline	12.333	0	0
Yes	Reset Baseline	12.39	0	0
Yes	Reset Baseline	12.697	0	0
Yes	Reset Baseline	12.957	0	0
Yes	Reset Baseline	14.093	0	0
Yes	Reset Baseline	14.337	0	0
Yes	Reset Baseline	14.835	0	0
Yes	Reset Baseline	17.227	0	0
Yes	Reset Baseline	17.606	0	0

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:08:18 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	175447	20.000 CAL
PCB1016#1	6.990	6.990	33903	100.000 CAL
PCB1016#2	7.627	7.627	62706	100.000 CAL
PCB1016#3	7.940	7.940	37117	100.000 CAL
PCB1016#4	8.410	8.410	20995	100.000 CAL
PCB1016#5	8.937	8.937	24267	100.000 CAL
PCB1260#1	12.550	12.530	88729	100.000 CAL
PCB1260#2	13.210	13.210	66527	100.000 CAL
PCB1260#3	14.077	14.077	48421	100.000 CAL
PCB1260#4	14.820	14.820	104070	100.000 CAL
PCB1260#5	15.480	15.483	43893	100.000 CAL
Decachlorobiphenyl	18.103	18.103	170938	20.000 CAL

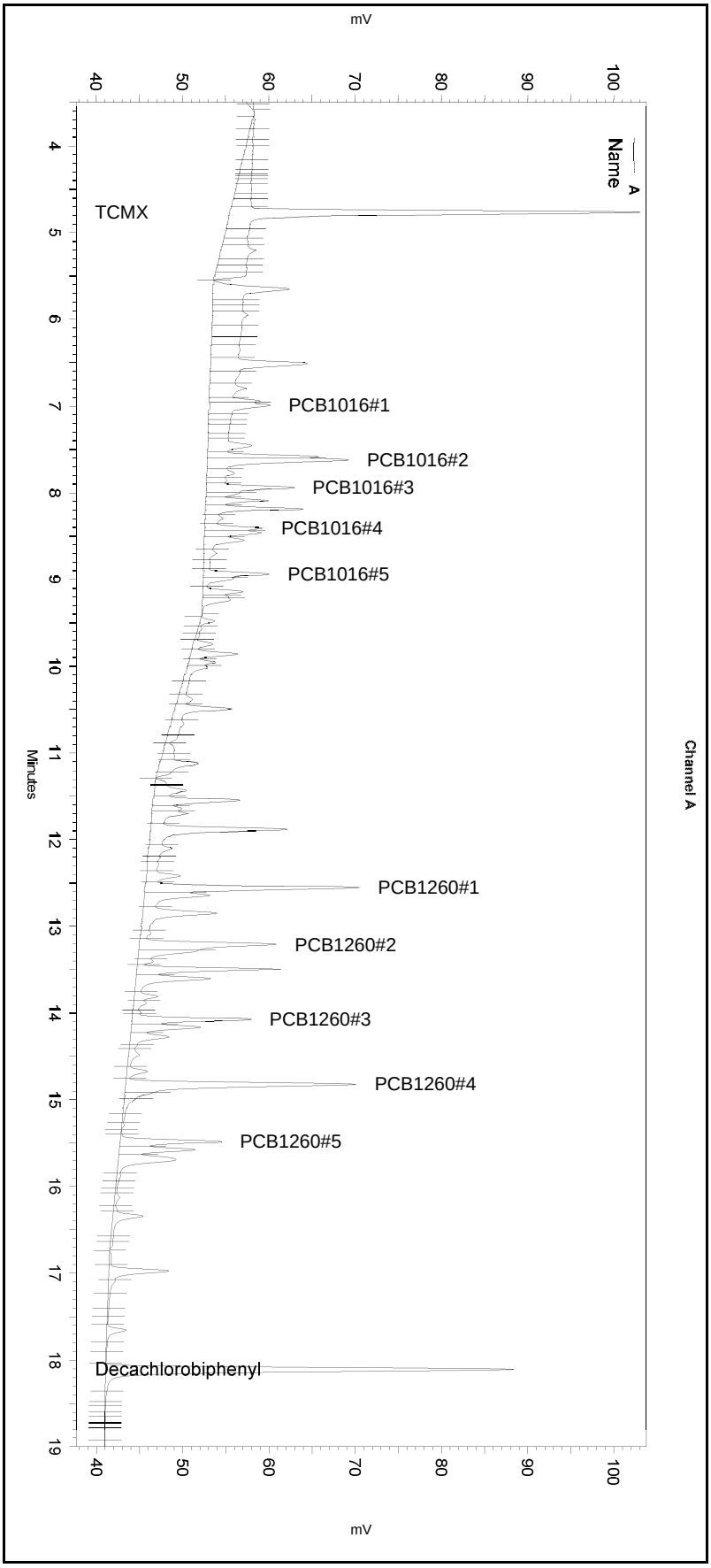
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	731652	20.000 CAL
PCB1016#1	5.983	5.983	557592	100.000 CAL
PCB1016#2	6.580	6.580	760646	100.000 CAL
PCB1016#3	6.800	6.803	604729	100.000 CAL
PCB1016#4	7.373	7.377	431950	100.000 CAL
PCB1016#5	7.843	7.847	335764	100.000 CAL
PCB1260#1	12.087	12.087	324866	100.000 CAL
PCB1260#2	12.493	12.497	334746	100.000 CAL
PCB1260#3	13.040	13.043	312711	100.000 CAL
PCB1260#4	13.697	13.700	604107	100.000 CAL
PCB1260#5	14.380	14.380	334172	100.000 CAL
Decachlorobiphenyl	17.390	17.390	733493	20.000 CAL

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:08:18 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

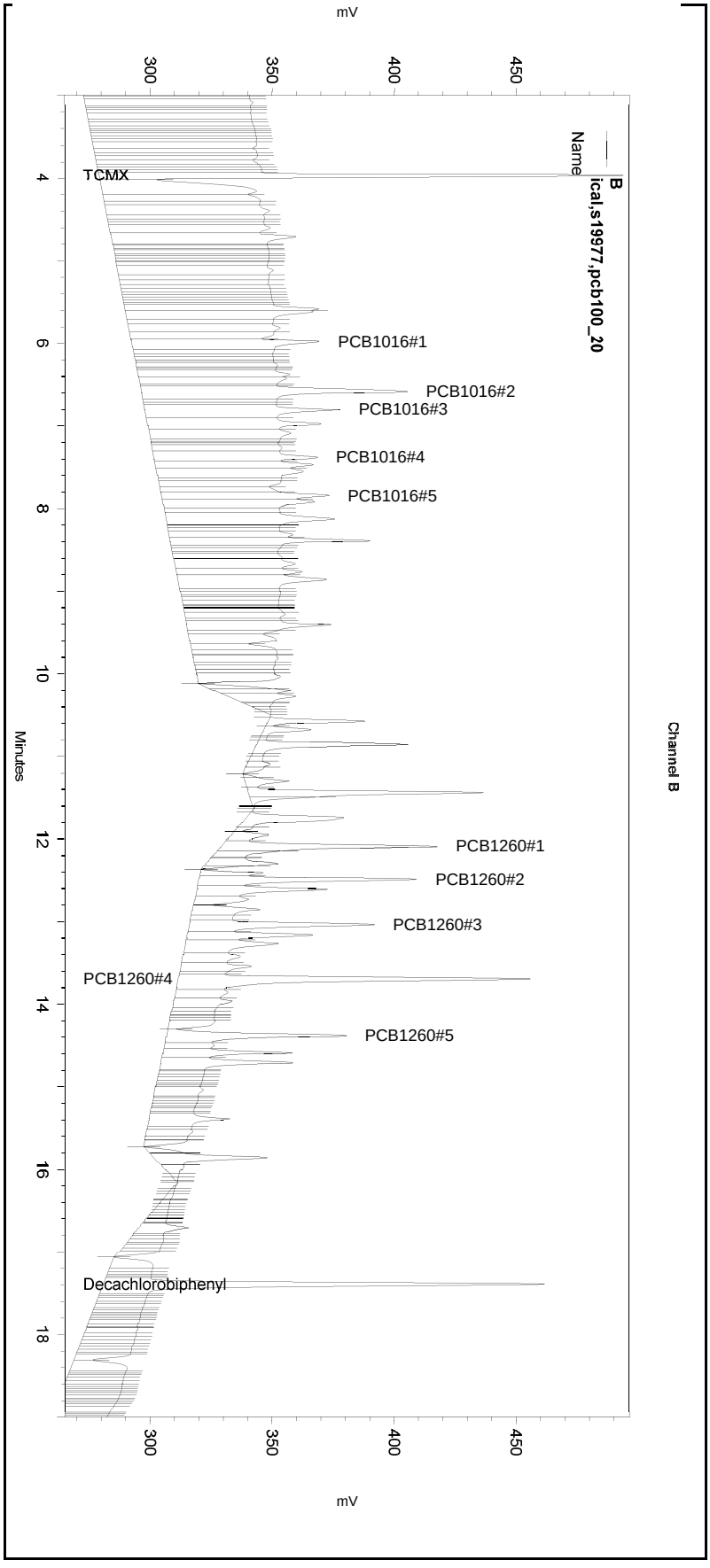
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:08:18 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:47:45 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	325280	50.000 CAL
PCB1016#1	6.990	7.004	32977	250.000 CAL
PCB1016#2	7.627	7.638	109472	250.000 CAL
PCB1016#3	7.940	7.951	62920	250.000 CAL
PCB1016#4	8.410	8.410	36376	250.000 CAL
PCB1016#5	8.937	8.937	51336	250.000 CAL
PCB1260#1	12.550	12.550	183250	250.000 CAL
PCB1260#2	13.210	13.210	147817	250.000 CAL
PCB1260#3	14.077	14.077	104832	250.000 CAL
PCB1260#4	14.820	14.820	241192	250.000 CAL
PCB1260#5	15.483	15.483	102689	250.000 CAL
Decachlorobiphenyl	18.103	18.103	385340	50.000 CAL

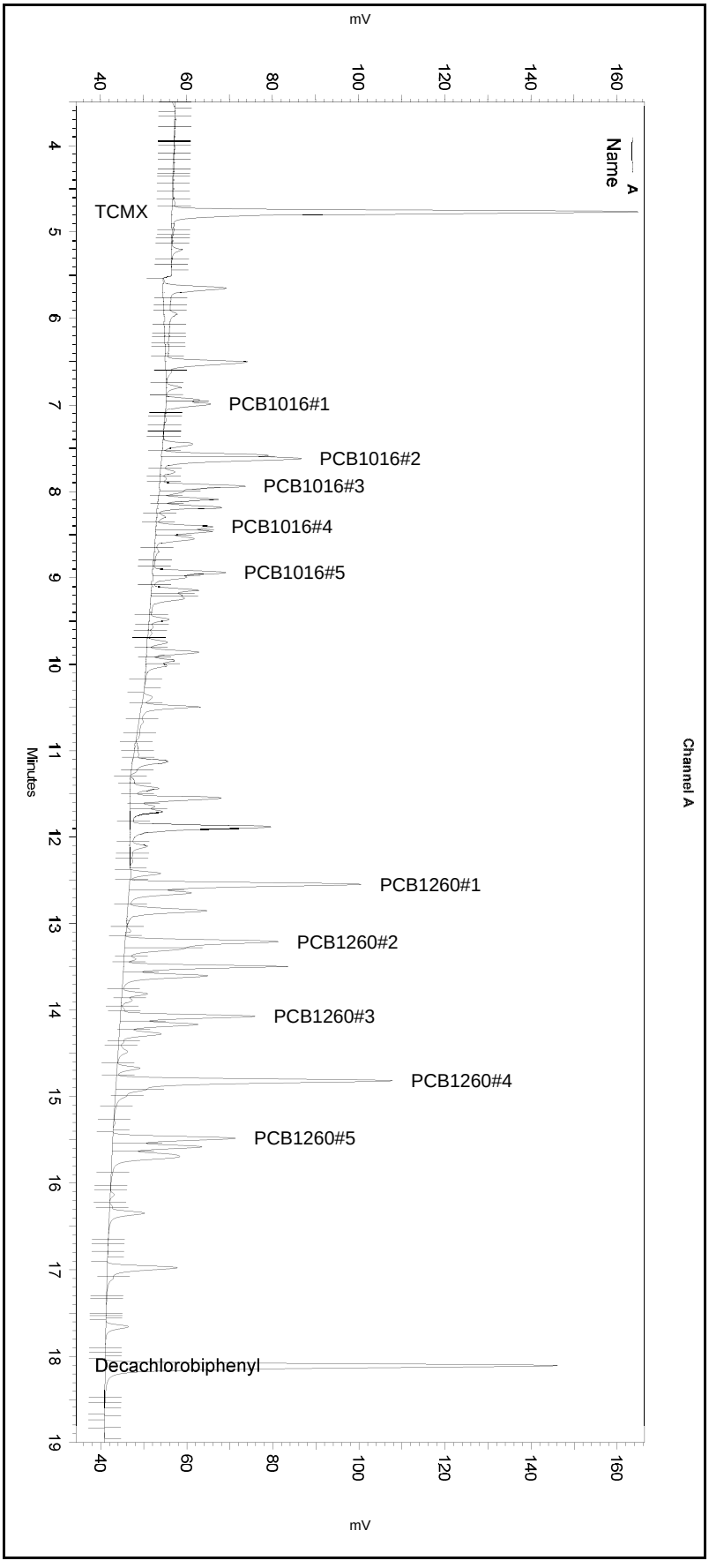
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	827591	50.000 CAL
PCB1016#1	5.983	5.983	137565	250.000 CAL
PCB1016#2	6.580	6.580	473753	250.000 CAL
PCB1016#3	6.803	6.803	196752	250.000 CAL
PCB1016#4	7.377	7.377	114094	250.000 CAL
PCB1016#5	7.847	7.847	134490	250.000 CAL
PCB1260#1	12.087	12.087	575982	250.000 CAL
PCB1260#2	12.497	12.497	475460	250.000 CAL
PCB1260#3	13.043	13.043	396095	250.000 CAL
PCB1260#4	13.700	13.700	907509	250.000 CAL
PCB1260#5	14.380	14.380	436868	250.000 CAL
Decachlorobiphenyl	17.390	17.390	1095183	50.000 CAL

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:47:45 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

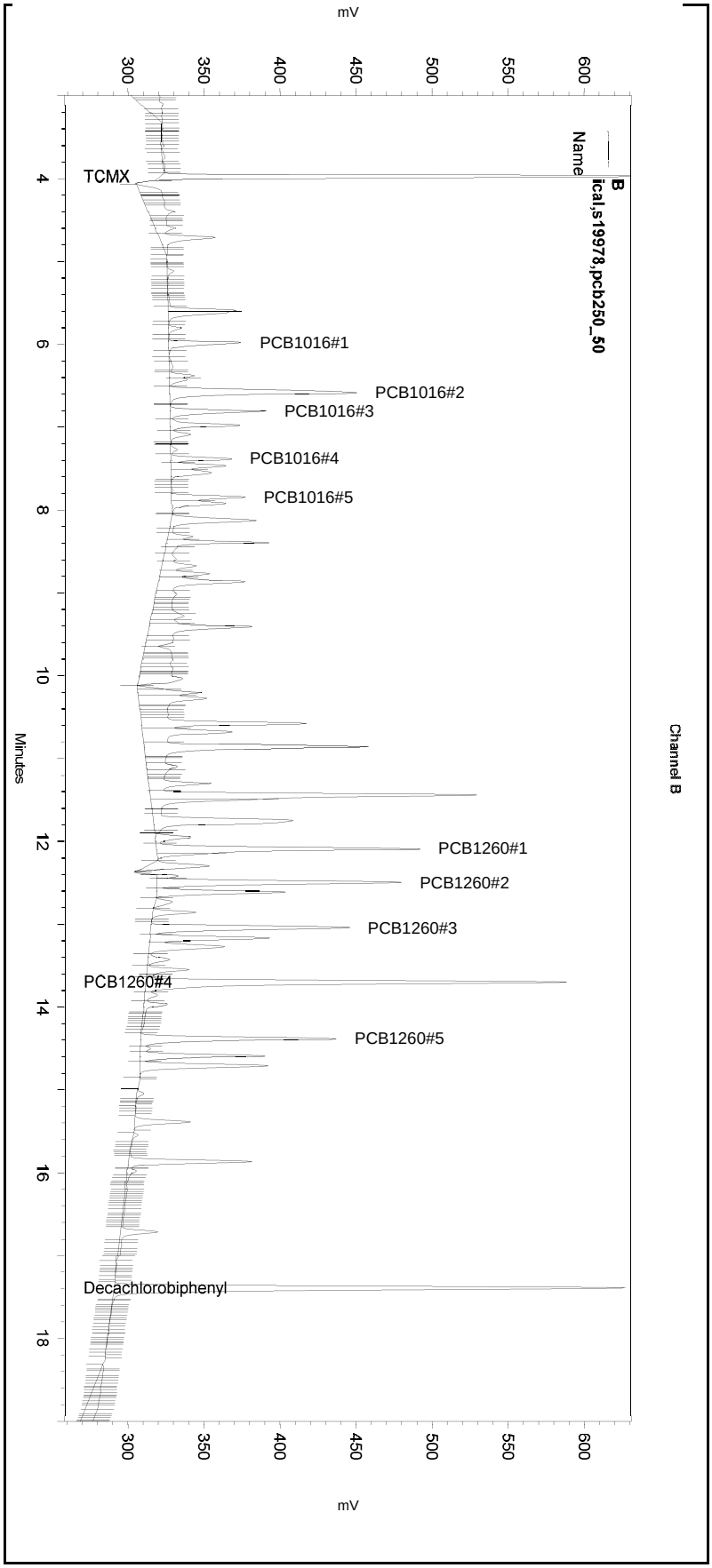
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.873	0	0
Yes	Reset Baseline	12.362	0	0

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:47:45 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.92	0	0
Yes	Reset Baseline	4.023	0	0
Yes	Reset Baseline	8.05	0	0
Yes	Reset Baseline	12.23	0	0
Yes	Manual Baseline	12.395	12.685	0
Yes	Reset Baseline	12.438	0	0

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:08:25 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	325280	50.000 CAL
PCB1016#1	6.990	6.990	48771	250.000 CAL
PCB1016#2	7.627	7.627	121864	250.000 CAL
PCB1016#3	7.940	7.940	72006	250.000 CAL
PCB1016#4	8.410	8.410	42092	250.000 CAL
PCB1016#5	8.937	8.937	56600	250.000 CAL
PCB1260#1	12.550	12.530	191375	250.000 CAL
PCB1260#2	13.210	13.210	153439	250.000 CAL
PCB1260#3	14.077	14.077	107747	250.000 CAL
PCB1260#4	14.820	14.820	242864	250.000 CAL
PCB1260#5	15.483	15.483	102689	250.000 CAL
Decachlorobiphenyl	18.103	18.103	385340	50.000 CAL

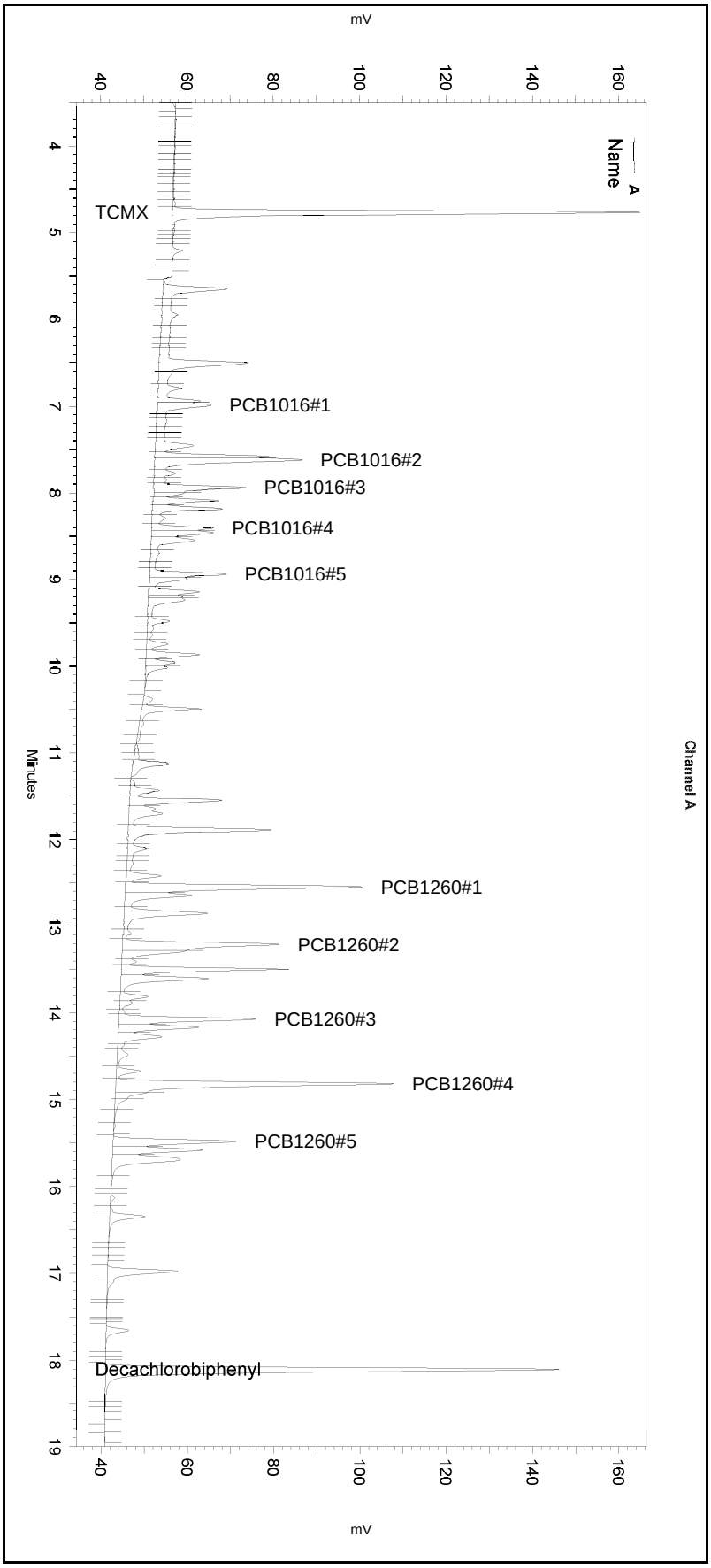
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	922308	50.000 CAL
PCB1016#1	5.983	5.983	182309	250.000 CAL
PCB1016#2	6.580	6.580	573838	250.000 CAL
PCB1016#3	6.803	6.803	287939	250.000 CAL
PCB1016#4	7.377	7.377	193495	250.000 CAL
PCB1016#5	7.847	7.847	221298	250.000 CAL
PCB1260#1	12.087	12.087	680465	250.000 CAL
PCB1260#2	12.497	12.497	579033	250.000 CAL
PCB1260#3	13.043	13.043	484635	250.000 CAL
PCB1260#4	13.700	13.700	964210	250.000 CAL
PCB1260#5	14.380	14.380	449722	250.000 CAL
Decachlorobiphenyl	17.390	17.390	1095183	50.000 CAL

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:08:25 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

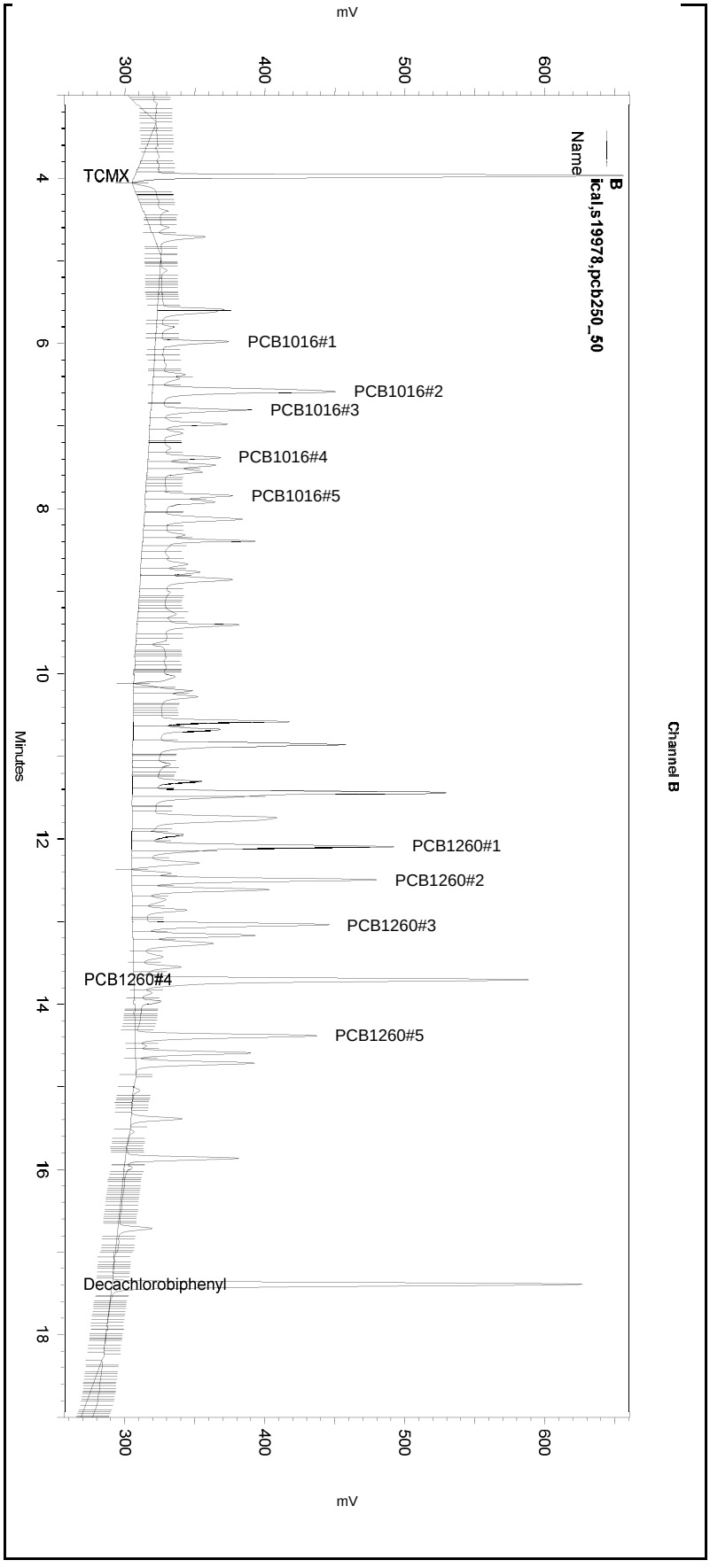
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:08:25 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:43:10 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	596169	100.000 CAL
PCB1016#1	6.997	7.004	66250	500.000 CAL
PCB1016#2	7.630	7.638	192643	500.000 CAL
PCB1016#3	7.947	7.951	111882	500.000 CAL
PCB1016#4	8.417	8.410	60139	500.000 CAL
PCB1016#5	8.943	8.937	87966	500.000 CAL
PCB1260#1	12.553	12.550	321448	500.000 CAL
PCB1260#2	13.213	13.210	259709	500.000 CAL
PCB1260#3	14.080	14.077	186170	500.000 CAL
PCB1260#4	14.823	14.820	429866	500.000 CAL
PCB1260#5	15.487	15.483	185707	500.000 CAL
Decachlorobiphenyl	18.107	18.103	664993	100.000 CAL

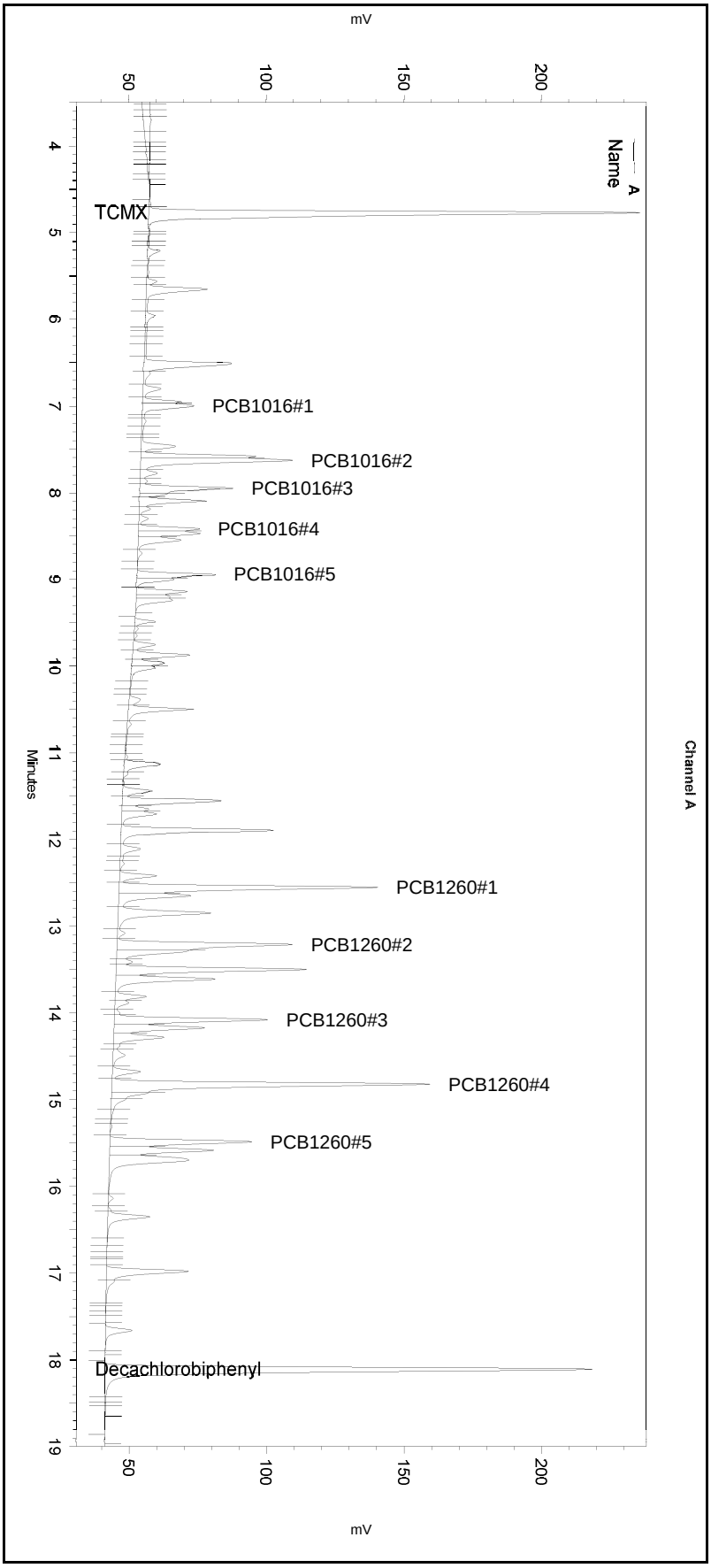
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.973	3.970	1690248	100.000 CAL
PCB1016#1	5.993	5.983	263242	500.000 CAL
PCB1016#2	6.587	6.580	832006	500.000 CAL
PCB1016#3	6.810	6.803	356144	500.000 CAL
PCB1016#4	7.383	7.377	205998	500.000 CAL
PCB1016#5	7.853	7.847	237285	500.000 CAL
PCB1260#1	12.090	12.087	990522	500.000 CAL
PCB1260#2	12.500	12.497	877326	500.000 CAL
PCB1260#3	13.047	13.043	681996	500.000 CAL
PCB1260#4	13.703	13.700	1540112	500.000 CAL
PCB1260#5	14.383	14.380	757230	500.000 CAL
Decachlorobiphenyl	17.393	17.390	1819990	100.000 CAL

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:43:10 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

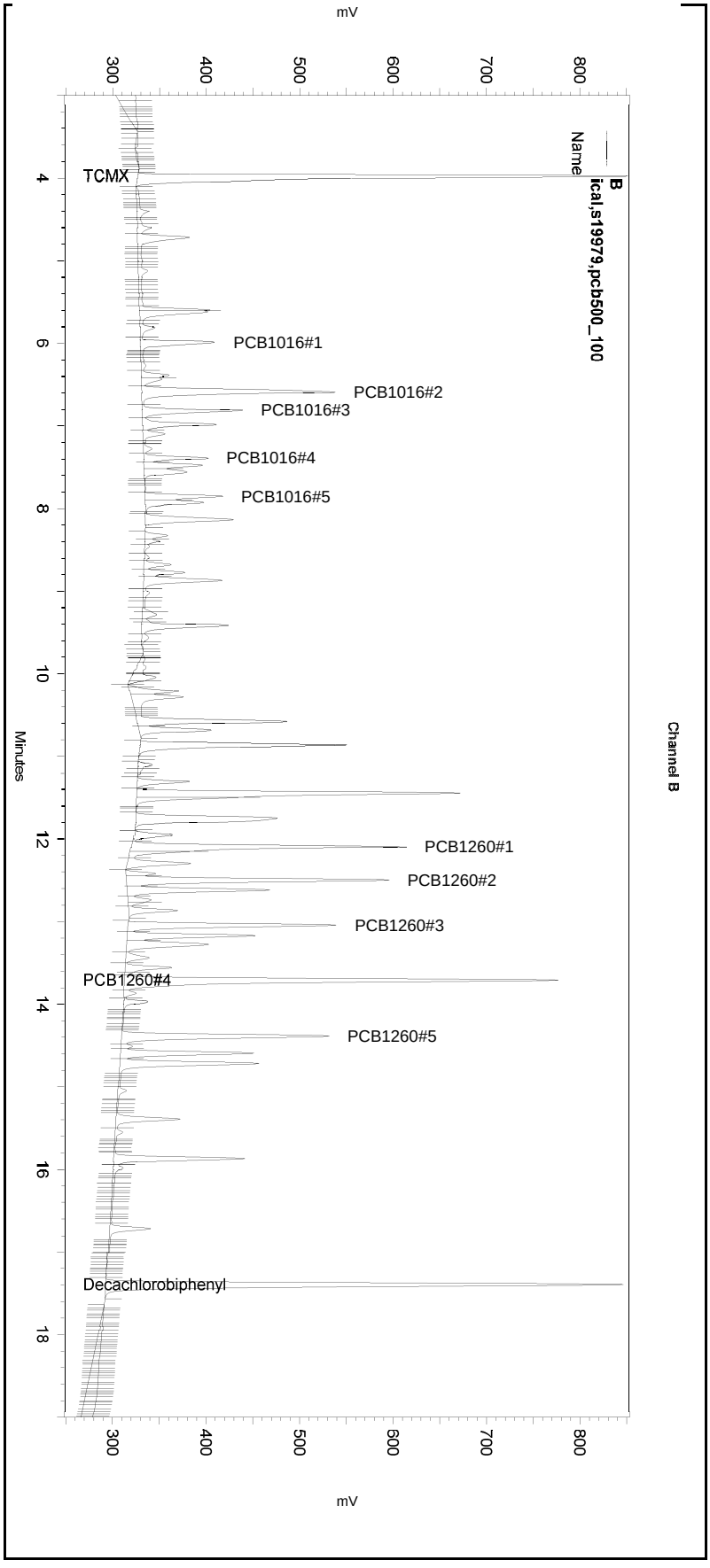
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.482	0	0
Yes	Reset Baseline	9.388	0	0

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:43:10 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.884	0	0
Yes	Reset Baseline	8.235	0	0
Yes	Reset Baseline	12.955	0	0
Yes	Reset Baseline	17.569	0	0

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:08:30 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	682805	100.000 CAL
PCB1016#1	6.997	6.990	104536	500.000 CAL
PCB1016#2	7.630	7.627	227290	500.000 CAL
PCB1016#3	7.947	7.940	139983	500.000 CAL
PCB1016#4	8.417	8.410	80815	500.000 CAL
PCB1016#5	8.943	8.937	114959	500.000 CAL
PCB1260#1	12.553	12.530	328279	500.000 CAL
PCB1260#2	13.213	13.210	265518	500.000 CAL
PCB1260#3	14.080	14.077	189374	500.000 CAL
PCB1260#4	14.823	14.820	432144	500.000 CAL
PCB1260#5	15.487	15.483	186280	500.000 CAL
Decachlorobiphenyl	18.107	18.103	664993	100.000 CAL

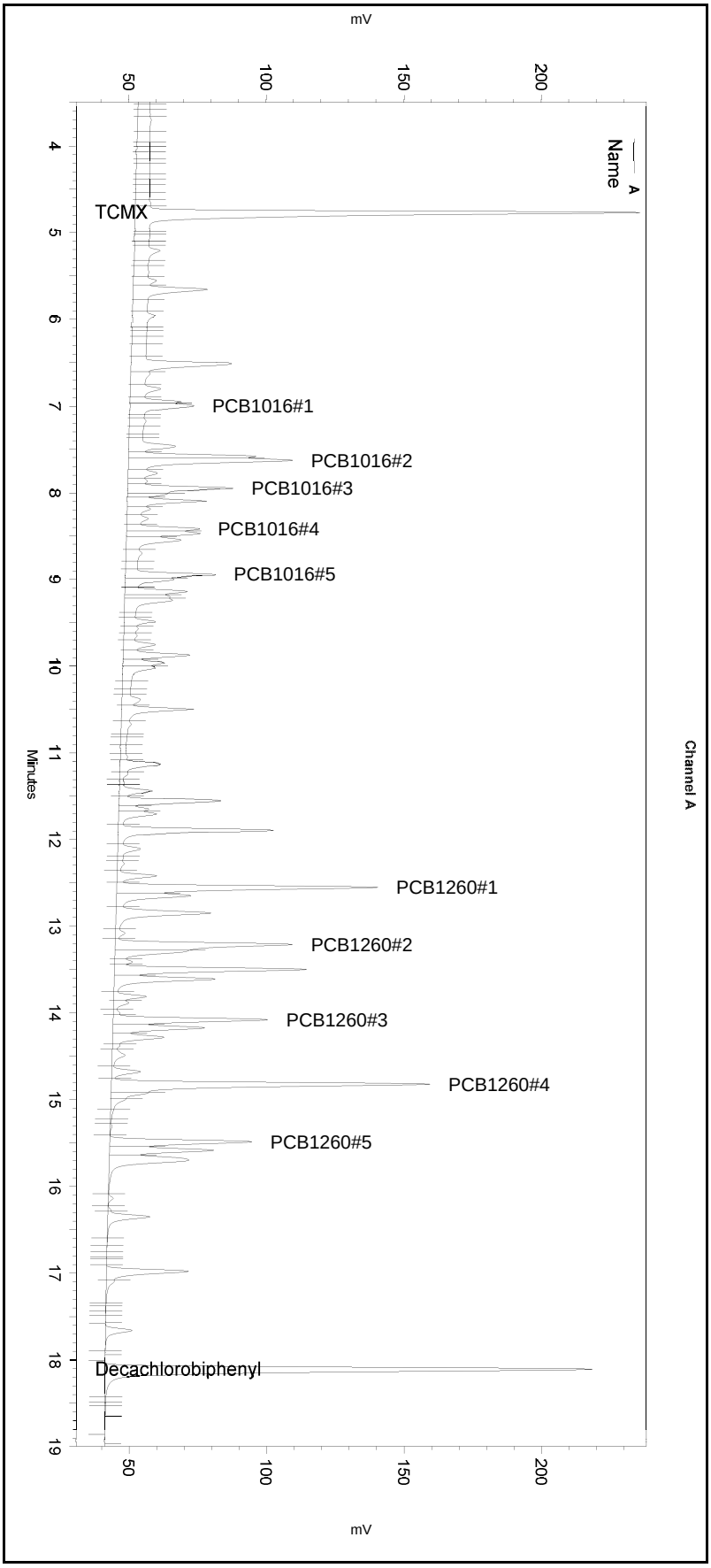
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.973	3.970	1716249	100.000 CAL
PCB1016#1	5.993	5.983	297728	500.000 CAL
PCB1016#2	6.587	6.580	888220	500.000 CAL
PCB1016#3	6.810	6.803	400449	500.000 CAL
PCB1016#4	7.383	7.377	239714	500.000 CAL
PCB1016#5	7.853	7.847	272915	500.000 CAL
PCB1260#1	12.090	12.087	990522	500.000 CAL
PCB1260#2	12.500	12.497	892620	500.000 CAL
PCB1260#3	13.047	13.043	761459	500.000 CAL
PCB1260#4	13.703	13.700	1667648	500.000 CAL
PCB1260#5	14.383	14.380	898685	500.000 CAL
Decachlorobiphenyl	17.393	17.390	2210059	100.000 CAL

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:08:30 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

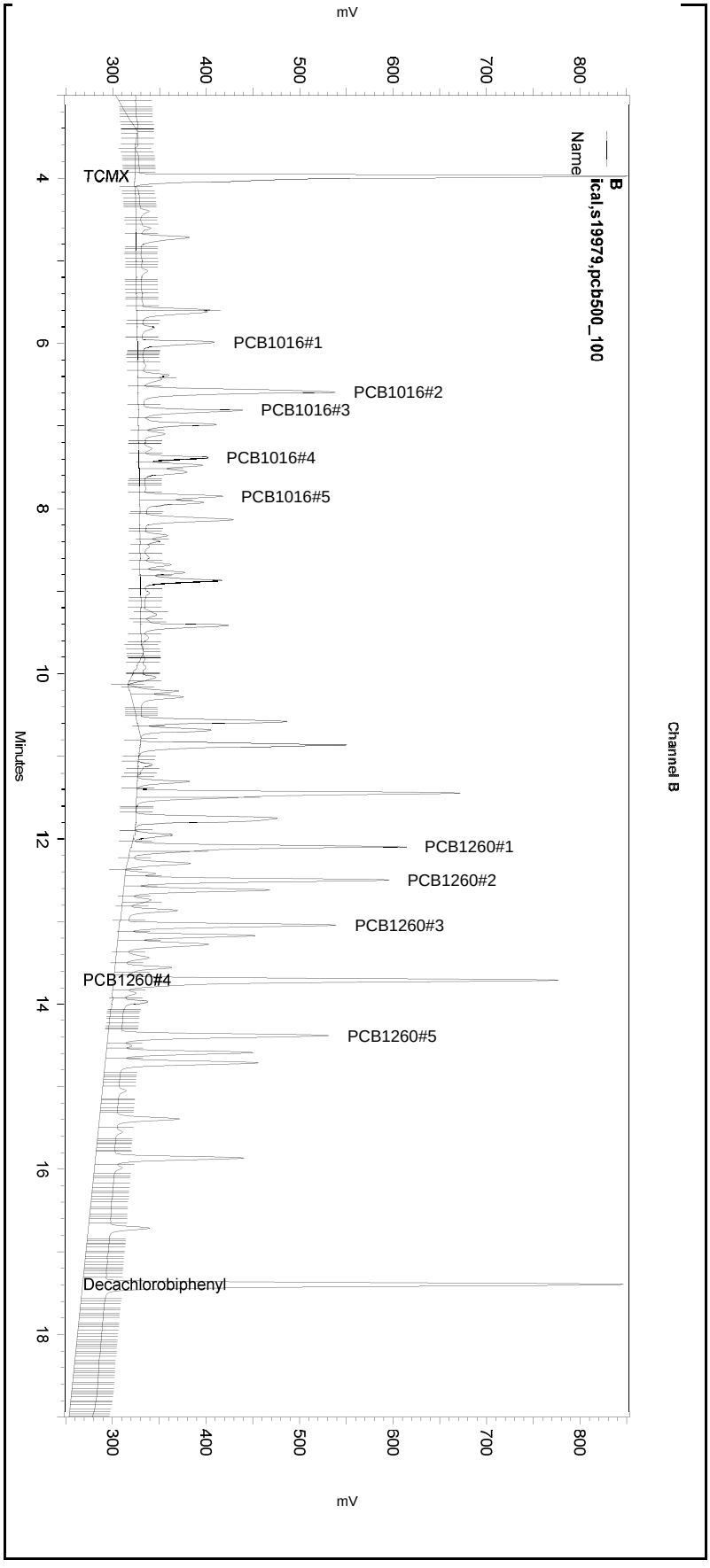
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:08:30 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:40:50 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.760	4.763	828717	150.000 CAL
PCB1016#1	6.987	7.004	86438	750.000 CAL
PCB1016#2	7.620	7.638	250253	750.000 CAL
PCB1016#3	7.937	7.951	144418	750.000 CAL
PCB1016#4	8.407	8.410	78627	750.000 CAL
PCB1016#5	8.933	8.937	122058	750.000 CAL
PCB1260#1	12.543	12.550	429369	750.000 CAL
PCB1260#2	13.203	13.210	355470	750.000 CAL
PCB1260#3	14.070	14.077	253746	750.000 CAL
PCB1260#4	14.813	14.820	586370	750.000 CAL
PCB1260#5	15.477	15.483	251877	750.000 CAL
Decachlorobiphenyl	18.097	18.103	852871	150.000 CAL

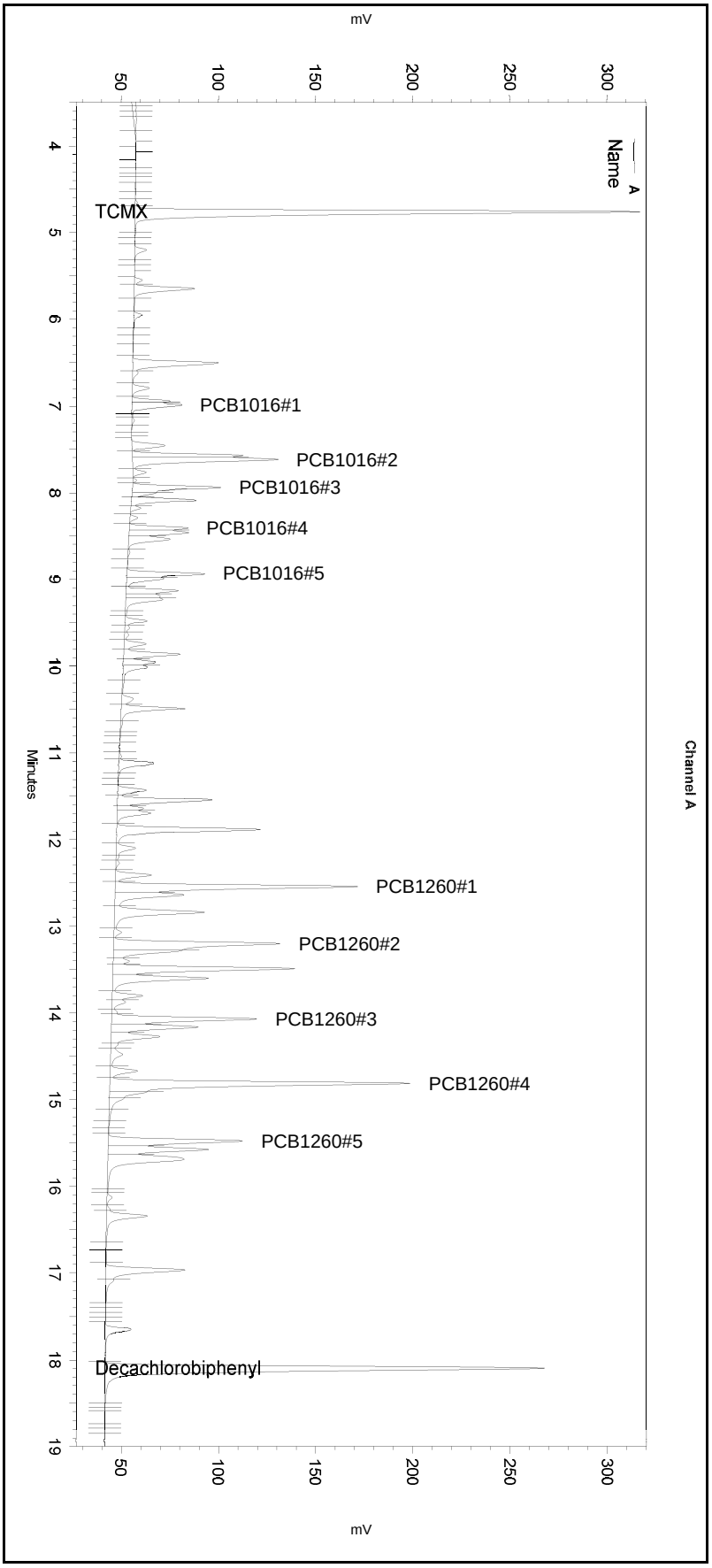
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	2264442	150.000 CAL
PCB1016#1	5.983	5.983	349194	750.000 CAL
PCB1016#2	6.577	6.580	1097380	750.000 CAL
PCB1016#3	6.800	6.803	467186	750.000 CAL
PCB1016#4	7.373	7.377	275695	750.000 CAL
PCB1016#5	7.843	7.847	332655	750.000 CAL
PCB1260#1	12.083	12.087	1297398	750.000 CAL
PCB1260#2	12.490	12.497	1159075	750.000 CAL
PCB1260#3	13.037	13.043	963756	750.000 CAL
PCB1260#4	13.693	13.700	2055476	750.000 CAL
PCB1260#5	14.377	14.380	977736	750.000 CAL
Decachlorobiphenyl	17.383	17.390	2309664	150.000 CAL

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:40:50 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

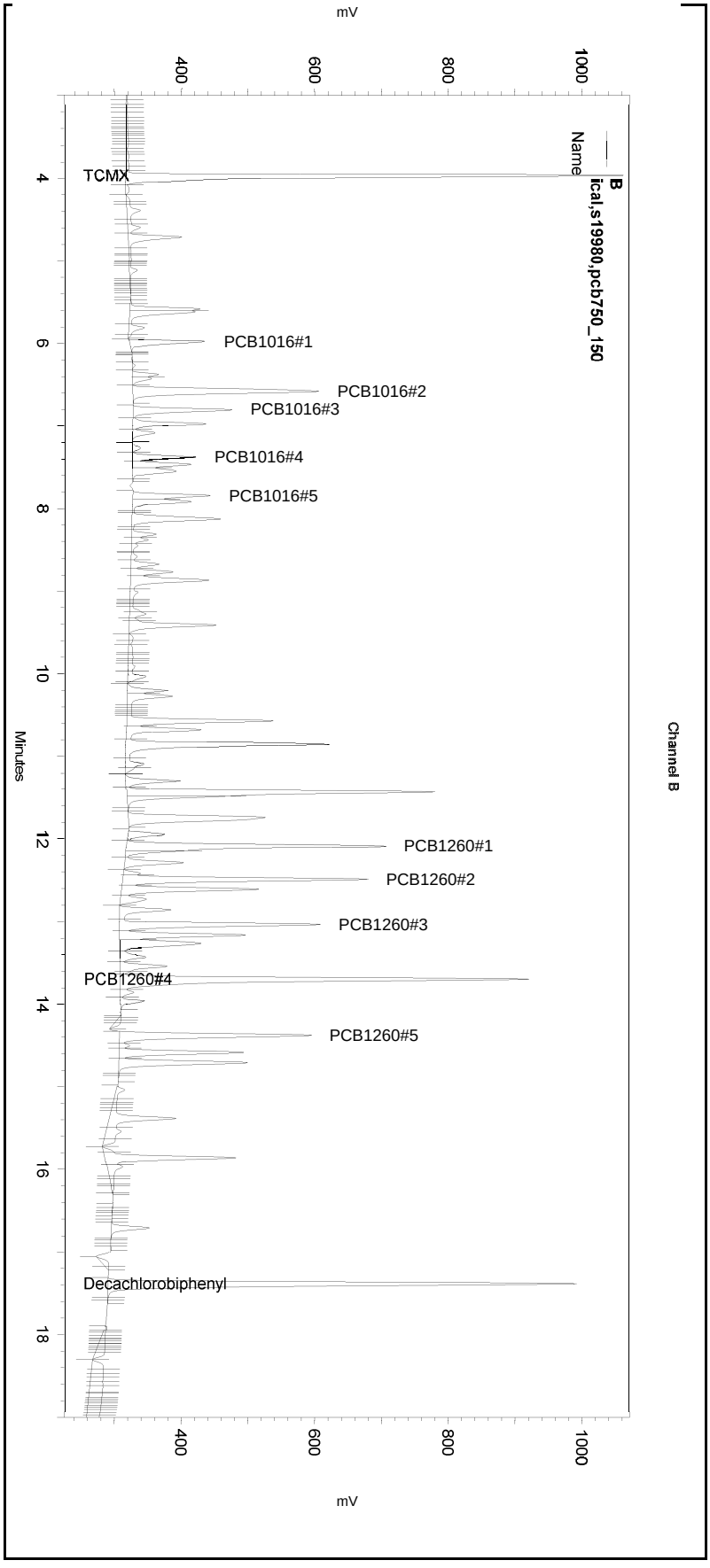
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.818	0	0

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:40:50 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.679	0	0
Yes	Reset Baseline	7.763	0	0
Yes	Reset Baseline	11.857	0	0
Yes	Reset Baseline	14.126	0	0
Yes	Reset Baseline	14.324	0	0
Yes	Reset Baseline	14.932	0	0
Yes	Reset Baseline	17.238	0	0
Yes	Reset Baseline	17.622	0	0

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:09:20 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.760	4.763	828717	150.000 CAL
PCB1016#1	6.987	6.990	93091	750.000 CAL
PCB1016#2	7.620	7.627	266914	750.000 CAL
PCB1016#3	7.937	7.940	161046	750.000 CAL
PCB1016#4	8.407	8.410	86147	750.000 CAL
PCB1016#5	8.933	8.937	128700	750.000 CAL
PCB1260#1	12.543	12.530	429369	750.000 CAL
PCB1260#2	13.203	13.210	355470	750.000 CAL
PCB1260#3	14.070	14.077	253746	750.000 CAL
PCB1260#4	14.813	14.820	586370	750.000 CAL
PCB1260#5	15.477	15.483	251877	750.000 CAL
Decachlorobiphenyl	18.097	18.103	852871	150.000 CAL

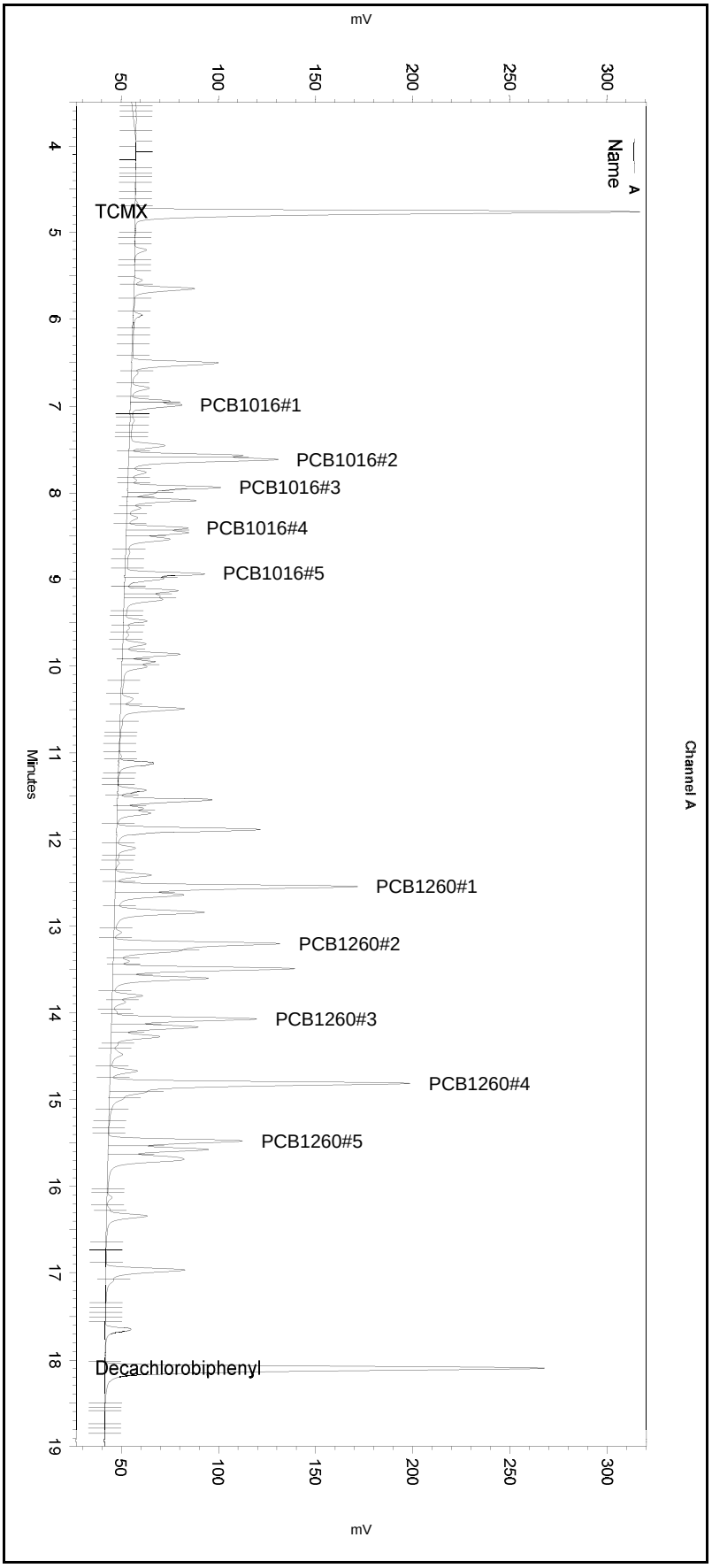
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	2264442	150.000 CAL
PCB1016#1	5.983	5.983	349194	750.000 CAL
PCB1016#2	6.577	6.580	1097380	750.000 CAL
PCB1016#3	6.800	6.803	469770	750.000 CAL
PCB1016#4	7.373	7.377	293111	750.000 CAL
PCB1016#5	7.843	7.847	364274	750.000 CAL
PCB1260#1	12.083	12.087	1428553	750.000 CAL
PCB1260#2	12.490	12.497	1258462	750.000 CAL
PCB1260#3	13.037	13.043	1069785	750.000 CAL
PCB1260#4	13.693	13.700	2228065	750.000 CAL
PCB1260#5	14.377	14.380	1143765	750.000 CAL
Decachlorobiphenyl	17.383	17.390	2607386	150.000 CAL

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:09:20 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

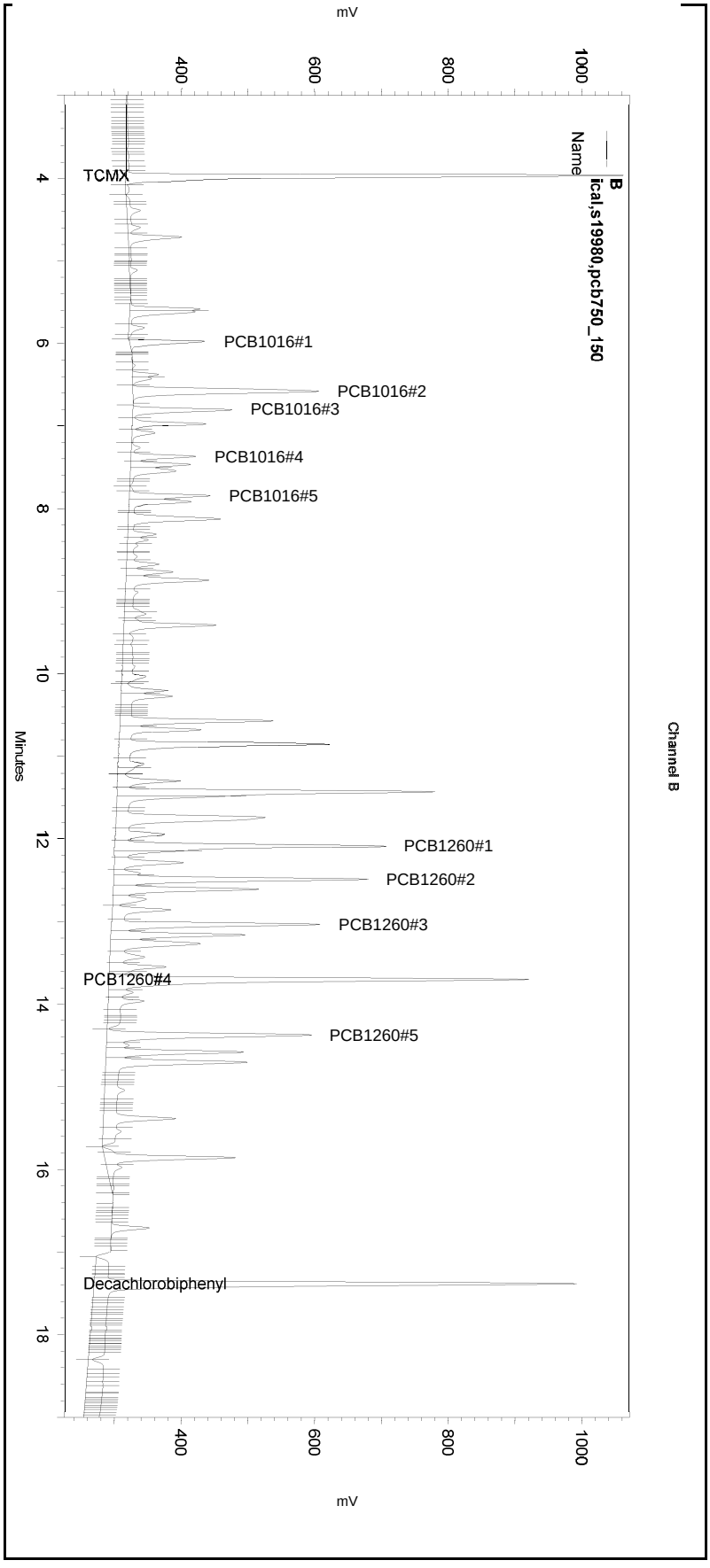
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:09:20 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:45:30 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.773	4.763	1076106	200.000 CAL
PCB1016#1	7.003	7.004	117622	1000.000 CAL
PCB1016#2	7.637	7.638	347710	1000.000 CAL
PCB1016#3	7.950	7.951	205234	1000.000 CAL
PCB1016#4	8.420	8.410	112837	1000.000 CAL
PCB1016#5	8.947	8.937	164360	1000.000 CAL
PCB1260#1	12.557	12.550	561628	1000.000 CAL
PCB1260#2	13.217	13.210	475944	1000.000 CAL
PCB1260#3	14.083	14.077	336688	1000.000 CAL
PCB1260#4	14.827	14.820	774134	1000.000 CAL
PCB1260#5	15.490	15.483	345469	1000.000 CAL
Decachlorobiphenyl	18.110	18.103	1120940	200.000 CAL

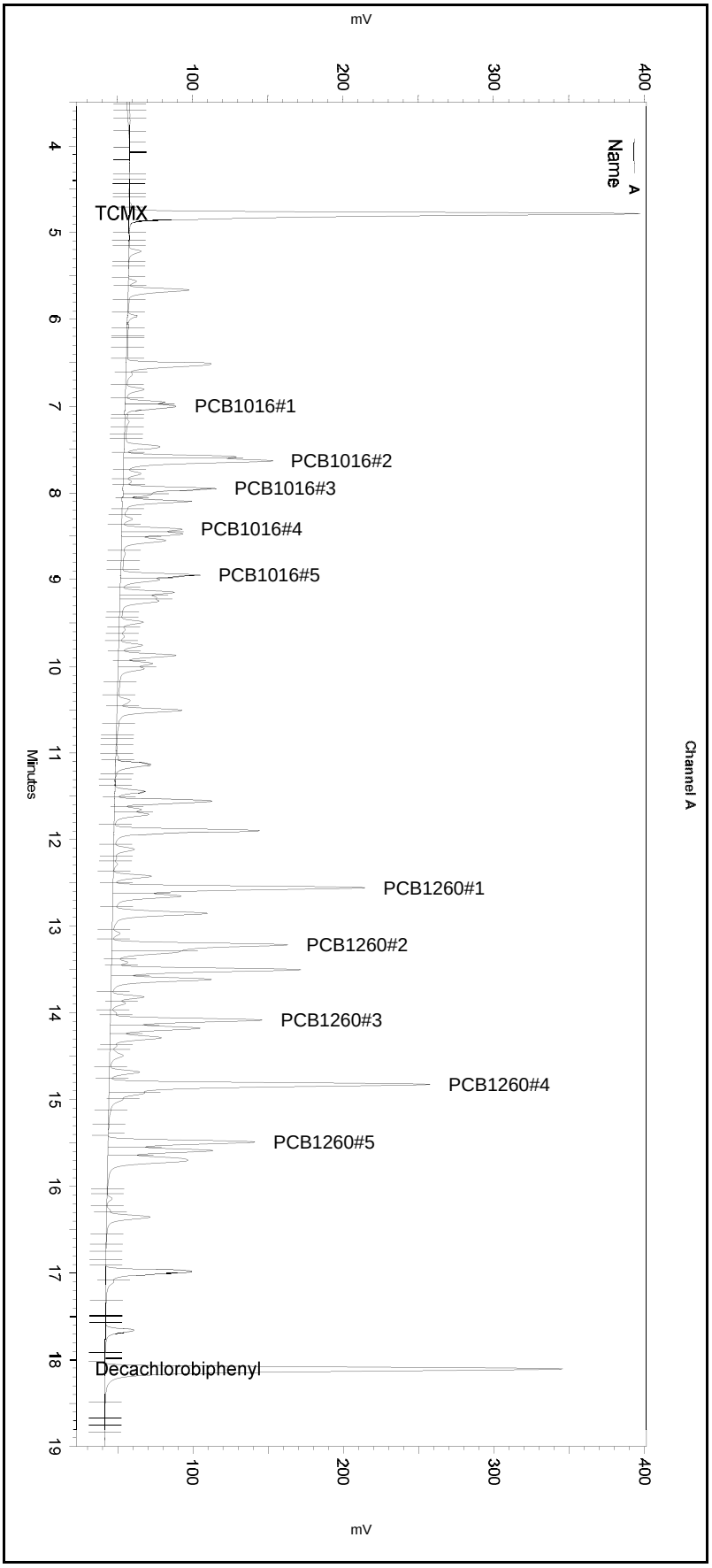
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.980	3.970	2811983	200.000 CAL
PCB1016#1	5.997	5.983	456896	1000.000 CAL
PCB1016#2	6.593	6.580	1387456	1000.000 CAL
PCB1016#3	6.817	6.803	626326	1000.000 CAL
PCB1016#4	7.387	7.377	365293	1000.000 CAL
PCB1016#5	7.857	7.847	426715	1000.000 CAL
PCB1260#1	12.097	12.087	1694979	1000.000 CAL
PCB1260#2	12.503	12.497	1482483	1000.000 CAL
PCB1260#3	13.050	13.043	1204600	1000.000 CAL
PCB1260#4	13.707	13.700	2634276	1000.000 CAL
PCB1260#5	14.387	14.380	1337671	1000.000 CAL
Decachlorobiphenyl	17.397	17.390	2983596	200.000 CAL

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:45:30 AM
Sample Amount: 1



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Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

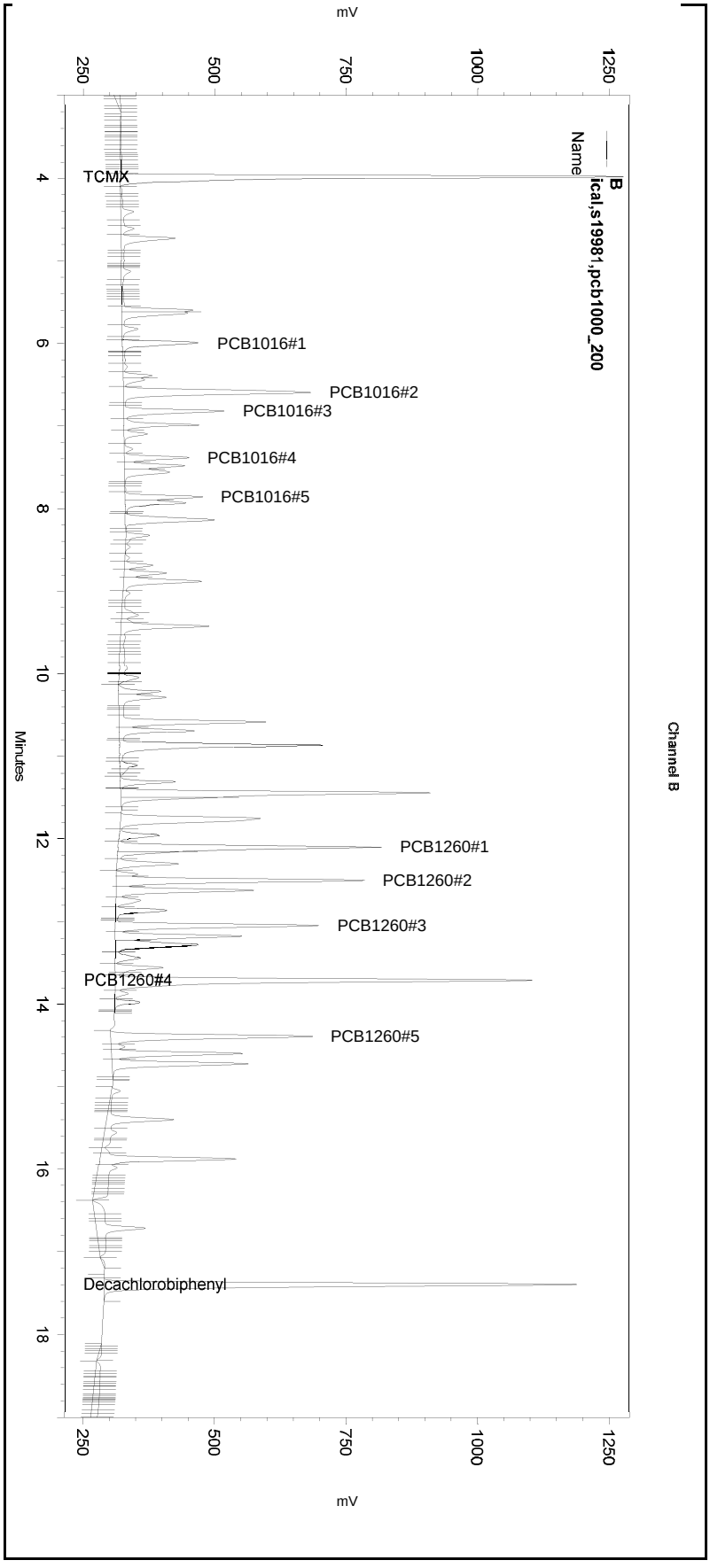
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:45:30 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.283	0	0
Yes	Reset Baseline	11.652	0	0
Yes	Reset Baseline	14.118	0	0
Yes	Reset Baseline	14.92	0	0
Yes	Reset Baseline	17.203	0	0
Yes	Reset Baseline	17.601	0	0

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:09:25 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.773	4.763	1076106	200.000 CAL
PCB1016#1	7.003	6.990	117622	1000.000 CAL
PCB1016#2	7.637	7.627	347710	1000.000 CAL
PCB1016#3	7.950	7.940	205234	1000.000 CAL
PCB1016#4	8.420	8.410	112837	1000.000 CAL
PCB1016#5	8.947	8.937	164360	1000.000 CAL
PCB1260#1	12.557	12.530	561628	1000.000 CAL
PCB1260#2	13.217	13.210	475944	1000.000 CAL
PCB1260#3	14.083	14.077	336688	1000.000 CAL
PCB1260#4	14.827	14.820	774134	1000.000 CAL
PCB1260#5	15.490	15.483	345469	1000.000 CAL
Decachlorobiphenyl	18.110	18.103	1120940	200.000 CAL

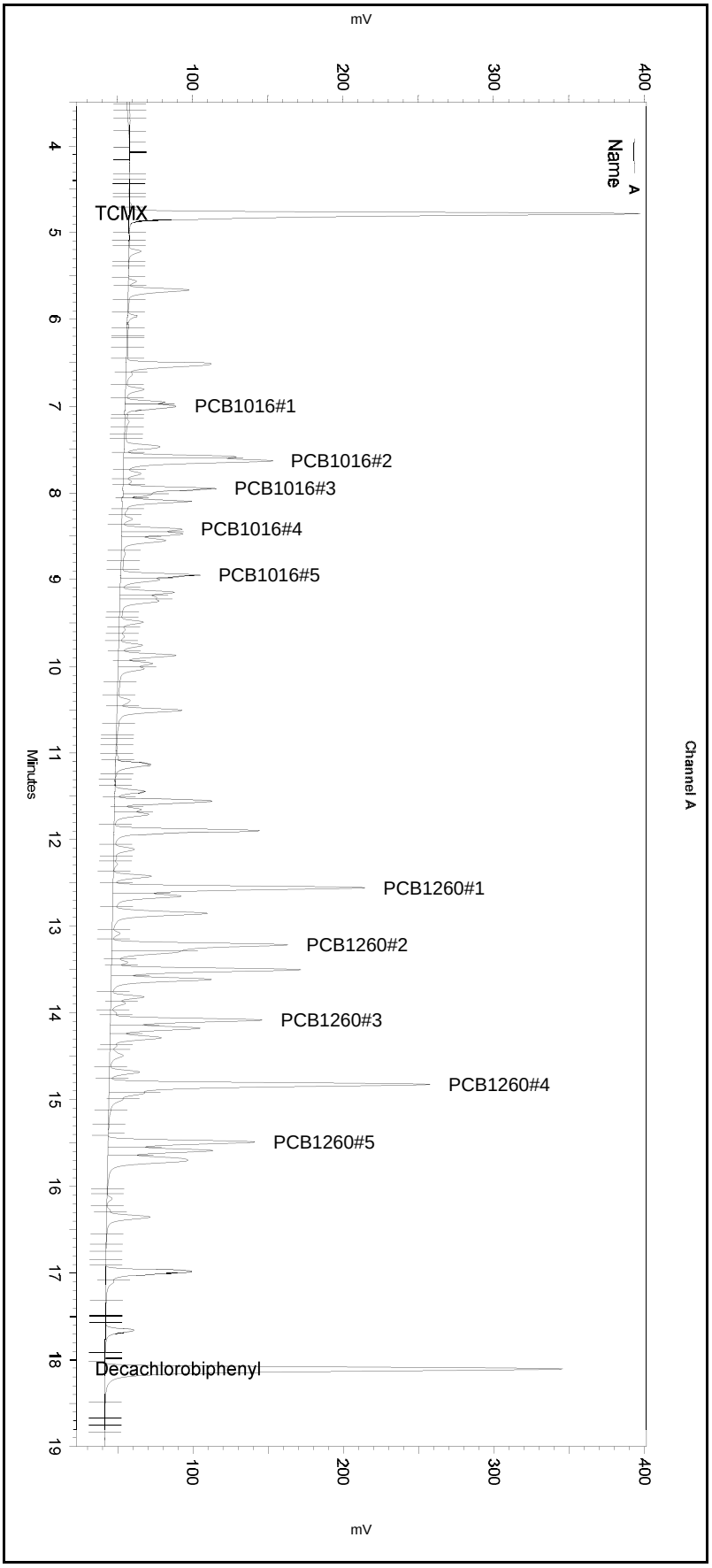
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.980	3.970	2833018	200.000 CAL
PCB1016#1	5.997	5.983	606263	1000.000 CAL
PCB1016#2	6.593	6.580	1620536	1000.000 CAL
PCB1016#3	6.817	6.803	837891	1000.000 CAL
PCB1016#4	7.387	7.377	528850	1000.000 CAL
PCB1016#5	7.857	7.847	599761	1000.000 CAL
PCB1260#1	12.097	12.087	1961204	1000.000 CAL
PCB1260#2	12.503	12.497	1725780	1000.000 CAL
PCB1260#3	13.050	13.043	1510718	1000.000 CAL
PCB1260#4	13.707	13.700	3043493	1000.000 CAL
PCB1260#5	14.387	14.380	1658900	1000.000 CAL
Decachlorobiphenyl	17.397	17.390	3535051	200.000 CAL

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:09:25 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

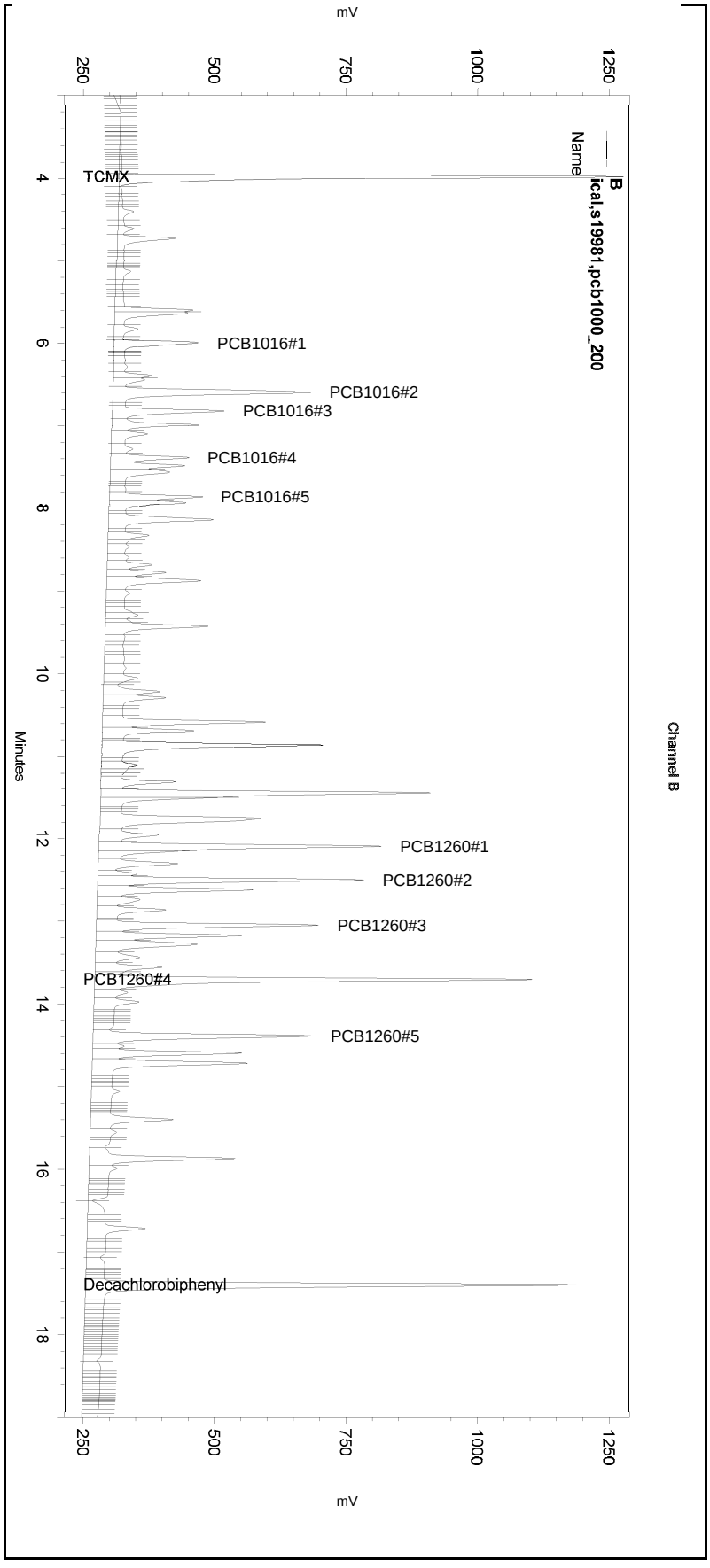
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:09:25 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:57:30 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	321909	48.723
PCB1016#1	6.990	7.004	34724	253.775
PCB1016#2	7.627	7.638	105533	245.350
PCB1016#3	7.940	7.951	57551	249.673
PCB1016#4	8.410	8.410	32830	271.075
PCB1016#5	8.937	8.937	50032	257.446
PCB1260#1	12.547	12.550	177195	231.000
PCB1260#2	13.207	13.210	137185	243.283
PCB1260#3	14.073	14.077	103349	218.712
PCB1260#4	14.817	14.820	235333	253.192
PCB1260#5	15.480	15.483	102602	262.368
Decachlorobiphenyl	18.100	18.103	323735	37.846

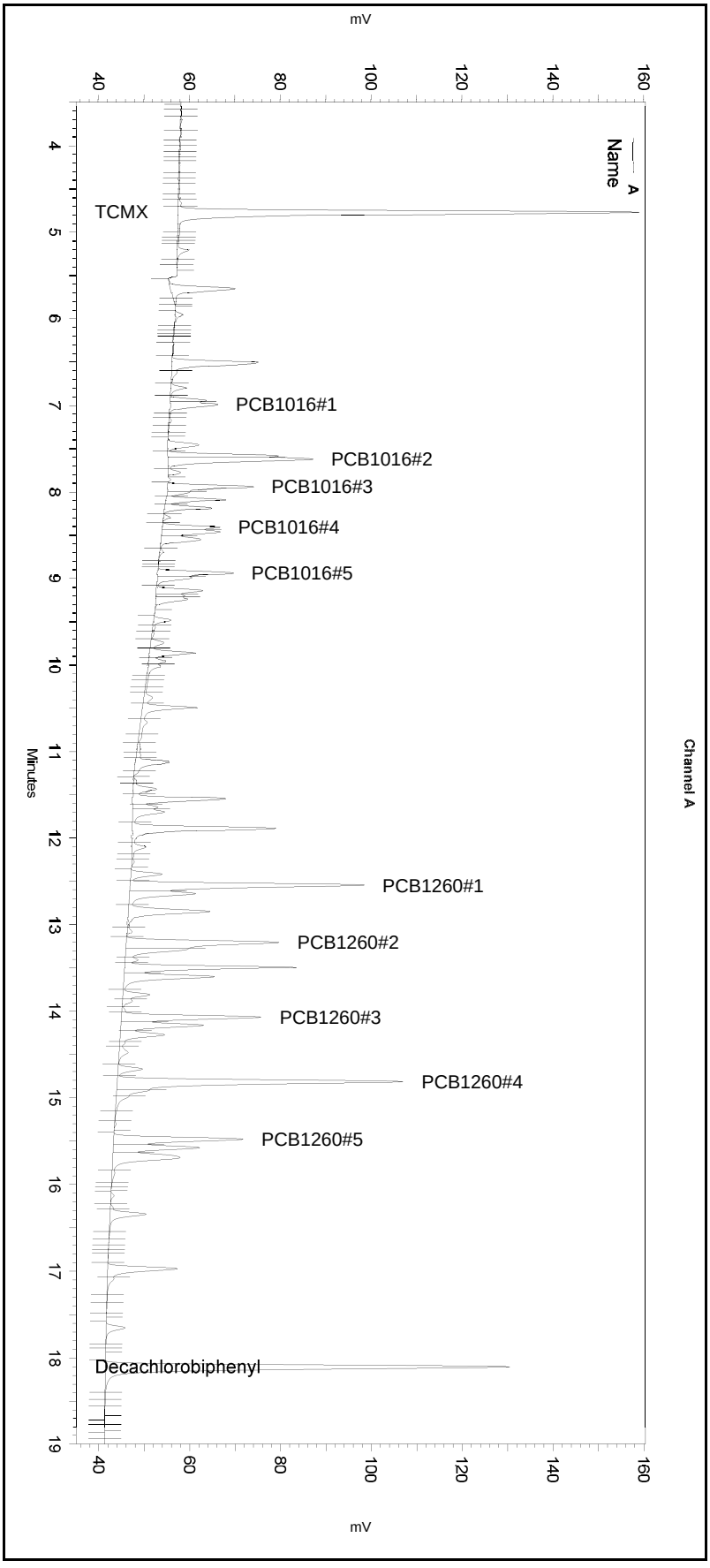
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	780721	44.360
PCB1016#1	5.987	5.983	141329	279.447
PCB1016#2	6.580	6.580	446193	246.593
PCB1016#3	6.803	6.803	186548	241.708
PCB1016#4	7.377	7.377	108180	270.002
PCB1016#5	7.847	7.847	131750	240.480
PCB1260#1	12.083	12.087	518936	264.131
PCB1260#2	12.493	12.497	464575	240.228
PCB1260#3	13.037	13.043	382945	226.945
PCB1260#4	13.697	13.700	868836	286.341
PCB1260#5	14.377	14.380	420559	289.392
Decachlorobiphenyl	17.387	17.390	910785	43.999

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:57:30 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

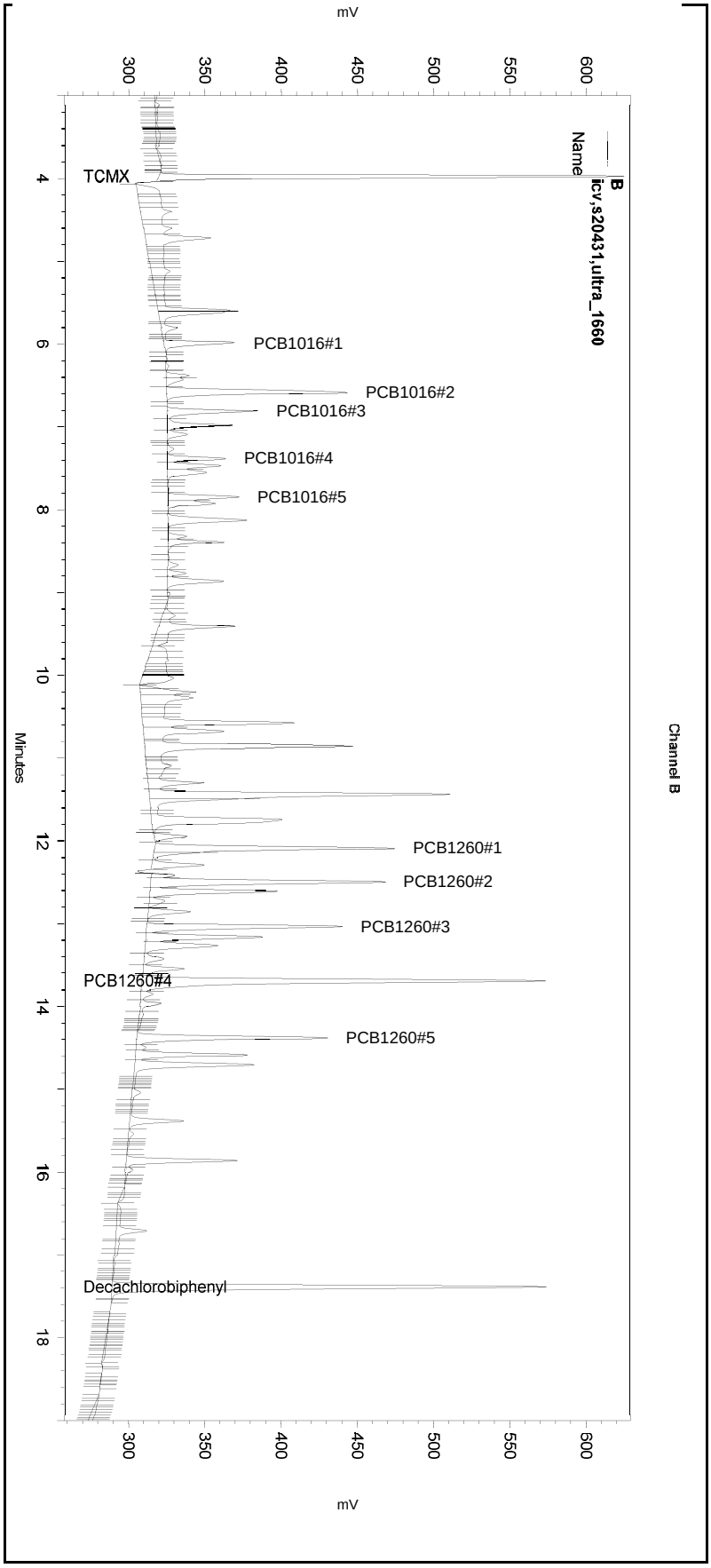
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.829	0	0
Yes	Reset Baseline	9.356	0	0
Yes	Reset Baseline	12.334	0	0

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:57:30 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.029	0	0
Yes	Reset Baseline	12.013	0	0
Yes	Reset Baseline	12.344	0	0
Yes	Reset Baseline	12.387	0	0
Yes	Reset Baseline	17.585	0	0

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:55:28 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	321909	48.723
PCB1016#1	6.990	7.004	40027	292.531
PCB1016#2	7.627	7.638	117185	272.440
PCB1016#3	7.940	7.951	69354	300.878
PCB1016#4	8.410	8.410	39641	334.363
PCB1016#5	8.937	8.937	58949	303.329
PCB1260#1	12.547	12.550	181479	236.585
PCB1260#2	13.207	13.210	140644	249.417
PCB1260#3	14.073	14.077	105130	222.481
PCB1260#4	14.817	14.820	236363	254.301
PCB1260#5	15.480	15.483	102602	262.368
Decachlorobiphenyl	18.100	18.103	323735	37.846

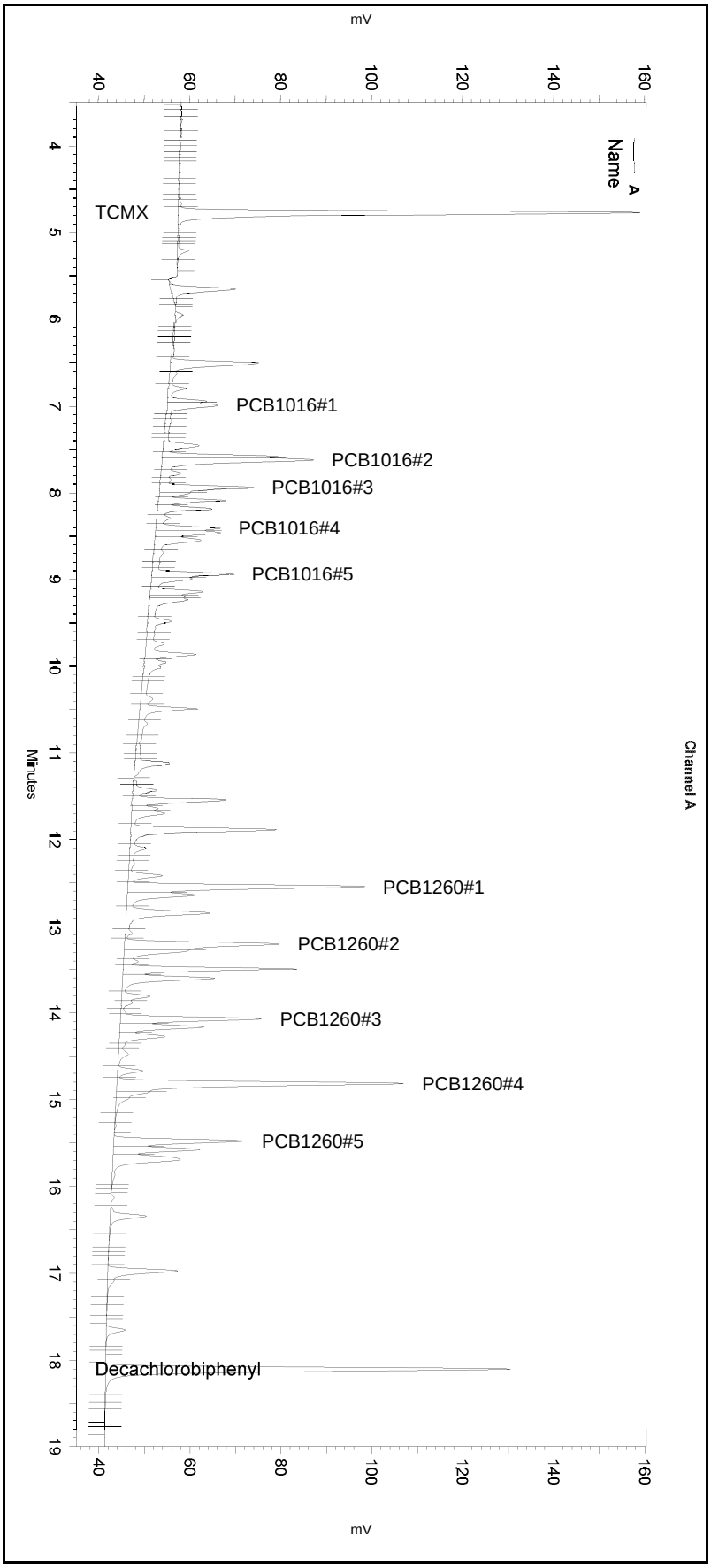
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	830674	47.198
PCB1016#1	5.987	5.983	141456	279.728
PCB1016#2	6.580	6.580	446193	246.593
PCB1016#3	6.803	6.803	186548	241.708
PCB1016#4	7.377	7.377	108180	270.002
PCB1016#5	7.847	7.847	131750	240.480
PCB1260#1	12.083	12.087	618491	324.295
PCB1260#2	12.493	12.497	545583	282.117
PCB1260#3	13.037	13.043	467375	276.980
PCB1260#4	13.697	13.700	952397	318.626
PCB1260#5	14.377	14.380	476273	332.005
Decachlorobiphenyl	17.387	17.390	941202	45.745

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:55:28 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

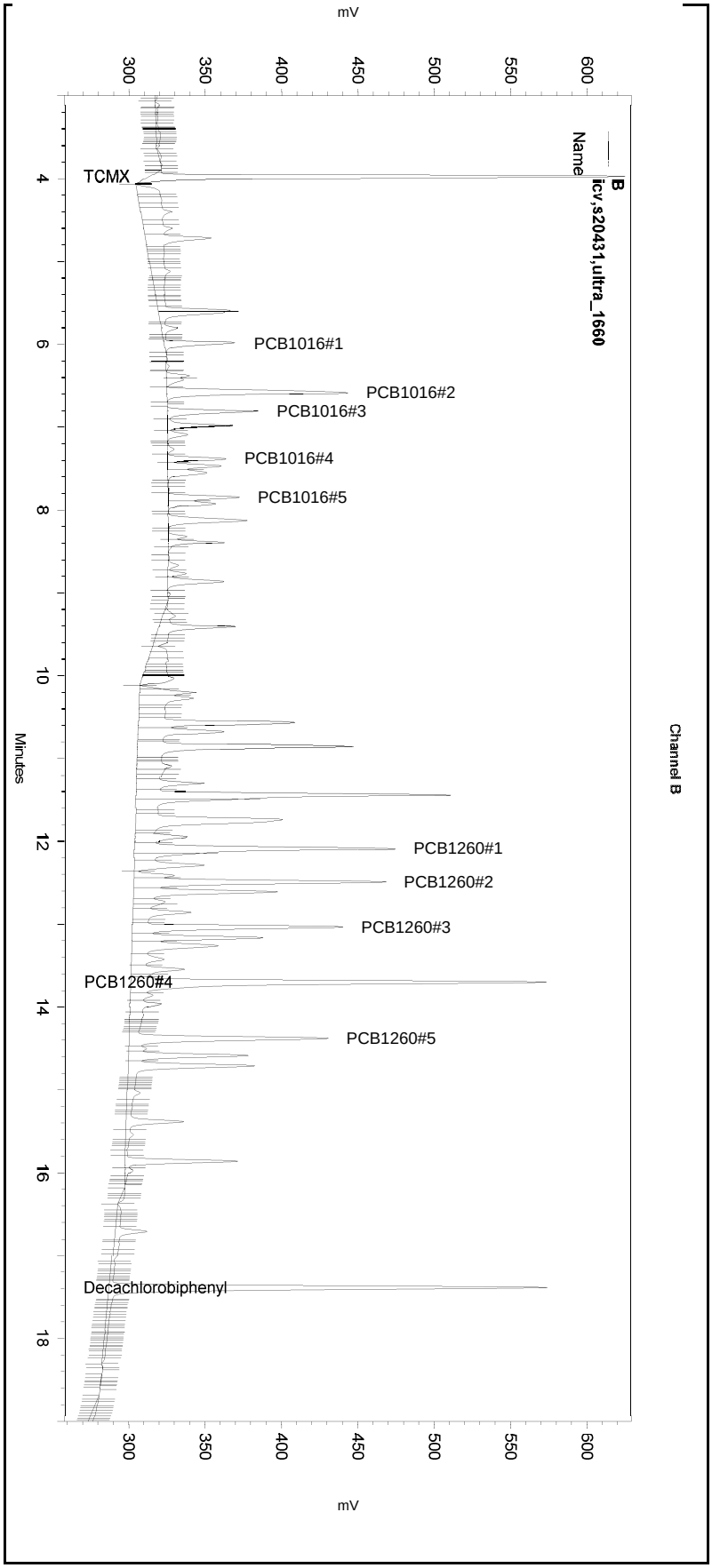
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:55:28 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 PCBS Water: EPA 8082A

Inst : GC16
Calnum : 232358946001
Units : pg/ul

Name : AR1660_249A
Date : 05-SEP-2012 18:41

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	249_011	232358946011	PCB10_2	05-SEP-2012 18:41	S19975
L2	249_012	232358946012	PCB25_5	05-SEP-2012 19:09	S19976
L3	249_013	232358946013	PCB100_20	05-SEP-2012 19:37	S19977
L4	249_014	232358946014	PCB250_50	05-SEP-2012 20:05	S19978
L5	249_015	232358946015	PCB500_100	05-SEP-2012 20:33	S19979
L6	249_016	232358946016	PCB750_150	05-SEP-2012 21:00	S19980
L7	249_017	232358946017	PCB1000_200	05-SEP-2012 21:28	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	2903.7	2645.1	2043.0	1737.6	1402.8	1280.3	1106.0	QUAD	A	26125.9	1714.03	-0.63519	1874.1	0.999	.99	20	
Aroclor-1260 Peak # 2	A	2014.6	2233.6	1766.6	1721.8	1453.3	1305.8		AVRG	R		5.72E-4		1749.3	20	.99	20	
Aroclor-1260 Peak # 3	A	1771.7	1496.8	1264.0	1095.8	936.53	843.23		LINR	R	-38.896	0.00120		1234.7	0.990	.99	20	
Aroclor-1260 Peak # 4	A	3727.3	3500.8	2817.0	2358.5	1983.1			LINR	R	-28.596	5.17E-4		2877.3	0.990	.99	20	
Aroclor-1260 Peak # 5	A	1374.7	1851.5	1420.5	1250.3	1105.9			AVRG	R		7.14E-4		1400.6	20	.99	20	
TCMX	A	25623	23507	19325	16224	13450	12341		LINR	R	-8.5129	8.29E-5		18411	0.990	.99	20	
Decachlorobiphenyl	A	19026	17296	15334	12347	10199	8511.2	7607.0	QUAD	A	39971.0	12237.7	-24.6931	12903	0.998	.99	20	
Aroclor-1260 Peak # 1	B	737.60	685.28	610.78	566.71	523.53	511.21	462.17	AVRG	R		0.00171		585.32	17	.99	20	
Aroclor-1260 Peak # 2	B	482.10	512.84	461.15	427.77	386.81	373.66	335.02	AVRG	R		0.00235		425.62	15	.99	20	
Aroclor-1260 Peak # 3	B	452.10	448.84	396.59	370.66	342.93	328.44	298.96	AVRG	R		0.00265		376.93	16	.99	20	
Aroclor-1260 Peak # 4	B	1098.3	1073.3	903.13	850.18	809.19	768.62	711.59	AVRG	R		0.00113		887.76	17	.99	20	
Aroclor-1260 Peak # 5	B	468.10	474.00	402.01	386.37	373.42	351.19	330.73	AVRG	R		0.00251		397.97	14	.99	20	
TCMX	B	7732.0	7094.6	6965.0	6979.1	6744.6	7130.1	6405.6	AVRG	R		1.43E-4		7007.3	6	.99	20	
Decachlorobiphenyl	B	11072	10605	8542.8	7613.2	7438.3			AVRG	R		1.10E-4		9054.2	19	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**-83**	25.000	-6	100.00	8	250.00	6	500.00	-4	750.00	1	1000.0	0
Aroclor-1260 Peak # 2	A	10.000	15	25.000	**28**	100.00	1	250.00	-2	500.00	-17	750.00	**-25**		
Aroclor-1260 Peak # 3	A	10.000	**-276**	25.000	**-76**	100.00	13	250.00	16	500.00	5	750.00	-4		
Aroclor-1260 Peak # 4	A	10.000	**-193**	25.000	**-33**	100.00	17	250.00	11	500.00	-3				
Aroclor-1260 Peak # 5	A	10.000	-2	25.000	**32**	100.00	1	250.00	-11	500.00	**-21**				
TCMX	A	2.0000	**-313**	5.0000	**-75**	20.000	18	50.000	17	100.00	3	150.00	-3		
Decachlorobiphenyl	A	2.0000	**-108**	5.0000	**-23**	20.000	14	50.000	6	100.00	0	150.00	-6	200.00	5
Aroclor-1260 Peak # 1	B	10.000	**26**	25.000	17	100.00	4	250.00	-3	500.00	-11	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 2	B	10.000	13	25.000	20	100.00	8	250.00	1	500.00	-9	750.00	-12	1000.0	**-21**
Aroclor-1260 Peak # 3	B	10.000	20	25.000	19	100.00	5	250.00	-2	500.00	-9	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 4	B	10.000	**24**	25.000	**21**	100.00	2	250.00	-4	500.00	-9	750.00	-13	1000.0	-20
Aroclor-1260 Peak # 5	B	10.000	18	25.000	19	100.00	1	250.00	-3	500.00	-6	750.00	-12	1000.0	-17
TCMX	B	2.0000	10	5.0000	1	20.000	-1	50.000	0	100.00	-4	150.00	2	200.00	-9
Decachlorobiphenyl	B	2.0000	**22**	5.0000	17	20.000	-6	50.000	-16	100.00	-18				

PML 09/06/12 : Corrected automatically drawn baseline in all levels.

PML 09/06/12 : changed fit types and dropped various points for better r^2 %RSD recovery

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 PCBS Water
EPA 8082A

Inst : GC16 Name : AR1660_249A
Calnum : 232358946001 Cal Date : 05-SEP-2012

ICV 232358946019 (249_019 05-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	268.7	pg/ul	7	20	
Aroclor-1260	B	250.0	265.0	pg/ul	6	20	

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 8:09:38 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	51245	2.000 CAL
PCB1016#1	6.197	6.197	4688	10.000 CAL
PCB1016#2	6.807	6.810	10375	10.000 CAL
PCB1016#3	7.107	7.110	6107	10.000 CAL
PCB1016#4	7.563	7.570	1172	10.000 CAL
PCB1016#5	8.073	8.077	6122	10.000 CAL
PCB1260#1	11.640	11.640	29037	10.000 CAL
PCB1260#2	12.290	12.290	20146	10.000 CAL
PCB1260#3	13.153	13.150	17717	10.000 CAL
PCB1260#4	13.893	13.897	37273	10.000 CAL
PCB1260#5	14.547	14.550	13747	10.000 CAL
Decachlorobiphenyl	17.163	17.167	38051	2.000 CAL

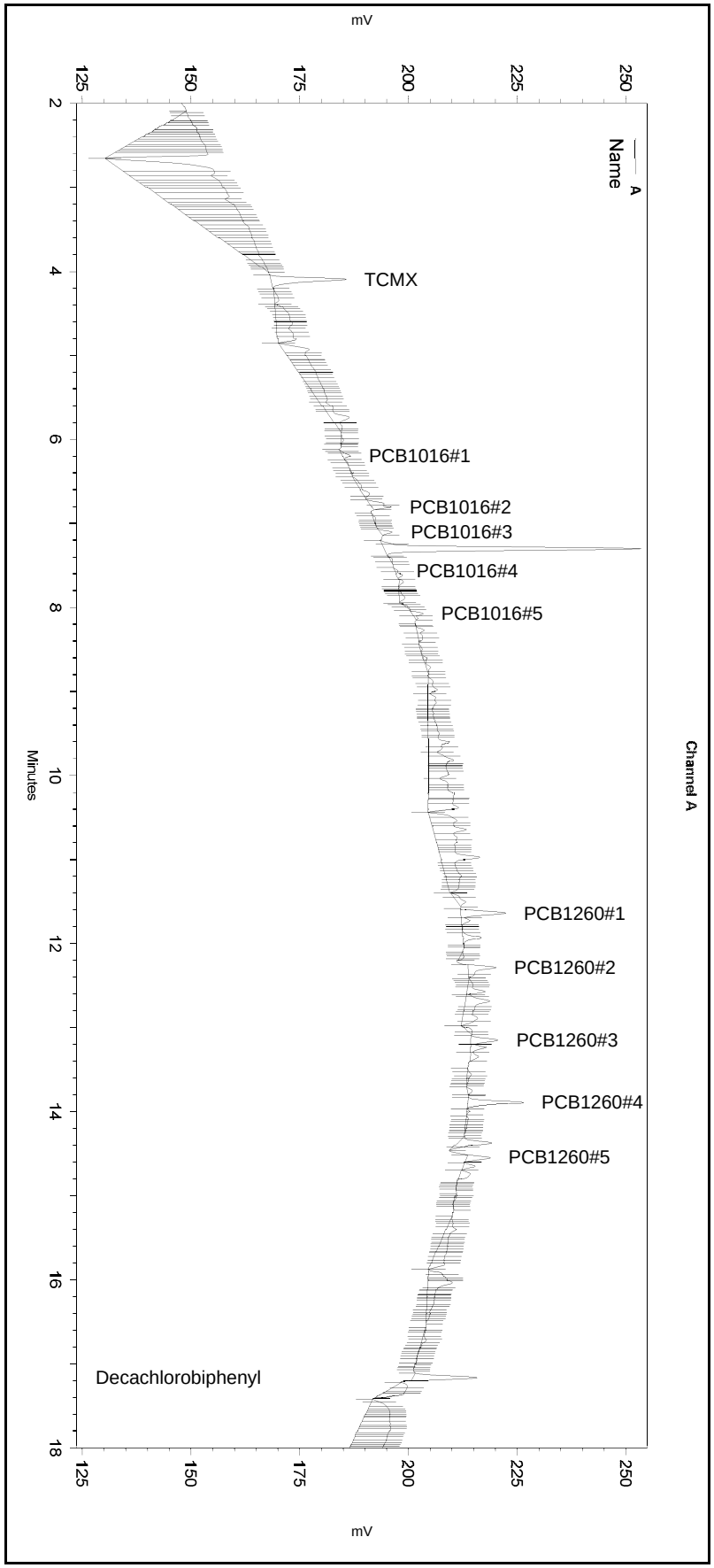
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	15464	2.000 CAL
PCB1016#1	5.203	5.207	2580	10.000 CAL
PCB1016#2	5.767	5.770	6619	10.000 CAL
PCB1016#3	5.983	5.987	2784	10.000 CAL
PCB1016#4	6.533	6.537	2027	10.000 CAL
PCB1016#5	6.987	6.990	2373	10.000 CAL
PCB1260#1	11.153	11.153	7376	10.000 CAL
PCB1260#2	11.557	11.560	4821	10.000 CAL
PCB1260#3	12.100	12.100	4521	10.000 CAL
PCB1260#4	12.757	12.757	10983	10.000 CAL
PCB1260#5	13.430	13.430	4681	10.000 CAL
Decachlorobiphenyl	16.423	16.423	22144	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 8:09:38 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

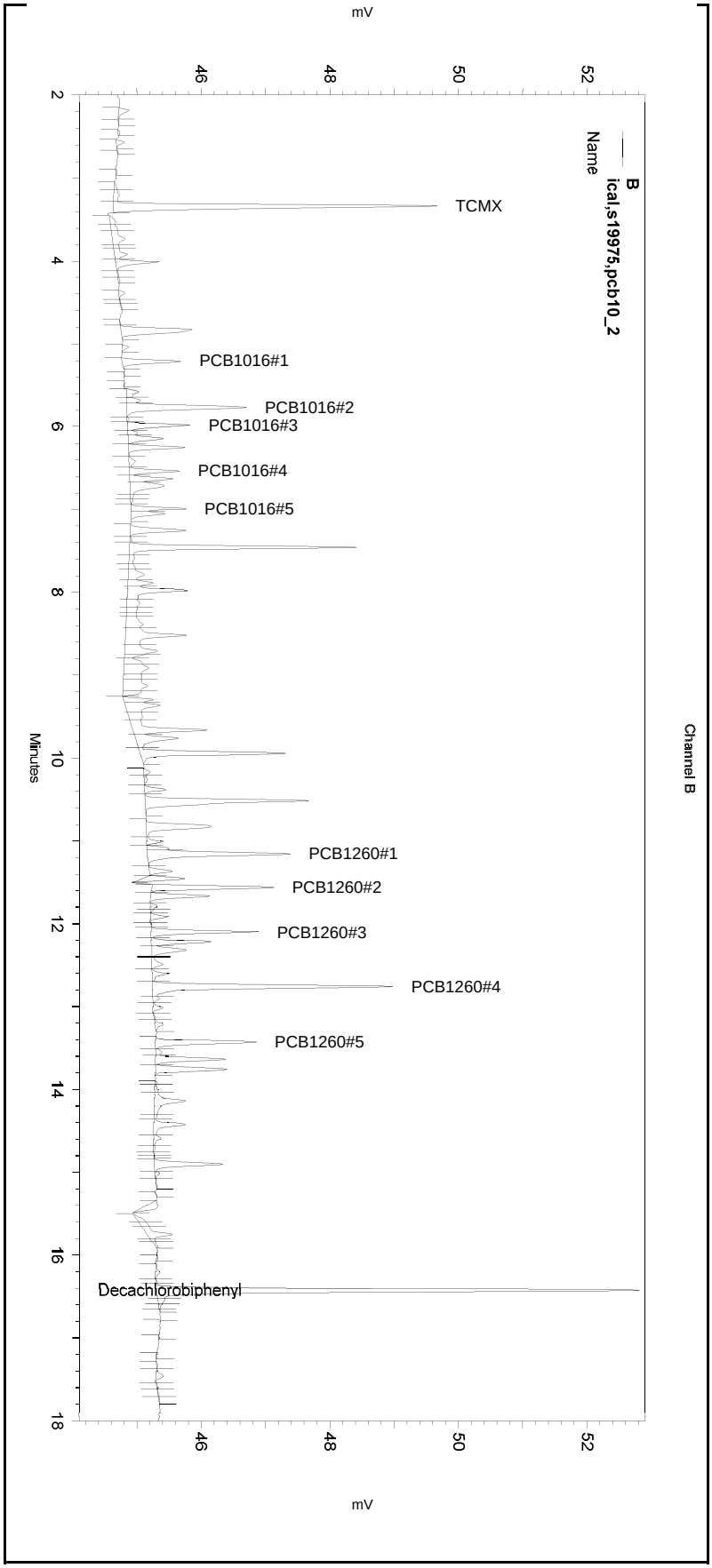
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.029	0	0
Yes	Reset Baseline	4.204	0	0
Yes	Split Peak	6.162	0	0
Yes	Reset Baseline	6.335	0	0
Yes	Reset Baseline	6.717	0	0
Yes	Reset Baseline	6.84	0	0
Yes	Reset Baseline	7.142	0	0
Yes	Reset Baseline	7.187	0	0
Yes	Reset Baseline	7.521	0	0
Yes	Reset Baseline	7.667	0	0
Yes	Reset Baseline	7.749	0	0
Yes	Reset Baseline	8.029	0	0
Yes	Reset Baseline	8.152	0	0
Yes	Reset Baseline	8.193	0	0
Yes	Reset Baseline	11.561	0	0
Yes	Reset Baseline	12.052	0	0
Yes	Reset Baseline	12.251	0	0
Yes	Reset Baseline	12.42	0	0
Yes	Reset Baseline	13.396	0	0
Yes	Reset Baseline	14.511	0	0
Yes	Reset Baseline	17.11	0	0
Yes	Reset Baseline	17.199	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 8:09:38 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.41	0	0
Yes	Manual Baseline	5.546	5.88	0
Yes	Reset Baseline	5.64	0	0
Yes	Reset Baseline	7.147	0	0
Yes	Reset Baseline	11.414	0	0
Yes	Move BL Start	11.503	11.524	0
Yes	Reset Baseline	11.742	0	0
Yes	Reset Baseline	12.033	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 (Offline) Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 7:31:19 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	175877	2.000 CAL
PCB1016#1	6.197	6.197	6680	10.000 CAL
PCB1016#2	6.807	6.810	22434	10.000 CAL
PCB1016#3	7.107	7.110	17654	10.000 CAL
PCB1016#4	7.563	7.570	6620	10.000 CAL
PCB1016#5	8.073	8.077	14368	10.000 CAL
PCB1260#1	11.640	11.640	57541	10.000 CAL
PCB1260#2	12.290	12.290	49117	10.000 CAL
PCB1260#3	13.153	13.150	18253	10.000 CAL
PCB1260#4	13.893	13.897	37273	10.000 CAL
PCB1260#5	14.547	14.550	38949	10.000 CAL
Decachlorobiphenyl	17.163	17.167	78280	2.000 CAL

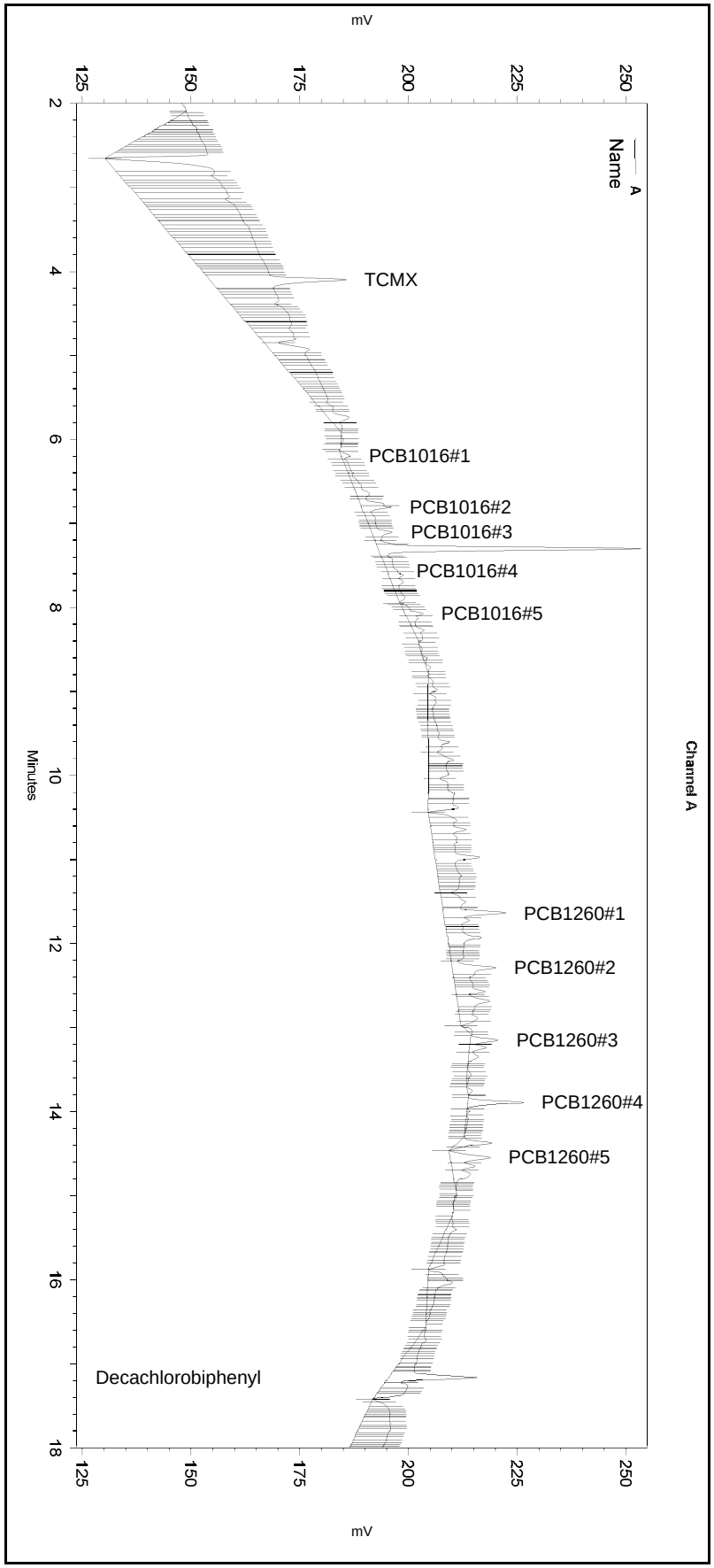
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	16023	2.000 CAL
PCB1016#1	5.203	5.207	2580	10.000 CAL
PCB1016#2	5.767	5.770	7194	10.000 CAL
PCB1016#3	5.983	5.987	3196	10.000 CAL
PCB1016#4	6.533	6.537	2584	10.000 CAL
PCB1016#5	6.987	6.990	3101	10.000 CAL
PCB1260#1	11.153	11.153	9296	10.000 CAL
PCB1260#2	11.557	11.560	6806	10.000 CAL
PCB1260#3	12.100	12.100	5965	10.000 CAL
PCB1260#4	12.757	12.757	11588	10.000 CAL
PCB1260#5	13.430	13.430	4681	10.000 CAL
Decachlorobiphenyl	16.423	16.423	22144	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 (Offline) Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 7:31:19 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

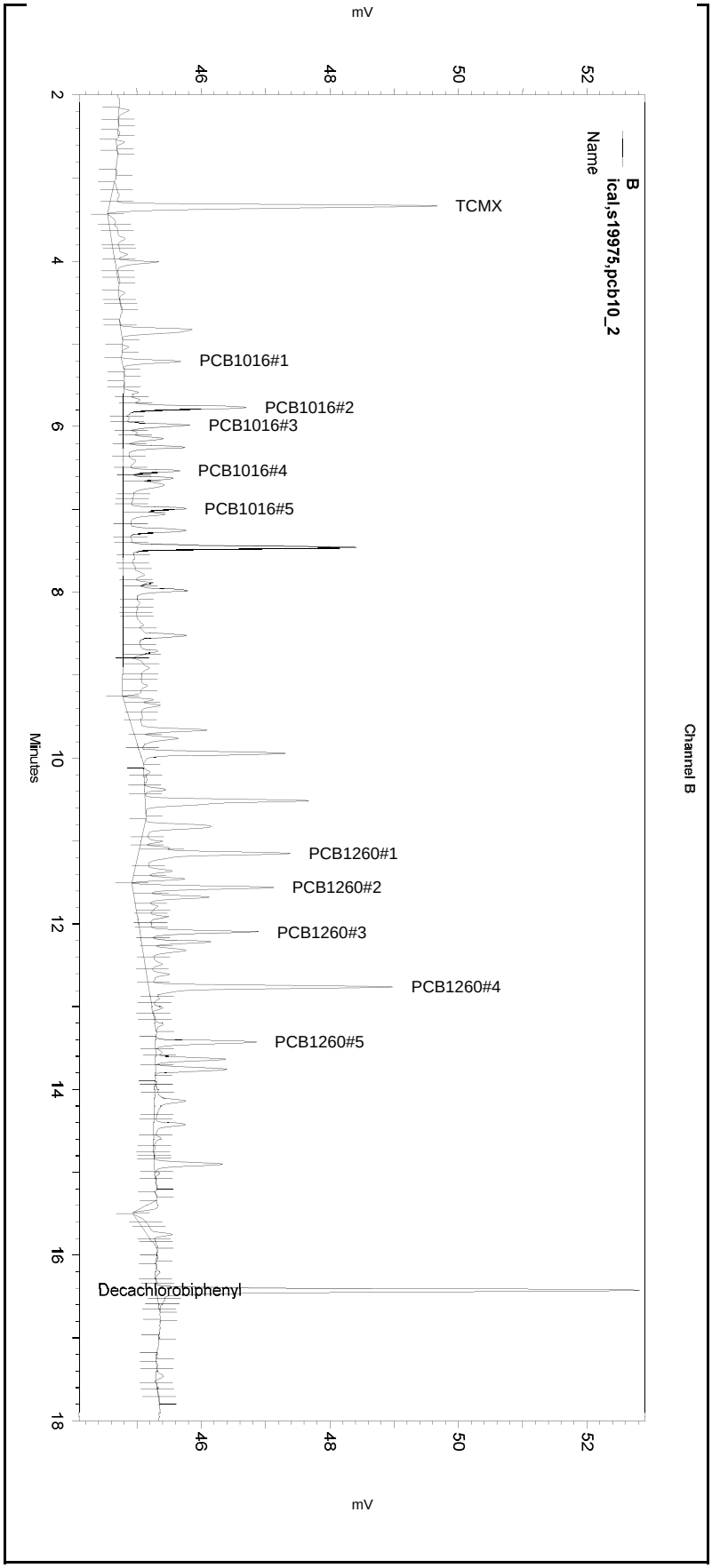
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 (Offline) Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 7:31:19 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 8:09:44 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	117533	5.000 CAL
PCB1016#1	6.197	6.197	10920	25.000 CAL
PCB1016#2	6.807	6.810	33027	25.000 CAL
PCB1016#3	7.110	7.110	20181	25.000 CAL
PCB1016#4	7.567	7.570	10350	25.000 CAL
PCB1016#5	8.077	8.077	16823	25.000 CAL
PCB1260#1	11.640	11.640	66128	25.000 CAL
PCB1260#2	12.290	12.290	55839	25.000 CAL
PCB1260#3	13.150	13.150	37420	25.000 CAL
PCB1260#4	13.893	13.897	87519	25.000 CAL
PCB1260#5	14.547	14.550	46288	25.000 CAL
Decachlorobiphenyl	17.160	17.167	86480	5.000 CAL

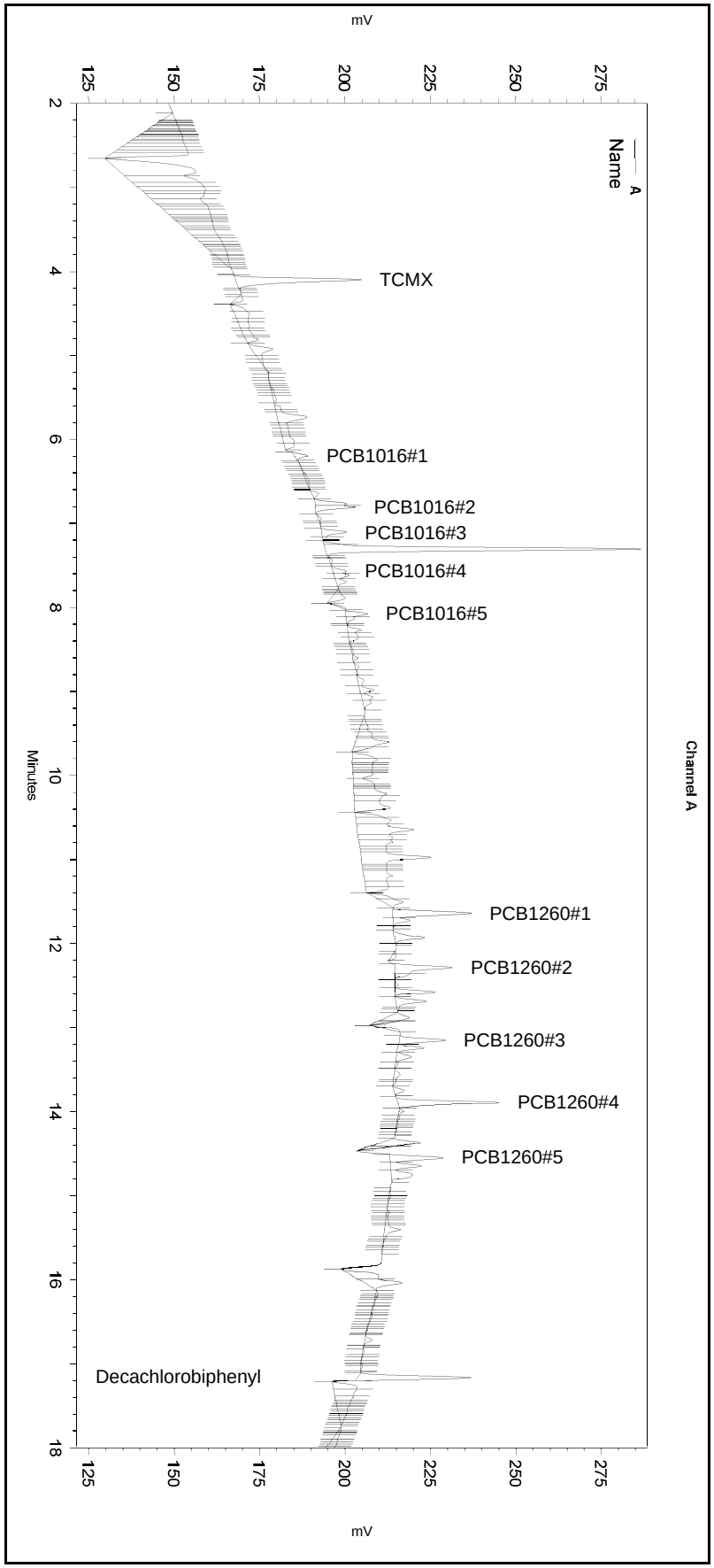
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	35473	5.000 CAL
PCB1016#1	5.203	5.207	5968	25.000 CAL
PCB1016#2	5.767	5.770	15096	25.000 CAL
PCB1016#3	5.983	5.987	7008	25.000 CAL
PCB1016#4	6.533	6.537	4782	25.000 CAL
PCB1016#5	6.987	6.990	5550	25.000 CAL
PCB1260#1	11.153	11.153	17132	25.000 CAL
PCB1260#2	11.560	11.560	12821	25.000 CAL
PCB1260#3	12.100	12.100	11221	25.000 CAL
PCB1260#4	12.757	12.757	26833	25.000 CAL
PCB1260#5	13.430	13.430	11850	25.000 CAL
Decachlorobiphenyl	16.423	16.423	53024	5.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 8:09:44 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

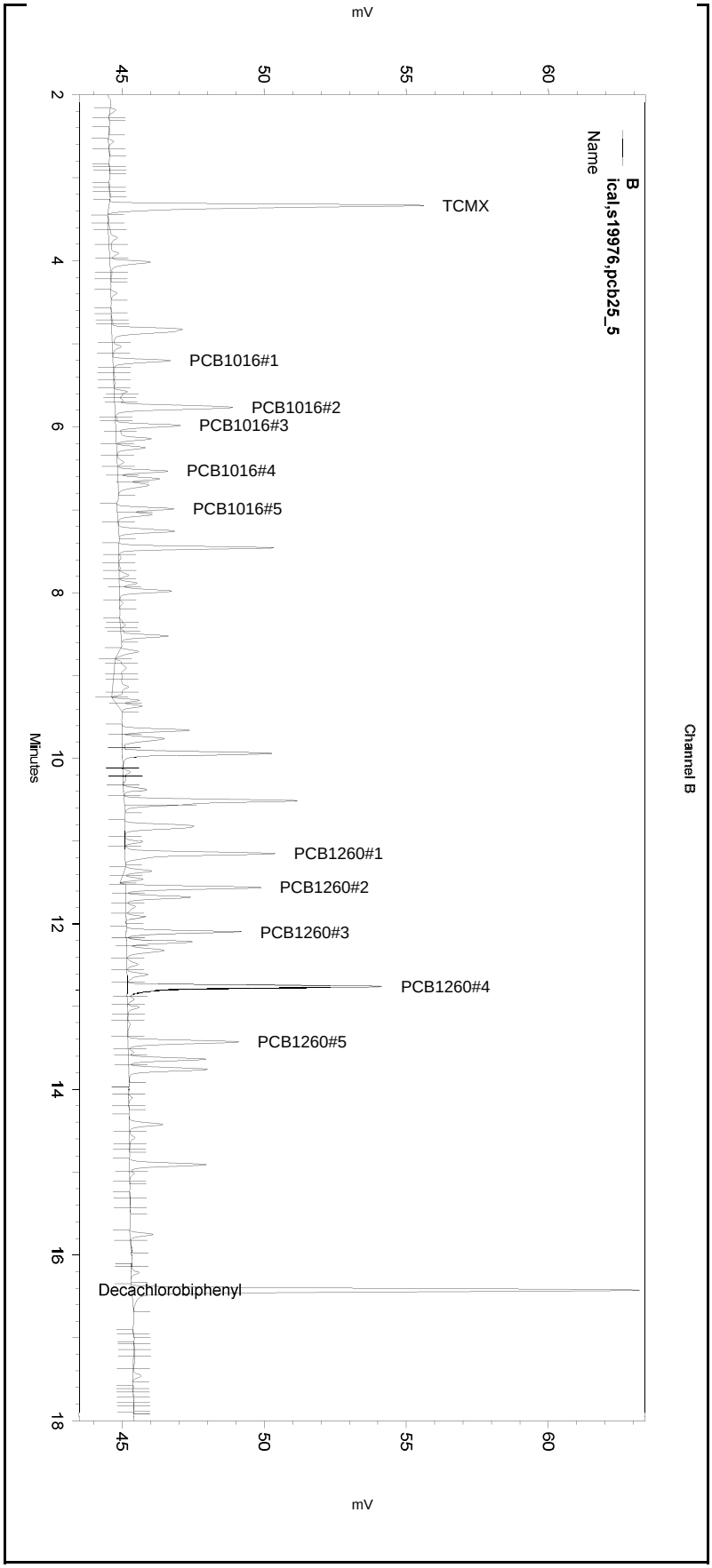
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.024	0	0
Yes	Reset Baseline	6.15	0	0
Yes	Reset Baseline	6.255	0	0
Yes	Reset Baseline	6.709	0	0
Yes	Reset Baseline	7.778	0	0
Yes	Reset Baseline	8.025	0	0
Yes	Reset Baseline	11.569	0	0
Yes	Reset Baseline	12.239	0	0
Yes	Reset Baseline	13.815	0	0
Yes	Move BL Start	14.467	14.508	0
Yes	Reset Baseline	14.843	0	0
Yes	Reset Baseline	16.119	0	0
Yes	Reset Baseline	17.104	0	0
Yes	Move BL Stop	17.213	17.196	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 8:09:44 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.824	0	0
Yes	Reset Baseline	11.295	0	0
Yes	Move BL Start	11.507	11.517	0
Yes	Reset Baseline	12	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 (Offline) Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 7:31:33 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	137337	5.000 CAL
PCB1016#1	6.197	6.197	22611	25.000 CAL
PCB1016#2	6.807	6.810	37981	25.000 CAL
PCB1016#3	7.110	7.110	20657	25.000 CAL
PCB1016#4	7.567	7.570	20762	25.000 CAL
PCB1016#5	8.077	8.077	41551	25.000 CAL
PCB1260#1	11.640	11.640	101401	25.000 CAL
PCB1260#2	12.290	12.290	68518	25.000 CAL
PCB1260#3	13.150	13.150	37420	25.000 CAL
PCB1260#4	13.893	13.897	99188	25.000 CAL
PCB1260#5	14.547	14.550	108952	25.000 CAL
Decachlorobiphenyl	17.160	17.167	126642	5.000 CAL

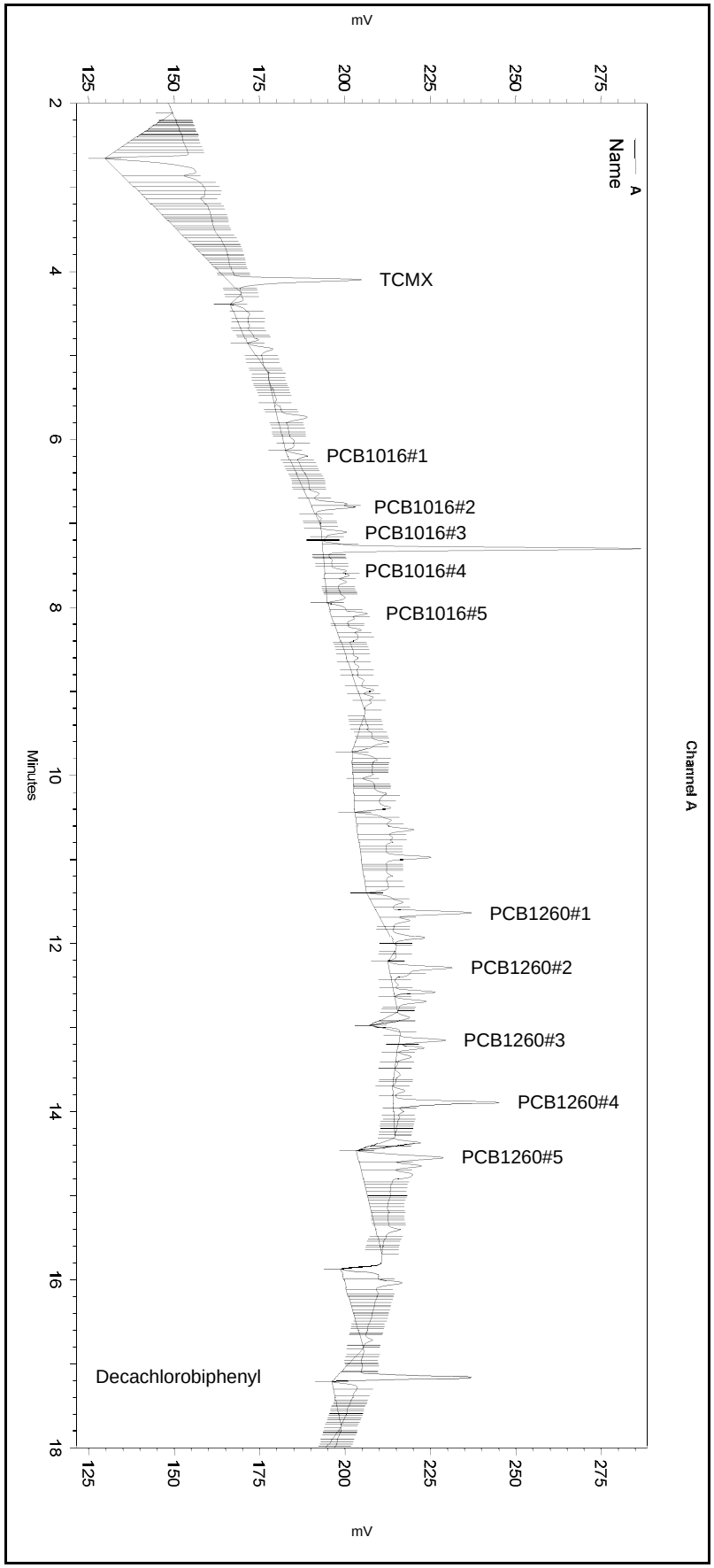
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	35473	5.000 CAL
PCB1016#1	5.203	5.207	6148	25.000 CAL
PCB1016#2	5.767	5.770	15490	25.000 CAL
PCB1016#3	5.983	5.987	7359	25.000 CAL
PCB1016#4	6.533	6.537	5219	25.000 CAL
PCB1016#5	6.987	6.990	5550	25.000 CAL
PCB1260#1	11.153	11.153	18507	25.000 CAL
PCB1260#2	11.560	11.560	14076	25.000 CAL
PCB1260#3	12.100	12.100	12801	25.000 CAL
PCB1260#4	12.757	12.757	27719	25.000 CAL
PCB1260#5	13.430	13.430	12038	25.000 CAL
Decachlorobiphenyl	16.423	16.423	53024	5.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 (Offline) Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 7:31:33 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

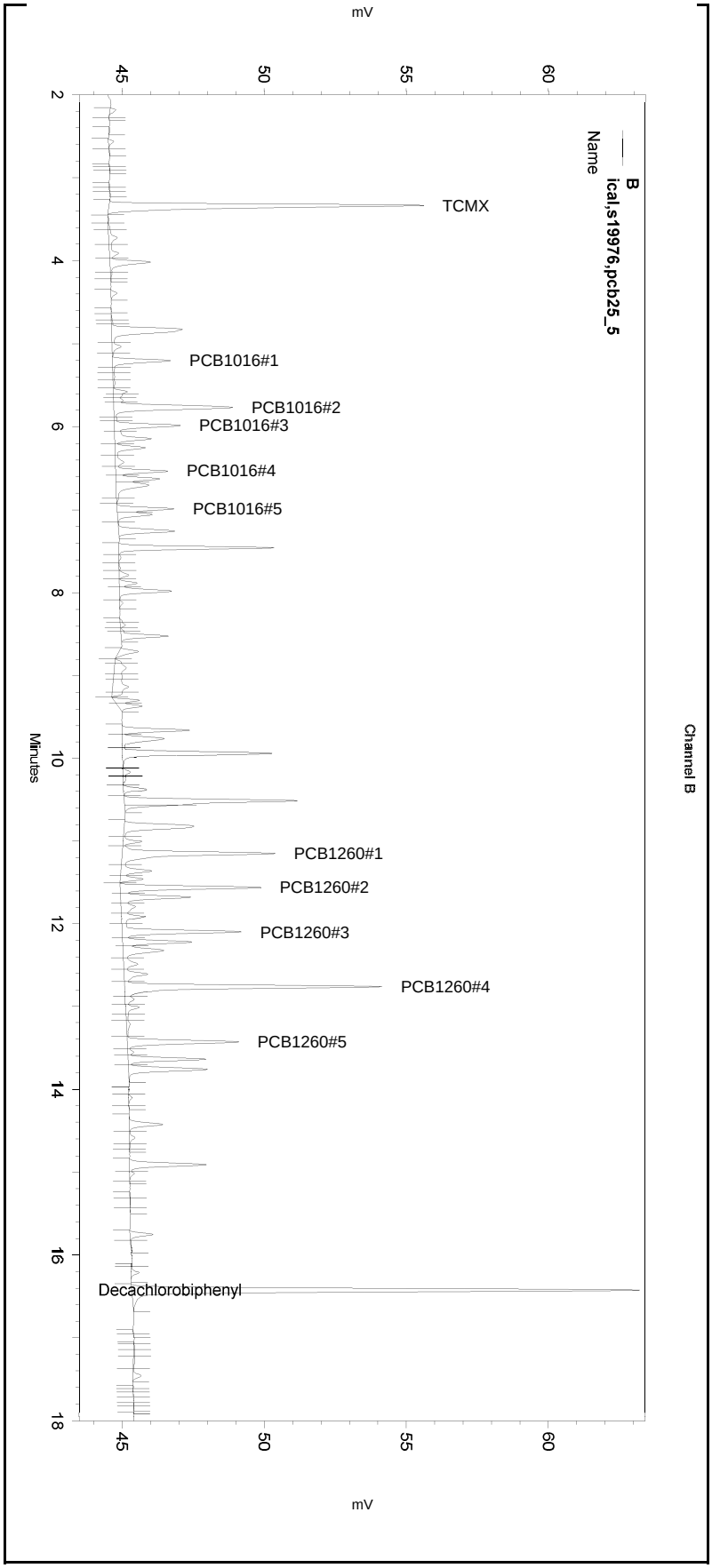
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 (Offline) Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 7:31:33 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:57:29 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	386492	20.000 CAL
PCB1016#1	6.200	6.197	37545	100.000 CAL
PCB1016#2	6.813	6.810	116135	100.000 CAL
PCB1016#3	7.113	7.110	74900	100.000 CAL
PCB1016#4	7.570	7.570	41959	100.000 CAL
PCB1016#5	8.080	8.077	62896	100.000 CAL
PCB1260#1	11.647	11.640	204301	100.000 CAL
PCB1260#2	12.293	12.290	176661	100.000 CAL
PCB1260#3	13.157	13.150	126401	100.000 CAL
PCB1260#4	13.900	13.897	281699	100.000 CAL
PCB1260#5	14.553	14.550	142049	100.000 CAL
Decachlorobiphenyl	17.170	17.167	306679	20.000 CAL

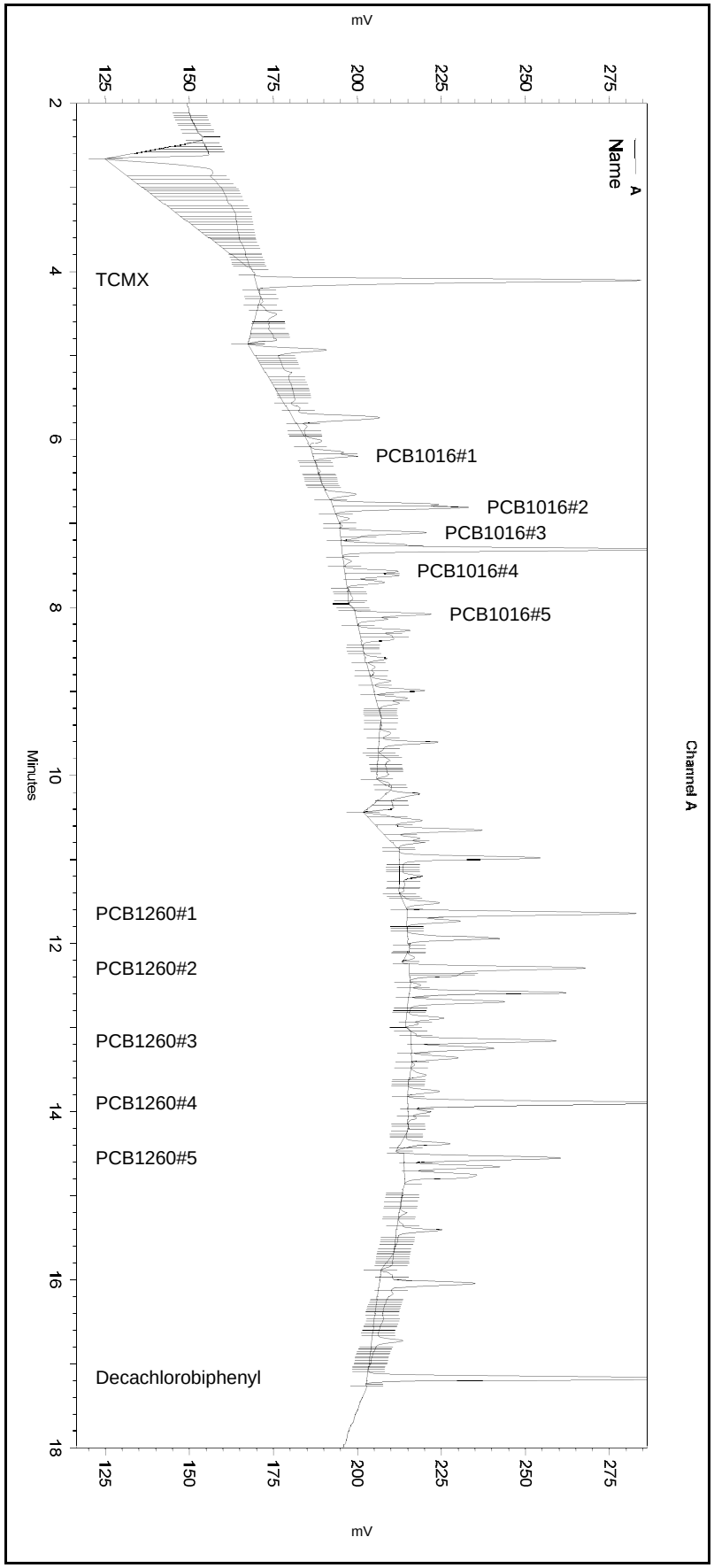
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	139300	20.000 CAL
PCB1016#1	5.210	5.207	22906	100.000 CAL
PCB1016#2	5.773	5.770	55734	100.000 CAL
PCB1016#3	5.990	5.987	26927	100.000 CAL
PCB1016#4	6.540	6.537	18100	100.000 CAL
PCB1016#5	6.993	6.990	19889	100.000 CAL
PCB1260#1	11.160	11.153	61078	100.000 CAL
PCB1260#2	11.563	11.560	46115	100.000 CAL
PCB1260#3	12.107	12.100	39659	100.000 CAL
PCB1260#4	12.763	12.757	90313	100.000 CAL
PCB1260#5	13.437	13.430	40201	100.000 CAL
Decachlorobiphenyl	16.430	16.423	170856	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:57:29 AM
Sample Amount: 1



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No items selected for this section

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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

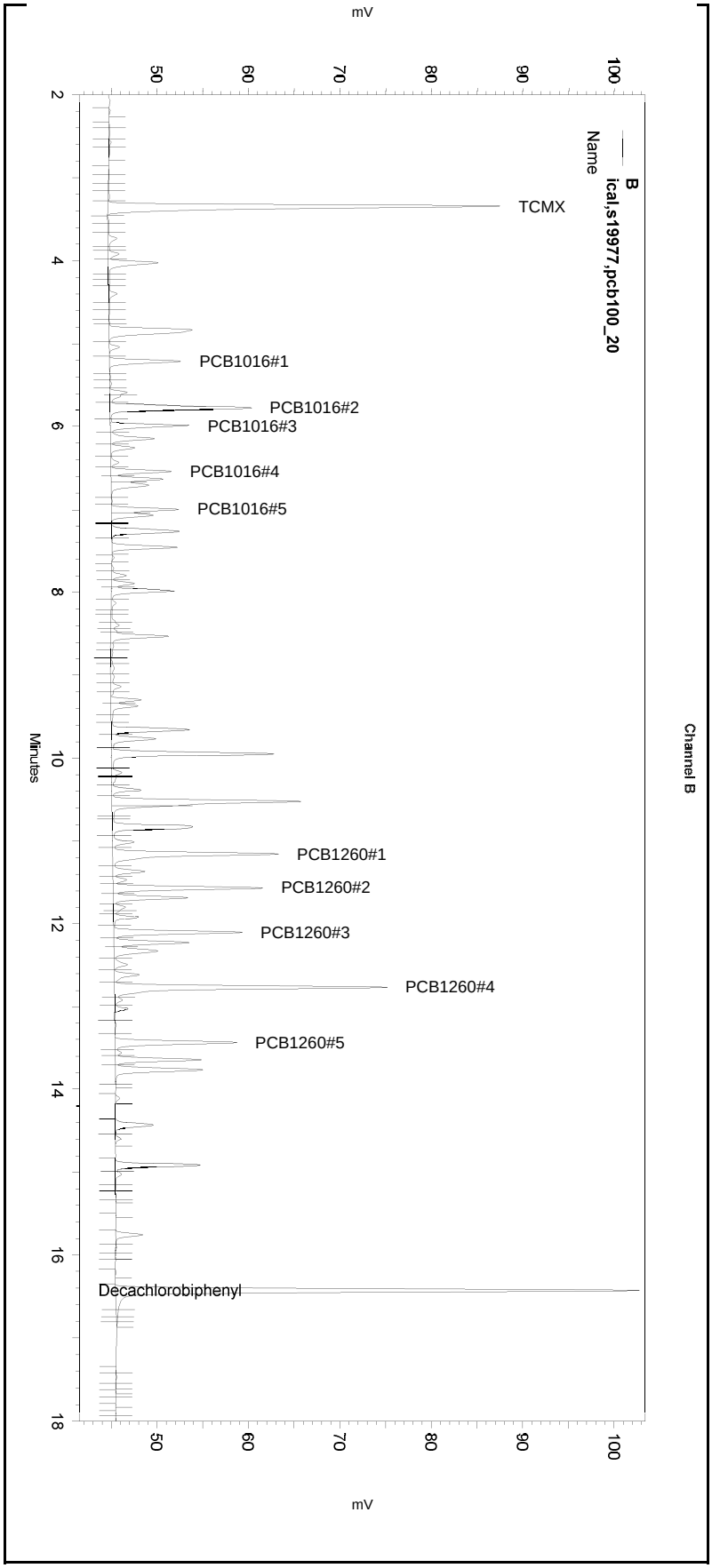
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.002	0	0
Yes	Reset Baseline	4.297	0	0
Yes	Reset Baseline	6.082	0	0
Yes	Reset Baseline	6.713	0	0
Yes	Reset Baseline	7.005	0	0
Yes	Reset Baseline	7.761	0	0
Yes	Reset Baseline	8.025	0	0
Yes	Reset Baseline	11.582	0	0
Yes	Reset Baseline	12.063	0	0
Yes	Move BL Start	12.22	12.243	0
Yes	Reset Baseline	12.458	0	0
Yes	Manual Baseline	13.045	13.419	0
Yes	Split Peak	13.101	0	0
Yes	Reset Baseline	14.497	0	0
Yes	Reset Baseline	14.862	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:57:29 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.545	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 (Offline) Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:31:46 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	684351	20.000 CAL
PCB1016#1	6.200	6.197	116854	100.000 CAL
PCB1016#2	6.813	6.810	198211	100.000 CAL
PCB1016#3	7.113	7.110	147868	100.000 CAL
PCB1016#4	7.570	7.570	78527	100.000 CAL
PCB1016#5	8.080	8.077	81926	100.000 CAL
PCB1260#1	11.647	11.640	218667	100.000 CAL
PCB1260#2	12.293	12.290	191489	100.000 CAL
PCB1260#3	13.157	13.150	118902	100.000 CAL
PCB1260#4	13.900	13.897	281699	100.000 CAL
PCB1260#5	14.553	14.550	159171	100.000 CAL
Decachlorobiphenyl	17.170	17.167	306679	20.000 CAL

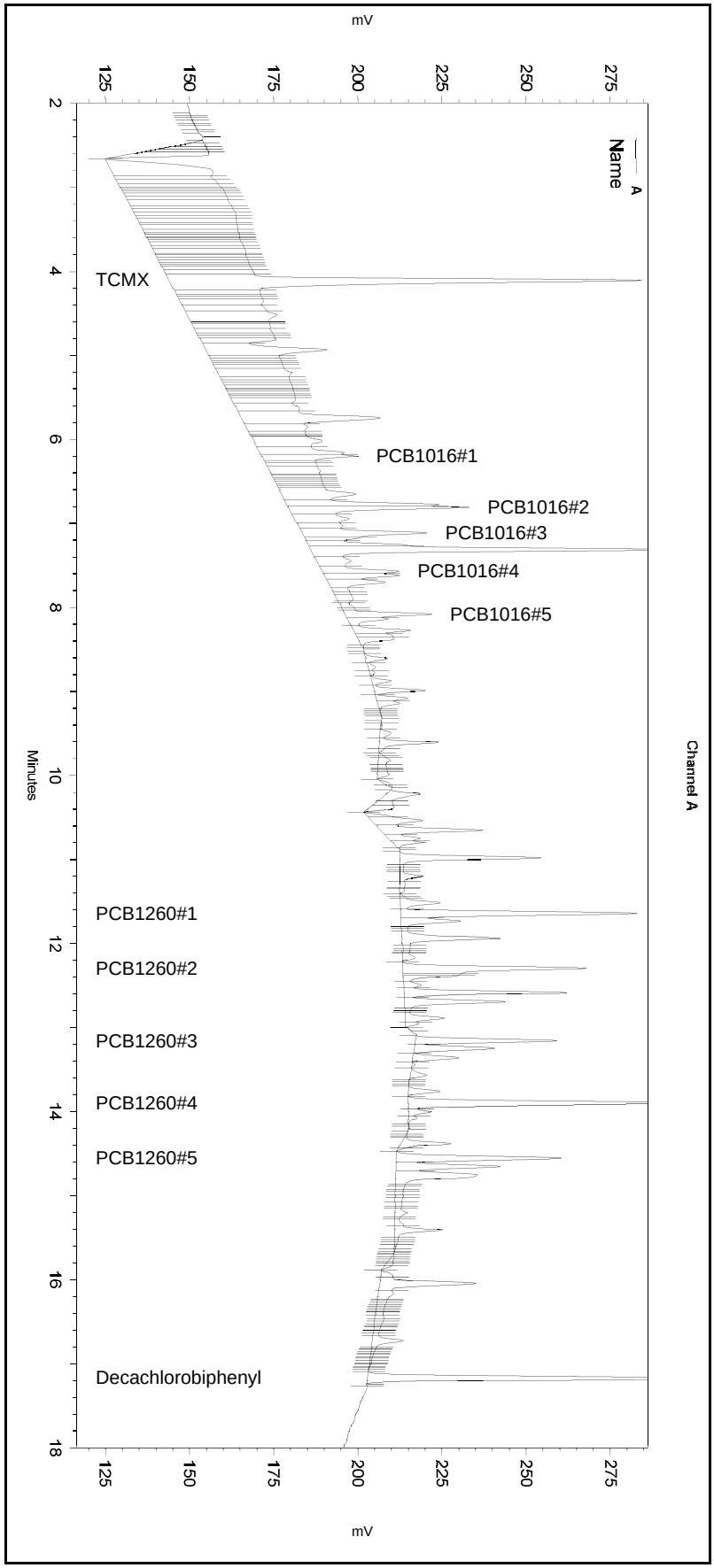
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	139300	20.000 CAL
PCB1016#1	5.210	5.207	24336	100.000 CAL
PCB1016#2	5.773	5.770	57577	100.000 CAL
PCB1016#3	5.990	5.987	28557	100.000 CAL
PCB1016#4	6.540	6.537	19330	100.000 CAL
PCB1016#5	6.993	6.990	21205	100.000 CAL
PCB1260#1	11.160	11.153	61078	100.000 CAL
PCB1260#2	11.563	11.560	46115	100.000 CAL
PCB1260#3	12.107	12.100	39659	100.000 CAL
PCB1260#4	12.763	12.757	90313	100.000 CAL
PCB1260#5	13.437	13.430	40201	100.000 CAL
Decachlorobiphenyl	16.430	16.423	170856	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 (Offline) Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:31:46 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

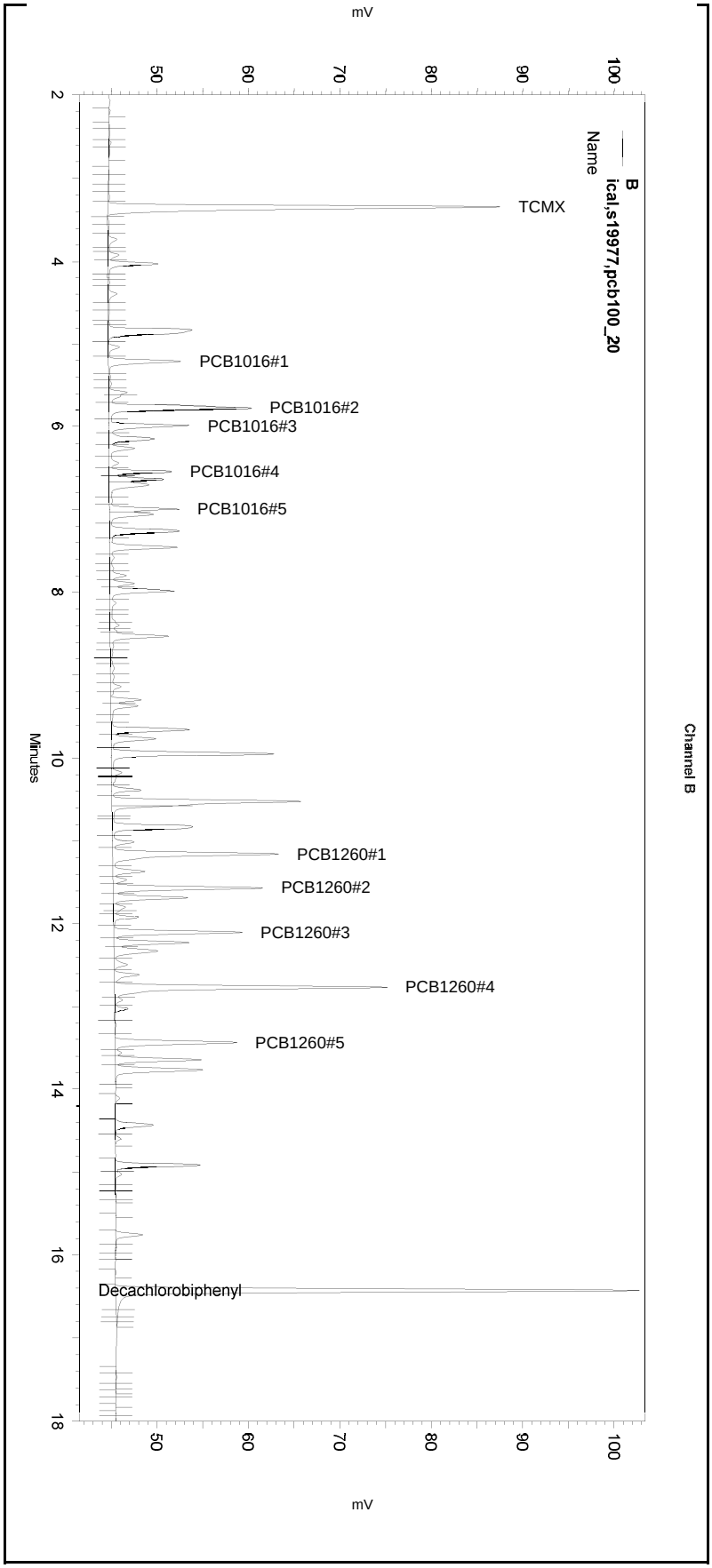
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 (Offline) Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:31:46 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:57:35 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	811212	50.000 CAL
PCB1016#1	6.197	6.197	92140	250.000 CAL
PCB1016#2	6.810	6.810	268218	250.000 CAL
PCB1016#3	7.110	7.110	184195	250.000 CAL
PCB1016#4	7.570	7.570	94019	250.000 CAL
PCB1016#5	8.077	8.077	145150	250.000 CAL
PCB1260#1	11.640	11.640	434397	250.000 CAL
PCB1260#2	12.290	12.290	430462	250.000 CAL
PCB1260#3	13.150	13.150	273946	250.000 CAL
PCB1260#4	13.897	13.897	589618	250.000 CAL
PCB1260#5	14.550	14.550	312567	250.000 CAL
Decachlorobiphenyl	17.167	17.167	617326	50.000 CAL

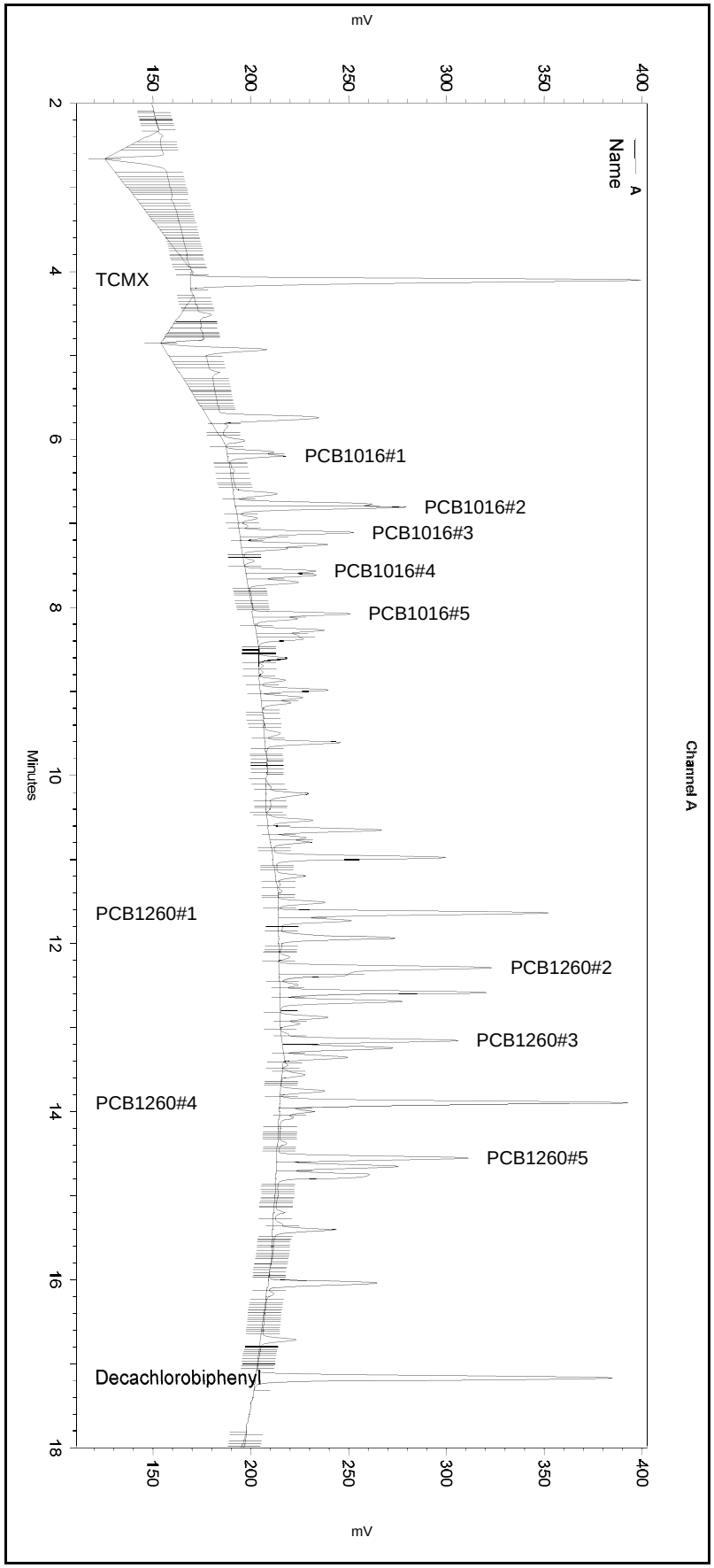
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	348956	50.000 CAL
PCB1016#1	5.207	5.207	53684	250.000 CAL
PCB1016#2	5.770	5.770	129867	250.000 CAL
PCB1016#3	5.987	5.987	62078	250.000 CAL
PCB1016#4	6.537	6.537	42866	250.000 CAL
PCB1016#5	6.990	6.990	48123	250.000 CAL
PCB1260#1	11.153	11.153	141677	250.000 CAL
PCB1260#2	11.560	11.560	106943	250.000 CAL
PCB1260#3	12.100	12.100	92664	250.000 CAL
PCB1260#4	12.757	12.757	212546	250.000 CAL
PCB1260#5	13.430	13.430	96592	250.000 CAL
Decachlorobiphenyl	16.423	16.423	380659	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:57:35 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

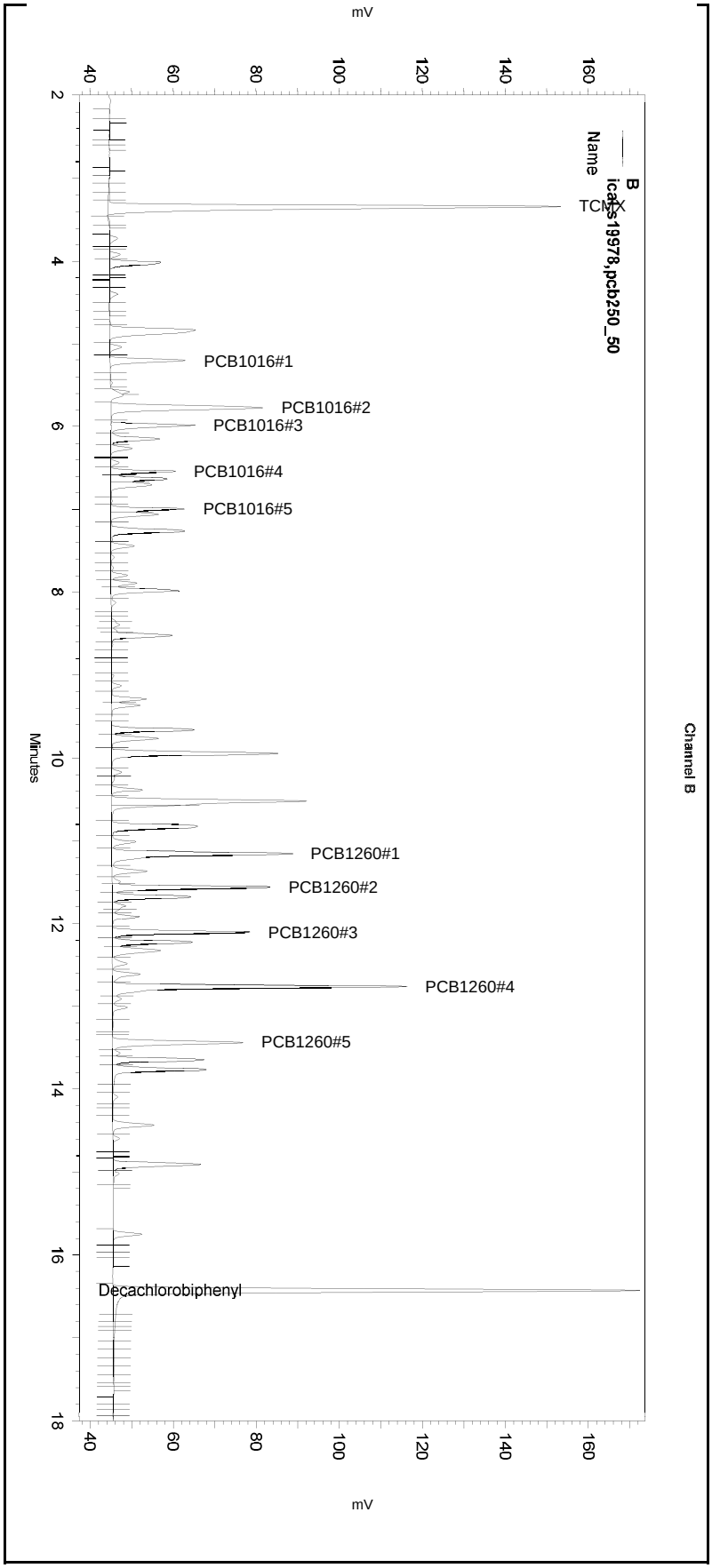
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.976	0	0
Yes	Reset Baseline	4.283	0	0
Yes	Reset Baseline	6.086	0	0
Yes	Reset Baseline	11.42	0	0
Yes	Manual Baseline	13.019	13.428	0
Yes	Split Peak	13.099	0	0
Yes	Reset Baseline	17.316	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:57:35 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 (Offline) Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:32:00 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	1089781	50.000 CAL
PCB1016#1	6.197	6.197	195490	250.000 CAL
PCB1016#2	6.810	6.810	341925	250.000 CAL
PCB1016#3	7.110	7.110	243006	250.000 CAL
PCB1016#4	7.570	7.570	124060	250.000 CAL
PCB1016#5	8.077	8.077	161343	250.000 CAL
PCB1260#1	11.640	11.640	451293	250.000 CAL
PCB1260#2	12.290	12.290	437868	250.000 CAL
PCB1260#3	13.150	13.150	256608	250.000 CAL
PCB1260#4	13.897	13.897	589618	250.000 CAL
PCB1260#5	14.550	14.550	312567	250.000 CAL
Decachlorobiphenyl	17.167	17.167	694583	50.000 CAL

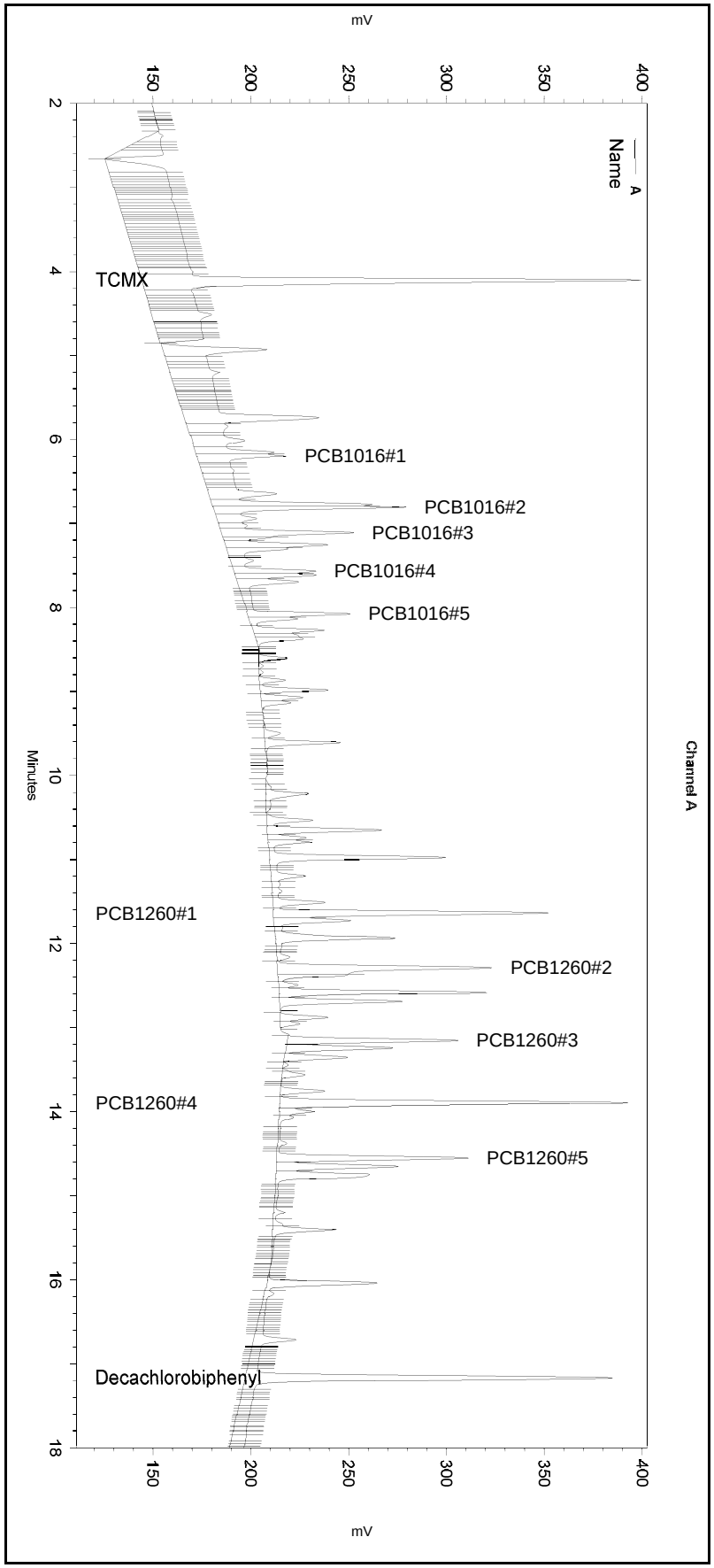
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	348956	50.000 CAL
PCB1016#1	5.207	5.207	53684	250.000 CAL
PCB1016#2	5.770	5.770	129867	250.000 CAL
PCB1016#3	5.987	5.987	62078	250.000 CAL
PCB1016#4	6.537	6.537	42866	250.000 CAL
PCB1016#5	6.990	6.990	48123	250.000 CAL
PCB1260#1	11.153	11.153	141677	250.000 CAL
PCB1260#2	11.560	11.560	106943	250.000 CAL
PCB1260#3	12.100	12.100	92664	250.000 CAL
PCB1260#4	12.757	12.757	212546	250.000 CAL
PCB1260#5	13.430	13.430	96592	250.000 CAL
Decachlorobiphenyl	16.423	16.423	380659	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 (Offline) Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:32:00 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

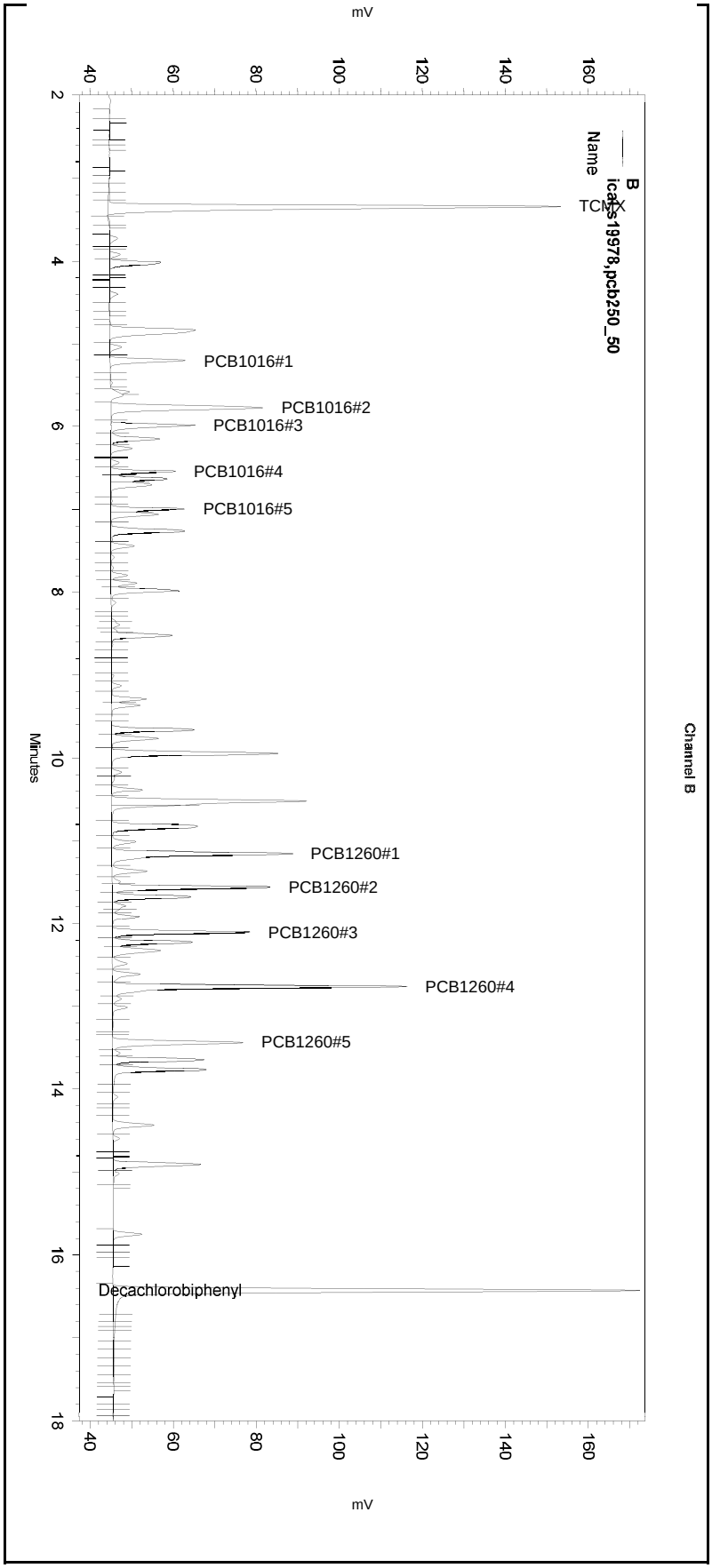
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 (Offline) Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:32:00 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:57:40 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.090	4.103	1344954	100.000 CAL
PCB1016#1	6.183	6.197	153076	500.000 CAL
PCB1016#2	6.797	6.810	438830	500.000 CAL
PCB1016#3	7.100	7.110	296694	500.000 CAL
PCB1016#4	7.557	7.570	157076	500.000 CAL
PCB1016#5	8.067	8.077	239254	500.000 CAL
PCB1260#1	11.630	11.640	701410	500.000 CAL
PCB1260#2	12.280	12.290	726674	500.000 CAL
PCB1260#3	13.140	13.150	468263	500.000 CAL
PCB1260#4	13.883	13.897	991537	500.000 CAL
PCB1260#5	14.537	14.550	552960	500.000 CAL
Decachlorobiphenyl	17.157	17.167	1019880	100.000 CAL

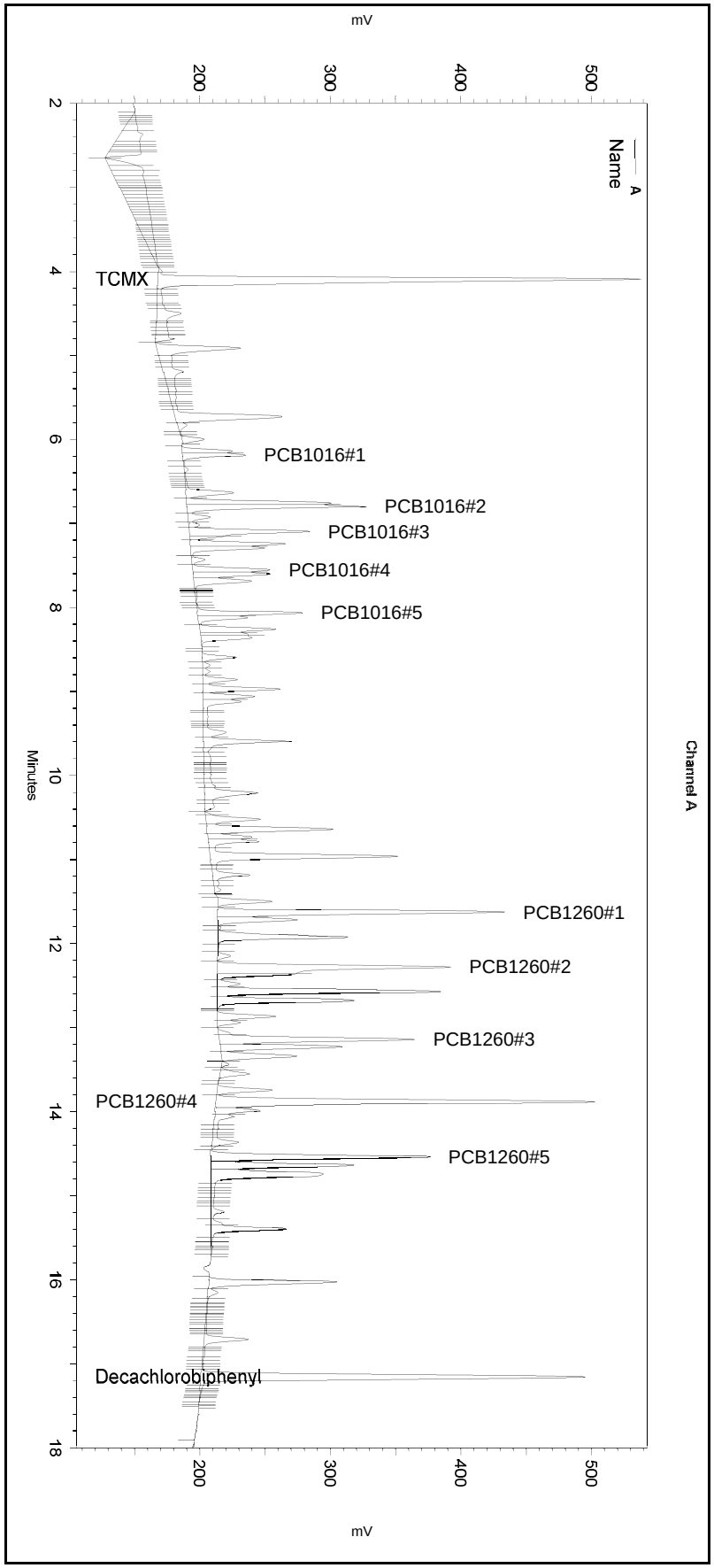
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.323	3.337	674460	100.000 CAL
PCB1016#1	5.193	5.207	94193	500.000 CAL
PCB1016#2	5.757	5.770	232508	500.000 CAL
PCB1016#3	5.973	5.987	110161	500.000 CAL
PCB1016#4	6.527	6.537	73914	500.000 CAL
PCB1016#5	6.980	6.990	85062	500.000 CAL
PCB1260#1	11.143	11.153	261764	500.000 CAL
PCB1260#2	11.550	11.560	193404	500.000 CAL
PCB1260#3	12.090	12.100	171467	500.000 CAL
PCB1260#4	12.747	12.757	404597	500.000 CAL
PCB1260#5	13.420	13.430	186709	500.000 CAL
Decachlorobiphenyl	16.413	16.423	743825	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:57:40 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.955	0	0
Yes	Reset Baseline	6.053	0	0
Yes	Reset Baseline	8.485	0	0
Yes	Reset Baseline	11.447	0	0
Yes	Manual Baseline	13.004	13.404	0
Yes	Reset Baseline	15.72	0	0
Yes	Reset Baseline	15.944	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
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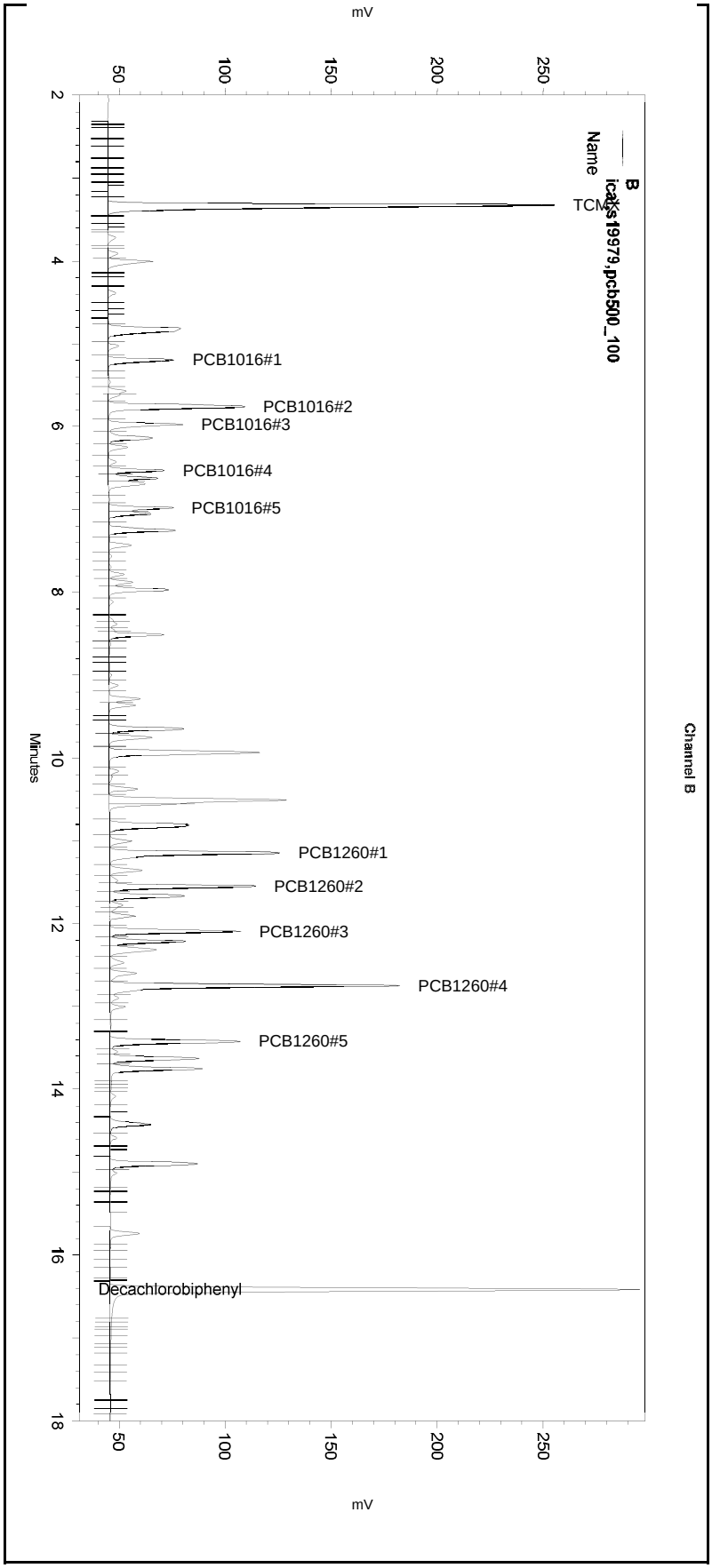
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 (Offline) Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:32:13 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.090	4.103	1675289	100.000 CAL
PCB1016#1	6.183	6.197	339005	500.000 CAL
PCB1016#2	6.797	6.810	632021	500.000 CAL
PCB1016#3	7.100	7.110	468564	500.000 CAL
PCB1016#4	7.557	7.570	290095	500.000 CAL
PCB1016#5	8.067	8.077	403651	500.000 CAL
PCB1260#1	11.630	11.640	786876	500.000 CAL
PCB1260#2	12.280	12.290	782149	500.000 CAL
PCB1260#3	13.140	13.150	393849	500.000 CAL
PCB1260#4	13.883	13.897	991537	500.000 CAL
PCB1260#5	14.537	14.550	555221	500.000 CAL
Decachlorobiphenyl	17.157	17.167	1031486	100.000 CAL

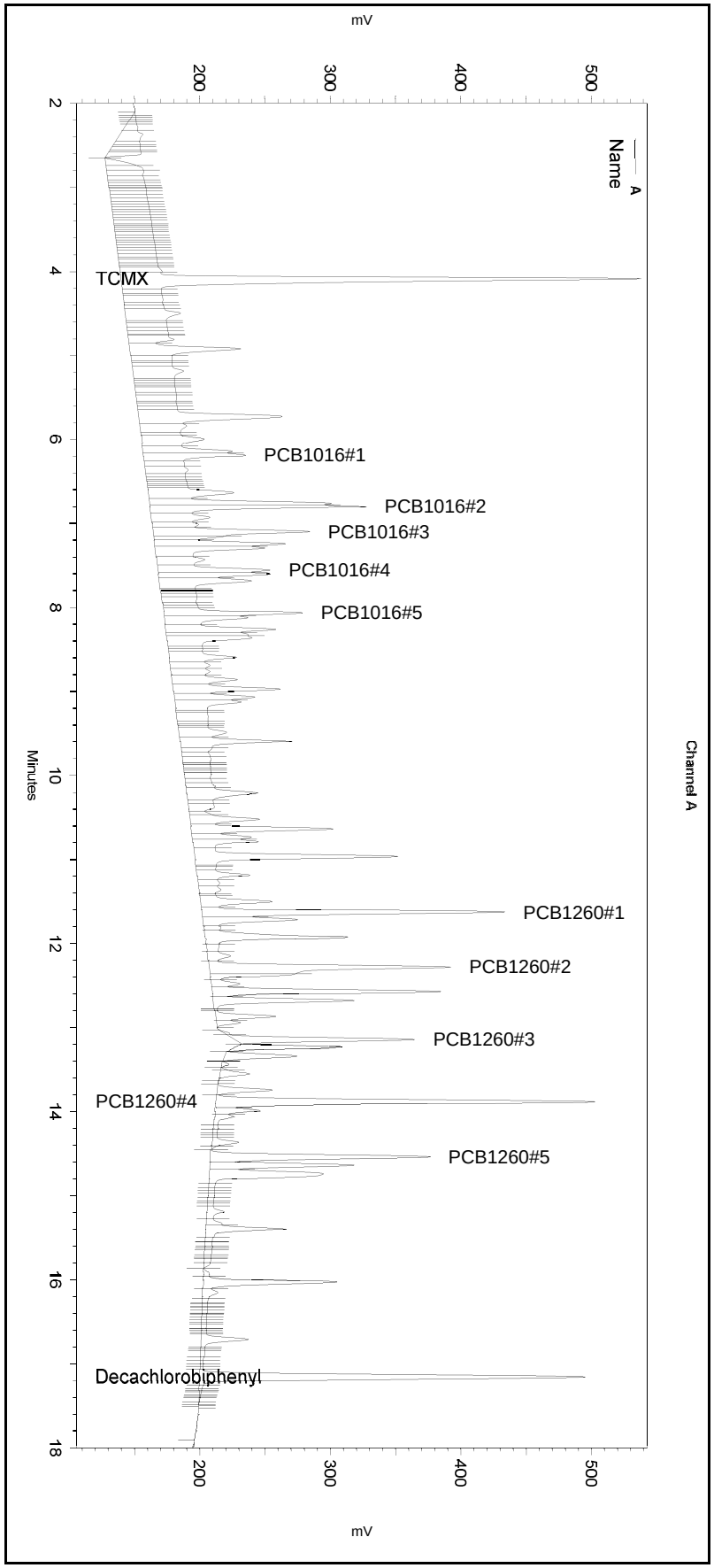
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.323	3.337	674460	100.000 CAL
PCB1016#1	5.193	5.207	94193	500.000 CAL
PCB1016#2	5.757	5.770	232508	500.000 CAL
PCB1016#3	5.973	5.987	110161	500.000 CAL
PCB1016#4	6.527	6.537	73914	500.000 CAL
PCB1016#5	6.980	6.990	85062	500.000 CAL
PCB1260#1	11.143	11.153	261764	500.000 CAL
PCB1260#2	11.550	11.560	193404	500.000 CAL
PCB1260#3	12.090	12.100	171467	500.000 CAL
PCB1260#4	12.747	12.757	404597	500.000 CAL
PCB1260#5	13.420	13.430	186709	500.000 CAL
Decachlorobiphenyl	16.413	16.423	743825	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 (Offline) Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:32:13 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

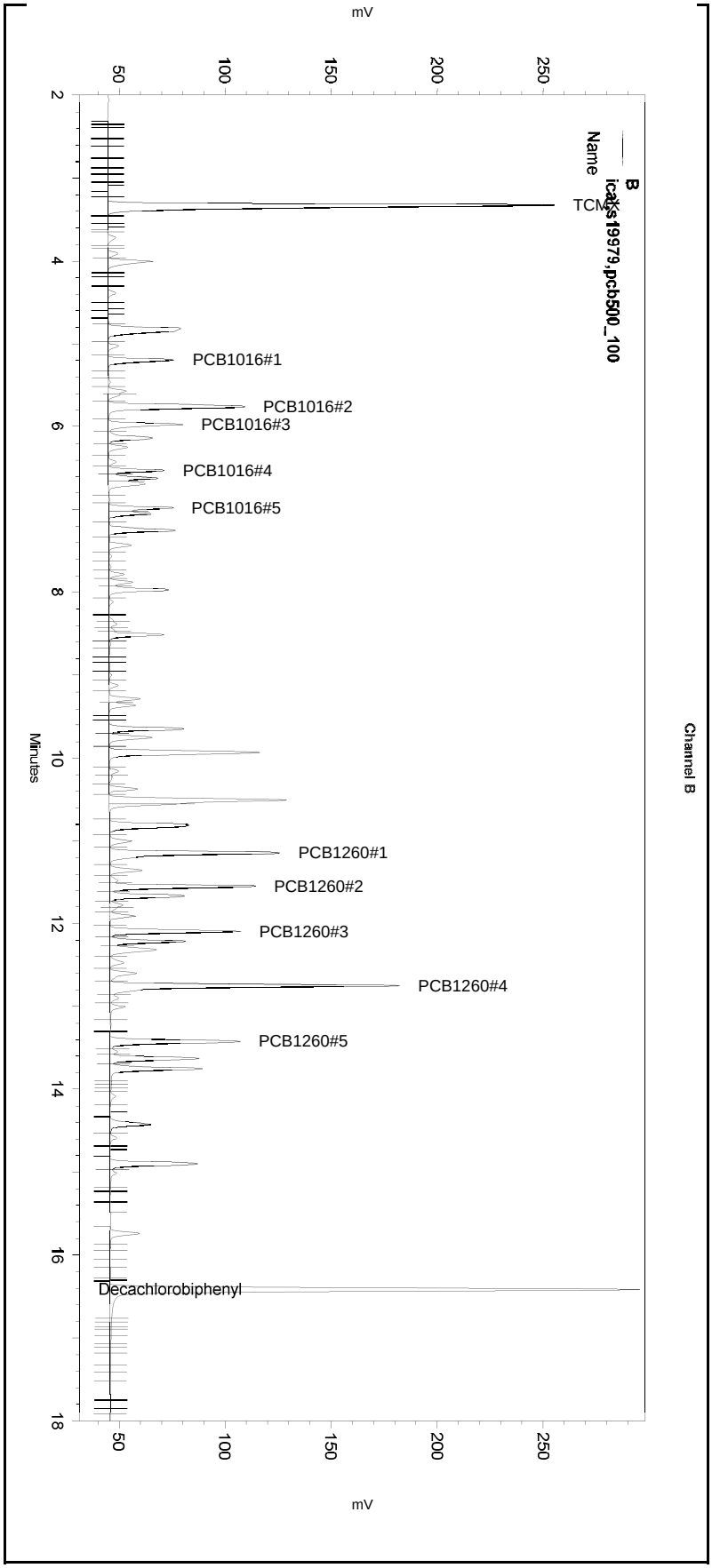
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 (Offline) Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:32:13 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:57:46 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	1851098	150.000 CAL
PCB1016#1	6.200	6.197	216798	750.000 CAL
PCB1016#2	6.813	6.810	608153	750.000 CAL
PCB1016#3	7.113	7.110	423496	750.000 CAL
PCB1016#4	7.573	7.570	229888	750.000 CAL
PCB1016#5	8.083	8.077	350252	750.000 CAL
PCB1260#1	11.643	11.640	960225	750.000 CAL
PCB1260#2	12.293	12.290	979347	750.000 CAL
PCB1260#3	13.153	13.150	632425	750.000 CAL
PCB1260#4	13.900	13.897	1292836	750.000 CAL
PCB1260#5	14.550	14.550	724082	750.000 CAL
Decachlorobiphenyl	17.167	17.167	1276679	150.000 CAL

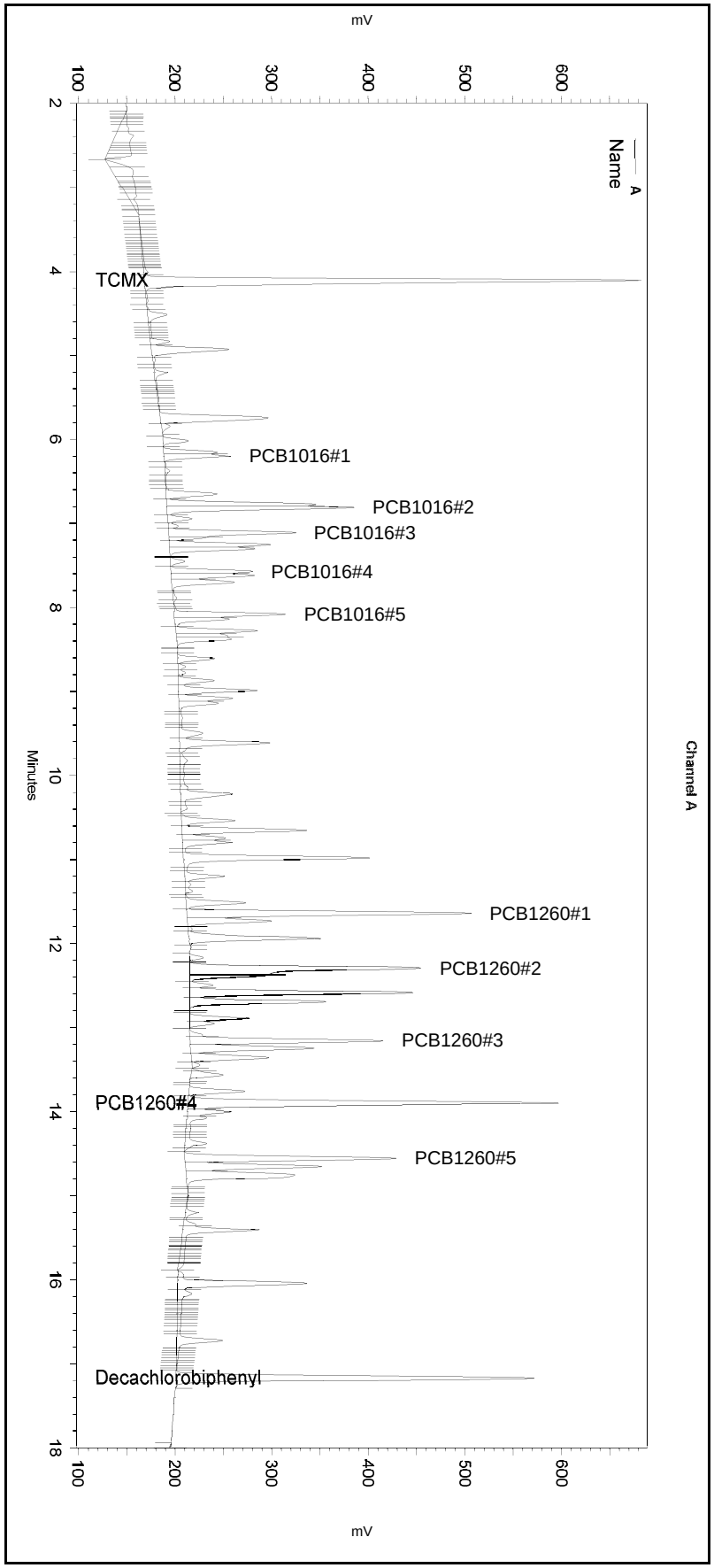
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	1069521	150.000 CAL
PCB1016#1	5.210	5.207	143624	750.000 CAL
PCB1016#2	5.773	5.770	366778	750.000 CAL
PCB1016#3	5.990	5.987	170474	750.000 CAL
PCB1016#4	6.540	6.537	113440	750.000 CAL
PCB1016#5	6.993	6.990	129786	750.000 CAL
PCB1260#1	11.160	11.153	383407	750.000 CAL
PCB1260#2	11.563	11.560	280246	750.000 CAL
PCB1260#3	12.107	12.100	246327	750.000 CAL
PCB1260#4	12.760	12.757	576462	750.000 CAL
PCB1260#5	13.437	13.430	263393	750.000 CAL
Decachlorobiphenyl	16.430	16.423	1006026	150.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:57:46 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

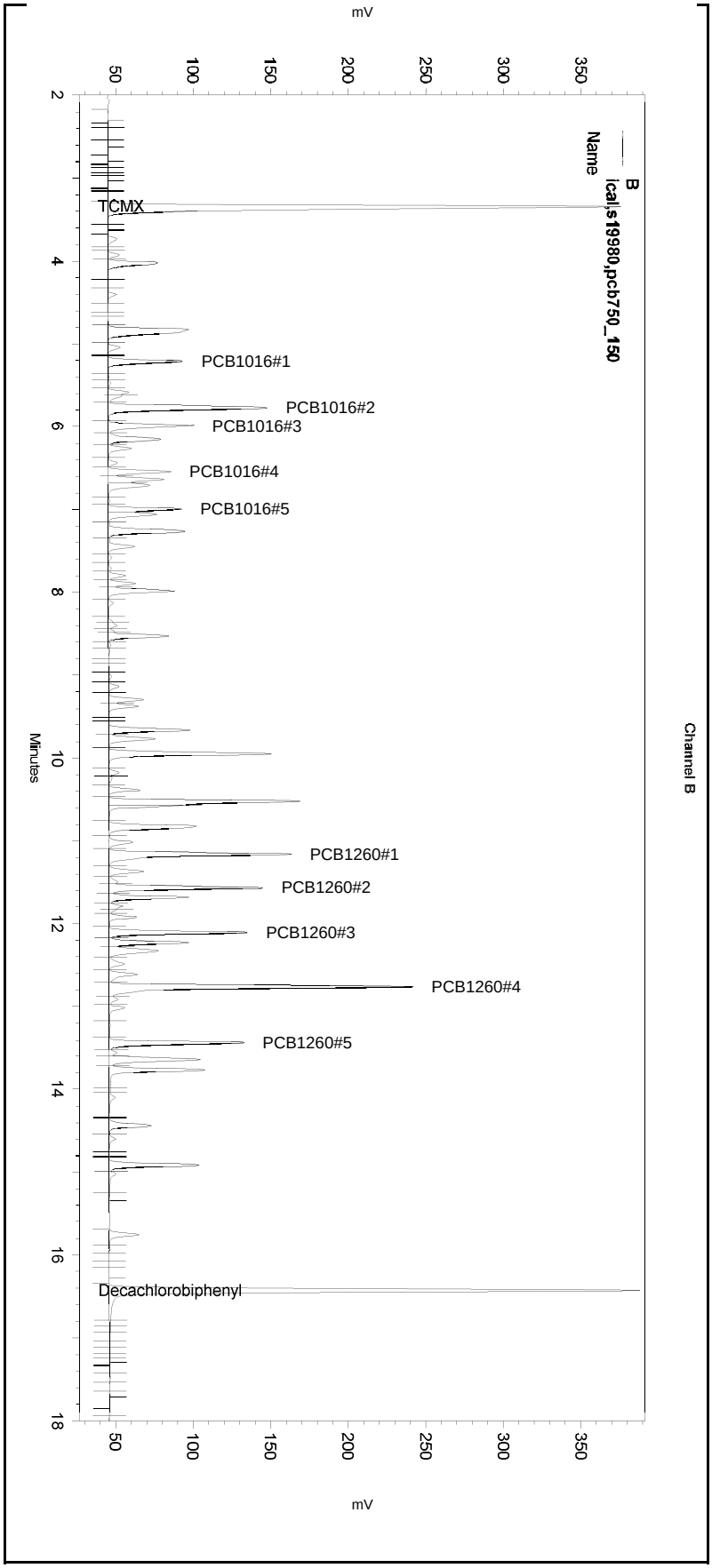
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.958	0	0
Yes	Reset Baseline	8.478	0	0
Yes	Reset Baseline	12.066	0	0
Yes	Manual Baseline	13.006	13.485	0
Yes	Split Peak	13.096	0	0
Yes	Split Peak	13.101	0	0
Yes	Reset Baseline	14.967	0	0
Yes	Reset Baseline	17.299	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:57:46 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 (Offline) Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:32:26 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	1870942	150.000 CAL
PCB1016#1	6.200	6.197	282147	750.000 CAL
PCB1016#2	6.813	6.810	680887	750.000 CAL
PCB1016#3	7.113	7.110	492386	750.000 CAL
PCB1016#4	7.573	7.570	286434	750.000 CAL
PCB1016#5	8.083	8.077	425062	750.000 CAL
PCB1260#1	11.643	11.640	998663	750.000 CAL
PCB1260#2	12.293	12.290	1012980	750.000 CAL
PCB1260#3	13.153	13.150	564621	750.000 CAL
PCB1260#4	13.900	13.897	1293117	750.000 CAL
PCB1260#5	14.550	14.550	733828	750.000 CAL
Decachlorobiphenyl	17.167	17.167	1429447	150.000 CAL

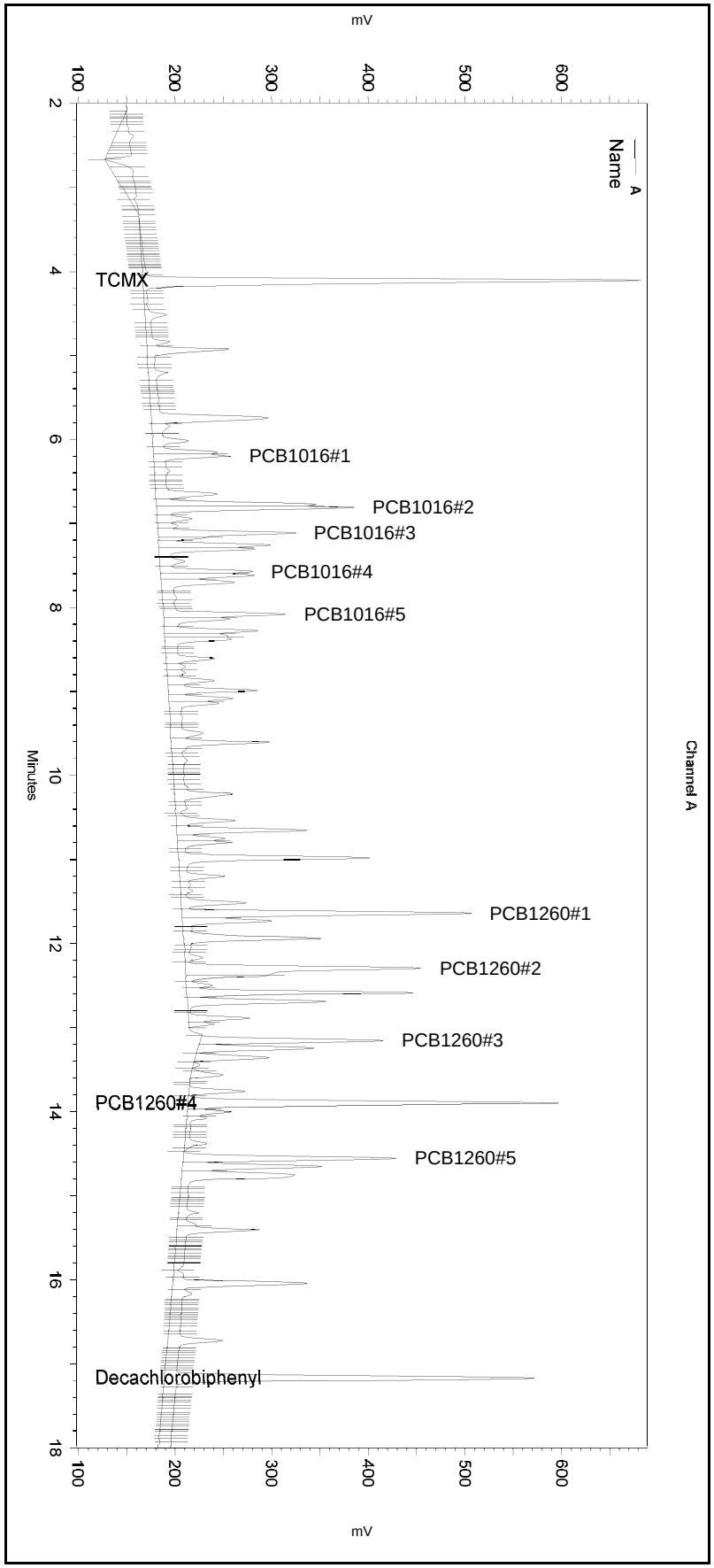
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	1069521	150.000 CAL
PCB1016#1	5.210	5.207	143624	750.000 CAL
PCB1016#2	5.773	5.770	366778	750.000 CAL
PCB1016#3	5.990	5.987	170474	750.000 CAL
PCB1016#4	6.540	6.537	113440	750.000 CAL
PCB1016#5	6.993	6.990	129786	750.000 CAL
PCB1260#1	11.160	11.153	383407	750.000 CAL
PCB1260#2	11.563	11.560	280246	750.000 CAL
PCB1260#3	12.107	12.100	246327	750.000 CAL
PCB1260#4	12.760	12.757	576462	750.000 CAL
PCB1260#5	13.437	13.430	263393	750.000 CAL
Decachlorobiphenyl	16.430	16.423	1006026	150.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 (Offline) Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:32:26 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

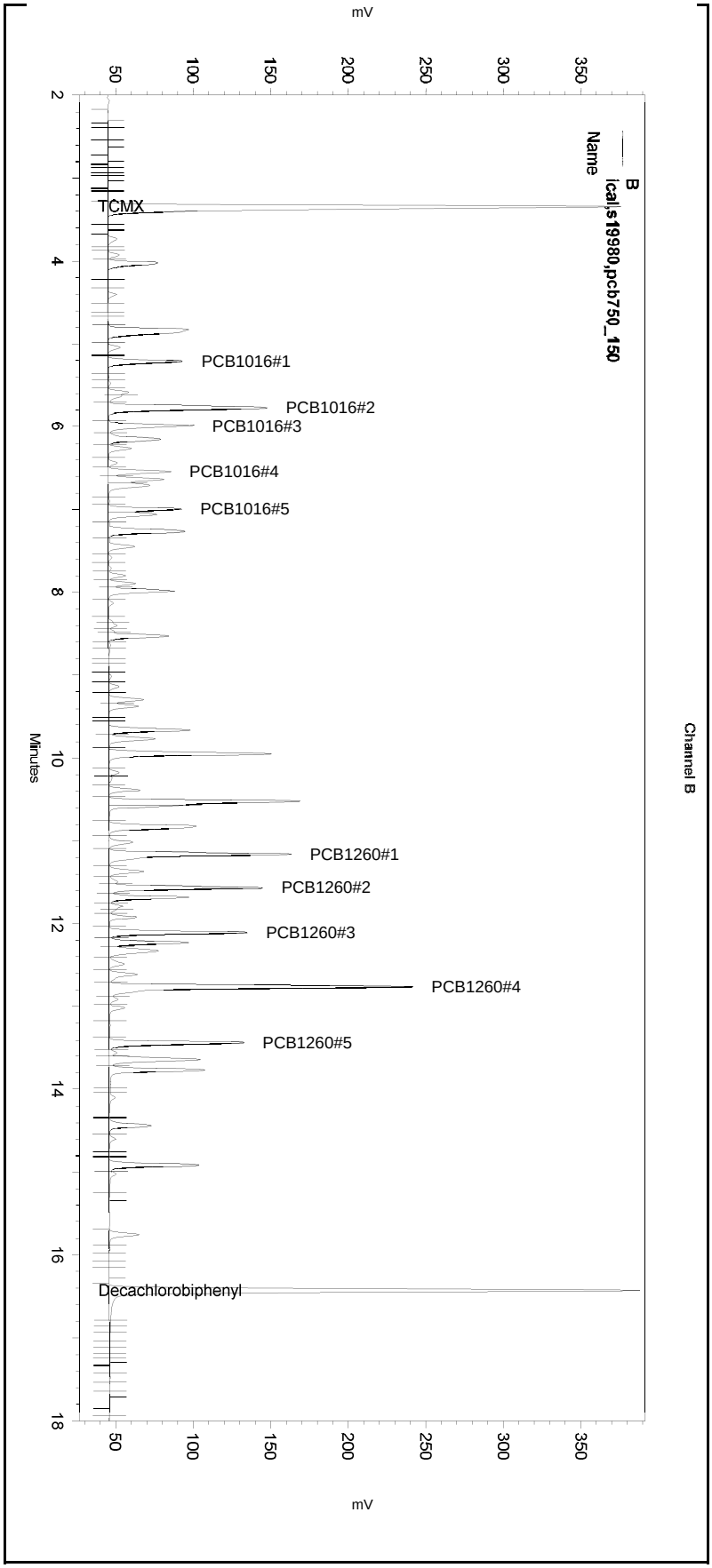
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 (Offline) Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:32:26 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:57:52 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.093	4.103	2139909	200.000 CAL
PCB1016#1	6.187	6.197	245258	1000.000 CAL
PCB1016#2	6.800	6.810	689174	1000.000 CAL
PCB1016#3	7.103	7.110	466173	1000.000 CAL
PCB1016#4	7.560	7.570	251333	1000.000 CAL
PCB1016#5	8.070	8.077	388721	1000.000 CAL
PCB1260#1	11.633	11.640	1106040	1000.000 CAL
PCB1260#2	12.280	12.290	1133714	1000.000 CAL
PCB1260#3	13.140	13.150	732069	1000.000 CAL
PCB1260#4	13.887	13.897	1516897	1000.000 CAL
PCB1260#5	14.540	14.550	843436	1000.000 CAL
Decachlorobiphenyl	17.157	17.167	1521403	200.000 CAL

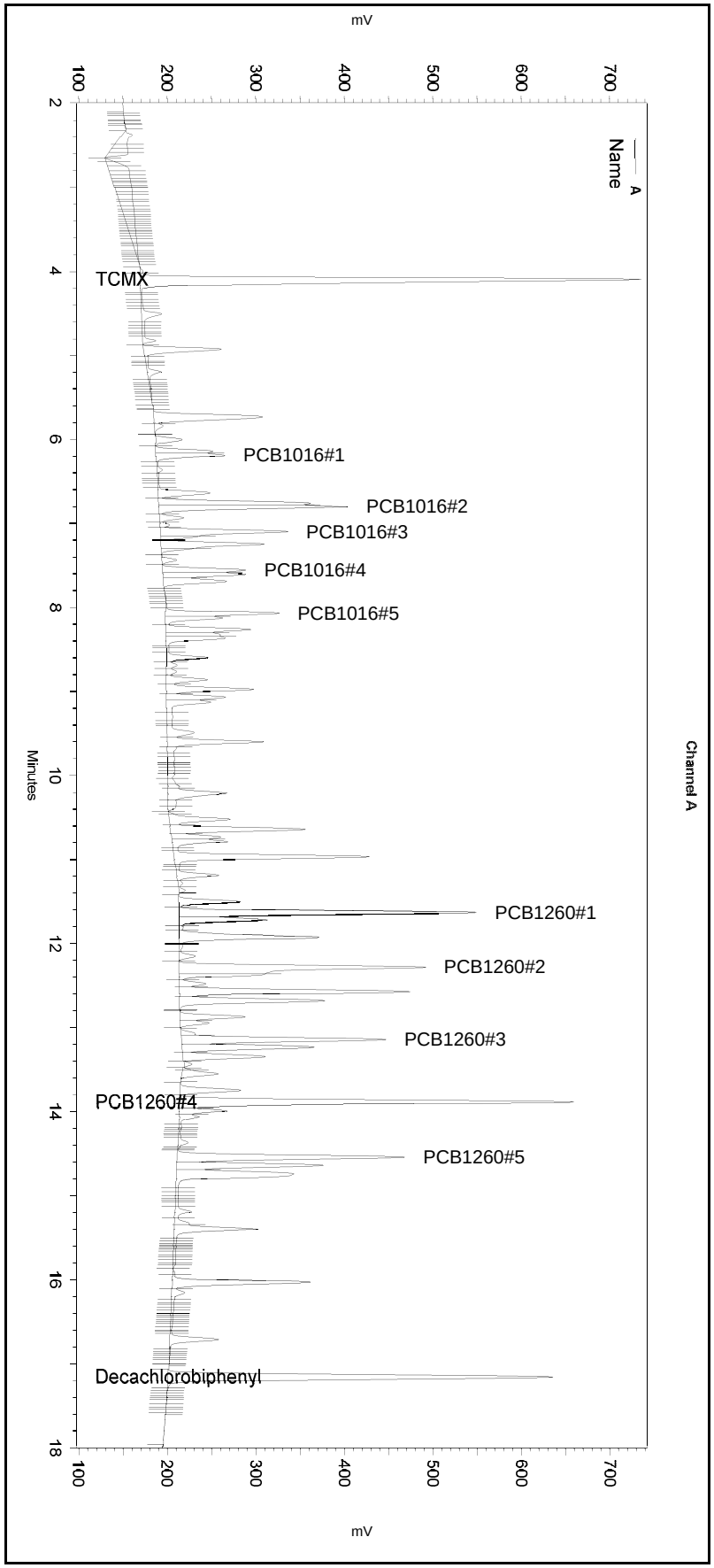
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.327	3.337	1281121	200.000 CAL
PCB1016#1	5.197	5.207	165556	1000.000 CAL
PCB1016#2	5.763	5.770	416829	1000.000 CAL
PCB1016#3	5.977	5.987	193652	1000.000 CAL
PCB1016#4	6.530	6.537	128512	1000.000 CAL
PCB1016#5	6.983	6.990	150292	1000.000 CAL
PCB1260#1	11.147	11.153	462166	1000.000 CAL
PCB1260#2	11.550	11.560	335022	1000.000 CAL
PCB1260#3	12.093	12.100	298965	1000.000 CAL
PCB1260#4	12.750	12.757	711594	1000.000 CAL
PCB1260#5	13.423	13.430	330730	1000.000 CAL
Decachlorobiphenyl	16.417	16.423	1246720	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:57:52 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

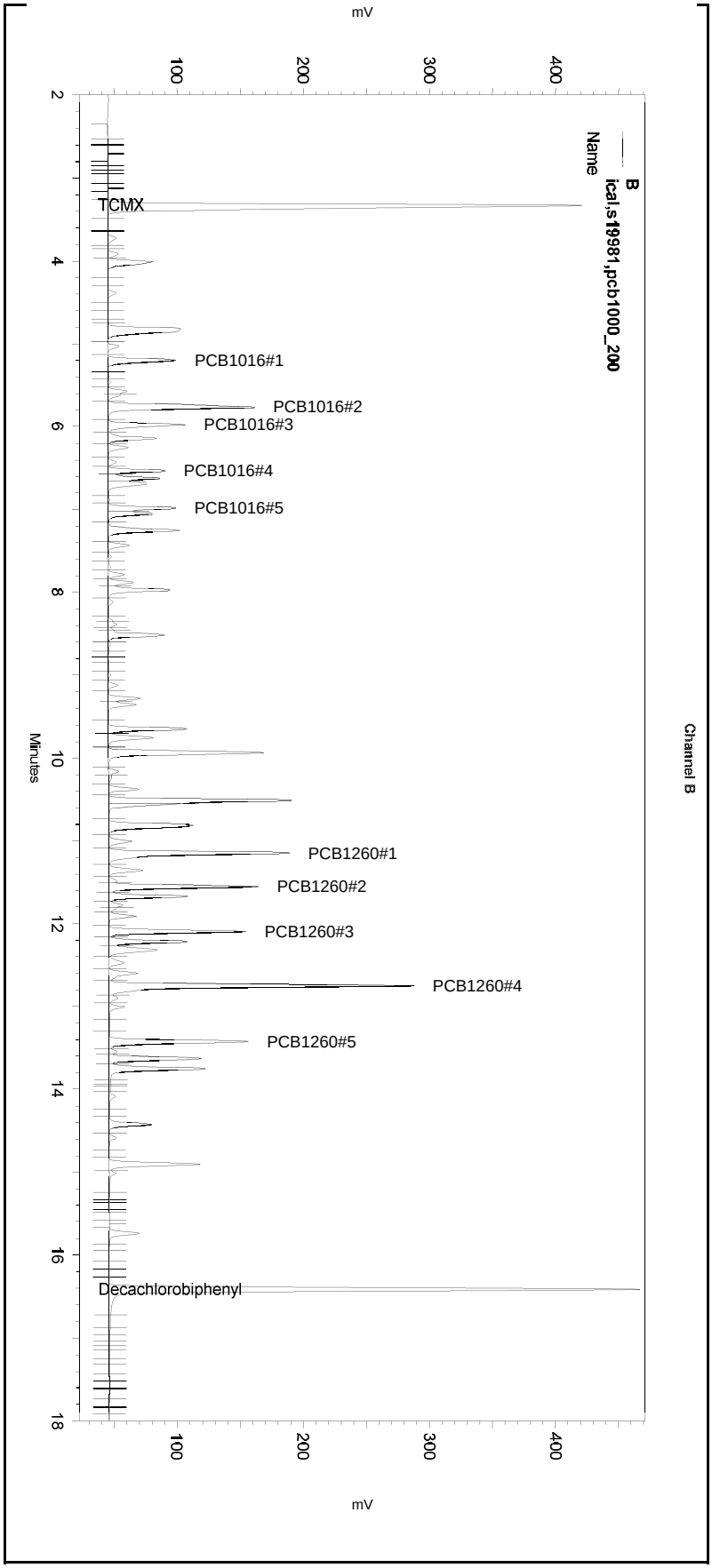
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.93	0	0
Yes	Reset Baseline	5.606	0	0
Yes	Reset Baseline	11.401	0	0
Yes	Manual Baseline	13.005	13.482	0
Yes	Split Peak	13.092	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:57:52 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 (Offline) Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:32:39 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.093	4.103	2421347	200.000 CAL
PCB1016#1	6.187	6.197	319954	1000.000 CAL
PCB1016#2	6.800	6.810	737237	1000.000 CAL
PCB1016#3	7.103	7.110	497422	1000.000 CAL
PCB1016#4	7.560	7.570	260528	1000.000 CAL
PCB1016#5	8.070	8.077	388721	1000.000 CAL
PCB1260#1	11.633	11.640	1147353	1000.000 CAL
PCB1260#2	12.280	12.290	1155812	1000.000 CAL
PCB1260#3	13.140	13.150	658691	1000.000 CAL
PCB1260#4	13.887	13.897	1516897	1000.000 CAL
PCB1260#5	14.540	14.550	843436	1000.000 CAL
Decachlorobiphenyl	17.157	17.167	1521403	200.000 CAL

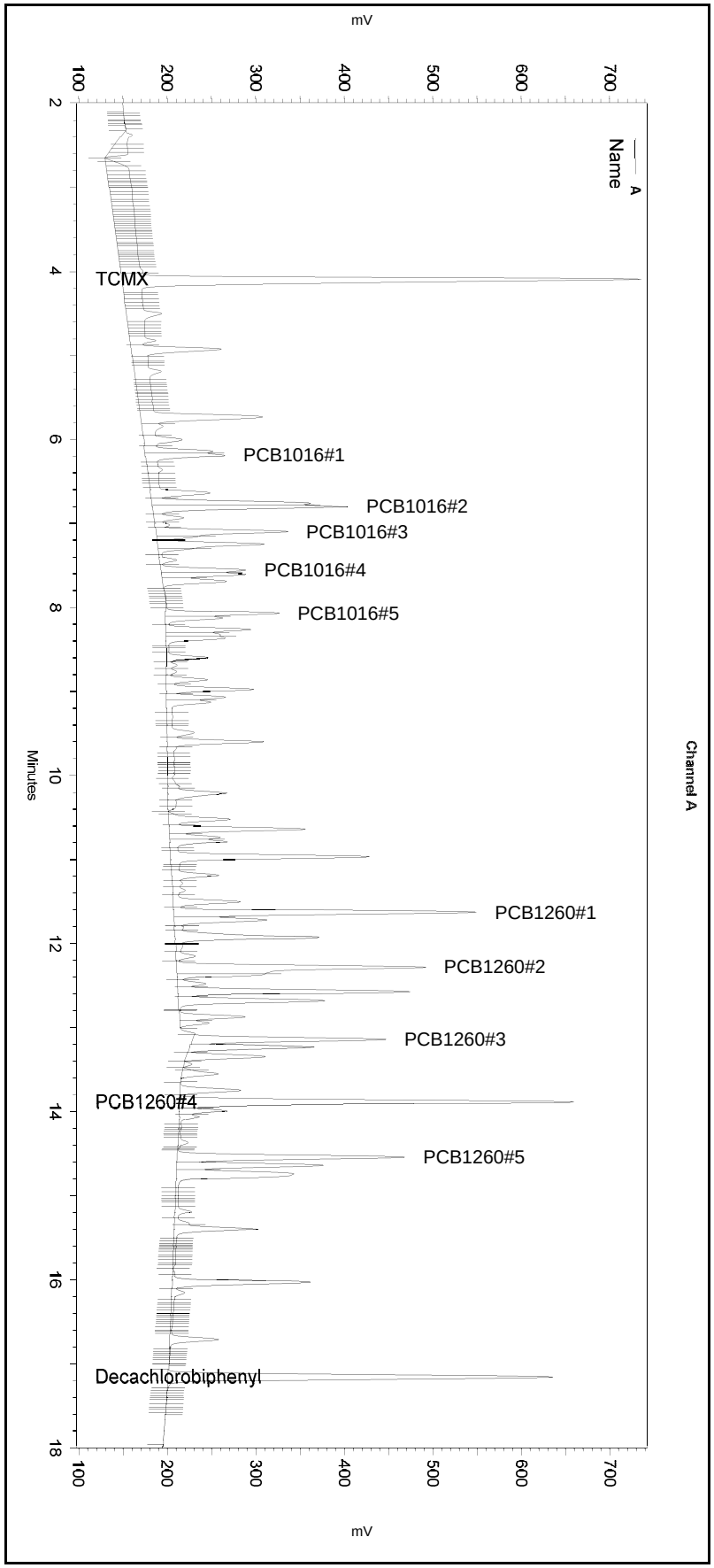
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.327	3.337	1281121	200.000 CAL
PCB1016#1	5.197	5.207	165556	1000.000 CAL
PCB1016#2	5.763	5.770	416829	1000.000 CAL
PCB1016#3	5.977	5.987	193652	1000.000 CAL
PCB1016#4	6.530	6.537	128512	1000.000 CAL
PCB1016#5	6.983	6.990	150292	1000.000 CAL
PCB1260#1	11.147	11.153	462166	1000.000 CAL
PCB1260#2	11.550	11.560	335022	1000.000 CAL
PCB1260#3	12.093	12.100	298965	1000.000 CAL
PCB1260#4	12.750	12.757	711594	1000.000 CAL
PCB1260#5	13.423	13.430	330730	1000.000 CAL
Decachlorobiphenyl	16.417	16.423	1246720	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 (Offline) Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:32:39 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

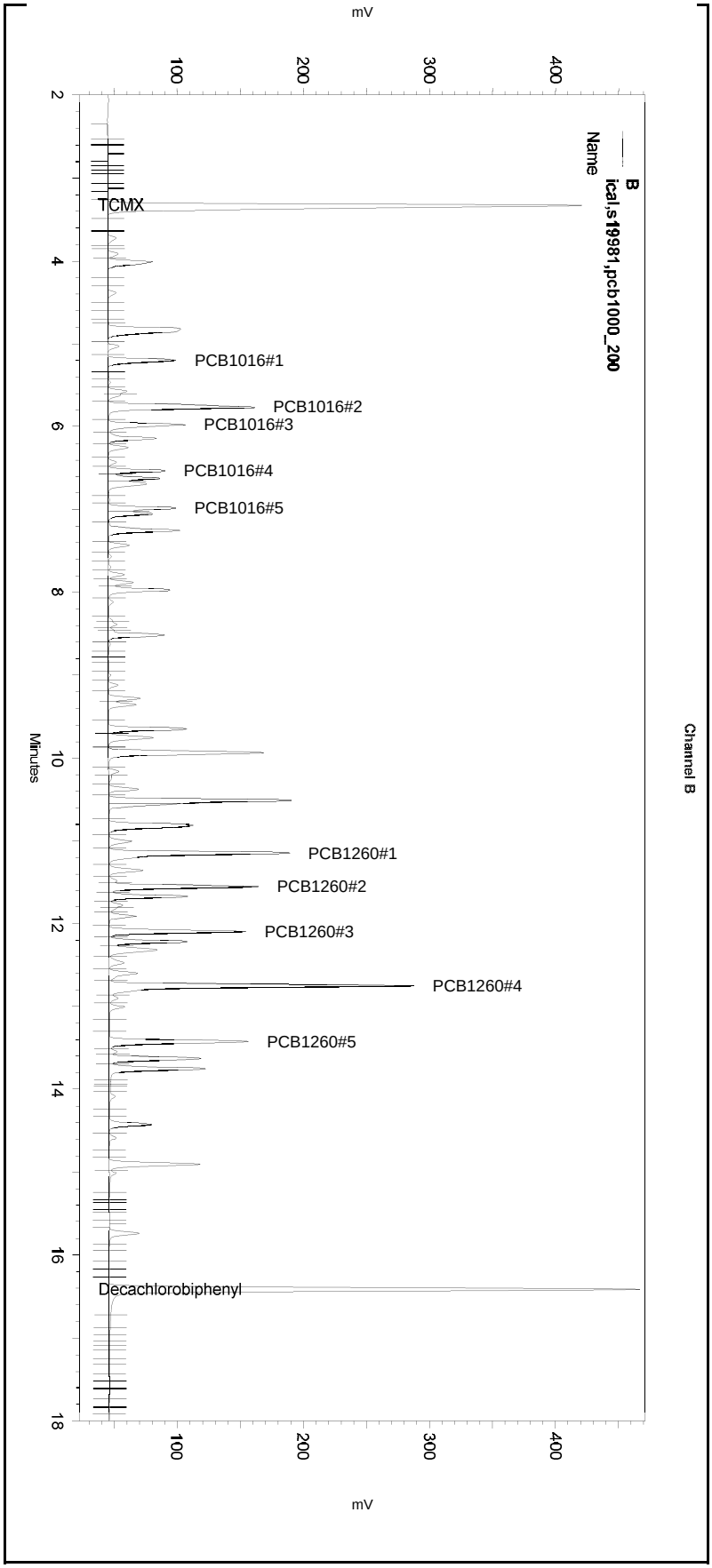
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 (Offline) Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:32:39 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:14:42 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	768976	55.209
PCB1016#1	6.193	6.197	90700	242.424
PCB1016#2	6.810	6.810	265699	253.799
PCB1016#3	7.110	7.110	180523	279.081
PCB1016#4	7.570	7.570	91018	278.909
PCB1016#5	8.077	8.077	143016	261.461
PCB1260#1	11.640	11.640	435893	265.114
PCB1260#2	12.290	12.290	399646	228.461
PCB1260#3	13.150	13.150	289106	308.211
PCB1260#4	13.897	13.897	631746	298.133
PCB1260#5	14.547	14.550	340983	243.458
Decachlorobiphenyl	17.163	17.167	602039	51.224

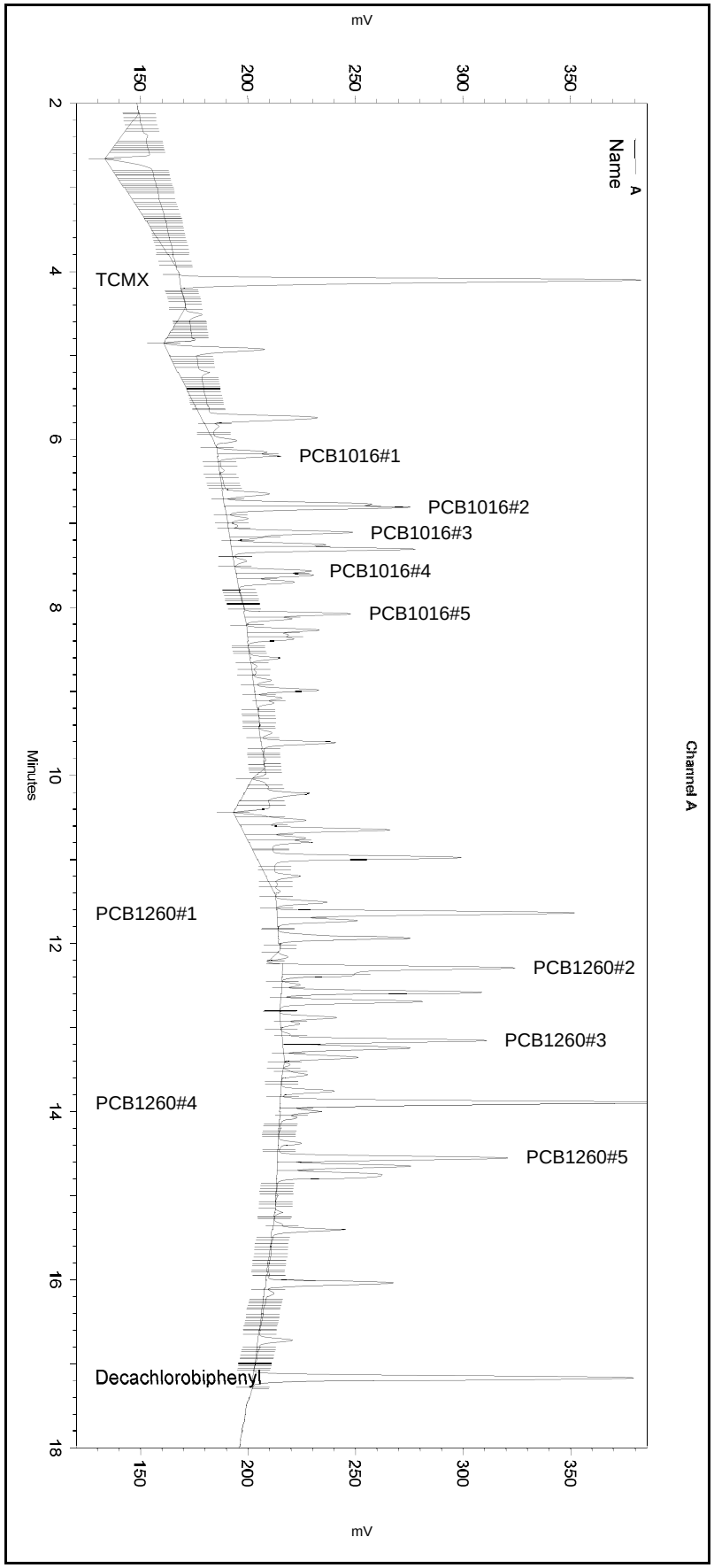
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	334788	47.777
PCB1016#1	5.207	5.207	53599	252.493
PCB1016#2	5.770	5.770	129276	243.692
PCB1016#3	5.987	5.987	61968	252.551
PCB1016#4	6.537	6.537	42719	254.705
PCB1016#5	6.990	6.990	49615	258.383
PCB1260#1	11.157	11.153	146740	250.699
PCB1260#2	11.560	11.560	112803	265.031
PCB1260#3	12.100	12.100	101583	269.500
PCB1260#4	12.757	12.757	234878	264.573
PCB1260#5	13.433	13.430	109422	274.948
Decachlorobiphenyl	16.423	16.423	374794	41.394

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:14:42 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

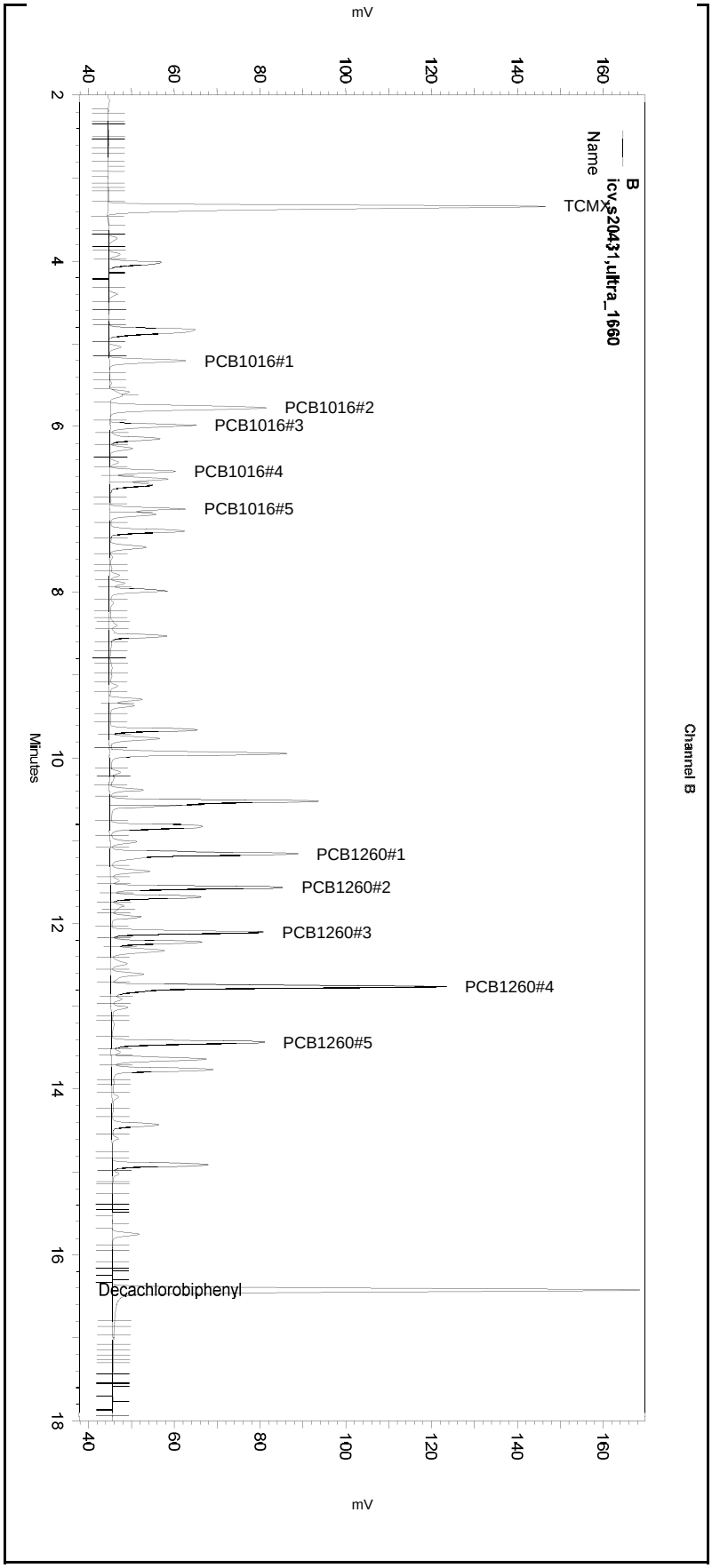
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.994	0	0
Yes	Reset Baseline	4.424	0	0
Yes	Reset Baseline	6.089	0	0
Yes	Reset Baseline	8.208	0	0
Yes	Reset Baseline	11.436	0	0
Yes	Reset Baseline	12.062	0	0
Yes	Move BL Start	12.213	12.239	0
Yes	Reset Baseline	12.444	0	0
Yes	Manual Baseline	13.017	13.421	0
Yes	Split Peak	13.098	0	0
Yes	Reset Baseline	17.298	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:14:42 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:02:24 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	984503	73.069
PCB1016#1	6.193	6.197	180244	481.758
PCB1016#2	6.810	6.810	339942	324.716
PCB1016#3	7.110	7.110	240826	372.306
PCB1016#4	7.570	7.570	128535	402.814
PCB1016#5	8.077	8.077	182909	334.393
PCB1260#1	11.640	11.640	507707	318.576
PCB1260#2	12.290	12.290	453511	259.254
PCB1260#3	13.150	13.150	270560	270.508
PCB1260#4	13.897	13.897	631746	298.133
PCB1260#5	14.547	14.550	340983	294.206
Decachlorobiphenyl	17.163	17.167	697304	61.260

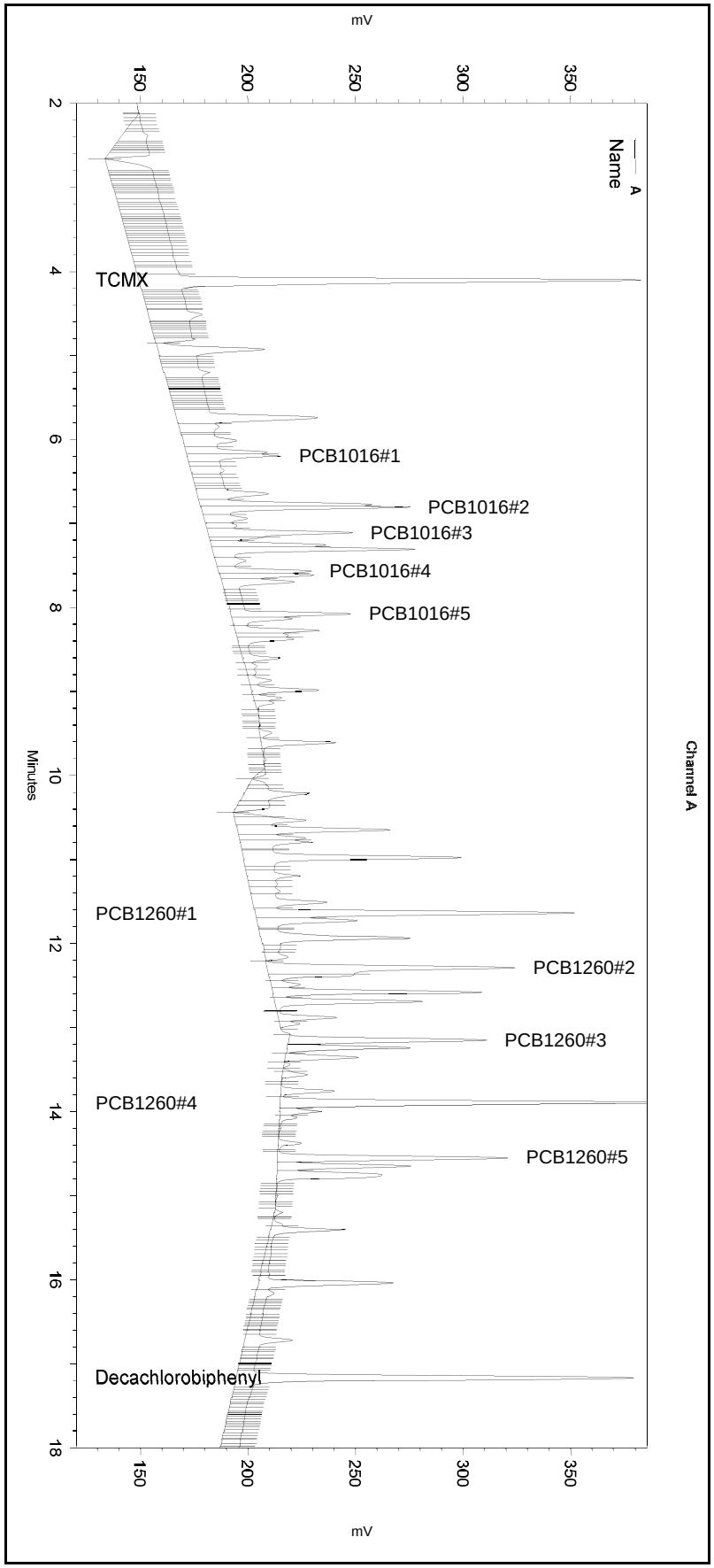
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	334788	47.777
PCB1016#1	5.207	5.207	53599	252.493
PCB1016#2	5.770	5.770	129276	245.990
PCB1016#3	5.987	5.987	61968	252.551
PCB1016#4	6.537	6.537	42719	254.705
PCB1016#5	6.990	6.990	49615	258.383
PCB1260#1	11.157	11.153	146740	250.699
PCB1260#2	11.560	11.560	112803	265.031
PCB1260#3	12.100	12.100	101583	269.500
PCB1260#4	12.757	12.757	234878	264.573
PCB1260#5	13.433	13.430	109422	274.948
Decachlorobiphenyl	16.423	16.423	374794	43.841

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:02:24 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

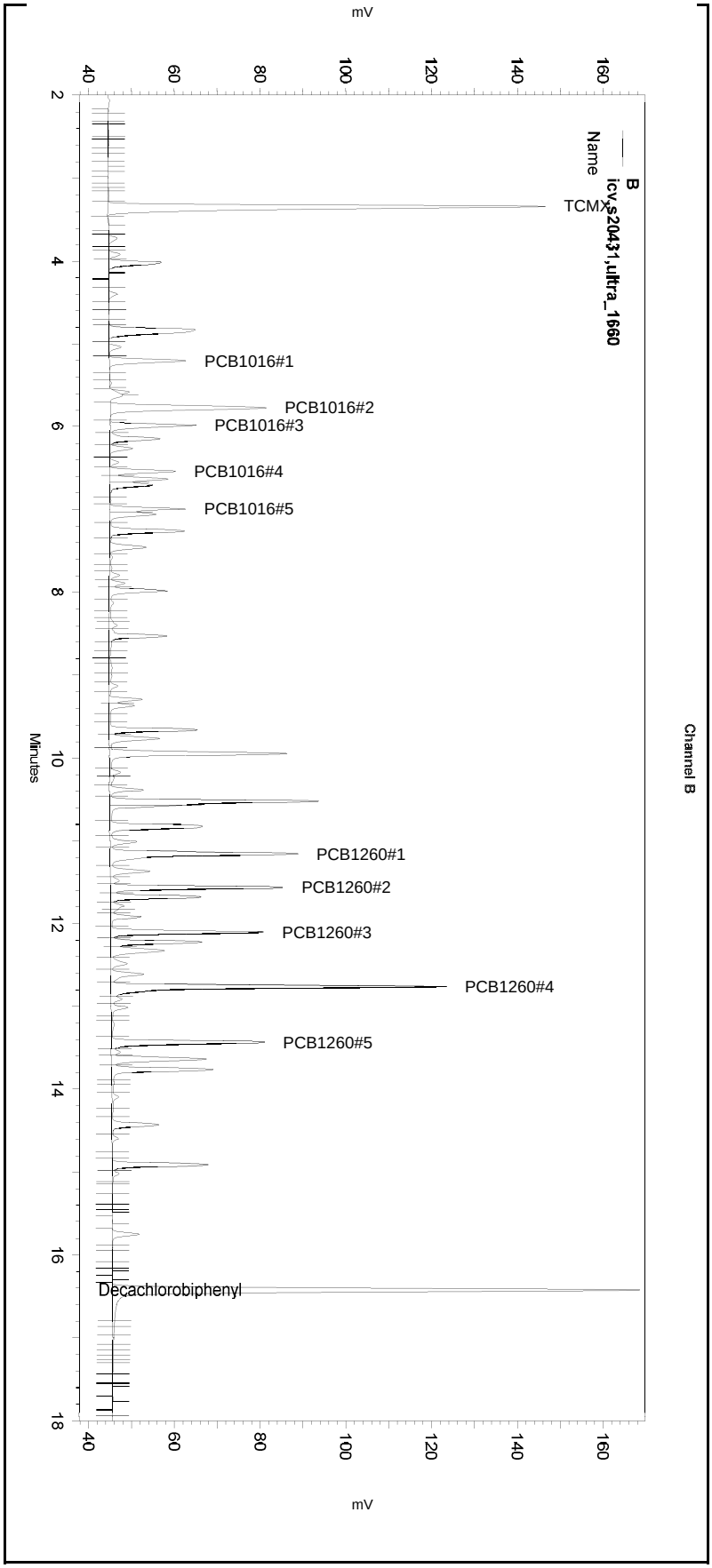
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:02:24 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 PCBS Water: EPA 8082A

Inst : GC22
Calnum : 252360400001
Units : pg/uL

Name : AR1660_250
Date : 06-SEP-2012 16:48
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	250_014	252360400014	PCB10_2	06-SEP-2012 16:48	S19975
L2	250_015	252360400015	PCB25_5	06-SEP-2012 17:53	S19976
L3	250_016	252360400016	PCB100_20	06-SEP-2012 18:20	S19977
L4	250_017	252360400017	PCB250_50	06-SEP-2012 18:46	S19978
L5	250_018	252360400018	PCB500_100	06-SEP-2012 19:12	S19979
L6	250_019	252360400019	PCB750_150	06-SEP-2012 19:38	S19980
L7	250_020	252360400020	PCB1000_200	06-SEP-2012 20:05	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	151.40	134.80	124.30	122.69	92.478	107.45	114.27	AVRG		0.00826		121.06	16	.99	20	
Aroclor-1260 Peak # 2	A	111.90	103.04	94.520	94.380	69.118	78.705	84.031	AVRG		0.01101		90.813	16	.99	20	
Aroclor-1260 Peak # 3	A	93.000	82.960	75.600	74.020	53.782	60.959	64.024	AVRG		0.01388		72.049	19	.99	20	
Aroclor-1260 Peak # 4	A	204.50	188.08	182.61	190.02	141.79	180.17	199.01	AVRG		0.00544		183.74	11	.99	20	
Aroclor-1260 Peak # 5	A	99.200	85.520	83.070	81.892	58.002	67.717	72.273	AVRG		0.01278		78.239	17	.99	20	
TCMX	A	1412.5	1470.4	1308.5	1350.6	1164.4	1291.3	1284.1	AVRG		7.54E-4		1326.0	7	.99	20	
Decachlorobiphenyl	A	1356.5	1230.6	1214.6	1260.7	936.36	1268.6	1408.8	AVRG		8.07E-4		1239.5	12	.99	20	
Aroclor-1260 Peak # 1	B	719.70	813.96	846.53	1168.3	1739.6	1236.6	1103.0	AVRG		9.18E-4		1089.7	**32**	.99	20	rsd ***
Aroclor-1260 Peak # 2	B	620.90	638.52	691.37	796.50	1697.3	1203.3	1192.2	AVRG		0.00102		977.16	**41**	.99	20	rsd ***
Aroclor-1260 Peak # 3	B	535.00	559.36	521.42	562.50	1281.3	904.19	934.48	AVRG		0.00132		756.89	**39**	.99	20	rsd ***
Aroclor-1260 Peak # 4	B	1156.4	1486.0	1580.9	2281.1	2764.7	1902.6	1503.0	AVRG		5.52E-4		1810.7	**30**	.99	20	rsd ***
Aroclor-1260 Peak # 5	B	494.30	536.00	484.59	467.08	1216.7	834.70	974.18	AVRG		0.00140		715.36	**41**	.99	20	rsd ***
TCMX	B	1311.5	6299.6	18129	21391	18864			LINR	1.25420	5.09E-5		13199	0.993	.99	20	
Decachlorobiphenyl	B	7605.5	9273.8	12559	16473	14363			LINR	0.77699	6.73E-5		12055	0.992	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**25**	25.000	11	100.00	3	250.00	1	500.00	**-24**	750.00	-11	1000.0	-6
Aroclor-1260 Peak # 2	A	10.000	**23**	25.000	13	100.00	4	250.00	4	500.00	**-24**	750.00	-13	1000.0	-7
Aroclor-1260 Peak # 3	A	10.000	**29**	25.000	15	100.00	5	250.00	3	500.00	**-25**	750.00	-15	1000.0	-11
Aroclor-1260 Peak # 4	A	10.000	11	25.000	2	100.00	-1	250.00	3	500.00	**-23**	750.00	-2	1000.0	8
Aroclor-1260 Peak # 5	A	10.000	**27**	25.000	9	100.00	6	250.00	5	500.00	**-26**	750.00	-13	1000.0	-8
TCMX	A	2.0000	7	5.0000	11	20.000	-1	50.000	2	100.00	-12	150.00	-3	200.00	-3
Decachlorobiphenyl	A	2.0000	9	5.0000	-1	20.000	-2	50.000	2	100.00	**-24**	150.00	2	200.00	14
Aroclor-1260 Peak # 1	B	10.000	**-34**	25.000	**-25**	100.00	**-22**	250.00	7	500.00	**60**	750.00	13	1000.0	1
Aroclor-1260 Peak # 2	B	10.000	**-36**	25.000	**-35**	100.00	**-29**	250.00	-18	500.00	**74**	750.00	**23**	1000.0	**22**
Aroclor-1260 Peak # 3	B	10.000	**-29**	25.000	**-26**	100.00	**-31**	250.00	**-26**	500.00	**69**	750.00	19	1000.0	**23**
Aroclor-1260 Peak # 4	B	10.000	**-36**	25.000	-18	100.00	-13	250.00	**26**	500.00	**53**	750.00	5	1000.0	-17
Aroclor-1260 Peak # 5	B	10.000	**-31**	25.000	**-25**	100.00	**-32**	250.00	**-35**	500.00	**70**	750.00	17	1000.0	**36**
TCMX	B	2.0000	**-31**	5.0000	**-43**	20.000	-1	50.000	11	100.00	-3				
Decachlorobiphenyl	B	2.0000	-10	5.0000	**-22**	20.000	-12	50.000	12	100.00	-3				

PML 09/07/12 : Corrected automatically drawn baseline in all levels.

PML 09/07/12 : ICAL fails for AR1016 and AR1260 on Ch. B; will only use said channel for confirm and report only from Ch. A

PML 09/07/12 : changed fit types and dropped various peaks for TCMX and DCB on Ch. B for better recovery

PML 09/07/12 : RTs updated in the integrated version of ICAL and integrated version of ICV

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression

252360400001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 PCBS Water
EPA 8082A

Inst : GC22 Name : AR1660_250
Calnum : 252360400001 Cal Date : 06-SEP-2012

ICV 252360400023 (250_023 06-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	223.0	pg/uL	-11	20	
Aroclor-1260	B	250.0	246.6	pg/uL	-1	20	

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 10:15:00 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.483	4.463	2825	2.000 CAL
PCB1016#1	6.633	6.613	230	10.000 CAL
PCB1016#2	7.247	7.227	744	10.000 CAL
PCB1016#3	7.543	7.523	363	10.000 CAL
PCB1016#4	7.990	7.970	203	10.000 CAL
PCB1016#5	8.493	8.473	322	10.000 CAL
PCB1260#1	11.917	11.907	1514	10.000 CAL
PCB1260#2	12.537	12.527	1119	10.000 CAL
PCB1260#3	13.357	13.347	930	10.000 CAL
PCB1260#4	14.060	14.053	2045	10.000 CAL
PCB1260#5	14.687	14.680	992	10.000 CAL
Decachlorobiphenyl	17.167	17.163	2713	2.000 CAL

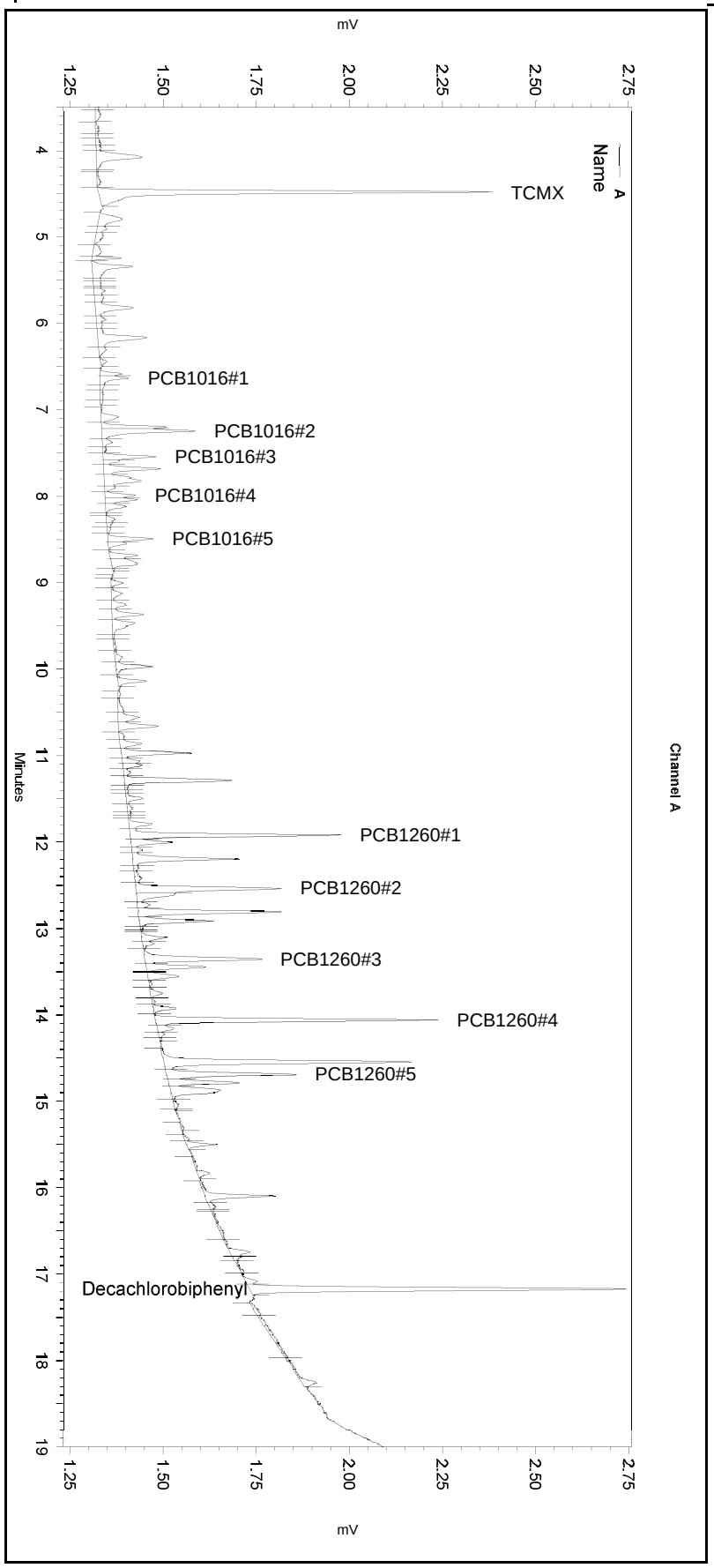
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.483	4.500	2623	2.000 CAL
PCB1016#1	6.400	6.410	1854	10.000 CAL
PCB1016#2	6.973	6.977	4128	10.000 CAL
PCB1016#3	7.180	7.187	2495	10.000 CAL
PCB1016#4	7.717	7.720	1361	10.000 CAL
PCB1016#5	8.167	8.170	1575	10.000 CAL
PCB1260#1	11.563	11.570	7197	10.000 CAL
PCB1260#2	12.183	12.187	6209	10.000 CAL
PCB1260#3	13.083	13.087	5350	10.000 CAL
PCB1260#4	13.703	13.710	11564	10.000 CAL
PCB1260#5	14.353	14.360	4943	10.000 CAL
Decachlorobiphenyl	17.203	17.210	15211	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 10:15:00 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

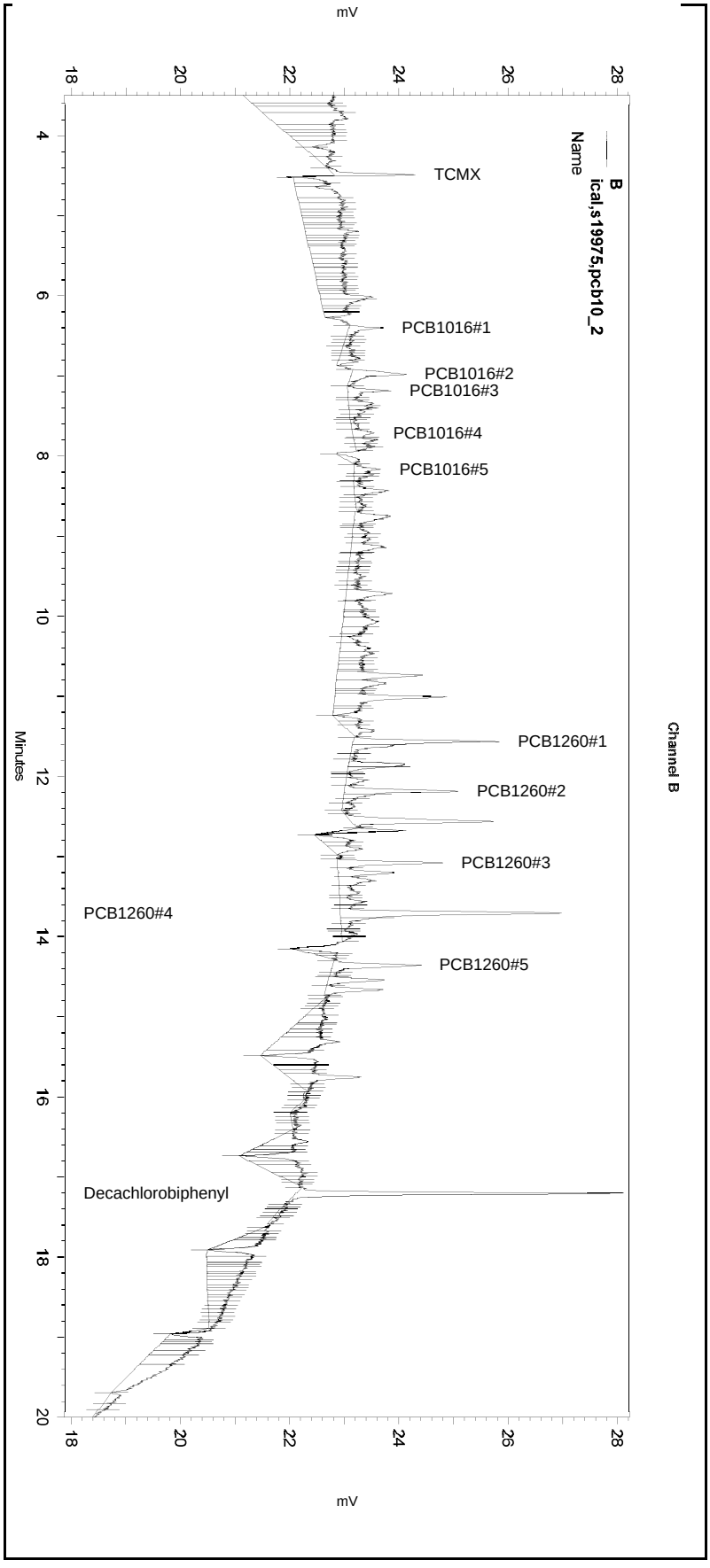
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.675	0	0
Yes	Split Peak	7.576	0	0
Yes	Split Peak	12.579	0	0
Yes	Reset Baseline	17.241	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 10:15:00 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.388	0	0
Yes	Reset Baseline	4.501	0	0
Yes	Reset Baseline	4.503	0	0
Yes	Reset Baseline	6.361	0	0
Yes	Reset Baseline	6.913	0	0
Yes	Reset Baseline	7.932	0	0
Yes	Reset Baseline	8.093	0	0
Yes	Reset Baseline	11.502	0	0
Yes	Split Peak	12.224	0	0
Yes	Reset Baseline	12.638	0	0
Yes	Reset Baseline	13.021	0	0
Yes	Split Peak	13.756	0	0
Yes	Reset Baseline	14.053	0	0
Yes	Reset Baseline	14.284	0	0
Yes	Reset Baseline	14.754	0	0
Yes	Reset Baseline	17.131	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 9:46:11 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.483	4.473	3077	2.000 CAL
PCB1016#1	6.633	6.637	230	10.000 CAL
PCB1016#2	7.247	7.250	744	10.000 CAL
PCB1016#3	7.543	7.545	471	10.000 CAL
PCB1016#4	7.990	7.990	203	10.000 CAL
PCB1016#5	8.493	8.494	322	10.000 CAL
PCB1260#1	11.917	11.907	1514	10.000 CAL
PCB1260#2	12.537	12.530	1519	10.000 CAL
PCB1260#3	13.357	13.350	930	10.000 CAL
PCB1260#4	14.060	14.053	2045	10.000 CAL
PCB1260#5	14.687	14.680	992	10.000 CAL
Decachlorobiphenyl	17.167	17.160	2879	2.000 CAL

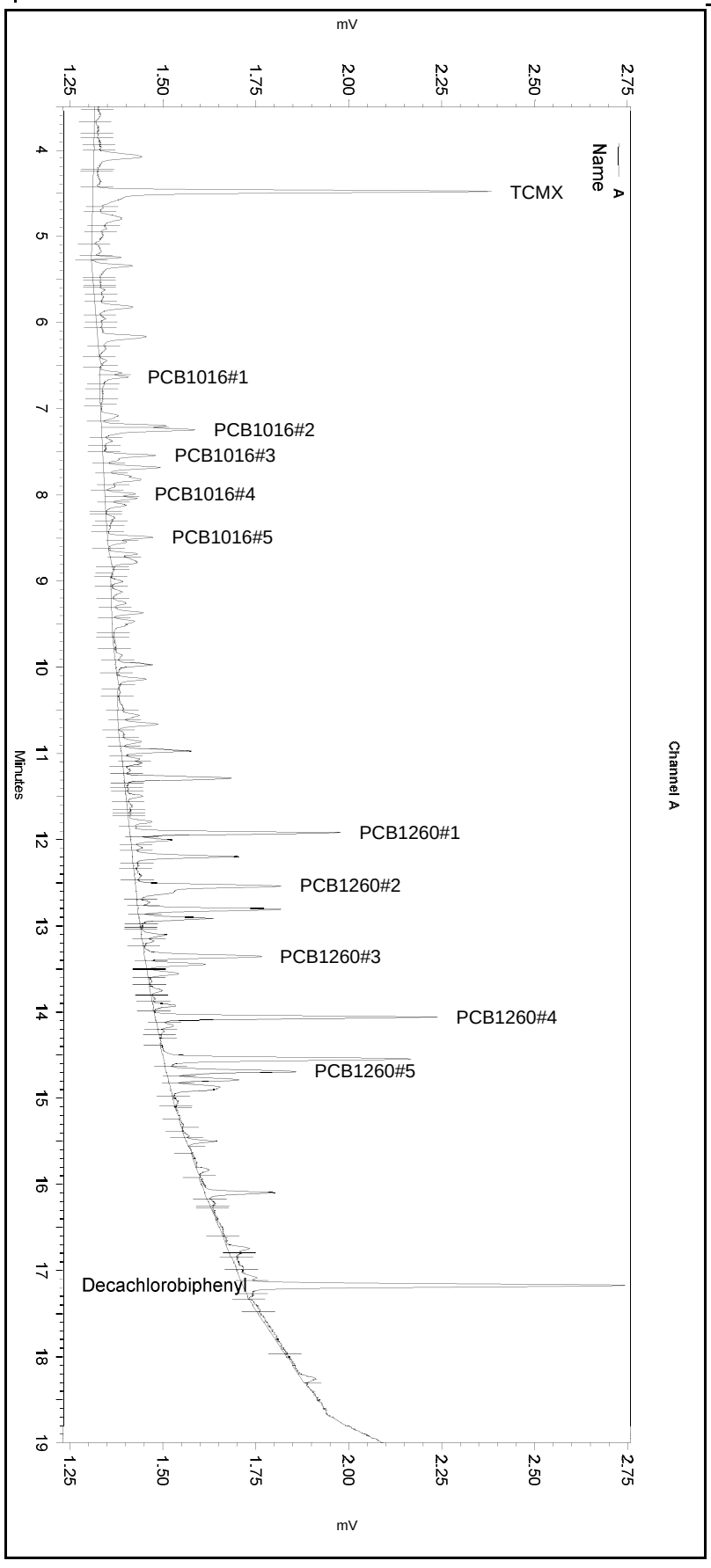
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.483	4.507	18701	2.000 CAL
PCB1016#1	6.400	6.427	16642	10.000 CAL
PCB1016#2	6.973	6.993	16651	10.000 CAL
PCB1016#3	7.180	7.200	8348	10.000 CAL
PCB1016#4	7.717	7.730	3959	10.000 CAL
PCB1016#5	8.167	8.180	3499	10.000 CAL
PCB1260#1	11.563	11.573	11125	10.000 CAL
PCB1260#2	12.183	12.190	14611	10.000 CAL
PCB1260#3	13.083	13.087	11310	10.000 CAL
PCB1260#4	13.703	13.707	24840	10.000 CAL
PCB1260#5	14.353	14.357	15459	10.000 CAL
Decachlorobiphenyl	17.203	17.187	25869	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 9:46:11 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

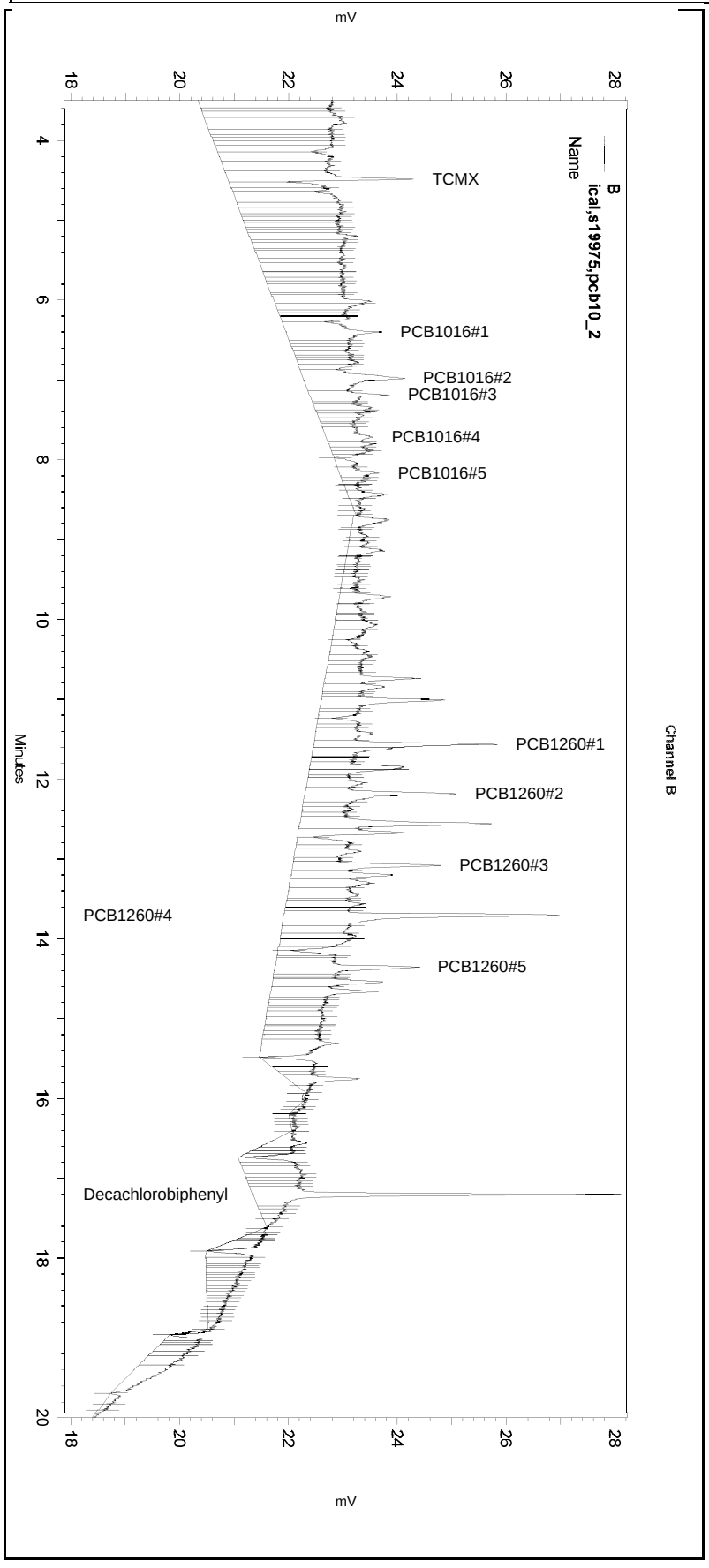
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 9:46:11 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 10:24:53 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.487	4.463	7352	5.000 CAL
PCB1016#1	6.637	6.613	560	25.000 CAL
PCB1016#2	7.243	7.227	1714	25.000 CAL
PCB1016#3	7.543	7.523	923	25.000 CAL
PCB1016#4	7.990	7.970	495	25.000 CAL
PCB1016#5	8.490	8.473	763	25.000 CAL
PCB1260#1	11.917	11.907	3370	25.000 CAL
PCB1260#2	12.540	12.527	2576	25.000 CAL
PCB1260#3	13.357	13.347	2074	25.000 CAL
PCB1260#4	14.060	14.053	4702	25.000 CAL
PCB1260#5	14.687	14.680	2138	25.000 CAL
Decachlorobiphenyl	17.170	17.163	6153	5.000 CAL

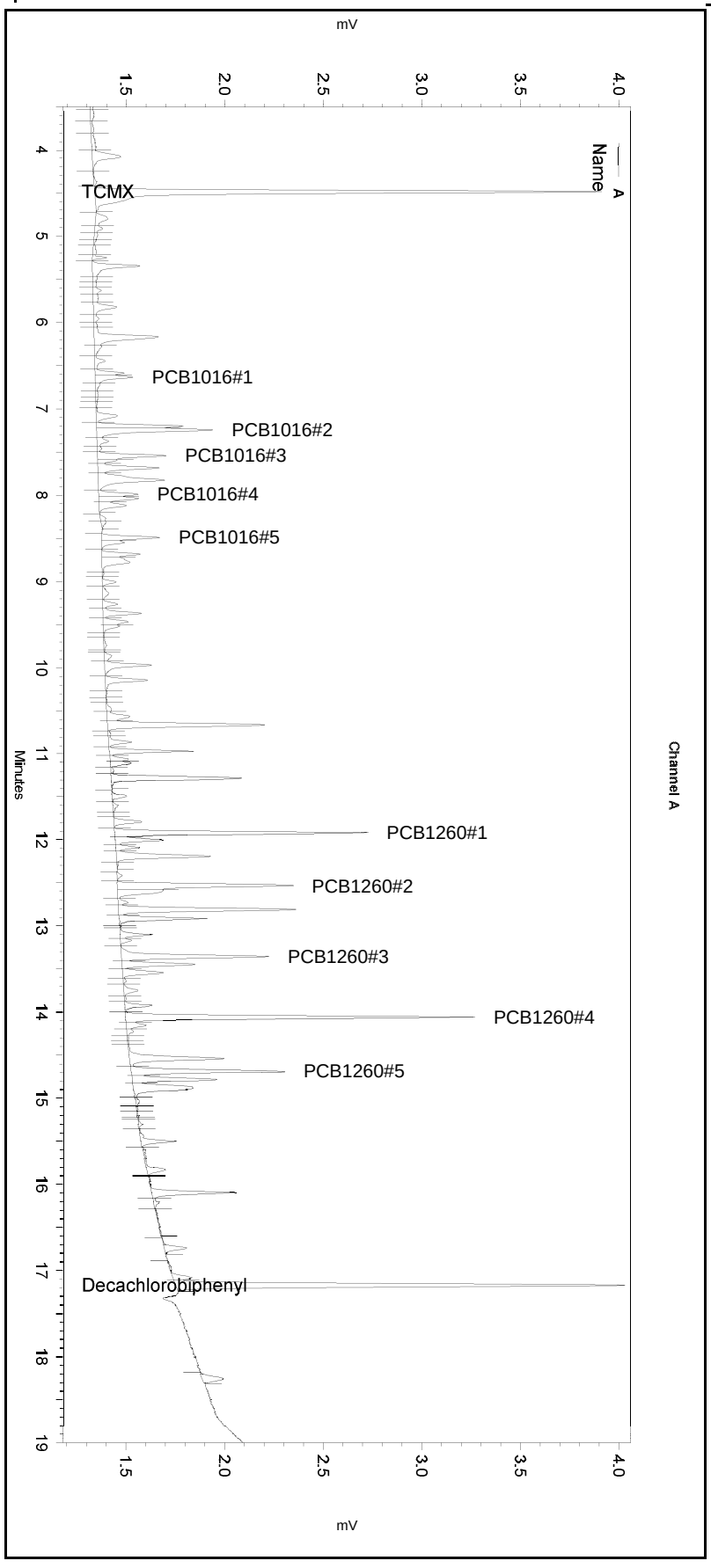
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	31498	5.000 CAL
PCB1016#1	6.403	6.410	6157	25.000 CAL
PCB1016#2	6.970	6.977	13831	25.000 CAL
PCB1016#3	7.183	7.187	6076	25.000 CAL
PCB1016#4	7.717	7.720	2390	25.000 CAL
PCB1016#5	8.163	8.170	3579	25.000 CAL
PCB1260#1	11.560	11.570	20349	25.000 CAL
PCB1260#2	12.177	12.187	15963	25.000 CAL
PCB1260#3	13.083	13.087	13984	25.000 CAL
PCB1260#4	13.703	13.710	37149	25.000 CAL
PCB1260#5	14.357	14.360	13400	25.000 CAL
Decachlorobiphenyl	17.207	17.210	46369	5.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 10:24:53 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

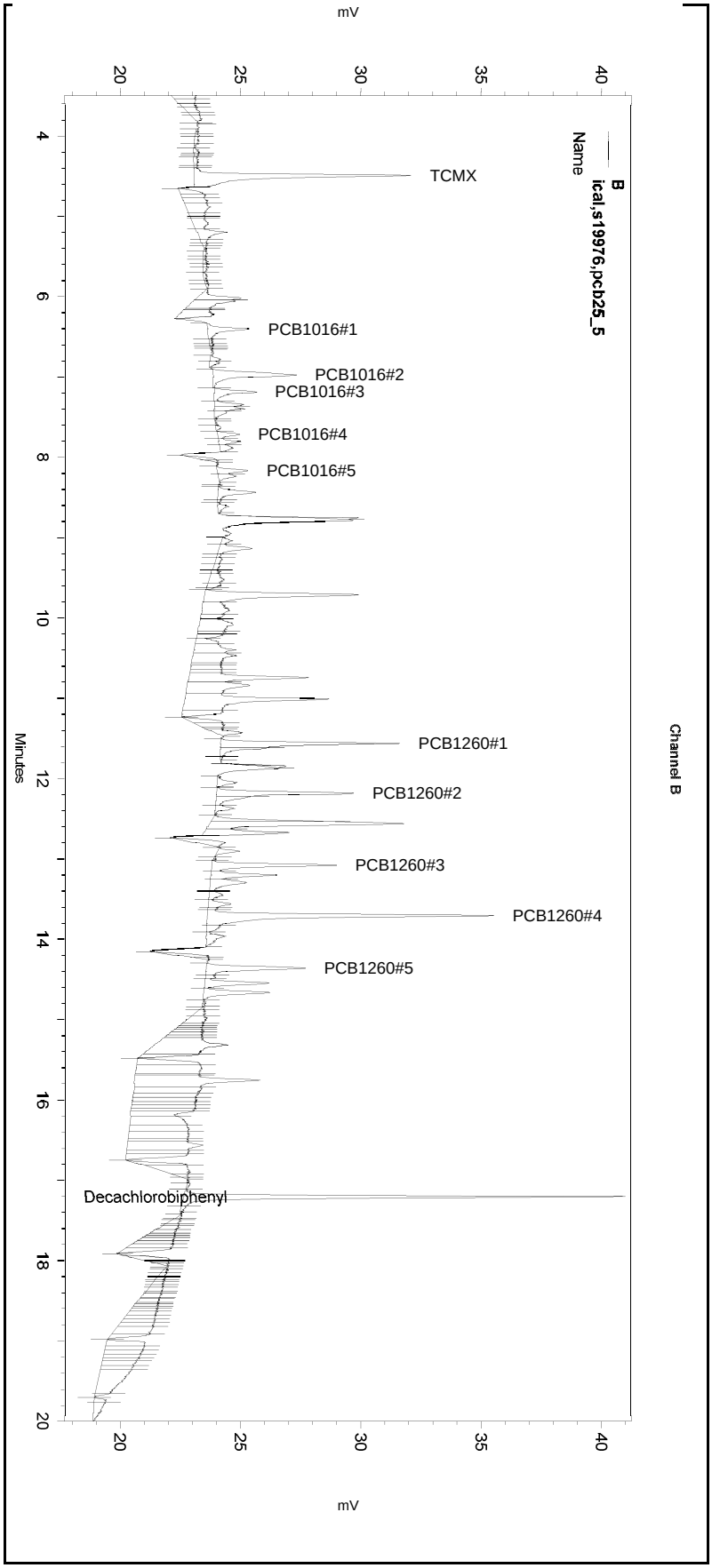
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.718	0	0
Yes	Split Peak	7.582	0	0
Yes	Split Peak	12.583	0	0
Yes	Reset Baseline	17.247	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 10:24:53 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.633	0	0
Yes	Reset Baseline	6.331	0	0
Yes	Disable End Peak Detection	6.843	7.026	0
Yes	Manual Baseline	6.903	7.132	0
Yes	Manual Peak	6.906	7.059	0
Yes	Disable End Peak Detection	6.939	7.022	0
Yes	Reset Baseline	7.073	0	0
Yes	Reset Baseline	7.924	0	0
Yes	Reset Baseline	8.084	0	0
Yes	Reset Baseline	11.476	0	0
Yes	Split Peak	12.221	0	0
Yes	Reset Baseline	12.451	0	0
Yes	Reset Baseline	12.707	0	0
Yes	Reset Baseline	12.856	0	0
Yes	Reset Baseline	14.09	0	0
Yes	Reset Baseline	14.252	0	0
Yes	Reset Baseline	14.836	0	0
Yes	Reset Baseline	17.019	0	0
Yes	Reset Baseline	17.405	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 9:46:16 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.487	4.473	7757	5.000 CAL
PCB1016#1	6.637	6.637	560	25.000 CAL
PCB1016#2	7.243	7.250	1714	25.000 CAL
PCB1016#3	7.543	7.545	1141	25.000 CAL
PCB1016#4	7.990	7.990	495	25.000 CAL
PCB1016#5	8.490	8.494	763	25.000 CAL
PCB1260#1	11.917	11.907	3370	25.000 CAL
PCB1260#2	12.540	12.530	3345	25.000 CAL
PCB1260#3	13.357	13.350	2074	25.000 CAL
PCB1260#4	14.060	14.053	4702	25.000 CAL
PCB1260#5	14.687	14.680	2138	25.000 CAL
Decachlorobiphenyl	17.170	17.160	7066	5.000 CAL

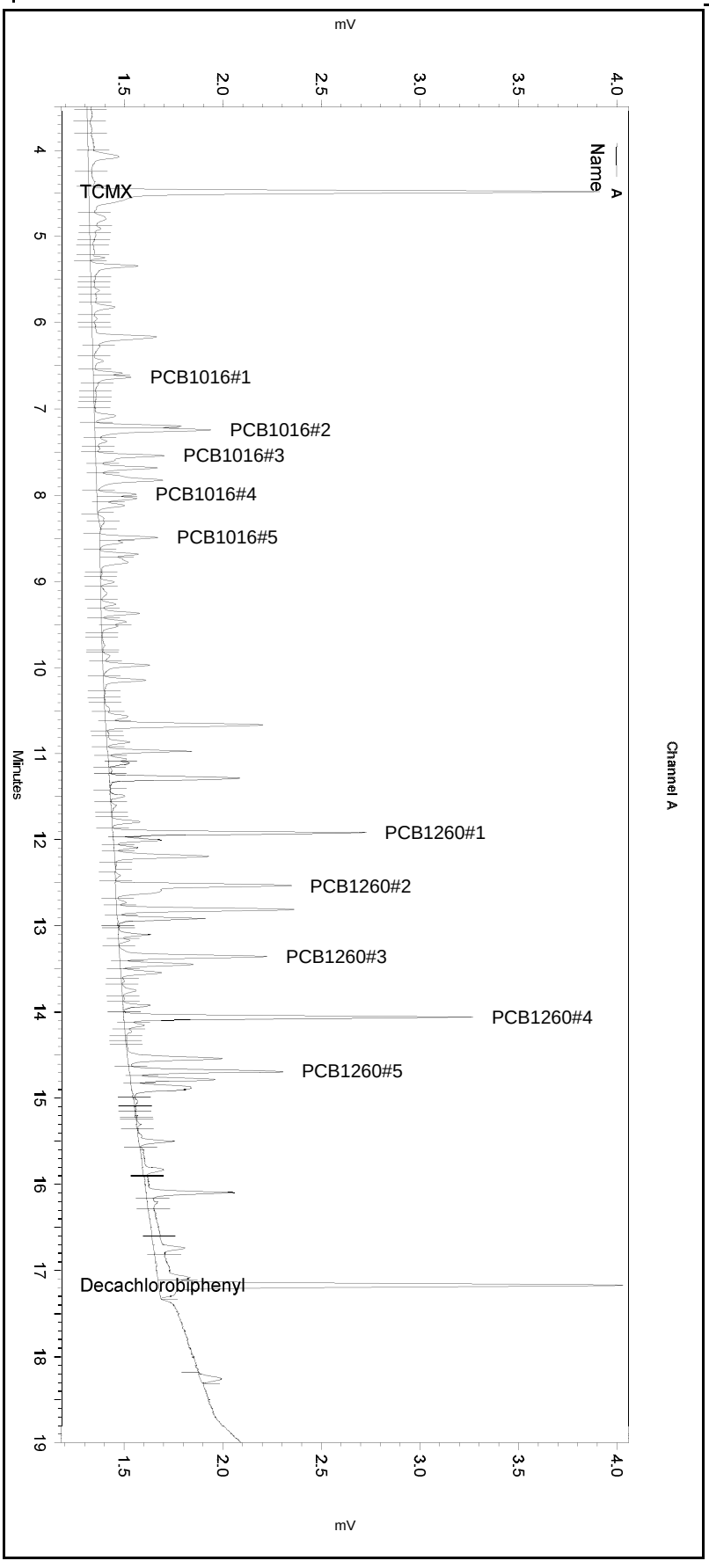
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.507	36842	5.000 CAL
PCB1016#1	6.403	6.427	15644	25.000 CAL
PCB1016#2	6.970	6.993	14587	25.000 CAL
PCB1016#3	7.183	7.200	13224	25.000 CAL
PCB1016#4	7.717	7.730	9186	25.000 CAL
PCB1016#5	8.163	8.180	7817	25.000 CAL
PCB1260#1	11.560	11.573	24911	25.000 CAL
PCB1260#2	12.177	12.190	28264	25.000 CAL
PCB1260#3	13.083	13.087	29436	25.000 CAL
PCB1260#4	13.703	13.707	62825	25.000 CAL
PCB1260#5	14.357	14.357	37672	25.000 CAL
Decachlorobiphenyl	17.207	17.187	78974	5.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 9:46:16 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

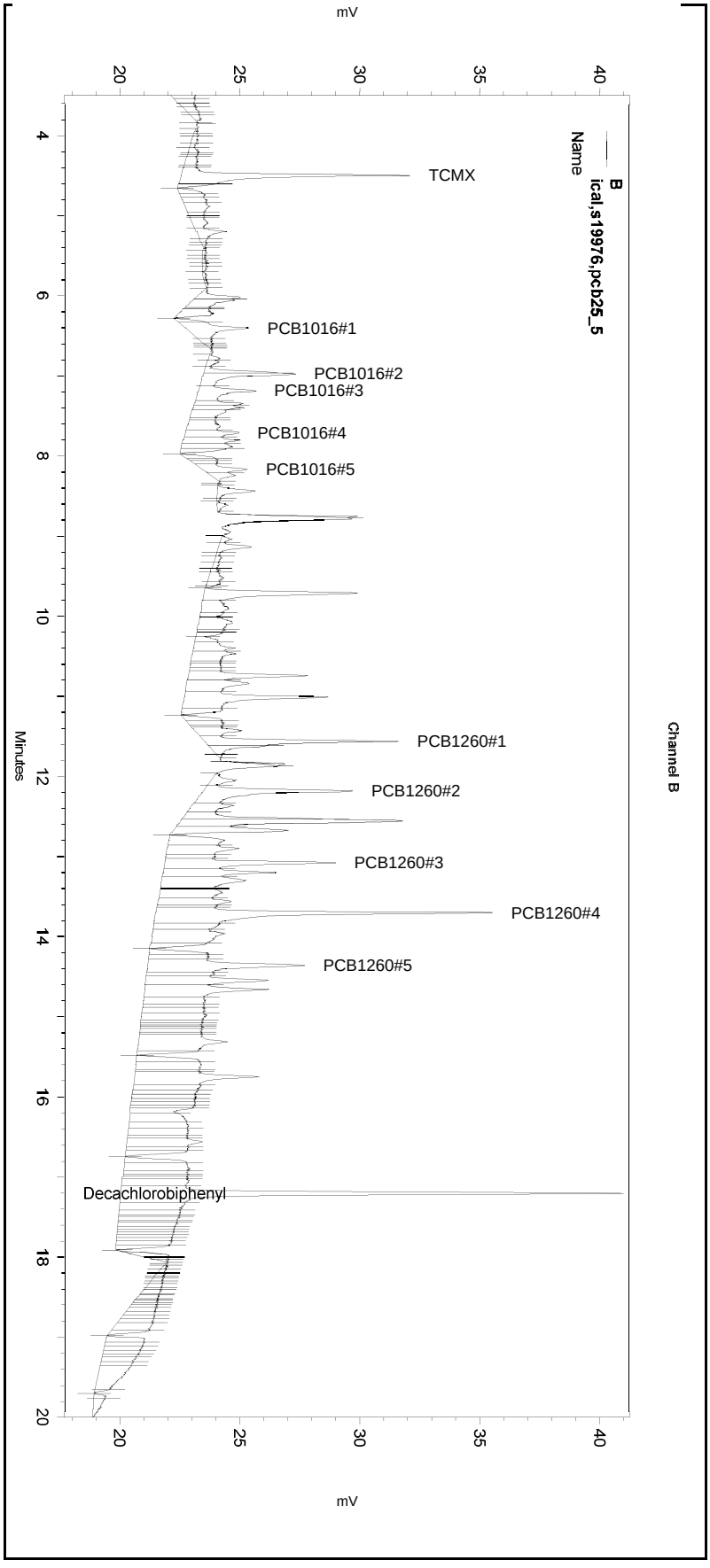
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 9:46:16 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 10:15:09 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.467	4.463	26169	20.000 CAL
PCB1016#1	6.617	6.613	1899	100.000 CAL
PCB1016#2	7.230	7.227	6324	100.000 CAL
PCB1016#3	7.527	7.523	3068	100.000 CAL
PCB1016#4	7.973	7.970	1817	100.000 CAL
PCB1016#5	8.477	8.473	2871	100.000 CAL
PCB1260#1	11.910	11.907	12430	100.000 CAL
PCB1260#2	12.530	12.527	9452	100.000 CAL
PCB1260#3	13.350	13.347	7560	100.000 CAL
PCB1260#4	14.053	14.053	18261	100.000 CAL
PCB1260#5	14.680	14.680	8307	100.000 CAL
Decachlorobiphenyl	17.167	17.163	24292	20.000 CAL

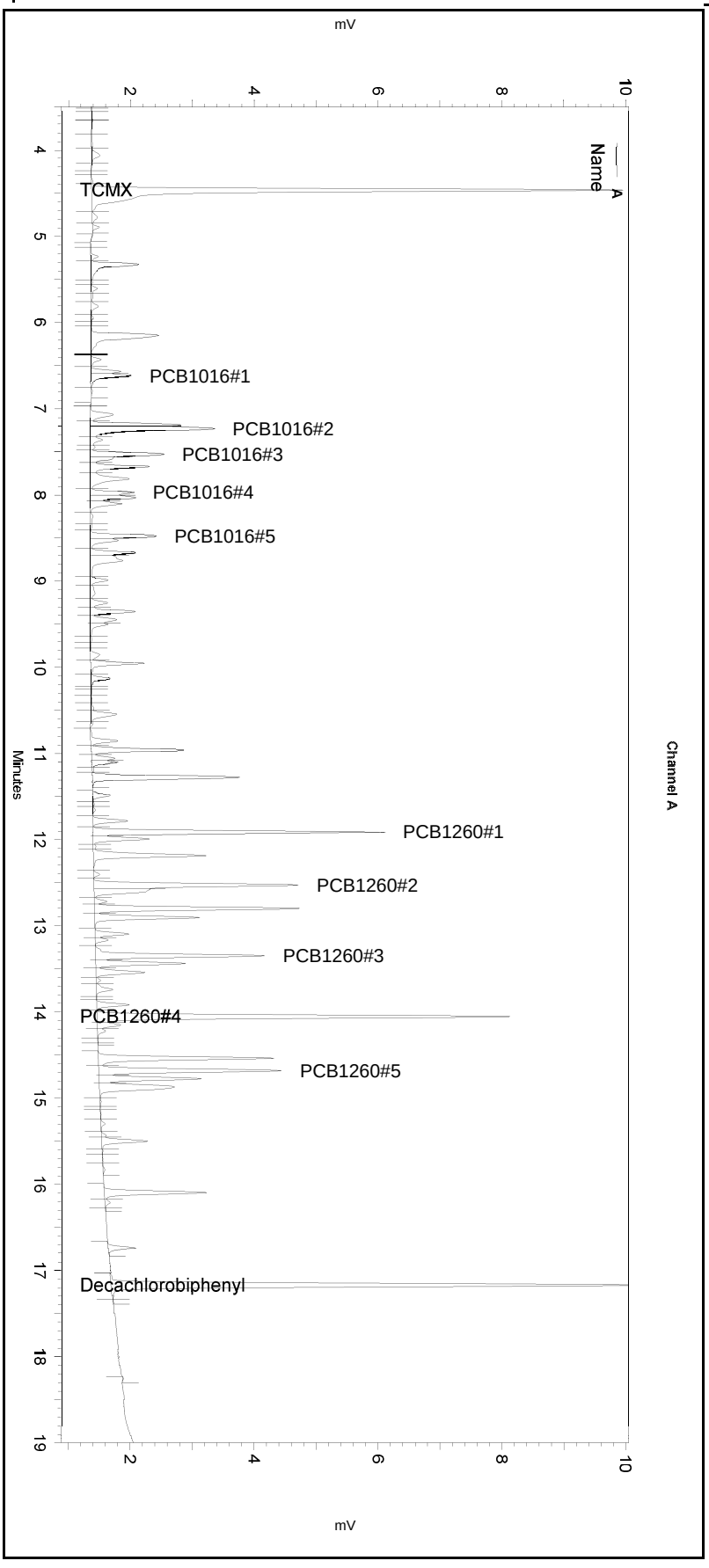
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.500	362584	20.000 CAL
PCB1016#1	6.410	6.410	18775	100.000 CAL
PCB1016#2	6.977	6.977	61324	100.000 CAL
PCB1016#3	7.187	7.187	25112	100.000 CAL
PCB1016#4	7.720	7.720	10201	100.000 CAL
PCB1016#5	8.173	8.170	13639	100.000 CAL
PCB1260#1	11.567	11.570	84653	100.000 CAL
PCB1260#2	12.187	12.187	69137	100.000 CAL
PCB1260#3	13.090	13.087	52142	100.000 CAL
PCB1260#4	13.710	13.710	158088	100.000 CAL
PCB1260#5	14.360	14.360	48459	100.000 CAL
Decachlorobiphenyl	17.213	17.210	251187	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 10:15:09 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

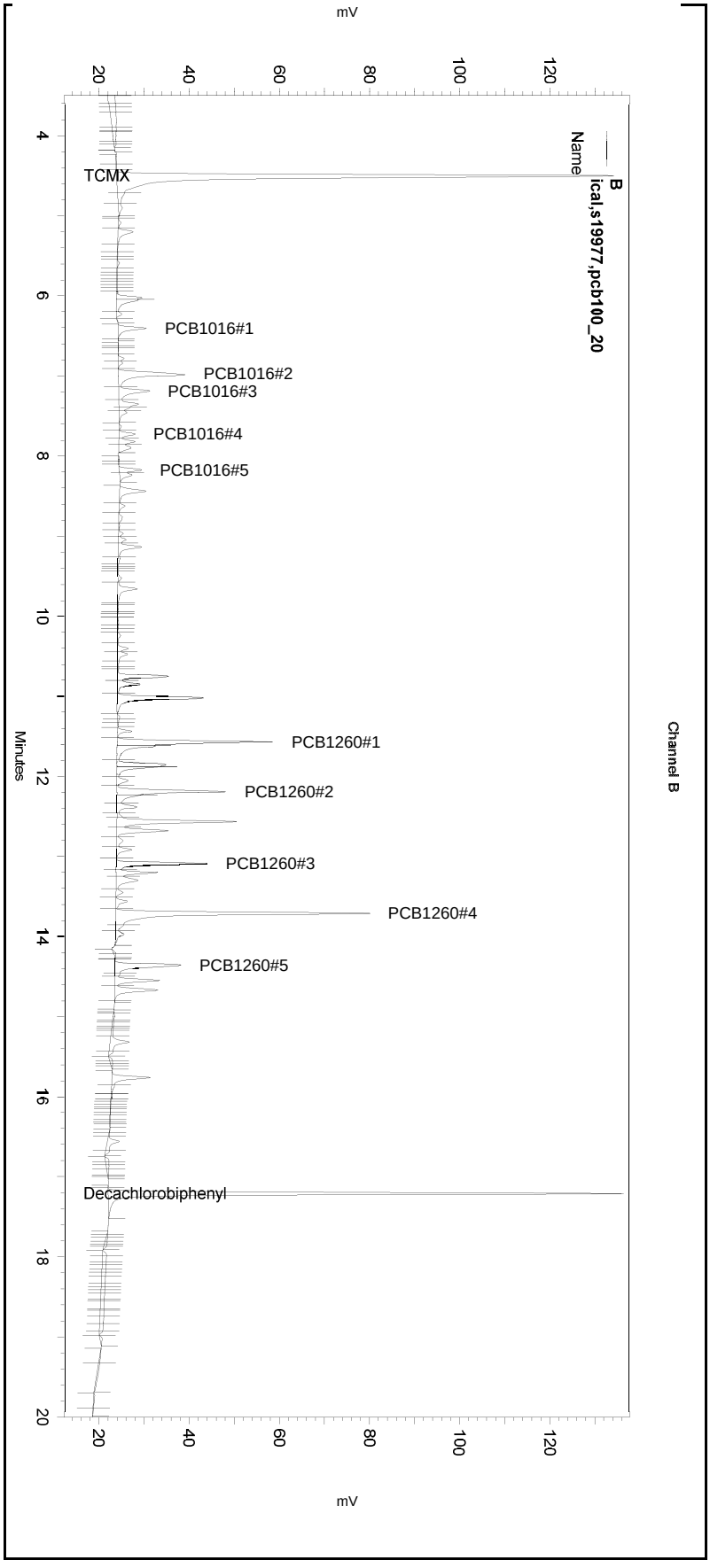
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.561	0	0
Yes	Split Peak	12.572	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 10:15:09 AM
Sample Amount: 1



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Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.355	0	0
Yes	Reset Baseline	7.58	0	0
Yes	Reset Baseline	7.961	0	0
Yes	Reset Baseline	8.332	0	0
Yes	Reset Baseline	14.106	0	0
Yes	Reset Baseline	14.821	0	0
Yes	Reset Baseline	17.066	0	0
Yes	Reset Baseline	17.527	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 9:46:20 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.467	4.473	26169	20.000 CAL
PCB1016#1	6.617	6.637	1899	100.000 CAL
PCB1016#2	7.230	7.250	6324	100.000 CAL
PCB1016#3	7.527	7.545	4059	100.000 CAL
PCB1016#4	7.973	7.990	1817	100.000 CAL
PCB1016#5	8.477	8.494	2871	100.000 CAL
PCB1260#1	11.910	11.907	12430	100.000 CAL
PCB1260#2	12.530	12.530	12487	100.000 CAL
PCB1260#3	13.350	13.350	7560	100.000 CAL
PCB1260#4	14.053	14.053	18261	100.000 CAL
PCB1260#5	14.680	14.680	8307	100.000 CAL
Decachlorobiphenyl	17.167	17.160	24292	20.000 CAL

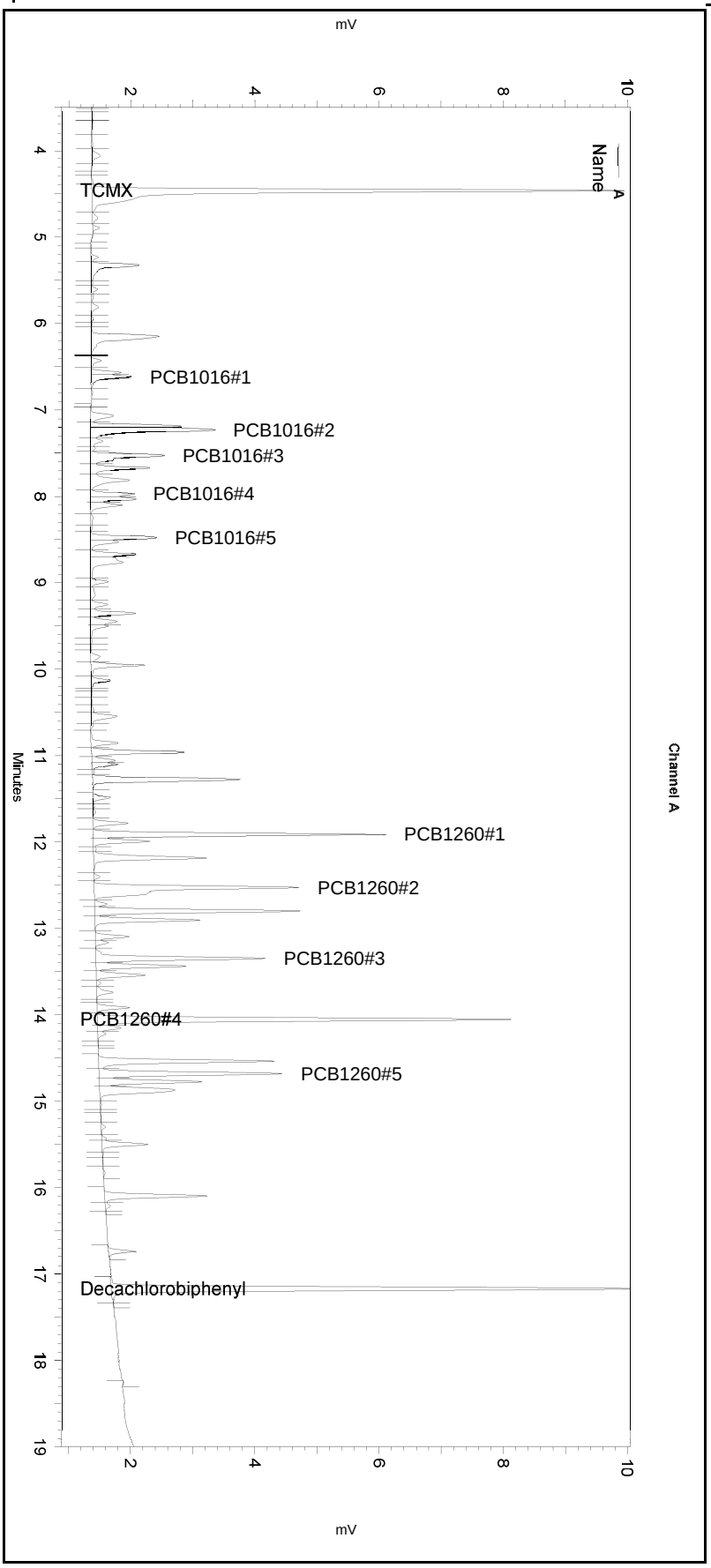
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.507	362584	20.000 CAL
PCB1016#1	6.410	6.427	22635	100.000 CAL
PCB1016#2	6.977	6.993	66809	100.000 CAL
PCB1016#3	7.187	7.200	29179	100.000 CAL
PCB1016#4	7.720	7.730	13145	100.000 CAL
PCB1016#5	8.173	8.180	16636	100.000 CAL
PCB1260#1	11.567	11.573	84951	100.000 CAL
PCB1260#2	12.187	12.190	70902	100.000 CAL
PCB1260#3	13.090	13.087	56348	100.000 CAL
PCB1260#4	13.710	13.707	166426	100.000 CAL
PCB1260#5	14.360	14.357	49427	100.000 CAL
Decachlorobiphenyl	17.213	17.187	283184	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 9:46:20 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

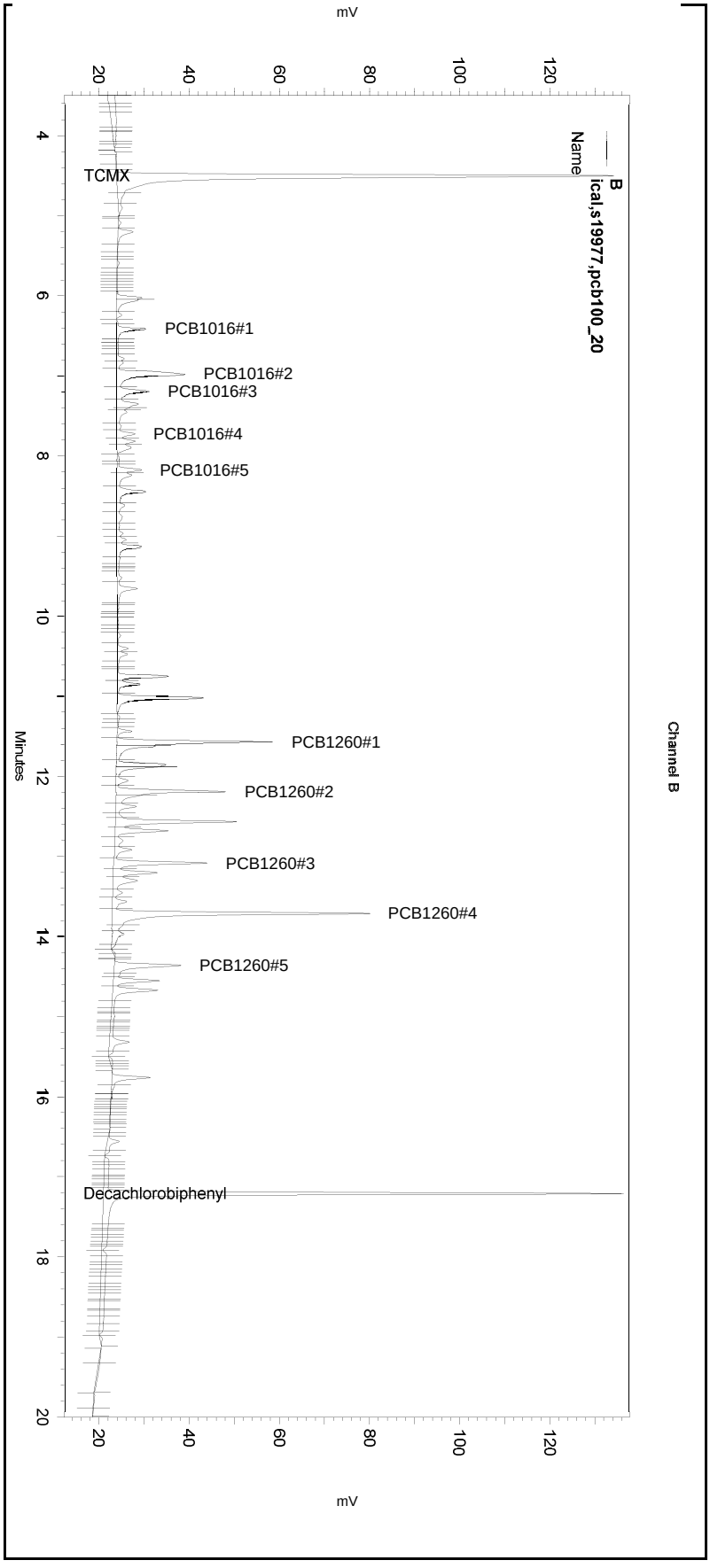
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 9:46:20 AM
Sample Amount: 1



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Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 10:15:14 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.463	4.463	67528	50.000 CAL
PCB1016#1	6.613	6.613	4680	250.000 CAL
PCB1016#2	7.227	7.227	14669	250.000 CAL
PCB1016#3	7.523	7.523	7591	250.000 CAL
PCB1016#4	7.970	7.970	4309	250.000 CAL
PCB1016#5	8.473	8.473	6822	250.000 CAL
PCB1260#1	11.907	11.907	30673	250.000 CAL
PCB1260#2	12.527	12.527	23595	250.000 CAL
PCB1260#3	13.347	13.347	18505	250.000 CAL
PCB1260#4	14.053	14.053	47505	250.000 CAL
PCB1260#5	14.680	14.680	20473	250.000 CAL
Decachlorobiphenyl	17.163	17.163	63036	50.000 CAL

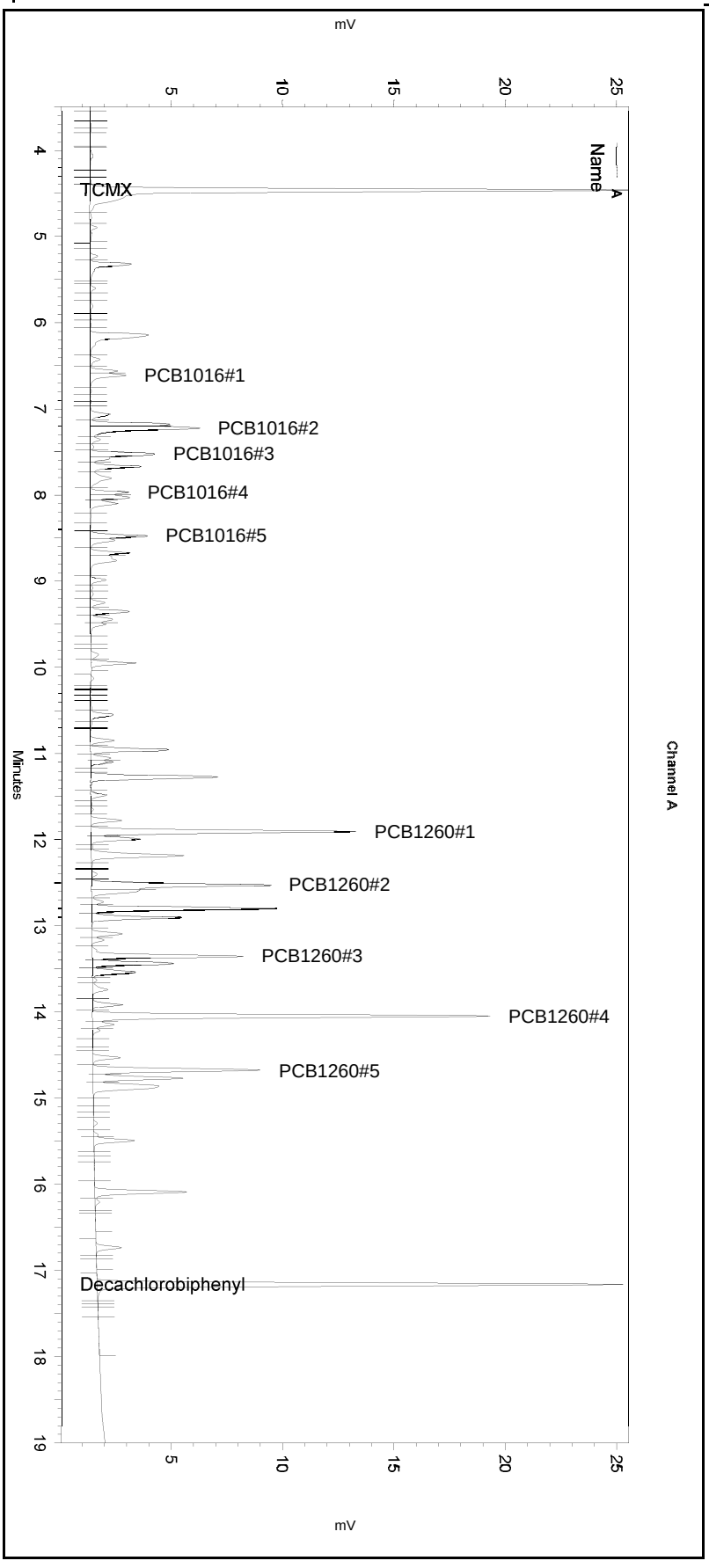
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.500	1069557	50.000 CAL
PCB1016#1	6.410	6.410	45775	250.000 CAL
PCB1016#2	6.977	6.977	162543	250.000 CAL
PCB1016#3	7.187	7.187	49887	250.000 CAL
PCB1016#4	7.720	7.720	22458	250.000 CAL
PCB1016#5	8.170	8.170	30308	250.000 CAL
PCB1260#1	11.570	11.570	292064	250.000 CAL
PCB1260#2	12.187	12.187	199125	250.000 CAL
PCB1260#3	13.087	13.087	140626	250.000 CAL
PCB1260#4	13.710	13.710	570283	250.000 CAL
PCB1260#5	14.360	14.360	116769	250.000 CAL
Decachlorobiphenyl	17.210	17.210	823667	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 10:15:14 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

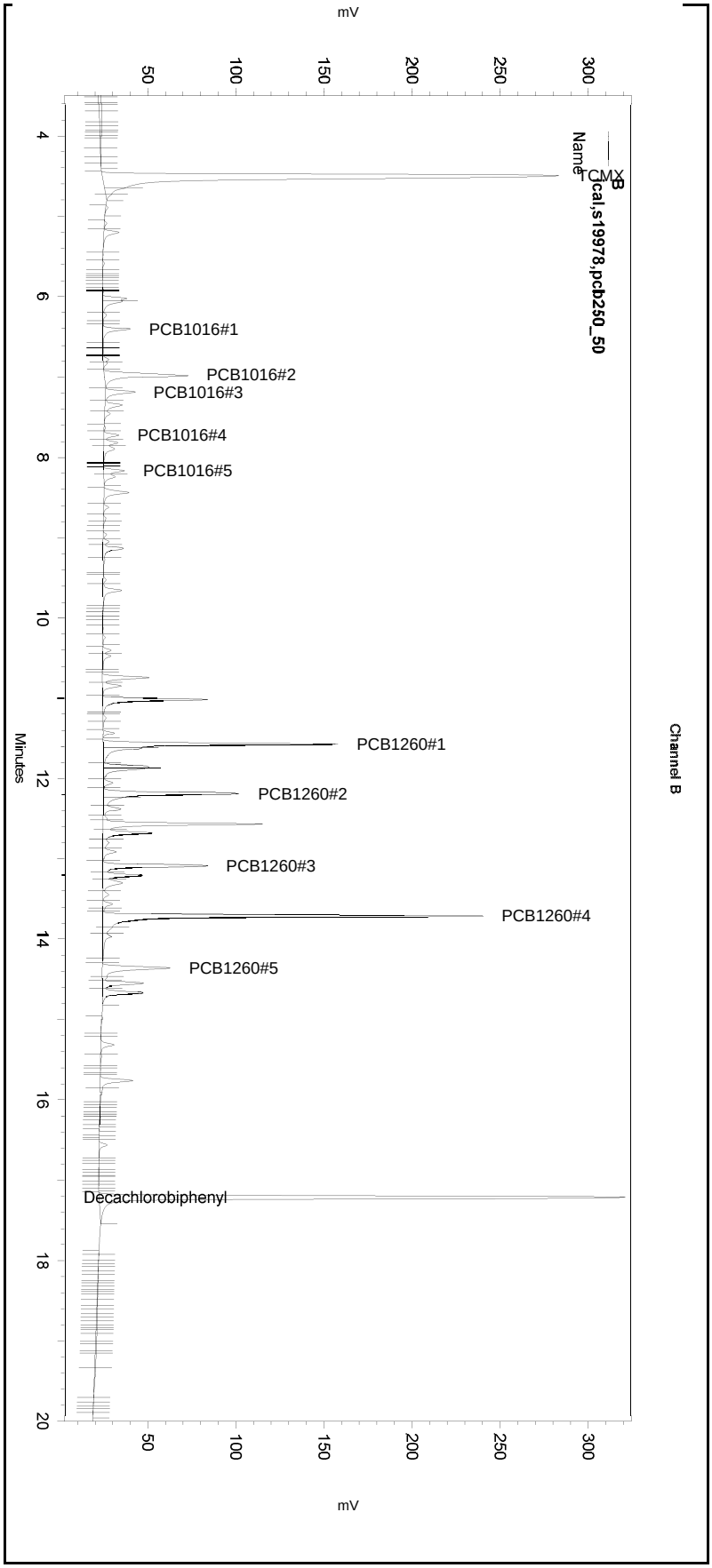
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.56	0	0
Yes	Split Peak	12.574	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 10:15:14 AM
Sample Amount: 1



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Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.811	0	0
Yes	Reset Baseline	7.13	0	0
Yes	Reset Baseline	8.351	0	0
Yes	Reset Baseline	11.494	0	0
Yes	Reset Baseline	14.822	0	0
Yes	Reset Baseline	17.541	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 9:46:24 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.463	4.473	67528	50.000 CAL
PCB1016#1	6.613	6.637	4680	250.000 CAL
PCB1016#2	7.227	7.250	14669	250.000 CAL
PCB1016#3	7.523	7.545	9784	250.000 CAL
PCB1016#4	7.970	7.990	4309	250.000 CAL
PCB1016#5	8.473	8.494	6822	250.000 CAL
PCB1260#1	11.907	11.907	30673	250.000 CAL
PCB1260#2	12.527	12.530	30696	250.000 CAL
PCB1260#3	13.347	13.350	18505	250.000 CAL
PCB1260#4	14.053	14.053	47505	250.000 CAL
PCB1260#5	14.680	14.680	20473	250.000 CAL
Decachlorobiphenyl	17.163	17.160	63036	50.000 CAL

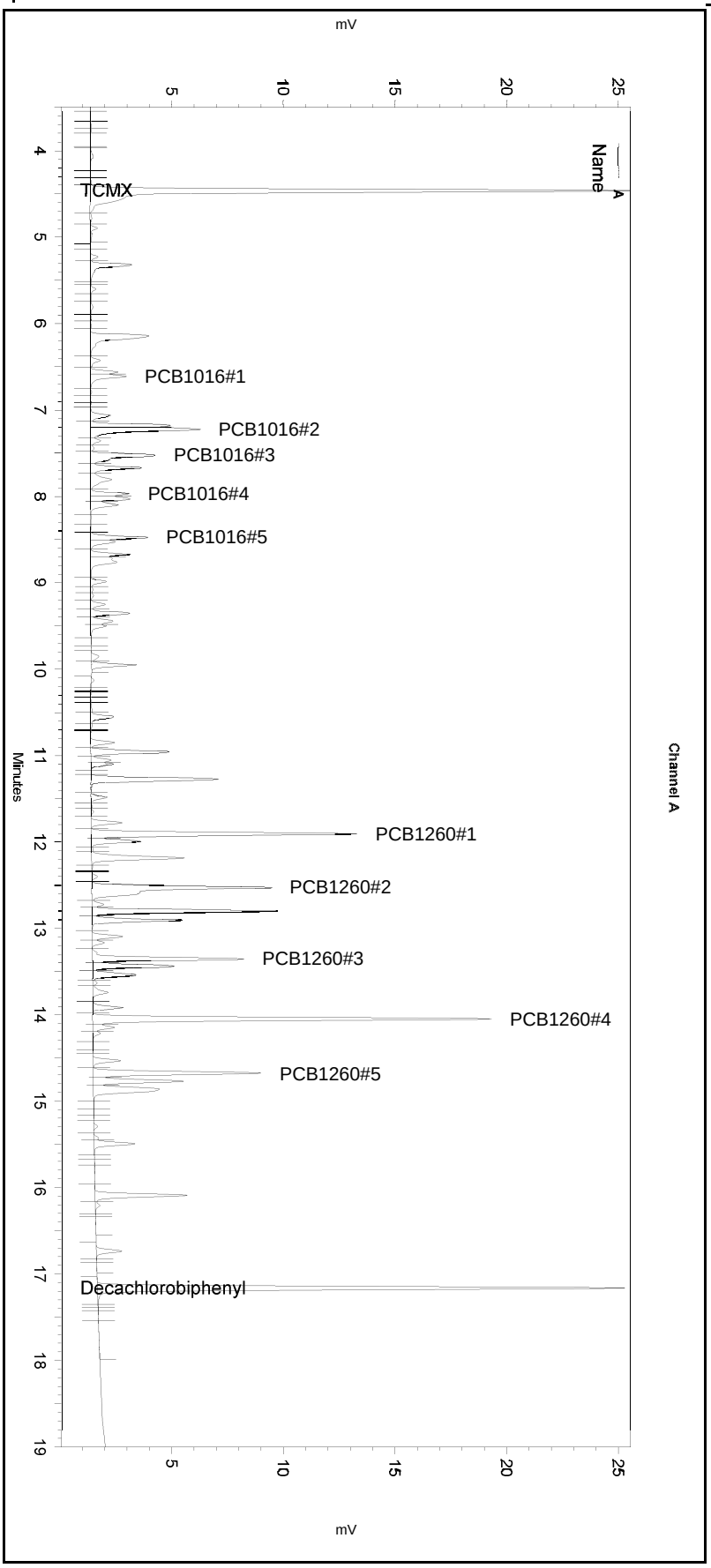
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.507	1117215	50.000 CAL
PCB1016#1	6.410	6.427	75603	250.000 CAL
PCB1016#2	6.977	6.993	202883	250.000 CAL
PCB1016#3	7.187	7.200	78885	250.000 CAL
PCB1016#4	7.720	7.730	35413	250.000 CAL
PCB1016#5	8.170	8.180	39638	250.000 CAL
PCB1260#1	11.570	11.573	297480	250.000 CAL
PCB1260#2	12.187	12.190	205337	250.000 CAL
PCB1260#3	13.087	13.087	148201	250.000 CAL
PCB1260#4	13.710	13.707	581451	250.000 CAL
PCB1260#5	14.360	14.357	126665	250.000 CAL
Decachlorobiphenyl	17.210	17.187	884157	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 9:46:24 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

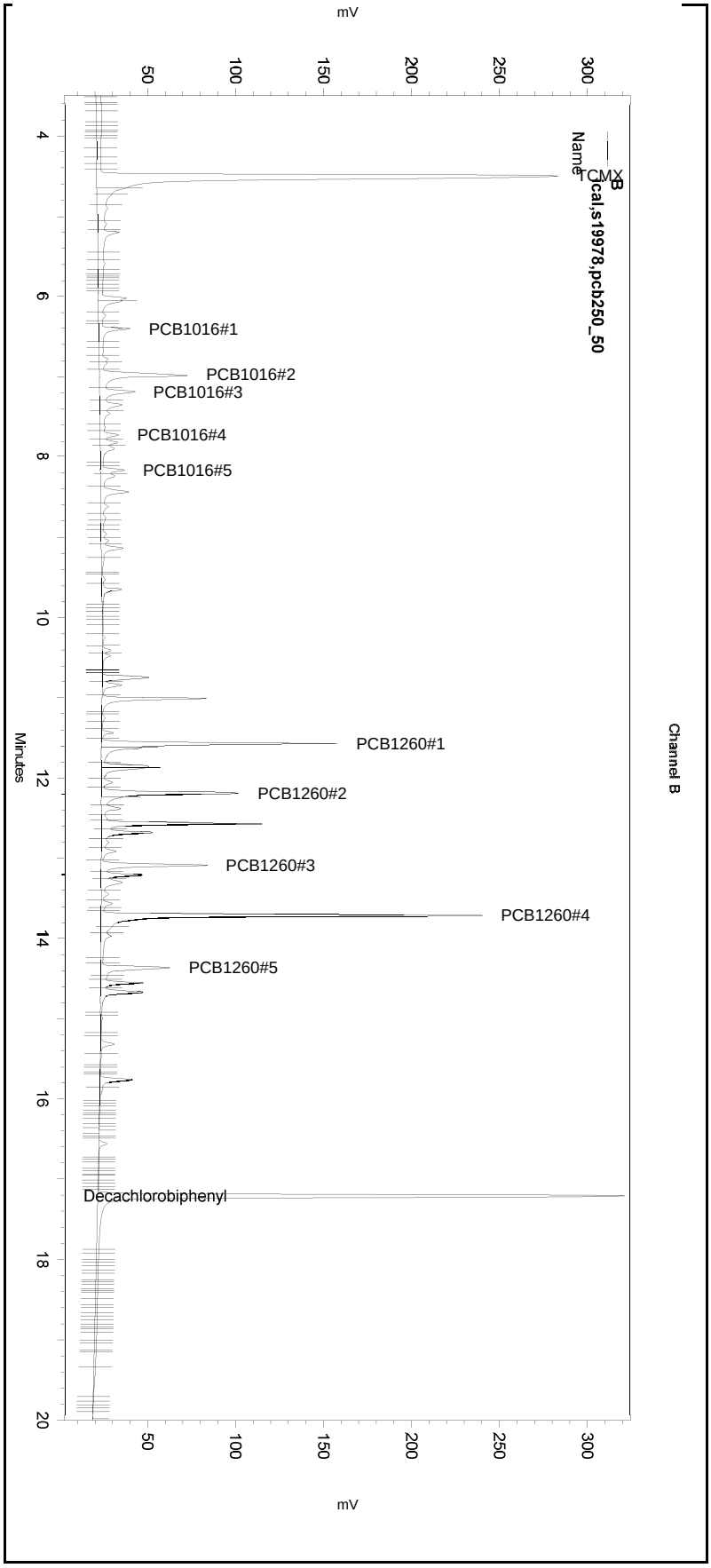
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 9:46:24 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 10:27:54 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.463	4.463	116439	100.000 CAL
PCB1016#1	6.613	6.613	7717	500.000 CAL
PCB1016#2	7.223	7.227	23304	500.000 CAL
PCB1016#3	7.523	7.523	12370	500.000 CAL
PCB1016#4	7.970	7.970	6293	500.000 CAL
PCB1016#5	8.470	8.473	10528	500.000 CAL
PCB1260#1	11.900	11.907	46239	500.000 CAL
PCB1260#2	12.523	12.527	34559	500.000 CAL
PCB1260#3	13.343	13.347	26891	500.000 CAL
PCB1260#4	14.047	14.053	70893	500.000 CAL
PCB1260#5	14.673	14.680	29001	500.000 CAL
Decachlorobiphenyl	17.157	17.163	93636	100.000 CAL

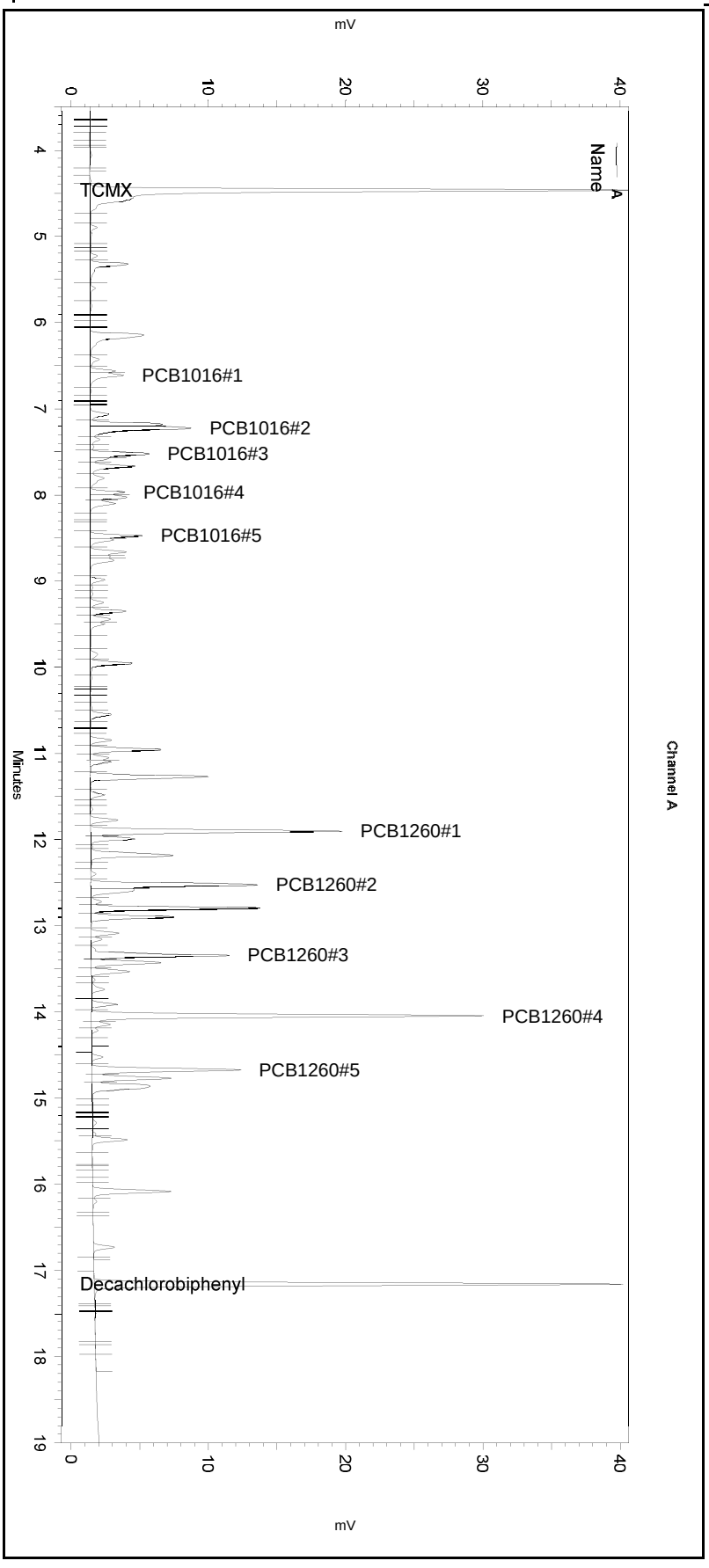
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.500	1886378	100.000 CAL
PCB1016#1	6.407	6.410	118623	500.000 CAL
PCB1016#2	6.977	6.977	717609	500.000 CAL
PCB1016#3	7.183	7.187	204883	500.000 CAL
PCB1016#4	7.717	7.720	54834	500.000 CAL
PCB1016#5	8.167	8.170	84260	500.000 CAL
PCB1260#1	11.567	11.570	869810	500.000 CAL
PCB1260#2	12.183	12.187	848639	500.000 CAL
PCB1260#3	13.083	13.087	640627	500.000 CAL
PCB1260#4	13.707	13.710	1382363	500.000 CAL
PCB1260#5	14.357	14.360	608326	500.000 CAL
Decachlorobiphenyl	17.207	17.210	1436299	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 10:27:54 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

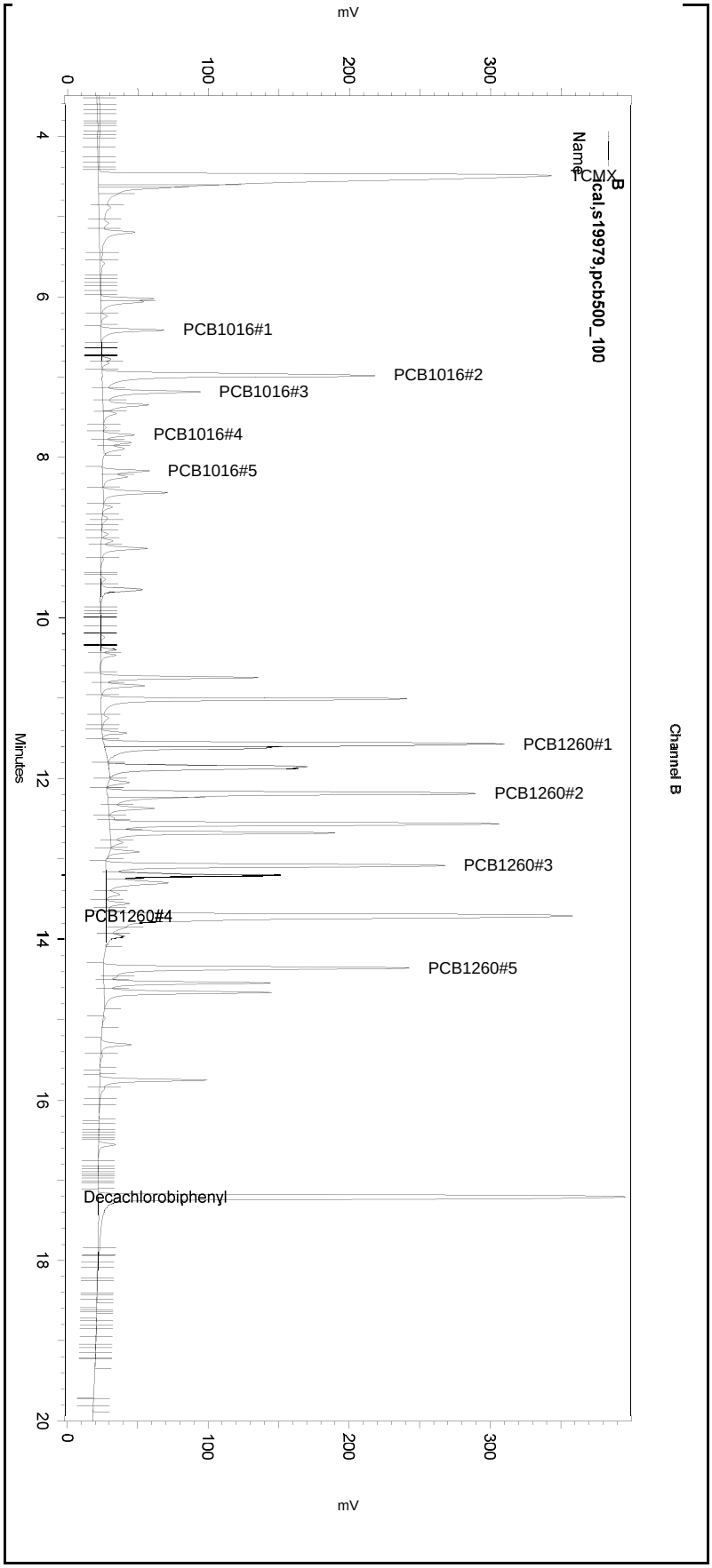
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.571	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 10:27:54 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.335	0	0
Yes	Manual Baseline	6.896	7.582	0
Yes	Reset Baseline	7.42	0	0
Yes	Reset Baseline	7.564	0	0
Yes	Reset Baseline	7.97	0	0
Yes	Reset Baseline	8.367	0	0
Yes	Reset Baseline	8.367	0	0
Yes	Manual Baseline	11.793	11.995	0
Yes	Reset Baseline	12.858	0	0
Yes	Reset Baseline	14.095	0	0
Yes	Reset Baseline	14.869	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 9:46:28 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.463	4.473	116439	100.000 CAL
PCB1016#1	6.613	6.637	7717	500.000 CAL
PCB1016#2	7.223	7.250	23304	500.000 CAL
PCB1016#3	7.523	7.545	14960	500.000 CAL
PCB1016#4	7.970	7.990	6293	500.000 CAL
PCB1016#5	8.470	8.494	10528	500.000 CAL
PCB1260#1	11.900	11.907	46239	500.000 CAL
PCB1260#2	12.523	12.530	34559	500.000 CAL
PCB1260#3	13.343	13.350	26891	500.000 CAL
PCB1260#4	14.047	14.053	70893	500.000 CAL
PCB1260#5	14.673	14.680	29001	500.000 CAL
Decachlorobiphenyl	17.157	17.160	93636	100.000 CAL

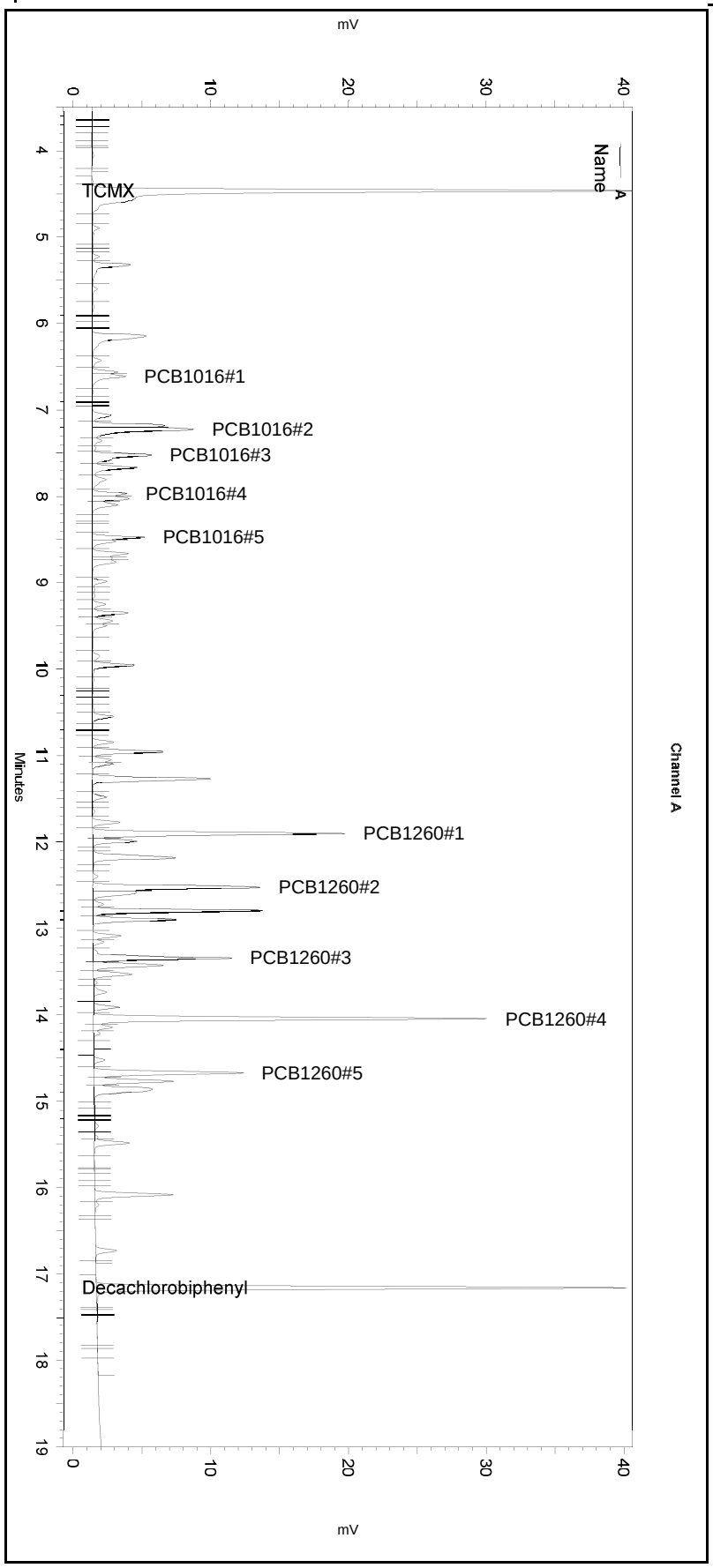
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.507	1901249	100.000 CAL
PCB1016#1	6.407	6.427	149972	500.000 CAL
PCB1016#2	6.977	6.993	759292	500.000 CAL
PCB1016#3	7.183	7.200	234381	500.000 CAL
PCB1016#4	7.717	7.730	78316	500.000 CAL
PCB1016#5	8.167	8.180	98359	500.000 CAL
PCB1260#1	11.567	11.573	869810	500.000 CAL
PCB1260#2	12.183	12.190	850850	500.000 CAL
PCB1260#3	13.083	13.087	647211	500.000 CAL
PCB1260#4	13.707	13.707	1402489	500.000 CAL
PCB1260#5	14.357	14.357	616684	500.000 CAL
Decachlorobiphenyl	17.207	17.187	1436299	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 9:46:28 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

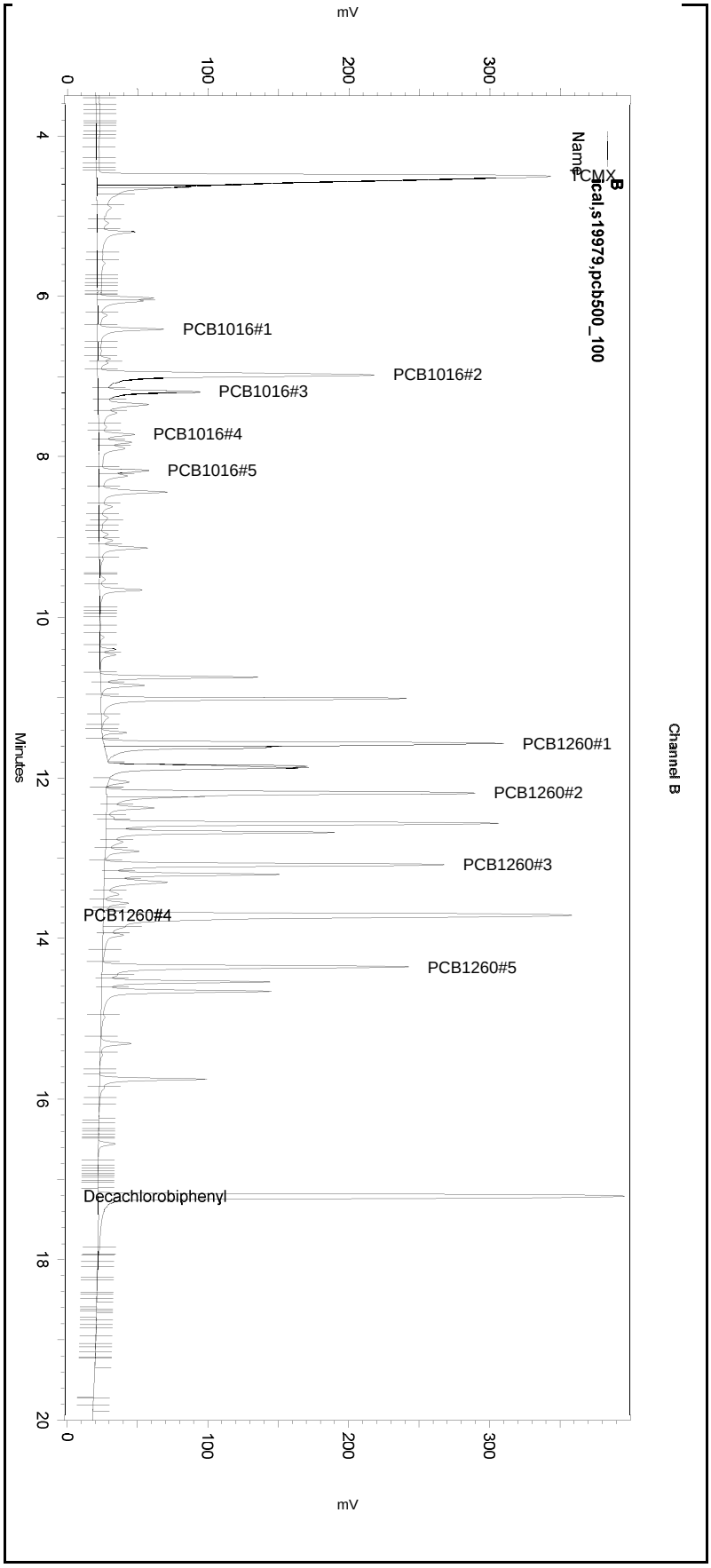
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 9:46:28 AM
Sample Amount: 1



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Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 10:15:22 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.460	4.463	193693	150.000 CAL
PCB1016#1	6.607	6.613	11925	750.000 CAL
PCB1016#2	7.220	7.227	37514	750.000 CAL
PCB1016#3	7.517	7.523	18510	750.000 CAL
PCB1016#4	7.963	7.970	10369	750.000 CAL
PCB1016#5	8.467	8.473	16580	750.000 CAL
PCB1260#1	11.897	11.907	80589	750.000 CAL
PCB1260#2	12.517	12.527	59029	750.000 CAL
PCB1260#3	13.337	13.347	45719	750.000 CAL
PCB1260#4	14.043	14.053	135124	750.000 CAL
PCB1260#5	14.667	14.680	50788	750.000 CAL
Decachlorobiphenyl	17.150	17.163	190295	150.000 CAL

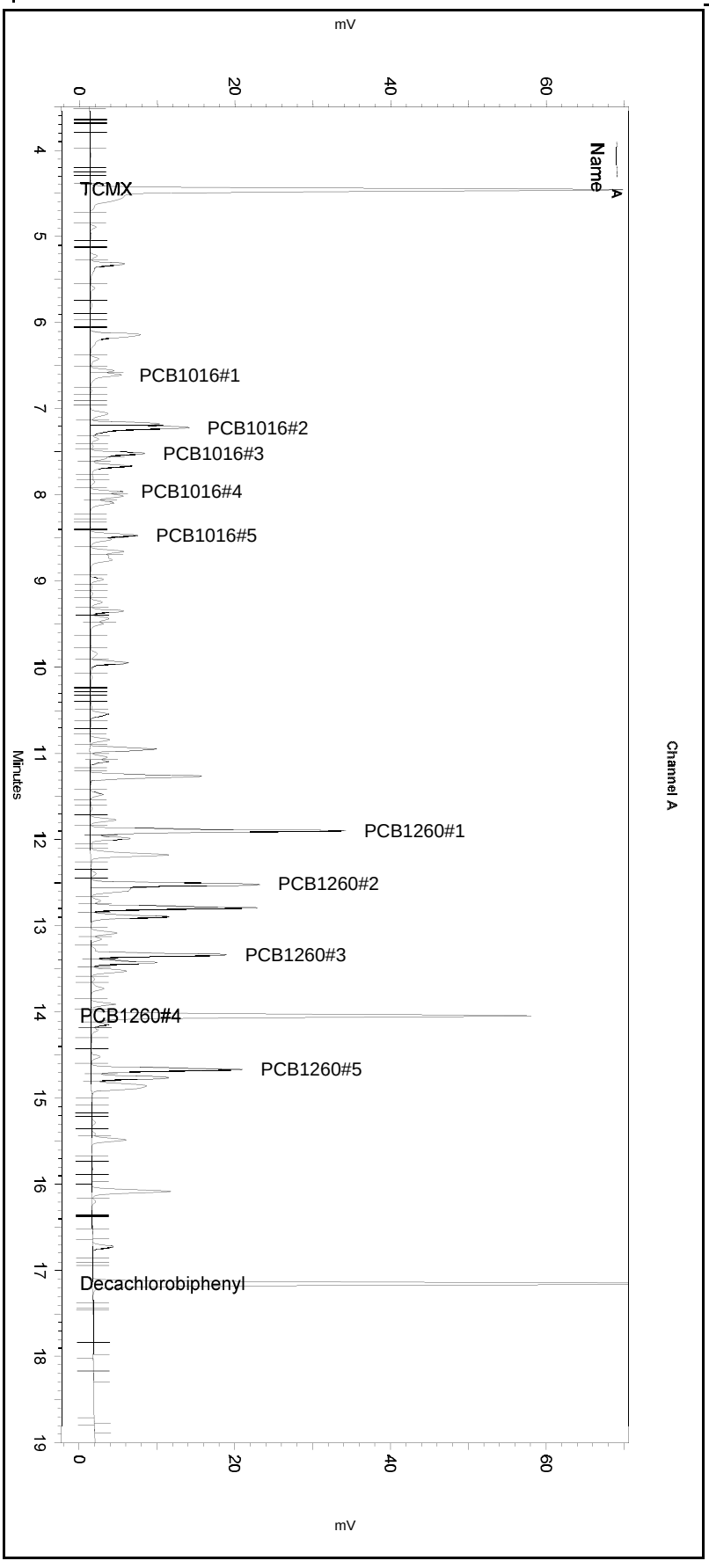
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.493	4.500	2070673	150.000 CAL
PCB1016#1	6.403	6.410	170181	750.000 CAL
PCB1016#2	6.973	6.977	933511	750.000 CAL
PCB1016#3	7.183	7.187	303486	750.000 CAL
PCB1016#4	7.713	7.720	74901	750.000 CAL
PCB1016#5	8.163	8.170	108224	750.000 CAL
PCB1260#1	11.563	11.570	927463	750.000 CAL
PCB1260#2	12.180	12.187	902470	750.000 CAL
PCB1260#3	13.080	13.087	678139	750.000 CAL
PCB1260#4	13.700	13.710	1426923	750.000 CAL
PCB1260#5	14.353	14.360	626028	750.000 CAL
Decachlorobiphenyl	17.200	17.210	1463369	150.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 10:15:22 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

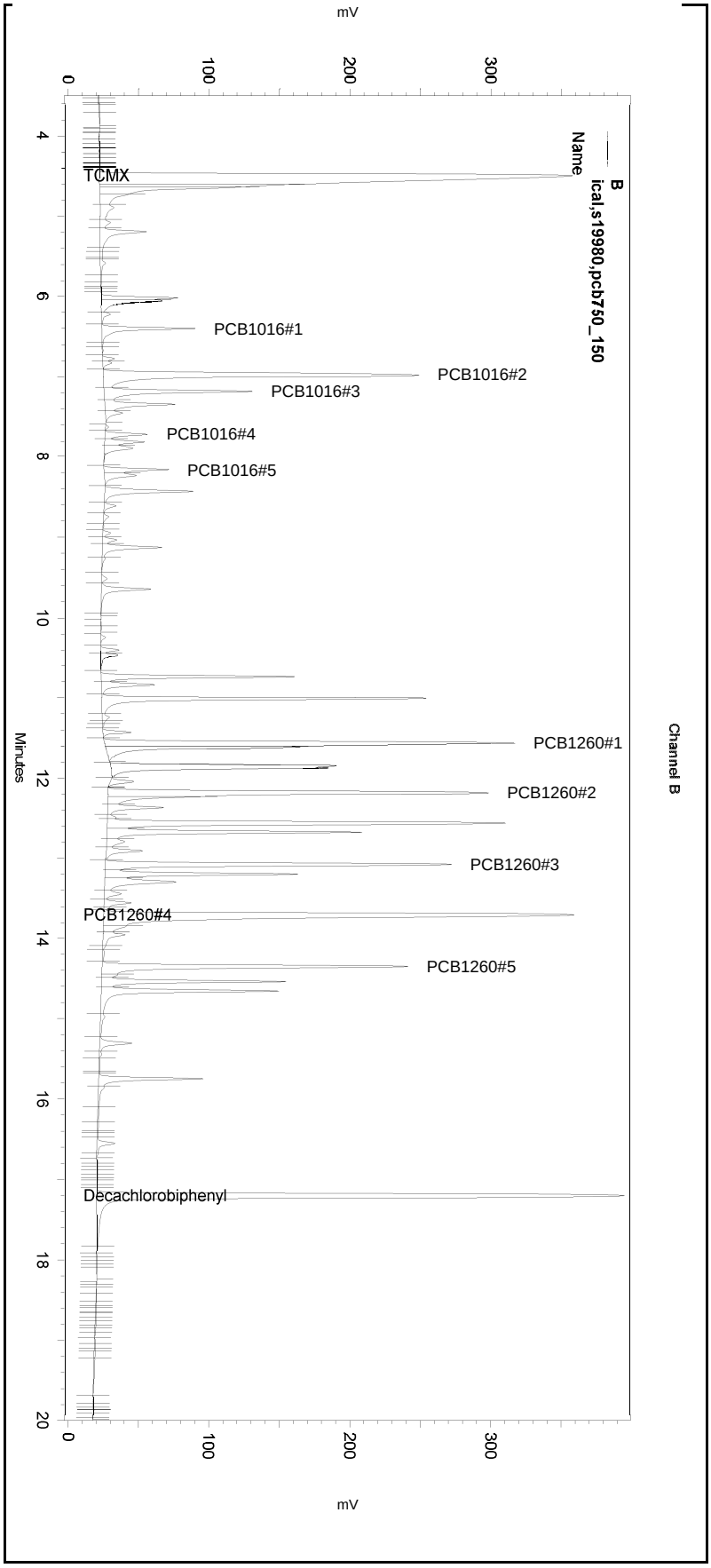
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.554	0	0
Yes	Split Peak	12.562	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 10:15:22 AM
Sample Amount: 1



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Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.56	0	0
Yes	Reset Baseline	8.358	0	0
Yes	Manual Baseline	11.801	11.992	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 9:46:32 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.460	4.473	193693	150.000 CAL
PCB1016#1		6.637		0.000 BDL
PCB1016#2	7.220	7.250	37514	750.000 CAL
PCB1016#3	7.517	7.545	24037	750.000 CAL
PCB1016#4	7.963	7.990	10369	750.000 CAL
PCB1016#5	8.467	8.494	16580	750.000 CAL
PCB1260#1	11.897	11.907	80589	750.000 CAL
PCB1260#2	12.517	12.530	76053	750.000 CAL
PCB1260#3	13.337	13.350	45719	750.000 CAL
PCB1260#4	14.043	14.053	135124	750.000 CAL
PCB1260#5	14.667	14.680	50788	750.000 CAL
Decachlorobiphenyl	17.150	17.160	190295	150.000 CAL

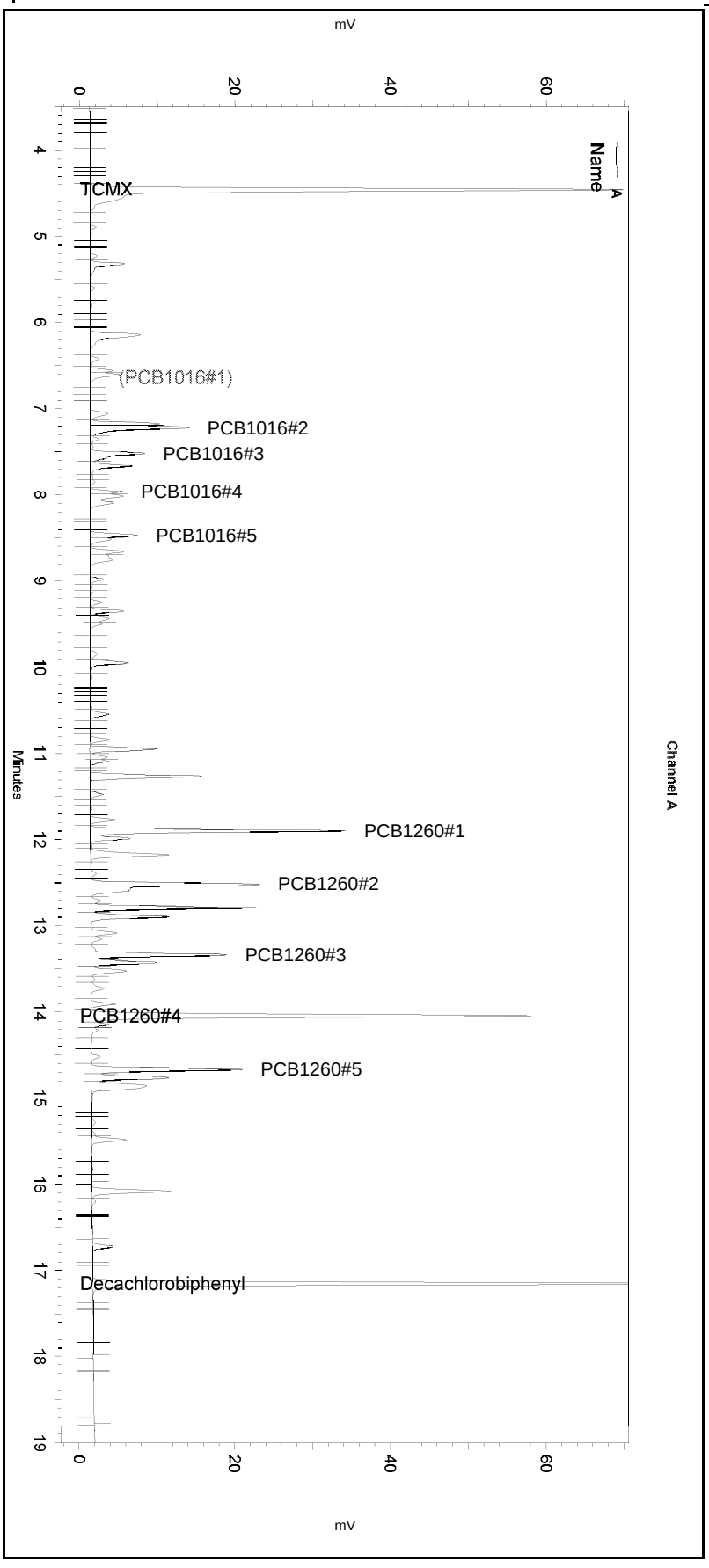
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.493	4.507	2073289	150.000 CAL
PCB1016#1	6.403	6.427	187610	750.000 CAL
PCB1016#2	6.973	6.993	967914	750.000 CAL
PCB1016#3	7.183	7.200	332288	750.000 CAL
PCB1016#4	7.713	7.730	98520	750.000 CAL
PCB1016#5	8.163	8.180	122539	750.000 CAL
PCB1260#1	11.563	11.573	927463	750.000 CAL
PCB1260#2	12.180	12.190	902470	750.000 CAL
PCB1260#3	13.080	13.087	678139	750.000 CAL
PCB1260#4	13.700	13.707	1426923	750.000 CAL
PCB1260#5	14.353	14.357	626028	750.000 CAL
Decachlorobiphenyl	17.200	17.187	1463369	150.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 9:46:32 AM
Sample Amount: 1



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Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes
==========

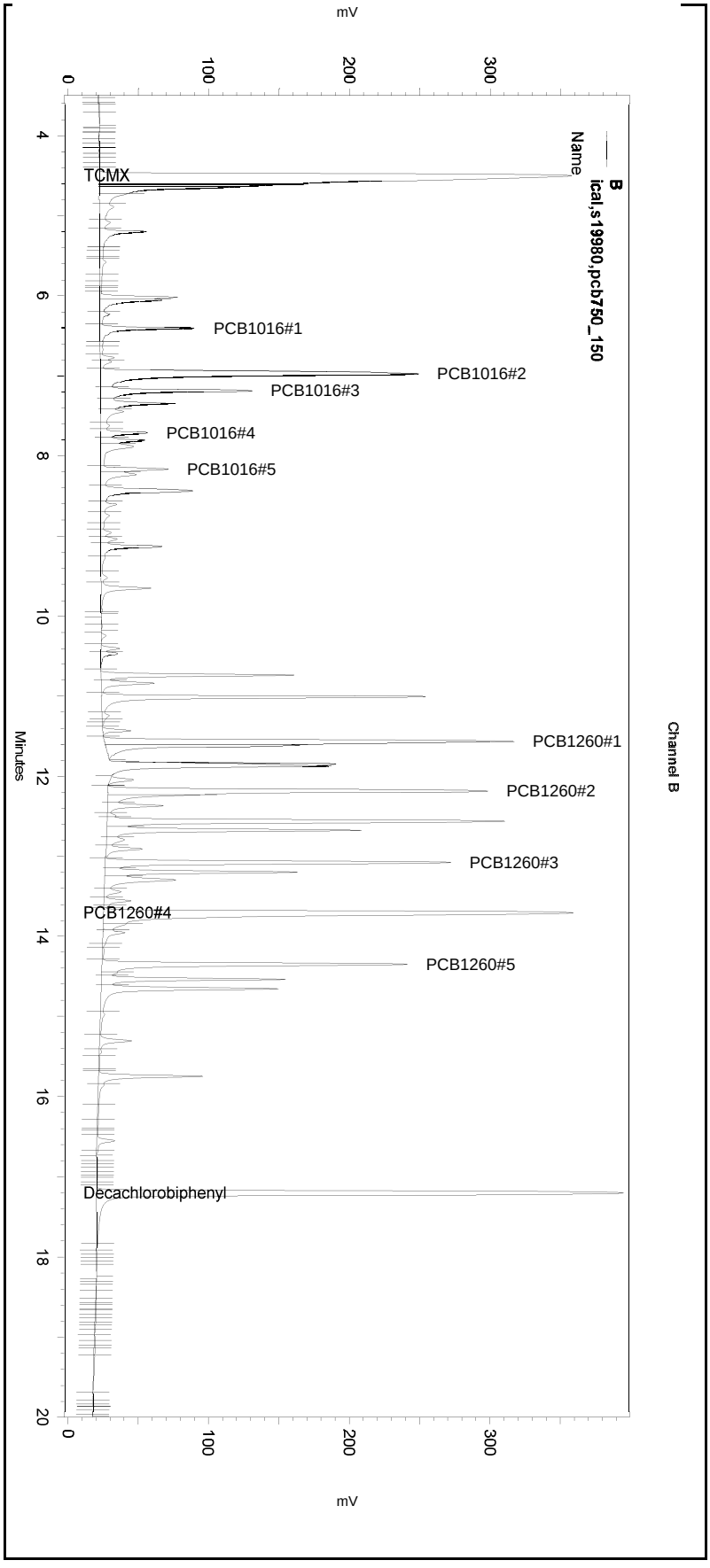
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 9:46:32 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 10:15:26 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.460	4.463	256820	200.000 CAL
PCB1016#1	6.607	6.613	15637	1000.000 CAL
PCB1016#2	7.220	7.227	50772	1000.000 CAL
PCB1016#3	7.517	7.523	24883	1000.000 CAL
PCB1016#4	7.963	7.970	13195	1000.000 CAL
PCB1016#5	8.467	8.473	22366	1000.000 CAL
PCB1260#1	11.893	11.907	114274	1000.000 CAL
PCB1260#2	12.517	12.527	84031	1000.000 CAL
PCB1260#3	13.337	13.347	64024	1000.000 CAL
PCB1260#4	14.043	14.053	199008	1000.000 CAL
PCB1260#5	14.667	14.680	72273	1000.000 CAL
Decachlorobiphenyl	17.150	17.163	281751	200.000 CAL

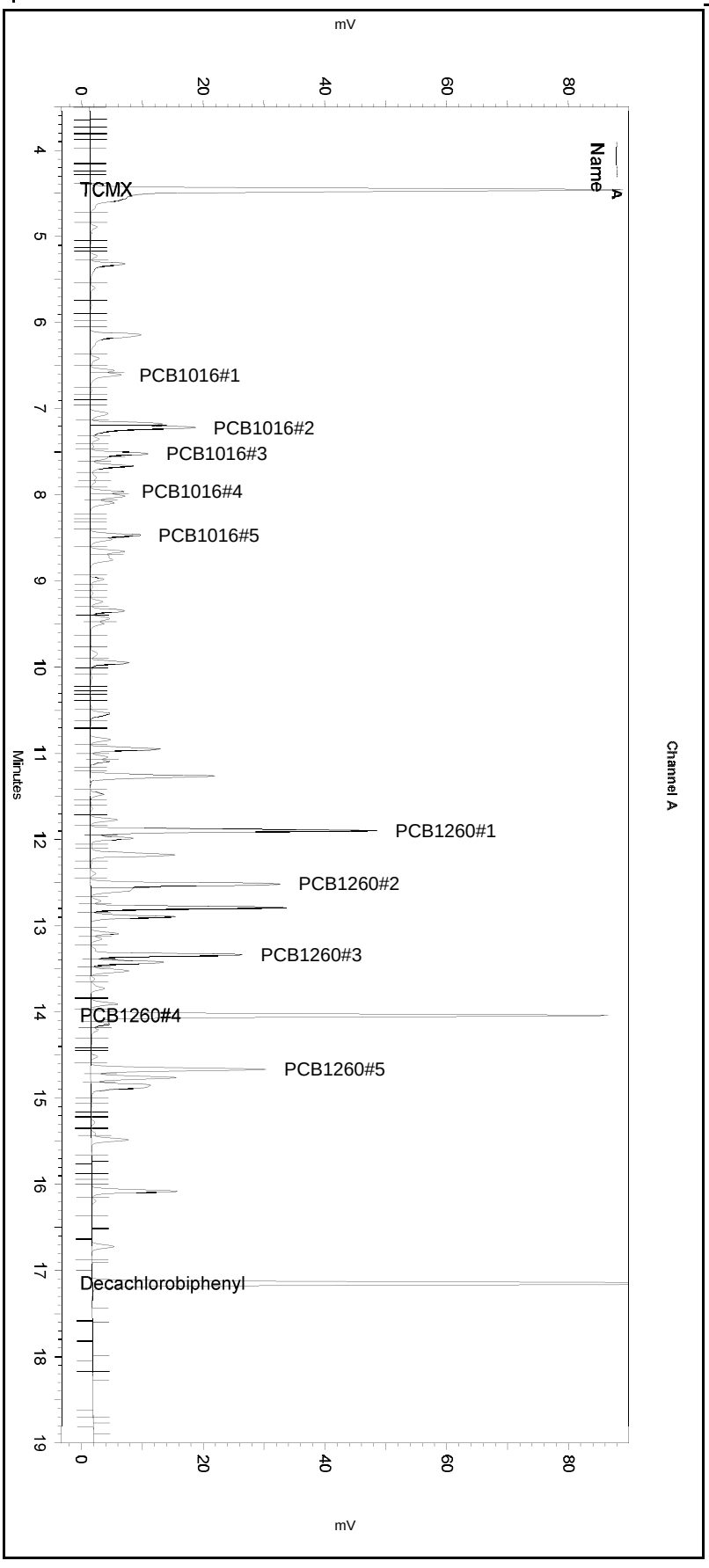
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.497	4.500	2202407	200.000 CAL
PCB1016#1	6.407	6.410	253854	1000.000 CAL
PCB1016#2	6.973	6.977	1200774	1000.000 CAL
PCB1016#3	7.183	7.187	486459	1000.000 CAL
PCB1016#4	7.717	7.720	118599	1000.000 CAL
PCB1016#5	8.167	8.170	181194	1000.000 CAL
PCB1260#1	11.560	11.570	1103013	1000.000 CAL
PCB1260#2	12.180	12.187	1192231	1000.000 CAL
PCB1260#3	13.080	13.087	934481	1000.000 CAL
PCB1260#4	13.700	13.710	1503038	1000.000 CAL
PCB1260#5	14.353	14.360	974180	1000.000 CAL
Decachlorobiphenyl	17.200	17.210	1664463	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 10:15:26 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

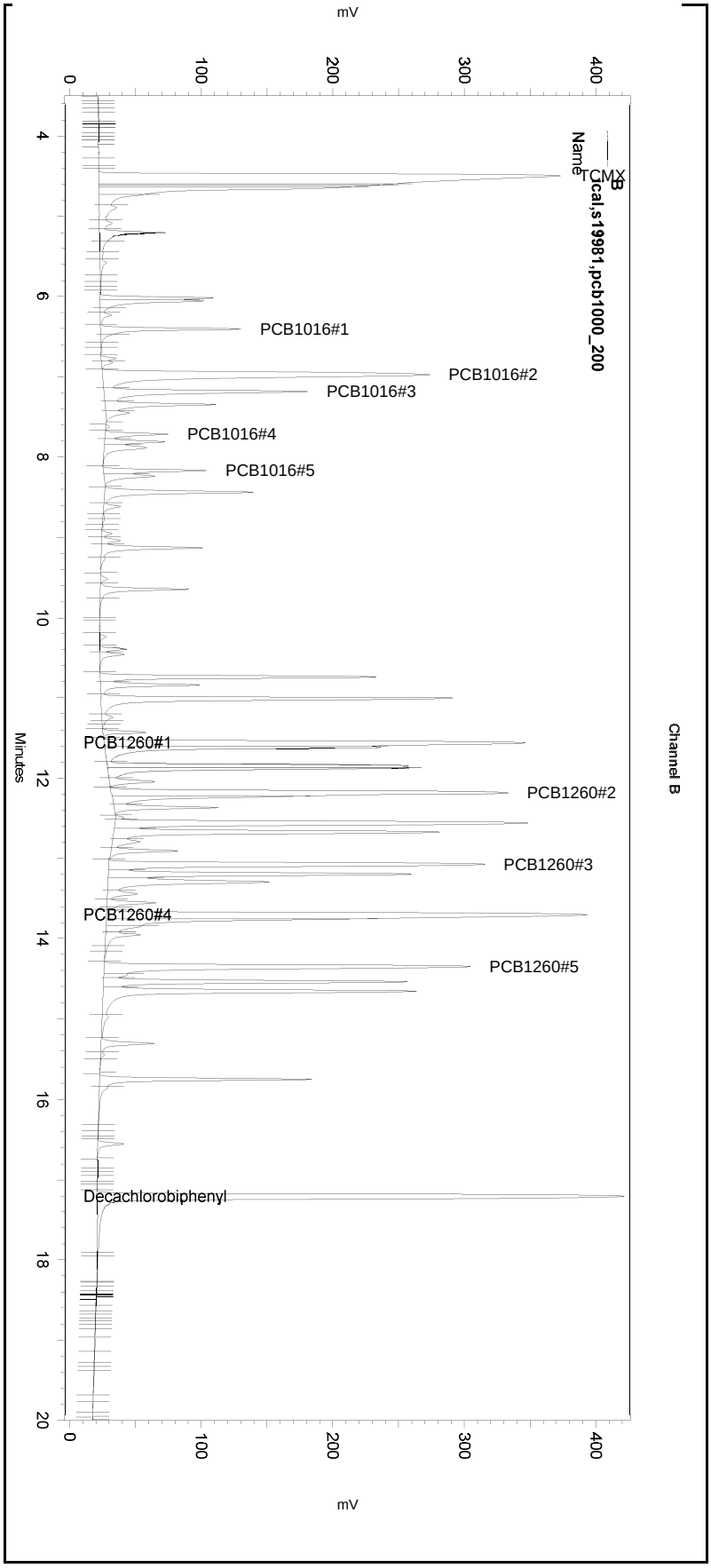
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.554	0	0
Yes	Split Peak	12.564	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 10:15:26 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.559	0	0
Yes	Reset Baseline	8.358	0	0
Yes	Reset Baseline	12.459	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 9:46:36 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.460	4.473	256820	200.000 CAL
PCB1016#1		6.637		0.000 BDL
PCB1016#2	7.220	7.250	50772	1000.000 CAL
PCB1016#3	7.517	7.545	32101	1000.000 CAL
PCB1016#4	8.013	7.990	16384	1000.000 CAL
PCB1016#5	8.467	8.494	22366	1000.000 CAL
PCB1260#1	11.893	11.907	114274	1000.000 CAL
PCB1260#2	12.517	12.530	106315	1000.000 CAL
PCB1260#3	13.337	13.350	64024	1000.000 CAL
PCB1260#4	14.043	14.053	199008	1000.000 CAL
PCB1260#5	14.667	14.680	72273	1000.000 CAL
Decachlorobiphenyl	17.150	17.160	281751	200.000 CAL

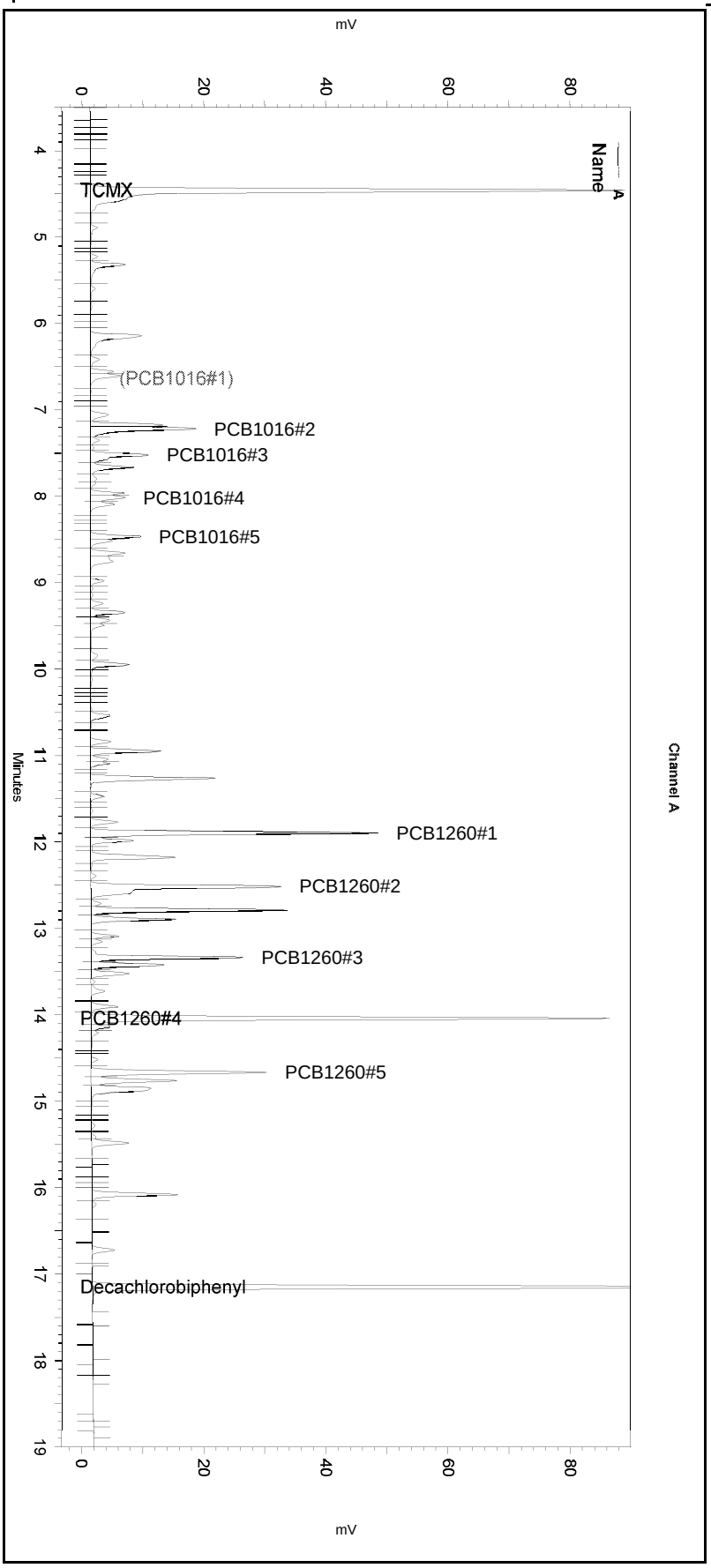
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.497	4.507	2204762	200.000 CAL
PCB1016#1	6.407	6.427	270150	1000.000 CAL
PCB1016#2	6.973	6.993	1257908	1000.000 CAL
PCB1016#3	7.183	7.200	537393	1000.000 CAL
PCB1016#4	7.717	7.730	154942	1000.000 CAL
PCB1016#5	8.167	8.180	206308	1000.000 CAL
PCB1260#1	11.560	11.573	1134918	1000.000 CAL
PCB1260#2	12.180	12.190	1267145	1000.000 CAL
PCB1260#3	13.080	13.087	1009921	1000.000 CAL
PCB1260#4	13.700	13.707	1552893	1000.000 CAL
PCB1260#5	14.353	14.357	1029696	1000.000 CAL
Decachlorobiphenyl	17.200	17.187	1683441	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 9:46:36 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

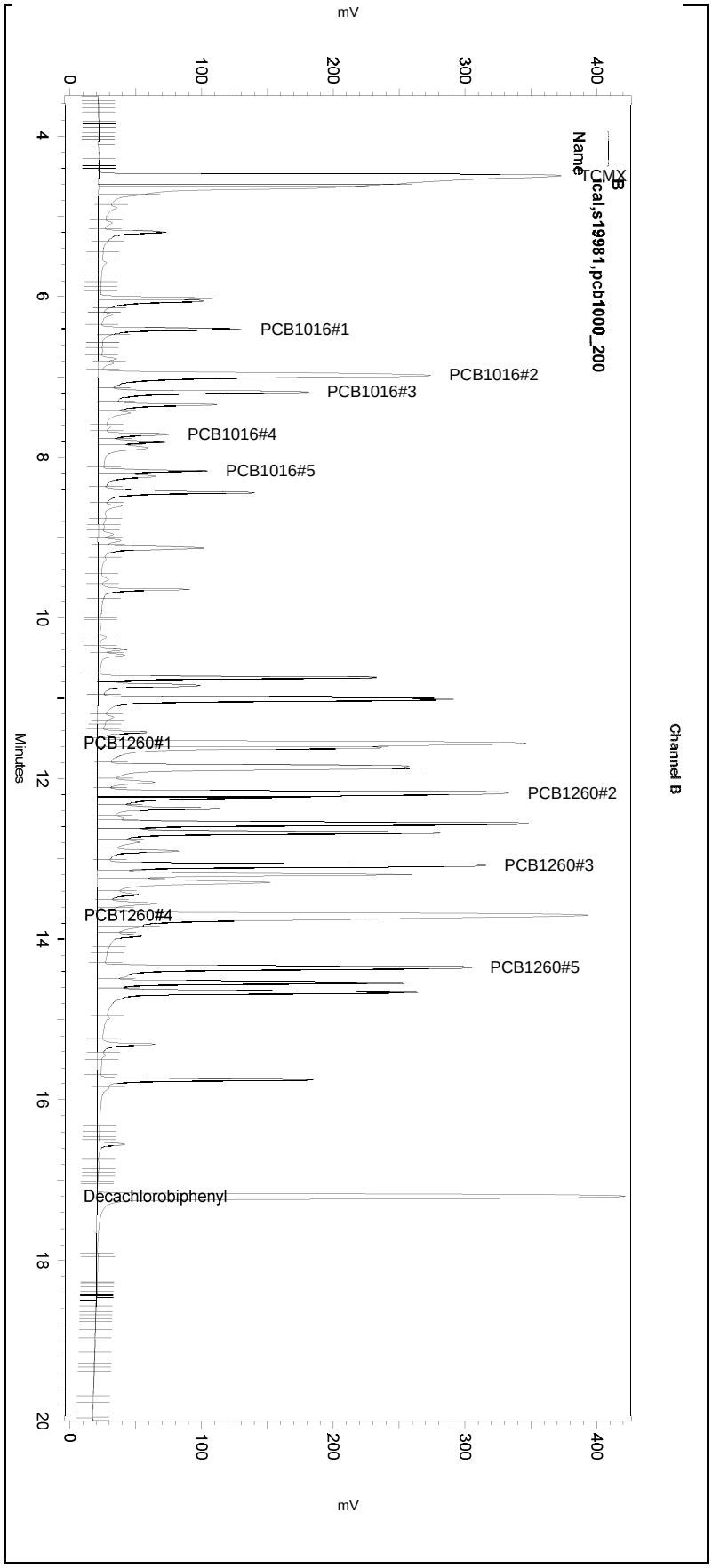
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 9:46:36 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 10:33:37 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.457	4.463	61754	46.573
PCB1016#1	6.607	6.613	4597	247.377
PCB1016#2	7.217	7.227	13876	235.600
PCB1016#3	7.513	7.523	7477	250.946
PCB1016#4	7.960	7.970	3803	231.261
PCB1016#5	8.463	8.473	6452	245.128
PCB1260#1	11.890	11.907	26082	215.453
PCB1260#2	12.513	12.527	20210	222.544
PCB1260#3	13.330	13.347	16221	225.138
PCB1260#4	14.037	14.053	40765	221.864
PCB1260#5	14.663	14.680	18002	230.089
Decachlorobiphenyl	17.147	17.163	45476	36.690

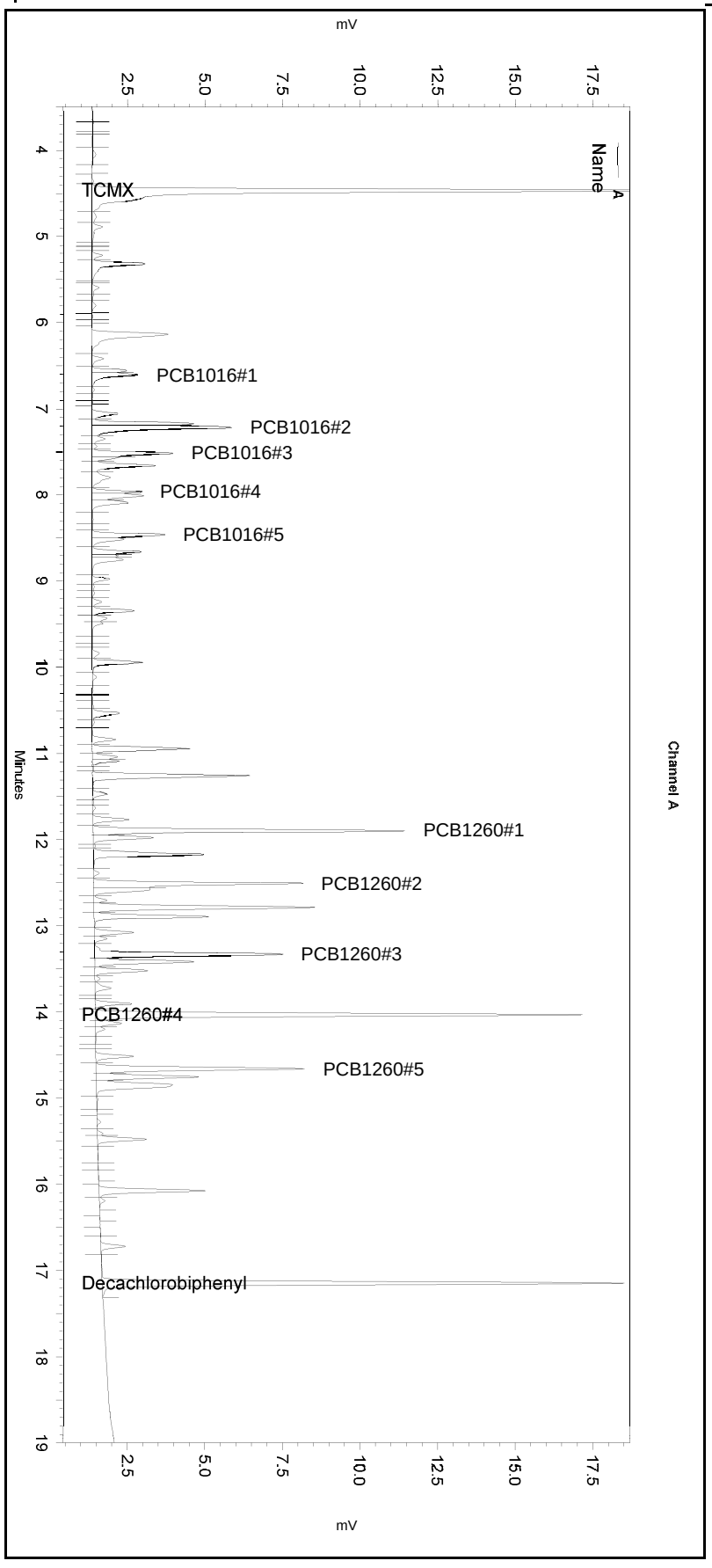
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.493	4.500	923530	48.284
PCB1016#1	6.403	6.410	46848	215.671
PCB1016#2	6.967	6.977	138281	158.420
PCB1016#3	7.180	7.187	62671	195.491
PCB1016#4	7.710	7.720	26617	247.871
PCB1016#5	8.160	8.170	33927	225.687
PCB1260#1	11.557	11.570	292711	268.623
PCB1260#2	12.173	12.187	210810	215.738
PCB1260#3	13.077	13.087	163971	216.639
PCB1260#4	13.697	13.710	608291	335.948
PCB1260#5	14.347	14.360	140330	196.168
Decachlorobiphenyl	17.197	17.210	693190	47.421

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 10:33:37 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

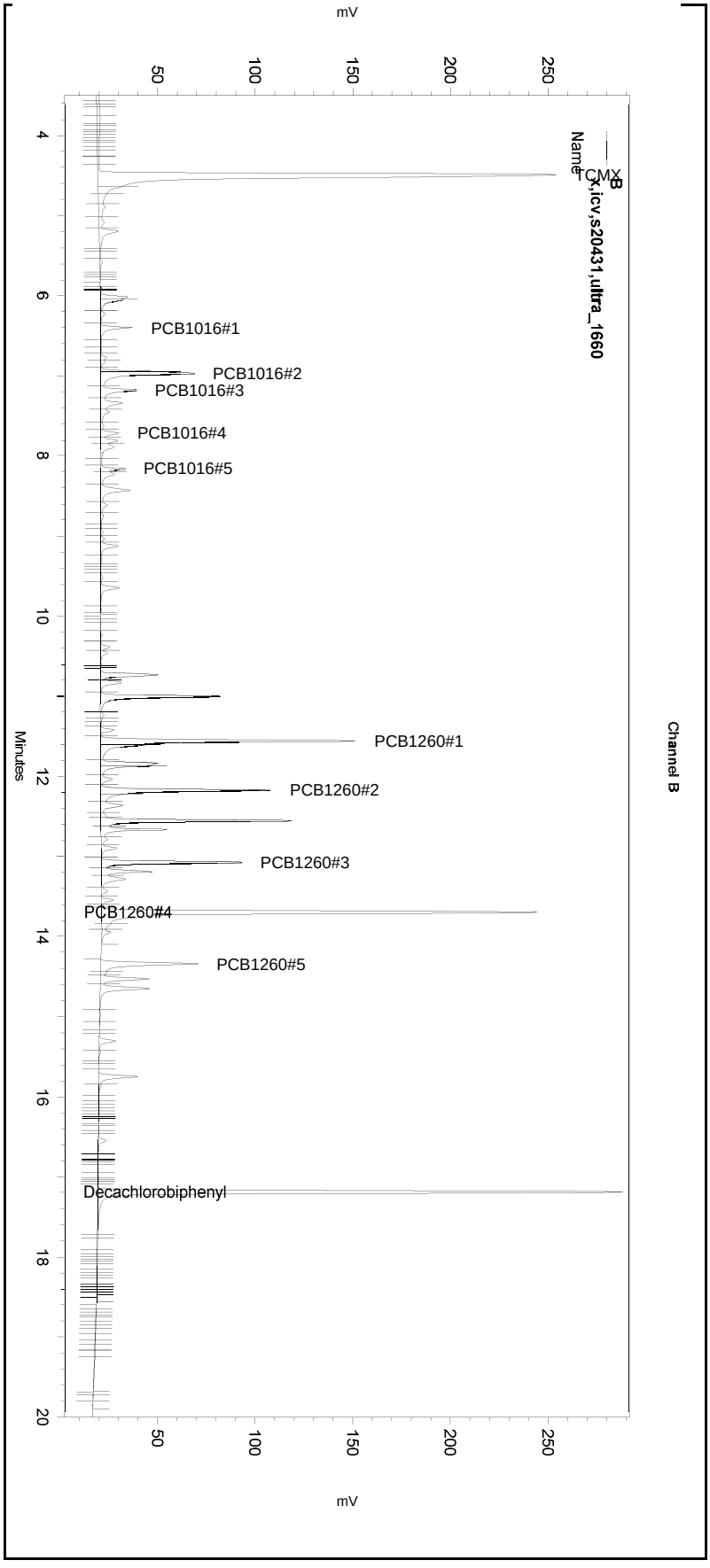
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.559	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 10:33:37 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.802	0	0
Yes	Reset Baseline	14.103	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 9:46:47 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.457	4.473	61754	45.557
PCB1016#1		6.637		0.000 BDL
PCB1016#2		7.250		0.000 BDL
PCB1016#3		7.545		0.000 BDL
PCB1016#4	8.010	7.990	4815	284.908
PCB1016#5	8.520	8.494	2751	104.517
PCB1260#1	11.890	11.907	26082	215.453
PCB1260#2	12.513	12.530	20210	174.613
PCB1260#3	13.330	13.350	16221	225.138
PCB1260#4	14.037	14.053	40765	221.864
PCB1260#5	14.663	14.680	18002	230.089
Decachlorobiphenyl	17.147	17.160	45476	35.601

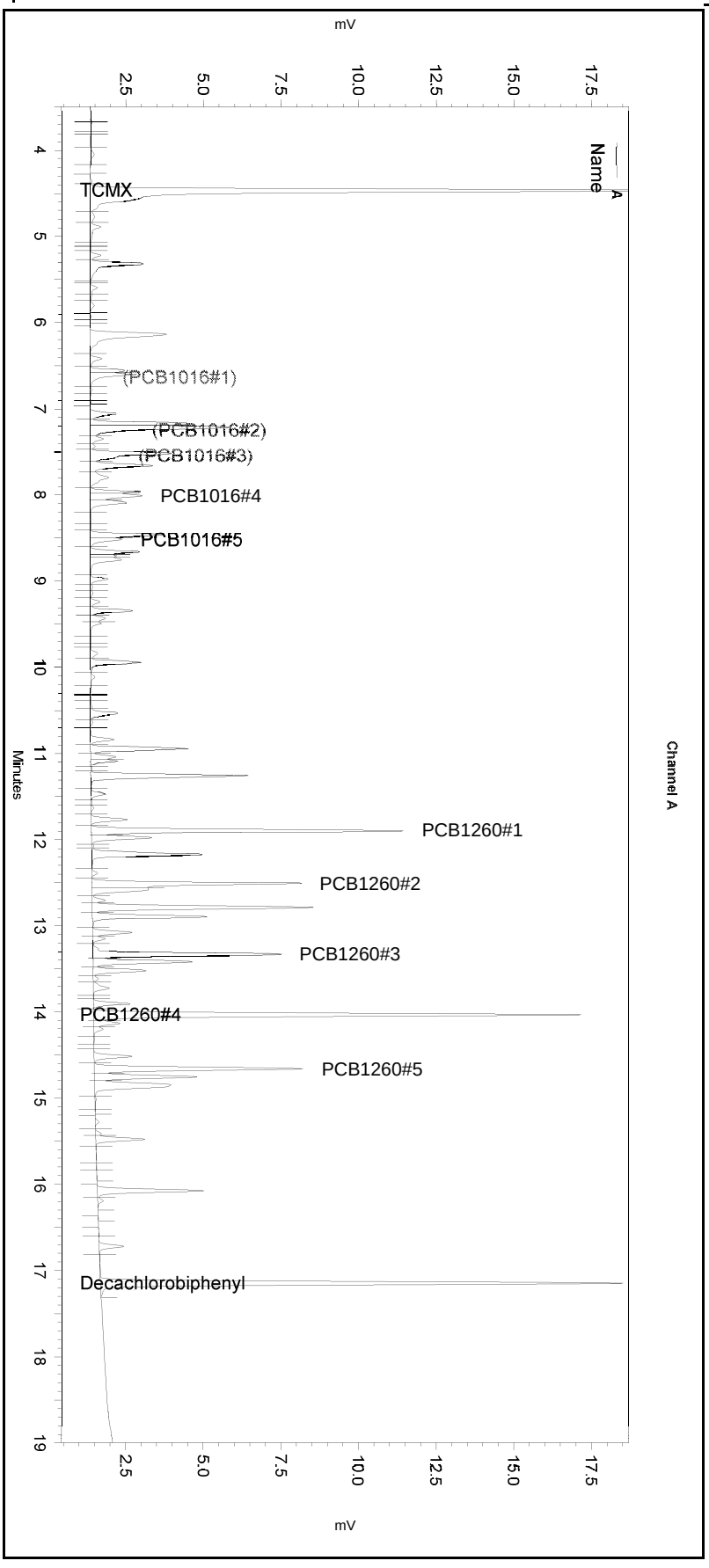
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.493	4.507	939702	43.280
PCB1016#1	6.403	6.427	64997	218.525
PCB1016#2	6.967	6.993	150562	133.126
PCB1016#3	7.180	7.200	72715	205.601
PCB1016#4	7.710	7.730	32080	226.747
PCB1016#5	8.160	8.180	38029	235.200
PCB1260#1	11.557	11.573	295453	189.524
PCB1260#2	12.173	12.190	215962	167.791
PCB1260#3	13.077	13.087	172360	180.185
PCB1260#4	13.697	13.707	624423	221.932
PCB1260#5	14.347	14.357	150758	178.084
Decachlorobiphenyl	17.197	17.187	697694	42.259

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 9:46:47 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

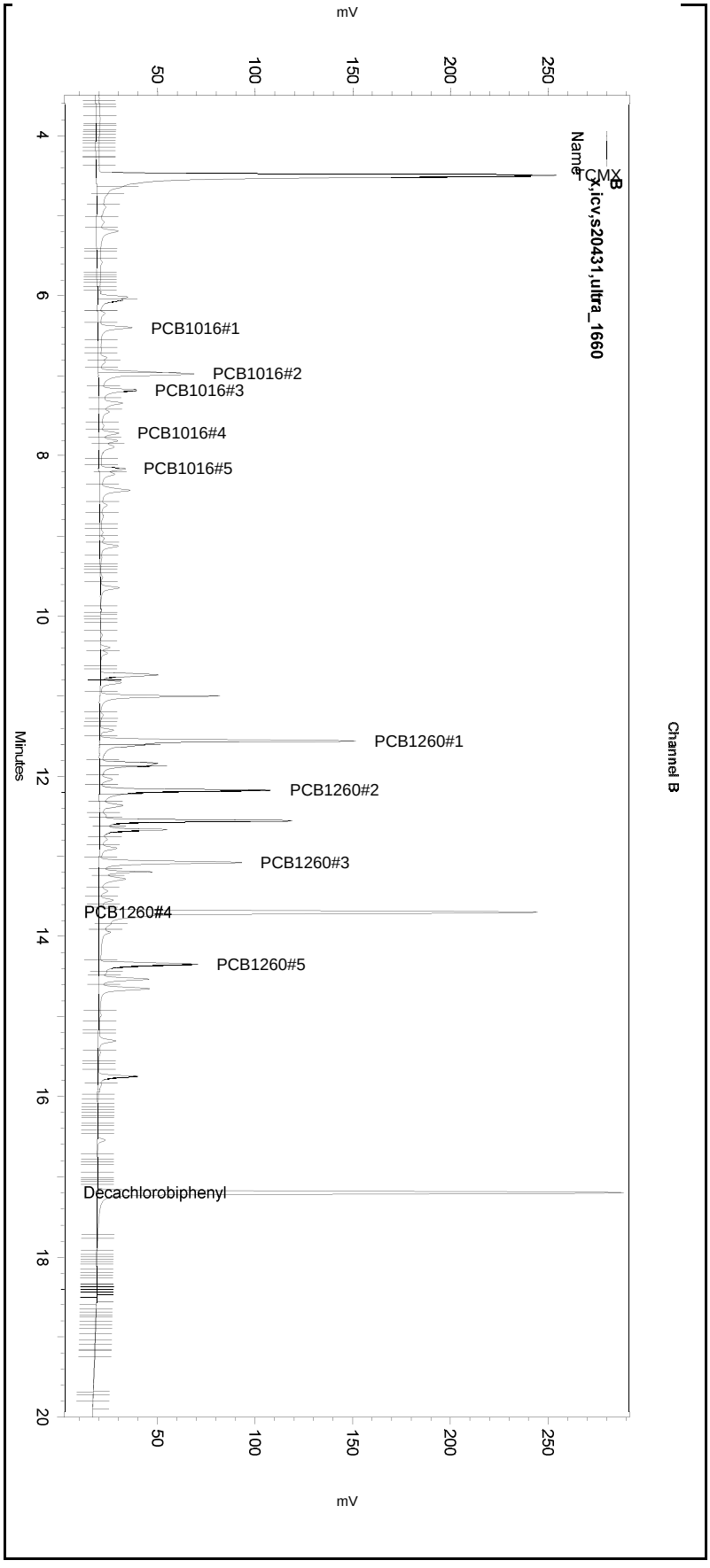
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 9:46:47 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Continuing Calibration Verification Raw Data

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC06 Run Name : PCB100_20 IDF : 1.0
Seqnum : 202366165024.1 File : 254_024 Time : 10-SEP-2012 21:27
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	123.5	pg/uL	**23**	20	c+ ***
TCMX	A	6606.9	7827.3	20.00	23.69	pg/uL	18	20	
Decachlorobiphenyl	A	8554.0	8552.0	20.00	20.00	pg/uL	0	20	
Aroclor-1260	B			100.0	143.2	pg/uL	**43**	20	c+ ***
TCMX	B	17600	23007	20.00	26.14	pg/uL	**31**	20	c+
Decachlorobiphenyl	B	23197	28582	20.00	25.18	pg/uL	**26**	20	c+

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:41:04 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.793	4.775	156546	23.694
PCB1016#1	7.020	7.002	16589	121.238
PCB1016#2	7.653	7.637	51610	119.986
PCB1016#3	7.967	7.950	29623	128.513
PCB1016#4	8.437	8.420	17633	129.866
PCB1016#5	8.963	8.947	25319	130.282
PCB1260#1	12.570	12.555	95204	124.113
PCB1260#2	13.227	13.214	73118	129.667
PCB1260#3	14.090	14.077	53051	112.269
PCB1260#4	14.833	14.820	115992	124.795
PCB1260#5	15.493	15.482	49456	126.466
Decachlorobiphenyl	18.113	18.102	171039	19.995

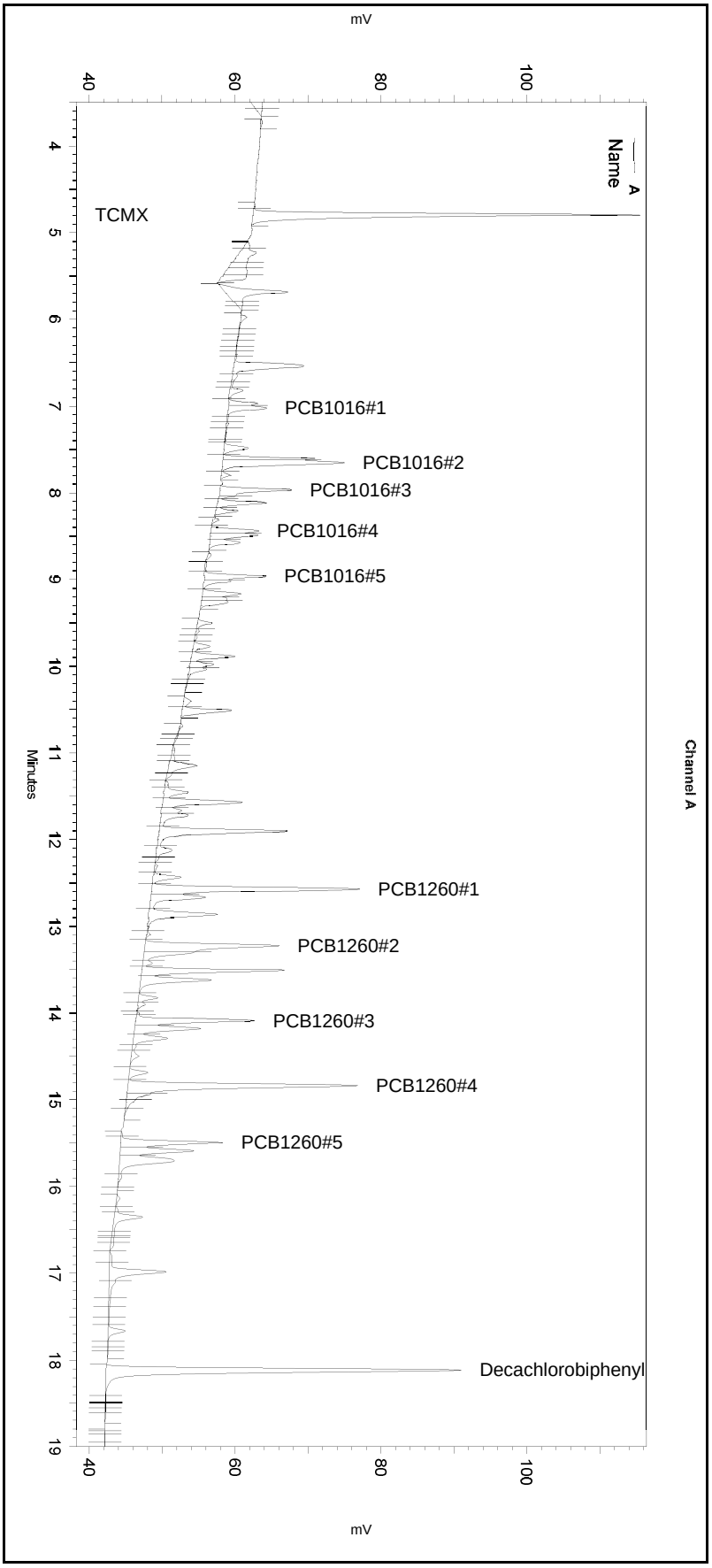
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.962	460137	26.144
PCB1016#1	5.980	5.979	68727	119.023
PCB1016#2	6.577	6.574	250942	138.686
PCB1016#3	6.800	6.799	117555	152.315
PCB1016#4	7.370	7.369	64526	148.917
PCB1016#5	7.840	7.839	77780	141.970
PCB1260#1	12.083	12.078	325200	147.050
PCB1260#2	12.490	12.475	284102	146.907
PCB1260#3	13.037	13.032	223964	132.728
PCB1260#4	13.693	13.688	515570	149.851
PCB1260#5	14.373	14.370	224821	139.682
Decachlorobiphenyl	17.383	17.378	571639	25.183

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:41:04 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

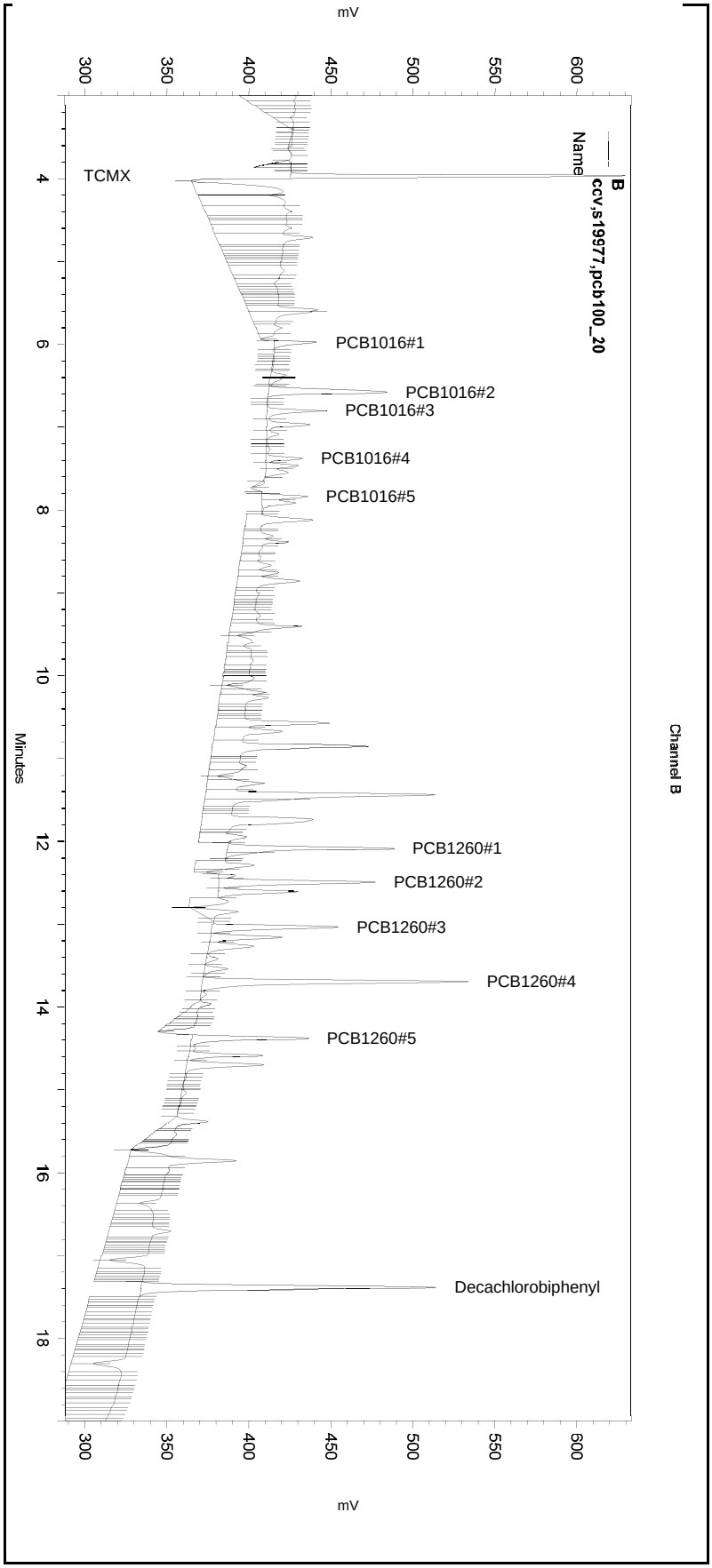
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.922	0	0
Yes	Reset Baseline	8.266	0	0
Yes	Reset Baseline	8.66	0	0
Yes	Reset Baseline	9.344	0	0
Yes	Reset Baseline	15.258	0	0
Yes	Reset Baseline	16.087	0	0

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:41:04 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	3.876	3.972	0
Yes	Backward Horizontal Baseline	5.948	6.057	0
Yes	Reset Baseline	7.615	0	0
Yes	Backward Horizontal Baseline	7.786	8.02	0
Yes	Manual Baseline	12.017	12.222	0
Yes	Backward Horizontal Baseline	12.399	12.674	0
Yes	Reset Baseline	12.961	0	0
Yes	Reset Baseline	13.626	0	0
Yes	Reset Baseline	13.905	0	0
Yes	Move BL Start	14.3	14.336	0
Yes	Manual Baseline	17.315	17.483	0

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:36:24 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.793	4.775	166003	25.126
PCB1016#1	7.020	7.002	16589	121.238
PCB1016#2	7.653	7.637	51610	119.986
PCB1016#3	7.967	7.950	29826	129.394
PCB1016#4	8.437	8.420	17852	131.901
PCB1016#5	8.963	8.947	26021	133.894
PCB1260#1	12.570	12.555	95476	124.467
PCB1260#2	13.227	13.214	73574	130.475
PCB1260#3	14.090	14.077	53647	113.530
PCB1260#4	14.833	14.820	117333	126.237
PCB1260#5	15.493	15.482	50017	127.901
Decachlorobiphenyl	18.113	18.102	171039	19.995

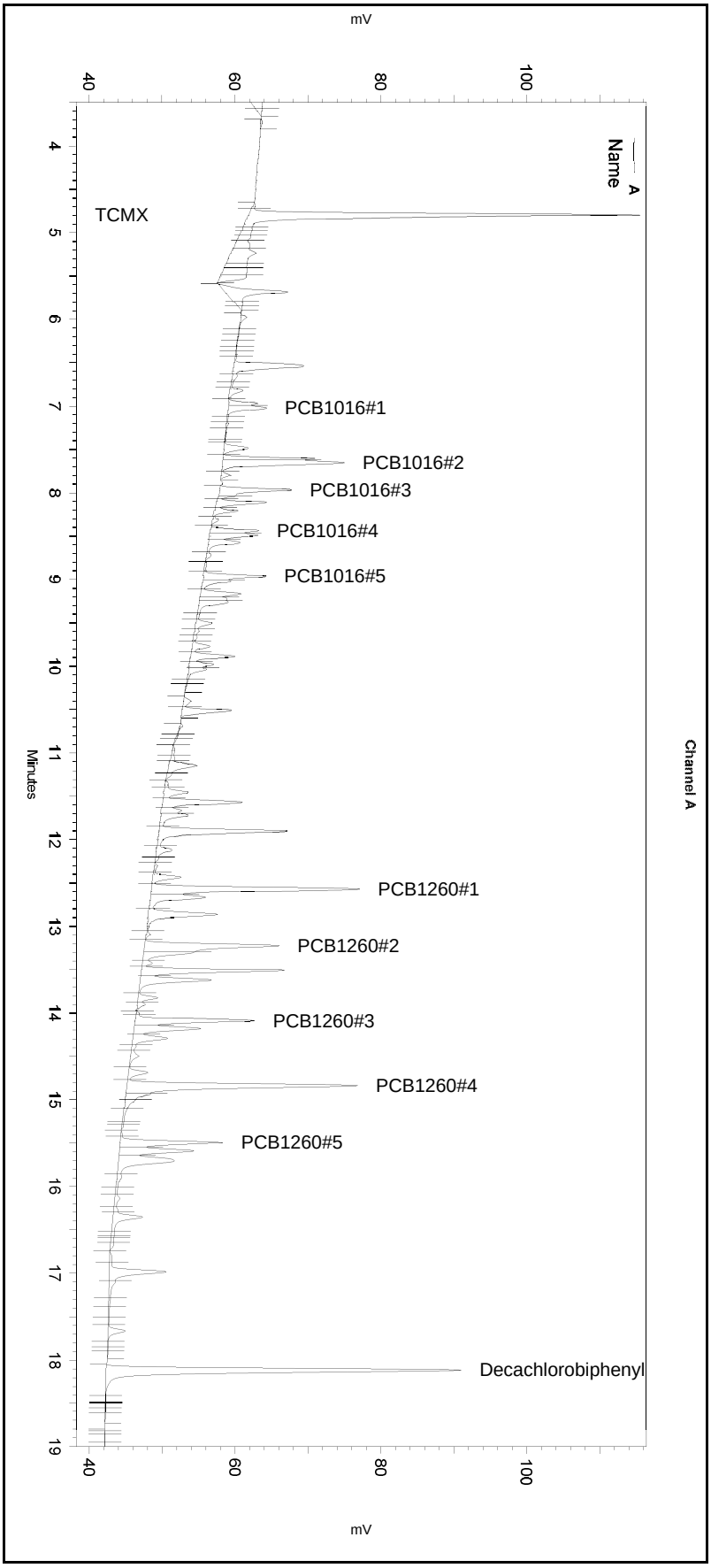
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.962	722456	41.049
PCB1016#1	5.980	5.979	100565	189.373
PCB1016#2	6.577	6.574	256469	141.740
PCB1016#3	6.800	6.799	137500	178.157
PCB1016#4	7.370	7.369	103534	257.115
PCB1016#5	7.840	7.839	118651	216.571
PCB1260#1	12.083	12.078	493647	248.848
PCB1260#2	12.490	12.475	440619	227.841
PCB1260#3	13.037	13.032	407483	241.487
PCB1260#4	13.693	13.688	750109	240.469
PCB1260#5	14.373	14.370	393829	268.947
Decachlorobiphenyl	17.383	17.378	894477	43.067

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:36:24 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

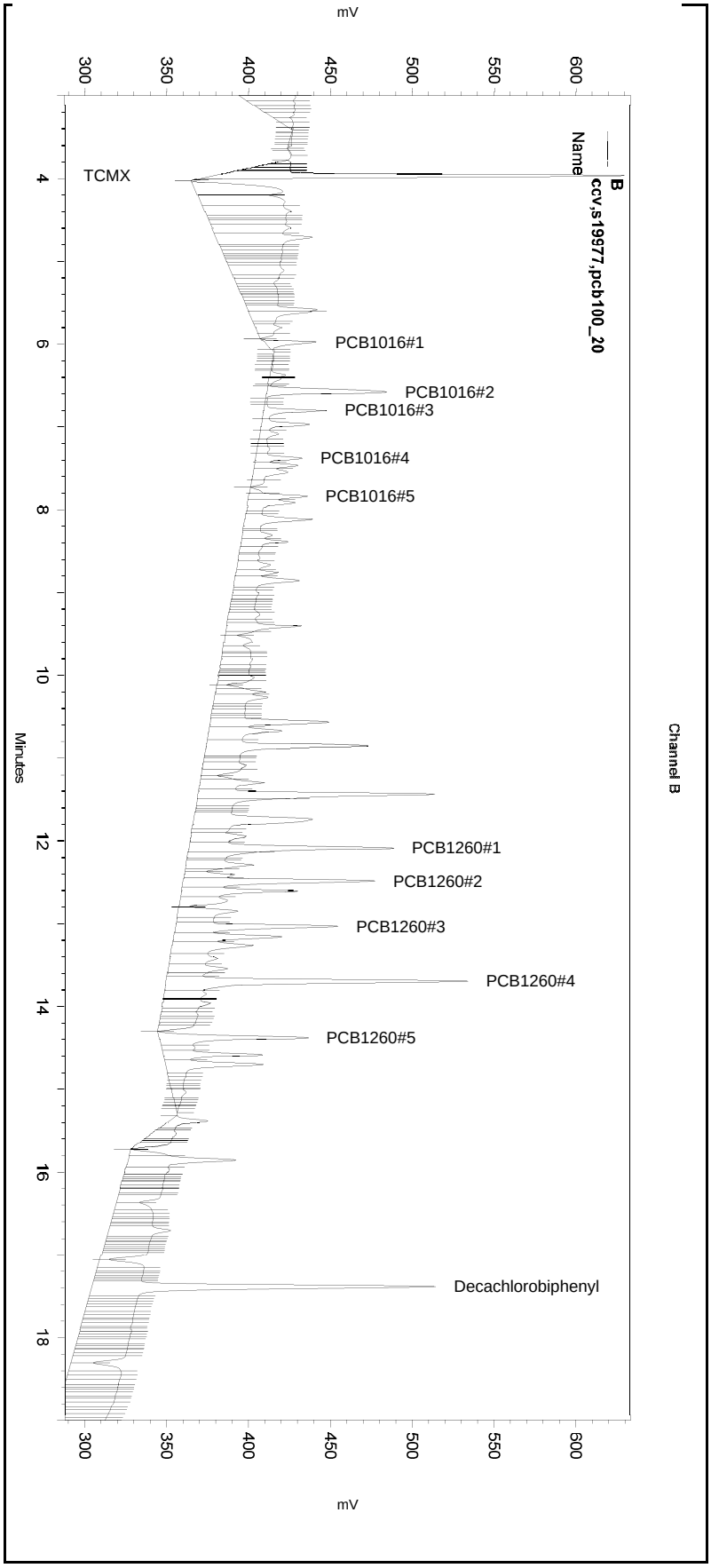
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:36:24 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC06 Run Name : PCB250_50 IDF : 1.0
Seqnum : 202366165040.1 File : 254_040 Time : 11-SEP-2012 04:48
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	275.9	pg/uL	10	20	
TCMX	A	6606.9	6823.8	50.00	51.64	pg/uL	3	20	
Decachlorobiphenyl	A	8554.0	7425.1	50.00	43.40	pg/uL	-13	20	
Aroclor-1260	B			250.0	304.5	pg/uL	**22**	20	c+ ***
TCMX	B	17600	16760	50.00	47.61	pg/uL	-5	20	
Decachlorobiphenyl	B	23197	22226	50.00	55.70	pg/uL	11	20	

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:43:16 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.757	4.775	341188	51.641
PCB1016#1	6.983	7.002	35040	256.084
PCB1016#2	7.620	7.637	114692	266.644
PCB1016#3	7.933	7.950	63996	277.634
PCB1016#4	8.403	8.420	36672	306.775
PCB1016#5	8.930	8.947	52202	268.612
PCB1260#1	12.540	12.555	202089	263.454
PCB1260#2	13.200	13.214	162490	288.158
PCB1260#3	14.063	14.077	116254	246.022
PCB1260#4	14.807	14.820	261506	281.352
PCB1260#5	15.470	15.482	117558	300.613
Decachlorobiphenyl	18.090	18.102	371255	43.401

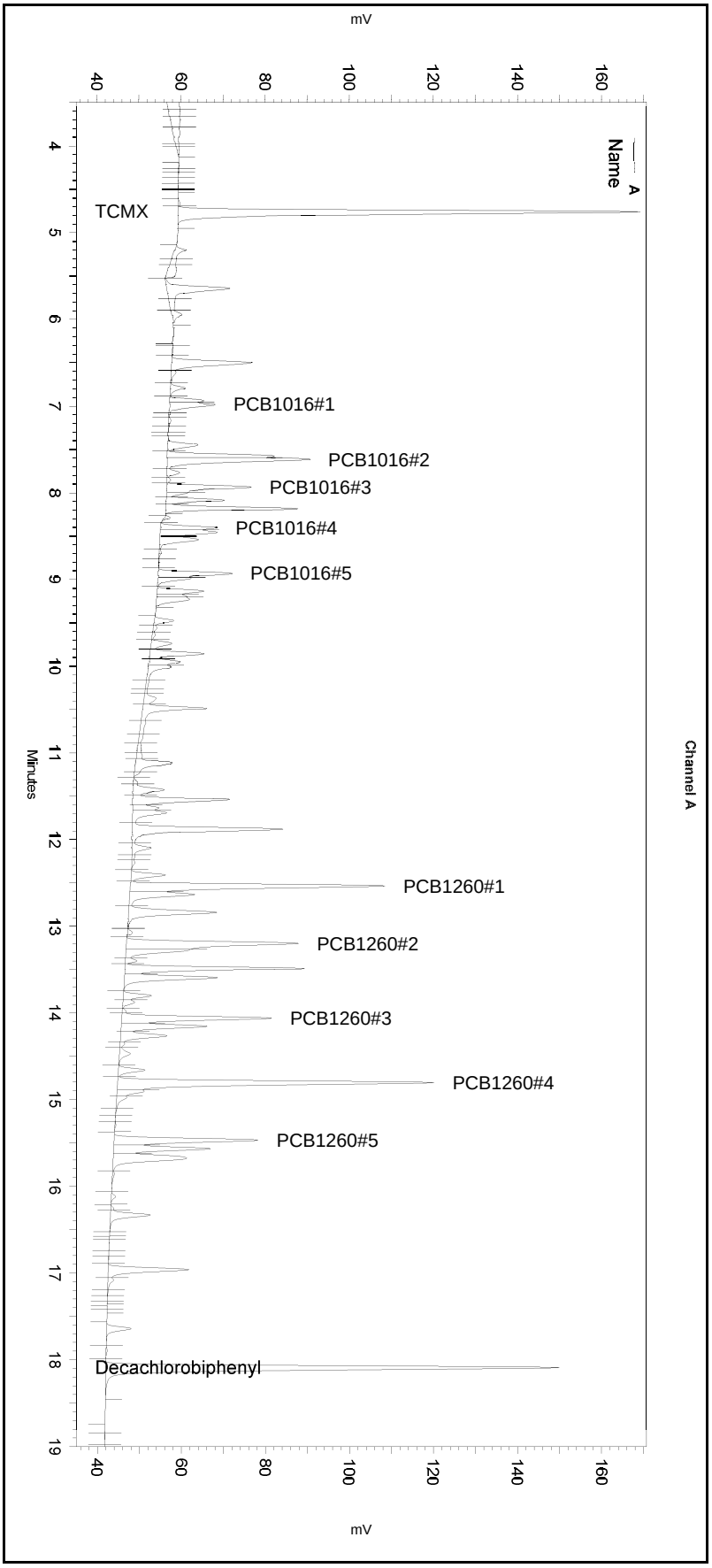
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.960	3.962	837995	47.614
PCB1016#1	5.977	5.979	146826	291.594
PCB1016#2	6.570	6.574	458457	253.371
PCB1016#3	6.797	6.799	215258	278.908
PCB1016#4	7.367	7.369	122196	308.878
PCB1016#5	7.837	7.839	139385	254.416
PCB1260#1	12.073	12.078	618277	324.166
PCB1260#2	12.480	12.475	526372	272.183
PCB1260#3	13.027	13.032	434117	257.271
PCB1260#4	13.683	13.688	990432	333.321
PCB1260#5	14.367	14.370	481217	335.786
Decachlorobiphenyl	17.373	17.378	1111302	55.704

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:43:16 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

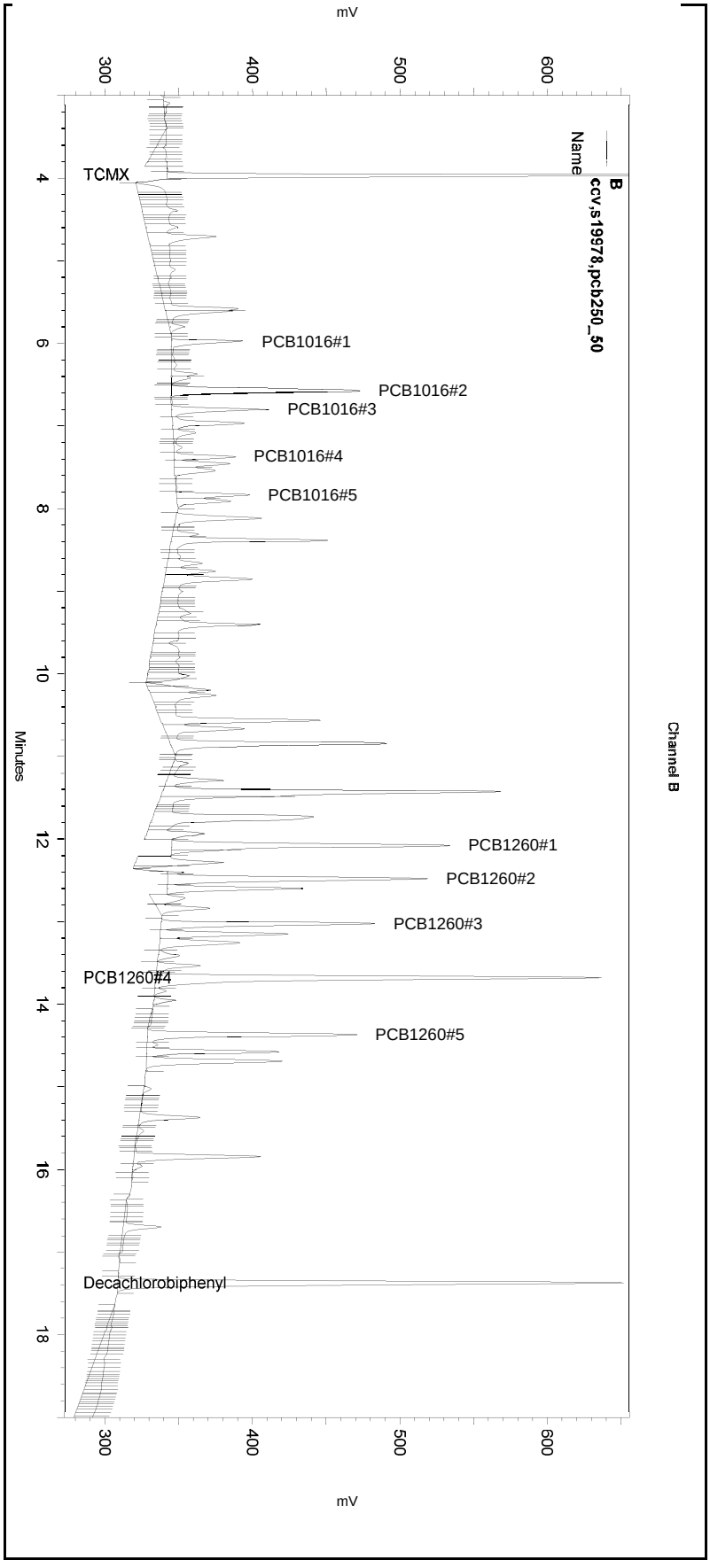
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.944	0	0
Yes	Reset Baseline	8.237	0	0
Yes	Reset Baseline	9.317	0	0
Yes	Reset Baseline	12.341	0	0

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:43:16 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	3.861	3.987	0
Yes	Reset Baseline	5.906	0	0
Yes	Reset Baseline	8.001	0	0
Yes	Horizontal Baseline	12.014	12.172	0
Yes	Backward Horizontal Baseline	12.38	12.671	0
Yes	Reset Baseline	12.923	0	0
Yes	Reset Baseline	14.028	0	0
Yes	Reset Baseline	14.817	0	0
Yes	Reset Baseline	17.501	0	0

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:38:11 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.757	4.775	352069	53.288
PCB1016#1	6.983	7.002	39370	287.729
PCB1016#2	7.620	7.637	124412	289.241
PCB1016#3	7.933	7.950	75047	325.576
PCB1016#4	8.403	8.420	42162	357.788
PCB1016#5	8.930	8.947	61640	317.176
PCB1260#1	12.540	12.555	206630	269.373
PCB1260#2	13.200	13.214	166248	294.823
PCB1260#3	14.063	14.077	118139	250.011
PCB1260#4	14.807	14.820	262560	282.486
PCB1260#5	15.470	15.482	117558	300.613
Decachlorobiphenyl	18.090	18.102	371255	43.401

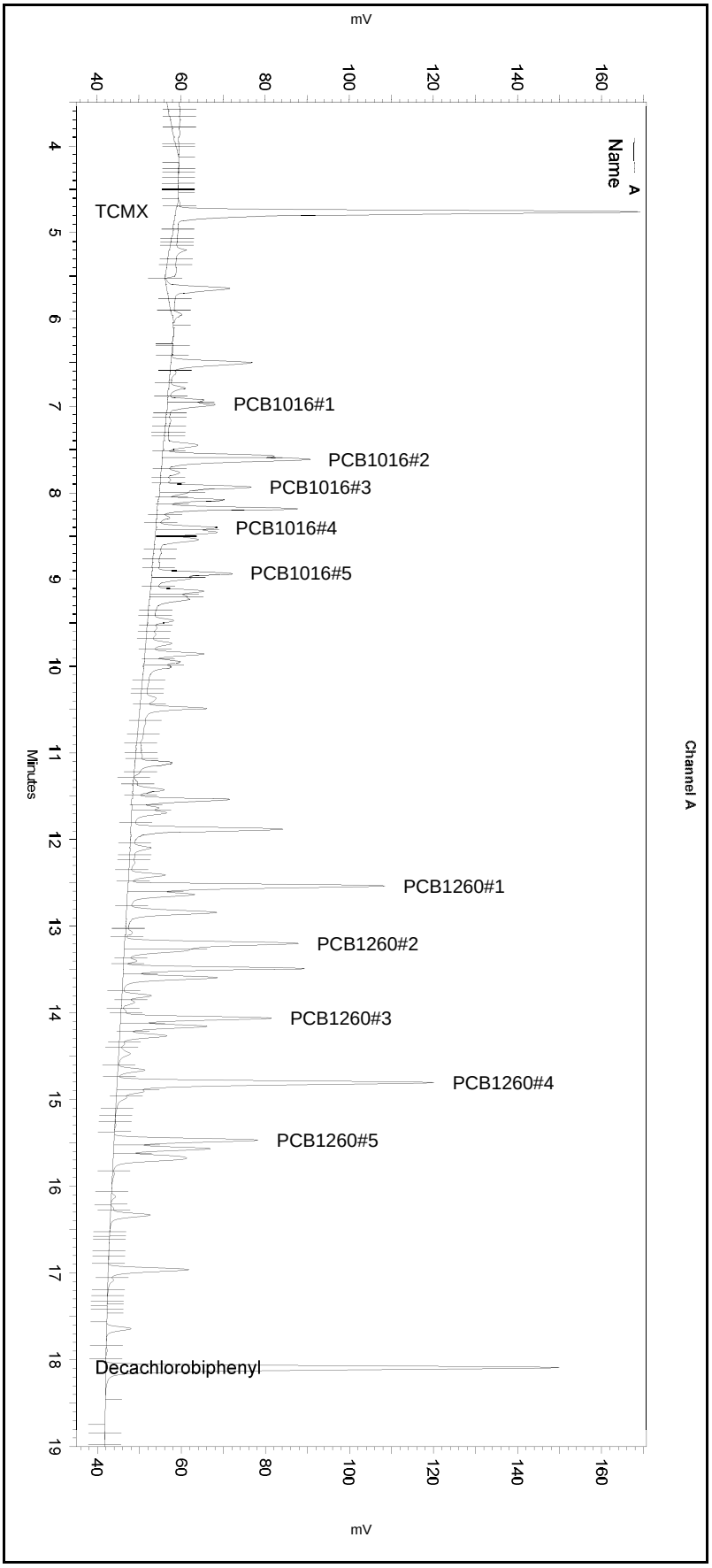
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.960	3.962	969376	55.079
PCB1016#1	5.977	5.979	357172	756.383
PCB1016#2	6.570	6.574	654760	361.860
PCB1016#3	6.797	6.799	420949	545.419
PCB1016#4	7.367	7.369	268843	715.638
PCB1016#5	7.837	7.839	273516	499.242
PCB1260#1	12.073	12.078	766594	413.799
PCB1260#2	12.480	12.475	692688	358.184
PCB1260#3	13.027	13.032	599589	355.334
PCB1260#4	13.683	13.688	1158026	398.074
PCB1260#5	14.367	14.370	582711	413.414
Decachlorobiphenyl	17.373	17.378	1145195	57.730

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:38:11 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

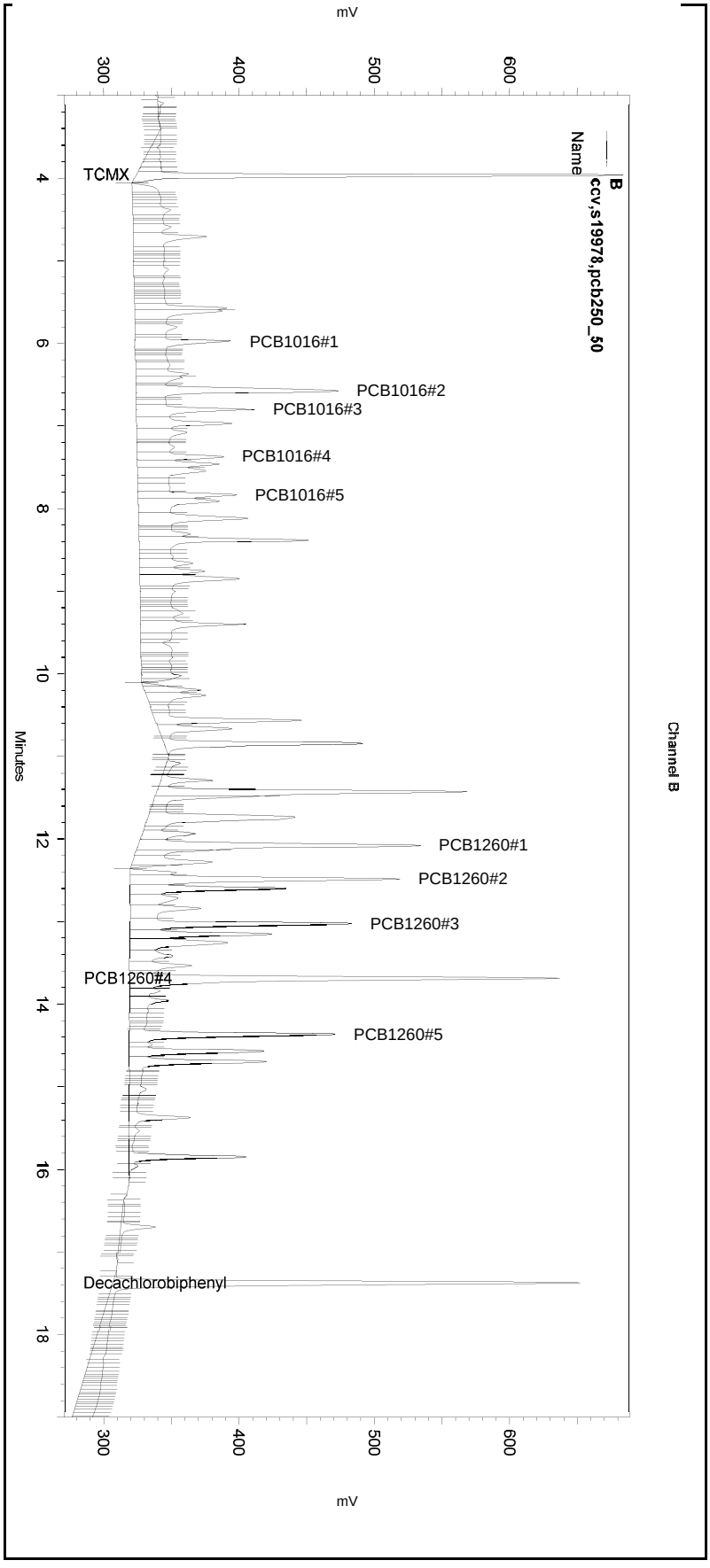
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:38:11 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC16 Run Name : PCB250_50 IDF : 1.0
Seqnum : 232366165009.2 File : 254_009 Time : 10-SEP-2012 16:22
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	355.1	pg/ul	**42**	20	c+ ***
TCMX	A	18411	31025	50.00	120.0	pg/ul	**140**	20	c+
Decachlorobiphenyl	A	12903	12067	50.00	51.36	pg/ul	3	20	
Aroclor-1260	B			250.0	231.7	pg/ul	-7	20	
TCMX	B	7007.3	7673.7	50.00	54.75	pg/ul	10	20	
Decachlorobiphenyl	B	9054.2	5534.6	50.00	30.56	pg/ul	**-39**	20	c-

WSR 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias -=low bias c=CCV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:49:26 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.123	4.103	1551252	120.033
PCB1016#1	6.217	6.197	157511	420.997
PCB1016#2	6.790	6.810	260658	248.983
PCB1016#3	7.133	7.110	298062	460.791
PCB1016#4	7.590	7.570	155084	490.496
PCB1016#5	8.100	8.077	236863	433.032
PCB1260#1	11.657	11.640	629439	416.171
PCB1260#2	12.307	12.290	602058	344.172
PCB1260#3	13.163	13.150	370850	406.355
PCB1260#4	13.910	13.897	731333	349.638
PCB1260#5	14.560	14.550	363254	259.360
Decachlorobiphenyl	17.173	17.167	603367	51.360

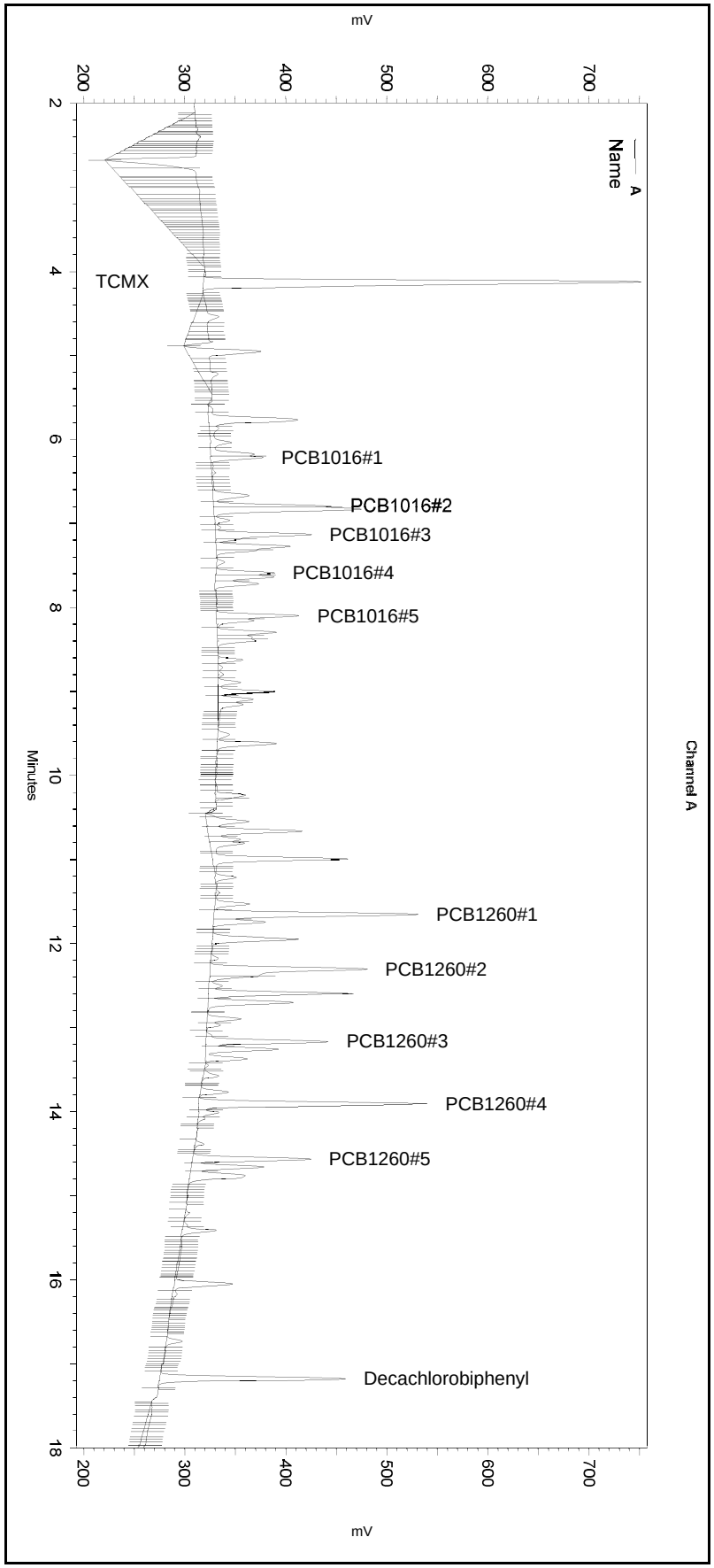
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.343	3.337	383683	54.755
PCB1016#1	5.210	5.207	59052	278.180
PCB1016#2	5.773	5.770	149362	281.555
PCB1016#3	5.990	5.987	70363	286.765
PCB1016#4	6.543	6.537	47275	281.869
PCB1016#5	6.993	6.990	54792	285.344
PCB1260#1	11.157	11.153	143145	244.557
PCB1260#2	11.560	11.560	105966	248.967
PCB1260#3	12.100	12.100	89492	237.422
PCB1260#4	12.757	12.757	193278	217.714
PCB1260#5	13.430	13.430	83456	209.702
Decachlorobiphenyl	16.423	16.423	276728	30.563

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:49:26 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

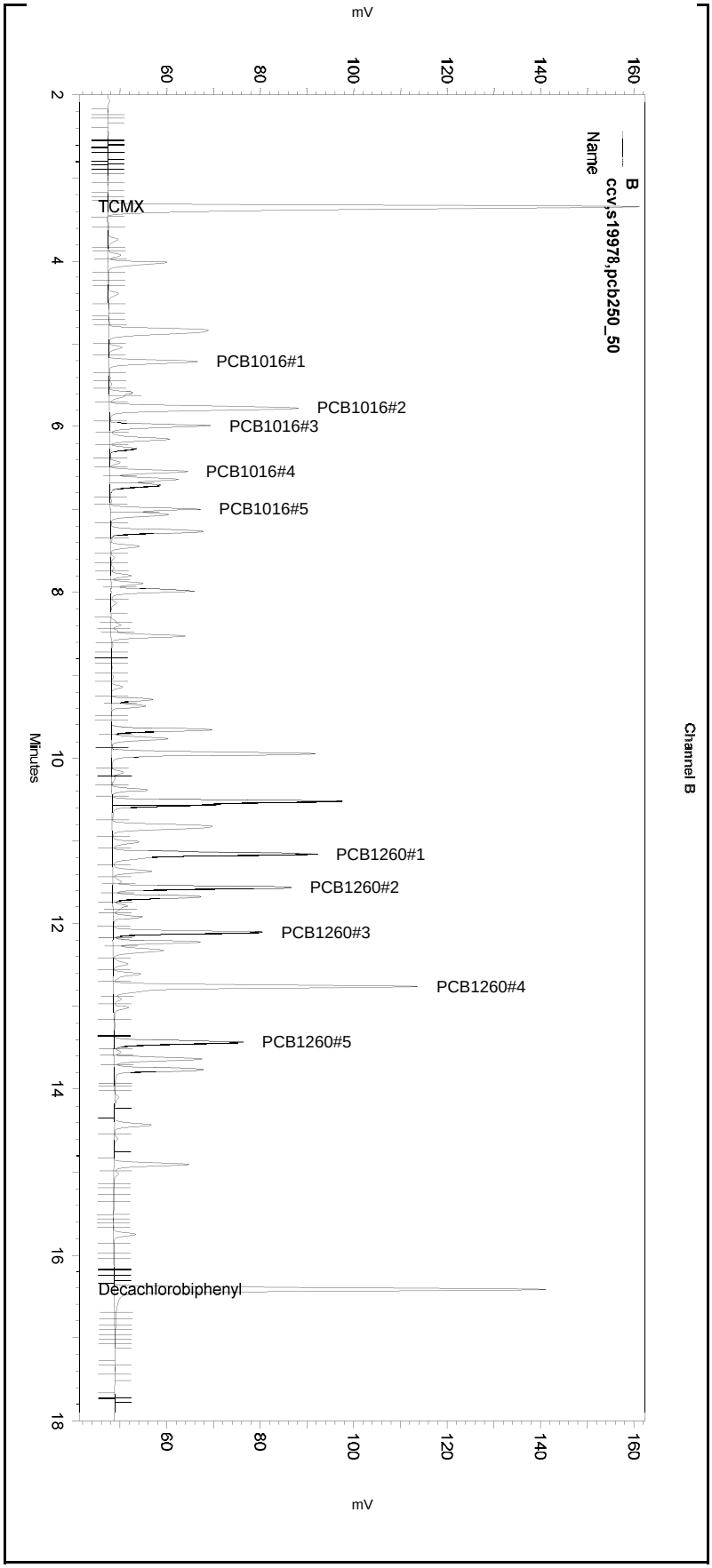
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.268	0	0
Yes	Reset Baseline	11.29	0	0
Yes	Manual Peak	13.03	13.43	0
Yes	Split Peak	13.104	0	0
Yes	Split Peak	13.215	0	0
Yes	Reset Baseline	17.312	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:49:26 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	3.173	3.466	0
Yes	Reset Baseline	4.651	0	0
Yes	Reset Baseline	8.256	0	0
Yes	Reset Baseline	14.256	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:46:18 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.123	4.103	1587384	123.027
PCB1016#1	6.217	6.197	157511	420.997
PCB1016#2	6.790	6.810	260658	248.983
PCB1016#3	7.133	7.110	298062	460.791
PCB1016#4	7.590	7.570	155084	490.496
PCB1016#5	8.100	8.077	236863	433.032
PCB1260#1	11.657	11.640	686890	465.968
PCB1260#2	12.307	12.290	636969	364.129
PCB1260#3	13.163	13.150	338024	366.943
PCB1260#4	13.910	13.897	731333	349.638
PCB1260#5	14.560	14.550	363254	259.360
Decachlorobiphenyl	17.173	17.167	658929	57.174

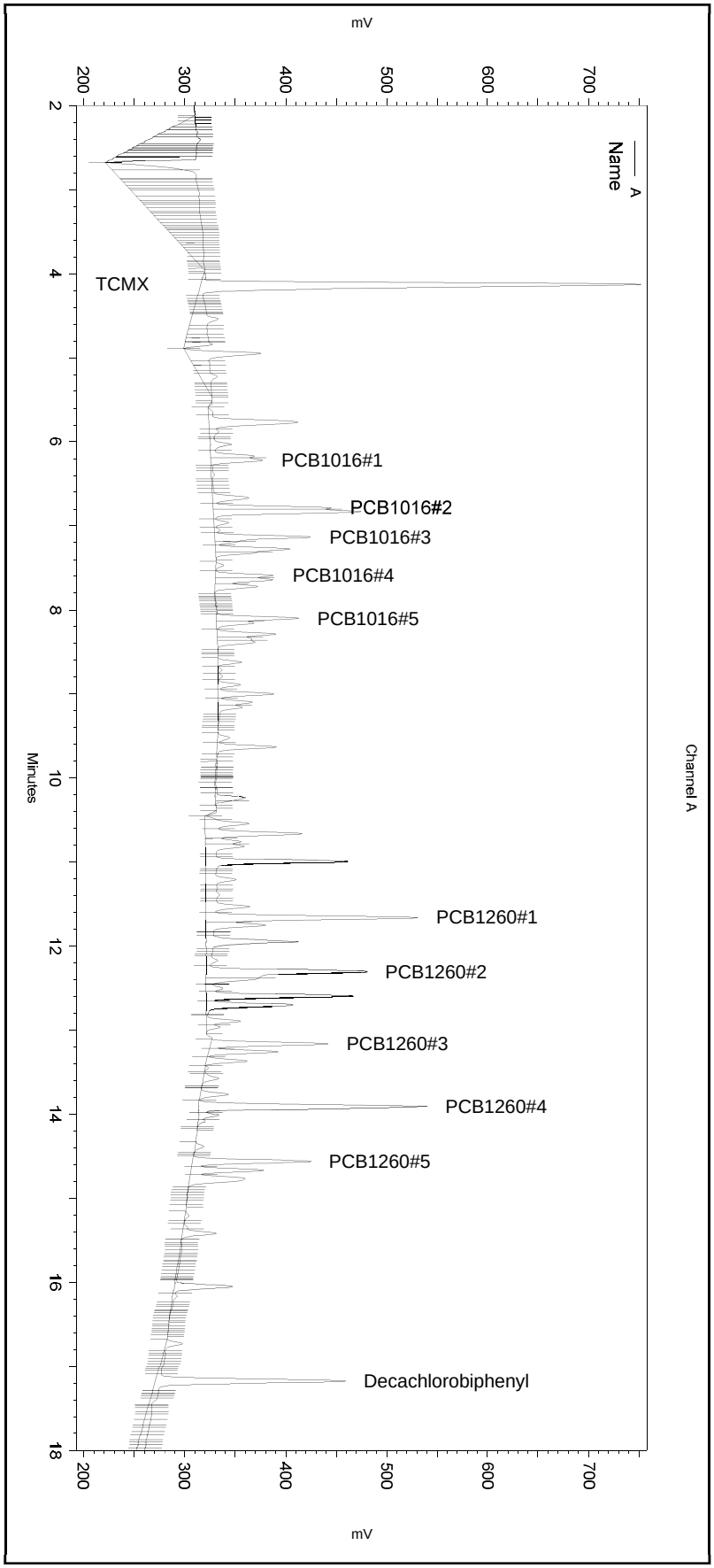
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.343	3.337	384648	54.893
PCB1016#1	5.210	5.207	60301	284.064
PCB1016#2	5.773	5.770	150779	284.226
PCB1016#3	5.990	5.987	71303	290.596
PCB1016#4	6.543	6.537	47985	286.102
PCB1016#5	6.993	6.990	55517	289.120
PCB1260#1	11.157	11.153	144119	246.221
PCB1260#2	11.560	11.560	106563	250.370
PCB1260#3	12.100	12.100	90274	239.497
PCB1260#4	12.757	12.757	194389	218.965
PCB1260#5	13.430	13.430	84534	212.411
Decachlorobiphenyl	16.423	16.423	276728	30.563

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:46:18 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

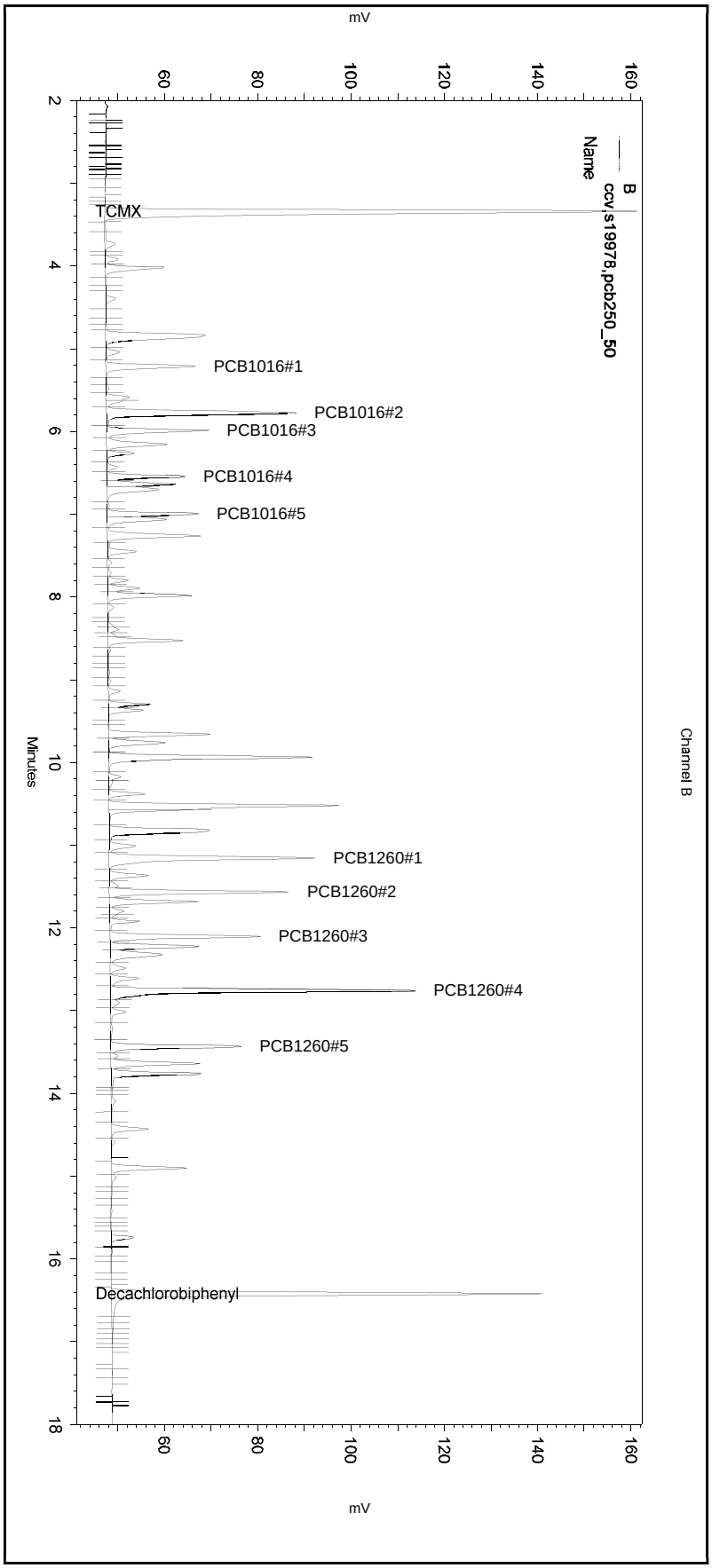
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-009_5DCB.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:46:18 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-009_5DCB.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC16 Run Name : PCB100_20 IDF : 1.0
Seqnum : 232366165014.1 File : 254_014 Time : 10-SEP-2012 19:52
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	158.4	pg/ul	**58**	20	c+ ***
TCMX	A	18411	40195	20.00	58.10	pg/ul	**191**	20	c+
Decachlorobiphenyl	A	12903	12762	20.00	18.26	pg/ul	-9	20	
Aroclor-1260	B			100.0	90.33	pg/ul	-10	20	
TCMX	B	7007.3	7041.9	20.00	20.10	pg/ul	0	20	
Decachlorobiphenyl	B	9054.2	5009.2	20.00	11.06	pg/ul	**-45**	20	c-

WSR 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias -=low bias c=CCV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:21:12 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.120	4.103	803902	58.103
PCB1016#1	6.217	6.197	70491	188.409
PCB1016#2	6.830	6.810	228767	218.521
PCB1016#3	7.133	7.110	142890	220.902
PCB1016#4	7.590	7.570	72862	218.947
PCB1016#5	8.100	8.077	107968	197.387
PCB1260#1	11.657	11.640	324213	186.849
PCB1260#2	12.303	12.290	283906	162.298
PCB1260#3	13.163	13.150	156660	149.194
PCB1260#4	13.907	13.897	353325	154.138
PCB1260#5	14.557	14.550	195573	139.637
Decachlorobiphenyl	17.170	17.167	255236	18.263

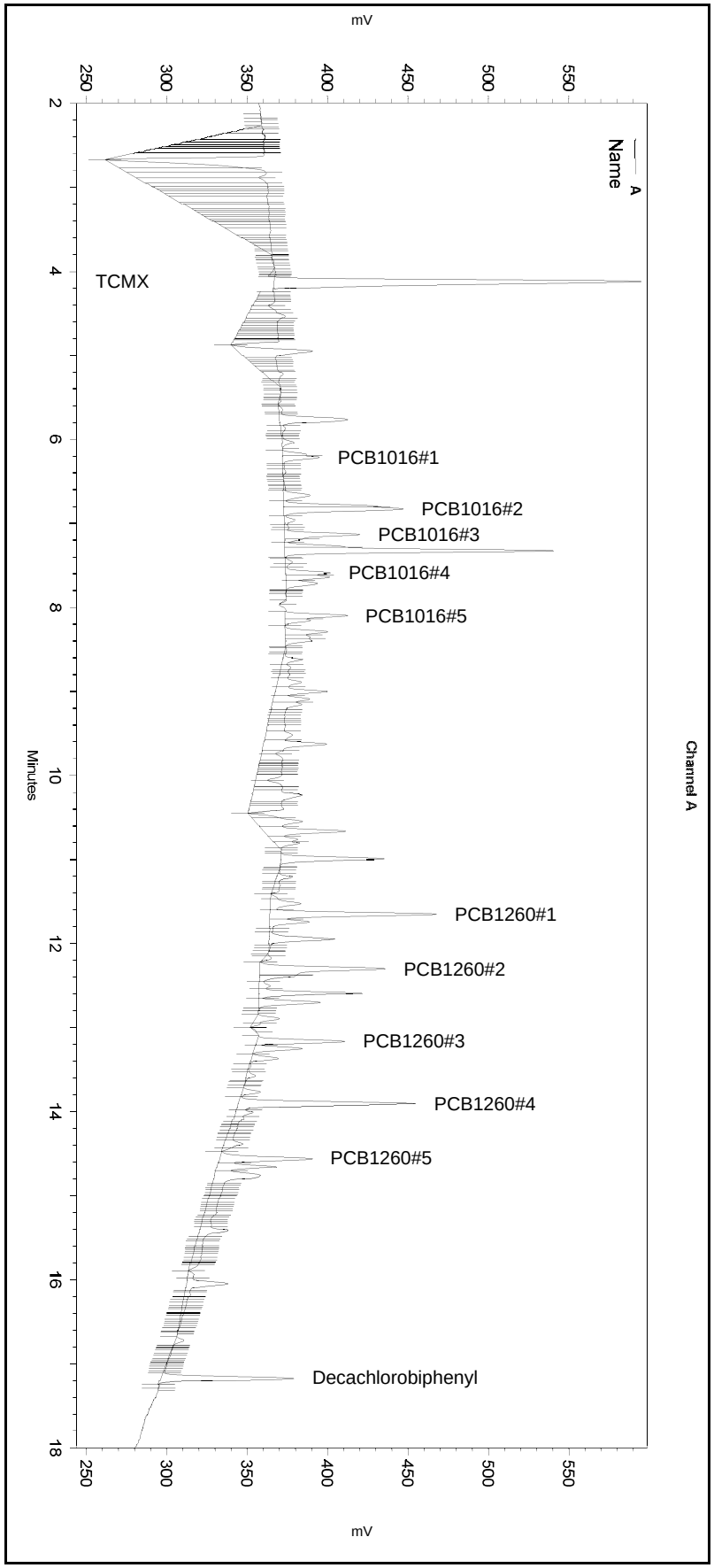
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	140837	20.099
PCB1016#1	5.207	5.207	23496	110.684
PCB1016#2	5.770	5.770	59915	112.943
PCB1016#3	5.987	5.987	28127	114.632
PCB1016#4	6.537	6.537	19125	114.030
PCB1016#5	6.990	6.990	21759	113.316
PCB1260#1	11.153	11.153	57138	97.618
PCB1260#2	11.557	11.560	42501	99.856
PCB1260#3	12.097	12.100	35140	93.226
PCB1260#4	12.753	12.757	74189	83.569
PCB1260#5	13.427	13.430	30794	77.377
Decachlorobiphenyl	16.420	16.423	100184	11.065

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:21:12 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

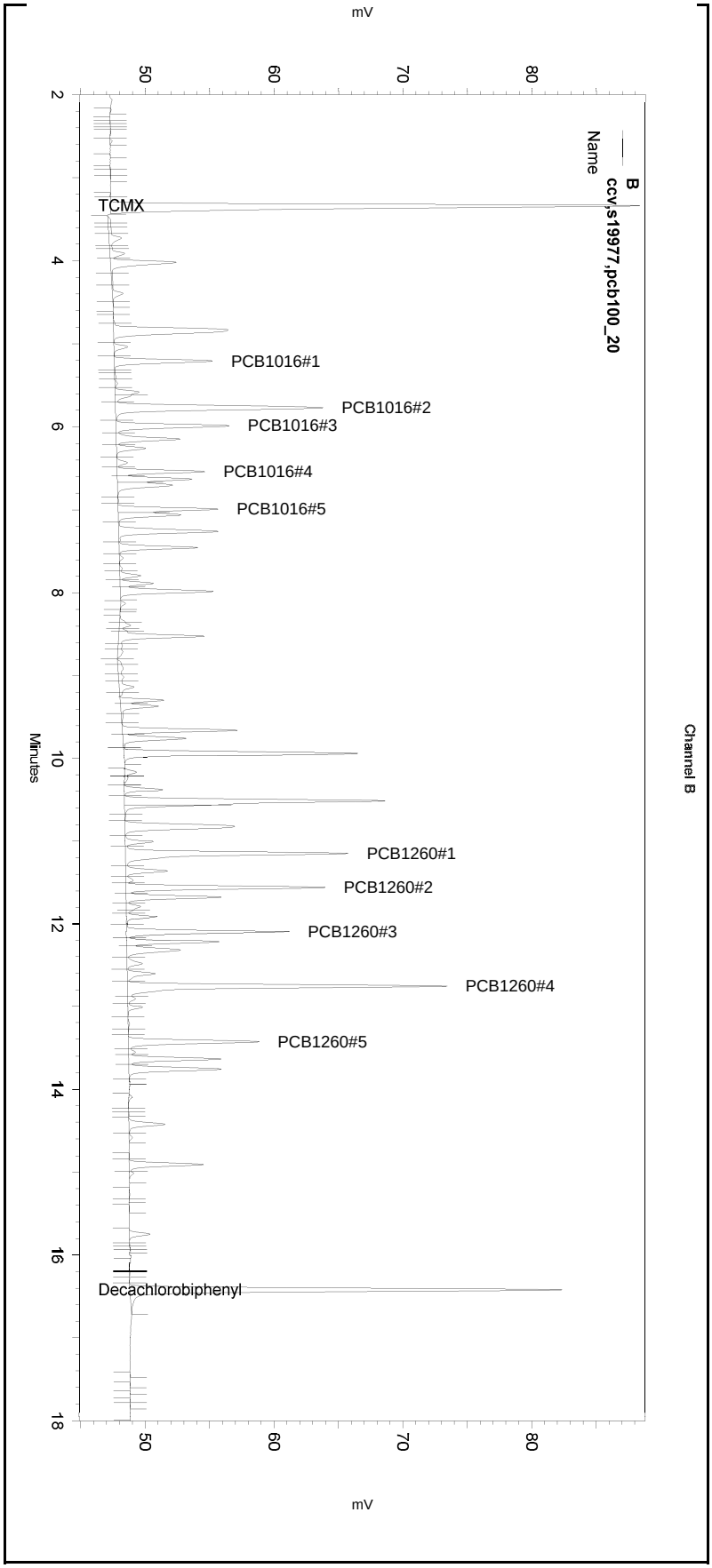
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	4.069	4.24	0
Yes	Reset Baseline	8.031	0	0
Yes	Reset Baseline	8.457	0	0
Yes	Reset Baseline	17.32	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:21:12 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	3.237	3.468	0
Yes	Reset Baseline	8.083	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:16:41 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.120	4.103	869161	63.511
PCB1016#1	6.217	6.197	70491	188.409
PCB1016#2	6.830	6.810	228767	218.521
PCB1016#3	7.133	7.110	142890	220.902
PCB1016#4	7.590	7.570	72862	218.947
PCB1016#5	8.100	8.077	137275	250.966
PCB1260#1	11.657	11.640	324213	186.849
PCB1260#2	12.303	12.290	283906	162.298
PCB1260#3	13.163	13.150	156660	149.194
PCB1260#4	13.907	13.897	353325	154.138
PCB1260#5	14.557	14.550	195573	139.637
Decachlorobiphenyl	17.170	17.167	284355	20.847

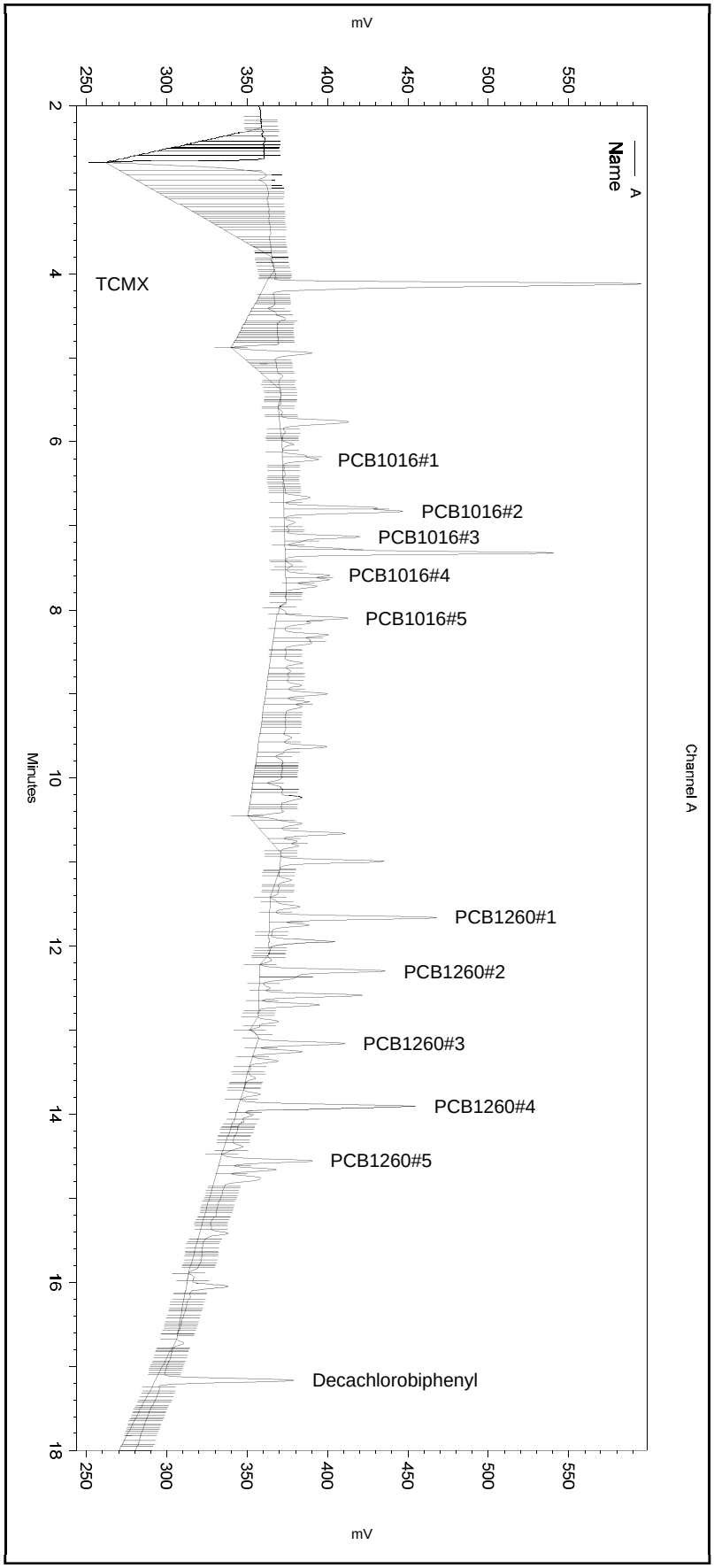
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	142882	20.390
PCB1016#1	5.207	5.207	23904	112.606
PCB1016#2	5.770	5.770	61151	115.273
PCB1016#3	5.987	5.987	29108	118.630
PCB1016#4	6.537	6.537	20103	119.861
PCB1016#5	6.990	6.990	23025	119.909
PCB1260#1	11.153	11.153	57138	97.618
PCB1260#2	11.557	11.560	42501	99.856
PCB1260#3	12.097	12.100	35140	93.226
PCB1260#4	12.753	12.757	74189	83.569
PCB1260#5	13.427	13.430	30794	77.377
Decachlorobiphenyl	16.420	16.423	100184	11.065

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:16:41 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes
==========

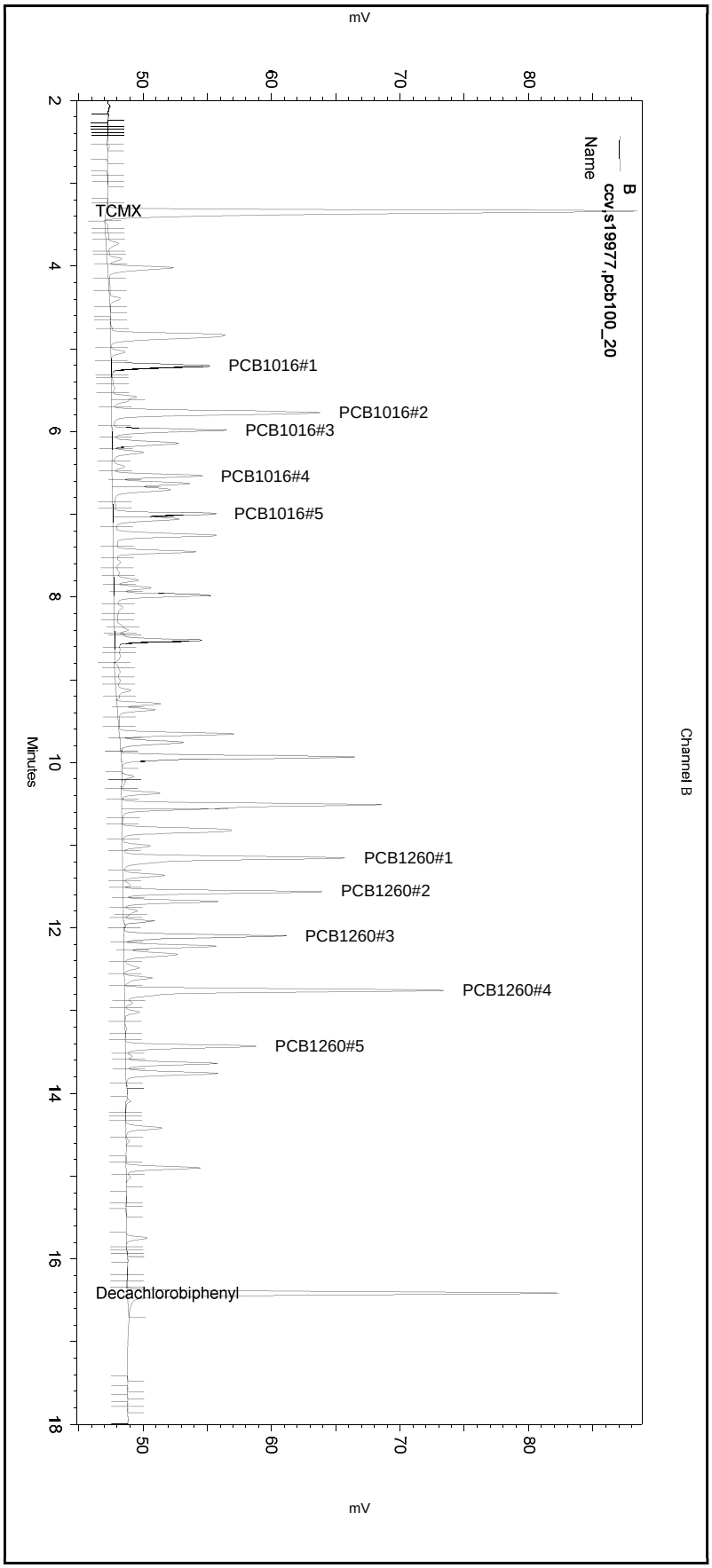
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-014_5DD0.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:16:41 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-014_5DD0.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC22 Run Name : PCB100_20 IDF : 1.0
Seqnum : 252360400074.2 File : 250_074 Time : 08-SEP-2012 00:42
Cal : 252360400001 Caldate : 06-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	82.71	pg/uL	-17	20	
TCMX	A	1326.0	1171.4	20.00	17.67	pg/uL	-12	20	
Decachlorobiphenyl	A	1239.5	949.45	20.00	15.32	pg/uL	**-23**	20	c-
Aroclor-1260	B			100.0	63.84	pg/uL	**-36**	20	c- rsd ***
TCMX	B	13199	14393	20.00	15.91	pg/uL	-20	20	
Decachlorobiphenyl	B	12055	11471	20.00	16.21	pg/uL	-19	20	

TKB 09/09/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV rsd=ICAL %RSD failure

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 (Offline) Vial: 74 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/9/2012 4:13:23 PM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.453	4.463	23427	17.668
PCB1016#1	6.600	6.613	1748	94.064
PCB1016#2	7.213	7.227	5551	94.250
PCB1016#3	7.513	7.523	2719	91.256
PCB1016#4	7.957	7.970	1364	82.945
PCB1016#5	8.460	8.473	2332	88.599
PCB1260#1	11.887	11.907	10005	82.647
PCB1260#2	12.510	12.527	7868	86.639
PCB1260#3	13.327	13.347	5931	82.319
PCB1260#4	14.033	14.053	14519	79.020
PCB1260#5	14.660	14.680	6489	82.938
Decachlorobiphenyl	17.143	17.163	18989	15.320

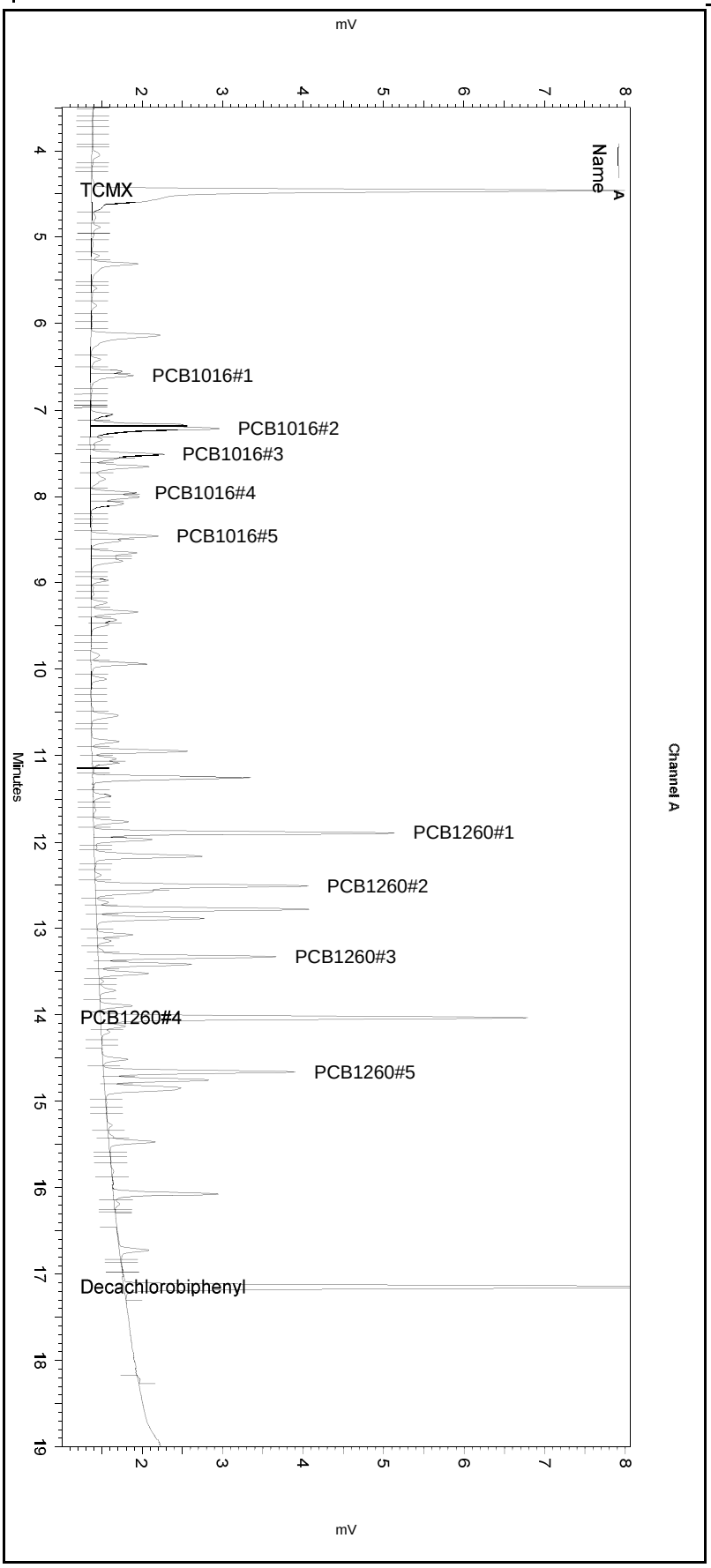
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	287859	15.913
PCB1016#1	6.397	6.410	20102	92.542
PCB1016#2	6.963	6.977	56848	65.127
PCB1016#3	7.173	7.187	23978	74.795
PCB1016#4	7.707	7.720	10507	97.847
PCB1016#5	8.157	8.170	12928	85.999
PCB1260#1	11.553	11.570	68927	63.255
PCB1260#2	12.170	12.187	57973	59.328
PCB1260#3	13.070	13.087	45190	59.705
PCB1260#4	13.693	13.710	135858	75.032
PCB1260#5	14.347	14.360	44256	61.866
Decachlorobiphenyl	17.193	17.210	229424	16.215

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 (Offline) Vial: 74 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/9/2012 4:13:23 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

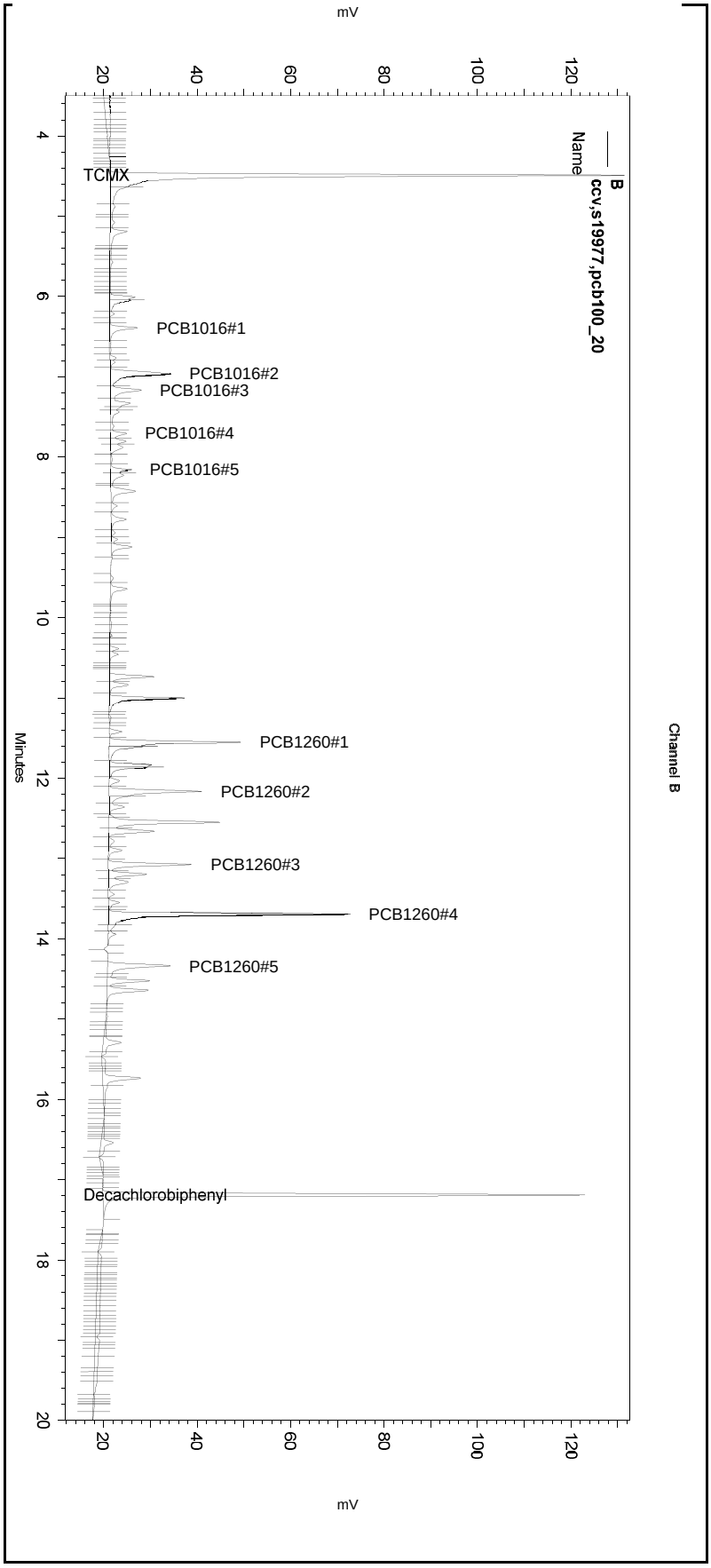
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.558	0	0
Yes	Split Peak	12.559	0	0
Yes	Split Peak	13.272	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 (Offline) Vial: 74 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/9/2012 4:13:23 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.278	0	0
Yes	Reset Baseline	9.263	0	0
Yes	Reset Baseline	11.343	0	0
Yes	Reset Baseline	14.09	0	0
Yes	Reset Baseline	14.203	0	0
Yes	Reset Baseline	16.956	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 Vial: 74 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/8/2012 1:05:54 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.453	4.463	23427	17.668
PCB1016#1	6.600	6.613	1748	94.064
PCB1016#2	7.213	7.227	5551	94.250
PCB1016#3	7.513	7.523	3360	112.770
PCB1016#4	7.957	7.970	1364	82.945
PCB1016#5	8.460	8.473	2332	88.599
PCB1260#1	11.887	11.907	10005	82.647
PCB1260#2	12.510	12.527	10041	110.567
PCB1260#3	13.327	13.347	6069	84.234
PCB1260#4	14.033	14.053	14519	79.020
PCB1260#5	14.660	14.680	6489	82.938
Decachlorobiphenyl	17.143	17.163	18989	15.320

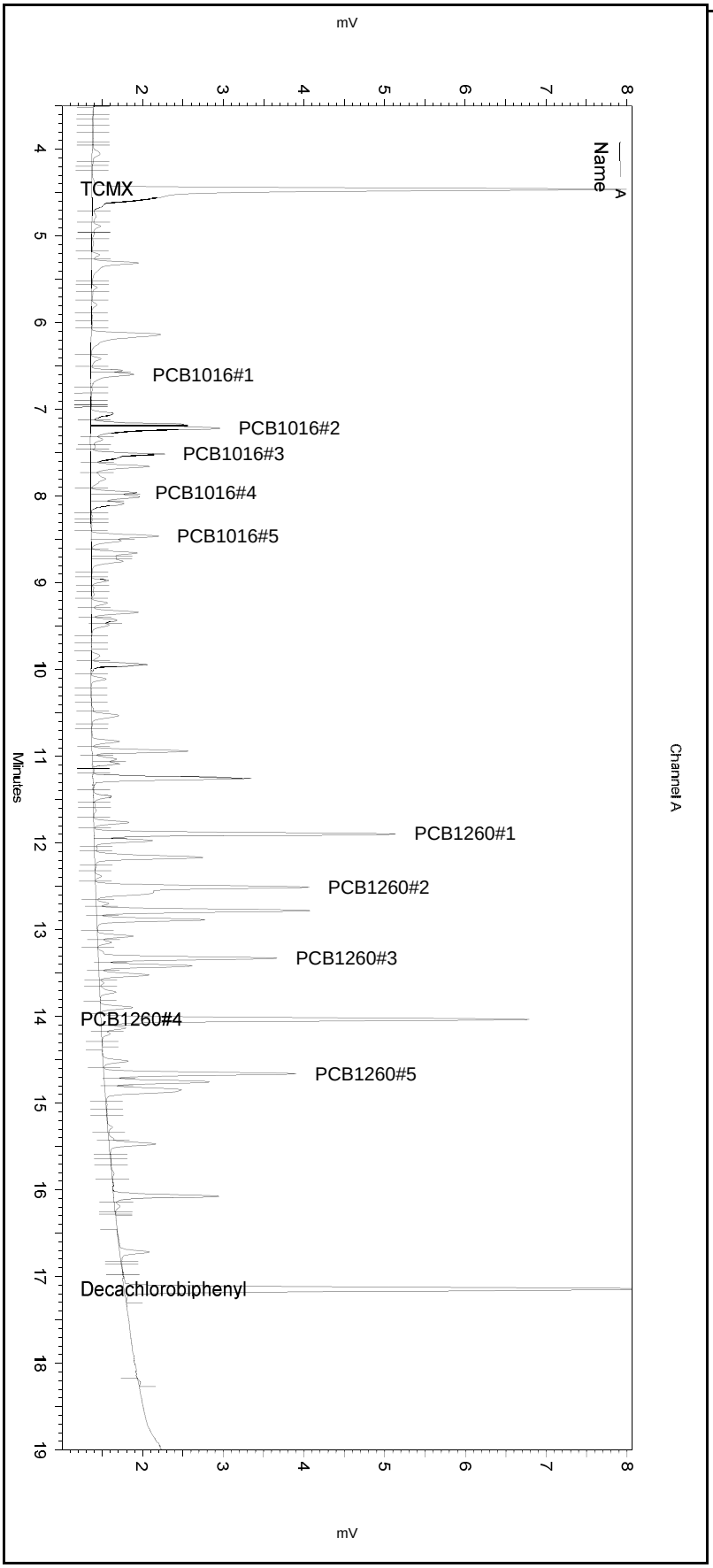
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	321239	17.613
PCB1016#1	6.397	6.410	45766	210.690
PCB1016#2	6.963	6.977	84468	96.770
PCB1016#3	7.173	7.187	42165	131.526
PCB1016#4	7.707	7.720	21573	200.899
PCB1016#5	8.157	8.170	26262	174.698
PCB1260#1	11.553	11.570	76763	70.446
PCB1260#2	12.170	12.187	66757	68.318
PCB1260#3	13.070	13.087	52930	69.931
PCB1260#4	13.693	13.710	144945	80.050
PCB1260#5	14.347	14.360	49396	69.051
Decachlorobiphenyl	17.193	17.210	232297	16.408

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 Vial: 74 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/8/2012 1:05:54 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes
==========

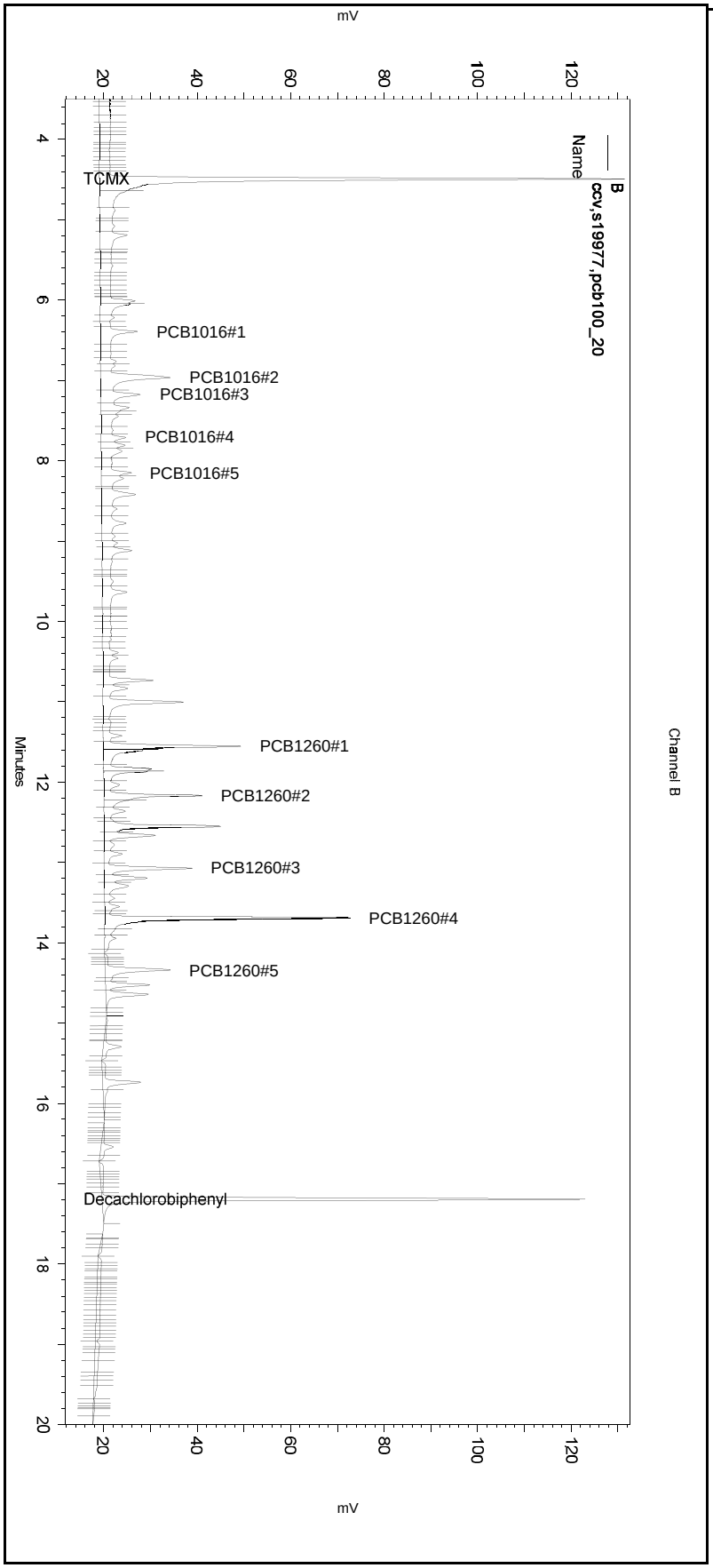
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10097\250-074_12A3.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 Vial: 74 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/8/2012 1:05:54 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10097\250-074_12A3.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Water
EPA 8082A

Inst : GC22 Run Name : PCB250_50 IDF : 1.0
Seqnum : 252360400089.2 File : 250_089 Time : 08-SEP-2012 07:17
Cal : 252360400001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	222.4	pg/uL	-11	20	
TCMX	A	1326.0	1281.9	50.00	48.34	pg/uL	-3	20	
Decachlorobiphenyl	A	1239.5	1085.6	50.00	43.79	pg/uL	-12	20	
Aroclor-1260	B			250.0	278.1	pg/uL	11	20	rsd ***
TCMX	B	13199	23077	50.00	60.01	pg/uL	20	20	
Decachlorobiphenyl	B	12055	17829	50.00	60.76	pg/uL	**22**	20	c+

TKB 09/09/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV rsd=ICAL %RSD failure

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 (Offline) Vial: 89 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/9/2012 4:14:39 PM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.453	4.463	64093	48.337
PCB1016#1	6.600	6.613	4562	245.493
PCB1016#2	7.210	7.227	13896	235.940
PCB1016#3	7.510	7.523	8916	299.242
PCB1016#4	7.957	7.970	3841	233.572
PCB1016#5	8.457	8.473	6186	235.022
PCB1260#1	11.883	11.907	26453	218.518
PCB1260#2	12.507	12.527	20779	228.810
PCB1260#3	13.327	13.347	15657	217.310
PCB1260#4	14.033	14.053	40588	220.901
PCB1260#5	14.657	14.680	17722	226.511
Decachlorobiphenyl	17.140	17.163	54278	43.792

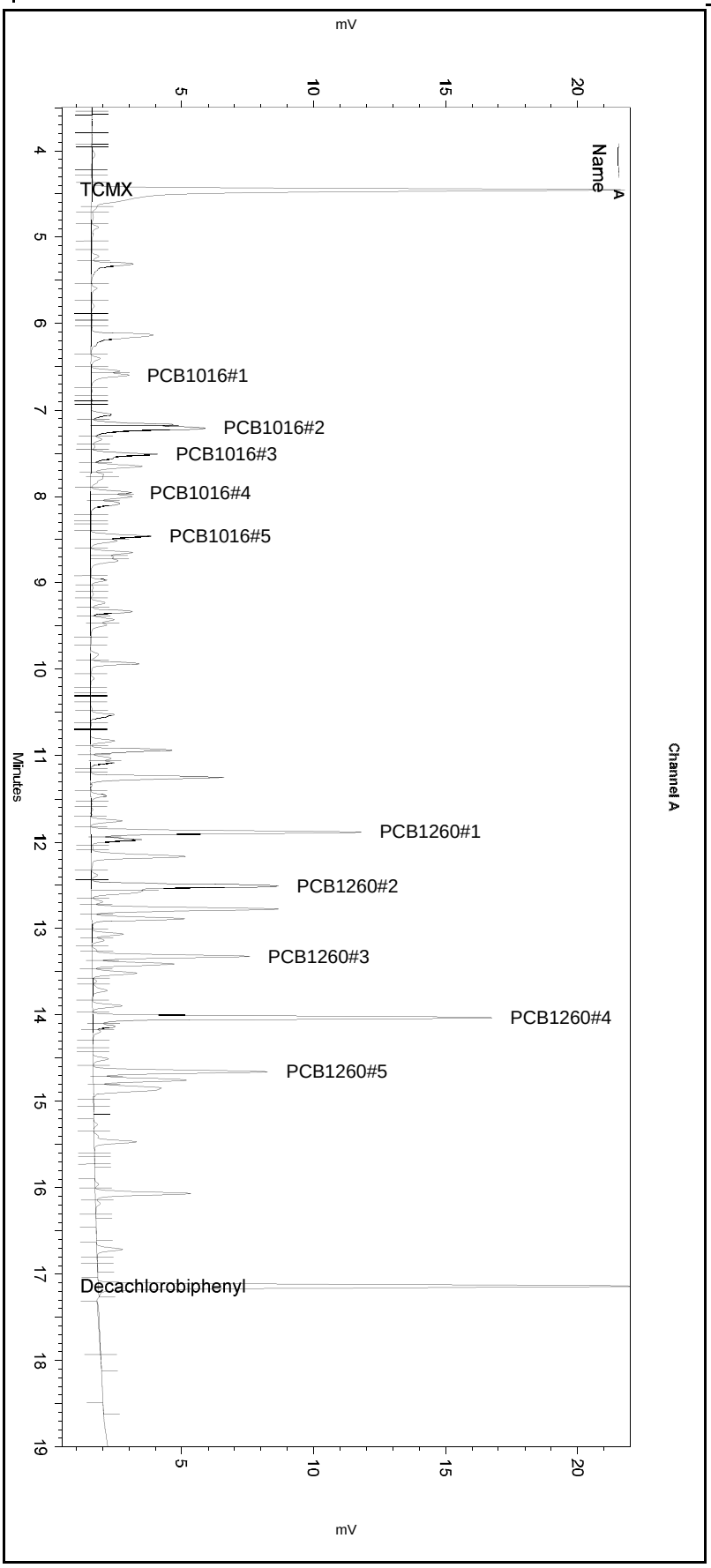
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	1153835	60.012
PCB1016#1	6.393	6.410	56489	260.055
PCB1016#2	6.963	6.977	162130	185.743
PCB1016#3	7.170	7.187	76371	238.225
PCB1016#4	7.703	7.720	28922	269.336
PCB1016#5	8.157	8.170	37292	248.071
PCB1260#1	11.550	11.570	327948	300.961
PCB1260#2	12.167	12.187	249266	255.093
PCB1260#3	13.067	13.087	182370	240.948
PCB1260#4	13.690	13.710	662561	365.920
PCB1260#5	14.340	14.360	162840	227.634
Decachlorobiphenyl	17.193	17.210	891440	60.761

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 (Offline) Vial: 89 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/9/2012 4:14:39 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

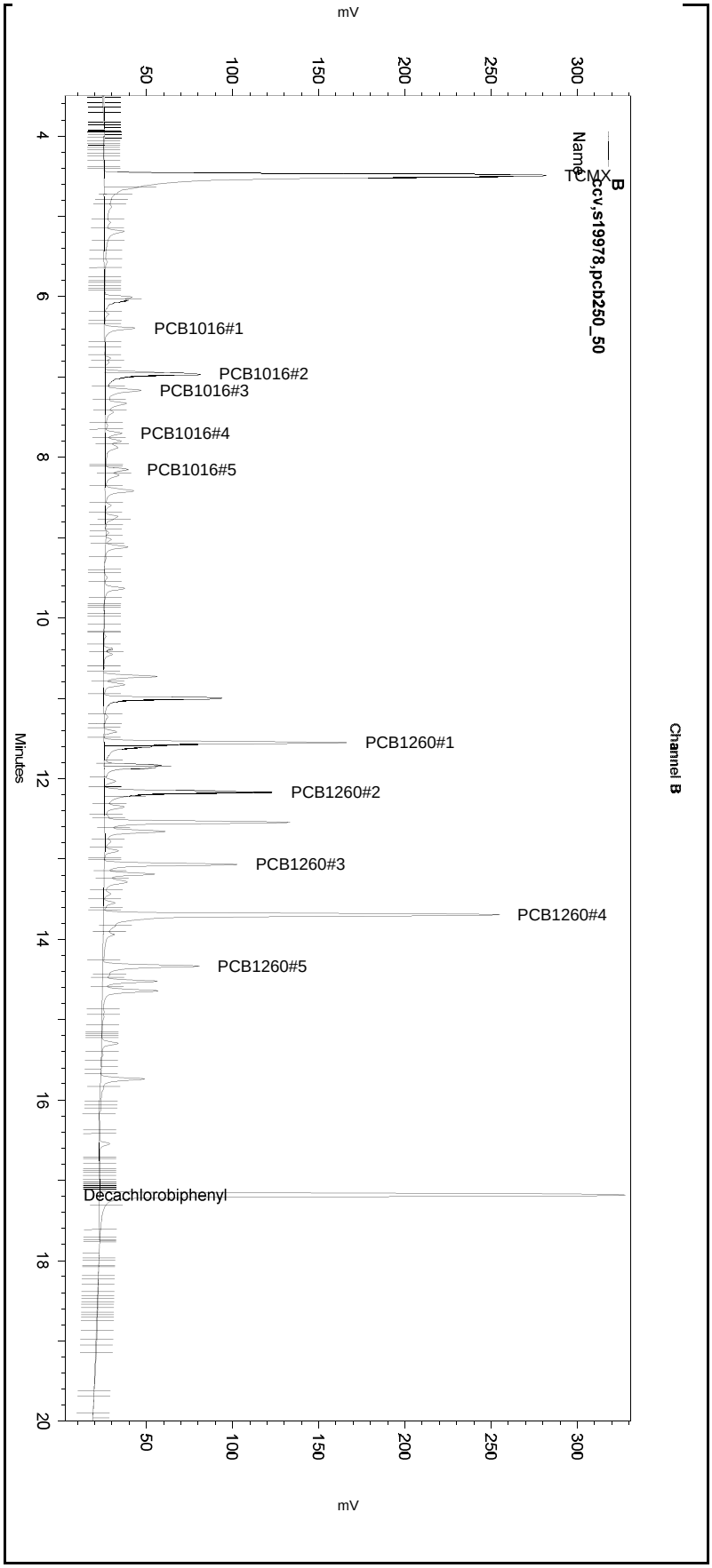
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	4.644	0	0
Yes	Split Peak	12.557	0	0
Yes	Split Peak	13.271	0	0
Yes	Reset Baseline	17.267	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 (Offline) Vial: 89 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/9/2012 4:14:39 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.912	0	0
Yes	Manual Baseline	11.367	13.008	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 Vial: 89 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/8/2012 7:41:02 AM
Sample Amount: 1

GC22

PCB - ECD Instrument Results

Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.453	4.463	64694	48.790
PCB1016#1	6.600	6.613	4562	245.493
PCB1016#2	7.210	7.227	13896	235.940
PCB1016#3	7.510	7.523	8916	299.242
PCB1016#4	7.957	7.970	3841	233.572
PCB1016#5	8.457	8.473	6186	235.022
PCB1260#1	11.883	11.907	26453	218.518
PCB1260#2	12.507	12.527	26580	292.688
PCB1260#3	13.327	13.347	16035	222.556
PCB1260#4	14.033	14.053	40588	220.901
PCB1260#5	14.657	14.680	17722	226.511
Decachlorobiphenyl	17.140	17.163	55393	44.692

GC22

PCB - ECD Instrument Results

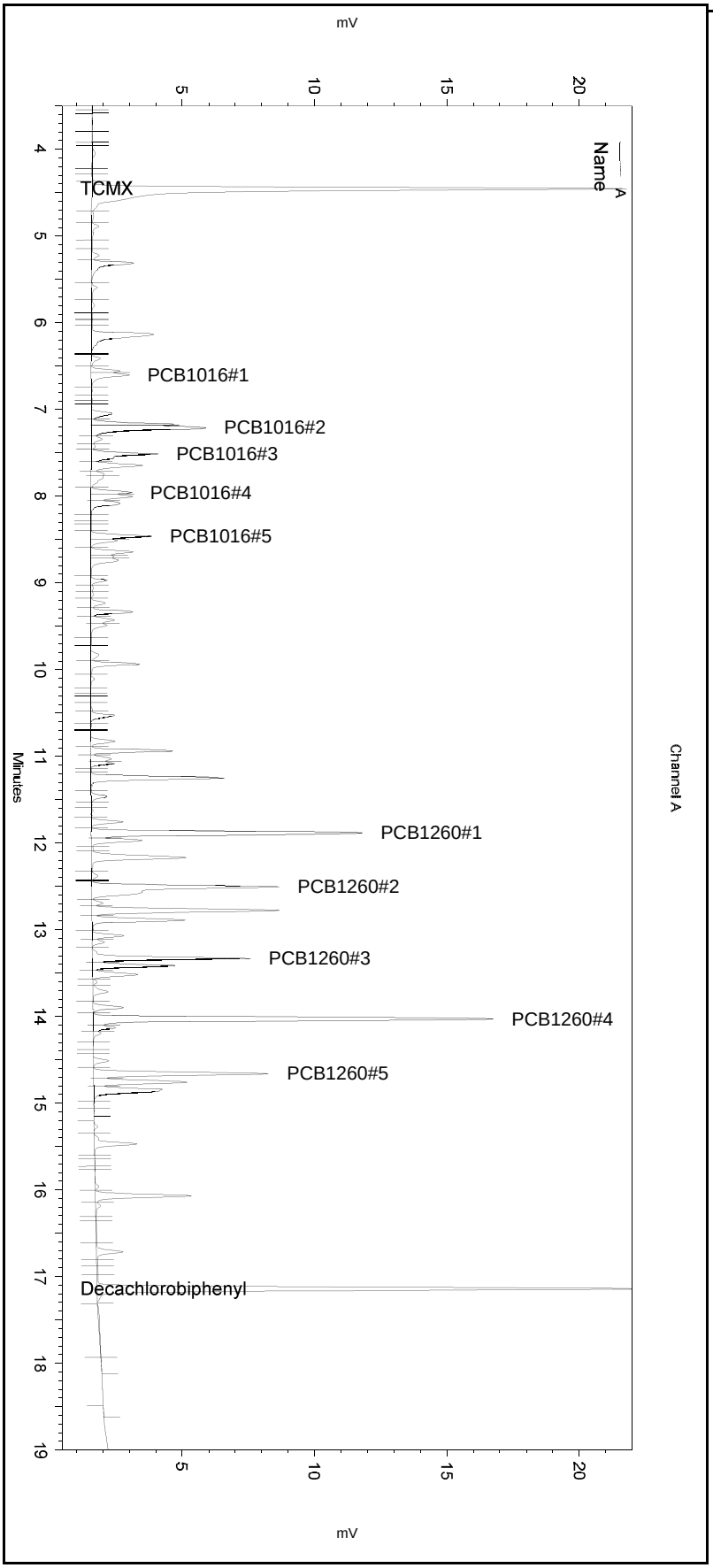
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	1154955	60.069
PCB1016#1	6.393	6.410	62949	289.794
PCB1016#2	6.963	6.977	168485	193.023
PCB1016#3	7.170	7.187	83101	259.218
PCB1016#4	7.703	7.720	33536	312.304
PCB1016#5	8.157	8.170	42310	281.452
PCB1260#1	11.550	11.570	325633	298.836
PCB1260#2	12.167	12.187	245281	251.015
PCB1260#3	13.067	13.087	182370	240.948
PCB1260#4	13.690	13.710	662561	365.920
PCB1260#5	14.340	14.360	162840	227.634
Decachlorobiphenyl	17.193	17.210	891440	60.761

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 Vial: 89 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/8/2012 7:41:02 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

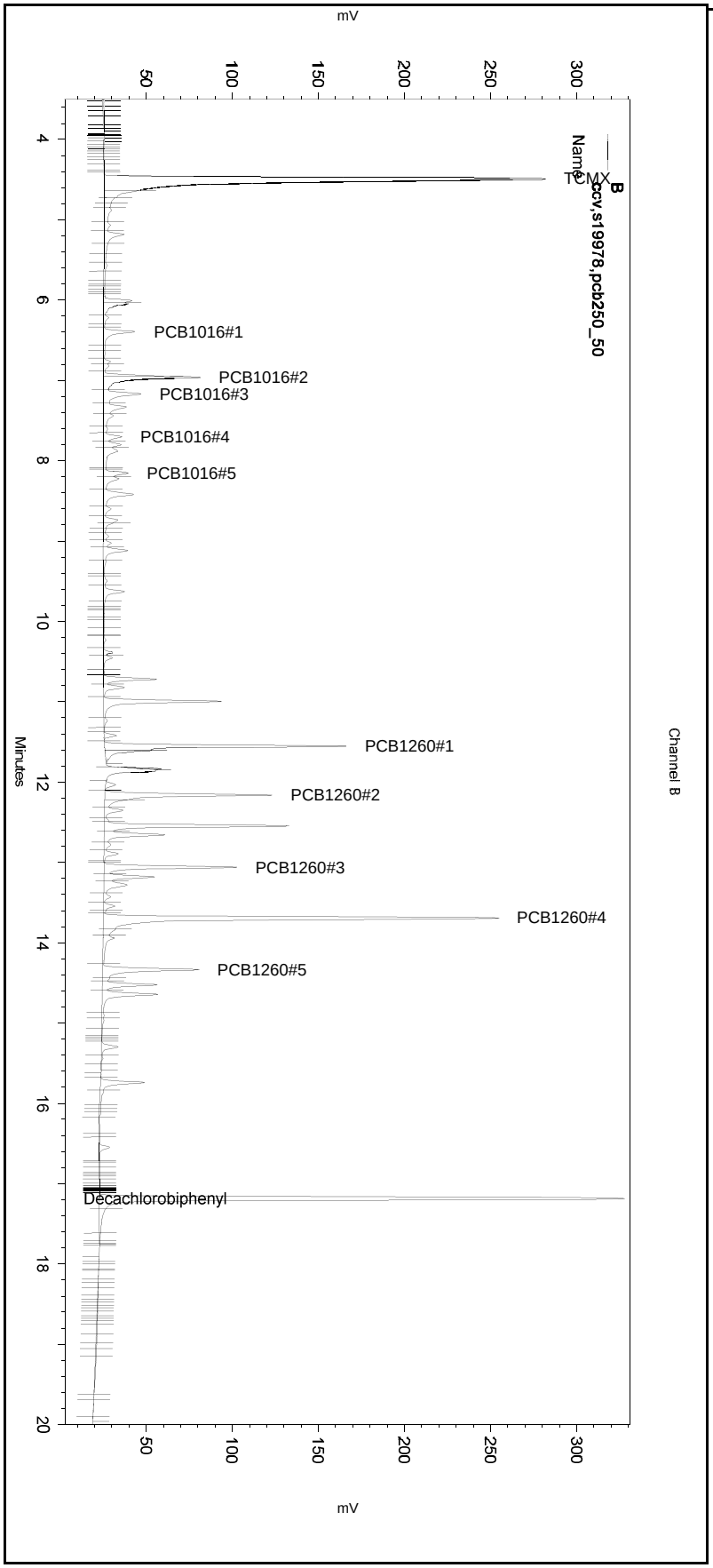
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10097\250-089_12B2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 Vial: 89 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/8/2012 7:41:02 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10097\250-089_12B2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239404
ANALYTICAL REPORT
PCBs
Matrix: Soil

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
EX13B003BA.2	239404-010
EX36B180C.2	239404-012
EX36B180B.2	239404-013
EX36B180A.2	239404-014

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
PCBS (EPA 8082A)
SOIL

Laboratory number:	**239404**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/05/12**
Samples Received:	**09/05/12**

This data package contains sample and QC results for four soil samples, requested for the above referenced project on 09/05/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

PCBs (EPA 8082A) Soil:

All samples underwent sulfuric acid cleanup using EPA Method 3665A.

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B.

High response was observed for Aroclor-1260 in the CCV analyzed 09/10/12 21:27; this analyte was not detected at or above the RL in the associated samples.

No other analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

239404

C&T LOGIN # _____

Chain of Custody # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht/E Mantar
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Arsenic by 6010	Copper by 6010	Mercury by 7471B	Benzo(a)pyrene by 8270D	Benzo(a)anthracene by 8270D	Benzo(b)fluoranthene by 8270D	Zinc by 6010	Aroclor-1260 by 8082
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None								
1	✓EX36B072A.2	9/5/12	0840		X		1					X	X	X						
2	✓EX36B072B.2	9/5/12	0855		X		1					X	X	X						
3	✓EX36B072C.2	9/5/12	0917		X		1					X	X	X	X					
4	✓EX36B078A.2	9/5/12	0955		X		1					X		X						
	~~EX36~~ EAM 9/5/12																			
5	✓EX13B010A.3	9/5/12	1020		X		1					X			X	X	X			
6	✓EX13B010B.2	9/5/12	1045		X		1					X			X	X	X			
7	✓EX13B004A.2	9/5/12	1110		X		1					X		X	X					
8	✓EX13B023A.2	9/5/12	1135		X		2					X		X	X	X	X	X		
9	✓EX13B023B.2	9/5/12	1155		X		2					X		X	X	X	X	X		
	~~EX13B003BA.2~~	9/5/12	1315		X		2					X		X						
10	✓EX13B003BA.2	9/5/12	1315		X		2					X		X			X		X	
11	✓EX13B021A.2	9/5/12	1330		X		1					X					X			

EAM 9/5/12

EAM 9/5/12

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 239404

Chain of Custody # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht / E Manter
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	Aroclor – ~~1254~~ 1260 DF by 8082	Copper by 6010C	PCBs	TPHg	TPHd	SVOCs	Pesticides	Metals
12	✓EX36B180C.2	9/5/12	1420		X	2					X	X	X						
13	✓EX36B180B.2	9/5/12	1435		X	2					X	X	X						
14	✓EX36B180A.2	9/5/12	1445		X	2					X	X	X						
15	EB.09052012	9/5/12	1515	X		3			1		2			X			X		X

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239404 Date Received 9/5/12 Number of coolers 1
Client ARCADIS Project HUNTER'S POINT

Date Opened 9/5/12 By (print) AA (sign) [signature]
Date Logged in ↓ By (print) JG (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.0°C

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ (YES) NO N/A
17. Did you document your preservative check? _____ (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

_____

_____

_____

_____

_____

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239404

Sample	pH: <2	>9	>12	Other
-015a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: AA

Date: 9/6/12

Results & QC Summary

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8082A
Matrix:	Soil	Batch#:	190332
Units:	ug/Kg	Sampled:	09/05/12
Basis:	dry	Received:	09/05/12
Diln Fac:	1.000	Prepared:	09/10/12

Field ID: EX13B003BA.2 Moisture: 4%
Type: SAMPLE Analyzed: 09/11/12
Lab ID: 239404-010

Analyte	Result	LOQ	DL
Aroclor-1260	84	12	1.0

Surrogate	%REC	Limits
TCMX	100	56-143
Decachlorobiphenyl	51	33-135

Field ID: EX36B180C.2 Moisture: 12%
Type: SAMPLE Analyzed: 09/11/12
Lab ID: 239404-012

Analyte	Result	LOQ	DL
Aroclor-1260	3.4 U	14	1.1

Surrogate	%REC	Limits
TCMX	102	56-143
Decachlorobiphenyl	88	33-135

Field ID: EX36B180B.2 Moisture: 14%
Type: SAMPLE Analyzed: 09/11/12
Lab ID: 239404-013

Analyte	Result	LOQ	DL
Aroclor-1260	3.5 U	14	1.1

Surrogate	%REC	Limits
TCMX	96	56-143
Decachlorobiphenyl	81	33-135

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8082A
Matrix:	Soil	Batch#:	190332
Units:	ug/Kg	Sampled:	09/05/12
Basis:	dry	Received:	09/05/12
Diln Fac:	1.000	Prepared:	09/10/12

Field ID: EX36B180A.2
Type: SAMPLE
Lab ID: 239404-014
Moisture: 10%
Analyzed: 09/11/12

Analyte	Result	LOQ	DL
Aroclor-1260	380	13	1.1

Surrogate	%REC	Limits
TCMX	105	56-143
Decachlorobiphenyl	89	33-135

Type: BLANK
Lab ID: QC655478
Analyzed: 09/10/12

Analyte	Result	LOQ	DL
Aroclor-1260	3.0 U	12	0.98

Surrogate	%REC	Limits
TCMX	108	56-143
Decachlorobiphenyl	106	33-135

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8082A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC655479	Batch#:	190332
Matrix:	Soil	Prepared:	09/10/12
Units:	ug/Kg	Analyzed:	09/12/12

Analyte	Spiked	Result	%REC	Limits
Aroclor-1260	168.8	140.0	83	56-141

Surrogate	%REC	Limits
TCMX	106	56-143
Decachlorobiphenyl	125	33-135

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8082A
Field ID:	EX05B104B.2	Batch#:	190332
MSS Lab ID:	239410-003	Sampled:	09/06/12
Matrix:	Soil	Received:	09/06/12
Units:	ug/Kg	Prepared:	09/10/12
Basis:	dry	Analyzed:	09/11/12
Diln Fac:	1.000		

Type: MS Moisture: 7%
Lab ID: QC655480

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1260	131.7	177.1	302.1	96	35-160

Surrogate	%REC	Limits
TCMX	103	56-143
Decachlorobiphenyl	70	33-135

Type: MSD Moisture: 7%
Lab ID: QC655481

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1260	180.8	309.1	98	35-160	1	42

Surrogate	%REC	Limits
TCMX	99	56-143
Decachlorobiphenyl	71	33-135

RPD= Relative Percent Difference

Confirmation Report for 239404 PCBS Soil
Curtis & Tompkins Laboratories

Units: ug/Kg

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
239404-010	EX13B003BA.2	Aroclor-1260	84.03	62.02	30	-26
239404-014	EX36B180A.2	Aroclor-1260	379.5	422.5	11	11

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 PCBS Soil: EPA 8082A

Inst : GC06
Calnum : 202360551001
Units : pg/uL

Name : AR1660_250
Date : 06-SEP-2012 16:49

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	250_008	202360551008	PCB10_2	06-SEP-2012 16:49	S19975
L2	250_009	202360551009	PCB25_5	06-SEP-2012 17:53	S19976
L3	250_010	202360551010	PCB100_20	06-SEP-2012 18:21	S19977
L4	250_011	202360551011	PCB250_50	06-SEP-2012 18:49	S19978
L5	250_012	202360551012	PCB500_100	06-SEP-2012 19:16	S19979
L6	250_013	202360551013	PCB750_150	06-SEP-2012 19:44	S19980
L7	250_014	202360551014	PCB1000_200	06-SEP-2012 20:11	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	977.50	867.00	809.57	733.00	642.90	572.49		AVRG	R		0.00130		767.08	19	.99	20	
Aroclor-1260 Peak # 2	A	636.20	645.28	605.17	591.27	519.42	473.96	475.94	AVRG	R		0.00177		563.89	13	.99	20	
Aroclor-1260 Peak # 3	A	618.80	500.24	451.97	419.33	372.34			AVRG	R		0.00212		472.54	20	.99	20	
Aroclor-1260 Peak # 4	A	1017.8	1084.9	1023.1	964.77	859.73	781.83	774.13	AVRG	R		0.00108		929.46	13	.99	20	
Aroclor-1260 Peak # 5	A	396.50	438.52	438.93	410.76	371.41	335.84	345.47	AVRG	R		0.00256		391.06	11	.99	20	
TCMX	A	7935.0	7919.0	7022.0	6505.6	5961.7	5524.8	5380.5	AVRG	R		1.51E-4		6606.9	16	.99	20	
Decachlorobiphenyl	A	9631.0	10236	8546.9	7706.8	6649.9			AVRG	R		1.17E-4		8554.0	17	.99	20	
Aroclor-1260 Peak # 1	B	2729.3	3301.2	2645.9	2303.9	1981.0	1729.9	1695.0	LINR	R	-49.479	6.04E-4		2340.9	0.991	.99	20	
Aroclor-1260 Peak # 2	B	2380.8	2230.8	2241.2	1901.8	1754.7	1545.4	1482.5	AVRG	R		5.17E-4		1933.9	19	.99	20	
Aroclor-1260 Peak # 3	B	2148.9	2011.4	1730.7	1584.4	1364.0	1285.0		AVRG	R		5.93E-4		1687.4	20	.99	20	
Aroclor-1260 Peak # 4	B	4938.5	4697.8	4098.2	3630.0	3080.2	2740.6	2634.3	LINR	R	-49.347	3.86E-4		3688.5	0.991	.99	20	
Aroclor-1260 Peak # 5	B	2595.9	1546.7	1663.5	1747.5	1514.5	1303.6	1337.7	LINR	R	-32.273	7.65E-4		1672.8	0.992	.99	20	
TCMX	B	23332	20443	16814	16552	16902	15096	14060	AVRG	R		5.68E-5		17600	18	.99	20	
Decachlorobiphenyl	B	33114	33066	25782	21904	18200	15398	14918	QUAD	A	85306.8	20048.7	-29.2621	23197	0.996	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**27**	25.000	13	100.00	6	250.00	-4	500.00	-16	750.00	**-25**		
Aroclor-1260 Peak # 2	A	10.000	13	25.000	14	100.00	7	250.00	5	500.00	-8	750.00	-16	1000.0	-16
Aroclor-1260 Peak # 3	A	10.000	**31**	25.000	6	100.00	-4	250.00	-11	500.00	**-21**				
Aroclor-1260 Peak # 4	A	10.000	10	25.000	17	100.00	10	250.00	4	500.00	-8	750.00	-16	1000.0	-17
Aroclor-1260 Peak # 5	A	10.000	1	25.000	12	100.00	12	250.00	5	500.00	-5	750.00	-14	1000.0	-12
TCMX	A	2.0000	20	5.0000	20	20.000	6	50.000	-2	100.00	-10	150.00	-16	200.00	-19
Decachlorobiphenyl	A	2.0000	13	5.0000	20	20.000	0	50.000	-10	100.00	**-22**				
Aroclor-1260 Peak # 1	B	10.000	**-430**	25.000	**-98**	100.00	10	250.00	19	500.00	10	750.00	-2	1000.0	-3
Aroclor-1260 Peak # 2	B	10.000	**23**	25.000	15	100.00	16	250.00	-2	500.00	-9	750.00	-20	1000.0	**-23**
Aroclor-1260 Peak # 3	B	10.000	**27**	25.000	19	100.00	3	250.00	-6	500.00	-19	750.00	**-24**		
Aroclor-1260 Peak # 4	B	10.000	**-403**	25.000	**-116**	100.00	9	250.00	**21**	500.00	9	750.00	-1	1000.0	-3
Aroclor-1260 Peak # 5	B	10.000	**-224**	25.000	**-111**	100.00	-5	250.00	**21**	500.00	9	750.00	-5	1000.0	-1
TCMX	B	2.0000	**33**	5.0000	16	20.000	-4	50.000	-6	100.00	-4	150.00	-14	200.00	-20
Decachlorobiphenyl	B	2.0000	**-148**	5.0000	-20	20.000	11	50.000	9	100.00	2	150.00	-7	200.00	4

PML 09/07/12 : Corrected automatically drawn baseline in all levels.

PML 09/07/12 : dropped various points and changed fit types for various peaks for better r^2 %RSD recovery

PML 09/07/12 : RTs updated in the integrated version of ICAL

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 PCBS Soil
EPA 8082A

Inst : GC06 Name : AR1660_250
Calnum : 202360551001 Cal Date : 06-SEP-2012

ICV 202360551016 (250_016 06-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	241.7	pg/uL	-3	20	
Aroclor-1260	B	250.0	261.4	pg/uL	5	20	

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 PCBS Soil: EPA 8082A

Inst : GC16
Calnum : 232358946001
Units : pg/ul

Name : AR1660_249A
Date : 05-SEP-2012 18:41

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	249_011	232358946011	PCB10_2	05-SEP-2012 18:41	S19975
L2	249_012	232358946012	PCB25_5	05-SEP-2012 19:09	S19976
L3	249_013	232358946013	PCB100_20	05-SEP-2012 19:37	S19977
L4	249_014	232358946014	PCB250_50	05-SEP-2012 20:05	S19978
L5	249_015	232358946015	PCB500_100	05-SEP-2012 20:33	S19979
L6	249_016	232358946016	PCB750_150	05-SEP-2012 21:00	S19980
L7	249_017	232358946017	PCB1000_200	05-SEP-2012 21:28	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	2903.7	2645.1	2043.0	1737.6	1402.8	1280.3	1106.0	QUAD	A	26125.9	1714.03	-0.63519	1874.1	0.999	.99	20	
Aroclor-1260 Peak # 2	A	2014.6	2233.6	1766.6	1721.8	1453.3	1305.8		AVRG	R		5.72E-4		1749.3	20	.99	20	
Aroclor-1260 Peak # 3	A	1771.7	1496.8	1264.0	1095.8	936.53	843.23		LINR	R	-38.896	0.00120		1234.7	0.990	.99	20	
Aroclor-1260 Peak # 4	A	3727.3	3500.8	2817.0	2358.5	1983.1			LINR	R	-28.596	5.17E-4		2877.3	0.990	.99	20	
Aroclor-1260 Peak # 5	A	1374.7	1851.5	1420.5	1250.3	1105.9			AVRG	R		7.14E-4		1400.6	20	.99	20	
TCMX	A	25623	23507	19325	16224	13450	12341		LINR	R	-8.5129	8.29E-5		18411	0.990	.99	20	
Decachlorobiphenyl	A	19026	17296	15334	12347	10199	8511.2	7607.0	QUAD	A	39971.0	12237.7	-24.6931	12903	0.998	.99	20	
Aroclor-1260 Peak # 1	B	737.60	685.28	610.78	566.71	523.53	511.21	462.17	AVRG	R		0.00171		585.32	17	.99	20	
Aroclor-1260 Peak # 2	B	482.10	512.84	461.15	427.77	386.81	373.66	335.02	AVRG	R		0.00235		425.62	15	.99	20	
Aroclor-1260 Peak # 3	B	452.10	448.84	396.59	370.66	342.93	328.44	298.96	AVRG	R		0.00265		376.93	16	.99	20	
Aroclor-1260 Peak # 4	B	1098.3	1073.3	903.13	850.18	809.19	768.62	711.59	AVRG	R		0.00113		887.76	17	.99	20	
Aroclor-1260 Peak # 5	B	468.10	474.00	402.01	386.37	373.42	351.19	330.73	AVRG	R		0.00251		397.97	14	.99	20	
TCMX	B	7732.0	7094.6	6965.0	6979.1	6744.6	7130.1	6405.6	AVRG	R		1.43E-4		7007.3	6	.99	20	
Decachlorobiphenyl	B	11072	10605	8542.8	7613.2	7438.3			AVRG	R		1.10E-4		9054.2	19	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**-83**	25.000	-6	100.00	8	250.00	6	500.00	-4	750.00	1	1000.0	0
Aroclor-1260 Peak # 2	A	10.000	15	25.000	**28**	100.00	1	250.00	-2	500.00	-17	750.00	**-25**		
Aroclor-1260 Peak # 3	A	10.000	**-276**	25.000	**-76**	100.00	13	250.00	16	500.00	5	750.00	-4		
Aroclor-1260 Peak # 4	A	10.000	**-193**	25.000	**-33**	100.00	17	250.00	11	500.00	-3				
Aroclor-1260 Peak # 5	A	10.000	-2	25.000	**32**	100.00	1	250.00	-11	500.00	**-21**				
TCMX	A	2.0000	**-313**	5.0000	**-75**	20.000	18	50.000	17	100.00	3	150.00	-3		
Decachlorobiphenyl	A	2.0000	**-108**	5.0000	**-23**	20.000	14	50.000	6	100.00	0	150.00	-6	200.00	5
Aroclor-1260 Peak # 1	B	10.000	**26**	25.000	17	100.00	4	250.00	-3	500.00	-11	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 2	B	10.000	13	25.000	20	100.00	8	250.00	1	500.00	-9	750.00	-12	1000.0	**-21**
Aroclor-1260 Peak # 3	B	10.000	20	25.000	19	100.00	5	250.00	-2	500.00	-9	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 4	B	10.000	**24**	25.000	**21**	100.00	2	250.00	-4	500.00	-9	750.00	-13	1000.0	-20
Aroclor-1260 Peak # 5	B	10.000	18	25.000	19	100.00	1	250.00	-3	500.00	-6	750.00	-12	1000.0	-17
TCMX	B	2.0000	10	5.0000	1	20.000	-1	50.000	0	100.00	-4	150.00	2	200.00	-9
Decachlorobiphenyl	B	2.0000	**22**	5.0000	17	20.000	-6	50.000	-16	100.00	-18				

PML 09/06/12 : Corrected automatically drawn baseline in all levels.

PML 09/06/12 : changed fit types and dropped various points for better r^2 %RSD recovery

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

232358946001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 PCBS Soil
EPA 8082A

Inst : GC16 Name : AR1660_249A
Calnum : 232358946001 Cal Date : 05-SEP-2012

ICV 232358946019 (249_019 05-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	268.7	pg/ul	7	20	
Aroclor-1260	B	250.0	265.0	pg/ul	6	20	

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC06 Run Name : PCB100_20 IDF : 1.0
Seqnum : 202366165024.1 File : 254_024 Time : 10-SEP-2012 21:27
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	123.5	pg/uL	**23**	20	c+ ***
TCMX	A	6606.9	7827.3	20.00	23.69	pg/uL	18	20	
Decachlorobiphenyl	A	8554.0	8552.0	20.00	20.00	pg/uL	0	20	
Aroclor-1260	B			100.0	143.2	pg/uL	**43**	20	c+ ***
TCMX	B	17600	23007	20.00	26.14	pg/uL	**31**	20	c+
Decachlorobiphenyl	B	23197	28582	20.00	25.18	pg/uL	**26**	20	c+

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC06 Run Name : PCB250_50 IDF : 1.0
Seqnum : 202366165040.1 File : 254_040 Time : 11-SEP-2012 04:48
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	275.9	pg/uL	10	20	
TCMX	A	6606.9	6823.8	50.00	51.64	pg/uL	3	20	
Decachlorobiphenyl	A	8554.0	7425.1	50.00	43.40	pg/uL	-13	20	
Aroclor-1260	B			250.0	304.5	pg/uL	**22**	20	c+ ***
TCMX	B	17600	16760	50.00	47.61	pg/uL	-5	20	
Decachlorobiphenyl	B	23197	22226	50.00	55.70	pg/uL	11	20	

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC06 Run Name : PCB500_100 IDF : 1.0
Seqnum : 202367629004.1 File : 255_004 Time : 11-SEP-2012 11:46
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19979

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			500.0	508.4	pg/uL	2	20	
TCMX	A	6606.9	6119.8	100.0	92.63	pg/uL	-7	20	
Decachlorobiphenyl	A	8554.0	6580.5	100.0	76.93	pg/uL	**-23**	20	c-
Aroclor-1260	B			500.0	587.6	pg/uL	18	20	
TCMX	B	17600	18529	100.0	105.3	pg/uL	5	20	
Decachlorobiphenyl	B	23197	20889	100.0	121.5	pg/uL	**21**	20	c+

WSR 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC06 Run Name : PCB250_50 IDF : 1.0
Seqnum : 202367629013.1 File : 255_013 Time : 11-SEP-2012 17:02
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	287.8	pg/uL	15	20	
TCMX	A	6606.9	6735.6	50.00	50.97	pg/uL	2	20	
Decachlorobiphenyl	A	8554.0	6388.3	50.00	37.34	pg/uL	**-25**	20	c-
Aroclor-1260	B			250.0	349.9	pg/uL	**40**	20	c+ ***
TCMX	B	17600	22125	50.00	62.86	pg/uL	**26**	20	c+
Decachlorobiphenyl	B	23197	22540	50.00	56.64	pg/uL	13	20	

WSR 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC16 Run Name : PCB100_20 IDF : 1.0
Seqnum : 232369045002.2 File : 256_002 Time : 12-SEP-2012 07:12
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	130.0	pg/ul	**30**	20	c+ ***
TCMX	A	18411	23287	20.00	30.08	pg/ul	**50**	20	c+
Decachlorobiphenyl	A	12903	15131	20.00	22.48	pg/ul	12	20	
Aroclor-1260	B			100.0	99.51	pg/ul	0	20	
TCMX	B	7007.3	7044.8	20.00	20.11	pg/ul	1	20	
Decachlorobiphenyl	B	9054.2	6736.2	20.00	14.88	pg/ul	**-26**	20	c-

KMH 09/12/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC16 Run Name : PCB250_50 IDF : 1.0
Seqnum : 232369045012.2 File : 256_012 Time : 12-SEP-2012 14:48
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	286.6	pg/ul	15	20	
TCMX	A	18411	24192	50.00	91.72	pg/ul	**83**	20	c+
Decachlorobiphenyl	A	12903	10589	50.00	43.88	pg/ul	-12	20	
Aroclor-1260	B			250.0	219.7	pg/ul	-12	20	
TCMX	B	7007.3	8051.3	50.00	57.45	pg/ul	15	20	
Decachlorobiphenyl	B	9054.2	5483.5	50.00	30.28	pg/ul	**-39**	20	c-

WSR 09/12/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202360551

Instrument : GC06
Method : EPA 8082A

Begun : 09/06/12 09:11
SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	250_001	X	PRIMER			09/06/12 09:11	1.0		
002	250_002	X	HEX			09/06/12 09:39	1.0		
003	250_003	CCV	TEST			09/06/12 10:06	1.0	1	
004	250_004	X	HEX			09/06/12 10:34	1.0		
005	250_005	X	PRIMER			09/06/12 14:04	1.0		
006	250_006	X	HEX			09/06/12 14:31	1.0		
007	250_007	IB	CAL			09/06/12 14:59	1.0		
008	250_008	ICAL	PCB10_2			09/06/12 16:49	1.0	2	
009	250_009	ICAL	PCB25_5			09/06/12 17:53	1.0	3	
010	250_010	ICAL	PCB100_20			09/06/12 18:21	1.0	1	
011	250_011	ICAL	PCB250_50			09/06/12 18:49	1.0	4	
012	250_012	ICAL	PCB500_100			09/06/12 19:16	1.0	5	
013	250_013	ICAL	PCB750_150			09/06/12 19:44	1.0	6	
014	250_014	ICAL	PCB1000_200			09/06/12 20:11	1.0	7	
015	250_015	X	HEX			09/06/12 20:39	1.0		
016	250_016	ICV	ULTRA_1660			09/06/12 21:06	1.0	8	
017	250_017	X	ICV			09/06/12 21:34	1.0	8	
018	250_018	IB	CAL			09/06/12 22:02	1.0		
019	250_019	ICAL	AR2154_10			09/06/12 22:29	1.0	9	
020	250_020	ICAL	AR2154_100			09/06/12 22:57	1.0	10	
021	250_021	ICAL	AR2154_250			09/06/12 23:24	1.0	11	
022	250_022	ICAL	AR2154_500			09/06/12 23:52	1.0	12	
023	250_023	ICAL	AR2154_1000			09/07/12 00:19	1.0	13	
024	250_024	X	HEX			09/07/12 00:47	1.0		
025	250_025	CCV	PCB250_50			09/07/12 01:14	1.0	4	
026	250_026	CCV	AR1254			09/07/12 01:42	1.0	11	
027	250_027	CCV	PCB250_50			09/07/12 02:09	1.0	4	
028	250_028	X	XCCV			09/07/12 02:37	1.0	11	
029	250_029	BLANK	QC654597	Water	190132	09/07/12 03:04	1.0		
030	250_030	BS	QC654598	Water	190132	09/07/12 03:32	1.0		
031	250_031	BSD	QC654599	Water	190132	09/07/12 03:59	1.0		
032	250_032	SAMPLE	239237-001	Water	190132	09/07/12 04:27	1.0		
033	250_033	SAMPLE	239333-001	Water	190132	09/07/12 04:54	1.0		
034	250_034	SAMPLE	239334-001	Water	190132	09/07/12 05:22	20.0		
035	250_035	SAMPLE	239335-001	Water	190132	09/07/12 05:50	1.0		
036	250_036	SAMPLE	239362-001	Water	190132	09/07/12 06:17	1.0		
037	250_037	MSS	239378-001	Soil	190194	09/07/12 06:45	1.0		
038	250_038	SAMPLE	239397-001	Soil	190194	09/07/12 07:12	1.0		
039	250_039	SAMPLE	239397-002	Soil	190194	09/07/12 07:40	1.0		
040	250_040	MS	QC654880	Soil	190194	09/07/12 08:07	1.0		
041	250_041	MSD	QC654881	Soil	190194	09/07/12 08:35	1.0		
042	250_042	X	PCB100_20			09/07/12 09:02	1.0	1	
043	250_043	CCV	AR1254			09/07/12 09:30	1.0	11	
044	250_044	CCV	PCB100_20			09/07/12 09:58	1.0	1	
045	250_045	CCV	AR1268			09/07/12 11:26	1.0	14	
046	250_046	SAMPLE	239265-013	Soil	190127	09/07/12 11:54	1.0		
047	250_047	SAMPLE	239265-014	Soil	190127	09/07/12 12:21	1.0		
048	250_048	CCV	PCB250_50			09/07/12 12:56	1.0	4	
049	250_049	CCV	AR1268			09/07/12 13:24	1.0	14	
050	250_050	SAMPLE	239260-021	Soil	190022	09/07/12 16:03	3.0		
051	250_051	SAMPLE	239260-022	Soil	190022	09/07/12 16:31	1.0		
052	250_052	SAMPLE	239260-023	Soil	190022	09/07/12 16:58	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202360551

Instrument : GC06 Begun : 09/06/12 09:11
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	250_053	CCV	PCB500_100			09/07/12 19:06	1.0	5	
054	250_054	CCV	AR1254			09/07/12 20:38	1.0	11	
055	250_055	CCV	AR1268			09/07/12 21:06	1.0	14	
056	250_056	IB	ICAL			09/07/12 21:33	1.0		
057	250_057	ICAL	AR1248_10			09/07/12 22:01	1.0	15	
058	250_058	ICAL	AR1248_100			09/07/12 22:28	1.0	16	
059	250_059	ICAL	AR1248_250			09/07/12 22:56	1.0	17	
060	250_060	ICAL	AR1248_500			09/07/12 23:23	1.0	18	
061	250_061	ICAL	AR1248_1000			09/07/12 23:51	1.0	19	
062	250_062	X	HEX			09/08/12 00:18	1.0		
063	250_063	CCV	PCB100_20			09/08/12 00:46	1.0	1	
064	250_064	CCV	AR1254			09/08/12 01:13	1.0	11	
065	250_065	CCV	AR1268			09/08/12 01:41	1.0	14	
066	250_066	CCV	AR1248_250			09/08/12 02:08	1.0	17	
067	250_067	SAMPLE	239260-015	Soil	190051	09/08/12 02:36	1.0		4:PCB1248#5=1400
068	250_068	SAMPLE	239260-016	Soil	190051	09/08/12 03:04	1.0		
069	250_069	SAMPLE	239260-017	Soil	190051	09/08/12 03:31	1.0		4:PCB1248#5=1300
070	250_070	SAMPLE	239211-003	Soil	189927	09/08/12 03:59	100.0		
071	250_071	SAMPLE	239211-004	Soil	189927	09/08/12 04:26	100.0		
072	250_072	SAMPLE	239211-005	Soil	189927	09/08/12 04:54	100.0		
073	250_073	SAMPLE	239211-006	Soil	189927	09/08/12 05:21	100.0		
074	250_074	SAMPLE	239211-007	Soil	189927	09/08/12 05:49	10.0		
075	250_075	SAMPLE	239211-008	Soil	189927	09/08/12 06:16	100.0		
076	250_076	SAMPLE	239211-009	Soil	189927	09/08/12 06:44	50.0		
077	250_077	CCV	PCB250_50			09/08/12 07:12	1.0	4	
078	250_078	CCV	AR1254			09/08/12 07:39	1.0	11	
079	250_079	CCV	AR1268			09/08/12 08:07	1.0	14	
080	250_080	CCV	AR1248_250			09/08/12 08:34	1.0	17	
081	250_081	BLANK	QC655166	Soil	190263	09/08/12 09:02	1.0		
082	250_082	LCS	QC655167	Soil	190263	09/08/12 09:30	1.0		
083	250_083	SAMPLE	239220-006	Soil	190263	09/08/12 09:57	1.0		
084	250_084	SAMPLE	239452-001	Soil	190263	09/08/12 10:25	1.0		
085	250_085	SAMPLE	239361-001	Soil	190186	09/08/12 10:52	5.0		
086	250_086	SAMPLE	239361-002	Soil	190186	09/08/12 11:20	2.0		
087	250_087	SAMPLE	239211-010	Soil	189927	09/08/12 11:47	50.0		
088	250_088	SAMPLE	239211-011	Soil	189927	09/08/12 12:15	100.0		
089	250_089	SAMPLE	239211-012	Soil	189927	09/08/12 12:43	100.0		
090	250_090	SAMPLE	239211-013	Soil	189927	09/08/12 13:10	100.0		
091	250_091	SAMPLE	239211-014	Soil	189927	09/08/12 13:38	100.0		
092	250_092	CCV	PCB500_100			09/08/12 14:05	1.0	5	
093	250_093	CCV	AR1254			09/08/12 14:33	1.0	11	
094	250_094	CCV	AR1268			09/08/12 15:00	1.0	14	

PML 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 044.

PML 09/07/12 : run_042 CCV processed and worked up; x'd out due to passes DOD/QSMV4 limits only

WSR 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 45 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202360551

Instrument : GC06 Begun : 09/06/12 09:11
Method : EPA 8082A SOP Version : pcb_rv.7

PML 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 050 through 094.

Standards used: 1=S19977 2=S19975 3=S19976 4=S19978 5=S19979 6=S19980 7=S19981 8=S20431 9=S20598 10=S20599 11=S20600 12=S20601 13=S20602 14=S19990 15=S20293 16=S20294 17=S20295 18=S20296 19=S20297

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202366165

Instrument : GC06 Begun : 09/10/12 06:45
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	254_001	X	HEX			09/10/12 06:45	1.0		
002	254_002	X	PCB100_20			09/10/12 07:12	1.0	1	
003	254_003	CCV	PCB100_20			09/10/12 08:22	1.0	1	
004	254_004	CCV	AR1254			09/10/12 09:06	1.0	2	
005	254_005	CCV	AR1268			09/10/12 09:33	1.0	3	
008	254_008	X	HEX			09/10/12 11:00	1.0		
009	254_009	SAMPLE	239304-011	Soil	190127	09/10/12 11:28	100.0		6:PCB1260#1=3700
010	254_010	SAMPLE	239304-012	Soil	190127	09/10/12 11:55	100.0		5:PCB1260#1=1300
011	254_011	SAMPLE	239304-011	Soil	190127	09/10/12 12:30	500.0		
012	254_012	SAMPLE	239304-012	Soil	190127	09/10/12 12:57	200.0		6:PCB1260#1=2100
013	254_013	SAMPLE	239304-012	Soil	190127	09/10/12 13:50	500.0		
014	254_014	SAMPLE	239304-009	Soil	190127	09/10/12 14:17	1.0		8:PCB1260#5=42000
015	254_015	SAMPLE	239304-009	Soil	190127	09/10/12 14:47	100.0		1:PCB1260#1=1200
016	254_016	SAMPLE	239260-028	Soil	190065	09/10/12 15:14	100.0		
017	254_017	CCV	PCB250_50			09/10/12 15:42	1.0	4	
018	254_018	CCV	AR1268			09/10/12 16:22	1.0	3	
019	254_019	CCV	AR1254			09/10/12 17:04	1.0	2	
020	254_020	BLANK	QC655500	Oil	190337	09/10/12 18:27	1.0		
021	254_021	BS	QC655501	Oil	190337	09/10/12 18:54	1.0		
022	254_022	BSD	QC655502	Oil	190337	09/10/12 19:22	1.0		
023	254_023	SAMPLE	239483-001	Oil	190337	09/10/12 19:50	1.0		
024	254_024	CCV	PCB100_20			09/10/12 21:27	1.0	1	
025	254_025	CCV	AR1254			09/10/12 21:55	1.0	2	
026	254_026	BS	QC655036	Water	190234	09/10/12 22:22	1.0		
027	254_027	BSD	QC655037	Water	190234	09/10/12 22:50	1.0		
028	254_028	BLANK	QC655478	Soil	190332	09/10/12 23:17	1.0		
029	254_029	LCS	QC655479	Soil	190332	09/10/12 23:45	1.0		
030	254_030	SAMPLE	239404-010	Soil	190332	09/11/12 00:13	10.0		
031	254_031	SAMPLE	239404-012	Soil	190332	09/11/12 00:40	1.0		
032	254_032	SAMPLE	239404-013	Soil	190332	09/11/12 01:08	1.0		
033	254_033	SAMPLE	239404-014	Soil	190332	09/11/12 01:35	5.0		
034	254_034	SAMPLE	239410-001	Soil	190332	09/11/12 02:03	5.0		
035	254_035	SAMPLE	239410-003	Soil	190332	09/11/12 02:30	5.0		
036	254_036	SAMPLE	239455-001	Soil	190332	09/11/12 02:58	1.0		11:PCB1260#1=2300
037	254_037	SAMPLE	239455-002	Soil	190332	09/11/12 03:25	1.0		11:PCB1260#1=2300
038	254_038	SAMPLE	239455-003	Soil	190332	09/11/12 03:53	1.0		11:PCB1260#1=2000
039	254_039	SAMPLE	239455-004	Soil	190332	09/11/12 04:20	1.0		
040	254_040	CCV	PCB250_50			09/11/12 04:48	1.0	4	
041	254_041	CCV	AR1254			09/11/12 05:16	1.0	2	

PML 09/10/12 : run_006 and run_007 did not/cannot send to LIMS due to range

WSR 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 18.

KMH 09/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 19 through 41.

Standards used: 1=S19977 2=S20600 3=S19990 4=S19978

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202367629

Instrument : GC06 Begun : 09/11/12 07:09
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	255_001	X	HEX			09/11/12 07:09	1.0		
002	255_002	X	PCB250_50			09/11/12 07:37	1.0	1	
003	255_003	X	AR1254			09/11/12 10:32	1.0	2	
004	255_004	CCV	PCB500_100			09/11/12 11:46	1.0	3	
005	255_005	CCV	AR1254			09/11/12 12:27	1.0	2	1:PCB1016#4=1300
006	255_006	LCS	QC655479	Soil	190332	09/11/12 13:32	1.0		
007	255_007	SAMPLE	239404-010	Soil	190332	09/11/12 14:00	1.0		
008	255_008	SAMPLE	239404-014	Soil	190332	09/11/12 14:27	1.0		
009	255_009	SAMPLE	239410-001	Soil	190332	09/11/12 14:55	2.0		
010	255_010	MSS	239410-003	Soil	190332	09/11/12 15:23	1.0		
011	255_011	MS	QC655480	Soil	190332	09/11/12 15:57	1.0		
012	255_012	MSD	QC655481	Soil	190332	09/11/12 16:25	1.0		
013	255_013	CCV	PCB250_50			09/11/12 17:02	1.0	1	
014	255_014	CCV	AR1254			09/11/12 17:29	1.0	2	
015	255_015	SAMPLE	239357-001	Soil	190378	09/11/12 18:53	1.0		
016	255_016	SAMPLE	239357-005	Soil	190378	09/11/12 19:20	1.0		
017	255_017	SAMPLE	239357-006	Soil	190378	09/11/12 19:48	1.0		
018	255_018	MSS	239357-007	Soil	190378	09/11/12 20:15	1.0		
019	255_019	SAMPLE	239357-009	Soil	190378	09/11/12 20:43	1.0		
020	255_020	SAMPLE	239357-010	Soil	190378	09/11/12 21:11	1.0		
021	255_021	CCV	PCB500_100			09/11/12 21:38	1.0	3	
022	255_022	CCV	AR1254			09/11/12 22:06	1.0	2	

WSR 09/12/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

Standards used: 1=S19978 2=S20600 3=S19979

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232358946

Instrument : GC16
Method : EPA 8082A
Begun : 09/05/12 06:26
SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	249_001	X	HEX			09/05/12 06:26	1.0		
002	249_002	CCV	PCB250_50			09/05/12 06:54	1.0	1	
003	249_003	CCV	PCB100_20			09/05/12 12:45	1.0	2	
005	249_005	CCV	PCB250_50			09/05/12 14:32	1.0	1	
006	249_006	CCV	PCB250_50			09/05/12 15:19	1.0	1	
007	249_007	IB	CAL			09/05/12 16:49	1.0		
008	249_008	X	PRIME			09/05/12 17:17	1.0		
009	249_009	X	HEX			09/05/12 17:45	1.0		
010	249_010	IB	CAL			09/05/12 18:13	1.0		
011	249_011	ICAL	PCB10_2			09/05/12 18:41	1.0	3	
012	249_012	ICAL	PCB25_5			09/05/12 19:09	1.0	4	
013	249_013	ICAL	PCB100_20			09/05/12 19:37	1.0	2	
014	249_014	ICAL	PCB250_50			09/05/12 20:05	1.0	1	
015	249_015	ICAL	PCB500_100			09/05/12 20:33	1.0	5	
016	249_016	ICAL	PCB750_150			09/05/12 21:00	1.0	6	
017	249_017	ICAL	PCB1000_200			09/05/12 21:28	1.0	7	
018	249_018	X	HEX			09/05/12 21:56	1.0		
019	249_019	ICV	ULTRA_1660			09/05/12 22:24	1.0	8	
020	249_020	X	ICV			09/05/12 22:52	1.0	8	
021	249_021	X	HEX			09/05/12 23:20	1.0		
022	249_022	CCV	PCB250_50			09/05/12 23:47	1.0	1	
023	249_023	CCV	AR1268			09/06/12 00:15	1.0	9	
024	249_024	BLANK	QC654831	Soil	190186	09/06/12 00:43	1.0		
025	249_025	LCS	QC654832	Soil	190186	09/06/12 01:11	1.0		
026	249_026	SAMPLE	239361-001	Soil	190186	09/06/12 01:39	1.0		6:PCB1260#1=3400
027	249_027	LCS	QC654358	Soil	190065	09/06/12 02:07	1.0		
028	249_028	SAMPLE	239261-012	Soil	189968	09/06/12 02:35	1.0		
029	249_029	SAMPLE	239261-019	Soil	190061	09/06/12 03:03	1.0		
030	249_030	SAMPLE	239261-029	Soil	190061	09/06/12 03:31	1.0		
031	249_031	SAMPLE	239263-002	Soil	190061	09/06/12 03:59	1.0		
032	249_032	CCV	PCB100_20			09/06/12 04:27	1.0	2	
033	249_033	CCV	AR1268			09/06/12 04:55	1.0	9	
034	249_034	SAMPLE	239361-002	Soil	190186	09/06/12 05:23	1.0		
035	249_035	SAMPLE	239364-001	Soil	190186	09/06/12 05:51	1.0		2:PCB1016#4=17000
036	249_036	SAMPLE	239364-002	Soil	190186	09/06/12 06:19	1.0		
037	249_037	SAMPLE	239364-003	Soil	190186	09/06/12 06:47	1.0		2:PCB1016#4=1400
038	249_038	SAMPLE	239364-004	Soil	190186	09/06/12 07:15	1.0		6:PCB1260#1=7900
039	249_039	SAMPLE	239364-005	Soil	190186	09/06/12 07:43	1.0		7:PCB1260#1=15000
040	249_040	SAMPLE	239364-006	Soil	190186	09/06/12 08:11	1.0		
041	249_041	MSS	239364-007	Soil	190186	09/06/12 08:39	1.0		6:PCB1260#1=5500
042	249_042	MS	QC654833	Soil	190186	09/06/12 09:07	1.0		2:PCB1260#1=1400
043	249_043	MSD	QC654834	Soil	190186	09/06/12 09:35	1.0		2:PCB1260#1=1900
044	249_044	CCV	PCB250_50			09/06/12 10:03	1.0	1	
045	249_045	CCV	AR1268			09/06/12 10:31	1.0	9	
046	249_046	CCV	AR1254			09/06/12 10:59	1.0	10	
047	249_047	SAMPLE	239364-002	Soil	190186	09/06/12 11:27	1.0		
048	249_048	SAMPLE	239364-006	Soil	190186	09/06/12 11:55	1.0		
049	249_049	SAMPLE	239364-001	Soil	190186	09/06/12 12:23	50.0		10:PCB1016#4=3300
050	249_050	SAMPLE	239364-003	Soil	190186	09/06/12 12:51	5.0		
051	249_051	SAMPLE	239364-004	Soil	190186	09/06/12 13:19	25.0		
052	249_052	SAMPLE	239364-005	Soil	190186	09/06/12 13:47	50.0		
053	249_053	MSS	239364-007	Soil	190186	09/06/12 14:15	5.0		9:PCB1254#5=1600

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232358946

Instrument : GC16 Begun : 09/05/12 06:26
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
054	249_054	SAMPLE	239364-001	Soil	190186	09/06/12 14:56	500.0		
055	249_055	MSS	239364-007	Soil	190186	09/06/12 15:28	50.0		
056	249_056	CCV	PCB100_20			09/06/12 16:07	1.0	2	
057	249_057	CCV	AR1254			09/06/12 16:35	1.0	10	
058	249_058	BLANK	QC654875	Soil	190194	09/06/12 18:07	1.0		
059	249_059	LCS	QC654879	Soil	190194	09/06/12 18:35	1.0		
060	249_060	MSS	239378-001	Soil	190194	09/06/12 19:03	1.0		
061	249_061	BLANK	QC654284	Soil	190051	09/06/12 20:04	1.0		
062	249_062	LCS	QC654285	Soil	190051	09/06/12 20:32	1.0		
063	249_063	MSS	239260-001	Soil	190051	09/06/12 21:00	50.0		
064	249_064	SAMPLE	239260-002	Soil	190051	09/06/12 21:28	50.0		
065	249_065	SAMPLE	239260-003	Soil	190051	09/06/12 21:56	50.0		
066	249_066	SAMPLE	239260-004	Soil	190051	09/06/12 22:24	50.0		
067	249_067	SAMPLE	239260-005	Soil	190051	09/06/12 22:52	50.0		
068	249_068	SAMPLE	239260-006	Soil	190051	09/06/12 23:20	100.0		
069	249_069	SAMPLE	239260-007	Soil	190051	09/06/12 23:48	50.0		
070	249_070	SAMPLE	239260-008	Soil	190051	09/07/12 00:16	50.0		
071	249_071	SAMPLE	239260-009	Soil	190051	09/07/12 00:44	50.0		
072	249_072	CCV	PCB250_50			09/07/12 01:12	1.0	1	
073	249_073	CCV	AR1268			09/07/12 01:40	1.0	9	
074	249_074	SAMPLE	239260-010	Soil	190051	09/07/12 02:08	50.0		
075	249_075	SAMPLE	239260-011	Soil	190051	09/07/12 02:36	50.0		
076	249_076	SAMPLE	239260-012	Soil	190051	09/07/12 03:05	50.0		
077	249_077	SAMPLE	239260-013	Soil	190051	09/07/12 03:33	50.0		
078	249_078	SAMPLE	239260-014	Soil	190051	09/07/12 04:01	50.0		
079	249_079	SAMPLE	239260-015	Soil	190051	09/07/12 04:29	50.0		
080	249_080	SAMPLE	239260-016	Soil	190051	09/07/12 04:57	50.0		
081	249_081	SAMPLE	239260-017	Soil	190051	09/07/12 05:25	50.0		
082	249_082	SAMPLE	239260-018	Soil	190051	09/07/12 05:53	50.0		
083	249_083	SAMPLE	239260-019	Soil	190051	09/07/12 06:21	50.0		
084	249_084	CCV	PCB100_20			09/07/12 06:49	1.0	2	
085	249_085	CCV	AR1268			09/07/12 07:18	1.0	9	
086	249_086	CCV	AR1254			09/07/12 07:59	1.0	10	
087	249_087	BLANK	QC654578	Soil	190127	09/07/12 11:26	1.0		
088	249_088	LCS	QC654579	Soil	190127	09/07/12 11:54	1.0		
089	249_089	MSS	239265-004	Soil	190065	09/07/12 12:26	1.0		
090	249_090	SAMPLE	239265-011	Soil	190127	09/07/12 12:58	200.0		
091	249_091	CCV	PCB250_50			09/07/12 13:51	1.0	1	
092	249_092	CCV	AR1268			09/07/12 14:18	1.0	9	
093	249_093	SAMPLE	239260-024	Soil	190022	09/07/12 15:59	1.0		
094	249_094	SAMPLE	239260-025	Soil	190022	09/07/12 16:27	1.0		
095	249_095	SAMPLE	239260-026	Soil	190022	09/07/12 16:55	1.0		
096	249_096	SAMPLE	239304-013	Soil	190127	09/07/12 17:29	3.0		4:PCB1260#1=1500
097	249_097	SAMPLE	239304-014	Soil	190127	09/07/12 17:56	3.0		4:PCB1260#5=2300
098	249_098	SAMPLE	239304-015	Soil	190127	09/07/12 18:24	3.0		4:PCB1260#1=2800
099	249_099	SAMPLE	239304-004	Soil	190127	09/07/12 19:58	1.0		
100	249_100	SAMPLE	239304-005	Soil	190127	09/07/12 20:26	50.0		
101	249_101	SAMPLE	239304-007	Soil	190127	09/07/12 20:54	1.0		
102	249_102	SAMPLE	239304-008	Soil	190127	09/07/12 21:22	1.0		
103	249_103	CCV	PCB100_20			09/07/12 21:50	1.0	2	
104	249_104	CCV	AR1268			09/07/12 22:18	1.0	9	
105	249_105	SAMPLE	239304-009	Soil	190127	09/07/12 22:46	50.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232358946

Instrument : GC16 Begun : 09/05/12 06:26
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
106	249_106	SAMPLE	239304-010	Soil	190127	09/07/12 23:14	1.0		4:PCB1260#5=50000
109	249_109	SAMPLE	239304-013	Soil	190127	09/08/12 00:38	50.0		
110	249_110	SAMPLE	239304-014	Soil	190127	09/08/12 01:07	50.0		
111	249_111	SAMPLE	239304-015	Soil	190127	09/08/12 01:35	100.0		
112	249_112	SAMPLE	239304-016	Soil	190127	09/08/12 02:03	1.0		4:PCB1260#5=26000
113	249_113	SAMPLE	239304-017	Soil	190096	09/08/12 02:31	1.0		4:PCB1260#5=22000
114	249_114	SAMPLE	239304-018	Soil	190096	09/08/12 02:59	1.0		
115	249_115	CCV	PCB250_50			09/08/12 03:27	1.0	1	
116	249_116	CCV	AR1268			09/08/12 03:55	1.0	9	
117	249_117	SAMPLE	239304-019	Soil	190096	09/08/12 04:23	1.0		
118	249_118	SAMPLE	239304-020	Soil	190096	09/08/12 04:52	1.0		
119	249_119	SAMPLE	239304-021	Soil	190096	09/08/12 05:20	1.0		4:PCB1260#5=1700
120	249_120	SAMPLE	239304-022	Soil	190096	09/08/12 05:48	1.0		4:PCB1260#5=1500
121	249_121	MS	QC654359	Soil	190065	09/08/12 06:16	1.0		
122	249_122	MSD	QC654360	Soil	190065	09/08/12 06:44	1.0		
123	249_123	MS	QC653943	Soil	189968	09/08/12 07:12	1.0		
124	249_124	MSD	QC653944	Soil	189968	09/08/12 07:40	1.0		
125	249_125	MS	QC654334	Soil	190061	09/08/12 08:08	1.0		
126	249_126	MSD	QC654335	Soil	190061	09/08/12 08:36	1.0		
127	249_127	CCV	PCB100_20			09/08/12 09:04	1.0	2	
128	249_128	CCV	AR1268			09/08/12 09:32	1.0	9	

PML 09/06/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 046.

WSR 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 47 through 92.

WSR 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 93 through 128.

Standards used: 1=S19978 2=S19977 3=S19975 4=S19976 5=S19979 6=S19980 7=S19981 8=S20431 9=S19990 10=S20600

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232369045

Instrument : GC16 Begun : 09/12/12 06:45
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	256_001	X	HEX			09/12/12 06:45	1.0	
002	256_002	CCV	PCB100_20			09/12/12 07:12	1.0	1
003	256_003	CCV	AR1254			09/12/12 07:40	1.0	2
004	256_004	LCS	QC655479	Soil	190332	09/12/12 10:56	1.0	
005	256_005	BLANK	QC655735	Water	190390	09/12/12 11:24	1.0	
006	256_006	LCS	QC655736	Water	190390	09/12/12 11:52	1.0	
007	256_007	SAMPLE	239499-001	Water	190390	09/12/12 12:20	1.0	
008	256_008	MSS	239499-002	Water	190390	09/12/12 12:48	1.0	
009	256_009	MS	QC655737	Water	190390	09/12/12 13:15	1.0	
010	256_010	MSD	QC655738	Water	190390	09/12/12 13:43	1.0	
011	256_011	X	PCB250_50			09/12/12 14:13	1.0	3
012	256_012	CCV	PCB250_50			09/12/12 14:48	1.0	3
013	256_013	CCV	AR1254			09/12/12 15:46	1.0	2
014	256_014	SAMPLE	239303-005	Soil	190332	09/12/12 17:00	4.0	
015	256_015	SAMPLE	239303-006	Soil	190332	09/12/12 17:28	1.0	
016	256_016	CHECK	PCB8081SURR			09/12/12 17:56	1.0	4
017	256_017	SAMPLE	239303-009	Soil	190332	09/12/12 18:26	1.0	
018	256_018	SAMPLE	239303-010	Soil	190332	09/12/12 18:54	1.0	
019	256_019	SAMPLE	239303-005	Soil	190332	09/12/12 19:22	1.0	
020	256_020	X	PCB100_20			09/12/12 21:05	1.0	1
021	256_021	CCV	AR1254			09/12/12 21:34	1.0	2
022	256_022	CCV	PCB100_20			09/12/12 22:01	1.0	1
023	256_023	IB	CAL			09/12/12 22:29	1.0	
024	256_024	ICAL	AR2154_10			09/12/12 22:57	1.0	5
025	256_025	ICAL	AR2154_100			09/12/12 23:25	1.0	6
026	256_026	ICAL	AR2154_250			09/12/12 23:53	1.0	2
027	256_027	ICAL	AR2154_500			09/13/12 00:21	1.0	7
028	256_028	ICAL	AR2154_1000			09/13/12 00:49	1.0	8
029	256_029	X	HEX			09/13/12 01:17	1.0	

WSR 09/12/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

PML 09/13/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 013 through 029.

Standards used: 1=S19977 2=S20600 3=S19978 4=S20678 5=S20598 6=S20599 7=S20601 8=S20602

SAMPLE PREPARATION SUMMARY

Batch # : 190332
Started By : CGL
Method : 3550B
Spike #1 ID : S20518
Prep Date : 10-SEP-2012 11:30
SOP Version : PCB_3550_rv8
Spike #2 ID : S20514
Analysis : PCB
Finished By : CGL
Units : g

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239303-005		Soil	30.09	25	1	0.8308		1				PCB	
239303-006		Soil	30.12	25	1	0.83		1				PCB	
239303-009		Soil	29.74	25	1	0.8406		1				PCB	
239303-010		Soil	30.31	25	1	0.8248		1				PCB	
239404-010		Soil	30.4	25	1	0.8224		1				PCB	
239404-012		Soil	29.71	25	1	0.8415		1				PCB	
239404-013		Soil	29.76	25	1	0.8401		1				PCB	
239404-014		Soil	29.73	25	1	0.8409		1				PCB	
239410-001		Soil	30.49	25	1	0.8199		1				PCB	
239410-003		Soil	30.32	25	1	0.8245		1				PCB	mss
239425-003		Soil	29.93	25	1	0.8353		1				PCB	
239425-006		Soil	30.16	25	1	0.8289		1				PCB	
239455-001		Soil	29.71	25	1	0.8415		1				PCB	
239455-002		Soil	29.74	25	1	0.8406		1				PCB	
239455-003		Soil	29.66	25	1	0.8429		1				PCB	
239455-004		Soil	29.68	25	1	0.8423		1				PCB	
239458-005		Soil	29.89	25	1	0.8364		1				PCB	
239458-010		Soil	29.84	25	1	0.8378		1				PCB	
239458-015		Soil	30.1	25	1	0.8306		1				PCB	
239458-020		Soil	30.37	25	1	0.8232		1				PCB	
QC655478	BLANK	Soil	29.64	25	1	0.8435		1				PCB	
QC655479	LCS	Soil	29.62	25	1	0.844		1	1			PCB	
QC655480	MS	Soil	30.36	25	1	0.8235		1	1			PCB	
QC655481	MSD	Soil	29.74	25	1	0.8406		1	1			PCB	

WSR 09/12/12 : READY FOR PCB REVIEW

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12

PCB (8082) Soil Prep Log

LIMS Batch No: 140332
LIMS Analysis PCB
Date Extracted: 9/10/12

☒ EPA 3550b Sonication
☐ Other _____

Curtis & Tompkins, Ltd.
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	Sample #	Container ID	Sample Wt (g)	Final Vol (mL)	Comments
	239303-005	B	30.09	☒ 25.0 ☐	
	-006	↓	30.12	☒ 25.0 ☐	
	-009	↓	29.74	☒ 25.0 ☐	
	-010	↓	30.31	☒ 25.0 ☐	
5	239401-010	A	30.40	☒ 25.0 ☐	
	-012	↓	29.71	☒ 25.0 ☐	
	-013	↓	29.76	☒ 25.0 ☐	
	-014	↓	29.73	☒ 25.0 ☐	
	239410-001	↓	30.49	☒ 25.0 ☐	
10	-003	↓	30.32	☒ 25.0 ☐	MSS
	239425-003	B	29.93	☒ 25.0 ☐	
	-006	↓	30.16	☒ 25.0 ☐	
	239455-001	A	29.71	☒ 25.0 ☐	
	-002	↓	29.74	☒ 25.0 ☐	
15	-003	↓	29.66	☒ 25.0 ☐	
	-004	↓	29.68	☒ 25.0 ☐	
	239456-005	Comp	29.89	☒ 25.0 ☐	
	-010	↓	29.84	☒ 25.0 ☐	
	-015	↓	30.10	☒ 25.0 ☐	
20	-020	↓	30.37	☒ 25.0 ☐	
	MB QC655478		29.61	☒ 25.0 ☐	
	LCS 79		29.62	☒ 25.0 ☐	
	MS 80		30.36	☒ 25.0 ☐	
	MSD ↓ 81		29.74	☒ 25.0 ☐	
				☐ 25.0 ☐	JQE 9/11/2012

	Mfg & Lot # / LIMS # / Time	Initials / Date
Solvent-rinsed granular Na_2SO_4 weighed out for QC samples	EM3012C150	9/10/12
dried with CH_2Cl_2-rinsed ☒ granular Na_2SO_4 ☐ powder	↓	
1.0 mL of surrogate solution was added to all samples	S20518A	
1.0 mL of matrix spiking solution was added to all spikes	S20514A	
1:1 CH_2Cl_2 (lot# EM52160):Acetone(lot# EM52035) was added to all	X	
Solvent added at (time)	11:30	
☒ sonicated 3 times w/ ≥100mL ☐ soxhlet extractors on at:	NA	
Soxhlets off at:	NA	
Extracts filtered through baked, CH_2Cl_2-rinsed powdered Na_2SO_4	EM3041C024	
Solvent exchanged with Hexane, Lot#	JTB LOT E17	
Concentrated to final volume at temperature (degrees C)	100	
EPA 3665A Clean-up: vortexed w/ H_2SO_4 Lot#	FS120430	
Centrifuged for 1 min; 5mL transferred to labelled vial	X	
Relinquished to PCB group	↓	

9/10/12
Extraction Chemist / Date

Continued from page _____
Continued on page _____

9/11/12
Reviewed by / Date

BOOK PAGE

TITLE Soil Aliquot **PROJECT** **DATI**

Continued from page

Sample ID	Weight	Analysis	Batch #	Comments
239303-005B	30.09	PCB	190332	
-006	30.12			
-009	29.74			
-010	30.31			
239404-010A	30.40			
-012	29.71			
-013	29.76			
-014	29.73			
239410-001	30.49			
-003	30.32			MSS
239425-003B	29.93			
-006	30.16			
239455-001A	29.71			
-002	29.74			
-003	29.66			
-004	29.68			
239458-005 Comp	29.89			(1-4) E@ 50g ea
-010	29.84			(6-9) E@ 50g ea
-015	30.10			(11-14) E@ 50g ea
-020	30.37			(16-19) E@ 50g ea
MB	29.64			EM30x2C150
LCS	29.62			
MS	30.36			239410-003 A
MSD	29.74			

[illegible] 9/10/12

Continued to page

SIGNATURE

DATE

DISCLOSED TO AND UNDERSTOOD BY

DATE

PROPRIETARY INFORMATION

REPORTING SUMMARY FOR 239404 PCBS Soil

Sample ID	Analyte	Inst ID	Ch	Date & Time
239404-010	Aroclor-1260	GC06	A	09/11/12 14:00
239404-010	TCMX	GC06	A	09/11/12 14:00
239404-010	Decachlorobiphenyl	GC06	A	09/11/12 14:00
239404-012	Aroclor-1260	GC06	A	09/11/12 00:40
239404-012	TCMX	GC06	A	09/11/12 00:40
239404-012	Decachlorobiphenyl	GC06	A	09/11/12 00:40
239404-013	Aroclor-1260	GC06	A	09/11/12 01:08
239404-013	TCMX	GC06	A	09/11/12 01:08
239404-013	Decachlorobiphenyl	GC06	A	09/11/12 01:08
239404-014	Aroclor-1260	GC06	A	09/11/12 14:27
239404-014	TCMX	GC06	A	09/11/12 14:27
239404-014	Decachlorobiphenyl	GC06	A	09/11/12 14:27
QC655478	Aroclor-1260	GC06	A	09/10/12 23:17
QC655478	TCMX	GC06	A	09/10/12 23:17
QC655478	Decachlorobiphenyl	GC06	A	09/10/12 23:17
QC655479	Aroclor-1260	GC16	B	09/12/12 10:56
QC655479	TCMX	GC16	B	09/12/12 10:56
QC655479	Decachlorobiphenyl	GC16	A	09/12/12 10:56
QC655480	Aroclor-1260	GC06	A	09/11/12 15:57
QC655480	TCMX	GC06	A	09/11/12 15:57
QC655480	Decachlorobiphenyl	GC06	A	09/11/12 15:57
QC655481	Aroclor-1260	GC06	A	09/11/12 16:25
QC655481	TCMX	GC06	A	09/11/12 16:25
QC655481	Decachlorobiphenyl	GC06	A	09/11/12 16:25

Case Narrative Addendum: Manual Integrations for 239404 PCBS (Soil)

For SAMPLE 239404-010 (GC06 255_007):
Corrected automatically drawn baseline.

For SAMPLE 239404-012 (GC06 254_031):
Corrected automatically drawn baseline.

For SAMPLE 239404-013 (GC06 254_032):
Corrected automatically drawn baseline.

For SAMPLE 239404-014 (GC06 255_008):
Corrected automatically drawn baseline.

For CCV PCB100_20 (GC06 254_024):
Corrected automatically drawn baseline.

For CCV PCB100_20 (GC16 256_002):
Corrected automatically drawn baseline.

For CCV PCB250_50 (GC16 256_012):
Corrected automatically drawn baseline.

For CCV PCB250_50 (GC06 254_040):
Corrected automatically drawn baseline.

For CCV PCB250_50 (GC06 255_013):
Corrected automatically drawn baseline.

For CCV PCB500_100 (GC06 255_004):
Corrected automatically drawn baseline.

For BLANK QC655478 (GC06 254_028):
Corrected automatically drawn baseline.

For LCS QC655479 (GC16 256_004):
Corrected automatically drawn baseline.

For MSD QC655481 (GC06 255_012):
Corrected automatically drawn baseline.
Aroclor-1016 Peak # 1 (Ch. A): Picked or reassigned peak for spike.
Aroclor-1016 Peak # 2 (Ch. A): Picked or reassigned peak for spike.

For Calibration GC16 (232358946001):
Corrected automatically drawn baseline in all levels.

For Calibration GC06 (202360551001):
Corrected automatically drawn baseline in all levels.

For ICV ULTRA_1660 (GC06 250_016):
Corrected automatically drawn baseline.

Sample Raw Data

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8082A

Inst	: GC06	Lab ID	: 239404-010	Client ID	: EX13B003BA.2
Seqnum	: 202367629007.1	Matrix	: Soil	Acct	: ARCSF (JG)
File	: 255_007	Batch	: 190332	Time	: 11-SEP-2012 14:00
Cal	: 202360551001	Caldate	: 06-SEP-2012		
IDF	: 1.0	Raw Units	: pg/uL	Units	: ug/Kg

30.40 g --> 25.0 ml = 0.8224 ml/g PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Blank	Flags
Aroclor-1254	A		ND			12		
Aroclor-1260	A	98.09	81	60	30%	12		u
Aroclor-1260 Peak # 1	A	114.5	94.18	57.13	49%			
Aroclor-1260 Peak # 2	A	94.41	77.64	70.02	10%			
Aroclor-1260 Peak # 3	A	468.4	385.22 [omit]	**876.72 >LR** [omit]	78%			
Aroclor-1260 Peak # 4	A	55.56	45.69 [omit]	51.47	12%			
Aroclor-1260 Peak # 5	A	85.34	70.18	30.90 [omit]	78%			

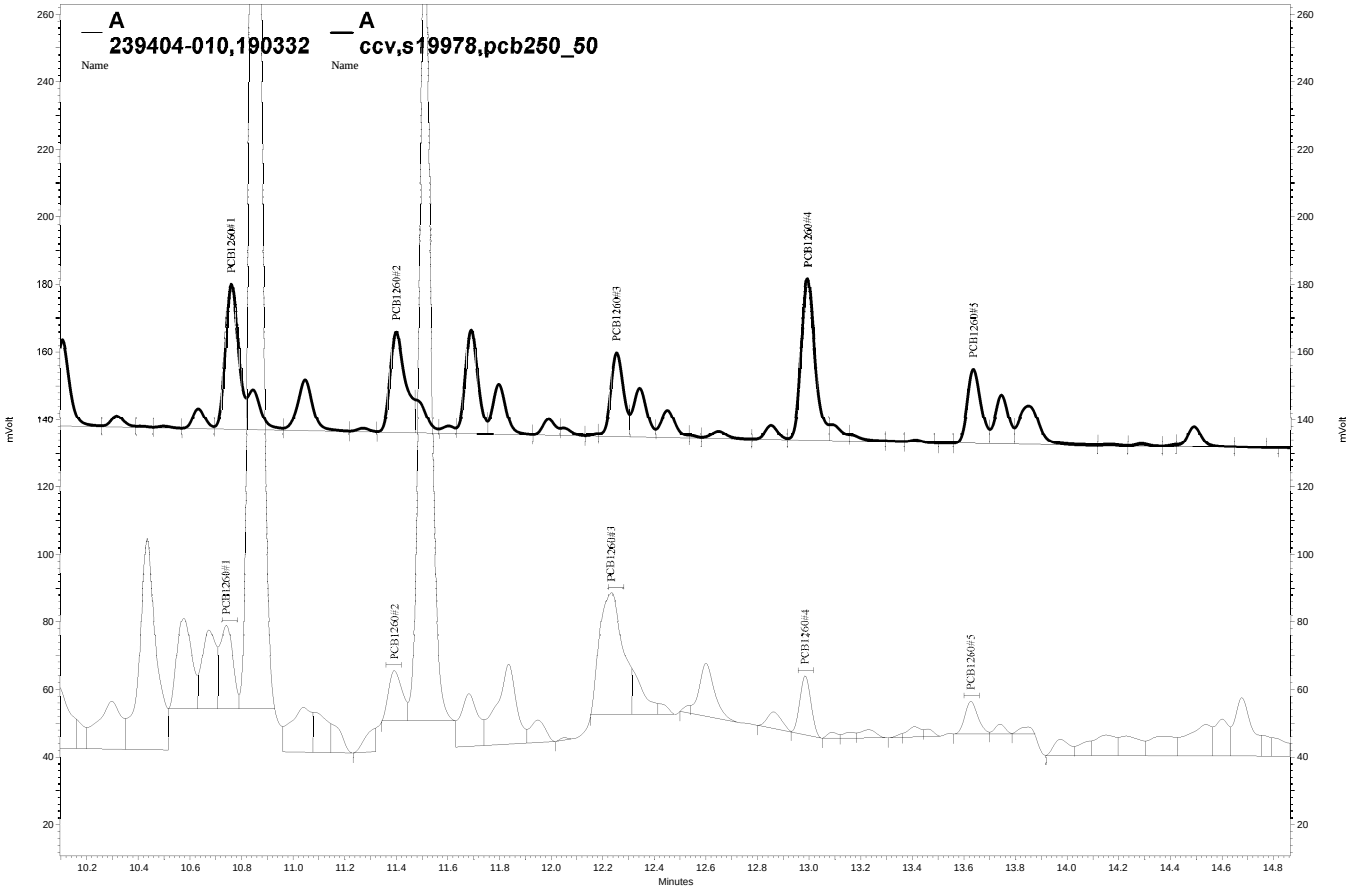
Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	39.85	32.89	32.77	100	56-143	u
Decachlorobiphenyl	A	20.50	32.89	16.86	51	33-135	<c- >c- u

KMH 09/12/12 : Corrected automatically drawn baseline.

KMH 09/12/12 : matrix interference

KMH: 09/12/12 * WSR: 09/12/12 EAH: 09/12/12

-=low bias <=opening >=closing c=CCV u=use



\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-007, A

\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013, A

Sample Name: **239404-010,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-007**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 7 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:00:22 PM
Analysis Date: 9/12/2012 11:08:48 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.453	3.460	263295	39.851
PCB1016#1		5.430		0.000 BDL
PCB1016#2	5.997	6.017	63627	147.924
PCB1016#3	6.323	6.307	20626	89.482
PCB1016#4	6.753	6.760	41600	352.566
PCB1016#5		7.250		0.000 BDL
PCB1260#1	10.740	10.753	87851	114.527
PCB1260#2	11.393	11.390	53236	94.408
PCB1260#3	12.230	12.247	221350	468.430
PCB1260#4	12.983	12.987	51637	55.556
PCB1260#5	13.627	13.630	33373	85.340
Decachlorobiphenyl	16.233	16.237	175336	20.497

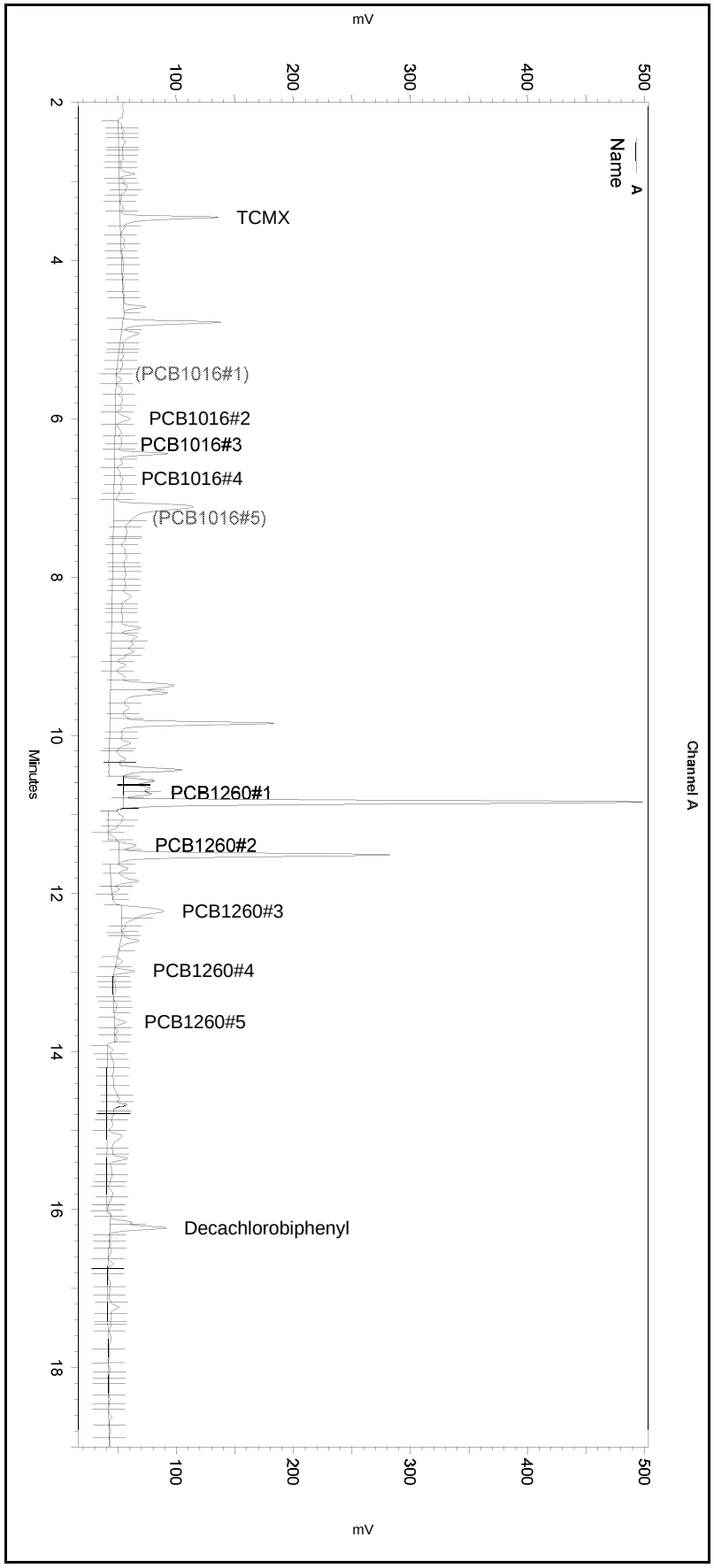
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.827	2.833	588596	33.443
PCB1016#1		4.580		0.000 BDL
PCB1016#2		5.120		0.000 BDL
PCB1016#3	5.330	5.327	69597	90.176
PCB1016#4	5.843	5.863	107003	266.737
PCB1016#5	6.317	6.297	463795	846.554
PCB1260#1	10.380	10.390	196818	69.464
PCB1260#2	10.797	10.793	164664	85.147
PCB1260#3	11.283	0.000	1798916	1066.092
PCB1260#4	12.003	11.983	289707	62.586
PCB1260#5	12.667	12.647	91329	37.580
Decachlorobiphenyl	15.627	15.627	557818	24.440

Sample Name: **239404-010,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-007**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 7 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:00:22 PM
Analysis Date: 9/12/2012 11:08:48 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

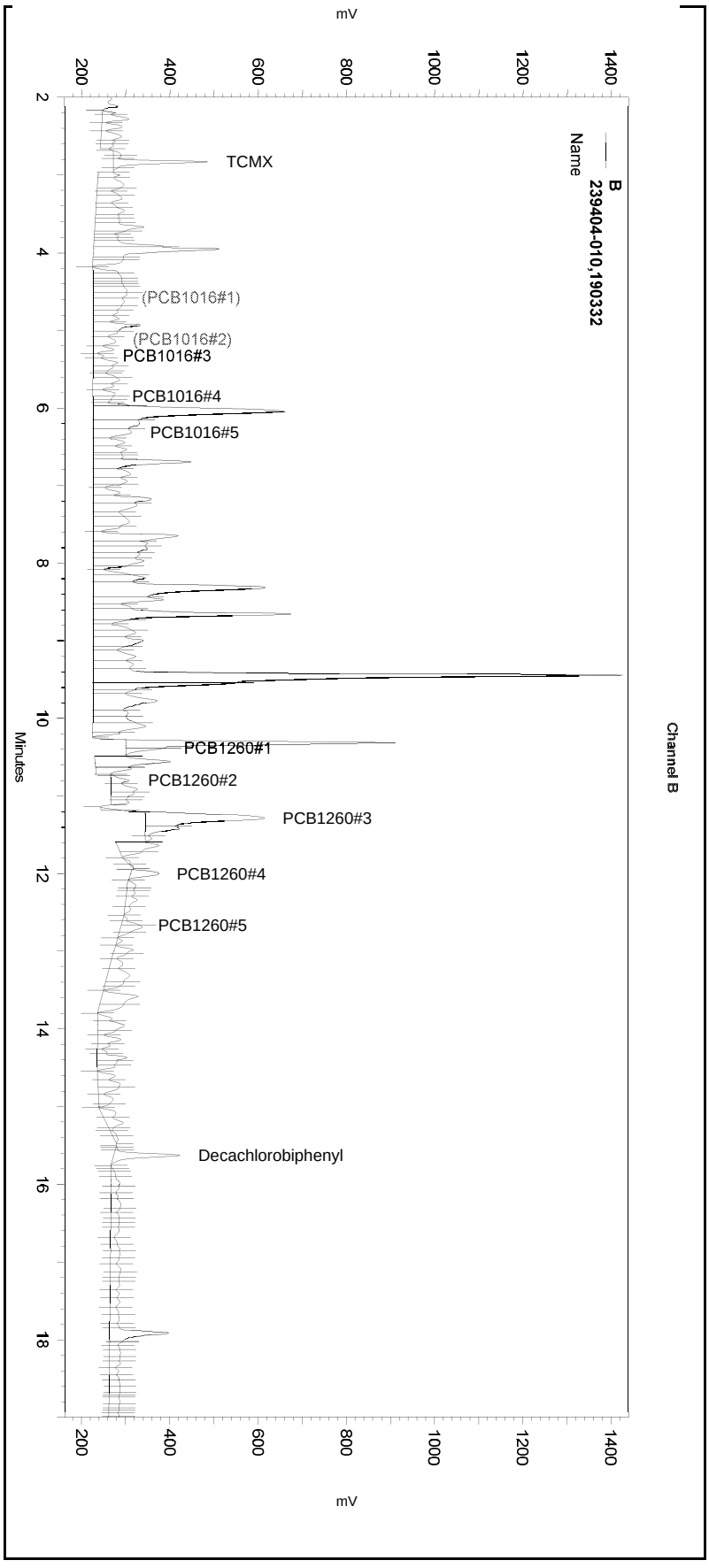
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	10.521	10.923	0
Yes	Backward Horizontal Baseline	11.36	11.62	0
Yes	Backward Horizontal Baseline	12.156	12.451	0
Yes	Reset Baseline	12.494	0	0
Yes	Reset Baseline	12.726	0	0
Yes	Horizontal Baseline	13.501	13.888	0
Yes	Reset Baseline	13.529	0	0
Yes	Reset Baseline	16.086	0	0

Sample Name: **239404-010,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-007**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 7 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:00:22 PM
Analysis Date: 9/12/2012 11:08:48 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Backward Horizontal Baseline	2.691	2.934	0
Yes	Backward Horizontal Baseline	10.289	10.47	0
Yes	Horizontal Baseline	10.704	11.09	0
Yes	Backward Horizontal Baseline	11.216	11.577	0
Yes	Reassign Peak	11.324	11.27	0
Yes	Reset Baseline	11.927	0	0
Yes	Reset Baseline	12.541	0	0

Sample Name: **239404-010,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-007**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 7 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:00:22 PM
Analysis Date: 9/12/2012 10:31:40 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.453	3.460	263295	39.851
PCB1016#1		5.430		0.000 BDL
PCB1016#2	5.997	6.017	63627	147.924
PCB1016#3	6.323	6.307	20626	89.482
PCB1016#4	6.753	6.760	41600	352.566
PCB1016#5		7.250		0.000 BDL
PCB1260#1	10.740	10.753	149871	195.380
PCB1260#2	11.393	11.390	121605	215.653
PCB1260#3	12.230	12.247	359747	761.312
PCB1260#4	12.983	12.987	92745	99.783
PCB1260#5	13.627	13.630	85802	219.408
Decachlorobiphenyl	16.233	16.237	194265	22.710

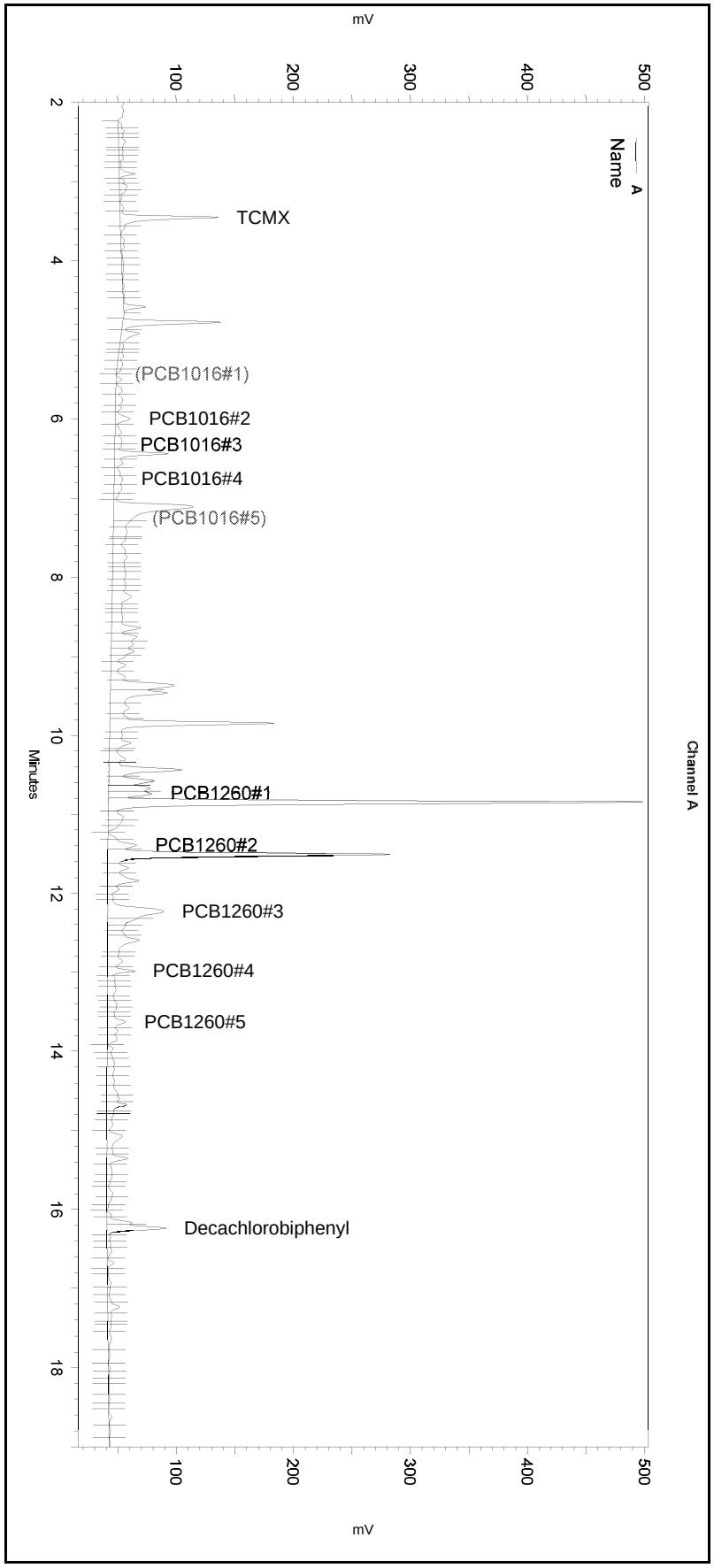
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.827	2.833	813333	46.213
PCB1016#1		4.580		0.000 BDL
PCB1016#2		5.120		0.000 BDL
PCB1016#3	5.330	5.327	69597	90.176
PCB1016#4	5.843	5.863	107003	266.737
PCB1016#5	6.317	6.297	463795	846.554
PCB1260#1	10.380	10.390	663737	351.639
PCB1260#2	10.797	10.793	404384	209.104
PCB1260#3		11.327		0.000 BDL
PCB1260#4	12.003	11.983	1006766	339.632
PCB1260#5	12.667	12.647	306283	201.988
Decachlorobiphenyl	15.627	15.627	557818	24.440

Sample Name: **239404-010,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-007**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 7 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:00:22 PM
Analysis Date: 9/12/2012 10:31:40 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

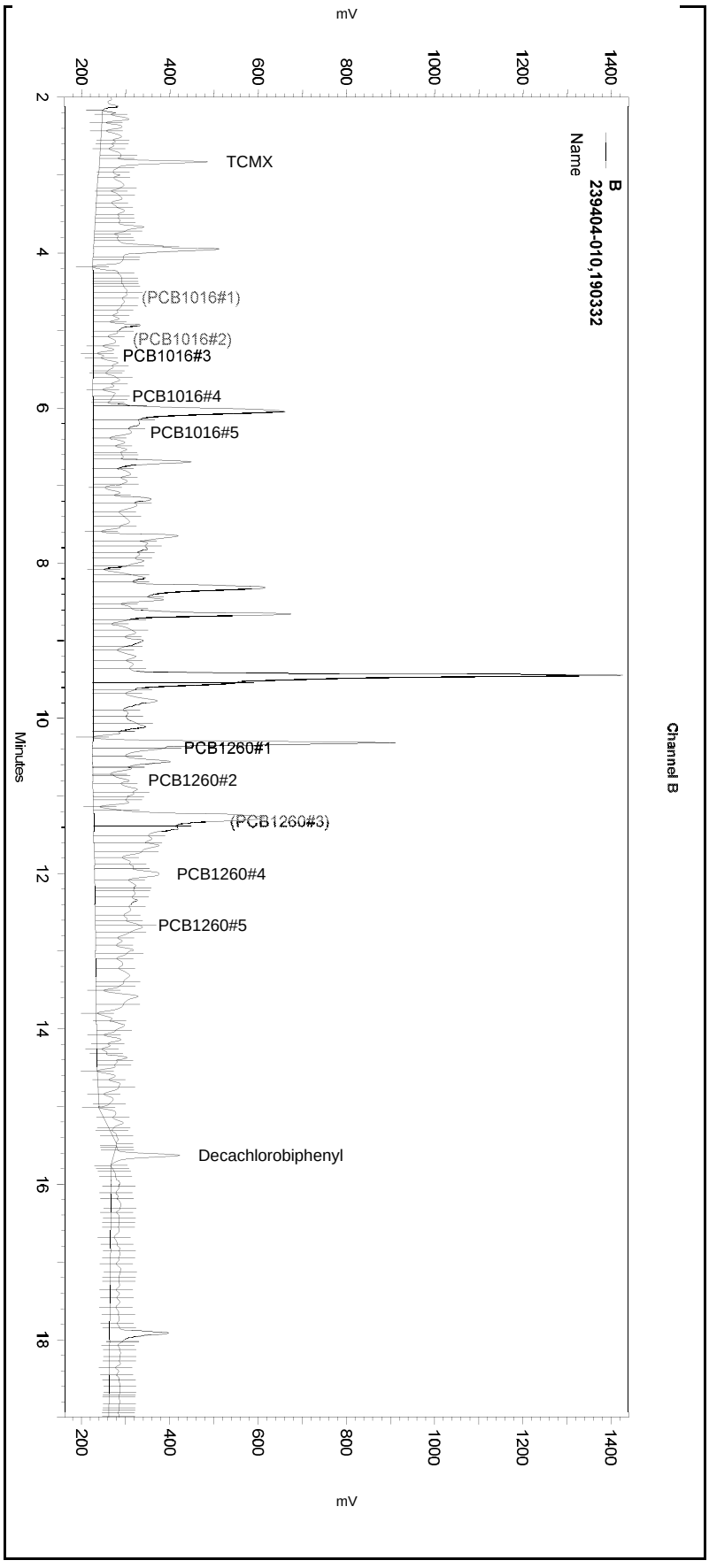
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **239404-010,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-007**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 7 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:00:22 PM
Analysis Date: 9/12/2012 10:31:40 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8082A

Inst	: GC06	Lab ID	: 239404-012	Client ID	: EX36B180C.2
Seqnum	: 202366165031.1	Matrix	: Soil	Acct	: ARCSF (JG)
File	: 254_031	Batch	: 190332	Time	: 11-SEP-2012 00:40
Cal	: 202360551001	Caldate	: 06-SEP-2012		
IDF	: 1.0	Raw Units	: pg/uL	Units	: ug/Kg

29.71 g --> 25.0 ml = 0.8415 ml/g PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Blank	Flags
Aroclor-1254	A		ND			12		
Aroclor-1260	A	11.45	9.6 J	ND	-1218%	12		<c+ l u x
Aroclor-1260 Peak # 1	A	8.707	7.33	ND	-314%			
Aroclor-1260 Peak # 2	A	12.41	10.44	6.00	54%			
Aroclor-1260 Peak # 3	A	15.88	13.37	7.24	59%			
Aroclor-1260 Peak # 4	A	9.743	8.20	ND	-348%			
Aroclor-1260 Peak # 5	A	10.50	8.84	ND	-632%			

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	40.94	33.66	34.45	102	56-143	u
Decachlorobiphenyl	A	35.28	33.66	29.69	88	33-135	u

KMH 09/11/12 : Corrected automatically drawn baseline.

Analyst: KMH Date: 09/11/12 Reviewer: EAH Date: 09/12/12

+=high bias <=opening c=CCV l=false positive flag altered u=use x=false positive

Sample Name: **239404-012,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-031**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 31 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 12:40:37 AM
Analysis Date: 9/11/2012 11:12:10 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.783	4.775	270478	40.938
PCB1016#1		7.002		0.000 BDL
PCB1016#2	7.613	7.637	2176	5.059
PCB1016#3	7.973	7.950	2932	12.720
PCB1016#4	8.407	8.420	1807	0.000
PCB1016#5	8.920	8.947	9510	48.935
PCB1260#1	12.563	12.555	6679	8.707
PCB1260#2	13.220	13.214	6997	12.408
PCB1260#3	14.080	14.077	7506	15.885
PCB1260#4	14.827	14.820	9056	9.743
PCB1260#5	15.487	15.482	4108	10.505
Decachlorobiphenyl	18.110	18.102	301804	35.282

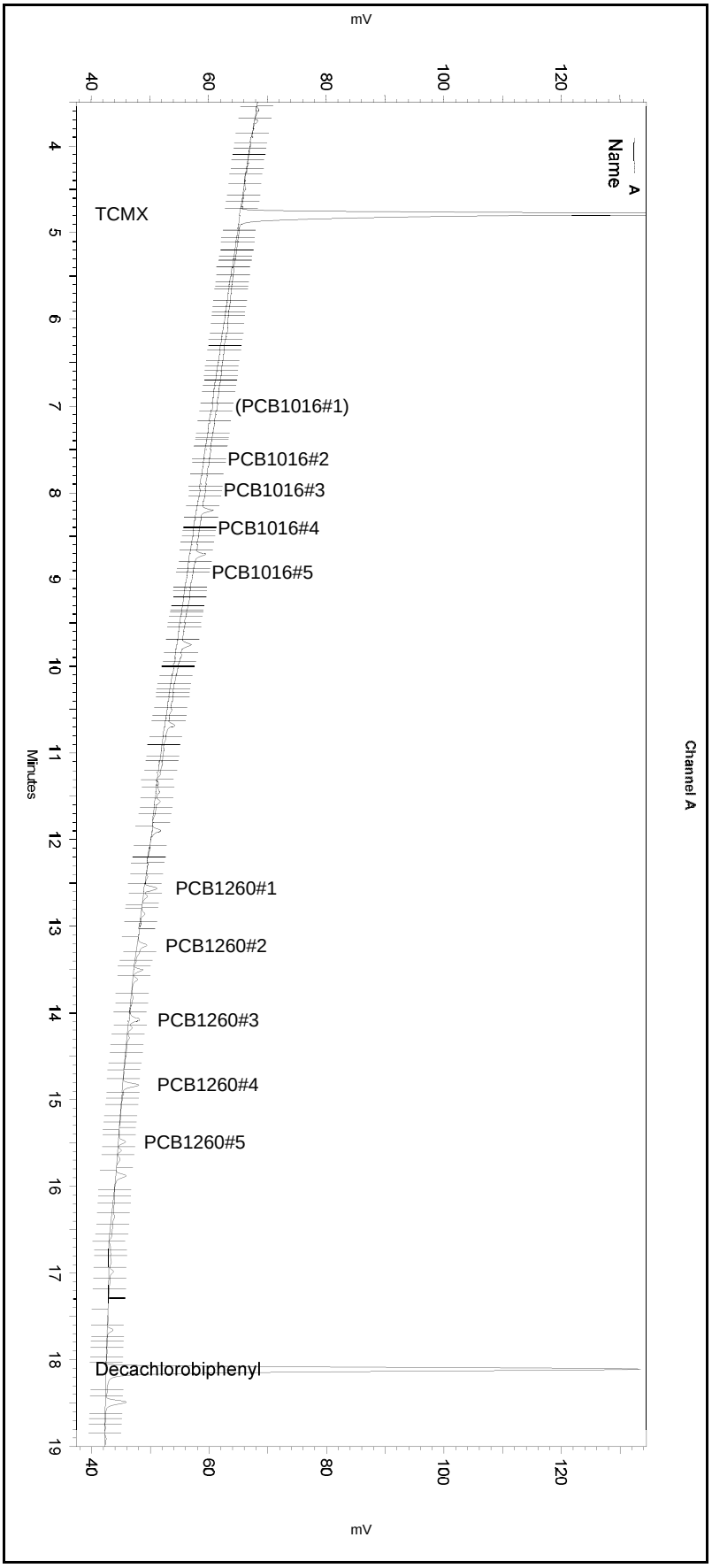
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.987	3.962	847999	48.182
PCB1016#1	5.967	5.979	1222	0.000
PCB1016#2	6.590	6.574	238	0.132
PCB1016#3	6.797	6.799	198	0.257
PCB1016#4	7.383	7.369	2951	0.000
PCB1016#5	7.827	7.839	1952	3.563
PCB1260#1	12.093	12.078	17132	0.000
PCB1260#2	12.500	12.475	13795	7.133
PCB1260#3	13.047	13.032	14526	8.609
PCB1260#4	13.703	13.688	34259	0.000
PCB1260#5	14.380	14.370	15735	0.000
Decachlorobiphenyl	17.393	17.378	889833	42.803

Sample Name: **239404-012,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-031**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 31 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 12:40:37 AM
Analysis Date: 9/11/2012 11:12:10 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

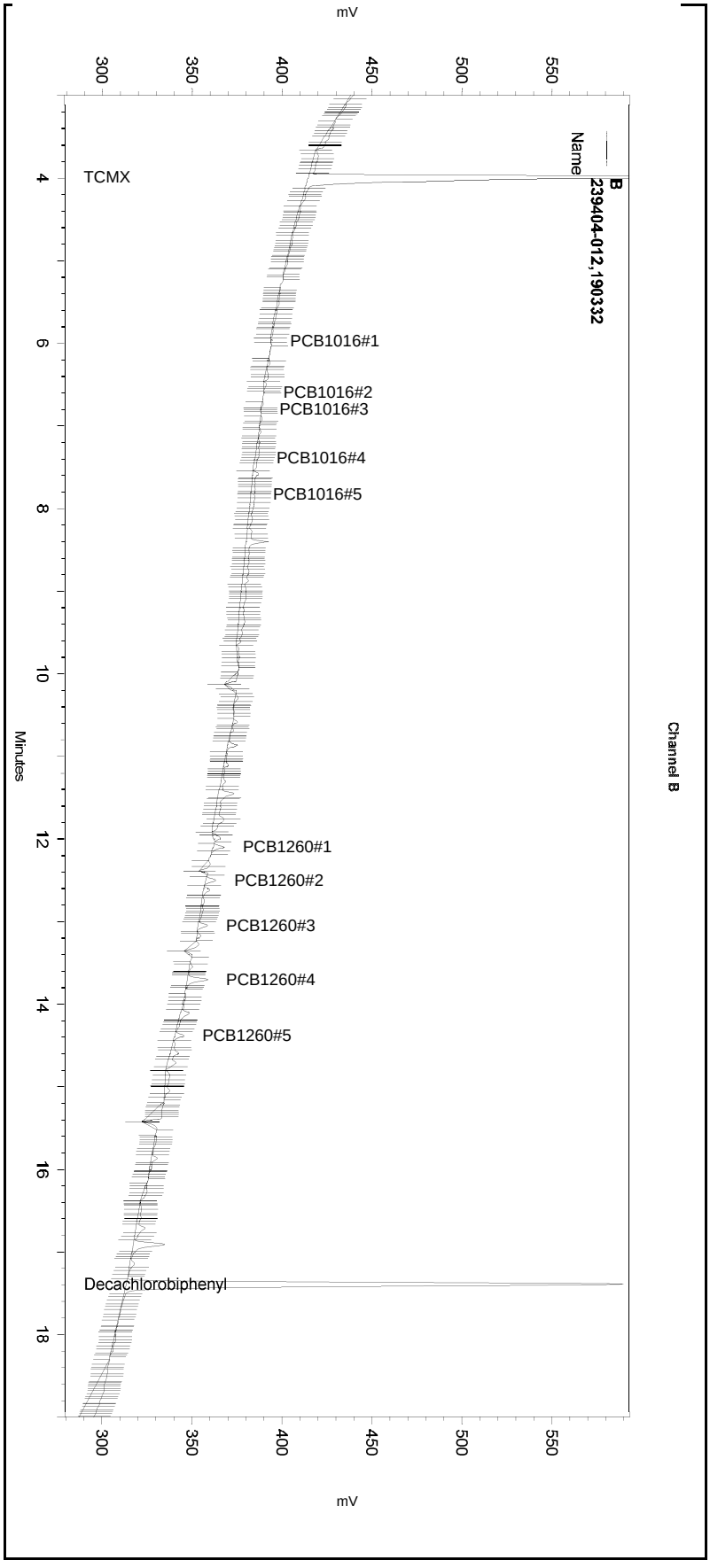
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-031

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	15.784	0	0

Sample Name: **239404-012,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-031**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 31 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 12:40:37 AM
Analysis Date: 9/11/2012 11:12:10 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-031

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	12.033	0	0
Yes	Reset Baseline	12.19	0	0
Yes	Reset Baseline	12.437	0	0
Yes	Reset Baseline	13.236	0	0
Yes	Reset Baseline	13.824	0	0

Sample Name: **239404-012,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-031**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 31 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 12:40:37 AM
Analysis Date: 9/11/2012 10:37:12 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.783	4.775	270478	40.938
PCB1016#1		7.002		0.000 BDL
PCB1016#2	7.613	7.637	2176	5.059
PCB1016#3	7.973	7.950	2932	12.720
PCB1016#4	8.407	8.420	1807	0.000
PCB1016#5	8.920	8.947	9510	48.935
PCB1260#1	12.563	12.555	6679	8.707
PCB1260#2	13.220	13.214	6997	12.408
PCB1260#3	14.080	14.077	7506	15.885
PCB1260#4	14.827	14.820	9216	9.915
PCB1260#5	15.487	15.482	5139	13.141
Decachlorobiphenyl	18.110	18.102	301804	35.282

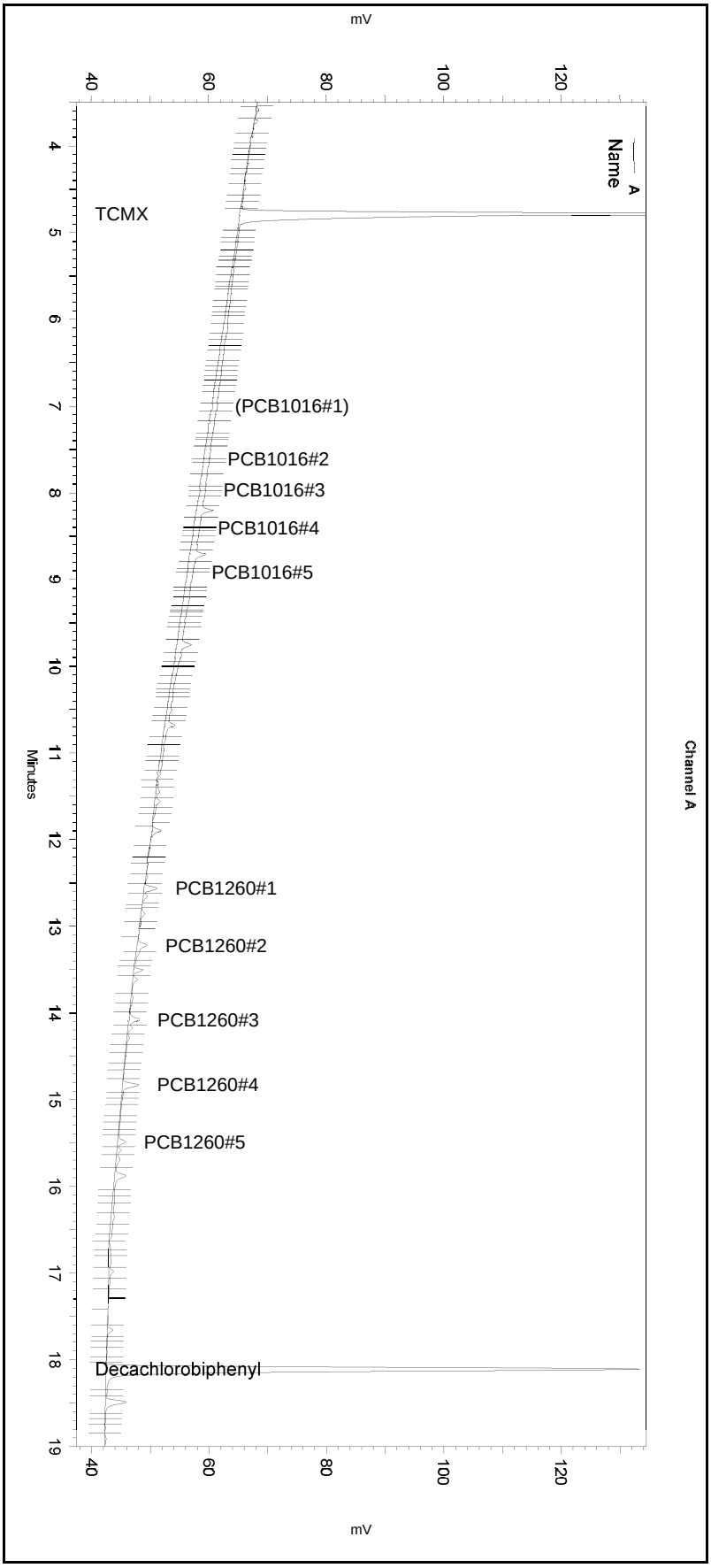
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.987	3.962	847999	48.182
PCB1016#1	5.967	5.979	1222	0.000
PCB1016#2	6.590	6.574	238	0.132
PCB1016#3	6.797	6.799	198	0.257
PCB1016#4	7.383	7.369	2951	0.000
PCB1016#5	7.827	7.839	1952	3.563
PCB1260#1	12.093	12.078	46515	0.000
PCB1260#2	12.500	12.475	43845	22.672
PCB1260#3	13.047	13.032	49791	29.508
PCB1260#4	13.703	13.688	39524	0.000
PCB1260#5	14.380	14.370	19292	0.000
Decachlorobiphenyl	17.393	17.378	889833	42.803

Sample Name: **239404-012,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-031**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 31 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 12:40:37 AM
Analysis Date: 9/11/2012 10:37:12 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

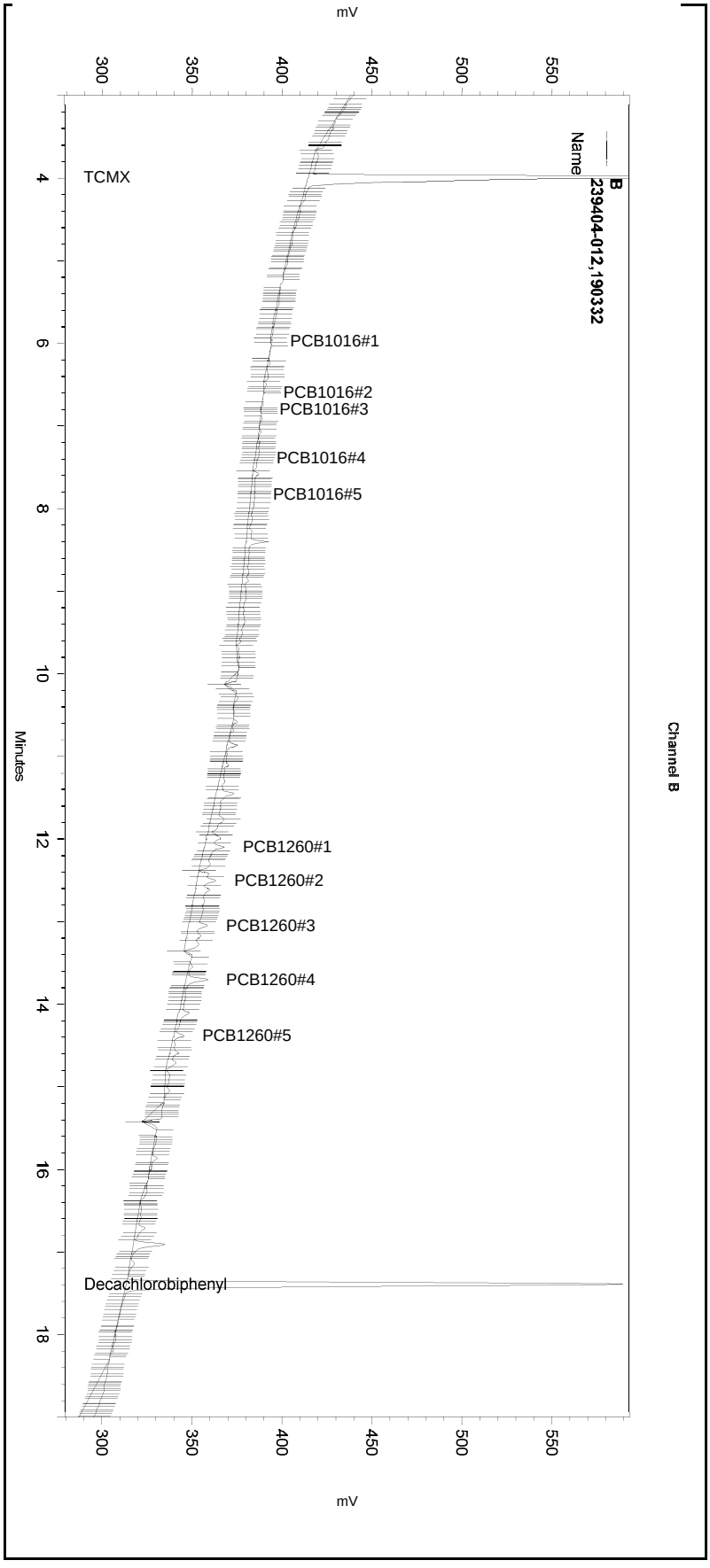
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-031

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **239404-012,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-031**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 31 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 12:40:37 AM
Analysis Date: 9/11/2012 10:37:12 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-031

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8082A

Inst	: GC06	Lab ID	: 239404-013	Client ID	: EX36B180B.2
Seqnum	: 202366165032.1	Matrix	: Soil	Acct	: ARCSF (JG)
File	: 254_032	Batch	: 190332	Time	: 11-SEP-2012 01:08
Cal	: 202360551001	Caldate	: 06-SEP-2012		
IDF	: 1.0	Raw Units	: pg/uL	Units	: ug/Kg

29.76 g --> 25.0 ml = 0.8401 ml/g PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Blank	Flags
Aroclor-1254	A		ND			12		
Aroclor-1260	A	7.159	6.0 J	ND	-742%	12		<c+ u x
Aroclor-1260 Peak # 1	A	4.084	3.43	ND	-276%			
Aroclor-1260 Peak # 2	A	6.689	5.62	18.30	106%			
Aroclor-1260 Peak # 3	A	11.52	9.67	4.21	79%			
Aroclor-1260 Peak # 4	A	6.056	5.09	ND	-270%			
Aroclor-1260 Peak # 5	A	7.446	6.26	ND	-396%			

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	38.56	33.60	32.39	96	56-143	u
Decachlorobiphenyl	A	32.29	33.60	27.13	81	33-135	u

KMH 09/11/12 : Corrected automatically drawn baseline.

Analyst: KMH Date: 09/11/12 Reviewer: EAH Date: 09/12/12

+=high bias <=opening c=CCV u=use x=false positive

Sample Name: **239404-013,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-032**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 32 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 1:08:10 AM
Analysis Date: 9/11/2012 11:12:45 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.783	4.775	254769	38.561
PCB1016#1	6.987	7.002	2512	18.359
PCB1016#2	7.617	7.637	1524	3.543
PCB1016#3	7.920	7.950	3567	15.475
PCB1016#4		8.420		0.000 BDL
PCB1016#5	8.923	8.947	2732	14.058
PCB1260#1	12.563	12.555	3133	4.084
PCB1260#2	13.220	13.214	3772	6.689
PCB1260#3	14.077	14.077	5442	11.517
PCB1260#4	14.830	14.820	5629	6.056
PCB1260#5	15.490	15.482	2912	7.446
Decachlorobiphenyl	18.113	18.102	276239	32.293

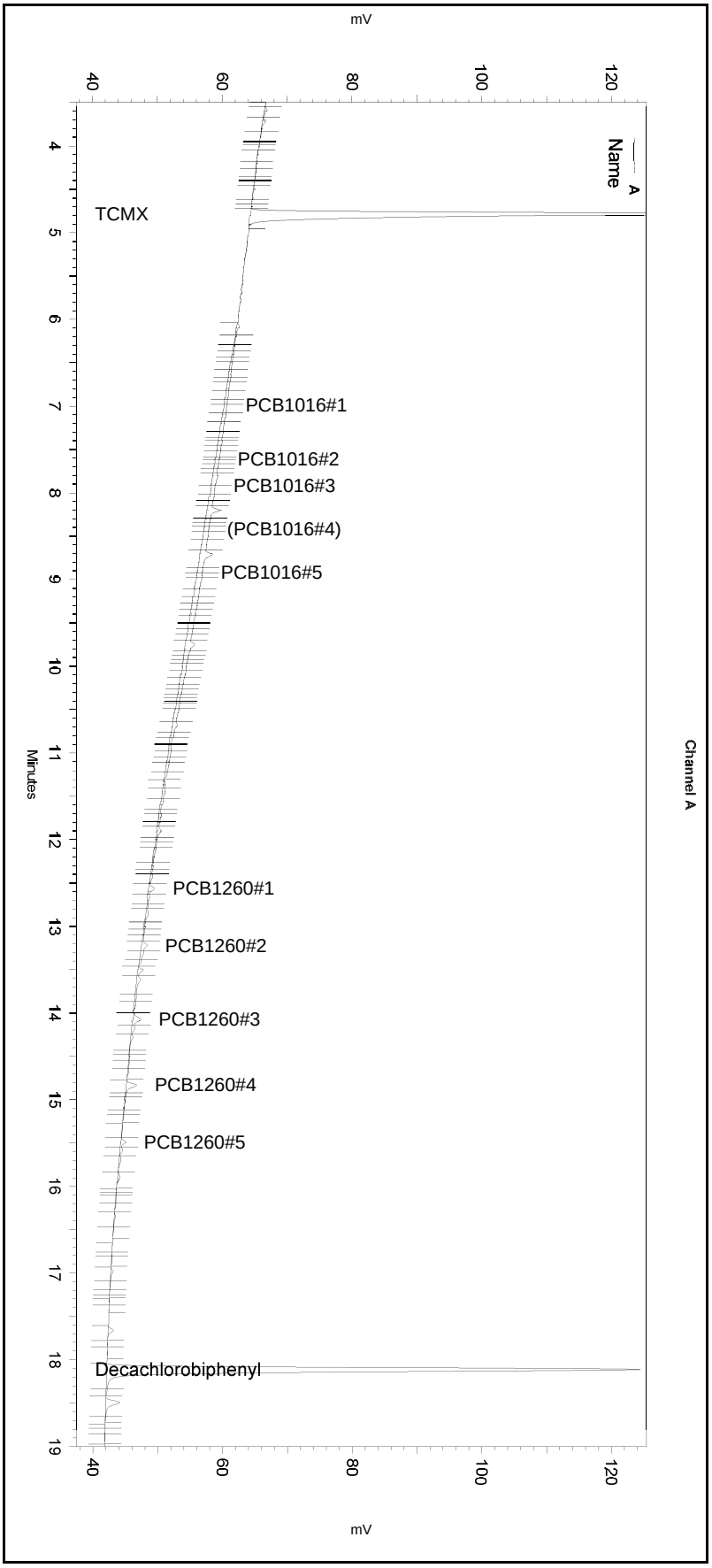
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.987	3.962	803083	45.630
PCB1016#1	5.987	5.979	1422	0.000
PCB1016#2	6.603	6.574	3715	2.053
PCB1016#3	6.783	6.799	1314	1.703
PCB1016#4	7.360	7.369	110	0.000
PCB1016#5	7.823	7.839	504	0.920
PCB1260#1	12.090	12.078	39348	0.000
PCB1260#2	12.500	12.475	42129	21.785
PCB1260#3	13.047	13.032	8459	5.013
PCB1260#4	13.707	13.688	22463	0.000
PCB1260#5	14.380	14.370	12598	0.000
Decachlorobiphenyl	17.397	17.378	835719	39.734

Sample Name: **239404-013,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-032**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 32 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 1:08:10 AM
Analysis Date: 9/11/2012 11:12:45 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

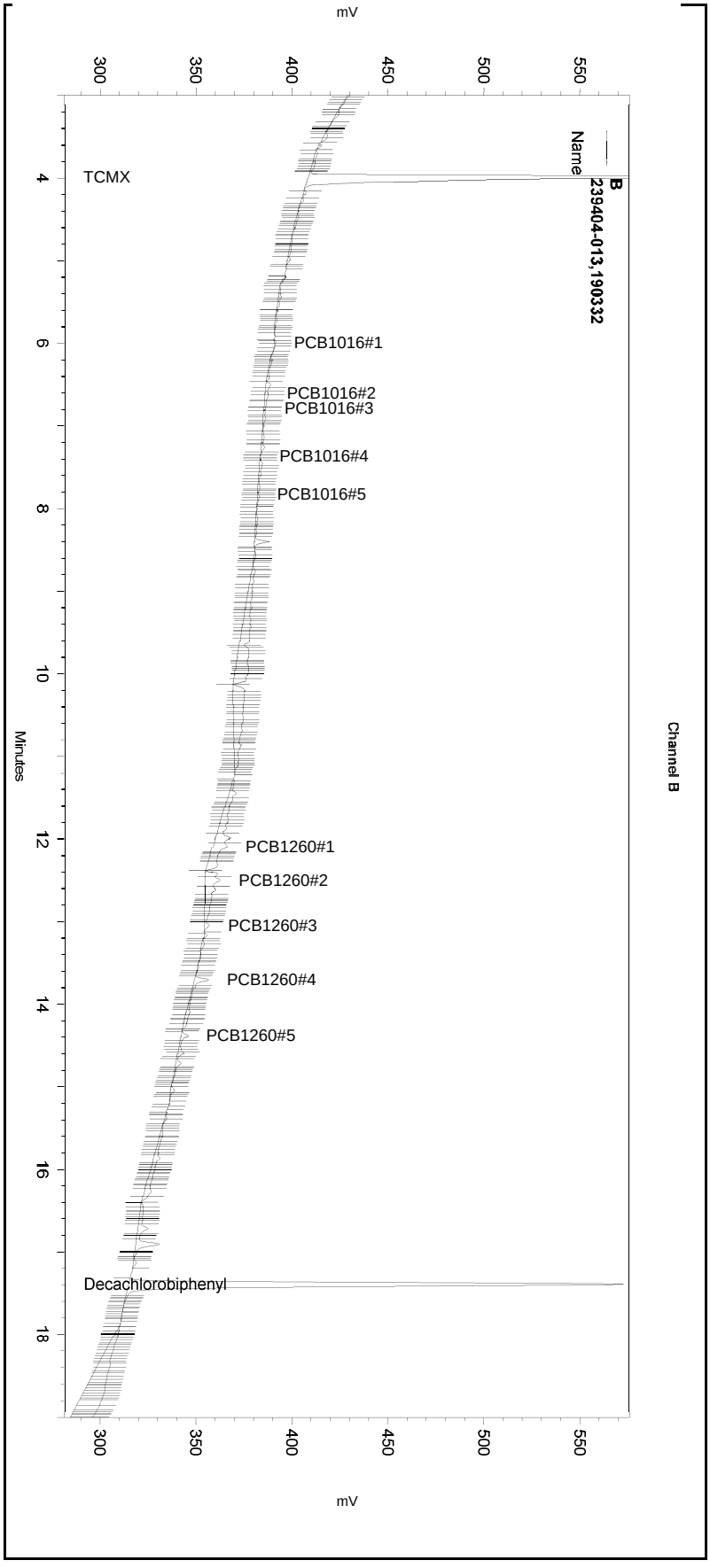
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-032

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.98	0	0

Sample Name: **239404-013,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-032**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 32 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 1:08:10 AM
Analysis Date: 9/11/2012 11:12:45 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-032

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	17.214	0	0

Sample Name: **239404-013,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-032**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 32 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 1:08:10 AM
Analysis Date: 9/11/2012 10:37:19 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.783	4.775	259544	39.284
PCB1016#1	6.987	7.002	5971	43.638
PCB1016#2	7.617	7.637	2854	6.635
PCB1016#3	7.920	7.950	6271	27.205
PCB1016#4		8.420		0.000 BDL
PCB1016#5	8.923	8.947	3847	19.795
PCB1260#1	12.563	12.555	3133	4.084
PCB1260#2	13.220	13.214	3772	6.689
PCB1260#3	14.077	14.077	5442	11.517
PCB1260#4	14.830	14.820	5629	6.056
PCB1260#5	15.490	15.482	2912	7.446
Decachlorobiphenyl	18.113	18.102	276239	32.293

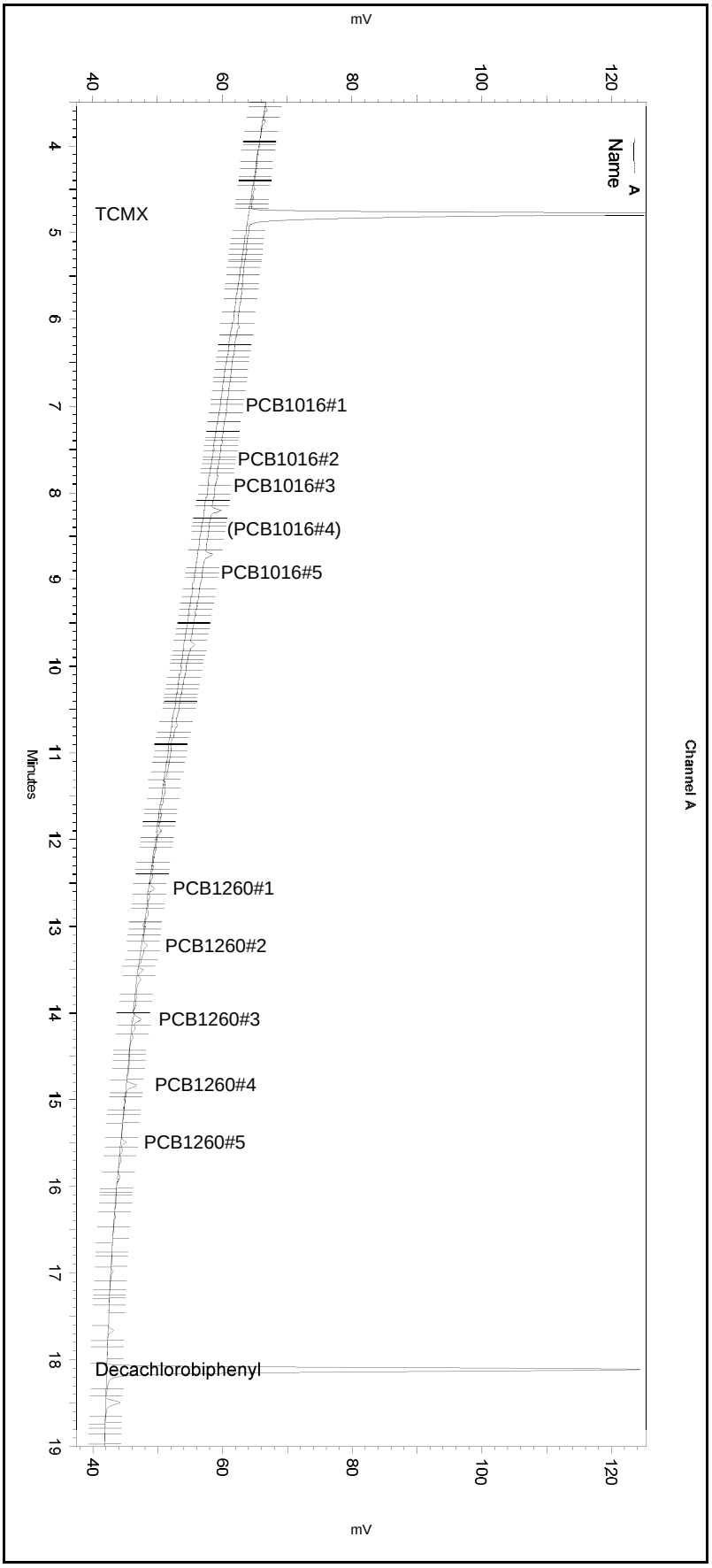
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.987	3.962	803083	45.630
PCB1016#1	5.987	5.979	1422	0.000
PCB1016#2	6.603	6.574	3715	2.053
PCB1016#3	6.783	6.799	1314	1.703
PCB1016#4	7.360	7.369	110	0.000
PCB1016#5	7.823	7.839	504	0.920
PCB1260#1	12.090	12.078	39348	0.000
PCB1260#2	12.500	12.475	42129	21.785
PCB1260#3	13.047	13.032	8459	5.013
PCB1260#4	13.707	13.688	22463	0.000
PCB1260#5	14.380	14.370	12598	0.000
Decachlorobiphenyl	17.397	17.378	844468	40.228

Sample Name: **239404-013,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-032**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 32 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 1:08:10 AM
Analysis Date: 9/11/2012 10:37:19 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

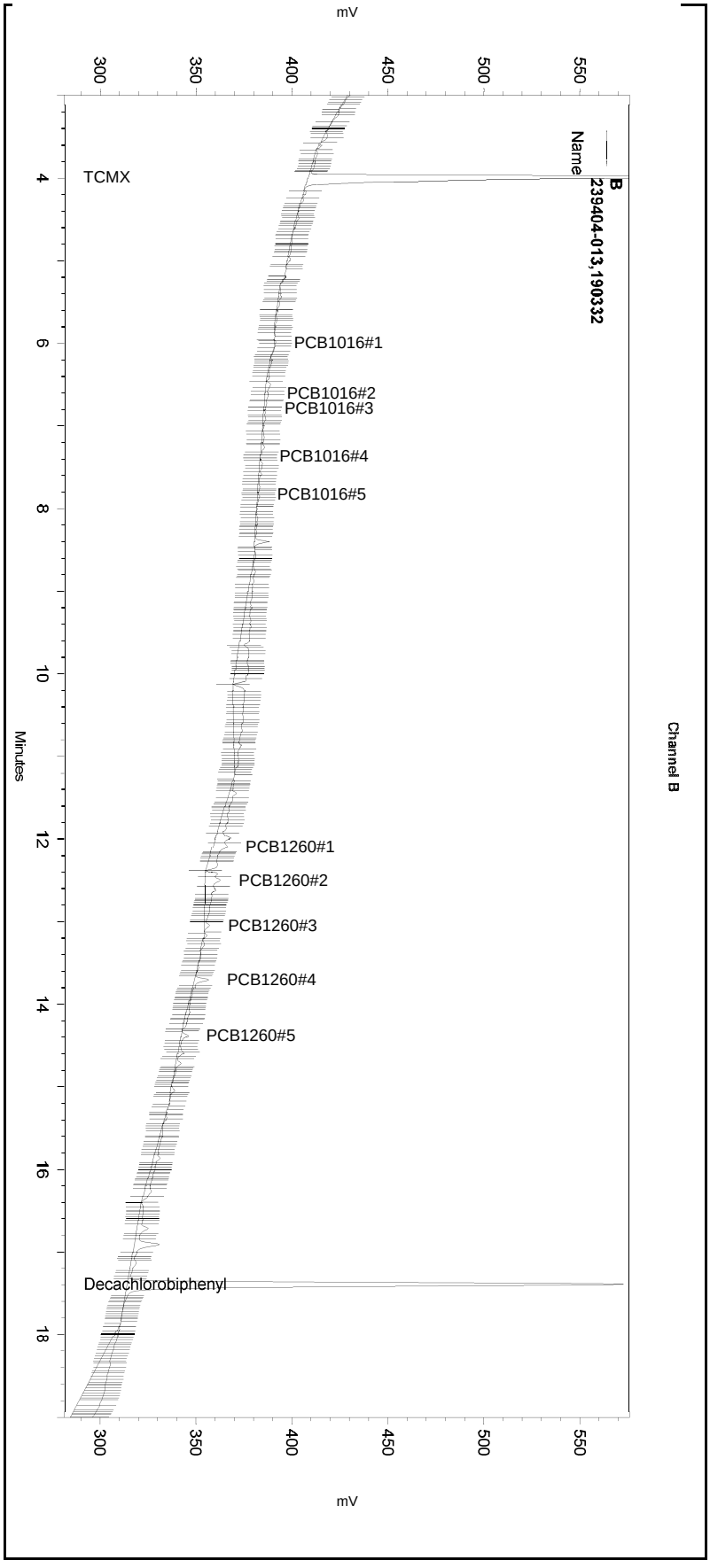
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-032

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **239404-013,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-032**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 32 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 1:08:10 AM
Analysis Date: 9/11/2012 10:37:19 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-032

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8082A

Inst	: GC06	Lab ID	: 239404-014	Client ID	: EX36B180A.2
Seqnum	: 202367629008.1	Matrix	: Soil	Acct	: ARCSF (JG)
File	: 255_008	Batch	: 190332	Time	: 11-SEP-2012 14:27
Cal	: 202360551001	Caldate	: 06-SEP-2012		
IDF	: 1.0	Raw Units	: pg/uL	Units	: ug/Kg

29.73 g --> 25.0 ml = 0.8409 ml/g PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Blank	Flags
Aroclor-1254	A		ND			12		
Aroclor-1260	A	406.2	340	380	11%	12		u
Aroclor-1260 Peak # 1	A	239.0	200.99	384.53	63%			
Aroclor-1260 Peak # 2	A	377.9	317.78	341.68	7%			
Aroclor-1260 Peak # 3	A	378.6	318.35	296.25	7%			
Aroclor-1260 Peak # 4	A	437.7	368.09	410.60	11%			
Aroclor-1260 Peak # 5	A	597.7	502.65	468.20	7%			

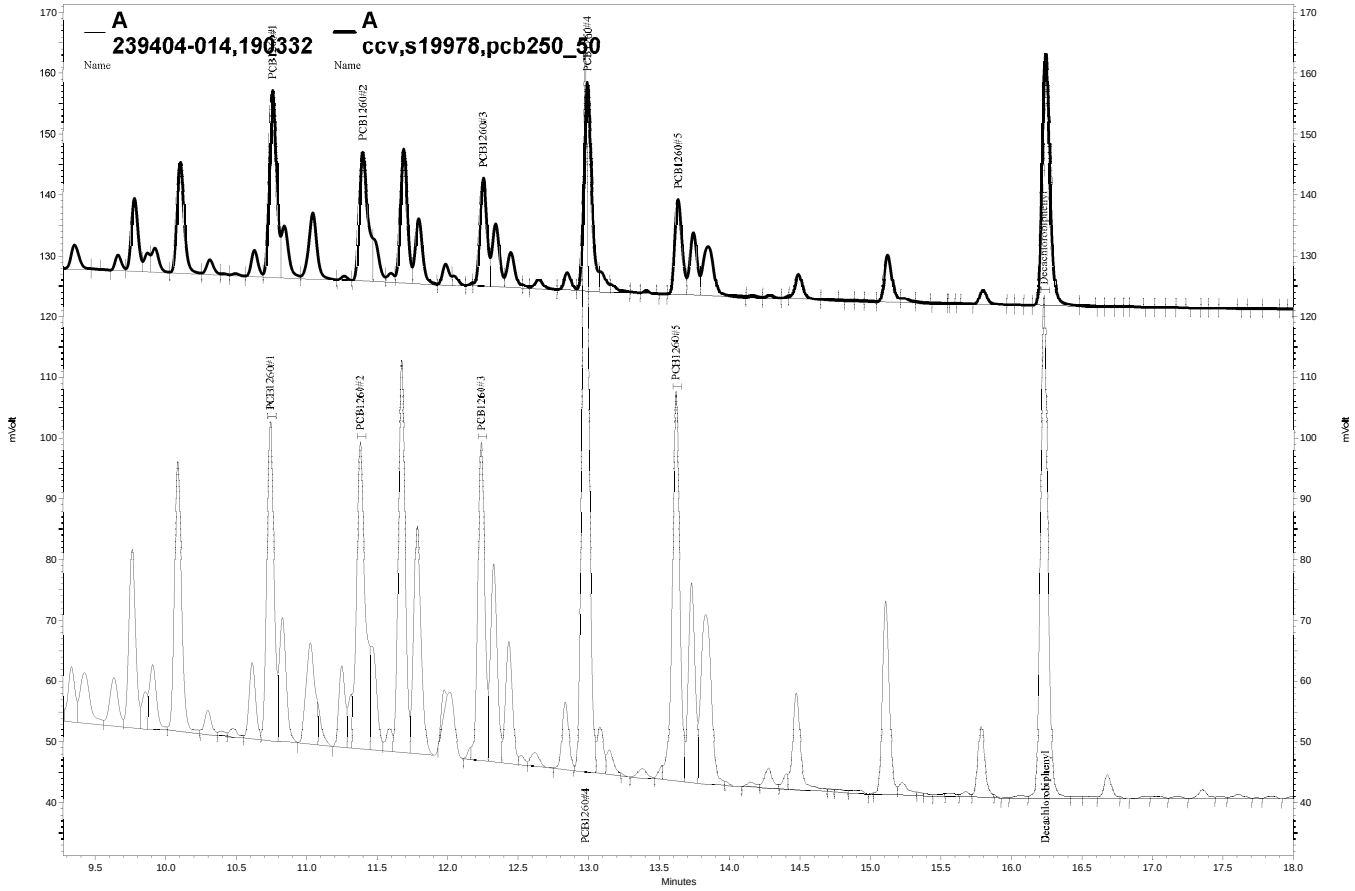
Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	42.06	33.64	35.37	105	56-143	u
Decachlorobiphenyl	A	35.41	33.64	29.77	89	33-135	<c- >c- u

KMH 09/12/12 : Corrected automatically drawn baseline.

KMH 09/12/12 : reporting from ch a for better ccv recovery

Analyst: KMH Date: 09/12/12 Reviewer: EAH Date: 09/12/12

-=low bias <=opening >=closing c=CCV u=use



\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-008, A

\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013, A

Sample Name: **239404-014,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:27:53 PM
Analysis Date: 9/12/2012 11:08:55 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.450	3.460	277865	42.057
PCB1016#1		5.430		0.000 BDL
PCB1016#2		6.017		0.000 BDL
PCB1016#3	6.310	6.307	3819	16.568
PCB1016#4	6.750	6.760	814	0.000
PCB1016#5	7.227	7.250	2400	12.349
PCB1260#1	10.743	10.753	183344	239.017
PCB1260#2	11.380	11.390	213096	377.903
PCB1260#3	12.240	12.247	178895	378.585
PCB1260#4	12.977	12.987	406852	437.728
PCB1260#5	13.620	13.630	233756	597.749
Decachlorobiphenyl	16.230	16.237	302870	35.407

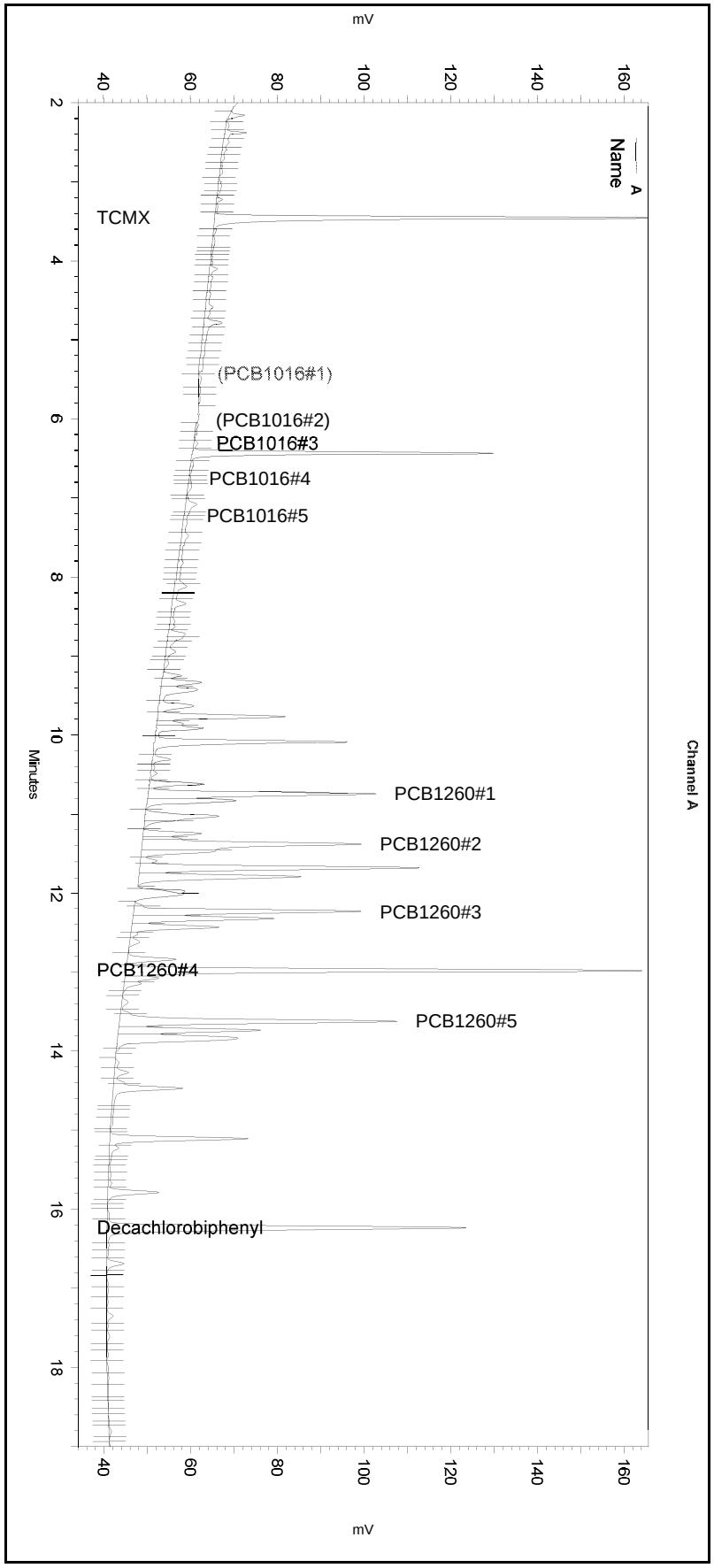
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.830	2.833	880410	50.024
PCB1016#1	4.563	4.580	18047	7.038
PCB1016#2	5.130	5.120	42102	23.268
PCB1016#3	5.320	5.327	6359	8.239
PCB1016#4	5.860	5.863	12794	5.427
PCB1016#5	6.293	6.297	39143	71.447
PCB1260#1	10.383	10.390	838540	457.278
PCB1260#2	10.790	10.793	785781	406.322
PCB1260#3	11.323	11.327	594470	352.301
PCB1260#4	11.980	11.983	1391500	488.280
PCB1260#5	12.643	12.647	770165	556.788
Decachlorobiphenyl	15.623	15.627	903804	43.600

Sample Name: **239404-014,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:27:53 PM
Analysis Date: 9/12/2012 11:08:55 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

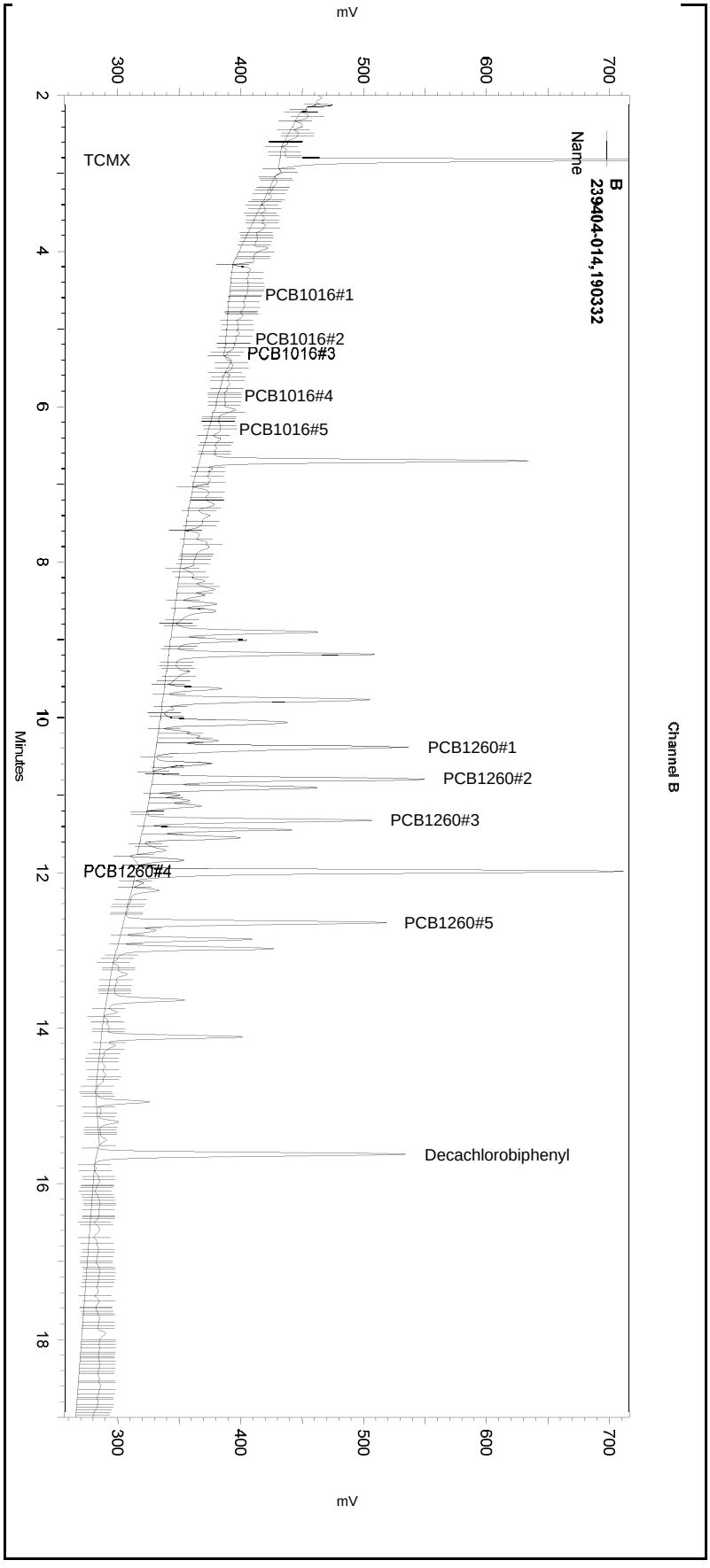
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	11.325	0	0

Sample Name: **239404-014,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:27:53 PM
Analysis Date: 9/12/2012 11:08:55 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	2.986	0	0
Yes	Reset Baseline	10.693	0	0
Yes	Reset Baseline	11.208	0	0
Yes	Reset Baseline	11.755	0	0
Yes	Reset Baseline	11.895	0	0
Yes	Reset Baseline	15.509	0	0

Sample Name: **239404-014,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:27:53 PM
Analysis Date: 9/12/2012 10:31:44 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.450	3.460	277865	42.057
PCB1016#1		5.430		0.000 BDL
PCB1016#2		6.017		0.000 BDL
PCB1016#3	6.310	6.307	3819	16.568
PCB1016#4	6.750	6.760	814	0.000
PCB1016#5	7.227	7.250	2400	12.349
PCB1260#1	10.743	10.753	183344	239.017
PCB1260#2	11.380	11.390	229281	406.605
PCB1260#3	12.240	12.247	178895	378.585
PCB1260#4	12.977	12.987	406852	437.728
PCB1260#5	13.620	13.630	233756	597.749
Decachlorobiphenyl	16.230	16.237	302870	35.407

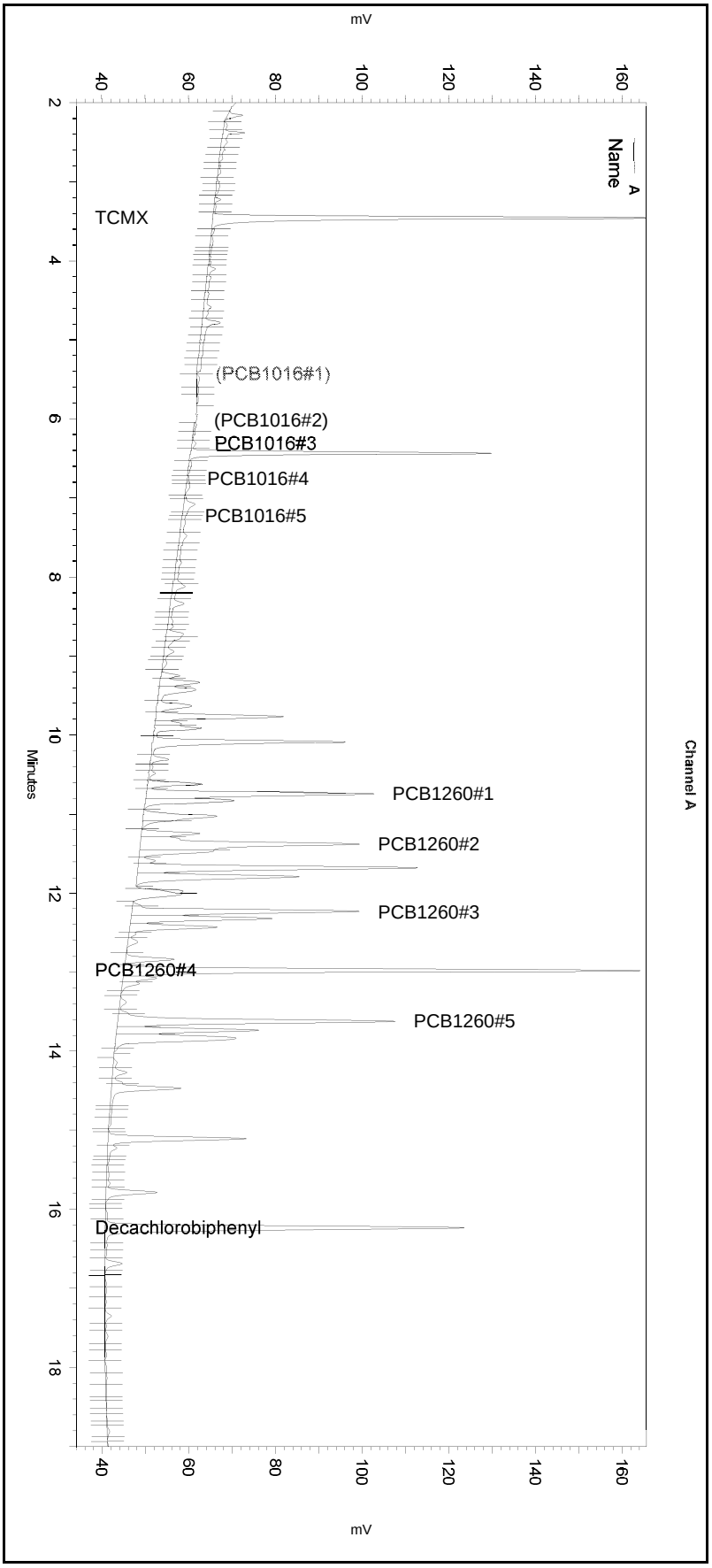
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.830	2.833	919724	52.258
PCB1016#1	4.563	4.580	18047	7.038
PCB1016#2	5.130	5.120	42102	23.268
PCB1016#3	5.320	5.327	6359	8.239
PCB1016#4	5.860	5.863	12794	5.427
PCB1016#5	6.293	6.297	39143	71.447
PCB1260#1	10.383	10.390	908327	499.453
PCB1260#2	10.790	10.793	849074	439.050
PCB1260#3	11.323	11.327	654789	388.048
PCB1260#4	11.980	11.983	1474661	520.410
PCB1260#5	12.643	12.647	804105	582.747
Decachlorobiphenyl	15.623	15.627	956967	46.654

Sample Name: **239404-014,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:27:53 PM
Analysis Date: 9/12/2012 10:31:44 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

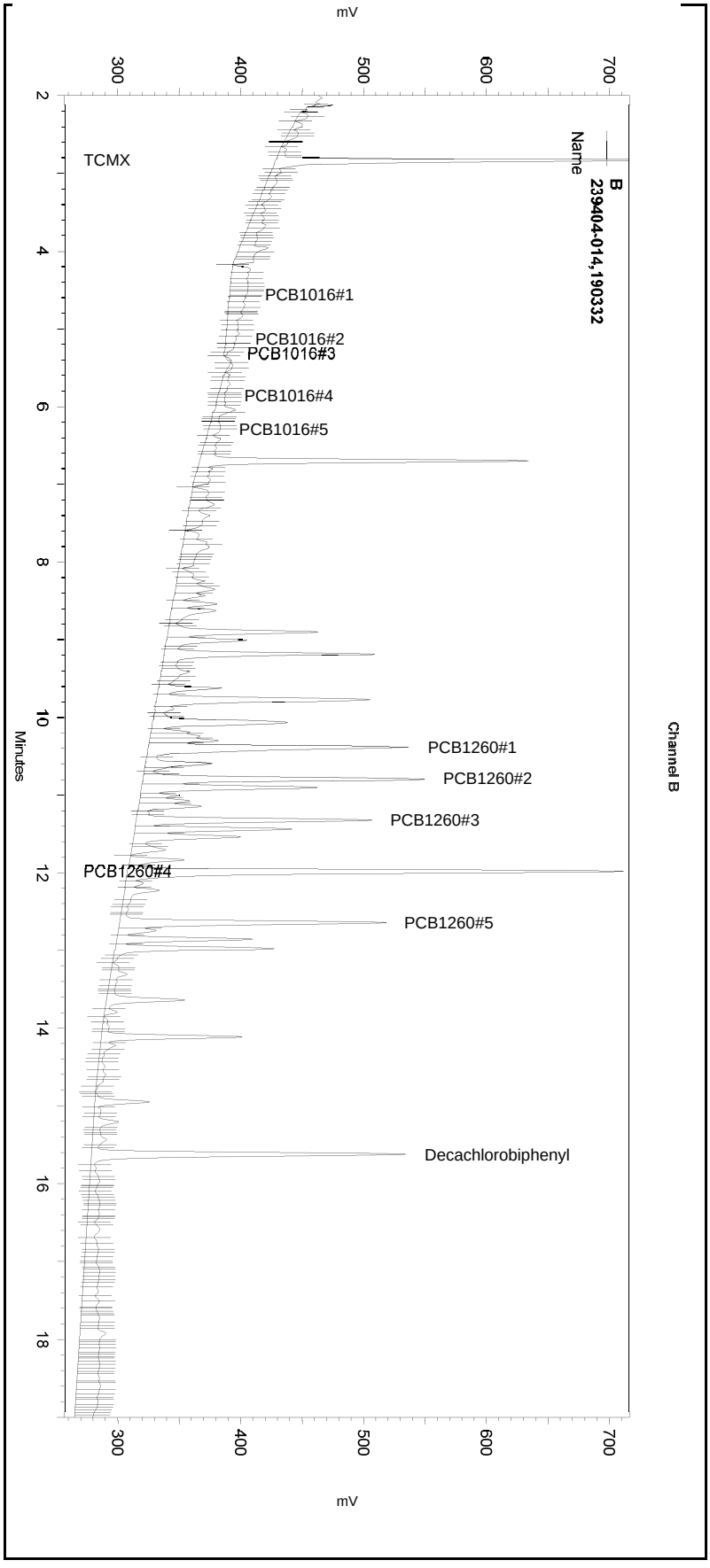
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **239404-014,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 2:27:53 PM
Analysis Date: 9/12/2012 10:31:44 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

QC Raw Data

CURTIS & TOMPKINS BLANK USER REPORT FOR 239404 PCBS Soil
EPA 8082A

Inst : GC06 Lab ID : QC655478
Seqnum : 202366165028.7 Matrix : Soil
File : 254_028 Batch : 190332 Time : 10-SEP-2012 23:17
Cal : 202360551001 Caldate : 06-SEP-2012
IDF : 1.0 Raw Units : pg/uL Units : ug/Kg

29.64 g --> 25.0 ml = 0.8435 ml/g PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Flags
Aroclor-1254	A		ND			12	
Aroclor-1260	A	0.5808	ND	ND	-210%	12	<c+ u

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	43.37	33.74	36.58	108	56-143	u
Decachlorobiphenyl	A	42.35	33.74	35.72	106	33-135	u

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12

+=high bias <=opening c=CCV u=use

Sample Name: **mb,qc655478,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-028**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 28 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 11:17:56 PM
Analysis Date: 9/11/2012 11:10:19 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.775	286563	43.373
PCB1016#1	7.000	7.002	1779	13.002
PCB1016#2	7.640	7.637	2296	5.338
PCB1016#3	7.970	7.950	6859	29.756
PCB1016#4	8.440	8.420	4368	6.609
PCB1016#5	8.923	8.947	2165	11.140
PCB1260#1	12.537	12.555	843	1.099
PCB1260#2	13.233	13.214	642	1.139
PCB1260#3		14.077		0.000 BDL
PCB1260#4	14.800	14.820	579	0.623
PCB1260#5	15.477	15.482	17	0.043
Decachlorobiphenyl	18.093	18.102	362226	42.346

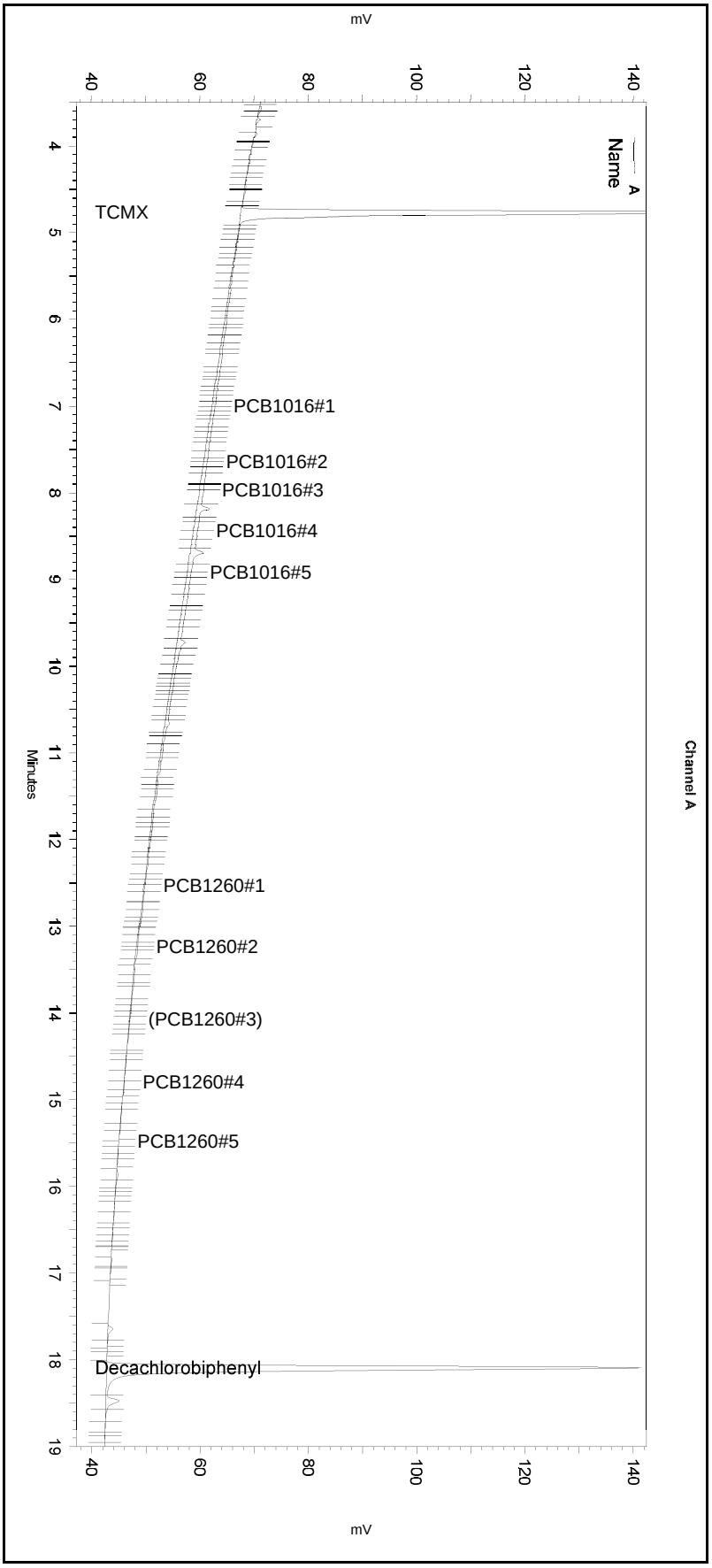
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.962	886752	50.384
PCB1016#1	5.953	5.979	552	0.000
PCB1016#2	6.583	6.574	2838	1.568
PCB1016#3	6.793	6.799	1094	1.417
PCB1016#4	7.360	7.369	602	0.000
PCB1016#5		7.839		0.000 BDL
PCB1260#1	12.057	12.078	19974	0.000
PCB1260#2	12.467	12.475	5147	2.661
PCB1260#3	13.040	13.032	2392	1.418
PCB1260#4	13.660	13.688	160	0.000
PCB1260#5	14.347	14.370	202	0.000
Decachlorobiphenyl	17.377	17.378	1062583	52.817

Sample Name: **mb,qc655478,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-028**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 28 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 11:17:56 PM
Analysis Date: 9/11/2012 11:10:19 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

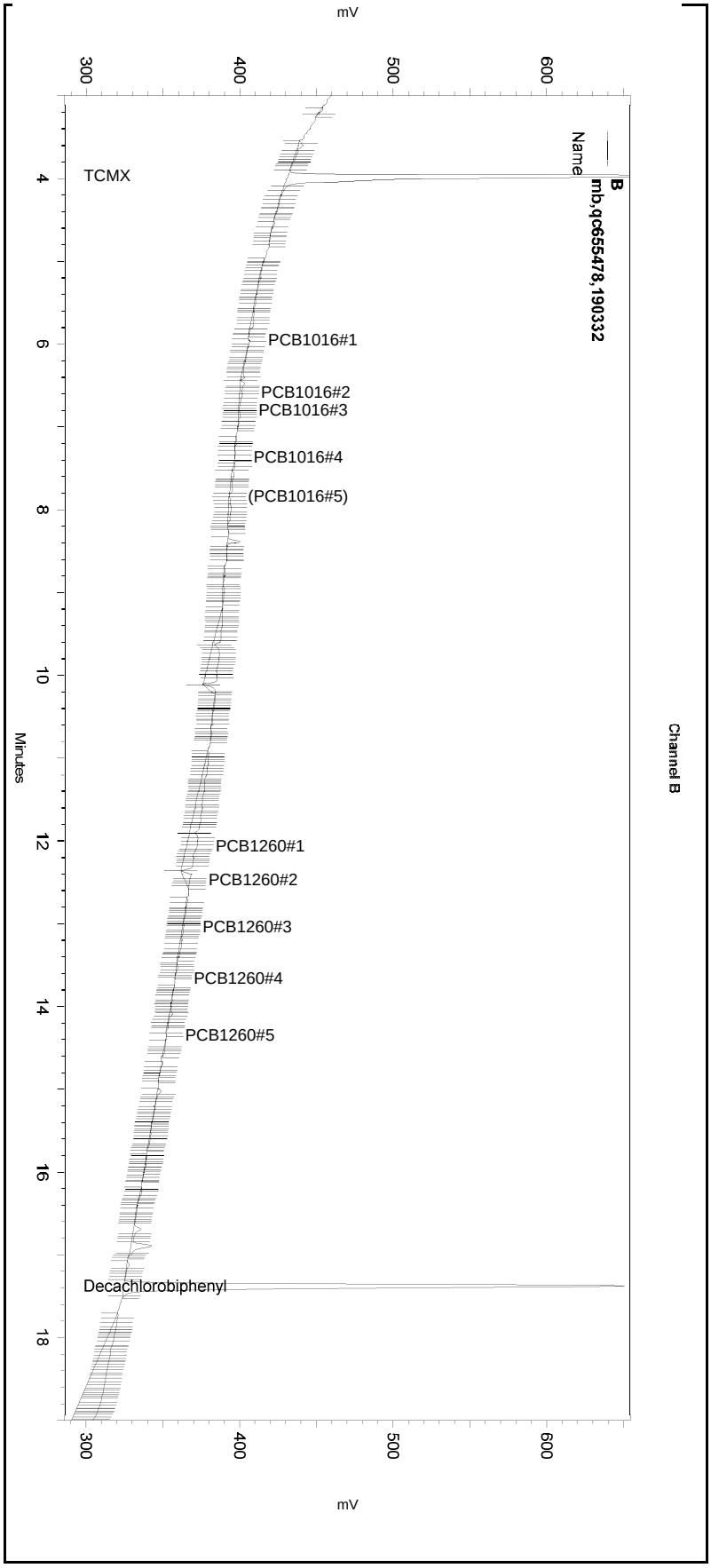
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-028

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **mb,qc655478,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-028**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 28 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 11:17:56 PM
Analysis Date: 9/11/2012 11:10:19 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-028

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	17.523	0	0

Sample Name: **mb,qc655478,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-028**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 28 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 11:17:56 PM
Analysis Date: 9/11/2012 10:36:52 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.775	286563	43.373
PCB1016#1	7.000	7.002	1779	13.002
PCB1016#2	7.640	7.637	2296	5.338
PCB1016#3	7.970	7.950	6859	29.756
PCB1016#4	8.440	8.420	4368	6.609
PCB1016#5	8.923	8.947	2165	11.140
PCB1260#1	12.537	12.555	843	1.099
PCB1260#2	13.233	13.214	642	1.139
PCB1260#3		14.077		0.000 BDL
PCB1260#4	14.800	14.820	579	0.623
PCB1260#5	15.477	15.482	17	0.043
Decachlorobiphenyl	18.093	18.102	362226	42.346

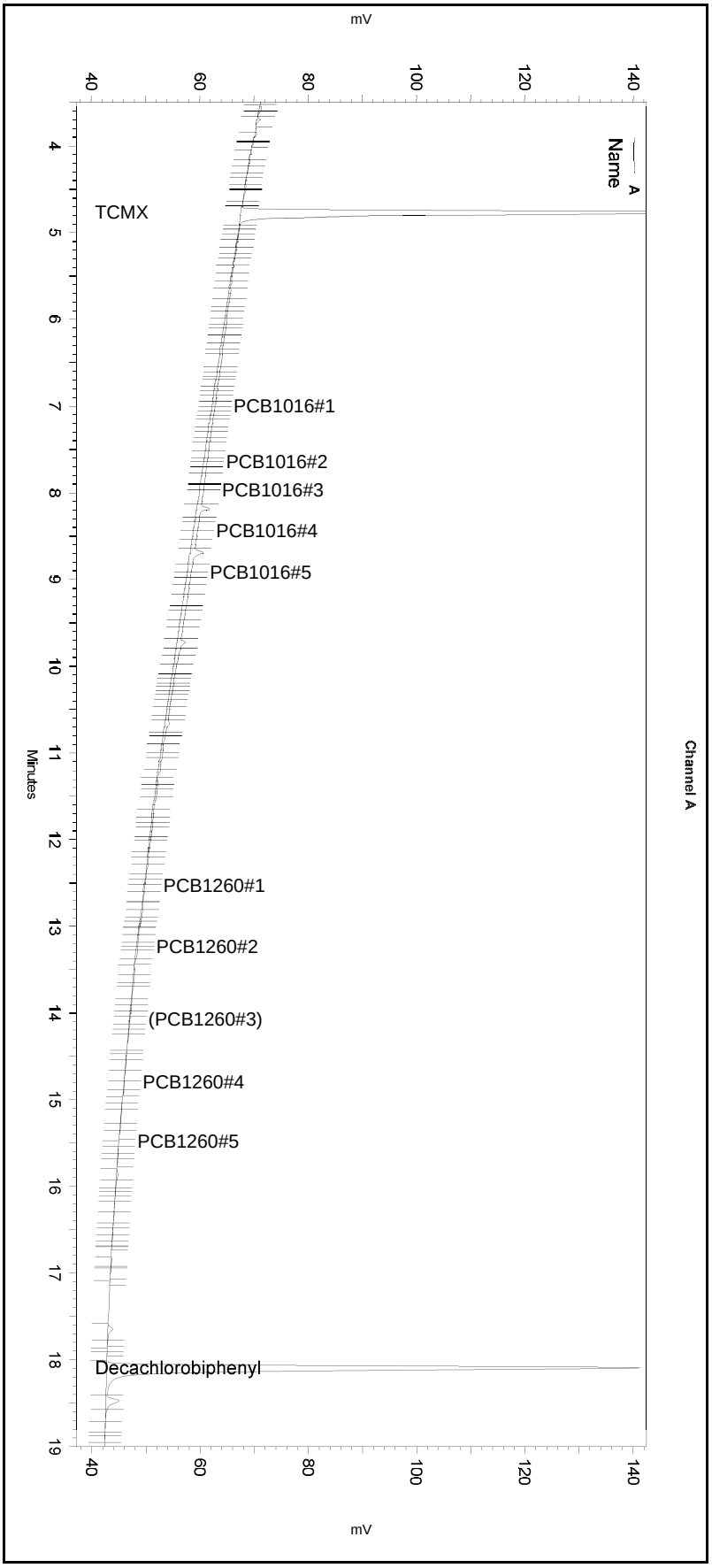
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.962	886752	50.384
PCB1016#1	5.953	5.979	552	0.000
PCB1016#2	6.583	6.574	2838	1.568
PCB1016#3	6.793	6.799	1094	1.417
PCB1016#4	7.360	7.369	602	0.000
PCB1016#5		7.839		0.000 BDL
PCB1260#1	12.057	12.078	19974	0.000
PCB1260#2	12.467	12.475	5147	2.661
PCB1260#3	13.040	13.032	2392	1.418
PCB1260#4	13.660	13.688	160	0.000
PCB1260#5	14.347	14.370	202	0.000
Decachlorobiphenyl	17.377	17.378	1196882	60.848

Sample Name: **mb,qc655478,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-028**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 28 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 11:17:56 PM
Analysis Date: 9/11/2012 10:36:52 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

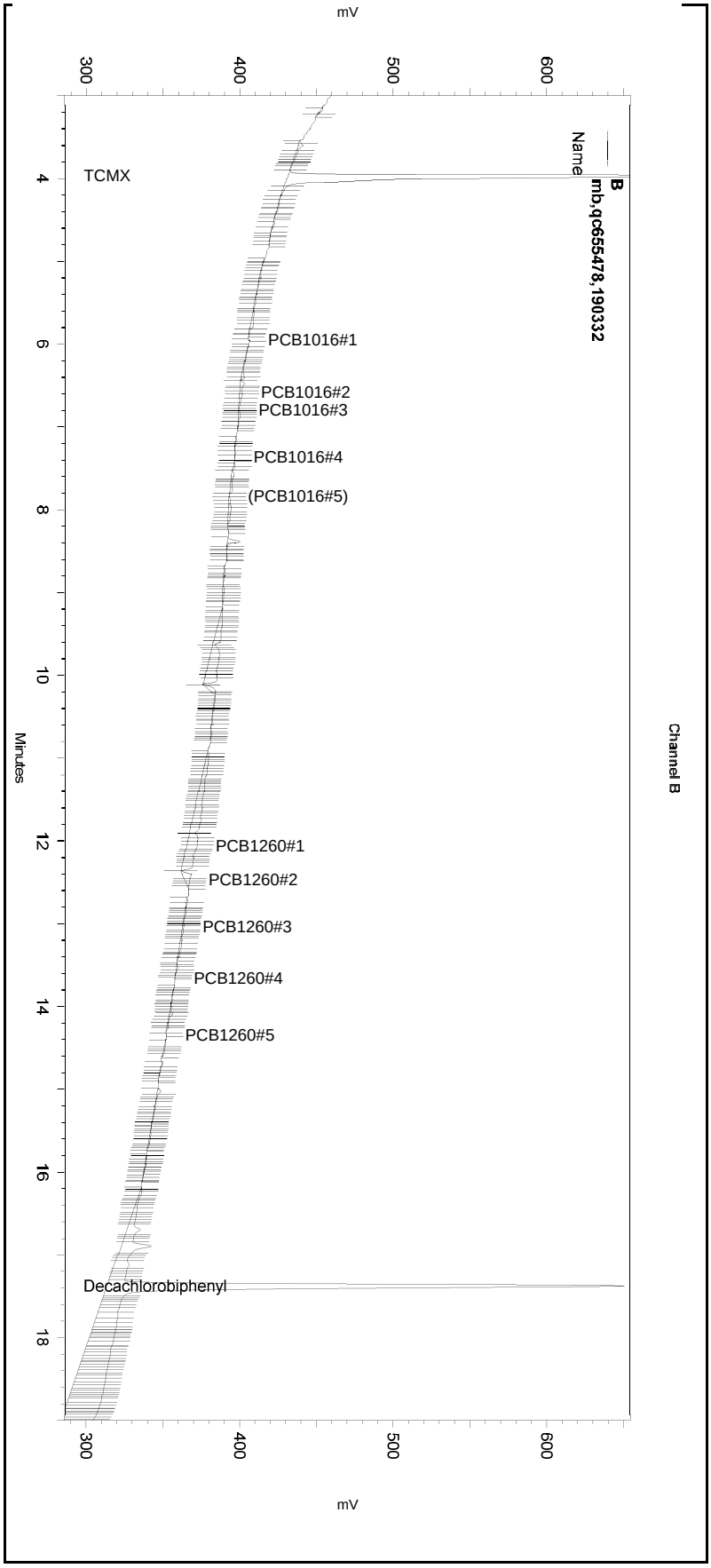
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-028

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **mb,qc655478,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-028**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 28 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 11:17:56 PM
Analysis Date: 9/11/2012 10:36:52 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-028

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 PCBS Soil
EPA 8082A

Type : LCS
Inst : GC16
Seqnum : 232369045004.3
File : 256_004
IDF : 1.0
Lab ID : QC655479
Matrix : Soil
Batch : 190332
Time : 12-SEP-2012 10:56
Cal : 232358946001
Units : mg/Kg

LCS: 29.62 g --> 25.0 ml = 0.844 ml/g PDF

Analyte	Spiked	Raw	LCS	Ch	%Rec	Limits	Flags
Aroclor-1260	0.1688	165.9	0.1400	B	83	56-141	u
Aroclor-1260 Peak # 1		201.8	0.1703	B			
Aroclor-1260 Peak # 2		163.3	0.1378	B			
Aroclor-1260 Peak # 3		160.4	0.1354	B			
Aroclor-1260 Peak # 4		149.4	0.1261	B			
Aroclor-1260 Peak # 5		154.7	0.1306	B			
TCMX	0.03376	42.22	0.03563	B	106	56-143	u
Decachlorobiphenyl	0.03376	49.81	0.04204	A	125	33-135	u

KMH 09/12/12 : Corrected automatically drawn baseline. [general version]

KMH 09/12/12 : rt shift on ch a, reporting from both channels for better ccv recovery [general version]

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12

u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-004**
Sample Name: **qc655479,190332,lcs**
Instrument: GC16 Vial: 4 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 10:56:23 AM
Analysis Date: 9/12/2012 11:50:07 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.133	0.000	1770021	138.161
PCB1016#1	6.227	6.197	147086	393.133
PCB1016#2	6.840	6.810	496240	474.014
PCB1016#3	7.143	0.000	313890	485.260
PCB1016#4	7.600	7.570	167377	531.095
PCB1016#5	8.110	0.000	246372	450.416
PCB1260#1	11.667	11.640	684334	463.693
PCB1260#2	12.313	12.290	617903	353.230
PCB1260#3	13.173	13.150	352267	384.044
PCB1260#4	13.917	13.897	715943	341.679
PCB1260#5	14.567	14.550	364897	260.533
Decachlorobiphenyl	17.180	17.167	588241	49.807

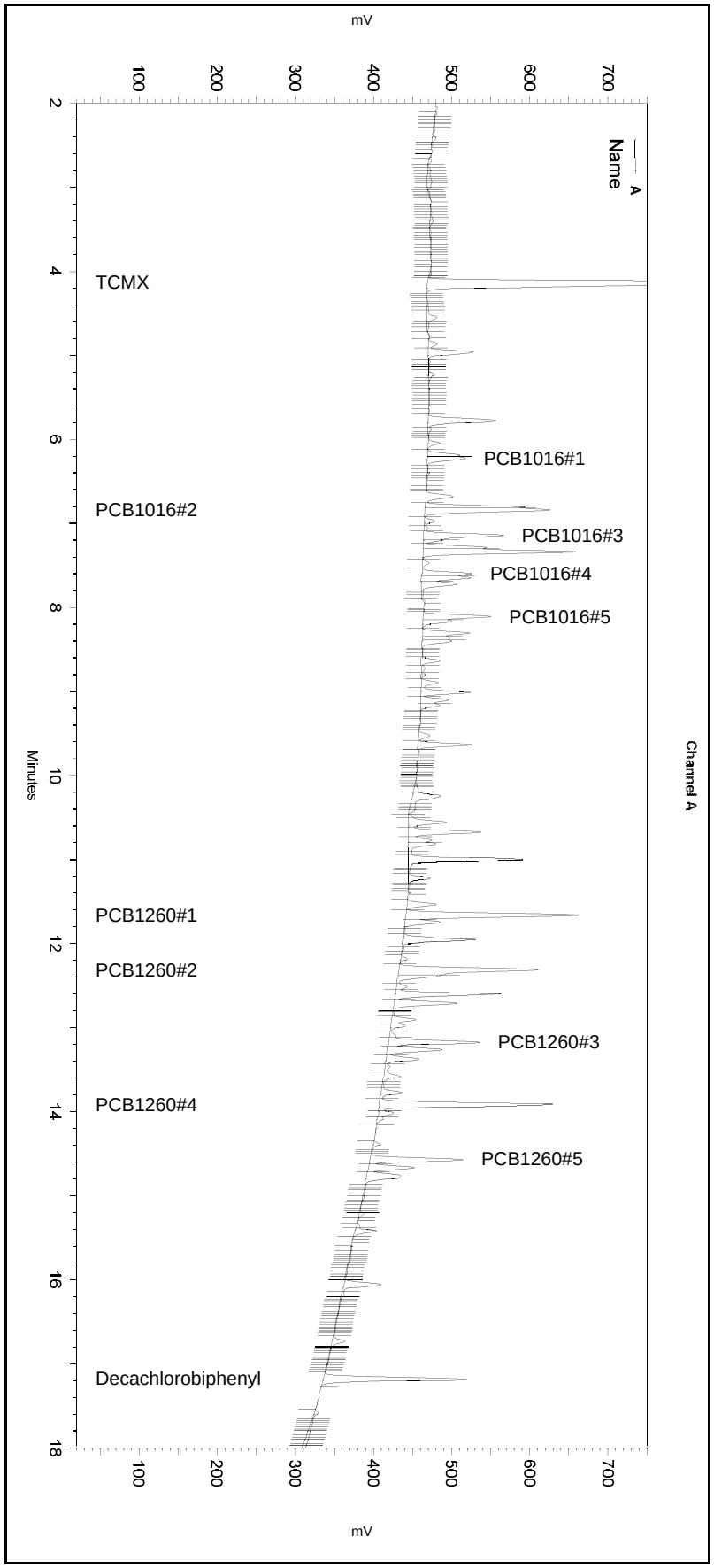
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.347	3.337	295827	42.217
PCB1016#1	5.217	5.207	41901	197.386
PCB1016#2	5.780	5.770	111648	210.462
PCB1016#3	5.997	5.987	50716	206.694
PCB1016#4	6.550	6.537	34303	204.526
PCB1016#5	7.000	6.990	39628	206.373
PCB1260#1	11.163	11.153	118116	201.796
PCB1260#2	11.567	11.560	69508	163.309
PCB1260#3	12.107	12.100	60462	160.406
PCB1260#4	12.763	12.757	132643	149.413
PCB1260#5	13.437	13.430	61572	154.714
Decachlorobiphenyl	16.430	16.423	206763	22.836

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-004**
Sample Name: **qc655479,190332,lcs**
Instrument: GC16 Vial: 4 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 10:56:23 AM
Analysis Date: 9/12/2012 11:50:07 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	17.302	0	0

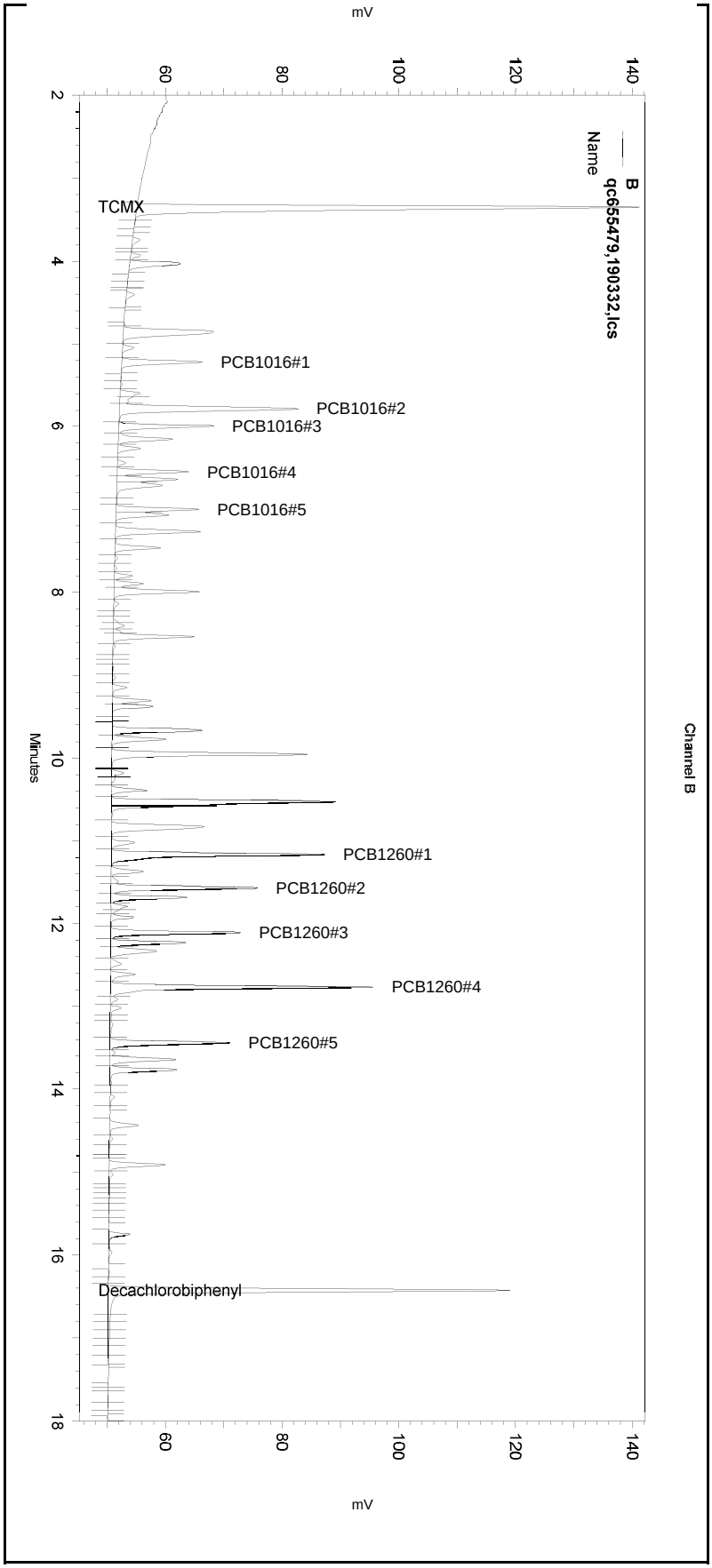
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\256-004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reassign Peak	4.099	4.156	0
Yes	Reassign Peak	6.168	6.271	0
Yes	Reassign Peak	6.806	6.863	0
Yes	Reassign Peak	7.103	7.148	0
Yes	Reset Baseline	7.946	0	0
Yes	Reassign Peak	8.072	8.1	0
Yes	Reset Baseline	11.421	0	0
Yes	Reset Baseline	14.189	0	0
Yes	Reset Baseline	17.091	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-004**
Sample Name: **qc655479,190332,lcs**
Instrument: GC16 Vial: 4 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 10:56:23 AM
Analysis Date: 9/12/2012 11:50:07 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\256-004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-004**
Sample Name: **qc655479,190332,lcs**
Instrument: GC16 Vial: 4 Operator: lims2k3\pest3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 10:56:23 AM
Analysis Date: 9/12/2012 11:20:20 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX		4.103		0.000 BDL
PCB1016#1	6.183	6.197	97345	260.185
PCB1016#2	6.800	6.810	282817	270.150
PCB1016#3		7.110		0.000 BDL
PCB1016#4	7.600	7.570	167377	531.095
PCB1016#5		8.077		0.000 BDL
PCB1260#1	11.667	11.640	707641	484.659
PCB1260#2	12.313	12.290	618818	353.753
PCB1260#3	13.173	13.150	363542	397.581
PCB1260#4	13.917	13.897	743883	356.129
PCB1260#5	14.567	14.550	388154	277.138
Decachlorobiphenyl	17.180	17.167	599000	50.911

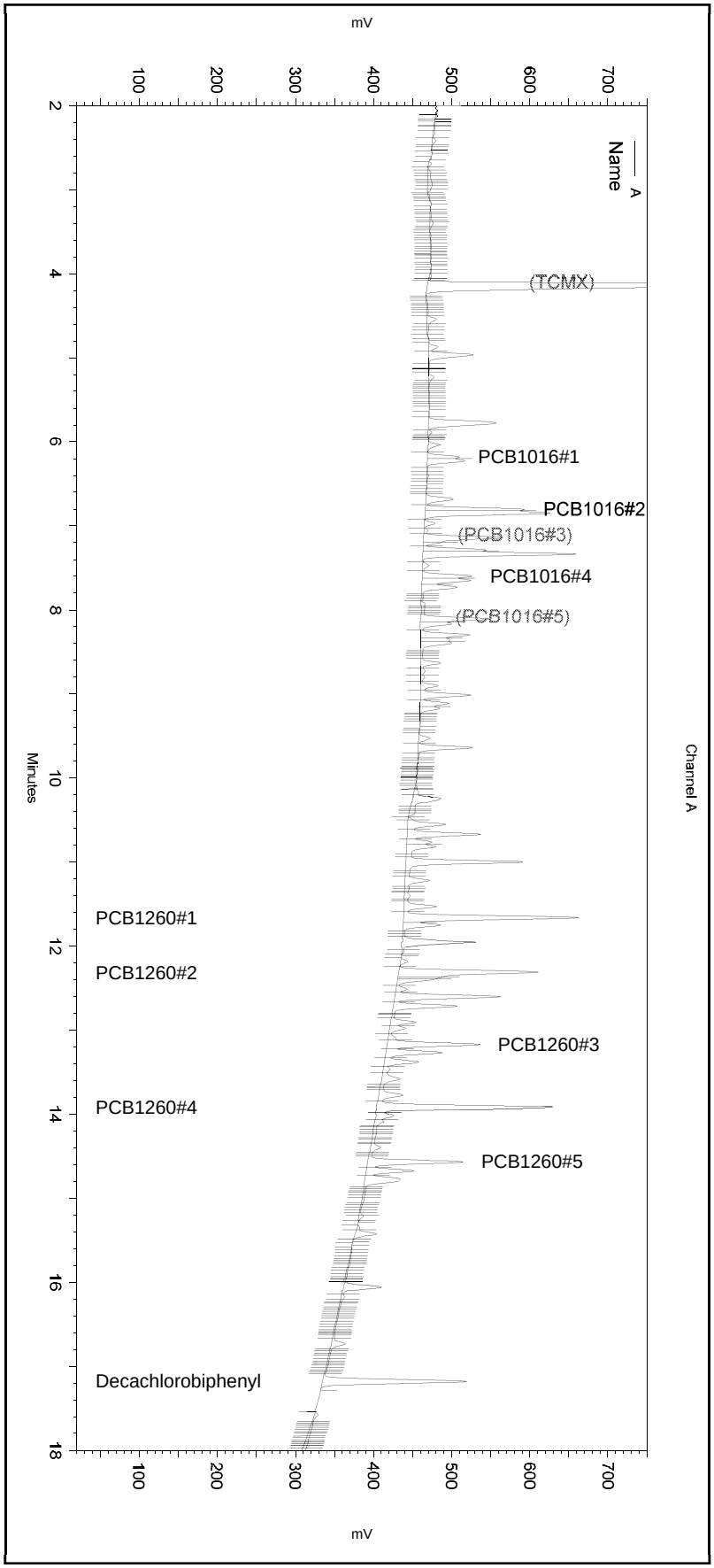
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.347	3.337	295827	42.217
PCB1016#1	5.217	5.207	41901	197.386
PCB1016#2	5.780	5.770	111648	210.462
PCB1016#3	5.997	5.987	50716	206.694
PCB1016#4	6.550	6.537	34303	204.526
PCB1016#5	7.000	6.990	39628	206.373
PCB1260#1	11.163	11.153	118116	201.796
PCB1260#2	11.567	11.560	69508	163.309
PCB1260#3	12.107	12.100	60462	160.406
PCB1260#4	12.763	12.757	132643	149.413
PCB1260#5	13.437	13.430	61572	154.714
Decachlorobiphenyl	16.430	16.423	206763	22.836

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-004**
Sample Name: **qc655479,190332,lcs**
Instrument: GC16 Vial: 4 Operator: lims2k3\pest3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 10:56:23 AM
Analysis Date: 9/12/2012 11:20:20 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	17.302	0	0

Manual Integration Fixes
==========

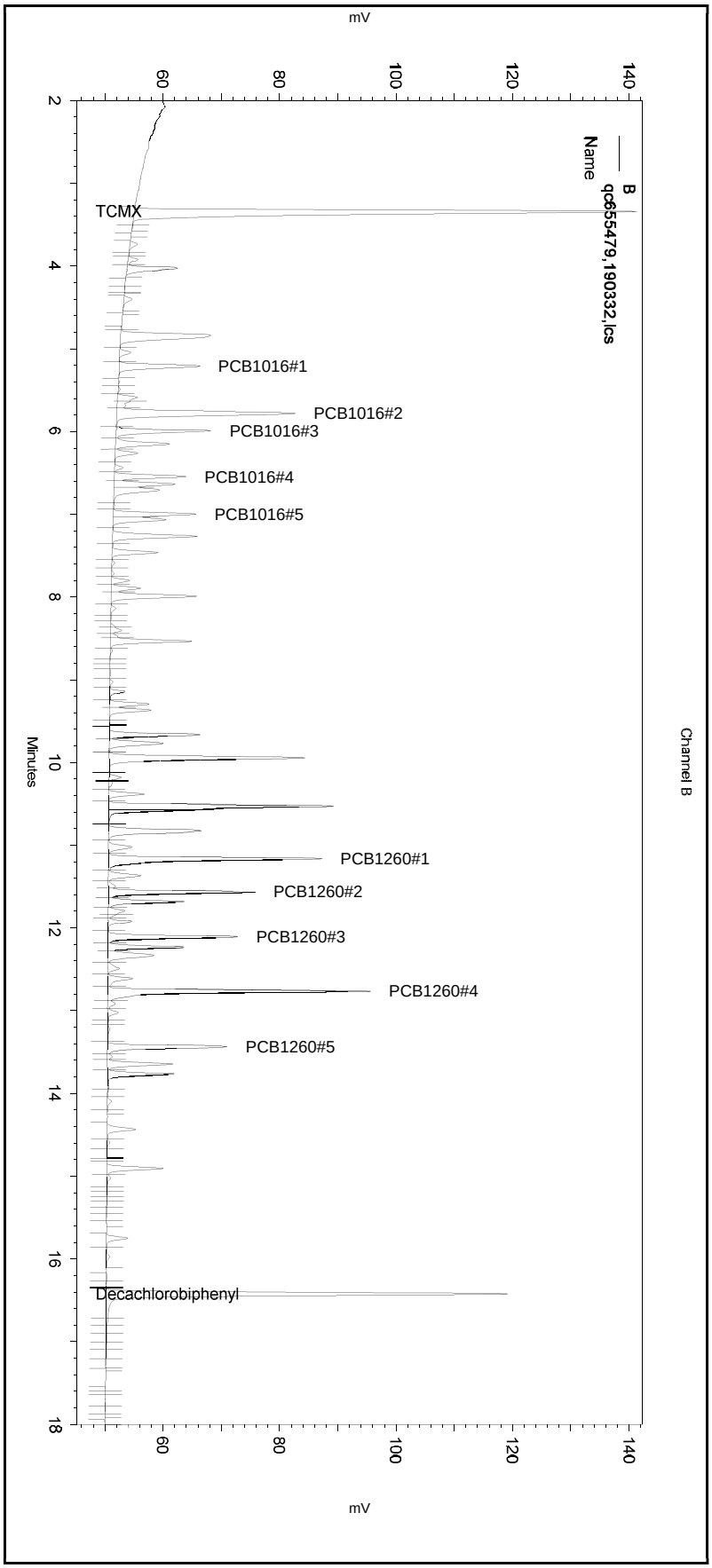
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\256-004_5DEA.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-004**
Sample Name: **qc655479,190332,lcs**
Instrument: GC16 Vial: 4 Operator: lims2k3\pest3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 10:56:23 AM
Analysis Date: 9/12/2012 11:20:20 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\256-004_5DEA.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 PCBS Soil
EPA 8082A

Type : MSS	Type : MS	Type : MSD
Inst : GC06	Inst : GC06	Inst : GC06
Seqnum : 202367629010	Seqnum : 202367629011.2	Seqnum : 202367629012.2
File : 255_010	File : 255_011	File : 255_012
IDF : 1.0	IDF : 1.0	IDF : 1.0
Lab ID : 239410-003	Lab ID : QC655480	Lab ID : QC655481
Matrix : Soil	Matrix : Soil	Matrix : Soil
Batch : 190332	Batch : 190332	Batch : 190332
Time : 11-SEP-2012 15:23	Time : 11-SEP-2012 15:57	Time : 11-SEP-2012 16:25
Cal : 202360551001	Cal : 202360551001	Cal : 202360551001
Units : ug/Kg		

MSS: 30.32 g --> 25.0 ml = 0.8245 ml/g PDF
MS: 30.36 g --> 25.0 ml = 0.8235 ml/g PDF
MSD: 29.74 g --> 25.0 ml = 0.8406 ml/g PDF

Analyte	MSS	Ch	Spiked	MS Raw	MS Result	Ch	%Rec	Spiked	MSD Raw	MSD Result	Ch	%Rec	Limits	RPD	Lim	Flags
Aroclor-1260	122.4	A	164.7	341.2	281.0	A	96	168.1	342.0	287.5	A	98	35-160	1	42	u
Aroclor-1260 Peak # 1				318.8	262.5	A			307.9	258.8	A					
Aroclor-1260 Peak # 2				420.4	346.2	A			418.0	351.4	A					
Aroclor-1260 Peak # 3				289.2	238.2	A			282.2	237.2	A					
Aroclor-1260 Peak # 4				308.5	254.1	A			314.2	264.1	A					
Aroclor-1260 Peak # 5				369.2	304.0	A			387.6	325.8	A					
TCMX			32.94	41.36	34.06	A	103	33.62	39.69	33.37	A	99	56-143			u
Decachlorobiphenyl			32.94	27.91	22.98	A	70	33.62	28.48	23.94	A	71	33-135			<c- >c- u

KMH 09/12/12 : Corrected automatically drawn baseline. [general version]

KMH 09/12/12 [Aroclor-1016 Peak # 1 A]: Picked or reassigned peak for spike. [general version]

KMH 09/12/12 [Aroclor-1016 Peak # 2 A]: Picked or reassigned peak for spike. [general version]

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12

-=low bias <=opening >=closing c=CCV u=use

Sample Name: **ms,qc655480,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 3:57:38 PM
Analysis Date: 9/12/2012 11:16:55 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.480	3.460	273285	41.363
PCB1016#1	5.450	5.430	22062	161.236
PCB1016#2	6.037	6.017	94566	219.853
PCB1016#3	6.330	6.307	48711	211.323
PCB1016#4	6.780	6.760	30314	247.697
PCB1016#5	7.270	7.250	50069	257.636
PCB1260#1	10.767	10.753	244550	318.808
PCB1260#2	11.407	11.390	237044	420.372
PCB1260#3	12.260	12.247	136668	289.223
PCB1260#4	12.997	12.987	286774	308.537
PCB1260#5	13.640	13.630	144393	369.234
Decachlorobiphenyl	16.247	16.237	238729	27.908

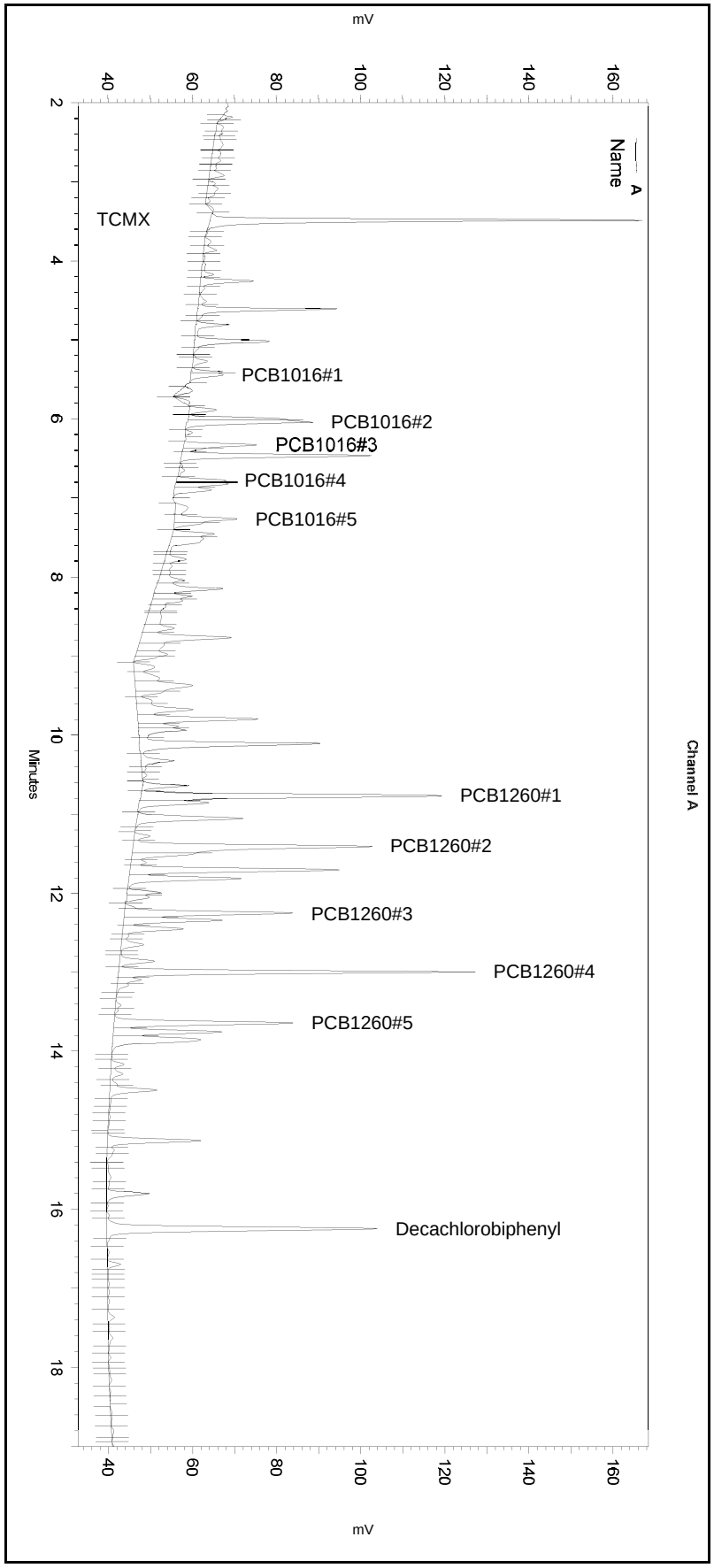
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.833	2.833	765839	43.514
PCB1016#1	4.577	4.580	91564	169.484
PCB1016#2	5.120	5.120	402008	222.174
PCB1016#3	5.330	5.327	61685	79.925
PCB1016#4	5.863	5.863	75295	178.788
PCB1016#5	6.297	6.297	110447	201.596
PCB1260#1	10.393	10.390	774292	418.451
PCB1260#2	10.800	10.793	492155	254.490
PCB1260#3	11.333	11.327	353637	209.576
PCB1260#4	11.990	11.983	928038	309.214
PCB1260#5	12.653	12.647	487935	340.924
Decachlorobiphenyl	15.633	15.627	642820	29.039

Sample Name: **ms,qc655480,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 3:57:38 PM
Analysis Date: 9/12/2012 11:16:55 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

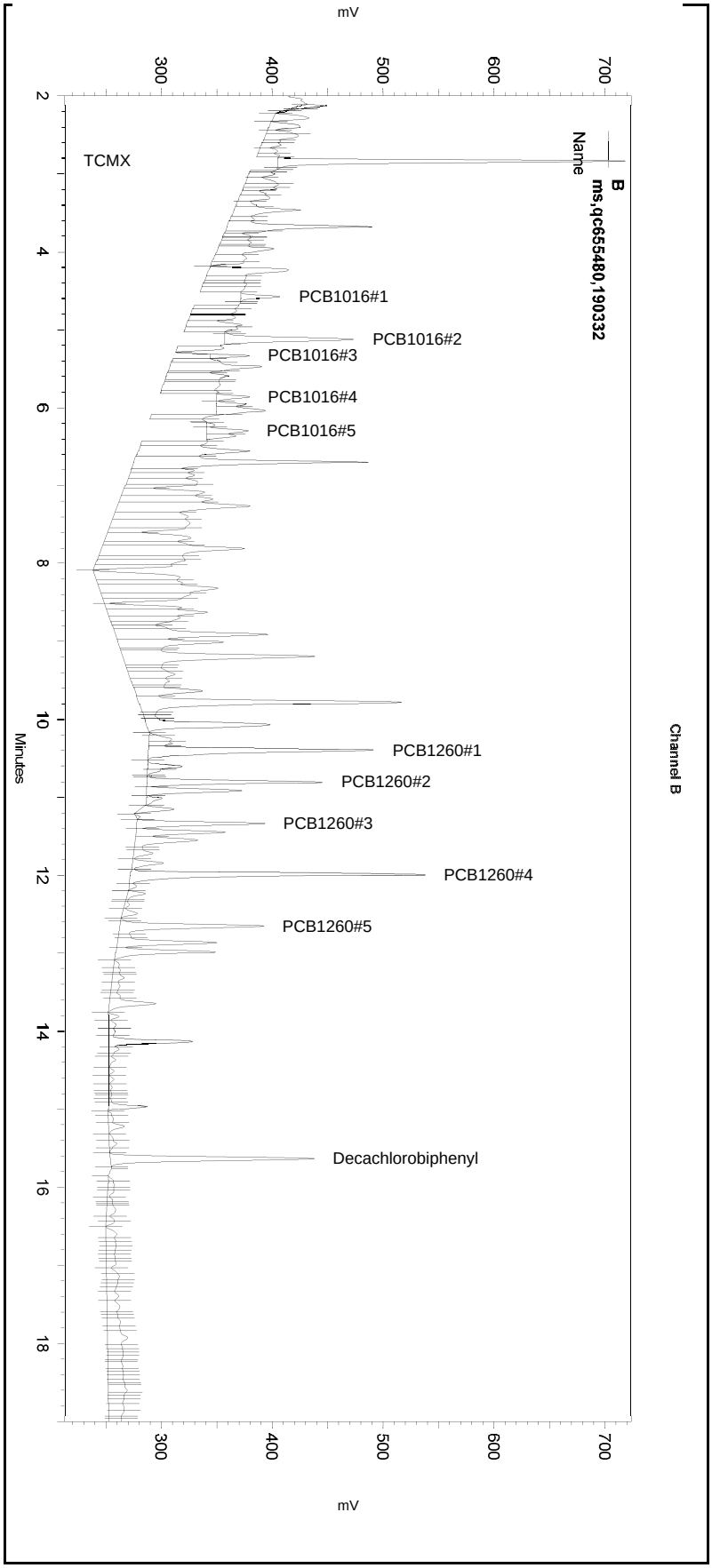
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.381	0	0
Yes	Reassign Peak	5.415	5.483	0
Yes	Reset Baseline	5.541	0	0
Yes	Reset Baseline	5.835	0	0
Yes	Reassign Peak	5.983	6.044	0
Yes	Split Peak	6.01	0	0
Yes	Split Peak	6.366	0	0
Yes	Reset Baseline	7.05	0	0
Yes	Reset Baseline	7.395	0	0
Yes	Reset Baseline	10.569	0	0

Sample Name: **ms,qc655480,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 3:57:38 PM
Analysis Date: 9/12/2012 11:16:55 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	2.776	2.96	0
Yes	Horizontal Baseline	4.526	4.673	0
Yes	Horizontal Baseline	5.011	5.232	0
Yes	Backward Horizontal Baseline	5.327	5.369	0
Yes	Horizontal Baseline	5.817	6.081	0
Yes	Backward Horizontal Baseline	6.181	6.408	0
Yes	Reset Baseline	10.166	0	0
Yes	Reset Baseline	11.091	0	0
Yes	Reset Baseline	11.101	0	0
Yes	Reset Baseline	11.272	0	0
Yes	Reset Baseline	12.182	0	0
Yes	Reset Baseline	15.763	0	0

Sample Name: **ms,qc655480,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 3:57:38 PM
Analysis Date: 9/12/2012 10:31:59 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.480	3.460	305254	46.202
PCB1016#1	5.410	5.430	31135	227.545
PCB1016#2	6.037	6.017	154160	358.402
PCB1016#3	6.330	6.307	59451	257.916
PCB1016#4	6.780	6.760	31556	259.238
PCB1016#5	7.270	7.250	61333	315.596
PCB1260#1	10.767	10.753	271770	354.293
PCB1260#2	11.407	11.390	259823	460.768
PCB1260#3	12.260	12.247	145356	307.609
PCB1260#4	12.997	12.987	291944	314.100
PCB1260#5	13.640	13.630	146310	374.136
Decachlorobiphenyl	16.247	16.237	238729	27.908

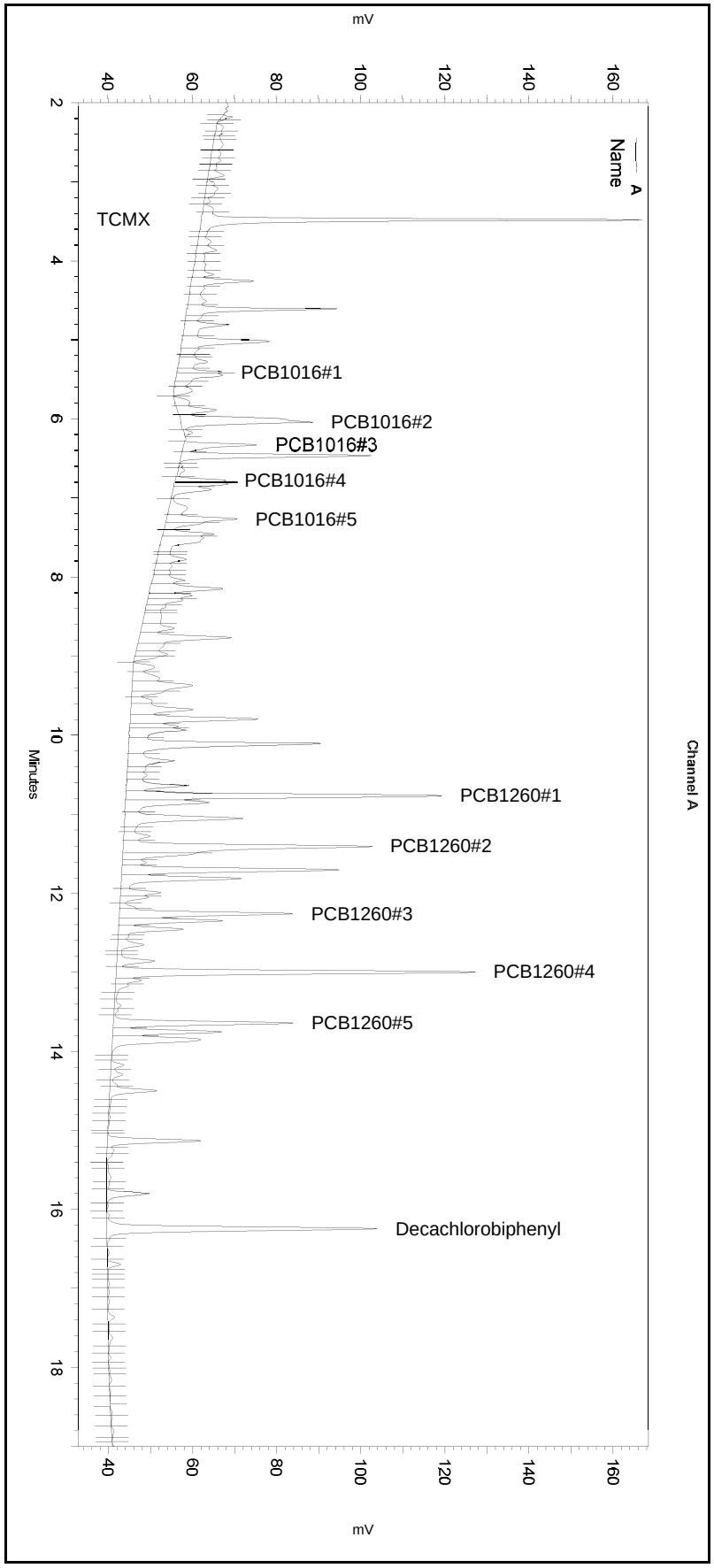
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.833	2.833	935325	53.144
PCB1016#1	4.577	4.580	377027	800.256
PCB1016#2	5.120	5.120	767785	424.324
PCB1016#3	5.330	5.327	183292	237.490
PCB1016#4	5.863	5.863	356293	958.200
PCB1016#5	6.297	6.297	384273	701.405
PCB1260#1	10.393	10.390	1309723	742.030
PCB1260#2	10.800	10.793	828211	428.262
PCB1260#3	11.333	11.327	613702	363.698
PCB1260#4	11.990	11.983	1240682	430.009
PCB1260#5	12.653	12.647	665331	476.606
Decachlorobiphenyl	15.633	15.627	708216	32.623

Sample Name: **ms,qc655480,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 3:57:38 PM
Analysis Date: 9/12/2012 10:31:59 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

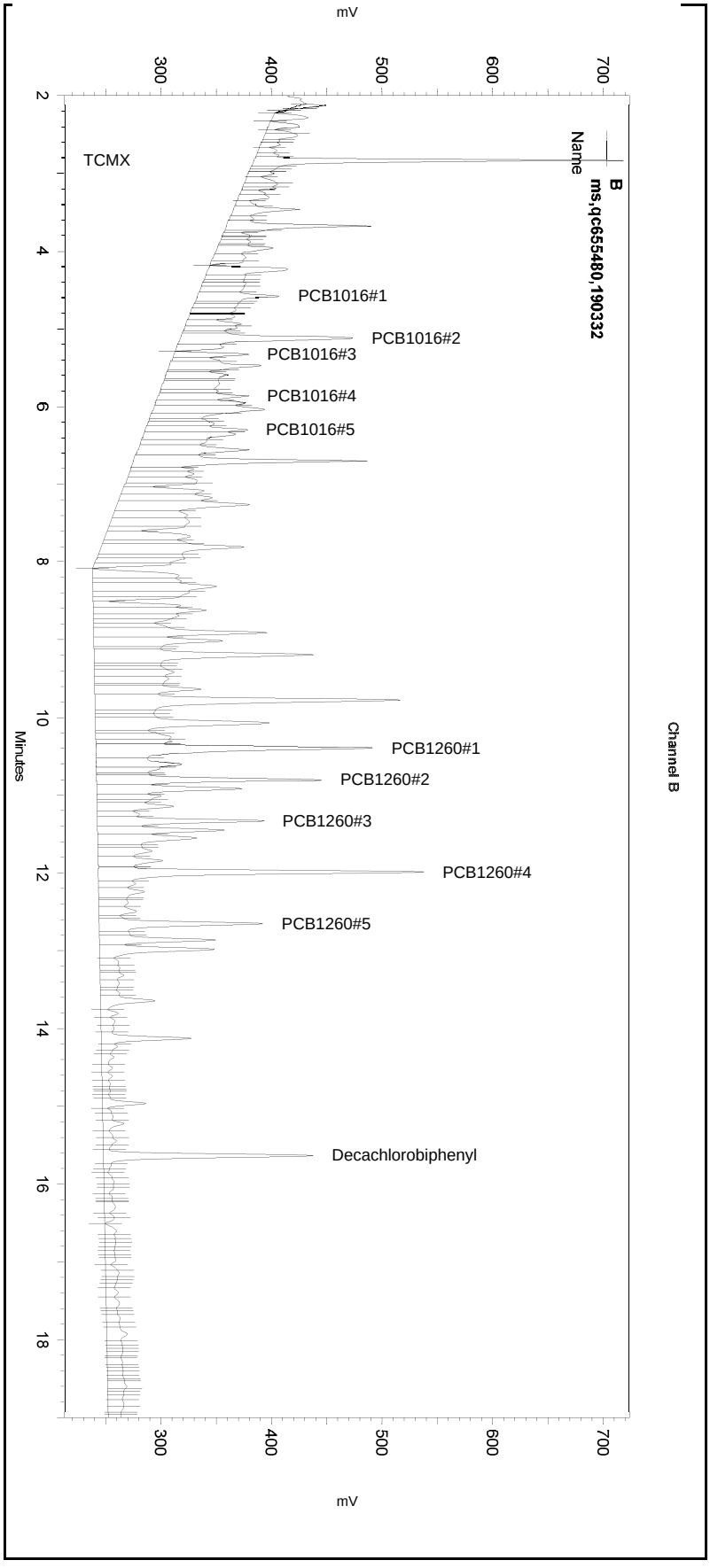
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Baseline	3.399	3.62	0
No	Manual Baseline	5.347	5.572	0
No	Reassign Peak	5.411	5.463	0
No	Reset Baseline	5.814	0	0
No	Reassign Peak	5.987	6.034	0
No	Split Peak	6.01	0	0
No	Reset Baseline	7.39	0	0
No	Reset Baseline	10.463	0	0

Sample Name: **ms,qc655480,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 3:57:38 PM
Analysis Date: 9/12/2012 10:31:59 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Reset Baseline	2.937	0	0
No	Manual Baseline	4.52	4.677	0
No	Manual Baseline	5.036	5.197	0
No	Backward Horizontal Baseline	5.296	6.146	0
No	Reset Baseline	6.412	0	0
No	Reset Baseline	9.508	0	0
No	Reset Baseline	15.796	0	0

Sample Name: **msd,qc655481,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:25:06 PM
Analysis Date: 9/12/2012 11:17:00 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.467	3.460	262252	39.693
PCB1016#1	5.433	5.430	20263	148.089
PCB1016#2	6.020	6.017	91113	211.826
PCB1016#3	6.313	6.307	46284	200.794
PCB1016#4	6.767	6.760	28061	226.762
PCB1016#5	7.253	7.250	45249	232.834
PCB1260#1	10.757	10.753	236192	307.912
PCB1260#2	11.397	11.390	235693	417.976
PCB1260#3	12.253	12.247	133352	282.205
PCB1260#4	12.990	12.987	292033	314.195
PCB1260#5	13.637	13.630	151572	387.592
Decachlorobiphenyl	16.243	16.237	243653	28.484

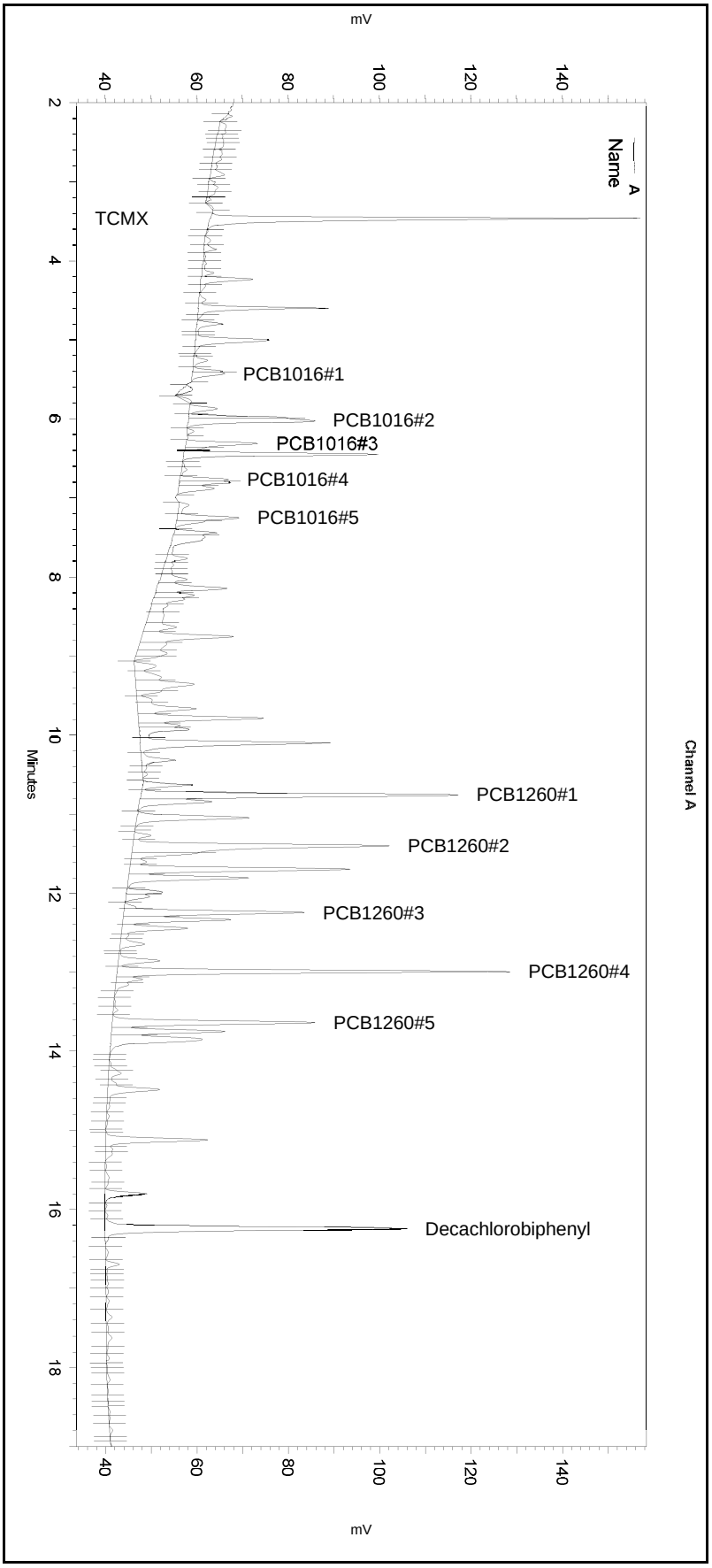
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.843	2.833	700866	39.822
PCB1016#1	4.587	4.580	81895	148.119
PCB1016#2	5.133	5.120	364488	201.438
PCB1016#3	5.340	5.327	54186	70.208
PCB1016#4	5.873	5.863	82674	199.255
PCB1016#5	6.307	6.297	88550	161.628
PCB1260#1	10.400	10.390	756720	407.832
PCB1260#2	10.803	10.793	484474	250.518
PCB1260#3	11.337	11.327	346334	205.248
PCB1260#4	11.993	11.983	928520	309.401
PCB1260#5	12.657	12.647	507145	355.617
Decachlorobiphenyl	15.637	15.627	647680	29.304

Sample Name: **msd,qc655481,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:25:06 PM
Analysis Date: 9/12/2012 11:17:00 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

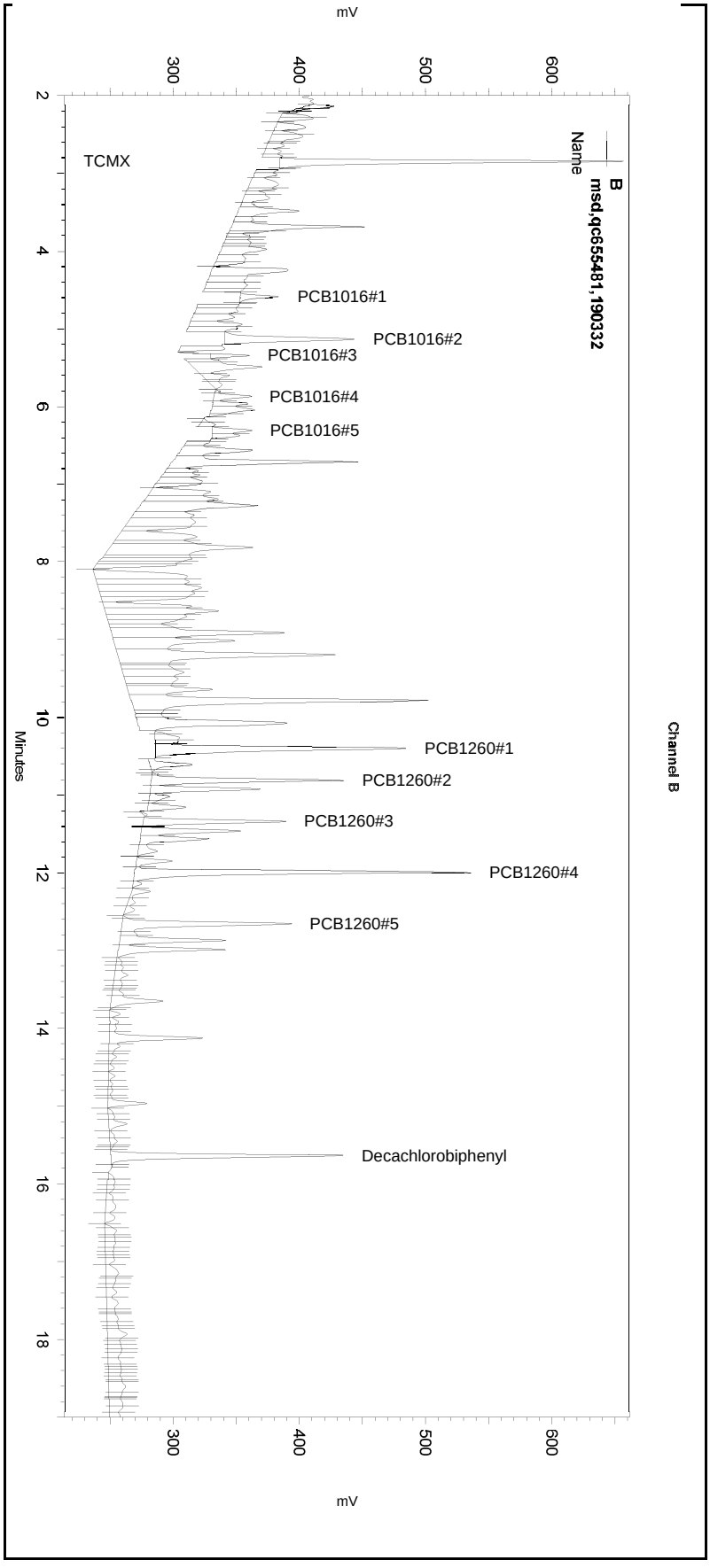
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.371	0	0
Yes	Reset Baseline	5.524	0	0
Yes	Reset Baseline	5.801	0	0
Yes	Split Peak	5.993	0	0
Yes	Split Peak	6.358	0	0
Yes	Reset Baseline	6.951	0	0
Yes	Reset Baseline	7.048	0	0
Yes	Reset Baseline	7.382	0	0
Yes	Reset Baseline	10.557	0	0

Sample Name: **msd,qc655481,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:25:06 PM
Analysis Date: 9/12/2012 11:17:00 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	2.792	2.972	0
Yes	Manual Baseline	4.536	4.674	0
Yes	Horizontal Baseline	5.037	5.203	0
Yes	Backward Horizontal Baseline	5.327	5.377	0
Yes	Reset Baseline	5.768	0	0
Yes	Reset Baseline	6.123	0	0
Yes	Horizontal Baseline	6.256	6.44	0
Yes	Horizontal Baseline	10.166	10.531	0
Yes	Reset Baseline	10.699	0	0
Yes	Reset Baseline	11.195	0	0
Yes	Reset Baseline	11.272	0	0
Yes	Reset Baseline	12.192	0	0
Yes	Reset Baseline	15.782	0	0

Sample Name: **msd,qc655481,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:25:06 PM
Analysis Date: 9/12/2012 10:32:04 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.467	3.460	286436	43.354
PCB1016#1	5.433	5.430	38308	279.968
PCB1016#2	6.020	6.017	142438	331.149
PCB1016#3	6.313	6.307	55258	239.726
PCB1016#4	6.767	6.760	30228	246.898
PCB1016#5	7.253	7.250	57612	296.450
PCB1260#1	10.757	10.753	261725	341.198
PCB1260#2	11.397	11.390	257590	456.808
PCB1260#3	12.253	12.247	141605	299.671
PCB1260#4	12.990	12.987	296853	319.381
PCB1260#5	13.637	13.630	153163	391.660
Decachlorobiphenyl	16.243	16.237	243653	28.484

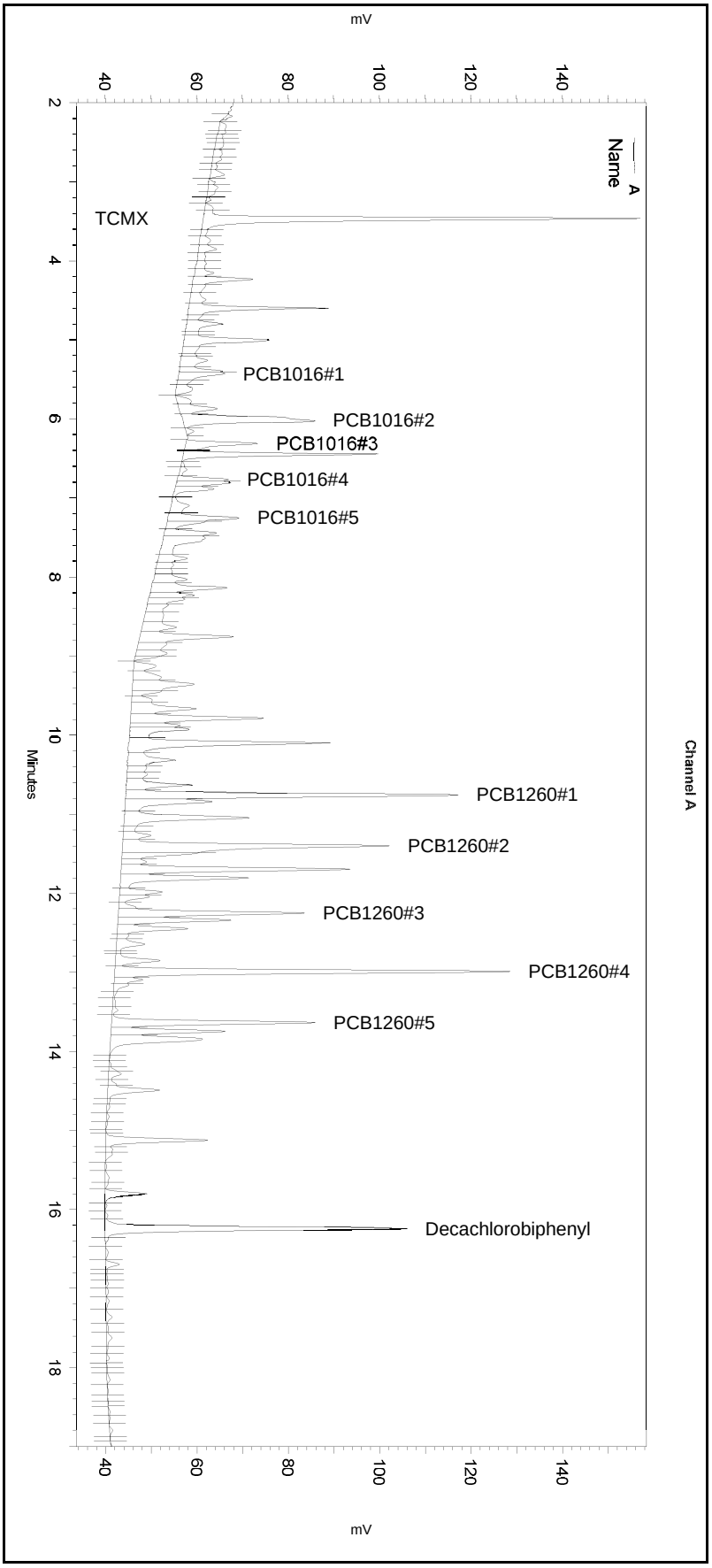
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.843	2.833	834651	47.424
PCB1016#1	4.587	4.580	325902	687.288
PCB1016#2	5.133	5.120	725140	400.756
PCB1016#3	5.340	5.327	155081	200.937
PCB1016#4	5.873	5.863	310850	832.154
PCB1016#5	6.307	6.297	343250	626.526
PCB1260#1	10.400	10.390	1287958	728.876
PCB1260#2	10.803	10.793	805495	416.516
PCB1260#3	11.337	11.327	605742	358.981
PCB1260#4	11.993	11.983	1248904	433.186
PCB1260#5	12.657	12.647	681900	489.279
Decachlorobiphenyl	15.637	15.627	715338	33.016

Sample Name: **msd,qc655481,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:25:06 PM
Analysis Date: 9/12/2012 10:32:04 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

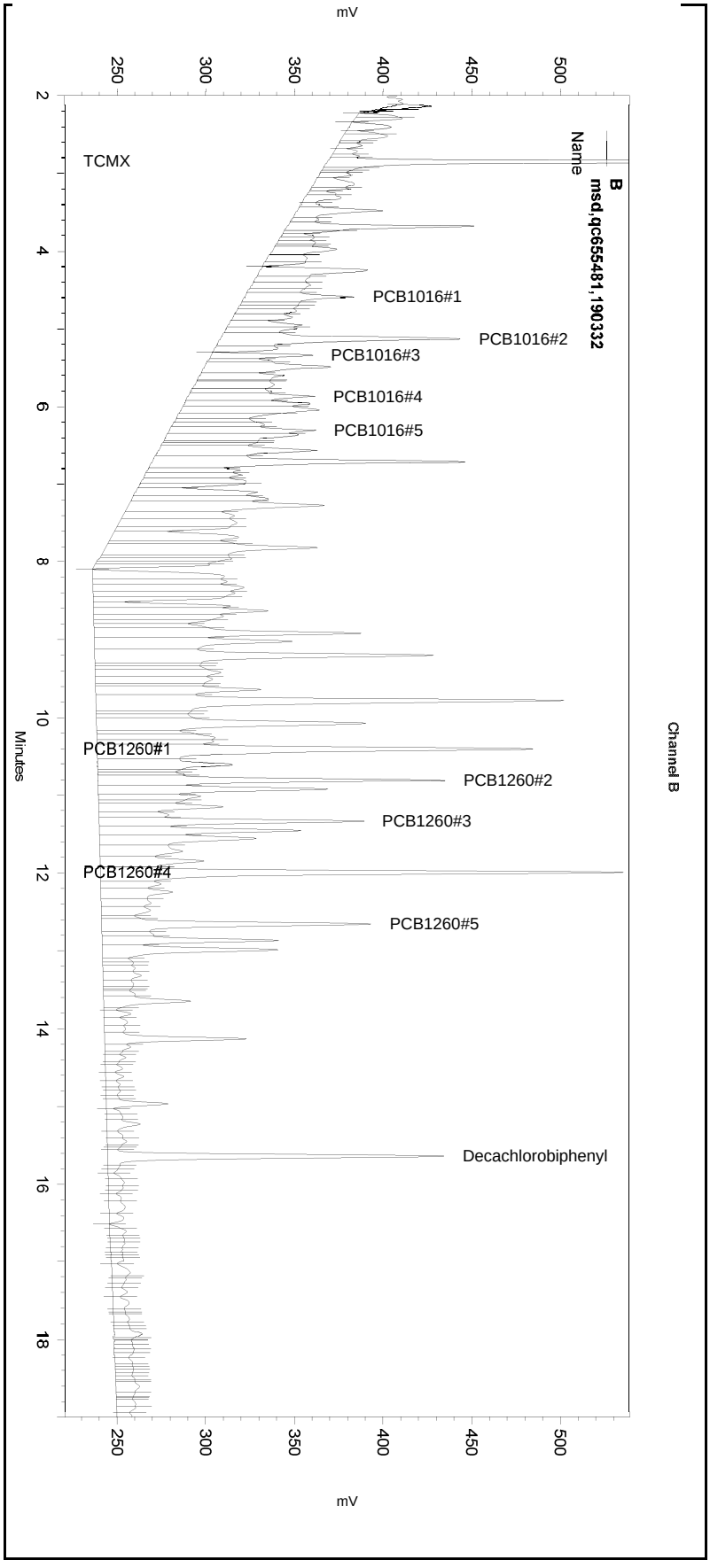
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Reset Baseline	3.377	0	0
No	Reset Baseline	5.584	0	0
No	Reset Baseline	5.749	0	0
No	Split Peak	5.99	0	0
No	Reset Baseline	7.39	0	0
No	Reset Baseline	10.453	0	0

Sample Name: **msd,qc655481,190332**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:25:06 PM
Analysis Date: 9/12/2012 10:32:04 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Reset Baseline	2.964	0	0
No	Valley to Valley	4.336	6.79	0
No	Backward Horizontal Baseline	5.302	5.374	0
No	Manual Baseline	6.249	6.445	0
No	Reset Baseline	10.159	0	0

Initial Calibration Raw Data

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 PCBS Soil: EPA 8082A

Inst : GC06
Calnum : 202360551001
Units : pg/uL

Name : AR1660_250
Date : 06-SEP-2012 16:49

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	250_008	202360551008	PCB10_2	06-SEP-2012 16:49	S19975
L2	250_009	202360551009	PCB25_5	06-SEP-2012 17:53	S19976
L3	250_010	202360551010	PCB100_20	06-SEP-2012 18:21	S19977
L4	250_011	202360551011	PCB250_50	06-SEP-2012 18:49	S19978
L5	250_012	202360551012	PCB500_100	06-SEP-2012 19:16	S19979
L6	250_013	202360551013	PCB750_150	06-SEP-2012 19:44	S19980
L7	250_014	202360551014	PCB1000_200	06-SEP-2012 20:11	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	977.50	867.00	809.57	733.00	642.90	572.49		AVRG	R		0.00130		767.08	19	.99	20	
Aroclor-1260 Peak # 2	A	636.20	645.28	605.17	591.27	519.42	473.96	475.94	AVRG	R		0.00177		563.89	13	.99	20	
Aroclor-1260 Peak # 3	A	618.80	500.24	451.97	419.33	372.34			AVRG	R		0.00212		472.54	20	.99	20	
Aroclor-1260 Peak # 4	A	1017.8	1084.9	1023.1	964.77	859.73	781.83	774.13	AVRG	R		0.00108		929.46	13	.99	20	
Aroclor-1260 Peak # 5	A	396.50	438.52	438.93	410.76	371.41	335.84	345.47	AVRG	R		0.00256		391.06	11	.99	20	
TCMX	A	7935.0	7919.0	7022.0	6505.6	5961.7	5524.8	5380.5	AVRG	R		1.51E-4		6606.9	16	.99	20	
Decachlorobiphenyl	A	9631.0	10236	8546.9	7706.8	6649.9			AVRG	R		1.17E-4		8554.0	17	.99	20	
Aroclor-1260 Peak # 1	B	2729.3	3301.2	2645.9	2303.9	1981.0	1729.9	1695.0	LINR	R	-49.479	6.04E-4		2340.9	0.991	.99	20	
Aroclor-1260 Peak # 2	B	2380.8	2230.8	2241.2	1901.8	1754.7	1545.4	1482.5	AVRG	R		5.17E-4		1933.9	19	.99	20	
Aroclor-1260 Peak # 3	B	2148.9	2011.4	1730.7	1584.4	1364.0	1285.0		AVRG	R		5.93E-4		1687.4	20	.99	20	
Aroclor-1260 Peak # 4	B	4938.5	4697.8	4098.2	3630.0	3080.2	2740.6	2634.3	LINR	R	-49.347	3.86E-4		3688.5	0.991	.99	20	
Aroclor-1260 Peak # 5	B	2595.9	1546.7	1663.5	1747.5	1514.5	1303.6	1337.7	LINR	R	-32.273	7.65E-4		1672.8	0.992	.99	20	
TCMX	B	23332	20443	16814	16552	16902	15096	14060	AVRG	R		5.68E-5		17600	18	.99	20	
Decachlorobiphenyl	B	33114	33066	25782	21904	18200	15398	14918	QUAD	A	85306.8	20048.7	-29.2621	23197	0.996	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**27**	25.000	13	100.00	6	250.00	-4	500.00	-16	750.00	**-25**		
Aroclor-1260 Peak # 2	A	10.000	13	25.000	14	100.00	7	250.00	5	500.00	-8	750.00	-16	1000.0	-16
Aroclor-1260 Peak # 3	A	10.000	**31**	25.000	6	100.00	-4	250.00	-11	500.00	**-21**				
Aroclor-1260 Peak # 4	A	10.000	10	25.000	17	100.00	10	250.00	4	500.00	-8	750.00	-16	1000.0	-17
Aroclor-1260 Peak # 5	A	10.000	1	25.000	12	100.00	12	250.00	5	500.00	-5	750.00	-14	1000.0	-12
TCMX	A	2.0000	20	5.0000	20	20.000	6	50.000	-2	100.00	-10	150.00	-16	200.00	-19
Decachlorobiphenyl	A	2.0000	13	5.0000	20	20.000	0	50.000	-10	100.00	**-22**				
Aroclor-1260 Peak # 1	B	10.000	**-430**	25.000	**-98**	100.00	10	250.00	19	500.00	10	750.00	-2	1000.0	-3
Aroclor-1260 Peak # 2	B	10.000	**23**	25.000	15	100.00	16	250.00	-2	500.00	-9	750.00	-20	1000.0	**-23**
Aroclor-1260 Peak # 3	B	10.000	**27**	25.000	19	100.00	3	250.00	-6	500.00	-19	750.00	**-24**		
Aroclor-1260 Peak # 4	B	10.000	**-403**	25.000	**-116**	100.00	9	250.00	**21**	500.00	9	750.00	-1	1000.0	-3
Aroclor-1260 Peak # 5	B	10.000	**-224**	25.000	**-111**	100.00	-5	250.00	**21**	500.00	9	750.00	-5	1000.0	-1
TCMX	B	2.0000	**33**	5.0000	16	20.000	-4	50.000	-6	100.00	-4	150.00	-14	200.00	-20
Decachlorobiphenyl	B	2.0000	**-148**	5.0000	-20	20.000	11	50.000	9	100.00	2	150.00	-7	200.00	4

PML 09/07/12 : Corrected automatically drawn baseline in all levels.

PML 09/07/12 : dropped various points and changed fit types for various peaks for better r^2 %RSD recovery

PML 09/07/12 : RTs updated in the integrated version of ICAL

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 PCBS Soil
EPA 8082A

Inst : GC06 Name : AR1660_250
Calnum : 202360551001 Cal Date : 06-SEP-2012

ICV 202360551016 (250_016 06-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	241.7	pg/uL	-3	20	
Aroclor-1260	B	250.0	261.4	pg/uL	5	20	

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:40:22 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.777	4.763	15870	2.000 CAL
PCB1016#1	7.003	7.004	1656	10.000 CAL
PCB1016#2	7.640	7.638	5307	10.000 CAL
PCB1016#3	7.953	7.951	2195	10.000 CAL
PCB1016#4	8.423	8.410	2172	10.000 CAL
PCB1016#5	8.950	8.937	2049	10.000 CAL
PCB1260#1	12.560	12.550	9775	10.000 CAL
PCB1260#2	13.220	13.210	6362	10.000 CAL
PCB1260#3	14.083	14.077	6188	10.000 CAL
PCB1260#4	14.827	14.820	10178	10.000 CAL
PCB1260#5	15.487	15.483	3965	10.000 CAL
Decachlorobiphenyl	18.110	18.103	19262	2.000 CAL

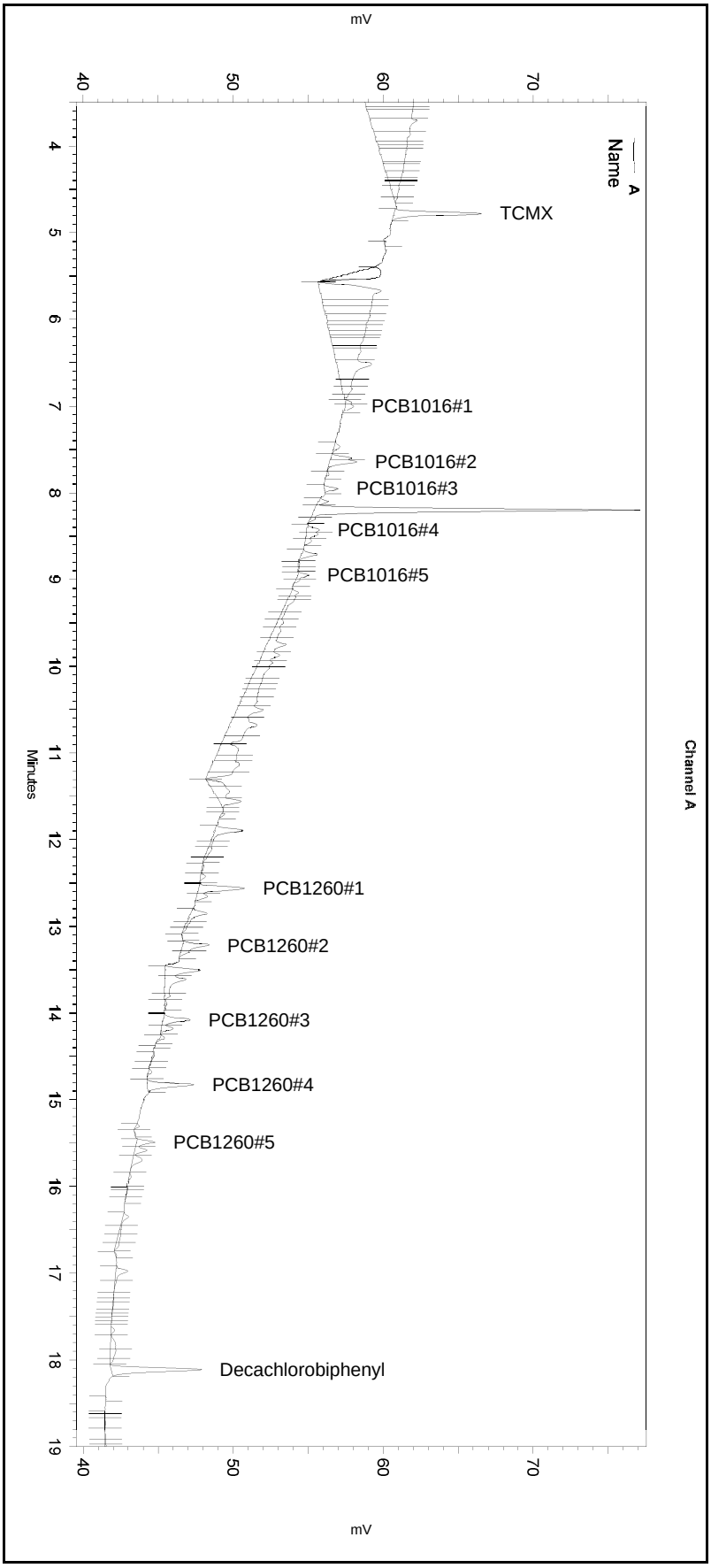
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.953	3.970	46663	2.000 CAL
PCB1016#1	5.970	5.983	5599	10.000 CAL
PCB1016#2	6.563	6.580	19739	10.000 CAL
PCB1016#3	6.790	6.803	9951	10.000 CAL
PCB1016#4	7.363	7.377	7511	10.000 CAL
PCB1016#5	7.833	7.847	6922	10.000 CAL
PCB1260#1	12.080	12.087	27293	10.000 CAL
PCB1260#2	12.487	12.497	23808	10.000 CAL
PCB1260#3	13.033	13.043	21489	10.000 CAL
PCB1260#4	13.693	13.700	49385	10.000 CAL
PCB1260#5	14.373	14.380	25959	10.000 CAL
Decachlorobiphenyl	17.387	17.390	66227	2.000 CAL

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:40:22 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

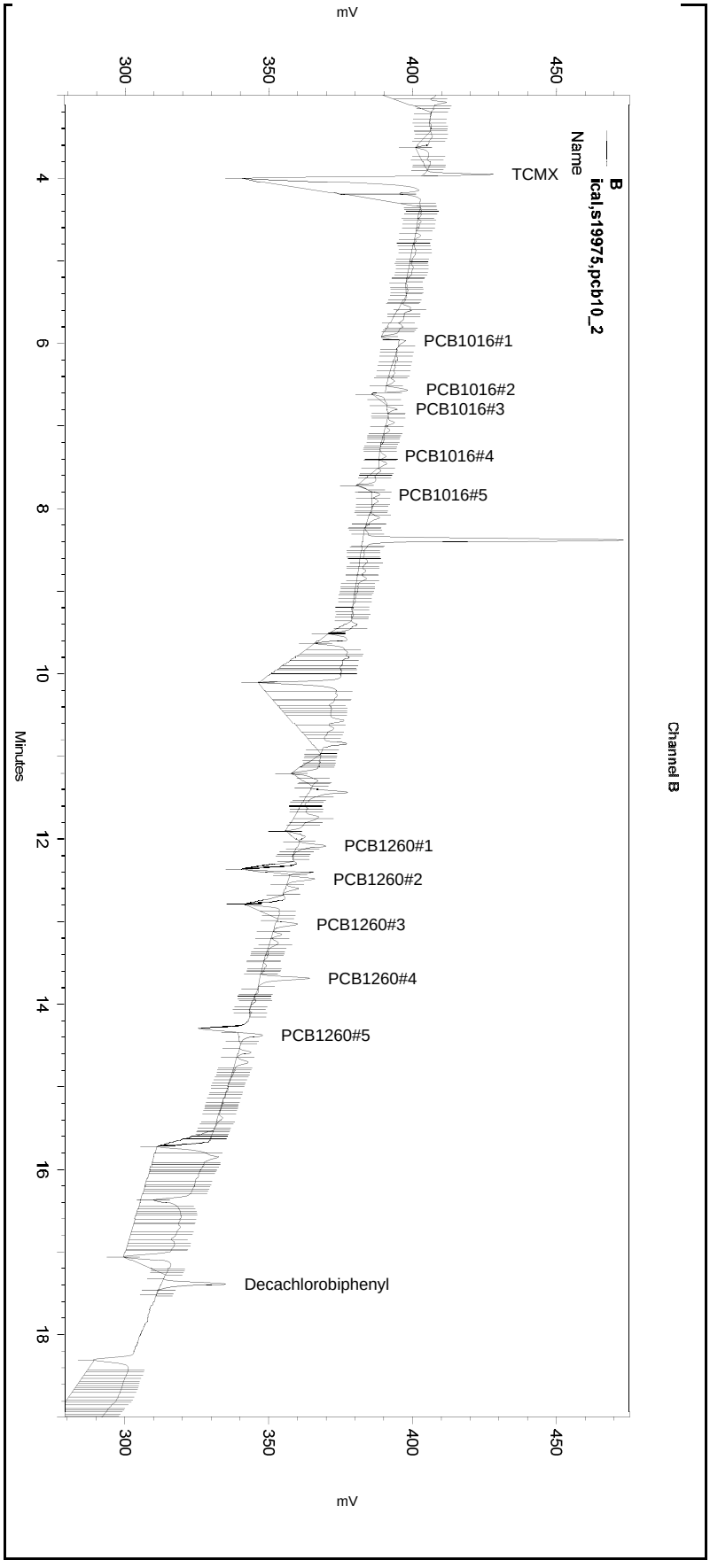
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.867	0	0
Yes	Reset Baseline	5.186	0	0
Yes	Reset Baseline	6.916	0	0
Yes	Reset Baseline	7.07	0	0
Yes	Reset Baseline	7.853	0	0
Yes	Reset Baseline	8.008	0	0
Yes	Reset Baseline	8.609	0	0
Yes	Reset Baseline	8.905	0	0
Yes	Reset Baseline	9.098	0	0
Yes	Reset Baseline	12.489	0	0
Yes	Reset Baseline	12.722	0	0
Yes	Reset Baseline	13.165	0	0
Yes	Reset Baseline	13.384	0	0
Yes	Reset Baseline	13.962	0	0
Yes	Reset Baseline	14.243	0	0
Yes	Reset Baseline	14.909	0	0
Yes	Reset Baseline	15.436	0	0
Yes	Reset Baseline	18.184	0	0

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:40:22 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.904	0	0
Yes	Move BL Stop	4	3.972	0
Yes	Move BL Start	5.92	5.953	0
Yes	Reset Baseline	6.03	0	0
Yes	Reset Baseline	6.591	0	0
Yes	Reset Baseline	6.746	0	0
Yes	Reset Baseline	7.418	0	0
Yes	Reset Baseline	7.788	0	0
Yes	Reset Baseline	7.976	0	0
Yes	Reset Baseline	12.033	0	0
Yes	Split Peak	12.119	0	0
Yes	Reset Baseline	12.26	0	0
Yes	Reset Baseline	12.437	0	0
Yes	Reset Baseline	12.675	0	0
Yes	Reset Baseline	12.974	0	0
Yes	Reset Baseline	13.786	0	0
Yes	Reset Baseline	14.16	0	0
Yes	Reset Baseline	14.341	0	0
Yes	Reset Baseline	14.473	0	0
Yes	Reset Baseline	17.273	0	0
Yes	Reset Baseline	17.548	0	0

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:08:07 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.777	4.763	20301	2.000 CAL
PCB1016#1	7.003	6.990	27824	10.000 CAL
PCB1016#2	7.640	7.627	33882	10.000 CAL
PCB1016#3	7.953	7.940	37352	10.000 CAL
PCB1016#4	8.423	8.410	17751	10.000 CAL
PCB1016#5	8.950	8.937	18533	10.000 CAL
PCB1260#1		12.530		0.000 BDL
PCB1260#2	13.220	13.210	11480	10.000 CAL
PCB1260#3	14.083	14.077	10620	10.000 CAL
PCB1260#4	14.827	14.820	13726	10.000 CAL
PCB1260#5	15.487	15.483	5885	10.000 CAL
Decachlorobiphenyl	18.110	18.103	22262	2.000 CAL

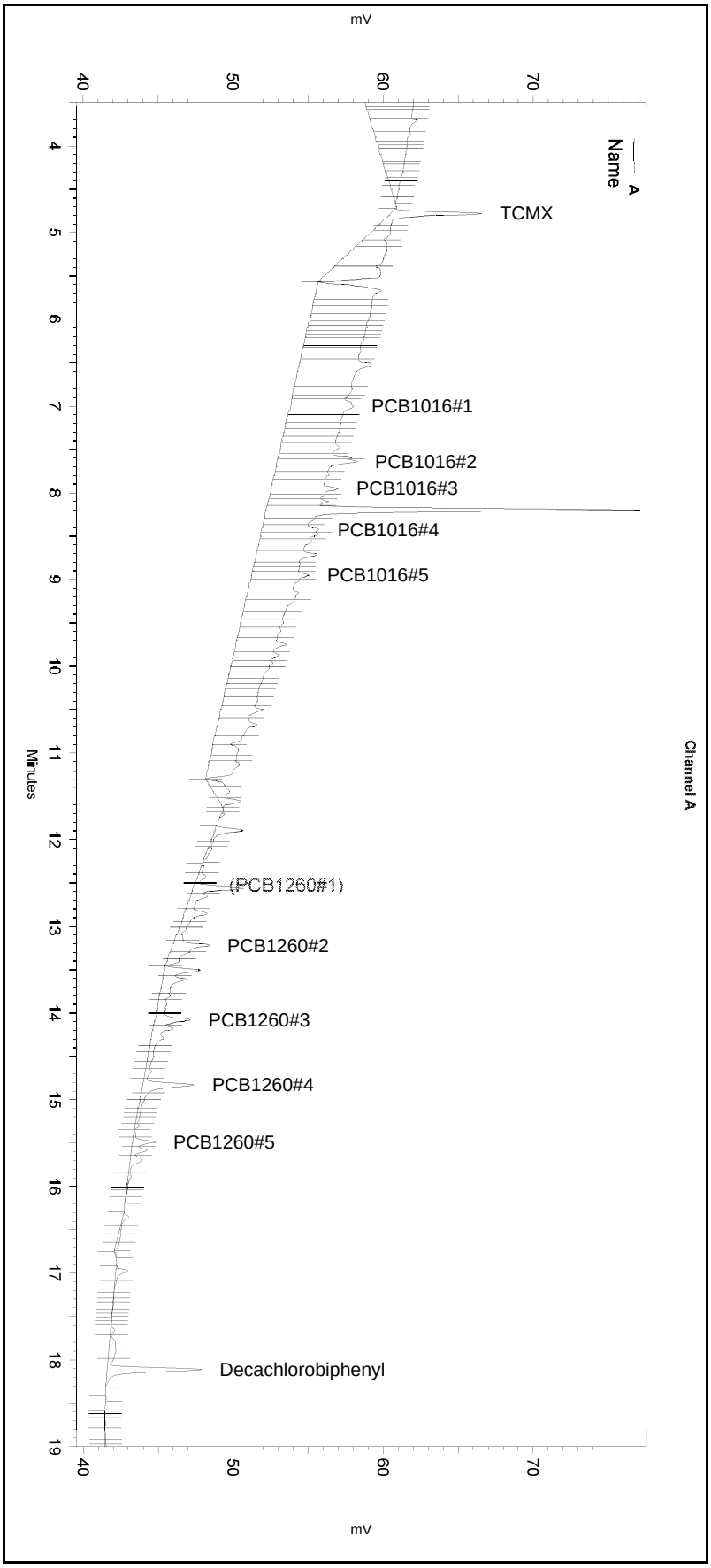
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.953	3.970	331451	2.000 CAL
PCB1016#1	5.970	5.983	38614	10.000 CAL
PCB1016#2	6.563	6.580	43604	10.000 CAL
PCB1016#3	6.790	6.803	18453	10.000 CAL
PCB1016#4	7.363	7.377	15266	10.000 CAL
PCB1016#5	7.833	7.847	28121	10.000 CAL
PCB1260#1	12.080	12.087	132212	10.000 CAL
PCB1260#2	12.487	12.497	135326	10.000 CAL
PCB1260#3	13.033	13.043	161807	10.000 CAL
PCB1260#4	13.693	13.700	217595	10.000 CAL
PCB1260#5	14.373	14.380	104386	10.000 CAL
Decachlorobiphenyl	17.387	17.390	273733	2.000 CAL

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:08:07 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

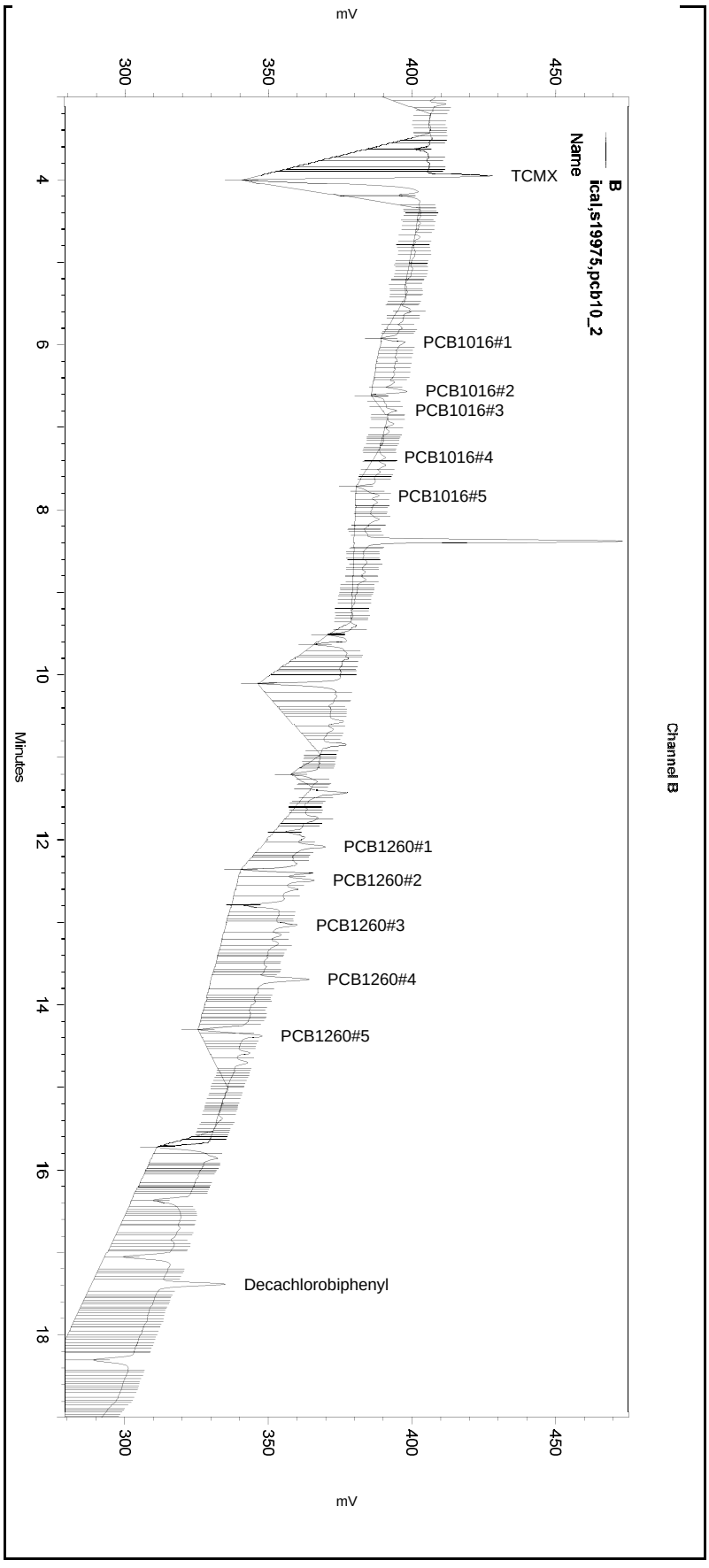
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:08:07 AM
Sample Amount: 1



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No items selected for this section

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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:40:27 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.787	4.763	39595	5.000 CAL
PCB1016#1	7.017	7.004	3772	25.000 CAL
PCB1016#2	7.650	7.638	12921	25.000 CAL
PCB1016#3	7.963	7.951	6905	25.000 CAL
PCB1016#4	8.433	8.410	4228	25.000 CAL
PCB1016#5	8.960	8.937	5829	25.000 CAL
PCB1260#1	12.570	12.550	21675	25.000 CAL
PCB1260#2	13.230	13.210	16132	25.000 CAL
PCB1260#3	14.093	14.077	12506	25.000 CAL
PCB1260#4	14.837	14.820	27123	25.000 CAL
PCB1260#5	15.500	15.483	10963	25.000 CAL
Decachlorobiphenyl	18.123	18.103	51178	5.000 CAL

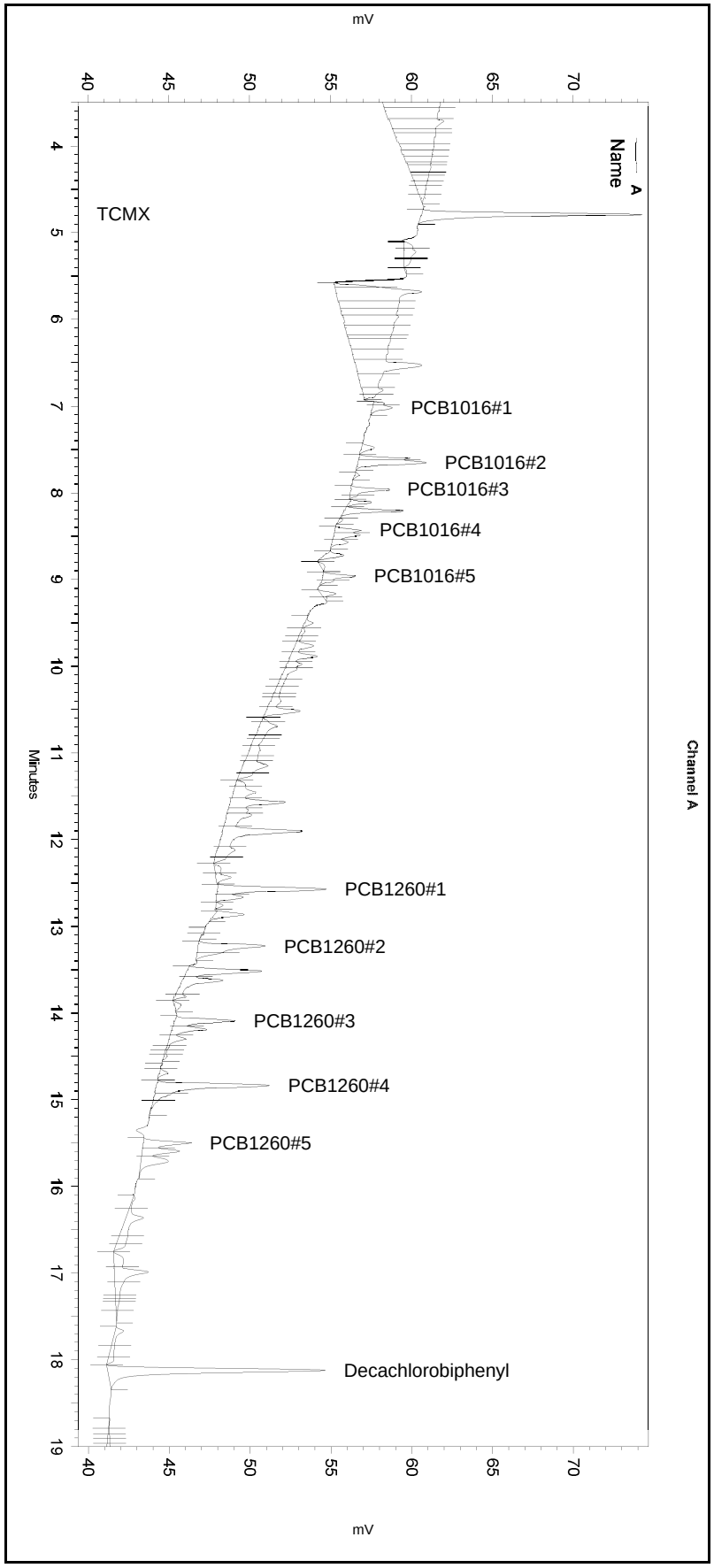
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.970	102216	5.000 CAL
PCB1016#1	5.990	5.983	9272	25.000 CAL
PCB1016#2	6.577	6.580	56063	25.000 CAL
PCB1016#3	6.800	6.803	21302	25.000 CAL
PCB1016#4	7.373	7.377	13052	25.000 CAL
PCB1016#5	7.843	7.847	17168	25.000 CAL
PCB1260#1	12.090	12.087	82531	25.000 CAL
PCB1260#2	12.497	12.497	55771	25.000 CAL
PCB1260#3	13.043	13.043	50285	25.000 CAL
PCB1260#4	13.703	13.700	117444	25.000 CAL
PCB1260#5	14.387	14.380	38667	25.000 CAL
Decachlorobiphenyl	17.397	17.390	165331	5.000 CAL

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:40:27 AM
Sample Amount: 1



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No items selected for this section

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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

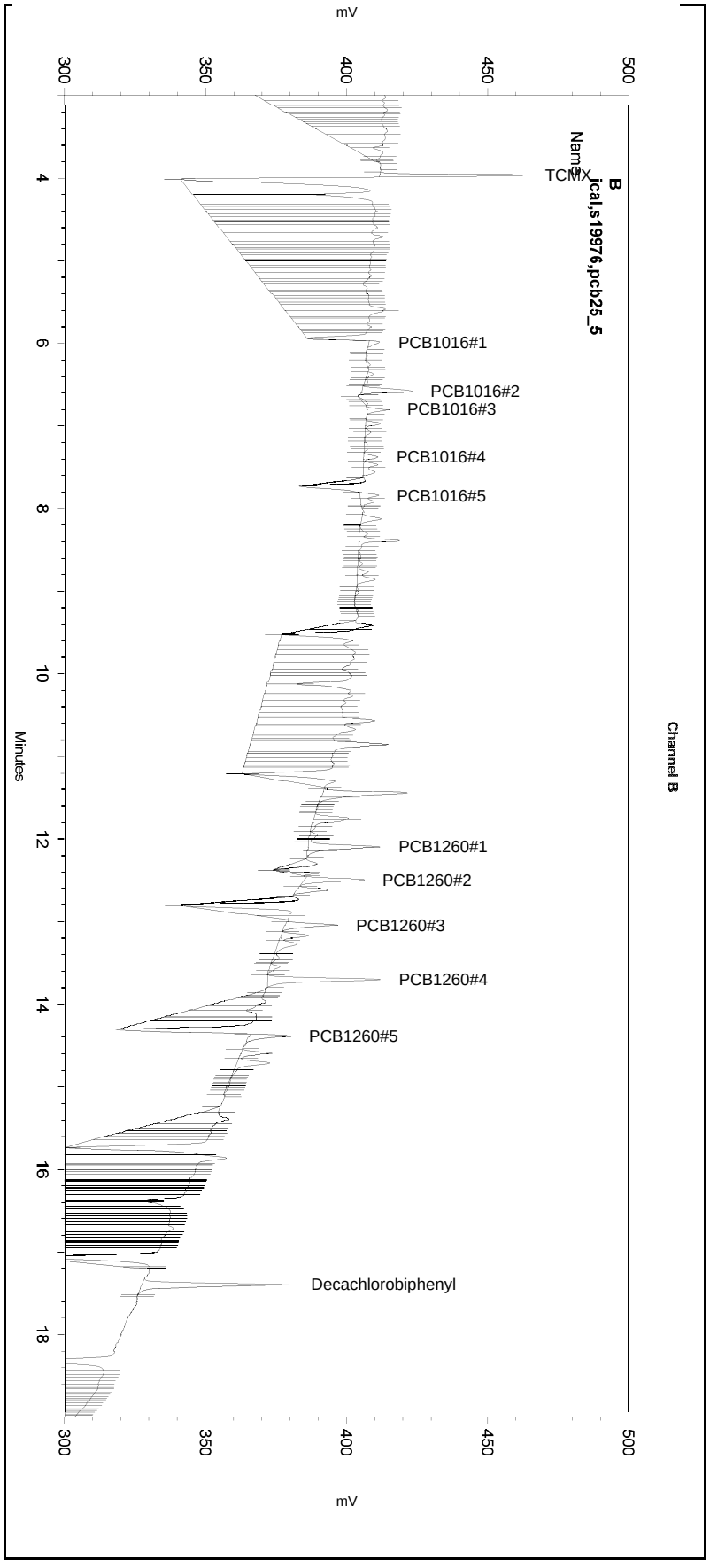
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.895	0	0
Yes	Reset Baseline	6.921	0	0
Yes	Reset Baseline	6.94	0	0
Yes	Reset Baseline	7.118	0	0
Yes	Reset Baseline	7.739	0	0
Yes	Reset Baseline	8.071	0	0
Yes	Reset Baseline	8.648	0	0
Yes	Reset Baseline	8.906	0	0
Yes	Reset Baseline	9.062	0	0
Yes	Reset Baseline	12.509	0	0
Yes	Reset Baseline	12.815	0	0
Yes	Reset Baseline	13.156	0	0
Yes	Reset Baseline	13.397	0	0
Yes	Reset Baseline	14.018	0	0
Yes	Reset Baseline	15.208	0	0
Yes	Reset Baseline	15.424	0	0
Yes	Reset Baseline	15.907	0	0
Yes	Reset Baseline	18.347	0	0

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:40:27 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.906	0	0
Yes	Reset Baseline	3.918	0	0
Yes	Move BL Stop	4.01	3.987	0
Yes	Move BL Start	5.933	5.972	0
Yes	Reset Baseline	6.072	0	0
Yes	Reset Baseline	6.62	0	0
Yes	Reset Baseline	6.746	0	0
Yes	Reset Baseline	6.857	0	0
Yes	Reset Baseline	7.619	0	0
Yes	Reset Baseline	7.804	0	0
Yes	Reset Baseline	8.015	0	0
Yes	Reset Baseline	12.217	0	0
Yes	Reset Baseline	12.456	0	0
Yes	Reset Baseline	12.683	0	0
Yes	Reset Baseline	12.694	0	0
Yes	Reset Baseline	12.975	0	0
Yes	Reset Baseline	13.793	0	0
Yes	Move BL Start	14.313	14.362	0
Yes	Reset Baseline	14.539	0	0
Yes	Reset Baseline	17.577	0	0

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:08:12 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.787	4.763	42143	5.000 CAL
PCB1016#1	6.967	6.990	11253	25.000 CAL
PCB1016#2	7.607	7.627	16378	25.000 CAL
PCB1016#3	7.963	7.940	24358	25.000 CAL
PCB1016#4	8.433	8.410	8733	25.000 CAL
PCB1016#5	8.960	8.937	7767	25.000 CAL
PCB1260#1		12.530		0.000 BDL
PCB1260#2	13.230	13.210	21006	25.000 CAL
PCB1260#3	14.093	14.077	17267	25.000 CAL
PCB1260#4	14.837	14.820	31800	25.000 CAL
PCB1260#5	15.500	15.483	15485	25.000 CAL
Decachlorobiphenyl	18.123	18.103	54704	5.000 CAL

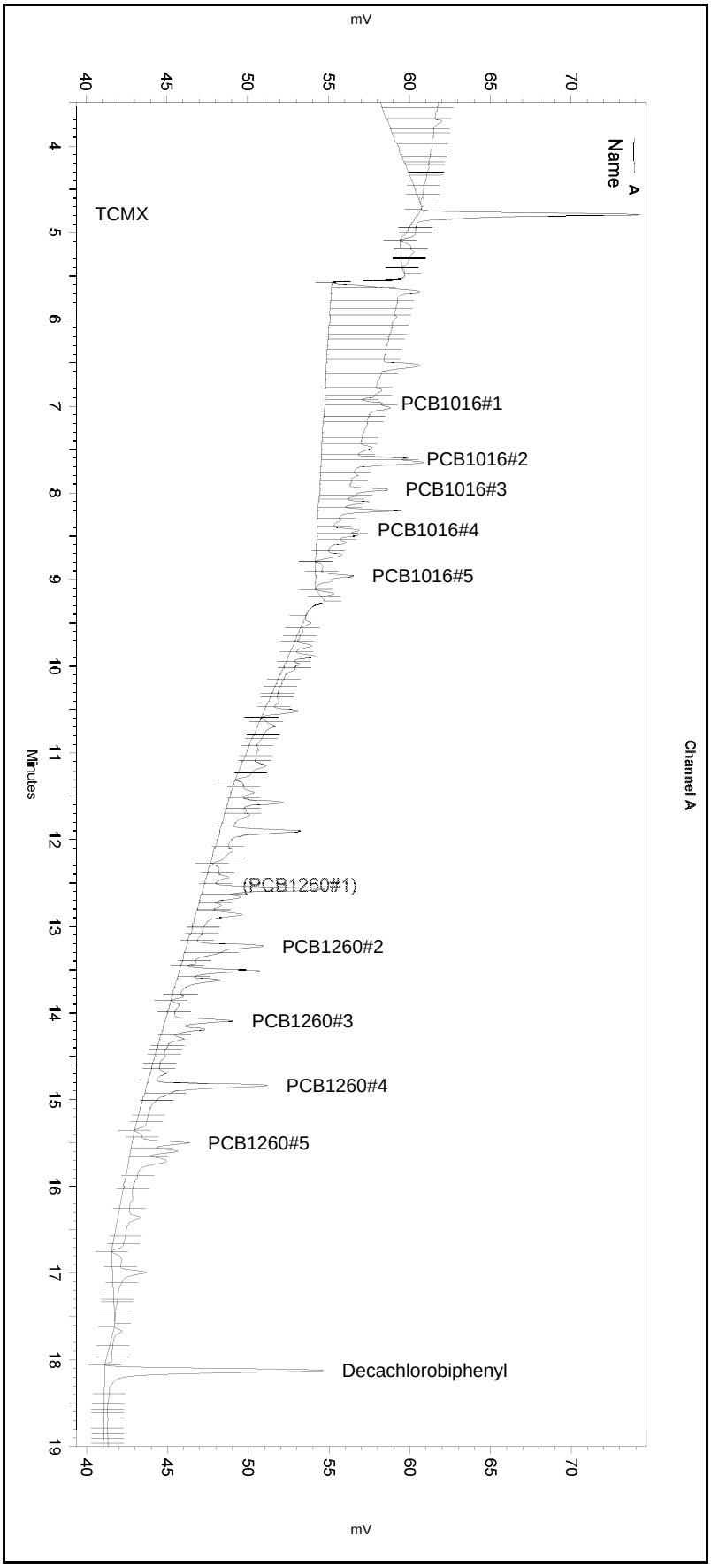
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.970	299430	5.000 CAL
PCB1016#1	5.990	5.983	127203	25.000 CAL
PCB1016#2	6.577	6.580	70837	25.000 CAL
PCB1016#3	6.800	6.803	79155	25.000 CAL
PCB1016#4	7.373	7.377	112142	25.000 CAL
PCB1016#5	7.843	7.847	102914	25.000 CAL
PCB1260#1	12.090	12.087	187843	25.000 CAL
PCB1260#2	12.497	12.497	279229	25.000 CAL
PCB1260#3	13.043	13.043	376067	25.000 CAL
PCB1260#4	13.703	13.700	520050	25.000 CAL
PCB1260#5	14.387	14.380	395564	25.000 CAL
Decachlorobiphenyl	17.397	17.390	214959	5.000 CAL

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:08:12 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

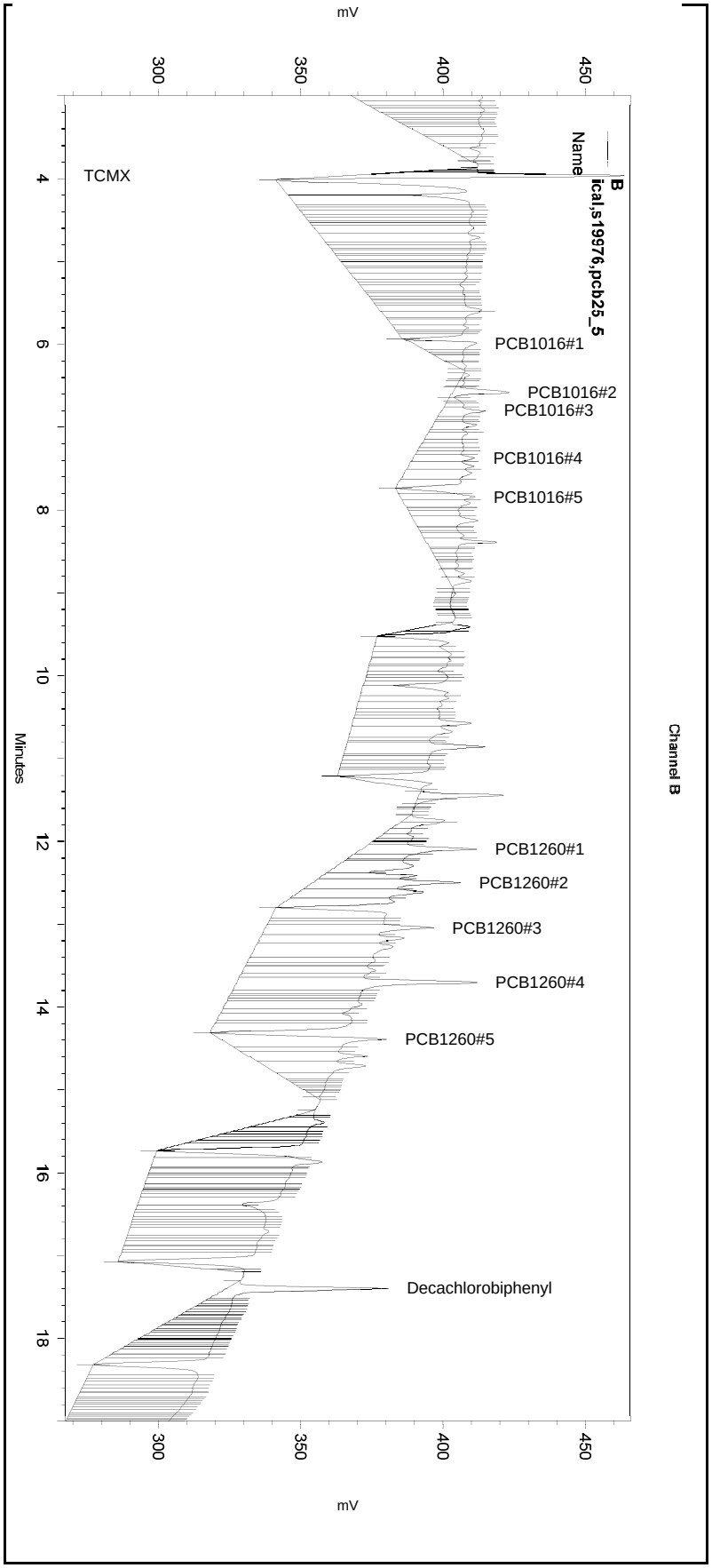
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:08:12 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:40:33 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	140440	20.000 CAL
PCB1016#1	6.990	7.004	14405	100.000 CAL
PCB1016#2	7.627	7.638	45883	100.000 CAL
PCB1016#3	7.940	7.951	24460	100.000 CAL
PCB1016#4	8.410	8.410	14798	100.000 CAL
PCB1016#5	8.937	8.937	21394	100.000 CAL
PCB1260#1	12.550	12.550	80957	100.000 CAL
PCB1260#2	13.210	13.210	60517	100.000 CAL
PCB1260#3	14.077	14.077	45197	100.000 CAL
PCB1260#4	14.820	14.820	102306	100.000 CAL
PCB1260#5	15.480	15.483	43893	100.000 CAL
Decachlorobiphenyl	18.103	18.103	170938	20.000 CAL

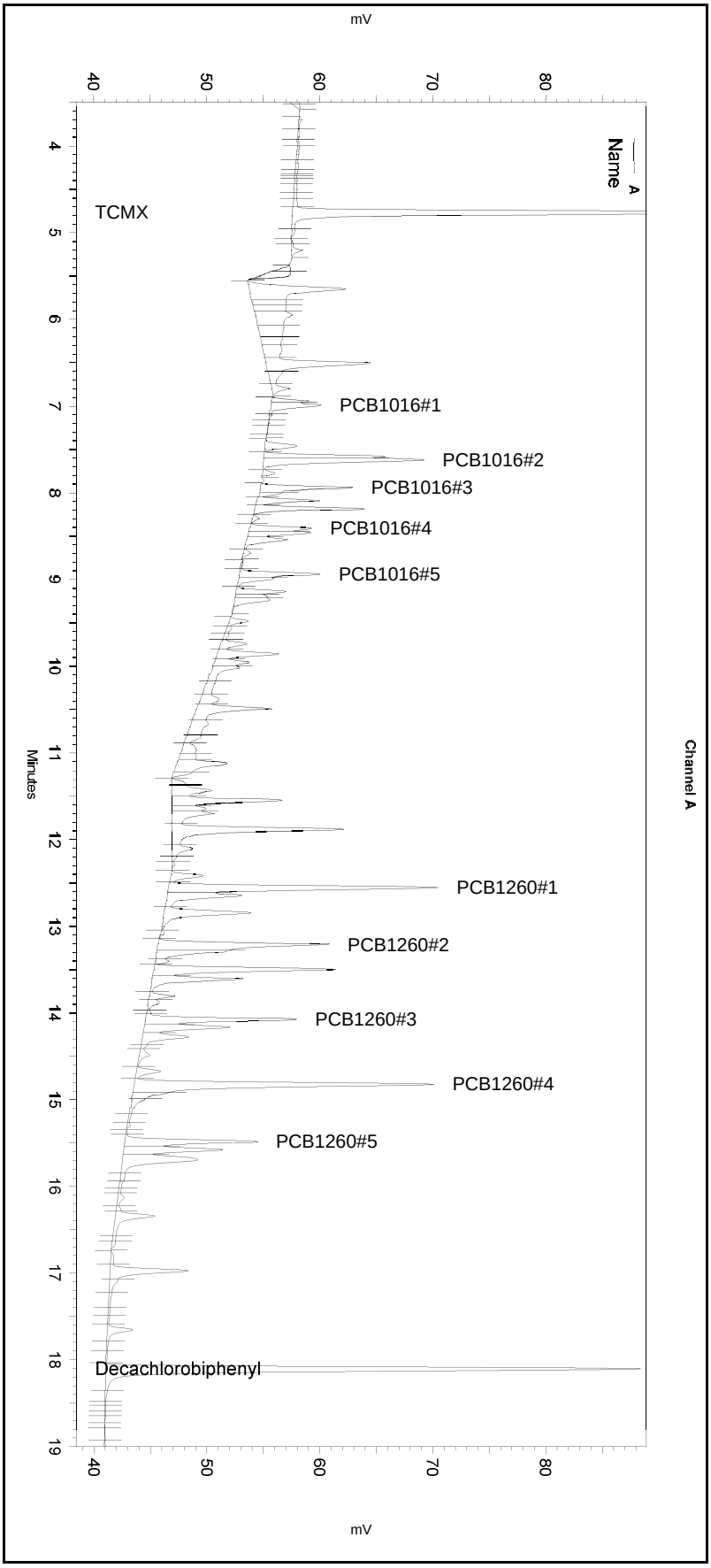
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	336272	20.000 CAL
PCB1016#1	5.983	5.983	74765	100.000 CAL
PCB1016#2	6.580	6.580	203994	100.000 CAL
PCB1016#3	6.800	6.803	80681	100.000 CAL
PCB1016#4	7.373	7.377	44204	100.000 CAL
PCB1016#5	7.843	7.847	57333	100.000 CAL
PCB1260#1	12.087	12.087	264593	100.000 CAL
PCB1260#2	12.493	12.497	224117	100.000 CAL
PCB1260#3	13.040	13.043	173068	100.000 CAL
PCB1260#4	13.697	13.700	409823	100.000 CAL
PCB1260#5	14.380	14.380	166353	100.000 CAL
Decachlorobiphenyl	17.390	17.390	515630	20.000 CAL

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:40:33 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

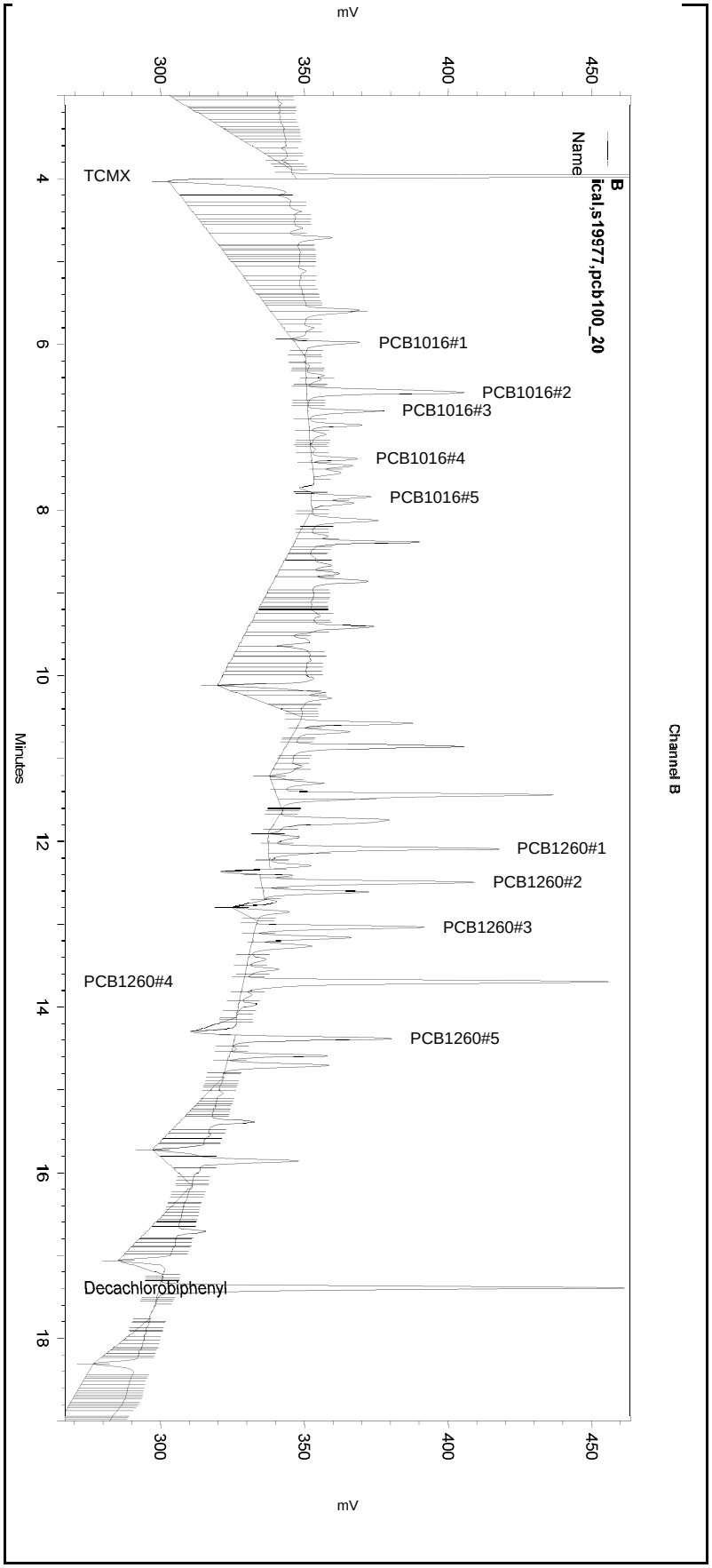
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.276	0	0
Yes	Reset Baseline	6.874	0	0
Yes	Reset Baseline	7.846	0	0
Yes	Reset Baseline	12.344	0	0

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:40:33 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.893	0	0
Yes	Move BL Stop	4.023	4.001	0
Yes	Reset Baseline	5.929	0	0
Yes	Reset Baseline	6.163	0	0
Yes	Reset Baseline	7.647	0	0
Yes	Reset Baseline	7.791	0	0
Yes	Reset Baseline	8.003	0	0
Yes	Reset Baseline	12.333	0	0
Yes	Reset Baseline	12.39	0	0
Yes	Reset Baseline	12.697	0	0
Yes	Reset Baseline	12.957	0	0
Yes	Reset Baseline	14.093	0	0
Yes	Reset Baseline	14.337	0	0
Yes	Reset Baseline	14.835	0	0
Yes	Reset Baseline	17.227	0	0
Yes	Reset Baseline	17.606	0	0

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:08:18 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	175447	20.000 CAL
PCB1016#1	6.990	6.990	33903	100.000 CAL
PCB1016#2	7.627	7.627	62706	100.000 CAL
PCB1016#3	7.940	7.940	37117	100.000 CAL
PCB1016#4	8.410	8.410	20995	100.000 CAL
PCB1016#5	8.937	8.937	24267	100.000 CAL
PCB1260#1	12.550	12.530	88729	100.000 CAL
PCB1260#2	13.210	13.210	66527	100.000 CAL
PCB1260#3	14.077	14.077	48421	100.000 CAL
PCB1260#4	14.820	14.820	104070	100.000 CAL
PCB1260#5	15.480	15.483	43893	100.000 CAL
Decachlorobiphenyl	18.103	18.103	170938	20.000 CAL

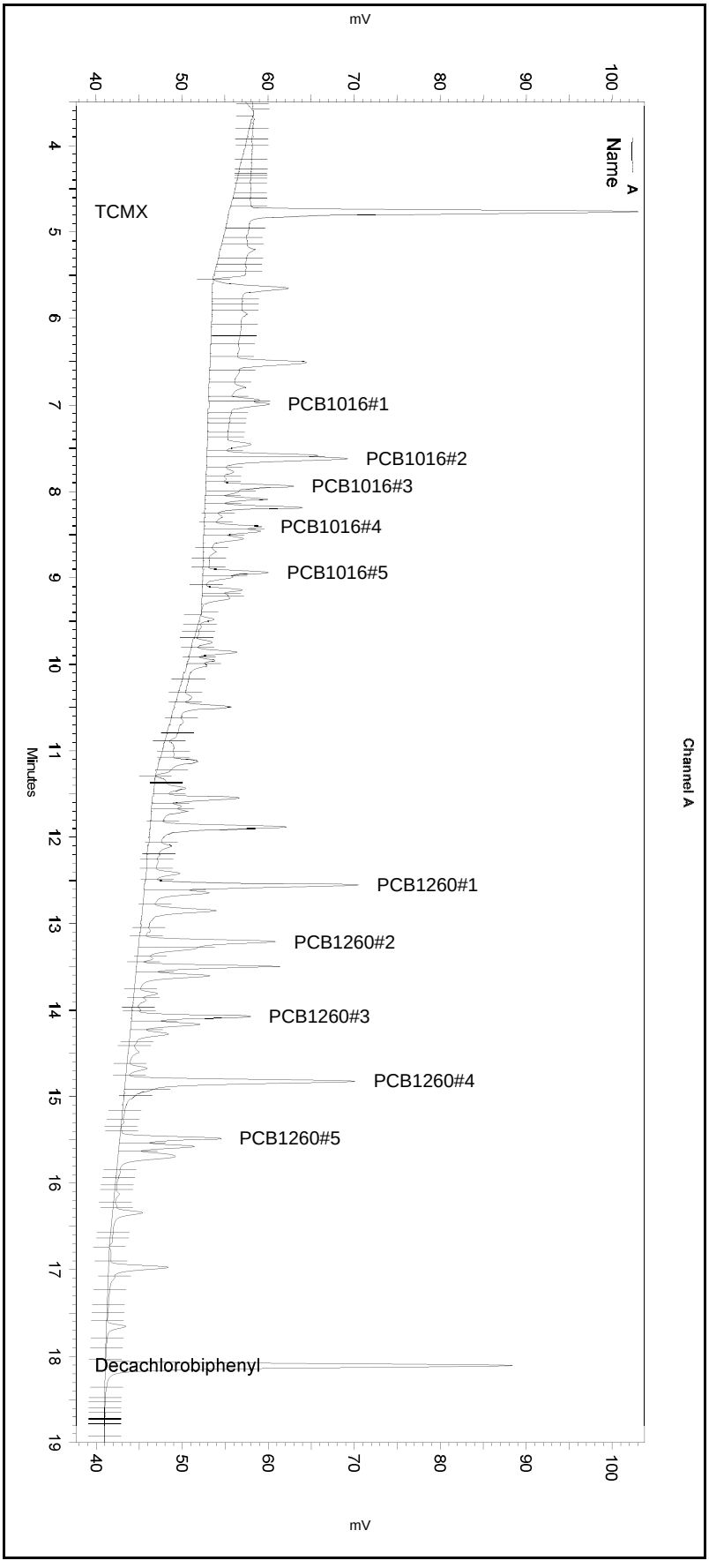
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	731652	20.000 CAL
PCB1016#1	5.983	5.983	557592	100.000 CAL
PCB1016#2	6.580	6.580	760646	100.000 CAL
PCB1016#3	6.800	6.803	604729	100.000 CAL
PCB1016#4	7.373	7.377	431950	100.000 CAL
PCB1016#5	7.843	7.847	335764	100.000 CAL
PCB1260#1	12.087	12.087	324866	100.000 CAL
PCB1260#2	12.493	12.497	334746	100.000 CAL
PCB1260#3	13.040	13.043	312711	100.000 CAL
PCB1260#4	13.697	13.700	604107	100.000 CAL
PCB1260#5	14.380	14.380	334172	100.000 CAL
Decachlorobiphenyl	17.390	17.390	733493	20.000 CAL

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:08:18 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

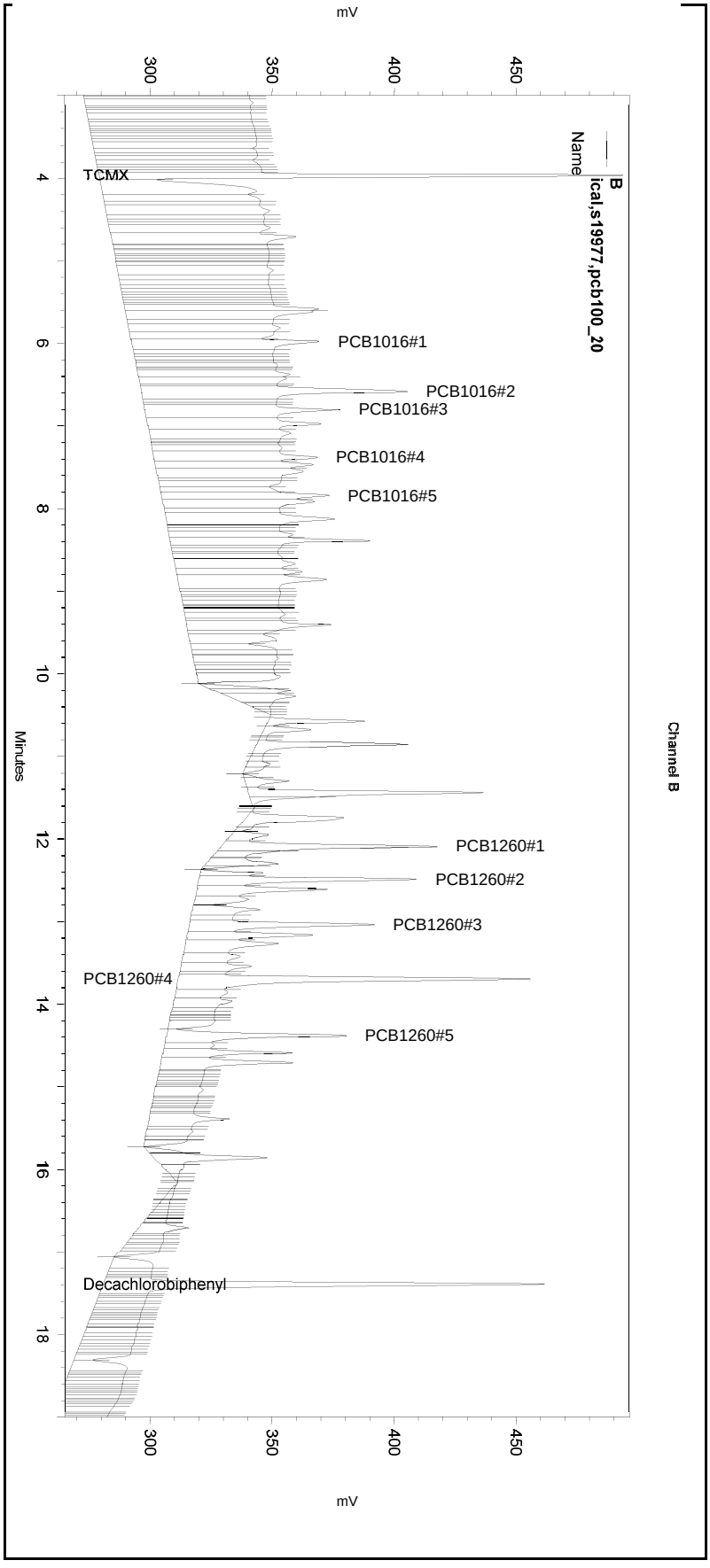
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:08:18 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:47:45 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	325280	50.000 CAL
PCB1016#1	6.990	7.004	32977	250.000 CAL
PCB1016#2	7.627	7.638	109472	250.000 CAL
PCB1016#3	7.940	7.951	62920	250.000 CAL
PCB1016#4	8.410	8.410	36376	250.000 CAL
PCB1016#5	8.937	8.937	51336	250.000 CAL
PCB1260#1	12.550	12.550	183250	250.000 CAL
PCB1260#2	13.210	13.210	147817	250.000 CAL
PCB1260#3	14.077	14.077	104832	250.000 CAL
PCB1260#4	14.820	14.820	241192	250.000 CAL
PCB1260#5	15.483	15.483	102689	250.000 CAL
Decachlorobiphenyl	18.103	18.103	385340	50.000 CAL

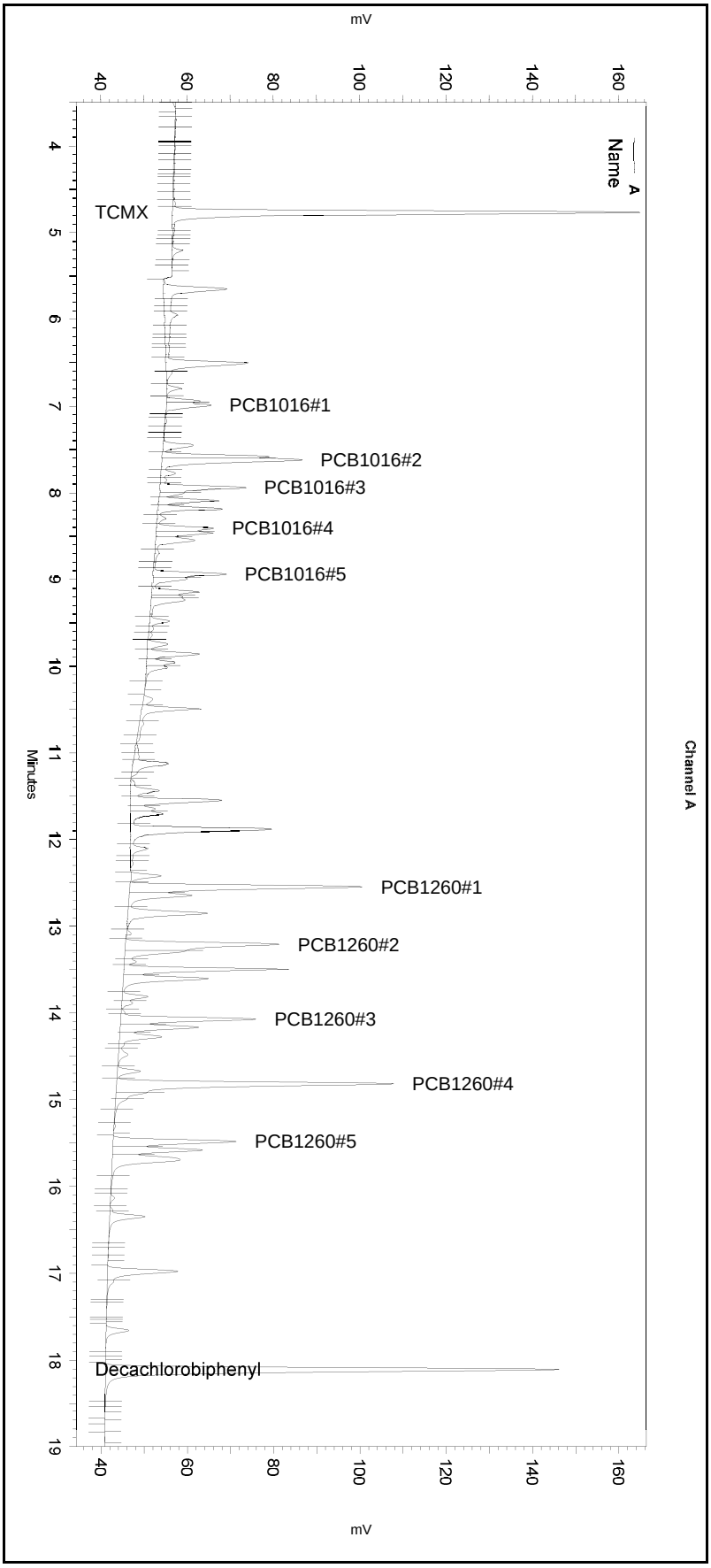
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	827591	50.000 CAL
PCB1016#1	5.983	5.983	137565	250.000 CAL
PCB1016#2	6.580	6.580	473753	250.000 CAL
PCB1016#3	6.803	6.803	196752	250.000 CAL
PCB1016#4	7.377	7.377	114094	250.000 CAL
PCB1016#5	7.847	7.847	134490	250.000 CAL
PCB1260#1	12.087	12.087	575982	250.000 CAL
PCB1260#2	12.497	12.497	475460	250.000 CAL
PCB1260#3	13.043	13.043	396095	250.000 CAL
PCB1260#4	13.700	13.700	907509	250.000 CAL
PCB1260#5	14.380	14.380	436868	250.000 CAL
Decachlorobiphenyl	17.390	17.390	1095183	50.000 CAL

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:47:45 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

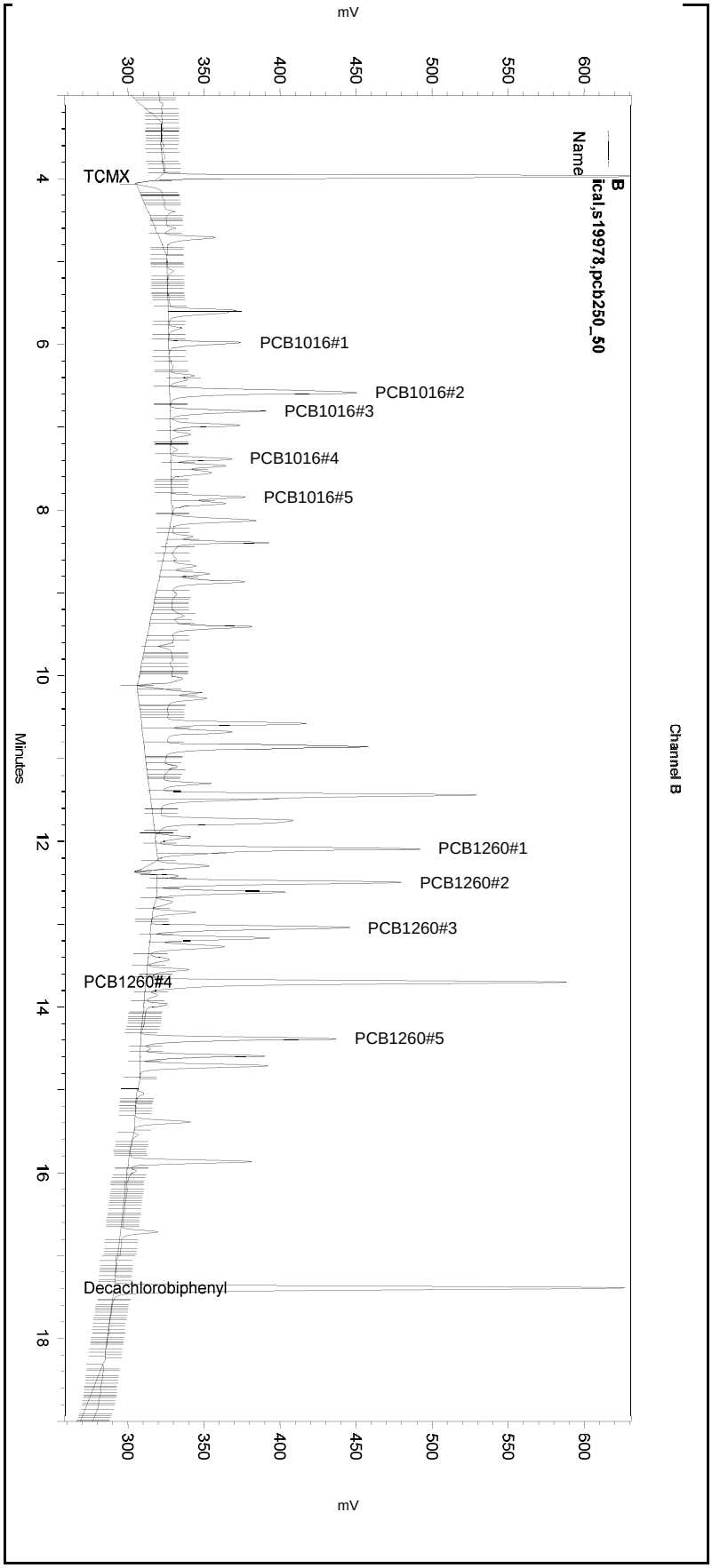
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.873	0	0
Yes	Reset Baseline	12.362	0	0

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:47:45 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.92	0	0
Yes	Reset Baseline	4.023	0	0
Yes	Reset Baseline	8.05	0	0
Yes	Reset Baseline	12.23	0	0
Yes	Manual Baseline	12.395	12.685	0
Yes	Reset Baseline	12.438	0	0

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:08:25 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	325280	50.000 CAL
PCB1016#1	6.990	6.990	48771	250.000 CAL
PCB1016#2	7.627	7.627	121864	250.000 CAL
PCB1016#3	7.940	7.940	72006	250.000 CAL
PCB1016#4	8.410	8.410	42092	250.000 CAL
PCB1016#5	8.937	8.937	56600	250.000 CAL
PCB1260#1	12.550	12.530	191375	250.000 CAL
PCB1260#2	13.210	13.210	153439	250.000 CAL
PCB1260#3	14.077	14.077	107747	250.000 CAL
PCB1260#4	14.820	14.820	242864	250.000 CAL
PCB1260#5	15.483	15.483	102689	250.000 CAL
Decachlorobiphenyl	18.103	18.103	385340	50.000 CAL

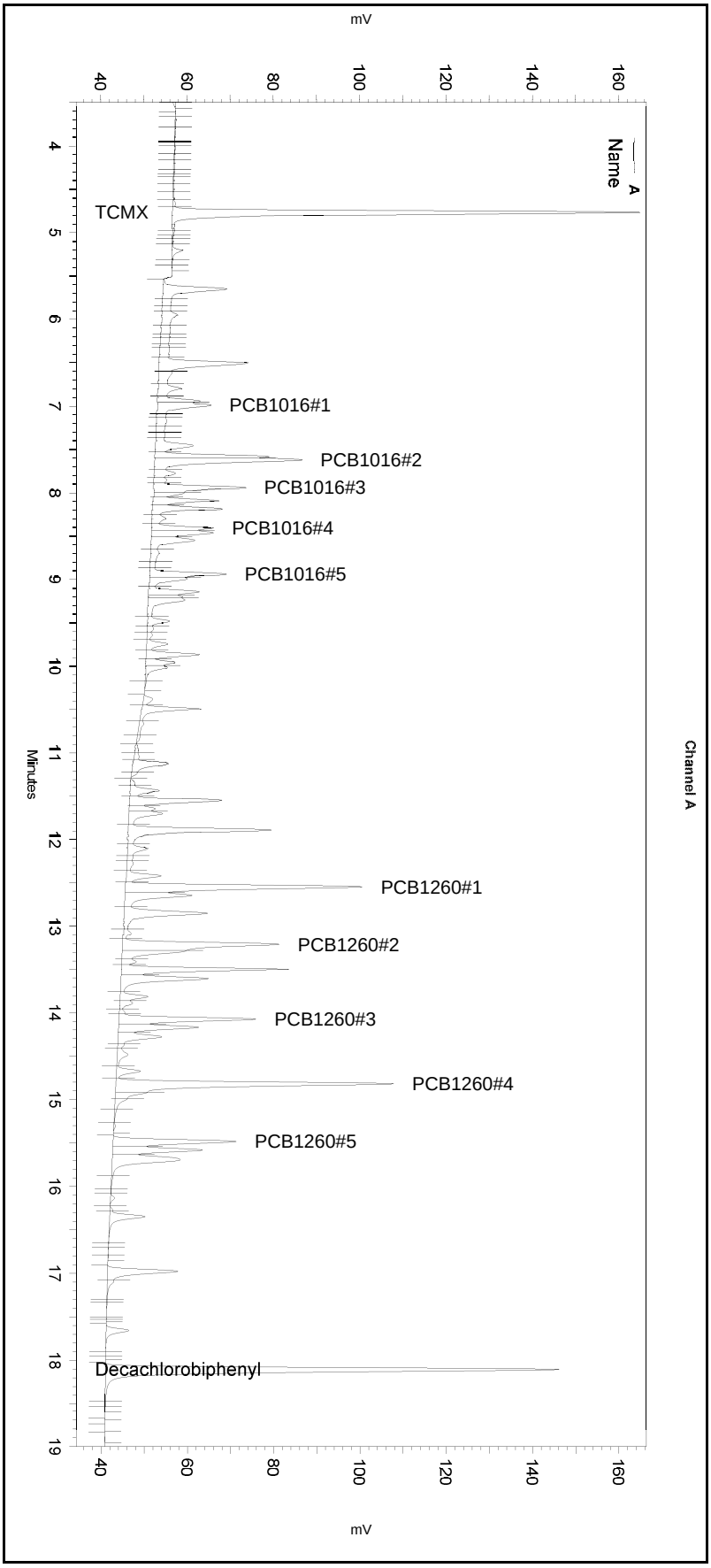
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	922308	50.000 CAL
PCB1016#1	5.983	5.983	182309	250.000 CAL
PCB1016#2	6.580	6.580	573838	250.000 CAL
PCB1016#3	6.803	6.803	287939	250.000 CAL
PCB1016#4	7.377	7.377	193495	250.000 CAL
PCB1016#5	7.847	7.847	221298	250.000 CAL
PCB1260#1	12.087	12.087	680465	250.000 CAL
PCB1260#2	12.497	12.497	579033	250.000 CAL
PCB1260#3	13.043	13.043	484635	250.000 CAL
PCB1260#4	13.700	13.700	964210	250.000 CAL
PCB1260#5	14.380	14.380	449722	250.000 CAL
Decachlorobiphenyl	17.390	17.390	1095183	50.000 CAL

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:08:25 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

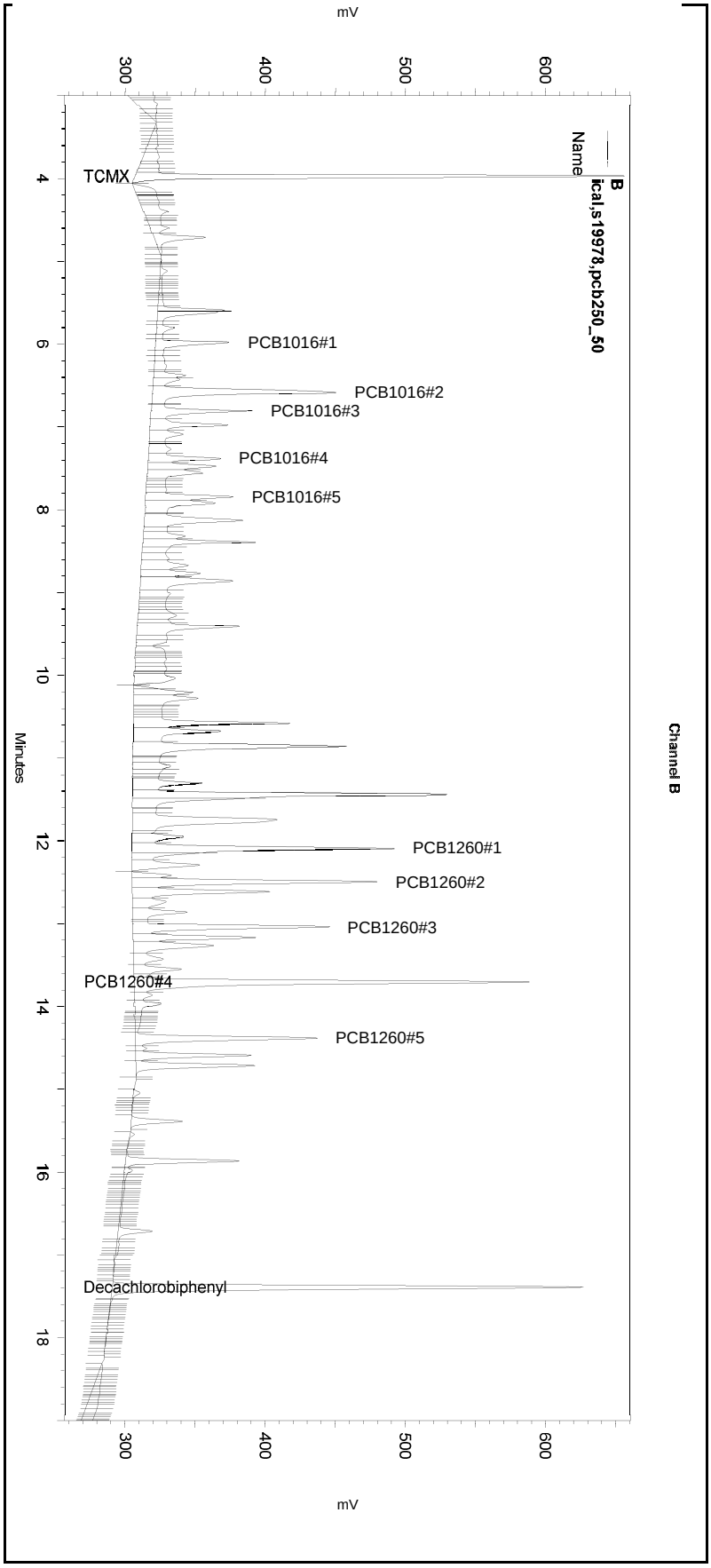
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:08:25 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:43:10 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	596169	100.000 CAL
PCB1016#1	6.997	7.004	66250	500.000 CAL
PCB1016#2	7.630	7.638	192643	500.000 CAL
PCB1016#3	7.947	7.951	111882	500.000 CAL
PCB1016#4	8.417	8.410	60139	500.000 CAL
PCB1016#5	8.943	8.937	87966	500.000 CAL
PCB1260#1	12.553	12.550	321448	500.000 CAL
PCB1260#2	13.213	13.210	259709	500.000 CAL
PCB1260#3	14.080	14.077	186170	500.000 CAL
PCB1260#4	14.823	14.820	429866	500.000 CAL
PCB1260#5	15.487	15.483	185707	500.000 CAL
Decachlorobiphenyl	18.107	18.103	664993	100.000 CAL

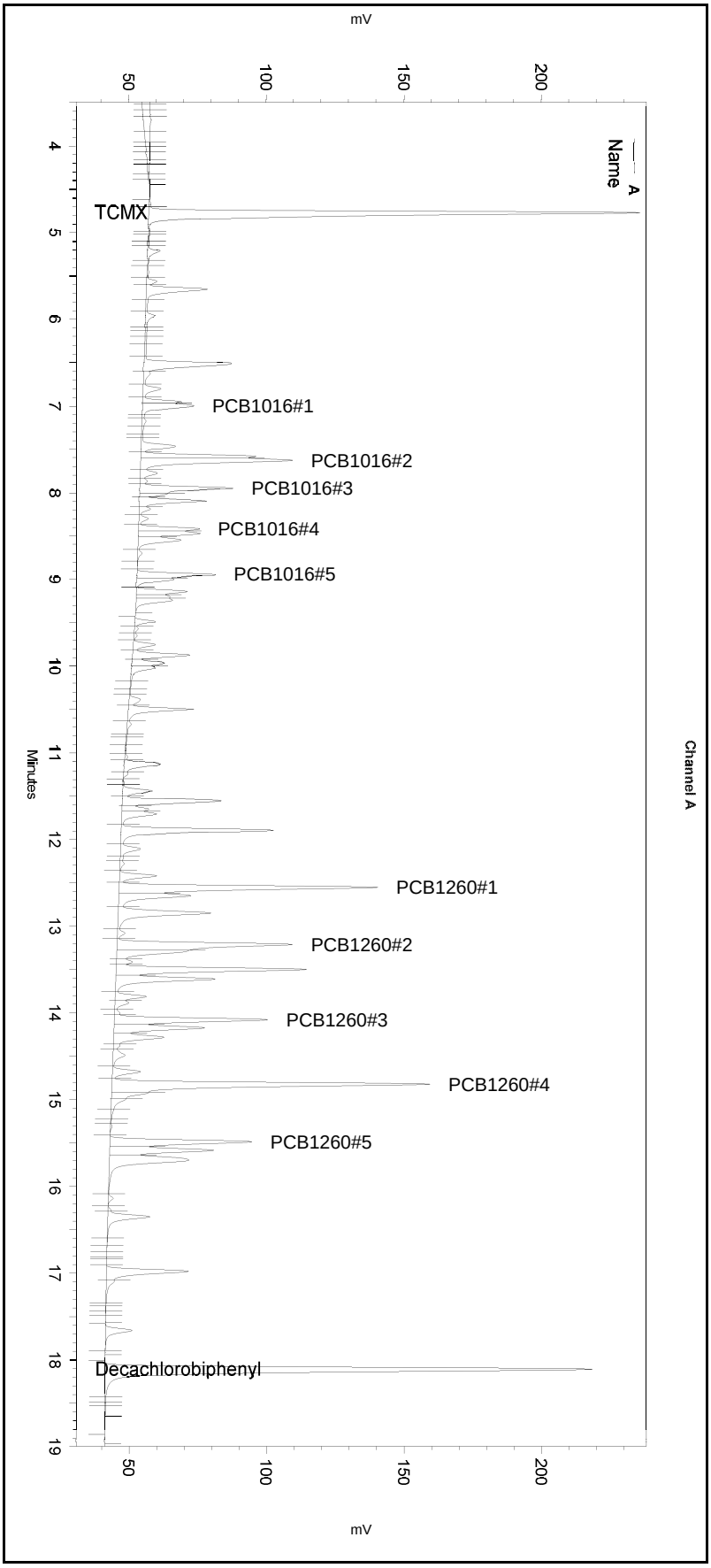
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.973	3.970	1690248	100.000 CAL
PCB1016#1	5.993	5.983	263242	500.000 CAL
PCB1016#2	6.587	6.580	832006	500.000 CAL
PCB1016#3	6.810	6.803	356144	500.000 CAL
PCB1016#4	7.383	7.377	205998	500.000 CAL
PCB1016#5	7.853	7.847	237285	500.000 CAL
PCB1260#1	12.090	12.087	990522	500.000 CAL
PCB1260#2	12.500	12.497	877326	500.000 CAL
PCB1260#3	13.047	13.043	681996	500.000 CAL
PCB1260#4	13.703	13.700	1540112	500.000 CAL
PCB1260#5	14.383	14.380	757230	500.000 CAL
Decachlorobiphenyl	17.393	17.390	1819990	100.000 CAL

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:43:10 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

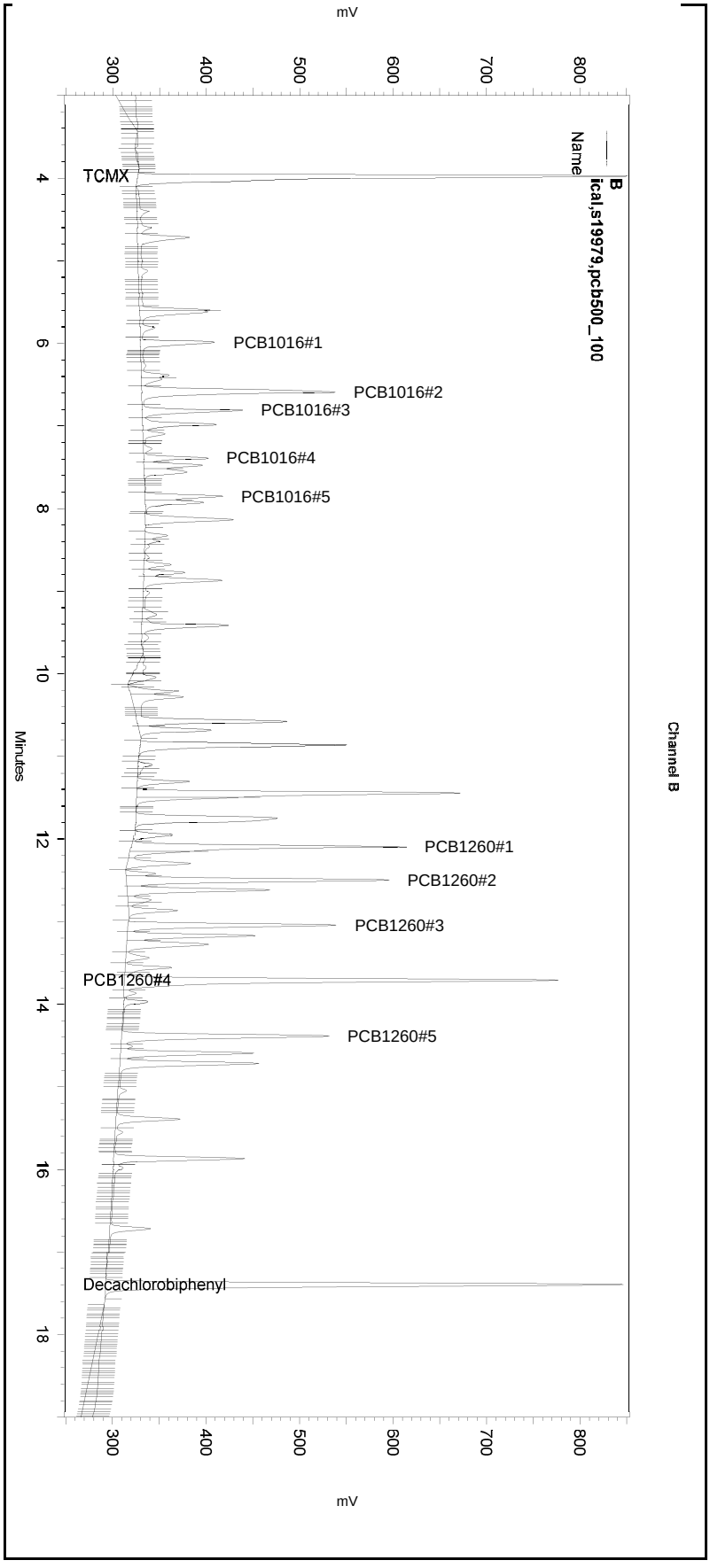
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.482	0	0
Yes	Reset Baseline	9.388	0	0

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:43:10 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.884	0	0
Yes	Reset Baseline	8.235	0	0
Yes	Reset Baseline	12.955	0	0
Yes	Reset Baseline	17.569	0	0

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:08:30 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	682805	100.000 CAL
PCB1016#1	6.997	6.990	104536	500.000 CAL
PCB1016#2	7.630	7.627	227290	500.000 CAL
PCB1016#3	7.947	7.940	139983	500.000 CAL
PCB1016#4	8.417	8.410	80815	500.000 CAL
PCB1016#5	8.943	8.937	114959	500.000 CAL
PCB1260#1	12.553	12.530	328279	500.000 CAL
PCB1260#2	13.213	13.210	265518	500.000 CAL
PCB1260#3	14.080	14.077	189374	500.000 CAL
PCB1260#4	14.823	14.820	432144	500.000 CAL
PCB1260#5	15.487	15.483	186280	500.000 CAL
Decachlorobiphenyl	18.107	18.103	664993	100.000 CAL

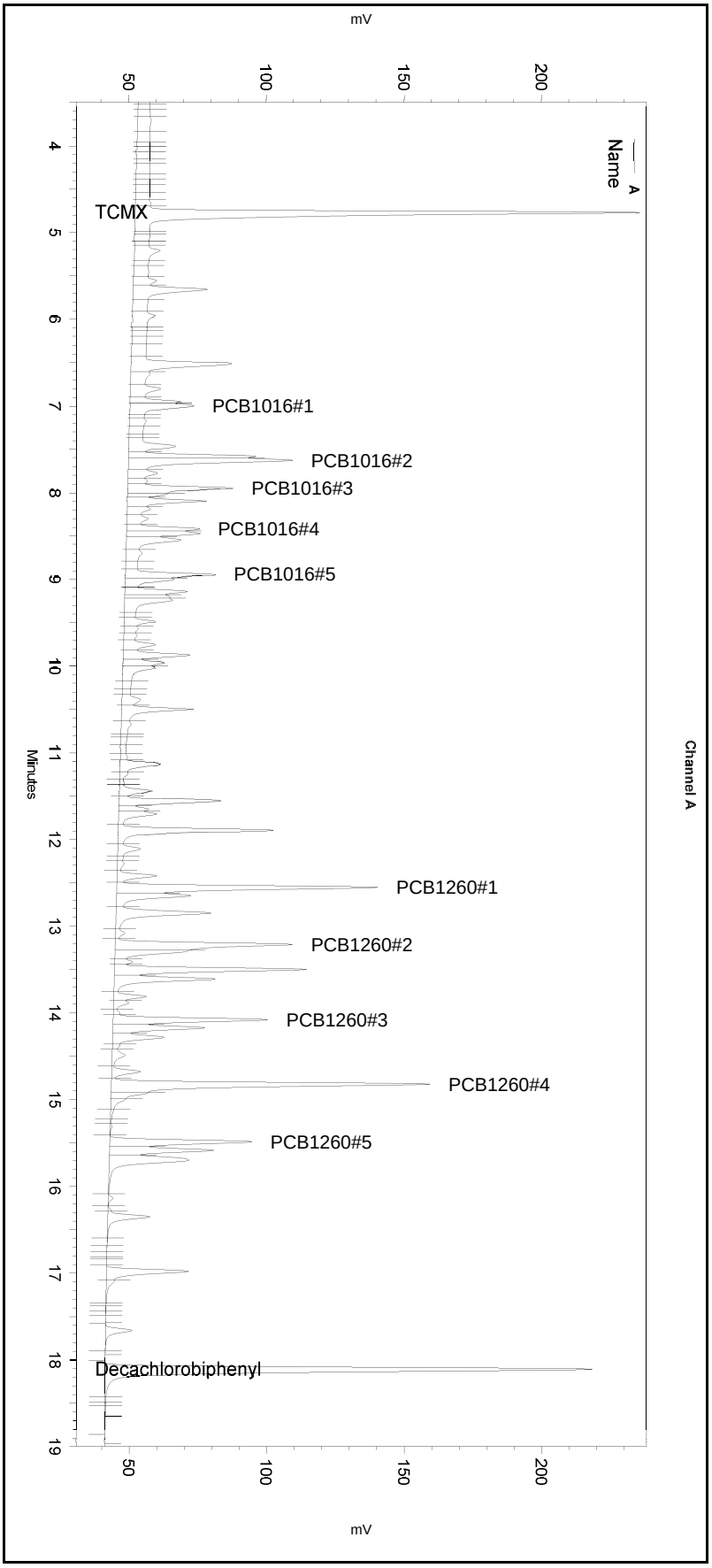
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.973	3.970	1716249	100.000 CAL
PCB1016#1	5.993	5.983	297728	500.000 CAL
PCB1016#2	6.587	6.580	888220	500.000 CAL
PCB1016#3	6.810	6.803	400449	500.000 CAL
PCB1016#4	7.383	7.377	239714	500.000 CAL
PCB1016#5	7.853	7.847	272915	500.000 CAL
PCB1260#1	12.090	12.087	990522	500.000 CAL
PCB1260#2	12.500	12.497	892620	500.000 CAL
PCB1260#3	13.047	13.043	761459	500.000 CAL
PCB1260#4	13.703	13.700	1667648	500.000 CAL
PCB1260#5	14.383	14.380	898685	500.000 CAL
Decachlorobiphenyl	17.393	17.390	2210059	100.000 CAL

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:08:30 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

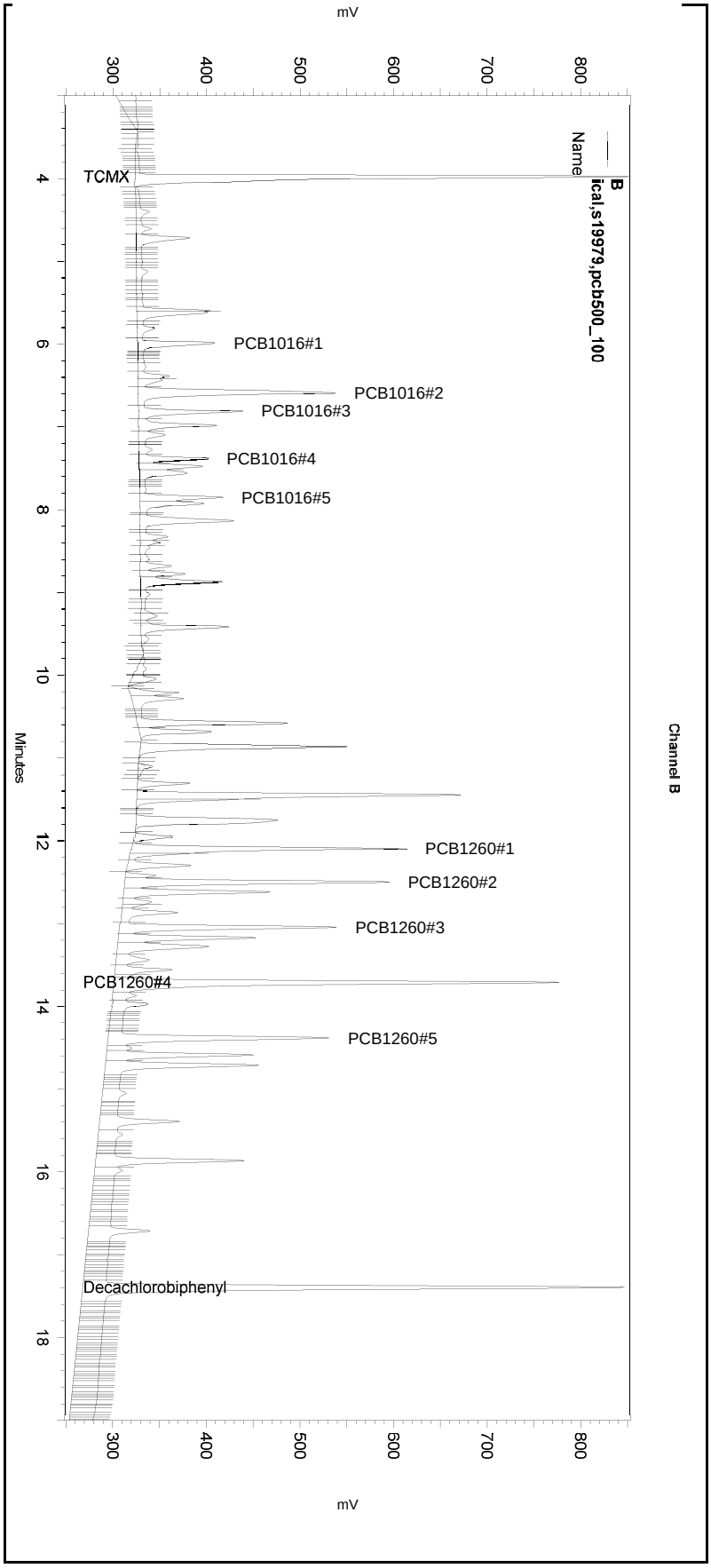
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:08:30 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:40:50 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.760	4.763	828717	150.000 CAL
PCB1016#1	6.987	7.004	86438	750.000 CAL
PCB1016#2	7.620	7.638	250253	750.000 CAL
PCB1016#3	7.937	7.951	144418	750.000 CAL
PCB1016#4	8.407	8.410	78627	750.000 CAL
PCB1016#5	8.933	8.937	122058	750.000 CAL
PCB1260#1	12.543	12.550	429369	750.000 CAL
PCB1260#2	13.203	13.210	355470	750.000 CAL
PCB1260#3	14.070	14.077	253746	750.000 CAL
PCB1260#4	14.813	14.820	586370	750.000 CAL
PCB1260#5	15.477	15.483	251877	750.000 CAL
Decachlorobiphenyl	18.097	18.103	852871	150.000 CAL

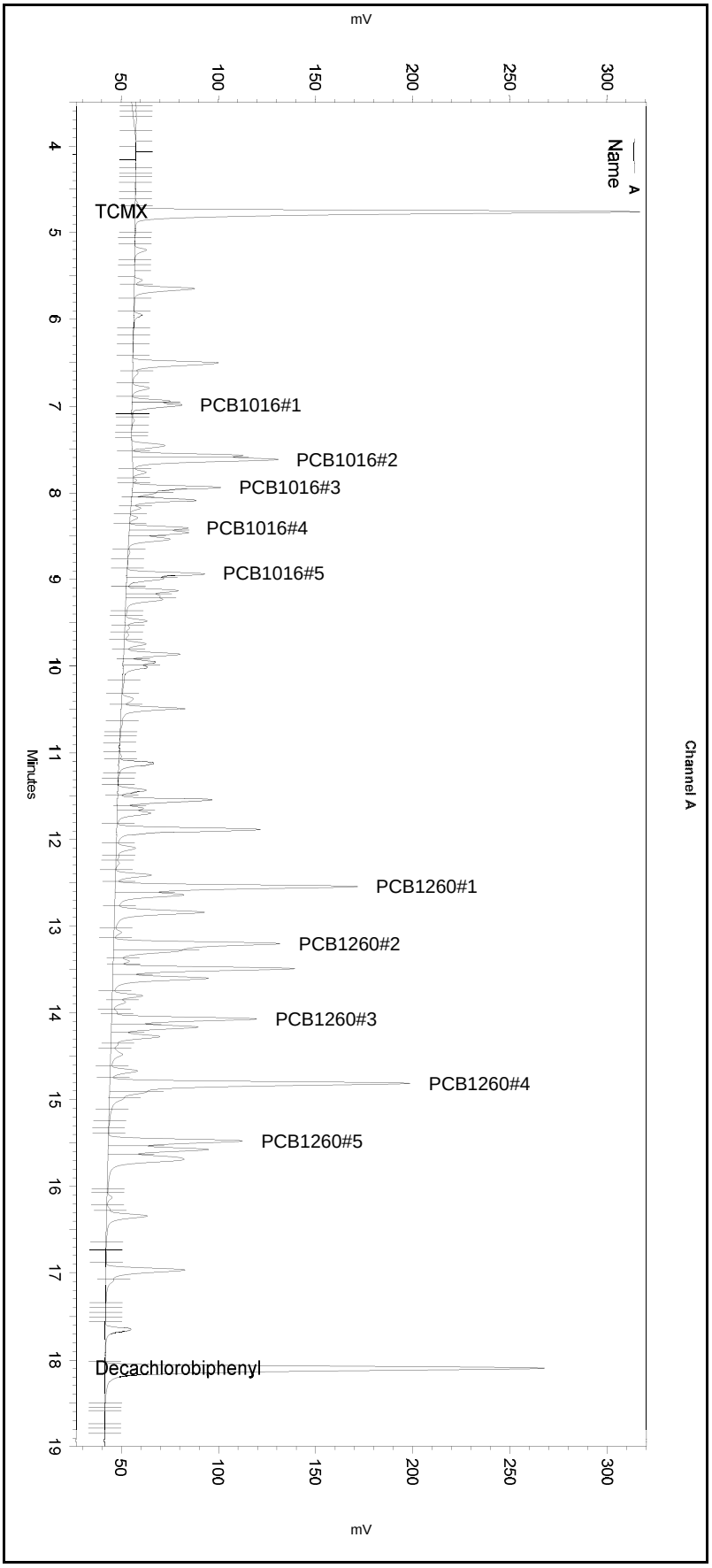
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	2264442	150.000 CAL
PCB1016#1	5.983	5.983	349194	750.000 CAL
PCB1016#2	6.577	6.580	1097380	750.000 CAL
PCB1016#3	6.800	6.803	467186	750.000 CAL
PCB1016#4	7.373	7.377	275695	750.000 CAL
PCB1016#5	7.843	7.847	332655	750.000 CAL
PCB1260#1	12.083	12.087	1297398	750.000 CAL
PCB1260#2	12.490	12.497	1159075	750.000 CAL
PCB1260#3	13.037	13.043	963756	750.000 CAL
PCB1260#4	13.693	13.700	2055476	750.000 CAL
PCB1260#5	14.377	14.380	977736	750.000 CAL
Decachlorobiphenyl	17.383	17.390	2309664	150.000 CAL

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:40:50 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

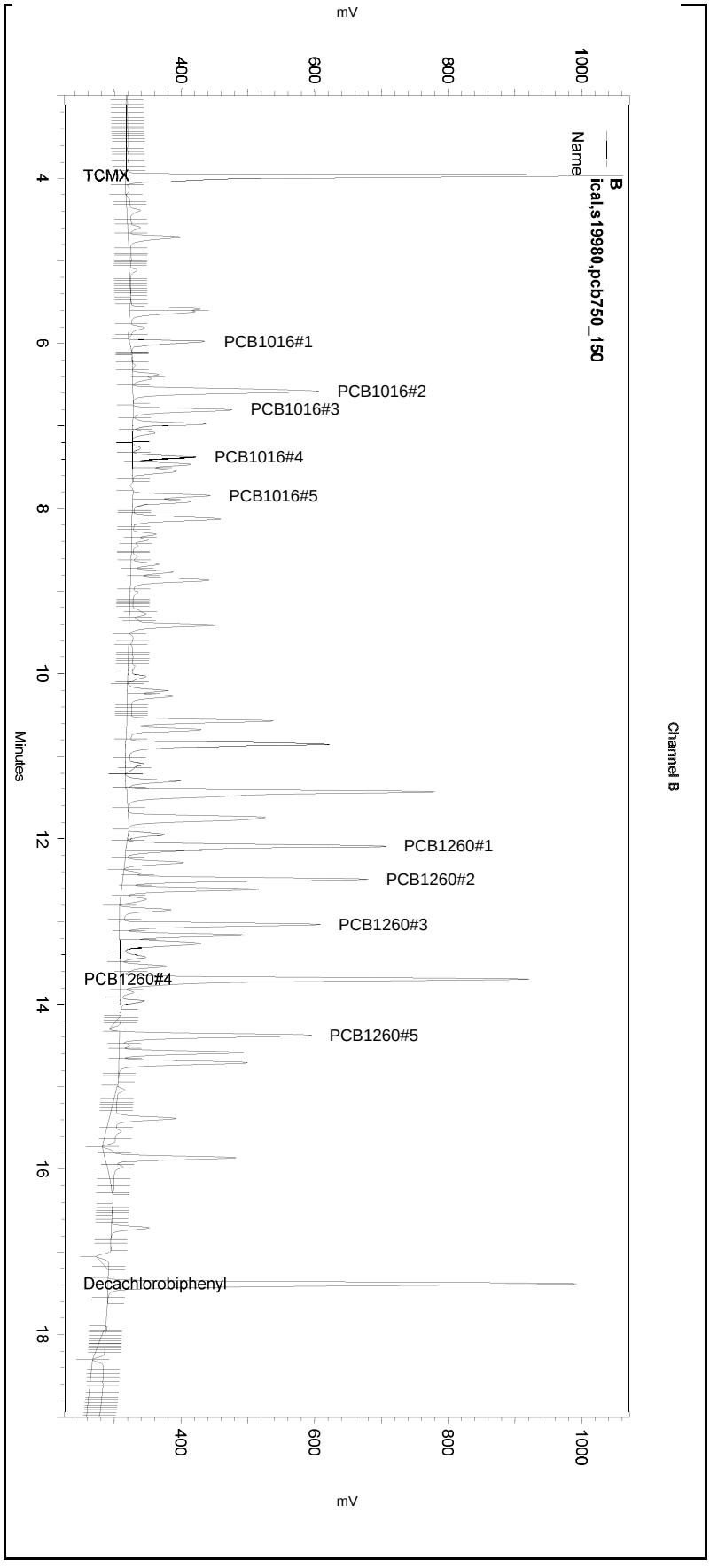
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.818	0	0

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:40:50 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.679	0	0
Yes	Reset Baseline	7.763	0	0
Yes	Reset Baseline	11.857	0	0
Yes	Reset Baseline	14.126	0	0
Yes	Reset Baseline	14.324	0	0
Yes	Reset Baseline	14.932	0	0
Yes	Reset Baseline	17.238	0	0
Yes	Reset Baseline	17.622	0	0

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:09:20 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.760	4.763	828717	150.000 CAL
PCB1016#1	6.987	6.990	93091	750.000 CAL
PCB1016#2	7.620	7.627	266914	750.000 CAL
PCB1016#3	7.937	7.940	161046	750.000 CAL
PCB1016#4	8.407	8.410	86147	750.000 CAL
PCB1016#5	8.933	8.937	128700	750.000 CAL
PCB1260#1	12.543	12.530	429369	750.000 CAL
PCB1260#2	13.203	13.210	355470	750.000 CAL
PCB1260#3	14.070	14.077	253746	750.000 CAL
PCB1260#4	14.813	14.820	586370	750.000 CAL
PCB1260#5	15.477	15.483	251877	750.000 CAL
Decachlorobiphenyl	18.097	18.103	852871	150.000 CAL

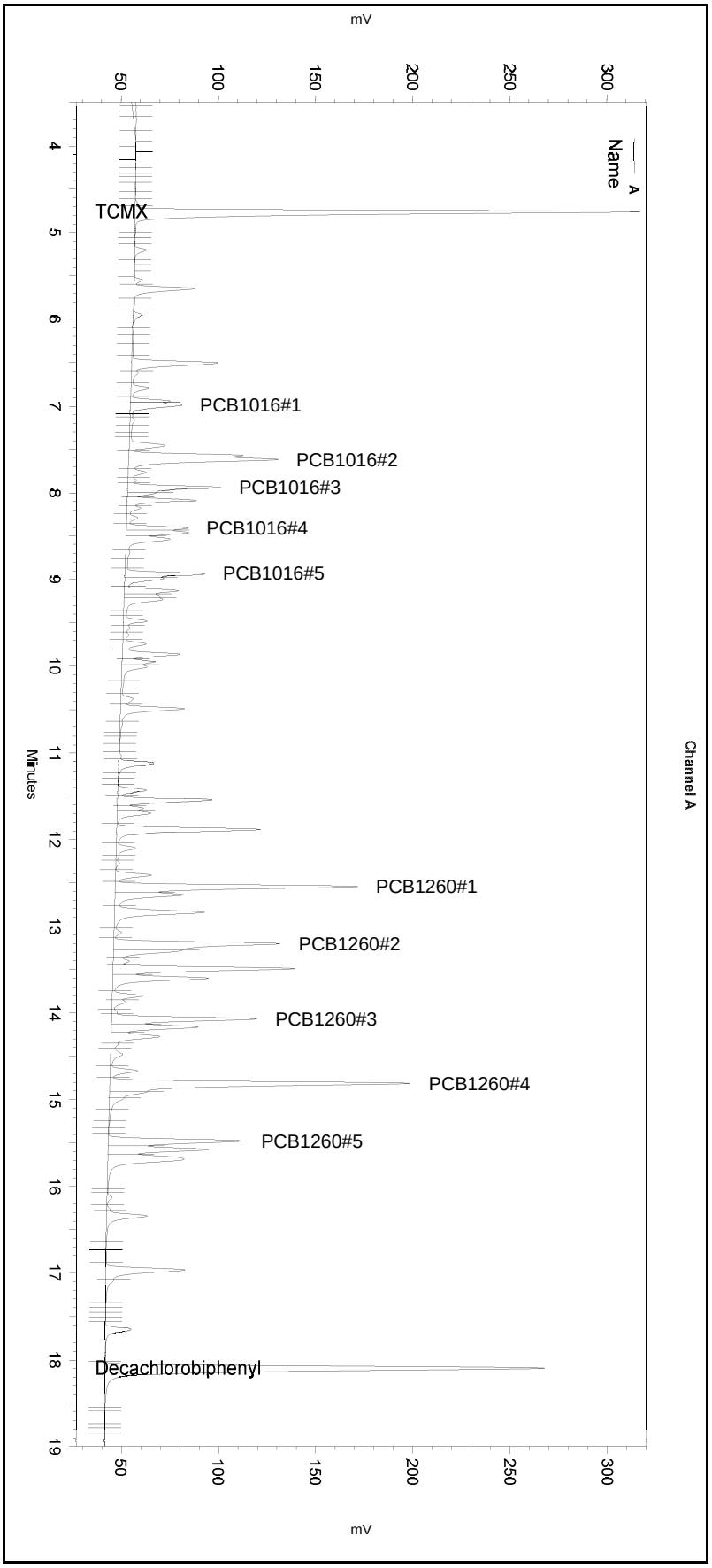
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	2264442	150.000 CAL
PCB1016#1	5.983	5.983	349194	750.000 CAL
PCB1016#2	6.577	6.580	1097380	750.000 CAL
PCB1016#3	6.800	6.803	469770	750.000 CAL
PCB1016#4	7.373	7.377	293111	750.000 CAL
PCB1016#5	7.843	7.847	364274	750.000 CAL
PCB1260#1	12.083	12.087	1428553	750.000 CAL
PCB1260#2	12.490	12.497	1258462	750.000 CAL
PCB1260#3	13.037	13.043	1069785	750.000 CAL
PCB1260#4	13.693	13.700	2228065	750.000 CAL
PCB1260#5	14.377	14.380	1143765	750.000 CAL
Decachlorobiphenyl	17.383	17.390	2607386	150.000 CAL

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:09:20 AM
Sample Amount: 1



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No items selected for this section

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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

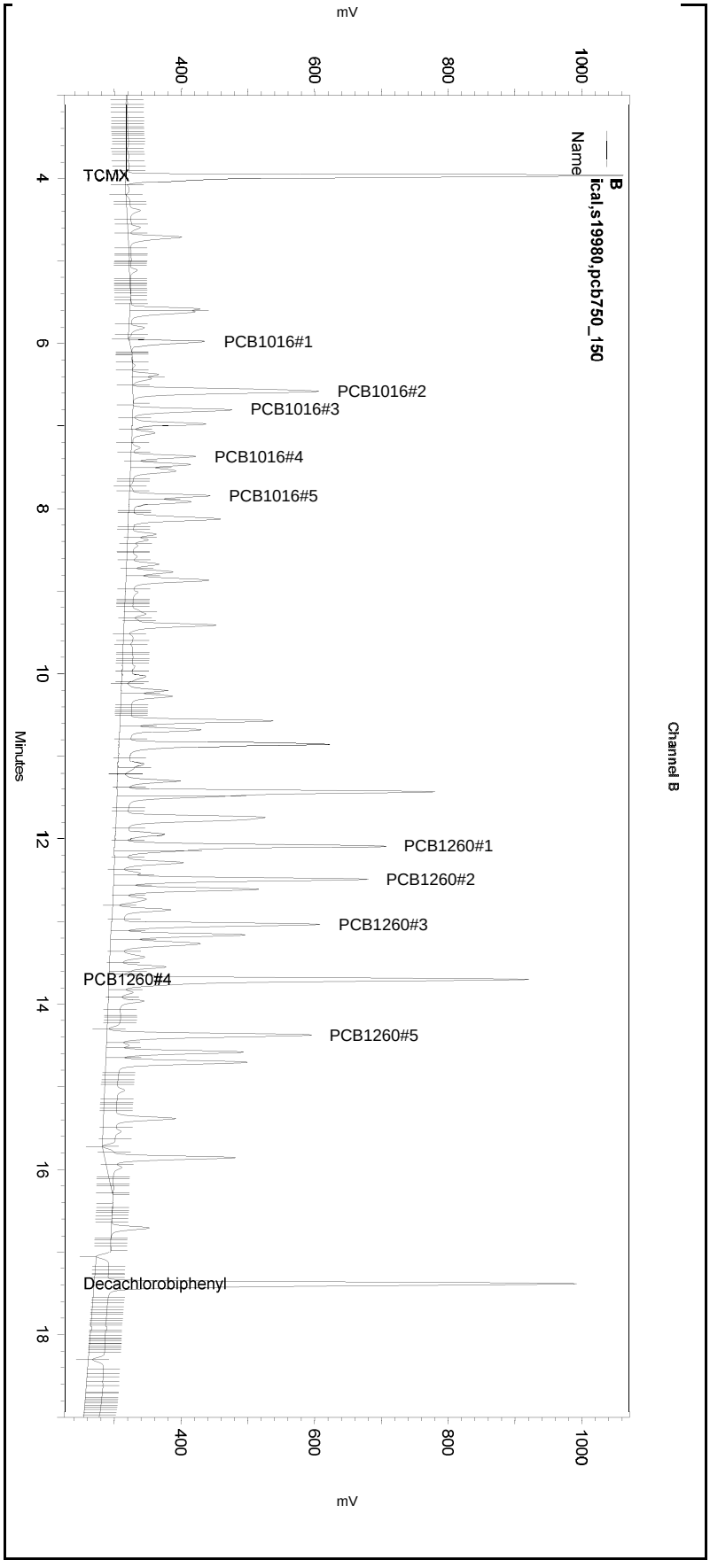
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:09:20 AM
Sample Amount: 1



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No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:45:30 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.773	4.763	1076106	200.000 CAL
PCB1016#1	7.003	7.004	117622	1000.000 CAL
PCB1016#2	7.637	7.638	347710	1000.000 CAL
PCB1016#3	7.950	7.951	205234	1000.000 CAL
PCB1016#4	8.420	8.410	112837	1000.000 CAL
PCB1016#5	8.947	8.937	164360	1000.000 CAL
PCB1260#1	12.557	12.550	561628	1000.000 CAL
PCB1260#2	13.217	13.210	475944	1000.000 CAL
PCB1260#3	14.083	14.077	336688	1000.000 CAL
PCB1260#4	14.827	14.820	774134	1000.000 CAL
PCB1260#5	15.490	15.483	345469	1000.000 CAL
Decachlorobiphenyl	18.110	18.103	1120940	200.000 CAL

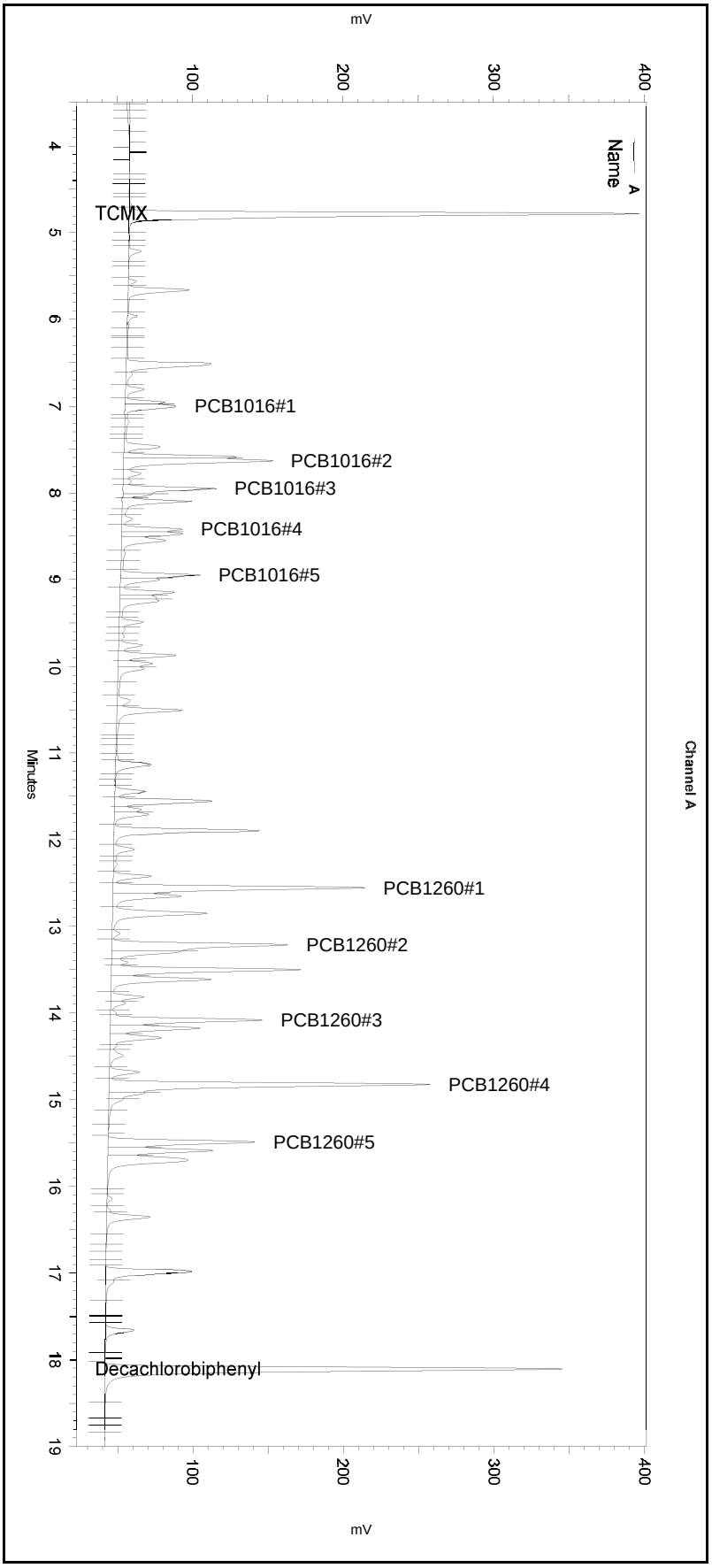
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.980	3.970	2811983	200.000 CAL
PCB1016#1	5.997	5.983	456896	1000.000 CAL
PCB1016#2	6.593	6.580	1387456	1000.000 CAL
PCB1016#3	6.817	6.803	626326	1000.000 CAL
PCB1016#4	7.387	7.377	365293	1000.000 CAL
PCB1016#5	7.857	7.847	426715	1000.000 CAL
PCB1260#1	12.097	12.087	1694979	1000.000 CAL
PCB1260#2	12.503	12.497	1482483	1000.000 CAL
PCB1260#3	13.050	13.043	1204600	1000.000 CAL
PCB1260#4	13.707	13.700	2634276	1000.000 CAL
PCB1260#5	14.387	14.380	1337671	1000.000 CAL
Decachlorobiphenyl	17.397	17.390	2983596	200.000 CAL

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:45:30 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

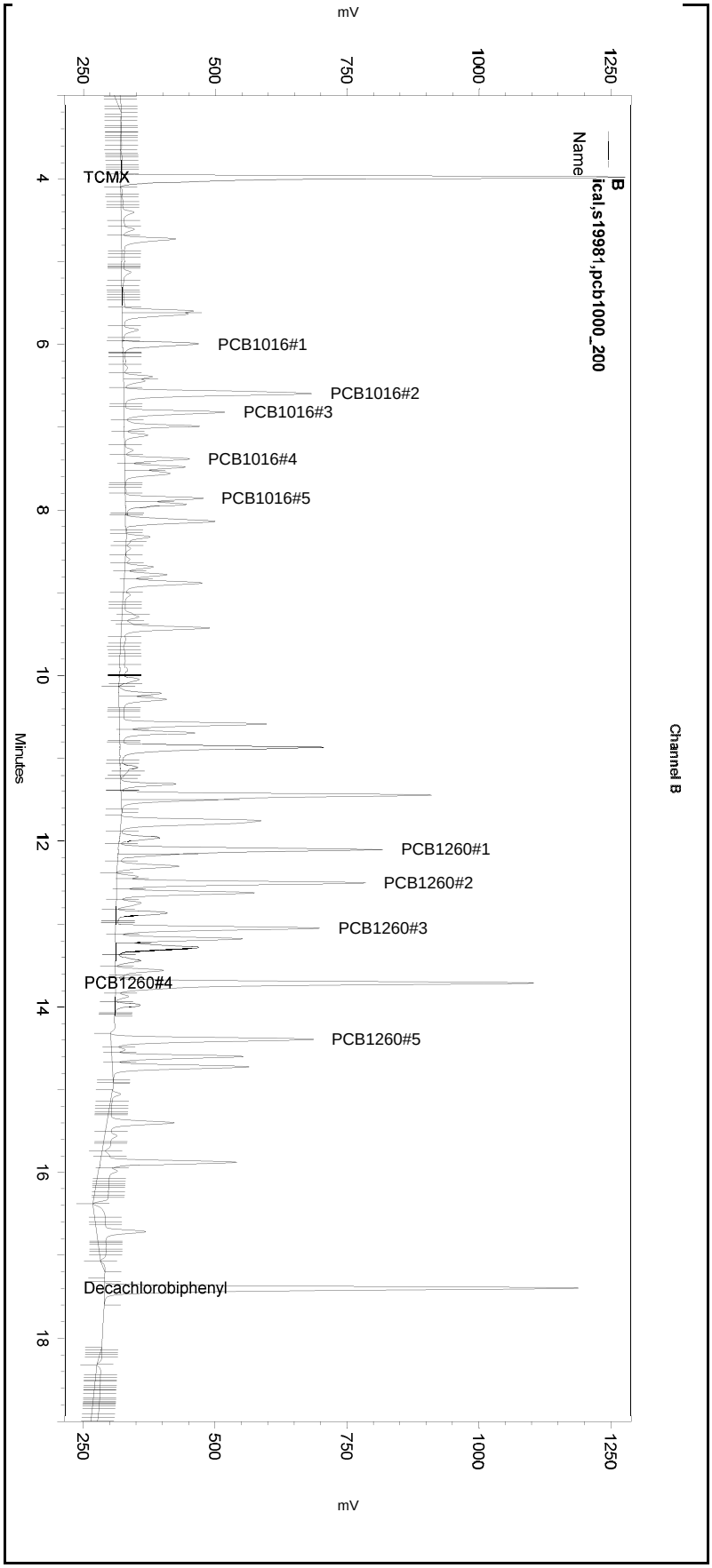
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:45:30 AM
Sample Amount: 1



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Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.283	0	0
Yes	Reset Baseline	11.652	0	0
Yes	Reset Baseline	14.118	0	0
Yes	Reset Baseline	14.92	0	0
Yes	Reset Baseline	17.203	0	0
Yes	Reset Baseline	17.601	0	0

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:09:25 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.773	4.763	1076106	200.000 CAL
PCB1016#1	7.003	6.990	117622	1000.000 CAL
PCB1016#2	7.637	7.627	347710	1000.000 CAL
PCB1016#3	7.950	7.940	205234	1000.000 CAL
PCB1016#4	8.420	8.410	112837	1000.000 CAL
PCB1016#5	8.947	8.937	164360	1000.000 CAL
PCB1260#1	12.557	12.530	561628	1000.000 CAL
PCB1260#2	13.217	13.210	475944	1000.000 CAL
PCB1260#3	14.083	14.077	336688	1000.000 CAL
PCB1260#4	14.827	14.820	774134	1000.000 CAL
PCB1260#5	15.490	15.483	345469	1000.000 CAL
Decachlorobiphenyl	18.110	18.103	1120940	200.000 CAL

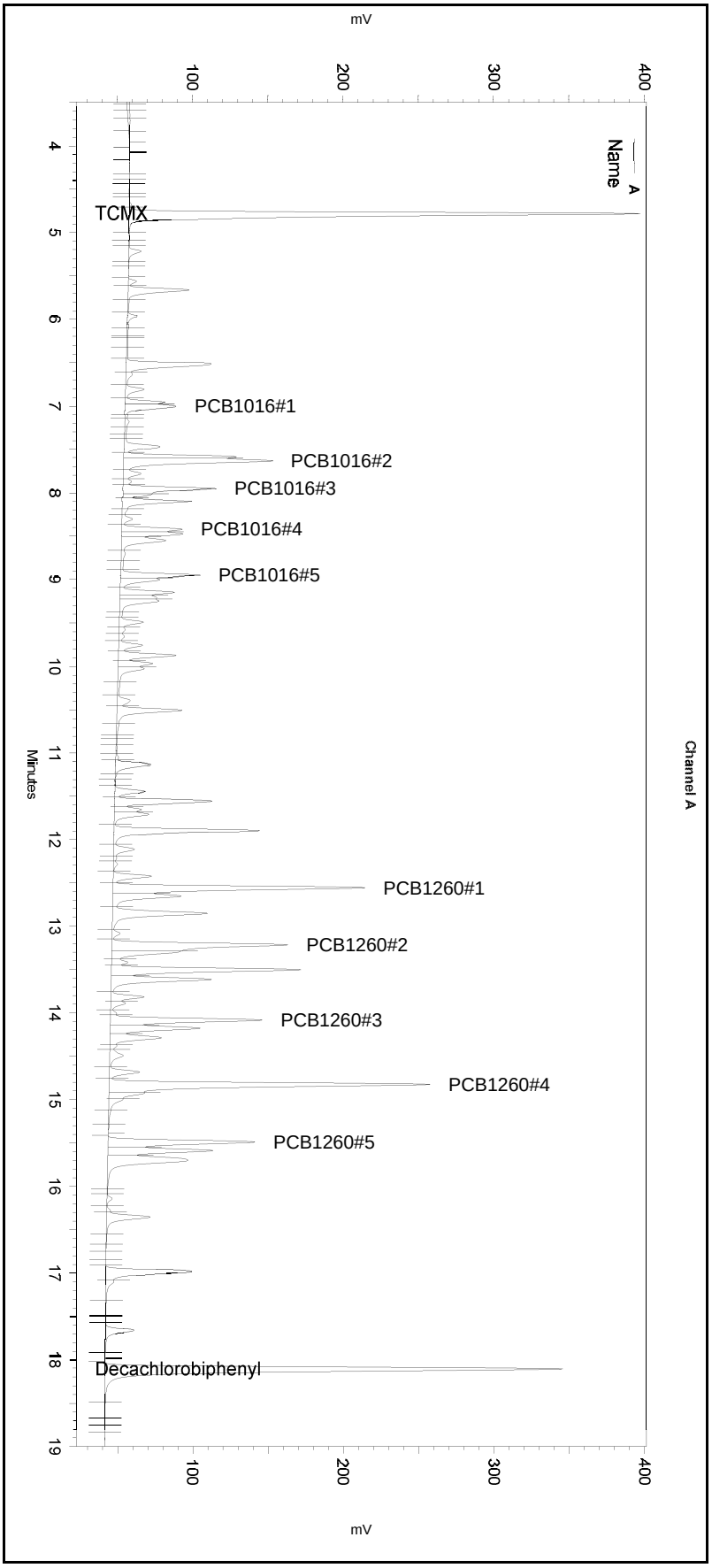
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.980	3.970	2833018	200.000 CAL
PCB1016#1	5.997	5.983	606263	1000.000 CAL
PCB1016#2	6.593	6.580	1620536	1000.000 CAL
PCB1016#3	6.817	6.803	837891	1000.000 CAL
PCB1016#4	7.387	7.377	528850	1000.000 CAL
PCB1016#5	7.857	7.847	599761	1000.000 CAL
PCB1260#1	12.097	12.087	1961204	1000.000 CAL
PCB1260#2	12.503	12.497	1725780	1000.000 CAL
PCB1260#3	13.050	13.043	1510718	1000.000 CAL
PCB1260#4	13.707	13.700	3043493	1000.000 CAL
PCB1260#5	14.387	14.380	1658900	1000.000 CAL
Decachlorobiphenyl	17.397	17.390	3535051	200.000 CAL

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:09:25 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

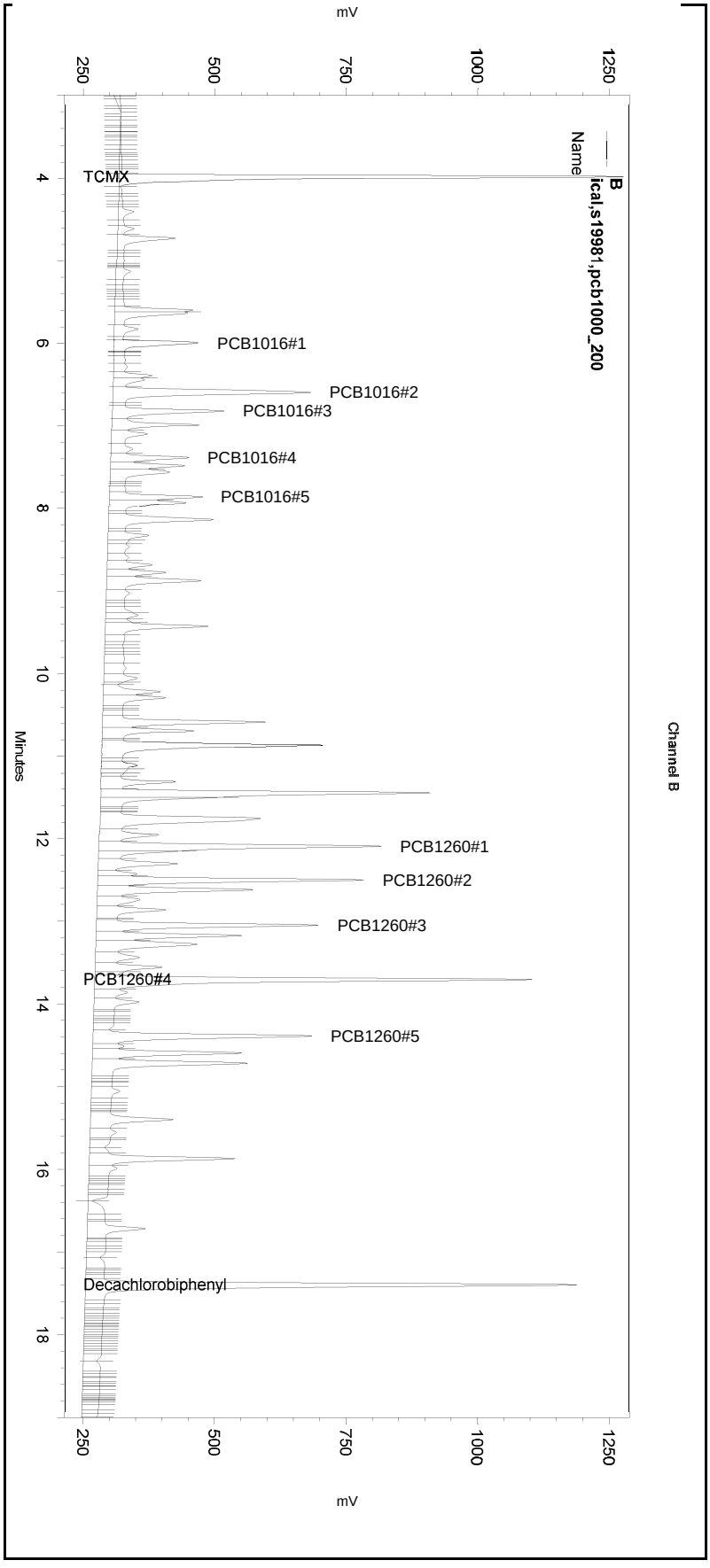
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:09:25 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:57:30 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	321909	48.723
PCB1016#1	6.990	7.004	34724	253.775
PCB1016#2	7.627	7.638	105533	245.350
PCB1016#3	7.940	7.951	57551	249.673
PCB1016#4	8.410	8.410	32830	271.075
PCB1016#5	8.937	8.937	50032	257.446
PCB1260#1	12.547	12.550	177195	231.000
PCB1260#2	13.207	13.210	137185	243.283
PCB1260#3	14.073	14.077	103349	218.712
PCB1260#4	14.817	14.820	235333	253.192
PCB1260#5	15.480	15.483	102602	262.368
Decachlorobiphenyl	18.100	18.103	323735	37.846

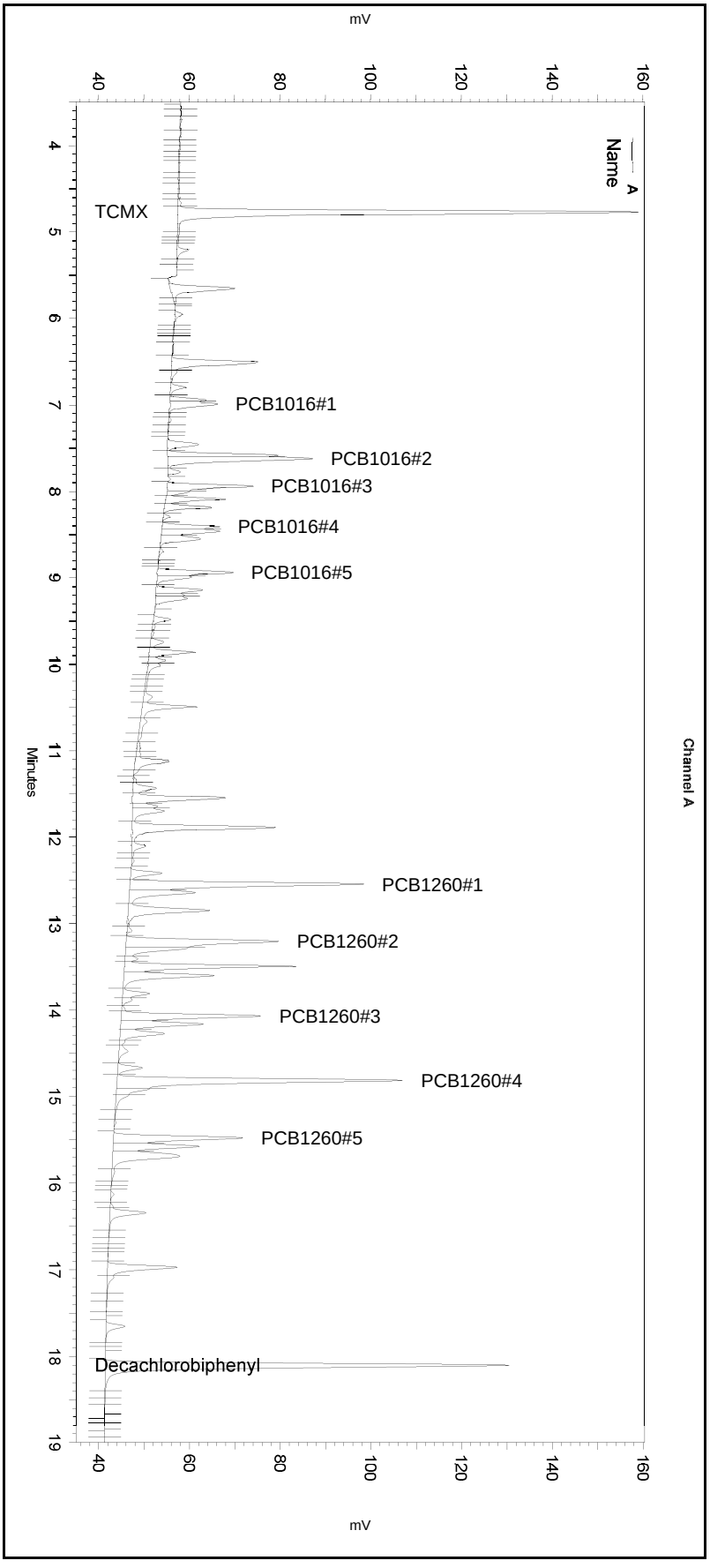
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	780721	44.360
PCB1016#1	5.987	5.983	141329	279.447
PCB1016#2	6.580	6.580	446193	246.593
PCB1016#3	6.803	6.803	186548	241.708
PCB1016#4	7.377	7.377	108180	270.002
PCB1016#5	7.847	7.847	131750	240.480
PCB1260#1	12.083	12.087	518936	264.131
PCB1260#2	12.493	12.497	464575	240.228
PCB1260#3	13.037	13.043	382945	226.945
PCB1260#4	13.697	13.700	868836	286.341
PCB1260#5	14.377	14.380	420559	289.392
Decachlorobiphenyl	17.387	17.390	910785	43.999

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:57:30 AM
Sample Amount: 1



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No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

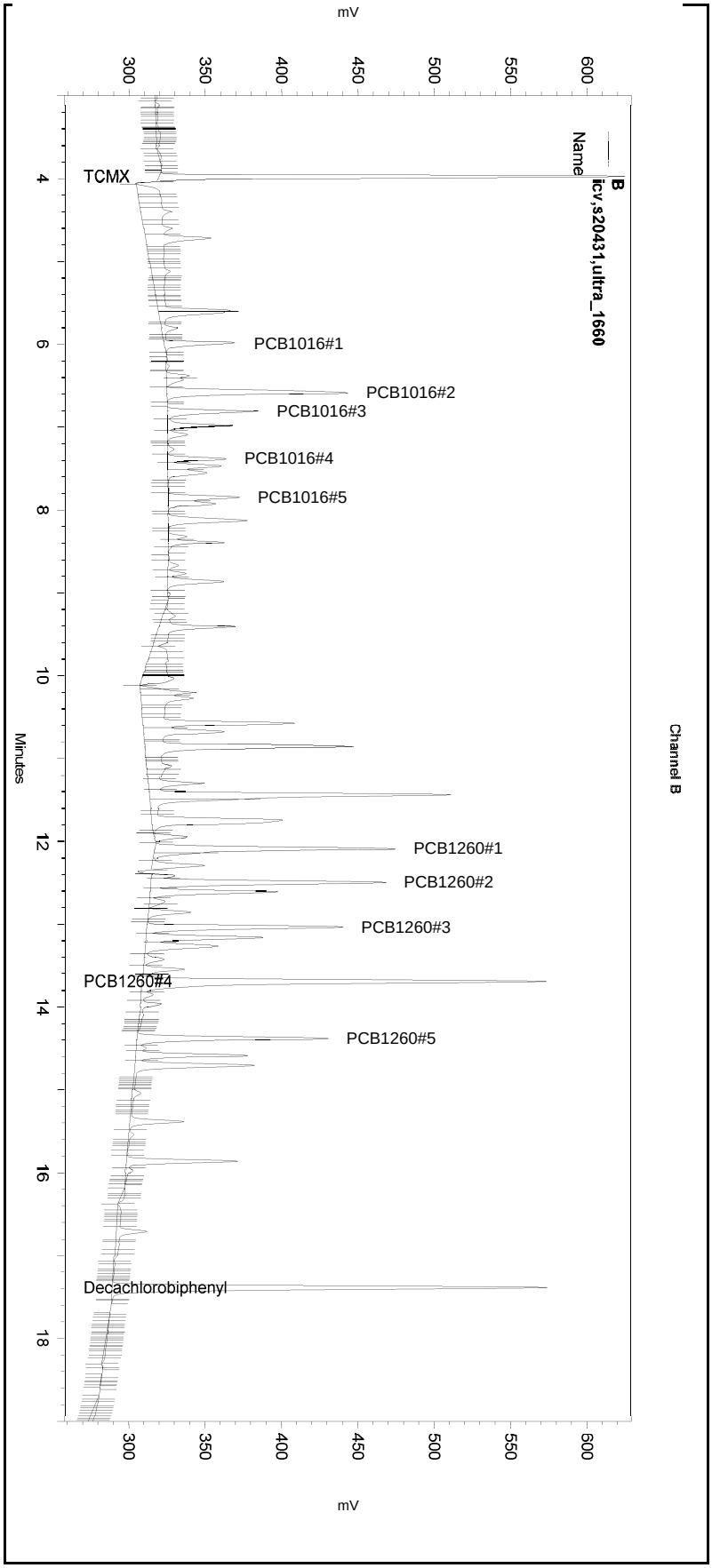
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.829	0	0
Yes	Reset Baseline	9.356	0	0
Yes	Reset Baseline	12.334	0	0

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:57:30 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.029	0	0
Yes	Reset Baseline	12.013	0	0
Yes	Reset Baseline	12.344	0	0
Yes	Reset Baseline	12.387	0	0
Yes	Reset Baseline	17.585	0	0

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:55:28 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	321909	48.723
PCB1016#1	6.990	7.004	40027	292.531
PCB1016#2	7.627	7.638	117185	272.440
PCB1016#3	7.940	7.951	69354	300.878
PCB1016#4	8.410	8.410	39641	334.363
PCB1016#5	8.937	8.937	58949	303.329
PCB1260#1	12.547	12.550	181479	236.585
PCB1260#2	13.207	13.210	140644	249.417
PCB1260#3	14.073	14.077	105130	222.481
PCB1260#4	14.817	14.820	236363	254.301
PCB1260#5	15.480	15.483	102602	262.368
Decachlorobiphenyl	18.100	18.103	323735	37.846

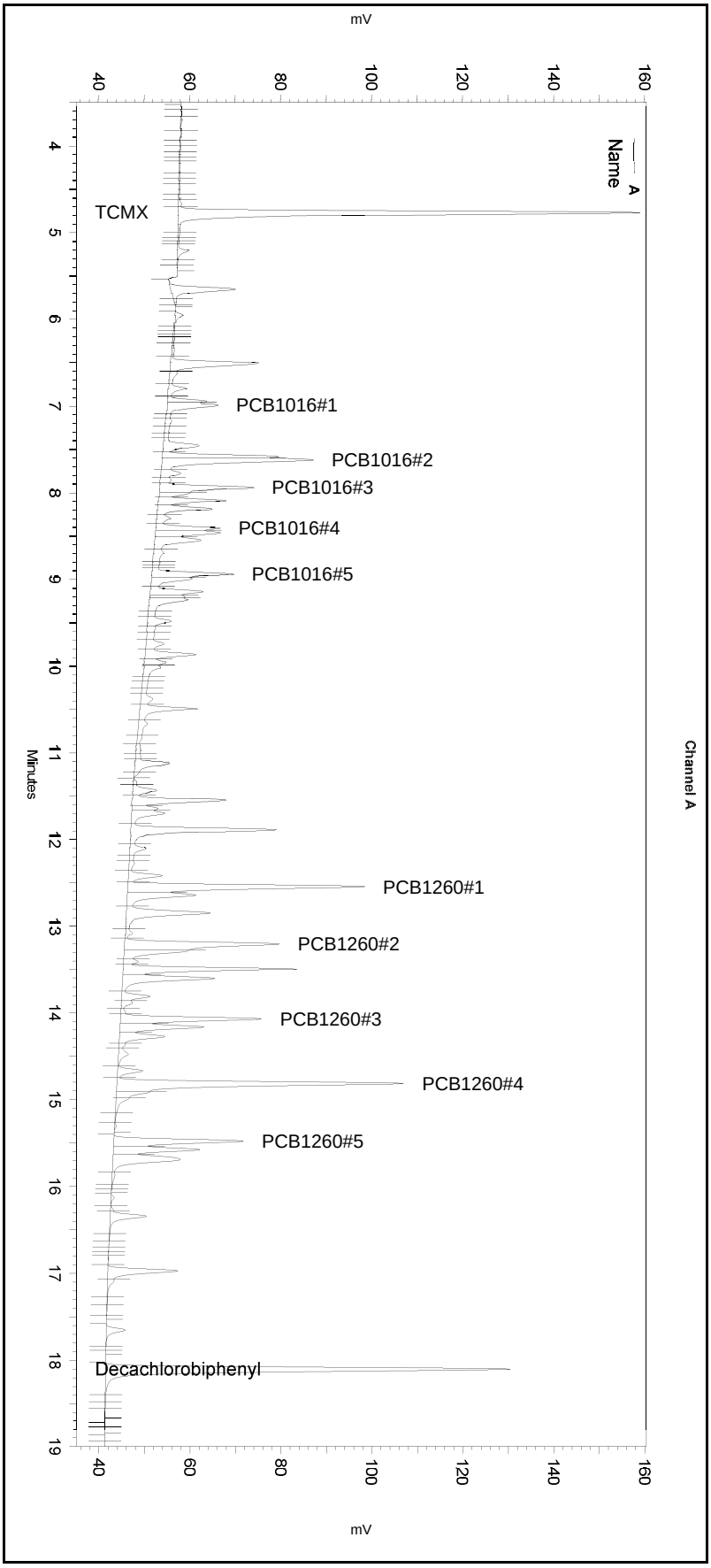
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	830674	47.198
PCB1016#1	5.987	5.983	141456	279.728
PCB1016#2	6.580	6.580	446193	246.593
PCB1016#3	6.803	6.803	186548	241.708
PCB1016#4	7.377	7.377	108180	270.002
PCB1016#5	7.847	7.847	131750	240.480
PCB1260#1	12.083	12.087	618491	324.295
PCB1260#2	12.493	12.497	545583	282.117
PCB1260#3	13.037	13.043	467375	276.980
PCB1260#4	13.697	13.700	952397	318.626
PCB1260#5	14.377	14.380	476273	332.005
Decachlorobiphenyl	17.387	17.390	941202	45.745

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:55:28 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

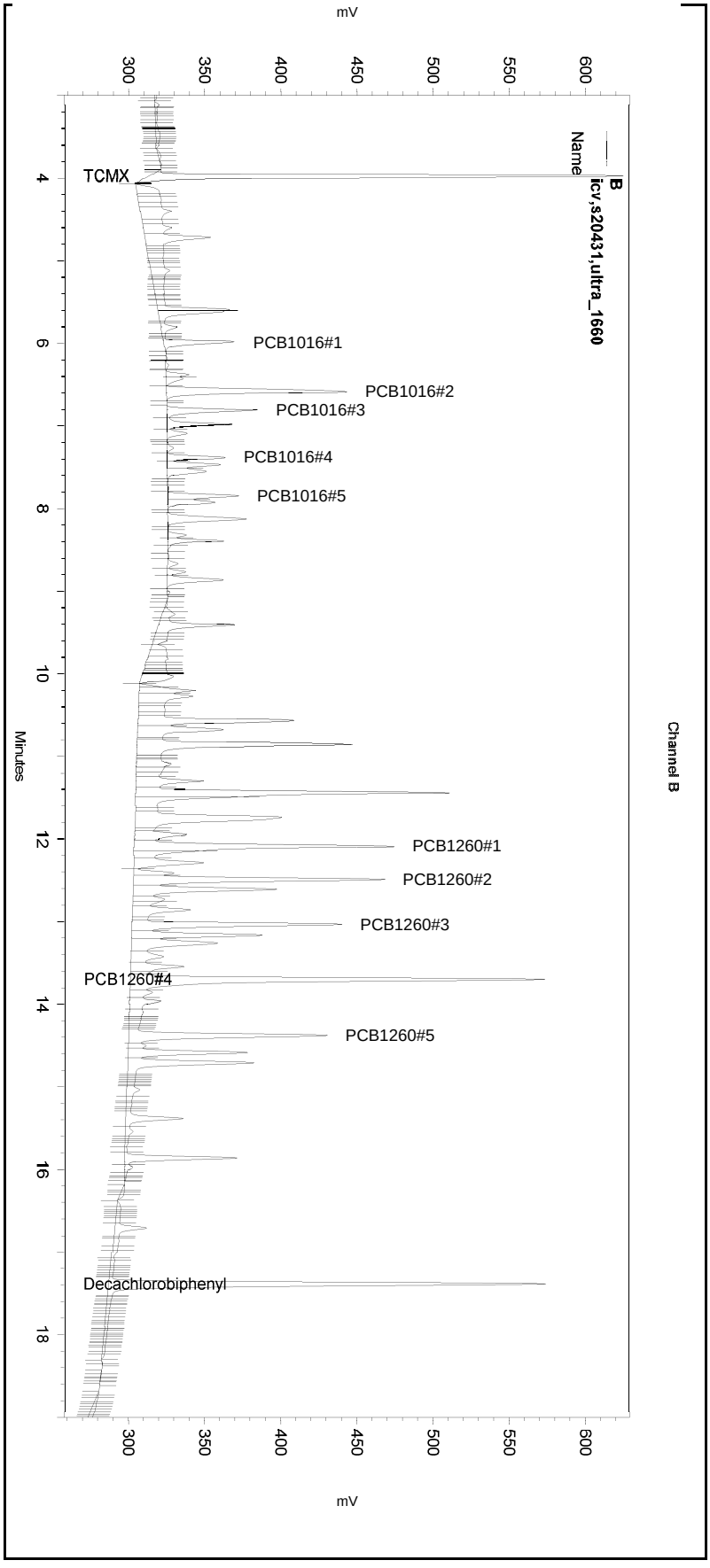
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:55:28 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 PCBS Soil: EPA 8082A

Inst : GC16
Calnum : 232358946001
Units : pg/ul

Name : AR1660_249A
Date : 05-SEP-2012 18:41

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	249_011	232358946011	PCB10_2	05-SEP-2012 18:41	S19975
L2	249_012	232358946012	PCB25_5	05-SEP-2012 19:09	S19976
L3	249_013	232358946013	PCB100_20	05-SEP-2012 19:37	S19977
L4	249_014	232358946014	PCB250_50	05-SEP-2012 20:05	S19978
L5	249_015	232358946015	PCB500_100	05-SEP-2012 20:33	S19979
L6	249_016	232358946016	PCB750_150	05-SEP-2012 21:00	S19980
L7	249_017	232358946017	PCB1000_200	05-SEP-2012 21:28	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	2903.7	2645.1	2043.0	1737.6	1402.8	1280.3	1106.0	QUAD	A	26125.9	1714.03	-0.63519	1874.1	0.999	.99	20	
Aroclor-1260 Peak # 2	A	2014.6	2233.6	1766.6	1721.8	1453.3	1305.8		AVRG	R		5.72E-4		1749.3	20	.99	20	
Aroclor-1260 Peak # 3	A	1771.7	1496.8	1264.0	1095.8	936.53	843.23		LINR	R	-38.896	0.00120		1234.7	0.990	.99	20	
Aroclor-1260 Peak # 4	A	3727.3	3500.8	2817.0	2358.5	1983.1			LINR	R	-28.596	5.17E-4		2877.3	0.990	.99	20	
Aroclor-1260 Peak # 5	A	1374.7	1851.5	1420.5	1250.3	1105.9			AVRG	R		7.14E-4		1400.6	20	.99	20	
TCMX	A	25623	23507	19325	16224	13450	12341		LINR	R	-8.5129	8.29E-5		18411	0.990	.99	20	
Decachlorobiphenyl	A	19026	17296	15334	12347	10199	8511.2	7607.0	QUAD	A	39971.0	12237.7	-24.6931	12903	0.998	.99	20	
Aroclor-1260 Peak # 1	B	737.60	685.28	610.78	566.71	523.53	511.21	462.17	AVRG	R		0.00171		585.32	17	.99	20	
Aroclor-1260 Peak # 2	B	482.10	512.84	461.15	427.77	386.81	373.66	335.02	AVRG	R		0.00235		425.62	15	.99	20	
Aroclor-1260 Peak # 3	B	452.10	448.84	396.59	370.66	342.93	328.44	298.96	AVRG	R		0.00265		376.93	16	.99	20	
Aroclor-1260 Peak # 4	B	1098.3	1073.3	903.13	850.18	809.19	768.62	711.59	AVRG	R		0.00113		887.76	17	.99	20	
Aroclor-1260 Peak # 5	B	468.10	474.00	402.01	386.37	373.42	351.19	330.73	AVRG	R		0.00251		397.97	14	.99	20	
TCMX	B	7732.0	7094.6	6965.0	6979.1	6744.6	7130.1	6405.6	AVRG	R		1.43E-4		7007.3	6	.99	20	
Decachlorobiphenyl	B	11072	10605	8542.8	7613.2	7438.3			AVRG	R		1.10E-4		9054.2	19	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**-83**	25.000	-6	100.00	8	250.00	6	500.00	-4	750.00	1	1000.0	0
Aroclor-1260 Peak # 2	A	10.000	15	25.000	**28**	100.00	1	250.00	-2	500.00	-17	750.00	**-25**		
Aroclor-1260 Peak # 3	A	10.000	**-276**	25.000	**-76**	100.00	13	250.00	16	500.00	5	750.00	-4		
Aroclor-1260 Peak # 4	A	10.000	**-193**	25.000	**-33**	100.00	17	250.00	11	500.00	-3				
Aroclor-1260 Peak # 5	A	10.000	-2	25.000	**32**	100.00	1	250.00	-11	500.00	**-21**				
TCMX	A	2.0000	**-313**	5.0000	**-75**	20.000	18	50.000	17	100.00	3	150.00	-3		
Decachlorobiphenyl	A	2.0000	**-108**	5.0000	**-23**	20.000	14	50.000	6	100.00	0	150.00	-6	200.00	5
Aroclor-1260 Peak # 1	B	10.000	**26**	25.000	17	100.00	4	250.00	-3	500.00	-11	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 2	B	10.000	13	25.000	20	100.00	8	250.00	1	500.00	-9	750.00	-12	1000.0	**-21**
Aroclor-1260 Peak # 3	B	10.000	20	25.000	19	100.00	5	250.00	-2	500.00	-9	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 4	B	10.000	**24**	25.000	**21**	100.00	2	250.00	-4	500.00	-9	750.00	-13	1000.0	-20
Aroclor-1260 Peak # 5	B	10.000	18	25.000	19	100.00	1	250.00	-3	500.00	-6	750.00	-12	1000.0	-17
TCMX	B	2.0000	10	5.0000	1	20.000	-1	50.000	0	100.00	-4	150.00	2	200.00	-9
Decachlorobiphenyl	B	2.0000	**22**	5.0000	17	20.000	-6	50.000	-16	100.00	-18				

PML 09/06/12 : Corrected automatically drawn baseline in all levels.

PML 09/06/12 : changed fit types and dropped various points for better r^2 %RSD recovery

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 PCBS Soil
EPA 8082A

Inst : GC16 Name : AR1660_249A
Calnum : 232358946001 Cal Date : 05-SEP-2012

ICV 232358946019 (249_019 05-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	268.7	pg/ul	7	20	
Aroclor-1260	B	250.0	265.0	pg/ul	6	20	

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 8:09:38 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	51245	2.000 CAL
PCB1016#1	6.197	6.197	4688	10.000 CAL
PCB1016#2	6.807	6.810	10375	10.000 CAL
PCB1016#3	7.107	7.110	6107	10.000 CAL
PCB1016#4	7.563	7.570	1172	10.000 CAL
PCB1016#5	8.073	8.077	6122	10.000 CAL
PCB1260#1	11.640	11.640	29037	10.000 CAL
PCB1260#2	12.290	12.290	20146	10.000 CAL
PCB1260#3	13.153	13.150	17717	10.000 CAL
PCB1260#4	13.893	13.897	37273	10.000 CAL
PCB1260#5	14.547	14.550	13747	10.000 CAL
Decachlorobiphenyl	17.163	17.167	38051	2.000 CAL

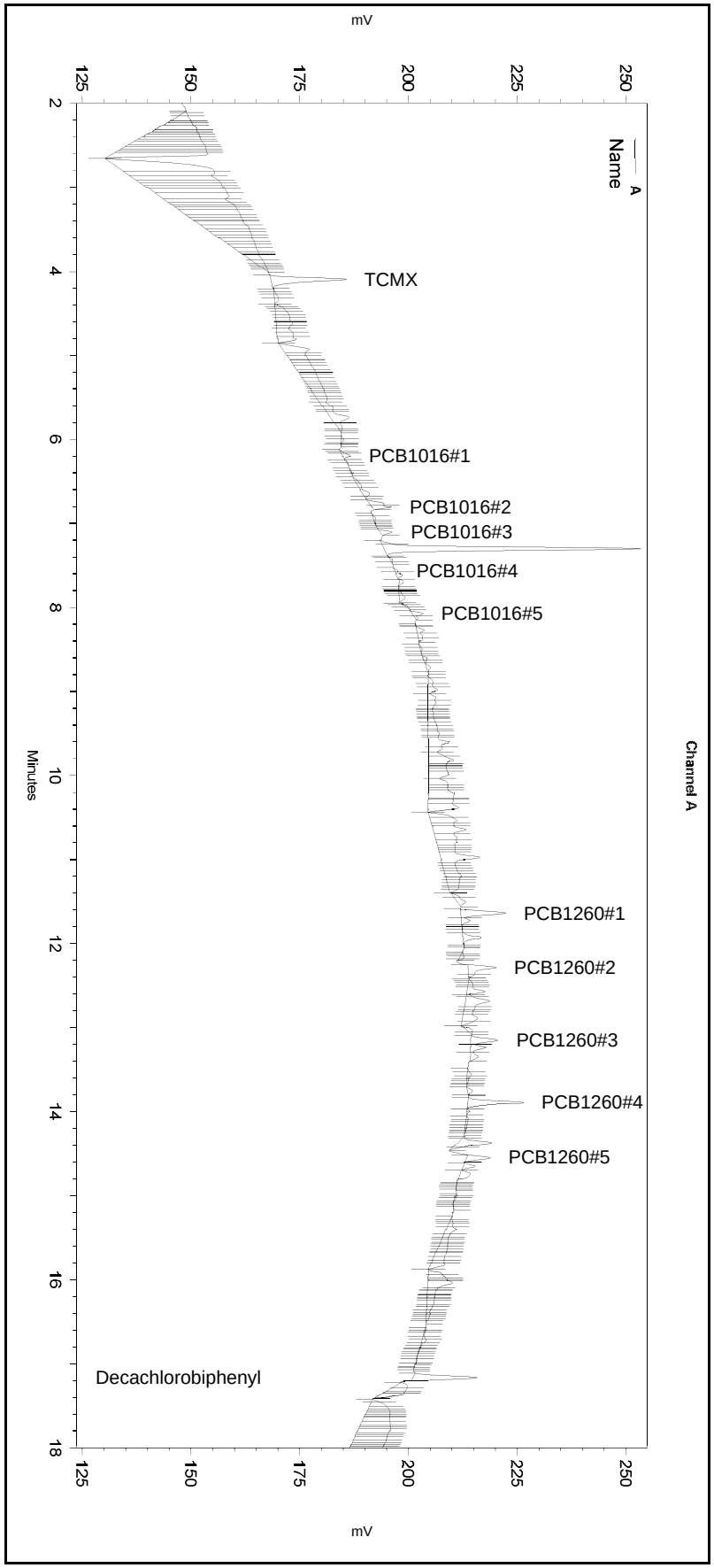
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	15464	2.000 CAL
PCB1016#1	5.203	5.207	2580	10.000 CAL
PCB1016#2	5.767	5.770	6619	10.000 CAL
PCB1016#3	5.983	5.987	2784	10.000 CAL
PCB1016#4	6.533	6.537	2027	10.000 CAL
PCB1016#5	6.987	6.990	2373	10.000 CAL
PCB1260#1	11.153	11.153	7376	10.000 CAL
PCB1260#2	11.557	11.560	4821	10.000 CAL
PCB1260#3	12.100	12.100	4521	10.000 CAL
PCB1260#4	12.757	12.757	10983	10.000 CAL
PCB1260#5	13.430	13.430	4681	10.000 CAL
Decachlorobiphenyl	16.423	16.423	22144	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 8:09:38 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

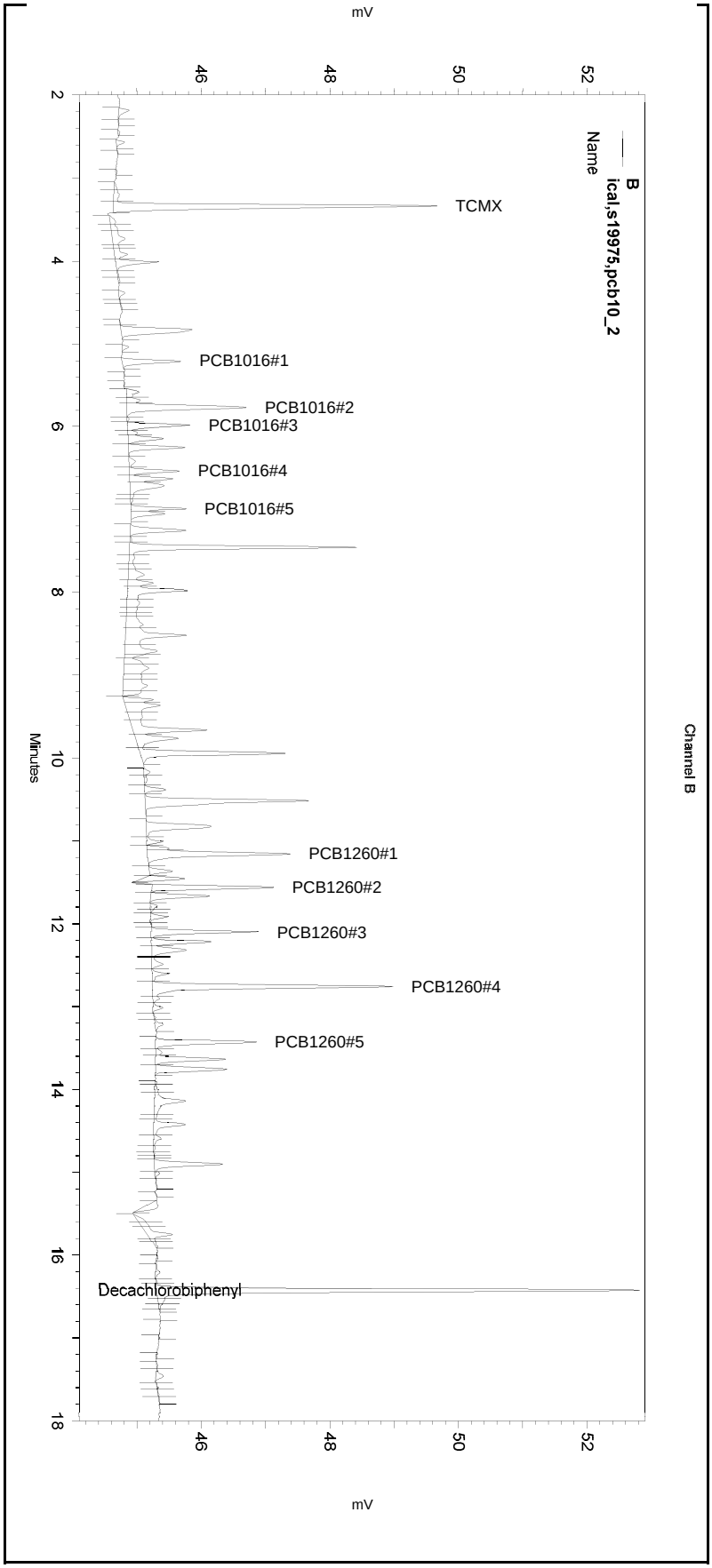
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.029	0	0
Yes	Reset Baseline	4.204	0	0
Yes	Split Peak	6.162	0	0
Yes	Reset Baseline	6.335	0	0
Yes	Reset Baseline	6.717	0	0
Yes	Reset Baseline	6.84	0	0
Yes	Reset Baseline	7.142	0	0
Yes	Reset Baseline	7.187	0	0
Yes	Reset Baseline	7.521	0	0
Yes	Reset Baseline	7.667	0	0
Yes	Reset Baseline	7.749	0	0
Yes	Reset Baseline	8.029	0	0
Yes	Reset Baseline	8.152	0	0
Yes	Reset Baseline	8.193	0	0
Yes	Reset Baseline	11.561	0	0
Yes	Reset Baseline	12.052	0	0
Yes	Reset Baseline	12.251	0	0
Yes	Reset Baseline	12.42	0	0
Yes	Reset Baseline	13.396	0	0
Yes	Reset Baseline	14.511	0	0
Yes	Reset Baseline	17.11	0	0
Yes	Reset Baseline	17.199	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 8:09:38 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.41	0	0
Yes	Manual Baseline	5.546	5.88	0
Yes	Reset Baseline	5.64	0	0
Yes	Reset Baseline	7.147	0	0
Yes	Reset Baseline	11.414	0	0
Yes	Move BL Start	11.503	11.524	0
Yes	Reset Baseline	11.742	0	0
Yes	Reset Baseline	12.033	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 (Offline) Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 7:31:19 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	175877	2.000 CAL
PCB1016#1	6.197	6.197	6680	10.000 CAL
PCB1016#2	6.807	6.810	22434	10.000 CAL
PCB1016#3	7.107	7.110	17654	10.000 CAL
PCB1016#4	7.563	7.570	6620	10.000 CAL
PCB1016#5	8.073	8.077	14368	10.000 CAL
PCB1260#1	11.640	11.640	57541	10.000 CAL
PCB1260#2	12.290	12.290	49117	10.000 CAL
PCB1260#3	13.153	13.150	18253	10.000 CAL
PCB1260#4	13.893	13.897	37273	10.000 CAL
PCB1260#5	14.547	14.550	38949	10.000 CAL
Decachlorobiphenyl	17.163	17.167	78280	2.000 CAL

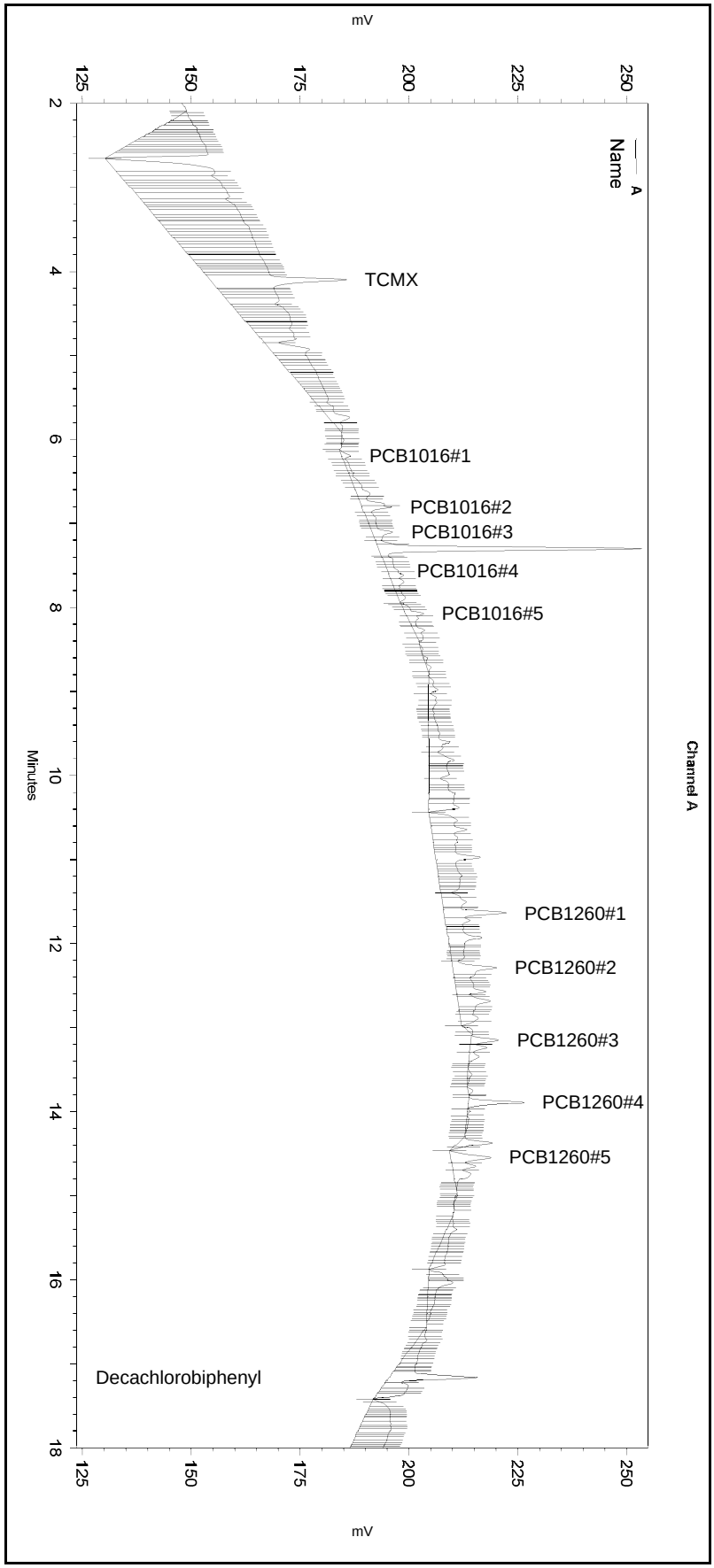
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	16023	2.000 CAL
PCB1016#1	5.203	5.207	2580	10.000 CAL
PCB1016#2	5.767	5.770	7194	10.000 CAL
PCB1016#3	5.983	5.987	3196	10.000 CAL
PCB1016#4	6.533	6.537	2584	10.000 CAL
PCB1016#5	6.987	6.990	3101	10.000 CAL
PCB1260#1	11.153	11.153	9296	10.000 CAL
PCB1260#2	11.557	11.560	6806	10.000 CAL
PCB1260#3	12.100	12.100	5965	10.000 CAL
PCB1260#4	12.757	12.757	11588	10.000 CAL
PCB1260#5	13.430	13.430	4681	10.000 CAL
Decachlorobiphenyl	16.423	16.423	22144	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 (Offline) Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 7:31:19 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

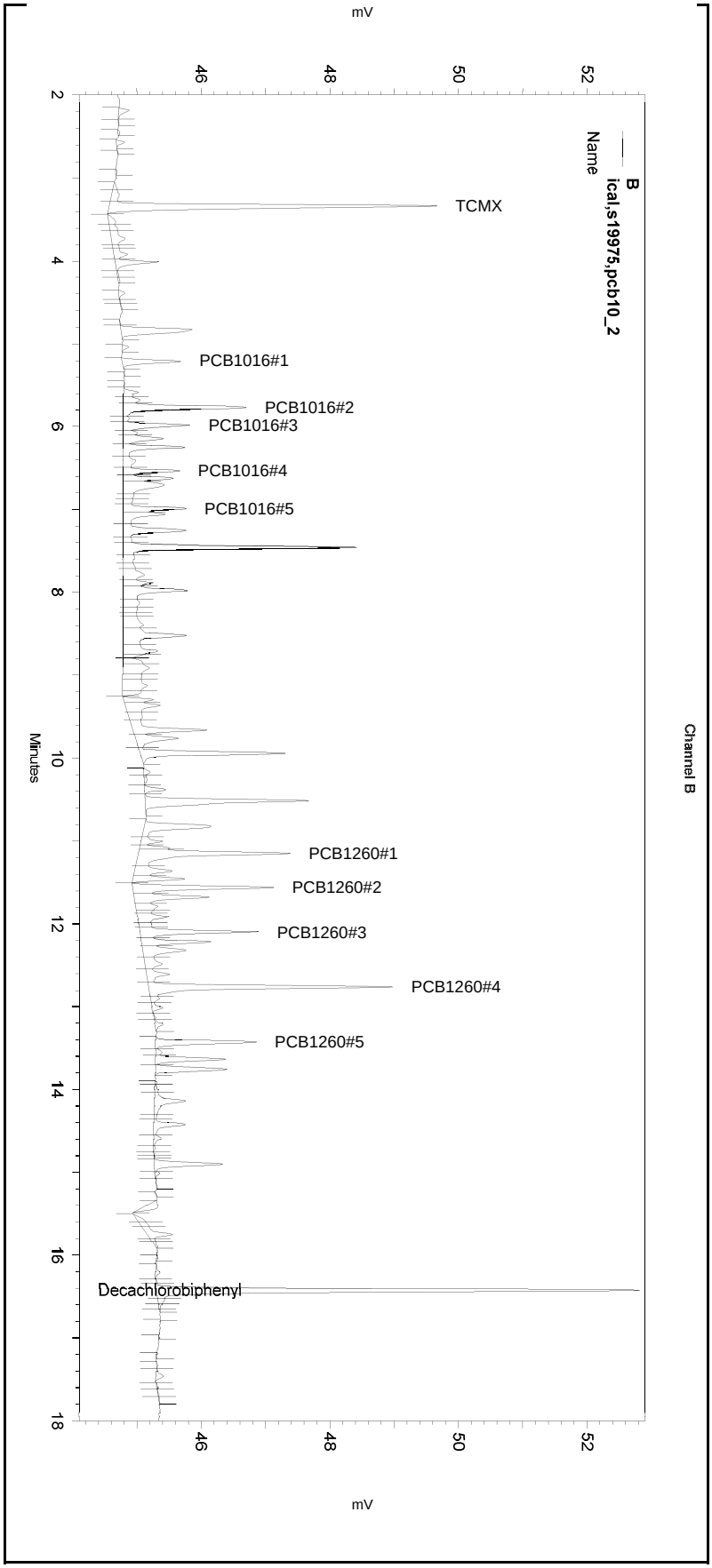
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 (Offline) Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 7:31:19 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 8:09:44 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	117533	5.000 CAL
PCB1016#1	6.197	6.197	10920	25.000 CAL
PCB1016#2	6.807	6.810	33027	25.000 CAL
PCB1016#3	7.110	7.110	20181	25.000 CAL
PCB1016#4	7.567	7.570	10350	25.000 CAL
PCB1016#5	8.077	8.077	16823	25.000 CAL
PCB1260#1	11.640	11.640	66128	25.000 CAL
PCB1260#2	12.290	12.290	55839	25.000 CAL
PCB1260#3	13.150	13.150	37420	25.000 CAL
PCB1260#4	13.893	13.897	87519	25.000 CAL
PCB1260#5	14.547	14.550	46288	25.000 CAL
Decachlorobiphenyl	17.160	17.167	86480	5.000 CAL

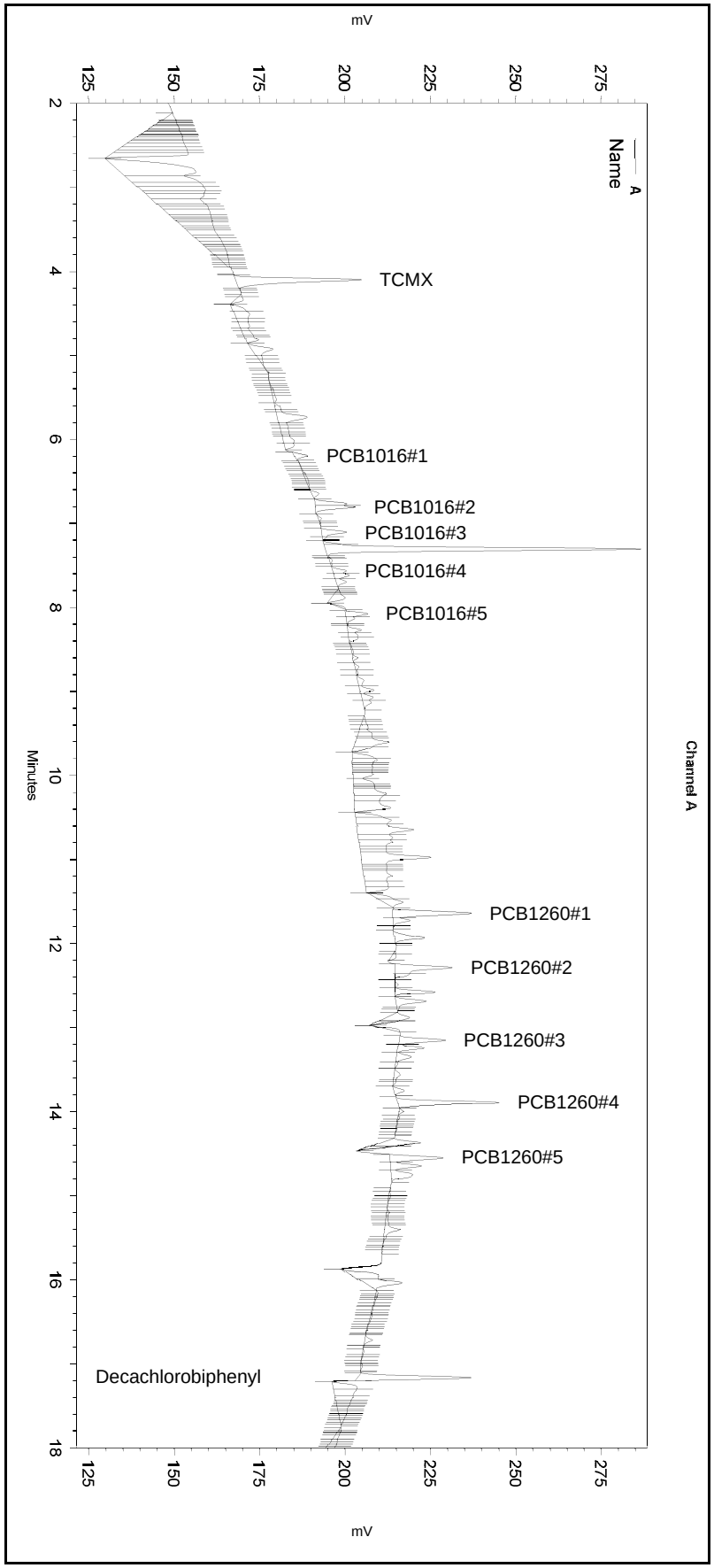
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	35473	5.000 CAL
PCB1016#1	5.203	5.207	5968	25.000 CAL
PCB1016#2	5.767	5.770	15096	25.000 CAL
PCB1016#3	5.983	5.987	7008	25.000 CAL
PCB1016#4	6.533	6.537	4782	25.000 CAL
PCB1016#5	6.987	6.990	5550	25.000 CAL
PCB1260#1	11.153	11.153	17132	25.000 CAL
PCB1260#2	11.560	11.560	12821	25.000 CAL
PCB1260#3	12.100	12.100	11221	25.000 CAL
PCB1260#4	12.757	12.757	26833	25.000 CAL
PCB1260#5	13.430	13.430	11850	25.000 CAL
Decachlorobiphenyl	16.423	16.423	53024	5.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 8:09:44 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

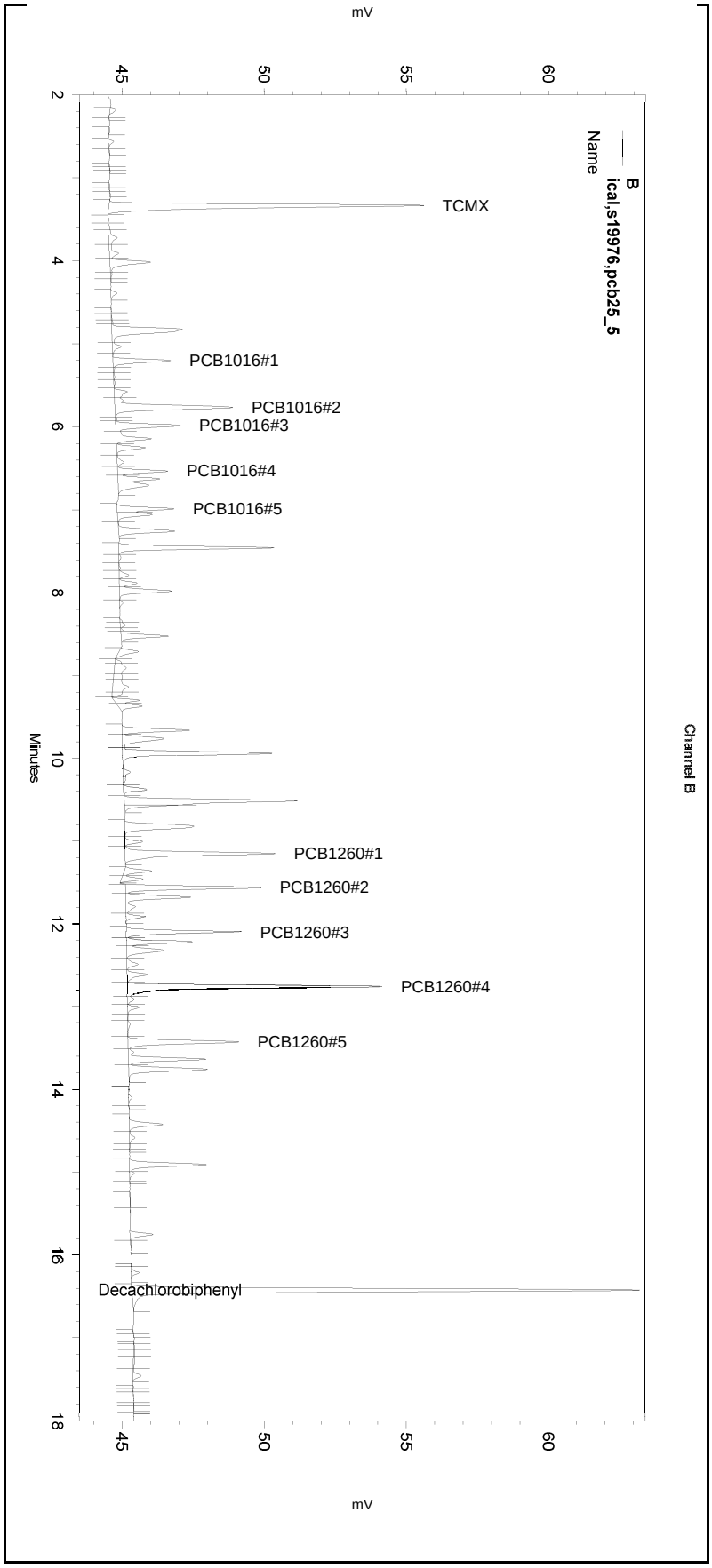
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.024	0	0
Yes	Reset Baseline	6.15	0	0
Yes	Reset Baseline	6.255	0	0
Yes	Reset Baseline	6.709	0	0
Yes	Reset Baseline	7.778	0	0
Yes	Reset Baseline	8.025	0	0
Yes	Reset Baseline	11.569	0	0
Yes	Reset Baseline	12.239	0	0
Yes	Reset Baseline	13.815	0	0
Yes	Move BL Start	14.467	14.508	0
Yes	Reset Baseline	14.843	0	0
Yes	Reset Baseline	16.119	0	0
Yes	Reset Baseline	17.104	0	0
Yes	Move BL Stop	17.213	17.196	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 8:09:44 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.824	0	0
Yes	Reset Baseline	11.295	0	0
Yes	Move BL Start	11.507	11.517	0
Yes	Reset Baseline	12	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 (Offline) Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 7:31:33 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	137337	5.000 CAL
PCB1016#1	6.197	6.197	22611	25.000 CAL
PCB1016#2	6.807	6.810	37981	25.000 CAL
PCB1016#3	7.110	7.110	20657	25.000 CAL
PCB1016#4	7.567	7.570	20762	25.000 CAL
PCB1016#5	8.077	8.077	41551	25.000 CAL
PCB1260#1	11.640	11.640	101401	25.000 CAL
PCB1260#2	12.290	12.290	68518	25.000 CAL
PCB1260#3	13.150	13.150	37420	25.000 CAL
PCB1260#4	13.893	13.897	99188	25.000 CAL
PCB1260#5	14.547	14.550	108952	25.000 CAL
Decachlorobiphenyl	17.160	17.167	126642	5.000 CAL

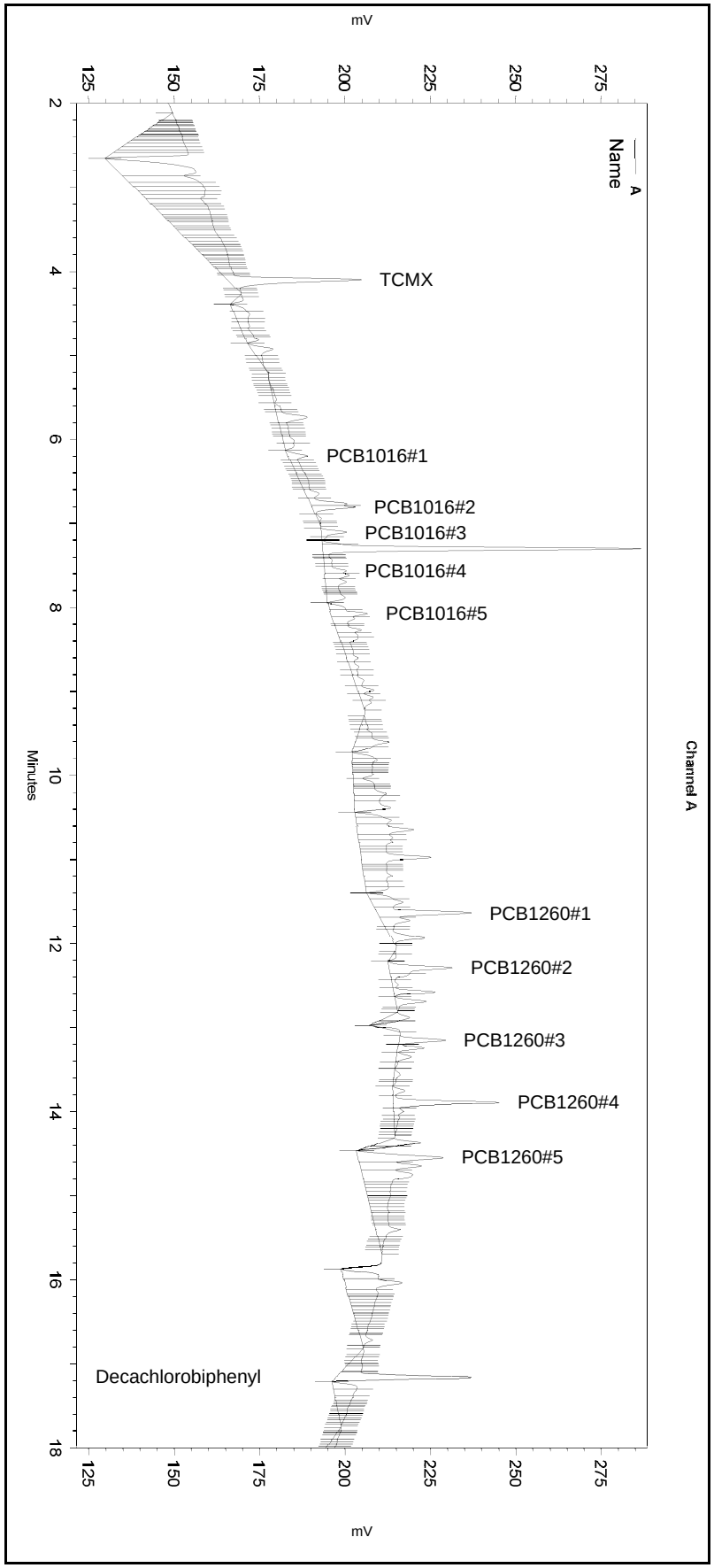
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	35473	5.000 CAL
PCB1016#1	5.203	5.207	6148	25.000 CAL
PCB1016#2	5.767	5.770	15490	25.000 CAL
PCB1016#3	5.983	5.987	7359	25.000 CAL
PCB1016#4	6.533	6.537	5219	25.000 CAL
PCB1016#5	6.987	6.990	5550	25.000 CAL
PCB1260#1	11.153	11.153	18507	25.000 CAL
PCB1260#2	11.560	11.560	14076	25.000 CAL
PCB1260#3	12.100	12.100	12801	25.000 CAL
PCB1260#4	12.757	12.757	27719	25.000 CAL
PCB1260#5	13.430	13.430	12038	25.000 CAL
Decachlorobiphenyl	16.423	16.423	53024	5.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 (Offline) Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 7:31:33 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

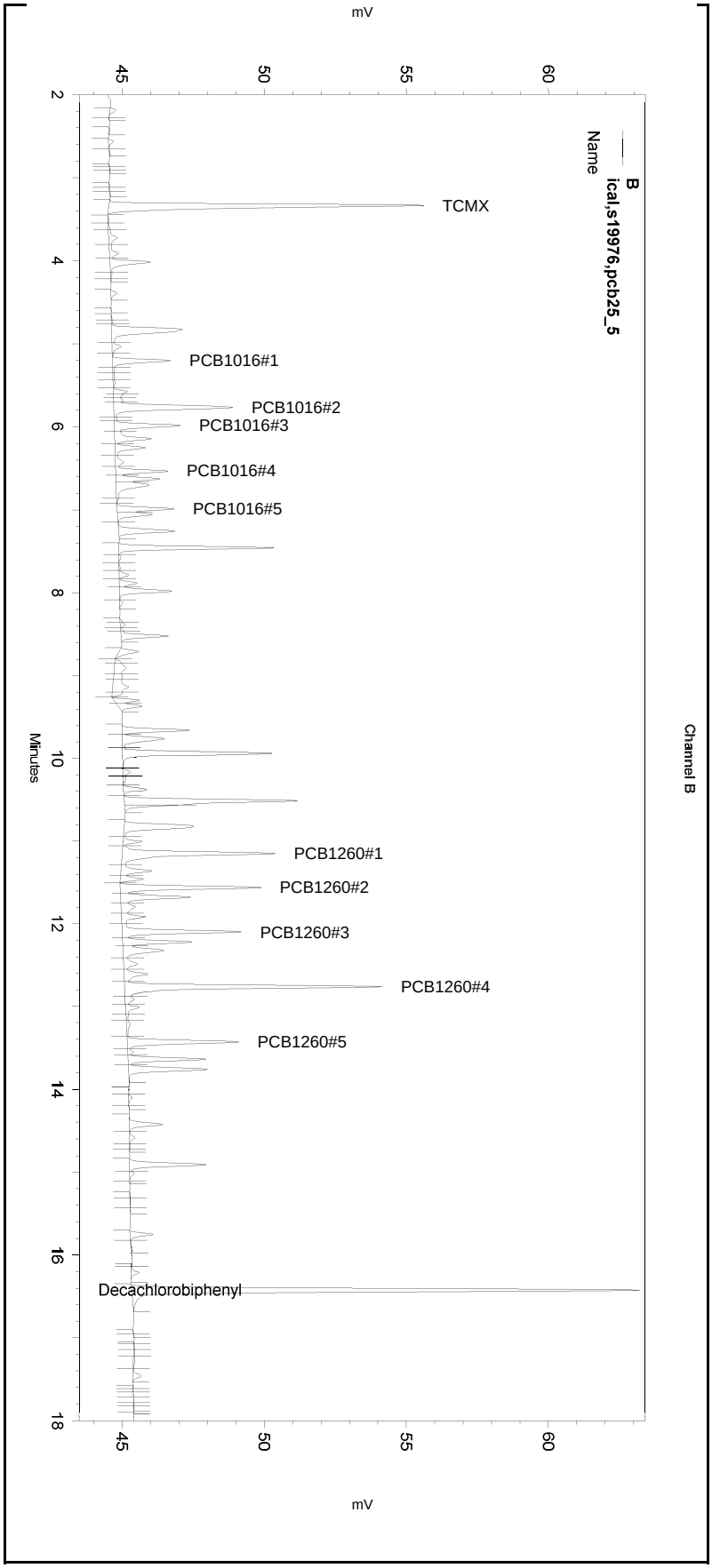
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 (Offline) Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 7:31:33 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:57:29 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	386492	20.000 CAL
PCB1016#1	6.200	6.197	37545	100.000 CAL
PCB1016#2	6.813	6.810	116135	100.000 CAL
PCB1016#3	7.113	7.110	74900	100.000 CAL
PCB1016#4	7.570	7.570	41959	100.000 CAL
PCB1016#5	8.080	8.077	62896	100.000 CAL
PCB1260#1	11.647	11.640	204301	100.000 CAL
PCB1260#2	12.293	12.290	176661	100.000 CAL
PCB1260#3	13.157	13.150	126401	100.000 CAL
PCB1260#4	13.900	13.897	281699	100.000 CAL
PCB1260#5	14.553	14.550	142049	100.000 CAL
Decachlorobiphenyl	17.170	17.167	306679	20.000 CAL

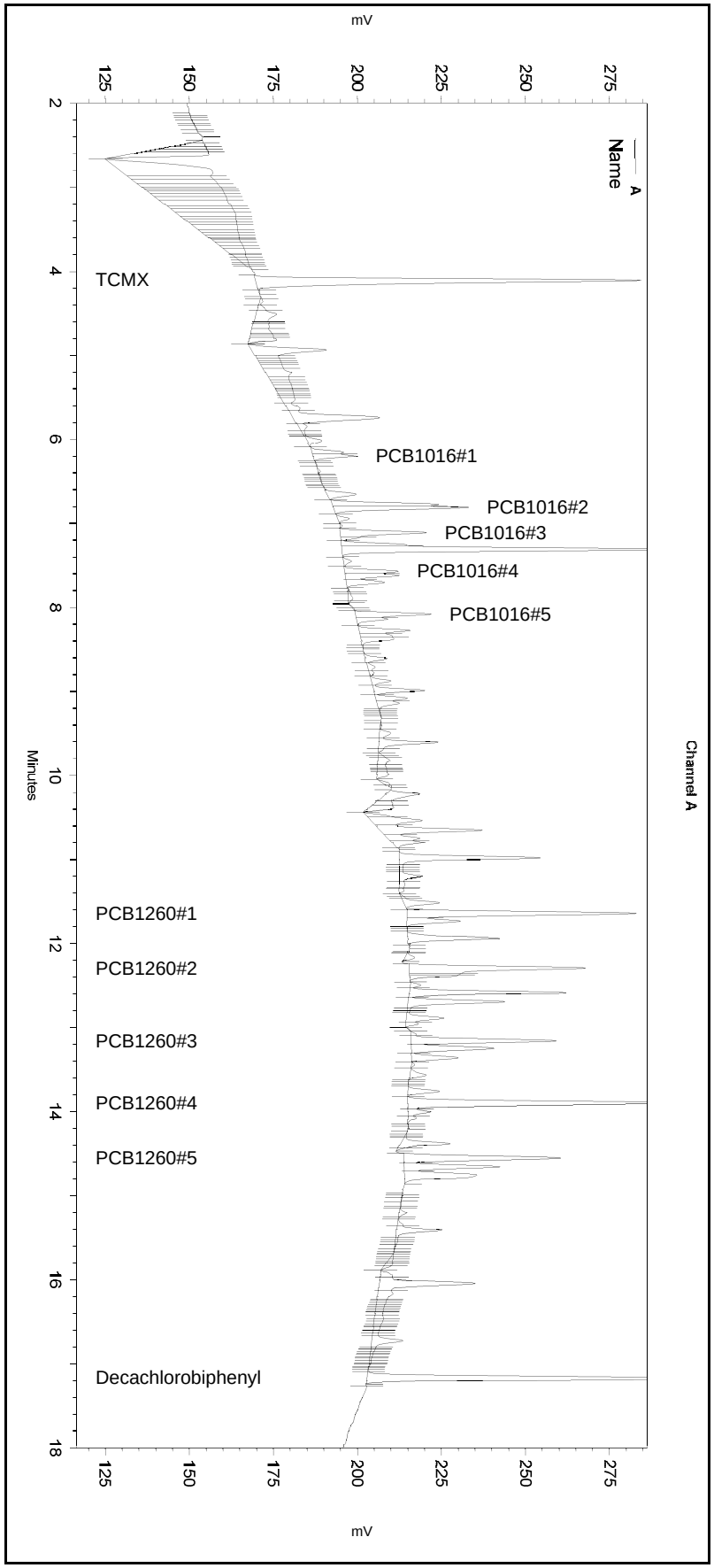
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	139300	20.000 CAL
PCB1016#1	5.210	5.207	22906	100.000 CAL
PCB1016#2	5.773	5.770	55734	100.000 CAL
PCB1016#3	5.990	5.987	26927	100.000 CAL
PCB1016#4	6.540	6.537	18100	100.000 CAL
PCB1016#5	6.993	6.990	19889	100.000 CAL
PCB1260#1	11.160	11.153	61078	100.000 CAL
PCB1260#2	11.563	11.560	46115	100.000 CAL
PCB1260#3	12.107	12.100	39659	100.000 CAL
PCB1260#4	12.763	12.757	90313	100.000 CAL
PCB1260#5	13.437	13.430	40201	100.000 CAL
Decachlorobiphenyl	16.430	16.423	170856	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:57:29 AM
Sample Amount: 1



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No items selected for this section

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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

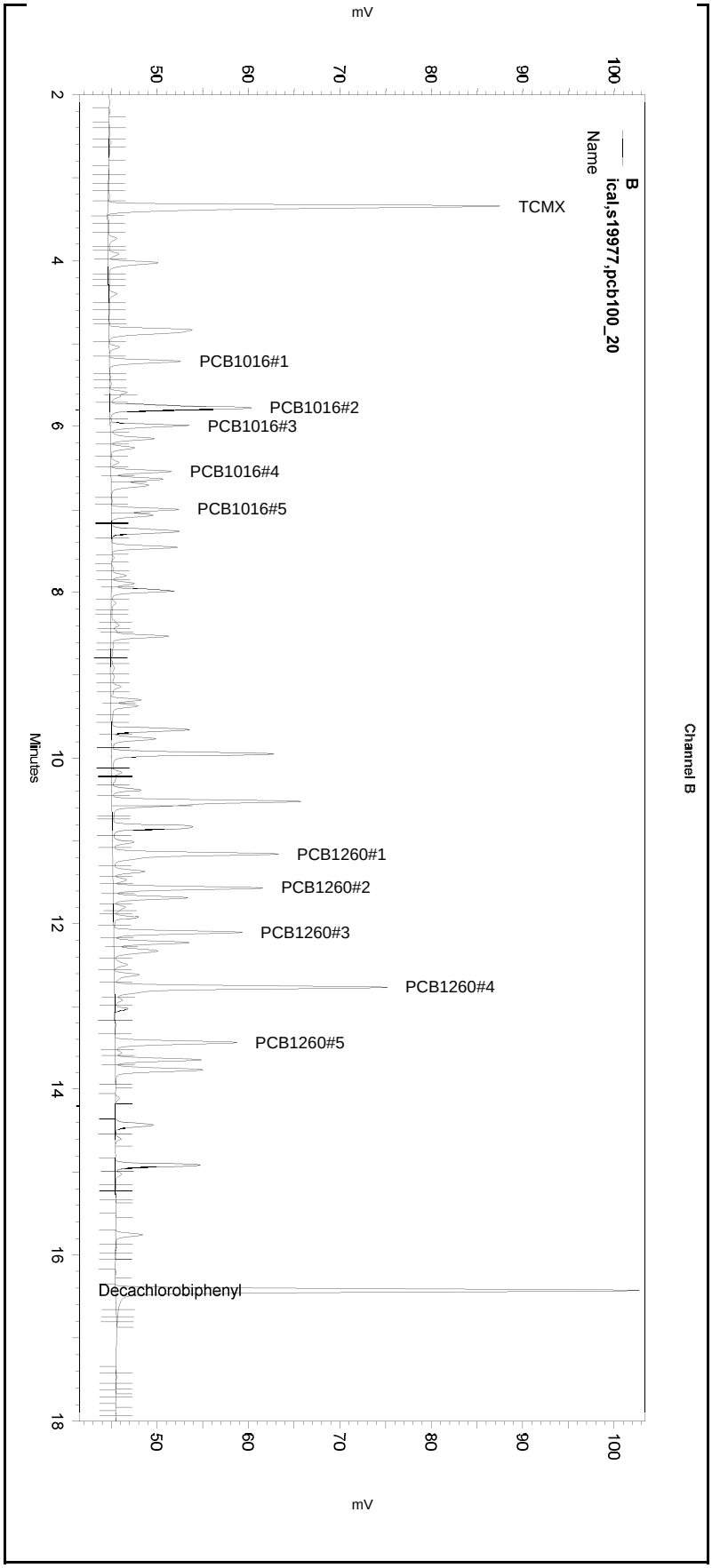
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.002	0	0
Yes	Reset Baseline	4.297	0	0
Yes	Reset Baseline	6.082	0	0
Yes	Reset Baseline	6.713	0	0
Yes	Reset Baseline	7.005	0	0
Yes	Reset Baseline	7.761	0	0
Yes	Reset Baseline	8.025	0	0
Yes	Reset Baseline	11.582	0	0
Yes	Reset Baseline	12.063	0	0
Yes	Move BL Start	12.22	12.243	0
Yes	Reset Baseline	12.458	0	0
Yes	Manual Baseline	13.045	13.419	0
Yes	Split Peak	13.101	0	0
Yes	Reset Baseline	14.497	0	0
Yes	Reset Baseline	14.862	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:57:29 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.545	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 (Offline) Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:31:46 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	684351	20.000 CAL
PCB1016#1	6.200	6.197	116854	100.000 CAL
PCB1016#2	6.813	6.810	198211	100.000 CAL
PCB1016#3	7.113	7.110	147868	100.000 CAL
PCB1016#4	7.570	7.570	78527	100.000 CAL
PCB1016#5	8.080	8.077	81926	100.000 CAL
PCB1260#1	11.647	11.640	218667	100.000 CAL
PCB1260#2	12.293	12.290	191489	100.000 CAL
PCB1260#3	13.157	13.150	118902	100.000 CAL
PCB1260#4	13.900	13.897	281699	100.000 CAL
PCB1260#5	14.553	14.550	159171	100.000 CAL
Decachlorobiphenyl	17.170	17.167	306679	20.000 CAL

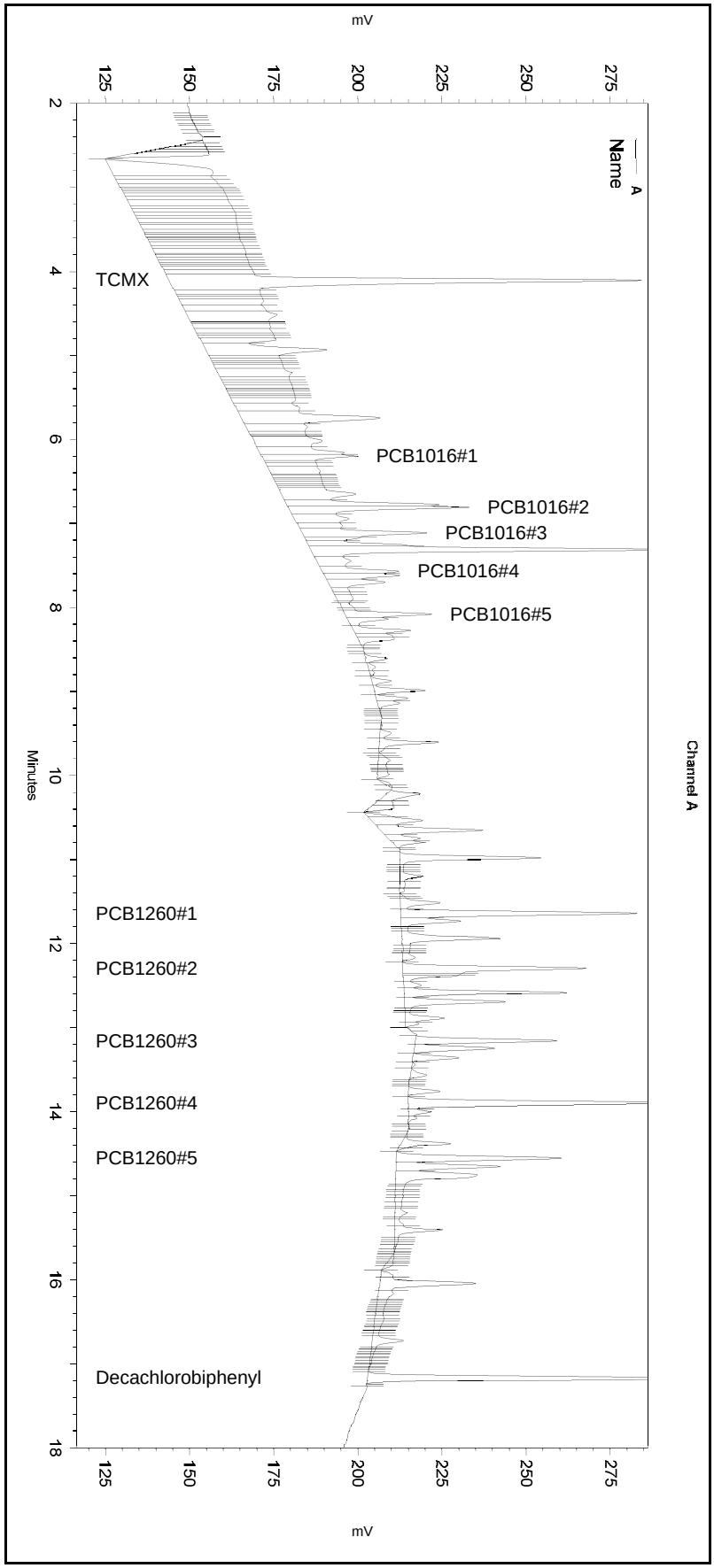
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	139300	20.000 CAL
PCB1016#1	5.210	5.207	24336	100.000 CAL
PCB1016#2	5.773	5.770	57577	100.000 CAL
PCB1016#3	5.990	5.987	28557	100.000 CAL
PCB1016#4	6.540	6.537	19330	100.000 CAL
PCB1016#5	6.993	6.990	21205	100.000 CAL
PCB1260#1	11.160	11.153	61078	100.000 CAL
PCB1260#2	11.563	11.560	46115	100.000 CAL
PCB1260#3	12.107	12.100	39659	100.000 CAL
PCB1260#4	12.763	12.757	90313	100.000 CAL
PCB1260#5	13.437	13.430	40201	100.000 CAL
Decachlorobiphenyl	16.430	16.423	170856	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 (Offline) Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:31:46 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

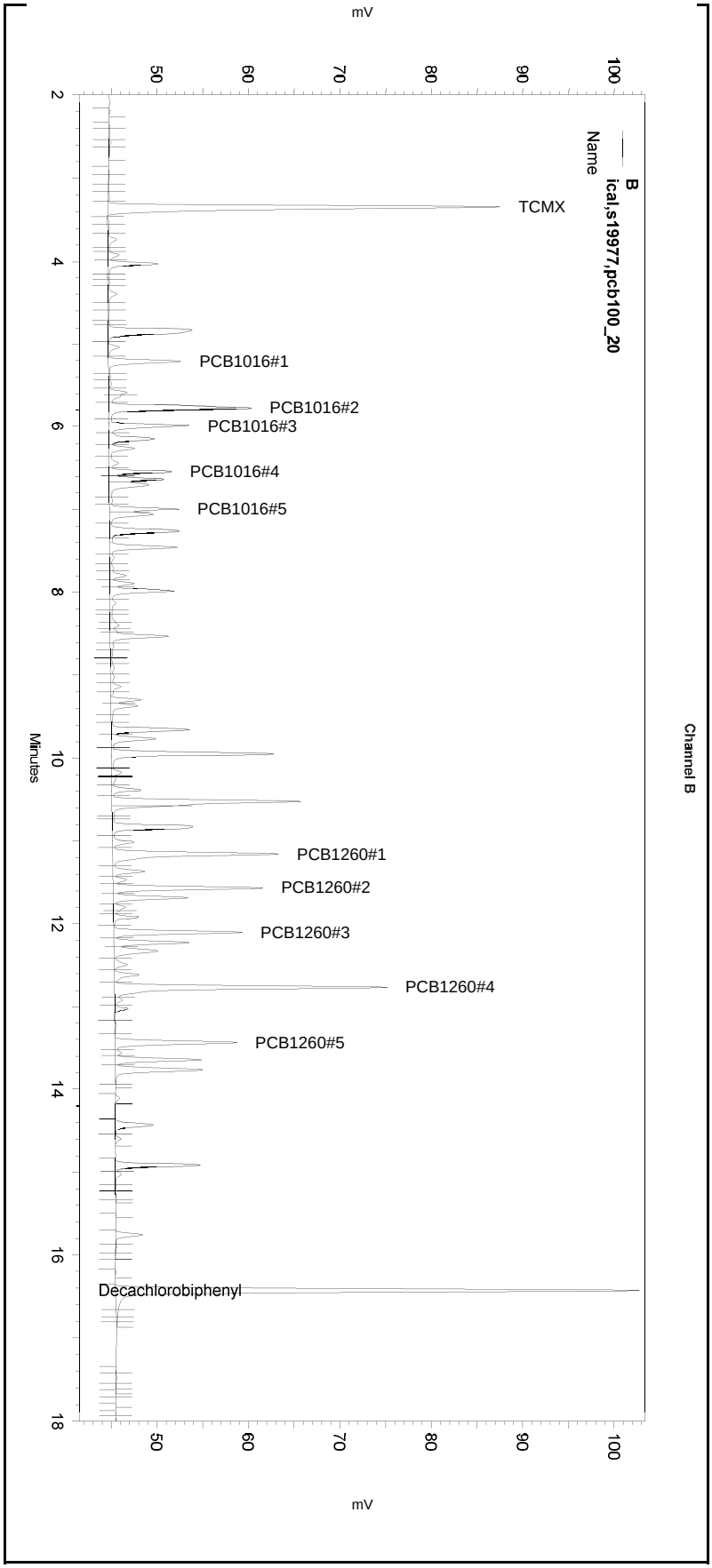
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 (Offline) Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:31:46 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:57:35 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	811212	50.000 CAL
PCB1016#1	6.197	6.197	92140	250.000 CAL
PCB1016#2	6.810	6.810	268218	250.000 CAL
PCB1016#3	7.110	7.110	184195	250.000 CAL
PCB1016#4	7.570	7.570	94019	250.000 CAL
PCB1016#5	8.077	8.077	145150	250.000 CAL
PCB1260#1	11.640	11.640	434397	250.000 CAL
PCB1260#2	12.290	12.290	430462	250.000 CAL
PCB1260#3	13.150	13.150	273946	250.000 CAL
PCB1260#4	13.897	13.897	589618	250.000 CAL
PCB1260#5	14.550	14.550	312567	250.000 CAL
Decachlorobiphenyl	17.167	17.167	617326	50.000 CAL

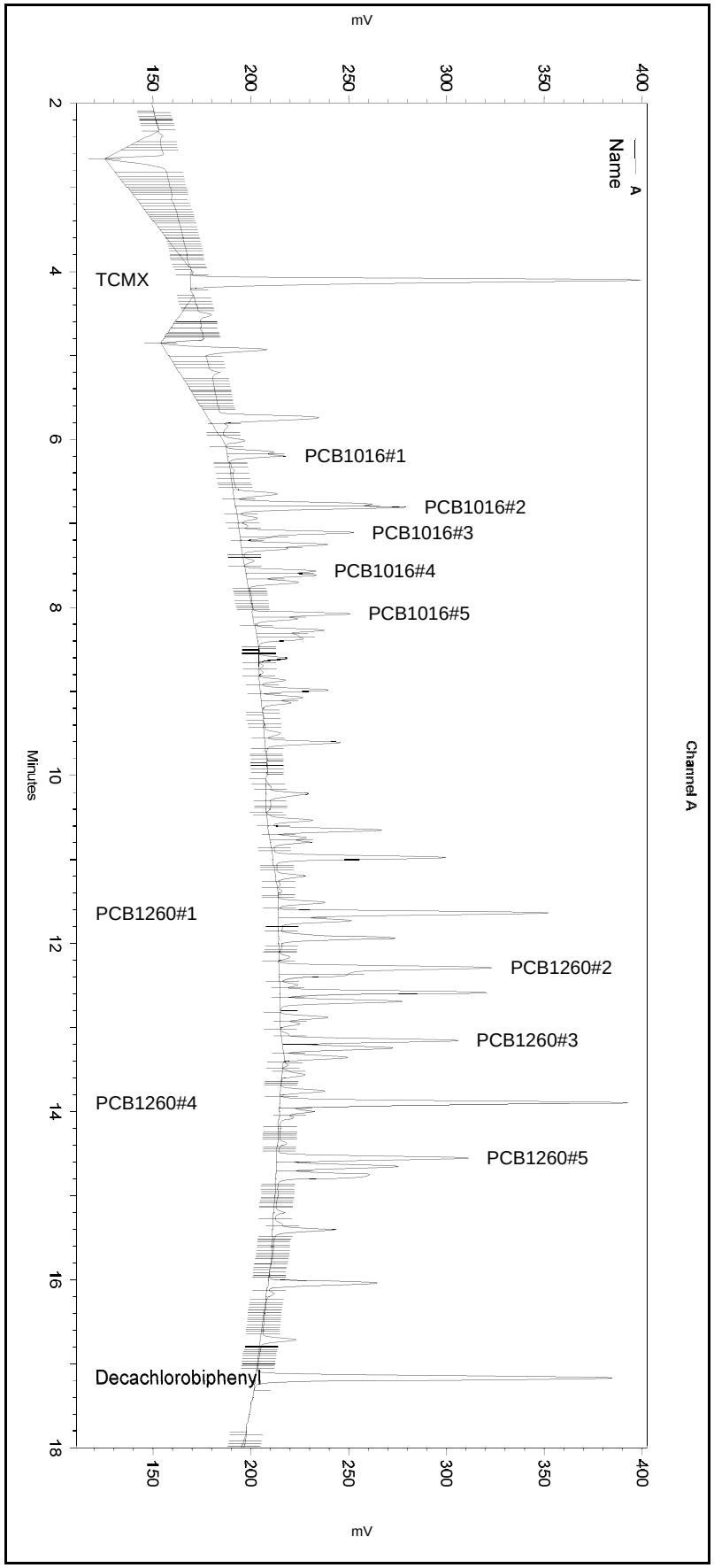
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	348956	50.000 CAL
PCB1016#1	5.207	5.207	53684	250.000 CAL
PCB1016#2	5.770	5.770	129867	250.000 CAL
PCB1016#3	5.987	5.987	62078	250.000 CAL
PCB1016#4	6.537	6.537	42866	250.000 CAL
PCB1016#5	6.990	6.990	48123	250.000 CAL
PCB1260#1	11.153	11.153	141677	250.000 CAL
PCB1260#2	11.560	11.560	106943	250.000 CAL
PCB1260#3	12.100	12.100	92664	250.000 CAL
PCB1260#4	12.757	12.757	212546	250.000 CAL
PCB1260#5	13.430	13.430	96592	250.000 CAL
Decachlorobiphenyl	16.423	16.423	380659	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:57:35 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

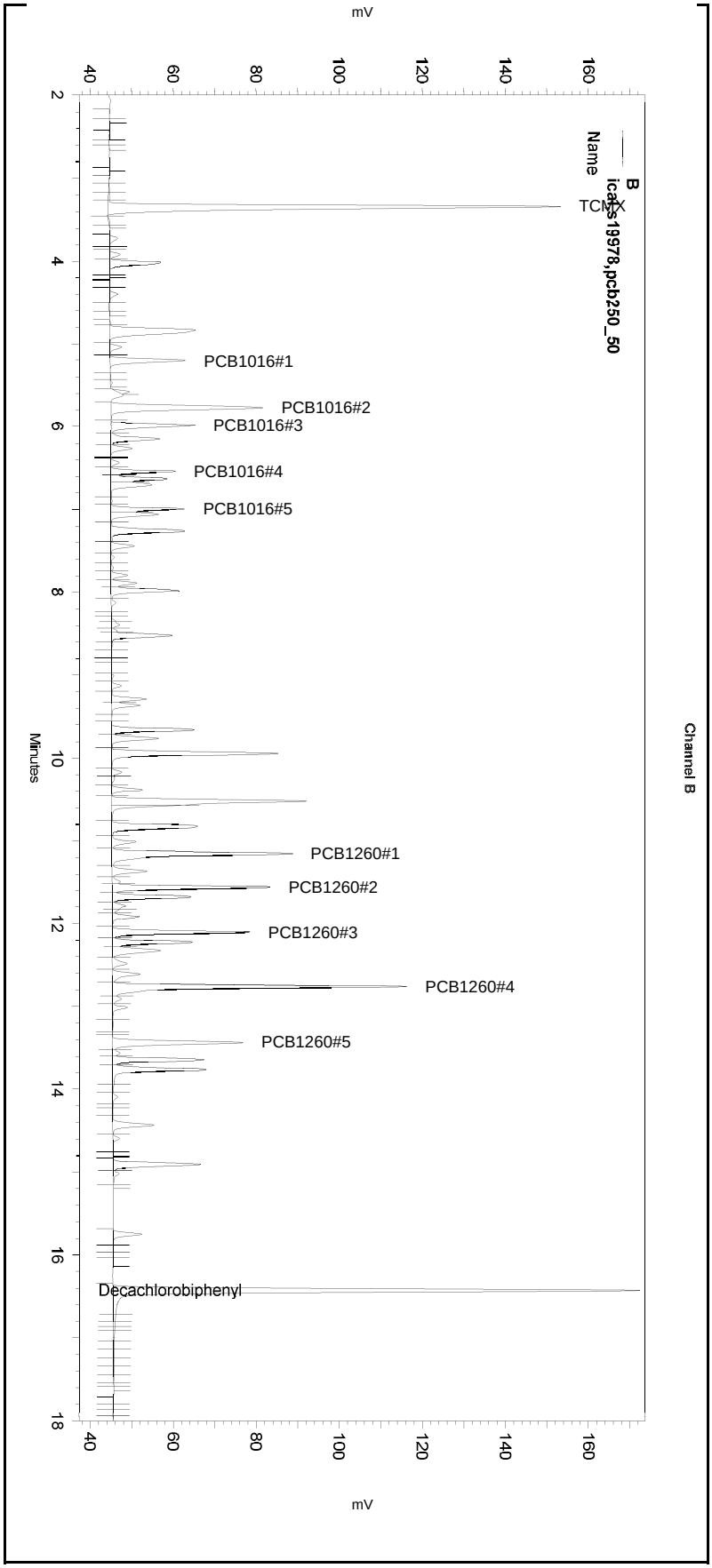
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.976	0	0
Yes	Reset Baseline	4.283	0	0
Yes	Reset Baseline	6.086	0	0
Yes	Reset Baseline	11.42	0	0
Yes	Manual Baseline	13.019	13.428	0
Yes	Split Peak	13.099	0	0
Yes	Reset Baseline	17.316	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:57:35 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 (Offline) Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:32:00 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	1089781	50.000 CAL
PCB1016#1	6.197	6.197	195490	250.000 CAL
PCB1016#2	6.810	6.810	341925	250.000 CAL
PCB1016#3	7.110	7.110	243006	250.000 CAL
PCB1016#4	7.570	7.570	124060	250.000 CAL
PCB1016#5	8.077	8.077	161343	250.000 CAL
PCB1260#1	11.640	11.640	451293	250.000 CAL
PCB1260#2	12.290	12.290	437868	250.000 CAL
PCB1260#3	13.150	13.150	256608	250.000 CAL
PCB1260#4	13.897	13.897	589618	250.000 CAL
PCB1260#5	14.550	14.550	312567	250.000 CAL
Decachlorobiphenyl	17.167	17.167	694583	50.000 CAL

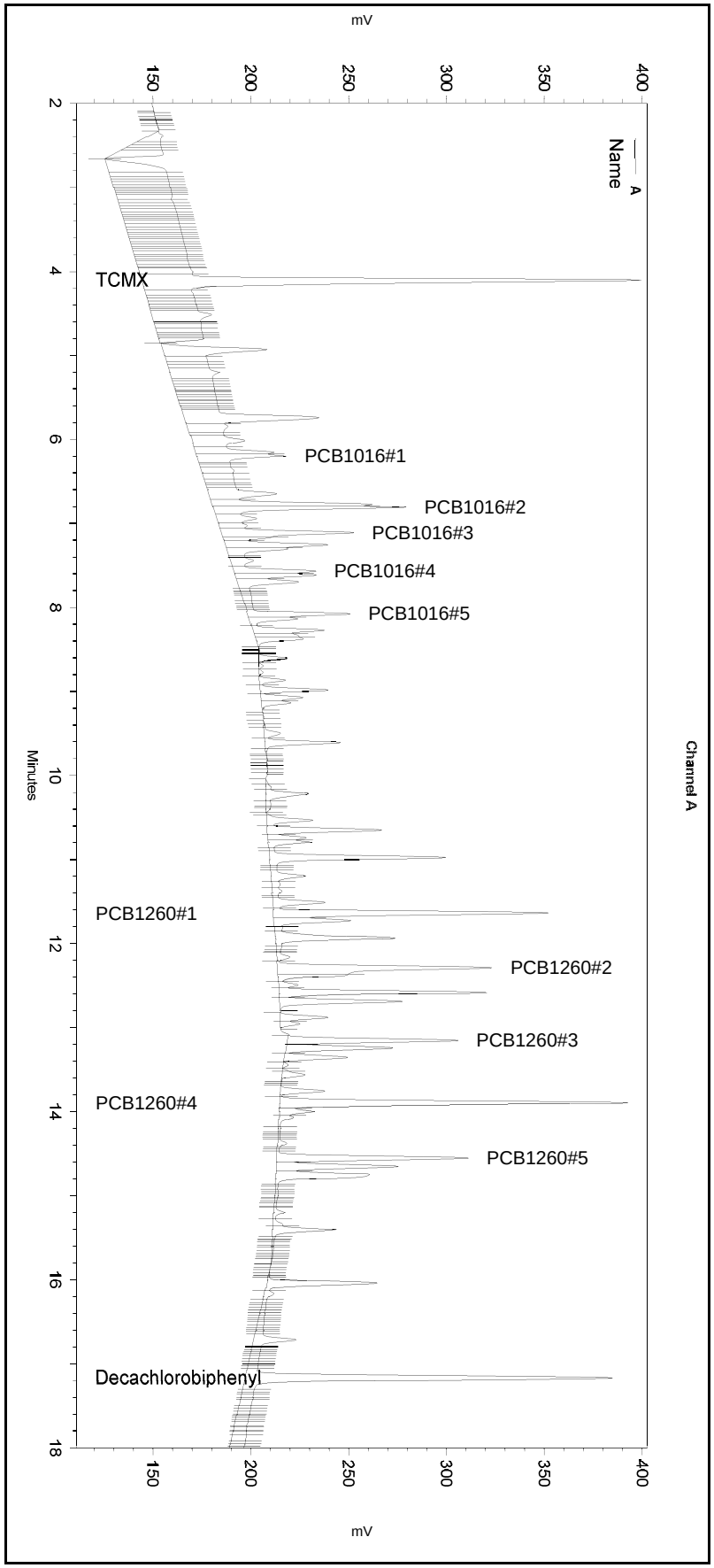
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	348956	50.000 CAL
PCB1016#1	5.207	5.207	53684	250.000 CAL
PCB1016#2	5.770	5.770	129867	250.000 CAL
PCB1016#3	5.987	5.987	62078	250.000 CAL
PCB1016#4	6.537	6.537	42866	250.000 CAL
PCB1016#5	6.990	6.990	48123	250.000 CAL
PCB1260#1	11.153	11.153	141677	250.000 CAL
PCB1260#2	11.560	11.560	106943	250.000 CAL
PCB1260#3	12.100	12.100	92664	250.000 CAL
PCB1260#4	12.757	12.757	212546	250.000 CAL
PCB1260#5	13.430	13.430	96592	250.000 CAL
Decachlorobiphenyl	16.423	16.423	380659	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 (Offline) Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:32:00 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

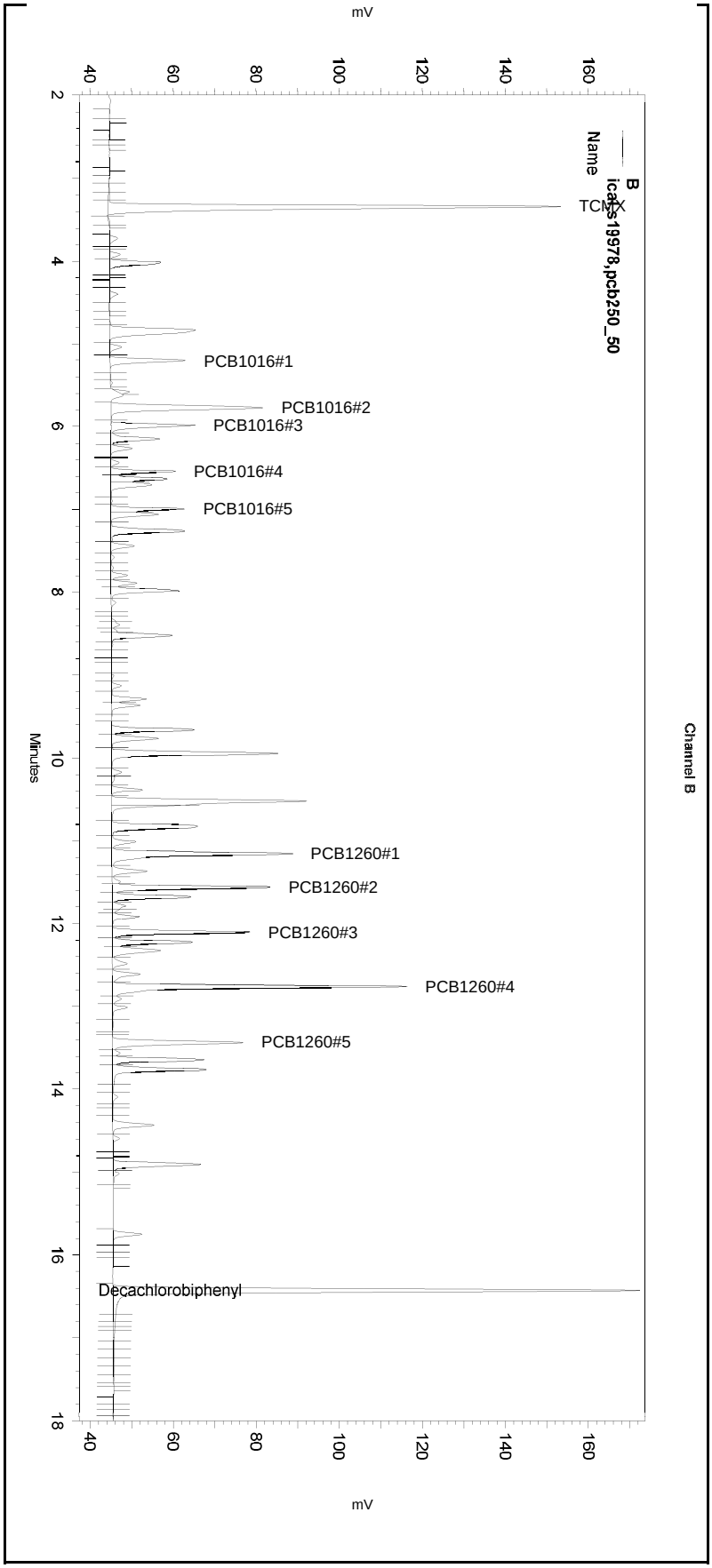
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 (Offline) Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:32:00 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:57:40 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.090	4.103	1344954	100.000 CAL
PCB1016#1	6.183	6.197	153076	500.000 CAL
PCB1016#2	6.797	6.810	438830	500.000 CAL
PCB1016#3	7.100	7.110	296694	500.000 CAL
PCB1016#4	7.557	7.570	157076	500.000 CAL
PCB1016#5	8.067	8.077	239254	500.000 CAL
PCB1260#1	11.630	11.640	701410	500.000 CAL
PCB1260#2	12.280	12.290	726674	500.000 CAL
PCB1260#3	13.140	13.150	468263	500.000 CAL
PCB1260#4	13.883	13.897	991537	500.000 CAL
PCB1260#5	14.537	14.550	552960	500.000 CAL
Decachlorobiphenyl	17.157	17.167	1019880	100.000 CAL

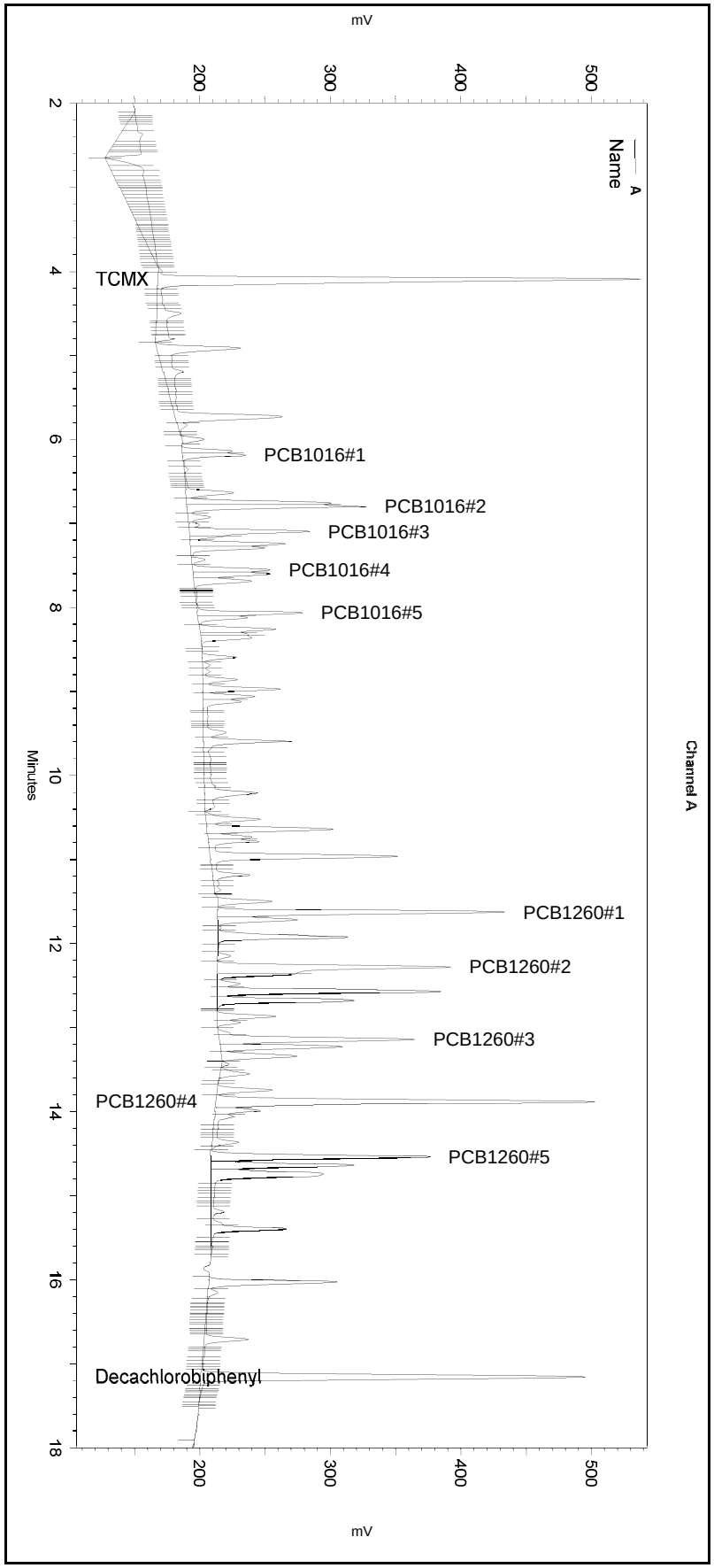
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.323	3.337	674460	100.000 CAL
PCB1016#1	5.193	5.207	94193	500.000 CAL
PCB1016#2	5.757	5.770	232508	500.000 CAL
PCB1016#3	5.973	5.987	110161	500.000 CAL
PCB1016#4	6.527	6.537	73914	500.000 CAL
PCB1016#5	6.980	6.990	85062	500.000 CAL
PCB1260#1	11.143	11.153	261764	500.000 CAL
PCB1260#2	11.550	11.560	193404	500.000 CAL
PCB1260#3	12.090	12.100	171467	500.000 CAL
PCB1260#4	12.747	12.757	404597	500.000 CAL
PCB1260#5	13.420	13.430	186709	500.000 CAL
Decachlorobiphenyl	16.413	16.423	743825	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:57:40 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

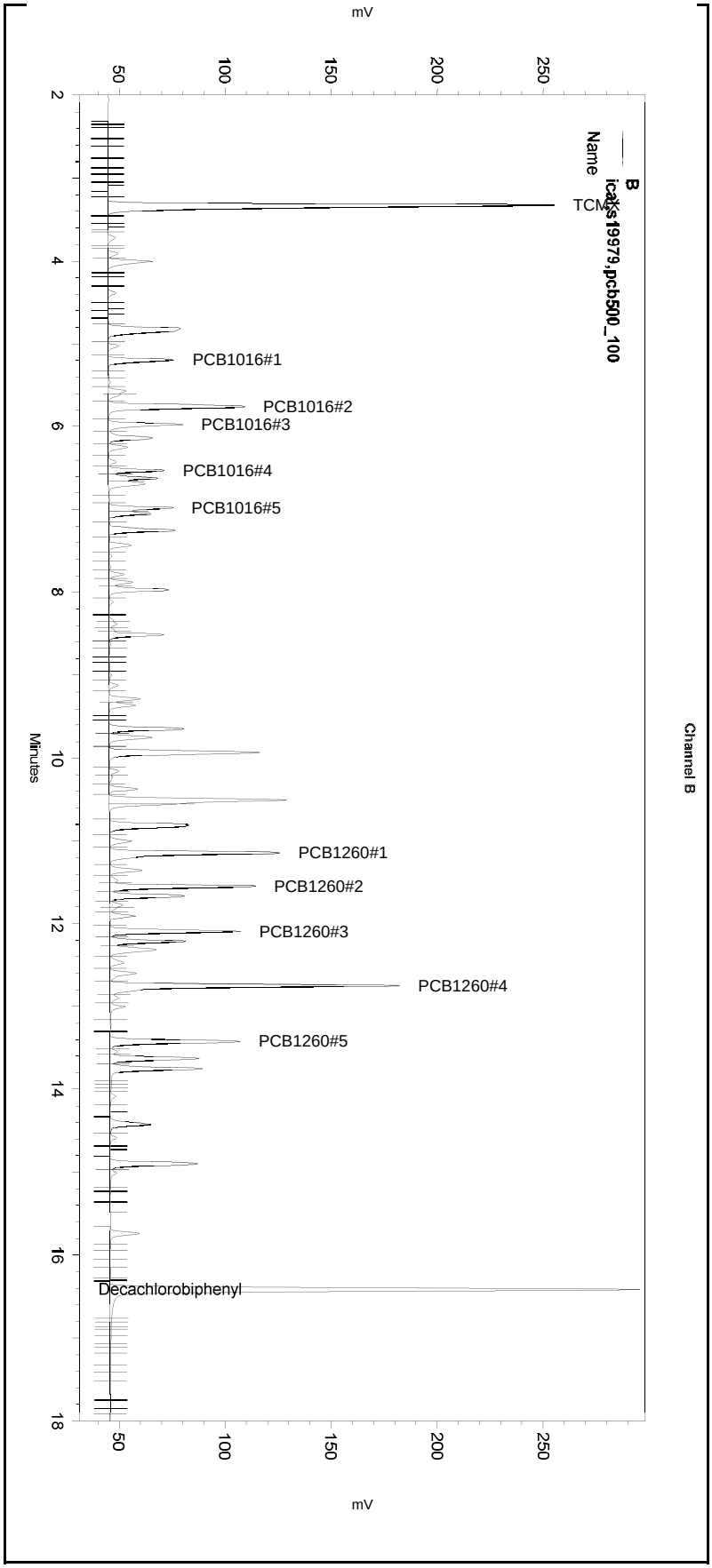
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.955	0	0
Yes	Reset Baseline	6.053	0	0
Yes	Reset Baseline	8.485	0	0
Yes	Reset Baseline	11.447	0	0
Yes	Manual Baseline	13.004	13.404	0
Yes	Reset Baseline	15.72	0	0
Yes	Reset Baseline	15.944	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:57:40 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 (Offline) Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:32:13 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.090	4.103	1675289	100.000 CAL
PCB1016#1	6.183	6.197	339005	500.000 CAL
PCB1016#2	6.797	6.810	632021	500.000 CAL
PCB1016#3	7.100	7.110	468564	500.000 CAL
PCB1016#4	7.557	7.570	290095	500.000 CAL
PCB1016#5	8.067	8.077	403651	500.000 CAL
PCB1260#1	11.630	11.640	786876	500.000 CAL
PCB1260#2	12.280	12.290	782149	500.000 CAL
PCB1260#3	13.140	13.150	393849	500.000 CAL
PCB1260#4	13.883	13.897	991537	500.000 CAL
PCB1260#5	14.537	14.550	555221	500.000 CAL
Decachlorobiphenyl	17.157	17.167	1031486	100.000 CAL

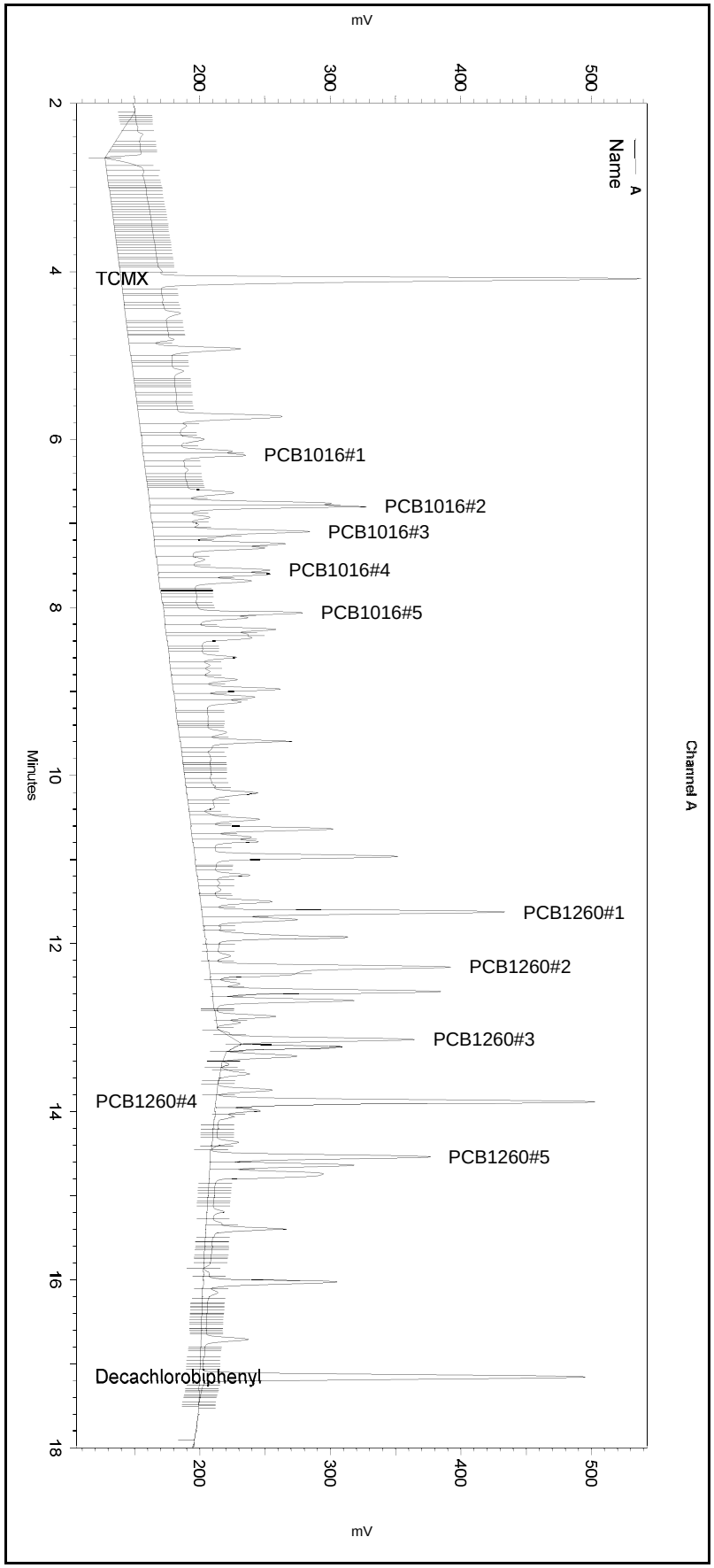
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.323	3.337	674460	100.000 CAL
PCB1016#1	5.193	5.207	94193	500.000 CAL
PCB1016#2	5.757	5.770	232508	500.000 CAL
PCB1016#3	5.973	5.987	110161	500.000 CAL
PCB1016#4	6.527	6.537	73914	500.000 CAL
PCB1016#5	6.980	6.990	85062	500.000 CAL
PCB1260#1	11.143	11.153	261764	500.000 CAL
PCB1260#2	11.550	11.560	193404	500.000 CAL
PCB1260#3	12.090	12.100	171467	500.000 CAL
PCB1260#4	12.747	12.757	404597	500.000 CAL
PCB1260#5	13.420	13.430	186709	500.000 CAL
Decachlorobiphenyl	16.413	16.423	743825	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 (Offline) Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:32:13 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

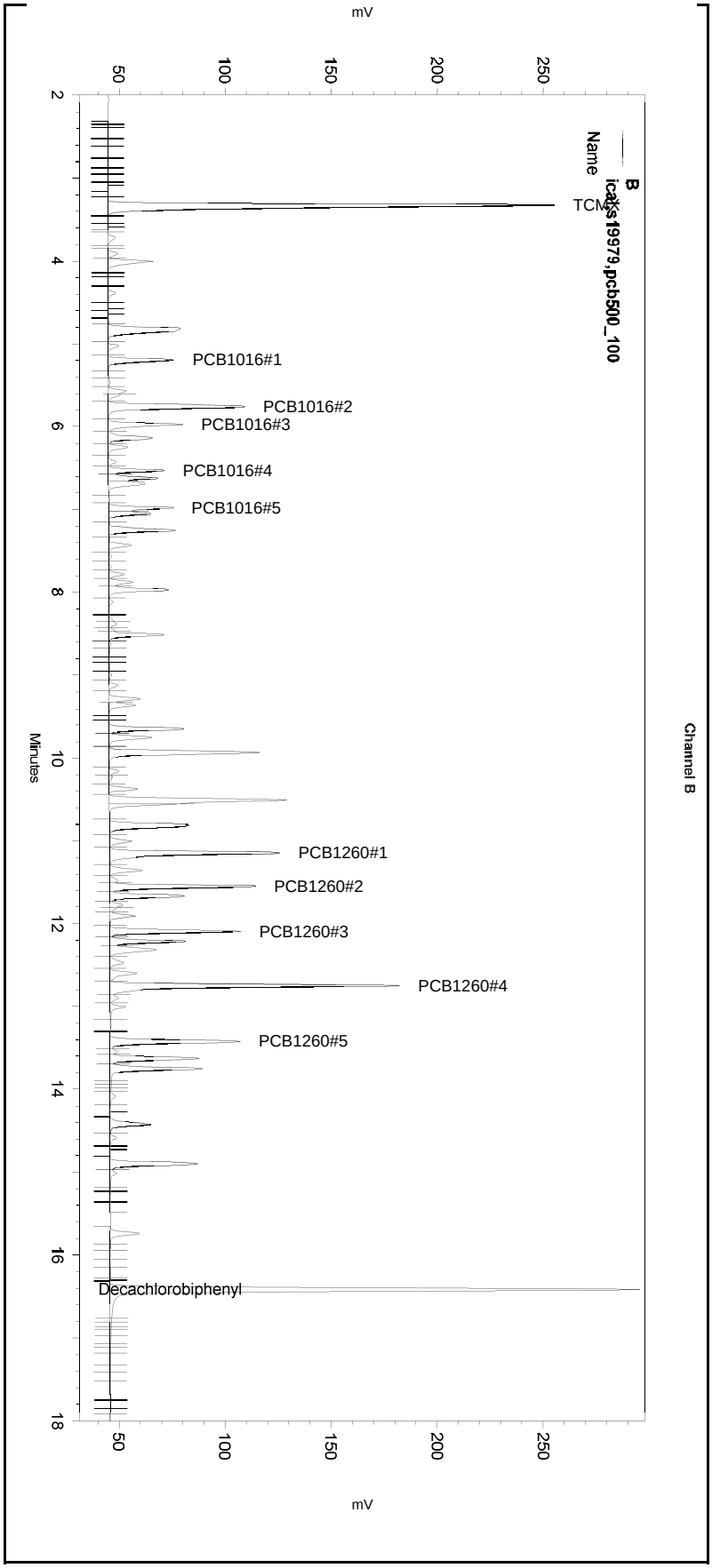
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 (Offline) Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:32:13 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:57:46 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	1851098	150.000 CAL
PCB1016#1	6.200	6.197	216798	750.000 CAL
PCB1016#2	6.813	6.810	608153	750.000 CAL
PCB1016#3	7.113	7.110	423496	750.000 CAL
PCB1016#4	7.573	7.570	229888	750.000 CAL
PCB1016#5	8.083	8.077	350252	750.000 CAL
PCB1260#1	11.643	11.640	960225	750.000 CAL
PCB1260#2	12.293	12.290	979347	750.000 CAL
PCB1260#3	13.153	13.150	632425	750.000 CAL
PCB1260#4	13.900	13.897	1292836	750.000 CAL
PCB1260#5	14.550	14.550	724082	750.000 CAL
Decachlorobiphenyl	17.167	17.167	1276679	150.000 CAL

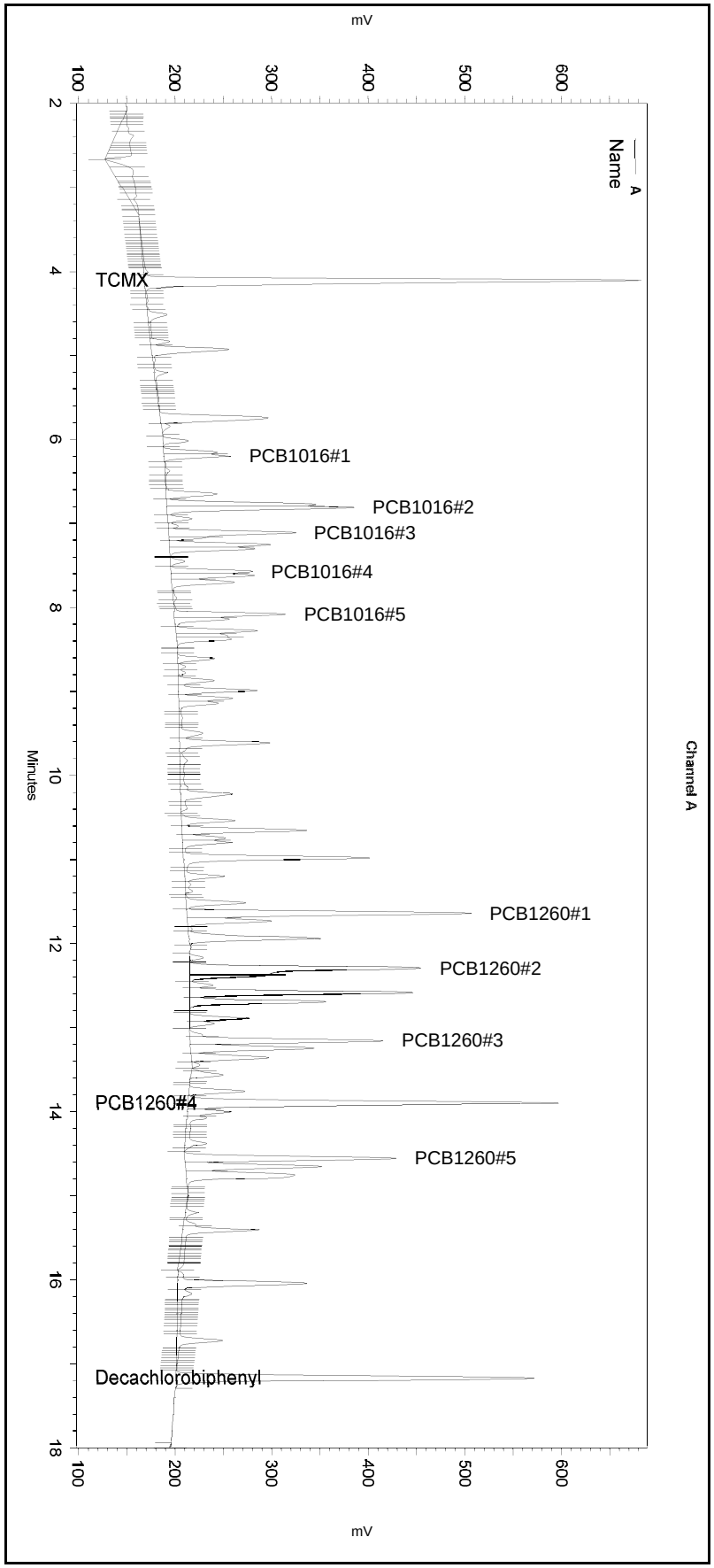
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	1069521	150.000 CAL
PCB1016#1	5.210	5.207	143624	750.000 CAL
PCB1016#2	5.773	5.770	366778	750.000 CAL
PCB1016#3	5.990	5.987	170474	750.000 CAL
PCB1016#4	6.540	6.537	113440	750.000 CAL
PCB1016#5	6.993	6.990	129786	750.000 CAL
PCB1260#1	11.160	11.153	383407	750.000 CAL
PCB1260#2	11.563	11.560	280246	750.000 CAL
PCB1260#3	12.107	12.100	246327	750.000 CAL
PCB1260#4	12.760	12.757	576462	750.000 CAL
PCB1260#5	13.437	13.430	263393	750.000 CAL
Decachlorobiphenyl	16.430	16.423	1006026	150.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:57:46 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

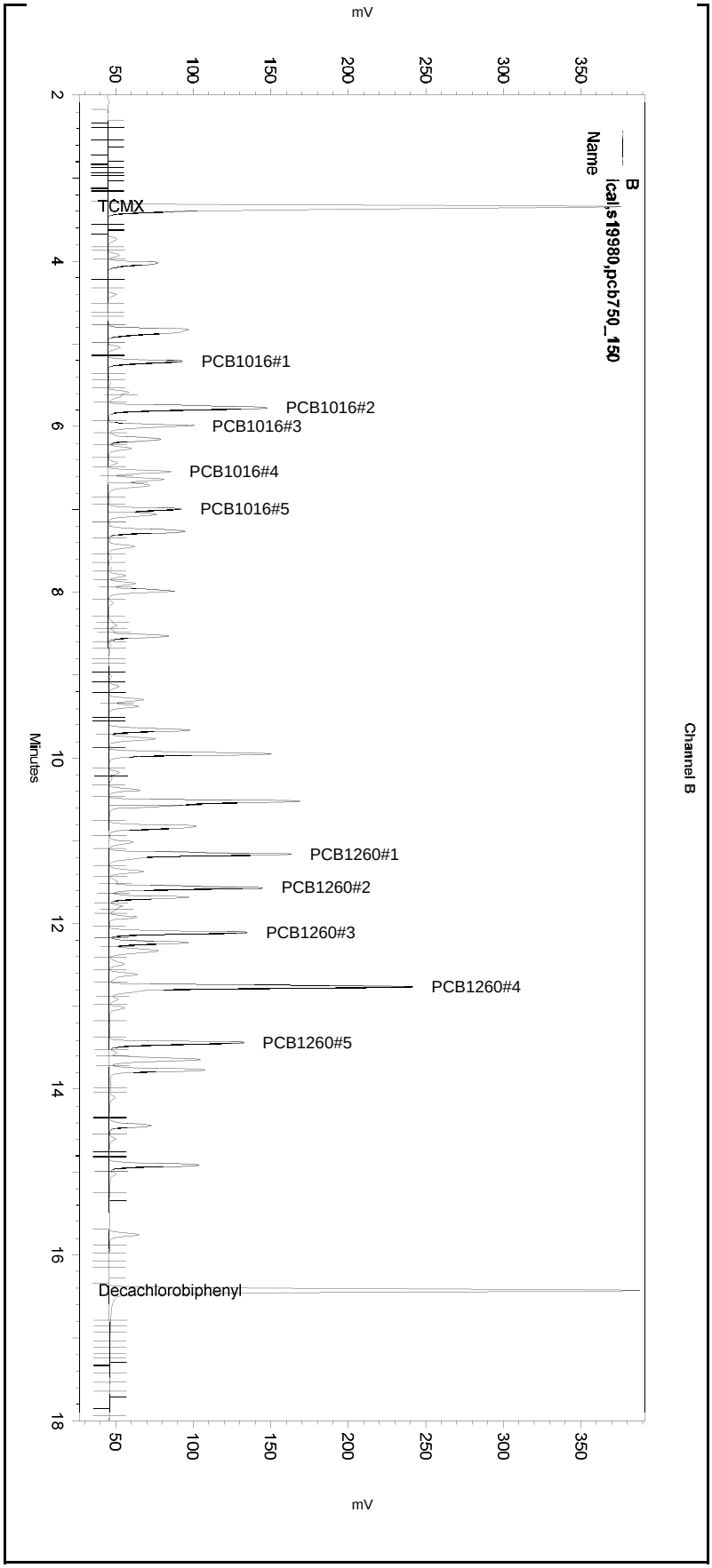
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.958	0	0
Yes	Reset Baseline	8.478	0	0
Yes	Reset Baseline	12.066	0	0
Yes	Manual Baseline	13.006	13.485	0
Yes	Split Peak	13.096	0	0
Yes	Split Peak	13.101	0	0
Yes	Reset Baseline	14.967	0	0
Yes	Reset Baseline	17.299	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:57:46 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 (Offline) Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:32:26 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	1870942	150.000 CAL
PCB1016#1	6.200	6.197	282147	750.000 CAL
PCB1016#2	6.813	6.810	680887	750.000 CAL
PCB1016#3	7.113	7.110	492386	750.000 CAL
PCB1016#4	7.573	7.570	286434	750.000 CAL
PCB1016#5	8.083	8.077	425062	750.000 CAL
PCB1260#1	11.643	11.640	998663	750.000 CAL
PCB1260#2	12.293	12.290	1012980	750.000 CAL
PCB1260#3	13.153	13.150	564621	750.000 CAL
PCB1260#4	13.900	13.897	1293117	750.000 CAL
PCB1260#5	14.550	14.550	733828	750.000 CAL
Decachlorobiphenyl	17.167	17.167	1429447	150.000 CAL

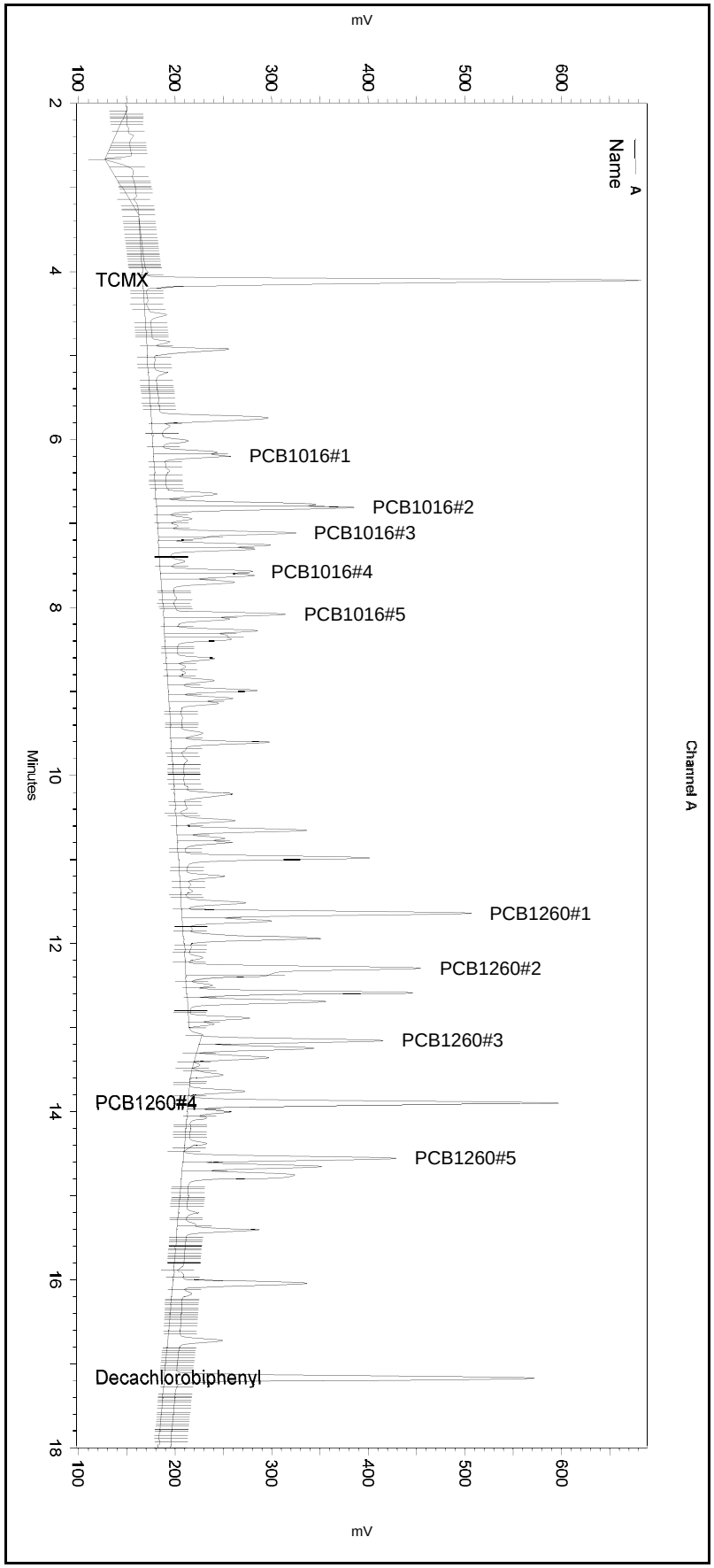
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	1069521	150.000 CAL
PCB1016#1	5.210	5.207	143624	750.000 CAL
PCB1016#2	5.773	5.770	366778	750.000 CAL
PCB1016#3	5.990	5.987	170474	750.000 CAL
PCB1016#4	6.540	6.537	113440	750.000 CAL
PCB1016#5	6.993	6.990	129786	750.000 CAL
PCB1260#1	11.160	11.153	383407	750.000 CAL
PCB1260#2	11.563	11.560	280246	750.000 CAL
PCB1260#3	12.107	12.100	246327	750.000 CAL
PCB1260#4	12.760	12.757	576462	750.000 CAL
PCB1260#5	13.437	13.430	263393	750.000 CAL
Decachlorobiphenyl	16.430	16.423	1006026	150.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 (Offline) Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:32:26 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

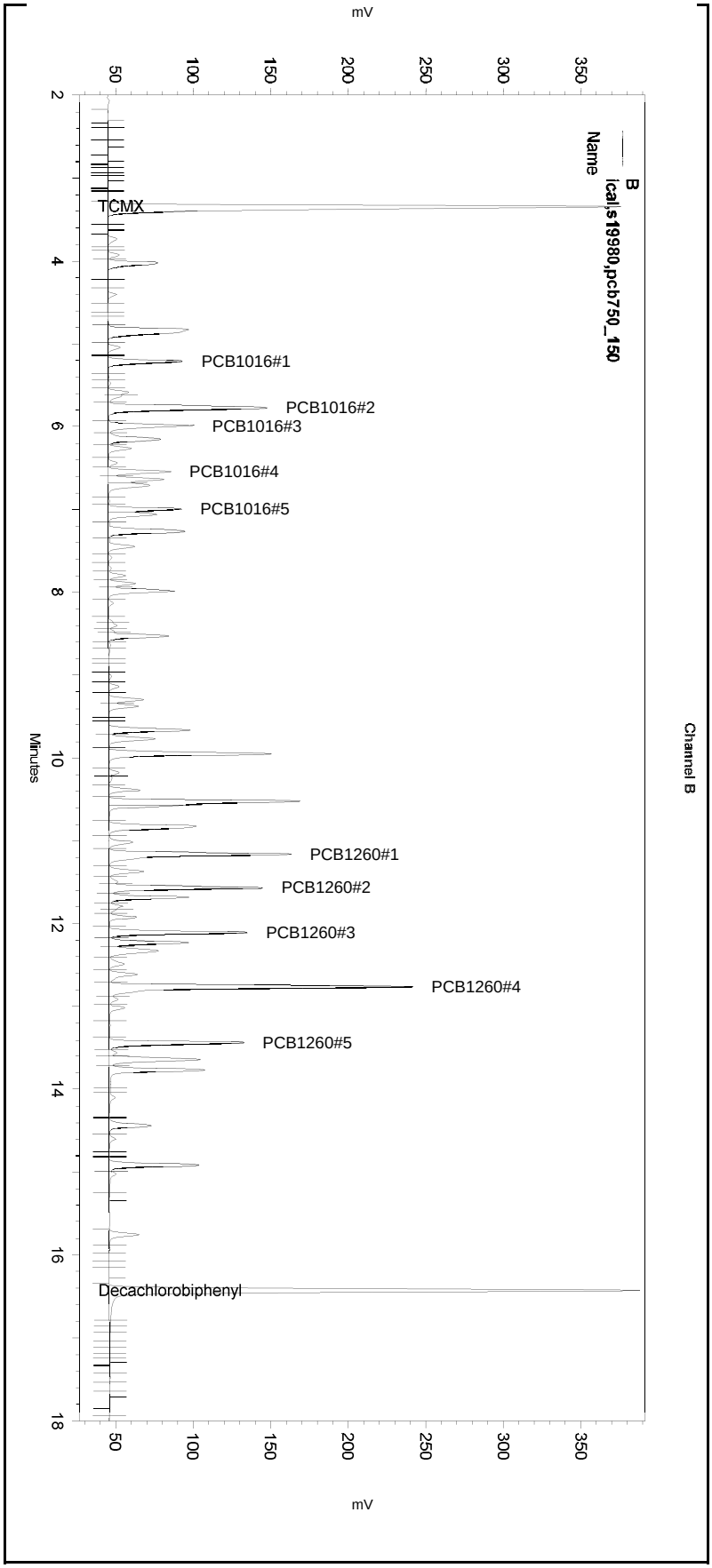
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 (Offline) Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:32:26 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:57:52 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.093	4.103	2139909	200.000 CAL
PCB1016#1	6.187	6.197	245258	1000.000 CAL
PCB1016#2	6.800	6.810	689174	1000.000 CAL
PCB1016#3	7.103	7.110	466173	1000.000 CAL
PCB1016#4	7.560	7.570	251333	1000.000 CAL
PCB1016#5	8.070	8.077	388721	1000.000 CAL
PCB1260#1	11.633	11.640	1106040	1000.000 CAL
PCB1260#2	12.280	12.290	1133714	1000.000 CAL
PCB1260#3	13.140	13.150	732069	1000.000 CAL
PCB1260#4	13.887	13.897	1516897	1000.000 CAL
PCB1260#5	14.540	14.550	843436	1000.000 CAL
Decachlorobiphenyl	17.157	17.167	1521403	200.000 CAL

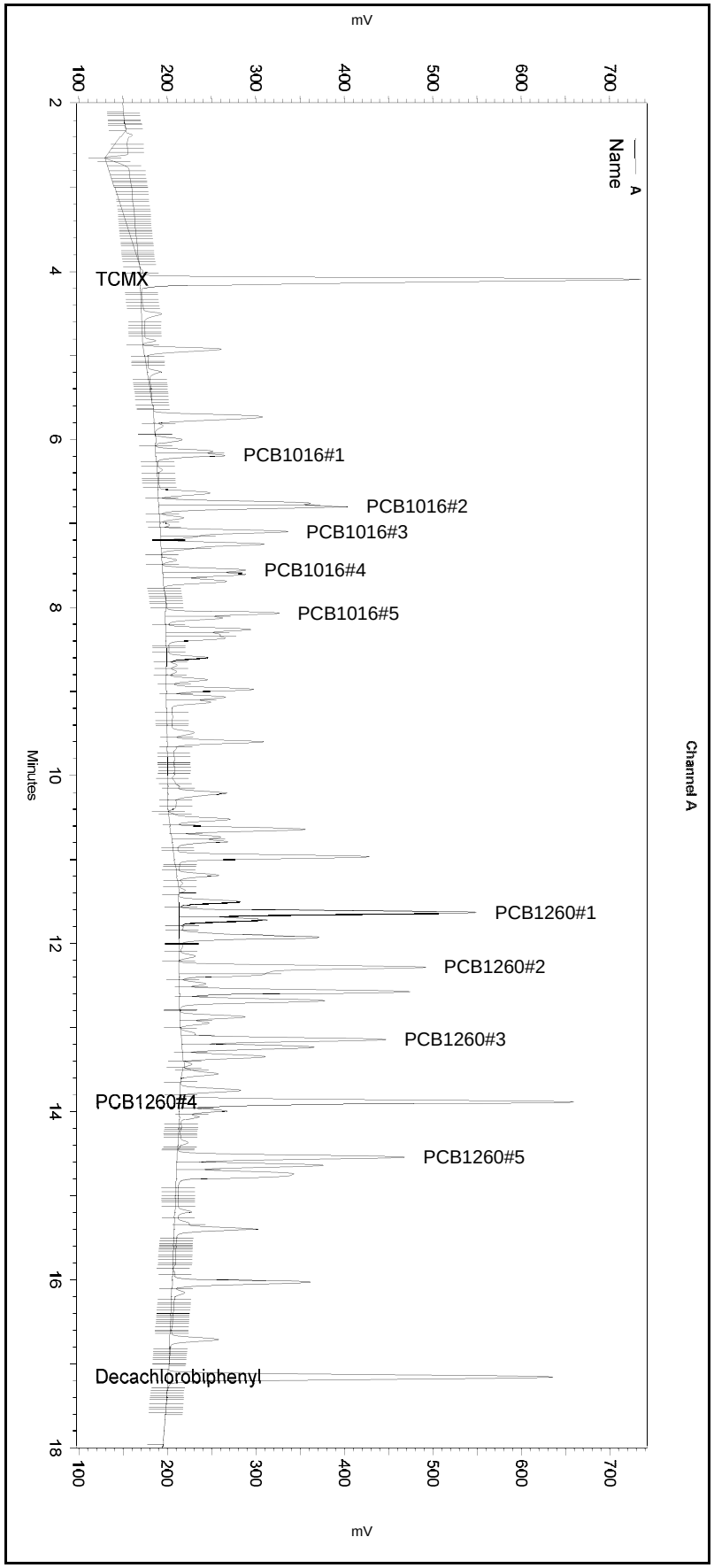
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.327	3.337	1281121	200.000 CAL
PCB1016#1	5.197	5.207	165556	1000.000 CAL
PCB1016#2	5.763	5.770	416829	1000.000 CAL
PCB1016#3	5.977	5.987	193652	1000.000 CAL
PCB1016#4	6.530	6.537	128512	1000.000 CAL
PCB1016#5	6.983	6.990	150292	1000.000 CAL
PCB1260#1	11.147	11.153	462166	1000.000 CAL
PCB1260#2	11.550	11.560	335022	1000.000 CAL
PCB1260#3	12.093	12.100	298965	1000.000 CAL
PCB1260#4	12.750	12.757	711594	1000.000 CAL
PCB1260#5	13.423	13.430	330730	1000.000 CAL
Decachlorobiphenyl	16.417	16.423	1246720	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:57:52 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

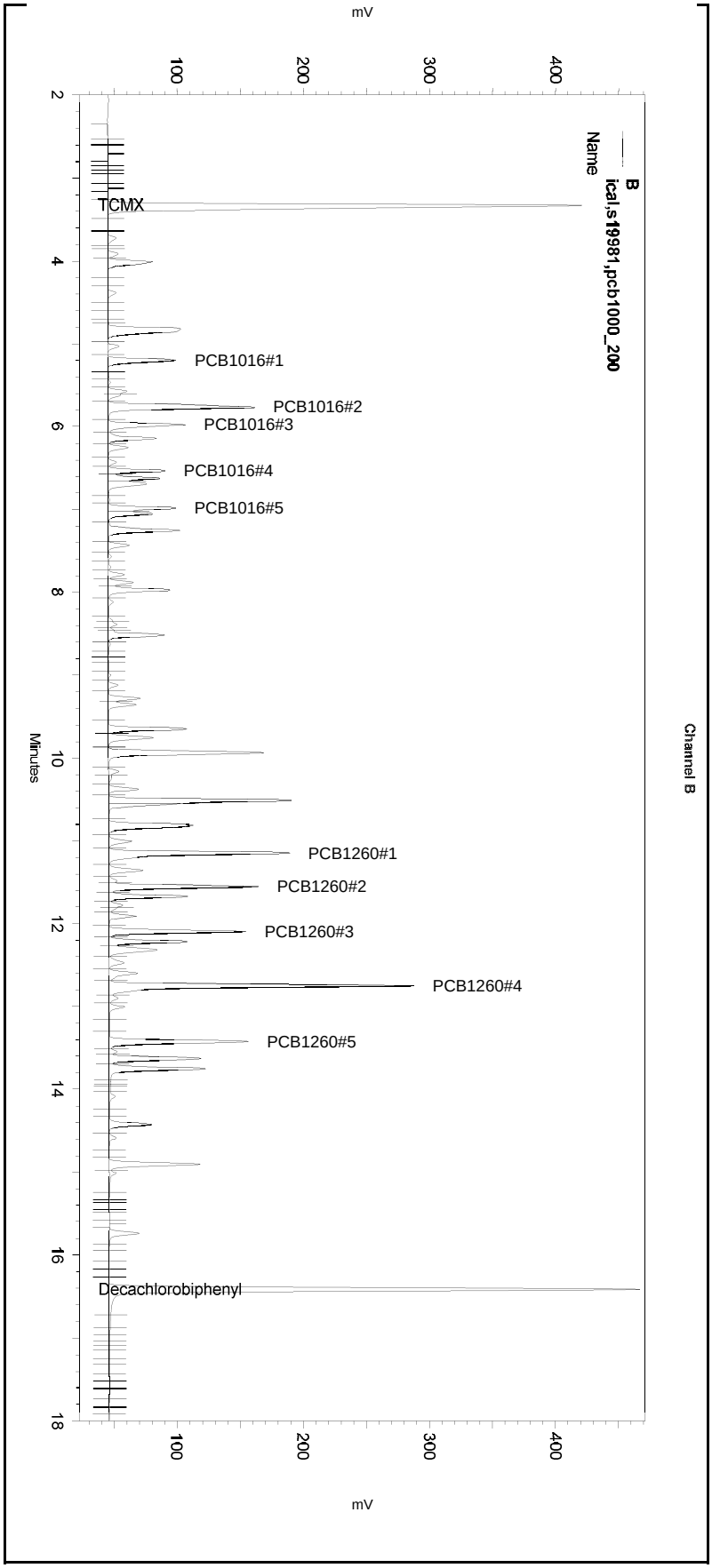
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.93	0	0
Yes	Reset Baseline	5.606	0	0
Yes	Reset Baseline	11.401	0	0
Yes	Manual Baseline	13.005	13.482	0
Yes	Split Peak	13.092	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:57:52 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 (Offline) Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:32:39 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.093	4.103	2421347	200.000 CAL
PCB1016#1	6.187	6.197	319954	1000.000 CAL
PCB1016#2	6.800	6.810	737237	1000.000 CAL
PCB1016#3	7.103	7.110	497422	1000.000 CAL
PCB1016#4	7.560	7.570	260528	1000.000 CAL
PCB1016#5	8.070	8.077	388721	1000.000 CAL
PCB1260#1	11.633	11.640	1147353	1000.000 CAL
PCB1260#2	12.280	12.290	1155812	1000.000 CAL
PCB1260#3	13.140	13.150	658691	1000.000 CAL
PCB1260#4	13.887	13.897	1516897	1000.000 CAL
PCB1260#5	14.540	14.550	843436	1000.000 CAL
Decachlorobiphenyl	17.157	17.167	1521403	200.000 CAL

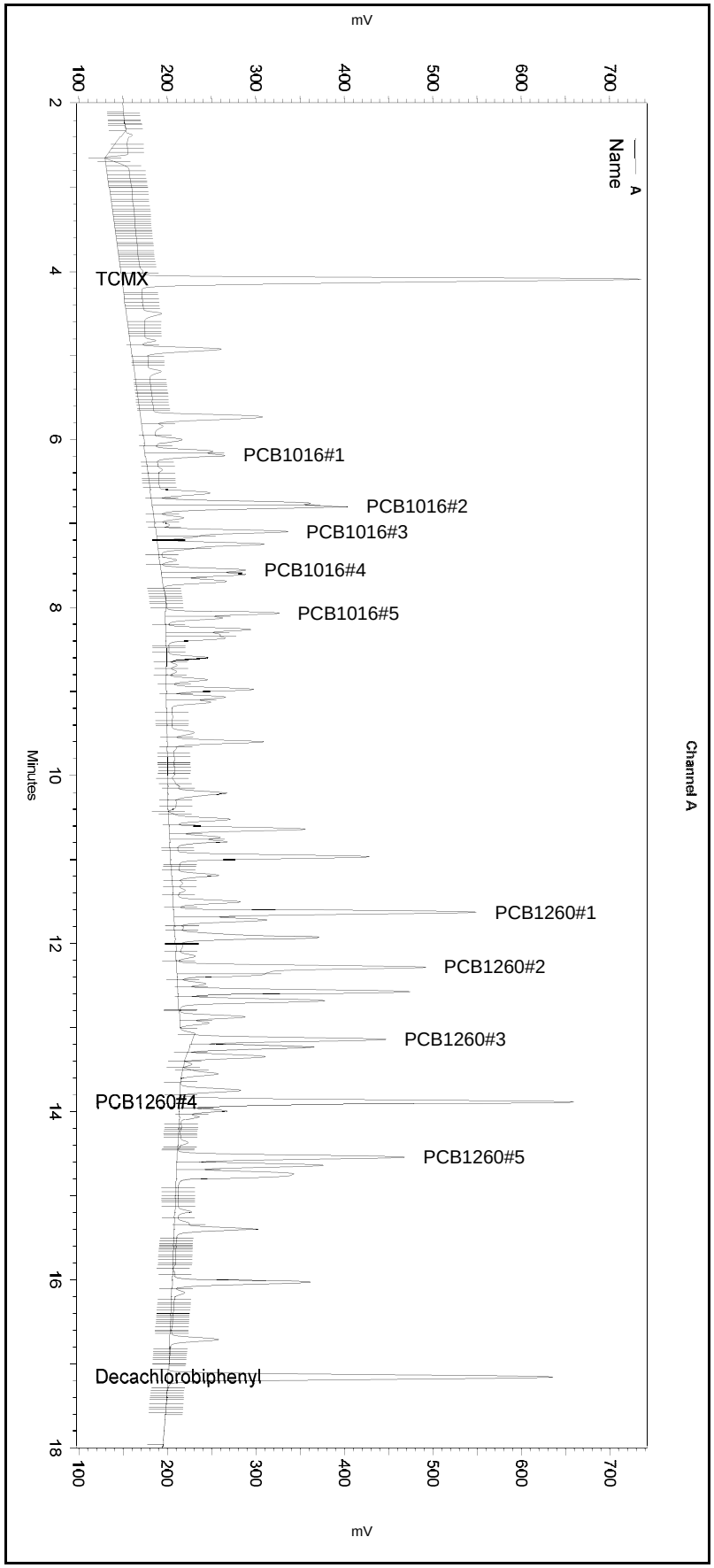
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.327	3.337	1281121	200.000 CAL
PCB1016#1	5.197	5.207	165556	1000.000 CAL
PCB1016#2	5.763	5.770	416829	1000.000 CAL
PCB1016#3	5.977	5.987	193652	1000.000 CAL
PCB1016#4	6.530	6.537	128512	1000.000 CAL
PCB1016#5	6.983	6.990	150292	1000.000 CAL
PCB1260#1	11.147	11.153	462166	1000.000 CAL
PCB1260#2	11.550	11.560	335022	1000.000 CAL
PCB1260#3	12.093	12.100	298965	1000.000 CAL
PCB1260#4	12.750	12.757	711594	1000.000 CAL
PCB1260#5	13.423	13.430	330730	1000.000 CAL
Decachlorobiphenyl	16.417	16.423	1246720	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 (Offline) Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:32:39 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

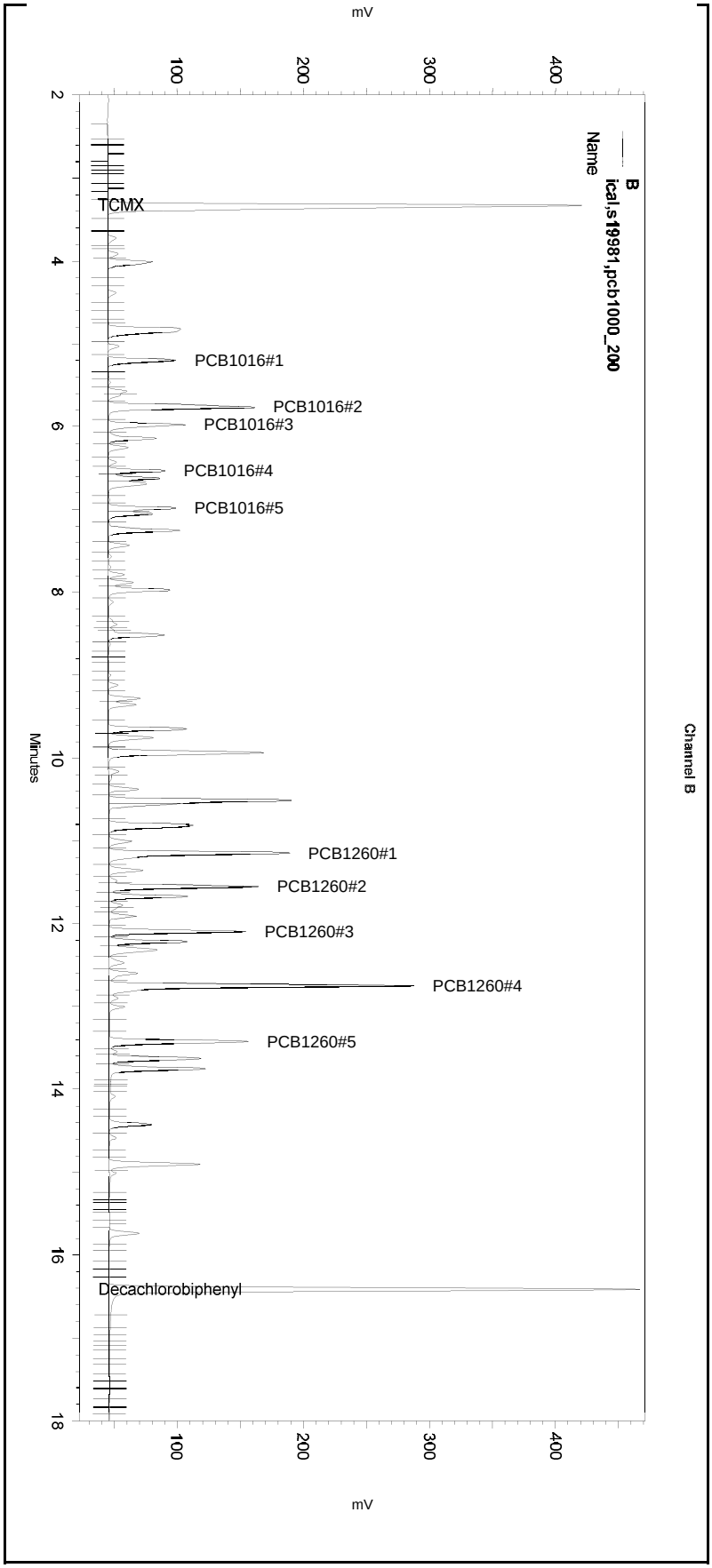
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 (Offline) Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:32:39 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:14:42 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	768976	55.209
PCB1016#1	6.193	6.197	90700	242.424
PCB1016#2	6.810	6.810	265699	253.799
PCB1016#3	7.110	7.110	180523	279.081
PCB1016#4	7.570	7.570	91018	278.909
PCB1016#5	8.077	8.077	143016	261.461
PCB1260#1	11.640	11.640	435893	265.114
PCB1260#2	12.290	12.290	399646	228.461
PCB1260#3	13.150	13.150	289106	308.211
PCB1260#4	13.897	13.897	631746	298.133
PCB1260#5	14.547	14.550	340983	243.458
Decachlorobiphenyl	17.163	17.167	602039	51.224

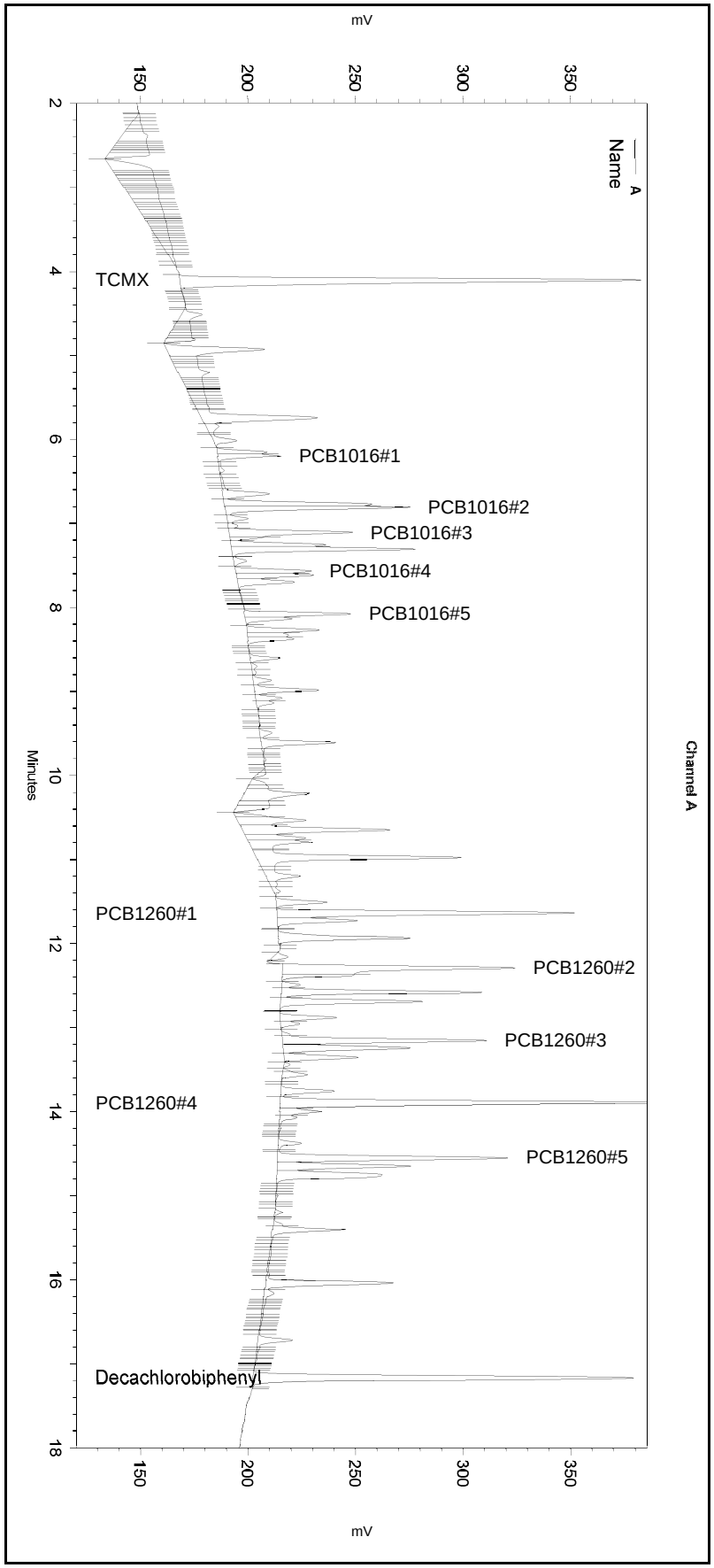
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	334788	47.777
PCB1016#1	5.207	5.207	53599	252.493
PCB1016#2	5.770	5.770	129276	243.692
PCB1016#3	5.987	5.987	61968	252.551
PCB1016#4	6.537	6.537	42719	254.705
PCB1016#5	6.990	6.990	49615	258.383
PCB1260#1	11.157	11.153	146740	250.699
PCB1260#2	11.560	11.560	112803	265.031
PCB1260#3	12.100	12.100	101583	269.500
PCB1260#4	12.757	12.757	234878	264.573
PCB1260#5	13.433	13.430	109422	274.948
Decachlorobiphenyl	16.423	16.423	374794	41.394

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:14:42 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

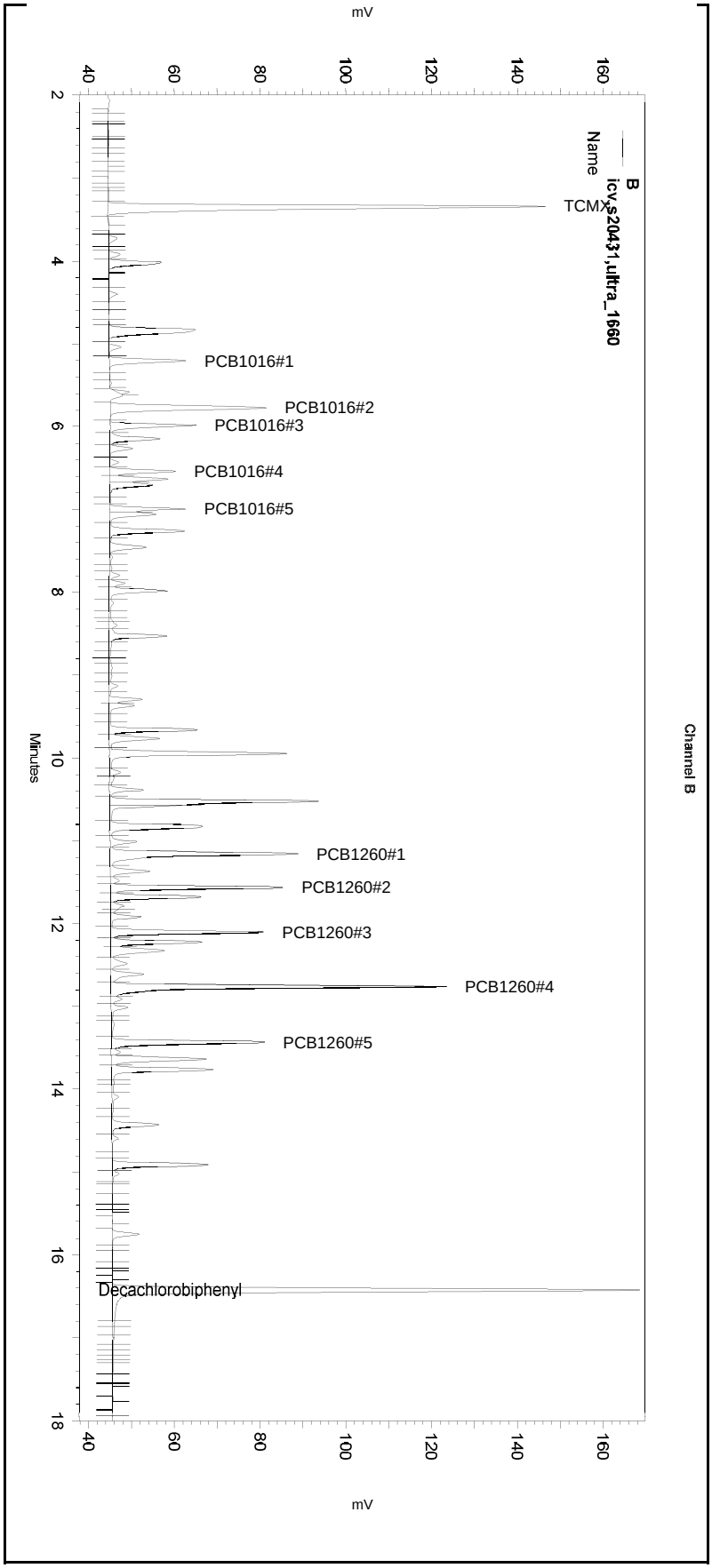
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.994	0	0
Yes	Reset Baseline	4.424	0	0
Yes	Reset Baseline	6.089	0	0
Yes	Reset Baseline	8.208	0	0
Yes	Reset Baseline	11.436	0	0
Yes	Reset Baseline	12.062	0	0
Yes	Move BL Start	12.213	12.239	0
Yes	Reset Baseline	12.444	0	0
Yes	Manual Baseline	13.017	13.421	0
Yes	Split Peak	13.098	0	0
Yes	Reset Baseline	17.298	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:14:42 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:02:24 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	984503	73.069
PCB1016#1	6.193	6.197	180244	481.758
PCB1016#2	6.810	6.810	339942	324.716
PCB1016#3	7.110	7.110	240826	372.306
PCB1016#4	7.570	7.570	128535	402.814
PCB1016#5	8.077	8.077	182909	334.393
PCB1260#1	11.640	11.640	507707	318.576
PCB1260#2	12.290	12.290	453511	259.254
PCB1260#3	13.150	13.150	270560	270.508
PCB1260#4	13.897	13.897	631746	298.133
PCB1260#5	14.547	14.550	340983	294.206
Decachlorobiphenyl	17.163	17.167	697304	61.260

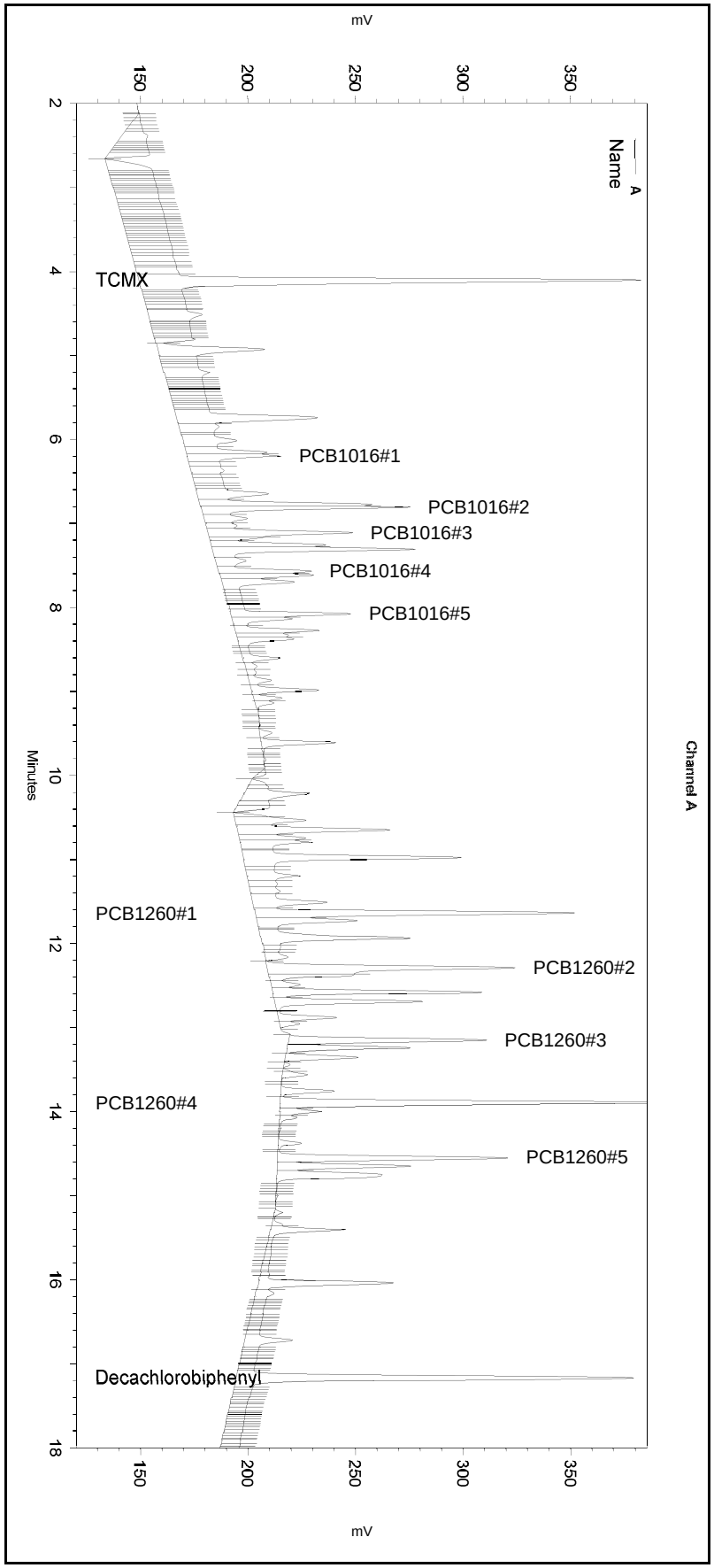
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	334788	47.777
PCB1016#1	5.207	5.207	53599	252.493
PCB1016#2	5.770	5.770	129276	245.990
PCB1016#3	5.987	5.987	61968	252.551
PCB1016#4	6.537	6.537	42719	254.705
PCB1016#5	6.990	6.990	49615	258.383
PCB1260#1	11.157	11.153	146740	250.699
PCB1260#2	11.560	11.560	112803	265.031
PCB1260#3	12.100	12.100	101583	269.500
PCB1260#4	12.757	12.757	234878	264.573
PCB1260#5	13.433	13.430	109422	274.948
Decachlorobiphenyl	16.423	16.423	374794	43.841

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:02:24 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

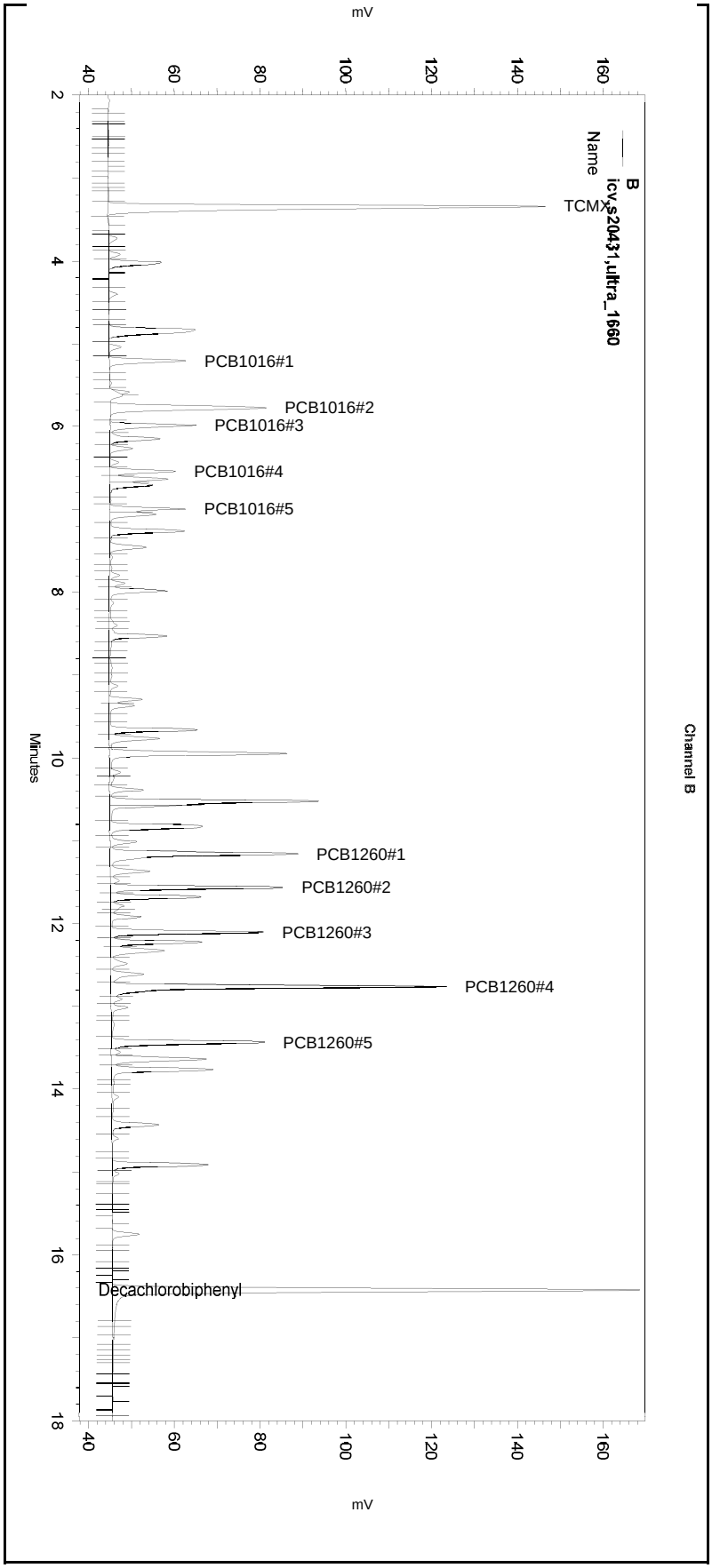
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:02:24 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Continuing Calibration Verification Raw Data

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC06 Run Name : PCB100_20 IDF : 1.0
Seqnum : 202366165024.1 File : 254_024 Time : 10-SEP-2012 21:27
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	123.5	pg/uL	**23**	20	c+ ***
TCMX	A	6606.9	7827.3	20.00	23.69	pg/uL	18	20	
Decachlorobiphenyl	A	8554.0	8552.0	20.00	20.00	pg/uL	0	20	
Aroclor-1260	B			100.0	143.2	pg/uL	**43**	20	c+ ***
TCMX	B	17600	23007	20.00	26.14	pg/uL	**31**	20	c+
Decachlorobiphenyl	B	23197	28582	20.00	25.18	pg/uL	**26**	20	c+

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:41:04 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.793	4.775	156546	23.694
PCB1016#1	7.020	7.002	16589	121.238
PCB1016#2	7.653	7.637	51610	119.986
PCB1016#3	7.967	7.950	29623	128.513
PCB1016#4	8.437	8.420	17633	129.866
PCB1016#5	8.963	8.947	25319	130.282
PCB1260#1	12.570	12.555	95204	124.113
PCB1260#2	13.227	13.214	73118	129.667
PCB1260#3	14.090	14.077	53051	112.269
PCB1260#4	14.833	14.820	115992	124.795
PCB1260#5	15.493	15.482	49456	126.466
Decachlorobiphenyl	18.113	18.102	171039	19.995

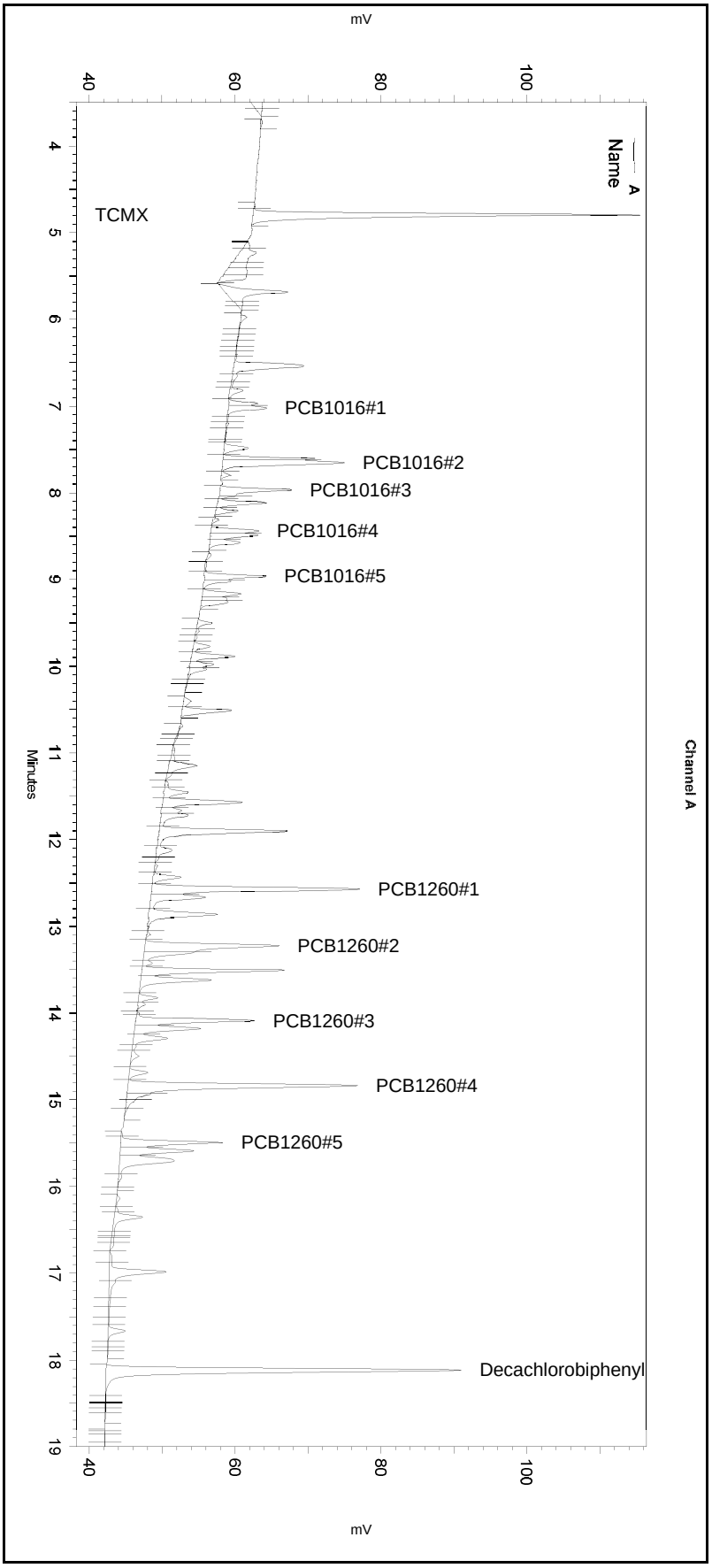
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.962	460137	26.144
PCB1016#1	5.980	5.979	68727	119.023
PCB1016#2	6.577	6.574	250942	138.686
PCB1016#3	6.800	6.799	117555	152.315
PCB1016#4	7.370	7.369	64526	148.917
PCB1016#5	7.840	7.839	77780	141.970
PCB1260#1	12.083	12.078	325200	147.050
PCB1260#2	12.490	12.475	284102	146.907
PCB1260#3	13.037	13.032	223964	132.728
PCB1260#4	13.693	13.688	515570	149.851
PCB1260#5	14.373	14.370	224821	139.682
Decachlorobiphenyl	17.383	17.378	571639	25.183

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:41:04 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

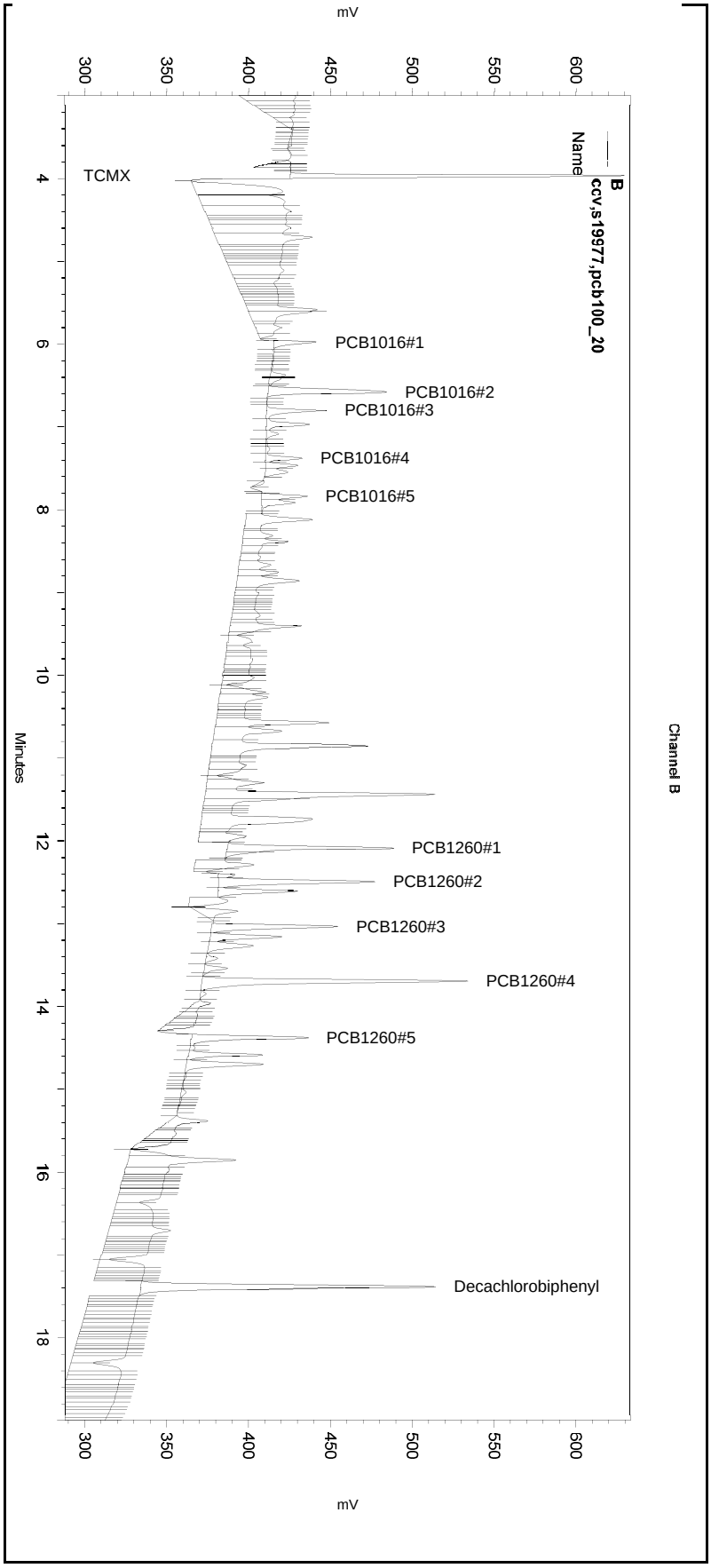
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.922	0	0
Yes	Reset Baseline	8.266	0	0
Yes	Reset Baseline	8.66	0	0
Yes	Reset Baseline	9.344	0	0
Yes	Reset Baseline	15.258	0	0
Yes	Reset Baseline	16.087	0	0

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:41:04 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	3.876	3.972	0
Yes	Backward Horizontal Baseline	5.948	6.057	0
Yes	Reset Baseline	7.615	0	0
Yes	Backward Horizontal Baseline	7.786	8.02	0
Yes	Manual Baseline	12.017	12.222	0
Yes	Backward Horizontal Baseline	12.399	12.674	0
Yes	Reset Baseline	12.961	0	0
Yes	Reset Baseline	13.626	0	0
Yes	Reset Baseline	13.905	0	0
Yes	Move BL Start	14.3	14.336	0
Yes	Manual Baseline	17.315	17.483	0

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:36:24 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.793	4.775	166003	25.126
PCB1016#1	7.020	7.002	16589	121.238
PCB1016#2	7.653	7.637	51610	119.986
PCB1016#3	7.967	7.950	29826	129.394
PCB1016#4	8.437	8.420	17852	131.901
PCB1016#5	8.963	8.947	26021	133.894
PCB1260#1	12.570	12.555	95476	124.467
PCB1260#2	13.227	13.214	73574	130.475
PCB1260#3	14.090	14.077	53647	113.530
PCB1260#4	14.833	14.820	117333	126.237
PCB1260#5	15.493	15.482	50017	127.901
Decachlorobiphenyl	18.113	18.102	171039	19.995

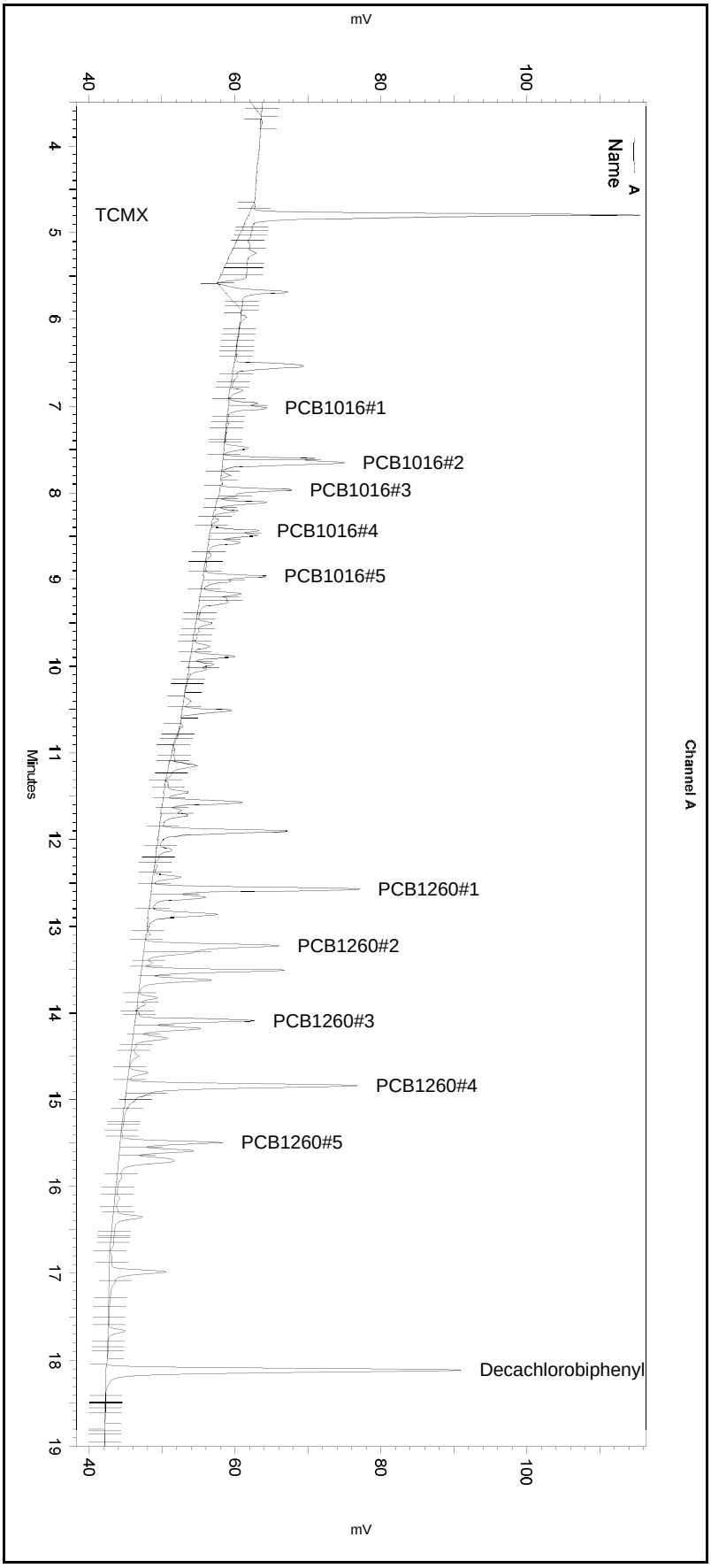
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.962	722456	41.049
PCB1016#1	5.980	5.979	100565	189.373
PCB1016#2	6.577	6.574	256469	141.740
PCB1016#3	6.800	6.799	137500	178.157
PCB1016#4	7.370	7.369	103534	257.115
PCB1016#5	7.840	7.839	118651	216.571
PCB1260#1	12.083	12.078	493647	248.848
PCB1260#2	12.490	12.475	440619	227.841
PCB1260#3	13.037	13.032	407483	241.487
PCB1260#4	13.693	13.688	750109	240.469
PCB1260#5	14.373	14.370	393829	268.947
Decachlorobiphenyl	17.383	17.378	894477	43.067

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:36:24 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

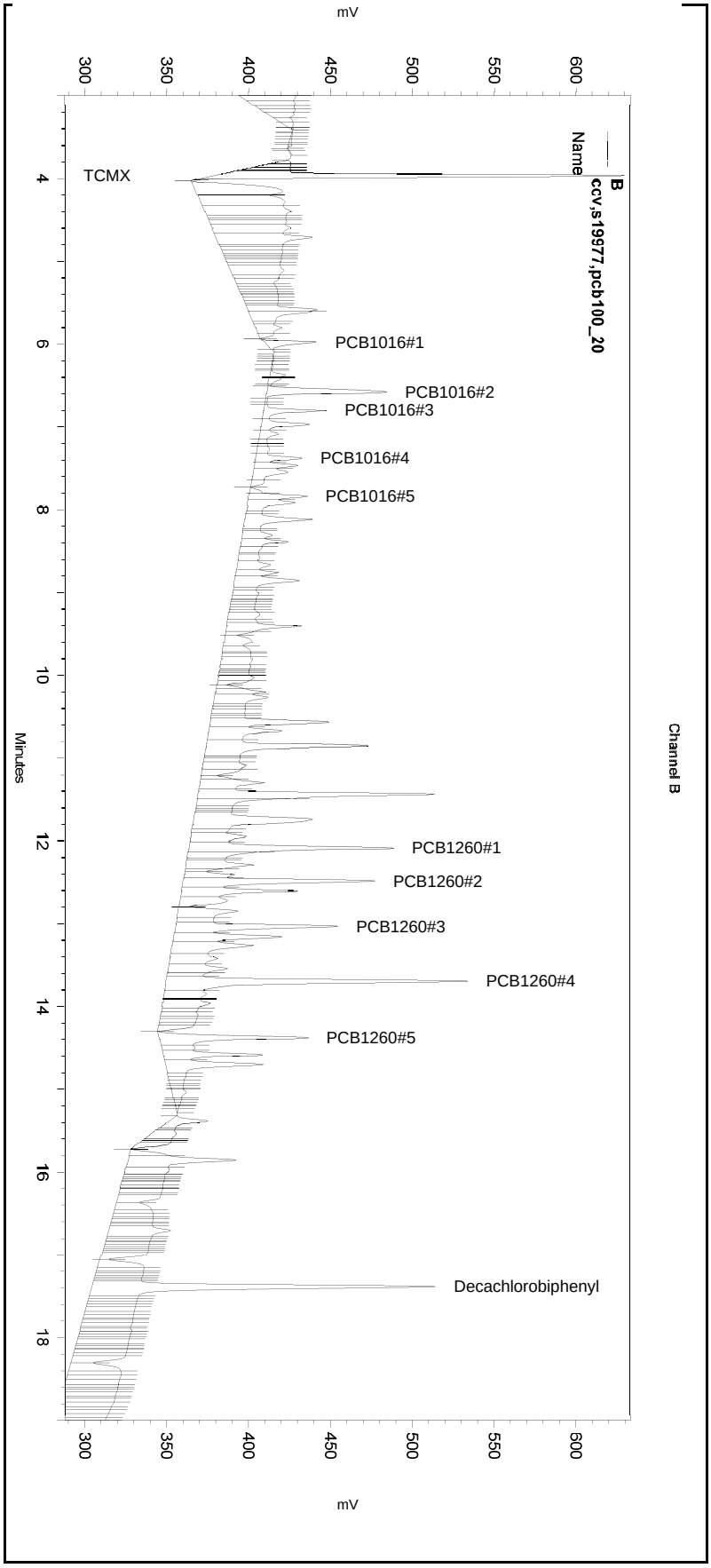
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:36:24 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC06 Run Name : PCB250_50 IDF : 1.0
Seqnum : 202366165040.1 File : 254_040 Time : 11-SEP-2012 04:48
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	275.9	pg/uL	10	20	
TCMX	A	6606.9	6823.8	50.00	51.64	pg/uL	3	20	
Decachlorobiphenyl	A	8554.0	7425.1	50.00	43.40	pg/uL	-13	20	
Aroclor-1260	B			250.0	304.5	pg/uL	**22**	20	c+ ***
TCMX	B	17600	16760	50.00	47.61	pg/uL	-5	20	
Decachlorobiphenyl	B	23197	22226	50.00	55.70	pg/uL	11	20	

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:43:16 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.757	4.775	341188	51.641
PCB1016#1	6.983	7.002	35040	256.084
PCB1016#2	7.620	7.637	114692	266.644
PCB1016#3	7.933	7.950	63996	277.634
PCB1016#4	8.403	8.420	36672	306.775
PCB1016#5	8.930	8.947	52202	268.612
PCB1260#1	12.540	12.555	202089	263.454
PCB1260#2	13.200	13.214	162490	288.158
PCB1260#3	14.063	14.077	116254	246.022
PCB1260#4	14.807	14.820	261506	281.352
PCB1260#5	15.470	15.482	117558	300.613
Decachlorobiphenyl	18.090	18.102	371255	43.401

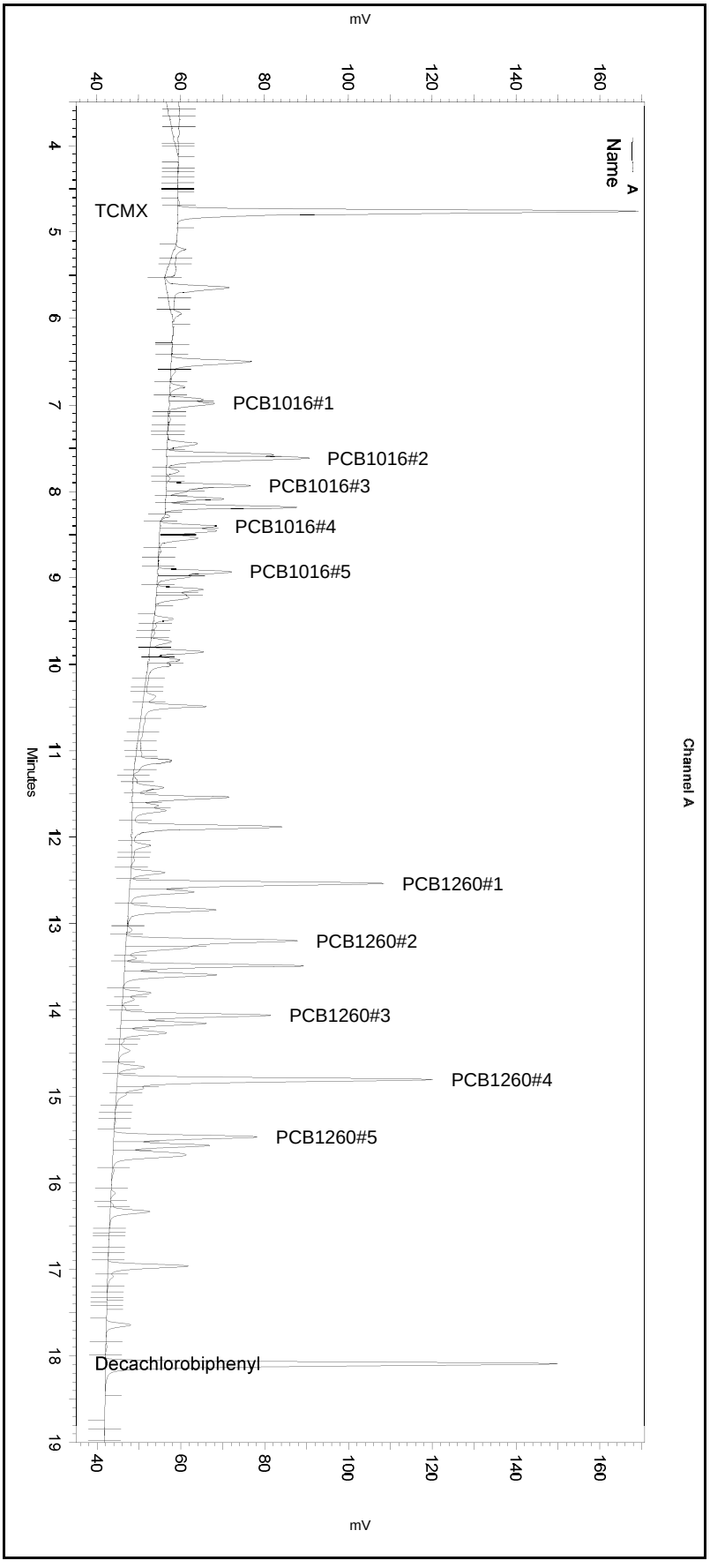
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.960	3.962	837995	47.614
PCB1016#1	5.977	5.979	146826	291.594
PCB1016#2	6.570	6.574	458457	253.371
PCB1016#3	6.797	6.799	215258	278.908
PCB1016#4	7.367	7.369	122196	308.878
PCB1016#5	7.837	7.839	139385	254.416
PCB1260#1	12.073	12.078	618277	324.166
PCB1260#2	12.480	12.475	526372	272.183
PCB1260#3	13.027	13.032	434117	257.271
PCB1260#4	13.683	13.688	990432	333.321
PCB1260#5	14.367	14.370	481217	335.786
Decachlorobiphenyl	17.373	17.378	1111302	55.704

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:43:16 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

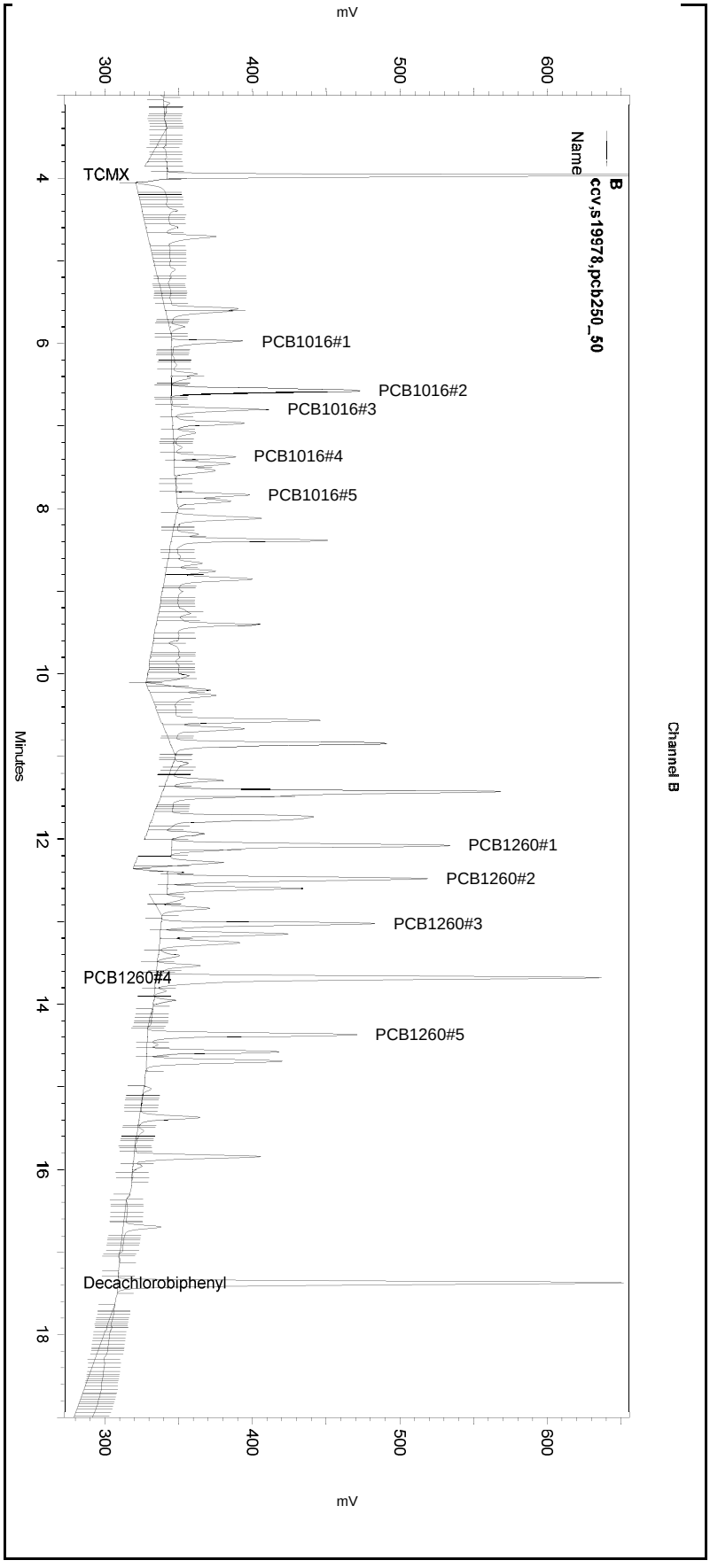
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.944	0	0
Yes	Reset Baseline	8.237	0	0
Yes	Reset Baseline	9.317	0	0
Yes	Reset Baseline	12.341	0	0

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:43:16 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	3.861	3.987	0
Yes	Reset Baseline	5.906	0	0
Yes	Reset Baseline	8.001	0	0
Yes	Horizontal Baseline	12.014	12.172	0
Yes	Backward Horizontal Baseline	12.38	12.671	0
Yes	Reset Baseline	12.923	0	0
Yes	Reset Baseline	14.028	0	0
Yes	Reset Baseline	14.817	0	0
Yes	Reset Baseline	17.501	0	0

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:38:11 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.757	4.775	352069	53.288
PCB1016#1	6.983	7.002	39370	287.729
PCB1016#2	7.620	7.637	124412	289.241
PCB1016#3	7.933	7.950	75047	325.576
PCB1016#4	8.403	8.420	42162	357.788
PCB1016#5	8.930	8.947	61640	317.176
PCB1260#1	12.540	12.555	206630	269.373
PCB1260#2	13.200	13.214	166248	294.823
PCB1260#3	14.063	14.077	118139	250.011
PCB1260#4	14.807	14.820	262560	282.486
PCB1260#5	15.470	15.482	117558	300.613
Decachlorobiphenyl	18.090	18.102	371255	43.401

GC06
PCB - ECD Instrument Results

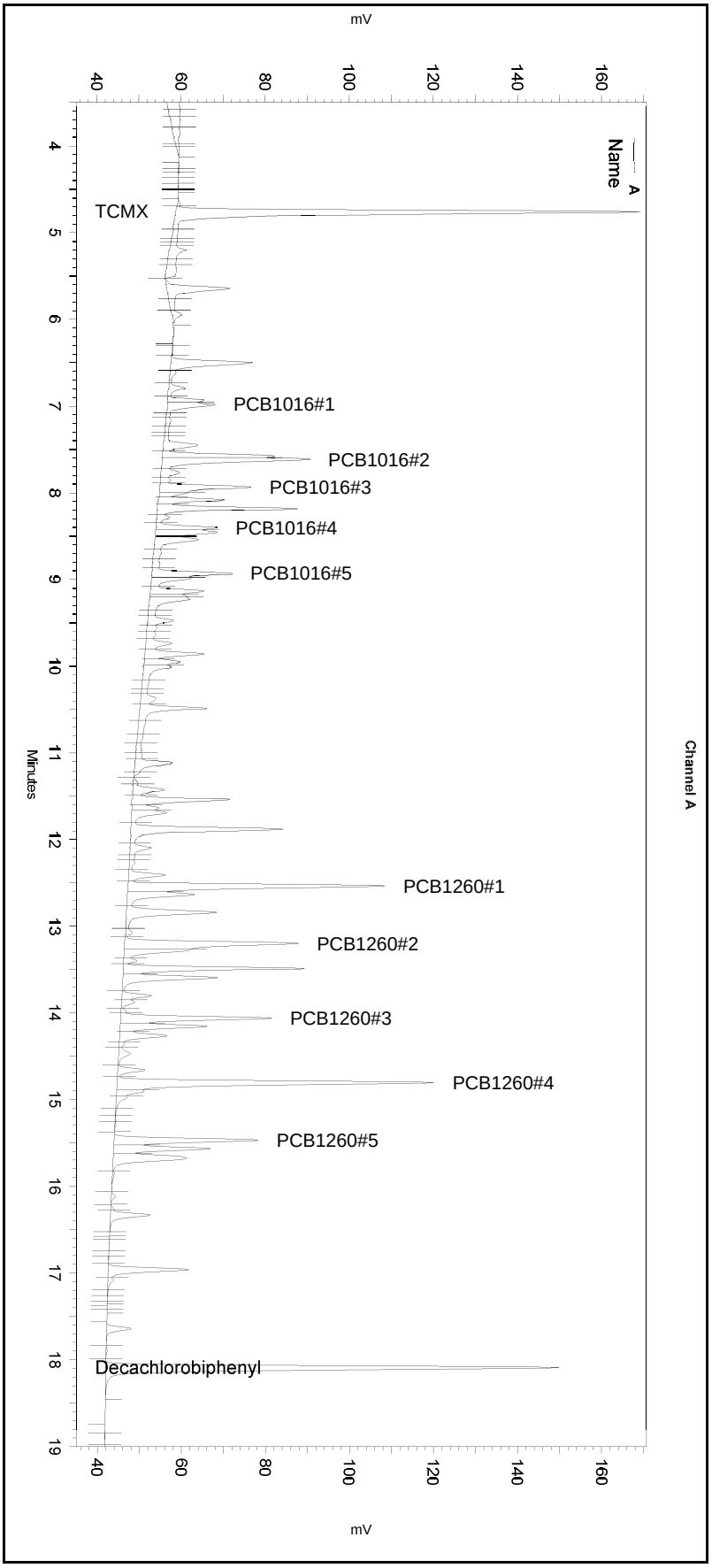
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.960	3.962	969376	55.079
PCB1016#1	5.977	5.979	357172	756.383
PCB1016#2	6.570	6.574	654760	361.860
PCB1016#3	6.797	6.799	420949	545.419
PCB1016#4	7.367	7.369	268843	715.638
PCB1016#5	7.837	7.839	273516	499.242
PCB1260#1	12.073	12.078	766594	413.799
PCB1260#2	12.480	12.475	692688	358.184
PCB1260#3	13.027	13.032	599589	355.334
PCB1260#4	13.683	13.688	1158026	398.074
PCB1260#5	14.367	14.370	582711	413.414
Decachlorobiphenyl	17.373	17.378	1145195	57.730

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:38:11 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

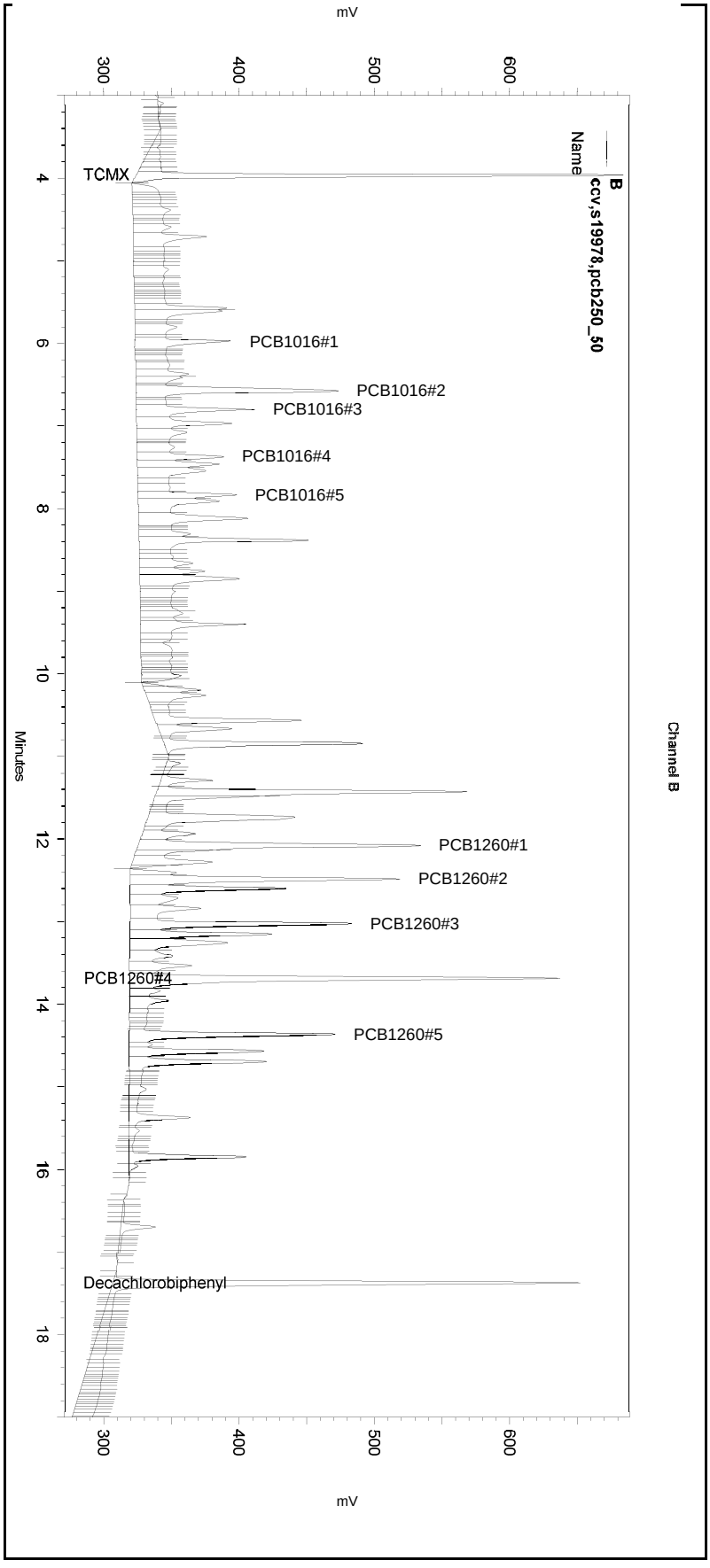
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:38:11 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC06 Run Name : PCB500_100 IDF : 1.0
Seqnum : 202367629004.1 File : 255_004 Time : 11-SEP-2012 11:46
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19979

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			500.0	508.4	pg/uL	2	20	
TCMX	A	6606.9	6119.8	100.0	92.63	pg/uL	-7	20	
Decachlorobiphenyl	A	8554.0	6580.5	100.0	76.93	pg/uL	**-23**	20	c-
Aroclor-1260	B			500.0	587.6	pg/uL	18	20	
TCMX	B	17600	18529	100.0	105.3	pg/uL	5	20	
Decachlorobiphenyl	B	23197	20889	100.0	121.5	pg/uL	**21**	20	c+

WSR 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12

+=high bias -=low bias c=CCV

Sample Name: **ccv,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-004**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 4 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 11:46:11 AM
Analysis Date: 9/12/2012 10:30:11 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.460	3.460	611976	92.626
PCB1016#1	5.430	5.430	64443	470.971
PCB1016#2	6.017	6.017	186678	434.002
PCB1016#3	6.307	6.307	134780	584.716
PCB1016#4	6.760	6.760	62110	543.143
PCB1016#5	7.250	7.250	98544	507.070
PCB1260#1	10.753	10.753	363043	473.281
PCB1260#2	11.390	11.390	306358	543.293
PCB1260#3	12.247	12.247	213754	452.355
PCB1260#4	12.987	12.987	469190	504.797
PCB1260#5	13.630	13.630	222238	568.295
Decachlorobiphenyl	16.237	16.237	658048	76.928

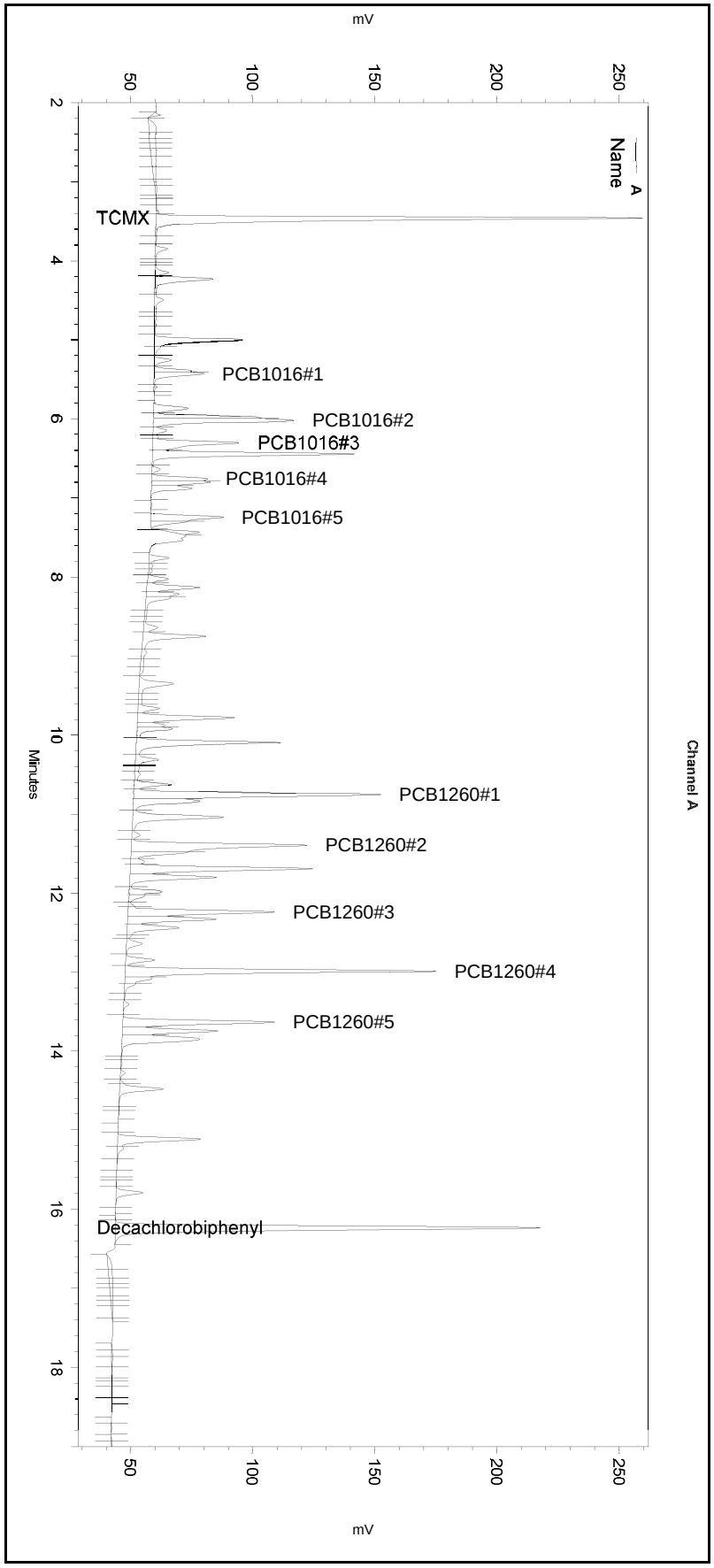
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.833	2.833	1852902	105.280
PCB1016#1	4.580	4.580	269240	562.085
PCB1016#2	5.120	5.120	926056	511.794
PCB1016#3	5.327	5.327	406552	526.765
PCB1016#4	5.863	5.863	232262	614.172
PCB1016#5	6.297	6.297	253039	461.866
PCB1260#1	10.390	10.390	1259759	711.835
PCB1260#2	10.793	10.793	856657	442.971
PCB1260#3	11.327	11.327	805261	477.222
PCB1260#4	11.983	11.983	1846846	664.210
PCB1260#5	12.647	12.647	881389	641.858
Decachlorobiphenyl	15.627	15.627	2088914	121.474

Sample Name: **ccv,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-004**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 4 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 11:46:11 AM
Analysis Date: 9/12/2012 10:30:11 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

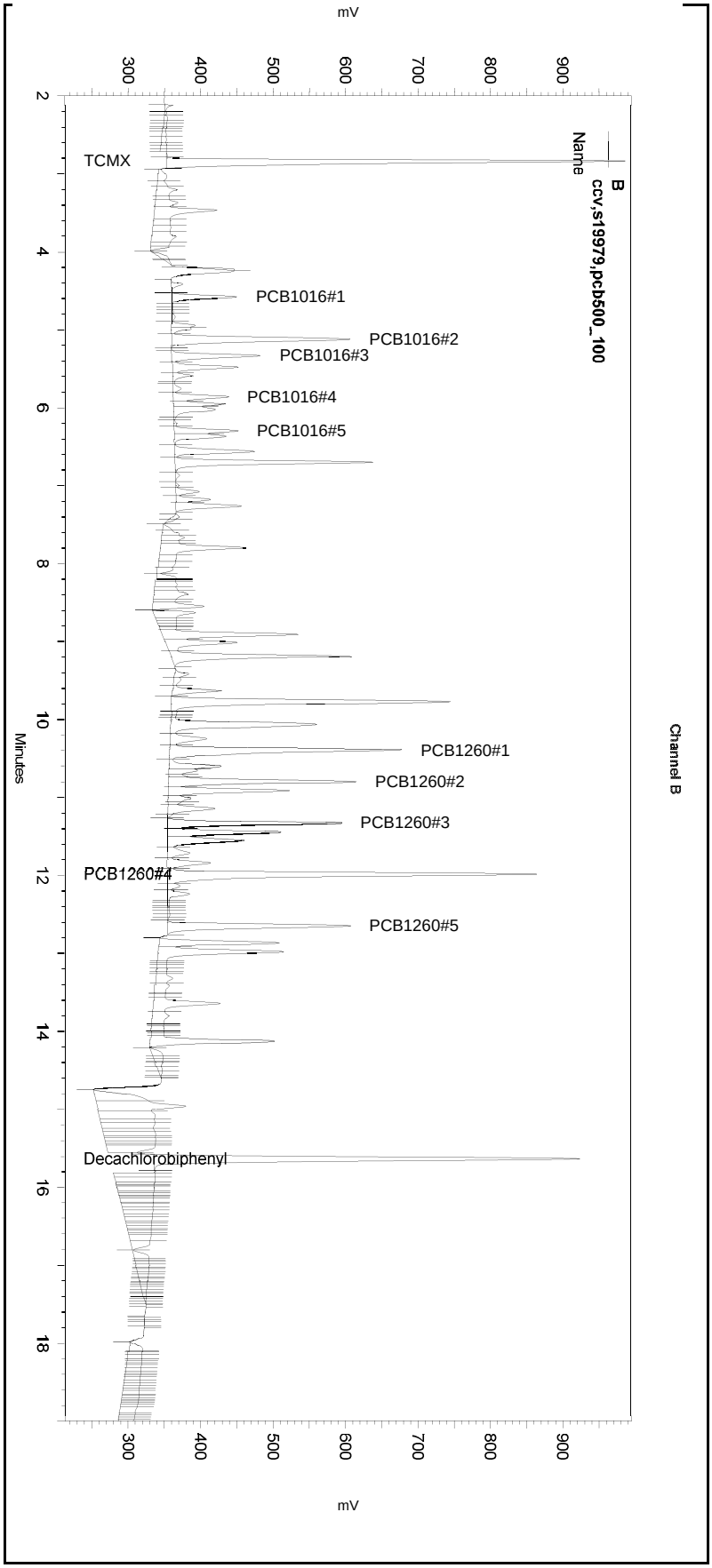
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.205	0	0
Yes	Reset Baseline	16.448	0	0
Yes	Reset Baseline	16.512	0	0

Sample Name: **ccv,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-004**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 4 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 11:46:11 AM
Analysis Date: 9/12/2012 10:30:11 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	2.777	2.972	0
Yes	Reset Baseline	7.341	0	0
Yes	Reset Baseline	9.319	0	0
Yes	Reset Baseline	12.754	0	0
Yes	Backward Horizontal Baseline	15.545	15.8	0

Sample Name: **ccv,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-004**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 4 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 11:46:11 AM
Analysis Date: 9/12/2012 10:29:52 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.460	3.460	652809	98.807
PCB1016#1	5.430	5.430	66515	486.114
PCB1016#2	6.017	6.017	186678	434.002
PCB1016#3	6.307	6.307	134780	584.716
PCB1016#4	6.760	6.760	62110	543.143
PCB1016#5	7.250	7.250	98544	507.070
PCB1260#1	10.753	10.753	366227	477.432
PCB1260#2	11.390	11.390	311750	552.855
PCB1260#3	12.247	12.247	220101	465.787
PCB1260#4	12.987	12.987	479014	515.366
PCB1260#5	13.630	13.630	233527	597.163
Decachlorobiphenyl	16.237	16.237	715899	83.691

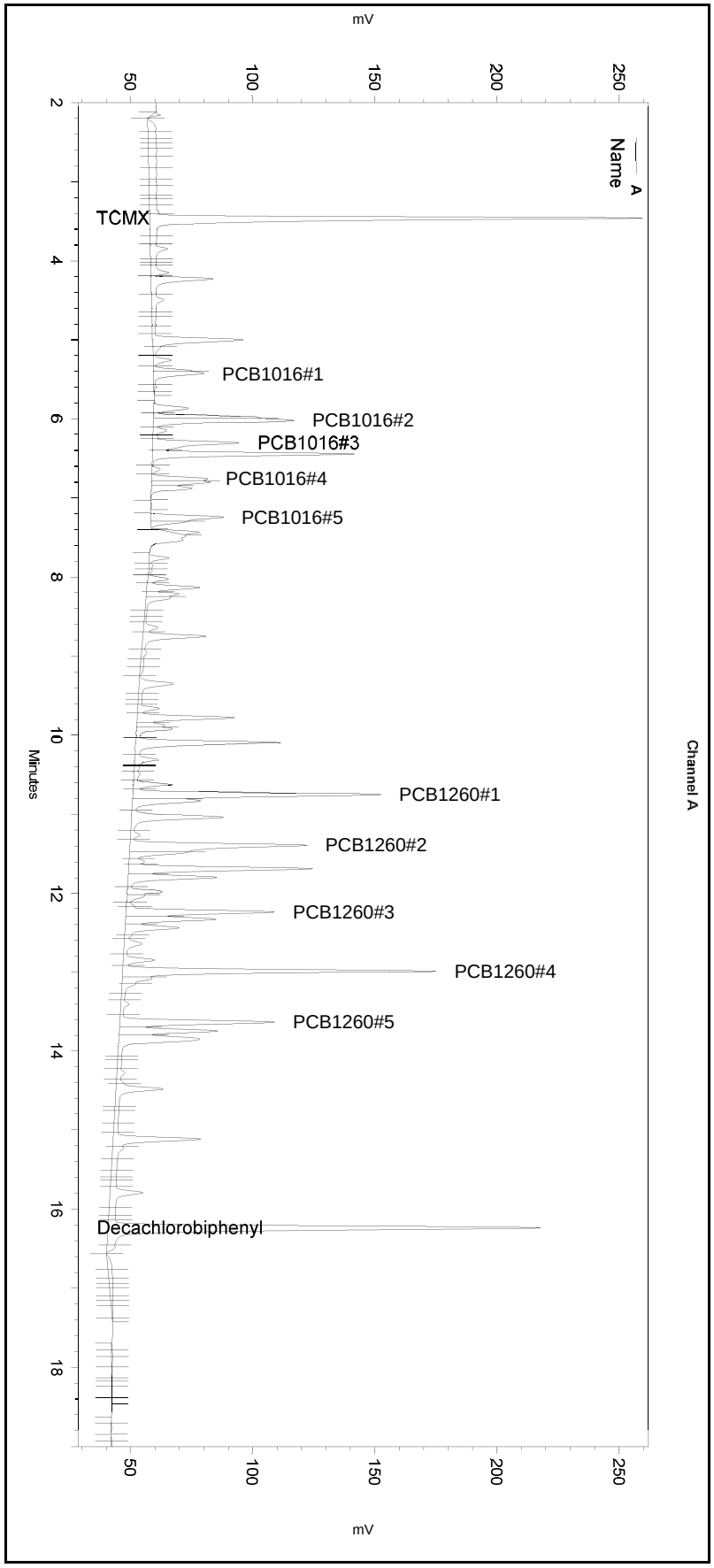
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.833	2.833	1947024	110.627
PCB1016#1	4.580	4.580	273677	571.889
PCB1016#2	5.120	5.120	971978	537.173
PCB1016#3	5.327	5.327	462708	599.526
PCB1016#4	5.863	5.863	300491	803.421
PCB1016#5	6.297	6.297	337024	615.162
PCB1260#1	10.390	10.390	1553212	889.178
PCB1260#2	10.793	10.793	1032519	533.908
PCB1260#3	11.327	11.327	983554	582.884
PCB1260#4	11.983	11.983	2106078	764.368
PCB1260#5	12.647	12.647	1146510	844.636
Decachlorobiphenyl	15.627	15.627	2932409	200.943

Sample Name: **ccv,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-004**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 4 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 11:46:11 AM
Analysis Date: 9/12/2012 10:29:52 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

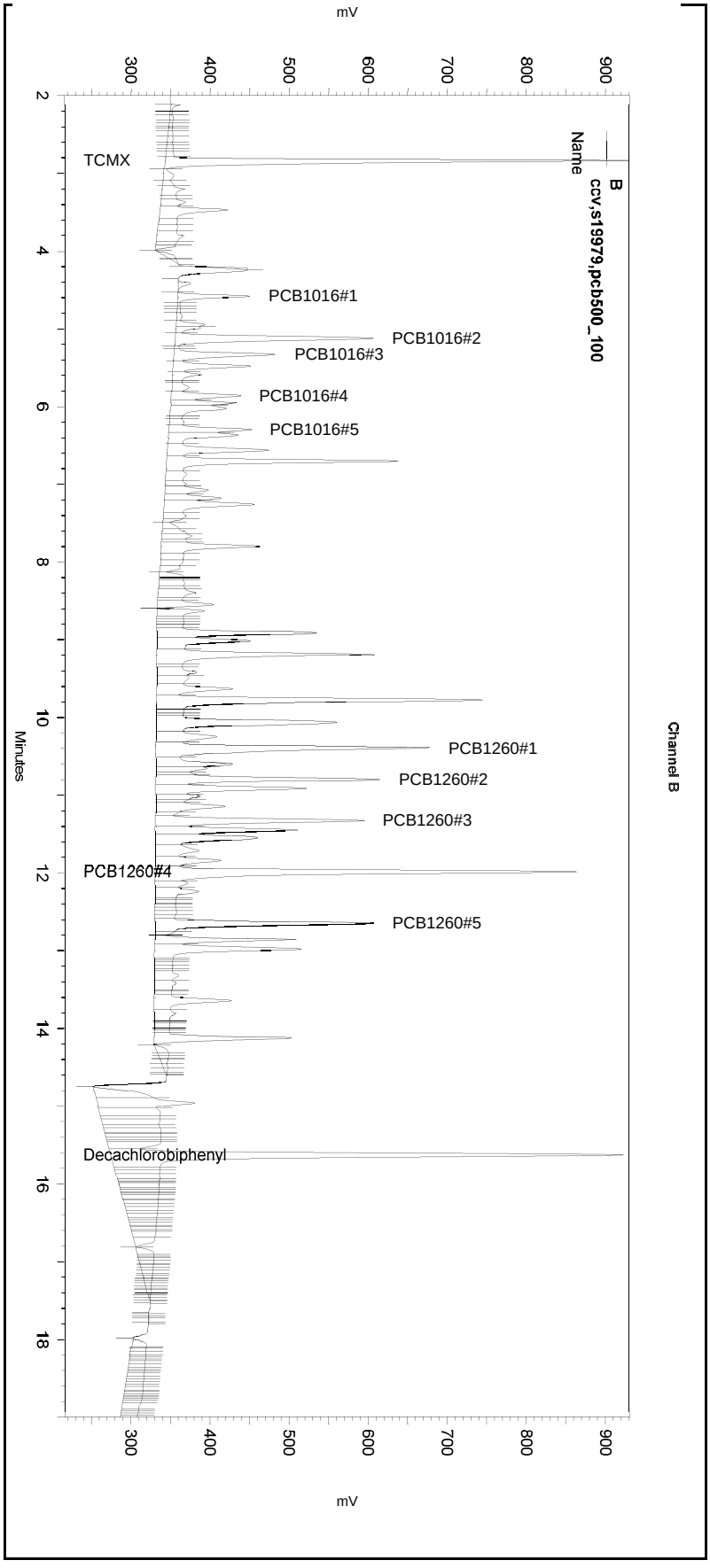
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Reset Baseline	3.205	0	0
No	Reset Baseline	16.448	0	0
No	Reset Baseline	16.512	0	0

Sample Name: **ccv,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-004**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 4 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 11:46:11 AM
Analysis Date: 9/12/2012 10:29:52 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Horizontal Baseline	2.777	2.972	0
No	Reset Baseline	7.341	0	0
No	Reset Baseline	9.319	0	0
No	Reset Baseline	12.754	0	0
No	Backward Horizontal Baseline	15.545	15.8	0

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC06 Run Name : PCB250_50 IDF : 1.0
Seqnum : 202367629013.1 File : 255_013 Time : 11-SEP-2012 17:02
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	287.8	pg/uL	15	20	
TCMX	A	6606.9	6735.6	50.00	50.97	pg/uL	2	20	
Decachlorobiphenyl	A	8554.0	6388.3	50.00	37.34	pg/uL	**-25**	20	c-
Aroclor-1260	B			250.0	349.9	pg/uL	**40**	20	c+ ***
TCMX	B	17600	22125	50.00	62.86	pg/uL	**26**	20	c+
Decachlorobiphenyl	B	23197	22540	50.00	56.64	pg/uL	13	20	

WSR 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12

+=high bias -=low bias c=CCV

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 5:02:24 PM
Analysis Date: 9/12/2012 10:33:46 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.473	3.460	336781	50.974
PCB1016#1	5.443	5.430	35248	257.604
PCB1016#2	6.030	6.017	115597	268.748
PCB1016#3	6.320	6.307	66046	286.527
PCB1016#4	6.770	6.760	34416	285.812
PCB1016#5	7.260	7.250	58990	303.540
PCB1260#1	10.760	10.753	221246	288.428
PCB1260#2	11.400	11.390	179538	318.391
PCB1260#3	12.253	12.247	122751	259.771
PCB1260#4	12.993	12.987	259611	279.313
PCB1260#5	13.637	13.630	114693	293.287
Decachlorobiphenyl	16.240	16.237	319417	37.341

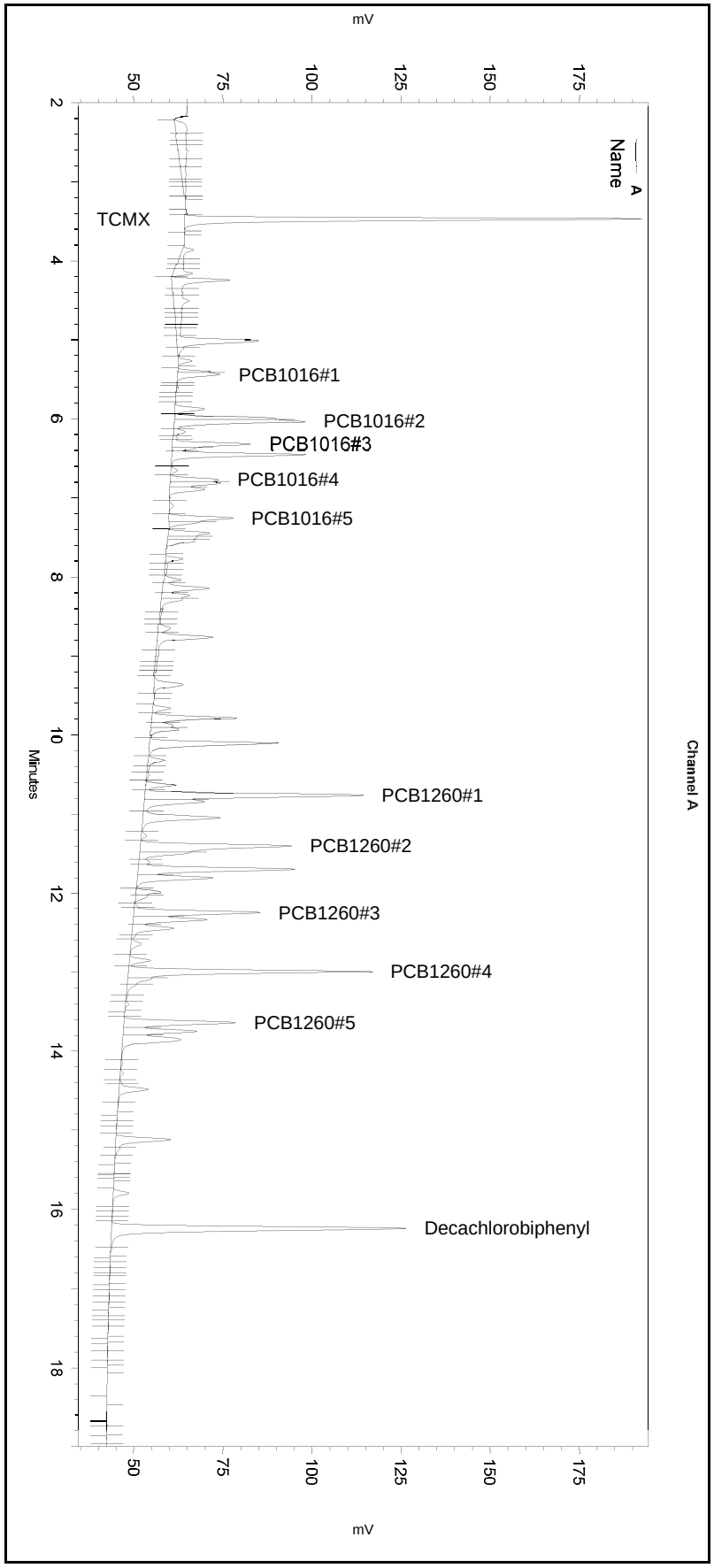
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.827	2.833	1106260	62.856
PCB1016#1	4.570	4.580	160621	322.076
PCB1016#2	5.110	5.120	569998	315.015
PCB1016#3	5.317	5.327	228541	296.118
PCB1016#4	5.853	5.863	131930	335.878
PCB1016#5	6.287	6.297	167499	305.732
PCB1260#1	10.383	10.390	784468	424.601
PCB1260#2	10.787	10.793	565597	292.466
PCB1260#3	11.320	11.327	506352	300.079
PCB1260#4	11.980	11.983	1090944	372.156
PCB1260#5	12.643	12.647	513345	360.359
Decachlorobiphenyl	15.623	15.627	1126984	56.640

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 5:02:24 PM
Analysis Date: 9/12/2012 10:33:46 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

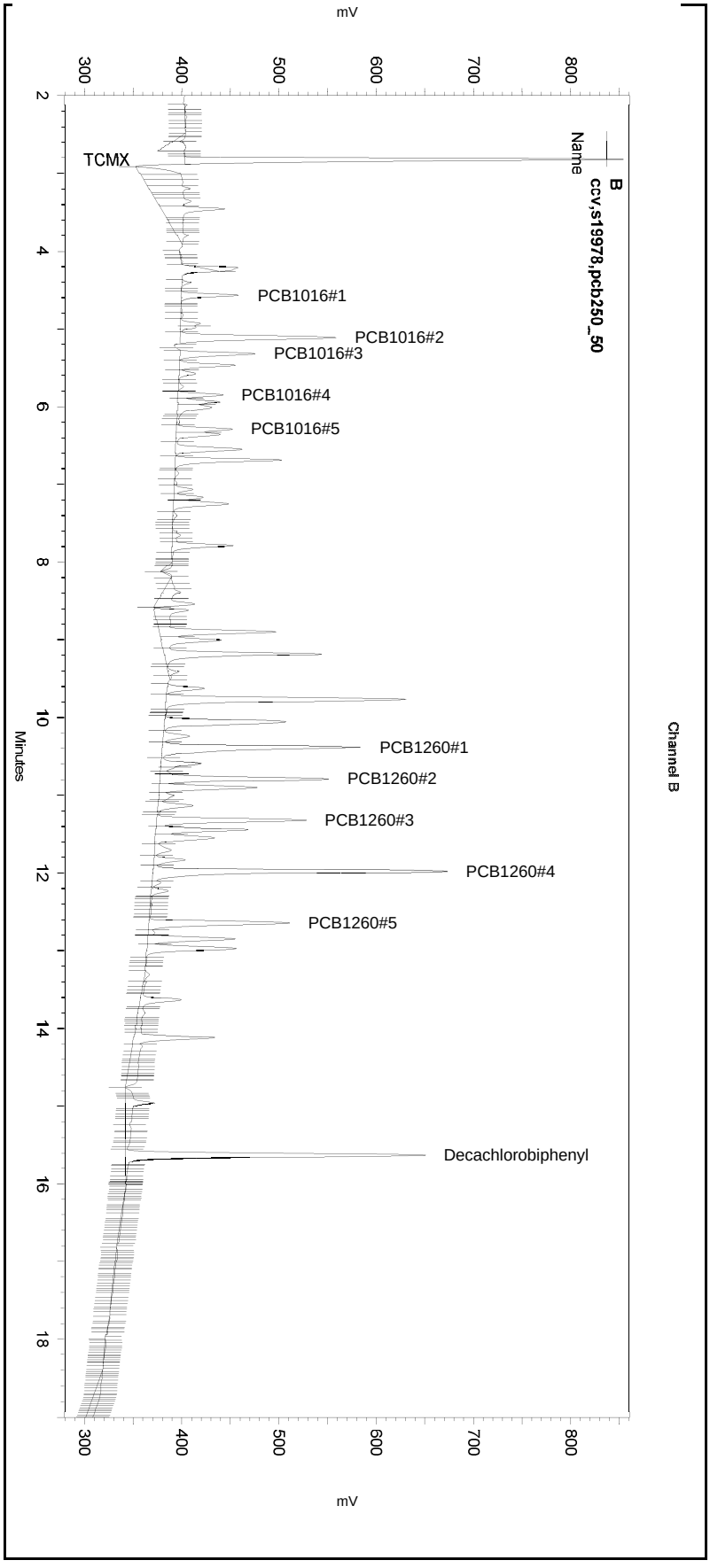
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.282	0	0
Yes	Reset Baseline	3.679	0	0
Yes	Reset Baseline	5.324	0	0
Yes	Split Peak	6.006	0	0
Yes	Split Peak	6.364	0	0
Yes	Reset Baseline	7.382	0	0

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 5:02:24 PM
Analysis Date: 9/12/2012 10:33:46 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	2.725	2.956	0
Yes	Reset Baseline	5.185	0	0
Yes	Reset Baseline	5.266	0	0
Yes	Reset Baseline	9.515	0	0
Yes	Reset Baseline	13.225	0	0

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 5:02:24 PM
Analysis Date: 9/12/2012 10:32:09 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.473	3.460	390387	59.087
PCB1016#1	5.443	5.430	62371	455.828
PCB1016#2	6.030	6.017	212349	493.683
PCB1016#3	6.320	6.307	104259	452.307
PCB1016#4	6.770	6.760	47494	407.332
PCB1016#5	7.260	7.250	76692	394.628
PCB1260#1	10.760	10.753	221246	288.428
PCB1260#2	11.400	11.390	179538	318.391
PCB1260#3	12.253	12.247	122751	259.771
PCB1260#4	12.993	12.987	259611	279.313
PCB1260#5	13.637	13.630	114693	293.287
Decachlorobiphenyl	16.240	16.237	319417	37.341

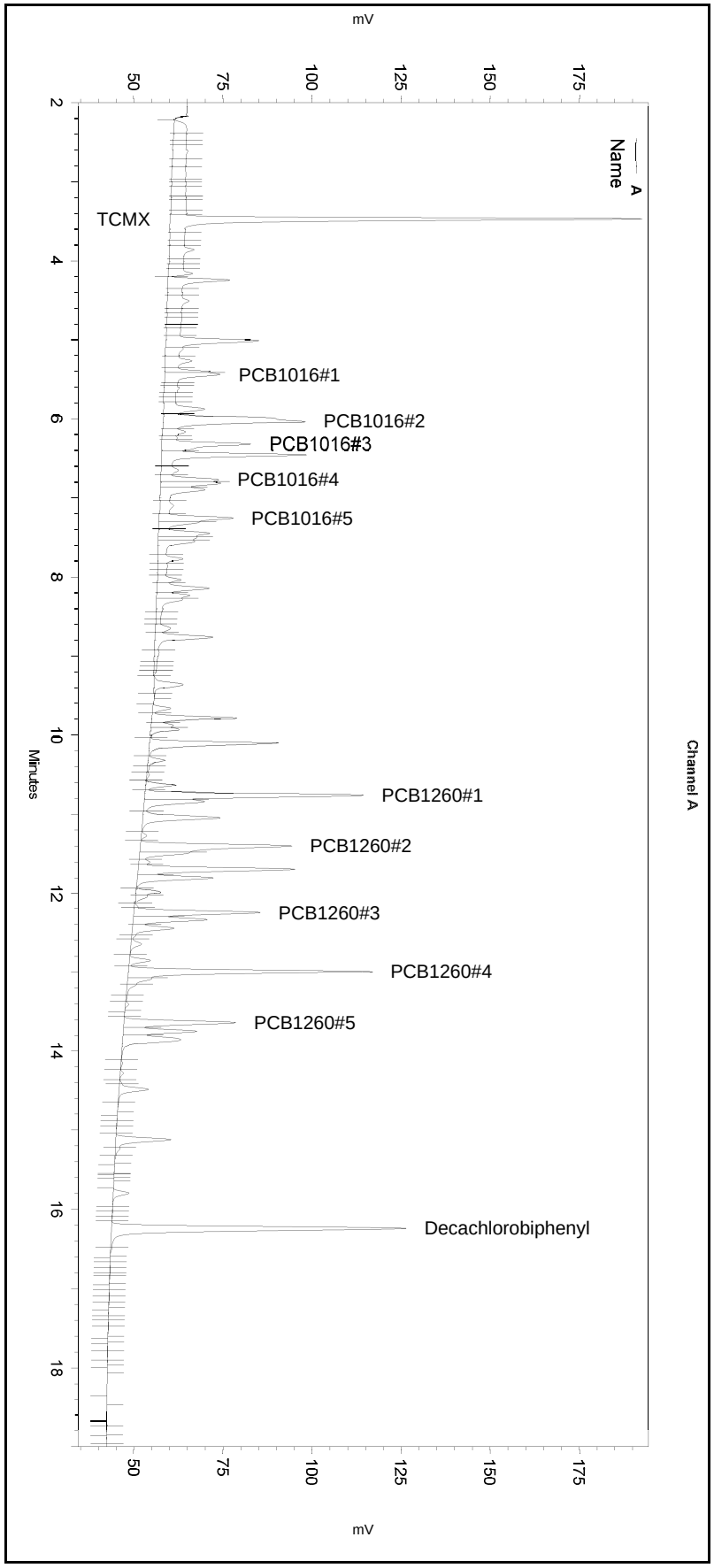
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.827	2.833	1385537	78.724
PCB1016#1	4.570	4.580	168824	340.201
PCB1016#2	5.110	5.120	619406	342.321
PCB1016#3	5.317	5.327	280185	363.033
PCB1016#4	5.853	5.863	158870	410.602
PCB1016#5	6.287	6.297	186789	340.942
PCB1260#1	10.383	10.390	995521	552.147
PCB1260#2	10.787	10.793	691967	357.811
PCB1260#3	11.320	11.327	643753	381.507
PCB1260#4	11.980	11.983	1263723	438.911
PCB1260#5	12.643	12.647	655917	469.405
Decachlorobiphenyl	15.623	15.627	1126984	56.640

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 5:02:24 PM
Analysis Date: 9/12/2012 10:32:09 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

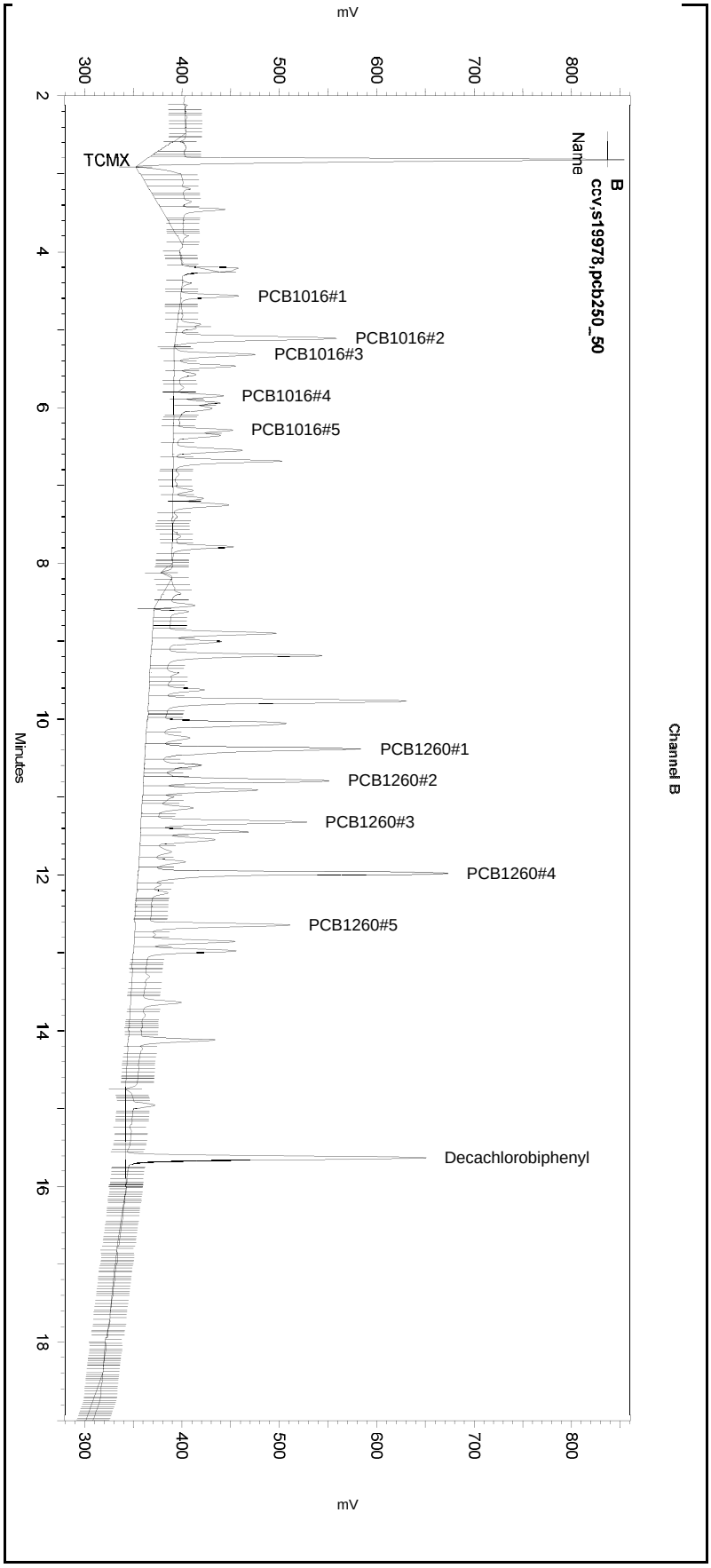
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Reset Baseline	3.282	0	0
No	Reset Baseline	3.679	0	0
No	Reset Baseline	5.324	0	0
No	Split Peak	6.006	0	0
No	Split Peak	6.364	0	0
No	Reset Baseline	7.382	0	0

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\255.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-255rt.met

Software Version 3.1.7
Run Date: 9/11/2012 5:02:24 PM
Analysis Date: 9/12/2012 10:32:09 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\255-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Horizontal Baseline	2.725	2.956	0
No	Reset Baseline	5.185	0	0
No	Reset Baseline	5.266	0	0
No	Reset Baseline	9.515	0	0
No	Reset Baseline	13.225	0	0

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC16 Run Name : PCB100_20 IDF : 1.0
Seqnum : 232369045002.2 File : 256_002 Time : 12-SEP-2012 07:12
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	130.0	pg/ul	**30**	20	c+ ***
TCMX	A	18411	23287	20.00	30.08	pg/ul	**50**	20	c+
Decachlorobiphenyl	A	12903	15131	20.00	22.48	pg/ul	12	20	
Aroclor-1260	B			100.0	99.51	pg/ul	0	20	
TCMX	B	7007.3	7044.8	20.00	20.11	pg/ul	1	20	
Decachlorobiphenyl	B	9054.2	6736.2	20.00	14.88	pg/ul	**-26**	20	c-

KMH 09/12/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12

+=high bias -=low bias c=CCV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-002**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 2 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 7:12:55 AM
Analysis Date: 9/12/2012 10:17:09 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.113	4.103	465745	30.081
PCB1016#1	6.207	6.197	46912	125.387
PCB1016#2	6.820	6.810	150413	143.676
PCB1016#3	7.120	7.110	91668	141.715
PCB1016#4	7.577	7.570	49335	141.246
PCB1016#5	8.087	8.077	77172	141.086
PCB1260#1	11.650	11.640	245811	134.914
PCB1260#2	12.297	12.290	224664	128.431
PCB1260#3	13.157	13.150	146625	137.145
PCB1260#4	13.903	13.897	319965	136.885
PCB1260#5	14.553	14.550	157589	112.517
Decachlorobiphenyl	17.170	17.167	302618	22.482

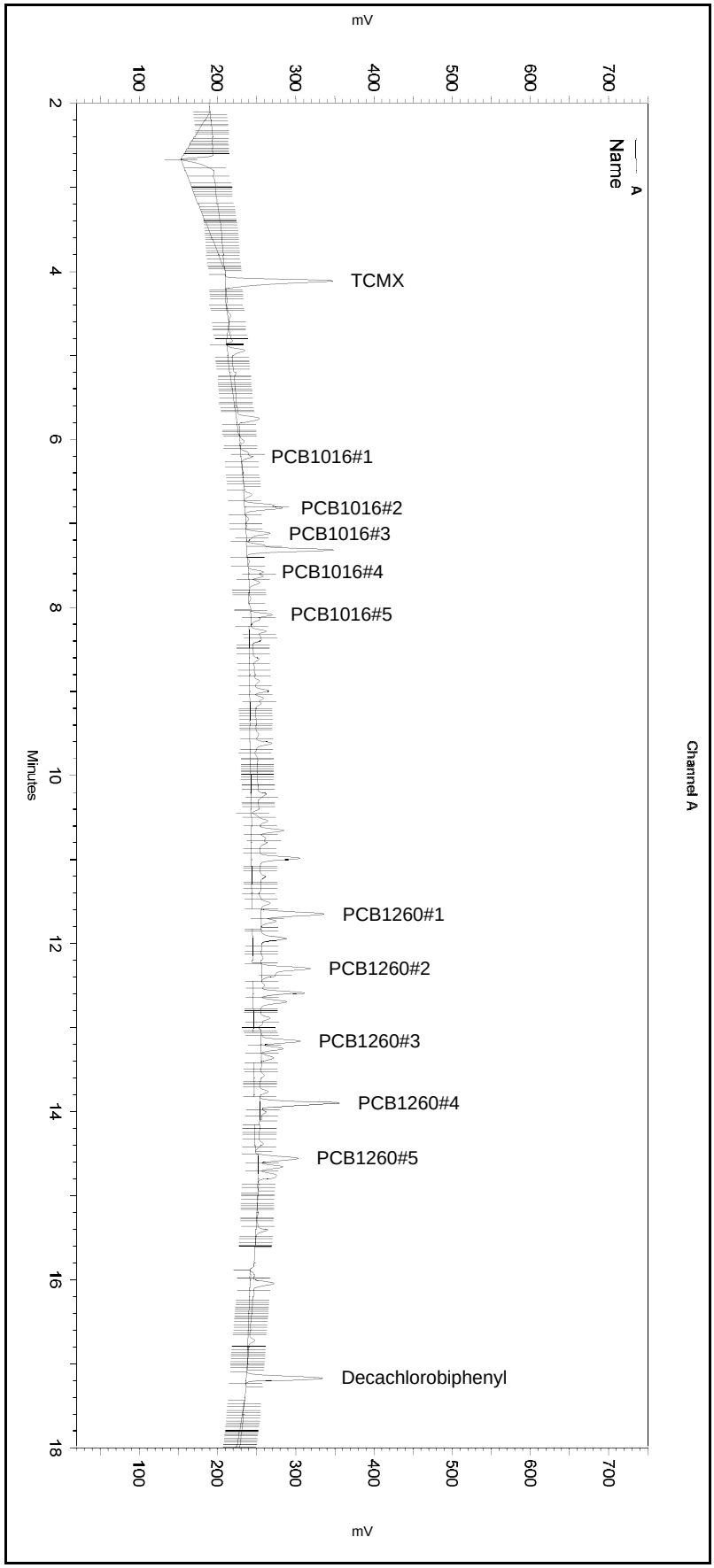
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.343	3.337	140896	20.107
PCB1016#1	5.213	5.207	22834	107.566
PCB1016#2	5.777	5.770	56886	107.233
PCB1016#3	5.993	5.987	26987	109.986
PCB1016#4	6.543	6.537	18270	108.932
PCB1016#5	6.997	6.990	20616	107.363
PCB1260#1	11.157	11.153	59766	102.107
PCB1260#2	11.563	11.560	44964	105.643
PCB1260#3	12.103	12.100	38054	100.957
PCB1260#4	12.760	12.757	84921	95.657
PCB1260#5	13.433	13.430	37094	93.207
Decachlorobiphenyl	16.423	16.423	134723	14.880

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-002**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 2 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 7:12:55 AM
Analysis Date: 9/12/2012 10:17:09 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	17.302	0	0

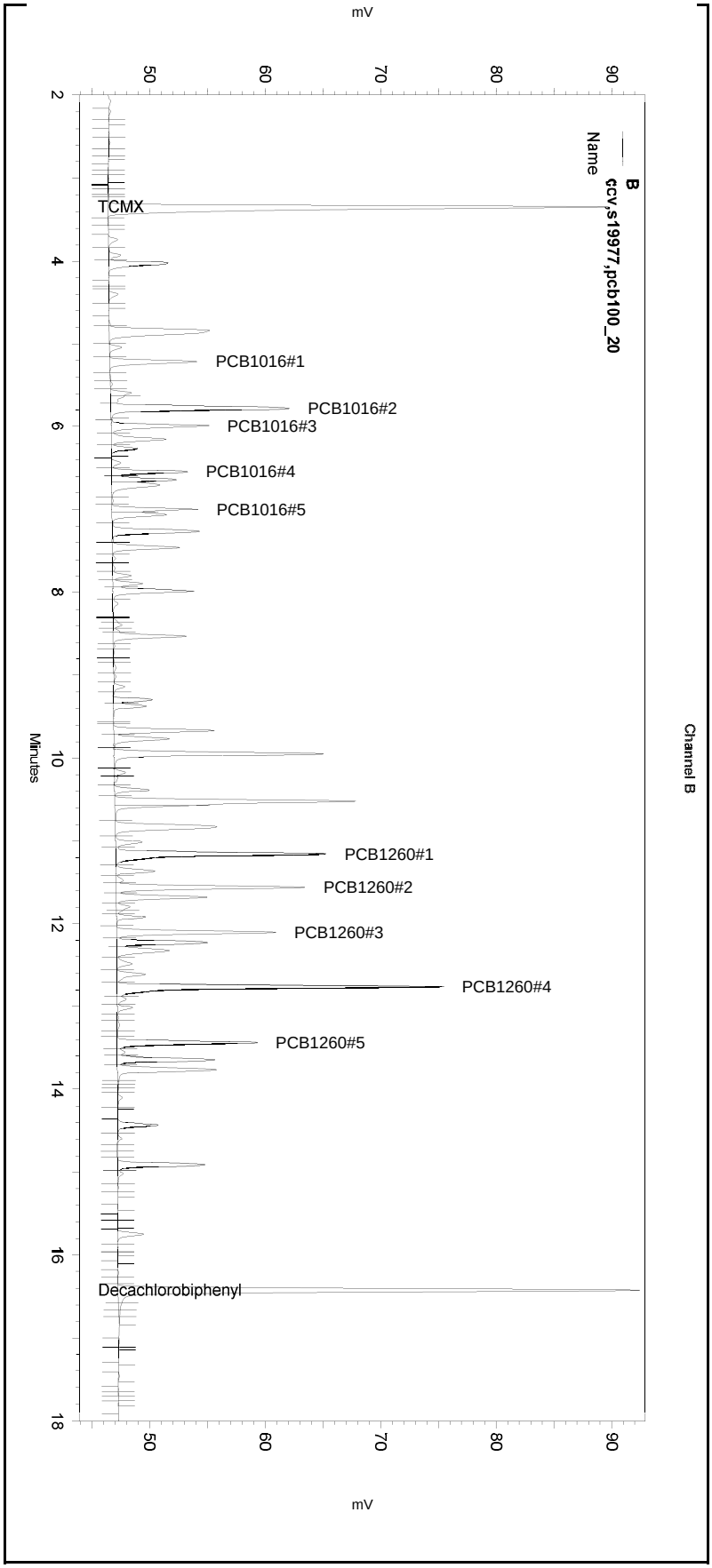
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\256-002

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.03	0	0
Yes	Reset Baseline	6.109	0	0
Yes	Reset Baseline	6.589	0	0
Yes	Reset Baseline	7.005	0	0
Yes	Reset Baseline	7.786	0	0
Yes	Manual Baseline	8.02	8.228	0
Yes	Horizontal Baseline	11.58	11.814	0
Yes	Backward Horizontal Baseline	12.255	12.462	0
Yes	Backward Horizontal Baseline	13.078	13.403	0
Yes	Horizontal Baseline	13.822	14.125	0
Yes	Backward Horizontal Baseline	14.481	14.853	0
Yes	Reset Baseline	17.085	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-002**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 2 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 7:12:55 AM
Analysis Date: 9/12/2012 10:17:09 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\256-002

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	5.539	6.356	0
Yes	Reset Baseline	12.018	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-002**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 2 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 7:12:55 AM
Analysis Date: 9/12/2012 7:36:52 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.113	4.103	585527	40.007
PCB1016#1	6.207	6.197	124429	332.575
PCB1016#2	6.820	6.810	259270	247.658
PCB1016#3	7.120	7.110	195574	302.349
PCB1016#4	7.577	7.570	144010	453.923
PCB1016#5	8.087	8.077	191269	349.677
PCB1260#1	11.650	11.640	379922	225.208
PCB1260#2	12.297	12.290	368022	210.383
PCB1260#3	13.157	13.150	231055	238.514
PCB1260#4	13.903	13.897	396039	176.229
PCB1260#5	14.553	14.550	182217	130.101
Decachlorobiphenyl	17.170	17.167	308342	22.997

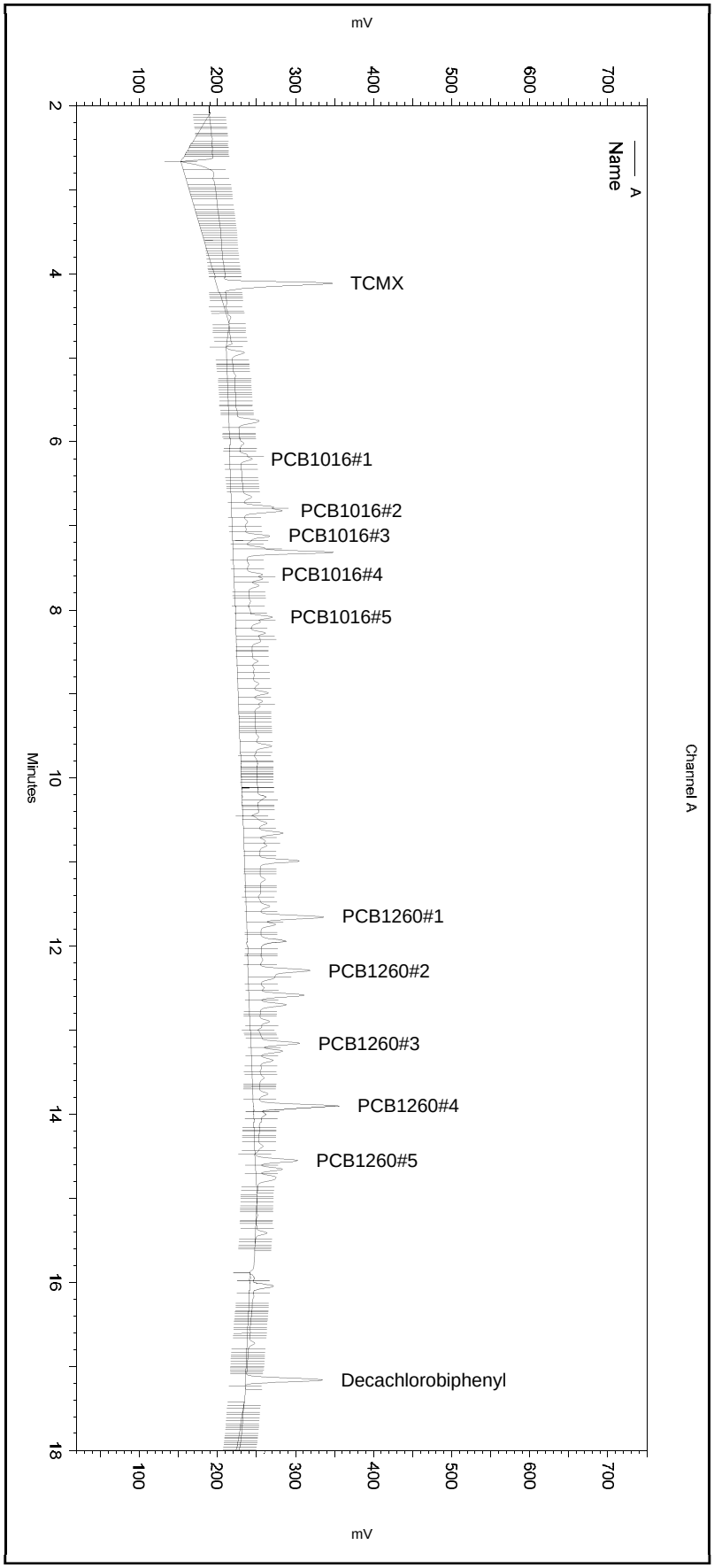
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.343	3.337	140896	20.107
PCB1016#1	5.213	5.207	22834	107.566
PCB1016#2	5.777	5.770	53460	100.775
PCB1016#3	5.993	5.987	26297	107.174
PCB1016#4	6.543	6.537	18270	108.932
PCB1016#5	6.997	6.990	20616	107.363
PCB1260#1	11.157	11.153	60544	103.437
PCB1260#2	11.563	11.560	45482	106.860
PCB1260#3	12.103	12.100	38761	102.833
PCB1260#4	12.760	12.757	85524	96.337
PCB1260#5	13.433	13.430	37397	93.968
Decachlorobiphenyl	16.423	16.423	134723	14.880

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-002**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 2 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 7:12:55 AM
Analysis Date: 9/12/2012 7:36:52 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	17.302	0	0

Manual Integration Fixes
==========

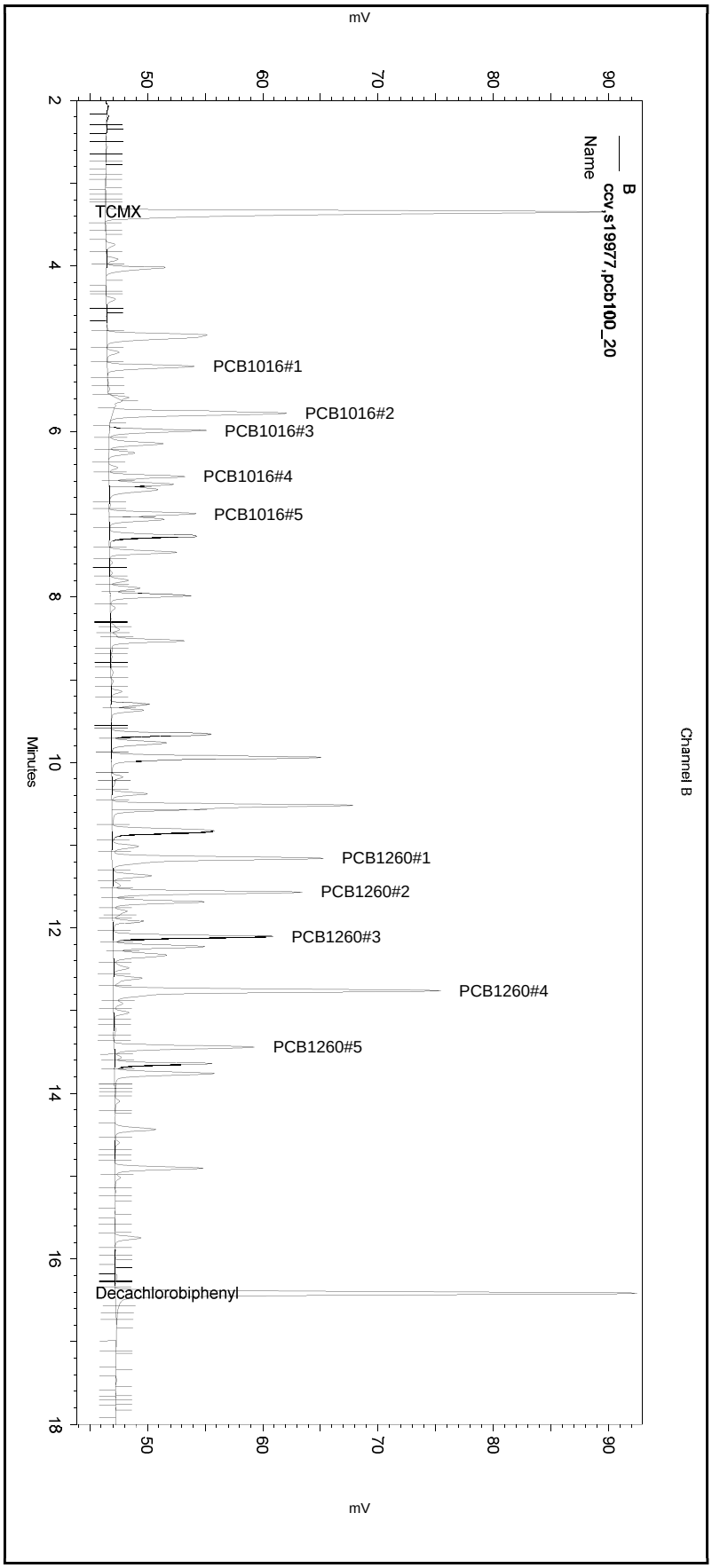
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\256-002_5DE8.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-002**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 2 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 7:12:55 AM
Analysis Date: 9/12/2012 7:36:52 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\256-002_5DE8.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 PCBS Soil
EPA 8082A

Inst : GC16 Run Name : PCB250_50 IDF : 1.0
Seqnum : 232369045012.2 File : 256_012 Time : 12-SEP-2012 14:48
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	286.6	pg/ul	15	20	
TCMX	A	18411	24192	50.00	91.72	pg/ul	**83**	20	c+
Decachlorobiphenyl	A	12903	10589	50.00	43.88	pg/ul	-12	20	
Aroclor-1260	B			250.0	219.7	pg/ul	-12	20	
TCMX	B	7007.3	8051.3	50.00	57.45	pg/ul	15	20	
Decachlorobiphenyl	B	9054.2	5483.5	50.00	30.28	pg/ul	**-39**	20	c-

WSR 09/12/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/12/12 Reviewer: EAH Date: 09/12/12
+=high bias -=low bias c=CCV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-012**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 12 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 2:48:37 PM
Analysis Date: 9/12/2012 3:14:46 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.120	4.103	1209622	91.723
PCB1016#1	6.213	6.197	129059	344.951
PCB1016#2	6.827	6.810	380090	363.066
PCB1016#3	7.130	7.110	235330	363.810
PCB1016#4	7.587	7.570	124205	388.514
PCB1016#5	8.093	8.077	195661	357.707
PCB1260#1	11.653	11.640	512502	322.245
PCB1260#2	12.300	12.290	476431	272.356
PCB1260#3	13.160	13.150	314139	338.267
PCB1260#4	13.903	13.897	613583	288.740
PCB1260#5	14.557	14.550	296192	211.478
Decachlorobiphenyl	17.170	17.167	529463	43.885

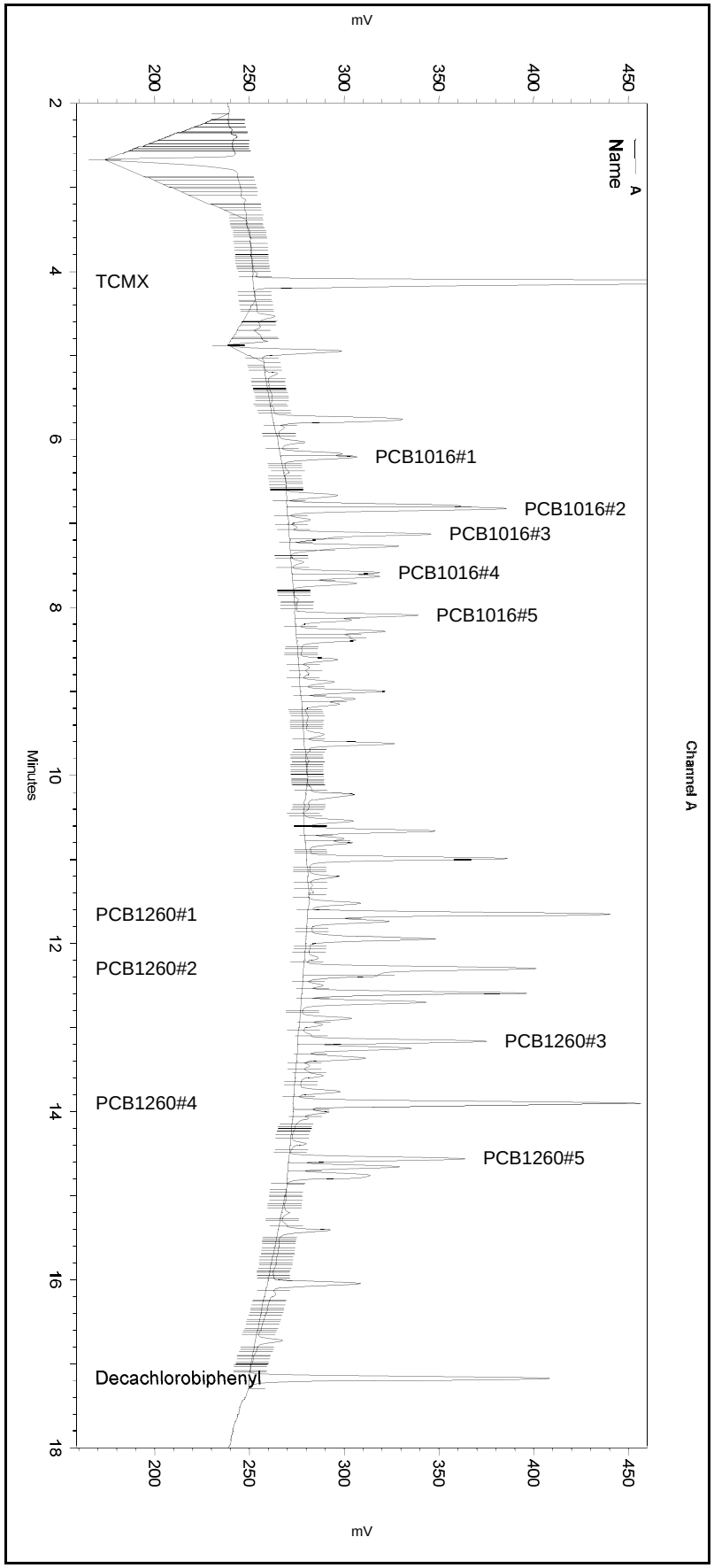
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	402567	57.450
PCB1016#1	5.210	5.207	60505	285.025
PCB1016#2	5.773	5.770	151396	285.389
PCB1016#3	5.990	5.987	70783	288.477
PCB1016#4	6.540	6.537	47836	285.214
PCB1016#5	6.993	6.990	54440	283.511
PCB1260#1	11.153	11.153	135510	231.513
PCB1260#2	11.560	11.560	102952	241.886
PCB1260#3	12.100	12.100	84543	224.293
PCB1260#4	12.757	12.757	181948	204.951
PCB1260#5	13.430	13.430	77896	195.731
Decachlorobiphenyl	16.420	16.423	274175	30.282

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-012**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 12 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 2:48:37 PM
Analysis Date: 9/12/2012 3:14:46 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	17.302	0	0

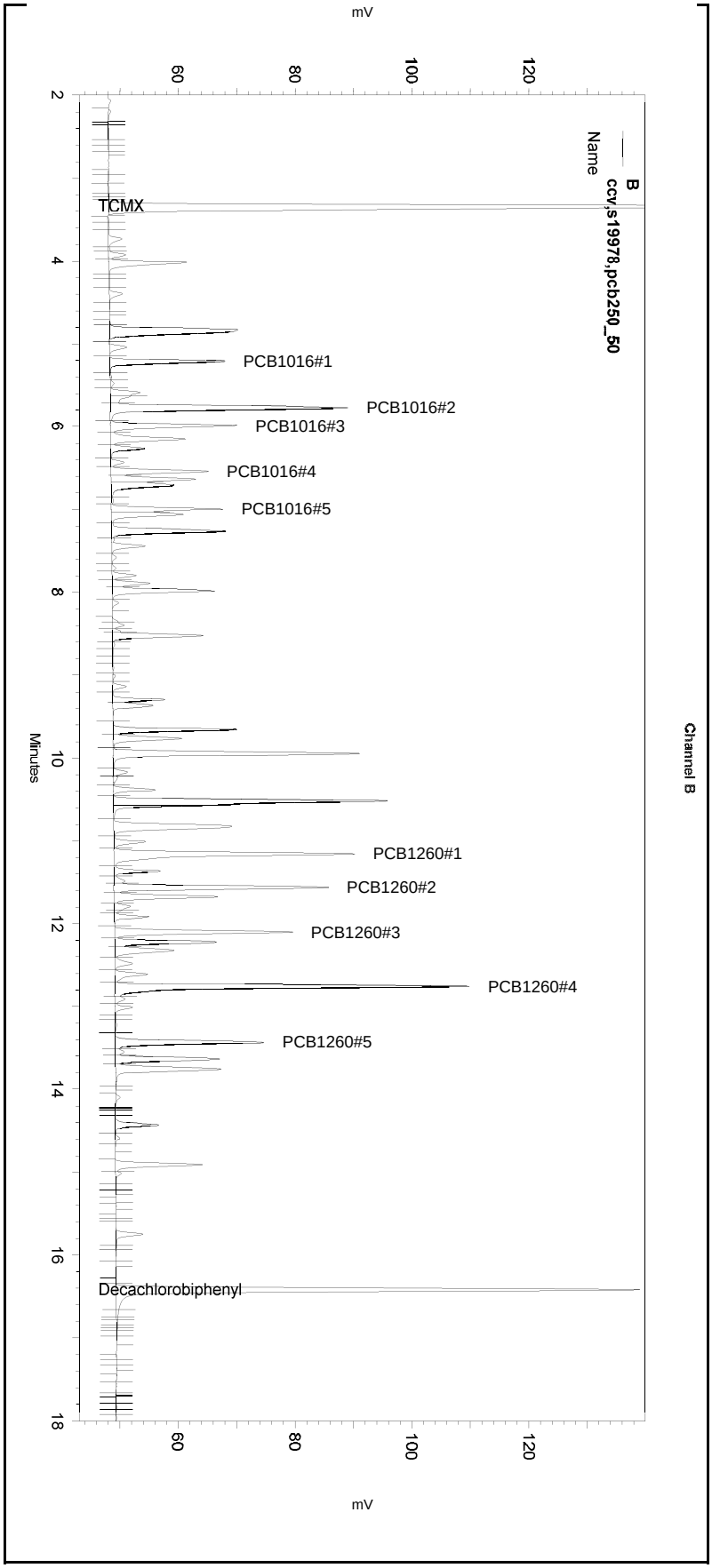
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\256-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.34	0	0
Yes	Reset Baseline	11.427	0	0
Yes	Reset Baseline	14.874	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-012**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 12 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 2:48:37 PM
Analysis Date: 9/12/2012 3:14:46 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\256-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	3.226	3.481	0
Yes	Reset Baseline	14.014	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-012**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 12 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 2:48:37 PM
Analysis Date: 9/12/2012 3:12:34 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.120	4.103	1284462	97.925
PCB1016#1	6.213	6.197	129059	344.951
PCB1016#2	6.827	6.810	380090	363.066
PCB1016#3	7.130	7.110	235330	363.810
PCB1016#4	7.587	7.570	124205	388.514
PCB1016#5	8.093	8.077	195661	357.707
PCB1260#1	11.653	11.640	565840	363.976
PCB1260#2	12.300	12.290	546736	312.547
PCB1260#3	13.160	13.150	371887	407.600
PCB1260#4	13.903	13.897	696411	331.577
PCB1260#5	14.557	14.550	376092	268.526
Decachlorobiphenyl	17.170	17.167	529463	43.885

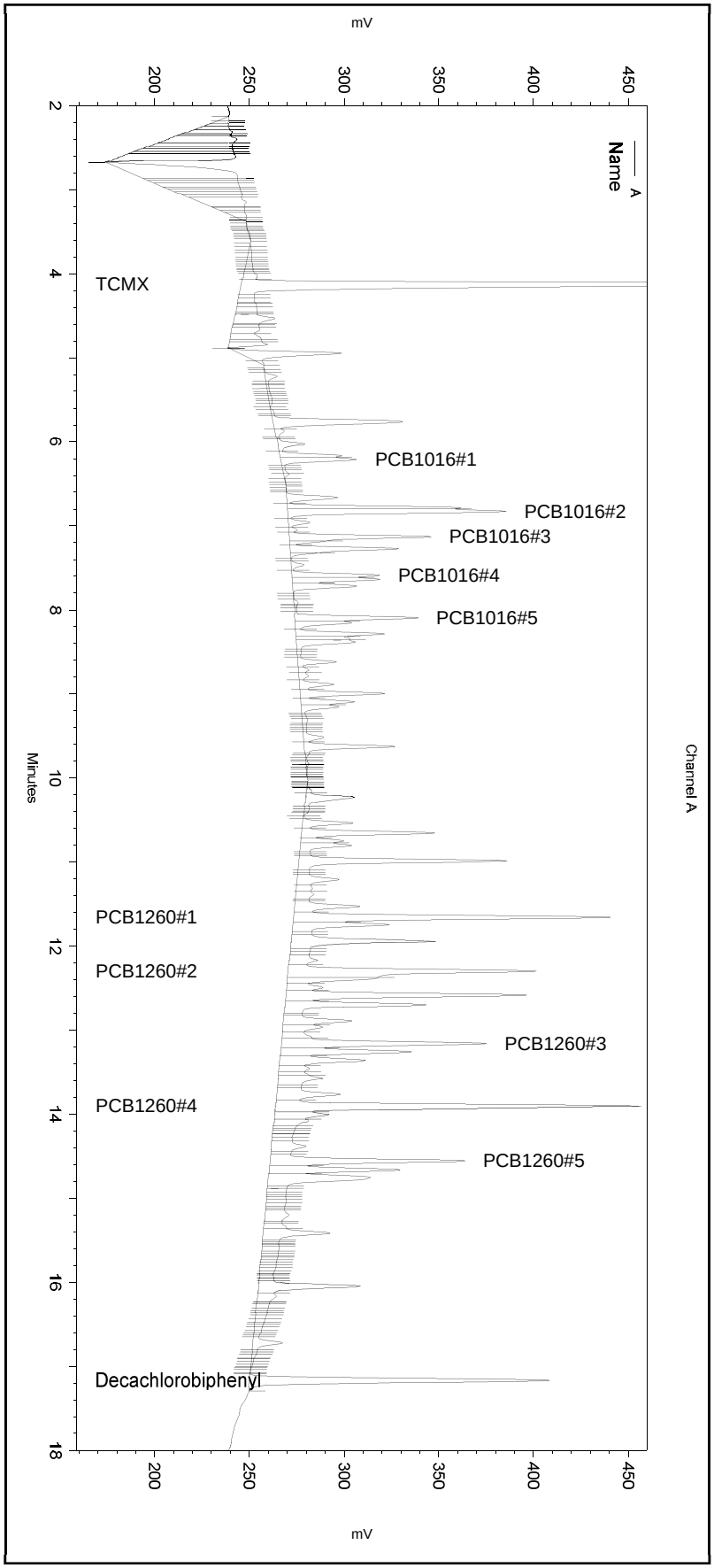
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	404598	57.740
PCB1016#1	5.210	5.207	60505	285.025
PCB1016#2	5.773	5.770	151396	285.389
PCB1016#3	5.990	5.987	70783	288.477
PCB1016#4	6.540	6.537	47836	285.214
PCB1016#5	6.993	6.990	54440	283.511
PCB1260#1	11.153	11.153	136252	232.780
PCB1260#2	11.560	11.560	103434	243.019
PCB1260#3	12.100	12.100	85255	226.182
PCB1260#4	12.757	12.757	183037	206.178
PCB1260#5	13.430	13.430	79304	199.269
Decachlorobiphenyl	16.420	16.423	274175	30.282

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-012**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 12 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 2:48:37 PM
Analysis Date: 9/12/2012 3:12:34 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

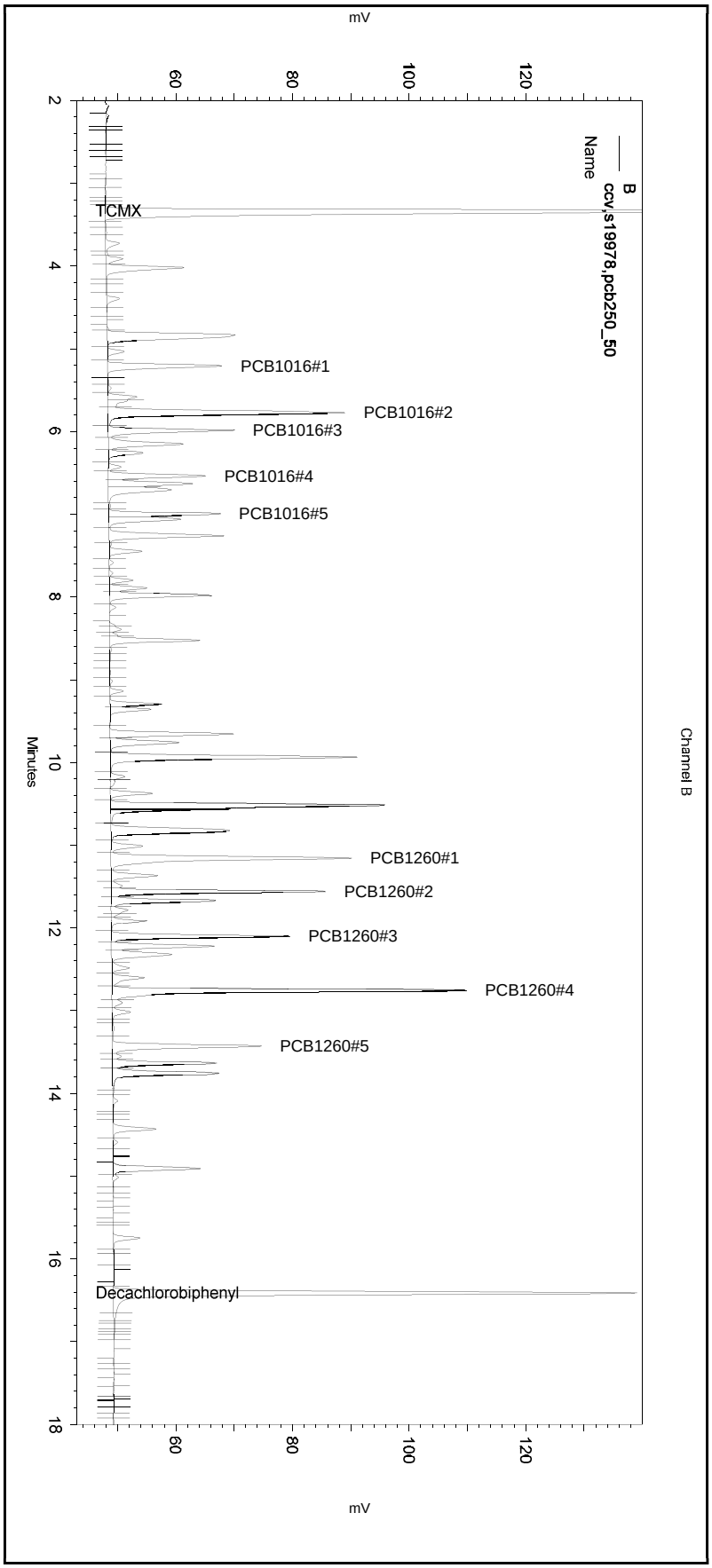
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	17.302	0	0

Manual Integration Fixes
==========
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\256-012_5DF2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\256.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\256-012**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 12 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/12/2012 2:48:37 PM
Analysis Date: 9/12/2012 3:12:34 PM
Sample Amount: 1



---< General Method Parameters >----------

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\256-012_5DF2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239404
ANALYTICAL REPORT
Metals
Matrix: Water

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
EB.09052012	239404-015

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
METALS (EPA 6010C AND EPA 7470A)
WATER

Laboratory number:	**239404**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/05/12**
Samples Received:	**09/05/12**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 09/05/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Metals (EPA 6010C and EPA 7470A) Water:

No analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 239404

Chain of Custody # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht/E Mantar
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Arsenic by 6010	Copper by 6010	Mercury by 7471B	Benzo(a)pyrene by 8270D	Benzo(a)anthracene by 8270D	Benzo(b)fluoranthene by 8270D	Zinc by 6010	Aroclor-1260 by 8082
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None								
1	✓EX36B072A.2	9/5/12	0840		X		1					X	X	X						
2	✓EX36B072B.2	9/5/12	0855		X		1					X	X	X						
3	✓EX36B072C.2	9/5/12	0917		X		1					X	X	X	X					
4	✓EX36B078A.2	9/5/12	0955		X		1					X		X						
	~~EX36~~ EAM 9/5/12																			
5	✓EX13B010A.3	9/5/12	1020		X		1					X				X	X	X		
6	✓EX13B010B.2	9/5/12	1045		X		1					X				X	X	X		
7	✓EX13B004A.2	9/5/12	1110		X		1					X		X	X					
8	✓EX13B023A.2	9/5/12	1135		X		2					X		X	X	X	X	X	X	
9	✓EX13B023B.2	9/5/12	1155		X		2					X		X	X	X	X	X	X	
	~~EX13B003BA.2~~	9/5/12	1315		X		2					X		X	X					
10	✓EX13B003BA.2	9/5/12	1315		X		2					X		X				X		
11	✓EX13B021A.2	9/5/12	1330		X		1					X						X		

EAM 9/5/12

EAM 9/5/12

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 239409

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht/E Manta
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Arsenic – 1260 (6010B/7471A/6020)	Copper – 6010B/6020	PCBs – 8082	TPH-g	TPH-d	SVOCs – 8270C	Pesticides – 8081A/8082	Metals – 6010B/6020
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None								
12	✓EX36B180C.2	9/5/12	1420		X		2					X	X	X						
13	✓EX36B180B.2	9/5/12	1435		X		2					X	X	X						
14	✓EX36B180A.2	9/5/12	1445		X		2					X	X	X						
15	EB.09052012	9/5/12	1515	X			3			1		2		X			X		X	

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1559
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239404 Date Received 9/5/12 Number of coolers 1
Client ARCADIS Project HUNTER'S POINT

Date Opened 9/5/12 By (print) AA (sign) [signature]
Date Logged in ↓ By (print) JG (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.0°C

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ (YES) NO N/A
17. Did you document your preservative check? _____ (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

_____

_____

_____

_____

_____

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239404

Sample	pH: <2	>9	>12	Other
-015a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: AA

Date: 9/6/12

Results & QC Summary

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	239404	Project#:	CA000761.0001
Client:	Arcadis	Location:	Hunters Point Parcel E
Field ID:	EB.09052012	Diln Fac:	1.000
Lab ID:	239404-015	Sampled:	09/05/12
Matrix:	Water	Received:	09/05/12
Units:	ug/L	Analyzed:	09/07/12

Analyte	Result	LOQ	DL	Batch#	Prepared	Prep	Analysis
Arsenic	5.0 U	5.0	1.5	190250	09/06/12	EPA 3010A	EPA 6010C
Cadmium	1.3 U	5.0	0.38	190250	09/06/12	EPA 3010A	EPA 6010C
Copper	5.0 U	5.0	1.3	190250	09/06/12	EPA 3010A	EPA 6010C
Lead	1.3 U	5.0	1.1	190250	09/06/12	EPA 3010A	EPA 6010C
Manganese	5.0 U	5.0	0.41	190250	09/06/12	EPA 3010A	EPA 6010C
Mercury	0.10 U	0.20	0.020	190269	09/07/12	METHOD	EPA 7470A
Vanadium	1.3 U	5.0	0.46	190250	09/06/12	EPA 3010A	EPA 6010C
Zinc	5.0 U	20	2.3	190250	09/06/12	EPA 3010A	EPA 6010C

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3010A
Project#:	CA000761.0001	Analysis:	EPA 6010C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC655108	Batch#:	190250
Matrix:	Water	Prepared:	09/06/12
Units:	ug/L	Analyzed:	09/07/12

Analyte	Result	LOQ	DL
Arsenic	5.0 U	5.0	1.5
Cadmium	1.3 U	5.0	0.38
Copper	5.0 U	5.0	1.3
Lead	1.3 U	5.0	1.1
Manganese	5.0 U	5.0	0.41
Vanadium	1.3 U	5.0	0.46
Zinc	5.0 U	20	2.3

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3010A
Project#:	CA000761.0001	Analysis:	EPA 6010C
Matrix:	Water	Batch#:	190250
Units:	ug/L	Prepared:	09/06/12
Diln Fac:	1.000	Analyzed:	09/07/12

Type: BS Lab ID: QC655109

Analyte	Spiked	Result	%REC	Limits
Arsenic	100.0	89.90	90	79-127
Cadmium	50.00	46.89	94	80-120
Copper	250.0	237.9	95	77-120
Lead	100.0	93.16	93	78-120
Manganese	50.00	48.67	97	80-120
Vanadium	500.0	470.9	94	80-120
Zinc	500.0	470.7	94	80-120

Type: BSD Lab ID: QC655110

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	93.04	93	79-127	3	21
Cadmium	50.00	47.71	95	80-120	2	20
Copper	250.0	241.0	96	77-120	1	20
Lead	100.0	93.74	94	78-120	1	20
Manganese	50.00	49.13	98	80-120	1	20
Vanadium	500.0	477.4	95	80-120	1	20
Zinc	500.0	479.5	96	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3010A
Project#:	CA000761.0001	Analysis:	EPA 6010C
Field ID:	EB.09052012	Batch#:	190250
MSS Lab ID:	239404-015	Sampled:	09/05/12
Matrix:	Water	Received:	09/05/12
Units:	ug/L	Prepared:	09/06/12
Diln Fac:	1.000	Analyzed:	09/07/12

Type: MS Lab ID: QC655111

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	<1.485	100.0	94.19	94	68-135
Cadmium	<0.3835	50.00	48.18	96	76-120
Copper	<1.279	250.0	244.4	98	71-120
Lead	<1.080	100.0	94.03	94	65-120
Manganese	<0.4052	50.00	50.26	101	66-130
Vanadium	<0.4570	500.0	483.3	97	78-120
Zinc	<2.259	500.0	483.1	97	75-124

Type: MSD Lab ID: QC655112

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	92.73	93	68-135	2	32
Cadmium	50.00	48.21	96	76-120	0	20
Copper	250.0	246.8	99	71-120	1	27
Lead	100.0	95.22	95	65-120	1	29
Manganese	50.00	50.34	101	66-130	0	22
Vanadium	500.0	485.6	97	78-120	0	20
Zinc	500.0	484.6	97	75-124	0	27

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3010A
Project#:	CA000761.0001	Analysis:	EPA 6010C
Field ID:	EB.09052012	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	190250
MSS Lab ID:	239404-015	Sampled:	09/05/12
Lab ID:	QC655113	Received:	09/05/12
Matrix:	Water	Analyzed:	09/07/12
Units:	ug/L		

Analyte	MSS Result	MSS LOQ	Result	LOQ	% Diff	Lim
Arsenic	25.00 ND	5.000	25.00 U	25.00	NC	10
Cadmium	6.250 ND	5.000	6.250 U	25.00	NC	10
Copper	25.00 ND	5.000	25.00 U	25.00	NC	10
Lead	6.250 ND	5.000	6.250 U	25.00	NC	10
Manganese	25.00 ND	5.000	25.00 U	25.00	NC	10
Vanadium	6.250 ND	5.000	6.250 U	25.00	NC	10
Zinc	25.00 ND	20.00	25.00 U	100.0	NC	10

U= Not Detected at or above DL
NC= Not Calculated
ND= Not Detected at or above DL
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3010A
Project#:	CA000761.0001	Analysis:	EPA 6010C
Field ID:	EB.09052012	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	190250
MSS Lab ID:	239404-015	Sampled:	09/05/12
Lab ID:	QC655114	Received:	09/05/12
Matrix:	Water	Analyzed:	09/07/12
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	<1.485	100.0	105.4	105	75-125
Cadmium	<0.3835	50.00	55.77	112	75-125
Copper	<1.279	250.0	285.8	114	75-125
Lead	<1.080	100.0	108.8	109	75-125
Manganese	<0.4052	50.00	58.91	118	75-125
Vanadium	<0.4570	500.0	560.6	112	75-125
Zinc	<2.259	500.0	568.3	114	75-125

Batch QC Report

Metals Analytical Report

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	190269
Lab ID:	QC655196	Prepared:	09/07/12
Matrix:	Water	Analyzed:	09/07/12
Units:	ug/L		

Result	LOQ	DL
0.10 U	0.20	0.020

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Batch QC Report

Metals Analytical Report

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	LCS	Batch#:	190269
Lab ID:	QC655197	Prepared:	09/07/12
Matrix:	Water	Analyzed:	09/07/12
Units:	ug/L		

Spiked	Result	%REC	Limits
2.500	2.320	93	80-120

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	190269
Field ID:	ZZZZZZZZZZ	Sampled:	09/05/12
MSS Lab ID:	239391-003	Received:	09/05/12
Matrix:	Water	Prepared:	09/07/12
Units:	ug/L	Analyzed:	09/07/12
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC655198	0.08940	2.500	2.204	85	64-124		
MSD	QC655199		2.500	2.145	82	64-124	3	40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	190269
MSS Lab ID:	239391-003	Sampled:	09/05/12
Lab ID:	QC655200	Received:	09/05/12
Matrix:	Water	Analyzed:	09/07/12

MSS Result	MSS LOQ	Result	LOQ	% Diff	Lim
0.08940	0.2000	0.5000 U	1.000	NC	10

U= Not Detected at or above DL
NC= Not Calculated
LOQ= Limit of Quantitation

REPORTING SUMMARY FOR 239404 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AS	CD	CU	PB	MN	HG	V	ZN
239404-015	MET09	09/07/12 13:45	1.0	+	+	+	+	+		+	+
239404-015	MET34	09/07/12 14:21	1.0						+		
239404-015	MET08	09/09/12 21:46	1.0								
QC655108	MET09	09/07/12 13:33	1.0	+	+	+	+	+		+	+
QC655108	MET08	09/09/12 21:22	1.0								
QC655109	MET09	09/07/12 13:37	1.0	+	+	+	+	+		+	+
QC655109	MET08	09/09/12 21:27	1.0								
QC655110	MET09	09/07/12 13:41	1.0	+	+	+	+	+		+	+
QC655110	MET08	09/09/12 21:42	1.0								
QC655111	MET09	09/07/12 13:50	1.0	+	+	+	+	+		+	+
QC655111	MET08	09/09/12 21:51	1.0								
QC655112	MET09	09/07/12 13:54	1.0	+	+	+	+	+		+	+
QC655112	MET08	09/09/12 21:55	1.0								
QC655113	MET09	09/07/12 13:57	5.0	+	+	+	+	+		+	+
QC655113	MET08	09/09/12 21:59	5.0								
QC655114	MET09	09/07/12 14:02	1.0	+	+	+	+	+		+	+
QC655114	MET08	09/09/12 22:04	1.0								
QC655196	MET34	09/07/12 13:56	1.0						+		
QC655197	MET34	09/07/12 13:57	1.0						+		
QC655198	MET34	09/07/12 14:01	1.0						+		
QC655199	MET34	09/07/12 14:03	1.0						+		
QC655200	MET34	09/07/12 14:04	5.0						+		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 92362179

Instrument : MET09 Begun : 09/07/12 12:19
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met09_sn	ICALBLK				09/07/12 12:19	1.0		
002	met09_sn	ICAL	CRI5.1			09/07/12 12:23	1.0	1	
003	met09_sn	ICAL	CS100			09/07/12 12:28	1.0	2	
004	met09_sn	ICAL	CS1K			09/07/12 12:32	1.0	3	
005	met09_sn	ICAL	CS10K			09/07/12 12:36	1.0	4	
006	met09_sn	ICAL	CS100K			09/07/12 12:41	1.0	5	
007	met09_sn	ICV				09/07/12 12:46	1.0	6	
008	met09_sn	ICB				09/07/12 12:51	1.0		
009	met09_sn	ICSA				09/07/12 12:56	1.0	7	10:AL=540000
010	met09_sn	ICSAB				09/07/12 13:14	1.0	8	5:AL=510000
011	met09_sn	XCRI				09/07/12 13:19	1.0	9	
012	met09_sn	CRI				09/07/12 13:23	1.0	9	
013	met09_sn	BLANK	QC655108	Water	190250	09/07/12 13:33	1.0		
014	met09_sn	BS	QC655109	Water	190250	09/07/12 13:37	1.0		
015	met09_sn	BSD	QC655110	Water	190250	09/07/12 13:41	1.0		
016	met09_sn	MSS	239404-015	Water	190250	09/07/12 13:45	1.0		
017	met09_sn	MS	QC655111	Water	190250	09/07/12 13:50	1.0		
018	met09_sn	MSD	QC655112	Water	190250	09/07/12 13:54	1.0		
019	met09_sn	SER	QC655113	Water	190250	09/07/12 13:57	5.0		
020	met09_sn	PDS	QC655114	Water	190250	09/07/12 14:02	1.0	10 11	
021	met09_sn	SAMPLE	239403-007	Water	190250	09/07/12 14:06	1.0		
022	met09_sn	CCV				09/07/12 14:11	1.0	12	
023	met09_sn	CCB				09/07/12 14:16	1.0		
024	met09_sn	SAMPLE	239403-008	Water	190250	09/07/12 14:21	1.0		
025	met09_sn	SAMPLE	239369-001	Water	190250	09/07/12 14:26	1.0		
026	met09_sn	SAMPLE	239374-001	Water	190250	09/07/12 14:30	1.0		
027	met09_sn	SAMPLE	239377-001	Water	190250	09/07/12 14:35	1.0		
028	met09_sn	BLANK	QC654896	Water	190197	09/07/12 14:40	1.0		
029	met09_sn	BS	QC654897	Water	190197	09/07/12 14:45	1.0		
030	met09_sn	BSD	QC654898	Water	190197	09/07/12 14:49	1.0		
031	met09_sn	MSS	239354-001	Water	190197	09/07/12 14:53	1.0		2:NA=400000
032	met09_sn	MS	QC654899	Water	190197	09/07/12 15:00	1.0		1:NA=410000
033	met09_sn	MSD	QC654900	Water	190197	09/07/12 15:05	1.0		1:NA=440000
034	met09_sn	ICSAB				09/07/12 15:11	1.0	8	5:AL=540000
035	met09_sn	CCV				09/07/12 15:16	1.0	12	
036	met09_sn	CCB				09/07/12 15:21	1.0		
037	met09_sn	SER	QC654901	Water	190197	09/07/12 15:26	5.0		
038	met09_sn	PDS	QC654902	Water	190197	09/07/12 15:31	1.0	10 11	1:NA=440000
039	met09_sn	SAMPLE	239343-001	Water	190197	09/07/12 15:37	1.0		1:FE=110000
040	met09_sn	SAMPLE	239343-002	Water	190197	09/07/12 15:42	1.0		
041	met09_sn	SAMPLE	239343-003	Water	190197	09/07/12 15:47	1.0		
042	met09_sn	SAMPLE	239362-001	Water	190197	09/07/12 15:52	1.0		
043	met09_sn	SAMPLE	239354-002	Water	190197	09/07/12 15:56	1.0		3:NA=420000
044	met09_sn	SAMPLE	239354-003	Water	190197	09/07/12 16:03	1.0		2:CA=190000
045	met09_sn	SAMPLE	239354-004	Water	190197	09/07/12 16:10	1.0		1:CA=190000
046	met09_sn	SAMPLE	239354-005	Water	190197	09/07/12 16:15	1.0		2:NA=370000
047	met09_sn	CCV				09/07/12 16:22	1.0	12	
048	met09_sn	CCB				09/07/12 16:27	1.0		
049	met09_sn	SAMPLE	239354-008	Water	190197	09/07/12 16:32	1.0		3:CA=290000
050	met09_sn	SAMPLE	239354-009	Water	190197	09/07/12 16:39	1.0		3:CA=410000
051	met09_sn	SAMPLE	239354-010	Water	190197	09/07/12 16:46	1.0		2:NA=360000
052	met09_sn	SAMPLE	239222-003	Soil	190141	09/07/12 16:52	1.0		5:CA=1300000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 92362179

Instrument : MET09 Begun : 09/07/12 12:19
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met09_sn	SAMPLE	239222-003	Soil	190141	09/07/12 16:56	10.0		2:CA=250000
054	met09_sn	CCV				09/07/12 17:00	1.0	12	
055	met09_sn	CCB				09/07/12 17:05	1.0		
056	met09_sn	ICSAB				09/07/12 17:09	1.0	8	5:AL=510000

NT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

JDB 09/09/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 13 through 56.

Standards used: 1=S20200 2=S20215 3=S20214 4=S20216 5=S20217 6=S20644 7=S20220 8=S20222 9=S20319 10=S19831 11=S19832 12=S20645

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 92362179

Date : 09/07/12 Reference : met09_sn
Sequence : MET09 09/07/12 Analyzed : 09/07/12 12:23

#	Type	Sample ID	Y	A
		ICAL STD	6234829	
		LOWER LIMIT	1870449	
		UPPER LIMIT	7481795	
008	ICB		6155614	
009	ICSA		5242601	
010	ICSAB		5145166	
013	BLANK	QC655108	6064234	
014	BS	QC655109	5895079	
015	BSD	QC655110	5906185	
016	MSS	239404-015	6079371	
017	MS	QC655111	5888577	
018	MSD	QC655112	5856122	
019	SER	QC655113	5970008	
020	PDS	QC655114	5850109	
021	SAMPLE	239403-007	6117394	
022	CCV		5733344	
023	CCB		6156635	
024	SAMPLE	239403-008	6159168	
025	SAMPLE	239369-001	5823322	
026	SAMPLE	239374-001	5848067	
027	SAMPLE	239377-001	6253428	
034	ICSAB		5063588	
035	CCV		5772787	
036	CCB		6214519	
042	SAMPLE	239362-001	6083070	
052	SAMPLE	239222-003	8219329	*
053	SAMPLE	239222-003	6022228	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 METALS Water: EPA 6010C

Inst : MET09
Calnum : 92362179001
Units : ug/L

Reviewer : ---
Date : 07-SEP-2012 12:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met09_sn	92362179002	CRI5.1	07-SEP-2012 12:23	S20200
L2	met09_sn	92362179003	CS100	07-SEP-2012 12:28	S20215
L3	met09_sn	92362179004	CS1K	07-SEP-2012 12:32	S20214
L4	met09_sn	92362179005	CS10K	07-SEP-2012 12:36	S20216
L5	met09_sn	92362179006	CS100K	07-SEP-2012 12:41	S20217

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Arsenic	A	4.9400	9.4610	9.4330	9.7825		LOR0	0.00000	0.10226		8.4041	1.000	0.998	
Cadmium	A	170.80	201.40	202.35	196.68		LOR0	0.00000	0.00508		192.81	1.000	0.998	
Copper	A	220.10	247.95	242.87	243.39		LOR0	0.00000	0.00411		238.58	1.000	0.998	
Lead	A	63.200	63.510	61.747	61.764		LOR0	0.00000	0.01619		62.555	1.000	0.998	
Manganese	A	714.14	846.13	820.66	786.20		LOR0	0.00000	0.00127		791.78	1.000	0.998	
Vanadium	A	233.38	275.29	270.67	275.14		LOR0	0.00000	0.00364		263.62	1.000	0.998	
Zinc	A	80.525	84.027	82.543	83.430		LOR0	0.00000	0.01199		82.631	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Arsenic	A	5.0000	**-49**	100.00	-3	1000.0	-4	10000	0		
Cadmium	A	5.0000	-13	100.00	2	1000.0	3	10000	0		
Copper	A	5.0000	-10	100.00	2	1000.0	0	10000	0		
Lead	A	5.0000	2	100.00	3	1000.0	0	10000	0		
Manganese	A	5.0000	-9	100.00	8	1000.0	4	10000	0		
Vanadium	A	5.0000	-15	100.00	0	1000.0	-2	10000	0		
Zinc	A	20.000	-3	100.00	1	1000.0	-1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 METALS Water
EPA 6010C

Inst : MET09
Calnum : 92362179001 Cal Date : 07-SEP-2012

ICV 92362179007 (07-SEP-2012) stds: S20644

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Arsenic	A	5000	5100	ug/L	2	10	
Cadmium	A	5000	5192	ug/L	4	10	
Copper	A	5000	5052	ug/L	1	10	
Lead	A	5000	5006	ug/L	0	10	
Manganese	A	5000	5119	ug/L	2	10	
Vanadium	A	5000	5100	ug/L	2	10	
Zinc	A	5000	5071	ug/L	1	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179008.1 File : met09_sn Time : 07-SEP-2012 12:51
Cal : 92362179001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.971	ug/L	
Cadmium	A	ND	5.000	0.7671	ug/L	
Copper	A	ND	5.000	2.558	ug/L	
Lead	A	ND	5.000	2.159	ug/L	
Manganese	A	ND	5.000	0.8105	ug/L	
Vanadium	A	ND	5.000	0.9140	ug/L	
Zinc	A	ND	20.00	4.517	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6155614	-1.27

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179009.1 File : met09_sn Time : 07-SEP-2012 12:56
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20220

Analyte	Ch	Quant	IQL	Units	Flags
Arsenic	A	[2.630]	5.000	ug/L	
Cadmium	A	[-1.863]	5.000	ug/L	!a-
Lead	A	[4.696]	5.000	ug/L	!a+
Zinc	A	[5.109]	20.00	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19210	ug/L	96
Copper	A	20000	20740	ug/L	104
Manganese	A	20000	18310	ug/L	92
Nickel	A	20000	17970	ug/L	90
Vanadium	A	20000	20110	ug/L	101
Aluminum	R	500000	537100	ug/L	107
Calcium	R	500000	502600	ug/L	101
Iron	R	200000	204000	ug/L	102
Magnesium	R	500000	509200	ug/L	102
Titanium	R	20000	21220	ug/L	106

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5242601	-15.91

!=warning +=high bias -=low bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179010.1 File : met09_sn Time : 07-SEP-2012 13:14
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	525.6	ug/L	5	20	
Cadmium	A	1000	1010	ug/L	1	20	
Copper	A	500.0	558.6	ug/L	12	20	
Lead	A	1000	930.6	ug/L	-7	20	
Manganese	A	500.0	517.5	ug/L	4	20	
Vanadium	A	500.0	529.4	ug/L	6	20	
Zinc	A	1000	981.3	ug/L	-2	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5145166	-17.48

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179012.1 File : met09_sn Time : 07-SEP-2012 13:23
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20319

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	20.00	17.58	ug/L	-12	30	
Cadmium	A	20.00	20.03	ug/L	0	30	
Copper	A	20.00	20.46	ug/L	2	30	
Lead	A	20.00	20.03	ug/L	0	30	
Manganese	A	20.00	21.40	ug/L	7	30	
Vanadium	A	20.00	19.70	ug/L	-2	30	
Zinc	A	80.00	83.12	ug/L	4	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6025843	-3.35

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179022.1 File : met09_sn Time : 07-SEP-2012 14:11
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	8.4041	10.172	5000	5201	ug/L	4	10	
Cadmium	A	192.81	206.61	5000	5251	ug/L	5	10	
Copper	A	238.58	257.32	5000	5286	ug/L	6	10	
Lead	A	62.555	61.909	5000	5012	ug/L	0	10	
Manganese	A	791.78	823.36	5000	5234	ug/L	5	10	
Vanadium	A	263.62	289.11	5000	5255	ug/L	5	10	
Zinc	A	82.631	86.477	5000	5183	ug/L	4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5733344	-8.04

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179023.1 File : met09_sn Time : 07-SEP-2012 14:16
Cal : 92362179001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.971	ug/L	
Cadmium	A	ND	5.000	0.7671	ug/L	
Copper	A	ND	5.000	2.558	ug/L	
Lead	A	ND	5.000	2.159	ug/L	
Manganese	A	ND	5.000	0.8105	ug/L	
Vanadium	A	ND	5.000	0.9140	ug/L	
Zinc	A	ND	20.00	4.517	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6156635	-1.25

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Water EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179034.1 File : met09_sn Time : 07-SEP-2012 15:11
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	532.7	ug/L	7	20	
Cadmium	A	1000	1005	ug/L	1	20	
Copper	A	500.0	558.8	ug/L	12	20	
Lead	A	1000	925.2	ug/L	-7	20	
Manganese	A	500.0	511.8	ug/L	2	20	
Vanadium	A	500.0	528.1	ug/L	6	20	
Zinc	A	1000	991.1	ug/L	-1	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5063588	-18.79

SAMPLE PREPARATION SUMMARY

Batch # : 190250
Started By : MCB
Method : 3010A
Spike #1 ID : S19831
Prep Date : 06-SEP-2012 19:30
SOP Version : 3010A_icp_rv9
Spike #2 ID : S19832
Analysis : ICAP
Finished By : MCB
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239369-001		Water	50	50	1	1.0						TAL/ICP	
239374-001		Water	50	50	1	1.0						TAL/ICP	
239377-001		Water	50	50	1	1.0						TAL/ICP	
239403-007		Water	50	50	1	1.0						AS, CD, CU, MN, PB, V, ZN	
239403-008		Water	50	50	1	1.0						AS, CD, CU, MN, PB, V, ZN	
239404-015		Water	50	50	1	1.0						AS, CD, CU, MN, PB, V, ZN	
QC655108	BLANK	Water	50	50	1	1.0							
QC655109	BS	Water	50	50	1	1.0		.5	.5				
QC655110	BSD	Water	50	50	1	1.0		.5	.5				
QC655111	MS	Water	50	50	1	1.0		.5	.5				
QC655112	MSD	Water	50	50	1	1.0		.5	.5				
QC655113	SER	Water	50	50	1	1.0							
QC655114	PDS	Water	50	50	1	1.0							

Analyst: JDB Date: 09/09/12 Reviewer: PRW Date: 09/10/12

Water Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 190250
Digested by: MCBIII
Date Digested: 9/6/12

Digestion Method
☒ EPA 3010a for ICP
☐ EPA 200.7
☐ _____

BK 3330
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Continued From: /
Continued On: /

Lvl.	Sample #	Container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	ID II	Comments
	BLANK		50	50	N		
	BS						
	BSD						
III	MS-404-015	A				✓	
5	MSD-404-015	↓				✓	
	239404-015	↓				✓	
	239403-007	G				✓	
↓	↓ -008	A				✓	
II	239369-001	↓				✓	
10	239374-001					✓	
↓	239377-001	↓	↓	↓	↓	✓	
15							
20							

MCB III 9/6/12

	Reagent ID or LIMS #	Initials / Date
Digestion Tube Lot #	J143054-262	
.5 mL of spike solution (Std1) was added to all spikes	519831	MCB III 9/6/12
.5 mL of spike solution (Std2) was added to all spikes	519832	↓
Digestion temperature (90-95 degrees C)	95°C / D-7	
Digestion started at (time)	7:30 AM	
☐ 1:1 HNO3, ☐ concentrated HNO3, added to all samples	0000003390 JTBAKER	
1:1 HCl added to all samples	V50038 ↓	
Digestion ended at (time)	11:45 pm	
☐ filtered thru' Whatman # 541	N/A	
Relinquished to ICP group	ICP	↓

Michael C. Brock III 9/6/12
Prep Chemist Signature / Date

Reviewer Signature / Date

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052362260

Instrument : MET34
Method : EPA 7470A

Begun : 09/07/12 13:40
SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	190269	ICALBLK	CAL BLANK			09/07/12 13:40	1.0		
002	190269	ICAL	CAL 1			09/07/12 13:42	1.0	1	
003	190269	ICAL	CAL 2			09/07/12 13:43	1.0	1	
004	190269	ICAL	CAL 3			09/07/12 13:45	1.0	1	
005	190269	ICAL	CAL 4			09/07/12 13:47	1.0	1	
006	190269	ICAL	CAL 5			09/07/12 13:49	1.0	1	
007	190269	ICV				09/07/12 13:52	1.0	2	
008	190269	ICB				09/07/12 13:54	1.0		
009	190269	BLANK	QC655196	Water	190269	09/07/12 13:56	1.0		
010	190269	LCS	QC655197	Water	190269	09/07/12 13:57	1.0		
011	190269	MSS	239391-003	Water	190269	09/07/12 13:59	1.0		
012	190269	MS	QC655198	Water	190269	09/07/12 14:01	1.0		
013	190269	MSD	QC655199	Water	190269	09/07/12 14:03	1.0		
014	190269	SER	QC655200	Water	190269	09/07/12 14:04	5.0		
015	190269	SAMPLE	239391-002	Filtrate	190269	09/07/12 14:06	1.0		
016	190269	SAMPLE	239391-004	Filtrate	190269	09/07/12 14:08	1.0		
017	190269	SAMPLE	239391-005	Water	190269	09/07/12 14:09	1.0		
018	190269	SAMPLE	239267-002	Water	190269	09/07/12 14:11	1.0		
019	190269	CCV				09/07/12 14:13	1.0	3	
020	190269	CCB				09/07/12 14:14	1.0		
021	190269	SAMPLE	239382-001	Water	190269	09/07/12 14:16	1.0		
022	190269	SAMPLE	239403-007	Water	190269	09/07/12 14:18	1.0		
023	190269	SAMPLE	239403-008	Water	190269	09/07/12 14:20	1.0		
024	190269	SAMPLE	239404-015	Water	190269	09/07/12 14:21	1.0		
025	190269	SAMPLE	239426-001	Water	190269	09/07/12 14:23	1.0		
026	190269	SAMPLE	239427-001	Water	190269	09/07/12 14:25	1.0		
027	190269	XSAMPLE	239267-005	Filtrate	190269	09/07/12 14:26	1.0		
028	190269	SAMPLE	239267-005	Filtrate	190269	09/07/12 14:31	1.0		
029	190269	CCV				09/07/12 14:32	1.0	3	
030	190269	CCB				09/07/12 14:34	1.0		
031	190269	BLANK	QC655201	WET Leachate	190270	09/07/12 14:51	1.0		
032	190269	BS	QC655202	WET Leachate	190270	09/07/12 14:53	1.0		
033	190269	BSD	QC655203	WET Leachate	190270	09/07/12 14:55	1.0		
034	190269	MSS	239300-001	WET Leachate	190270	09/07/12 14:56	1.0		
035	190269	MS	QC655204	WET Leachate	190270	09/07/12 14:58	1.0		
036	190269	MSD	QC655205	WET Leachate	190270	09/07/12 15:00	1.0		
037	190269	SAMPLE	239300-002	WET Leachate	190270	09/07/12 15:01	1.0		
038	190269	SAMPLE	239300-003	WET Leachate	190270	09/07/12 15:03	1.0		
039	190269	SAMPLE	239300-004	WET Leachate	190270	09/07/12 15:05	1.0		
040	190269	SAMPLE	239300-005	WET Leachate	190270	09/07/12 15:07	1.0		
041	190269	CCV				09/07/12 15:08	1.0	3	
042	190269	CCB				09/07/12 15:10	1.0		
043	190269	SAMPLE	239300-006	WET Leachate	190270	09/07/12 15:12	1.0		
044	190269	SAMPLE	239300-007	WET Leachate	190270	09/07/12 15:13	1.0		
045	190269	SAMPLE	239300-008	WET Leachate	190270	09/07/12 15:15	1.0		
046	190269	SAMPLE	239300-009	WET Leachate	190270	09/07/12 15:17	1.0		
047	190269	SAMPLE	239300-010	WET Leachate	190270	09/07/12 15:19	1.0		
048	190269	SAMPLE	239300-011	WET Leachate	190270	09/07/12 15:20	1.0		
049	190269	SAMPLE	239296-001	WET Leachate	190270	09/07/12 15:22	1.0		
050	190269	SAMPLE	239296-002	WET Leachate	190270	09/07/12 15:24	1.0		
051	190269	SAMPLE	239296-003	WET Leachate	190270	09/07/12 15:25	1.0		
052	190269	SAMPLE	239296-004	WET Leachate	190270	09/07/12 15:27	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052362260

Instrument : MET34
Method : EPA 7470A
Begun : 09/07/12 13:40
SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	190269	CCV				09/07/12 15:29	1.0	3	
054	190269	CCB				09/07/12 15:30	1.0		
055	190269	SAMPLE	239296-005	WET Leachate	190270	09/07/12 15:32	1.0		
056	190269	SAMPLE	239296-006	WET Leachate	190270	09/07/12 15:34	1.0		
057	190269	SAMPLE	239296-007	WET Leachate	190270	09/07/12 15:36	1.0		
058	190269	SAMPLE	239296-008	WET Leachate	190270	09/07/12 15:37	1.0		
059	190269	SAMPLE	239296-009	WET Leachate	190270	09/07/12 15:39	1.0		
060	190269	CCV				09/07/12 15:41	1.0	3	
061	190269	CCB				09/07/12 15:42	1.0		

CRT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 61.

CRT 09/07/12 : On run 27, the sample vial was not on the rack during analysis. The run was aborted and the sample was reran on run 28.

Standards used: 1=S20657 2=S20659 3=S20660

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 METALS Water: EPA 7470A

Inst : MET34
Calnum : 1052362260001
Units : ug/L

Date : 07-SEP-2012 13:40
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	190269	1052362260002	CAL 1	07-SEP-2012 13:42	S20657 (500X)
L2	190269	1052362260003	CAL 2	07-SEP-2012 13:43	S20657 (200X)
L3	190269	1052362260004	CAL 3	07-SEP-2012 13:45	S20657 (50X)
L4	190269	1052362260005	CAL 4	07-SEP-2012 13:47	S20657 (20X)
L5	190269	1052362260006	CAL 5	07-SEP-2012 13:49	S20657 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	6330.0	5370.0	4748.5	4725.2	4769.4	LINR	-0.0467	2.11E-4		5188.6	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.2000	10	0.5000	4	2.0000	-2	5.0000	-1	10.000	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 METALS Water EPA 7470A

Inst : MET34
Calnum : 1052362260001 Cal Date : 07-SEP-2012 Type : WATER

ICV 1052362260007 (07-SEP-2012) stds: S20659

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	4.616	ug/L	-8	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260008 File : 190269 Time : 07-SEP-2012 13:54
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260019 File : 190269 Time : 07-SEP-2012 14:13
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5188.6	4496.8	5.000	4.705	ug/L	-6	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260020 File : 190269 Time : 07-SEP-2012 14:14
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260029 File : 190269 Time : 07-SEP-2012 14:32
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5188.6	5014.8	5.000	5.252	ug/L	5	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260030 File : 190269 Time : 07-SEP-2012 14:34
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

SAMPLE PREPARATION SUMMARY

Batch # : 190269
Started By : CRT
Method : METHOD
Spike #1 ID : S20657

Prep Date : 07-SEP-2012 09:50

Analysis : HG
Finished By : CRT
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239267-002		Water	50	50	1	1.0						HG-200	
239267-005		Filtrate	50	50	1	1.0						T22/HG	
239382-001		Water	50	50	1	1.0						HG-200	
239391-002		Filtrate	50	50	1	1.0						HG-200	
239391-003		Water	50	50	1	1.0						HG-200	MSS, SER
239391-004		Filtrate	50	50	1	1.0						HG-200	
239391-005		Water	50	50	1	1.0						HG-200	
239403-007		Water	50	50	1	1.0						HG	
239403-008		Water	50	50	1	1.0						HG	
239404-015		Water	50	50	1	1.0						HG	
239426-001		Water	50	50	1	1.0						T22/HG-200	
239427-001		Water	50	50	1	1.0						T22/HG-200	
QC655196	BLANK	Water	50	50	1	1.0							
QC655197	LCS	Water	50	50	1	1.0		1.25					
QC655198	MS	Water	50	50	1	1.0		1.25					
QC655199	MSD	Water	50	50	1	1.0		1.25					
QC655200	SER	Water	50	50	1	1.0							

Analyst: CRT Date: 09/07/12 Reviewer: PRW Date: 09/07/12

Water Digestion for Mercury — Curtis & Tompkins, Ltd.

LIMS Batch #: 190269
Date Digested: 9/7/12

Digestion Method: ☑ EPA 7470A/ EPA 245.1 ☐ _____ — BK3325 — Page 59

	Sample #	container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	MB QCC55196		☑ 50 ☐	☑ 50 ☐	N	
	~~BS~~ LCS ↓ 97		☑ 50 ☐	☑ 50 ☐		
	~~RSD~~ ART 9/7		☑ 50 ☐	☑ 50 ☐		
	239391-003	G	☑ 50 ☐	☑ 50 ☐		MS5, SEE
5	MS QC655198		☑ 50 ☐	☑ 50 ☐		
	MSD ↓ 99		☑ 50 ☐	☑ 50 ☐		
	239391-002	G	☑ 50 ☐	☑ 50 ☐		
	↓ -004	B	☑ 50 ☐	☑ 50 ☐		
	↓ -005	G	☑ 50 ☐	☑ 50 ☐		
10	239267-002	A	☑ 50 ☐	☑ 50 ☐		
	239382-001	G	☑ 50 ☐	☑ 50 ☐		
	239403-007	G	☑ 50 ☐	☑ 50 ☐		
	↓ -008	A	☑ 50 ☐	☑ 50 ☐		
	239404-015	A	☑ 50 ☐	☑ 50 ☐		
15	239426-001		☑ 50 ☐	☑ 50 ☐		already : 239238-001
	239427-001		☑ 50 ☐	☑ 50 ☐		↓ 239235-001
	239267-005	A	☑ 50 ☐	☑ 50 ☐	↓	
			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		
20			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		

CRT 9/7/12

	Reagent ID/ LIMS# / Time	Initials / Date
Digestion Tube Lot #	EK120423	CRT 9/7/12
1.25 mL of spike solution was added to all spikes	S20C57	↓
☑ CAL digested with this batch — ICAL Source LIMS S#	58	
ICV / CCV LIMS S#	↓ 59/60	
Digestion Temperature (°C), Block and Probe Location	95°C A-35	
Digestion Started at (time)	9:50	
concentrated H_2SO_4	L09049	
concentrated HNO_3	L10023	
5% $KMnO_4$	9-6	
5% $K_2S_2O_8$	8-27	
NaCl.hydroxylamine hydrochloride	8-27	
Stannous Chloride	9-6	
Digestion Completed at (time)	11:50	
☐ filtered thru' 0.45 um syringe filter (lot #)	N/A	↓

9/7/12
Prep Chemist / Date

Continued from page ____
Continued on page ____

9-7-12
Reviewed by / Date

Dilutions for 239404 METALS Water
Curtis & Tompkins Laboratories

Type	Sample ID	IDFs
SER	QC655113	5X
SER	QC655200	5X

ICP Raw Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 92362179

Instrument : MET09 Begun : 09/07/12 12:19
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met09_sn	ICALBLK				09/07/12 12:19	1.0		
002	met09_sn	ICAL	CRI5.1			09/07/12 12:23	1.0	1	
003	met09_sn	ICAL	CS100			09/07/12 12:28	1.0	2	
004	met09_sn	ICAL	CS1K			09/07/12 12:32	1.0	3	
005	met09_sn	ICAL	CS10K			09/07/12 12:36	1.0	4	
006	met09_sn	ICAL	CS100K			09/07/12 12:41	1.0	5	
007	met09_sn	ICV				09/07/12 12:46	1.0	6	
008	met09_sn	ICB				09/07/12 12:51	1.0		
009	met09_sn	ICSA				09/07/12 12:56	1.0	7	10:AL=540000
010	met09_sn	ICSAB				09/07/12 13:14	1.0	8	5:AL=510000
011	met09_sn	XCRI				09/07/12 13:19	1.0	9	
012	met09_sn	CRI				09/07/12 13:23	1.0	9	
013	met09_sn	BLANK	QC655108	Water	190250	09/07/12 13:33	1.0		
014	met09_sn	BS	QC655109	Water	190250	09/07/12 13:37	1.0		
015	met09_sn	BSD	QC655110	Water	190250	09/07/12 13:41	1.0		
016	met09_sn	MSS	239404-015	Water	190250	09/07/12 13:45	1.0		
017	met09_sn	MS	QC655111	Water	190250	09/07/12 13:50	1.0		
018	met09_sn	MSD	QC655112	Water	190250	09/07/12 13:54	1.0		
019	met09_sn	SER	QC655113	Water	190250	09/07/12 13:57	5.0		
020	met09_sn	PDS	QC655114	Water	190250	09/07/12 14:02	1.0	10 11	
021	met09_sn	SAMPLE	239403-007	Water	190250	09/07/12 14:06	1.0		
022	met09_sn	CCV				09/07/12 14:11	1.0	12	
023	met09_sn	CCB				09/07/12 14:16	1.0		
024	met09_sn	SAMPLE	239403-008	Water	190250	09/07/12 14:21	1.0		
025	met09_sn	SAMPLE	239369-001	Water	190250	09/07/12 14:26	1.0		
026	met09_sn	SAMPLE	239374-001	Water	190250	09/07/12 14:30	1.0		
027	met09_sn	SAMPLE	239377-001	Water	190250	09/07/12 14:35	1.0		
028	met09_sn	BLANK	QC654896	Water	190197	09/07/12 14:40	1.0		
029	met09_sn	BS	QC654897	Water	190197	09/07/12 14:45	1.0		
030	met09_sn	BSD	QC654898	Water	190197	09/07/12 14:49	1.0		
031	met09_sn	MSS	239354-001	Water	190197	09/07/12 14:53	1.0		2:NA=400000
032	met09_sn	MS	QC654899	Water	190197	09/07/12 15:00	1.0		1:NA=410000
033	met09_sn	MSD	QC654900	Water	190197	09/07/12 15:05	1.0		1:NA=440000
034	met09_sn	ICSAB				09/07/12 15:11	1.0	8	5:AL=540000
035	met09_sn	CCV				09/07/12 15:16	1.0	12	
036	met09_sn	CCB				09/07/12 15:21	1.0		
037	met09_sn	SER	QC654901	Water	190197	09/07/12 15:26	5.0		
038	met09_sn	PDS	QC654902	Water	190197	09/07/12 15:31	1.0	10 11	1:NA=440000
039	met09_sn	SAMPLE	239343-001	Water	190197	09/07/12 15:37	1.0		1:FE=110000
040	met09_sn	SAMPLE	239343-002	Water	190197	09/07/12 15:42	1.0		
041	met09_sn	SAMPLE	239343-003	Water	190197	09/07/12 15:47	1.0		
042	met09_sn	SAMPLE	239362-001	Water	190197	09/07/12 15:52	1.0		
043	met09_sn	SAMPLE	239354-002	Water	190197	09/07/12 15:56	1.0		3:NA=420000
044	met09_sn	SAMPLE	239354-003	Water	190197	09/07/12 16:03	1.0		2:CA=190000
045	met09_sn	SAMPLE	239354-004	Water	190197	09/07/12 16:10	1.0		1:CA=190000
046	met09_sn	SAMPLE	239354-005	Water	190197	09/07/12 16:15	1.0		2:NA=370000
047	met09_sn	CCV				09/07/12 16:22	1.0	12	
048	met09_sn	CCB				09/07/12 16:27	1.0		
049	met09_sn	SAMPLE	239354-008	Water	190197	09/07/12 16:32	1.0		3:CA=290000
050	met09_sn	SAMPLE	239354-009	Water	190197	09/07/12 16:39	1.0		3:CA=410000
051	met09_sn	SAMPLE	239354-010	Water	190197	09/07/12 16:46	1.0		2:NA=360000
052	met09_sn	SAMPLE	239222-003	Soil	190141	09/07/12 16:52	1.0		5:CA=1300000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 92362179

Instrument : MET09 Begun : 09/07/12 12:19
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met09_sn	SAMPLE	239222-003	Soil	190141	09/07/12 16:56	10.0		2:CA=250000
054	met09_sn	CCV				09/07/12 17:00	1.0	12	
055	met09_sn	CCB				09/07/12 17:05	1.0		
056	met09_sn	ICSAB				09/07/12 17:09	1.0	8	5:AL=510000

NT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

JDB 09/09/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 13 through 56.

Standards used: 1=S20200 2=S20215 3=S20214 4=S20216 5=S20217 6=S20644 7=S20220 8=S20222 9=S20319 10=S19831 11=S19832 12=S20645

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst : MET09 Lab ID : 239404-015 Client ID : EB.09052012
Seqnum : 92362179016 Matrix : Water Acct : ARCSF (JG)
File : met09_sn Batch : 190250 Time : 07-SEP-2012 13:45
Cal : 92362179001 Caldate : 07-SEP-2012
IDF : 1.0 Units : ug/L

50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Ch	Result	RL	Blank	Flags
Arsenic	A	ND	5.0		u
Cadmium	A	ND	5.0		!<a- u
Copper	A	ND	5.0		u
Lead	A	ND	**5.0**		!<a+ u **y**
Manganese	A	ND	5.0		u
Vanadium	A	ND	5.0		u
Zinc	A	ND	20		!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	MSS Abund	%Drift
Yttrium	A	6234829	6079371	-2.49

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

Sequence No.: 15 **Autosampler Location: 14**
Sample ID: 239404-015,190250,1 **Date Collected: 9/7/2012 1:45:27 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-015,190250,1

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: 239404-015,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6079371.4	97.5066	%	0.49821				0.51%
Y	699972.2	97.9867	%	3.12124				3.19%
Ag 328.068†	-202.4	-0.435820	ug/L	0.2751531	-0.435820	ug/L	0.2751531	63.13%
Al 308.215 R†	-1.3	-2.01358	ug/L	4.713759	-2.01358	ug/L	4.713759	234.10%
As 188.979†	-16.9	-1.73310	ug/L	0.712011	-1.73310	ug/L	0.712011	41.08%
B 249.677†	-2390.3	-10.9247	ug/L	0.26940	-10.9247	ug/L	0.26940	2.47%
Ba 233.527†	22.2	0.207487	ug/L	0.1059011	0.207487	ug/L	0.1059011	51.04%
Be 313.107†	-979.1	-0.162181	ug/L	0.0211481	-0.162181	ug/L	0.0211481	13.04%
Ca 315.887 R†	111.8	10.7919	ug/L	8.83624	10.7919	ug/L	8.83624	81.88%
Cd 214.440†	-239.4	-1.21678	ug/L	0.020511	-1.21678	ug/L	0.020511	1.69%
Co 228.616†	-44.1	-0.576566	ug/L	0.0433674	-0.576566	ug/L	0.0433674	7.52%
Cr 267.716†	-99.9	-0.415271	ug/L	0.0835328	-0.415271	ug/L	0.0835328	20.12%
Cu 324.752†	-54.0	-0.221754	ug/L	0.1998982	-0.221754	ug/L	0.1998982	90.14%
Fe 238.204 R†	69.2	14.6172	ug/L	0.68093	14.6172	ug/L	0.68093	4.66%
K 766.490 R†	-273.2	-76.2985	ug/L	84.58080	-76.2985	ug/L	84.58080	110.86%
Mg 279.077 R†	30.0	17.1099	ug/L	10.57742	17.1099	ug/L	10.57742	61.82%
Mn 257.610†	-308.8	-0.392541	ug/L	0.0489999	-0.392541	ug/L	0.0489999	12.48%
Mo 202.031†	-92.3	-2.34069	ug/L	0.144902	-2.34069	ug/L	0.144902	6.19%
Na 589.592 R†	842.7	6.24614	ug/L	2.619196	6.24614	ug/L	2.619196	41.93%
Ni 231.604†	-55.7	-0.429573	ug/L	0.1340252	-0.429573	ug/L	0.1340252	31.20%
Pb 220.353†	-16.9	-0.274288	ug/L	0.5905618	-0.274288	ug/L	0.5905618	215.31%
Sb 206.836†	-22.6	-1.32449	ug/L	0.628204	-1.32449	ug/L	0.628204	47.43%
Se 196.026†	-52.9	-3.98851	ug/L	0.806223	-3.98851	ug/L	0.806223	20.21%
Ti 334.940 R†	-46.9	-0.724908	ug/L	0.3070433	-0.724908	ug/L	0.3070433	42.36%
Tl 190.801†	-28.4	-3.02811	ug/L	0.370497	-3.02811	ug/L	0.370497	12.24%
V 292.402†	-154.2	-0.560390	ug/L	0.3549543	-0.560390	ug/L	0.3549543	63.34%
Zn 206.200†	13.6	0.163020	ug/L	0.0096928	0.163020	ug/L	0.0096928	5.95%
Sn 189.927†	-23.1	-1.07386	ug/L	0.172479	-1.07386	ug/L	0.172479	16.06%

CURTIS & TOMPKINS BLANK USER REPORT FOR 239404 METALS Water
EPA 6010C

Inst : MET09 Lab ID : QC655108
Seqnum : 92362179013.2 Matrix : Water
File : met09_sn Batch : 190250 Time : 07-SEP-2012 13:33
Cal : 92362179001 Caldate : 07-SEP-2012
IDF : 1.0 Units : ug/L

50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Ch	Result	RL	Flags
Arsenic	A	ND	5.0	u
Cadmium	A	ND	5.0	!<a- u
Copper	A	ND	5.0	u
Lead	A	ND	**5.0**	!<a+ u **y**
Manganese	A	ND	5.0	u
Vanadium	A	ND	5.0	u
Zinc	A	ND	20	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	BLANK Abund	%Drift
Yttrium	A	6234829	6064234	-2.74

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

User canceled analysis.

==========

Sequence No.: 12 **Autosampler Location: 11**
Sample ID: qc655108,190250,1 **Date Collected: 9/7/2012 1:33:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655108,190250,1

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: qc655108,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6064233.7	97.2638	%	1.17786				1.21%
Y	705405.7	98.7473	%	3.56779				3.61%
Ag 328.068†	-167.0	-0.359715	ug/L	0.2582207	-0.359715	ug/L	0.2582207	71.78%
Al 308.215 R†	1.1	1.71160	ug/L	6.490698	1.71160	ug/L	6.490698	379.22%
As 188.979†	-28.6	-2.92098	ug/L	0.778329	-2.92098	ug/L	0.778329	26.65%
B 249.677†	-2428.1	-11.0972	ug/L	0.15881	-11.0972	ug/L	0.15881	1.43%
Ba 233.527†	-78.0	-0.729118	ug/L	0.0453579	-0.729118	ug/L	0.0453579	6.22%
Be 313.107†	-1256.7	-0.208165	ug/L	0.0431136	-0.208165	ug/L	0.0431136	20.71%
Ca 315.887 R†	-417.0	-40.2639	ug/L	6.91154	-40.2639	ug/L	6.91154	17.17%
Cd 214.440†	-228.5	-1.16129	ug/L	0.041233	-1.16129	ug/L	0.041233	3.55%
Co 228.616†	-56.5	-0.738402	ug/L	0.0921727	-0.738402	ug/L	0.0921727	12.48%
Cr 267.716†	-110.5	-0.459462	ug/L	0.2981639	-0.459462	ug/L	0.2981639	64.89%
Cu 324.752†	-51.6	-0.212007	ug/L	0.6546367	-0.212007	ug/L	0.6546367	308.78%
Fe 238.204 R†	-24.3	-5.13784	ug/L	1.626454	-5.13784	ug/L	1.626454	31.66%
K 766.490 R†	-143.2	-39.9835	ug/L	15.58585	-39.9835	ug/L	15.58585	38.98%
Mg 279.077 R†	-5.2	-2.97951	ug/L	5.544672	-2.97951	ug/L	5.544672	186.09%
Mn 257.610†	-621.6	-0.790323	ug/L	0.0187533	-0.790323	ug/L	0.0187533	2.37%
Mo 202.031†	-135.4	-3.43263	ug/L	0.214527	-3.43263	ug/L	0.214527	6.25%
Na 589.592 R†	-3372.6	-24.9986	ug/L	1.34491	-24.9986	ug/L	1.34491	5.38%
Ni 231.604†	-106.9	-0.825160	ug/L	0.2398308	-0.825160	ug/L	0.2398308	29.06%
Pb 220.353†	-5.9	-0.0960961	ug/L	0.25216449	-0.0960961	ug/L	0.25216449	262.41%
Sb 206.836†	-20.1	-1.17700	ug/L	1.408233	-1.17700	ug/L	1.408233	119.65%
Se 196.026†	-52.9	-3.98541	ug/L	0.859184	-3.98541	ug/L	0.859184	21.56%
Ti 334.940 R†	-56.1	-0.866662	ug/L	0.1177078	-0.866662	ug/L	0.1177078	13.58%
Tl 190.801†	-36.7	-3.92135	ug/L	1.385846	-3.92135	ug/L	1.385846	35.34%
V 292.402†	-259.1	-0.941710	ug/L	0.3686155	-0.941710	ug/L	0.3686155	39.14%
Zn 206.200†	-26.0	-0.311647	ug/L	0.1158115	-0.311647	ug/L	0.1158115	37.16%
Sn 189.927†	-28.5	-1.32792	ug/L	0.174381	-1.32792	ug/L	0.174381	13.13%

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 METALS Water
EPA 6010C

Type : BS
Inst : MET09
Seqnum : 92362179014.2
File : met09_sn
IDF : 1.0
Lab ID : QC655109
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 13:37
Cal : 92362179001
Units : ug/L

Type : BSD
Inst : MET09
Seqnum : 92362179015.2
File : met09_sn
IDF : 1.0
Lab ID : QC655110
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 13:41
Cal : 92362179001

BS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
BSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Spiked	BS	Ch	%Rec	BSD	Ch	%Rec	Limits	RPD	Lim	Flags
Arsenic	100.0	89.90	A	90	93.04	A	93	79-127	3	21	u
Cadmium	50.00	46.89	A	94	47.71	A	95	80-120	2	20	!<a- u
Copper	250.0	237.9	A	95	241.0	A	96	77-120	1	20	u
Lead	100.0	93.16	A	93	93.74	A	94	78-120	1	20	!<a+ u **y**
Manganese	50.00	48.67	A	97	49.13	A	98	80-120	1	20	u
Vanadium	500.0	470.9	A	94	477.4	A	95	80-120	1	20	u
Zinc	500.0	470.7	A	94	479.5	A	96	80-120	2	20	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	BS Abund	%Drift
Yttrium	A	6234829	5895079	-5.45

ISTD (ICAL 002)	Ch	ICAL Abund	BSD Abund	%Drift
Yttrium	A	6234829	5906185	-5.27

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

Sequence No.: 13 **Autosampler Location: 12**
Sample ID: qc655109,190250,1 **Date Collected: 9/7/2012 1:37:51 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655109,190250,1

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: qc655109,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5895078.8	94.5508	%	0.52376				0.55%
Y	680175.9	95.2155	%	1.11120				1.17%
Ag 328.068†	21766.7	46.8791	ug/L	0.22566	46.8791	ug/L	0.22566	0.48%
Al 308.215 R†	1221.9	1836.56	ug/L	87.190	1836.56	ug/L	87.190	4.75%
As 188.979†	879.2	89.9027	ug/L	0.17363	89.9027	ug/L	0.17363	0.19%
B 249.677†	204766.0	935.862	ug/L	8.4975	935.862	ug/L	8.4975	0.91%
Ba 233.527†	201029.6	1878.20	ug/L	11.894	1878.20	ug/L	11.894	0.63%
Be 313.107†	302544.1	50.1153	ug/L	0.30146	50.1153	ug/L	0.30146	0.60%
Ca 315.887 R†	197257.4	19045.7	ug/L	53.73	19045.7	ug/L	53.73	0.28%
Cd 214.440†	9225.4	46.8925	ug/L	0.39431	46.8925	ug/L	0.39431	0.84%
Co 228.616†	35096.5	458.097	ug/L	3.0778	458.097	ug/L	3.0778	0.67%
Cr 267.716†	44761.6	186.152	ug/L	0.7012	186.152	ug/L	0.7012	0.38%
Cu 324.752†	57895.3	237.876	ug/L	1.0345	237.876	ug/L	1.0345	0.43%
Fe 238.204 R†	4447.6	939.824	ug/L	24.5299	939.824	ug/L	24.5299	2.61%
K 766.490 R†	32014.7	8940.87	ug/L	87.266	8940.87	ug/L	87.266	0.98%
Mg 279.077 R†	32224.7	18406.2	ug/L	672.61	18406.2	ug/L	672.61	3.65%
Mn 257.610†	38279.5	48.6678	ug/L	0.34901	48.6678	ug/L	0.34901	0.72%
Mo 202.031†	14375.9	364.408	ug/L	4.6955	364.408	ug/L	4.6955	1.29%
Na 589.592 R†	2495263.7	18495.6	ug/L	48.01	18495.6	ug/L	48.01	0.26%
Ni 231.604†	59818.8	461.700	ug/L	4.0183	461.700	ug/L	4.0183	0.87%
Pb 220.353†	5754.0	93.1611	ug/L	0.95143	93.1611	ug/L	0.95143	1.02%
Sb 206.836†	7841.7	459.034	ug/L	3.4266	459.034	ug/L	3.4266	0.75%
Se 196.026†	1216.4	91.6390	ug/L	1.03870	91.6390	ug/L	1.03870	1.13%
Ti 334.940 R†	57227.9	884.207	ug/L	24.9737	884.207	ug/L	24.9737	2.82%
Tl 190.801†	845.5	90.2741	ug/L	1.22797	90.2741	ug/L	1.22797	1.36%
V 292.402†	129531.8	470.865	ug/L	1.9934	470.865	ug/L	1.9934	0.42%
Zn 206.200†	39266.9	470.705	ug/L	2.8703	470.705	ug/L	2.8703	0.61%
Sn 189.927†	19537.0	909.535	ug/L	7.6698	909.535	ug/L	7.6698	0.84%

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Sequence No.: 14 **Autosampler Location: 13**
Sample ID: qc655110,190250,1 **Date Collected: 9/7/2012 1:41:39 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655110,190250,1

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: qc655110,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5906184.9	94.7289	%	0.61099				0.64%
Y	680118.3	95.2074	%	1.02202				1.07%
Ag 328.068†	22010.0	47.4031	ug/L	0.55811	47.4031	ug/L	0.55811	1.18%
Al 308.215 R†	1280.0	1923.83	ug/L	29.137	1923.83	ug/L	29.137	1.51%
As 188.979†	909.8	93.0400	ug/L	0.36382	93.0400	ug/L	0.36382	0.39%
B 249.677†	207760.4	949.548	ug/L	2.6695	949.548	ug/L	2.6695	0.28%
Ba 233.527†	203392.9	1900.28	ug/L	11.068	1900.28	ug/L	11.068	0.58%
Be 313.107†	305539.1	50.6114	ug/L	0.16382	50.6114	ug/L	0.16382	0.32%
Ca 315.887 R†	202190.8	19522.0	ug/L	46.76	19522.0	ug/L	46.76	0.24%
Cd 214.440†	9386.1	47.7093	ug/L	0.33447	47.7093	ug/L	0.33447	0.70%
Co 228.616†	35643.0	465.216	ug/L	4.0174	465.216	ug/L	4.0174	0.86%
Cr 267.716†	45417.6	188.881	ug/L	0.7766	188.881	ug/L	0.7766	0.41%
Cu 324.752†	58652.5	240.987	ug/L	1.8106	240.987	ug/L	1.8106	0.75%
Fe 238.204 R†	4624.8	977.270	ug/L	10.9241	977.270	ug/L	10.9241	1.12%
K 766.490 R†	32529.6	9084.68	ug/L	78.511	9084.68	ug/L	78.511	0.86%
Mg 279.077 R†	33218.4	18973.8	ug/L	149.34	18973.8	ug/L	149.34	0.79%
Mn 257.610†	38646.0	49.1337	ug/L	0.42207	49.1337	ug/L	0.42207	0.86%
Mo 202.031†	14615.9	370.492	ug/L	2.7276	370.492	ug/L	2.7276	0.74%
Na 589.592 R†	2619511.1	19416.5	ug/L	14.80	19416.5	ug/L	14.80	0.08%
Ni 231.604†	60622.8	467.905	ug/L	1.6527	467.905	ug/L	1.6527	0.35%
Pb 220.353†	5790.0	93.7435	ug/L	1.84636	93.7435	ug/L	1.84636	1.97%
Sb 206.836†	7952.3	465.508	ug/L	4.3801	465.508	ug/L	4.3801	0.94%
Se 196.026†	1212.8	91.3635	ug/L	1.96391	91.3635	ug/L	1.96391	2.15%
Ti 334.940 R†	58550.5	904.642	ug/L	6.6739	904.642	ug/L	6.6739	0.74%
Tl 190.801†	858.4	91.6471	ug/L	0.86877	91.6471	ug/L	0.86877	0.95%
V 292.402†	131331.0	477.406	ug/L	1.5387	477.406	ug/L	1.5387	0.32%
Zn 206.200†	40004.0	479.542	ug/L	2.5226	479.542	ug/L	2.5226	0.53%
Sn 189.927†	19767.3	920.253	ug/L	4.8165	920.253	ug/L	4.8165	0.52%

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 METALS Water
EPA 6010C

Type : MSS	Type : MS	Type : MSD
Inst : MET09	Inst : MET09	Inst : MET09
Seqnum : 92362179016	Seqnum : 92362179017.2	Seqnum : 92362179018.2
File : met09_sn	File : met09_sn	File : met09_sn
IDF : 1.0	IDF : 1.0	IDF : 1.0
Lab ID : 239404-015	Lab ID : QC655111	Lab ID : QC655112
Matrix : Water	Matrix : Water	Matrix : Water
Batch : 190250	Batch : 190250	Batch : 190250
Time : 07-SEP-2012 13:45	Time : 07-SEP-2012 13:50	Time : 07-SEP-2012 13:54
Cal : 92362179001	Cal : 92362179001	Cal : 92362179001
Units : ug/L		

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS	Ch	Spiked	MS	Ch	%Rec	MSD	Ch	%Rec	Limits	RPD	Lim	Flags
Arsenic	ND	A	100.0	94.19	A	94	92.73	A	93	68-135	2	32	u
Cadmium	ND	A	50.00	48.18	A	96	48.21	A	96	76-120	0	20	!<a- u
Copper	ND	A	250.0	244.4	A	98	246.8	A	99	71-120	1	27	u
Lead	ND	A	100.0	94.03	A	94	95.22	A	95	65-120	1	29	!<a+ u **y**
Manganese	ND	A	50.00	50.26	A	101	50.34	A	101	66-130	0	22	u
Vanadium	ND	A	500.0	483.3	A	97	485.6	A	97	78-120	0	20	u
Zinc	ND	A	500.0	483.1	A	97	484.6	A	97	75-124	0	27	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	MS Abund	%Drift
Yttrium	A	6234829	5888577	-5.55

ISTD (ICAL 002)	Ch	ICAL Abund	MSD Abund	%Drift
Yttrium	A	6234829	5856122	-6.07

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

Sequence No.: 16 **Autosampler Location: 15**
Sample ID: qc655111,190250,1 **Date Collected: 9/7/2012 1:50:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655111,190250,1

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: qc655111,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5888576.9	94.4465	%	1.04664				1.11%
Y	693843.6	97.1288	%	1.48871				1.53%
Ag 328.068†	22555.4	48.5777	ug/L	0.55761	48.5777	ug/L	0.55761	1.15%
Al 308.215 R†	1302.2	1957.28	ug/L	6.907	1957.28	ug/L	6.907	0.35%
As 188.979†	921.1	94.1877	ug/L	1.28917	94.1877	ug/L	1.28917	1.37%
B 249.677†	209743.8	958.613	ug/L	16.0848	958.613	ug/L	16.0848	1.68%
Ba 233.527†	205246.2	1917.59	ug/L	27.195	1917.59	ug/L	27.195	1.42%
Be 313.107†	309639.0	51.2905	ug/L	0.62922	51.2905	ug/L	0.62922	1.23%
Ca 315.887 R†	208443.3	20125.7	ug/L	25.64	20125.7	ug/L	25.64	0.13%
Cd 214.440†	9478.8	48.1806	ug/L	0.47384	48.1806	ug/L	0.47384	0.98%
Co 228.616†	36146.4	471.743	ug/L	7.1088	471.743	ug/L	7.1088	1.51%
Cr 267.716†	45931.5	191.018	ug/L	1.9263	191.018	ug/L	1.9263	1.01%
Cu 324.752†	59488.5	244.422	ug/L	3.3980	244.422	ug/L	3.3980	1.39%
Fe 238.204 R†	4877.2	1030.60	ug/L	7.013	1030.60	ug/L	7.013	0.68%
K 766.490 R†	32705.8	9133.90	ug/L	37.438	9133.90	ug/L	37.438	0.41%
Mg 279.077 R†	33378.8	19065.4	ug/L	88.22	19065.4	ug/L	88.22	0.46%
Mn 257.610†	39530.5	50.2583	ug/L	0.81674	50.2583	ug/L	0.81674	1.63%
Mo 202.031†	14713.4	372.965	ug/L	4.5803	372.965	ug/L	4.5803	1.23%
Na 589.592 R†	2804213.6	20785.6	ug/L	39.38	20785.6	ug/L	39.38	0.19%
Ni 231.604†	61427.6	474.117	ug/L	6.1808	474.117	ug/L	6.1808	1.30%
Pb 220.353†	5807.9	94.0328	ug/L	1.11402	94.0328	ug/L	1.11402	1.18%
Sb 206.836†	8024.8	469.748	ug/L	8.3123	469.748	ug/L	8.3123	1.77%
Se 196.026†	1249.2	94.1079	ug/L	3.16238	94.1079	ug/L	3.16238	3.36%
Ti 334.940 R†	60641.6	936.951	ug/L	16.4604	936.951	ug/L	16.4604	1.76%
Tl 190.801†	872.4	93.1428	ug/L	1.32558	93.1428	ug/L	1.32558	1.42%
V 292.402†	132938.8	483.250	ug/L	5.3619	483.250	ug/L	5.3619	1.11%
Zn 206.200†	40297.4	483.058	ug/L	5.7797	483.058	ug/L	5.7797	1.20%
Sn 189.927†	19893.6	926.135	ug/L	10.5775	926.135	ug/L	10.5775	1.14%

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Sequence No.: 17 **Autosampler Location: 16**
Sample ID: qc655112,190250,1 **Date Collected: 9/7/2012 1:54:04 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655112,190250,1

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: qc655112,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5856121.6	93.9259	%	0.70325				0.75%
Y	717008.1	100.371	%	1.8020				1.80%
Ag 328.068†	22321.1	48.0730	ug/L	0.08550	48.0730	ug/L	0.08550	0.18%
Al 308.215 R†	1422.8	2138.53	ug/L	38.823	2138.53	ug/L	38.823	1.82%
As 188.979†	906.8	92.7270	ug/L	1.54568	92.7270	ug/L	1.54568	1.67%
B 249.677†	211925.3	968.583	ug/L	8.4024	968.583	ug/L	8.4024	0.87%
Ba 233.527†	206270.7	1927.16	ug/L	11.876	1927.16	ug/L	11.876	0.62%
Be 313.107†	311658.6	51.6251	ug/L	0.39416	51.6251	ug/L	0.39416	0.76%
Ca 315.887 R†	217725.5	21022.0	ug/L	80.55	21022.0	ug/L	80.55	0.38%
Cd 214.440†	9484.8	48.2112	ug/L	0.39211	48.2112	ug/L	0.39211	0.81%
Co 228.616†	36256.5	473.056	ug/L	2.8822	473.056	ug/L	2.8822	0.61%
Cr 267.716†	46122.8	191.813	ug/L	1.1226	191.813	ug/L	1.1226	0.59%
Cu 324.752†	60069.7	246.810	ug/L	1.3025	246.810	ug/L	1.3025	0.53%
Fe 238.204 R†	5234.8	1106.17	ug/L	7.239	1106.17	ug/L	7.239	0.65%
K 766.490 R†	31709.0	8855.52	ug/L	168.198	8855.52	ug/L	168.198	1.90%
Mg 279.077 R†	34020.7	19432.1	ug/L	234.85	19432.1	ug/L	234.85	1.21%
Mn 257.610†	39594.6	50.3397	ug/L	0.48912	50.3397	ug/L	0.48912	0.97%
Mo 202.031†	14788.0	374.856	ug/L	4.3278	374.856	ug/L	4.3278	1.15%
Na 589.592 R†	3345668.7	24799.0	ug/L	96.46	24799.0	ug/L	96.46	0.39%
Ni 231.604†	61771.9	476.775	ug/L	2.8437	476.775	ug/L	2.8437	0.60%
Pb 220.353†	5881.1	95.2190	ug/L	1.06804	95.2190	ug/L	1.06804	1.12%
Sb 206.836†	8029.6	470.029	ug/L	6.2295	470.029	ug/L	6.2295	1.33%
Se 196.026†	1242.2	93.5758	ug/L	0.98953	93.5758	ug/L	0.98953	1.06%
Ti 334.940 R†	64471.8	996.131	ug/L	11.5712	996.131	ug/L	11.5712	1.16%
Tl 190.801†	880.0	93.9562	ug/L	0.47775	93.9562	ug/L	0.47775	0.51%
V 292.402†	133573.1	485.556	ug/L	3.1240	485.556	ug/L	3.1240	0.64%
Zn 206.200†	40430.0	484.648	ug/L	2.5238	484.648	ug/L	2.5238	0.52%
Sn 189.927†	19917.3	927.236	ug/L	8.9371	927.236	ug/L	8.9371	0.96%

CURTIS & TOMPKINS SERIAL DILUTION FOR 239404 METALS Water
EPA 6010C

Type : MSS
Inst : MET09
Seqnum : 92362179016
File : met09_sn
IDF : 1.0
Lab ID : 239404-015
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 13:45
Cal : 92362179001
Units : ug/L

Type : SER
Inst : MET09
Seqnum : 92362179019.2
File : met09_sn
IDF : 5.0
Lab ID : QC655113
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 13:57
Cal : 92362179001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
SER: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS	Ch	RL	SER	Ch	RL	%D	Lim	Flags
Arsenic	ND	A	5.000	ND	A	25.00		10	u
Cadmium	ND	A	5.000	ND	A	25.00		10	!<a- u
Copper	ND	A	5.000	ND	A	25.00		10	u
Lead	ND	A	5.000	ND	A	**25.00**		10	!<a+ u **y**
Manganese	ND	A	5.000	ND	A	25.00		10	u
Vanadium	ND	A	5.000	ND	A	25.00		10	u
Zinc	ND	A	20.00	ND	A	100.0		10	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	SER Abund	%Drift
Yttrium	A	6234829	5970008	-4.25

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

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Sequence No.: 18 **Autosampler Location: 17**
Sample ID: qc655113,190250,5 **Date Collected: 9/7/2012 1:57:54 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655113,190250,5

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: qc655113,190250,5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5970007.6	95.7525	%	0.67884				0.71%
Y	697278.7	97.6096	%	2.27560				2.33%
Ag 328.068†	-154.5	-0.332827	ug/L	0.5287740	-0.332827	ug/L	0.5287740	158.87%
Al 308.215 R†	-1.9	-2.82978	ug/L	5.557585	-2.82978	ug/L	5.557585	196.40%
As 188.979†	-22.0	-2.25070	ug/L	1.091389	-2.25070	ug/L	1.091389	48.49%
B 249.677†	-1933.4	-8.83629	ug/L	0.676950	-8.83629	ug/L	0.676950	7.66%
Ba 233.527†	24.7	0.230917	ug/L	0.0313942	0.230917	ug/L	0.0313942	13.60%
Be 313.107†	-881.1	-0.145957	ug/L	0.0240923	-0.145957	ug/L	0.0240923	16.51%
Ca 315.887 R†	-350.2	-33.8163	ug/L	6.66573	-33.8163	ug/L	6.66573	19.71%
Cd 214.440†	-253.7	-1.28947	ug/L	0.010426	-1.28947	ug/L	0.010426	0.81%
Co 228.616†	-43.1	-0.562670	ug/L	0.0985237	-0.562670	ug/L	0.0985237	17.51%
Cr 267.716†	-161.2	-0.670450	ug/L	0.3373516	-0.670450	ug/L	0.3373516	50.32%
Cu 324.752†	99.0	0.406656	ug/L	0.1618912	0.406656	ug/L	0.1618912	39.81%
Fe 238.204 R†	-34.7	-7.33688	ug/L	1.141311	-7.33688	ug/L	1.141311	15.56%
K 766.490 R†	158.7	44.3197	ug/L	96.07581	44.3197	ug/L	96.07581	216.78%
Mg 279.077 R†	-26.3	-15.0000	ug/L	5.19927	-15.0000	ug/L	5.19927	34.66%
Mn 257.610†	-727.3	-0.924660	ug/L	0.0213239	-0.924660	ug/L	0.0213239	2.31%
Mo 202.031†	-93.9	-2.38138	ug/L	0.056642	-2.38138	ug/L	0.056642	2.38%
Na 589.592 R†	1449.1	10.7409	ug/L	6.90854	10.7409	ug/L	6.90854	64.32%
Ni 231.604†	-46.4	-0.358260	ug/L	0.1104673	-0.358260	ug/L	0.1104673	30.83%
Pb 220.353†	-58.3	-0.944145	ug/L	1.1283844	-0.944145	ug/L	1.1283844	119.51%
Sb 206.836†	-32.8	-1.91796	ug/L	3.415150	-1.91796	ug/L	3.415150	178.06%
Se 196.026†	-37.8	-2.84808	ug/L	1.543351	-2.84808	ug/L	1.543351	54.19%
Ti 334.940 R†	-50.1	-0.774653	ug/L	0.1958470	-0.774653	ug/L	0.1958470	25.28%
Tl 190.801†	-33.0	-3.52469	ug/L	0.883836	-3.52469	ug/L	0.883836	25.08%
V 292.402†	-242.3	-0.880855	ug/L	0.5267343	-0.880855	ug/L	0.5267343	59.80%
Zn 206.200†	-75.0	-0.899160	ug/L	0.0381008	-0.899160	ug/L	0.0381008	4.24%
Sn 189.927†	-25.9	-1.20653	ug/L	0.212170	-1.20653	ug/L	0.212170	17.59%

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR 239404 METALS Water
EPA 6010C

Type : MSS
Inst : MET09
Seqnum : 92362179016
File : met09_sn
IDF : 1.0
Lab ID : 239404-015
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 13:45
Cal : 92362179001
Units : ug/L

Type : PDS
Inst : MET09
Seqnum : 92362179020.2
File : met09_sn
IDF : 1.0
Lab ID : QC655114
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 14:02
Cal : 92362179001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S19831 (100X), S19832 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Arsenic	ND	A	100.0	105.4	A	105	75-125	u
Cadmium	ND	A	50.00	55.77	A	112	75-125	!<a- u
Copper	ND	A	250.0	285.8	A	114	75-125	u
Lead	ND	A	100.0	108.8	A	109	75-125	!<a+ u **y**
Manganese	ND	A	50.00	58.91	A	118	75-125	u
Vanadium	ND	A	500.0	560.6	A	112	75-125	u
Zinc	ND	A	500.0	568.3	A	114	75-125	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	PDS Abund	%Drift
Yttrium	A	6234829	5850109	-6.17

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

==========

Sequence No.: 19 **Autosampler Location: 18**
Sample ID: qc655114,190250,1,s19831 **Date Collected: 9/7/2012 2:02:44 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655114,190250,1,s19831

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: qc655114,190250,1,s19831

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5850108.9	93.8295	%	1.06724				1.14%
Y	712059.9	99.6788	%	1.56532				1.57%
Ag 328.068†	15127.7	32.5805	ug/L	0.32526	32.5805	ug/L	0.32526	1.00%
Al 308.215 R†	1541.7	2317.29	ug/L	53.113	2317.29	ug/L	53.113	2.29%
As 188.979†	1030.3	105.359	ug/L	2.5692	105.359	ug/L	2.5692	2.44%
B 249.677†	249641.1	1140.96	ug/L	21.785	1140.96	ug/L	21.785	1.91%
Ba 233.527†	237166.0	2215.81	ug/L	27.130	2215.81	ug/L	27.130	1.22%
Be 313.107†	363672.5	60.2410	ug/L	0.76348	60.2410	ug/L	0.76348	1.27%
Ca 315.887 R†	239952.3	23168.0	ug/L	207.37	23168.0	ug/L	207.37	0.90%
Cd 214.440†	10971.2	55.7663	ug/L	0.67849	55.7663	ug/L	0.67849	1.22%
Co 228.616†	42241.9	551.260	ug/L	7.2322	551.260	ug/L	7.2322	1.31%
Cr 267.716†	54022.1	224.665	ug/L	2.9868	224.665	ug/L	2.9868	1.33%
Cu 324.752†	69552.6	285.773	ug/L	4.3840	285.773	ug/L	4.3840	1.53%
Fe 238.204 R†	5693.7	1203.14	ug/L	22.718	1203.14	ug/L	22.718	1.89%
K 766.490 R†	37055.3	10348.6	ug/L	184.31	10348.6	ug/L	184.31	1.78%
Mg 279.077 R†	38311.4	21882.9	ug/L	320.06	21882.9	ug/L	320.06	1.46%
Mn 257.610†	46332.7	58.9064	ug/L	0.85621	58.9064	ug/L	0.85621	1.45%
Mo 202.031†	17141.4	434.509	ug/L	5.8483	434.509	ug/L	5.8483	1.35%
Na 589.592 R†	3555696.9	26355.8	ug/L	212.27	26355.8	ug/L	212.27	0.81%
Ni 231.604†	72321.6	558.200	ug/L	9.0516	558.200	ug/L	9.0516	1.62%
Pb 220.353†	6717.9	108.768	ug/L	1.7300	108.768	ug/L	1.7300	1.59%
Sb 206.836†	9194.9	538.245	ug/L	11.9132	538.245	ug/L	11.9132	2.21%
Se 196.026†	1419.1	106.908	ug/L	2.7810	106.908	ug/L	2.7810	2.60%
Ti 334.940 R†	71885.8	1110.68	ug/L	15.188	1110.68	ug/L	15.188	1.37%
Tl 190.801†	1033.9	110.392	ug/L	0.3816	110.392	ug/L	0.3816	0.35%
V 292.402†	154211.0	560.578	ug/L	7.4284	560.578	ug/L	7.4284	1.33%
Zn 206.200†	47408.7	568.304	ug/L	6.1750	568.304	ug/L	6.1750	1.09%
Sn 189.927†	23103.4	1075.56	ug/L	10.881	1075.56	ug/L	10.881	1.01%

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 METALS Water: EPA 6010C

Inst : MET09
Calnum : 92362179001
Units : ug/L

Reviewer : ---
Date : 07-SEP-2012 12:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met09_sn	92362179002	CRI5.1	07-SEP-2012 12:23	S20200
L2	met09_sn	92362179003	CS100	07-SEP-2012 12:28	S20215
L3	met09_sn	92362179004	CS1K	07-SEP-2012 12:32	S20214
L4	met09_sn	92362179005	CS10K	07-SEP-2012 12:36	S20216
L5	met09_sn	92362179006	CS100K	07-SEP-2012 12:41	S20217

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Arsenic	A	4.9400	9.4610	9.4330	9.7825		LOR0	0.00000	0.10226		8.4041	1.000	0.998	
Cadmium	A	170.80	201.40	202.35	196.68		LOR0	0.00000	0.00508		192.81	1.000	0.998	
Copper	A	220.10	247.95	242.87	243.39		LOR0	0.00000	0.00411		238.58	1.000	0.998	
Lead	A	63.200	63.510	61.747	61.764		LOR0	0.00000	0.01619		62.555	1.000	0.998	
Manganese	A	714.14	846.13	820.66	786.20		LOR0	0.00000	0.00127		791.78	1.000	0.998	
Vanadium	A	233.38	275.29	270.67	275.14		LOR0	0.00000	0.00364		263.62	1.000	0.998	
Zinc	A	80.525	84.027	82.543	83.430		LOR0	0.00000	0.01199		82.631	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Arsenic	A	5.0000	**-49**	100.00	-3	1000.0	-4	10000	0		
Cadmium	A	5.0000	-13	100.00	2	1000.0	3	10000	0		
Copper	A	5.0000	-10	100.00	2	1000.0	0	10000	0		
Lead	A	5.0000	2	100.00	3	1000.0	0	10000	0		
Manganese	A	5.0000	-9	100.00	8	1000.0	4	10000	0		
Vanadium	A	5.0000	-15	100.00	0	1000.0	-2	10000	0		
Zinc	A	20.000	-3	100.00	1	1000.0	-1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

92362179001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 METALS Water
EPA 6010C

Inst : MET09
Calnum : 92362179001 Cal Date : 07-SEP-2012

ICV 92362179007 (07-SEP-2012) stds: S20644

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Arsenic	A	5000	5100	ug/L	2	10	
Cadmium	A	5000	5192	ug/L	4	10	
Copper	A	5000	5052	ug/L	1	10	
Lead	A	5000	5006	ug/L	0	10	
Manganese	A	5000	5119	ug/L	2	10	
Vanadium	A	5000	5100	ug/L	2	10	
Zinc	A	5000	5071	ug/L	1	10	

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: ICALBLK, **Date Collected: 9/7/2012 12:19:02 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:09 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICALBLK,

Analyte	Back Pressure	Flow
All	175.0 kPa	0.55 L/min

Mean Data: ICALBLK,

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	12.6	55.73	443.65%	[0.00]	ug/L
Al 308.215 R	55.6	9.17	16.50%	[0.00]	ug/L
As 188.979	-0.9	3.92	439.07%	[0.00]	ug/L
B 249.677	5710.9	148.58	2.60%	[0.00]	ug/L
Ba 233.527	91.7	8.48	9.25%	[0.00]	ug/L
Be 313.107	-3616.5	258.54	7.15%	[0.00]	ug/L
Ca 315.887 R	1607.9	269.97	16.79%	[0.00]	ug/L
Cd 214.440	226.8	12.29	5.42%	[0.00]	ug/L
Co 228.616	68.3	9.86	14.43%	[0.00]	ug/L
Cr 267.716	-389.5	42.36	10.87%	[0.00]	ug/L
Cu 324.752	3960.8	123.87	3.13%	[0.00]	ug/L
Fe 238.204 R	7.3	16.30	222.75%	[0.00]	ug/L
K 766.490 R	321.2	382.25	119.00%	[0.00]	ug/L
Mg 279.077 R	-455.2	2.34	0.51%	[0.00]	ug/L
Mn 257.610	776.7	31.46	4.05%	[0.00]	ug/L
Mo 202.031	142.8	7.91	5.54%	[0.00]	ug/L
Na 589.592 R	2717.0	317.79	11.70%	[0.00]	ug/L
Ni 231.604	1049.5	11.10	1.06%	[0.00]	ug/L
Pb 220.353	-35.9	24.37	67.89%	[0.00]	ug/L
Sb 206.836	93.9	11.40	12.14%	[0.00]	ug/L
Se 196.026	125.8	11.42	9.09%	[0.00]	ug/L
Ti 334.940 R	188.2	13.59	7.22%	[0.00]	ug/L
Tl 190.801	26.7	4.55	17.05%	[0.00]	ug/L
V 292.402	-1253.3	95.40	7.61%	[0.00]	ug/L
Zn 206.200	267.6	7.27	2.72%	[0.00]	ug/L
Sn 189.927	34.0	4.28	12.60%	[0.00]	ug/L

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: ICAL,CRI5.1 **Date Collected: 9/7/2012 12:23:46 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:10 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CRI5.1

Analyte	Back Pressure	Flow
All	175.0 kPa	0.55 L/min

Mean Data: ICAL,CRI5.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6234829.2	33948.04	0.54%	100.000	%
Y	714354.4	12473.46	1.75%	100.000	%
Ag 328.068†	2122.1	68.25	3.22%	[5.0]	ug/L
Al 308.215 R†	65.9	2.24	3.39%	[100]	ug/L
As 188.979†	24.7	13.97	56.60%	[5.0]	ug/L
B 249.677†	21406.4	294.87	1.38%	[100]	ug/L
Ba 233.527†	489.5	0.43	0.09%	[5.0]	ug/L
Be 313.107†	11164.5	235.08	2.11%	[2.0]	ug/L
Ca 315.887 R†	2129.3	89.86	4.22%	[200]	ug/L
Cd 214.440†	854.0	5.99	0.70%	[5.0]	ug/L
Co 228.616†	327.0	5.97	1.83%	[5.0]	ug/L
Cr 267.716†	1141.1	104.01	9.11%	[5.0]	ug/L
Cu 324.752†	1100.5	167.34	15.21%	[5.0]	ug/L
Fe 238.204 R†	480.3	4.47	0.93%	[100]	ug/L
K 766.490 R†	1795.3	134.14	7.47%	[500]	ug/L
Mg 279.077 R†	332.5	5.89	1.77%	[200]	ug/L
Mn 257.610†	3570.7	132.38	3.71%	[5.0]	ug/L
Mo 202.031†	115.9	2.78	2.40%	[5.0]	ug/L
Na 589.592 R†	73695.4	2604.39	3.53%	[500]	ug/L
Ni 231.604†	525.2	21.33	4.06%	[5.0]	ug/L
Pb 220.353†	316.0	23.06	7.30%	[5.0]	ug/L
Sb 206.836†	202.4	49.02	24.22%	[10]	ug/L
Se 196.026†	102.6	12.44	12.12%	[10]	ug/L
Ti 334.940 R†	581.5	3.85	0.66%	[10]	ug/L
Tl 190.801†	78.1	12.02	15.39%	[10]	ug/L
V 292.402†	1166.9	80.64	6.91%	[5.0]	ug/L
Zn 206.200†	1610.5	7.99	0.50%	[20]	ug/L
Sn 189.927†	845.0	8.26	0.98%	[40]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	424.4	0.00000	1.000000	
Al 308.215 R	1	Lin Thru 0	0.0	0.6593	0.00000	1.000000	
As 188.979	1	Lin Thru 0	0.0	4.937	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	214.1	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	97.90	0.00000	1.000000	
Be 313.107	1	Lin Thru 0	0.0	5582	0.00000	1.000000	
Ca 315.887 R	1	Lin Thru 0	0.0	10.65	0.00000	1.000000	
Cd 214.440	1	Lin Thru 0	0.0	170.8	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	65.40	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	228.2	0.00000	1.000000	
Cu 324.752	1	Lin Thru 0	0.0	220.1	0.00000	1.000000	
Fe 238.204 R	1	Lin Thru 0	0.0	4.803	0.00000	1.000000	
K 766.490 R	1	Lin Thru 0	0.0	3.591	0.00000	1.000000	
Mg 279.077 R	1	Lin Thru 0	0.0	1.663	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	714.1	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	23.17	0.00000	1.000000	
Na 589.592 R	1	Lin Thru 0	0.0	147.4	0.00000	1.000000	
Ni 231.604	1	Lin Thru 0	0.0	105.0	0.00000	1.000000	
Pb 220.353	1	Lin Thru 0	0.0	63.20	0.00000	1.000000	
Sb 206.836	1	Lin Thru 0	0.0	20.24	0.00000	1.000000	
Se 196.026	1	Lin Thru 0	0.0	10.26	0.00000	1.000000	
Ti 334.940 R	1	Lin Thru 0	0.0	58.15	0.00000	1.000000	
Tl 190.801	1	Lin Thru 0	0.0	7.808	0.00000	1.000000	
V 292.402	1	Lin Thru 0	0.0	233.4	0.00000	1.000000	
Zn 206.200	1	Lin Thru 0	0.0	80.52	0.00000	1.000000	
Sn 189.927	1	Lin Thru 0	0.0	21.12	0.00000	1.000000	

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Sequence No.: 3 **Autosampler Location: 3**
Sample ID: ICAL,CS100 **Date Collected: 9/7/2012 12:28:33 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:11 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS100

Analyte	Back Pressure	Flow
All	175.0 kPa	0.55 L/min

Mean Data: ICAL,CS100

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6059171.3	144255.61	2.38%	97.1826	%
Y	706193.6	8010.11	1.13%	98.8576	%
Ag 328.068†	46630.6	1877.08	4.03%	[100]	ug/L
As 188.979†	946.1	37.71	3.99%	[100]	ug/L
Ba 233.527†	11084.9	246.58	2.22%	[100]	ug/L
Be 313.107†	616196.7	18682.02	3.03%	[100]	ug/L
Cd 214.440†	20139.6	466.76	2.32%	[100]	ug/L
Co 228.616†	7541.5	167.81	2.23%	[100]	ug/L
Cr 267.716†	24635.7	990.22	4.02%	[100]	ug/L
Cu 324.752†	24795.3	1319.15	5.32%	[100]	ug/L
Mn 257.610†	84613.3	3324.30	3.93%	[100]	ug/L
Mo 202.031†	3839.0	90.09	2.35%	[100]	ug/L
Ni 231.604†	12765.4	318.28	2.49%	[100]	ug/L
Pb 220.353†	6351.0	144.28	2.27%	[100]	ug/L
Sb 206.836†	1697.6	26.48	1.56%	[100]	ug/L
Se 196.026†	1260.0	37.31	2.96%	[100]	ug/L
Ti 334.940 R†	6129.9	121.02	1.97%	[100]	ug/L
Tl 190.801†	957.3	15.91	1.66%	[100]	ug/L
V 292.402†	27528.5	1264.21	4.59%	[100]	ug/L
Zn 206.200†	8402.7	198.02	2.36%	[100]	ug/L
Sn 189.927†	2165.3	57.65	2.66%	[100]	ug/L

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Sequence No.: 4 **Autosampler Location: 4**
Sample ID: ICAL,CS1K **Date Collected: 9/7/2012 12:32:25 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:11 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS1K

Analyte	Back Pressure	Flow
All	175.0 kPa	0.55 L/min

Mean Data: ICAL,CS1K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6315860.3	28966.60	0.46%	101.300	%
Y	700236.7	12848.52	1.83%	98.0237	%
Ag 328.068†	459381.0	1781.92	0.39%	[1000]	ug/L
Al 308.215 R†	684.6	9.23	1.35%	[1000]	ug/L
As 188.979†	9433.0	96.68	1.02%	[1000]	ug/L
B 249.677†	212769.9	905.18	0.43%	[1000]	ug/L
Ba 233.527†	109081.7	493.51	0.45%	[1000]	ug/L
Be 313.107†	6035713.7	21090.59	0.35%	[1000]	ug/L
Ca 315.887 R†	10864.0	131.92	1.21%	[1000]	ug/L
Cd 214.440†	202352.3	1219.33	0.60%	[1000]	ug/L
Co 228.616†	76404.0	374.09	0.49%	[1000]	ug/L
Cr 267.716†	240594.4	811.84	0.34%	[1000]	ug/L
Cu 324.752†	242867.6	665.82	0.27%	[1000]	ug/L
Fe 238.204 R†	5059.5	68.40	1.35%	[1000]	ug/L
K 766.490 R†	3311.6	35.74	1.08%	[1000]	ug/L
Mg 279.077 R†	1797.9	16.18	0.90%	[1000]	ug/L
Mn 257.610†	820657.6	4900.85	0.60%	[1000]	ug/L
Mo 202.031†	38346.3	352.26	0.92%	[1000]	ug/L
Na 589.592 R†	144074.0	2796.04	1.94%	[1000]	ug/L
Ni 231.604†	129477.2	505.11	0.39%	[1000]	ug/L
Pb 220.353†	61747.2	760.61	1.23%	[1000]	ug/L
Sb 206.836†	16381.8	275.12	1.68%	[1000]	ug/L
Se 196.026†	12696.7	199.09	1.57%	[1000]	ug/L
Ti 334.940 R†	61520.7	1446.21	2.35%	[1000]	ug/L
Tl 190.801†	9394.4	72.96	0.78%	[1000]	ug/L
V 292.402†	270665.1	1073.74	0.40%	[1000]	ug/L
Zn 206.200†	82542.6	260.83	0.32%	[1000]	ug/L
Sn 189.927†	21173.7	184.37	0.87%	[1000]	ug/L

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Sequence No.: 5 **Autosampler Location: 5**
Sample ID: ICAL,CS10K **Date Collected: 9/7/2012 12:36:19 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:12 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS10K

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: ICAL,CS10K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	5924784.6	57333.41	0.97%	95.0272	%
Y	702635.3	282.94	0.04%	98.3595	%
Ag 328.068†	931091.0	8415.72	0.90%	[2000]	ug/L
Al 308.215 R†	6701.9	65.69	0.98%	[10000]	ug/L
As 188.979†	97825.0	735.28	0.75%	[10000]	ug/L
B 249.677†	2188600.2	26940.61	1.23%	[10000]	ug/L
Ba 233.527†	1070125.1	9118.62	0.85%	[10000]	ug/L
Ca 315.887 R†	105160.9	890.36	0.85%	[10000]	ug/L
Cd 214.440†	1966780.4	11727.82	0.60%	[10000]	ug/L
Co 228.616†	762886.7	6778.15	0.89%	[10000]	ug/L
Cr 267.716†	2404547.5	24089.12	1.00%	[10000]	ug/L
Cu 324.752†	2433889.2	36988.90	1.52%	[10000]	ug/L
Fe 238.204 R†	49620.8	497.06	1.00%	[10000]	ug/L
K 766.490 R†	34011.3	380.71	1.12%	[10000]	ug/L
Mg 279.077 R†	17556.8	102.60	0.58%	[10000]	ug/L
Mn 257.610†	7862000.8	54762.93	0.70%	[10000]	ug/L
Mo 202.031†	394610.7	3215.02	0.81%	[10000]	ug/L
Na 589.592 R†	1491779.4	5477.50	0.37%	[10000]	ug/L
Ni 231.604†	1295631.3	13774.35	1.06%	[10000]	ug/L
Pb 220.353†	617642.9	9468.51	1.53%	[10000]	ug/L
Sb 206.836†	170901.5	1438.06	0.84%	[10000]	ug/L
Se 196.026†	132801.4	211.00	0.16%	[10000]	ug/L
Ti 334.940 R†	647546.1	8747.04	1.35%	[10000]	ug/L
Tl 190.801†	93658.2	981.20	1.05%	[10000]	ug/L
V 292.402†	2751373.6	31098.15	1.13%	[10000]	ug/L
Zn 206.200†	834301.1	6443.67	0.77%	[10000]	ug/L
Sn 189.927†	214833.2	1756.99	0.82%	[10000]	ug/L

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: ICAL,CS100K **Date Collected: 9/7/2012 12:41:18 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:12 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS100K

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: ICAL,CS100K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	5468449.3	35193.77	0.64%	87.7081	%
Y	666811.1	7945.60	1.19%	93.3446	%
Al 308.215 R†	66526.8	418.22	0.63%	[100000]	ug/L
Ca 315.887 R†	1035540.8	6849.35	0.66%	[100000]	ug/L
Fe 238.204 R†	473005.8	1510.68	0.32%	[100000]	ug/L
K 766.490 R†	358253.1	613.03	0.17%	[100000]	ug/L
Mg 279.077 R†	175069.7	1942.60	1.11%	[100000]	ug/L
Na 589.592 R†	13476753.3	301210.27	2.24%	[100000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin Thru 0	0.0	464.3	0.00000	0.999986	
Al 308.215 R	4	Lin Thru 0	0.0	0.6653	0.00000	1.000000	
As 188.979	4	Lin Thru 0	0.0	9.779	0.00000	0.999994	
B 249.677	3	Lin Thru 0	0.0	218.8	0.00000	0.999996	
Ba 233.527	4	Lin Thru 0	0.0	107.0	0.00000	0.999998	
Be 313.107	3	Lin Thru 0	0.0	6037	0.00000	0.999998	
Ca 315.887 R	4	Lin Thru 0	0.0	10.36	0.00000	0.999999	
Cd 214.440	4	Lin Thru 0	0.0	196.7	0.00000	0.999996	
Co 228.616	4	Lin Thru 0	0.0	76.29	0.00000	1.000000	
Cr 267.716	4	Lin Thru 0	0.0	240.5	0.00000	1.000000	
Cu 324.752	4	Lin Thru 0	0.0	243.4	0.00000	1.000000	
Fe 238.204 R	4	Lin Thru 0	0.0	4.732	0.00000	0.999988	
K 766.490 R	4	Lin Thru 0	0.0	3.581	0.00000	0.999987	
Mg 279.077 R	4	Lin Thru 0	0.0	1.751	0.00000	1.000000	
Mn 257.610	4	Lin Thru 0	0.0	786.5	0.00000	0.999990	
Mo 202.031	4	Lin Thru 0	0.0	39.45	0.00000	0.999996	
Na 589.592 R	4	Lin Thru 0	0.0	134.9	0.00000	0.999944	
Ni 231.604	4	Lin Thru 0	0.0	129.6	0.00000	1.000000	
Pb 220.353	4	Lin Thru 0	0.0	61.76	0.00000	1.000000	
Sb 206.836	4	Lin Thru 0	0.0	17.08	0.00000	0.999992	
Se 196.026	4	Lin Thru 0	0.0	13.27	0.00000	0.999990	
Ti 334.940 R	4	Lin Thru 0	0.0	64.72	0.00000	0.999988	
Tl 190.801	4	Lin Thru 0	0.0	9.366	0.00000	1.000000	
V 292.402	4	Lin Thru 0	0.0	275.1	0.00000	0.999999	
Zn 206.200	4	Lin Thru 0	0.0	83.42	0.00000	0.999999	
Sn 189.927	4	Lin Thru 0	0.0	21.48	0.00000	0.999999	

Sequence No.: 7 **Autosampler Location: 218**
Sample ID: s20644 **Date Collected: 9/7/2012 12:46:10 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:13 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20644

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: s20644

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5842499.4	93.7074	%	0.13201				0.14%
Y	692572.0	96.9508	%	0.33590				0.35%
Ag 328.068†	467390.1	1006.62	ug/L	3.829	1006.62	ug/L	3.829	0.38%
QC value within limits for Ag 328.068 Recovery = 100.66%								
Al 308.215 R†	13756.2	20676.1	ug/L	341.48	20676.1	ug/L	341.48	1.65%
QC value within limits for Al 308.215 R Recovery = 103.38%								
As 188.979†	49869.2	5099.62	ug/L	20.666	5099.62	ug/L	20.666	0.41%
QC value within limits for As 188.979 Recovery = 101.99%								
B 249.677†	1130241.5	5165.66	ug/L	31.858	5165.66	ug/L	31.858	0.62%
QC value within limits for B 249.677 Recovery = 103.31%								
Ba 233.527†	544735.2	5089.40	ug/L	25.365	5089.40	ug/L	25.365	0.50%
QC value within limits for Ba 233.527 Recovery = 101.79%								
Be 313.107†	3167233.8	524.640	ug/L	2.6229	524.640	ug/L	2.6229	0.50%
QC value within limits for Be 313.107 Recovery = 104.93%								
Ca 315.887 R†	213676.3	20631.0	ug/L	309.88	20631.0	ug/L	309.88	1.50%
QC value within limits for Ca 315.887 R Recovery = 103.15%								
Cd 214.440†	1021372.6	5191.62	ug/L	37.027	5191.62	ug/L	37.027	0.71%
QC value within limits for Cd 214.440 Recovery = 103.83%								
Co 228.616†	385330.0	5039.85	ug/L	20.481	5039.85	ug/L	20.481	0.41%
QC value within limits for Co 228.616 Recovery = 100.80%								
Cr 267.716†	1214345.8	5050.16	ug/L	20.728	5050.16	ug/L	20.728	0.41%
QC value within limits for Cr 267.716 Recovery = 101.00%								
Cu 324.752†	1229635.2	5052.24	ug/L	31.032	5052.24	ug/L	31.032	0.61%
QC value within limits for Cu 324.752 Recovery = 101.04%								
Fe 238.204 R†	101496.6	21447.2	ug/L	247.46	21447.2	ug/L	247.46	1.15%
QC value within limits for Fe 238.204 R Recovery = 107.24%								
K 766.490 R†	68921.8	19248.1	ug/L	258.50	19248.1	ug/L	258.50	1.34%
QC value within limits for K 766.490 R Recovery = 96.24%								
Mg 279.077 R†	35714.3	20399.4	ug/L	388.85	20399.4	ug/L	388.85	1.91%
QC value within limits for Mg 279.077 R Recovery = 102.00%								
Mn 257.610†	4026673.8	5119.43	ug/L	28.043	5119.43	ug/L	28.043	0.55%
QC value within limits for Mn 257.610 Recovery = 102.39%								
Mo 202.031†	205033.0	5197.30	ug/L	18.788	5197.30	ug/L	18.788	0.36%
QC value within limits for Mo 202.031 Recovery = 103.95%								
Na 589.592 R†	2942577.9	21811.2	ug/L	318.22	21811.2	ug/L	318.22	1.46%
QC value within limits for Na 589.592 R Recovery = 109.06%								
Ni 231.604†	651878.4	5031.40	ug/L	24.554	5031.40	ug/L	24.554	0.49%
QC value within limits for Ni 231.604 Recovery = 100.63%								
Pb 220.353†	309186.6	5005.91	ug/L	50.557	5005.91	ug/L	50.557	1.01%
QC value within limits for Pb 220.353 Recovery = 100.12%								
Sb 206.836†	87839.6	5141.89	ug/L	11.051	5141.89	ug/L	11.051	0.21%
QC value within limits for Sb 206.836 Recovery = 102.84%								
Se 196.026†	67410.6	5078.28	ug/L	28.405	5078.28	ug/L	28.405	0.56%
QC value within limits for Se 196.026 Recovery = 101.57%								
Ti 334.940 R†	324457.4	5013.07	ug/L	78.289	5013.07	ug/L	78.289	1.56%
QC value within limits for Ti 334.940 R Recovery = 100.26%								
Tl 190.801†	47587.9	5080.86	ug/L	16.913	5080.86	ug/L	16.913	0.33%
QC value within limits for Tl 190.801 Recovery = 101.62%								
V 292.402†	1402886.5	5099.68	ug/L	16.716	5099.68	ug/L	16.716	0.33%
QC value within limits for V 292.402 Recovery = 101.99%								
Zn 206.200†	423023.0	5070.92	ug/L	24.658	5070.92	ug/L	24.658	0.49%
QC value within limits for Zn 206.200 Recovery = 101.42%								
Sn 189.927†	109105.3	5079.33	ug/L	15.788	5079.33	ug/L	15.788	0.31%
QC value within limits for Sn 189.927 Recovery = 101.59%								

All analyte(s) passed QC.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179008.1 File : met09_sn Time : 07-SEP-2012 12:51
Cal : 92362179001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.971	ug/L	
Cadmium	A	ND	5.000	0.7671	ug/L	
Copper	A	ND	5.000	2.558	ug/L	
Lead	A	ND	5.000	2.159	ug/L	
Manganese	A	ND	5.000	0.8105	ug/L	
Vanadium	A	ND	5.000	0.9140	ug/L	
Zinc	A	ND	20.00	4.517	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6155614	-1.27

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Sequence No.: 8 **Autosampler Location: 221**
Sample ID: ICB **Date Collected: 9/7/2012 12:51:08 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:13 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6155614.3	98.7295	%	1.07899				1.09%
Y	700186.9	98.0168	%	0.74410				0.76%
Ag 328.068†	-99.3	-0.213805	ug/L	0.2478395	-0.213805	ug/L	0.2478395	115.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	1.2	1.81624	ug/L	9.102004	1.81624	ug/L	9.102004	501.14%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	-20.3	-2.08015	ug/L	1.456794	-2.08015	ug/L	1.456794	70.03%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2532.7	11.5756	ug/L	0.62778	11.5756	ug/L	0.62778	5.42%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-42.2	-0.394557	ug/L	0.0542734	-0.394557	ug/L	0.0542734	13.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-445.3	-0.0737661	ug/L	0.04282809	-0.0737661	ug/L	0.04282809	58.06%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	-72.7	-7.02368	ug/L	9.056958	-7.02368	ug/L	9.056958	128.95%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	-81.6	-0.414945	ug/L	0.0559936	-0.414945	ug/L	0.0559936	13.49%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-29.5	-0.385220	ug/L	0.1488858	-0.385220	ug/L	0.1488858	38.65%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-2.5	-0.0102057	ug/L	0.16358247	-0.0102057	ug/L	0.16358247	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-56.3	-0.231394	ug/L	0.9238013	-0.231394	ug/L	0.9238013	399.23%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	-13.3	-2.82069	ug/L	2.647088	-2.82069	ug/L	2.647088	93.85%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	-94.3	-26.3278	ug/L	40.68344	-26.3278	ug/L	40.68344	154.53%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	-30.5	-17.4210	ug/L	1.01693	-17.4210	ug/L	1.01693	5.84%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	-497.2	-0.632176	ug/L	0.0767198	-0.632176	ug/L	0.0767198	12.14%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.3	0.209257	ug/L	0.4798451	0.209257	ug/L	0.4798451	229.31%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	-26.1	-0.193324	ug/L	1.9425894	-0.193324	ug/L	1.9425894	>999.9%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	-71.7	-0.553642	ug/L	0.1545096	-0.553642	ug/L	0.1545096	27.91%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	39.0	0.631553	ug/L	0.2283665	0.631553	ug/L	0.2283665	36.16%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.6	0.153693	ug/L	1.8976945	0.153693	ug/L	1.8976945	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-4.9	-0.367650	ug/L	2.4141278	-0.367650	ug/L	2.4141278	656.64%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	-30.5	-0.471924	ug/L	0.2595536	-0.471924	ug/L	0.2595536	55.00%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	2.8	0.295446	ug/L	0.2805176	0.295446	ug/L	0.2805176	94.95%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-128.7	-0.467681	ug/L	0.1205631	-0.467681	ug/L	0.1205631	25.78%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-21.8	-0.260973	ug/L	0.1180670	-0.260973	ug/L	0.1180670	45.24%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	-11.4	-0.532786	ug/L	0.1420610	-0.532786	ug/L	0.1420610	26.66%
QC value within limits for Sn 189.927 Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179009.1 File : met09_sn Time : 07-SEP-2012 12:56
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20220

Analyte	Ch	Quant	IQL	Units	Flags
Arsenic	A	[2.630]	5.000	ug/L	
Cadmium	A	[-1.863]	5.000	ug/L	!a-
Lead	A	[4.696]	5.000	ug/L	!a+
Zinc	A	[5.109]	20.00	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19210	ug/L	96
Copper	A	20000	20740	ug/L	104
Manganese	A	20000	18310	ug/L	92
Nickel	A	20000	17970	ug/L	90
Vanadium	A	20000	20110	ug/L	101
Aluminum	R	500000	537100	ug/L	107
Calcium	R	500000	502600	ug/L	101
Iron	R	200000	204000	ug/L	102
Magnesium	R	500000	509200	ug/L	102
Titanium	R	20000	21220	ug/L	106

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5242601	-15.91

!=warning +=high bias -=low bias a=ICSA

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: s20220 **Date Collected: 9/7/2012 12:56:00 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:14 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20220

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: s20220

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5242601.2	84.0857	%	0.39162				0.47%
Y	637450.3	89.2345	%	2.23444				2.50%
Ag 328.068†	1179.2	2.53965	ug/L	0.415788	2.53965	ug/L	0.415788	16.37%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	357343.3	537101	ug/L	1127.2	537101	ug/L	1127.2	0.21%
QC value within limits for Al 308.215 R Recovery = 107.42%								
As 188.979†	25.7	2.63011	ug/L	6.092960	2.63011	ug/L	6.092960	231.66%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	11967.6	54.6967	ug/L	2.48057	54.6967	ug/L	2.48057	4.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	417.9	3.90470	ug/L	0.280511	3.90470	ug/L	0.280511	7.18%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-273.0	-0.0452244	ug/L	0.07010766	-0.0452244	ug/L	0.07010766	155.02%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	5205445.8	502599	ug/L	18200.5	502599	ug/L	18200.5	3.62%
QC value within limits for Ca 315.887 R Recovery = 100.52%								
Cd 214.440†	-366.4	-1.86251	ug/L	0.453512	-1.86251	ug/L	0.453512	24.35%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	3437.8	-1.62351	ug/L	1.640190	-1.62351	ug/L	1.640190	101.03%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	4619638.0	19211.9	ug/L	68.88	19211.9	ug/L	68.88	0.36%
QC value within limits for Cr 267.716 Recovery = 96.06%								
Cu 324.752†	5046807.7	20736.0	ug/L	26.27	20736.0	ug/L	26.27	0.13%
QC value within limits for Cu 324.752 Recovery = 103.68%								
Fe 238.204 R†	965270.8	203971	ug/L	7469.4	203971	ug/L	7469.4	3.66%
QC value within limits for Fe 238.204 R Recovery = 101.99%								
K 766.490 R†	762.2	212.873	ug/L	10.8915	212.873	ug/L	10.8915	5.12%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	891496.7	509208	ug/L	18389.8	509208	ug/L	18389.8	3.61%
QC value within limits for Mg 279.077 R Recovery = 101.84%								
Mn 257.610†	14398124.3	18305.5	ug/L	126.47	18305.5	ug/L	126.47	0.69%
QC value within limits for Mn 257.610 Recovery = 91.53%								
Mo 202.031†	-99.7	-2.52666	ug/L	0.156602	-2.52666	ug/L	0.156602	6.20%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	11166.2	82.7668	ug/L	2.21643	82.7668	ug/L	2.21643	2.68%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	2328631.7	17973.1	ug/L	64.77	17973.1	ug/L	64.77	0.36%
QC value less than the lower limit for Ni 231.604 Recovery = 89.87%								
Pb 220.353†	290.1	4.69638	ug/L	1.004023	4.69638	ug/L	1.004023	21.38%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-24.7	-1.44462	ug/L	15.022230	-1.44462	ug/L	15.022230	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	39.3	2.96088	ug/L	19.335328	2.96088	ug/L	19.335328	653.03%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	1373460.3	21220.8	ug/L	313.87	21220.8	ug/L	313.87	1.48%
QC value within limits for Ti 334.940 R Recovery = 106.10%								
Tl 190.801†	-81.7	-8.72107	ug/L	12.755957	-8.72107	ug/L	12.755957	146.27%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	5533063.1	20113.4	ug/L	56.06	20113.4	ug/L	56.06	0.28%
QC value within limits for V 292.402 Recovery = 100.57%								
Zn 206.200†	426.2	5.10890	ug/L	1.052748	5.10890	ug/L	1.052748	20.61%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	-294.4	-13.7047	ug/L	4.01009	-13.7047	ug/L	4.01009	29.26%
QC value within limits for Sn 189.927 Recovery = Not calculated								

QC Failed. Continue with analysis.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179010.1 File : met09_sn Time : 07-SEP-2012 13:14
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	525.6	ug/L	5	20	
Cadmium	A	1000	1010	ug/L	1	20	
Copper	A	500.0	558.6	ug/L	12	20	
Lead	A	1000	930.6	ug/L	-7	20	
Manganese	A	500.0	517.5	ug/L	4	20	
Vanadium	A	500.0	529.4	ug/L	6	20	
Zinc	A	1000	981.3	ug/L	-2	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5145166	-17.48

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: ICALBLK, **Date Collected: 9/7/2012 1:14:25 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
User canceled analysis.

==========

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: s20222 **Date Collected: 9/7/2012 1:14:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20222

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: s20222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5145165.9	82.5230	%	0.29801				0.36%
Y	634780.2	88.8607	%	1.08357				1.22%
Ag 328.068†	522831.8	1126.02	ug/L	4.944	1126.02	ug/L	4.944	0.44%
QC value within limits for Ag 328.068 Recovery = 112.60%								
Al 308.215 R†	338483.2	508754	ug/L	2324.7	508754	ug/L	2324.7	0.46%
QC value within limits for Al 308.215 R Recovery = 101.75%								
As 188.979†	5140.2	525.632	ug/L	6.9447	525.632	ug/L	6.9447	1.32%
QC value within limits for As 188.979 Recovery = 105.13%								
B 249.677†	11309.8	51.6901	ug/L	2.87033	51.6901	ug/L	2.87033	5.55%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	55082.8	514.632	ug/L	2.0708	514.632	ug/L	2.0708	0.40%
QC value within limits for Ba 233.527 Recovery = 102.93%								
Be 313.107†	3221291.1	533.595	ug/L	2.3074	533.595	ug/L	2.3074	0.43%
QC value within limits for Be 313.107 Recovery = 106.72%								
Ca 315.887 R†	5000715.2	482832	ug/L	2769.5	482832	ug/L	2769.5	0.57%
QC value within limits for Ca 315.887 R Recovery = 96.57%								
Cd 214.440†	198786.2	1010.43	ug/L	5.985	1010.43	ug/L	5.985	0.59%
QC value within limits for Cd 214.440 Recovery = 101.04%								
Co 228.616†	39012.7	465.685	ug/L	2.6282	465.685	ug/L	2.6282	0.56%
QC value within limits for Co 228.616 Recovery = 93.14%								
Cr 267.716†	119339.2	496.302	ug/L	1.0962	496.302	ug/L	1.0962	0.22%
QC value within limits for Cr 267.716 Recovery = 99.26%								
Cu 324.752†	135944.1	558.558	ug/L	3.6359	558.558	ug/L	3.6359	0.65%
QC value within limits for Cu 324.752 Recovery = 111.71%								
Fe 238.204 R†	912967.5	192919	ug/L	1070.9	192919	ug/L	1070.9	0.56%
QC value within limits for Fe 238.204 R Recovery = 96.46%								
K 766.490 R†	637.1	177.915	ug/L	76.8370	177.915	ug/L	76.8370	43.19%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	872429.8	498318	ug/L	2662.3	498318	ug/L	2662.3	0.53%
QC value within limits for Mg 279.077 R Recovery = 99.66%								
Mn 257.610†	407062.3	517.531	ug/L	2.8329	517.531	ug/L	2.8329	0.55%
QC value within limits for Mn 257.610 Recovery = 103.51%								
Mo 202.031†	19858.5	503.384	ug/L	0.8327	503.384	ug/L	0.8327	0.17%
QC value within limits for Mo 202.031 Recovery = 100.68%								
Na 589.592 R†	10270.7	76.1295	ug/L	5.42440	76.1295	ug/L	5.42440	7.13%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	119494.8	922.298	ug/L	5.1873	922.298	ug/L	5.1873	0.56%
QC value within limits for Ni 231.604 Recovery = 92.23%								
Pb 220.353†	57479.7	930.629	ug/L	3.1867	930.629	ug/L	3.1867	0.34%
QC value within limits for Pb 220.353 Recovery = 93.06%								
Sb 206.836†	9233.4	540.498	ug/L	22.2817	540.498	ug/L	22.2817	4.12%
QC value within limits for Sb 206.836 Recovery = 108.10%								
Se 196.026†	6696.7	504.483	ug/L	10.3888	504.483	ug/L	10.3888	2.06%
QC value within limits for Se 196.026 Recovery = 100.90%								
Ti 334.940 R†	1344203.0	20768.8	ug/L	165.53	20768.8	ug/L	165.53	0.80%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	4250.3	453.800	ug/L	4.4202	453.800	ug/L	4.4202	0.97%
QC value within limits for Tl 190.801 Recovery = 90.76%								
V 292.402†	145630.4	529.386	ug/L	1.1814	529.386	ug/L	1.1814	0.22%
QC value within limits for V 292.402 Recovery = 105.88%								
Zn 206.200†	81863.7	981.328	ug/L	6.1543	981.328	ug/L	6.1543	0.63%
QC value within limits for Zn 206.200 Recovery = 98.13%								

Sn 189.927† -287.0 -13.3588 ug/L 2.64223 -13.3588 ug/L 2.64223 19.78%
QC value within limits for Sn 189.927 Recovery = Not calculated
All analyte(s) passed QC.

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179012.1 File : met09_sn Time : 07-SEP-2012 13:23
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20319

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	20.00	17.58	ug/L	-12	30	
Cadmium	A	20.00	20.03	ug/L	0	30	
Copper	A	20.00	20.46	ug/L	2	30	
Lead	A	20.00	20.03	ug/L	0	30	
Manganese	A	20.00	21.40	ug/L	7	30	
Vanadium	A	20.00	19.70	ug/L	-2	30	
Zinc	A	80.00	83.12	ug/L	4	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6025843	-3.35

User canceled analysis.

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Sequence No.: 11 **Autosampler Location: 7**
Sample ID: s20319 **Date Collected: 9/7/2012 1:23:35 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20319

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: s20319

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6025842.5	96.6481	%	0.73078				0.76%
Y	691245.8	96.7651	%	2.36012				2.44%
Ag 328.068†	9286.2	19.9998	ug/L	0.09579	19.9998	ug/L	0.09579	0.48%
QC value within limits for Ag 328.068 Recovery = 100.00%								
Al 308.215 R†	329.7	495.522	ug/L	13.5368	495.522	ug/L	13.5368	2.73%
QC value within limits for Al 308.215 R Recovery = 123.88%								
As 188.979†	171.9	17.5756	ug/L	0.39716	17.5756	ug/L	0.39716	2.26%
QC value within limits for As 188.979 Recovery = 87.88%								
B 249.677†	88477.0	404.375	ug/L	7.1499	404.375	ug/L	7.1499	1.77%
QC value within limits for B 249.677 Recovery = 101.09%								
Ba 233.527†	2172.1	20.2934	ug/L	0.15412	20.2934	ug/L	0.15412	0.76%
QC value within limits for Ba 233.527 Recovery = 101.47%								
Be 313.107†	50171.5	8.31071	ug/L	0.121233	8.31071	ug/L	0.121233	1.46%
QC value within limits for Be 313.107 Recovery = 103.88%								
Ca 315.887 R†	9171.0	885.488	ug/L	30.1977	885.488	ug/L	30.1977	3.41%
QC value within limits for Ca 315.887 R Recovery = 110.69%								
Cd 214.440†	3941.1	20.0326	ug/L	0.17488	20.0326	ug/L	0.17488	0.87%
QC value within limits for Cd 214.440 Recovery = 100.16%								
Co 228.616†	1509.7	19.6974	ug/L	0.22312	19.6974	ug/L	0.22312	1.13%
QC value within limits for Co 228.616 Recovery = 98.49%								
Cr 267.716†	4910.3	20.4207	ug/L	0.61161	20.4207	ug/L	0.61161	3.00%
QC value within limits for Cr 267.716 Recovery = 102.10%								
Cu 324.752†	4978.6	20.4559	ug/L	0.76421	20.4559	ug/L	0.76421	3.74%
QC value within limits for Cu 324.752 Recovery = 102.28%								
Fe 238.204 R†	2187.5	462.239	ug/L	11.9911	462.239	ug/L	11.9911	2.59%
QC value within limits for Fe 238.204 R Recovery = 115.56%								
K 766.490 R†	6598.6	1842.81	ug/L	36.087	1842.81	ug/L	36.087	1.96%
QC value within limits for K 766.490 R Recovery = 92.14%								
Mg 279.077 R†	1586.0	905.890	ug/L	20.0242	905.890	ug/L	20.0242	2.21%
QC value within limits for Mg 279.077 R Recovery = 113.24%								
Mn 257.610†	16834.7	21.4033	ug/L	0.22262	21.4033	ug/L	0.22262	1.04%
QC value within limits for Mn 257.610 Recovery = 107.02%								
Mo 202.031†	698.0	17.6942	ug/L	0.23535	17.6942	ug/L	0.23535	1.33%
QC value within limits for Mo 202.031 Recovery = 88.47%								
Na 589.592 R†	285208.8	2114.05	ug/L	46.741	2114.05	ug/L	46.741	2.21%
QC value within limits for Na 589.592 R Recovery = 105.70%								
Ni 231.604†	2555.8	19.7265	ug/L	0.20640	19.7265	ug/L	0.20640	1.05%
QC value within limits for Ni 231.604 Recovery = 98.63%								
Pb 220.353†	1237.2	20.0308	ug/L	0.67234	20.0308	ug/L	0.67234	3.36%
QC value within limits for Pb 220.353 Recovery = 100.15%								
Sb 206.836†	740.7	43.3596	ug/L	1.97025	43.3596	ug/L	1.97025	4.54%
QC value within limits for Sb 206.836 Recovery = 108.40%								
Se 196.026†	494.0	37.2157	ug/L	0.53074	37.2157	ug/L	0.53074	1.43%
QC value within limits for Se 196.026 Recovery = 93.04%								
Ti 334.940 R†	2699.9	41.7158	ug/L	0.55257	41.7158	ug/L	0.55257	1.32%
QC value within limits for Ti 334.940 R Recovery = 104.29%								
Tl 190.801†	361.0	38.5462	ug/L	0.02030	38.5462	ug/L	0.02030	0.05%
QC value within limits for Tl 190.801 Recovery = 96.37%								
V 292.402†	5418.8	19.6980	ug/L	0.26925	19.6980	ug/L	0.26925	1.37%
QC value within limits for V 292.402 Recovery = 98.49%								
Zn 206.200†	6933.8	83.1174	ug/L	0.72624	83.1174	ug/L	0.72624	0.87%
QC value within limits for Zn 206.200 Recovery = 103.90%								
Sn 189.927†	3538.7	164.742	ug/L	1.3364	164.742	ug/L	1.3364	0.81%
QC value within limits for Sn 189.927 Recovery = 102.96%								

All analyte(s) passed QC.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179022.1 File : met09_sn Time : 07-SEP-2012 14:11
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	8.4041	10.172	5000	5201	ug/L	4	10	
Cadmium	A	192.81	206.61	5000	5251	ug/L	5	10	
Copper	A	238.58	257.32	5000	5286	ug/L	6	10	
Lead	A	62.555	61.909	5000	5012	ug/L	0	10	
Manganese	A	791.78	823.36	5000	5234	ug/L	5	10	
Vanadium	A	263.62	289.11	5000	5255	ug/L	5	10	
Zinc	A	82.631	86.477	5000	5183	ug/L	4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5733344	-8.04

==========

Sequence No.: 21 **Autosampler Location: 218**
Sample ID: s20645 **Date Collected: 9/7/2012 2:11:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20645

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: s20645

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5733344.1	91.9567	%	0.48583				0.53%
Y	683473.3	95.6771	%	1.56371				1.63%
Ag 328.068†	474371.9	1021.66	ug/L	9.716	1021.66	ug/L	9.716	0.95%
QC value within limits for Ag 328.068 Recovery = 102.17%								
Al 308.215 R†	14155.2	21275.8	ug/L	660.53	21275.8	ug/L	660.53	3.10%
QC value within limits for Al 308.215 R Recovery = 106.38%								
As 188.979†	50861.5	5201.09	ug/L	51.204	5201.09	ug/L	51.204	0.98%
QC value within limits for As 188.979 Recovery = 104.02%								
B 249.677†	1162761.0	5314.28	ug/L	12.171	5314.28	ug/L	12.171	0.23%
QC value within limits for B 249.677 Recovery = 106.29%								
Ba 233.527†	560726.4	5238.80	ug/L	15.108	5238.80	ug/L	15.108	0.29%
QC value within limits for Ba 233.527 Recovery = 104.78%								
Be 313.107†	3280974.6	543.481	ug/L	1.0799	543.481	ug/L	1.0799	0.20%
QC value within limits for Be 313.107 Recovery = 108.70%								
Ca 315.887 R†	219398.2	21183.5	ug/L	687.73	21183.5	ug/L	687.73	3.25%
QC value within limits for Ca 315.887 R Recovery = 105.92%								
Cd 214.440†	1033027.4	5250.87	ug/L	4.766	5250.87	ug/L	4.766	0.09%
QC value within limits for Cd 214.440 Recovery = 105.02%								
Co 228.616†	399633.7	5226.99	ug/L	7.427	5226.99	ug/L	7.427	0.14%
QC value within limits for Co 228.616 Recovery = 104.54%								
Cr 267.716†	1252065.6	5207.03	ug/L	13.601	5207.03	ug/L	13.601	0.26%
QC value within limits for Cr 267.716 Recovery = 104.14%								
Cu 324.752†	1286606.8	5286.32	ug/L	18.043	5286.32	ug/L	18.043	0.34%
QC value within limits for Cu 324.752 Recovery = 105.73%								
Fe 238.204 R†	103149.6	21796.5	ug/L	591.04	21796.5	ug/L	591.04	2.71%
QC value within limits for Fe 238.204 R Recovery = 108.98%								
K 766.490 R†	70588.8	19713.6	ug/L	667.32	19713.6	ug/L	667.32	3.39%
QC value within limits for K 766.490 R Recovery = 98.57%								
Mg 279.077 R†	36771.1	21003.1	ug/L	682.96	21003.1	ug/L	682.96	3.25%
QC value within limits for Mg 279.077 R Recovery = 105.02%								
Mn 257.610†	4116824.0	5234.05	ug/L	11.933	5234.05	ug/L	11.933	0.23%
QC value within limits for Mn 257.610 Recovery = 104.68%								
Mo 202.031†	206706.4	5239.72	ug/L	43.263	5239.72	ug/L	43.263	0.83%
QC value within limits for Mo 202.031 Recovery = 104.79%								
Na 589.592 R†	3033323.6	22483.8	ug/L	731.16	22483.8	ug/L	731.16	3.25%
QC value greater than the upper limit for Na 589.592 R Recovery = 112.42%								
Ni 231.604†	672047.4	5187.07	ug/L	9.738	5187.07	ug/L	9.738	0.19%
QC value within limits for Ni 231.604 Recovery = 103.74%								
Pb 220.353†	309545.2	5011.72	ug/L	28.859	5011.72	ug/L	28.859	0.58%
QC value within limits for Pb 220.353 Recovery = 100.23%								
Sb 206.836†	88032.5	5153.18	ug/L	44.486	5153.18	ug/L	44.486	0.86%
QC value within limits for Sb 206.836 Recovery = 103.06%								
Se 196.026†	68991.1	5197.34	ug/L	67.182	5197.34	ug/L	67.182	1.29%
QC value within limits for Se 196.026 Recovery = 103.95%								
Ti 334.940 R†	334878.8	5174.09	ug/L	92.010	5174.09	ug/L	92.010	1.78%
QC value within limits for Ti 334.940 R Recovery = 103.48%								
Tl 190.801†	47912.4	5115.50	ug/L	44.798	5115.50	ug/L	44.798	0.88%
QC value within limits for Tl 190.801 Recovery = 102.31%								
V 292.402†	1445572.1	5254.85	ug/L	11.933	5254.85	ug/L	11.933	0.23%
QC value within limits for V 292.402 Recovery = 105.10%								
Zn 206.200†	432383.3	5183.12	ug/L	8.384	5183.12	ug/L	8.384	0.16%
QC value within limits for Zn 206.200 Recovery = 103.66%								
Sn 189.927†	110651.0	5151.29	ug/L	34.802	5151.29	ug/L	34.802	0.68%
QC value within limits for Sn 189.927 Recovery = 103.03%								

QC Failed. Continue with analysis.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179023.1 File : met09_sn Time : 07-SEP-2012 14:16
Cal : 92362179001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.971	ug/L	
Cadmium	A	ND	5.000	0.7671	ug/L	
Copper	A	ND	5.000	2.558	ug/L	
Lead	A	ND	5.000	2.159	ug/L	
Manganese	A	ND	5.000	0.8105	ug/L	
Vanadium	A	ND	5.000	0.9140	ug/L	
Zinc	A	ND	20.00	4.517	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6156635	-1.25

Sequence No.: 22 **Autosampler Location: 221**
Sample ID: ccb **Date Collected: 9/7/2012 2:16:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ccb

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: ccb

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6156634.7	98.7458	%	0.41651				0.42%
Y	713613.3	99.8963	%	0.63800				0.64%
Ag 328.068†	-212.9	-0.458540	ug/L	0.2081658	-0.458540	ug/L	0.2081658	45.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	-0.6	-0.874714	ug/L	2.0803097	-0.874714	ug/L	2.0803097	237.83%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	-4.3	-0.439515	ug/L	0.5160609	-0.439515	ug/L	0.5160609	117.42%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-1122.6	-5.13056	ug/L	0.236842	-5.13056	ug/L	0.236842	4.62%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-32.7	-0.305814	ug/L	0.0148402	-0.305814	ug/L	0.0148402	4.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-789.5	-0.130783	ug/L	0.0486082	-0.130783	ug/L	0.0486082	37.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	-401.7	-38.7887	ug/L	8.43113	-38.7887	ug/L	8.43113	21.74%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	-127.1	-0.646278	ug/L	0.0115592	-0.646278	ug/L	0.0115592	1.79%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-27.6	-0.361757	ug/L	0.0556837	-0.361757	ug/L	0.0556837	15.39%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-50.2	-0.208920	ug/L	0.2064116	-0.208920	ug/L	0.2064116	98.80%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-93.0	-0.382168	ug/L	0.0964055	-0.382168	ug/L	0.0964055	25.23%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	-41.1	-8.68399	ug/L	0.657132	-8.68399	ug/L	0.657132	7.57%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	159.5	44.5307	ug/L	81.92887	44.5307	ug/L	81.92887	183.98%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	-47.4	-27.0962	ug/L	2.23852	-27.0962	ug/L	2.23852	8.26%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	-474.1	-0.602759	ug/L	0.0210429	-0.602759	ug/L	0.0210429	3.49%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-15.7	-0.398102	ug/L	0.3212588	-0.398102	ug/L	0.3212588	80.70%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	-741.1	-5.49293	ug/L	2.020196	-5.49293	ug/L	2.020196	36.78%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	-65.6	-0.506513	ug/L	0.0812913	-0.506513	ug/L	0.0812913	16.05%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-88.7	-1.43530	ug/L	0.468422	-1.43530	ug/L	0.468422	32.64%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-9.8	-0.571217	ug/L	1.0363253	-0.571217	ug/L	1.0363253	181.42%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-17.5	-1.31986	ug/L	0.772735	-1.31986	ug/L	0.772735	58.55%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	-19.1	-0.295357	ug/L	0.3401914	-0.295357	ug/L	0.3401914	115.18%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	-5.6	-0.598002	ug/L	0.9237982	-0.598002	ug/L	0.9237982	154.48%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-41.2	-0.149774	ug/L	0.5749624	-0.149774	ug/L	0.5749624	383.89%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-77.0	-0.923346	ug/L	0.0517519	-0.923346	ug/L	0.0517519	5.60%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	-10.4	-0.483833	ug/L	0.0748930	-0.483833	ug/L	0.0748930	15.48%
QC value within limits for Sn 189.927 Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179034.1 File : met09_sn Time : 07-SEP-2012 15:11
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	532.7	ug/L	7	20	
Cadmium	A	1000	1005	ug/L	1	20	
Copper	A	500.0	558.8	ug/L	12	20	
Lead	A	1000	925.2	ug/L	-7	20	
Manganese	A	500.0	511.8	ug/L	2	20	
Vanadium	A	500.0	528.1	ug/L	6	20	
Zinc	A	1000	991.1	ug/L	-1	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5063588	-18.79

Sequence No.: 33 **Autosampler Location: 10**
Sample ID: s20222 **Date Collected: 9/7/2012 3:11:49 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20222

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: s20222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5063588.1	81.2145	%	0.08905				0.11%
Y	624726.5	87.4533	%	0.56995				0.65%
Ag 328.068†	523244.1	1126.91	ug/L	6.773	1126.91	ug/L	6.773	0.60%
QC value within limits for Ag 328.068 Recovery = 112.69%								
Al 308.215 R†	362391.5	544689	ug/L	2952.7	544689	ug/L	2952.7	0.54%
QC value within limits for Al 308.215 R Recovery = 108.94%								
As 188.979†	5209.8	532.749	ug/L	5.6029	532.749	ug/L	5.6029	1.05%
QC value within limits for As 188.979 Recovery = 106.55%								
B 249.677†	10271.4	46.9445	ug/L	3.10415	46.9445	ug/L	3.10415	6.61%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	55200.0	515.727	ug/L	5.3240	515.727	ug/L	5.3240	1.03%
QC value within limits for Ba 233.527 Recovery = 103.15%								
Be 313.107†	3212611.6	532.157	ug/L	2.2453	532.157	ug/L	2.2453	0.42%
QC value within limits for Be 313.107 Recovery = 106.43%								
Ca 315.887 R†	5220679.2	504070	ug/L	1440.9	504070	ug/L	1440.9	0.29%
QC value within limits for Ca 315.887 R Recovery = 100.81%								
Cd 214.440†	197773.7	1005.28	ug/L	5.881	1005.28	ug/L	5.881	0.58%
QC value within limits for Cd 214.440 Recovery = 100.53%								
Co 228.616†	39095.8	464.893	ug/L	4.2077	464.893	ug/L	4.2077	0.91%
QC value within limits for Co 228.616 Recovery = 92.98%								
Cr 267.716†	118918.4	494.552	ug/L	5.1370	494.552	ug/L	5.1370	1.04%
QC value within limits for Cr 267.716 Recovery = 98.91%								
Cu 324.752†	135994.9	558.766	ug/L	1.9477	558.766	ug/L	1.9477	0.35%
QC value within limits for Cu 324.752 Recovery = 111.75%								
Fe 238.204 R†	975715.7	206178	ug/L	1008.2	206178	ug/L	1008.2	0.49%
QC value within limits for Fe 238.204 R Recovery = 103.09%								
K 766.490 R†	1044.2	291.617	ug/L	41.4291	291.617	ug/L	41.4291	14.21%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	891467.4	509192	ug/L	2330.5	509192	ug/L	2330.5	0.46%
QC value within limits for Mg 279.077 R Recovery = 101.84%								
Mn 257.610†	402549.0	511.793	ug/L	3.9035	511.793	ug/L	3.9035	0.76%
QC value within limits for Mn 257.610 Recovery = 102.36%								
Mo 202.031†	20247.4	513.242	ug/L	5.1492	513.242	ug/L	5.1492	1.00%
QC value within limits for Mo 202.031 Recovery = 102.65%								
Na 589.592 R†	106147.8	786.796	ug/L	6.3806	786.796	ug/L	6.3806	0.81%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	118924.7	917.897	ug/L	9.5641	917.897	ug/L	9.5641	1.04%
QC value within limits for Ni 231.604 Recovery = 91.79%								
Pb 220.353†	57143.0	925.178	ug/L	19.1721	925.178	ug/L	19.1721	2.07%
QC value within limits for Pb 220.353 Recovery = 92.52%								
Sb 206.836†	8988.9	526.188	ug/L	28.5250	526.188	ug/L	28.5250	5.42%
QC value within limits for Sb 206.836 Recovery = 105.24%								
Se 196.026†	7253.2	546.408	ug/L	11.3816	546.408	ug/L	11.3816	2.08%
QC value within limits for Se 196.026 Recovery = 109.28%								
Ti 334.940 R†	1399533.7	21623.7	ug/L	173.42	21623.7	ug/L	173.42	0.80%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	4373.4	466.938	ug/L	6.6688	466.938	ug/L	6.6688	1.43%
QC value within limits for Tl 190.801 Recovery = 93.39%								
V 292.402†	145265.9	528.061	ug/L	5.6296	528.061	ug/L	5.6296	1.07%
QC value within limits for V 292.402 Recovery = 105.61%								
Zn 206.200†	82682.4	991.142	ug/L	10.0091	991.142	ug/L	10.0091	1.01%
QC value within limits for Zn 206.200 Recovery = 99.11%								
Sn 189.927†	-285.8	-13.3052	ug/L	3.25249	-13.3052	ug/L	3.25249	24.45%
QC value within limits for Sn 189.927 Recovery = Not calculated								

All analyte(s) passed QC.

Mercury Raw Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052362260

Instrument : MET34
Method : EPA 7470A

Begun : 09/07/12 13:40
SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	190269	ICALBLK	CAL BLANK			09/07/12 13:40	1.0		
002	190269	ICAL	CAL 1			09/07/12 13:42	1.0	1	
003	190269	ICAL	CAL 2			09/07/12 13:43	1.0	1	
004	190269	ICAL	CAL 3			09/07/12 13:45	1.0	1	
005	190269	ICAL	CAL 4			09/07/12 13:47	1.0	1	
006	190269	ICAL	CAL 5			09/07/12 13:49	1.0	1	
007	190269	ICV				09/07/12 13:52	1.0	2	
008	190269	ICB				09/07/12 13:54	1.0		
009	190269	BLANK	QC655196	Water	190269	09/07/12 13:56	1.0		
010	190269	LCS	QC655197	Water	190269	09/07/12 13:57	1.0		
011	190269	MSS	239391-003	Water	190269	09/07/12 13:59	1.0		
012	190269	MS	QC655198	Water	190269	09/07/12 14:01	1.0		
013	190269	MSD	QC655199	Water	190269	09/07/12 14:03	1.0		
014	190269	SER	QC655200	Water	190269	09/07/12 14:04	5.0		
015	190269	SAMPLE	239391-002	Filtrate	190269	09/07/12 14:06	1.0		
016	190269	SAMPLE	239391-004	Filtrate	190269	09/07/12 14:08	1.0		
017	190269	SAMPLE	239391-005	Water	190269	09/07/12 14:09	1.0		
018	190269	SAMPLE	239267-002	Water	190269	09/07/12 14:11	1.0		
019	190269	CCV				09/07/12 14:13	1.0	3	
020	190269	CCB				09/07/12 14:14	1.0		
021	190269	SAMPLE	239382-001	Water	190269	09/07/12 14:16	1.0		
022	190269	SAMPLE	239403-007	Water	190269	09/07/12 14:18	1.0		
023	190269	SAMPLE	239403-008	Water	190269	09/07/12 14:20	1.0		
024	190269	SAMPLE	239404-015	Water	190269	09/07/12 14:21	1.0		
025	190269	SAMPLE	239426-001	Water	190269	09/07/12 14:23	1.0		
026	190269	SAMPLE	239427-001	Water	190269	09/07/12 14:25	1.0		
027	190269	XSAMPLE	239267-005	Filtrate	190269	09/07/12 14:26	1.0		
028	190269	SAMPLE	239267-005	Filtrate	190269	09/07/12 14:31	1.0		
029	190269	CCV				09/07/12 14:32	1.0	3	
030	190269	CCB				09/07/12 14:34	1.0		
031	190269	BLANK	QC655201	WET Leachate	190270	09/07/12 14:51	1.0		
032	190269	BS	QC655202	WET Leachate	190270	09/07/12 14:53	1.0		
033	190269	BSD	QC655203	WET Leachate	190270	09/07/12 14:55	1.0		
034	190269	MSS	239300-001	WET Leachate	190270	09/07/12 14:56	1.0		
035	190269	MS	QC655204	WET Leachate	190270	09/07/12 14:58	1.0		
036	190269	MSD	QC655205	WET Leachate	190270	09/07/12 15:00	1.0		
037	190269	SAMPLE	239300-002	WET Leachate	190270	09/07/12 15:01	1.0		
038	190269	SAMPLE	239300-003	WET Leachate	190270	09/07/12 15:03	1.0		
039	190269	SAMPLE	239300-004	WET Leachate	190270	09/07/12 15:05	1.0		
040	190269	SAMPLE	239300-005	WET Leachate	190270	09/07/12 15:07	1.0		
041	190269	CCV				09/07/12 15:08	1.0	3	
042	190269	CCB				09/07/12 15:10	1.0		
043	190269	SAMPLE	239300-006	WET Leachate	190270	09/07/12 15:12	1.0		
044	190269	SAMPLE	239300-007	WET Leachate	190270	09/07/12 15:13	1.0		
045	190269	SAMPLE	239300-008	WET Leachate	190270	09/07/12 15:15	1.0		
046	190269	SAMPLE	239300-009	WET Leachate	190270	09/07/12 15:17	1.0		
047	190269	SAMPLE	239300-010	WET Leachate	190270	09/07/12 15:19	1.0		
048	190269	SAMPLE	239300-011	WET Leachate	190270	09/07/12 15:20	1.0		
049	190269	SAMPLE	239296-001	WET Leachate	190270	09/07/12 15:22	1.0		
050	190269	SAMPLE	239296-002	WET Leachate	190270	09/07/12 15:24	1.0		
051	190269	SAMPLE	239296-003	WET Leachate	190270	09/07/12 15:25	1.0		
052	190269	SAMPLE	239296-004	WET Leachate	190270	09/07/12 15:27	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052362260

Instrument : MET34
Method : EPA 7470A
Begun : 09/07/12 13:40
SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	190269	CCV				09/07/12 15:29	1.0	3	
054	190269	CCB				09/07/12 15:30	1.0		
055	190269	SAMPLE	239296-005	WET Leachate	190270	09/07/12 15:32	1.0		
056	190269	SAMPLE	239296-006	WET Leachate	190270	09/07/12 15:34	1.0		
057	190269	SAMPLE	239296-007	WET Leachate	190270	09/07/12 15:36	1.0		
058	190269	SAMPLE	239296-008	WET Leachate	190270	09/07/12 15:37	1.0		
059	190269	SAMPLE	239296-009	WET Leachate	190270	09/07/12 15:39	1.0		
060	190269	CCV				09/07/12 15:41	1.0	3	
061	190269	CCB				09/07/12 15:42	1.0		

CRT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 61.

CRT 09/07/12 : On run 27, the sample vial was not on the rack during analysis. The run was aborted and the sample was reran on run 28.

Standards used: 1=S20657 2=S20659 3=S20660

Method: m34hgppb Operator: Admin Date of Analysis: 07 Sep 2012 12:54:40

Date	Sample ID	Extended ID	Type	µ Abs.	Conc.	Units
07 Sep 2012 13:40:32	CAL Blank - 1		S	312	-	ppb
07 Sep 2012 13:42:16	CAL 1 - 1		S	1266	-	ppb
07 Sep 2012 13:43:59	CAL 2 - 1		S	2685	-	ppb
07 Sep 2012 13:45:41	CAL 3 - 1		S	9497	-	ppb
07 Sep 2012 13:47:24	CAL 4 - 1		S	23626	-	ppb
07 Sep 2012 13:49:06	CAL 5 - 1		S	47694	-	ppb
07 Sep 2012 13:52:51	ICV,s20659 - 1		C	22061	92.3% 4.6155	ppb
07 Sep 2012 13:54:31	ICB - 1		C	145	-0.0161	ppb
07 Sep 2012 13:56:14	QC655196 - 1	190269,1	U	246	0.0053	ppb
07 Sep 2012 13:57:56	QC655197 - 1	190269,1	U	11198	2.3198	ppb
07 Sep 2012 13:59:38	239391-003 - 1	190269,1	U	644	0.0894	ppb
07 Sep 2012 14:01:19	QC655198 - 1	190269,1	U	10652	2.2044	ppb
07 Sep 2012 14:03:01	QC655199 - 1	190269,1	U	10371	2.1450	ppb
07 Sep 2012 14:04:44	QC655200 - 1	190269,5	U	-131	-0.0744	ppb
07 Sep 2012 14:06:27	239391-002 - 1	190269,1	U	625	0.0854	ppb
07 Sep 2012 14:08:09	239391-004 - 1	190269,1	U	287	0.0139	ppb
07 Sep 2012 14:09:51	239391-005 - 1	190269,1	U	300	0.0167	ppb
07 Sep 2012 14:11:34	239267-002 - 1	190269,1	U	373	0.0321	ppb
07 Sep 2012 14:13:17	CCV,s20660 - 1		C	22484	94.1% 4.7049	ppb
07 Sep 2012 14:14:58	CCB - 1		C	147	-0.0157	ppb
07 Sep 2012 14:16:40	239382-001 - 1	190269,1	U	63	-0.0334	ppb
07 Sep 2012 14:18:23	239403-007 - 1	190269,1	U	268	0.0099	ppb
07 Sep 2012 14:20:06	239403-008 - 1	190269,1	U	254	0.0070	ppb
07 Sep 2012 14:21:47	239404-015 - 1	190269,1	U	240	0.0040	ppb
07 Sep 2012 14:23:29	239426-001 - 1	190269,1	U	211	-0.0021	ppb
07 Sep 2012 14:25:11	239427-001 - 1	190269,1	U	302	0.0171	ppb
07 Sep 2012 14:26:52	239267-005 - 1	190269,1	U	0	-0.0467	ppb
07 Sep 2012 14:31:11	239267-005 - 1	190269,1	U	462	0.0509	ppb
07 Sep 2012 14:32:52	CCV,s20660 - 1		C	25074	105.0% 5.2523	ppb
07 Sep 2012 14:34:34	CCB - 1		C	114	-0.0226	ppb
07 Sep 2012 14:51:44	QC655201 - 1	190270,1	U	258	0.0078	ppb
07 Sep 2012 14:53:25	QC655202 - 1	190270,1	U	11928	2.4741	ppb
07 Sep 2012 14:55:07	QC655203 - 1	190270,1	U	12222	2.5362	ppb
07 Sep 2012 14:56:49	239300-001 - 1	190270,1	U	216	-0.0011	ppb
07 Sep 2012 14:58:32	QC655204 - 1	190270,1	U	9885	2.0423	ppb
07 Sep 2012 15:00:14	QC655205 - 1	190270,1	U	9616	1.9855	ppb
07 Sep 2012 15:01:58	239300-002 - 1	190270,1	U	128	-0.0197	ppb
07 Sep 2012 15:03:42	239300-003 - 1	190270,1	U	263	0.0089	ppb
07 Sep 2012 15:05:24	239300-004 - 1	190270,1	U	302	0.0171	ppb
07 Sep 2012 15:07:06	239300-005 - 1	190270,1	U	286	0.0137	ppb
07 Sep 2012 15:08:49	CCV,s20660 - 1		C	26049	109.2% 5.4583	ppb
07 Sep 2012 15:10:30	CCB - 1		C	92	-0.0273	ppb
07 Sep 2012 15:12:13	239300-006 - 1	190270,1	U	377	0.0329	ppb
07 Sep 2012 15:13:55	239300-007 - 1	190270,1	U	325	0.0220	ppb
07 Sep 2012 15:15:39	239300-008 - 1	190270,1	U	333	0.0236	ppb
07 Sep 2012 15:17:20	239300-009 - 1	190270,1	U	305	0.0177	ppb
07 Sep 2012 15:19:02	239300-010 - 1	190270,1	U	274	0.0112	ppb
07 Sep 2012 15:20:44	239300-011 - 1	190270,1	U	671	0.0951	ppb
07 Sep 2012 15:22:25	239296-001 - 1	190270,1	U	316	0.0201	ppb
07 Sep 2012 15:24:07	239296-002 - 1	190270,1	U	260	0.0082	ppb
07 Sep 2012 15:25:49	239296-003 - 1	190270,1	U	338	0.0247	ppb
07 Sep 2012 15:27:31	239296-004 - 1	190270,1	U	289	0.0143	ppb
07 Sep 2012 15:29:13	CCV,s20660 - 1		C	26386	110.6% 5.5296	ppb
07 Sep 2012 15:30:54	CCB - 1		C	117	-0.0220	ppb
07 Sep 2012 15:32:37	239296-005 - 1	190270,1	U	302	0.0171	ppb
07 Sep 2012 15:34:19	239296-006 - 1	190270,1	U	399	0.0376	ppb
07 Sep 2012 15:36:02	239296-007 - 1	190270,1	U	269	0.0101	ppb
07 Sep 2012 15:37:45	239296-008 - 1	190270,1	U	305	0.0177	ppb
07 Sep 2012 15:39:28	239296-009 - 1	190270,1	U	354	0.0281	ppb
07 Sep 2012 15:41:10	CCV,s20660 - 1		C	26084	109.3% 5.4657	ppb
07 Sep 2012 15:42:51	CCB - 1		C	112	-0.0231	ppb

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 7470A

Inst	: MET34	Lab ID	: 239404-015	Client ID	: EB.09052012
Seqnum	: 1052362260024	Matrix	: Water	Acct	: ARCSF (JG)
File	: 190269	Batch	: 190269	Time	: 07-SEP-2012 14:21
Cal	: 1052362260001	Caldate	: 07-SEP-2012	Caltype	: WATER
IDF	: 1.0			Units	: ug/L

50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Result	RL	Blank	Flags
Mercury	ND	0.20		u

u=use

1052362260024

CURTIS & TOMPKINS BLANK USER REPORT FOR 239404 METALS Water
EPA 7470A

Inst	: MET34	Lab ID	: QC655196		
Seqnum	: 1052362260009.9	Matrix	: Water		
File	: 190269	Batch	: 190269	Time	: 07-SEP-2012 13:56
Cal	: 1052362260001	Caldate	: 07-SEP-2012	Caltype	: WATER
IDF	: 1.0			Units	: mg/L

50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Result	RL	Flags
Mercury	ND	0.00020	u

u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 METALS Water
EPA 7470A

Type : LCS
Inst : MET34
Seqnum : 1052362260010.9
File : 190269
IDF : 1.0
Lab ID : QC655197
Matrix : Water
Batch : 190269
Time : 07-SEP-2012 13:57
Cal : 1052362260001
Caltype : WATER
Units : mg/L

LCS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Spiked	LCS	%Rec	Limits	Flags
Mercury	0.002500	0.002320	93	80-120	u

u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 METALS Water
EPA 7470A

Type : MSS	Type : MS	Type : MSD
Inst : MET34	Inst : MET34	Inst : MET34
Seqnum : 1052362260011	Seqnum : 1052362260012.9	Seqnum : 1052362260013.9
File : 190269	File : 190269	File : 190269
IDF : 1.0	IDF : 1.0	IDF : 1.0
Lab ID : 239391-003	Lab ID : QC655198	Lab ID : QC655199
Matrix : Water	Matrix : Water	Matrix : Water
Batch : 190269	Batch : 190269	Batch : 190269
Time : 07-SEP-2012 13:59	Time : 07-SEP-2012 14:01	Time : 07-SEP-2012 14:03
Cal : 1052362260001	Cal : 1052362260001	Cal : 1052362260001
Caltype : WATER	Caltype : WATER	Caltype : WATER
Units : mg/L		

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Mercury	0.00008940 J	0.002500	0.002204	85	0.002145	82	64-124	3	40	u

u=use

CURTIS & TOMPKINS SERIAL DILUTION FOR 239404 METALS Water
EPA 7470A

Type	: MSS	Type	: SER
Inst	: MET34	Inst	: MET34
Seqnum	: 1052362260011	Seqnum	: 1052362260014.5
File	: 190269	File	: 190269
IDF	: 1.0	IDF	: 5.0
Lab ID	: 239391-003	Lab ID	: QC655200
Matrix	: Water	Matrix	: Water
Batch	: 190269	Batch	: 190269
Time	: 07-SEP-2012 13:59	Time	: 07-SEP-2012 14:04
Cal	: 1052362260001	Cal	: 1052362260001
Caltype	: WATER	Caltype	: WATER
Units	: mg/L		

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
SER: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS	RL	SER	RL	%D	Lim	Flags
Mercury	0.00008940 J	0.0002000	ND	0.001000		10	u

u=use

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 METALS Water: EPA 7470A

Inst : MET34
Calnum : 1052362260001
Units : ug/L

Date : 07-SEP-2012 13:40
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	190269	1052362260002	CAL 1	07-SEP-2012 13:42	S20657 (500X)
L2	190269	1052362260003	CAL 2	07-SEP-2012 13:43	S20657 (200X)
L3	190269	1052362260004	CAL 3	07-SEP-2012 13:45	S20657 (50X)
L4	190269	1052362260005	CAL 4	07-SEP-2012 13:47	S20657 (20X)
L5	190269	1052362260006	CAL 5	07-SEP-2012 13:49	S20657 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	6330.0	5370.0	4748.5	4725.2	4769.4	LINR	-0.0467	2.11E-4		5188.6	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.2000	10	0.5000	4	2.0000	-2	5.0000	-1	10.000	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 METALS Water EPA 7470A

Inst : MET34
Calnum : 1052362260001 Cal Date : 07-SEP-2012 Type : WATER

ICV 1052362260007 (07-SEP-2012) stds: S20659

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	4.616	ug/L	-8	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260008 File : 190269 Time : 07-SEP-2012 13:54
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260019 File : 190269 Time : 07-SEP-2012 14:13
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5188.6	4496.8	5.000	4.705	ug/L	-6	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260020 File : 190269 Time : 07-SEP-2012 14:14
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260029 File : 190269 Time : 07-SEP-2012 14:32
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5188.6	5014.8	5.000	5.252	ug/L	5	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260030 File : 190269 Time : 07-SEP-2012 14:34
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239404
ANALYTICAL REPORT
Metals
Matrix: Soil

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
EX36B072A.2	239404-001
EX36B072B.2	239404-002
EX36B072C.2	239404-003
EX36B078A.2	239404-004
EX13B004A.2	239404-007
EX13B023A.2	239404-008
EX13B023B.2	239404-009
EX13B003BA.2	239404-010
EX36B180C.2	239404-012
EX36B180B.2	239404-013
EX36B180A.2	239404-014

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
METALS (EPA 6010C AND EPA 7471B)
SOIL

Laboratory number:	**239404**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/05/12**
Samples Received:	**09/05/12**

This data package contains sample and QC results for eleven soil samples, requested for the above referenced project on 09/05/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Metals (EPA 6010C and EPA 7471B) Soil:

Zinc was detected between the MDL and the RL in the method blank for batch 190409; this analyte was detected in samples at a level at least 10 times that of the blank.

No other analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 239404

Chain of Custody # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht/E Mantar
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Arsenic by 6010c	Copper by 6010c	Mercury by 7471B	Benzo(a)pyrene by 8270D	Benzo(a)anthracene by 8270D	Benzo(b)fluoranthene by 8270D	Zinc by 6010c	Aroclor-1260 by 8082
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None								
1	✓EX36B072A.2	9/5/12	0840		X		1					X	X	X						
2	✓EX36B072B.2	9/5/12	0855		X		1					X	X	X						
3	✓EX36B072C.2	9/5/12	0917		X		1					X	X	X	X					
4	✓EX36B078A.2	9/5/12	0955		X		1					X		X						
	~~EX36~~ EAM 9/5/12																			
5	✓EX13B010A.3	9/5/12	1020		X		1					X			X	X	X			
6	✓EX13B010B.2	9/5/12	1045		X		1					X			X	X	X			
7	✓EX13B004A.2	9/5/12	1110		X		1					X		X	X					
8	✓EX13B023A.2	9/5/12	1135		X		2					X		X	X	X	X	X		
9	✓EX13B023B.2	9/5/12	1155		X		2					X		X	X	X	X	X		
	~~EX13B003BA.2~~	9/5/12	1315		X		2					X		X						
10	✓EX13B003BA.2	9/5/12	1315		X		2					X		X						
11	✓EX13B021A.2	9/5/12	1330		X		1					X					X		X	

EAM 9/5/12

EAM 9/5/12

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 239404

Chain of Custody # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht / E Manter
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	Aroclor – ~~1254~~ 1260 DF by 8082	Copper by 6010C	PCBs	TPHg	TPHd	SVOCs	Pesticides	Metals
12	✓EX36B180C.2	9/5/12	1420		X	2					X	X	X						
13	✓EX36B180B.2	9/5/12	1435		X	2					X	X	X						
14	✓EX36B180A.2	9/5/12	1445		X	2					X	X	X						
15	EB.09052012	9/5/12	1515	X		3			1		2			X			X		X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239404 Date Received 9/5/12 Number of coolers 1
Client ARCADIS Project HUNTER'S POINT

Date Opened 9/5/12 By (print) AA (sign) [signature]
Date Logged in ↓ By (print) JG (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.0°C

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ (YES) NO N/A
17. Did you document your preservative check? _____ (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239404

Sample	pH: <2	>9	>12	Other
-015a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: AA

Date: 9/6/12

Results & QC Summary

Curtis & Tompkins, Ltd.

Arsenic

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Arsenic	Batch#:	190409
Matrix:	Soil	Sampled:	09/05/12
Units:	mg/Kg	Received:	09/05/12
Basis:	dry	Prepared:	09/11/12
Diln Fac:	1.000	Analyzed:	09/12/12

Field ID	Type	Lab ID	Result	LOQ	DL	Moisture
EX36B072A.2	SAMPLE	239404-001	6.9	0.28	0.094	11%
EX36B072B.2	SAMPLE	239404-002	7.2	0.30	0.10	12%
EX36B072C.2	SAMPLE	239404-003	19	0.26	0.086	4%
	BLANK	QC655811	0.13 U	0.25	0.083	

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Copper

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Copper	Sampled:	09/05/12
Matrix:	Soil	Received:	09/05/12
Units:	mg/Kg	Prepared:	09/11/12
Basis:	dry	Analyzed:	09/12/12
Batch#:	190409		

Field ID	Type	Lab ID	Result	LOQ	DL	Moisture	Diln Fac
EX36B072A.2	SAMPLE	239404-001	59	0.29	0.098	11%	1.000
EX36B072B.2	SAMPLE	239404-002	130	0.31	0.10	12%	1.000
EX36B072C.2	SAMPLE	239404-003	930	27	9.0	4%	100.0
EX36B078A.2	SAMPLE	239404-004	98	0.28	0.093	8%	1.000
EX13B004A.2	SAMPLE	239404-007	150	0.26	0.088	8%	1.000
EX13B023A.2	SAMPLE	239404-008	440	0.28	0.094	6%	1.000
EX13B023B.2	SAMPLE	239404-009	560	0.30	0.099	12%	1.000
EX13B003BA.2	SAMPLE	239404-010	5,000	27	9.1	4%	100.0
EX36B180C.2	SAMPLE	239404-012	34	0.30	0.10	12%	1.000
EX36B180B.2	SAMPLE	239404-013	10	0.30	0.10	14%	1.000
EX36B180A.2	SAMPLE	239404-014	130	0.31	0.10	10%	1.000
	BLANK	QC655811	0.13 U	0.26	0.086		1.000

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Mercury by Cold Vapor AA

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7471B
Analyte:	Mercury	Sampled:	09/05/12
Matrix:	Soil	Received:	09/05/12
Units:	mg/Kg	Prepared:	09/10/12
Basis:	dry	Analyzed:	09/10/12
Batch#:	190335		

Field ID	Type	Lab ID	Result	LOQ	DL	Moisture	Diln Fac
EX36B072C.2	SAMPLE	239404-003	3.3	0.091	0.0089	4%	5.000
EX13B004A.2	SAMPLE	239404-007	0.27	0.095	0.0093	8%	5.000
EX13B023A.2	SAMPLE	239404-008	1.6	0.084	0.0082	6%	5.000
EX13B023B.2	SAMPLE	239404-009	2.8	0.092	0.0089	12%	5.000
	BLANK	QC655489	0.0083 U	0.017	0.0016		1.000

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Zinc

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Zinc	Sampled:	09/05/12
Matrix:	Soil	Received:	09/05/12
Units:	mg/Kg	Prepared:	09/11/12
Basis:	dry	Analyzed:	09/12/12
Batch#:	190409		

Field ID	Type	Lab ID	Result	LOQ	DL	Moisture	Diln Fac
EX13B023A.2	SAMPLE	239404-008	250	1.1	0.11	6%	1.000
EX13B023B.2	SAMPLE	239404-009	740	110	11	12%	100.0
	BLANK	QC655811	0.19 J	1.0	0.098		1.000

J= Estimated value
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7471B
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	190335
MSS Lab ID:	239290-001	Sampled:	08/27/12
Matrix:	Soil	Received:	08/30/12
Units:	mg/Kg	Prepared:	09/10/12
Basis:	as received	Analyzed:	09/10/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC655490		0.2083	0.2031	98	80-120		
BSD	QC655491		0.2083	0.2011	97	80-120	1	20
MS	QC655492	0.04389	0.2119	0.2618	103	76-138		
MSD	QC655493		0.2083	0.2457	97	76-138	5	42

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7471B
Analyte:	Mercury	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	190335
MSS Lab ID:	239452-001	Sampled:	09/06/12
Lab ID:	QC655494	Received:	09/07/12
Matrix:	Soil	Analyzed:	09/10/12
Units:	mg/Kg		

MSS Result	MSS LOQ	Result	LOQ	Moisture %	Diff	Lim
0.05905 ND	0.02174	0.05905 U	0.1181	27%	NC	10

U= Not Detected at or above DL
NC= Not Calculated
ND= Not Detected at or above DL
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Arsenic

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Arsenic	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	190409
MSS Lab ID:	239455-001	Sampled:	09/06/12
Matrix:	Soil	Received:	09/07/12
Units:	mg/Kg	Prepared:	09/11/12
Basis:	dry	Analyzed:	09/12/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
BS	QC655812		50.00	49.14	98	80-121			
BSD	QC655813		50.00	48.90	98	80-121		0	20
MS	QC655814	1.292	50.01	49.42	96	73-121	1%		
MSD	QC655815		49.03	48.05	95	73-121	1%	1	40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Copper

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Copper	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	190409
MSS Lab ID:	239455-001	Sampled:	09/06/12
Matrix:	Soil	Received:	09/07/12
Units:	mg/Kg	Prepared:	09/11/12
Basis:	dry	Analyzed:	09/12/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
BS	QC655812		12.50	12.25	98	80-120			
BSD	QC655813		12.50	12.24	98	80-120		0	20
MS	QC655814	4.440	12.50	17.26	103	48-150	1%		
MSD	QC655815		12.26	16.29	97	48-150	1%	4	39

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Zinc

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Zinc	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	190409
MSS Lab ID:	239455-001	Sampled:	09/06/12
Matrix:	Soil	Received:	09/07/12
Units:	mg/Kg	Prepared:	09/11/12
Basis:	dry	Analyzed:	09/12/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
BS	QC655812		25.00	24.78	99	80-120			
BSD	QC655813		25.00	24.56	98	80-120		1	20
MS	QC655814	190.9	25.00	270.4	318 NM	43-147	1%		
MSD	QC655815		24.52	204.8	57 NM	43-147	1%	27	41

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Arsenic

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Arsenic	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	190409
MSS Lab ID:	239455-001	Sampled:	09/06/12
Lab ID:	QC655816	Received:	09/07/12
Matrix:	Soil	Analyzed:	09/12/12
Units:	mg/Kg		

MSS Result	MSS LOQ	Result	LOQ	Moisture	% Diff	Lim
1.292	0.2500	1.564	1.250	1%	NC	10

NC= Not Calculated
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Copper

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Copper	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	190409
MSS Lab ID:	239455-001	Sampled:	09/06/12
Lab ID:	QC655816	Received:	09/07/12
Matrix:	Soil	Analyzed:	09/12/12
Units:	mg/Kg		

MSS Result	MSS LOQ	Result	LOQ	Moisture %	Diff Lim
4.440	0.2593	4.310	1.297	1%	3 10

LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Zinc

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Zinc	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	190409
MSS Lab ID:	239455-001	Sampled:	09/06/12
Lab ID:	QC655816	Received:	09/07/12
Matrix:	Soil	Analyzed:	09/12/12
Units:	mg/Kg		

MSS Result	MSS LOQ	Result	LOQ	Moisture %	Diff Lim
190.9	1.000	192.9	5.001	1%	1 10

LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Arsenic

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Arsenic	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	190409
MSS Lab ID:	239455-001	Sampled:	09/06/12
Lab ID:	QC655817	Received:	09/07/12
Matrix:	Soil	Analyzed:	09/12/12
Units:	mg/Kg		

MSS Result	Spiked	Result	%REC	Limits	Moisture
1.292	50.01	50.01	97	75-125	1%

Curtis & Tompkins, Ltd.

Batch QC Report

Copper

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Copper	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	190409
MSS Lab ID:	239455-001	Sampled:	09/06/12
Lab ID:	QC655817	Received:	09/07/12
Matrix:	Soil	Analyzed:	09/12/12
Units:	mg/Kg		

MSS Result	Spiked	Result	%REC	Limits	Moisture
4.440	12.50	16.91	100	75-125	1%

Curtis & Tompkins, Ltd.

Batch QC Report

Zinc

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Zinc	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	190409
MSS Lab ID:	239455-001	Sampled:	09/06/12
Lab ID:	QC655817	Received:	09/07/12
Matrix:	Soil	Analyzed:	09/12/12
Units:	mg/Kg		

MSS Result	Spiked	Result	%REC	Limits	Moisture
190.9	25.00	211.4	82 NM	75-125	1%

NM= Not Meaningful: Sample concentration > 4X spike concentration

REPORTING SUMMARY FOR 239404 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AS	CU	HG	ZN
239404-001	MET08	09/12/12 09:33	1.0	+	+		
239404-002	MET08	09/12/12 09:37	1.0	+	+		
239404-003	MET34	09/10/12 15:41	5.0			+	
239404-003	MET08	09/12/12 09:40	1.0	+			
239404-003	MET08	09/12/12 11:20	100.0		+		
239404-004	MET08	09/12/12 09:45	1.0		+		
239404-007	MET34	09/10/12 15:43	5.0			+	
239404-007	MET08	09/12/12 09:49	1.0		+		
239404-008	MET34	09/10/12 15:45	5.0			+	
239404-008	MET08	09/12/12 09:52	1.0		+		+
239404-009	MET34	09/10/12 15:50	5.0			+	
239404-009	MET08	09/12/12 09:55	1.0		+		
239404-009	MET08	09/12/12 11:24	100.0				+
239404-010	MET08	09/12/12 10:00	1.0				
239404-010	MET08	09/12/12 11:28	100.0		+		
239404-012	MET08	09/12/12 10:07	1.0		+		
239404-013	MET08	09/12/12 10:10	1.0		+		
239404-014	MET08	09/12/12 10:30	1.0		+		
QC655489	MET34	09/10/12 15:09	1.0			+	
QC655490	MET34	09/10/12 15:11	1.0			+	
QC655491	MET34	09/10/12 15:12	1.0			+	
QC655492	MET34	09/10/12 15:16	1.0			+	
QC655493	MET34	09/10/12 15:17	1.0			+	
QC655494	MET34	09/10/12 15:53	5.0			+	
QC655811	MET08	09/12/12 08:41	1.0	+	+		+
QC655812	MET08	09/12/12 08:46	1.0	+	+		+
QC655813	MET08	09/12/12 08:50	1.0	+	+		+
QC655814	MET08	09/12/12 09:00	1.0	+	+		+
QC655815	MET08	09/12/12 09:06	1.0	+	+		+
QC655816	MET08	09/12/12 09:13	5.0	+	+		+

REPORTING SUMMARY FOR 239404 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AS	CU	HG	ZN
QC655817	MET08	09/12/12 09:17	1.0	+	+		+

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82369087

Instrument : MET08 Begun : 09/12/12 07:27
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met08_sr_6010	ICALBLK				09/12/12 07:27	1.0		
002	met08_sr_6010	ICAL	CRI5.1			09/12/12 07:32	1.0	1	
003	met08_sr_6010	ICAL	CS100			09/12/12 07:37	1.0	2	
004	met08_sr_6010	ICAL	CS1K			09/12/12 07:41	1.0	3	
005	met08_sr_6010	ICAL	CS10K			09/12/12 07:46	1.0	4	
006	met08_sr_6010	ICAL	CS100K			09/12/12 07:51	1.0	5	
007	met08_sr_6010	ICV				09/12/12 07:56	1.0	6	
008	met08_sr_6010	ICB				09/12/12 08:02	1.0		
009	met08_sr_6010	ICSA				09/12/12 08:07	1.0	7	10:AL=510000
010	met08_sr_6010	ICSAB				09/12/12 08:21	1.0	8	5:AL=510000
011	met08_sr_6010	CRI				09/12/12 08:26	1.0	9	
012	met08_sr_6010	BLANK	QC655811	Soil	190409	09/12/12 08:41	1.0		
013	met08_sr_6010	BS	QC655812	Soil	190409	09/12/12 08:46	1.0		
014	met08_sr_6010	BSD	QC655813	Soil	190409	09/12/12 08:50	1.0		
015	met08_sr_6010	MSS	239455-001	Soil	190409	09/12/12 08:54	1.0		1:FE=150000
016	met08_sr_6010	MS	QC655814	Soil	190409	09/12/12 09:00	1.0		1:FE=150000
017	met08_sr_6010	MSD	QC655815	Soil	190409	09/12/12 09:06	1.0		1:FE=140000
018	met08_sr_6010	SER	QC655816	Soil	190409	09/12/12 09:13	5.0		
019	met08_sr_6010	PDS	QC655817	Soil	190409	09/12/12 09:17	1.0	10 11	
020	met08_sr_6010	CCV				09/12/12 09:23	1.0	12	
021	met08_sr_6010	CCB				09/12/12 09:28	1.0		
022	met08_sr_6010	SAMPLE	239404-001	Soil	190409	09/12/12 09:33	1.0		6:MG=1000000
023	met08_sr_6010	SAMPLE	239404-002	Soil	190409	09/12/12 09:37	1.0		6:MG=730000
024	met08_sr_6010	SAMPLE	239404-003	Soil	190409	09/12/12 09:40	1.0		5:CA=1000000
025	met08_sr_6010	SAMPLE	239404-004	Soil	190409	09/12/12 09:45	1.0		4:FE=550000
026	met08_sr_6010	SAMPLE	239404-007	Soil	190409	09/12/12 09:49	1.0		6:MG=900000
027	met08_sr_6010	SAMPLE	239404-008	Soil	190409	09/12/12 09:52	1.0		5:FE=680000
028	met08_sr_6010	SAMPLE	239404-009	Soil	190409	09/12/12 09:55	1.0		6:FE=790000
029	met08_sr_6010	SAMPLE	239404-010	Soil	190409	09/12/12 10:00	1.0		4:FE=100000
030	met08_sr_6010	SAMPLE	239404-012	Soil	190409	09/12/12 10:07	1.0		5:MG=3600000
031	met08_sr_6010	SAMPLE	239404-013	Soil	190409	09/12/12 10:10	1.0		4:MG=3200000
032	met08_sr_6010	ICSAB				09/12/12 10:13	1.0	8	5:AL=510000
033	met08_sr_6010	CCV				09/12/12 10:19	1.0	12	
034	met08_sr_6010	CCB				09/12/12 10:25	1.0		
035	met08_sr_6010	SAMPLE	239404-014	Soil	190409	09/12/12 10:30	1.0		5:MG=580000
036	met08_sr_6010	SAMPLE	239455-002	Soil	190409	09/12/12 10:33	1.0		1:FE=130000
037	met08_sr_6010	SAMPLE	239455-003	Soil	190409	09/12/12 10:37	1.0		1:FE=110000
038	met08_sr_6010	SAMPLE	239455-004	Soil	190409	09/12/12 10:41	1.0		
039	met08_sr_6010	SAMPLE	239507-002	Soil	190409	09/12/12 10:45	1.0		4:FE=480000
040	met08_sr_6010	SAMPLE	239530-001	Soil	190409	09/12/12 10:49	1.0		4:FE=360000
041	met08_sr_6010	CCV				09/12/12 10:54	1.0	12	
042	met08_sr_6010	CCB				09/12/12 10:59	1.0		
043	met08_sr_6010	ICSAB				09/12/12 11:03	1.0	8	5:AL=510000
044	met08_sr_6010	SAMPLE	239507-002	Soil	190409	09/12/12 11:17	1.0		4:FE=480000
045	met08_sr_6010	SAMPLE	239404-003	Soil	190409	09/12/12 11:20	100.0		
046	met08_sr_6010	SAMPLE	239404-009	Soil	190409	09/12/12 11:24	100.0		
047	met08_sr_6010	SAMPLE	239404-010	Soil	190409	09/12/12 11:28	100.0		
048	met08_sr_6010	SAMPLE	239530-001	Soil	190409	09/12/12 11:32	100.0		
049	met08_sr_6010	CCV				09/12/12 11:36	1.0	12	
050	met08_sr_6010	CCB				09/12/12 11:42	1.0		
051	met08_sr_6010	ICSAB				09/12/12 11:47	1.0	8	5:AL=510000
052	met08_sr_6010	BLANK	QC655838	Filtrate	190414	09/12/12 12:05	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82369087

Instrument : MET08
Method : EPA 6010C

Begun : 09/12/12 07:27
SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met08_sr_6010	BS	QC655839	Filtrate	190414	09/12/12 12:09	1.0		
054	met08_sr_6010	BSD	QC655840	Filtrate	190414	09/12/12 12:13	1.0		
055	met08_sr_6010	MSS	239502-001	Filtrate	190414	09/12/12 12:17	1.0		3:NA=620000
056	met08_sr_6010	MS	QC655841	Filtrate	190414	09/12/12 12:25	1.0		3:NA=630000
057	met08_sr_6010	MSD	QC655842	Filtrate	190414	09/12/12 12:31	1.0		3:NA=620000
058	met08_sr_6010	MSS	239391-002	Filtrate	190414	09/12/12 12:37	1.0		
059	met08_sr_6010	SER	QC655843	Filtrate	190414	09/12/12 12:42	5.0		
060	met08_sr_6010	PDS	QC655844	Filtrate	190414	09/12/12 12:47	1.0	13 14	1:CA=110000
061	met08_sr_6010	SAMPLE	239391-004	Filtrate	190414	09/12/12 12:52	1.0		3:CA=120000
062	met08_sr_6010	ICSAB				09/12/12 12:56	1.0	8	5:AL=510000
063	met08_sr_6010	CCV				09/12/12 13:01	1.0	12	
064	met08_sr_6010	CCB				09/12/12 13:06	1.0		
065	met08_sr_6010	BLANK	QC655838	Filtrate	190414	09/12/12 13:12	1.0		
066	met08_sr_6010	SAMPLE	239502-002	Filtrate	190414	09/12/12 13:16	1.0		2:CA=350000
067	met08_sr_6010	SAMPLE	239502-003	Filtrate	190414	09/12/12 13:23	1.0		2:NA=330000
068	met08_sr_6010	SAMPLE	239502-004	Filtrate	190414	09/12/12 13:28	1.0		3:CA=310000
069	met08_sr_6010	SAMPLE	239502-005	Filtrate	190414	09/12/12 13:33	1.0		2:CA=280000
070	met08_sr_6010	SAMPLE	239502-006	Filtrate	190414	09/12/12 13:37	1.0		
071	met08_sr_6010	SAMPLE	239391-004	Filtrate	190414	09/12/12 13:41	100.0		
072	met08_sr_6010	CCV				09/12/12 13:46	1.0	12	
073	met08_sr_6010	CCB				09/12/12 13:52	1.0		
074	met08_sr_6010	ICSAB				09/12/12 14:00	1.0	8	5:AL=500000
075	met08_sr_6010	BLANK	QC655845	Filtrate	190415	09/12/12 14:14	1.0		
076	met08_sr_6010	BS	QC655846	Filtrate	190415	09/12/12 14:20	1.0		
077	met08_sr_6010	BSD	QC655847	Filtrate	190415	09/12/12 14:24	1.0		
078	met08_sr_6010	MSS	239449-001	Filtrate	190415	09/12/12 14:28	1.0		1:NA=260000
079	met08_sr_6010	MS	QC655848	Filtrate	190415	09/12/12 14:32	1.0		
080	met08_sr_6010	MSD	QC655849	Filtrate	190415	09/12/12 14:36	1.0		
081	met08_sr_6010	SAMPLE	239449-002	Filtrate	190415	09/12/12 17:01	1.0		3:MG=1100000
082	met08_sr_6010	SAMPLE	239449-003	Filtrate	190415	09/12/12 17:06	1.0		4:MG=1000000
083	met08_sr_6010	SAMPLE	239449-004	Filtrate	190415	09/12/12 17:09	1.0		3:MG=830000
084	met08_sr_6010	SAMPLE	239449-005	Filtrate	190415	09/12/12 17:30	1.0		3:MG=890000
085	met08_sr_6010	CCV				09/12/12 17:37	1.0	12	
086	met08_sr_6010	X				09/12/12 17:42	1.0		
087	met08_sr_6010	CCB				09/12/12 17:46	1.0		
088	met08_sr_6010	SAMPLE	239449-006	Filtrate	190415	09/12/12 17:51	1.0		3:MG=460000
089	met08_sr_6010	SAMPLE	239449-007	Filtrate	190415	09/12/12 17:58	1.0		2:MG=420000
090	met08_sr_6010	SAMPLE	239449-008	Filtrate	190415	09/12/12 18:04	1.0		2:CA=190000
091	met08_sr_6010	SAMPLE	239449-009	Filtrate	190415	09/12/12 18:10	1.0		3:MG=680000
092	met08_sr_6010	SAMPLE	239449-010	Filtrate	190415	09/12/12 18:17	1.0		2:MG=420000
093	met08_sr_6010	XBLANK	QC655823	Soil	190411	09/12/12 18:24	1.0		
094	met08_sr_6010	XBS	QC655824	Soil	190411	09/12/12 18:29	1.0		
095	met08_sr_6010	XBSD	QC655825	Soil	190411	09/12/12 18:33	1.0		
096	met08_sr_6010	XMSS	239296-001	Soil	190411	09/12/12 18:37	1.0		2:FE=360000
097	met08_sr_6010	XMS	QC655826	Soil	190411	09/12/12 18:40	1.0		3:FE=410000
098	met08_sr_6010	CCV				09/12/12 18:46	1.0	12	
099	met08_sr_6010	X				09/12/12 18:51	1.0		
100	met08_sr_6010	CCB				09/12/12 18:55	1.0		
101	met08_sr_6010	XMSD	QC655827	Soil	190411	09/12/12 19:00	1.0		3:FE=370000
102	met08_sr_6010	XSAMPLE	239296-002	Soil	190411	09/12/12 19:05	1.0		3:FE=360000
103	met08_sr_6010	XSAMPLE	239296-003	Soil	190411	09/12/12 19:08	1.0		2:FE=340000
104	met08_sr_6010	XSAMPLE	239296-004	Soil	190411	09/12/12 19:12	1.0		2:FE=350000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82369087

Instrument : MET08 Begun : 09/12/12 07:27
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met08_sr_6010	XSAMPLE	239296-005	Soil	190411	09/12/12 19:15	1.0		2:FE=270000
106	met08_sr_6010	XSAMPLE	239296-006	Soil	190411	09/12/12 19:18	1.0		3:FE=410000
107	met08_sr_6010	XSAMPLE	239296-007	Soil	190411	09/12/12 19:21	1.0		4:FE=400000
108	met08_sr_6010	ICSAB				09/12/12 19:24	1.0	8	5:AL=490000
109	met08_sr_6010	XSAMPLE	239296-008	Soil	190411	09/12/12 19:30	1.0		3:FE=410000
110	met08_sr_6010	XSAMPLE	239296-009	Soil	190411	09/12/12 19:33	1.0		3:FE=410000
111	met08_sr_6010	XSAMPLE	239300-001	Soil	190411	09/12/12 19:36	1.0		2:FE=270000
112	met08_sr_6010	CCV				09/12/12 19:39	1.0	12	
113	met08_sr_6010	CCB				09/12/12 19:45	1.0		
114	met08_sr_6010	XSAMPLE	239300-002	Soil	190411	09/12/12 19:50	1.0		3:FE=340000
115	met08_sr_6010	XSAMPLE	239300-003	Soil	190411	09/12/12 19:53	1.0		2:FE=240000
116	met08_sr_6010	XSAMPLE	239300-004	Soil	190411	09/12/12 19:56	1.0		2:FE=240000
117	met08_sr_6010	XSAMPLE	239300-005	Soil	190411	09/12/12 20:00	1.0		3:FE=340000
118	met08_sr_6010	XSAMPLE	239300-006	Soil	190411	09/12/12 20:03	1.0		2:FE=400000
119	met08_sr_6010	XSAMPLE	239300-007	Soil	190411	09/12/12 20:06	1.0		3:FE=220000
120	met08_sr_6010	XSAMPLE	239300-008	Soil	190411	09/12/12 20:09	1.0		2:FE=350000
121	met08_sr_6010	XSAMPLE	239300-009	Soil	190411	09/12/12 20:12	1.0		2:FE=290000
122	met08_sr_6010	XSAMPLE	239300-010	Soil	190411	09/12/12 20:16	1.0		2:FE=300000
123	met08_sr_6010	XSAMPLE	239300-011	Soil	190411	09/12/12 20:19	1.0		4:FE=410000
124	met08_sr_6010	CCV				09/12/12 20:22	1.0	12	
125	met08_sr_6010	CCB				09/12/12 20:28	1.0		
126	met08_sr_6010	XSAMPLE	239290-001	Soil	190360	09/12/12 20:33	1.0		2:FE=310000
127	met08_sr_6010	XSAMPLE	239290-002	Soil	190360	09/12/12 20:36	1.0		3:FE=390000
128	met08_sr_6010	XSAMPLE	239290-003	Soil	190360	09/12/12 20:41	1.0		3:FE=380000
129	met08_sr_6010	XSAMPLE	239290-004	Soil	190360	09/12/12 20:46	1.0		3:FE=370000
130	met08_sr_6010	XSAMPLE	239290-005	Soil	190360	09/12/12 20:52	1.0		3:FE=380000
131	met08_sr_6010	XSAMPLE	239290-006	Soil	190360	09/12/12 20:55	1.0		3:FE=410000
132	met08_sr_6010	XSAMPLE	239290-007	Soil	190360	09/12/12 21:00	1.0		3:FE=370000
133	met08_sr_6010	ICSAB				09/12/12 21:06	1.0	8	5:AL=500000
134	met08_sr_6010	XSAMPLE	239290-008	Soil	190360	09/12/12 21:11	1.0		3:FE=390000
135	met08_sr_6010	XSAMPLE	239290-009	Soil	190360	09/12/12 21:16	1.0		3:FE=370000
136	met08_sr_6010	XSAMPLE	239290-010	Soil	190360	09/12/12 21:21	1.0		3:FE=410000
137	met08_sr_6010	CCV				09/12/12 21:27	1.0	12	
138	met08_sr_6010	CCB				09/12/12 21:32	1.0		
139	met08_sr_6010	XSAMPLE	239290-011	Soil	190360	09/12/12 21:37	1.0		3:FE=400000
140	met08_sr_6010	XSAMPLE	239290-012	Soil	190360	09/12/12 21:42	1.0		3:FE=380000
141	met08_sr_6010	XBLANK	QC655818	Soil	190410	09/12/12 21:48	1.0		
142	met08_sr_6010	XSAMPLE	239303-001	Soil	190410	09/12/12 21:53	1.0		2:FE=400000
143	met08_sr_6010	XSAMPLE	239303-002	Soil	190410	09/12/12 21:56	1.0		3:FE=390000
144	met08_sr_6010	XSAMPLE	239303-003	Soil	190410	09/12/12 21:59	1.0		3:FE=380000
145	met08_sr_6010	XSAMPLE	239303-004	Soil	190410	09/12/12 22:02	1.0		3:FE=420000
146	met08_sr_6010	XSAMPLE	239303-005	Soil	190410	09/12/12 22:05	1.0		2:FE=290000
147	met08_sr_6010	XSAMPLE	239303-006	Soil	190410	09/12/12 22:09	1.0		3:FE=410000
148	met08_sr_6010	XSAMPLE	239303-007	Soil	190410	09/12/12 22:12	1.0		4:FE=410000
149	met08_sr_6010	CCV				09/12/12 22:15	1.0	12	
150	met08_sr_6010	CCB				09/12/12 22:20	1.0		
151	met08_sr_6010	XSAMPLE	239303-008	Soil	190410	09/12/12 22:26	1.0		2:FE=280000
152	met08_sr_6010	XSAMPLE	239303-009	Soil	190410	09/12/12 22:29	1.0		3:FE=400000
153	met08_sr_6010	XSAMPLE	239303-010	Soil	190410	09/12/12 22:32	1.0		3:FE=390000
154	met08_sr_6010	CCV				09/12/12 22:35	1.0	12	
155	met08_sr_6010	CCB				09/12/12 22:40	1.0		
156	met08_sr_6010	XICSAB				09/12/12 22:46	1.0	8	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82369087

Instrument : MET08 Begun : 09/12/12 07:27
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met08_sr_6010	ICSAB				09/13/12 00:11	1.0	8	5:AL=500000

NT 09/13/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 157.

JDB 09/12/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 76 through 156.

JDB 09/12/12 : Time difference between runs #80 and #81 due to software encountering a fatal error.

Standards used: 1=S20200 2=S20215 3=S20214 4=S20216 5=S20217 6=S20644 7=S20220 8=S20222 9=S20319 10=S20436 11=S20437 12=S20645 13=S19831 14=S19832

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 82369087

Date : 09/12/12 Reference : met08_sr_6010
Sequence : MET08 09/12/12 Analyzed : 09/12/12 07:32

#	Type	Sample ID	Y A
		ICAL STD	1585880
		LOWER LIMIT	475764
		UPPER LIMIT	1903056
008	ICB		1674788
009	ICSA		1370407
010	ICSAB		1406607
012	BLANK	QC655811	1696148
013	BS	QC655812	1580472
014	BSD	QC655813	1578235
015	MSS	239455-001	1647973
016	MS	QC655814	1607544
017	MSD	QC655815	1561752
018	SER	QC655816	1664079
019	PDS	QC655817	1618002
020	CCV		1619985
021	CCB		1659706
022	SAMPLE	239404-001	1543903
023	SAMPLE	239404-002	1586747
024	SAMPLE	239404-003	1842988
025	SAMPLE	239404-004	1744172
026	SAMPLE	239404-007	1527240
027	SAMPLE	239404-008	1718682
028	SAMPLE	239404-009	1630006
029	SAMPLE	239404-010	1691410
030	SAMPLE	239404-012	1336546
031	SAMPLE	239404-013	1360083
032	ICSAB		1395785
033	CCV		1618769
034	CCB		1674449
035	SAMPLE	239404-014	1550257
036	SAMPLE	239455-002	1624859
037	SAMPLE	239455-003	1660196
038	SAMPLE	239455-004	1693658
041	CCV		1586989
042	CCB		1660029
043	ICSAB		1385446
045	SAMPLE	239404-003	1709186
046	SAMPLE	239404-009	1681369
047	SAMPLE	239404-010	1708666
049	CCV		1611671
050	CCB		1673331
051	ICSAB		1372546

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 METALS Soil: EPA 6010C

Inst : MET08
Calnum : 82369087001
Units : ug/L

Date : 12-SEP-2012 07:27
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met08_sr_6010	82369087002	CRI5.1	12-SEP-2012 07:32	S20200
L2	met08_sr_6010	82369087003	CS100	12-SEP-2012 07:37	S20215
L3	met08_sr_6010	82369087004	CS1K	12-SEP-2012 07:41	S20214
L4	met08_sr_6010	82369087005	CS10K	12-SEP-2012 07:46	S20216
L5	met08_sr_6010	82369087006	CS100K	12-SEP-2012 07:51	S20217

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Arsenic	A	19.440	17.990	18.289	18.938		LOR0	0.00000	0.05282		18.664	1.000	0.998	
Copper	A	111.44	100.72	101.58	105.14		LOR0	0.00000	0.00951		104.72	1.000	0.998	
Zinc	A	82.155	72.969	72.792	74.874		LOR0	0.00000	0.01336		75.698	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Arsenic	A	5.0000	3	100.00	-5	1000.0	-3	10000	0		
Copper	A	5.0000	6	100.00	-4	1000.0	-3	10000	0		
Zinc	A	20.000	10	100.00	-3	1000.0	-3	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

82369087001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 METALS Soil
EPA 6010C

Inst : MET08
Calnum : 82369087001 Cal Date : 12-SEP-2012

ICV 82369087007 (12-SEP-2012) stds: S20644

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Arsenic	A	5000	4904	ug/L	-2	10	
Copper	A	5000	4797	ug/L	-4	10	
Zinc	A	5000	4877	ug/L	-2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087008.2 File : met08_sr_6010 Time : 12-SEP-2012 08:02
Cal : 82369087001 Caldate : 12-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.582	ug/L	
Copper	A	ND	5.000	3.219	ug/L	
Zinc	A	ND	20.00	4.561	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1674788	5.61

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087009.2 File : met08_sr_6010 Time : 12-SEP-2012 08:07
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20220

Analyte	Ch	Quant	IQL	Units	Flags
Arsenic	A	[3.267]	5.000	ug/L	!a+
Zinc	A	[16.72]	20.00	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19330	ug/L	97
Copper	A	20000	20500	ug/L	103
Manganese	A	20000	18650	ug/L	93
Nickel	A	20000	18140	ug/L	91
Vanadium	A	20000	20070	ug/L	100
Aluminum	R	500000	514900	ug/L	103
Calcium	R	500000	488300	ug/L	98
Iron	R	200000	195700	ug/L	98
Magnesium	R	500000	497100	ug/L	99
Titanium	R	20000	21030	ug/L	105

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1370407	-13.59

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087010.2 File : met08_sr_6010 Time : 12-SEP-2012 08:21
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	507.7	ug/L	2	20	
Copper	A	500.0	523.5	ug/L	5	20	
Zinc	A	1000	967.3	ug/L	-3	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1406607	-11.30

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087011.2 File : met08_sr_6010 Time : 12-SEP-2012 08:26
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20319

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	20.00	18.44	ug/L	-8	30	
Copper	A	20.00	19.81	ug/L	-1	30	
Zinc	A	80.00	79.99	ug/L	0	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1659009	4.61

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087020.2 File : met08_sr_6010 Time : 12-SEP-2012 09:23
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	18.664	18.066	5000	4771	ug/L	-5	10	
Copper	A	104.72	102.67	5000	4884	ug/L	-2	10	
Zinc	A	75.698	72.252	5000	4826	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1619985	2.15

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087021.2 File : met08_sr_6010 Time : 12-SEP-2012 09:28
Cal : 82369087001 Caldate : 12-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.582	ug/L	
Copper	A	ND	5.000	3.219	ug/L	
Zinc	A	ND	20.00	4.561	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1659706	4.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087032.2 File : met08_sr_6010 Time : 12-SEP-2012 10:13
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	485.2	ug/L	-3	20	
Copper	A	500.0	532.2	ug/L	6	20	
Zinc	A	1000	958.2	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1395785	-11.99

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087033.2 File : met08_sr_6010 Time : 12-SEP-2012 10:19
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	18.664	18.559	5000	4902	ug/L	-2	10	
Copper	A	104.72	103.92	5000	4944	ug/L	-1	10	
Zinc	A	75.698	72.358	5000	4833	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1618769	2.07

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087034.2 File : met08_sr_6010 Time : 12-SEP-2012 10:25
Cal : 82369087001 Caldate : 12-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.582	ug/L	
Copper	A	ND	5.000	3.219	ug/L	
Zinc	A	ND	20.00	4.561	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1674449	5.58

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087041.2 File : met08_sr_6010 Time : 12-SEP-2012 10:54
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	18.664	18.425	5000	4866	ug/L	-3	10	
Copper	A	104.72	104.62	5000	4977	ug/L	0	10	
Zinc	A	75.698	72.076	5000	4815	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1586989	0.07

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087042.2 File : met08_sr_6010 Time : 12-SEP-2012 10:59
Cal : 82369087001 Caldate : 12-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.582	ug/L	
Copper	A	ND	5.000	3.219	ug/L	
Zinc	A	ND	20.00	4.561	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1660029	4.68

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087043.2 File : met08_sr_6010 Time : 12-SEP-2012 11:03
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	503.0	ug/L	1	20	
Copper	A	500.0	536.5	ug/L	7	20	
Zinc	A	1000	965.6	ug/L	-3	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1385446	-12.64

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087049.1 File : met08_sr_6010 Time : 12-SEP-2012 11:36
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	18.664	18.083	5000	4776	ug/L	-4	10	
Copper	A	104.72	102.73	5000	4887	ug/L	-2	10	
Zinc	A	75.698	71.635	5000	4785	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1611671	1.63

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087050.1 File : met08_sr_6010 Time : 12-SEP-2012 11:42
Cal : 82369087001 Caldate : 12-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.582	ug/L	
Copper	A	ND	5.000	3.219	ug/L	
Zinc	A	ND	20.00	4.561	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1673331	5.51

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087051.1 File : met08_sr_6010 Time : 12-SEP-2012 11:47
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	502.5	ug/L	0	20	
Copper	A	500.0	529.7	ug/L	6	20	
Zinc	A	1000	962.1	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1372546	-13.45

SAMPLE PREPARATION SUMMARY

Batch # : 190409
Started By : JDB
Method : 3050B
Spike #1 ID : S20436
Prep Date : 11-SEP-2012 21:30
SOP Version : 3050B_ICP_rv9
Spike #2 ID : S20437
Analysis : ICAP
Finished By : JDB
Units : g

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239404-001		Soil	.99	50	1	50.51						AS, CU	
239404-002		Soil	.94	50	1	53.19						AS, CU	
239404-003		Soil	1	50	1	50.0						AS, CU	
239404-004		Soil	1.01	50	1	49.50						CU	
239404-007		Soil	1.07	50	1	46.73						CU	
239404-008		Soil	.98	50	1	51.02						CU, ZN	
239404-009		Soil	.99	50	1	50.51						CU, ZN	
239404-010		Soil	.99	50	1	50.51						CU	
239404-012		Soil	.98	50	1	51.02						CU	
239404-013		Soil	1	50	1	50.0						CU	
239404-014		Soil	.94	50	1	53.19						CU	
239455-001		Soil	1.01	50	1	49.50						PB	
239455-002		Soil	1	50	1	50.0						MO, PB, ZN	
239455-003		Soil	1.03	50	1	48.54						PB	
239455-004		Soil	1	50	1	50.0						PB	
239507-002		Soil	1.02	50	1	49.02						T22/ICP	
239530-001		Soil	.96	50	1	52.08						T22/ICP	
QC655811	BLANK	Soil	1	50	1	50.0							
QC655812	BS	Soil	1	50	1	50.0		.5	.5				
QC655813	BSD	Soil	1	50	1	50.0		.5	.5				
QC655814	MS	Soil	1.01	50	1	49.50		.5	.5				
QC655815	MSD	Soil	1.03	50	1	48.54		.5	.5				
QC655816	SER	Soil	1.01	50	1	49.50							
QC655817	PDS	Soil	1.01	50	1	49.50							

Analyst: NT Date: 09/12/12 Reviewer: PRW Date: 09/12/12

Soil Digestion for ICP & ICP-MS — Curtis & Tompkins, Ltd.

LIMS Batch #: 190409 | Scale Used | Digestion Method | **BK 3343**
Date Digested: 9/11/12 | ☑ Metals Prep | ☑ EPA 3050b | Page 96
Digested by: JDB | ☐ _____ | ☐ _____

Lvl.	Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID	Comments
	BLANK		Ø	☑50 ☐	Y	✓	
	BS		↓	☑50 ☐	↓	✓	
	BSD		↓	☑50 ☐	↓	✓	
II	239455-001	A	1.01	☑50 ☐	↓	✓	MSS
5	MS	↓	1.01	☑50 ☐	↓	✓	
	MSD	↓	1.03	☑50 ☐	↓	✓	
	239455-002	↓	1.00	☑50 ☐	↓	✓	
	239455-003	↓	1.03	☑50 ☐	↓	✓	
↓	239455-004	↓	1.00	☑50 ☐	↓	✓	
II	10 239404-001	A	0.99	☑50 ☐	↓	✓	
↑	-002	↓	0.94	☑50 ☐	↓	✓	
	-003	↓	1.00	☑50 ☐	↓	✓	
	-004	↓	1.01	☑50 ☐	↓	✓	
	-007	↓	1.07	☐ 50 ☐	↓	✓	
15	-008	↓	0.98	☐ 50 ☐	↓	✓	
	-009	↓	0.99	☐ 50 ☐	↓	✓	
	-010	↓	0.99	☐ 50 ☐	↓	✓	
	-012	↓	0.98	☐ 50 ☐	↓	✓	
	-013	↓	1.00	☐ 50 ☐	↓	✓	
↓	20 -014	↓	0.94	☐ 50 ☐	↓	✓	
II	239507-002	A	1.02	☐ 50 ☐	↓	✓	
↓	239530-001	B	0.96	☐ 50 ☐	↓	✓	
				☐ 50 ☐			
			BRS 9/11/12	☐ 50 ☐			
				☐ 50 ☐			

	Reagent ID or LIMS #		Initials / Date
Digestion tubes, lot#	143056-262		JDB 9.11.12
0.50 mL of spike solution (Std1) was added to all spikes	S20436		
0.50 mL of spike solution (Std2) was added to all spikes	S20437		
Digestion Temperature (°C), Block and Probe Location	B-12	95°	
Digestion begun at (time)	21:30		
1:1 HNO3	03390-091012		
concentrated HNO3	000000390		
3mL 30% hydrogen peroxide	1K52A02		
concentrated HCl	1K140541		
Digestion ended at (time)	02:30		
O filtered thru' 541 Whatman	666446		
Relinquished to ICP group	✓		

JDB 9.11.12
Digestion Chemist / Date

Continued from page 1
Continued on page 1

_____
Reviewed by / Date

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052366650

Instrument : MET34 Begun : 09/10/12 14:50
Method : EPA 7471B SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	190335	ICALBLK	CAL BLANK			09/10/12 14:50	1.0		
002	190335	ICAL	CAL 1			09/10/12 14:52	1.0	1	
003	190335	ICAL	CAL 2			09/10/12 14:54	1.0	1	
004	190335	ICAL	CAL 3			09/10/12 14:56	1.0	1	
005	190335	ICAL	CAL 4			09/10/12 14:57	1.0	1	
006	190335	ICAL	CAL 5			09/10/12 14:59	1.0	1	
007	190335	XICV				09/10/12 15:02	1.0	2	
008	190335	ICV				09/10/12 15:06	1.0	2	
009	190335	ICB				09/10/12 15:07	1.0		
010	190335	BLANK	QC655489	Soil	190335	09/10/12 15:09	1.0		
011	190335	BS	QC655490	Soil	190335	09/10/12 15:11	1.0		
012	190335	BSD	QC655491	Soil	190335	09/10/12 15:12	1.0		
013	190335	MSS	239290-001	Soil	190335	09/10/12 15:14	1.0		
014	190335	MS	QC655492	Soil	190335	09/10/12 15:16	1.0		
015	190335	MSD	QC655493	Soil	190335	09/10/12 15:17	1.0		
016	190335	SAMPLE	239290-002	Soil	190335	09/10/12 15:19	1.0		
017	190335	SAMPLE	239290-003	Soil	190335	09/10/12 15:21	1.0		
018	190335	SAMPLE	239290-004	Soil	190335	09/10/12 15:23	1.0		
019	190335	SAMPLE	239290-005	Soil	190335	09/10/12 15:24	1.0		
020	190335	CCV				09/10/12 15:26	1.0	3	
021	190335	CCB				09/10/12 15:28	1.0		
022	190335	SAMPLE	239290-006	Soil	190335	09/10/12 15:29	1.0		
023	190335	SAMPLE	239290-007	Soil	190335	09/10/12 15:31	1.0		
024	190335	SAMPLE	239290-008	Soil	190335	09/10/12 15:33	1.0		
025	190335	SAMPLE	239290-009	Soil	190335	09/10/12 15:35	1.0		
026	190335	SAMPLE	239290-010	Soil	190335	09/10/12 15:36	1.0		
027	190335	SAMPLE	239290-011	Soil	190335	09/10/12 15:38	1.0		
028	190335	SAMPLE	239290-012	Soil	190335	09/10/12 15:40	1.0		
029	190335	SAMPLE	239404-003	Soil	190335	09/10/12 15:41	5.0		
030	190335	SAMPLE	239404-007	Soil	190335	09/10/12 15:43	5.0		
031	190335	SAMPLE	239404-008	Soil	190335	09/10/12 15:45	5.0		
032	190335	CCV				09/10/12 15:46	1.0	3	
033	190335	CCB				09/10/12 15:48	1.0		
034	190335	SAMPLE	239404-009	Soil	190335	09/10/12 15:50	5.0		
035	190335	MSS	239452-001	Soil	190335	09/10/12 15:52	1.0		
036	190335	SER	QC655494	Soil	190335	09/10/12 15:53	5.0		
037	190335	SAMPLE	239475-002	Soil	190335	09/10/12 15:55	1.0		
038	190335	SAMPLE	239476-002	Soil	190335	09/10/12 15:57	1.0		
039	190335	SAMPLE	239477-002	Soil	190335	09/10/12 15:58	1.0		
040	190335	CCV				09/10/12 16:00	1.0	3	
041	190335	CCB				09/10/12 16:02	1.0		
042	190335	BLANK	QC655495	Soil	190336	09/10/12 16:10	1.0		
043	190335	BS	QC655496	Soil	190336	09/10/12 16:12	1.0		spk
044	190335	BSD	QC655497	Soil	190336	09/10/12 16:13	1.0		spk
045	190335	BS	QC655496	Soil	190336	09/10/12 16:22	1.0		
046	190335	BSD	QC655497	Soil	190336	09/10/12 16:24	1.0		
047	190335	MSS	239303-002	Soil	190336	09/10/12 16:26	1.0		spk
048	190335	MS	QC655498	Soil	190336	09/10/12 16:28	1.0		
049	190335	MSD	QC655499	Soil	190336	09/10/12 16:29	1.0		
050	190335	SAMPLE	239303-001	Soil	190336	09/10/12 16:31	1.0		spk
051	190335	SAMPLE	239303-003	Soil	190336	09/10/12 16:33	1.0		spk
052	190336	CCV				09/10/12 16:35	1.0	3	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052366650

Instrument : MET34 Begun : 09/10/12 14:50
Method : EPA 7471B SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	190336	CCB				09/10/12 16:37	1.0		
054	190336	SAMPLE	239303-004	Soil	190336	09/10/12 16:39	1.0		spk
055	190336	SAMPLE	239303-005	Soil	190336	09/10/12 16:40	1.0		spk
056	190336	SAMPLE	239303-006	Soil	190336	09/10/12 16:42	1.0		spk , 1:HG=12
057	190336	SAMPLE	239303-007	Soil	190336	09/10/12 16:44	1.0		spk
058	190336	SAMPLE	239303-008	Soil	190336	09/10/12 16:46	1.0		spk
059	190336	SAMPLE	239303-009	Soil	190336	09/10/12 16:47	1.0		spk
060	190336	SAMPLE	239303-010	Soil	190336	09/10/12 16:49	1.0		spk
061	190336	CCV				09/10/12 16:51	1.0	3	
062	190336	CCB				09/10/12 16:52	1.0		
063	190336	SAMPLE	239303-006	Soil	190336	09/10/12 16:59	5.0		
064	190336	CCV				09/10/12 17:00	1.0	3	
065	190336	CCB				09/10/12 17:02	1.0		

CRT 09/10/12 : On run 07, the ICV was just slightly over the limit which suggests poor homogenization. The ICV was re-shaken and reran on run 08. On run 43, and 44, the BS, BSD for the 2nd batch of soils had a high bias. The machine was stopped and the L/G separator was aired out due to moisture. The BS and BSD was then re-shaken and reran on 45 and 46. This might be due to poor homogenization or moisture build up.

CRT 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 41.

Standards used: 1=S20662 2=S20664 3=S20665

Flags used: spk=5% spike rule

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 METALS Soil: EPA 7471B

Inst : MET34
Calnum : 1052366650001
Units : ug/L

Date : 10-SEP-2012 14:50
X Axis : R

Reviewer : ---
Type : SOIL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	190335	1052366650002	CAL 1	10-SEP-2012 14:52	S20662 (500X)
L2	190335	1052366650003	CAL 2	10-SEP-2012 14:54	S20662 (200X)
L3	190335	1052366650004	CAL 3	10-SEP-2012 14:56	S20662 (50X)
L4	190335	1052366650005	CAL 4	10-SEP-2012 14:57	S20662 (20X)
L5	190335	1052366650006	CAL 5	10-SEP-2012 14:59	S20662 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	6375.0	5306.0	4846.0	4525.0	4434.6	LINR	-0.1130	2.27E-4		5097.3	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.2000	-12	0.5000	-2	2.0000	4	5.0000	1	10.000	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

1052366650001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 METALS Soil
EPA 7471B

Inst : MET34
Calnum : 1052366650001 Cal Date : 10-SEP-2012 Type : SOIL

ICV 1052366650008 (10-SEP-2012) stds: S20664

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	4.809	ug/L	-4	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650009 File : 190335 Time : 10-SEP-2012 15:07
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650020 File : 190335 Time : 10-SEP-2012 15:26
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL
Standards: S20665

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5097.3	4267.2	5.000	4.737	ug/L	-5	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650021 File : 190335 Time : 10-SEP-2012 15:28
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650032 File : 190335 Time : 10-SEP-2012 15:46
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL
Standards: S20665

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5097.3	4233.4	5.000	4.698	ug/L	-6	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650033 File : 190335 Time : 10-SEP-2012 15:48
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650040 File : 190335 Time : 10-SEP-2012 16:00
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL
Standards: S20665

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5097.3	4191.6	5.000	4.651	ug/L	-7	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650041 File : 190335 Time : 10-SEP-2012 16:02
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

SAMPLE PREPARATION SUMMARY

Batch # : 190335
Started By : CRT
Method : METHOD
Spike #1 ID : S20662

Prep Date : 10-SEP-2012 11:30

Analysis : HG
Finished By : CRT
Units : g

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239290-001		Soil	.58	50	1	86.21						T22/HG	MSS
239290-002		Soil	.58	50	1	86.21						T22/HG	
239290-003		Soil	.63	50	1	79.37						T22/HG	
239290-004		Soil	.58	50	1	86.21						T22/HG	
239290-005		Soil	.63	50	1	79.37						T22/HG	
239290-006		Soil	.59	50	1	84.75						T22/HG	
239290-007		Soil	.57	50	1	87.72						T22/HG	
239290-008		Soil	.62	50	1	80.65						T22/HG	
239290-009		Soil	.61	50	1	81.97						T22/HG	
239290-010		Soil	.57	50	1	87.72						T22/HG	
239290-011		Soil	.57	50	1	87.72						T22/HG	
239290-012		Soil	.63	50	1	79.37						T22/HG	
239404-003		Soil	.57	50	1	87.72						HG	
239404-007		Soil	.57	50	1	87.72						HG	
239404-008		Soil	.63	50	1	79.37						HG	
239404-009		Soil	.62	50	1	80.65						HG	
239452-001		Soil	.63	50	1	79.37						T22/HG	SER
239475-002		Soil	.64	50	1	78.13						T22/HG	
239476-002		Soil	.6	50	1	83.33						T22/HG	
239477-002		Soil	.59	50	1	84.75						T22/HG	
QC655489	BLANK	Soil	.6	50	1	83.33							
QC655490	BS	Soil	.6	50	1	83.33		1.25					
QC655491	BSD	Soil	.6	50	1	83.33		1.25					
QC655492	MS	Soil	.59	50	1	84.75		1.25					
QC655493	MSD	Soil	.6	50	1	83.33		1.25					
QC655494	SER	Soil	.58	50	1	86.21							

Analyst: CRT Date: 09/10/12 Reviewer: PRW Date: 09/10/12

Soil Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 190335
Date Digested: 9/10/12

Scale Used: ☑ Metals Prep ☐ _____
Digestion Method: ☑ EPA 7471A ☐ _____

BK 3336
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	Sample #	container ID	Sample Weight (g)	Final Volume (mL)	Filtered? (y/n)	Comments
	MB QC655489		0	☑ 50 ☐	Y	
	BS ↓ 90		0	☑ 50 ☐	↓	
	BSD ↓ 91		0	☑ 50 ☐		
	239290-001	C	0.58	☑ 50 ☐		MSS
5	MS QC 655492		0.59	☑ 50 ☐		
	MSD ↓ 93		0.60	☑ 50 ☐		
	239290-002	C	0.58	☑ 50 ☐		
	-003		0.63	☑ 50 ☐		
	-004		0.58	☑ 50 ☐		
10	-005		0.63	☑ 50 ☐		
	-006		0.59	☑ 50 ☐		
	-007		0.57	☑ 50 ☐		
	-009		0.62	☑ 50 ☐		
	-009		0.61	☑ 50 ☐		
15	-010		0.59	☑ 50 ☐		
	-011		0.57	☑ 50 ☐		
	-012	↓	0.63	☑ 50 ☐		
	239404-003	A	0.57	☑ 50 ☐		
	-004		0.59	☑ 50 ☐		
20	-005		0.63	☑ 50 ☐		
	-006	↓	0.62	☑ 50 ☐		
	239452-001	A	0.63	☑ 50 ☐		SER
	239475-002	B	0.61	☑ 50 ☐		
	239476-002	A	0.60	☑ 50 ☐		
	239477-002	↓	0.59	☑ 50 ☐	↓	

Reagent ID/ LIMS# / Time	Initials / Date
Digestion Tubes, Lot # EK120423	CFT 9/11/12
1.25 mL of spike standard was added to all spikes S20662	↓
☑ CAL digested with this batch ICAL Source LIMS S# ↓ 63	
ICV / CCV LIMS S# ↓ 64/65	
Digestion Temperature (°C), Block and Probe Location 95°C B-37	
Digestion Started at (time) 11:30	
Aqua Regia Acids (HNO3+ HCl) 9-10	
5% $KMnO_4$ 9-6	
NaCl.hydroxylamine hydrochloride 8-27	
Stannous Chloride 9-6	
Digestion Completd at (time) 12:00	
☑ filtered thru' 0.45 um syringe filter (lot #) SS, 208C7103	↓

9/10/12
Prep Chemist / Date

Continued from page _____
Continued on page _____

_____
Reviewed by / Date

Dilutions for 239404 METALS Soil
Curtis & Tompkins Laboratories

Type	Sample ID	IDFs
SAMPLE	239404-003	1X, 5X, 100X
SAMPLE	239404-007	1X, 5X
SAMPLE	239404-008	1X, 5X
SAMPLE	239404-009	1X, 5X, 100X
SAMPLE	239404-010	100X
SER	QC655494	5X
SER	QC655816	5X

ICP Raw Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82369087

Instrument : MET08 Begun : 09/12/12 07:27
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met08_sr_6010	ICALBLK				09/12/12 07:27	1.0		
002	met08_sr_6010	ICAL	CRI5.1			09/12/12 07:32	1.0	1	
003	met08_sr_6010	ICAL	CS100			09/12/12 07:37	1.0	2	
004	met08_sr_6010	ICAL	CS1K			09/12/12 07:41	1.0	3	
005	met08_sr_6010	ICAL	CS10K			09/12/12 07:46	1.0	4	
006	met08_sr_6010	ICAL	CS100K			09/12/12 07:51	1.0	5	
007	met08_sr_6010	ICV				09/12/12 07:56	1.0	6	
008	met08_sr_6010	ICB				09/12/12 08:02	1.0		
009	met08_sr_6010	ICSA				09/12/12 08:07	1.0	7	10:AL=510000
010	met08_sr_6010	ICSAB				09/12/12 08:21	1.0	8	5:AL=510000
011	met08_sr_6010	CRI				09/12/12 08:26	1.0	9	
012	met08_sr_6010	BLANK	QC655811	Soil	190409	09/12/12 08:41	1.0		
013	met08_sr_6010	BS	QC655812	Soil	190409	09/12/12 08:46	1.0		
014	met08_sr_6010	BSD	QC655813	Soil	190409	09/12/12 08:50	1.0		
015	met08_sr_6010	MSS	239455-001	Soil	190409	09/12/12 08:54	1.0		1:FE=150000
016	met08_sr_6010	MS	QC655814	Soil	190409	09/12/12 09:00	1.0		1:FE=150000
017	met08_sr_6010	MSD	QC655815	Soil	190409	09/12/12 09:06	1.0		1:FE=140000
018	met08_sr_6010	SER	QC655816	Soil	190409	09/12/12 09:13	5.0		
019	met08_sr_6010	PDS	QC655817	Soil	190409	09/12/12 09:17	1.0	10 11	
020	met08_sr_6010	CCV				09/12/12 09:23	1.0	12	
021	met08_sr_6010	CCB				09/12/12 09:28	1.0		
022	met08_sr_6010	SAMPLE	239404-001	Soil	190409	09/12/12 09:33	1.0		6:MG=1000000
023	met08_sr_6010	SAMPLE	239404-002	Soil	190409	09/12/12 09:37	1.0		6:MG=730000
024	met08_sr_6010	SAMPLE	239404-003	Soil	190409	09/12/12 09:40	1.0		5:CA=1000000
025	met08_sr_6010	SAMPLE	239404-004	Soil	190409	09/12/12 09:45	1.0		4:FE=550000
026	met08_sr_6010	SAMPLE	239404-007	Soil	190409	09/12/12 09:49	1.0		6:MG=900000
027	met08_sr_6010	SAMPLE	239404-008	Soil	190409	09/12/12 09:52	1.0		5:FE=680000
028	met08_sr_6010	SAMPLE	239404-009	Soil	190409	09/12/12 09:55	1.0		6:FE=790000
029	met08_sr_6010	SAMPLE	239404-010	Soil	190409	09/12/12 10:00	1.0		4:FE=100000
030	met08_sr_6010	SAMPLE	239404-012	Soil	190409	09/12/12 10:07	1.0		5:MG=3600000
031	met08_sr_6010	SAMPLE	239404-013	Soil	190409	09/12/12 10:10	1.0		4:MG=3200000
032	met08_sr_6010	ICSAB				09/12/12 10:13	1.0	8	5:AL=510000
033	met08_sr_6010	CCV				09/12/12 10:19	1.0	12	
034	met08_sr_6010	CCB				09/12/12 10:25	1.0		
035	met08_sr_6010	SAMPLE	239404-014	Soil	190409	09/12/12 10:30	1.0		5:MG=580000
036	met08_sr_6010	SAMPLE	239455-002	Soil	190409	09/12/12 10:33	1.0		1:FE=130000
037	met08_sr_6010	SAMPLE	239455-003	Soil	190409	09/12/12 10:37	1.0		1:FE=110000
038	met08_sr_6010	SAMPLE	239455-004	Soil	190409	09/12/12 10:41	1.0		
039	met08_sr_6010	SAMPLE	239507-002	Soil	190409	09/12/12 10:45	1.0		4:FE=480000
040	met08_sr_6010	SAMPLE	239530-001	Soil	190409	09/12/12 10:49	1.0		4:FE=360000
041	met08_sr_6010	CCV				09/12/12 10:54	1.0	12	
042	met08_sr_6010	CCB				09/12/12 10:59	1.0		
043	met08_sr_6010	ICSAB				09/12/12 11:03	1.0	8	5:AL=510000
044	met08_sr_6010	SAMPLE	239507-002	Soil	190409	09/12/12 11:17	1.0		4:FE=480000
045	met08_sr_6010	SAMPLE	239404-003	Soil	190409	09/12/12 11:20	100.0		
046	met08_sr_6010	SAMPLE	239404-009	Soil	190409	09/12/12 11:24	100.0		
047	met08_sr_6010	SAMPLE	239404-010	Soil	190409	09/12/12 11:28	100.0		
048	met08_sr_6010	SAMPLE	239530-001	Soil	190409	09/12/12 11:32	100.0		
049	met08_sr_6010	CCV				09/12/12 11:36	1.0	12	
050	met08_sr_6010	CCB				09/12/12 11:42	1.0		
051	met08_sr_6010	ICSAB				09/12/12 11:47	1.0	8	5:AL=510000
052	met08_sr_6010	BLANK	QC655838	Filtrate	190414	09/12/12 12:05	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82369087

Instrument : MET08
Method : EPA 6010C

Begun : 09/12/12 07:27
SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met08_sr_6010	BS	QC655839	Filtrate	190414	09/12/12 12:09	1.0		
054	met08_sr_6010	BSD	QC655840	Filtrate	190414	09/12/12 12:13	1.0		
055	met08_sr_6010	MSS	239502-001	Filtrate	190414	09/12/12 12:17	1.0		3:NA=620000
056	met08_sr_6010	MS	QC655841	Filtrate	190414	09/12/12 12:25	1.0		3:NA=630000
057	met08_sr_6010	MSD	QC655842	Filtrate	190414	09/12/12 12:31	1.0		3:NA=620000
058	met08_sr_6010	MSS	239391-002	Filtrate	190414	09/12/12 12:37	1.0		
059	met08_sr_6010	SER	QC655843	Filtrate	190414	09/12/12 12:42	5.0		
060	met08_sr_6010	PDS	QC655844	Filtrate	190414	09/12/12 12:47	1.0	13 14	1:CA=110000
061	met08_sr_6010	SAMPLE	239391-004	Filtrate	190414	09/12/12 12:52	1.0		3:CA=120000
062	met08_sr_6010	ICSAB				09/12/12 12:56	1.0	8	5:AL=510000
063	met08_sr_6010	CCV				09/12/12 13:01	1.0	12	
064	met08_sr_6010	CCB				09/12/12 13:06	1.0		
065	met08_sr_6010	BLANK	QC655838	Filtrate	190414	09/12/12 13:12	1.0		
066	met08_sr_6010	SAMPLE	239502-002	Filtrate	190414	09/12/12 13:16	1.0		2:CA=350000
067	met08_sr_6010	SAMPLE	239502-003	Filtrate	190414	09/12/12 13:23	1.0		2:NA=330000
068	met08_sr_6010	SAMPLE	239502-004	Filtrate	190414	09/12/12 13:28	1.0		3:CA=310000
069	met08_sr_6010	SAMPLE	239502-005	Filtrate	190414	09/12/12 13:33	1.0		2:CA=280000
070	met08_sr_6010	SAMPLE	239502-006	Filtrate	190414	09/12/12 13:37	1.0		
071	met08_sr_6010	SAMPLE	239391-004	Filtrate	190414	09/12/12 13:41	100.0		
072	met08_sr_6010	CCV				09/12/12 13:46	1.0	12	
073	met08_sr_6010	CCB				09/12/12 13:52	1.0		
074	met08_sr_6010	ICSAB				09/12/12 14:00	1.0	8	5:AL=500000
075	met08_sr_6010	BLANK	QC655845	Filtrate	190415	09/12/12 14:14	1.0		
076	met08_sr_6010	BS	QC655846	Filtrate	190415	09/12/12 14:20	1.0		
077	met08_sr_6010	BSD	QC655847	Filtrate	190415	09/12/12 14:24	1.0		
078	met08_sr_6010	MSS	239449-001	Filtrate	190415	09/12/12 14:28	1.0		1:NA=260000
079	met08_sr_6010	MS	QC655848	Filtrate	190415	09/12/12 14:32	1.0		
080	met08_sr_6010	MSD	QC655849	Filtrate	190415	09/12/12 14:36	1.0		
081	met08_sr_6010	SAMPLE	239449-002	Filtrate	190415	09/12/12 17:01	1.0		3:MG=1100000
082	met08_sr_6010	SAMPLE	239449-003	Filtrate	190415	09/12/12 17:06	1.0		4:MG=1000000
083	met08_sr_6010	SAMPLE	239449-004	Filtrate	190415	09/12/12 17:09	1.0		3:MG=830000
084	met08_sr_6010	SAMPLE	239449-005	Filtrate	190415	09/12/12 17:30	1.0		3:MG=890000
085	met08_sr_6010	CCV				09/12/12 17:37	1.0	12	
086	met08_sr_6010	X				09/12/12 17:42	1.0		
087	met08_sr_6010	CCB				09/12/12 17:46	1.0		
088	met08_sr_6010	SAMPLE	239449-006	Filtrate	190415	09/12/12 17:51	1.0		3:MG=460000
089	met08_sr_6010	SAMPLE	239449-007	Filtrate	190415	09/12/12 17:58	1.0		2:MG=420000
090	met08_sr_6010	SAMPLE	239449-008	Filtrate	190415	09/12/12 18:04	1.0		2:CA=190000
091	met08_sr_6010	SAMPLE	239449-009	Filtrate	190415	09/12/12 18:10	1.0		3:MG=680000
092	met08_sr_6010	SAMPLE	239449-010	Filtrate	190415	09/12/12 18:17	1.0		2:MG=420000
093	met08_sr_6010	XBLANK	QC655823	Soil	190411	09/12/12 18:24	1.0		
094	met08_sr_6010	XBS	QC655824	Soil	190411	09/12/12 18:29	1.0		
095	met08_sr_6010	XBSD	QC655825	Soil	190411	09/12/12 18:33	1.0		
096	met08_sr_6010	XMSS	239296-001	Soil	190411	09/12/12 18:37	1.0		2:FE=360000
097	met08_sr_6010	XMS	QC655826	Soil	190411	09/12/12 18:40	1.0		3:FE=410000
098	met08_sr_6010	CCV				09/12/12 18:46	1.0	12	
099	met08_sr_6010	X				09/12/12 18:51	1.0		
100	met08_sr_6010	CCB				09/12/12 18:55	1.0		
101	met08_sr_6010	XMSD	QC655827	Soil	190411	09/12/12 19:00	1.0		3:FE=370000
102	met08_sr_6010	XSAMPLE	239296-002	Soil	190411	09/12/12 19:05	1.0		3:FE=360000
103	met08_sr_6010	XSAMPLE	239296-003	Soil	190411	09/12/12 19:08	1.0		2:FE=340000
104	met08_sr_6010	XSAMPLE	239296-004	Soil	190411	09/12/12 19:12	1.0		2:FE=350000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82369087

Instrument : MET08 Begun : 09/12/12 07:27
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met08_sr_6010	XSAMPLE	239296-005	Soil	190411	09/12/12 19:15	1.0		2:FE=270000
106	met08_sr_6010	XSAMPLE	239296-006	Soil	190411	09/12/12 19:18	1.0		3:FE=410000
107	met08_sr_6010	XSAMPLE	239296-007	Soil	190411	09/12/12 19:21	1.0		4:FE=400000
108	met08_sr_6010	ICSAB				09/12/12 19:24	1.0	8	5:AL=490000
109	met08_sr_6010	XSAMPLE	239296-008	Soil	190411	09/12/12 19:30	1.0		3:FE=410000
110	met08_sr_6010	XSAMPLE	239296-009	Soil	190411	09/12/12 19:33	1.0		3:FE=410000
111	met08_sr_6010	XSAMPLE	239300-001	Soil	190411	09/12/12 19:36	1.0		2:FE=270000
112	met08_sr_6010	CCV				09/12/12 19:39	1.0	12	
113	met08_sr_6010	CCB				09/12/12 19:45	1.0		
114	met08_sr_6010	XSAMPLE	239300-002	Soil	190411	09/12/12 19:50	1.0		3:FE=340000
115	met08_sr_6010	XSAMPLE	239300-003	Soil	190411	09/12/12 19:53	1.0		2:FE=240000
116	met08_sr_6010	XSAMPLE	239300-004	Soil	190411	09/12/12 19:56	1.0		2:FE=240000
117	met08_sr_6010	XSAMPLE	239300-005	Soil	190411	09/12/12 20:00	1.0		3:FE=340000
118	met08_sr_6010	XSAMPLE	239300-006	Soil	190411	09/12/12 20:03	1.0		2:FE=400000
119	met08_sr_6010	XSAMPLE	239300-007	Soil	190411	09/12/12 20:06	1.0		3:FE=220000
120	met08_sr_6010	XSAMPLE	239300-008	Soil	190411	09/12/12 20:09	1.0		2:FE=350000
121	met08_sr_6010	XSAMPLE	239300-009	Soil	190411	09/12/12 20:12	1.0		2:FE=290000
122	met08_sr_6010	XSAMPLE	239300-010	Soil	190411	09/12/12 20:16	1.0		2:FE=300000
123	met08_sr_6010	XSAMPLE	239300-011	Soil	190411	09/12/12 20:19	1.0		4:FE=410000
124	met08_sr_6010	CCV				09/12/12 20:22	1.0	12	
125	met08_sr_6010	CCB				09/12/12 20:28	1.0		
126	met08_sr_6010	XSAMPLE	239290-001	Soil	190360	09/12/12 20:33	1.0		2:FE=310000
127	met08_sr_6010	XSAMPLE	239290-002	Soil	190360	09/12/12 20:36	1.0		3:FE=390000
128	met08_sr_6010	XSAMPLE	239290-003	Soil	190360	09/12/12 20:41	1.0		3:FE=380000
129	met08_sr_6010	XSAMPLE	239290-004	Soil	190360	09/12/12 20:46	1.0		3:FE=370000
130	met08_sr_6010	XSAMPLE	239290-005	Soil	190360	09/12/12 20:52	1.0		3:FE=380000
131	met08_sr_6010	XSAMPLE	239290-006	Soil	190360	09/12/12 20:55	1.0		3:FE=410000
132	met08_sr_6010	XSAMPLE	239290-007	Soil	190360	09/12/12 21:00	1.0		3:FE=370000
133	met08_sr_6010	ICSAB				09/12/12 21:06	1.0	8	5:AL=500000
134	met08_sr_6010	XSAMPLE	239290-008	Soil	190360	09/12/12 21:11	1.0		3:FE=390000
135	met08_sr_6010	XSAMPLE	239290-009	Soil	190360	09/12/12 21:16	1.0		3:FE=370000
136	met08_sr_6010	XSAMPLE	239290-010	Soil	190360	09/12/12 21:21	1.0		3:FE=410000
137	met08_sr_6010	CCV				09/12/12 21:27	1.0	12	
138	met08_sr_6010	CCB				09/12/12 21:32	1.0		
139	met08_sr_6010	XSAMPLE	239290-011	Soil	190360	09/12/12 21:37	1.0		3:FE=400000
140	met08_sr_6010	XSAMPLE	239290-012	Soil	190360	09/12/12 21:42	1.0		3:FE=380000
141	met08_sr_6010	XBLANK	QC655818	Soil	190410	09/12/12 21:48	1.0		
142	met08_sr_6010	XSAMPLE	239303-001	Soil	190410	09/12/12 21:53	1.0		2:FE=400000
143	met08_sr_6010	XSAMPLE	239303-002	Soil	190410	09/12/12 21:56	1.0		3:FE=390000
144	met08_sr_6010	XSAMPLE	239303-003	Soil	190410	09/12/12 21:59	1.0		3:FE=380000
145	met08_sr_6010	XSAMPLE	239303-004	Soil	190410	09/12/12 22:02	1.0		3:FE=420000
146	met08_sr_6010	XSAMPLE	239303-005	Soil	190410	09/12/12 22:05	1.0		2:FE=290000
147	met08_sr_6010	XSAMPLE	239303-006	Soil	190410	09/12/12 22:09	1.0		3:FE=410000
148	met08_sr_6010	XSAMPLE	239303-007	Soil	190410	09/12/12 22:12	1.0		4:FE=410000
149	met08_sr_6010	CCV				09/12/12 22:15	1.0	12	
150	met08_sr_6010	CCB				09/12/12 22:20	1.0		
151	met08_sr_6010	XSAMPLE	239303-008	Soil	190410	09/12/12 22:26	1.0		2:FE=280000
152	met08_sr_6010	XSAMPLE	239303-009	Soil	190410	09/12/12 22:29	1.0		3:FE=400000
153	met08_sr_6010	XSAMPLE	239303-010	Soil	190410	09/12/12 22:32	1.0		3:FE=390000
154	met08_sr_6010	CCV				09/12/12 22:35	1.0	12	
155	met08_sr_6010	CCB				09/12/12 22:40	1.0		
156	met08_sr_6010	XICSAB				09/12/12 22:46	1.0	8	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82369087

Instrument : MET08 Begun : 09/12/12 07:27
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met08_sr_6010	ICSAB				09/13/12 00:11	1.0	8	5:AL=500000

NT 09/13/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 157.

JDB 09/12/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 76 through 156.

JDB 09/12/12 : Time difference between runs #80 and #81 due to software encountering a fatal error.

Standards used: 1=S20200 2=S20215 3=S20214 4=S20216 5=S20217 6=S20644 7=S20220 8=S20222 9=S20319 10=S20436 11=S20437 12=S20645 13=S19831 14=S19832

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst : MET08 Lab ID : 239404-001 Client ID : EX36B072A.2
Seqnum : 82369087022 Matrix : Soil Acct : ARCSF (JG)
File : met08_sr_6010 Batch : 190409 Time : 12-SEP-2012 09:33
Cal : 82369087001 Caldate : 12-SEP-2012
IDF : 1.0 Units : mg/Kg

0.99 g --> 50.0 ml = 50.51 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Arsenic	A	6.1	0.25		!<a+ u
Copper	A	52	**0.26**		B u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1543903	-2.65

!=warning +=high bias <=opening B=method blank contamination a=ICSA u=use y=RL raised

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Sequence No.: 22 **Autosampler Location: 19**
Sample ID: 239404-001,190409,1 **Date Collected: 9/12/2012 9:33:50 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-001,190409,1

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: 239404-001,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1543902.5	97.3530	%	1.32507				1.36%
Y	98140.6	105.142	%	0.5062				0.48%
Ag 328.068†	3519.0	5.27857	ug/L	0.952573	5.27857	ug/L	0.952573	18.05%
Al 308.215 R†	693918.1	659104	ug/L	2856.4	659104	ug/L	2856.4	0.43%
As 188.979†	2299.6	121.470	ug/L	16.7146	121.470	ug/L	16.7146	13.76%
B 249.677†	79213.0	418.936	ug/L	9.6159	418.936	ug/L	9.6159	2.30%
Ba 233.527†	1498534.1	3965.28	ug/L	48.082	3965.28	ug/L	48.082	1.21%
Be 313.107†	37700.3	8.57685	ug/L	0.164249	8.57685	ug/L	0.164249	1.92%
Ca 315.887 R†	2747058.7	329198	ug/L	2119.8	329198	ug/L	2119.8	0.64%
Cd 214.440†	880.1	3.95139	ug/L	0.128352	3.95139	ug/L	0.128352	3.25%
Co 228.616†	81760.8	591.165	ug/L	8.9699	591.165	ug/L	8.9699	1.52%
Cr 267.716†	416857.6	4940.82	ug/L	46.458	4940.82	ug/L	46.458	0.94%
Cu 324.752†	109026.5	1037.31	ug/L	6.852	1037.31	ug/L	6.852	0.66%
Fe 238.204 R†	3311116.3	761903	ug/L	3939.1	761903	ug/L	3939.1	0.52%
K 766.490 R†	102171.7	23631.5	ug/L	182.58	23631.5	ug/L	182.58	0.77%
Mg 279.077 R†	983031.6	1023760	ug/L	4694.1	1023760	ug/L	4694.1	0.46%
Mn 257.610†	34697473.0	21793.7	ug/L	514.84	21793.7	ug/L	514.84	2.36%
Mo 202.031†	-374.7	-11.2512	ug/L	1.14133	-11.2512	ug/L	1.14133	10.14%
Na 589.592 R†	145659.1	16053.2	ug/L	76.42	16053.2	ug/L	76.42	0.48%
Ni 231.604†	304116.0	6430.75	ug/L	62.766	6430.75	ug/L	62.766	0.98%
Pb 220.353†	16910.6	307.642	ug/L	6.9997	307.642	ug/L	6.9997	2.28%
Sb 206.836†	1930.3	64.1882	ug/L	9.19447	64.1882	ug/L	9.19447	14.32%
Se 196.026†	1621.3	56.6422	ug/L	15.27907	56.6422	ug/L	15.27907	26.97%
Ti 334.940 R†	3195458.4	43983.2	ug/L	741.86	43983.2	ug/L	741.86	1.69%
Tl 190.801†	62.9	3.49892	ug/L	13.361610	3.49892	ug/L	13.361610	381.88%
V 292.402†	257566.5	1855.71	ug/L	17.869	1855.71	ug/L	17.869	0.96%
Zn 206.200†	104260.2	1392.87	ug/L	14.269	1392.87	ug/L	14.269	1.02%
Sn 189.927†	131.1	6.42532	ug/L	4.089160	6.42532	ug/L	4.089160	63.64%
Sr 421.552 R	581790.9	1362.27	ug/L	11.004	1362.27	ug/L	11.004	0.81%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239404-002	Client ID	: EX36B072B.2
Seqnum	: 82369087023	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190409	Time	: 12-SEP-2012 09:37
Cal	: 82369087001	Caldate	: 12-SEP-2012		
IDF	: 1.0			Units	: mg/Kg

0.94 g --> 50.0 ml = 53.19 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Arsenic	A	6.4	0.27		!<a+ u
Copper	A	110	**0.28**		B u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1586747	0.05

!=warning +=high bias <=opening B=method blank contamination a=ICSA u=use y=RL raised

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Sequence No.: 23 **Autosampler Location: 20**
Sample ID: 239404-002,190409,1 **Date Collected: 9/12/2012 9:37:07 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-002,190409,1

Analyte	Back Pressure	Flow
All	136.0 kPa	0.55 L/min

Mean Data: 239404-002,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1586747.4	100.055	%	0.5384				0.54%
Y	102362.7	109.665	%	1.9740				1.80%
Ag 328.068†	2135.4	3.20325	ug/L	0.393294	3.20325	ug/L	0.393294	12.28%
Al 308.215 R†	399591.7	379544	ug/L	255.1	379544	ug/L	255.1	0.07%
As 188.979†	2264.4	119.614	ug/L	2.5258	119.614	ug/L	2.5258	2.11%
B 249.677†	64787.4	342.643	ug/L	9.0534	342.643	ug/L	9.0534	2.64%
Ba 233.527†	1496491.6	3959.88	ug/L	12.733	3959.88	ug/L	12.733	0.32%
Be 313.107†	22489.0	5.11627	ug/L	0.059863	5.11627	ug/L	0.059863	1.17%
Ca 315.887 R†	2725461.1	326610	ug/L	4087.9	326610	ug/L	4087.9	1.25%
Cd 214.440†	934.3	4.19497	ug/L	0.129495	4.19497	ug/L	0.129495	3.09%
Co 228.616†	70695.3	517.478	ug/L	4.7223	517.478	ug/L	4.7223	0.91%
Cr 267.716†	274469.0	3253.15	ug/L	17.947	3253.15	ug/L	17.947	0.55%
Cu 324.752†	223634.0	2127.73	ug/L	18.777	2127.73	ug/L	18.777	0.88%
Fe 238.204 R†	2523387.6	580643	ug/L	2122.4	580643	ug/L	2122.4	0.37%
K 766.490 R†	95800.7	22157.9	ug/L	27.17	22157.9	ug/L	27.17	0.12%
Mg 279.077 R†	700493.6	729516	ug/L	4803.3	729516	ug/L	4803.3	0.66%
Mn 257.610†	31522863.7	19799.7	ug/L	93.65	19799.7	ug/L	93.65	0.47%
Mo 202.031†	-341.1	-10.2419	ug/L	1.83671	-10.2419	ug/L	1.83671	17.93%
Na 589.592 R†	112139.7	12359.0	ug/L	55.01	12359.0	ug/L	55.01	0.45%
Ni 231.604†	271129.1	5733.22	ug/L	25.305	5733.22	ug/L	25.305	0.44%
Pb 220.353†	13528.4	246.111	ug/L	6.5099	246.111	ug/L	6.5099	2.65%
Sb 206.836†	1590.3	52.8816	ug/L	10.74701	52.8816	ug/L	10.74701	20.32%
Se 196.026†	859.0	30.0109	ug/L	26.34599	30.0109	ug/L	26.34599	87.79%
Ti 334.940 R†	2507841.5	34518.6	ug/L	756.73	34518.6	ug/L	756.73	2.19%
Tl 190.801†	-175.5	-9.76423	ug/L	14.989927	-9.76423	ug/L	14.989927	153.52%
V 292.402†	172589.2	1243.47	ug/L	5.066	1243.47	ug/L	5.066	0.41%
Zn 206.200†	107694.4	1438.75	ug/L	9.039	1438.75	ug/L	9.039	0.63%
Sn 189.927†	131.2	6.43158	ug/L	2.257259	6.43158	ug/L	2.257259	35.10%
Sr 421.552 R	611662.9	1425.39	ug/L	26.836	1425.39	ug/L	26.836	1.88%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239404-003	Client ID	: EX36B072C.2
Seqnum	: 82369087024	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190409	Time	: 12-SEP-2012 09:40
Cal	: 82369087001	Caldate	: 12-SEP-2012		
IDF	: 1.0			Units	: mg/Kg

1.00 g --> 50.0 ml = 50.0 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Arsenic	A	18	0.25		!<a+ u
Copper	A	**710 >LR**	**0.26**		>LR B **y b***

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1842988	16.21

!=warning +=high bias <=opening >LR=overrange B=method blank contamination a=ICSA b=noncompliant u=use y=RL raised

Sequence No.: 24 **Autosampler Location: 21**
Sample ID: 239404-003,190409,1 **Date Collected: 9/12/2012 9:40:27 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-003,190409,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: 239404-003,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1842988.0	116.212	%	1.0727				0.92%
Y	116855.8	125.192	%	1.6261				1.30%
Ag 328.068†	1938.7	2.90816	ug/L	0.511624	2.90816	ug/L	0.511624	17.59%
Al 308.215 R†	128196.5	121765	ug/L	995.7	121765	ug/L	995.7	0.82%
As 188.979†	6882.6	363.560	ug/L	22.9456	363.560	ug/L	22.9456	6.31%
B 249.677†	30720.2	162.471	ug/L	4.8290	162.471	ug/L	4.8290	2.97%
Ba 233.527†	6064142.2	16046.4	ug/L	164.05	16046.4	ug/L	164.05	1.02%
Be 313.107†	26708.8	6.07627	ug/L	0.078196	6.07627	ug/L	0.078196	1.29%
Ca 315.887 R†	8643739.1	1035830	ug/L	14276.5	1035830	ug/L	14276.5	1.38%
Cd 214.440†	1640.3	7.36451	ug/L	0.380541	7.36451	ug/L	0.380541	5.17%
Co 228.616†	36241.4	279.872	ug/L	6.7143	279.872	ug/L	6.7143	2.40%
Cr 267.716†	89756.6	1063.84	ug/L	7.619	1063.84	ug/L	7.619	0.72%
Cu 324.752†	1484678.7	14125.7	ug/L	111.37	14125.7	ug/L	111.37	0.79%
Fe 238.204 R†	1393529.7	320658	ug/L	1744.8	320658	ug/L	1744.8	0.54%
K 766.490 R†	102209.8	23640.3	ug/L	234.43	23640.3	ug/L	234.43	0.99%
Mg 279.077 R†	77197.4	80395.7	ug/L	656.63	80395.7	ug/L	656.63	0.82%
Mn 257.610†	Saturated2							
Mo 202.031†	129.6	3.89181	ug/L	0.810991	3.89181	ug/L	0.810991	20.84%
Na 589.592 R†	11747.6	1294.72	ug/L	3.291	1294.72	ug/L	3.291	0.25%
Ni 231.604†	46290.9	978.854	ug/L	6.6364	978.854	ug/L	6.6364	0.68%
Pb 220.353†	99889.7	1817.21	ug/L	36.334	1817.21	ug/L	36.334	2.00%
Sb 206.836†	988.0	32.8547	ug/L	10.75584	32.8547	ug/L	10.75584	32.74%
Se 196.026†	27.0	0.944837	ug/L	7.9647264	0.944837	ug/L	7.9647264	842.97%
Ti 334.940 R†	696716.5	9589.80	ug/L	27.294	9589.80	ug/L	27.294	0.28%
Tl 190.801†	-147.1	-8.18310	ug/L	7.685530	-8.18310	ug/L	7.685530	93.92%
V 292.402†	131517.9	947.557	ug/L	4.1609	947.557	ug/L	4.1609	0.44%
Zn 206.200†	237180.0	3168.61	ug/L	24.235	3168.61	ug/L	24.235	0.76%
Sn 189.927†	147.1	7.21247	ug/L	1.568316	7.21247	ug/L	1.568316	21.74%
Sr 421.552 R	941318.6	2173.20	ug/L	9.099	2173.20	ug/L	9.099	0.42%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst : MET08 Lab ID : 239404-003 Client ID : EX36B072C.2
Seqnum : 82369087045 Matrix : Soil Acct : ARCSF (JG)
File : met08_sr_6010 Batch : 190409 Time : 12-SEP-2012 11:20
Cal : 82369087001 Caldate : 12-SEP-2012
IDF : 100.0 Units : mg/Kg

1.00 g --> 50.0 ml = 50.0 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Arsenic	A	17 J	25		!<a+
Copper	A	890	**26**		B u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1709186	7.78

!=warning +=high bias <=opening B=method blank contamination a=ICSA u=use y=RL raised

Sequence No.: 13 **Autosampler Location: 12**
Sample ID: 239404-003,190409,100 **Date Collected: 9/12/2012 11:20:23 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-003,190409,100

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: 239404-003,190409,100

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1709186.2	107.775	%	1.7676				1.64%
Y	100069.0	107.208	%	1.8355				1.71%
Ag 328.068†	-601.5	-0.902304	ug/L	0.3061118	-0.902304	ug/L	0.3061118	33.93%
Al 308.215 R†	1881.3	1786.93	ug/L	23.863	1786.93	ug/L	23.863	1.34%
As 188.979†	66.0	3.48545	ug/L	1.672539	3.48545	ug/L	1.672539	47.99%
B 249.677†	2594.5	13.7215	ug/L	0.44218	13.7215	ug/L	0.44218	3.22%
Ba 233.527†	84623.8	223.924	ug/L	2.2807	223.924	ug/L	2.2807	1.02%
Be 313.107†	-152.4	-0.0346698	ug/L	0.00894386	-0.0346698	ug/L	0.00894386	25.80%
Ca 315.887 R†	123954.4	14854.3	ug/L	73.59	14854.3	ug/L	73.59	0.50%
Cd 214.440†	64.4	0.289056	ug/L	0.0202686	0.289056	ug/L	0.0202686	7.01%
Co 228.616†	525.4	4.09779	ug/L	0.083270	4.09779	ug/L	0.083270	2.03%
Cr 267.716†	1232.1	14.6031	ug/L	0.37955	14.6031	ug/L	0.37955	2.60%
Cu 324.752†	18729.2	178.196	ug/L	0.5917	178.196	ug/L	0.5917	0.33%
Fe 238.204 R†	20651.1	4751.91	ug/L	92.841	4751.91	ug/L	92.841	1.95%
K 766.490 R†	725.0	167.690	ug/L	71.6648	167.690	ug/L	71.6648	42.74%
Mg 279.077 R†	1165.8	1214.10	ug/L	52.940	1214.10	ug/L	52.940	4.36%
Mn 257.610†	740430.3	465.069	ug/L	5.7523	465.069	ug/L	5.7523	1.24%
Mo 202.031†	38.4	1.15425	ug/L	0.285388	1.15425	ug/L	0.285388	24.73%
Na 589.592 R†	469.8	51.7798	ug/L	8.18983	51.7798	ug/L	8.18983	15.82%
Ni 231.604†	685.4	14.4933	ug/L	0.48310	14.4933	ug/L	0.48310	3.33%
Pb 220.353†	1500.3	27.2936	ug/L	0.36469	27.2936	ug/L	0.36469	1.34%
Sb 206.836†	21.9	0.727330	ug/L	0.4545360	0.727330	ug/L	0.4545360	62.49%
Se 196.026†	-49.4	-1.72549	ug/L	0.851321	-1.72549	ug/L	0.851321	49.34%
Ti 334.940 R†	8484.5	116.783	ug/L	1.2093	116.783	ug/L	1.2093	1.04%
Tl 190.801†	21.2	1.17899	ug/L	1.167578	1.17899	ug/L	1.167578	99.03%
V 292.402†	1687.5	12.1580	ug/L	0.28630	12.1580	ug/L	0.28630	2.35%
Zn 206.200†	3379.7	45.1507	ug/L	1.10141	45.1507	ug/L	1.10141	2.44%
Sn 189.927†	33.6	1.64808	ug/L	0.430188	1.64808	ug/L	0.430188	26.10%
Sr 421.552 R	12047.2	27.8169	ug/L	0.93549	27.8169	ug/L	0.93549	3.36%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239404-004	Client ID	: EX36B078A.2
Seqnum	: 82369087025	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190409	Time	: 12-SEP-2012 09:45
Cal	: 82369087001	Caldate	: 12-SEP-2012		
IDF	: 1.0			Units	: mg/Kg

1.01 g --> 50.0 ml = 49.50 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Copper	A	91	**0.26**		B u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1744172	9.98

B=method blank contamination u=use y=RL raised

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Sequence No.: 25 **Autosampler Location: 22**
Sample ID: 239404-004,190409,1 **Date Collected: 9/12/2012 9:45:53 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-004,190409,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: 239404-004,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1744172.2	109.981	%	1.0176				0.93%
Y	109858.8	117.696	%	1.9968				1.70%
Ag 328.068†	251.4	0.377156	ug/L	0.1909238	0.377156	ug/L	0.1909238	50.62%
Al 308.215 R†	283210.1	269001	ug/L	2079.4	269001	ug/L	2079.4	0.77%
As 188.979†	593.4	31.3444	ug/L	3.74212	31.3444	ug/L	3.74212	11.94%
B 249.677†	57438.7	303.777	ug/L	2.5270	303.777	ug/L	2.5270	0.83%
Ba 233.527†	3306291.1	8748.80	ug/L	10.013	8748.80	ug/L	10.013	0.11%
Be 313.107†	64275.0	14.6226	ug/L	0.08104	14.6226	ug/L	0.08104	0.55%
Ca 315.887 R†	482946.4	57874.6	ug/L	458.41	57874.6	ug/L	458.41	0.79%
Cd 214.440†	718.9	3.22757	ug/L	0.384297	3.22757	ug/L	0.384297	11.91%
Co 228.616†	39635.2	299.696	ug/L	4.1218	299.696	ug/L	4.1218	1.38%
Cr 267.716†	41117.4	487.345	ug/L	3.8057	487.345	ug/L	3.8057	0.78%
Cu 324.752†	192264.2	1829.26	ug/L	2.945	1829.26	ug/L	2.945	0.16%
Fe 238.204 R†	2370309.6	545419	ug/L	3882.6	545419	ug/L	3882.6	0.71%
K 766.490 R†	195154.6	45137.7	ug/L	345.99	45137.7	ug/L	345.99	0.77%
Mg 279.077 R†	95762.3	99729.8	ug/L	775.16	99729.8	ug/L	775.16	0.78%
Mn 257.610†	34823905.7	21873.1	ug/L	253.42	21873.1	ug/L	253.42	1.16%
Mo 202.031†	-522.5	-15.6878	ug/L	0.84519	-15.6878	ug/L	0.84519	5.39%
Na 589.592 R†	31571.5	3479.53	ug/L	34.742	3479.53	ug/L	34.742	1.00%
Ni 231.604†	50929.5	1076.94	ug/L	10.657	1076.94	ug/L	10.657	0.99%
Pb 220.353†	13808.0	251.198	ug/L	0.7787	251.198	ug/L	0.7787	0.31%
Sb 206.836†	1426.5	47.4349	ug/L	5.41913	47.4349	ug/L	5.41913	11.42%
Se 196.026†	219.7	7.67701	ug/L	17.961561	7.67701	ug/L	17.961561	233.97%
Ti 334.940 R†	1019628.2	14034.4	ug/L	208.45	14034.4	ug/L	208.45	1.49%
Tl 190.801†	-379.5	-21.1188	ug/L	2.29396	-21.1188	ug/L	2.29396	10.86%
V 292.402†	107067.3	771.396	ug/L	0.6696	771.396	ug/L	0.6696	0.09%
Zn 206.200†	129176.3	1725.73	ug/L	2.813	1725.73	ug/L	2.813	0.16%
Sn 189.927†	259.9	12.7388	ug/L	2.23201	12.7388	ug/L	2.23201	17.52%
Sr 421.552 R	180384.3	418.013	ug/L	5.7999	418.013	ug/L	5.7999	1.39%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239404-007	Client ID	: EX13B004A.2
Seqnum	: 82369087026	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190409	Time	: 12-SEP-2012 09:49
Cal	: 82369087001	Caldate	: 12-SEP-2012		
IDF	: 1.0			Units	: mg/Kg

1.07 g --> 50.0 ml = 46.73 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Copper	A	140	**0.24**		B u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1527240	-3.70

B=method blank contamination u=use y=RL raised

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Sequence No.: 26 **Autosampler Location: 23**
Sample ID: 239404-007,190409,1 **Date Collected: 9/12/2012 9:49:11 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-007,190409,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: 239404-007,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1527239.5	96.3023	%	0.46651				0.48%
Y	99574.1	106.677	%	0.8314				0.78%
Ag 328.068†	4032.1	6.04831	ug/L	0.254661	6.04831	ug/L	0.254661	4.21%
Al 308.215 R†	569815.1	541227	ug/L	1039.4	541227	ug/L	1039.4	0.19%
As 188.979†	1870.1	98.7867	ug/L	9.52360	98.7867	ug/L	9.52360	9.64%
B 249.677†	82525.7	436.456	ug/L	3.0746	436.456	ug/L	3.0746	0.70%
Ba 233.527†	1511216.8	3998.84	ug/L	19.407	3998.84	ug/L	19.407	0.49%
Be 313.107†	32486.9	7.39078	ug/L	0.176709	7.39078	ug/L	0.176709	2.39%
Ca 315.887 R†	3590991.4	430332	ug/L	4843.1	430332	ug/L	4843.1	1.13%
Cd 214.440†	1499.2	6.73137	ug/L	0.278369	6.73137	ug/L	0.278369	4.14%
Co 228.616†	77042.9	563.450	ug/L	3.8835	563.450	ug/L	3.8835	0.69%
Cr 267.716†	333370.4	3951.28	ug/L	25.884	3951.28	ug/L	25.884	0.66%
Cu 324.752†	311060.3	2959.53	ug/L	28.496	2959.53	ug/L	28.496	0.96%
Fe 238.204 R†	3073250.4	707169	ug/L	393.5	707169	ug/L	393.5	0.06%
K 766.490 R†	117113.0	27087.3	ug/L	37.04	27087.3	ug/L	37.04	0.14%
Mg 279.077 R†	865647.6	901512	ug/L	1521.5	901512	ug/L	1521.5	0.17%
Mn 257.610†	30284097.0	19021.6	ug/L	267.09	19021.6	ug/L	267.09	1.40%
Mo 202.031†	-430.8	-12.9355	ug/L	1.76049	-12.9355	ug/L	1.76049	13.61%
Na 589.592 R†	113073.5	12461.9	ug/L	20.44	12461.9	ug/L	20.44	0.16%
Ni 231.604†	288009.2	6090.16	ug/L	31.175	6090.16	ug/L	31.175	0.51%
Pb 220.353†	21664.6	394.126	ug/L	6.4526	394.126	ug/L	6.4526	1.64%
Sb 206.836†	1921.4	63.8924	ug/L	7.43100	63.8924	ug/L	7.43100	11.63%
Se 196.026†	475.6	16.6158	ug/L	9.13108	16.6158	ug/L	9.13108	54.95%
Ti 334.940 R†	2752864.4	37891.2	ug/L	495.25	37891.2	ug/L	495.25	1.31%
Tl 190.801†	-163.7	-9.10780	ug/L	3.422260	-9.10780	ug/L	3.422260	37.58%
V 292.402†	219344.9	1580.33	ug/L	8.028	1580.33	ug/L	8.028	0.51%
Zn 206.200†	145793.9	1947.74	ug/L	16.436	1947.74	ug/L	16.436	0.84%
Sn 189.927†	186.5	9.14388	ug/L	9.331796	9.14388	ug/L	9.331796	102.06%
Sr 421.552 R	884389.6	2058.00	ug/L	11.423	2058.00	ug/L	11.423	0.56%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239404-008	Client ID	: EX13B023A.2
Seqnum	: 82369087027	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190409	Time	: 12-SEP-2012 09:52
Cal	: 82369087001	Caldate	: 12-SEP-2012		
IDF	: 1.0			Units	: mg/Kg

0.98 g --> 50.0 ml = 51.02 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Copper	A	420	**0.26**		B u **y**
Zinc	A	240	1.0	**0.19**	!<a+ B u

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1718682	8.37

!=warning +=high bias <=opening B=method blank contamination a=ICSA u=use y=RL raised

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Sequence No.: 27 **Autosampler Location: 24**
Sample ID: 239404-008,190409,1 **Date Collected: 9/12/2012 9:52:28 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-008,190409,1

Analyte	Back Pressure	Flow
All	133.0 kPa	0.55 L/min

Mean Data: 239404-008,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1718681.8	108.374	%	0.4729				0.44%
Y	106342.7	113.929	%	0.5556				0.49%
Ag 328.068†	3201.0	4.80170	ug/L	0.177361	4.80170	ug/L	0.177361	3.69%
Al 308.215 R†	419609.9	398558	ug/L	1425.5	398558	ug/L	1425.5	0.36%
As 188.979†	2672.0	141.142	ug/L	14.8094	141.142	ug/L	14.8094	10.49%
B 249.677†	56732.1	300.041	ug/L	3.6566	300.041	ug/L	3.6566	1.22%
Ba 233.527†	379689.3	1004.70	ug/L	3.707	1004.70	ug/L	3.707	0.37%
Be 313.107†	66769.1	15.1900	ug/L	0.02247	15.1900	ug/L	0.02247	0.15%
Ca 315.887 R†	1016076.5	121763	ug/L	492.5	121763	ug/L	492.5	0.40%
Cd 214.440†	1795.4	8.06122	ug/L	0.253980	8.06122	ug/L	0.253980	3.15%
Co 228.616†	35379.2	276.594	ug/L	5.6767	276.594	ug/L	5.6767	2.05%
Cr 267.716†	109474.6	1297.55	ug/L	1.893	1297.55	ug/L	1.893	0.15%
Cu 324.752†	858279.7	8165.95	ug/L	23.027	8165.95	ug/L	23.027	0.28%
Fe 238.204 R†	2949257.8	678638	ug/L	1098.4	678638	ug/L	1098.4	0.16%
K 766.490 R†	104934.4	24270.5	ug/L	132.32	24270.5	ug/L	132.32	0.55%
Mg 279.077 R†	252104.5	262549	ug/L	633.9	262549	ug/L	633.9	0.24%
Mn 257.610†	26131738.6	16413.5	ug/L	84.66	16413.5	ug/L	84.66	0.52%
Mo 202.031†	-157.0	-4.71296	ug/L	2.287303	-4.71296	ug/L	2.287303	48.53%
Na 589.592 R†	24241.2	2671.64	ug/L	18.799	2671.64	ug/L	18.799	0.70%
Ni 231.604†	58832.1	1244.05	ug/L	26.765	1244.05	ug/L	26.765	2.15%
Pb 220.353†	83396.3	1517.16	ug/L	29.052	1517.16	ug/L	29.052	1.91%
Sb 206.836†	2119.4	70.4770	ug/L	10.86369	70.4770	ug/L	10.86369	15.41%
Se 196.026†	583.4	20.3832	ug/L	7.06996	20.3832	ug/L	7.06996	34.69%
Ti 334.940 R†	543709.0	7483.76	ug/L	50.855	7483.76	ug/L	50.855	0.68%
Tl 190.801†	-52.8	-2.93718	ug/L	7.279673	-2.93718	ug/L	7.279673	247.85%
V 292.402†	153562.2	1106.38	ug/L	0.429	1106.38	ug/L	0.429	0.04%
Zn 206.200†	350919.9	4688.12	ug/L	12.836	4688.12	ug/L	12.836	0.27%
Sn 189.927†	1079.9	52.9409	ug/L	3.49293	52.9409	ug/L	3.49293	6.60%
Sr 421.552 R	213941.5	498.754	ug/L	1.8106	498.754	ug/L	1.8106	0.36%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239404-009	Client ID	: EX13B023B.2
Seqnum	: 82369087028	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190409	Time	: 12-SEP-2012 09:55
Cal	: 82369087001	Caldate	: 12-SEP-2012		
IDF	: 1.0			Units	: mg/Kg

0.99 g --> 50.0 ml = 50.51 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Copper	A	500	**0.26**		B u **y**
Zinc	A	**520 >LR**	1.0	**0.19**	!<a+ >LR B **b***

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1630006	2.78

!=warning +=high bias <=opening >LR=overrange B=method blank contamination a=ICSA b=noncompliant u=use y=RL raised

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Sequence No.: 28 **Autosampler Location: 25**
Sample ID: 239404-009,190409,1 **Date Collected: 9/12/2012 9:55:46 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-009,190409,1

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: 239404-009,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1630006.3	102.782	%	0.6122				0.60%
Y	102867.1	110.205	%	1.9451				1.76%
Ag 328.068†	6045.1	9.06796	ug/L	0.866172	9.06796	ug/L	0.866172	9.55%
Al 308.215 R†	357017.1	339105	ug/L	1328.3	339105	ug/L	1328.3	0.39%
As 188.979†	2424.3	128.059	ug/L	7.4907	128.059	ug/L	7.4907	5.85%
B 249.677†	72372.8	382.760	ug/L	7.1600	382.760	ug/L	7.1600	1.87%
Ba 233.527†	1988960.3	5263.00	ug/L	21.401	5263.00	ug/L	21.401	0.41%
Be 313.107†	27042.3	6.15213	ug/L	0.102764	6.15213	ug/L	0.102764	1.67%
Ca 315.887 R†	2068590.8	247893	ug/L	709.5	247893	ug/L	709.5	0.29%
Cd 214.440†	3779.3	16.9684	ug/L	0.35307	16.9684	ug/L	0.35307	2.08%
Co 228.616†	74222.9	556.835	ug/L	4.6404	556.835	ug/L	4.6404	0.83%
Cr 267.716†	228754.1	2711.32	ug/L	54.799	2711.32	ug/L	54.799	2.02%
Cu 324.752†	1031829.9	9817.16	ug/L	16.899	9817.16	ug/L	16.899	0.17%
Fe 238.204 R†	3432484.5	789830	ug/L	2018.0	789830	ug/L	2018.0	0.26%
K 766.490 R†	88740.2	20524.9	ug/L	118.24	20524.9	ug/L	118.24	0.58%
Mg 279.077 R†	440306.7	458549	ug/L	1157.1	458549	ug/L	1157.1	0.25%
Mn 257.610†	Saturated2							
Mo 202.031†	219.2	6.58189	ug/L	1.974667	6.58189	ug/L	1.974667	30.00%
Na 589.592 R†	118335.4	13041.9	ug/L	71.22	13041.9	ug/L	71.22	0.55%
Ni 231.604†	165076.9	3490.67	ug/L	21.412	3490.67	ug/L	21.412	0.61%
Pb 220.353†	114728.1	2087.16	ug/L	9.895	2087.16	ug/L	9.895	0.47%
Sb 206.836†	2516.9	83.6935	ug/L	10.43571	83.6935	ug/L	10.43571	12.47%
Se 196.026†	1595.1	55.7286	ug/L	18.09296	55.7286	ug/L	18.09296	32.47%
Ti 334.940 R†	2086645.8	28721.2	ug/L	523.52	28721.2	ug/L	523.52	1.82%
Tl 190.801†	-361.2	-20.0993	ug/L	8.72193	-20.0993	ug/L	8.72193	43.39%
V 292.402†	190743.3	1374.26	ug/L	6.638	1374.26	ug/L	6.638	0.48%
Zn 206.200†	773906.3	10339.0	ug/L	55.26	10339.0	ug/L	55.26	0.53%
Sn 189.927†	15964.6	782.624	ug/L	2.0065	782.624	ug/L	2.0065	0.26%
Sr 421.552 R	518140.3	1204.27	ug/L	13.153	1204.27	ug/L	13.153	1.09%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239404-009	Client ID	: EX13B023B.2
Seqnum	: 82369087046	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190409	Time	: 12-SEP-2012 11:24
Cal	: 82369087001	Caldate	: 12-SEP-2012		
IDF	: 100.0			Units	: mg/Kg

0.99 g --> 50.0 ml = 50.51 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Copper	A	520	**26**		B **y**
Zinc	A	650	100	**0.19**	!<a+ B u

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1681369	6.02

!=warning +=high bias <=opening B=method blank contamination a=ICSA u=use y=RL raised

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Sequence No.: 14 **Autosampler Location: 13**
Sample ID: 239404-009,190409,100 **Date Collected: 9/12/2012 11:24:28 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-009,190409,100

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: 239404-009,190409,100

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1681369.2	106.021	%	2.1535				2.03%
Y	98694.5	105.735	%	0.9353				0.88%
Ag 328.068†	-481.2	-0.721776	ug/L	0.2371342	-0.721776	ug/L	0.2371342	32.85%
Al 308.215 R†	4042.0	3839.21	ug/L	61.631	3839.21	ug/L	61.631	1.61%
As 188.979†	42.1	2.22285	ug/L	0.459511	2.22285	ug/L	0.459511	20.67%
B 249.677†	2820.9	14.9187	ug/L	0.08163	14.9187	ug/L	0.08163	0.55%
Ba 233.527†	22990.8	60.8361	ug/L	0.38827	60.8361	ug/L	0.38827	0.64%
Be 313.107†	29.8	0.0067789	ug/L	0.01108232	0.0067789	ug/L	0.01108232	163.48%
Ca 315.887 R†	24529.6	2939.54	ug/L	19.851	2939.54	ug/L	19.851	0.68%
Cd 214.440†	104.3	0.468105	ug/L	0.0343070	0.468105	ug/L	0.0343070	7.33%
Co 228.616†	908.4	6.91667	ug/L	0.199829	6.91667	ug/L	0.199829	2.89%
Cr 267.716†	2674.3	31.6970	ug/L	0.75121	31.6970	ug/L	0.75121	2.37%
Cu 324.752†	10877.2	103.489	ug/L	0.4418	103.489	ug/L	0.4418	0.43%
Fe 238.204 R†	44153.7	10160.0	ug/L	49.02	10160.0	ug/L	49.02	0.48%
K 766.490 R†	801.0	185.258	ug/L	43.1539	185.258	ug/L	43.1539	23.29%
Mg 279.077 R†	5129.8	5342.35	ug/L	50.418	5342.35	ug/L	50.418	0.94%
Mn 257.610†	543293.1	341.246	ug/L	1.2742	341.246	ug/L	1.2742	0.37%
Mo 202.031†	6.5	0.195413	ug/L	0.0702227	0.195413	ug/L	0.0702227	35.94%
Na 589.592 R†	1336.0	147.240	ug/L	2.4633	147.240	ug/L	2.4633	1.67%
Ni 231.604†	2042.4	43.1882	ug/L	0.66787	43.1882	ug/L	0.66787	1.55%
Pb 220.353†	1429.7	26.0088	ug/L	0.50015	26.0088	ug/L	0.50015	1.92%
Sb 206.836†	16.8	0.559161	ug/L	1.6512112	0.559161	ug/L	1.6512112	295.30%
Se 196.026†	-39.6	-1.38257	ug/L	2.277315	-1.38257	ug/L	2.277315	164.72%
Ti 334.940 R†	21446.0	295.189	ug/L	5.5894	295.189	ug/L	5.5894	1.89%
Tl 190.801†	14.3	0.795031	ug/L	0.6511104	0.795031	ug/L	0.6511104	81.90%
V 292.402†	2117.2	15.2540	ug/L	0.27643	15.2540	ug/L	0.27643	1.81%
Zn 206.200†	9614.7	128.448	ug/L	2.2004	128.448	ug/L	2.2004	1.71%
Sn 189.927†	196.1	9.61507	ug/L	0.049891	9.61507	ug/L	0.049891	0.52%
Sr 421.552 R	6015.2	13.9813	ug/L	0.33704	13.9813	ug/L	0.33704	2.41%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239404-010	Client ID	: EX13B003BA.2
Seqnum	: 82369087047	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190409	Time	: 12-SEP-2012 11:28
Cal	: 82369087001	Caldate	: 12-SEP-2012		
IDF	: 100.0			Units	: mg/Kg

0.99 g --> 50.0 ml = 50.51 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Copper	A	4800	**26**		B u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1708666	7.74

B=method blank contamination u=use y=RL raised

Sequence No.: 15 **Autosampler Location: 14**
Sample ID: 239404-010,190409,100 **Date Collected: 9/12/2012 11:28:33 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-010,190409,100

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: 239404-010,190409,100

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1708666.0	107.742	%	0.5291				0.49%
Y	100201.0	107.349	%	2.9894				2.78%
Ag 328.068†	-356.5	-0.534725	ug/L	0.4805358	-0.534725	ug/L	0.4805358	89.87%
Al 308.215 R†	405.6	385.283	ug/L	20.1916	385.283	ug/L	20.1916	5.24%
As 188.979†	13.2	0.698618	ug/L	1.9314288	0.698618	ug/L	1.9314288	276.46%
B 249.677†	1940.3	10.2617	ug/L	0.08914	10.2617	ug/L	0.08914	0.87%
Ba 233.527†	749.6	1.98354	ug/L	0.036696	1.98354	ug/L	0.036696	1.85%
Be 313.107†	-409.9	-0.0932590	ug/L	0.02869374	-0.0932590	ug/L	0.02869374	30.77%
Ca 315.887 R†	1649.7	197.695	ug/L	5.9078	197.695	ug/L	5.9078	2.99%
Cd 214.440†	202.0	0.906903	ug/L	0.0248375	0.906903	ug/L	0.0248375	2.74%
Co 228.616†	49.6	0.372408	ug/L	0.0963712	0.372408	ug/L	0.0963712	25.88%
Cr 267.716†	2848.2	33.7587	ug/L	0.22455	33.7587	ug/L	0.22455	0.67%
Cu 324.752†	98973.5	941.666	ug/L	5.9463	941.666	ug/L	5.9463	0.63%
Fe 238.204 R†	4670.9	1074.79	ug/L	34.614	1074.79	ug/L	34.614	3.22%
K 766.490 R†	-31.5	-7.28866	ug/L	62.125365	-7.28866	ug/L	62.125365	852.36%
Mg 279.077 R†	198.5	206.716	ug/L	33.1200	206.716	ug/L	33.1200	16.02%
Mn 257.610†	38174.3	23.9775	ug/L	0.16148	23.9775	ug/L	0.16148	0.67%
Mo 202.031†	7.6	0.228434	ug/L	0.1691419	0.228434	ug/L	0.1691419	74.04%
Na 589.592 R†	312.3	34.4236	ug/L	9.33471	34.4236	ug/L	9.33471	27.12%
Ni 231.604†	108.6	2.29628	ug/L	0.122072	2.29628	ug/L	0.122072	5.32%
Pb 220.353†	6052.8	110.113	ug/L	0.8472	110.113	ug/L	0.8472	0.77%
Sb 206.836†	12.4	0.410859	ug/L	1.0464316	0.410859	ug/L	1.0464316	254.69%
Se 196.026†	-29.8	-1.04198	ug/L	0.751178	-1.04198	ug/L	0.751178	72.09%
Ti 334.940 R†	1372.3	18.8881	ug/L	4.93499	18.8881	ug/L	4.93499	26.13%
Tl 190.801†	36.4	2.02439	ug/L	0.668653	2.02439	ug/L	0.668653	33.03%
V 292.402†	139.3	1.00358	ug/L	0.025304	1.00358	ug/L	0.025304	2.52%
Zn 206.200†	24841.7	331.874	ug/L	2.5545	331.874	ug/L	2.5545	0.77%
Sn 189.927†	26.4	1.29455	ug/L	0.339299	1.29455	ug/L	0.339299	26.21%
Sr 421.552 R	2389.3	5.51622	ug/L	0.180868	5.51622	ug/L	0.180868	3.28%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239404-012	Client ID	: EX36B180C.2
Seqnum	: 82369087030	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190409	Time	: 12-SEP-2012 10:07
Cal	: 82369087001	Caldate	: 12-SEP-2012		
IDF	: 1.0			Units	: mg/Kg

0.98 g --> 50.0 ml = 51.02 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Copper	A	30	**0.26**		B u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1336546	-15.72

B=method blank contamination u=use y=RL raised

Sequence No.: 30 **Autosampler Location: 27**
Sample ID: 239404-012,190409,1 **Date Collected: 9/12/2012 10:07:15 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-012,190409,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: 239404-012,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1336545.9	84.2779	%	0.82913				0.98%
Y	86835.8	93.0303	%	1.52361				1.64%
Ag 328.068†	2604.2	3.90636	ug/L	0.371687	3.90636	ug/L	0.371687	9.51%
Al 308.215 R†	33370.6	31696.3	ug/L	27.75	31696.3	ug/L	27.75	0.09%
As 188.979†	175.8	9.28416	ug/L	4.682476	9.28416	ug/L	4.682476	50.44%
B 249.677†	91980.4	486.459	ug/L	8.3910	486.459	ug/L	8.3910	1.72%
Ba 233.527†	14981.1	39.6415	ug/L	0.35813	39.6415	ug/L	0.35813	0.90%
Be 313.107†	-124.5	-0.0283227	ug/L	0.02739604	-0.0283227	ug/L	0.02739604	96.73%
Ca 315.887 R†	42098.2	5044.90	ug/L	13.349	5044.90	ug/L	13.349	0.26%
Cd 214.440†	275.2	1.23557	ug/L	0.222675	1.23557	ug/L	0.222675	18.02%
Co 228.616†	149533.5	1225.17	ug/L	3.155	1225.17	ug/L	3.155	0.26%
Cr 267.716†	943346.4	11181.0	ug/L	77.47	11181.0	ug/L	77.47	0.69%
Cu 324.752†	61696.5	587.000	ug/L	8.0364	587.000	ug/L	8.0364	1.37%
Fe 238.204 R†	3080927.2	708935	ug/L	8124.9	708935	ug/L	8124.9	1.15%
K 766.490 R†	2232.8	516.428	ug/L	50.7264	516.428	ug/L	50.7264	9.82%
Mg 279.077 R†	3429735.9	3571830	ug/L	39528.6	3571830	ug/L	39528.6	1.11%
Mn 257.610†	18404169.4	11559.8	ug/L	296.97	11559.8	ug/L	296.97	2.57%
Mo 202.031†	-820.7	-24.6443	ug/L	0.38985	-24.6443	ug/L	0.38985	1.58%
Na 589.592 R†	10535.2	1161.09	ug/L	9.776	1161.09	ug/L	9.776	0.84%
Ni 231.604†	1249991.8	26432.0	ug/L	171.79	26432.0	ug/L	171.79	0.65%
Pb 220.353†	3567.0	64.8920	ug/L	5.44468	64.8920	ug/L	5.44468	8.39%
Sb 206.836†	1420.7	47.2417	ug/L	10.06447	47.2417	ug/L	10.06447	21.30%
Se 196.026†	2143.3	74.8788	ug/L	12.54274	74.8788	ug/L	12.54274	16.75%
Ti 334.940 R†	32852.1	452.186	ug/L	11.6909	452.186	ug/L	11.6909	2.59%
Tl 190.801†	664.0	36.9479	ug/L	15.12765	36.9479	ug/L	15.12765	40.94%
V 292.402†	34831.0	250.949	ug/L	0.8019	250.949	ug/L	0.8019	0.32%
Zn 206.200†	44059.0	588.607	ug/L	6.4100	588.607	ug/L	6.4100	1.09%
Sn 189.927†	-24.7	-1.20845	ug/L	2.777688	-1.20845	ug/L	2.777688	229.86%
Sr 421.552 R	9631.4	93.6523	ug/L	0.97682	93.6523	ug/L	0.97682	1.04%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239404-013	Client ID	: EX36B180B.2
Seqnum	: 82369087031	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190409	Time	: 12-SEP-2012 10:10
Cal	: 82369087001	Caldate	: 12-SEP-2012		
IDF	: 1.0			Units	: mg/Kg

1.00 g --> 50.0 ml = 50.0 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Copper	A	8.8	**0.26**		B u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1360083	-14.24

B=method blank contamination u=use y=RL raised

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Sequence No.: 31 **Autosampler Location: 28**
Sample ID: 239404-013,190409,1 **Date Collected: 9/12/2012 10:10:30 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-013,190409,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: 239404-013,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1360082.6	85.7620	%	0.89322				1.04%
Y	86099.2	92.2412	%	0.87472				0.95%
Ag 328.068†	2637.6	3.95657	ug/L	0.337514	3.95657	ug/L	0.337514	8.53%
Al 308.215 R†	53979.6	51271.4	ug/L	116.77	51271.4	ug/L	116.77	0.23%
As 188.979†	132.0	6.97511	ug/L	11.816144	6.97511	ug/L	11.816144	169.40%
B 249.677†	88794.4	469.609	ug/L	20.8101	469.609	ug/L	20.8101	4.43%
Ba 233.527†	53713.9	142.133	ug/L	0.7228	142.133	ug/L	0.7228	0.51%
Be 313.107†	1181.9	0.268877	ug/L	0.0117503	0.268877	ug/L	0.0117503	4.37%
Ca 315.887 R†	171170.5	20512.5	ug/L	165.34	20512.5	ug/L	165.34	0.81%
Cd 214.440†	188.4	0.845763	ug/L	0.1278342	0.845763	ug/L	0.1278342	15.11%
Co 228.616†	157499.3	1288.45	ug/L	5.743	1288.45	ug/L	5.743	0.45%
Cr 267.716†	672360.1	7969.17	ug/L	42.279	7969.17	ug/L	42.279	0.53%
Cu 324.752†	18594.7	176.916	ug/L	1.9959	176.916	ug/L	1.9959	1.13%
Fe 238.204 R†	2916470.1	671093	ug/L	14530.5	671093	ug/L	14530.5	2.17%
K 766.490 R†	11069.1	2560.18	ug/L	83.232	2560.18	ug/L	83.232	3.25%
Mg 279.077 R†	3090139.7	3218170	ug/L	72833.9	3218170	ug/L	72833.9	2.26%
Mn 257.610†	17931676.2	11263.0	ug/L	123.65	11263.0	ug/L	123.65	1.10%
Mo 202.031†	-717.1	-21.5327	ug/L	2.35380	-21.5327	ug/L	2.35380	10.93%
Na 589.592 R†	63647.5	7014.66	ug/L	43.077	7014.66	ug/L	43.077	0.61%
Ni 231.604†	1193816.9	25244.1	ug/L	106.23	25244.1	ug/L	106.23	0.42%
Pb 220.353†	1251.3	22.7646	ug/L	3.76253	22.7646	ug/L	3.76253	16.53%
Sb 206.836†	1037.0	34.4836	ug/L	8.34120	34.4836	ug/L	8.34120	24.19%
Se 196.026†	1223.9	42.7593	ug/L	16.63185	42.7593	ug/L	16.63185	38.90%
Ti 334.940 R†	114704.1	1578.82	ug/L	27.101	1578.82	ug/L	27.101	1.72%
Tl 190.801†	557.6	31.0267	ug/L	6.19065	31.0267	ug/L	6.19065	19.95%
V 292.402†	45267.8	326.145	ug/L	1.7160	326.145	ug/L	1.7160	0.53%
Zn 206.200†	33246.7	444.160	ug/L	1.1054	444.160	ug/L	1.1054	0.25%
Sn 189.927†	-54.5	-2.67272	ug/L	1.631445	-2.67272	ug/L	1.631445	61.04%
Sr 421.552 R	38167.1	152.402	ug/L	0.6754	152.402	ug/L	0.6754	0.44%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239404-014	Client ID	: EX36B180A.2
Seqnum	: 82369087035	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190409	Time	: 12-SEP-2012 10:30
Cal	: 82369087001	Caldate	: 12-SEP-2012		
IDF	: 1.0			Units	: mg/Kg

0.94 g --> 50.0 ml = 53.19 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Copper	A	110	**0.28**		B u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1585880	1550257	-2.25

B=method blank contamination u=use y=RL raised

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Sequence No.: 35 **Autosampler Location: 29**
Sample ID: 239404-014,190409,1 **Date Collected: 9/12/2012 10:30:19 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239404-014,190409,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: 239404-014,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1550256.9	97.7537	%	0.68034				0.70%
Y	96570.4	103.459	%	2.3467				2.27%
Ag 328.068†	2541.4	3.81225	ug/L	0.337969	3.81225	ug/L	0.337969	8.87%
Al 308.215 R†	249702.9	237175	ug/L	613.7	237175	ug/L	613.7	0.26%
As 188.979†	1527.7	80.6967	ug/L	3.72605	80.6967	ug/L	3.72605	4.62%
B 249.677†	45509.0	240.685	ug/L	9.5372	240.685	ug/L	9.5372	3.96%
Ba 233.527†	621079.6	1643.44	ug/L	8.137	1643.44	ug/L	8.137	0.50%
Be 313.107†	18792.8	4.27537	ug/L	0.067799	4.27537	ug/L	0.067799	1.59%
Ca 315.887 R†	1284143.2	153887	ug/L	3525.5	153887	ug/L	3525.5	2.29%
Cd 214.440†	1308.2	5.87362	ug/L	0.124690	5.87362	ug/L	0.124690	2.12%
Co 228.616†	50160.9	381.165	ug/L	1.6815	381.165	ug/L	1.6815	0.44%
Cr 267.716†	246379.1	2920.22	ug/L	19.678	2920.22	ug/L	19.678	0.67%
Cu 324.752†	223044.2	2122.11	ug/L	14.440	2122.11	ug/L	14.440	0.68%
Fe 238.204 R†	1861886.0	428428	ug/L	10355.5	428428	ug/L	10355.5	2.42%
K 766.490 R†	78881.2	18244.6	ug/L	98.81	18244.6	ug/L	98.81	0.54%
Mg 279.077 R†	554933.5	577925	ug/L	3023.5	577925	ug/L	3023.5	0.52%
Mn 257.610†	15258330.0	9583.85	ug/L	139.293	9583.85	ug/L	139.293	1.45%
Mo 202.031†	-69.7	-2.09278	ug/L	1.120225	-2.09278	ug/L	1.120225	53.53%
Na 589.592 R†	28627.4	3155.05	ug/L	16.285	3155.05	ug/L	16.285	0.52%
Ni 231.604†	249432.5	5274.43	ug/L	25.541	5274.43	ug/L	25.541	0.48%
Pb 220.353†	38380.6	698.227	ug/L	8.5945	698.227	ug/L	8.5945	1.23%
Sb 206.836†	1374.9	45.7185	ug/L	18.73329	45.7185	ug/L	18.73329	40.98%
Se 196.026†	620.2	21.6666	ug/L	12.99977	21.6666	ug/L	12.99977	60.00%
Ti 334.940 R†	1214503.4	16716.8	ug/L	444.45	16716.8	ug/L	444.45	2.66%
Tl 190.801†	-80.5	-4.48110	ug/L	5.254066	-4.48110	ug/L	5.254066	117.25%
V 292.402†	114810.0	827.180	ug/L	3.0715	827.180	ug/L	3.0715	0.37%
Zn 206.200†	279766.0	3737.54	ug/L	20.628	3737.54	ug/L	20.628	0.55%
Sn 189.927†	397.9	19.5063	ug/L	2.52644	19.5063	ug/L	2.52644	12.95%
Sr 421.552 R	327557.3	767.088	ug/L	15.0067	767.088	ug/L	15.0067	1.96%

CURTIS & TOMPKINS BLANK USER REPORT FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 Lab ID : QC655811
Seqnum : 82369087012.3 Matrix : Soil
File : met08_sr_6010 Batch : 190409 Time : 12-SEP-2012 08:41
Cal : 82369087001 Caldate : 12-SEP-2012
IDF : 1.0 Units : mg/Kg

1.00 g --> 50.0 ml = 50.0 ml/g PDF

Analyte	Ch	Result	RL	Flags
Arsenic	A	ND	0.25	!<a+ u
Copper	A	ND	**0.26**	u **y**
Zinc	A	0.19 J	1.0	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	BLANK Abund	%Drift
Yttrium	A	1585880	1696148	6.95

!=warning +=high bias <=opening a=ICSA u=use y=RL raised

User canceled analysis.

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Sequence No.: 12 **Autosampler Location: 11**
Sample ID: qc655811,190409,1 **Date Collected: 9/12/2012 8:41:17 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655811,190409,1

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: qc655811,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1696147.8	106.953	%	1.5626				1.46%
Y	99078.2	106.146	%	1.2737				1.20%
Ag 328.068†	-714.6	-1.07195	ug/L	0.149705	-1.07195	ug/L	0.149705	13.97%
Al 308.215 R†	55.0	52.2625	ug/L	3.35417	52.2625	ug/L	3.35417	6.42%
As 188.979†	-18.2	-0.961385	ug/L	0.9912191	-0.961385	ug/L	0.9912191	103.10%
B 249.677†	1883.7	9.96249	ug/L	0.245270	9.96249	ug/L	0.245270	2.46%
Ba 233.527†	170.1	0.449987	ug/L	0.0206833	0.449987	ug/L	0.0206833	4.60%
Be 313.107†	-321.5	-0.0731487	ug/L	0.03278389	-0.0731487	ug/L	0.03278389	44.82%
Ca 315.887 R†	749.7	89.8375	ug/L	3.16723	89.8375	ug/L	3.16723	3.53%
Cd 214.440†	17.6	0.0788227	ug/L	0.06113233	0.0788227	ug/L	0.06113233	77.56%
Co 228.616†	12.0	0.0963927	ug/L	0.14319181	0.0963927	ug/L	0.14319181	148.55%
Cr 267.716†	62.0	0.734985	ug/L	0.0197562	0.734985	ug/L	0.0197562	2.69%
Cu 324.752†	107.9	1.02613	ug/L	0.602177	1.02613	ug/L	0.602177	58.68%
Fe 238.204 R†	266.2	61.2427	ug/L	1.25982	61.2427	ug/L	1.25982	2.06%
K 766.490 R†	-578.1	-133.718	ug/L	22.8465	-133.718	ug/L	22.8465	17.09%
Mg 279.077 R†	71.7	74.6812	ug/L	3.46878	74.6812	ug/L	3.46878	4.64%
Mn 257.610†	2487.2	1.56224	ug/L	0.036547	1.56224	ug/L	0.036547	2.34%
Mo 202.031†	7.0	0.209003	ug/L	0.1495493	0.209003	ug/L	0.1495493	71.55%
Na 589.592 R†	747.1	82.3433	ug/L	2.25702	82.3433	ug/L	2.25702	2.74%
Ni 231.604†	79.5	1.68177	ug/L	0.054342	1.68177	ug/L	0.054342	3.23%
Pb 220.353†	-0.5	-0.0092826	ug/L	0.36434586	-0.0092826	ug/L	0.36434586	>999.9%
Sb 206.836†	9.9	0.328955	ug/L	0.8088726	0.328955	ug/L	0.8088726	245.89%
Se 196.026†	-3.6	-0.124768	ug/L	1.4527527	-0.124768	ug/L	1.4527527	>999.9%
Ti 334.940 R†	96.1	1.32285	ug/L	0.207009	1.32285	ug/L	0.207009	15.65%
Tl 190.801†	22.2	1.23650	ug/L	0.346831	1.23650	ug/L	0.346831	28.05%
V 292.402†	32.9	0.237014	ug/L	0.1196018	0.237014	ug/L	0.1196018	50.46%
Zn 206.200†	281.1	3.75481	ug/L	0.077530	3.75481	ug/L	0.077530	2.06%
Sn 189.927†	311.7	15.2814	ug/L	0.34467	15.2814	ug/L	0.34467	2.26%
Sr 421.552 R	812.1	1.87495	ug/L	0.118159	1.87495	ug/L	0.118159	6.30%

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 METALS Soil
EPA 6010C

Type : BS
Inst : MET08
Seqnum : 82369087013.3
File : met08_sr_6010
IDF : 1.0
Lab ID : QC655812
Matrix : Soil
Batch : 190409
Time : 12-SEP-2012 08:46
Cal : 82369087001
Units : mg/Kg

Type : BSD
Inst : MET08
Seqnum : 82369087014.3
File : met08_sr_6010
IDF : 1.0
Lab ID : QC655813
Matrix : Soil
Batch : 190409
Time : 12-SEP-2012 08:50
Cal : 82369087001

BS: 1.00 g --> 50.0 ml = 50.0 ml/g PDF
BSD: 1.00 g --> 50.0 ml = 50.0 ml/g PDF

Analyte	Spiked	BS	Ch	%Rec	BSD	Ch	%Rec	Limits	RPD	Lim	Flags
Arsenic	50.00	49.14	A	98	48.90	A	98	80-121	0	20	!<a+ u
Copper	12.50	12.25	A	98	12.24	A	98	80-120	0	20	u **y**
Zinc	25.00	24.78	A	99	24.56	A	98	80-120	1	20	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	BS Abund	%Drift
Yttrium	A	1585880	1580472	-0.34

ISTD (ICAL 002)	Ch	ICAL Abund	BSD Abund	%Drift
Yttrium	A	1585880	1578235	-0.48

!=warning +=high bias <=opening a=ICSA u=use y=RL raised

Sequence No.: 13 **Autosampler Location: 12**
Sample ID: qc655812,190409,1 **Date Collected: 9/12/2012 8:46:17 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655812,190409,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: qc655812,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1580471.6	99.6590	%	1.58312				1.59%
Y	94239.6	100.962	%	0.4336				0.43%
Ag 328.068†	128515.1	192.778	ug/L	1.1132	192.778	ug/L	1.1132	0.58%
Al 308.215 R†	21584.7	20501.8	ug/L	182.31	20501.8	ug/L	182.31	0.89%
As 188.979†	18604.3	982.740	ug/L	13.3388	982.740	ug/L	13.3388	1.36%
B 249.677†	184969.4	978.252	ug/L	3.6007	978.252	ug/L	3.6007	0.37%
Ba 233.527†	740593.7	1959.69	ug/L	9.942	1959.69	ug/L	9.942	0.51%
Be 313.107†	229917.1	52.3063	ug/L	0.29205	52.3063	ug/L	0.29205	0.56%
Ca 315.887 R†	171133.0	20508.0	ug/L	103.88	20508.0	ug/L	103.88	0.51%
Cd 214.440†	45192.7	202.908	ug/L	1.2129	202.908	ug/L	1.2129	0.60%
Co 228.616†	59669.8	487.452	ug/L	3.0308	487.452	ug/L	3.0308	0.62%
Cr 267.716†	163055.5	1932.62	ug/L	7.727	1932.62	ug/L	7.727	0.40%
Cu 324.752†	25749.0	244.984	ug/L	3.4957	244.984	ug/L	3.4957	1.43%
Fe 238.204 R†	89125.1	20508.1	ug/L	122.62	20508.1	ug/L	122.62	0.60%
K 766.490 R†	41499.7	9598.54	ug/L	45.178	9598.54	ug/L	45.178	0.47%
Mg 279.077 R†	19267.1	20065.3	ug/L	51.09	20065.3	ug/L	51.09	0.25%
Mn 257.610†	789907.2	496.146	ug/L	2.0241	496.146	ug/L	2.0241	0.41%
Mo 202.031†	13333.5	400.363	ug/L	5.6816	400.363	ug/L	5.6816	1.42%
Na 589.592 R†	186578.0	20562.9	ug/L	75.24	20562.9	ug/L	75.24	0.37%
Ni 231.604†	22871.0	483.624	ug/L	2.1398	483.624	ug/L	2.1398	0.44%
Pb 220.353†	104736.7	1905.39	ug/L	8.409	1905.39	ug/L	8.409	0.44%
Sb 206.836†	58454.6	1943.81	ug/L	25.980	1943.81	ug/L	25.980	1.34%
Se 196.026†	27552.9	962.596	ug/L	15.6987	962.596	ug/L	15.6987	1.63%
Ti 334.940 R†	71245.3	980.640	ug/L	18.6088	980.640	ug/L	18.6088	1.90%
Tl 190.801†	17401.8	968.325	ug/L	14.5633	968.325	ug/L	14.5633	1.50%
V 292.402†	68965.9	496.884	ug/L	1.8091	496.884	ug/L	1.8091	0.36%
Zn 206.200†	37104.4	495.697	ug/L	2.8818	495.697	ug/L	2.8818	0.58%
Sn 189.927†	20048.6	982.829	ug/L	13.8933	982.829	ug/L	13.8933	1.41%
Sr 421.552 R	-132.2	0.0865127	ug/L	0.33279102	0.0865127	ug/L	0.33279102	384.67%

Sequence No.: 14 **Autosampler Location: 13**
Sample ID: qc655813,190409,1 **Date Collected: 9/12/2012 8:50:24 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655813,190409,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: qc655813,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1578234.9	99.5179	%	1.21378				1.22%
Y	90879.1	97.3620	%	0.88719				0.91%
Ag 328.068†	128021.3	192.037	ug/L	0.6492	192.037	ug/L	0.6492	0.34%
Al 308.215 R†	22020.4	20915.6	ug/L	25.16	20915.6	ug/L	25.16	0.12%
As 188.979†	18514.8	978.013	ug/L	10.5424	978.013	ug/L	10.5424	1.08%
B 249.677†	184772.4	977.211	ug/L	4.2750	977.211	ug/L	4.2750	0.44%
Ba 233.527†	734754.2	1944.24	ug/L	3.879	1944.24	ug/L	3.879	0.20%
Be 313.107†	229665.9	52.2491	ug/L	0.11244	52.2491	ug/L	0.11244	0.22%
Ca 315.887 R†	171744.6	20581.3	ug/L	64.19	20581.3	ug/L	64.19	0.31%
Cd 214.440†	44945.6	201.799	ug/L	0.5366	201.799	ug/L	0.5366	0.27%
Co 228.616†	59246.7	484.021	ug/L	0.4405	484.021	ug/L	0.4405	0.09%
Cr 267.716†	162915.8	1930.96	ug/L	6.808	1930.96	ug/L	6.808	0.35%
Cu 324.752†	25722.7	244.734	ug/L	1.8400	244.734	ug/L	1.8400	0.75%
Fe 238.204 R†	89934.8	20694.4	ug/L	44.55	20694.4	ug/L	44.55	0.22%
K 766.490 R†	42330.2	9790.64	ug/L	22.783	9790.64	ug/L	22.783	0.23%
Mg 279.077 R†	19360.1	20162.2	ug/L	86.79	20162.2	ug/L	86.79	0.43%
Mn 257.610†	785022.9	493.078	ug/L	0.6025	493.078	ug/L	0.6025	0.12%
Mo 202.031†	13278.9	398.724	ug/L	4.5299	398.724	ug/L	4.5299	1.14%
Na 589.592 R†	190282.7	20971.2	ug/L	216.09	20971.2	ug/L	216.09	1.03%
Ni 231.604†	22763.5	481.350	ug/L	0.9212	481.350	ug/L	0.9212	0.19%
Pb 220.353†	104578.6	1902.51	ug/L	8.203	1902.51	ug/L	8.203	0.43%
Sb 206.836†	58266.5	1937.55	ug/L	22.444	1937.55	ug/L	22.444	1.16%
Se 196.026†	27388.5	956.853	ug/L	8.2317	956.853	ug/L	8.2317	0.86%
Ti 334.940 R†	69703.3	959.416	ug/L	20.4893	959.416	ug/L	20.4893	2.14%
Tl 190.801†	17160.8	954.919	ug/L	7.9737	954.919	ug/L	7.9737	0.84%
V 292.402†	68971.4	496.923	ug/L	0.8242	496.923	ug/L	0.8242	0.17%
Zn 206.200†	36773.4	491.276	ug/L	1.4789	491.276	ug/L	1.4789	0.30%
Sn 189.927†	20133.3	986.983	ug/L	10.1924	986.983	ug/L	10.1924	1.03%
Sr 421.552 R	-699.7	-1.22063	ug/L	0.211620	-1.22063	ug/L	0.211620	17.34%

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 METALS Soil
EPA 6010C

Type	: MSS	Type	: MS	Type	: MSD
Inst	: MET08	Inst	: MET08	Inst	: MET08
Seqnum	: 82369087015	Seqnum	: 82369087016.3	Seqnum	: 82369087017.3
File	: met08_sr_6010	File	: met08_sr_6010	File	: met08_sr_6010
IDF	: 1.0	IDF	: 1.0	IDF	: 1.0
Lab ID	: 239455-001	Lab ID	: QC655814	Lab ID	: QC655815
Matrix	: Soil	Matrix	: Soil	Matrix	: Soil
Batch	: 190409	Batch	: 190409	Batch	: 190409
Time	: 12-SEP-2012 08:54	Time	: 12-SEP-2012 09:00	Time	: 12-SEP-2012 09:06
Cal	: 82369087001	Cal	: 82369087001	Cal	: 82369087001
Units	: mg/Kg				

MSS: 1.01 g --> 50.0 ml = 49.50 ml/g PDF
 MS: 1.01 g --> 50.0 ml = 49.50 ml/g PDF
MSD: 1.03 g --> 50.0 ml = 48.54 ml/g PDF

Analyte	MSS	Ch	Spiked	MS	Ch	%Rec	Spiked	MSD	Ch	%Rec	Limits	RPD	Lim	Flags
Arsenic	1.279	A	49.50	48.92	A	96	48.54	47.57	A	95	73-121	1	40	!<a+ u
Copper	4.396	A	12.38	17.09	A	103	12.14	16.12	A	97	48-150	4	39	u **y**
Zinc	189.0	A	24.75	267.7	A	318	24.27	202.8	A	57	43-147	27	41	!<a+ : u

ISTD (ICAL 002)	Ch	ICAL Abund	MS Abund	%Drift
Yttrium	A	1585880	1607544	1.37

ISTD (ICAL 002)	Ch	ICAL Abund	MSD Abund	%Drift
Yttrium	A	1585880	1561752	-1.52

PRW 09/12/12 [Zinc A]: Zinc results are not meaningful [general version]

!=warning +=high bias :=recovery not meaningful <=opening a=ICSA u=use y=RL raised

Sequence No.: 16 **Autosampler Location: 15**
Sample ID: qc655814,190409,1 **Date Collected: 9/12/2012 9:00:42 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655814,190409,1

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: qc655814,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1607544.2	101.366	%	1.8687				1.84%
Y	97497.3	104.452	%	1.1486				1.10%
Ag 328.068†	127764.3	191.652	ug/L	0.6318	191.652	ug/L	0.6318	0.33%
Al 308.215 R†	106553.6	101208	ug/L	164.9	101208	ug/L	164.9	0.16%
As 188.979†	18708.1	988.224	ug/L	19.2630	988.224	ug/L	19.2630	1.95%
B 249.677†	185021.5	978.528	ug/L	3.7959	978.528	ug/L	3.7959	0.39%
Ba 233.527†	870189.1	2302.61	ug/L	2.243	2302.61	ug/L	2.243	0.10%
Be 313.107†	239401.5	54.4640	ug/L	0.16842	54.4640	ug/L	0.16842	0.31%
Ca 315.887 R†	387503.1	46437.0	ug/L	40.49	46437.0	ug/L	40.49	0.09%
Cd 214.440†	45346.5	203.599	ug/L	0.5976	203.599	ug/L	0.5976	0.29%
Co 228.616†	63920.0	514.480	ug/L	0.3874	514.480	ug/L	0.3874	0.08%
Cr 267.716†	193278.1	2290.83	ug/L	9.896	2290.83	ug/L	9.896	0.43%
Cu 324.752†	36286.0	345.236	ug/L	3.5359	345.236	ug/L	3.5359	1.02%
Fe 238.204 R†	641420.3	147594	ug/L	291.3	147594	ug/L	291.3	0.20%
K 766.490 R†	72260.3	16713.2	ug/L	54.38	16713.2	ug/L	54.38	0.33%
Mg 279.077 R†	30393.9	31653.2	ug/L	212.54	31653.2	ug/L	212.54	0.67%
Mn 257.610†	2732352.0	1716.21	ug/L	3.823	1716.21	ug/L	3.823	0.22%
Mo 202.031†	12883.8	386.859	ug/L	6.8248	386.859	ug/L	6.8248	1.76%
Na 589.592 R†	201111.2	22164.7	ug/L	281.31	22164.7	ug/L	281.31	1.27%
Ni 231.604†	26520.3	560.791	ug/L	0.8600	560.791	ug/L	0.8600	0.15%
Pb 220.353†	366154.0	6661.15	ug/L	14.303	6661.15	ug/L	14.303	0.21%
Sb 206.836†	44155.4	1468.31	ug/L	24.443	1468.31	ug/L	24.443	1.66%
Se 196.026†	26863.8	938.520	ug/L	20.0686	938.520	ug/L	20.0686	2.14%
Ti 334.940 R†	386790.4	5323.89	ug/L	54.314	5323.89	ug/L	54.314	1.02%
Tl 190.801†	16430.6	914.285	ug/L	15.6749	914.285	ug/L	15.6749	1.71%
V 292.402†	104082.0	749.887	ug/L	1.8106	749.887	ug/L	1.8106	0.24%
Zn 206.200†	404814.4	5408.13	ug/L	12.153	5408.13	ug/L	12.153	0.22%
Sn 189.927†	18748.9	919.119	ug/L	14.3569	919.119	ug/L	14.3569	1.56%
Sr 421.552 R	77017.4	178.264	ug/L	2.5980	178.264	ug/L	2.5980	1.46%

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Sequence No.: 17 **Autosampler Location: 16**
Sample ID: qc655815,190409,1 **Date Collected: 9/12/2012 9:06:54 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655815,190409,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: qc655815,190409,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1561751.8	98.4786	%	0.73212				0.74%
Y	96899.3	103.812	%	1.3294				1.28%
Ag 328.068†	126179.0	189.274	ug/L	1.4113	189.274	ug/L	1.4113	0.75%
Al 308.215 R†	106019.5	100700	ug/L	384.4	100700	ug/L	384.4	0.38%
As 188.979†	18550.2	979.880	ug/L	4.2409	979.880	ug/L	4.2409	0.43%
B 249.677†	183029.3	967.992	ug/L	5.5023	967.992	ug/L	5.5023	0.57%
Ba 233.527†	881285.8	2331.98	ug/L	14.916	2331.98	ug/L	14.916	0.64%
Be 313.107†	235623.3	53.6044	ug/L	0.31056	53.6044	ug/L	0.31056	0.58%
Ca 315.887 R†	344833.7	41323.6	ug/L	203.46	41323.6	ug/L	203.46	0.49%
Cd 214.440†	44619.6	200.335	ug/L	1.5218	200.335	ug/L	1.5218	0.76%
Co 228.616†	64591.5	519.817	ug/L	3.9056	519.817	ug/L	3.9056	0.75%
Cr 267.716†	193439.9	2292.75	ug/L	9.506	2292.75	ug/L	9.506	0.41%
Cu 324.752†	34909.3	332.138	ug/L	2.7608	332.138	ug/L	2.7608	0.83%
Fe 238.204 R†	598004.5	137604	ug/L	527.4	137604	ug/L	527.4	0.38%
K 766.490 R†	71556.2	16550.4	ug/L	117.19	16550.4	ug/L	117.19	0.71%
Mg 279.077 R†	28146.4	29312.5	ug/L	190.76	29312.5	ug/L	190.76	0.65%
Mn 257.610†	2576690.8	1618.44	ug/L	9.358	1618.44	ug/L	9.358	0.58%
Mo 202.031†	12838.2	385.489	ug/L	1.6638	385.489	ug/L	1.6638	0.43%
Na 589.592 R†	193524.3	21328.5	ug/L	109.63	21328.5	ug/L	109.63	0.51%
Ni 231.604†	25861.4	546.859	ug/L	2.7363	546.859	ug/L	2.7363	0.50%
Pb 220.353†	404814.2	7364.46	ug/L	44.708	7364.46	ug/L	44.708	0.61%
Sb 206.836†	42495.5	1413.11	ug/L	7.373	1413.11	ug/L	7.373	0.52%
Se 196.026†	26622.4	930.089	ug/L	0.7694	930.089	ug/L	0.7694	0.08%
Ti 334.940 R†	393570.2	5417.21	ug/L	7.018	5417.21	ug/L	7.018	0.13%
Tl 190.801†	16588.1	923.047	ug/L	1.5622	923.047	ug/L	1.5622	0.17%
V 292.402†	101328.3	730.048	ug/L	2.5198	730.048	ug/L	2.5198	0.35%
Zn 206.200†	312701.0	4177.54	ug/L	28.611	4177.54	ug/L	28.611	0.68%
Sn 189.927†	18689.2	916.189	ug/L	3.9538	916.189	ug/L	3.9538	0.43%
Sr 421.552 R	70777.0	163.819	ug/L	1.6797	163.819	ug/L	1.6797	1.03%

CURTIS & TOMPKINS SERIAL DILUTION FOR 239404 METALS Soil
EPA 6010C

Type : MSS
Inst : MET08
Seqnum : 82369087015
File : met08_sr_6010
IDF : 1.0
Lab ID : 239455-001
Matrix : Soil
Batch : 190409
Time : 12-SEP-2012 08:54
Cal : 82369087001
Units : mg/Kg

Type : SER
Inst : MET08
Seqnum : 82369087018.3
File : met08_sr_6010
IDF : 5.0
Lab ID : QC655816
Matrix : Soil
Batch : 190409
Time : 12-SEP-2012 09:13
Cal : 82369087001

MSS: 1.01 g --> 50.0 ml = 49.50 ml/g PDF
SER: 1.01 g --> 50.0 ml = 49.50 ml/g PDF

Analyte	MSS	Ch	RL	SER	Ch	RL	%D	Lim	Flags
Arsenic	1.279	A	0.2475	1.548	A	1.238		10	!<a+ r u
Copper	4.396	A	0.2567	4.267	A	**1.284**	3	10	u **y**
Zinc	189.0	A	0.9901	190.9	A	4.950	1	10	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	SER Abund	%Drift
Yttrium	A	1585880	1664079	4.93

!=warning +=high bias <=opening a=ICSA r=RSD out u=use y=RL raised

Sequence No.: 18 **Autosampler Location: 17**
Sample ID: qc655816,190409,5 **Date Collected: 9/12/2012 9:13:03 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655816,190409,5

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: qc655816,190409,5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1664079.4	104.931	%	0.6091				0.58%
Y	99428.6	106.522	%	1.1484				1.08%
Ag 328.068†	-514.7	-0.772048	ug/L	0.2277196	-0.772048	ug/L	0.2277196	29.50%
Al 308.215 R†	14801.3	14058.7	ug/L	107.87	14058.7	ug/L	107.87	0.77%
As 188.979†	118.4	6.25518	ug/L	1.914570	6.25518	ug/L	1.914570	30.61%
B 249.677†	5772.4	30.5285	ug/L	1.07266	30.5285	ug/L	1.07266	3.51%
Ba 233.527†	26832.5	71.0018	ug/L	0.59184	71.0018	ug/L	0.59184	0.83%
Be 313.107†	1484.9	0.337817	ug/L	0.0414268	0.337817	ug/L	0.0414268	12.26%
Ca 315.887 R†	50359.1	6034.86	ug/L	61.846	6034.86	ug/L	61.846	1.02%
Cd 214.440†	140.9	0.632570	ug/L	0.0492047	0.632570	ug/L	0.0492047	7.78%
Co 228.616†	1108.1	7.26464	ug/L	0.052249	7.26464	ug/L	0.052249	0.72%
Cr 267.716†	6379.9	75.6174	ug/L	0.67687	75.6174	ug/L	0.67687	0.90%
Cu 324.752†	1811.8	17.2378	ug/L	0.63173	17.2378	ug/L	0.63173	3.66%
Fe 238.204 R†	131180.6	30185.3	ug/L	216.91	30185.3	ug/L	216.91	0.72%
K 766.490 R†	5997.3	1387.12	ug/L	85.601	1387.12	ug/L	85.601	6.17%
Mg 279.077 R†	2128.3	2216.52	ug/L	14.380	2216.52	ug/L	14.380	0.65%
Mn 257.610†	452558.0	284.255	ug/L	1.0114	284.255	ug/L	1.0114	0.36%
Mo 202.031†	42.1	1.26413	ug/L	0.205487	1.26413	ug/L	0.205487	16.26%
Na 589.592 R†	3026.7	333.572	ug/L	22.4585	333.572	ug/L	22.4585	6.73%
Ni 231.604†	769.5	16.2726	ug/L	0.15277	16.2726	ug/L	0.15277	0.94%
Pb 220.353†	61351.0	1116.11	ug/L	11.508	1116.11	ug/L	11.508	1.03%
Sb 206.836†	211.2	7.02444	ug/L	1.070229	7.02444	ug/L	1.070229	15.24%
Se 196.026†	-16.6	-0.581087	ug/L	0.1958072	-0.581087	ug/L	0.1958072	33.70%
Ti 334.940 R†	73460.8	1011.14	ug/L	4.145	1011.14	ug/L	4.145	0.41%
Tl 190.801†	-11.0	-0.610411	ug/L	1.2247242	-0.610411	ug/L	1.2247242	200.64%
V 292.402†	8670.0	62.4656	ug/L	0.70078	62.4656	ug/L	0.70078	1.12%
Zn 206.200†	57743.1	771.420	ug/L	3.2655	771.420	ug/L	3.2655	0.42%
Sn 189.927†	70.3	3.44698	ug/L	0.136509	3.44698	ug/L	0.136509	3.96%
Sr 421.552 R	15461.7	35.7053	ug/L	0.41475	35.7053	ug/L	0.41475	1.16%

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR 239404 METALS Soil EPA 6010C

Type : MSS
Inst : MET08
Seqnum : 82369087015
File : met08_sr_6010
IDF : 1.0
Lab ID : 239455-001
Matrix : Soil
Batch : 190409
Time : 12-SEP-2012 08:54
Cal : 82369087001
Units : ug/L

Type : PDS
Inst : MET08
Seqnum : 82369087019.2
File : met08_sr_6010
IDF : 1.0
Lab ID : QC655817
Matrix : Soil
Batch : 190409
Time : 12-SEP-2012 09:17
Cal : 82369087001

MSS: 1.01 g --> 50.0 ml = 49.50 ml/g PDF
PDS: 1.01 g --> 50.0 ml = 49.50 ml/g PDF

PDS standards: S20436 (100X), S20437 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Arsenic	25.83	A	1000	1000	A	97	75-125	!<a+ u
Copper	88.80	A	250.0	338.2	A	100	75-125	u **y**
Zinc	3817	A	500.0	4229	A	82	75-125	!<a+ : u

ISTD (ICAL 002)	Ch	ICAL Abund	PDS Abund	%Drift
Yttrium	A	1585880	1618002	2.03

!=warning +=high bias :=recovery not meaningful <=opening a=ICSA u=use y=RL raised

Sequence No.: 19 **Autosampler Location: 18**
Sample ID: qc655817,190409,1,s20436 **Date Collected: 9/12/2012 9:17:09 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655817,190409,1,s20436

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: qc655817,190409,1,s20436

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1618001.9	102.025	%	1.7380				1.70%
Y	99134.0	106.206	%	1.1760				1.11%
Ag 328.068†	118995.2	178.498	ug/L	1.0874	178.498	ug/L	1.0874	0.61%
Al 308.215 R†	90372.9	85838.8	ug/L	608.90	85838.8	ug/L	608.90	0.71%
As 188.979†	18931.3	1000.01	ug/L	16.927	1000.01	ug/L	16.927	1.69%
B 249.677†	202522.9	1071.09	ug/L	7.241	1071.09	ug/L	7.241	0.68%
Ba 233.527†	856023.7	2265.13	ug/L	14.800	2265.13	ug/L	14.800	0.65%
Be 313.107†	233803.7	53.1905	ug/L	0.40429	53.1905	ug/L	0.40429	0.76%
Ca 315.887 R†	388686.9	46578.9	ug/L	258.61	46578.9	ug/L	258.61	0.56%
Cd 214.440†	45549.1	204.509	ug/L	1.9413	204.509	ug/L	1.9413	0.95%
Co 228.616†	63409.7	509.251	ug/L	4.2816	509.251	ug/L	4.2816	0.84%
Cr 267.716†	191355.6	2268.05	ug/L	18.428	2268.05	ug/L	18.428	0.81%
Cu 324.752†	35548.1	338.216	ug/L	3.3224	338.216	ug/L	3.3224	0.98%
Fe 238.204 R†	693997.9	159692	ug/L	744.4	159692	ug/L	744.4	0.47%
K 766.490 R†	69948.4	16178.5	ug/L	120.11	16178.5	ug/L	120.11	0.74%
Mg 279.077 R†	28087.6	29251.3	ug/L	156.45	29251.3	ug/L	156.45	0.53%
Mn 257.610†	2909709.2	1827.61	ug/L	13.130	1827.61	ug/L	13.130	0.72%
Mo 202.031†	13083.0	392.842	ug/L	6.0776	392.842	ug/L	6.0776	1.55%
Na 589.592 R†	195295.0	21523.7	ug/L	351.77	21523.7	ug/L	351.77	1.63%
Ni 231.604†	26180.9	553.614	ug/L	3.9701	553.614	ug/L	3.9701	0.72%
Pb 220.353†	394670.1	7179.92	ug/L	63.075	7179.92	ug/L	63.075	0.88%
Sb 206.836†	58155.4	1933.86	ug/L	33.536	1933.86	ug/L	33.536	1.73%
Se 196.026†	27374.4	956.362	ug/L	13.7984	956.362	ug/L	13.7984	1.44%
Ti 334.940 R†	428970.4	5904.47	ug/L	66.474	5904.47	ug/L	66.474	1.13%
Tl 190.801†	16202.5	901.592	ug/L	13.9743	901.592	ug/L	13.9743	1.55%
V 292.402†	110491.6	796.067	ug/L	4.8775	796.067	ug/L	4.8775	0.61%
Zn 206.200†	316516.4	4228.51	ug/L	37.579	4228.51	ug/L	37.579	0.89%
Sn 189.927†	19406.8	951.367	ug/L	18.1966	951.367	ug/L	18.1966	1.91%
Sr 421.552 R	70036.5	162.105	ug/L	1.3702	162.105	ug/L	1.3702	0.85%

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 METALS Soil: EPA 6010C

Inst : MET08
Calnum : 82369087001
Units : ug/L

Date : 12-SEP-2012 07:27
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met08_sr_6010	82369087002	CRI5.1	12-SEP-2012 07:32	S20200
L2	met08_sr_6010	82369087003	CS100	12-SEP-2012 07:37	S20215
L3	met08_sr_6010	82369087004	CS1K	12-SEP-2012 07:41	S20214
L4	met08_sr_6010	82369087005	CS10K	12-SEP-2012 07:46	S20216
L5	met08_sr_6010	82369087006	CS100K	12-SEP-2012 07:51	S20217

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Arsenic	A	19.440	17.990	18.289	18.938		LOR0	0.00000	0.05282		18.664	1.000	0.998	
Copper	A	111.44	100.72	101.58	105.14		LOR0	0.00000	0.00951		104.72	1.000	0.998	
Zinc	A	82.155	72.969	72.792	74.874		LOR0	0.00000	0.01336		75.698	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Arsenic	A	5.0000	3	100.00	-5	1000.0	-3	10000	0		
Copper	A	5.0000	6	100.00	-4	1000.0	-3	10000	0		
Zinc	A	20.000	10	100.00	-3	1000.0	-3	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

82369087001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 METALS Soil
EPA 6010C

Inst : MET08
Calnum : 82369087001 Cal Date : 12-SEP-2012

ICV 82369087007 (12-SEP-2012) stds: S20644

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Arsenic	A	5000	4904	ug/L	-2	10	
Copper	A	5000	4797	ug/L	-4	10	
Zinc	A	5000	4877	ug/L	-2	10	

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Sequence No.: 1 **Autosampler Location: 1**
Sample ID: ICALBLK, **Date Collected: 9/12/2012 7:27:53 AM**
Analyst: **Data Type: Reprocessed on 9/12/2012 8:18:44 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICALBLK,

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: ICALBLK,

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	2528.5	207.92	8.22%	[0.00]	ug/L
Al 308.215 R	-239.1	4.17	1.75%	[0.00]	ug/L
As 188.979	17.7	32.10	181.80%	[0.00]	ug/L
B 249.677	-2283.8	24.93	1.09%	[0.00]	ug/L
Ba 233.527	45.3	8.73	19.29%	[0.00]	ug/L
Be 313.107	1558.9	48.76	3.13%	[0.00]	ug/L
Ca 315.887 R	-305.3	19.35	6.34%	[0.00]	ug/L
Cd 214.440	-28.5	9.74	34.23%	[0.00]	ug/L
Co 228.616	-216.3	4.45	2.06%	[0.00]	ug/L
Cr 267.716	-311.9	6.55	2.10%	[0.00]	ug/L
Cu 324.752	420.6	176.49	41.96%	[0.00]	ug/L
Fe 238.204 R	123.8	2.59	2.09%	[0.00]	ug/L
K 766.490 R	1471.0	271.50	18.46%	[0.00]	ug/L
Mg 279.077 R	-22.9	2.30	10.04%	[0.00]	ug/L
Mn 257.610	2047.7	33.11	1.62%	[0.00]	ug/L
Mo 202.031	-17.6	4.44	25.20%	[0.00]	ug/L
Na 589.592 R	-749.9	10.38	1.38%	[0.00]	ug/L
Ni 231.604	-314.8	4.10	1.30%	[0.00]	ug/L
Pb 220.353	-17.7	10.96	61.86%	[0.00]	ug/L
Sb 206.836	-240.7	13.24	5.50%	[0.00]	ug/L
Se 196.026	118.5	46.63	39.36%	[0.00]	ug/L
Ti 334.940 R	187.4	16.76	8.94%	[0.00]	ug/L
Tl 190.801	-88.1	19.74	22.40%	[0.00]	ug/L
V 292.402	-276.9	14.90	5.38%	[0.00]	ug/L
Zn 206.200	41.3	1.89	4.57%	[0.00]	ug/L
Sn 189.927	-63.2	9.29	14.71%	[0.00]	ug/L
Sr 421.552 R	56938.7	331.63	0.58%	[0.00]	ug/L

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: ICAL,CRI5.1 **Date Collected: 9/12/2012 7:32:52 AM**
Analyst: **Data Type: Reprocessed on 9/12/2012 8:18:48 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CRI5.1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: ICAL,CRI5.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1585880.2	3940.83	0.25%	100.000	%
Y	93341.4	1139.42	1.22%	100.000	%
Ag 328.068†	3248.4	218.68	6.73%	[5]	ug/L
Al 308.215 R†	100.8	6.01	5.96%	[100]	ug/L
As 188.979†	97.2	25.35	26.07%	[5]	ug/L
B 249.677†	18583.6	26.92	0.14%	[100]	ug/L
Ba 233.527†	1966.0	6.21	0.32%	[5]	ug/L
Be 313.107†	9074.1	93.93	1.04%	[2]	ug/L
Ca 315.887 R†	1875.0	12.63	0.67%	[200]	ug/L
Cd 214.440†	1150.3	6.58	0.57%	[5]	ug/L
Co 228.616†	620.1	9.36	1.51%	[5]	ug/L
Cr 267.716†	424.2	10.80	2.55%	[5]	ug/L
Cu 324.752†	557.2	43.16	7.75%	[5]	ug/L
Fe 238.204 R†	463.9	4.02	0.87%	[100]	ug/L
K 766.490 R†	1762.1	112.37	6.38%	[500]	ug/L
Mg 279.077 R†	205.3	2.48	1.21%	[200]	ug/L
Mn 257.610†	8546.1	21.29	0.25%	[5]	ug/L
Mo 202.031†	174.0	2.71	1.56%	[5]	ug/L
Na 589.592 R†	4763.4	22.53	0.47%	[500]	ug/L
Ni 231.604†	227.8	6.60	2.90%	[5]	ug/L
Pb 220.353†	236.3	51.79	21.91%	[5]	ug/L
Sb 206.836†	300.0	9.09	3.03%	[10]	ug/L
Se 196.026†	255.2	36.72	14.39%	[10]	ug/L
Ti 334.940 R†	716.3	12.65	1.77%	[10]	ug/L
Tl 190.801†	201.9	25.83	12.79%	[10]	ug/L
V 292.402†	671.3	7.18	1.07%	[5]	ug/L
Zn 206.200†	1643.1	5.85	0.36%	[20]	ug/L
Sn 189.927†	849.2	3.75	0.44%	[40]	ug/L
Sr 421.552 R	3189.8	263.99	8.28%	[5]	ug/L

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Sequence No.: 3 **Autosampler Location: 3**
Sample ID: ICAL,CS100 **Date Collected: 9/12/2012 7:37:54 AM**
Analyst: **Data Type: Reprocessed on 9/12/2012 8:18:50 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS100

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: ICAL,CS100

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1618648.1	30132.40	1.86%	102.066	%
Y	92263.4	2038.21	2.21%	98.8451	%
Ag 328.068†	65171.0	213.50	0.33%	[100]	ug/L
As 188.979†	1799.0	39.19	2.18%	[100]	ug/L
Ba 233.527†	37976.8	197.67	0.52%	[100]	ug/L
Be 313.107†	435596.1	568.61	0.13%	[100]	ug/L
Cd 214.440†	22039.4	378.32	1.72%	[100]	ug/L
Co 228.616†	11837.9	189.20	1.60%	[100]	ug/L
Cr 267.716†	8321.6	142.97	1.72%	[100]	ug/L
Cu 324.752†	10071.6	195.71	1.94%	[100]	ug/L
Mn 257.610†	161144.6	484.69	0.30%	[100]	ug/L
Mo 202.031†	3261.2	43.69	1.34%	[100]	ug/L
Ni 231.604†	4579.0	74.49	1.63%	[100]	ug/L
Pb 220.353†	5477.4	90.23	1.65%	[100]	ug/L
Sb 206.836†	2864.9	57.93	2.02%	[100]	ug/L
Se 196.026†	2754.3	141.27	5.13%	[100]	ug/L
Ti 334.940 R†	6743.4	217.38	3.22%	[100]	ug/L
Tl 190.801†	1810.8	21.40	1.18%	[100]	ug/L
V 292.402†	13524.1	140.08	1.04%	[100]	ug/L
Zn 206.200†	7296.9	113.03	1.55%	[100]	ug/L
Sn 189.927†	2026.3	33.63	1.66%	[100]	ug/L
Sr 421.552 R	42227.8	902.43	2.14%	[100]	ug/L

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Sequence No.: 4 **Autosampler Location: 4**
Sample ID: ICAL,CS1K **Date Collected: 9/12/2012 7:41:55 AM**
Analyst: **Data Type: Reprocessed on 9/12/2012 8:18:52 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS1K

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: ICAL,CS1K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1658901.1	4770.09	0.29%	104.604	%
Y	95967.1	1332.23	1.39%	102.813	%
Ag 328.068†	655446.4	3298.88	0.50%	[1000]	ug/L
Al 308.215 R†	1125.7	26.98	2.40%	[1000]	ug/L
As 188.979†	18289.3	38.90	0.21%	[1000]	ug/L
B 249.677†	180793.8	1502.05	0.83%	[1000]	ug/L
Ba 233.527†	376675.3	2094.00	0.56%	[1000]	ug/L
Be 313.107†	4395989.7	13466.82	0.31%	[1000]	ug/L
Ca 315.887 R†	8809.2	225.64	2.56%	[1000]	ug/L
Cd 214.440†	223186.3	1616.39	0.72%	[1000]	ug/L
Co 228.616†	120628.9	820.90	0.68%	[1000]	ug/L
Cr 267.716†	83625.6	713.01	0.85%	[1000]	ug/L
Cu 324.752†	101579.0	1131.56	1.11%	[1000]	ug/L
Fe 238.204 R†	4454.9	95.50	2.14%	[1000]	ug/L
K 766.490 R†	3161.5	96.82	3.06%	[1000]	ug/L
Mg 279.077 R†	988.5	29.72	3.01%	[1000]	ug/L
Mn 257.610†	1614391.9	5905.99	0.37%	[1000]	ug/L
Mo 202.031†	32665.3	138.63	0.42%	[1000]	ug/L
Na 589.592 R†	9490.6	66.30	0.70%	[1000]	ug/L
Ni 231.604†	46681.2	326.55	0.70%	[1000]	ug/L
Pb 220.353†	54830.9	193.30	0.35%	[1000]	ug/L
Sb 206.836†	28993.5	179.06	0.62%	[1000]	ug/L
Se 196.026†	27305.1	68.48	0.25%	[1000]	ug/L
Ti 334.940 R†	69514.6	1031.23	1.48%	[1000]	ug/L
Tl 190.801†	18110.5	46.86	0.26%	[1000]	ug/L
V 292.402†	136011.1	880.84	0.65%	[1000]	ug/L
Zn 206.200†	72792.4	640.19	0.88%	[1000]	ug/L
Sn 189.927†	20348.7	56.08	0.28%	[1000]	ug/L
Sr 421.552 R	448991.9	5285.42	1.18%	[1000]	ug/L

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Sequence No.: 5 **Autosampler Location: 5**
Sample ID: ICAL,CS10K **Date Collected: 9/12/2012 7:46:05 AM**
Analyst: **Data Type: Reprocessed on 9/12/2012 8:18:54 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS10K

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: ICAL,CS10K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1569298.5	18454.92	1.18%	98.9544	%
Y	94146.3	2102.65	2.23%	100.862	%
Ag 328.068†	1338971.4	5861.99	0.44%	[2000]	ug/L
Al 308.215 R†	11067.0	110.49	1.00%	[10000]	ug/L
As 188.979†	189375.8	3638.64	1.92%	[10000]	ug/L
B 249.677†	1891646.6	12025.67	0.64%	[10000]	ug/L
Ba 233.527†	3779256.7	39120.11	1.04%	[10000]	ug/L
Ca 315.887 R†	87541.7	568.87	0.65%	[10000]	ug/L
Cd 214.440†	2227202.1	8671.27	0.39%	[10000]	ug/L
Co 228.616†	1219839.1	8718.30	0.71%	[10000]	ug/L
Cr 267.716†	843777.2	5329.95	0.63%	[10000]	ug/L
Cu 324.752†	1051404.5	6163.54	0.59%	[10000]	ug/L
Fe 238.204 R†	44393.7	268.46	0.60%	[10000]	ug/L
K 766.490 R†	42157.3	206.73	0.49%	[10000]	ug/L
Mg 279.077 R†	10006.3	71.38	0.71%	[10000]	ug/L
Mn 257.610†	15918618.9	142635.31	0.90%	[10000]	ug/L
Mo 202.031†	333100.1	1855.36	0.56%	[10000]	ug/L
Na 589.592 R†	94593.1	2481.71	2.62%	[10000]	ug/L
Ni 231.604†	472971.2	2676.94	0.57%	[10000]	ug/L
Pb 220.353†	549700.1	2647.68	0.48%	[10000]	ug/L
Sb 206.836†	300831.8	7667.43	2.55%	[10000]	ug/L
Se 196.026†	286368.1	6503.14	2.27%	[10000]	ug/L
Ti 334.940 R†	726837.1	7729.98	1.06%	[10000]	ug/L
Tl 190.801†	179695.8	3342.29	1.86%	[10000]	ug/L
V 292.402†	1388250.5	5580.93	0.40%	[10000]	ug/L
Zn 206.200†	748737.4	4418.75	0.59%	[10000]	ug/L
Sn 189.927†	203993.2	3333.79	1.63%	[10000]	ug/L
Sr 421.552 R	4332961.1	23023.27	0.53%	[10000]	ug/L

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Sequence No.: 6 **Autosampler Location: 6**
Sample ID: ICAL,CS100K **Date Collected: 9/12/2012 7:51:32 AM**
Analyst: **Data Type: Reprocessed on 9/12/2012 8:18:56 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS100K

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: ICAL,CS100K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1468558.3	17624.53	1.20%	92.6021	%
Y	90507.6	551.32	0.61%	96.9641	%
Al 308.215 R†	105227.5	119.18	0.11%	[100000]	ug/L
Ca 315.887 R†	834056.2	1546.90	0.19%	[100000]	ug/L
Fe 238.204 R†	434490.5	702.82	0.16%	[100000]	ug/L
K 766.490 R†	432475.4	797.25	0.18%	[100000]	ug/L
Mg 279.077 R†	95981.0	345.27	0.36%	[100000]	ug/L
Na 589.592 R†	906959.2	22912.91	2.53%	[100000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin Thru 0	0.0	666.6	0.00000	0.999964	
Al 308.215 R	4	Lin Thru 0	0.0	1.053	0.00000	0.999987	
As 188.979	4	Lin Thru 0	0.0	18.93	0.00000	0.999994	
B 249.677	3	Lin Thru 0	0.0	189.1	0.00000	0.999990	
Ba 233.527	4	Lin Thru 0	0.0	377.9	0.00000	1.000000	
Be 313.107	3	Lin Thru 0	0.0	4396	0.00000	1.000000	
Ca 315.887 R	4	Lin Thru 0	0.0	8.345	0.00000	0.999988	
Cd 214.440	4	Lin Thru 0	0.0	222.7	0.00000	1.000000	
Co 228.616	4	Lin Thru 0	0.0	122.0	0.00000	0.999999	
Cr 267.716	4	Lin Thru 0	0.0	84.37	0.00000	1.000000	
Cu 324.752	4	Lin Thru 0	0.0	105.1	0.00000	0.999994	
Fe 238.204 R	4	Lin Thru 0	0.0	4.346	0.00000	0.999998	
K 766.490 R	4	Lin Thru 0	0.0	4.324	0.00000	0.999993	
Mg 279.077 R	4	Lin Thru 0	0.0	0.9602	0.00000	0.999991	
Mn 257.610	4	Lin Thru 0	0.0	1592	0.00000	0.999999	
Mo 202.031	4	Lin Thru 0	0.0	33.30	0.00000	0.999998	
Na 589.592 R	4	Lin Thru 0	0.0	9.074	0.00000	0.999991	
Ni 231.604	4	Lin Thru 0	0.0	47.29	0.00000	0.999999	
Pb 220.353	4	Lin Thru 0	0.0	54.97	0.00000	1.000000	
Sb 206.836	4	Lin Thru 0	0.0	30.07	0.00000	0.999993	
Se 196.026	4	Lin Thru 0	0.0	28.62	0.00000	0.999989	
Ti 334.940 R	4	Lin Thru 0	0.0	72.65	0.00000	0.999990	
Tl 190.801	4	Lin Thru 0	0.0	17.97	0.00000	1.000000	
V 292.402	4	Lin Thru 0	0.0	138.8	0.00000	0.999998	
Zn 206.200	4	Lin Thru 0	0.0	74.85	0.00000	0.999996	
Sn 189.927	4	Lin Thru 0	0.0	20.40	0.00000	1.000000	
Sr 421.552 R	4	Lin Thru 0	0.0	433.5	0.00000	0.999994	

Sequence No.: 7 **Autosampler Location: 217**
Sample ID: s20644 **Date Collected: 9/12/2012 7:56:45 AM**
Analyst: **Data Type: Reprocessed on 9/12/2012 8:18:58 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20644

Analyte	Back Pressure	Flow
All	133.0 kPa	0.55 L/min

Mean Data: s20644

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1570816.3	99.0501	%	0.25705				0.26%
Y	89568.7	95.9582	%	0.52493				0.55%
Ag 328.068†	649960.4	974.968	ug/L	3.1424	974.968	ug/L	3.1424	0.32%
QC value within limits for Ag 328.068 Recovery = 97.50%								
Al 308.215 R†	22008.0	20903.8	ug/L	101.97	20903.8	ug/L	101.97	0.49%
QC value within limits for Al 308.215 R Recovery = 104.52%								
As 188.979†	92844.7	4904.36	ug/L	52.568	4904.36	ug/L	52.568	1.07%
QC value within limits for As 188.979 Recovery = 98.09%								
B 249.677†	948640.2	5017.10	ug/L	19.071	5017.10	ug/L	19.071	0.38%
QC value within limits for B 249.677 Recovery = 100.34%								
Ba 233.527†	1856405.0	4912.25	ug/L	19.113	4912.25	ug/L	19.113	0.39%
QC value within limits for Ba 233.527 Recovery = 98.24%								
Be 313.107†	2252387.1	512.419	ug/L	2.3243	512.419	ug/L	2.3243	0.45%
QC value within limits for Be 313.107 Recovery = 102.48%								
Ca 315.887 R†	168855.8	20235.1	ug/L	77.59	20235.1	ug/L	77.59	0.38%
QC value within limits for Ca 315.887 R Recovery = 101.18%								
Cd 214.440†	1111263.5	4989.41	ug/L	22.396	4989.41	ug/L	22.396	0.45%
QC value within limits for Cd 214.440 Recovery = 99.79%								
Co 228.616†	594335.1	4864.32	ug/L	22.101	4864.32	ug/L	22.101	0.45%
QC value within limits for Co 228.616 Recovery = 97.29%								
Cr 267.716†	411214.0	4873.93	ug/L	11.326	4873.93	ug/L	11.326	0.23%
QC value within limits for Cr 267.716 Recovery = 97.48%								
Cu 324.752†	504234.5	4797.45	ug/L	8.304	4797.45	ug/L	8.304	0.17%
QC value within limits for Cu 324.752 Recovery = 95.95%								
Fe 238.204 R†	89733.6	20648.1	ug/L	33.36	20648.1	ug/L	33.36	0.16%
QC value within limits for Fe 238.204 R Recovery = 103.24%								
K 766.490 R†	85932.4	19875.5	ug/L	55.93	19875.5	ug/L	55.93	0.28%
QC value within limits for K 766.490 R Recovery = 99.38%								
Mg 279.077 R†	19425.2	20230.0	ug/L	83.11	20230.0	ug/L	83.11	0.41%
QC value within limits for Mg 279.077 R Recovery = 101.15%								
Mn 257.610†	7797938.7	4897.94	ug/L	16.327	4897.94	ug/L	16.327	0.33%
QC value within limits for Mn 257.610 Recovery = 97.96%								
Mo 202.031†	167067.4	5016.50	ug/L	18.115	5016.50	ug/L	18.115	0.36%
QC value within limits for Mo 202.031 Recovery = 100.33%								
Na 589.592 R†	188947.9	20824.1	ug/L	396.02	20824.1	ug/L	396.02	1.90%
QC value within limits for Na 589.592 R Recovery = 104.12%								
Ni 231.604†	229412.2	4851.09	ug/L	20.476	4851.09	ug/L	20.476	0.42%
QC value within limits for Ni 231.604 Recovery = 97.02%								
Pb 220.353†	264038.9	4803.45	ug/L	18.325	4803.45	ug/L	18.325	0.38%
QC value within limits for Pb 220.353 Recovery = 96.07%								
Sb 206.836†	148477.1	4937.35	ug/L	76.866	4937.35	ug/L	76.866	1.56%
QC value within limits for Sb 206.836 Recovery = 98.75%								
Se 196.026†	138074.1	4823.80	ug/L	65.258	4823.80	ug/L	65.258	1.35%
QC value within limits for Se 196.026 Recovery = 96.48%								
Ti 334.940 R†	341884.2	4705.79	ug/L	27.765	4705.79	ug/L	27.765	0.59%
QC value within limits for Ti 334.940 R Recovery = 94.12%								
Tl 190.801†	87358.0	4861.06	ug/L	49.472	4861.06	ug/L	49.472	1.02%
QC value within limits for Tl 190.801 Recovery = 97.22%								
V 292.402†	693963.6	4999.85	ug/L	8.715	4999.85	ug/L	8.715	0.17%
QC value within limits for V 292.402 Recovery = 100.00%								
Zn 206.200†	365055.6	4876.97	ug/L	20.766	4876.97	ug/L	20.766	0.43%
QC value within limits for Zn 206.200 Recovery = 97.54%								
Sn 189.927†	100195.3	4911.82	ug/L	53.573	4911.82	ug/L	53.573	1.09%
QC value within limits for Sn 189.927 Recovery = 98.24%								
Sr 421.552 R	209319.9	483.273	ug/L	12.0902	483.273	ug/L	12.0902	2.50%
QC value within limits for Sr 421.552 R Recovery = 96.65%								

All analyte(s) passed QC.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087008.2 File : met08_sr_6010 Time : 12-SEP-2012 08:02
Cal : 82369087001 Caldate : 12-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.582	ug/L	
Copper	A	ND	5.000	3.219	ug/L	
Zinc	A	ND	20.00	4.561	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1674788	5.61

Sequence No.: 8 **Autosampler Location: 220**
Sample ID: ICB **Date Collected: 9/12/2012 8:02:06 AM**
Analyst: **Data Type: Reprocessed on 9/12/2012 8:19:02 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	136.0 kPa	0.55 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1674788.1	105.606	%	0.7478				0.71%
Y	96207.8	103.071	%	2.6946				2.61%
Ag 328.068†	-566.9	-0.850357	ug/L	0.3624464	-0.850357	ug/L	0.3624464	42.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	7.0	6.60587	ug/L	3.941580	6.60587	ug/L	3.941580	59.67%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	21.3	1.12401	ug/L	0.842697	1.12401	ug/L	0.842697	74.97%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	4951.3	26.1859	ug/L	0.64685	26.1859	ug/L	0.64685	2.47%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	70.1	0.185560	ug/L	0.0314612	0.185560	ug/L	0.0314612	16.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-213.2	-0.0485009	ug/L	0.04719104	-0.0485009	ug/L	0.04719104	97.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	-52.5	-6.29569	ug/L	3.637415	-6.29569	ug/L	3.637415	57.78%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	77.6	0.348457	ug/L	0.0620705	0.348457	ug/L	0.0620705	17.81%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	18.8	0.153522	ug/L	0.1102375	0.153522	ug/L	0.1102375	71.81%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	30.5	0.361360	ug/L	0.0913921	0.361360	ug/L	0.0913921	25.29%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	101.9	0.969901	ug/L	0.9287728	0.969901	ug/L	0.9287728	95.76%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	-2.1	-0.488395	ug/L	0.6634306	-0.488395	ug/L	0.6634306	135.84%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	-393.0	-90.8982	ug/L	47.88281	-90.8982	ug/L	47.88281	52.68%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	-0.5	-0.567467	ug/L	4.2511775	-0.567467	ug/L	4.2511775	749.15%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	764.1	0.479940	ug/L	0.0725065	0.479940	ug/L	0.0725065	15.11%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	21.9	0.657762	ug/L	0.0606240	0.657762	ug/L	0.0606240	9.22%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	187.7	20.6859	ug/L	11.68228	20.6859	ug/L	11.68228	56.47%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	20.6	0.435533	ug/L	0.0678309	0.435533	ug/L	0.0678309	15.57%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	14.4	0.261332	ug/L	0.5121616	0.261332	ug/L	0.5121616	195.98%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	9.4	0.313886	ug/L	0.4720523	0.313886	ug/L	0.4720523	150.39%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-14.1	-0.494085	ug/L	2.4014446	-0.494085	ug/L	2.4014446	486.04%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	9.9	0.136382	ug/L	0.5916412	0.136382	ug/L	0.5916412	433.81%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	29.2	1.62329	ug/L	1.077816	1.62329	ug/L	1.077816	66.40%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	37.8	0.272688	ug/L	0.1083425	0.272688	ug/L	0.1083425	39.73%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	43.7	0.583789	ug/L	0.0283446	0.583789	ug/L	0.0283446	4.86%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	50.3	2.46809	ug/L	0.253918	2.46809	ug/L	0.253918	10.29%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	595.6	1.37409	ug/L	1.042597	1.37409	ug/L	1.042597	75.88%
QC value within limits for Sr 421.552 R Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087009.2 File : met08_sr_6010 Time : 12-SEP-2012 08:07
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20220

Analyte	Ch	Quant	IQL	Units	Flags
Arsenic	A	[3.267]	5.000	ug/L	!a+
Zinc	A	[16.72]	20.00	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19330	ug/L	97
Copper	A	20000	20500	ug/L	103
Manganese	A	20000	18650	ug/L	93
Nickel	A	20000	18140	ug/L	91
Vanadium	A	20000	20070	ug/L	100
Aluminum	R	500000	514900	ug/L	103
Calcium	R	500000	488300	ug/L	98
Iron	R	200000	195700	ug/L	98
Magnesium	R	500000	497100	ug/L	99
Titanium	R	20000	21030	ug/L	105

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1370407	-13.59

!=warning +=high bias a=ICSA

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: s20220 **Date Collected: 9/12/2012 8:07:12 AM**
Analyst: **Data Type: Reprocessed on 9/12/2012 8:19:04 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20220

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: s20220

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1370407.2	86.4130	%	0.65897				0.76%
Y	87148.5	93.3653	%	0.71022				0.76%
Ag 328.068†	-487.5	-0.731202	ug/L	0.3014571	-0.731202	ug/L	0.3014571	41.23%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	542116.2	514918	ug/L	6905.5	514918	ug/L	6905.5	1.34%
QC value within limits for Al 308.215 R Recovery = 102.98%								
As 188.979†	61.9	3.26742	ug/L	8.860584	3.26742	ug/L	8.860584	271.18%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	11182.6	59.1415	ug/L	2.08770	59.1415	ug/L	2.08770	3.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.7	0.0151637	ug/L	0.07479999	0.0151637	ug/L	0.07479999	493.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-2868.9	-0.652676	ug/L	0.0217608	-0.652676	ug/L	0.0217608	3.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	4074861.1	488317	ug/L	6036.5	488317	ug/L	6036.5	1.24%
QC value within limits for Ca 315.887 R Recovery = 97.66%								
Cd 214.440†	-464.5	-2.08567	ug/L	0.109421	-2.08567	ug/L	0.109421	5.25%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	4913.0	2.43292	ug/L	0.673799	2.43292	ug/L	0.673799	27.70%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1631224.1	19334.1	ug/L	34.93	19334.1	ug/L	34.93	0.18%
QC value within limits for Cr 267.716 Recovery = 96.67%								
Cu 324.752†	2154736.6	20500.8	ug/L	396.58	20500.8	ug/L	396.58	1.93%
QC value within limits for Cu 324.752 Recovery = 102.50%								
Fe 238.204 R†	850340.7	195667	ug/L	687.9	195667	ug/L	687.9	0.35%
QC value within limits for Fe 238.204 R Recovery = 97.83%								
K 766.490 R†	-773.0	-178.800	ug/L	30.1505	-178.800	ug/L	30.1505	16.86%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	477308.7	497084	ug/L	2379.3	497084	ug/L	2379.3	0.48%
QC value within limits for Mg 279.077 R Recovery = 99.42%								
Mn 257.610†	29685654.8	18645.8	ug/L	340.09	18645.8	ug/L	340.09	1.82%
QC value within limits for Mn 257.610 Recovery = 93.23%								
Mo 202.031†	-10.8	-0.322850	ug/L	2.6039532	-0.322850	ug/L	2.6039532	806.55%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	430.3	47.4201	ug/L	2.36376	47.4201	ug/L	2.36376	4.98%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	858034.3	18143.8	ug/L	31.83	18143.8	ug/L	31.83	0.18%
QC value within limits for Ni 231.604 Recovery = 90.72%								
Pb 220.353†	96.3	1.75238	ug/L	8.049015	1.75238	ug/L	8.049015	459.32%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	141.3	4.69991	ug/L	10.128063	4.69991	ug/L	10.128063	215.49%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	36.6	1.27832	ug/L	23.332931	1.27832	ug/L	23.332931	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	1527598.5	21026.3	ug/L	269.44	21026.3	ug/L	269.44	1.28%
QC value within limits for Ti 334.940 R Recovery = 105.13%								
Tl 190.801†	-152.2	-8.46847	ug/L	6.410083	-8.46847	ug/L	6.410083	75.69%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	2785509.3	20069.0	ug/L	48.02	20069.0	ug/L	48.02	0.24%
QC value within limits for V 292.402 Recovery = 100.34%								
Zn 206.200†	1251.9	16.7248	ug/L	0.38912	16.7248	ug/L	0.38912	2.33%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	-86.4	-4.23515	ug/L	2.061154	-4.23515	ug/L	2.061154	48.67%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	-3238.6	2.25984	ug/L	0.244017	2.25984	ug/L	0.244017	10.80%
QC value within limits for Sr 421.552 R Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087010.2 File : met08_sr_6010 Time : 12-SEP-2012 08:21
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	507.7	ug/L	2	20	
Copper	A	500.0	523.5	ug/L	5	20	
Zinc	A	1000	967.3	ug/L	-3	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1406607	-11.30

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: ICALBLK, **Date Collected: 9/12/2012 8:20:39 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
User canceled analysis.

==========

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: s20222 **Date Collected: 9/12/2012 8:21:12 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20222

Analyte	Back Pressure	Flow
All	136.0 kPa	0.55 L/min

Mean Data: s20222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1406606.5	88.6956	%	0.41833				0.47%
Y	89694.3	96.0928	%	1.20548				1.25%
Ag 328.068†	719784.5	1079.71	ug/L	9.703	1079.71	ug/L	9.703	0.90%
QC value within limits for Ag 328.068 Recovery = 107.97%								
Al 308.215 R†	534926.4	508089	ug/L	2167.5	508089	ug/L	2167.5	0.43%
QC value within limits for Al 308.215 R Recovery = 101.62%								
As 188.979†	9611.9	507.729	ug/L	18.3964	507.729	ug/L	18.3964	3.62%
QC value within limits for As 188.979 Recovery = 101.55%								
B 249.677†	11027.5	58.3214	ug/L	3.16978	58.3214	ug/L	3.16978	5.44%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	192223.0	508.643	ug/L	5.7192	508.643	ug/L	5.7192	1.12%
QC value within limits for Ba 233.527 Recovery = 101.73%								
Be 313.107†	2324856.3	528.906	ug/L	6.3940	528.906	ug/L	6.3940	1.21%
QC value within limits for Be 313.107 Recovery = 105.78%								
Ca 315.887 R†	4059439.5	486469	ug/L	5726.4	486469	ug/L	5726.4	1.18%
QC value within limits for Ca 315.887 R Recovery = 97.29%								
Cd 214.440†	221104.4	992.725	ug/L	12.4538	992.725	ug/L	12.4538	1.25%
QC value within limits for Cd 214.440 Recovery = 99.27%								
Co 228.616†	61189.4	464.304	ug/L	6.4003	464.304	ug/L	6.4003	1.38%
QC value within limits for Co 228.616 Recovery = 92.86%								
Cr 267.716†	41197.7	488.298	ug/L	6.0712	488.298	ug/L	6.0712	1.24%
QC value within limits for Cr 267.716 Recovery = 97.66%								
Cu 324.752†	55017.4	523.453	ug/L	6.5338	523.453	ug/L	6.5338	1.25%
QC value within limits for Cu 324.752 Recovery = 104.69%								
Fe 238.204 R†	829810.4	190943	ug/L	797.1	190943	ug/L	797.1	0.42%
QC value within limits for Fe 238.204 R Recovery = 95.47%								
K 766.490 R†	-1268.8	-293.475	ug/L	73.0415	-293.475	ug/L	73.0415	24.89%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	468735.3	488155	ug/L	2536.9	488155	ug/L	2536.9	0.52%
QC value within limits for Mg 279.077 R Recovery = 97.63%								
Mn 257.610†	728226.5	457.404	ug/L	4.9185	457.404	ug/L	4.9185	1.08%
QC value within limits for Mn 257.610 Recovery = 91.48%								
Mo 202.031†	16902.7	507.533	ug/L	8.5807	507.533	ug/L	8.5807	1.69%
QC value within limits for Mo 202.031 Recovery = 101.51%								
Na 589.592 R†	381.7	42.0671	ug/L	5.60648	42.0671	ug/L	5.60648	13.33%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	42985.8	908.966	ug/L	13.8012	908.966	ug/L	13.8012	1.52%
QC value within limits for Ni 231.604 Recovery = 90.90%								
Pb 220.353†	51132.3	930.209	ug/L	15.5784	930.209	ug/L	15.5784	1.67%
QC value within limits for Pb 220.353 Recovery = 93.02%								
Sb 206.836†	15612.8	519.177	ug/L	4.4953	519.177	ug/L	4.4953	0.87%
QC value within limits for Sb 206.836 Recovery = 103.84%								
Se 196.026†	14076.6	491.785	ug/L	14.8349	491.785	ug/L	14.8349	3.02%
QC value within limits for Se 196.026 Recovery = 98.36%								
Ti 334.940 R†	1508390.0	20761.9	ug/L	345.27	20761.9	ug/L	345.27	1.66%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	8260.8	459.675	ug/L	13.3427	459.675	ug/L	13.3427	2.90%
QC value within limits for Tl 190.801 Recovery = 91.93%								
V 292.402†	73713.9	531.092	ug/L	4.7344	531.092	ug/L	4.7344	0.89%
QC value within limits for V 292.402 Recovery = 106.22%								
Zn 206.200†	72405.7	967.306	ug/L	12.9489	967.306	ug/L	12.9489	1.34%

QC value within limits for Zn 206.200 Recovery = 96.73%

Sn 189.927†	-82.5	-4.04627 ug/L	0.741938	-4.04627 ug/L	0.741938	18.34%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552 R	208625.0	490.868 ug/L	7.7336	490.868 ug/L	7.7336	1.58%

QC value within limits for Sr 421.552 R Recovery = 98.17%

All analyte(s) passed QC.

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087011.2 File : met08_sr_6010 Time : 12-SEP-2012 08:26
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20319

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	20.00	18.44	ug/L	-8	30	
Copper	A	20.00	19.81	ug/L	-1	30	
Zinc	A	80.00	79.99	ug/L	0	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1659009	4.61

Sequence No.: 11 **Autosampler Location: 7**
Sample ID: s20319 **Date Collected: 9/12/2012 8:26:33 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20319

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: s20319

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1659008.7	104.611	%	1.3911				1.33%
Y	96731.9	103.632	%	0.5579				0.54%
Ag 328.068†	12398.7	18.5986	ug/L	0.08607	18.5986	ug/L	0.08607	0.46%
QC value within limits for Ag 328.068 Recovery = 92.99%								
Al 308.215 R†	495.9	471.028	ug/L	6.7726	471.028	ug/L	6.7726	1.44%
QC value within limits for Al 308.215 R Recovery = 117.76%								
As 188.979†	349.0	18.4375	ug/L	1.49442	18.4375	ug/L	1.49442	8.11%
QC value within limits for As 188.979 Recovery = 92.19%								
B 249.677†	74752.0	395.343	ug/L	2.3447	395.343	ug/L	2.3447	0.59%
QC value within limits for B 249.677 Recovery = 98.84%								
Ba 233.527†	7405.6	19.5961	ug/L	0.30600	19.5961	ug/L	0.30600	1.56%
QC value within limits for Ba 233.527 Recovery = 97.98%								
Be 313.107†	34791.1	7.91499	ug/L	0.026254	7.91499	ug/L	0.026254	0.33%
QC value within limits for Be 313.107 Recovery = 98.94%								
Ca 315.887 R†	7266.8	870.826	ug/L	1.6229	870.826	ug/L	1.6229	0.19%
QC value within limits for Ca 315.887 R Recovery = 108.85%								
Cd 214.440†	4484.0	20.1326	ug/L	0.23783	20.1326	ug/L	0.23783	1.18%
QC value within limits for Cd 214.440 Recovery = 100.66%								
Co 228.616†	2366.3	19.3299	ug/L	0.26804	19.3299	ug/L	0.26804	1.39%
QC value within limits for Co 228.616 Recovery = 96.65%								
Cr 267.716†	1663.7	19.7196	ug/L	0.23057	19.7196	ug/L	0.23057	1.17%
QC value within limits for Cr 267.716 Recovery = 98.60%								
Cu 324.752†	2081.8	19.8073	ug/L	0.29256	19.8073	ug/L	0.29256	1.48%
QC value within limits for Cu 324.752 Recovery = 99.04%								
Fe 238.204 R†	1873.4	431.071	ug/L	1.7801	431.071	ug/L	1.7801	0.41%
QC value within limits for Fe 238.204 R Recovery = 107.77%								
K 766.490 R†	7488.6	1732.05	ug/L	46.372	1732.05	ug/L	46.372	2.68%
QC value within limits for K 766.490 R Recovery = 86.60%								
Mg 279.077 R†	847.8	882.954	ug/L	6.0078	882.954	ug/L	6.0078	0.68%
QC value within limits for Mg 279.077 R Recovery = 110.37%								
Mn 257.610†	31900.8	20.0371	ug/L	0.17780	20.0371	ug/L	0.17780	0.89%
QC value within limits for Mn 257.610 Recovery = 100.19%								
Mo 202.031†	658.7	19.7780	ug/L	0.21982	19.7780	ug/L	0.21982	1.11%
QC value within limits for Mo 202.031 Recovery = 98.89%								
Na 589.592 R†	18487.3	2037.50	ug/L	19.033	2037.50	ug/L	19.033	0.93%
QC value within limits for Na 589.592 R Recovery = 101.88%								
Ni 231.604†	923.6	19.5302	ug/L	0.16469	19.5302	ug/L	0.16469	0.84%
QC value within limits for Ni 231.604 Recovery = 97.65%								
Pb 220.353†	1054.1	19.1771	ug/L	0.70770	19.1771	ug/L	0.70770	3.69%
QC value within limits for Pb 220.353 Recovery = 95.89%								
Sb 206.836†	1185.9	39.4341	ug/L	1.43359	39.4341	ug/L	1.43359	3.64%
QC value within limits for Sb 206.836 Recovery = 98.59%								
Se 196.026†	1028.8	35.9419	ug/L	1.22995	35.9419	ug/L	1.22995	3.42%
QC value within limits for Se 196.026 Recovery = 89.85%								
Ti 334.940 R†	2851.8	39.2534	ug/L	0.42846	39.2534	ug/L	0.42846	1.09%
QC value within limits for Ti 334.940 R Recovery = 98.13%								
Tl 190.801†	727.3	40.4697	ug/L	0.84894	40.4697	ug/L	0.84894	2.10%
QC value within limits for Tl 190.801 Recovery = 101.17%								
V 292.402†	2679.4	19.3047	ug/L	0.33263	19.3047	ug/L	0.33263	1.72%
QC value within limits for V 292.402 Recovery = 96.52%								
Zn 206.200†	5987.5	79.9902	ug/L	1.13726	79.9902	ug/L	1.13726	1.42%
QC value within limits for Zn 206.200 Recovery = 99.99%								
Sn 189.927†	3185.8	156.176	ug/L	2.5850	156.176	ug/L	2.5850	1.66%
QC value within limits for Sn 189.927 Recovery = 97.61%								
Sr 421.552 R	10013.9	23.1199	ug/L	0.18987	23.1199	ug/L	0.18987	0.82%

All analyte(s) passed QC.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087020.2 File : met08_sr_6010 Time : 12-SEP-2012 09:23
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	18.664	18.066	5000	4771	ug/L	-5	10	
Copper	A	104.72	102.67	5000	4884	ug/L	-2	10	
Zinc	A	75.698	72.252	5000	4826	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1619985	2.15

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Sequence No.: 20 **Autosampler Location: 217**
Sample ID: s20645 **Date Collected: 9/12/2012 9:23:22 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20645

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: s20645

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1619984.6	102.151	%	0.8391				0.82%
Y	96852.9	103.762	%	1.5772				1.52%
Ag 328.068†	637164.1	955.773	ug/L	9.2819	955.773	ug/L	9.2819	0.97%
QC value within limits for Ag 328.068 Recovery = 95.58%								
Al 308.215 R†	21487.2	20409.1	ug/L	27.94	20409.1	ug/L	27.94	0.14%
QC value within limits for Al 308.215 R Recovery = 102.05%								
As 188.979†	90327.7	4771.40	ug/L	22.609	4771.40	ug/L	22.609	0.47%
QC value within limits for As 188.979 Recovery = 95.43%								
B 249.677†	935884.9	4949.64	ug/L	30.302	4949.64	ug/L	30.302	0.61%
QC value within limits for B 249.677 Recovery = 98.99%								
Ba 233.527†	1810836.4	4791.67	ug/L	41.837	4791.67	ug/L	41.837	0.87%
QC value within limits for Ba 233.527 Recovery = 95.83%								
Be 313.107†	2228016.3	506.875	ug/L	4.0499	506.875	ug/L	4.0499	0.80%
QC value within limits for Be 313.107 Recovery = 101.37%								
Ca 315.887 R†	164008.3	19654.2	ug/L	196.55	19654.2	ug/L	196.55	1.00%
QC value within limits for Ca 315.887 R Recovery = 98.27%								
Cd 214.440†	1101927.1	4947.49	ug/L	34.864	4947.49	ug/L	34.864	0.70%
QC value within limits for Cd 214.440 Recovery = 98.95%								
Co 228.616†	584661.8	4784.84	ug/L	42.440	4784.84	ug/L	42.440	0.89%
QC value within limits for Co 228.616 Recovery = 95.70%								
Cr 267.716†	403645.5	4784.22	ug/L	45.761	4784.22	ug/L	45.761	0.96%
QC value within limits for Cr 267.716 Recovery = 95.68%								
Cu 324.752†	513347.8	4884.15	ug/L	18.231	4884.15	ug/L	18.231	0.37%
QC value within limits for Cu 324.752 Recovery = 97.68%								
Fe 238.204 R†	87345.8	20098.7	ug/L	123.45	20098.7	ug/L	123.45	0.61%
QC value within limits for Fe 238.204 R Recovery = 100.49%								
K 766.490 R†	83153.1	19232.7	ug/L	56.17	19232.7	ug/L	56.17	0.29%
QC value within limits for K 766.490 R Recovery = 96.16%								
Mg 279.077 R†	18946.4	19731.4	ug/L	154.13	19731.4	ug/L	154.13	0.78%
QC value within limits for Mg 279.077 R Recovery = 98.66%								
Mn 257.610†	7673161.2	4819.56	ug/L	39.658	4819.56	ug/L	39.658	0.82%
QC value within limits for Mn 257.610 Recovery = 96.39%								
Mo 202.031†	164797.7	4948.35	ug/L	27.347	4948.35	ug/L	27.347	0.55%
QC value within limits for Mo 202.031 Recovery = 98.97%								
Na 589.592 R†	179173.7	19746.9	ug/L	246.33	19746.9	ug/L	246.33	1.25%
QC value within limits for Na 589.592 R Recovery = 98.73%								
Ni 231.604†	226028.0	4779.53	ug/L	36.947	4779.53	ug/L	36.947	0.77%
QC value within limits for Ni 231.604 Recovery = 95.59%								
Pb 220.353†	259852.7	4727.29	ug/L	34.309	4727.29	ug/L	34.309	0.73%
QC value within limits for Pb 220.353 Recovery = 94.55%								
Sb 206.836†	144587.4	4808.00	ug/L	44.591	4808.00	ug/L	44.591	0.93%
QC value within limits for Sb 206.836 Recovery = 96.16%								
Se 196.026†	134596.1	4702.29	ug/L	83.846	4702.29	ug/L	83.846	1.78%
QC value within limits for Se 196.026 Recovery = 94.05%								
Ti 334.940 R†	348898.5	4802.34	ug/L	101.328	4802.34	ug/L	101.328	2.11%
QC value within limits for Ti 334.940 R Recovery = 96.05%								
Tl 190.801†	83938.4	4670.77	ug/L	47.682	4670.77	ug/L	47.682	1.02%
QC value within limits for Tl 190.801 Recovery = 93.42%								
V 292.402†	683144.2	4921.90	ug/L	31.059	4921.90	ug/L	31.059	0.63%
QC value within limits for V 292.402 Recovery = 98.44%								
Zn 206.200†	361260.5	4826.27	ug/L	41.344	4826.27	ug/L	41.344	0.86%
QC value within limits for Zn 206.200 Recovery = 96.53%								
Sn 189.927†	96549.9	4733.11	ug/L	63.446	4733.11	ug/L	63.446	1.34%
QC value within limits for Sn 189.927 Recovery = 94.66%								
Sr 421.552 R	217891.1	503.036	ug/L	4.5286	503.036	ug/L	4.5286	0.90%
QC value within limits for Sr 421.552 R Recovery = 100.61%								

All analyte(s) passed QC.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087021.2 File : met08_sr_6010 Time : 12-SEP-2012 09:28
Cal : 82369087001 Caldate : 12-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.582	ug/L	
Copper	A	ND	5.000	3.219	ug/L	
Zinc	A	ND	20.00	4.561	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1659706	4.66

Sequence No.: 21 **Autosampler Location: 220**
Sample ID: ccb **Date Collected: 9/12/2012 9:28:45 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ccb

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: ccb

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1659706.3	104.655	%	0.2570				0.25%
Y	95105.2	101.890	%	0.8806				0.86%
Ag 328.068†	-785.3	-1.17798	ug/L	0.172856	-1.17798	ug/L	0.172856	14.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	4.9	4.61900	ug/L	3.414029	4.61900	ug/L	3.414029	73.91%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	20.0	1.05519	ug/L	0.831011	1.05519	ug/L	0.831011	78.75%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	4291.5	22.6967	ug/L	0.38506	22.6967	ug/L	0.38506	1.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	48.2	0.127633	ug/L	0.0274541	0.127633	ug/L	0.0274541	21.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-238.2	-0.0541907	ug/L	0.01402794	-0.0541907	ug/L	0.01402794	25.89%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	-37.0	-4.43917	ug/L	0.502489	-4.43917	ug/L	0.502489	11.32%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	75.4	0.338328	ug/L	0.0485861	0.338328	ug/L	0.0485861	14.36%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	5.5	0.0445058	ug/L	0.07480079	0.0445058	ug/L	0.07480079	168.07%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	25.9	0.307381	ug/L	0.0769994	0.307381	ug/L	0.0769994	25.05%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-37.8	-0.359640	ug/L	0.5032346	-0.359640	ug/L	0.5032346	139.93%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	5.7	1.30826	ug/L	0.193639	1.30826	ug/L	0.193639	14.80%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	-549.0	-126.985	ug/L	25.6955	-126.985	ug/L	25.6955	20.24%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	-7.8	-8.15456	ug/L	7.723895	-8.15456	ug/L	7.723895	94.72%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	195.5	0.122785	ug/L	0.0238335	0.122785	ug/L	0.0238335	19.41%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	20.1	0.604927	ug/L	0.1431731	0.604927	ug/L	0.1431731	23.67%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	142.5	15.7026	ug/L	13.75341	15.7026	ug/L	13.75341	87.59%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	26.9	0.568112	ug/L	0.1192184	0.568112	ug/L	0.1192184	20.99%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	89.5	1.62856	ug/L	0.764972	1.62856	ug/L	0.764972	46.97%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	29.6	0.985934	ug/L	1.1134290	0.985934	ug/L	1.1134290	112.93%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-18.3	-0.637658	ug/L	4.2662651	-0.637658	ug/L	4.2662651	669.05%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	10.7	0.146669	ug/L	0.1065130	0.146669	ug/L	0.1065130	72.62%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	32.1	1.78615	ug/L	0.915213	1.78615	ug/L	0.915213	51.24%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	46.6	0.335741	ug/L	0.1263390	0.335741	ug/L	0.1263390	37.63%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	56.5	0.754544	ug/L	0.1732952	0.754544	ug/L	0.1732952	22.97%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	34.8	1.70743	ug/L	0.385330	1.70743	ug/L	0.385330	22.57%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	-78.8	-0.181998	ug/L	0.3295804	-0.181998	ug/L	0.3295804	181.09%
QC value within limits for Sr 421.552 R Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087032.2 File : met08_sr_6010 Time : 12-SEP-2012 10:13
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	485.2	ug/L	-3	20	
Copper	A	500.0	532.2	ug/L	6	20	
Zinc	A	1000	958.2	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1395785	-11.99

Sequence No.: 32 **Autosampler Location: 10**
Sample ID: s20222 **Date Collected: 9/12/2012 10:13:45 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20222

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: s20222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1395785.4	88.0133	%	1.06995				1.22%
Y	87324.4	93.5538	%	0.83719				0.89%
Ag 328.068†	710942.7	1066.44	ug/L	4.166	1066.44	ug/L	4.166	0.39%
QC value within limits for Ag 328.068 Recovery = 106.64%								
Al 308.215 R†	540610.2	513487	ug/L	1929.2	513487	ug/L	1929.2	0.38%
QC value within limits for Al 308.215 R Recovery = 102.70%								
As 188.979†	9185.5	485.210	ug/L	13.1092	485.210	ug/L	13.1092	2.70%
QC value within limits for As 188.979 Recovery = 97.04%								
B 249.677†	11389.9	60.2380	ug/L	0.79461	60.2380	ug/L	0.79461	1.32%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	188275.7	498.198	ug/L	1.1739	498.198	ug/L	1.1739	0.24%
QC value within limits for Ba 233.527 Recovery = 99.64%								
Be 313.107†	2298350.5	522.876	ug/L	1.3800	522.876	ug/L	1.3800	0.26%
QC value within limits for Be 313.107 Recovery = 104.58%								
Ca 315.887 R†	4010984.5	480662	ug/L	9681.0	480662	ug/L	9681.0	2.01%
QC value within limits for Ca 315.887 R Recovery = 96.13%								
Cd 214.440†	218802.2	982.389	ug/L	3.0178	982.389	ug/L	3.0178	0.31%
QC value within limits for Cd 214.440 Recovery = 98.24%								
Co 228.616†	59537.7	451.752	ug/L	7.3588	451.752	ug/L	7.3588	1.63%
QC value within limits for Co 228.616 Recovery = 90.35%								
Cr 267.716†	40676.0	482.114	ug/L	0.6024	482.114	ug/L	0.6024	0.12%
QC value within limits for Cr 267.716 Recovery = 96.42%								
Cu 324.752†	55934.9	532.182	ug/L	1.5675	532.182	ug/L	1.5675	0.29%
QC value within limits for Cu 324.752 Recovery = 106.44%								
Fe 238.204 R†	814302.5	187375	ug/L	916.6	187375	ug/L	916.6	0.49%
QC value within limits for Fe 238.204 R Recovery = 93.69%								
K 766.490 R†	-1138.8	-263.393	ug/L	26.7494	-263.393	ug/L	26.7494	10.16%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	455979.8	474871	ug/L	3377.9	474871	ug/L	3377.9	0.71%
QC value within limits for Mg 279.077 R Recovery = 94.97%								
Mn 257.610†	719424.7	451.875	ug/L	1.4326	451.875	ug/L	1.4326	0.32%
QC value within limits for Mn 257.610 Recovery = 90.38%								
Mo 202.031†	16624.3	499.174	ug/L	5.7015	499.174	ug/L	5.7015	1.14%
QC value within limits for Mo 202.031 Recovery = 99.83%								
Na 589.592 R†	412.7	45.4833	ug/L	6.10285	45.4833	ug/L	6.10285	13.42%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	42165.4	891.617	ug/L	13.5569	891.617	ug/L	13.5569	1.52%
QC value within limits for Ni 231.604 Recovery = 89.16%								
Pb 220.353†	49934.9	908.426	ug/L	11.7501	908.426	ug/L	11.7501	1.29%
QC value within limits for Pb 220.353 Recovery = 90.84%								
Sb 206.836†	15053.8	500.588	ug/L	16.6818	500.588	ug/L	16.6818	3.33%
QC value within limits for Sb 206.836 Recovery = 100.12%								
Se 196.026†	14434.6	504.291	ug/L	13.9948	504.291	ug/L	13.9948	2.78%
QC value within limits for Se 196.026 Recovery = 100.86%								
Ti 334.940 R†	1468448.1	20212.1	ug/L	116.63	20212.1	ug/L	116.63	0.58%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	7877.0	438.317	ug/L	6.2158	438.317	ug/L	6.2158	1.42%
QC value within limits for Tl 190.801 Recovery = 87.66%								
V 292.402†	73018.8	526.084	ug/L	1.1699	526.084	ug/L	1.1699	0.22%
QC value within limits for V 292.402 Recovery = 105.22%								
Zn 206.200†	71724.8	958.210	ug/L	5.4427	958.210	ug/L	5.4427	0.57%
QC value within limits for Zn 206.200 Recovery = 95.82%								
Sn 189.927†	-93.1	-4.56362	ug/L	1.744899	-4.56362	ug/L	1.744899	38.24%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	205165.4	482.626	ug/L	4.5961	482.626	ug/L	4.5961	0.95%
QC value within limits for Sr 421.552 R Recovery = 96.53%								

All analyte(s) passed QC.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087033.2 File : met08_sr_6010 Time : 12-SEP-2012 10:19
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	18.664	18.559	5000	4902	ug/L	-2	10	
Copper	A	104.72	103.92	5000	4944	ug/L	-1	10	
Zinc	A	75.698	72.358	5000	4833	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1618769	2.07

Sequence No.: 33 **Autosampler Location: 217**
Sample ID: s20645 **Date Collected: 9/12/2012 10:19:50 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20645

Analyte	Back Pressure	Flow
All	136.0 kPa	0.55 L/min

Mean Data: s20645

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1618768.5	102.074	%	1.0366				1.02%
Y	98752.9	105.798	%	0.9458				0.89%
Ag 328.068†	640943.4	961.442	ug/L	2.1259	961.442	ug/L	2.1259	0.22%
QC value within limits for Ag 328.068 Recovery = 96.14%								
Al 308.215 R†	21579.9	20497.2	ug/L	23.94	20497.2	ug/L	23.94	0.12%
QC value within limits for Al 308.215 R Recovery = 102.49%								
As 188.979†	92792.7	4901.61	ug/L	84.048	4901.61	ug/L	84.048	1.71%
QC value within limits for As 188.979 Recovery = 98.03%								
B 249.677†	924087.7	4887.25	ug/L	11.127	4887.25	ug/L	11.127	0.23%
QC value within limits for B 249.677 Recovery = 97.74%								
Ba 233.527†	1815102.2	4802.96	ug/L	17.191	4802.96	ug/L	17.191	0.36%
QC value within limits for Ba 233.527 Recovery = 96.06%								
Be 313.107†	2214240.7	503.741	ug/L	1.0662	503.741	ug/L	1.0662	0.21%
QC value within limits for Be 313.107 Recovery = 100.75%								
Ca 315.887 R†	163116.6	19547.3	ug/L	57.79	19547.3	ug/L	57.79	0.30%
QC value within limits for Ca 315.887 R Recovery = 97.74%								
Cd 214.440†	1105012.7	4961.34	ug/L	5.727	4961.34	ug/L	5.727	0.12%
QC value within limits for Cd 214.440 Recovery = 99.23%								
Co 228.616†	585954.2	4795.26	ug/L	15.851	4795.26	ug/L	15.851	0.33%
QC value within limits for Co 228.616 Recovery = 95.91%								
Cr 267.716†	404936.2	4799.52	ug/L	21.057	4799.52	ug/L	21.057	0.44%
QC value within limits for Cr 267.716 Recovery = 95.99%								
Cu 324.752†	519605.2	4943.69	ug/L	8.453	4943.69	ug/L	8.453	0.17%
QC value within limits for Cu 324.752 Recovery = 98.87%								
Fe 238.204 R†	85620.1	19701.6	ug/L	25.93	19701.6	ug/L	25.93	0.13%
QC value within limits for Fe 238.204 R Recovery = 98.51%								
K 766.490 R†	81877.7	18937.7	ug/L	118.60	18937.7	ug/L	118.60	0.63%
QC value within limits for K 766.490 R Recovery = 94.69%								
Mg 279.077 R†	18833.9	19614.2	ug/L	3.57	19614.2	ug/L	3.57	0.02%
QC value within limits for Mg 279.077 R Recovery = 98.07%								
Mn 257.610†	7643097.4	4800.68	ug/L	62.039	4800.68	ug/L	62.039	1.29%
QC value within limits for Mn 257.610 Recovery = 96.01%								
Mo 202.031†	165503.9	4969.55	ug/L	24.475	4969.55	ug/L	24.475	0.49%
QC value within limits for Mo 202.031 Recovery = 99.39%								
Na 589.592 R†	182051.1	20064.0	ug/L	335.34	20064.0	ug/L	335.34	1.67%
QC value within limits for Na 589.592 R Recovery = 100.32%								
Ni 231.604†	226934.8	4798.70	ug/L	16.861	4798.70	ug/L	16.861	0.35%
QC value within limits for Ni 231.604 Recovery = 95.97%								
Pb 220.353†	260643.5	4741.68	ug/L	12.779	4741.68	ug/L	12.779	0.27%
QC value within limits for Pb 220.353 Recovery = 94.83%								
Sb 206.836†	148002.5	4921.56	ug/L	88.578	4921.56	ug/L	88.578	1.80%
QC value within limits for Sb 206.836 Recovery = 98.43%								
Se 196.026†	137402.4	4800.33	ug/L	62.131	4800.33	ug/L	62.131	1.29%
QC value within limits for Se 196.026 Recovery = 96.01%								
Ti 334.940 R†	355774.5	4896.98	ug/L	84.214	4896.98	ug/L	84.214	1.72%
QC value within limits for Ti 334.940 R Recovery = 97.94%								
Tl 190.801†	86352.8	4805.12	ug/L	79.123	4805.12	ug/L	79.123	1.65%
QC value within limits for Tl 190.801 Recovery = 96.10%								
V 292.402†	685538.8	4939.15	ug/L	13.154	4939.15	ug/L	13.154	0.27%
QC value within limits for V 292.402 Recovery = 98.78%								
Zn 206.200†	361787.7	4833.31	ug/L	9.212	4833.31	ug/L	9.212	0.19%
QC value within limits for Zn 206.200 Recovery = 96.67%								
Sn 189.927†	98861.6	4846.44	ug/L	87.341	4846.44	ug/L	87.341	1.80%
QC value within limits for Sn 189.927 Recovery = 96.93%								
Sr 421.552 R	225937.7	521.597	ug/L	13.3421	521.597	ug/L	13.3421	2.56%
QC value within limits for Sr 421.552 R Recovery = 104.32%								

All analyte(s) passed QC.

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EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087034.2 File : met08_sr_6010 Time : 12-SEP-2012 10:25
Cal : 82369087001 Caldate : 12-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.582	ug/L	
Copper	A	ND	5.000	3.219	ug/L	
Zinc	A	ND	20.00	4.561	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1674449	5.58

Sequence No.: 34 **Autosampler Location: 220**
Sample ID: ccb **Date Collected: 9/12/2012 10:25:14 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ccb

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: ccb

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1674449.3	105.585	%	0.7359				0.70%
Y	99323.0	106.408	%	0.5433				0.51%
Ag 328.068†	-488.6	-0.732947	ug/L	0.4029241	-0.732947	ug/L	0.4029241	54.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	28.1	26.6918	ug/L	5.96839	26.6918	ug/L	5.96839	22.36%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	9.2	0.483982	ug/L	0.1856232	0.483982	ug/L	0.1856232	38.35%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	3005.0	15.8926	ug/L	0.53040	15.8926	ug/L	0.53040	3.34%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	51.3	0.135709	ug/L	0.0206993	0.135709	ug/L	0.0206993	15.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-259.5	-0.0590274	ug/L	0.01884108	-0.0590274	ug/L	0.01884108	31.92%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	-19.7	-2.36337	ug/L	1.125959	-2.36337	ug/L	1.125959	47.64%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	190.3	0.854271	ug/L	0.0734498	0.854271	ug/L	0.0734498	8.60%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	23.0	0.188332	ug/L	0.0707081	0.188332	ug/L	0.0707081	37.54%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	35.3	0.418834	ug/L	0.0599024	0.418834	ug/L	0.0599024	14.30%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-90.5	-0.861351	ug/L	0.1902343	-0.861351	ug/L	0.1902343	22.09%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	0.1	0.0211500	ug/L	0.65056562	0.0211500	ug/L	0.65056562	>999.9%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	-464.7	-107.484	ug/L	9.7005	-107.484	ug/L	9.7005	9.03%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	9.5	9.85494	ug/L	4.684614	9.85494	ug/L	4.684614	47.54%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	159.0	0.0998769	ug/L	0.03166441	0.0998769	ug/L	0.03166441	31.70%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	11.1	0.332862	ug/L	0.3305153	0.332862	ug/L	0.3305153	99.29%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	135.2	14.9009	ug/L	5.47341	14.9009	ug/L	5.47341	36.73%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	31.7	0.669914	ug/L	0.1094282	0.669914	ug/L	0.1094282	16.33%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.0	0.0183798	ug/L	0.31522701	0.0183798	ug/L	0.31522701	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.6	0.184624	ug/L	2.8307662	0.184624	ug/L	2.8307662	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	43.7	1.52634	ug/L	1.706558	1.52634	ug/L	1.706558	111.81%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	24.2	0.332617	ug/L	0.4515562	0.332617	ug/L	0.4515562	135.76%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	76.8	4.27425	ug/L	1.117715	4.27425	ug/L	1.117715	26.15%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	30.8	0.221573	ug/L	0.0868390	0.221573	ug/L	0.0868390	39.19%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	211.3	2.82313	ug/L	0.093437	2.82313	ug/L	0.093437	3.31%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	38.8	1.90362	ug/L	0.774795	1.90362	ug/L	0.774795	40.70%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	1215.3	2.80403	ug/L	0.362631	2.80403	ug/L	0.362631	12.93%
QC value within limits for Sr 421.552 R Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087041.2 File : met08_sr_6010 Time : 12-SEP-2012 10:54
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	18.664	18.425	5000	4866	ug/L	-3	10	
Copper	A	104.72	104.62	5000	4977	ug/L	0	10	
Zinc	A	75.698	72.076	5000	4815	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1586989	0.07

Sequence No.: 41 **Autosampler Location: 217**
Sample ID: s20645 **Date Collected: 9/12/2012 10:54:33 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20645

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: s20645

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1586989.1	100.070	%	0.5184				0.52%
Y	93084.8	99.7251	%	1.45712				1.46%
Ag 328.068†	636097.1	954.173	ug/L	1.9907	954.173	ug/L	1.9907	0.21%
QC value within limits for Ag 328.068 Recovery = 95.42%								
Al 308.215 R†	21772.4	20680.1	ug/L	61.03	20680.1	ug/L	61.03	0.30%
QC value within limits for Al 308.215 R Recovery = 103.40%								
As 188.979†	92126.3	4866.41	ug/L	10.896	4866.41	ug/L	10.896	0.22%
QC value within limits for As 188.979 Recovery = 97.33%								
B 249.677†	921965.5	4876.02	ug/L	9.567	4876.02	ug/L	9.567	0.20%
QC value within limits for B 249.677 Recovery = 97.52%								
Ba 233.527†	1810048.1	4789.58	ug/L	10.521	4789.58	ug/L	10.521	0.22%
QC value within limits for Ba 233.527 Recovery = 95.79%								
Be 313.107†	2215299.9	503.982	ug/L	1.0848	503.982	ug/L	1.0848	0.22%
QC value within limits for Be 313.107 Recovery = 100.80%								
Ca 315.887 R†	163922.1	19643.8	ug/L	81.56	19643.8	ug/L	81.56	0.42%
QC value within limits for Ca 315.887 R Recovery = 98.22%								
Cd 214.440†	1104995.7	4961.26	ug/L	8.498	4961.26	ug/L	8.498	0.17%
QC value within limits for Cd 214.440 Recovery = 99.23%								
Co 228.616†	583368.2	4774.34	ug/L	10.303	4774.34	ug/L	10.303	0.22%
QC value within limits for Co 228.616 Recovery = 95.49%								
Cr 267.716†	400881.5	4751.46	ug/L	6.254	4751.46	ug/L	6.254	0.13%
QC value within limits for Cr 267.716 Recovery = 95.03%								
Cu 324.752†	523122.0	4977.15	ug/L	4.055	4977.15	ug/L	4.055	0.08%
QC value within limits for Cu 324.752 Recovery = 99.54%								
Fe 238.204 R†	86719.0	19954.4	ug/L	56.38	19954.4	ug/L	56.38	0.28%
QC value within limits for Fe 238.204 R Recovery = 99.77%								
K 766.490 R†	82809.8	19153.2	ug/L	52.26	19153.2	ug/L	52.26	0.27%
QC value within limits for K 766.490 R Recovery = 95.77%								
Mg 279.077 R†	18783.8	19562.0	ug/L	116.30	19562.0	ug/L	116.30	0.59%
QC value within limits for Mg 279.077 R Recovery = 97.81%								
Mn 257.610†	7675984.4	4821.34	ug/L	9.308	4821.34	ug/L	9.308	0.19%
QC value within limits for Mn 257.610 Recovery = 96.43%								
Mo 202.031†	165013.3	4954.83	ug/L	8.392	4954.83	ug/L	8.392	0.17%
QC value within limits for Mo 202.031 Recovery = 99.10%								
Na 589.592 R†	187522.8	20667.1	ug/L	570.53	20667.1	ug/L	570.53	2.76%
QC value within limits for Na 589.592 R Recovery = 103.34%								
Ni 231.604†	225851.1	4775.79	ug/L	9.289	4775.79	ug/L	9.289	0.19%
QC value within limits for Ni 231.604 Recovery = 95.52%								
Pb 220.353†	260022.1	4730.37	ug/L	5.803	4730.37	ug/L	5.803	0.12%
QC value within limits for Pb 220.353 Recovery = 94.61%								
Sb 206.836†	147449.3	4903.17	ug/L	34.656	4903.17	ug/L	34.656	0.71%
QC value within limits for Sb 206.836 Recovery = 98.06%								
Se 196.026†	135601.9	4737.43	ug/L	17.327	4737.43	ug/L	17.327	0.37%
QC value within limits for Se 196.026 Recovery = 94.75%								
Ti 334.940 R†	344749.9	4745.23	ug/L	59.064	4745.23	ug/L	59.064	1.24%
QC value within limits for Ti 334.940 R Recovery = 94.90%								
Tl 190.801†	85261.2	4744.38	ug/L	18.276	4744.38	ug/L	18.276	0.39%
QC value within limits for Tl 190.801 Recovery = 94.89%								
V 292.402†	681721.6	4911.65	ug/L	5.968	4911.65	ug/L	5.968	0.12%
QC value within limits for V 292.402 Recovery = 98.23%								
Zn 206.200†	360380.3	4814.51	ug/L	11.170	4814.51	ug/L	11.170	0.23%
QC value within limits for Zn 206.200 Recovery = 96.29%								
Sn 189.927†	97818.9	4795.32	ug/L	22.335	4795.32	ug/L	22.335	0.47%
QC value within limits for Sn 189.927 Recovery = 95.91%								
Sr 421.552 R	219930.8	507.739	ug/L	10.8991	507.739	ug/L	10.8991	2.15%
QC value within limits for Sr 421.552 R Recovery = 101.55%								

All analyte(s) passed QC.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087042.2 File : met08_sr_6010 Time : 12-SEP-2012 10:59
Cal : 82369087001 Caldate : 12-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.582	ug/L	
Copper	A	ND	5.000	3.219	ug/L	
Zinc	A	ND	20.00	4.561	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1660029	4.68

Sequence No.: 42 **Autosampler Location: 220**
Sample ID: ccb **Date Collected: 9/12/2012 10:59:55 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ccb

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: ccb

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1660028.6	104.676	%	0.4002				0.38%
Y	97468.7	104.422	%	1.7808				1.71%
Ag 328.068†	-386.1	-0.579181	ug/L	0.1753447	-0.579181	ug/L	0.1753447	30.27%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	25.8	24.4893	ug/L	5.83868	24.4893	ug/L	5.83868	23.84%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	1.0	0.0543641	ug/L	1.77826651	0.0543641	ug/L	1.77826651	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	3439.9	18.1929	ug/L	0.28488	18.1929	ug/L	0.28488	1.57%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	51.2	0.135589	ug/L	0.0287828	0.135589	ug/L	0.0287828	21.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-238.5	-0.0542493	ug/L	0.01569861	-0.0542493	ug/L	0.01569861	28.94%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	-36.3	-4.35541	ug/L	1.163668	-4.35541	ug/L	1.163668	26.72%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	165.5	0.743063	ug/L	0.0315068	0.743063	ug/L	0.0315068	4.24%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	14.1	0.115495	ug/L	0.0878299	0.115495	ug/L	0.0878299	76.05%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	20.9	0.248129	ug/L	0.0926537	0.248129	ug/L	0.0926537	37.34%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-32.3	-0.307005	ug/L	0.8469793	-0.307005	ug/L	0.8469793	275.88%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	1.7	0.390942	ug/L	1.5445890	0.390942	ug/L	1.5445890	395.09%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	-393.4	-90.9869	ug/L	65.41567	-90.9869	ug/L	65.41567	71.90%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	-4.5	-4.65641	ug/L	8.003103	-4.65641	ug/L	8.003103	171.87%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	237.5	0.149163	ug/L	0.0180491	0.149163	ug/L	0.0180491	12.10%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	17.5	0.524918	ug/L	0.1060280	0.524918	ug/L	0.1060280	20.20%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	135.0	14.8744	ug/L	15.76800	14.8744	ug/L	15.76800	106.01%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	25.2	0.532837	ug/L	0.1846803	0.532837	ug/L	0.1846803	34.66%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	29.6	0.537930	ug/L	0.2644917	0.537930	ug/L	0.2644917	49.17%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-8.4	-0.279591	ug/L	1.2168119	-0.279591	ug/L	1.2168119	435.21%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-31.2	-1.08967	ug/L	1.466398	-1.08967	ug/L	1.466398	134.57%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	-8.8	-0.121706	ug/L	0.2313515	-0.121706	ug/L	0.2313515	190.09%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	57.1	3.17919	ug/L	1.252526	3.17919	ug/L	1.252526	39.40%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	23.9	0.172550	ug/L	0.0403259	0.172550	ug/L	0.0403259	23.37%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	172.3	2.30148	ug/L	0.035771	2.30148	ug/L	0.035771	1.55%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	29.9	1.46511	ug/L	0.958349	1.46511	ug/L	0.958349	65.41%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	895.4	2.06558	ug/L	0.459230	2.06558	ug/L	0.459230	22.23%
QC value within limits for Sr 421.552 R Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087043.2 File : met08_sr_6010 Time : 12-SEP-2012 11:03
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	503.0	ug/L	1	20	
Copper	A	500.0	536.5	ug/L	7	20	
Zinc	A	1000	965.6	ug/L	-3	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1385446	-12.64

User canceled analysis.

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Sequence No.: 43 **Autosampler Location: 10**
Sample ID: s20222 **Date Collected: 9/12/2012 11:03:50 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20222

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: s20222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1385445.6	87.3613	%	1.58782				1.82%
Y	89024.6	95.3753	%	0.80944				0.85%
Ag 328.068†	719713.1	1079.60	ug/L	8.852	1079.60	ug/L	8.852	0.82%
QC value within limits for Ag 328.068 Recovery = 107.96%								
Al 308.215 R†	535362.9	508503	ug/L	1105.1	508503	ug/L	1105.1	0.22%
QC value within limits for Al 308.215 R Recovery = 101.70%								
As 188.979†	9521.8	502.971	ug/L	4.4057	502.971	ug/L	4.4057	0.88%
QC value within limits for As 188.979 Recovery = 100.59%								
B 249.677†	13048.9	69.0121	ug/L	7.86046	69.0121	ug/L	7.86046	11.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	189520.8	501.492	ug/L	6.5979	501.492	ug/L	6.5979	1.32%
QC value within limits for Ba 233.527 Recovery = 100.30%								
Be 313.107†	2314125.7	526.465	ug/L	5.6443	526.465	ug/L	5.6443	1.07%
QC value within limits for Be 313.107 Recovery = 105.29%								
Ca 315.887 R†	3832287.0	459248	ug/L	9627.1	459248	ug/L	9627.1	2.10%
QC value within limits for Ca 315.887 R Recovery = 91.85%								
Cd 214.440†	221399.6	994.051	ug/L	10.0388	994.051	ug/L	10.0388	1.01%
QC value within limits for Cd 214.440 Recovery = 99.41%								
Co 228.616†	60558.3	459.472	ug/L	7.8707	459.472	ug/L	7.8707	1.71%
QC value within limits for Co 228.616 Recovery = 91.89%								
Cr 267.716†	40770.0	483.228	ug/L	7.5316	483.228	ug/L	7.5316	1.56%
QC value within limits for Cr 267.716 Recovery = 96.65%								
Cu 324.752†	56391.0	536.522	ug/L	4.1269	536.522	ug/L	4.1269	0.77%
QC value within limits for Cu 324.752 Recovery = 107.30%								
Fe 238.204 R†	808246.3	185981	ug/L	637.8	185981	ug/L	637.8	0.34%
QC value within limits for Fe 238.204 R Recovery = 92.99%								
K 766.490 R†	-1071.0	-247.704	ug/L	33.8090	-247.704	ug/L	33.8090	13.65%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	450300.2	468956	ug/L	122.7	468956	ug/L	122.7	0.03%
QC value within limits for Mg 279.077 R Recovery = 93.79%								
Mn 257.610†	723742.3	454.587	ug/L	5.7112	454.587	ug/L	5.7112	1.26%
QC value within limits for Mn 257.610 Recovery = 90.92%								
Mo 202.031†	16791.0	504.181	ug/L	9.1207	504.181	ug/L	9.1207	1.81%
QC value within limits for Mo 202.031 Recovery = 100.84%								
Na 589.592 R†	364.6	40.1785	ug/L	11.50793	40.1785	ug/L	11.50793	28.64%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	42568.8	900.147	ug/L	11.5896	900.147	ug/L	11.5896	1.29%
QC value within limits for Ni 231.604 Recovery = 90.01%								
Pb 220.353†	50851.7	925.104	ug/L	12.5210	925.104	ug/L	12.5210	1.35%
QC value within limits for Pb 220.353 Recovery = 92.51%								
Sb 206.836†	15945.7	530.248	ug/L	7.8614	530.248	ug/L	7.8614	1.48%
QC value within limits for Sb 206.836 Recovery = 106.05%								
Se 196.026†	14013.8	489.589	ug/L	18.8567	489.589	ug/L	18.8567	3.85%
QC value within limits for Se 196.026 Recovery = 97.92%								
Ti 334.940 R†	1494580.7	20571.8	ug/L	520.62	20571.8	ug/L	520.62	2.53%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	8010.9	445.767	ug/L	8.3383	445.767	ug/L	8.3383	1.87%
Saturated outside survey window (code 6)								
QC value within limits for Tl 190.801 Recovery = 89.15%								
V 292.402†	73749.0	531.345	ug/L	3.2105	531.345	ug/L	3.2105	0.60%
QC value within limits for V 292.402 Recovery = 106.27%								
Zn 206.200†	72277.7	965.596	ug/L	12.3560	965.596	ug/L	12.3560	1.28%
QC value within limits for Zn 206.200 Recovery = 96.56%								
Sn 189.927†	-115.3	-5.65189	ug/L	3.086698	-5.65189	ug/L	3.086698	54.61%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	207438.4	487.748	ug/L	4.1861	487.748	ug/L	4.1861	0.86%
QC value within limits for Sr 421.552 R Recovery = 97.55%								

All analyte(s) passed QC.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087049.1 File : met08_sr_6010 Time : 12-SEP-2012 11:36
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	18.664	18.083	5000	4776	ug/L	-4	10	
Copper	A	104.72	102.73	5000	4887	ug/L	-2	10	
Zinc	A	75.698	71.635	5000	4785	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1611671	1.63

Sequence No.: 17 **Autosampler Location: 217**
Sample ID: s20645 **Date Collected: 9/12/2012 11:36:43 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20645

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: s20645

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1611671.4	101.626	%	0.6494				0.64%
Y	95807.9	102.643	%	1.4690				1.43%
Ag 328.068†	633642.3	950.490	ug/L	1.3423	950.490	ug/L	1.3423	0.14%
QC value within limits for Ag 328.068 Recovery = 95.05%								
Al 308.215 R†	21465.4	20388.5	ug/L	169.67	20388.5	ug/L	169.67	0.83%
QC value within limits for Al 308.215 R Recovery = 101.94%								
As 188.979†	90415.9	4776.06	ug/L	105.893	4776.06	ug/L	105.893	2.22%
QC value within limits for As 188.979 Recovery = 95.52%								
B 249.677†	914317.9	4835.58	ug/L	14.310	4835.58	ug/L	14.310	0.30%
QC value within limits for B 249.677 Recovery = 96.71%								
Ba 233.527†	1800759.7	4765.01	ug/L	10.401	4765.01	ug/L	10.401	0.22%
QC value within limits for Ba 233.527 Recovery = 95.30%								
Be 313.107†	2199410.4	500.367	ug/L	1.1401	500.367	ug/L	1.1401	0.23%
QC value within limits for Be 313.107 Recovery = 100.07%								
Ca 315.887 R†	161190.1	19316.4	ug/L	190.89	19316.4	ug/L	190.89	0.99%
QC value within limits for Ca 315.887 R Recovery = 96.58%								
Cd 214.440†	1096243.7	4921.97	ug/L	16.094	4921.97	ug/L	16.094	0.33%
QC value within limits for Cd 214.440 Recovery = 98.44%								
Co 228.616†	579223.2	4740.37	ug/L	8.548	4740.37	ug/L	8.548	0.18%
QC value within limits for Co 228.616 Recovery = 94.81%								
Cr 267.716†	400376.3	4745.47	ug/L	11.242	4745.47	ug/L	11.242	0.24%
QC value within limits for Cr 267.716 Recovery = 94.91%								
Cu 324.752†	513661.8	4887.14	ug/L	34.751	4887.14	ug/L	34.751	0.71%
QC value within limits for Cu 324.752 Recovery = 97.74%								
Fe 238.204 R†	85264.5	19619.8	ug/L	141.52	19619.8	ug/L	141.52	0.72%
QC value within limits for Fe 238.204 R Recovery = 98.10%								
K 766.490 R†	81688.8	18894.0	ug/L	248.60	18894.0	ug/L	248.60	1.32%
QC value within limits for K 766.490 R Recovery = 94.47%								
Mg 279.077 R†	18496.1	19262.4	ug/L	260.97	19262.4	ug/L	260.97	1.35%
QC value within limits for Mg 279.077 R Recovery = 96.31%								
Mn 257.610†	7617631.4	4784.68	ug/L	11.752	4784.68	ug/L	11.752	0.25%
QC value within limits for Mn 257.610 Recovery = 95.69%								
Mo 202.031†	163878.9	4920.76	ug/L	18.607	4920.76	ug/L	18.607	0.38%
QC value within limits for Mo 202.031 Recovery = 98.42%								
Na 589.592 R†	180418.4	19884.1	ug/L	277.55	19884.1	ug/L	277.55	1.40%
QC value within limits for Na 589.592 R Recovery = 99.42%								
Ni 231.604†	224562.1	4748.53	ug/L	16.099	4748.53	ug/L	16.099	0.34%
QC value within limits for Ni 231.604 Recovery = 94.97%								
Pb 220.353†	258584.2	4704.22	ug/L	21.361	4704.22	ug/L	21.361	0.45%
QC value within limits for Pb 220.353 Recovery = 94.08%								
Sb 206.836†	144600.3	4808.43	ug/L	94.415	4808.43	ug/L	94.415	1.96%
QC value within limits for Sb 206.836 Recovery = 96.17%								
Se 196.026†	133529.5	4665.03	ug/L	69.541	4665.03	ug/L	69.541	1.49%
QC value within limits for Se 196.026 Recovery = 93.30%								
Ti 334.940 R†	343906.6	4733.63	ug/L	52.901	4733.63	ug/L	52.901	1.12%
QC value within limits for Ti 334.940 R Recovery = 94.67%								
Tl 190.801†	84171.5	4683.74	ug/L	83.464	4683.74	ug/L	83.464	1.78%
QC value within limits for Tl 190.801 Recovery = 93.67%								
V 292.402†	679175.4	4893.31	ug/L	3.253	4893.31	ug/L	3.253	0.07%
QC value within limits for V 292.402 Recovery = 97.87%								
Zn 206.200†	358174.0	4785.03	ug/L	11.021	4785.03	ug/L	11.021	0.23%
QC value within limits for Zn 206.200 Recovery = 95.70%								
Sn 189.927†	96819.6	4746.33	ug/L	80.049	4746.33	ug/L	80.049	1.69%
QC value within limits for Sn 189.927 Recovery = 94.93%								
Sr 421.552 R	216840.5	500.604	ug/L	5.9882	500.604	ug/L	5.9882	1.20%
QC value within limits for Sr 421.552 R Recovery = 100.12%								

All analyte(s) passed QC.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087050.1 File : met08_sr_6010 Time : 12-SEP-2012 11:42
Cal : 82369087001 Caldate : 12-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.582	ug/L	
Copper	A	ND	5.000	3.219	ug/L	
Zinc	A	ND	20.00	4.561	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1673331	5.51

Sequence No.: 18 **Autosampler Location: 220**
Sample ID: ccb **Date Collected: 9/12/2012 11:42:06 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ccb

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: ccb

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1673331.2	105.514	%	0.7358				0.70%
Y	97247.4	104.185	%	1.6738				1.61%
Ag 328.068†	-564.9	-0.847393	ug/L	0.4458761	-0.847393	ug/L	0.4458761	52.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	15.6	14.8422	ug/L	4.69897	14.8422	ug/L	4.69897	31.66%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	-0.0	-0.0021163	ug/L	0.98838112	-0.0021163	ug/L	0.98838112	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	3350.1	17.7178	ug/L	0.33337	17.7178	ug/L	0.33337	1.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	49.5	0.130979	ug/L	0.0109983	0.130979	ug/L	0.0109983	8.40%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-314.0	-0.0714434	ug/L	0.01862516	-0.0714434	ug/L	0.01862516	26.07%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	-43.3	-5.18870	ug/L	2.116622	-5.18870	ug/L	2.116622	40.79%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	171.7	0.771127	ug/L	0.0595239	0.771127	ug/L	0.0595239	7.72%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	15.2	0.124594	ug/L	0.1205126	0.124594	ug/L	0.1205126	96.72%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	23.6	0.279728	ug/L	0.0228233	0.279728	ug/L	0.0228233	8.16%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-61.6	-0.586386	ug/L	0.9452522	-0.586386	ug/L	0.9452522	161.20%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	-1.7	-0.384691	ug/L	0.4360850	-0.384691	ug/L	0.4360850	113.36%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	-552.3	-127.743	ug/L	52.4092	-127.743	ug/L	52.4092	41.03%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	-1.1	-1.16073	ug/L	4.671492	-1.16073	ug/L	4.671492	402.46%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	172.5	0.108349	ug/L	0.0153308	0.108349	ug/L	0.0153308	14.15%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	16.2	0.486668	ug/L	0.0887767	0.486668	ug/L	0.0887767	18.24%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	59.2	6.52858	ug/L	10.448297	6.52858	ug/L	10.448297	160.04%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	17.6	0.372218	ug/L	0.2543014	0.372218	ug/L	0.2543014	68.32%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-7.5	-0.135901	ug/L	1.0028044	-0.135901	ug/L	1.0028044	737.89%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	19.8	0.659414	ug/L	0.4695789	0.659414	ug/L	0.4695789	71.21%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-15.4	-0.539467	ug/L	0.3754858	-0.539467	ug/L	0.3754858	69.60%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	1.7	0.0240334	ug/L	0.09277234	0.0240334	ug/L	0.09277234	386.01%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	54.5	3.03266	ug/L	0.392531	3.03266	ug/L	0.392531	12.94%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	19.2	0.138610	ug/L	0.0392828	0.138610	ug/L	0.0392828	28.34%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	127.1	1.69781	ug/L	0.055329	1.69781	ug/L	0.055329	3.26%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	40.1	1.96624	ug/L	0.261308	1.96624	ug/L	0.261308	13.29%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	948.2	2.18744	ug/L	0.358452	2.18744	ug/L	0.358452	16.39%
QC value within limits for Sr 421.552 R Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239404 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82369087051.1 File : met08_sr_6010 Time : 12-SEP-2012 11:47
Cal : 82369087001 Caldate : 12-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	502.5	ug/L	0	20	
Copper	A	500.0	529.7	ug/L	6	20	
Zinc	A	1000	962.1	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1585880	1372546	-13.45

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Sequence No.: 19 **Autosampler Location: 10**
Sample ID: s20222 **Date Collected: 9/12/2012 11:47:11 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20222

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: s20222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1372545.6	86.5479	%	1.26849				1.47%
Y	88618.6	94.9403	%	1.06066				1.12%
Ag 328.068†	717561.7	1076.37	ug/L	4.494	1076.37	ug/L	4.494	0.42%
QC value within limits for Ag 328.068 Recovery = 107.64%								
Al 308.215 R†	532803.7	506073	ug/L	978.9	506073	ug/L	978.9	0.19%
QC value within limits for Al 308.215 R Recovery = 101.21%								
As 188.979†	9512.5	502.480	ug/L	22.5998	502.480	ug/L	22.5998	4.50%
QC value within limits for As 188.979 Recovery = 100.50%								
B 249.677†	11922.7	63.0559	ug/L	1.49871	63.0559	ug/L	1.49871	2.38%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	189756.0	502.115	ug/L	2.1250	502.115	ug/L	2.1250	0.42%
QC value within limits for Ba 233.527 Recovery = 100.42%								
Be 313.107†	2314055.0	526.449	ug/L	1.3990	526.449	ug/L	1.3990	0.27%
QC value within limits for Be 313.107 Recovery = 105.29%								
Ca 315.887 R†	3905107.4	467974	ug/L	4841.5	467974	ug/L	4841.5	1.03%
QC value within limits for Ca 315.887 R Recovery = 93.59%								
Cd 214.440†	219559.2	985.788	ug/L	4.0528	985.788	ug/L	4.0528	0.41%
QC value within limits for Cd 214.440 Recovery = 98.58%								
Co 228.616†	61857.6	470.009	ug/L	14.2430	470.009	ug/L	14.2430	3.03%
QC value within limits for Co 228.616 Recovery = 94.00%								
Cr 267.716†	40999.2	485.944	ug/L	1.9051	485.944	ug/L	1.9051	0.39%
QC value within limits for Cr 267.716 Recovery = 97.19%								
Cu 324.752†	55671.4	529.675	ug/L	2.3740	529.675	ug/L	2.3740	0.45%
QC value within limits for Cu 324.752 Recovery = 105.94%								
Fe 238.204 R†	806771.0	185642	ug/L	686.3	185642	ug/L	686.3	0.37%
QC value within limits for Fe 238.204 R Recovery = 92.82%								
K 766.490 R†	-789.7	-182.658	ug/L	23.7196	-182.658	ug/L	23.7196	12.99%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	450789.9	469466	ug/L	1594.9	469466	ug/L	1594.9	0.34%
QC value within limits for Mg 279.077 R Recovery = 93.89%								
Mn 257.610†	722776.2	453.980	ug/L	0.9388	453.980	ug/L	0.9388	0.21%
QC value within limits for Mn 257.610 Recovery = 90.80%								
Mo 202.031†	17168.0	515.502	ug/L	14.0048	515.502	ug/L	14.0048	2.72%
QC value within limits for Mo 202.031 Recovery = 103.10%								
Na 589.592 R†	326.0	35.9316	ug/L	8.44695	35.9316	ug/L	8.44695	23.51%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	43715.9	924.404	ug/L	28.3866	924.404	ug/L	28.3866	3.07%
QC value within limits for Ni 231.604 Recovery = 92.44%								
Pb 220.353†	52139.5	948.532	ug/L	32.9198	948.532	ug/L	32.9198	3.47%
QC value within limits for Pb 220.353 Recovery = 94.85%								
Sb 206.836†	16179.0	538.003	ug/L	24.5077	538.003	ug/L	24.5077	4.56%
QC value within limits for Sb 206.836 Recovery = 107.60%								
Se 196.026†	14585.3	509.556	ug/L	33.2767	509.556	ug/L	33.2767	6.53%
QC value within limits for Se 196.026 Recovery = 101.91%								
Ti 334.940 R†	1499229.4	20635.8	ug/L	477.84	20635.8	ug/L	477.84	2.32%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	8160.7	454.106	ug/L	2.6704	454.106	ug/L	2.6704	0.59%
QC value within limits for Tl 190.801 Recovery = 90.82%								
V 292.402†	73567.3	530.036	ug/L	1.3497	530.036	ug/L	1.3497	0.25%
QC value within limits for V 292.402 Recovery = 106.01%								
Zn 206.200†	72014.4	962.077	ug/L	4.7175	962.077	ug/L	4.7175	0.49%
QC value within limits for Zn 206.200 Recovery = 96.21%								
Sn 189.927†	-84.9	-4.15984	ug/L	5.341219	-4.15984	ug/L	5.341219	128.40%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	205438.2	483.143	ug/L	5.4006	483.143	ug/L	5.4006	1.12%
QC value within limits for Sr 421.552 R Recovery = 96.63%								

All analyte(s) passed QC.

Mercury Raw Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052366650

Instrument : MET34 Begun : 09/10/12 14:50
Method : EPA 7471B SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	190335	ICALBLK	CAL BLANK			09/10/12 14:50	1.0		
002	190335	ICAL	CAL 1			09/10/12 14:52	1.0	1	
003	190335	ICAL	CAL 2			09/10/12 14:54	1.0	1	
004	190335	ICAL	CAL 3			09/10/12 14:56	1.0	1	
005	190335	ICAL	CAL 4			09/10/12 14:57	1.0	1	
006	190335	ICAL	CAL 5			09/10/12 14:59	1.0	1	
007	190335	XICV				09/10/12 15:02	1.0	2	
008	190335	ICV				09/10/12 15:06	1.0	2	
009	190335	ICB				09/10/12 15:07	1.0		
010	190335	BLANK	QC655489	Soil	190335	09/10/12 15:09	1.0		
011	190335	BS	QC655490	Soil	190335	09/10/12 15:11	1.0		
012	190335	BSD	QC655491	Soil	190335	09/10/12 15:12	1.0		
013	190335	MSS	239290-001	Soil	190335	09/10/12 15:14	1.0		
014	190335	MS	QC655492	Soil	190335	09/10/12 15:16	1.0		
015	190335	MSD	QC655493	Soil	190335	09/10/12 15:17	1.0		
016	190335	SAMPLE	239290-002	Soil	190335	09/10/12 15:19	1.0		
017	190335	SAMPLE	239290-003	Soil	190335	09/10/12 15:21	1.0		
018	190335	SAMPLE	239290-004	Soil	190335	09/10/12 15:23	1.0		
019	190335	SAMPLE	239290-005	Soil	190335	09/10/12 15:24	1.0		
020	190335	CCV				09/10/12 15:26	1.0	3	
021	190335	CCB				09/10/12 15:28	1.0		
022	190335	SAMPLE	239290-006	Soil	190335	09/10/12 15:29	1.0		
023	190335	SAMPLE	239290-007	Soil	190335	09/10/12 15:31	1.0		
024	190335	SAMPLE	239290-008	Soil	190335	09/10/12 15:33	1.0		
025	190335	SAMPLE	239290-009	Soil	190335	09/10/12 15:35	1.0		
026	190335	SAMPLE	239290-010	Soil	190335	09/10/12 15:36	1.0		
027	190335	SAMPLE	239290-011	Soil	190335	09/10/12 15:38	1.0		
028	190335	SAMPLE	239290-012	Soil	190335	09/10/12 15:40	1.0		
029	190335	SAMPLE	239404-003	Soil	190335	09/10/12 15:41	5.0		
030	190335	SAMPLE	239404-007	Soil	190335	09/10/12 15:43	5.0		
031	190335	SAMPLE	239404-008	Soil	190335	09/10/12 15:45	5.0		
032	190335	CCV				09/10/12 15:46	1.0	3	
033	190335	CCB				09/10/12 15:48	1.0		
034	190335	SAMPLE	239404-009	Soil	190335	09/10/12 15:50	5.0		
035	190335	MSS	239452-001	Soil	190335	09/10/12 15:52	1.0		
036	190335	SER	QC655494	Soil	190335	09/10/12 15:53	5.0		
037	190335	SAMPLE	239475-002	Soil	190335	09/10/12 15:55	1.0		
038	190335	SAMPLE	239476-002	Soil	190335	09/10/12 15:57	1.0		
039	190335	SAMPLE	239477-002	Soil	190335	09/10/12 15:58	1.0		
040	190335	CCV				09/10/12 16:00	1.0	3	
041	190335	CCB				09/10/12 16:02	1.0		
042	190335	BLANK	QC655495	Soil	190336	09/10/12 16:10	1.0		
043	190335	BS	QC655496	Soil	190336	09/10/12 16:12	1.0		spk
044	190335	BSD	QC655497	Soil	190336	09/10/12 16:13	1.0		spk
045	190335	BS	QC655496	Soil	190336	09/10/12 16:22	1.0		
046	190335	BSD	QC655497	Soil	190336	09/10/12 16:24	1.0		
047	190335	MSS	239303-002	Soil	190336	09/10/12 16:26	1.0		spk
048	190335	MS	QC655498	Soil	190336	09/10/12 16:28	1.0		
049	190335	MSD	QC655499	Soil	190336	09/10/12 16:29	1.0		
050	190335	SAMPLE	239303-001	Soil	190336	09/10/12 16:31	1.0		spk
051	190335	SAMPLE	239303-003	Soil	190336	09/10/12 16:33	1.0		spk
052	190336	CCV				09/10/12 16:35	1.0	3	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052366650

Instrument : MET34 Begun : 09/10/12 14:50
Method : EPA 7471B SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	190336	CCB				09/10/12 16:37	1.0		
054	190336	SAMPLE	239303-004	Soil	190336	09/10/12 16:39	1.0		spk
055	190336	SAMPLE	239303-005	Soil	190336	09/10/12 16:40	1.0		spk
056	190336	SAMPLE	239303-006	Soil	190336	09/10/12 16:42	1.0		spk , 1:HG=12
057	190336	SAMPLE	239303-007	Soil	190336	09/10/12 16:44	1.0		spk
058	190336	SAMPLE	239303-008	Soil	190336	09/10/12 16:46	1.0		spk
059	190336	SAMPLE	239303-009	Soil	190336	09/10/12 16:47	1.0		spk
060	190336	SAMPLE	239303-010	Soil	190336	09/10/12 16:49	1.0		spk
061	190336	CCV				09/10/12 16:51	1.0	3	
062	190336	CCB				09/10/12 16:52	1.0		
063	190336	SAMPLE	239303-006	Soil	190336	09/10/12 16:59	5.0		
064	190336	CCV				09/10/12 17:00	1.0	3	
065	190336	CCB				09/10/12 17:02	1.0		

CRT 09/10/12 : On run 07, the ICV was just slightly over the limit which suggests poor homogenization. The ICV was re-shaken and reran on run 08. On run 43, and 44, the BS, BSD for the 2nd batch of soils had a high bias. The machine was stopped and the L/G separator was aired out due to moisture. The BS and BSD was then re-shaken and reran on 45 and 46. This might be due to poor homogenization or moisture build up.

CRT 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 41.

Standards used: 1=S20662 2=S20664 3=S20665

Flags used: spk=5% spike rule

Method: m34hgppb Operator: Admin Date of Analysis: 10 Sep 2012 14:48:04

Date	Sample ID	Extended ID	Type	µ Abs.	Conc.	Units
10 Sep 2012 14:50:55	CAL Blank - 1		S	263	-	ppb
10 Sep 2012 14:52:37	CAL 1 - 1		S	1275	-	ppb
10 Sep 2012 14:54:20	CAL 2 - 1		S	2653	-	ppb
10 Sep 2012 14:56:03	CAL 3 - 1		S	9692	-	ppb
10 Sep 2012 14:57:45	CAL 4 - 1		S	22625	-	ppb
10 Sep 2012 14:59:27	CAL 5 - 1		S	44346	-	ppb
10 Sep 2012 15:02:18	ICV,s20664 - 1		C	24732	(H)110.2% 5.5086	ppb
10 Sep 2012 15:06:08	ICV,s20664 - 1		C	21655	96.2% 4.8092	ppb
10 Sep 2012 15:07:49	ICB - 1		C	103	-0.0896	ppb
10 Sep 2012 15:09:31	QC655489 - 1	190335,1	U	277	-0.0500	ppb
10 Sep 2012 15:11:12	QC655490 - 1	190335,1	U	11221	2.4375	ppb
10 Sep 2012 15:12:54	QC655491 - 1	190335,1	U	11114	2.4132	ppb
10 Sep 2012 15:14:36	239290-001 - 1	190335,1	U	2737	0.5091	ppb
10 Sep 2012 15:16:17	QC655492 - 1	190335,1	U	14088	3.0892	ppb
10 Sep 2012 15:17:59	QC655493 - 1	190335,1	U	13466	2.9478	ppb
10 Sep 2012 15:19:41	239290-002 - 1	190335,1	U	3564	0.6971	ppb
10 Sep 2012 15:21:23	239290-003 - 1	190335,1	U	4480	0.9053	ppb
10 Sep 2012 15:23:05	239290-004 - 1	190335,1	U	2893	0.5446	ppb
10 Sep 2012 15:24:48	239290-005 - 1	190335,1	U	4184	0.8380	ppb
10 Sep 2012 15:26:30	CCV,s20665 - 1		C	21336	94.7% 4.7366	ppb
10 Sep 2012 15:28:12	CCB - 1		C	214	-0.0644	ppb
10 Sep 2012 15:29:53	239290-006 - 1	190335,1	U	2991	0.5668	ppb
10 Sep 2012 15:31:36	239290-007 - 1	190335,1	U	2691	0.4987	ppb
10 Sep 2012 15:33:19	239290-008 - 1	190335,1	U	3390	0.6575	ppb
10 Sep 2012 15:35:01	239290-009 - 1	190335,1	U	3706	0.7294	ppb
10 Sep 2012 15:36:43	239290-010 - 1	190335,1	U	2659	0.4914	ppb
10 Sep 2012 15:38:24	239290-011 - 1	190335,1	U	2528	0.4616	ppb
10 Sep 2012 15:40:06	239290-012 - 1	190335,1	U	3656	0.7180	ppb
10 Sep 2012 15:41:48	239404-003 - 1	190335,5	U	32690	7.3174	ppb
10 Sep 2012 15:43:29	239404-007 - 1	190335,5	U	2998	0.5684	ppb
10 Sep 2012 15:45:14	239404-008 - 1	190335,5	U	17089	3.7713	ppb
10 Sep 2012 15:46:56	CCV,s20665 - 1		C	21167	94.0% 4.6982	ppb
10 Sep 2012 15:48:39	CCB - 1		C	160	-0.0766	ppb
10 Sep 2012 15:50:21	239404-009 - 1	190335,5	U	27311	6.0948	ppb
10 Sep 2012 15:52:03	239452-001 - 1	190335,1	U	491	-0.0014	ppb
10 Sep 2012 15:53:48	QC655494 - 1	190335,5	U	129	-0.0837	ppb
10 Sep 2012 15:55:30	239475-002 - 1	190335,1	U	3487	0.6796	ppb
10 Sep 2012 15:57:13	239476-002 - 1	190335,1	U	2821	0.5282	ppb
10 Sep 2012 15:58:55	239477-002 - 1	190335,1	U	3301	0.6373	ppb
10 Sep 2012 16:00:36	CCV,s20665 - 1		C	20958	93.0% 4.6507	ppb
10 Sep 2012 16:02:18	CCB - 1		C	190	-0.0698	ppb
10 Sep 2012 16:10:22	QC655495 - 1	190336,1	U	418	-0.0180	ppb
10 Sep 2012 16:12:04	QC655496 - 1	190336,1	U	13899	3.0462	ppb
10 Sep 2012 16:13:45	QC655497 - 1	190336,1	U	13807	3.0253	ppb
10 Sep 2012 16:22:55	QC655496 - 1	190336,1	U	10734	2.3268	ppb
10 Sep 2012 16:24:37	QC655497 - 1	190336,1	U	10979	2.3825	ppb
10 Sep 2012 16:26:19	239303-002 - 1	190336,1	U	3611	0.7078	ppb
10 Sep 2012 16:28:00	QC655498 - 1	190336,1	U	14082	3.0878	ppb
10 Sep 2012 16:29:42	QC655499 - 1	190336,1	U	16048	3.5347	ppb
10 Sep 2012 16:31:25	239303-001 - 1	190336,1	U	17385	3.8386	ppb
10 Sep 2012 16:33:08	239303-003 - 1	190336,1	U	3031	0.5759	ppb
10 Sep 2012 16:35:52	CCV,s20665 - 1		C	21058	93.5% 4.6735	ppb
10 Sep 2012 16:37:34	CCB - 1		C	174	-0.0735	ppb
10 Sep 2012 16:39:16	239303-004 - 1	190336,1	U	2932	0.5534	ppb
10 Sep 2012 16:40:59	239303-005 - 1	190336,1	U	1108	0.1388	ppb
10 Sep 2012 16:42:42	239303-006 - 1	190336,1	U	55008	12.3903	ppb
10 Sep 2012 16:44:23	239303-007 - 1	190336,1	U	2461	0.4464	ppb
10 Sep 2012 16:46:07	239303-008 - 1	190336,1	U	23103	5.1383	ppb
10 Sep 2012 16:47:49	239303-009 - 1	190336,1	U	4301	0.8646	ppb
10 Sep 2012 16:49:32	239303-010 - 1	190336,1	U	4187	0.8387	ppb
10 Sep 2012 16:51:13	CCV,s20665 - 1		C	21080	93.6% 4.6785	ppb
10 Sep 2012 16:52:55	CCB - 1		C	125	-0.0846	ppb
10 Sep 2012 16:59:08	239303-006 - 1	190336,5	U	12530	2.7351	ppb
10 Sep 2012 17:00:50	CCV,s20665 - 1		C	24775	110.4% 5.5183	ppb
10 Sep 2012 17:02:32	CCB - 1		C	135	-0.0823	ppb

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 7471B

Inst	: MET34	Lab ID	: 239404-003	Client ID	: EX36B072C.2
Seqnum	: 1052366650029	Matrix	: Soil	Acct	: ARCSF (JG)
File	: 190335	Batch	: 190335	Time	: 10-SEP-2012 15:41
Cal	: 1052366650001	Caldate	: 10-SEP-2012	Caltype	: SOIL
IDF	: 5.0			Units	: mg/Kg

0.57 g --> 50.0 ml = 87.72 ml/g PDF

Analyte	Result	RL	Blank	Flags
Mercury	3.2	0.088		u

u=use

1052366650029

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 7471B

Inst	: MET34	Lab ID	: 239404-007	Client ID	: EX13B004A.2
Seqnum	: 1052366650030	Matrix	: Soil	Acct	: ARCSF (JG)
File	: 190335	Batch	: 190335	Time	: 10-SEP-2012 15:43
Cal	: 1052366650001	Caldate	: 10-SEP-2012	Caltype	: SOIL
IDF	: 5.0			Units	: mg/Kg

0.57 g --> 50.0 ml = 87.72 ml/g PDF

Analyte	Result	RL	Blank	Flags
Mercury	0.25	0.088		u

u=use

1052366650030

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 7471B

Inst	: MET34	Lab ID	: 239404-008	Client ID	: EX13B023A.2
Seqnum	: 1052366650031	Matrix	: Soil	Acct	: ARCSF (JG)
File	: 190335	Batch	: 190335	Time	: 10-SEP-2012 15:45
Cal	: 1052366650001	Caldate	: 10-SEP-2012	Caltype	: SOIL
IDF	: 5.0			Units	: mg/Kg

0.63 g --> 50.0 ml = 79.37 ml/g PDF

Analyte	Result	RL	Blank	Flags
Mercury	1.5	0.079		u

u=use

1052366650031

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 7471B

Inst	: MET34	Lab ID	: 239404-009	Client ID	: EX13B023B.2
Seqnum	: 1052366650034	Matrix	: Soil	Acct	: ARCSF (JG)
File	: 190335	Batch	: 190335	Time	: 10-SEP-2012 15:50
Cal	: 1052366650001	Caldate	: 10-SEP-2012	Caltype	: SOIL
IDF	: 5.0			Units	: mg/Kg

0.62 g --> 50.0 ml = 80.65 ml/g PDF

Analyte	Result	RL	Blank	Flags
Mercury	2.5	0.081		u

u=use

1052366650034

CURTIS & TOMPKINS BLANK USER REPORT FOR 239404 METALS Soil
EPA 7471B

Inst	: MET34	Lab ID	: QC655489		
Seqnum	: 1052366650010.6	Matrix	: Soil		
File	: 190335	Batch	: 190335	Time	: 10-SEP-2012 15:09
Cal	: 1052366650001	Caldate	: 10-SEP-2012	Caltype	: SOIL
IDF	: 1.0			Units	: mg/Kg

0.60 g --> 50.0 ml = 83.33 ml/g PDF

Analyte	Result	RL	Flags
Mercury	ND	0.017	u

u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 METALS Soil
EPA 7471B

Type	: BS	Type	: BSD
Inst	: MET34	Inst	: MET34
Seqnum	: 1052366650011.6	Seqnum	: 1052366650012.6
File	: 190335	File	: 190335
IDF	: 1.0	IDF	: 1.0
Lab ID	: QC655490	Lab ID	: QC655491
Matrix	: Soil	Matrix	: Soil
Batch	: 190335	Batch	: 190335
Time	: 10-SEP-2012 15:11	Time	: 10-SEP-2012 15:12
Cal	: 1052366650001	Cal	: 1052366650001
Caltype	: SOIL	Caltype	: SOIL
Units	: mg/Kg		

BS: 0.60 g --> 50.0 ml = 83.33 ml/g PDF
BSD: 0.60 g --> 50.0 ml = 83.33 ml/g PDF

Analyte	Spiked	BS	%Rec	BSD	%Rec	Limits	RPD	Lim	Flags
Mercury	0.2083	0.2031	98	0.2011	97	80-120	1	20	u

u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239404 METALS Soil
EPA 7471B

Type	: MSS	Type	: MS	Type	: MSD
Inst	: MET34	Inst	: MET34	Inst	: MET34
Seqnum	: 1052366650013	Seqnum	: 1052366650014.6	Seqnum	: 1052366650015.6
File	: 190335	File	: 190335	File	: 190335
IDF	: 1.0	IDF	: 1.0	IDF	: 1.0
Lab ID	: 239290-001	Lab ID	: QC655492	Lab ID	: QC655493
Matrix	: Soil	Matrix	: Soil	Matrix	: Soil
Batch	: 190335	Batch	: 190335	Batch	: 190335
Time	: 10-SEP-2012 15:14	Time	: 10-SEP-2012 15:16	Time	: 10-SEP-2012 15:17
Cal	: 1052366650001	Cal	: 1052366650001	Cal	: 1052366650001
Caltype	: SOIL	Caltype	: SOIL	Caltype	: SOIL
Units	: mg/Kg				

MSS: 0.58 g --> 50.0 ml = 86.21 ml/g PDF
MS: 0.59 g --> 50.0 ml = 84.75 ml/g PDF
MSD: 0.60 g --> 50.0 ml = 83.33 ml/g PDF

Analyte	MSS	Spiked	MS	%Rec	Spiked	MSD	%Rec	Limits	RPD	Lim	Flags
Mercury	0.04389	0.2119	0.2618	103	0.2083	0.2457	97	76-138	5	42	u

u=use

CURTIS & TOMPKINS SERIAL DILUTION FOR 239404 METALS Soil
EPA 7471B

Type	: MSS	Type	: SER
Inst	: MET34	Inst	: MET34
Seqnum	: 1052366650035	Seqnum	: 1052366650036.2
File	: 190335	File	: 190335
IDF	: 1.0	IDF	: 5.0
Lab ID	: 239452-001	Lab ID	: QC655494
Matrix	: Soil	Matrix	: Soil
Batch	: 190335	Batch	: 190335
Time	: 10-SEP-2012 15:52	Time	: 10-SEP-2012 15:53
Cal	: 1052366650001	Cal	: 1052366650001
Caltype	: SOIL	Caltype	: SOIL
Units	: mg/Kg		

MSS: 0.63 g --> 50.0 ml = 79.37 ml/g PDF
SER: 0.58 g --> 50.0 ml = 86.21 ml/g PDF

Analyte	MSS	RL	SER	RL	%D	Lim	Flags
Mercury	ND	0.01587	ND	0.08621		10	u

u=use

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239404 METALS Soil: EPA 7471B

Inst : MET34
Calnum : 1052366650001
Units : ug/L

Date : 10-SEP-2012 14:50
X Axis : R

Reviewer : ---
Type : SOIL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	190335	1052366650002	CAL 1	10-SEP-2012 14:52	S20662 (500X)
L2	190335	1052366650003	CAL 2	10-SEP-2012 14:54	S20662 (200X)
L3	190335	1052366650004	CAL 3	10-SEP-2012 14:56	S20662 (50X)
L4	190335	1052366650005	CAL 4	10-SEP-2012 14:57	S20662 (20X)
L5	190335	1052366650006	CAL 5	10-SEP-2012 14:59	S20662 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	6375.0	5306.0	4846.0	4525.0	4434.6	LINR	-0.1130	2.27E-4		5097.3	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.2000	-12	0.5000	-2	2.0000	4	5.0000	1	10.000	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

1052366650001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239404 METALS Soil
EPA 7471B

Inst : MET34
Calnum : 1052366650001 Cal Date : 10-SEP-2012 Type : SOIL

ICV 1052366650008 (10-SEP-2012) stds: S20664

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	4.809	ug/L	-4	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650009 File : 190335 Time : 10-SEP-2012 15:07
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650020 File : 190335 Time : 10-SEP-2012 15:26
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL
Standards: S20665

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5097.3	4267.2	5.000	4.737	ug/L	-5	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650021 File : 190335 Time : 10-SEP-2012 15:28
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650032 File : 190335 Time : 10-SEP-2012 15:46
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL
Standards: S20665

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5097.3	4233.4	5.000	4.698	ug/L	-6	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650033 File : 190335 Time : 10-SEP-2012 15:48
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650040 File : 190335 Time : 10-SEP-2012 16:00
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL
Standards: S20665

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5097.3	4191.6	5.000	4.651	ug/L	-7	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239404 METALS Soil
EPA 7471B

Inst : MET34 IDF : 1.0
Seqnum : 1052366650041 File : 190335 Time : 10-SEP-2012 16:02
Cal : 1052366650001 Caldate : 10-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239404
ANALYTICAL REPORT
Wet Chemistry

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
EX36B072A.2	239404-001
EX36B072B.2	239404-002
EX36B072C.2	239404-003
EX36B078A.2	239404-004
EX13B010A.3	239404-005
EX13B010B.2	239404-006
EX13B004A.2	239404-007
EX13B023A.2	239404-008
EX13B023B.2	239404-009
EX13B003BA.2	239404-010
EX13B021A.2	239404-011
EX36B180C.2	239404-012
EX36B180B.2	239404-013
EX36B180A.2	239404-014

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
WET CHEMISTRY (ASTM D2216/CLP)

Laboratory number:	**239404**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/05/12**
Samples Received:	**09/05/12**

This data package contains sample and QC results for fourteen soil samples, requested for the above referenced project on 09/05/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Moisture (ASTM D2216/CLP):
No analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

239404

C&T LOGIN # _____

Chain of Custody # _____

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht/E Mantar
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST: Arsenic by 6010c	Copper by 6010c	Mercury by 7471B	Benzo(a)pyrene by 8270D	Benzo(a)anthracene by 8270D	Benzo(b)fluoranthene by 8270D	Zinc by 6010c	Aroclor-1260 by 8082
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None								
1	✓EX36B072A.2	9/5/12	0840		X		1					X	X	X						
2	✓EX36B072B.2	9/5/12	0855		X		1					X	X	X						
3	✓EX36B072C.2	9/5/12	0917		X		1					X	X	X	X					
4	✓EX36B078A.2	9/5/12	0955		X		1					X		X						
	~~EX36~~ EAM 9/5/12																			
5	✓EX13B010A.3	9/5/12	1020		X		1					X				X	X	X		
6	✓EX13B010B.2	9/5/12	1045		X		1					X				X	X	X		
7	✓EX13B004A.2	9/5/12	1110		X		1					X		X	X					
8	✓EX13B023A.2	9/5/12	1135		X		2					X		X	X	X	X	X	X	
9	✓EX13B023B.2	9/5/12	1155		X		2					X		X	X	X	X	X	X	
	~~EX13B003BA.2~~	9/5/12	1315		X		2					X		X	X					
10	✓EX13B003BA.2	9/5/12	1315		X		2					X		X				X		
11	✓EX13B021A.2	9/5/12	1330		X		1					X						X		

EAM 9/5/12

EAM 9/5/12

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 239404

Chain of Custody #

Project No: CA000761.0001
Project Name: Hunters Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☒ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: D Feucht/E Manter
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510 697 7738
Email: Drew.Feucht@ARCADIS-US.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	Aroclor – ~~1254~~ 1260 DF by 8082	Copper by 6010C	PCBs	TPHg	TPHd	SVOCs	Pesticides	Metals
12	✓EX36B180C.2	9/5/12	1420		X	2					X	X	X						
13	✓EX36B180B.2	9/5/12	1435		X	2					X	X	X						
14	✓EX36B180A.2	9/5/12	1445		X	2					X	X	X						
15	EB.09052012	9/5/12	1515	X		3			1		2			X			X		X

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

RECEIVED BY:
DATE: 9/5/12 TIME: 1539
DATE: 9/5/12 TIME: 1725
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239404 Date Received 9/5/12 Number of coolers 1
Client ARCADIS Project HUNTER'S POINT

Date Opened 9/5/12 By (print) AA (sign) [signature]
Date Logged in ↓ By (print) JG (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.0°C

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ (YES) NO N/A
17. Did you document your preservative check? _____ (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

_____

_____

_____

_____

_____

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239404

Sample	pH: <2	>9	>12	Other
-015a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: AA

Date: 9/6/12

Results & QC Summary

Curtis & Tompkins, Ltd.

Moisture

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Batch#:	190344
Matrix:	Soil	Sampled:	09/05/12
Units:	%	Received:	09/05/12
Diln Fac:	1.000	Analyzed:	09/10/12

Field ID	Lab ID	Result	LOQ
EX36B072A.2	239404-001	11	1
EX36B072B.2	239404-002	12	1
EX36B072C.2	239404-003	4	1
EX36B078A.2	239404-004	8	1
EX13B010A.3	239404-005	10	1
EX13B010B.2	239404-006	13	1
EX13B004A.2	239404-007	8	1
EX13B023A.2	239404-008	6	1
EX13B023B.2	239404-009	12	1
EX13B003BA.2	239404-010	4	1
EX13B021A.2	239404-011	6	1
EX36B180C.2	239404-012	12	1
EX36B180B.2	239404-013	14	1
EX36B180A.2	239404-014	10	1

LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Moisture

Lab #:	239404	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	190344
MSS Lab ID:	239411-021	Sampled:	09/06/12
Lab ID:	QC655535	Received:	09/06/12
Matrix:	Soil	Analyzed:	09/10/12

MSS Result	Result	LOQ	RPD	Lim
0.7625	0.8469	1.000	10	25

LOQ= Limit of Quantitation
RPD= Relative Percent Difference

Percent Moisture Summary Report

Batch: 190344
Date: 09/10/12
Method: CLP SOW 390
Analyst: MFV

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
239404-001	10.9164	17.3835	16.6624	89	11
239404-002	11.0134	17.1388	16.3951	88	12
239404-003	11.3764	17.4564	17.2019	96	4
239404-004	11.3460	17.2582	16.7637	92	8
239404-005	11.3410	17.1779	16.6121	90	10
239404-006	11.3579	17.5655	16.7469	87	13
239404-007	10.9527	17.9734	17.4355	92	8
239404-008	11.4131	17.4089	17.0521	94	6
239404-009	11.4090	17.6420	16.8683	88	12
239404-010	11.2945	18.9143	18.5745	96	4
239404-011	11.3996	17.3067	16.9295	94	6
239404-012	11.1557	17.3662	16.6097	88	12
239404-013	10.8724	17.2480	16.3506	86	14
239404-014	11.2475	17.3828	16.7877	90	10
239411-021	11.3539	17.5572	17.5099	99	1
239411-022	10.9358	17.1373	17.0427	98	2
QC655535	11.3424	17.2581	17.2080	99	1
of 239411-021			RPD:	0.1%	10.5%

Moisture LOG **Curtis & Tompkins, Ltd.**

LIMS Batch #: 190344
Date: 9-10-12

Page: 44
Benchbook#: **BK 3348**
Scale Used
☒ Leachates Analytical
☐ _____

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
BLK	ED9	11.3201	Ø	11.3201	
239404-001 A	ACT	10.9164	17.3835	16.6624	
-002	5CB	11.0134	17.1388	16.3951	
-003	AD2	11.3764	17.4564	17.2019	
-004	CT14	11.3460	17.2582	16.7637	
-005	D32	11.3410	17.1779	16.6121	
-006	VCM	11.3579	17.5655	16.7469	
-007	10G	10.9527	17.9734	17.4355	
-008 B	CT3	11.4131	17.4089	17.0521	
-009	A09	11.4090	17.6420	16.8683	
-010	CT26	11.2945	18.9143	18.5745	
-011 A	CT29	11.3996	17.3067	16.9295	
-012 B	1X	11.1557	17.3662	16.6097	
-013	B108	10.8724	17.2480	16.3506	
-014	K10	11.2475	17.3828	16.7877	
239411-021 A	K07	11.3539	17.5572	17.5099	
SOUR -021	301	11.3424	17.2581	17.2080	
-022	ZAX	10.9358	17.1373	17.0427	
		MW 9-11-12			

Date/ Time IN: 9-10-12 1400
Temp (F) IN: 105
Date/ Time OUT: 9-11-12 1115
Temp (F) OUT: 105

9-10-12
Extraction Chemist **Date**

9/11/12
Reviewed by **Date**

PROJECT AE 163 METTLER Notebook No. BK2394 45

Continued From Page

DATE	ANALYST	0.2000	0.5000	1.0000	2.0000	5.0000	10.0000	20.0000	50.0000	100.0000	SET
9-6-12	MV	0.2001	0.5000	1.0001	2.0001	5.0001	10.0002	20.0001	50.0001	100.0001	10827
9-7-12	MV	0.2000	0.5000	1.0000	2.0000	5.0000	10.0001	20.0000	50.0001	100.0000	10827
9-8-12	VV	0.2000	0.5000	1.0000	2.0000	5.0000	10.0000	20.0000	50.0001	100.0000	10827
9-10-12	MV	0.2000	0.5000	1.0000	2.0001	5.0001	10.0001	20.0001	50.0002	100.0002	10827
9-11-12	MV	0.2000	0.5000	1.0000	2.0000	5.0000	10.0000	20.0000	50.0000	99.9998	10827

Continued on Page

Read and Understood By

Signed Date Signed Date

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239403
ANALYTICAL REPORT
TPH-Purgeables and/or BTXE by GC

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
FB.09042012	239403-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
TPH-PURGEABLES AND/OR BTXE BY GC (EPA 8015D)

Laboratory number:	**239403**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/04/12**
Samples Received:	**09/04/12**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 09/04/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Purgeables and/or BTXE by GC (EPA 8015D):

No analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 23403

Chain of Custody # _____

Project No: CA0007611.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: E Manton and D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None
1	EX36B116D.2	04/04/12	1150		X			1					X
2	EX36B116A.2	04/04/12	1155		X			1					X
3	EX36B116B.2	04/04/12	1140		X			1					X
4	EX36B116C.2	04/04/12	1200		X			1					X
5	EX36B015A.2	04/04/12	1250		X			1					X
6	EX36B163A.2	04/04/12	1315		X			2					X
7	FB.090420120	04/04/12	1455	X				9	3		1		5
8	EB.090420120	04/04/12	1505	X				3			1		2
	Temp Blank												

ANALYTICAL REQUEST

Big(2)-Ethylhexyl)phthlate by 8270D	Copper by EPA 6010C	Mercury by EPA 7471B	Alpha-BHC by EPA 8081B	PCBs by 8082	TPHg by 8015	TPHd by 8015	SVOCs by 8270	Pesticides by 8081	Metals by 6010/7174
X									
X									
X									
X									
	X	X							
	X	X	X						
				X	X	X	X	X	X
							X	X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

RECEIVED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 239403 Date Received 9/4/12 Number of coolers 1
Client ARCADIS Project CA000761.0001

Date Opened 9/4/12 By (print) EL (sign) [signature]
Date Logged in ~~EL~~ 9/6/12 By (print) ~~EL~~ JG (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? (YES) NO N/A
17. Did you document your preservative check? (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239403

Sample	pH: <2	>9	>12	Other
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
-008a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: EL
Date: 9/6/12

Page 1 of 1

Results & QC Summary

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 5030C
Project#:	CA000761.0001	Analysis:	EPA 8015D
Field ID:	FB.09042012	Batch#:	190357
Matrix:	Water	Sampled:	09/04/12
Units:	ug/L	Received:	09/04/12
Diln Fac:	1.000	Analyzed:	09/10/12

Type: SAMPLE Lab ID: 239403-007

Analyte	Result	LOQ	DL
Gasoline C7-C12	20 U	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	75-124

Type: BLANK Lab ID: QC655590

Analyte	Result	LOQ	DL
Gasoline C7-C12	20 U	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	75-124

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 5030C
Project#:	CA000761.0001	Analysis:	EPA 8015D
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC655589	Batch#:	190357
Matrix:	Water	Analyzed:	09/10/12
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,027	103	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	75-124

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 5030C
Project#:	CA000761.0001	Analysis:	EPA 8015D
Field ID:	ZZZZZZZZZZ	Batch#:	190357
MSS Lab ID:	239461-002	Sampled:	09/07/12
Matrix:	Water	Received:	09/07/12
Units:	ug/L	Analyzed:	09/10/12
Diln Fac:	1.000		

Type: MS Lab ID: QC655591

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<10.56	2,000	2,063	103	71-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	75-124

Type: MSD Lab ID: QC655592

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,059	103	71-120	0	22

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	75-124

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCVOA Water: EPA 8015D

Inst : GC07
Calnum : 322265478001
Units : ng

Name : tvh/bfb_184
Date : 02-JUL-2012 20:13
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	184_005	322265478005	TVH_14	02-JUL-2012 20:13	S19489 (1000X), S19637 (5000X)
L2	184_006	322265478006	TVH_15	02-JUL-2012 20:52	S19488 (1000X), S19637 (5000X)
L3	184_007	322265478007	TVH_16	02-JUL-2012 21:31	S19487 (1000X), S19637 (5000X)
L4	184_008	322265478008	TVH_17	02-JUL-2012 22:09	S19466 (2000X), S19637 (5000X)
L5	184_009	322265478009	TVH_18	02-JUL-2012 22:48	S19466 (1000X), S19637 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	3418.2	2803.9	2837.6	2937.0	2889.4	AVRG		3.36E-4		2977.2	8	0.995	20	
Bromofluorobenzene (FID)	A	2531.6	2727.7	2625.8	2717.1	3133.1	AVRG		3.64E-4		2747.0	8	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Gasoline C7-C12	A	250.00	15	2500.0	-6	10000	-5	25000	-1	50000	-3
Bromofluorobenzene (FID)	A	900.00	-8	900.00	-1	900.00	-4	900.00	-1	900.00	14

Analyst: DJA Date: 07/03/12 Reviewer: EAH Date: 07/03/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

322265478001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 GCVOA Water
EPA 8015D

Inst : GC07 Name : tvh/bfb_184
Calnum : 322265478001 Cal Date : 02-JUL-2012

ICV 322265478011 (184_011 03-JUL-2012) stds: S19608 (1000X), S19637 (5000X)

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Gasoline C7-C12	A	10000	10050	ng	0	20	

Analyst: DJA Date: 07/03/12 Reviewer: EAH Date: 07/03/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCVOA Water
EPA 8015D

Inst : GC07 Run Name : TVH IDF : 1.0
Seqnum : 322366282006.1 File : 254_006 Time : 10-SEP-2012 14:05
Cal : 322265478001 Caldate : 02-JUL-2012
Standards: S20263 (2000X), S20276 (5000X)

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	2977.2	3199.9	5000	5374	ng	7	20	
Bromofluorobenzene (FID)	A	2747.0	2760.2	900.0	904.3	ng	0	20	

Analyst: DJA Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 GCVOA Water
EPA 8015D

Inst : GC07 Run Name : QC655589 IDF : 1.0
Seqnum : 322366282009.3 File : 254_009 Time : 10-SEP-2012 17:34
Cal : 322265478001 Caldate : 02-JUL-2012
Standards: S20263 (2000X), S20276 (5000X)

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	2977.2	3057.2	5000	5134	ng	3	20	u
Bromofluorobenzene (FID)	A	2747.0	2712.2	900.0	888.6	ng	-1	20	u

DJA 09/11/12 : ccv/lcs,qc655589,190357 [general version]

Analyst: DJA Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCVOA Water
EPA 8015D

Inst : GC07 Run Name : TVH IDF : 1.0
Seqnum : 322366282022.1 File : 254_022 Time : 11-SEP-2012 03:16
Cal : 322265478001 Caldate : 02-JUL-2012
Standards: S20263 (1000X), S20276 (5000X)

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	2977.2	2629.8	10000	8833	ng	-12	20	
Bromofluorobenzene (FID)	A	2747.0	2615.4	900.0	856.9	ng	-5	20	

Analyst: DJA Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 322265478

Instrument : GC07 Begun : 07/02/12 08:38
Method : EPA 8015D, EPA 8021B SOP Version : TVH_BTXE_rv14

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	184_001	X	CMARK			07/02/12 08:38	1.0	1 2	
002	184_002	CCV	TVH			07/02/12 09:16	1.0	3 2	5:BZME=14000
003	184_003	CCV	TVH			07/02/12 10:07	1.0	3 2	5:BZME=15000
004	184_004	IB	CALIB			07/02/12 19:35	1.0	2	
005	184_005	ICAL	TVH_14			07/02/12 20:13	1.0	4 2	
006	184_006	ICAL	TVH_15			07/02/12 20:52	1.0	5 2	
007	184_007	ICAL	TVH_16			07/02/12 21:31	1.0	6 2	
008	184_008	ICAL	TVH_17			07/02/12 22:09	1.0	7 2	
009	184_009	ICAL	TVH_18			07/02/12 22:48	1.0	7 2	
010	184_010	X	IB			07/02/12 23:26	1.0	2	
011	184_011	ICV	TVH			07/03/12 00:05	1.0	8 2	4:BZME=31000
012	184_012	X	ICV			07/03/12 00:43	1.0	8 2	
013	184_013	X				07/03/12 01:22	1.0	1 2	
014	184_014	CMARKER				07/03/12 08:30	1.0	1 2	

DJA 07/03/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 14.

DJA 07/03/12 : CM 184_013 is a misprep. Replaced by CM that ran the next morning.

Reviewed by: DJA Date: 07/03/12

Standards used: 1=S19631 2=S19637 3=S19834 4=S19489 5=S19488 6=S19487 7=S19466 8=S19608

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 322366282

Instrument : GC07 Begun : 09/10/12 08:42
Method : EPA 8015D, EPA 8021B SOP Version : TVH_BTXE_rv14

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	254_001	X	BTXE			09/10/12 08:42	1.0	1 2	
002	254_002	X	BTXE			09/10/12 09:21	1.0	1 2	
003	254_003	X	BTXE			09/10/12 10:45	1.0	1 2	
004	254_004	CCV/BS	QC655587	Water	190357	09/10/12 11:23	1.0	1 2	
005	254_005	BSD	QC655588	Water	190357	09/10/12 12:41	1.0	1 2	
006	254_006	CCV	TVH			09/10/12 14:05	1.0	3 2	
007	254_007	X	IB			09/10/12 14:54	1.0	2	
008	254_008	X	CMARK			09/10/12 16:56	1.0	4 2	
009	254_009	CCV/LCS	QC655589	Water	190357	09/10/12 17:34	1.0	3 2	
010	254_010	BLANK	QC655590	Water	190357	09/10/12 18:52	1.0	2	
011	254_011	SAMPLE	239403-007	Water	190357	09/10/12 20:10	1.0	2	
012	254_012	MS	QC655091	Water	190247	09/10/12 20:49	1.0	3 2	
013	254_013	MSD	QC655092	Water	190247	09/10/12 21:27	1.0	3 2	
014	254_014	MSS	239461-002	Water	190357	09/10/12 22:06	1.0	2	pH > 2
015	254_015	MS	QC655591	Water	190357	09/10/12 22:45	1.0	3 2	
016	254_016	MSD	QC655592	Water	190357	09/10/12 23:23	1.0	3 2	pH > 2
017	254_017	SAMPLE	239461-003	Water	190357	09/11/12 00:02	1.0	2	pH > 2
018	254_018	SAMPLE	239461-005	Water	190357	09/11/12 00:41	1.0	2	pH > 2
019	254_019	SAMPLE	239494-001	Water	190357	09/11/12 01:20	1.0	2	
020	254_020	SAMPLE	239497-020	Water	190357	09/11/12 01:58	1.0	2	
021	254_021	CCV	BTXE			09/11/12 02:37	1.0	1 2	
022	254_022	CCV	TVH			09/11/12 03:16	1.0	3 2	
023	254_023	CCV	BTXE			09/11/12 03:55	1.0	1 2	
024	254_024	CCV	TVH			09/11/12 04:33	1.0	3 2	
025	254_025	X	CMARK			09/11/12 05:11	1.0	4 2	
026	254_026	SAMPLE	239469-001	Water	190357	09/11/12 05:49	1.0	2	
027	254_027	SAMPLE	239469-002	Water	190357	09/11/12 06:27	1.0	2	
028	254_028	SAMPLE	239469-003	Water	190357	09/11/12 07:05	1.0	2	
029	254_029	SAMPLE	239469-004	Water	190357	09/11/12 07:43	1.0	2	
030	254_030	SAMPLE	239469-005	Water	190357	09/11/12 08:21	1.0	2	
031	254_031	SAMPLE	239469-006	Water	190357	09/11/12 09:00	1.0	2	
032	254_032	SAMPLE	239469-007	Water	190357	09/11/12 09:37	1.0	2	
033	254_033	SAMPLE	239383-002	Water	190357	09/11/12 10:15	1.0	2	1:MTBE=9000
034	254_034	SAMPLE	239438-005	Water	190357	09/11/12 10:53	1.0	2	
035	254_035	SAMPLE	239438-010	Water	190357	09/11/12 11:32	1.0	2	
036	254_036	CCV	TVH			09/11/12 12:11	1.0	3 2	1:BZME=2200
037	254_037	X	CMARK			09/11/12 12:49	1.0	4 2	

DJA 09/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 37.

Reviewed by: DJA Date: 09/11/12

Standards used: 1=S20258 2=S20276 3=S20263 4=S19631

Sample Raw Data

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8015D

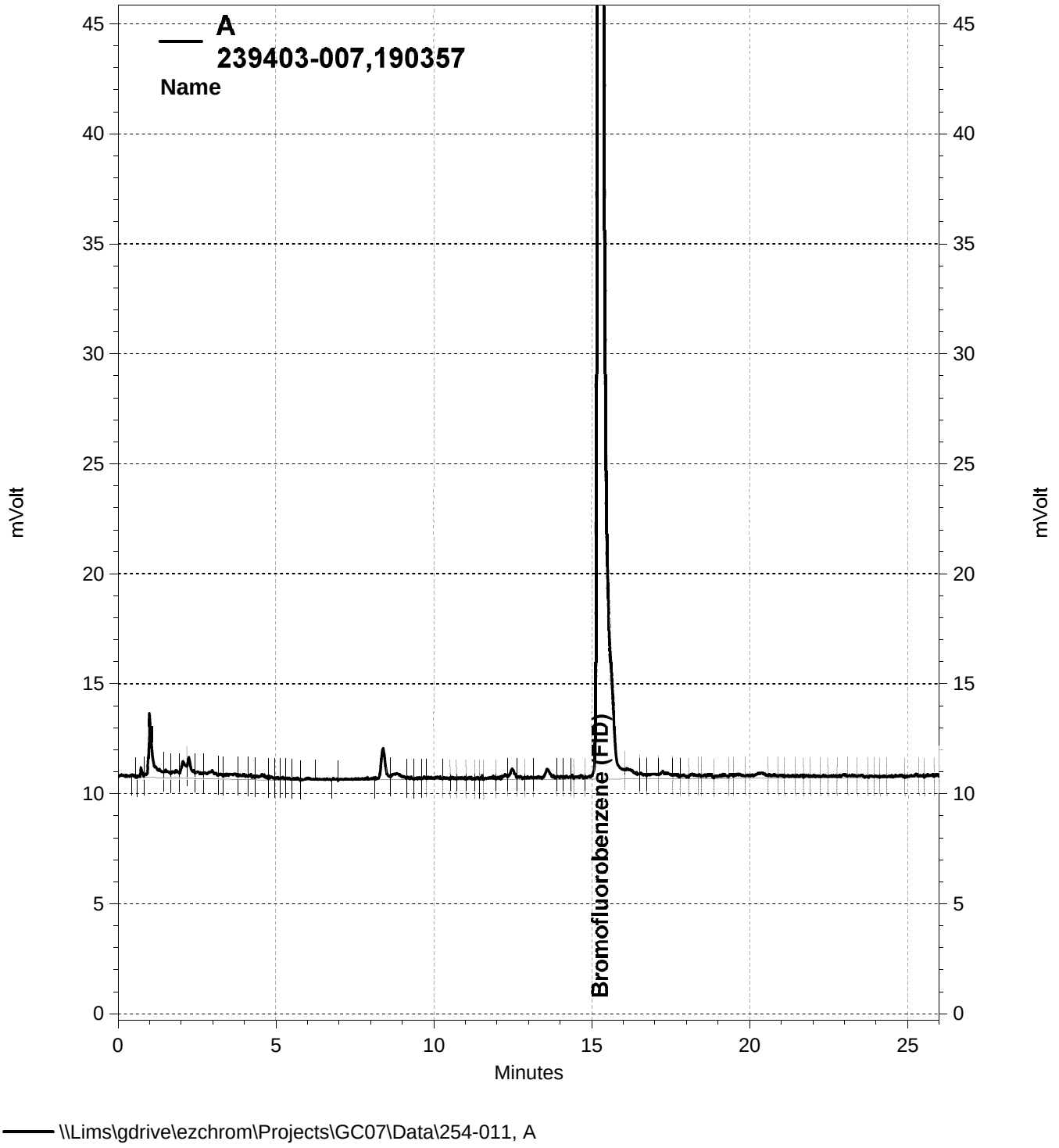
Inst	: GC07	Lab ID	: 239403-007	Client ID	: FB.09042012
Seqnum	: 322366282011	Matrix	: Water	Acct	: ARCSF (JG)
File	: 254_011	Batch	: 190357	Time	: 10-SEP-2012 20:10
Cal	: 322265478001	Caldate	: 02-JUL-2012		
IDF	: 1.0	Raw Units	: ng	Units	: ug/L
PDF	: 1.0				

Analyte	Ch	Raw	Result	RL	Blank	Flags
Gasoline C7-C12	A	40.34	ND	50		u

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene (FID)	A	914.5	180.0	182.9	102	75-124	u

Analyst: DJA Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use



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Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **239403-007,190357**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-011**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 8:10:14 PM
Analysis Date: 9/10/2012 8:38:58 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: b1.0

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.267	15.283	2512088	914.471
GAS:6-8			41451	0.000
GAS:6-10			101551	32.365
GAS:8-10			60100	0.000
GAS:6-12			151355	41.037
GAS:7-12			120105	40.341

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.100		0.000 BDL
Benzene		4.567		0.000 BDL
Toluene	8.367	8.383	722	1.659
Ethylbenzene		12.250		0.000 BDL
m,p-Xylenes	12.433	12.467	153	0.310
o-Xylene		13.583		0.000 BDL
Bromofluorobenzene (PID)	15.250	15.250	395924	1163.139

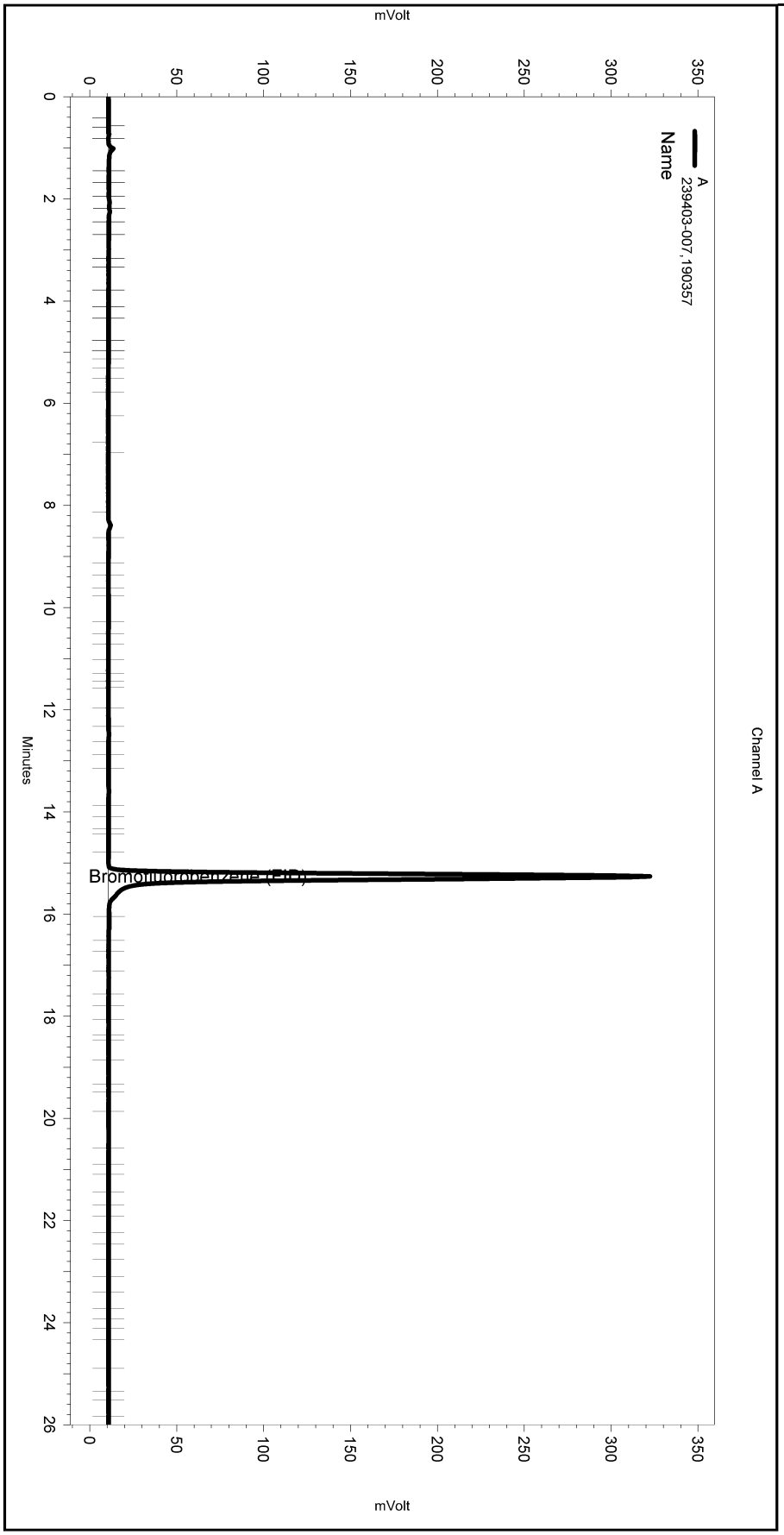
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.950		0.000 BDL
Benzene		3.450		0.000 BDL
Toluene	6.850	6.833	350	1.655
Ethylbenzene		10.483		0.000 BDL
m,p-Xylenes		10.833		0.000 BDL
o-Xylene		11.683		0.000 BDL
Bromofluorobenzene (PID)	12.583	12.583	231940	1178.904

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **239403-007,190357**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-011**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 8:10:14 PM
Analysis Date: 9/10/2012 8:38:58 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: b1.0



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No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\254-011_1A57.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

QC Raw Data

CURTIS & TOMPKINS BLANK USER REPORT FOR 239403 GCVOA Water
EPA 8015D

Inst : GC07 Lab ID : QC655590
Seqnum : 322366282010.1 Matrix : Water
File : 254_010 Batch : 190357 Time : 10-SEP-2012 18:52
Cal : 322265478001 Caldate : 02-JUL-2012
IDF : 1.0 Raw Units : ng Units : ug/L
PDF : 1.0

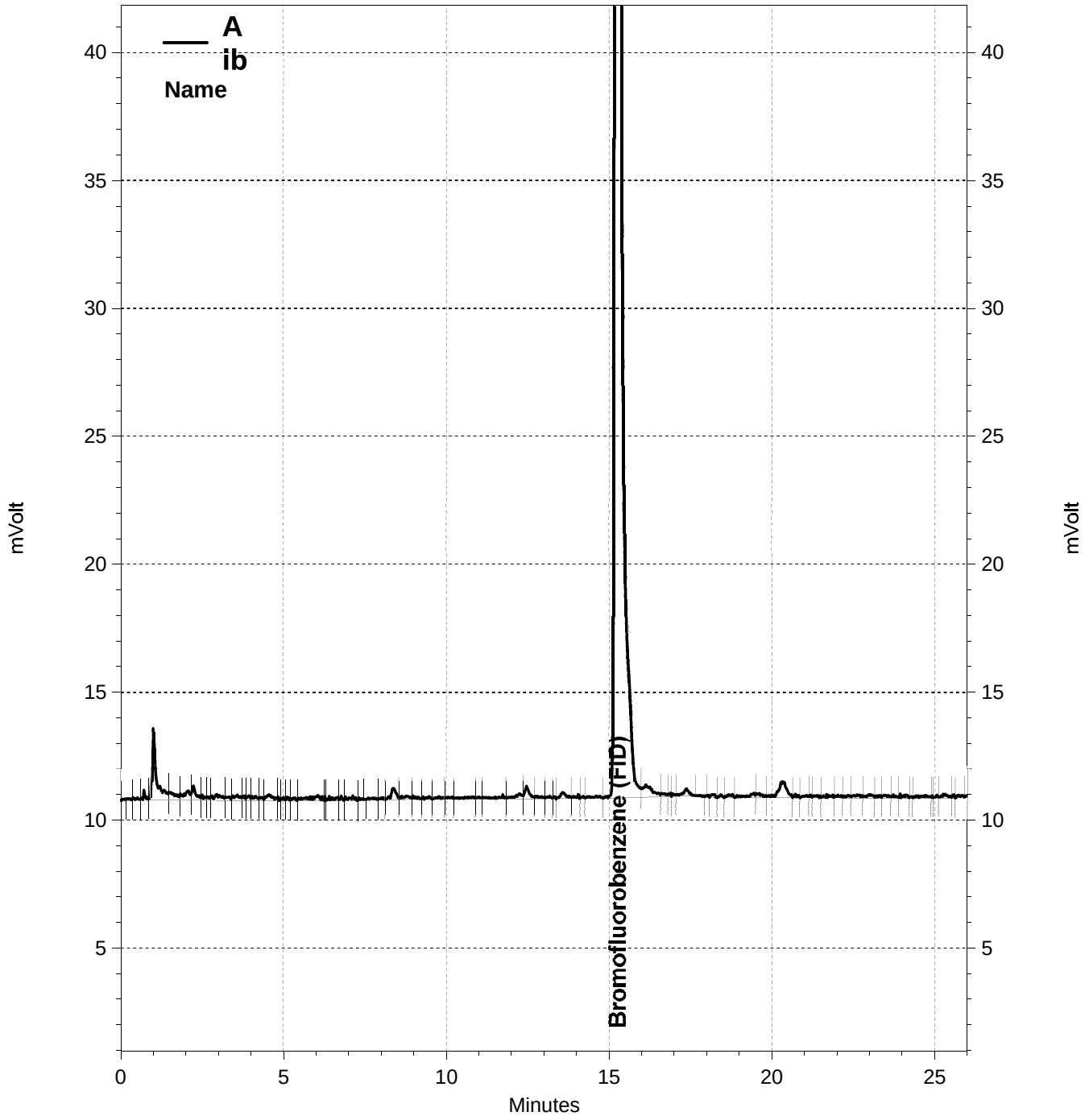
Analyte	Ch	Raw	Result	RL	Flags
Gasoline C7-C12	A	32.88	ND	50	u

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene (FID)	A	889.9	180.0	178.0	99	75-124	u

DJA 09/11/12 : blank,qc655590,190357 [general version]

Analyst: DJA Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use



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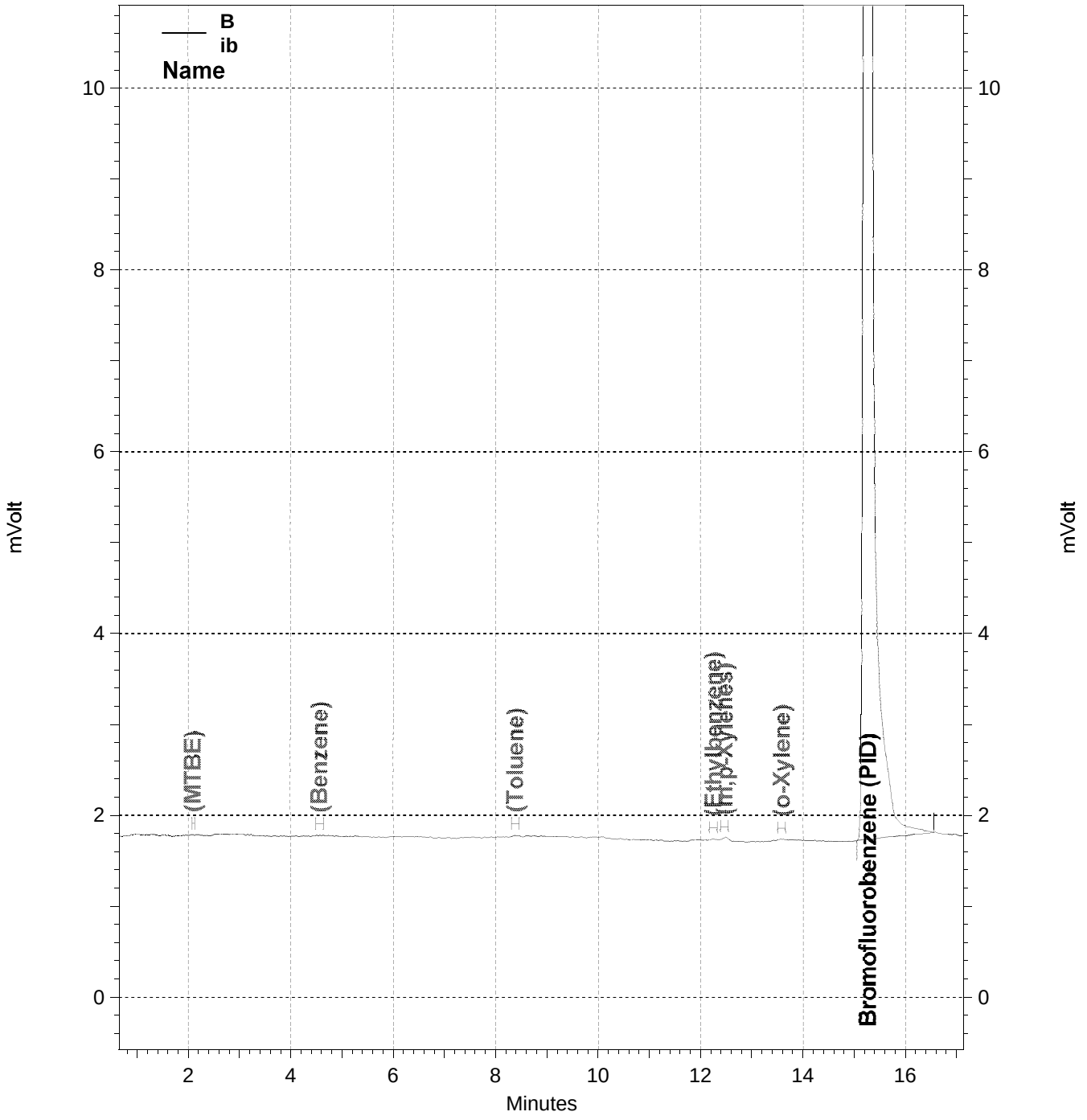

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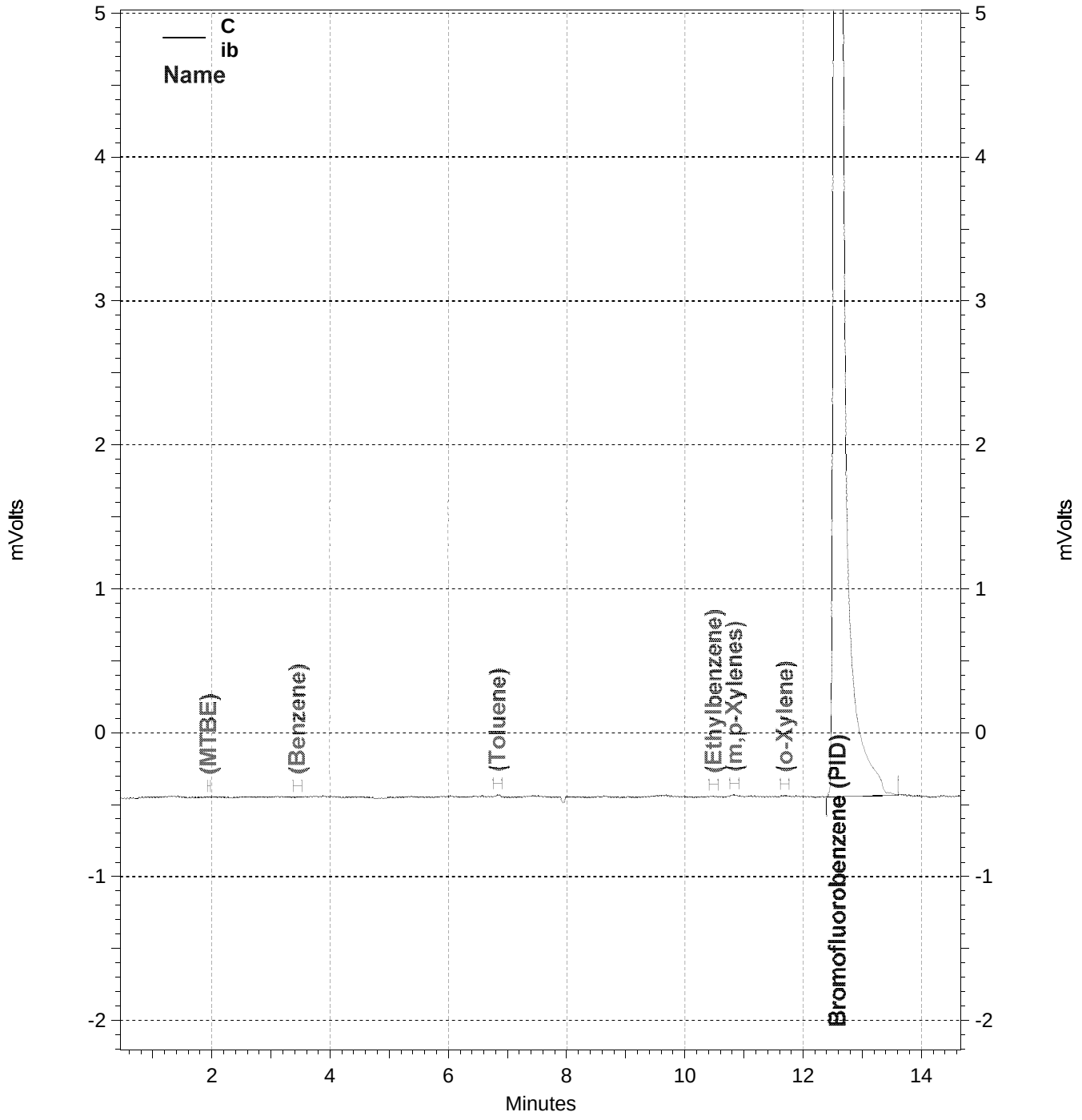


\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-010, C

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ib**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-010**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 6:52:56 PM
Analysis Date: 9/10/2012 7:21:38 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.267	15.283	2444647	889.920
GAS:6-8			39309	0.000
GAS:6-10			81038	25.827
GAS:8-10			41729	0.000
GAS:6-12			117933	31.975
GAS:7-12			97880	32.876

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.100		0.000 BDL
Benzene		4.567		0.000 BDL
Toluene		8.383		0.000 BDL
Ethylbenzene		12.250		0.000 BDL
m,p-Xylenes		12.467		0.000 BDL
o-Xylene		13.583		0.000 BDL
Bromofluorobenzene (PID)	15.267	15.250	376235	1105.297

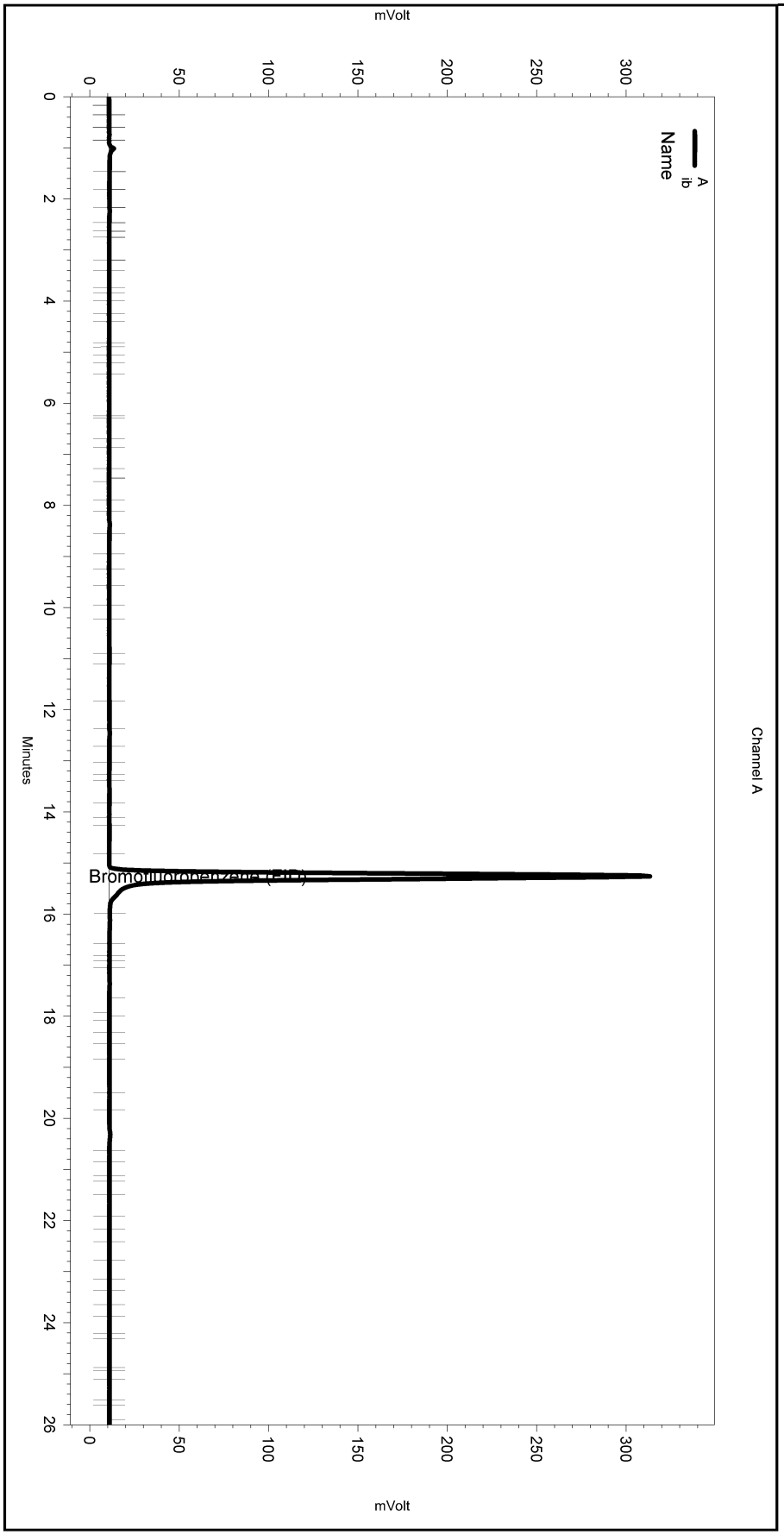
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.950		0.000 BDL
Benzene		3.450		0.000 BDL
Toluene		6.833		0.000 BDL
Ethylbenzene		10.483		0.000 BDL
m,p-Xylenes		10.833		0.000 BDL
o-Xylene		11.683		0.000 BDL
Bromofluorobenzene (PID)	12.583	12.583	220152	1118.988

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ib**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-010**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 6:52:56 PM
Analysis Date: 9/10/2012 7:21:38 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\254-010_1A56.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 GCVOA Water
EPA 8015D

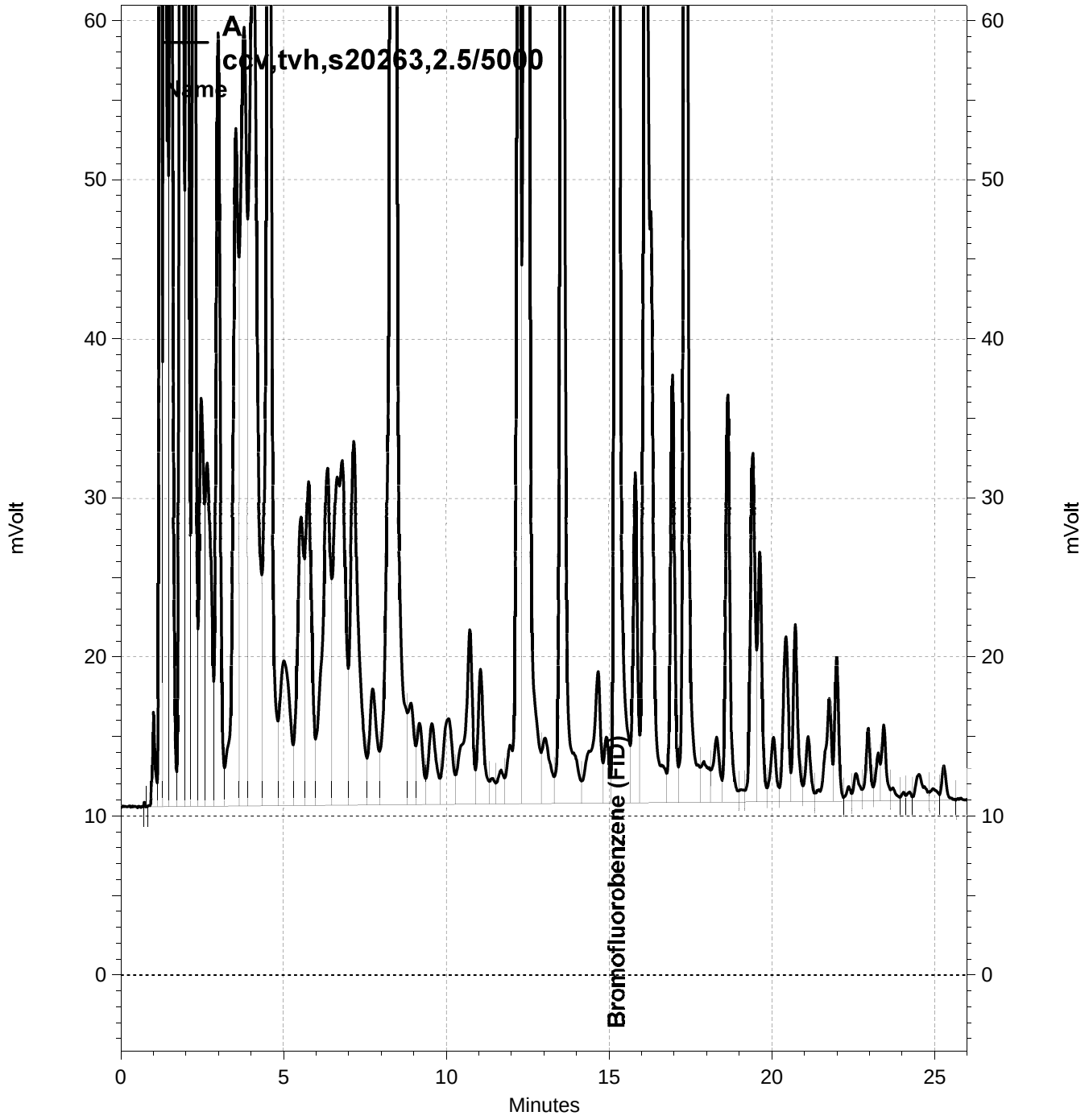
Type : CCV/LCS
Inst : GC07
Seqnum : 322366282009.3
File : 254_009
IDF : 1.0
PDF : 1.0
Lab ID : QC655589
Matrix : Water
Batch : 190357
Time : 10-SEP-2012 17:34
Cal : 322265478001
Units : ug/L

Analyte	Spiked	Raw	CCV/LCS	Ch	%Rec	Limits	Flags
Gasoline C7-C12	1000	5134	1027	A	103	80-120	u
Bromofluorobenzene (FID)	180.0	888.6	177.7	A	99	75-124	u

DJA 09/11/12 : ccv/lcs,qc655589,190357 [general version]

Analyst: DJA Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use



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Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ccv,tvh,s20263,2.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-009**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 5:34:43 PM
Analysis Date: 9/10/2012 6:03:27 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.233	15.283	2441014	888.598
GAS:6-8			7029309	0.000
GAS:6-10			16700278	5322.412
GAS:8-10			9670969	0.000
GAS:6-12			19204100	5206.793
GAS:7-12			15285966	5134.287

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.100		0.000 BDL
Benzene	4.567	4.567	38366	86.184
Toluene	8.367	8.383	245279	563.563
Ethylbenzene	12.233	12.250	42087	117.984
m,p-Xylenes	12.450	12.467	201125	407.157
o-Xylene	13.567	13.583	71409	184.479
Bromofluorobenzene (PID)	15.233	15.250	374123	1099.093

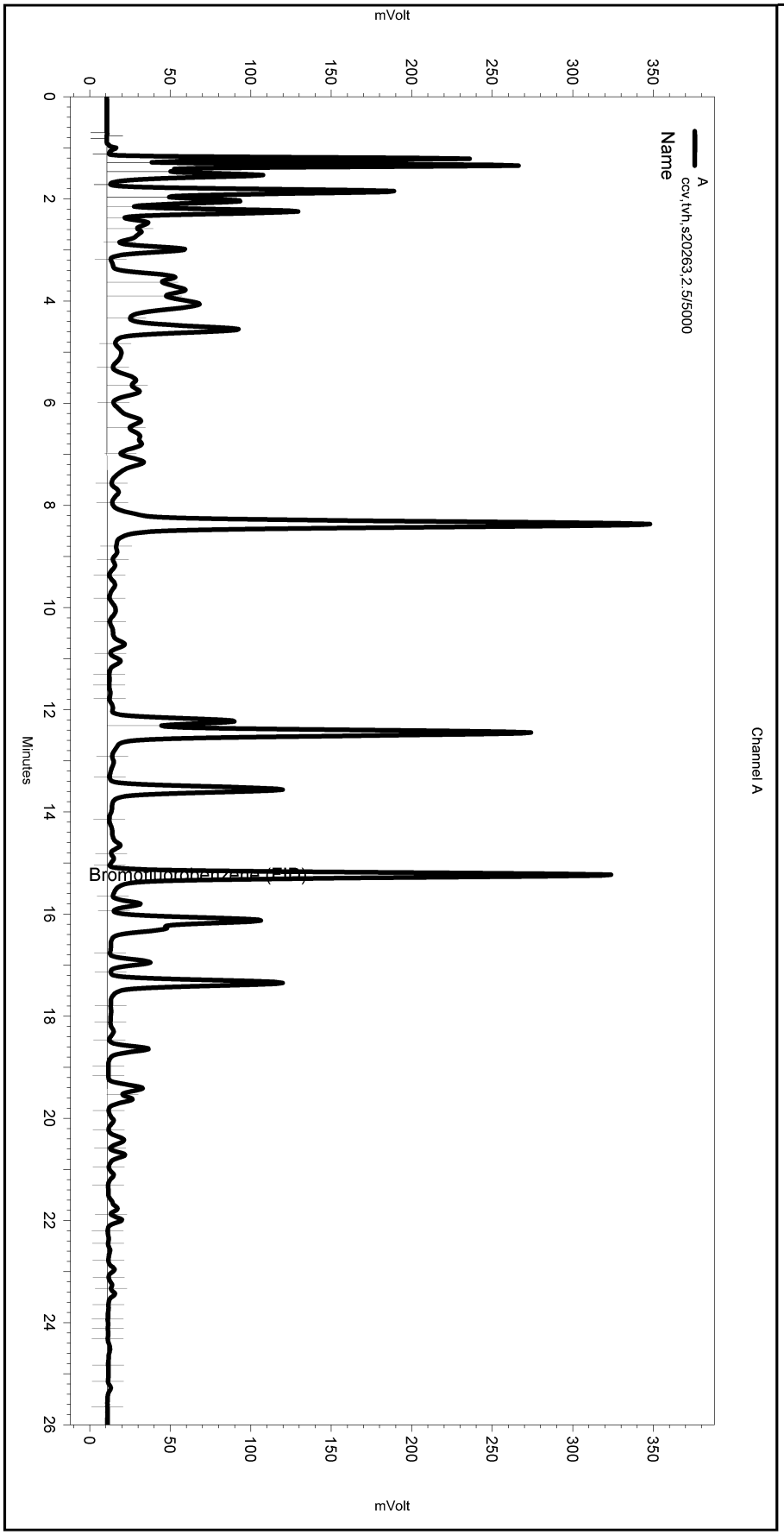
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.950		0.000 BDL
Benzene	3.450	3.450	20884	90.332
Toluene	6.833	6.833	148664	702.789
Ethylbenzene	10.466	10.483	25184	140.630
m,p-Xylenes	10.816	10.833	112991	500.488
o-Xylene	11.683	11.683	40896	211.626
Bromofluorobenzene (PID)	12.583	12.583	228769	1162.786

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ccv,tvh,s20263,2.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-009**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 5:34:43 PM
Analysis Date: 9/10/2012 6:03:27 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\254-009_1A55.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 GCVOA Water
EPA 8015D

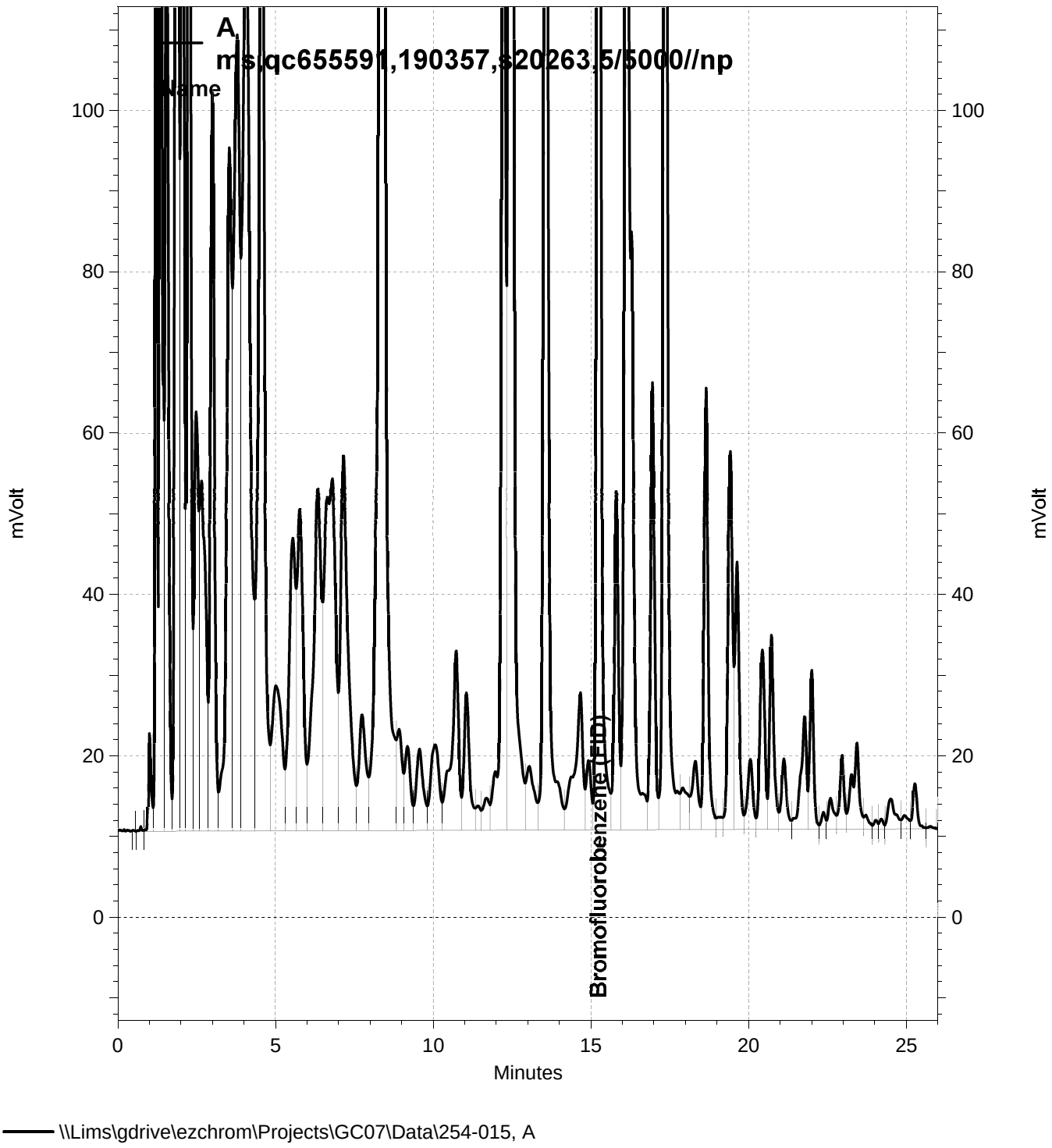
Type	: MSS	Type	: MS	Type	: MSD
Inst	: GC07	Inst	: GC07	Inst	: GC07
Seqnum	: 322366282014	Seqnum	: 322366282015.1	Seqnum	: 322366282016.1
File	: 254_014	File	: 254_015	File	: 254_016
IDF	: 1.0	IDF	: 1.0	IDF	: 1.0
PDF	: 1.0	PDF	: 1.0	PDF	: 1.0
Lab ID	: 239461-002	Lab ID	: QC655591	Lab ID	: QC655592
Matrix	: Water	Matrix	: Water	Matrix	: Water
Batch	: 190357	Batch	: 190357	Batch	: 190357
Time	: 10-SEP-2012 22:06	Time	: 10-SEP-2012 22:45	Time	: 10-SEP-2012 23:23
Cal	: 322265478001	Cal	: 322265478001	Cal	: 322265478001
Units	: ug/L				

Analyte	MSS	Ch	Spiked	MS Raw	MS Result	Ch	%Rec	MSD Raw	MSD Result	Ch	%Rec	Limits	RPD	Lim	Flags
Gasoline C7-C12	ND	A	2000	10320	2063	A	103	10290	2059	A	103	71-120	0	22	u
Bromofluorobenzene (FID)			180.0	926.9	185.4	A	103	903.0	180.6	A	100	75-124			u

09/10/12 : Had pH greater than 2. [general version]

Analyst: DJA Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use



\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-015, A

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ms,qc655591,190357,s20263,5/5000//np**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-015**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 10:45:21 PM
Analysis Date: 9/10/2012 11:14:05 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: a7.0

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.250	15.283	2546168	926.877
GAS:6-8			14018609	0.000
GAS:6-10			33327504	10621.542
GAS:8-10			19308892	0.000
GAS:6-12			38512800	10441.947
GAS:7-12			30714058	10316.310

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.100		0.000 BDL
Benzene	4.583	4.567	74708	167.821
Toluene	8.383	8.383	503059	1155.849
Ethylbenzene	12.233	12.250	89152	249.924
m,p-Xylenes	12.467	12.467	419579	849.395
o-Xylene	13.567	13.583	147175	380.214
Bromofluorobenzene (PID)	15.250	15.250	409899	1204.195

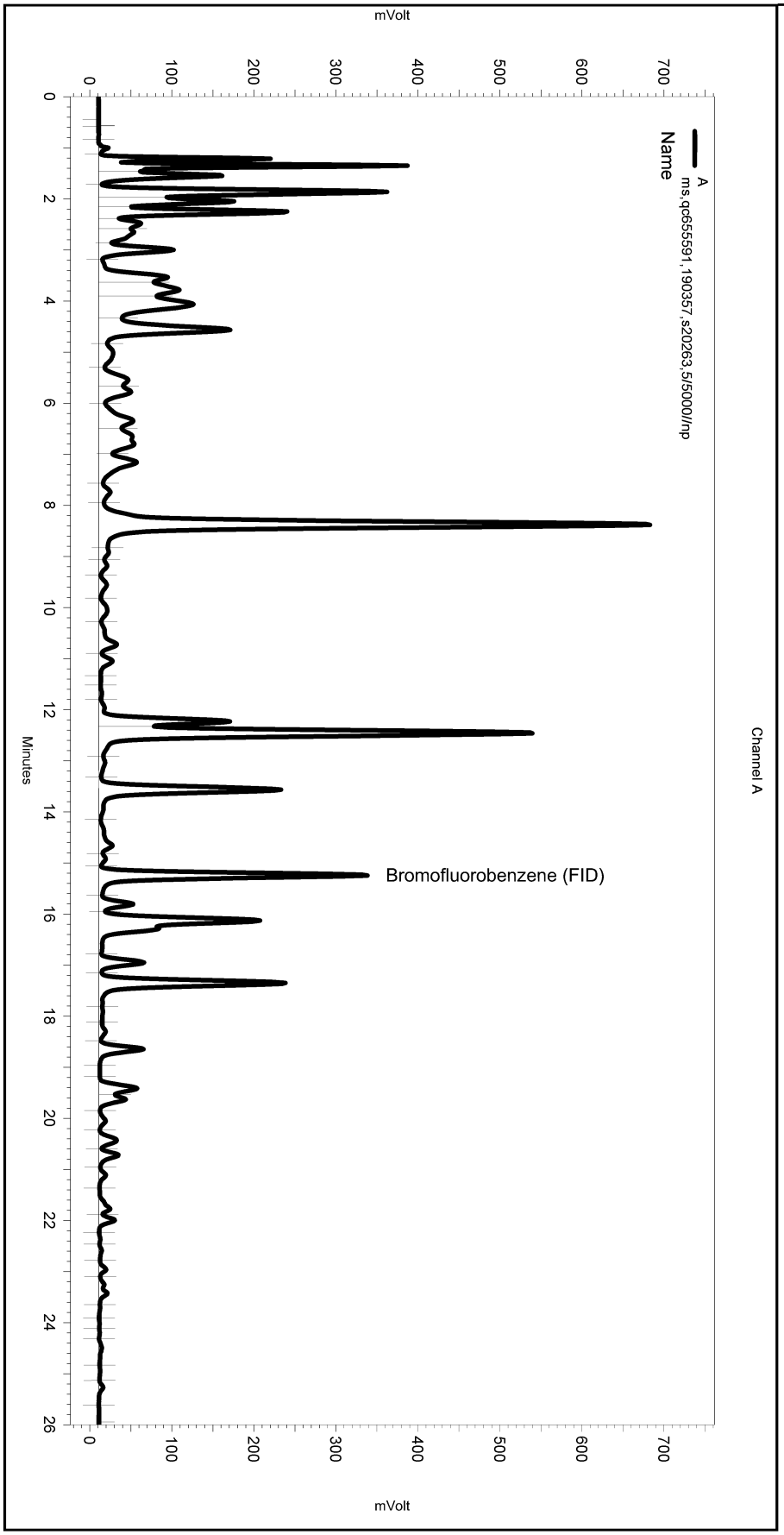
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.950		0.000 BDL
Benzene	3.466	3.450	45271	195.816
Toluene	6.833	6.833	315062	1489.413
Ethylbenzene	10.466	10.483	55579	310.359
m,p-Xylenes	10.816	10.833	242682	1074.947
o-Xylene	11.683	11.683	89224	461.712
Bromofluorobenzene (PID)	12.583	12.583	243407	1237.188

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ms,qc655591,190357,s20263,5/5000//np**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-015**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 10:45:21 PM
Analysis Date: 9/10/2012 11:14:05 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: a7.0



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No items selected for this section

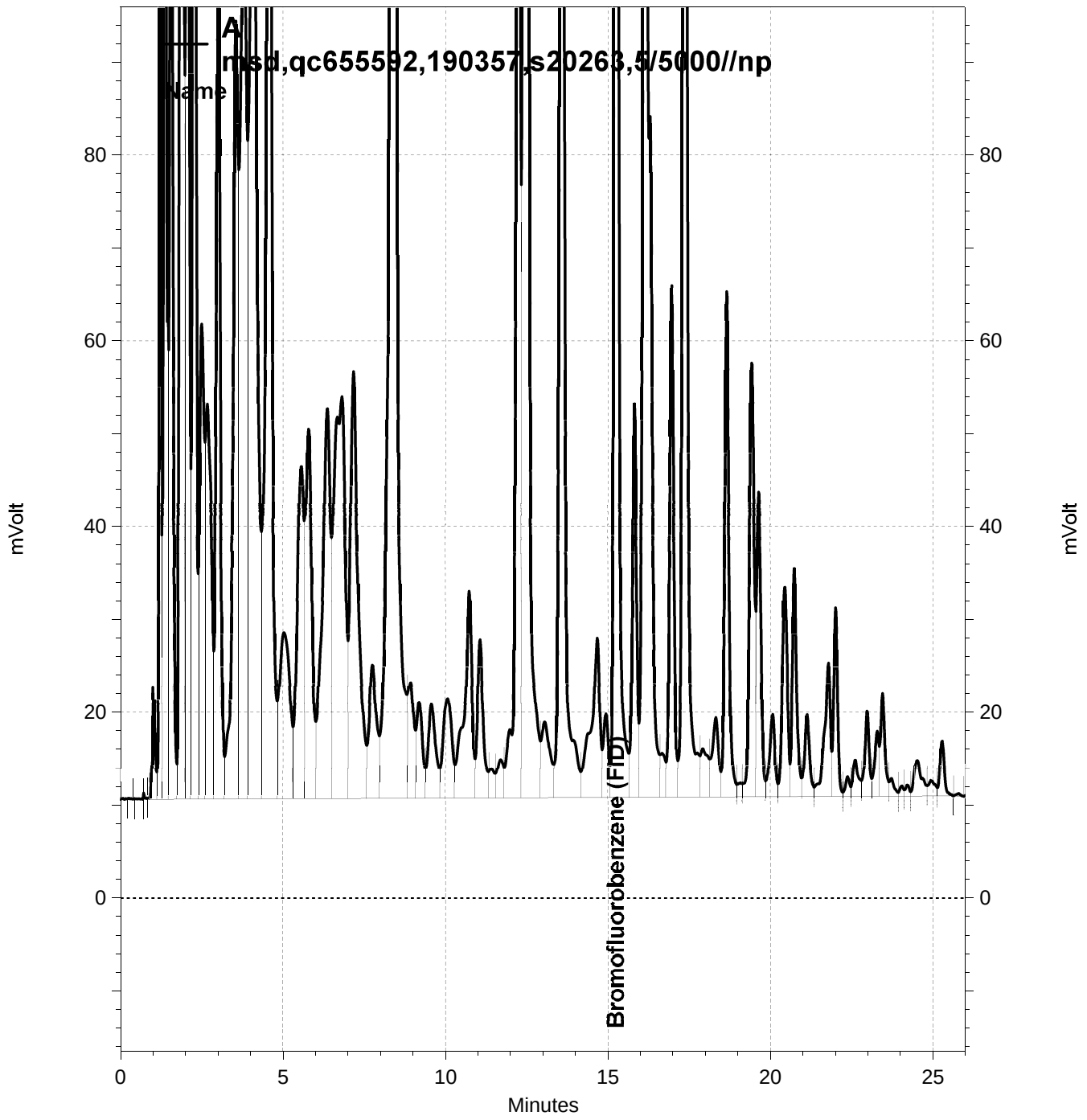
Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\254-015_1A5B.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-016, A

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **msd,qc655592,190357,s20263,5/5000//np**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-016**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 11:23:37 PM
Analysis Date: 9/10/2012 11:52:20 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: a7.0

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.250	15.283	2480615	903.013
GAS:6-8			13899657	0.000
GAS:6-10			33129204	10558.343
GAS:8-10			19229544	0.000
GAS:6-12			38357592	10399.867
GAS:7-12			30645656	10293.337

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.100		0.000 BDL
Benzene	4.583	4.567	77246	173.522
Toluene	8.383	8.383	510981	1174.051
Ethylbenzene	12.250	12.250	92974	260.638
m,p-Xylenes	12.467	12.467	419279	848.787
o-Xylene	13.583	13.583	148442	383.488
Bromofluorobenzene (PID)	15.250	15.250	400051	1175.263

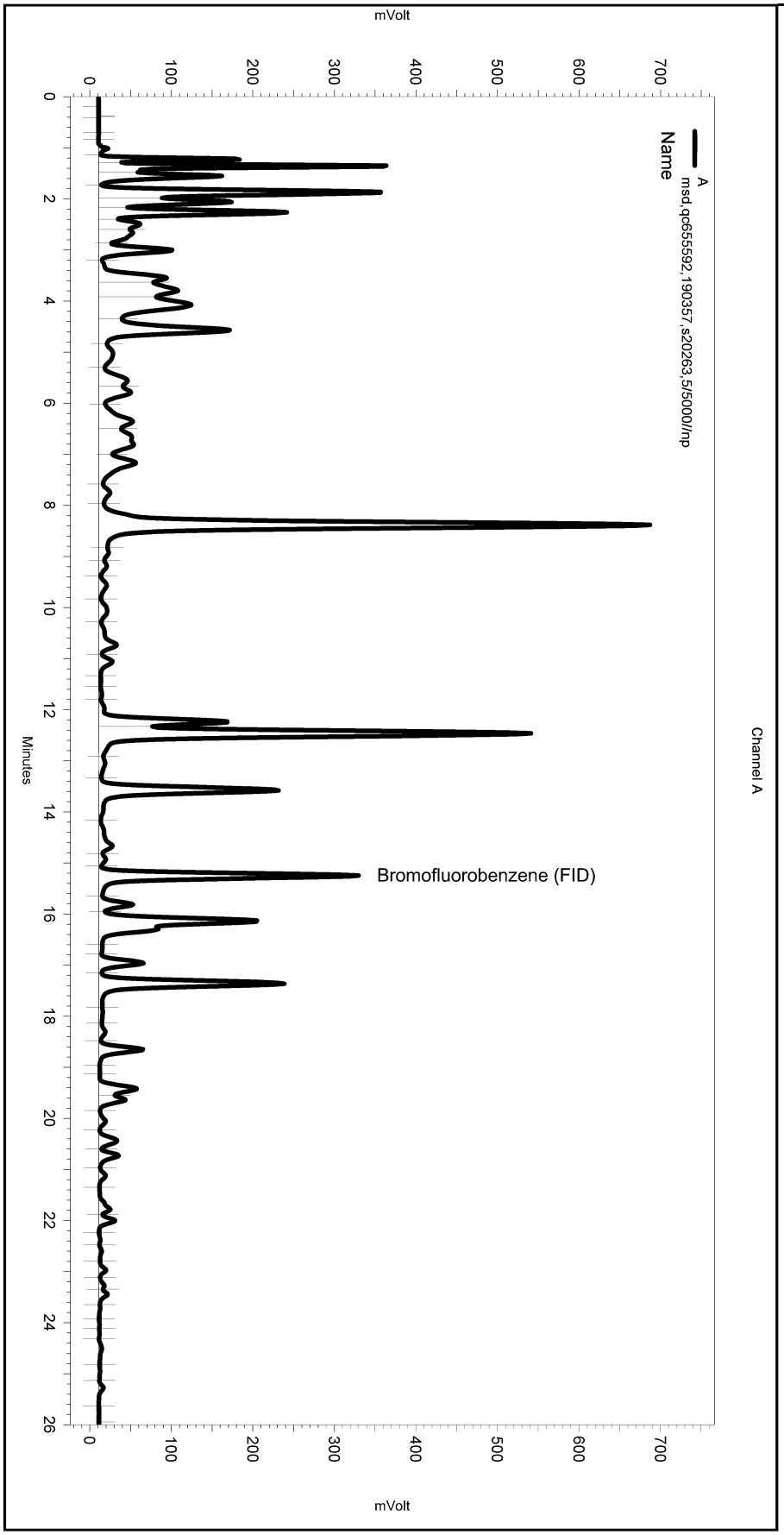
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.950		0.000 BDL
Benzene	3.466	3.450	45507	196.837
Toluene	6.833	6.833	316398	1495.729
Ethylbenzene	10.466	10.483	55530	310.085
m,p-Xylenes	10.816	10.833	242379	1073.605
o-Xylene	11.683	11.683	88690	458.948
Bromofluorobenzene (PID)	12.583	12.583	237539	1207.362

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **msd,qc655592,190357,s20263,5/5000//np**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-016**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 11:23:37 PM
Analysis Date: 9/10/2012 11:52:20 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: a7.0



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\254-016_1A5C.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Initial Calibration Raw Data

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCVOA Water: EPA 8015D

Inst : GC07
Calnum : 322265478001
Units : ng

Name : tvh/bfb_184
Date : 02-JUL-2012 20:13
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	184_005	322265478005	TVH_14	02-JUL-2012 20:13	S19489 (1000X), S19637 (5000X)
L2	184_006	322265478006	TVH_15	02-JUL-2012 20:52	S19488 (1000X), S19637 (5000X)
L3	184_007	322265478007	TVH_16	02-JUL-2012 21:31	S19487 (1000X), S19637 (5000X)
L4	184_008	322265478008	TVH_17	02-JUL-2012 22:09	S19466 (2000X), S19637 (5000X)
L5	184_009	322265478009	TVH_18	02-JUL-2012 22:48	S19466 (1000X), S19637 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	3418.2	2803.9	2837.6	2937.0	2889.4	AVRG		3.36E-4		2977.2	8	0.995	20	
Bromofluorobenzene (FID)	A	2531.6	2727.7	2625.8	2717.1	3133.1	AVRG		3.64E-4		2747.0	8	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Gasoline C7-C12	A	250.00	15	2500.0	-6	10000	-5	25000	-1	50000	-3
Bromofluorobenzene (FID)	A	900.00	-8	900.00	-1	900.00	-4	900.00	-1	900.00	14

Analyst: DJA Date: 07/03/12 Reviewer: EAH Date: 07/03/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

322265478001

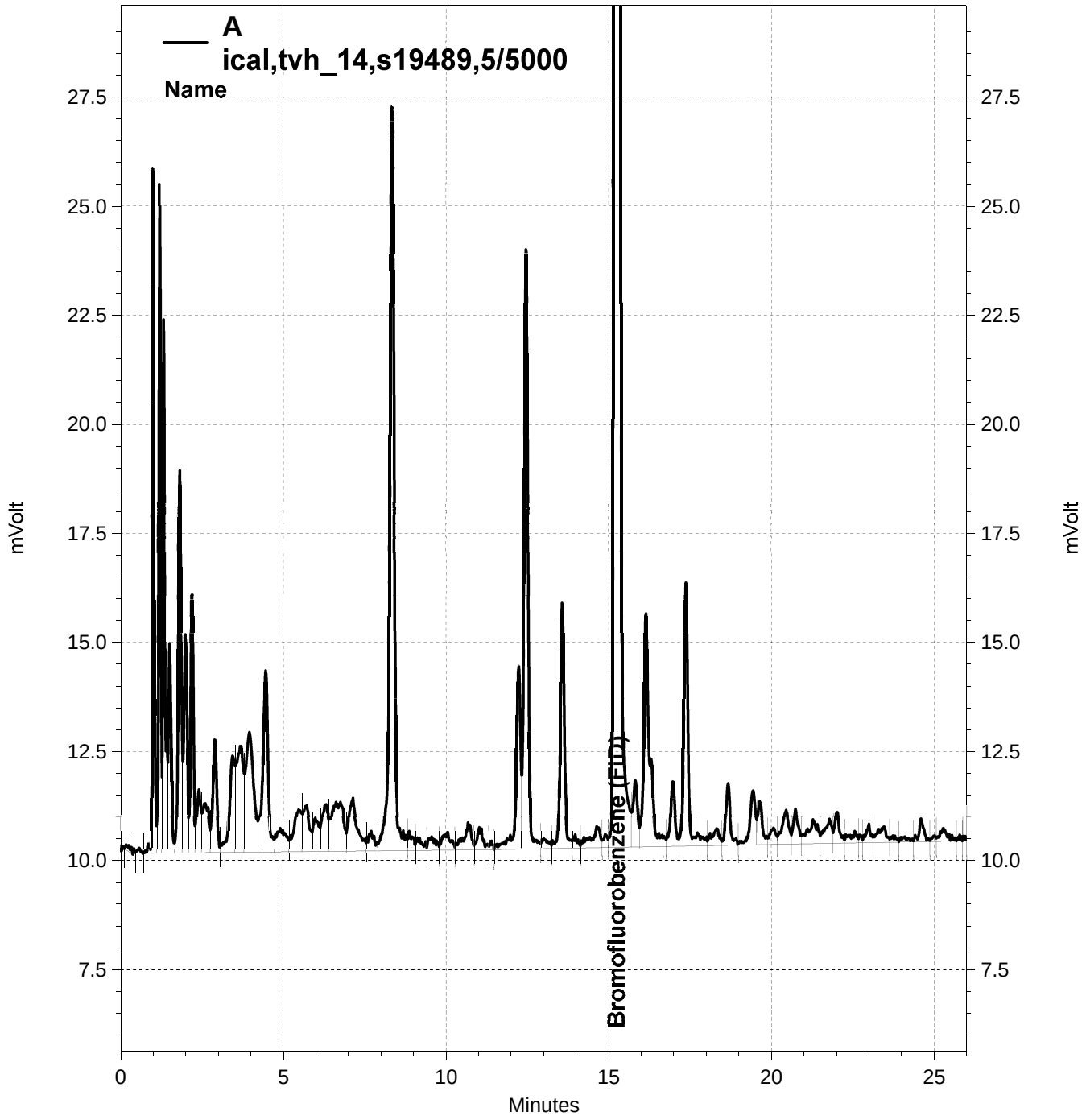
CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 GCVOA Water
EPA 8015D

Inst : GC07 Name : tvh/bfb_184
Calnum : 322265478001 Cal Date : 02-JUL-2012

ICV 322265478011 (184_011 03-JUL-2012) stds: S19608 (1000X), S19637 (5000X)

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Gasoline C7-C12	A	10000	10050	ng	0	20	

Analyst: DJA Date: 07/03/12 Reviewer: EAH Date: 07/03/12



\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-005, A

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq** Sample Name: **ical,tvh_14,s19489,5/5000** Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-005** Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met	Software Version 3.1.7 Run Date: 7/2/2012 8:13:54 PM Analysis Date: 7/3/2012 10:50:38 AM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: {Data Description}

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.250	15.283	2278407	900.000 CAL
GAS:6-8			363799	0.000 CAL
GAS:6-10			872639	250.000 CAL
GAS:8-10			508840	0.000 CAL
GAS:6-12			1048917	250.000 CAL
GAS:7-12			854543	250.000 CAL

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.033		0.000 BDL
Benzene	4.467	4.467	34095	0.000 CAL
Toluene	8.333	8.317	188719	0.000 CAL
Ethylbenzene	12.233	12.217	31626	0.000 CAL
m,p-Xylenes	12.450	12.433	141102	0.000 CAL
o-Xylene	13.567	13.550	49503	0.000 CAL
Bromofluorobenzene (PID)	15.250	15.233	5316764	0.000 CAL

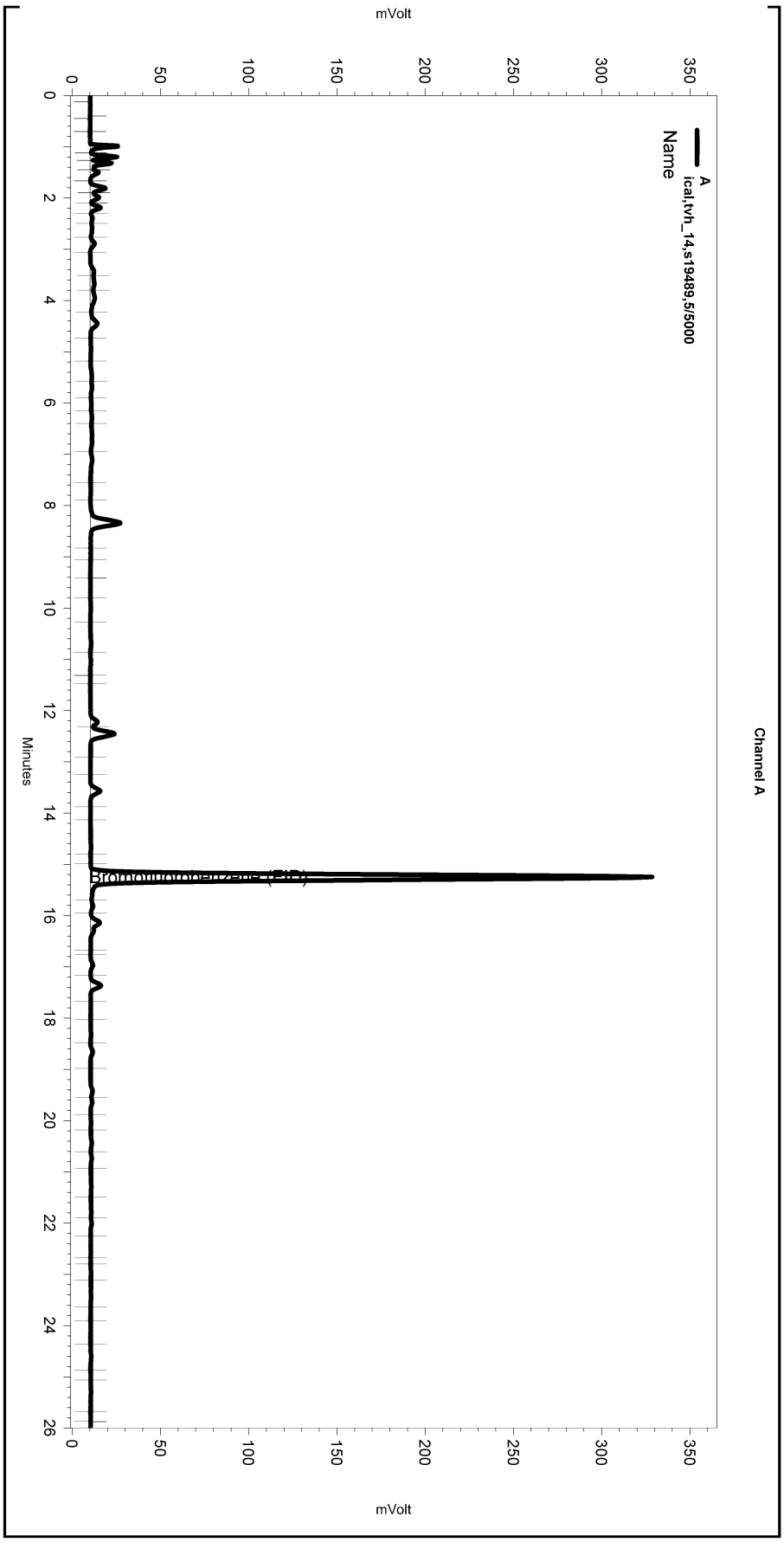
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.895		0.000 BDL
Benzene	3.333	3.350	2245	0.000 CAL
Toluene	6.766	6.766	108732	0.000 CAL
Ethylbenzene	10.449	10.433	19334	0.000 CAL
m,p-Xylenes	10.799	10.799	82812	0.000 CAL
o-Xylene	11.649	11.649	29208	0.000 CAL
Bromofluorobenzene (PID)	12.566	12.549	3278417	0.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq**
Sample Name: **ical,tvh_14,s19489,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-005**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met

Software Version 3.1.7
Run Date: 7/2/2012 8:13:54 PM
Analysis Date: 7/3/2012 10:50:38 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\184-005

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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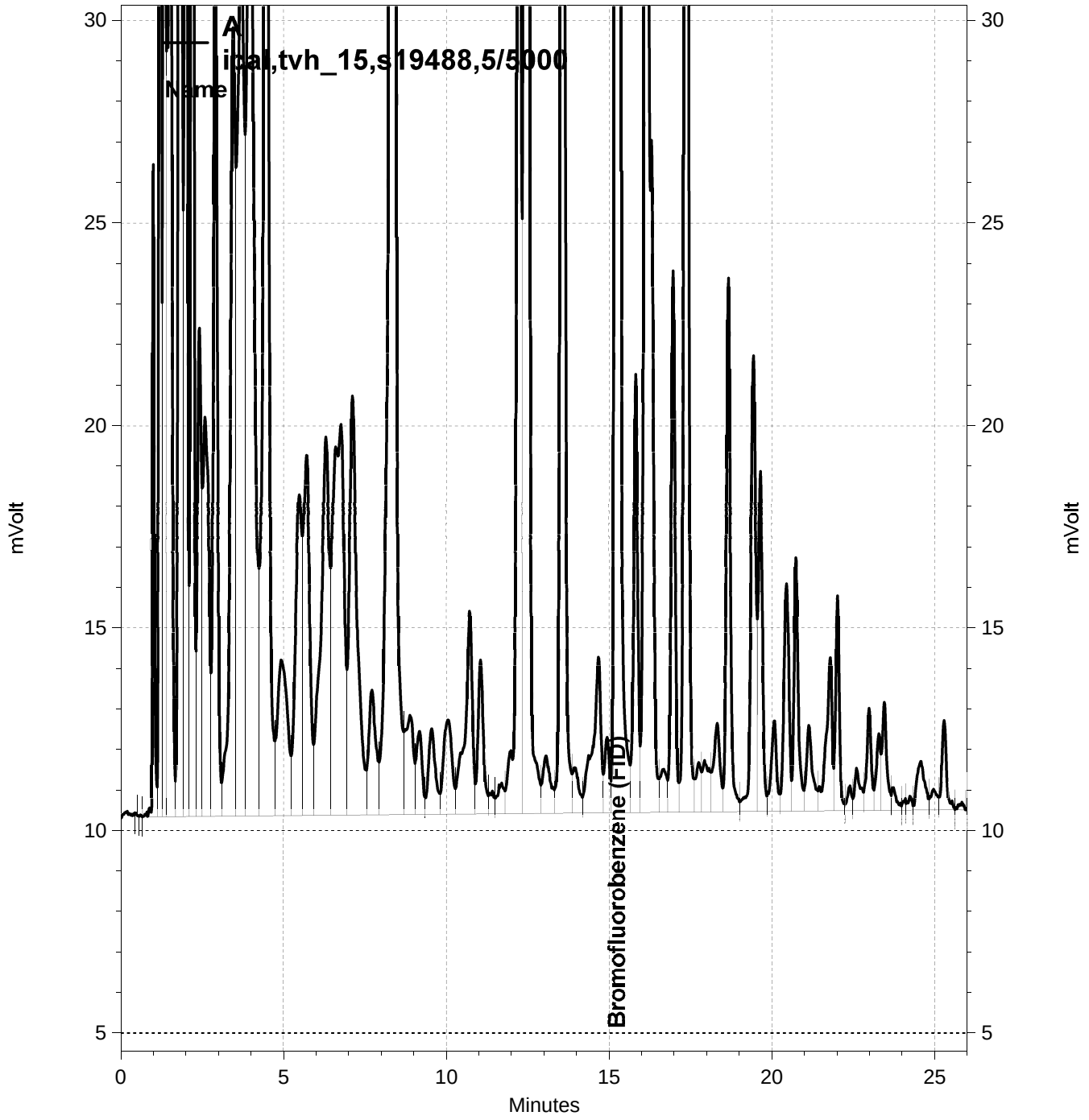


\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-006, A

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq** Sample Name: **ical,tvh_15,s19488,5/5000** Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-006** Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met	Software Version 3.1.7 Run Date: 7/2/2012 8:52:37 PM Analysis Date: 7/3/2012 10:50:46 AM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: {Data Description}

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.250	15.283	2454889	900.000 CAL
GAS:6-8			3087974	0.000 CAL
GAS:6-10			7469671	2500.000 CAL
GAS:8-10			4381697	0.000 CAL
GAS:6-12			8730934	2500.000 CAL
GAS:7-12			7009774	2500.000 CAL

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.033		0.000 BDL
Benzene	4.483	4.467	268870	0.000 CAL
Toluene	8.350	8.317	1674493	0.000 CAL
Ethylbenzene	12.233	12.217	314180	0.000 CAL
m,p-Xylenes	12.450	12.433	1340634	0.000 CAL
o-Xylene	13.567	13.550	477564	0.000 CAL
Bromofluorobenzene (PID)	15.250	15.233	5716088	0.000 CAL

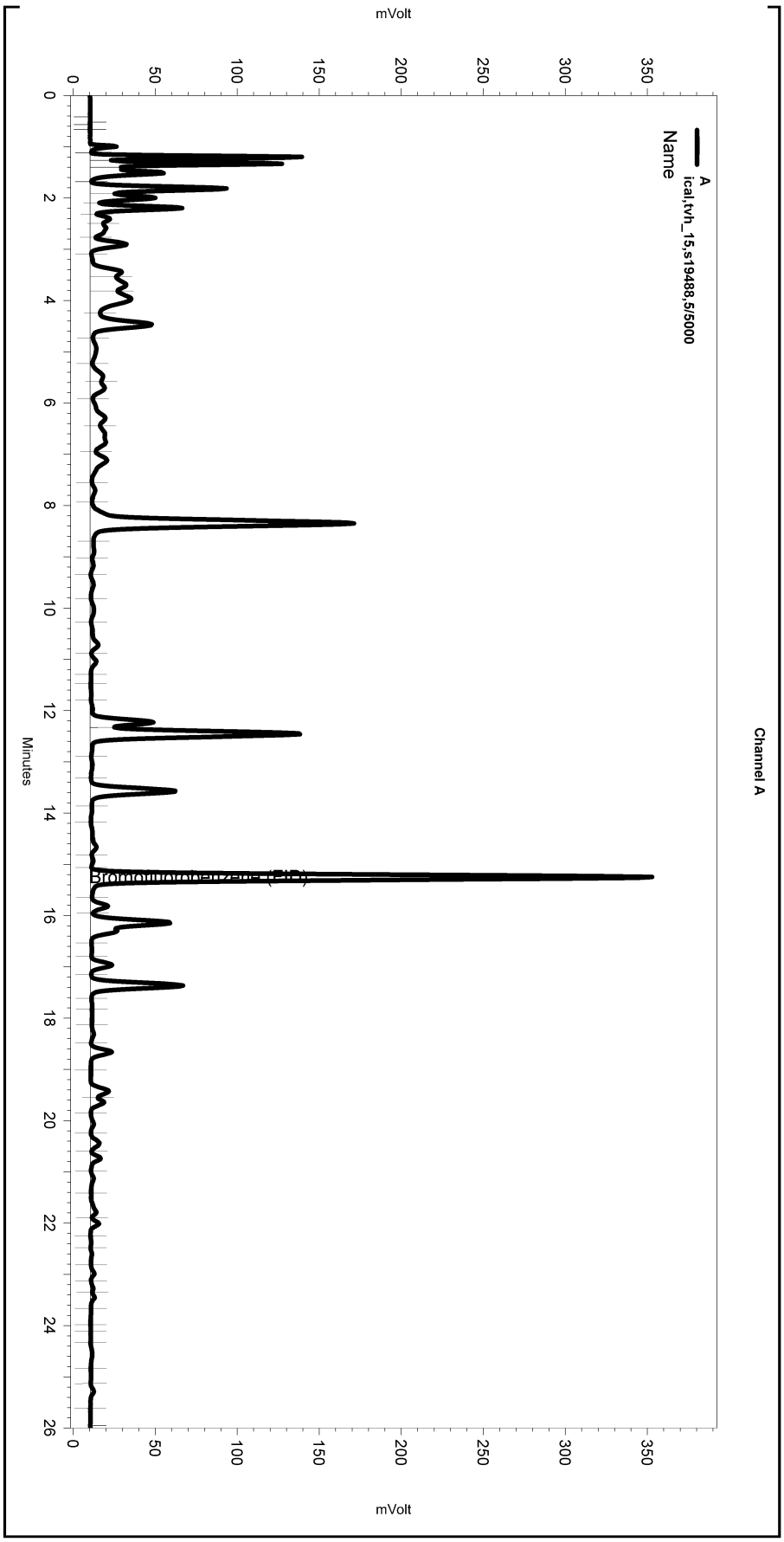
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.895		0.000 BDL
Benzene	3.350	3.350	128698	0.000 CAL
Toluene	6.783	6.766	1070041	0.000 CAL
Ethylbenzene	10.449	10.433	197080	0.000 CAL
m,p-Xylenes	10.799	10.799	817860	0.000 CAL
o-Xylene	11.649	11.649	283273	0.000 CAL
Bromofluorobenzene (PID)	12.566	12.549	3518688	0.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq**
Sample Name: **ical,tvh_15,s19488,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-006**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met

Software Version 3.1.7
Run Date: 7/2/2012 8:52:37 PM
Analysis Date: 7/3/2012 10:50:46 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

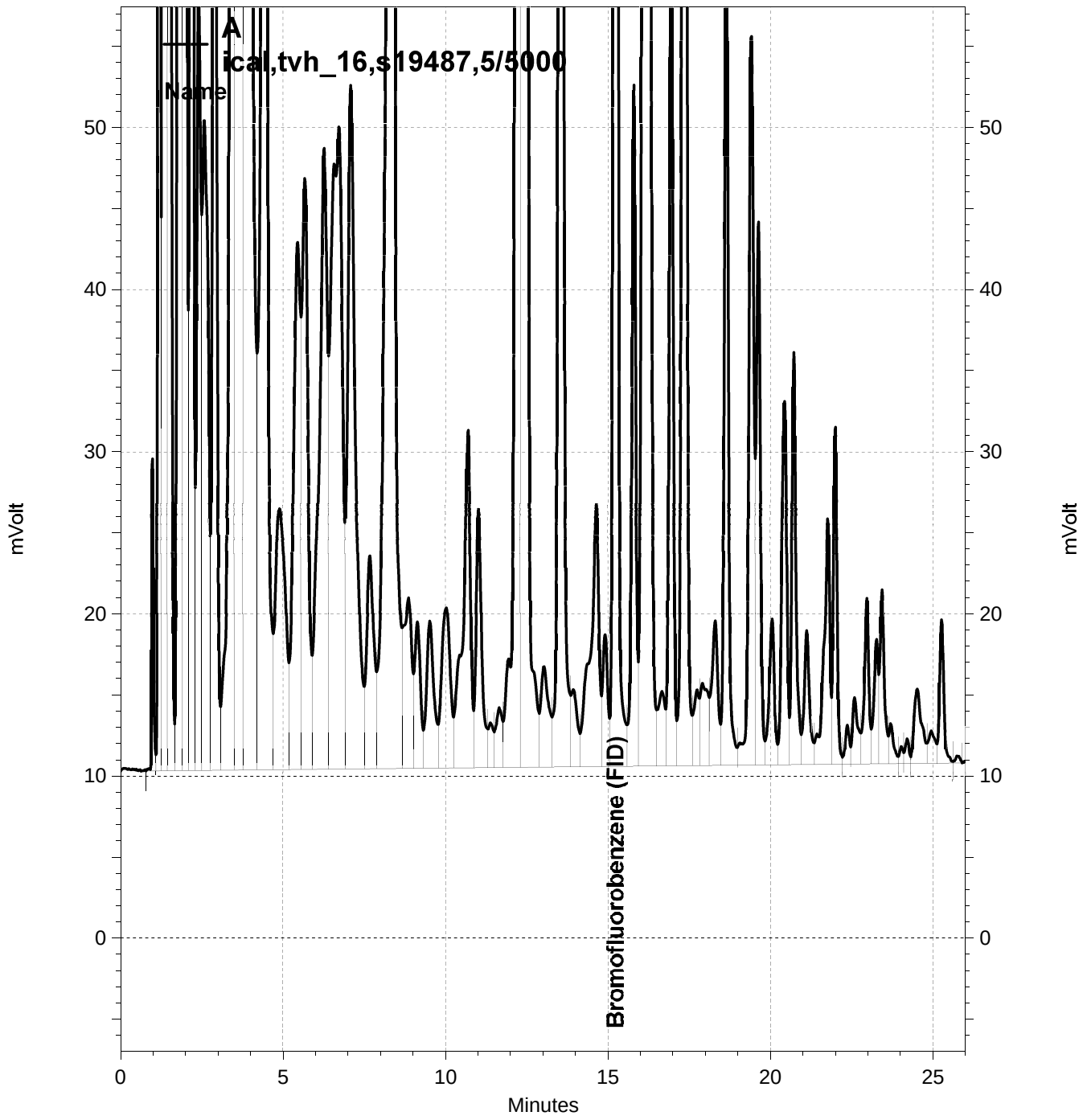
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\184-006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None



\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-007, A

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq** Sample Name: **ical,tvh_16,s19487,5/5000** Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-007** Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met	Software Version 3.1.7 Run Date: 7/2/2012 9:31:04 PM Analysis Date: 7/3/2012 10:50:54 AM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: {Data Description}

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.233	15.283	2363198	900.000 CAL
GAS:6-8			18706020	0.000 CAL
GAS:6-10			30417588	10000.000 CAL
GAS:8-10			17672036	0.000 CAL
GAS:6-12			35442544	10000.000 CAL
GAS:7-12			28375896	10000.000 CAL

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.033		0.000 BDL
Benzene	4.450	4.467	1022856	0.000 CAL
Toluene	8.317	8.317	6536562	0.000 CAL
Ethylbenzene	12.217	12.217	1253363	0.000 CAL
m,p-Xylenes	12.433	12.433	5199358	0.000 CAL
o-Xylene	13.550	13.550	1847299	0.000 CAL
Bromofluorobenzene (PID)	15.233	15.233	5419606	0.000 CAL

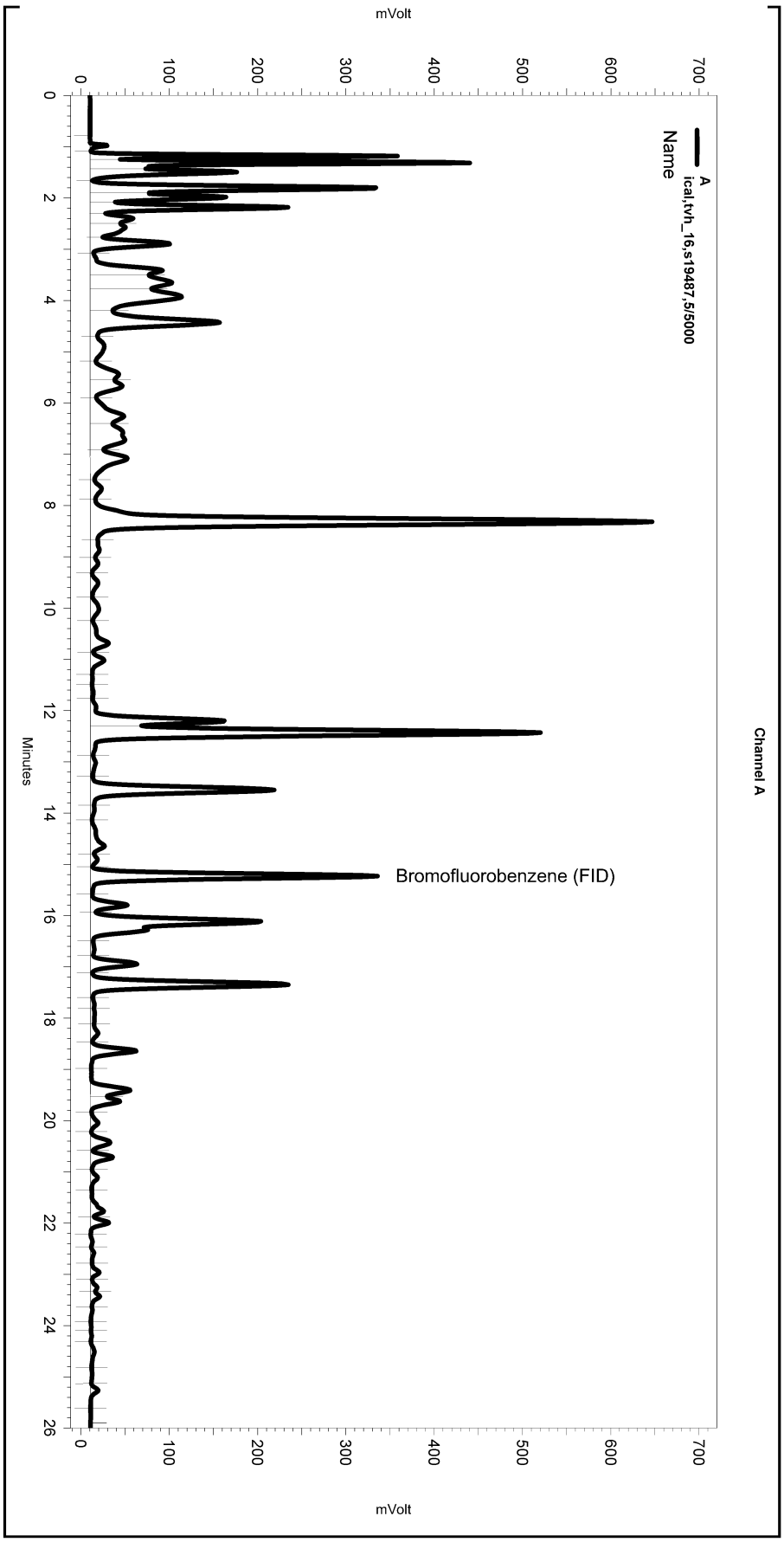
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.895		0.000 BDL
Benzene	3.350	3.350	75041	0.000 CAL
Toluene	6.766	6.766	4038369	0.000 CAL
Ethylbenzene	10.433	10.433	794944	0.000 CAL
m,p-Xylenes	10.799	10.799	3160806	0.000 CAL
o-Xylene	11.649	11.649	1117708	0.000 CAL
Bromofluorobenzene (PID)	12.566	12.549	3307116	0.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq**
Sample Name: **ical,tvh_16,s19487,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-007**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met

Software Version 3.1.7
Run Date: 7/2/2012 9:31:04 PM
Analysis Date: 7/3/2012 10:50:54 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

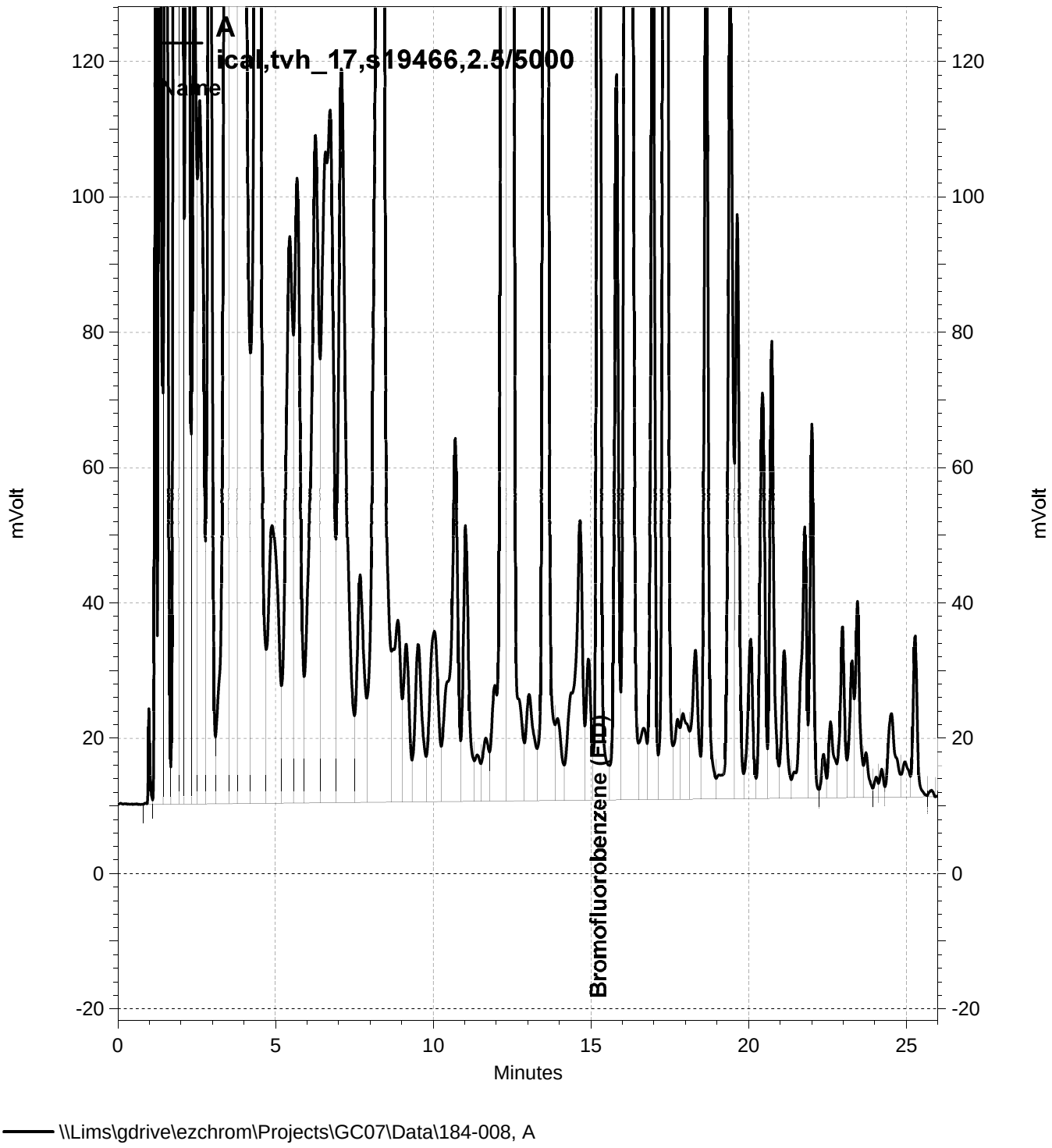
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\184-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None



\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-008, A

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq** Sample Name: **ical,tvh_17,s19466,2.5/5000** Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-008** Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met	Software Version 3.1.7 Run Date: 7/2/2012 10:09:31 PM Analysis Date: 7/3/2012 10:51:03 AM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: {Data Description}

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.250	15.283	2445388	900.000 CAL
GAS:6-8			32788902	0.000 CAL
GAS:6-10			78468768	25000.000 CAL
GAS:8-10			45679856	0.000 CAL
GAS:6-12			91477296	25000.000 CAL
GAS:7-12			73426144	25000.000 CAL

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.033		0.000 BDL
Benzene	4.450	4.467	1070585	0.000 CAL
Toluene	8.333	8.317	16669961	0.000 CAL
Ethylbenzene	12.217	12.217	3294824	0.000 CAL
m,p-Xylenes	12.450	12.433	13112571	0.000 CAL
o-Xylene	13.567	13.550	4769886	0.000 CAL
Bromofluorobenzene (PID)	15.250	15.233	5487774	0.000 CAL

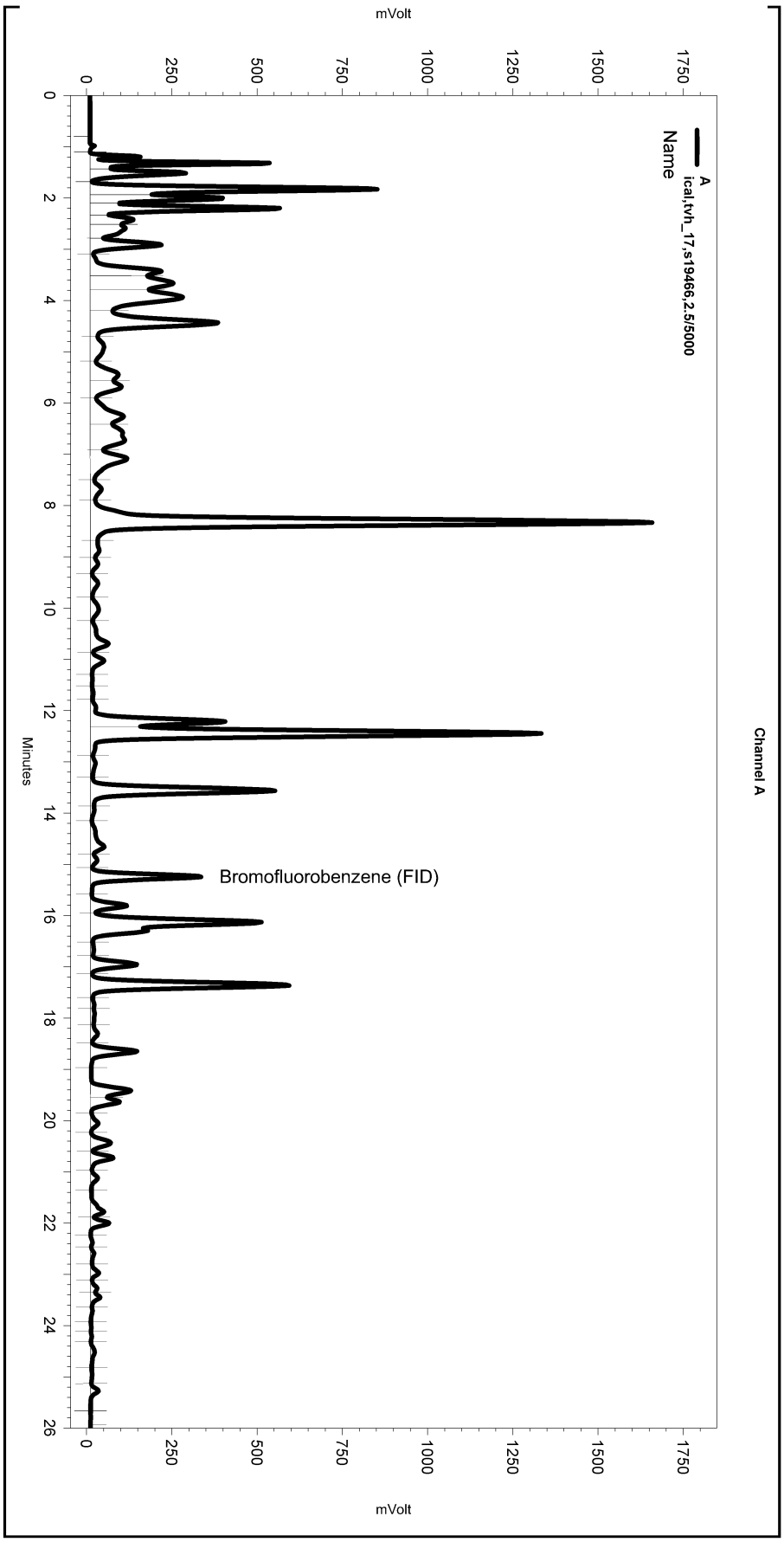
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.895		0.000 BDL
Benzene	3.366	3.350	229564	0.000 CAL
Toluene	6.750	6.766	9280713	0.000 CAL
Ethylbenzene	10.433	10.433	2040474	0.000 CAL
m,p-Xylenes	10.799	10.799	7805476	0.000 CAL
o-Xylene	11.649	11.649	2834286	0.000 CAL
Bromofluorobenzene (PID)	12.566	12.549	3341283	0.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq**
Sample Name: **ical,tvh_17,s19466,2.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-008**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met

Software Version 3.1.7
Run Date: 7/2/2012 10:09:31 PM
Analysis Date: 7/3/2012 10:51:03 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\184-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

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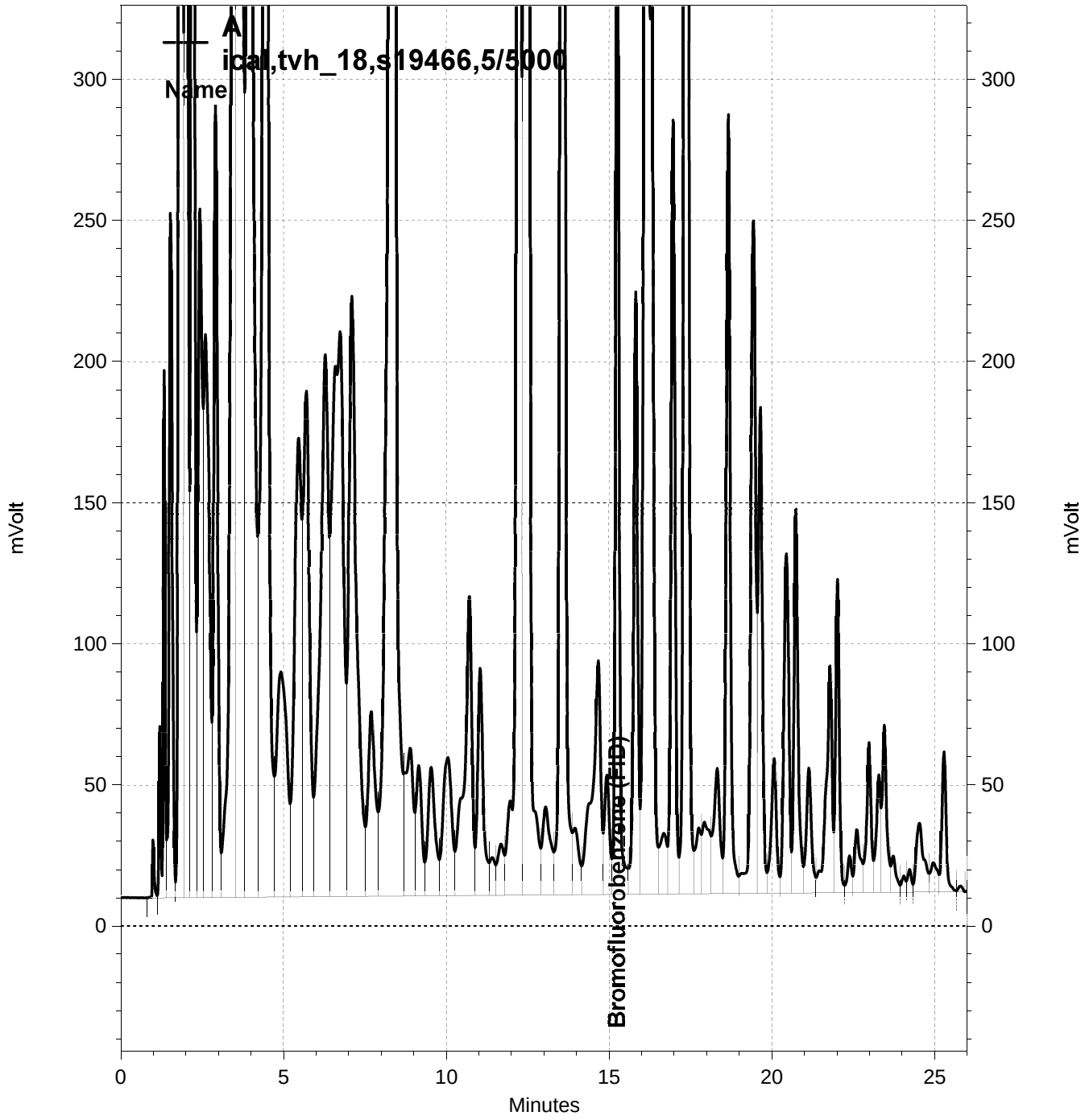


\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-009, A

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq** Sample Name: **ical,tvh_18,s19466,5/5000** Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-009** Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met	Software Version 3.1.7 Run Date: 7/2/2012 10:48:15 PM Analysis Date: 7/3/2012 10:51:10 AM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: {Data Description}

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.250	15.283	2819802	900.000 CAL
GAS:6-8			61518364	0.000 CAL
GAS:6-10			151485136	50000.000 CAL
GAS:8-10			89966784	0.000 CAL
GAS:6-12			177499904	50000.000 CAL
GAS:7-12			144472288	50000.000 CAL

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.033		0.000 BDL
Benzene	4.483	4.467	3810794	0.000 CAL
Toluene	8.350	8.317	32052245	0.000 CAL
Ethylbenzene	12.233	12.217	6276287	0.000 CAL
m,p-Xylenes	12.467	12.433	25452148	0.000 CAL
o-Xylene	13.567	13.550	9400672	0.000 CAL
Bromofluorobenzene (PID)	15.250	15.233	6162817	0.000 CAL

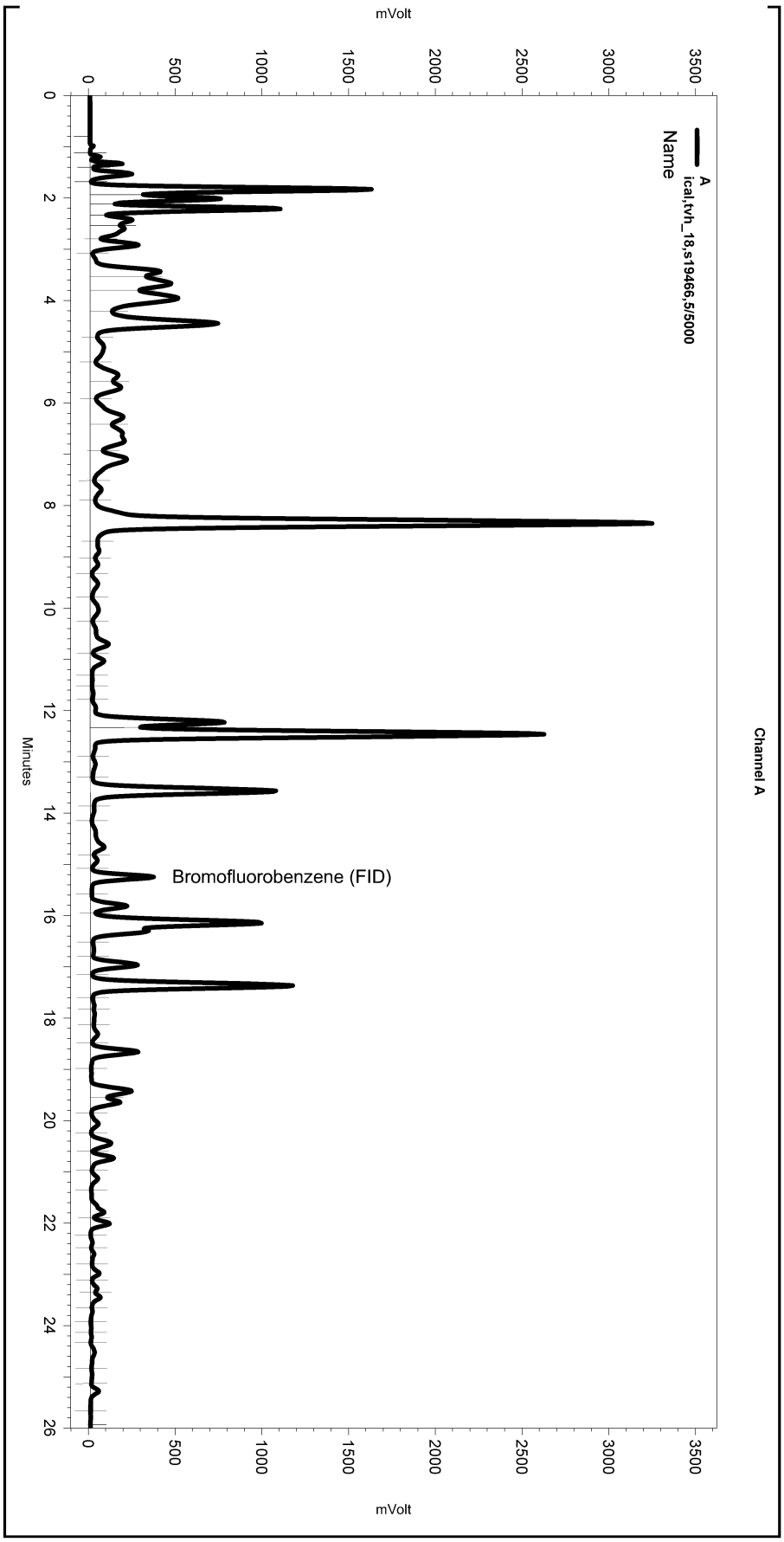
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.895		0.000 BDL
Benzene	3.366	3.350	437607	0.000 CAL
Toluene	6.816	6.766	12135743	0.000 CAL
Ethylbenzene	10.449	10.433	3918168	0.000 CAL
m,p-Xylenes	10.833	10.799	11897295	0.000 CAL
o-Xylene	11.666	11.649	5435403	0.000 CAL
Bromofluorobenzene (PID)	12.566	12.549	3748761	0.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq**
Sample Name: **ical,tvh_18,s19466,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-009**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met

Software Version 3.1.7
Run Date: 7/2/2012 10:48:15 PM
Analysis Date: 7/3/2012 10:51:10 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\184-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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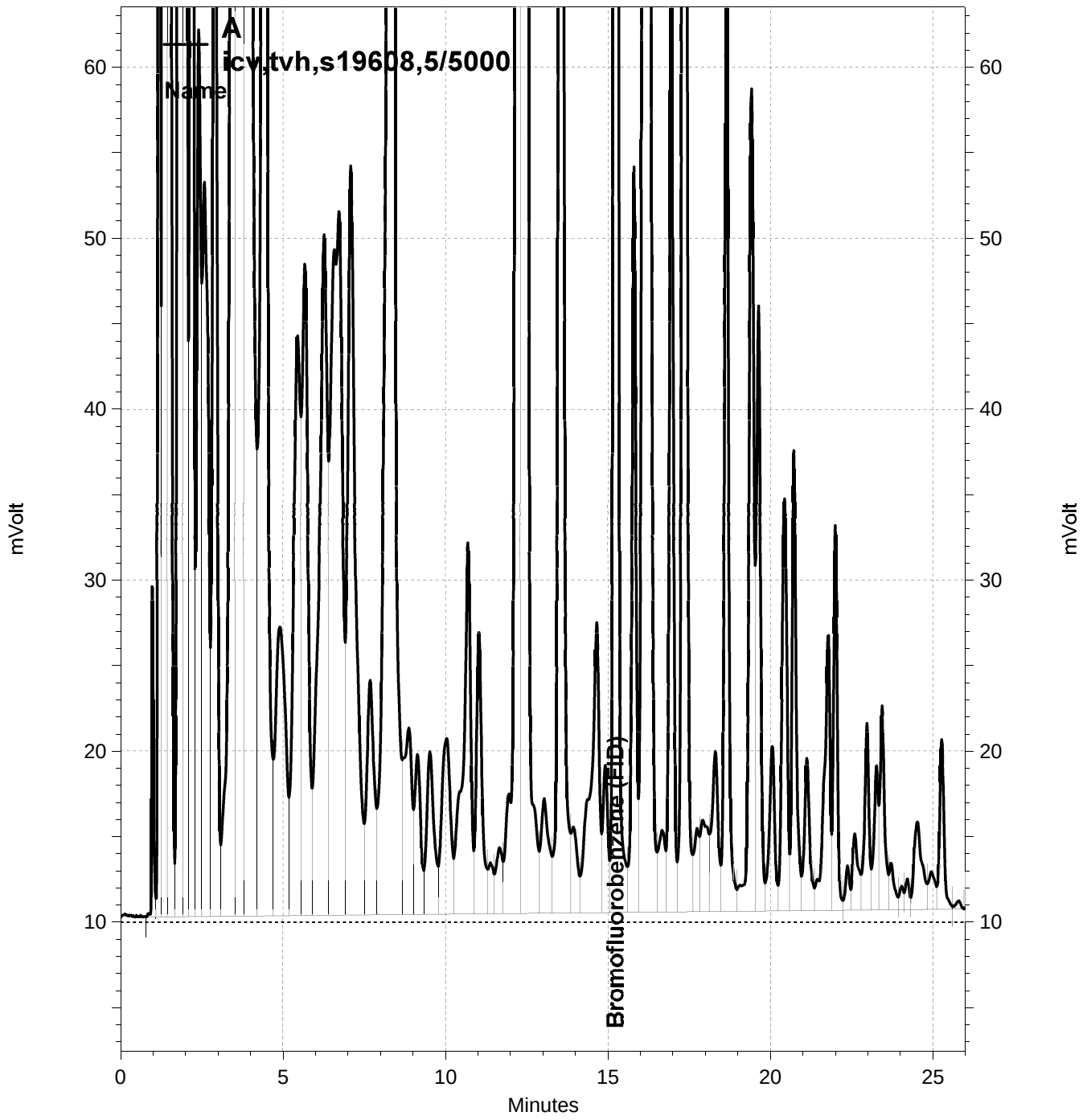

A
icv,tvh,s19608,5/5000
Name
mVolt
mVolt
60
50
40
30
20
10
0
5
10
15
20
25
Minutes
Bromofluorobenzene (FID)
\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-011, A

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq** Sample Name: **icv,tvh,s19608,5/5000** Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-011** Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met	Software Version 3.1.7 Run Date: 7/3/2012 12:05:18 AM Analysis Date: 7/3/2012 10:51:23 AM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: {Data Description}

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.233	15.283	2552624	929.227
GAS:6-8			19797356	0.000
GAS:6-10			32123008	10237.666
GAS:8-10			18621520	0.000
GAS:6-12			37461204	10156.830
GAS:7-12			29918524	10049.105

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.033		0.000 BDL
Benzene	4.450	4.467	468642	65.614
Toluene	8.317	8.317	7006051	897.910
Ethylbenzene	12.217	12.217	1310520	190.116
m,p-Xylenes	12.433	12.433	5563585	664.373
o-Xylene	13.550	13.550	1981912	274.720
Bromofluorobenzene (PID)	15.233	15.233	5931958	1010.185

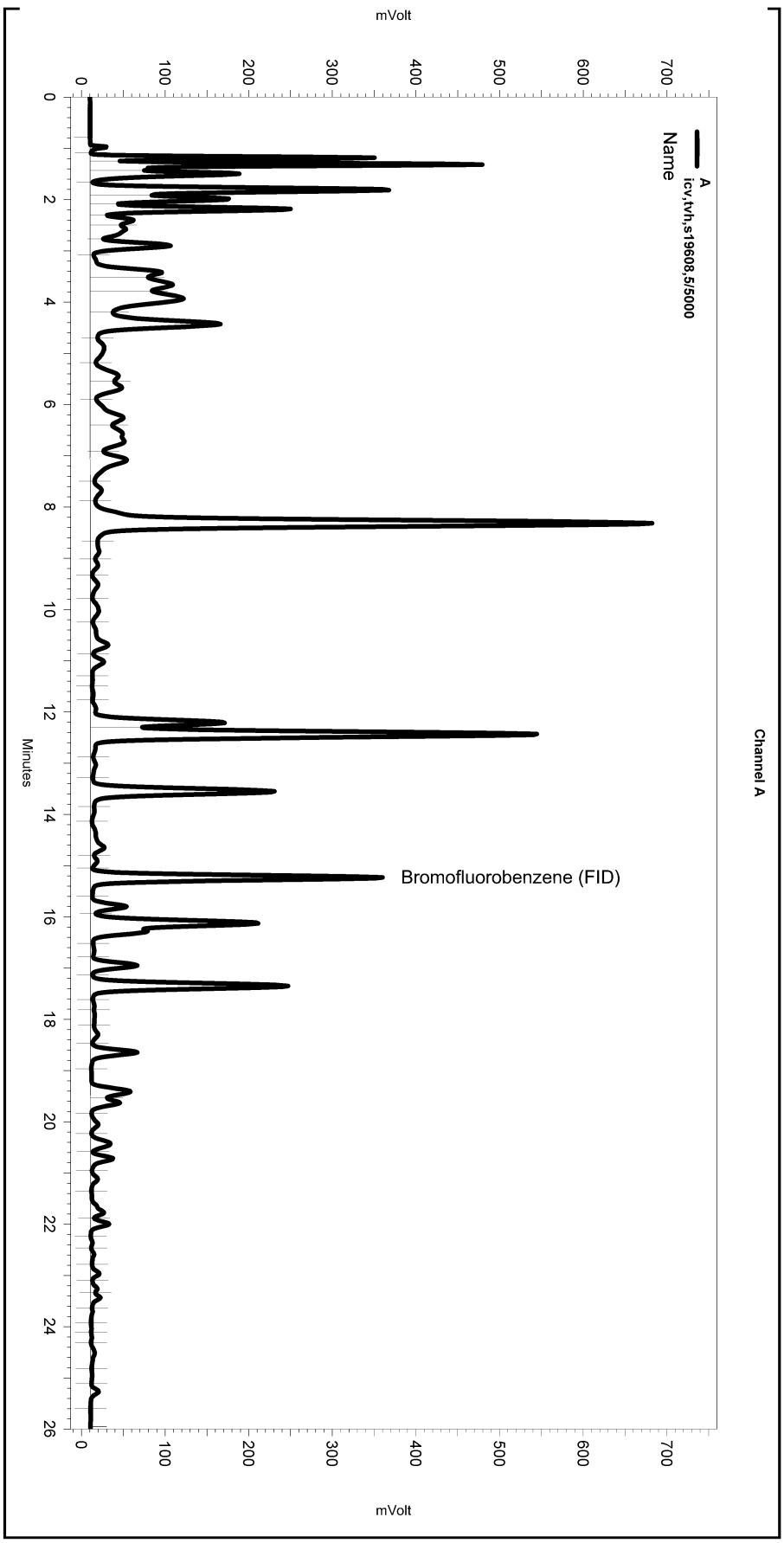
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.895		0.000 BDL
Benzene	3.350	3.350	101489	82.851
Toluene	6.766	6.766	4266788	992.271
Ethylbenzene	10.433	10.433	836801	209.500
m,p-Xylenes	10.799	10.799	3329642	701.195
o-Xylene	11.649	11.649	1190247	287.656
Bromofluorobenzene (PID)	12.566	12.549	3579691	1060.171

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\184.seq**
Sample Name: **icv,tvh,s19608,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-011**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe184.met

Software Version 3.1.7
Run Date: 7/3/2012 12:05:18 AM
Analysis Date: 7/3/2012 10:51:23 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\184-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

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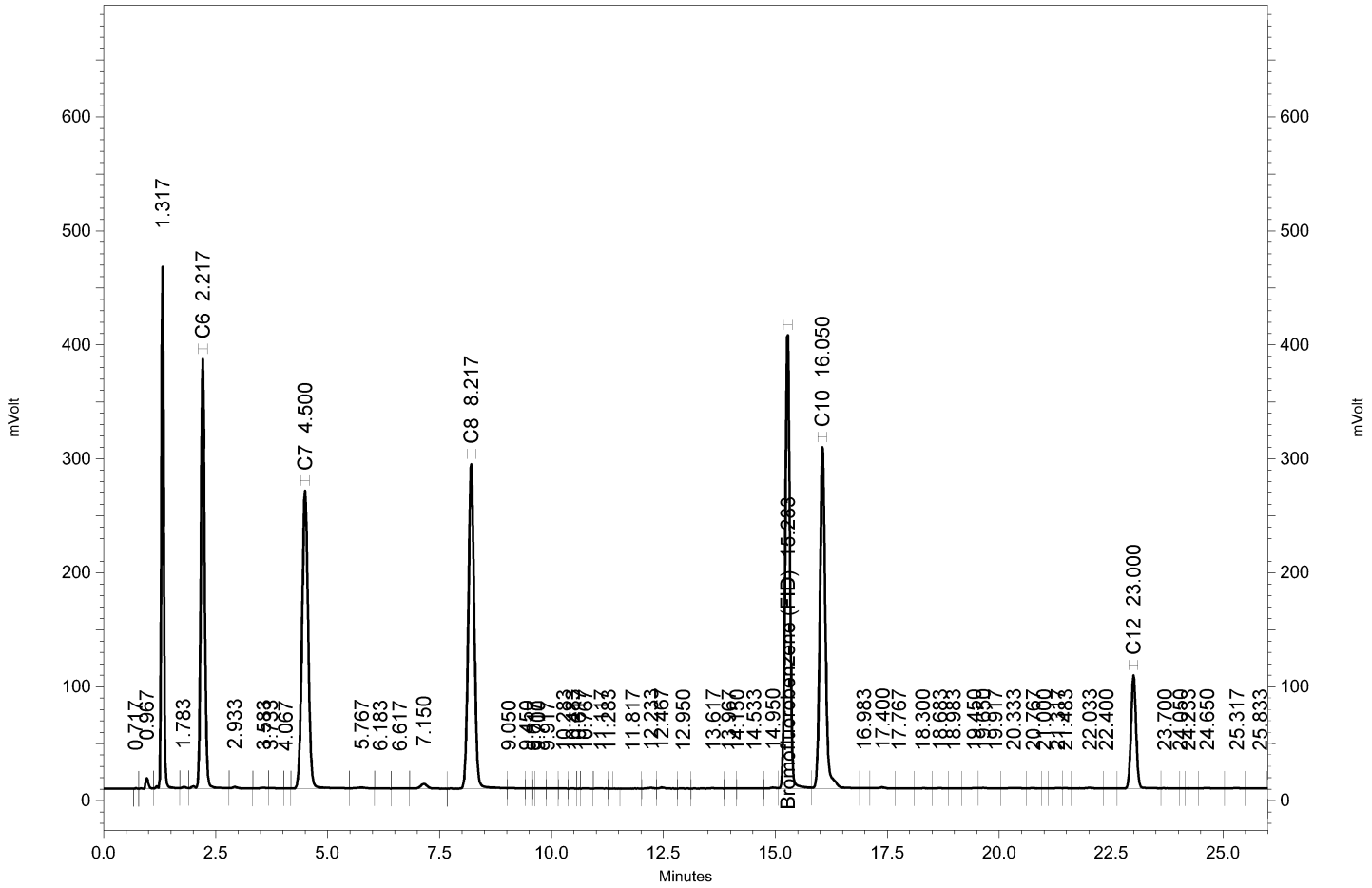
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\184-014**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\CM184.met

Software Version 3.1.7
Run Date: 7/3/2012 8:30:10 AM
Analysis Date: 7/3/2012 10:47:06 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}

GC07
TVH Instrument Results
Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ppm)
C6	2.217	2.217	2311456	0.000
C7	4.500	4.500	2545208	0.000
C8	8.217	8.217	2676732	0.000
Bromofluorobenzene (FID)	15.283	15.283	2901448	0.000
C10	16.050	16.050	2594015	0.000
C12	23.000	23.000	788594	0.000



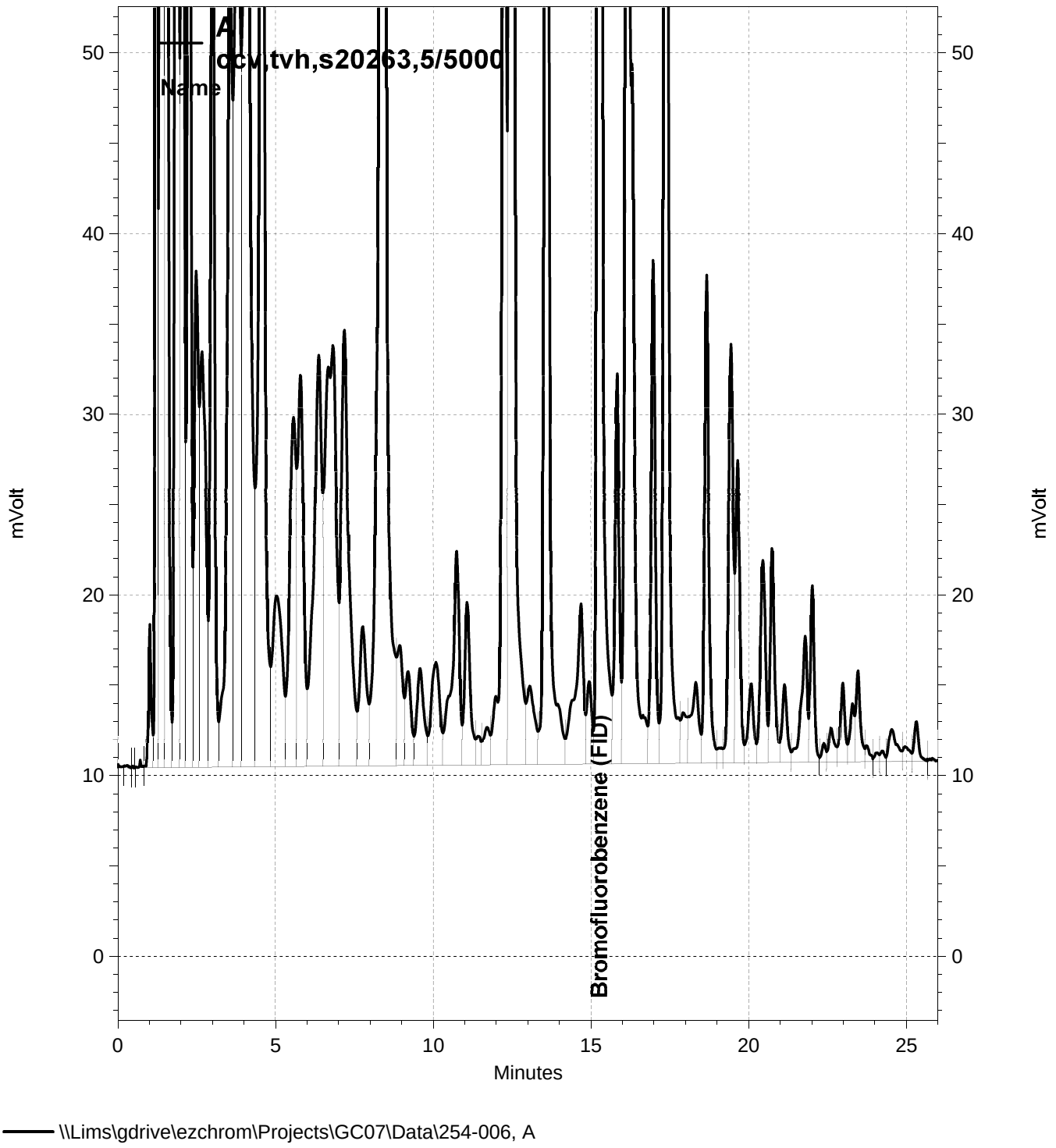
Continuing Calibration Verification Raw Data

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCVOA Water
EPA 8015D

Inst : GC07 Run Name : TVH IDF : 1.0
Seqnum : 322366282006.1 File : 254_006 Time : 10-SEP-2012 14:05
Cal : 322265478001 Caldate : 02-JUL-2012
Standards: S20263 (2000X), S20276 (5000X)

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	2977.2	3199.9	5000	5374	ng	7	20	
Bromofluorobenzene (FID)	A	2747.0	2760.2	900.0	904.3	ng	0	20	

Analyst: DJA Date: 09/11/12 Reviewer: EAH Date: 09/11/12



\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-006, A

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ccv,tvh,s20263,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-006**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 2:05:11 PM
Analysis Date: 9/10/2012 2:33:51 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.267	15.283	2484182	904.312
GAS:6-8			7511342	0.000
GAS:6-10			17561834	5596.992
GAS:8-10			10050492	0.000
GAS:6-12			20214066	5480.624
GAS:7-12			15999330	5373.893

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.100		0.000 BDL
Benzene	4.583	4.567	40097	90.072
Toluene	8.400	8.383	266649	612.664
Ethylbenzene	12.250	12.250	49522	138.827
m,p-Xylenes	12.483	12.467	219241	443.831
o-Xylene	13.583	13.583	76859	198.559
Bromofluorobenzene (PID)	15.267	15.250	405851	1192.303

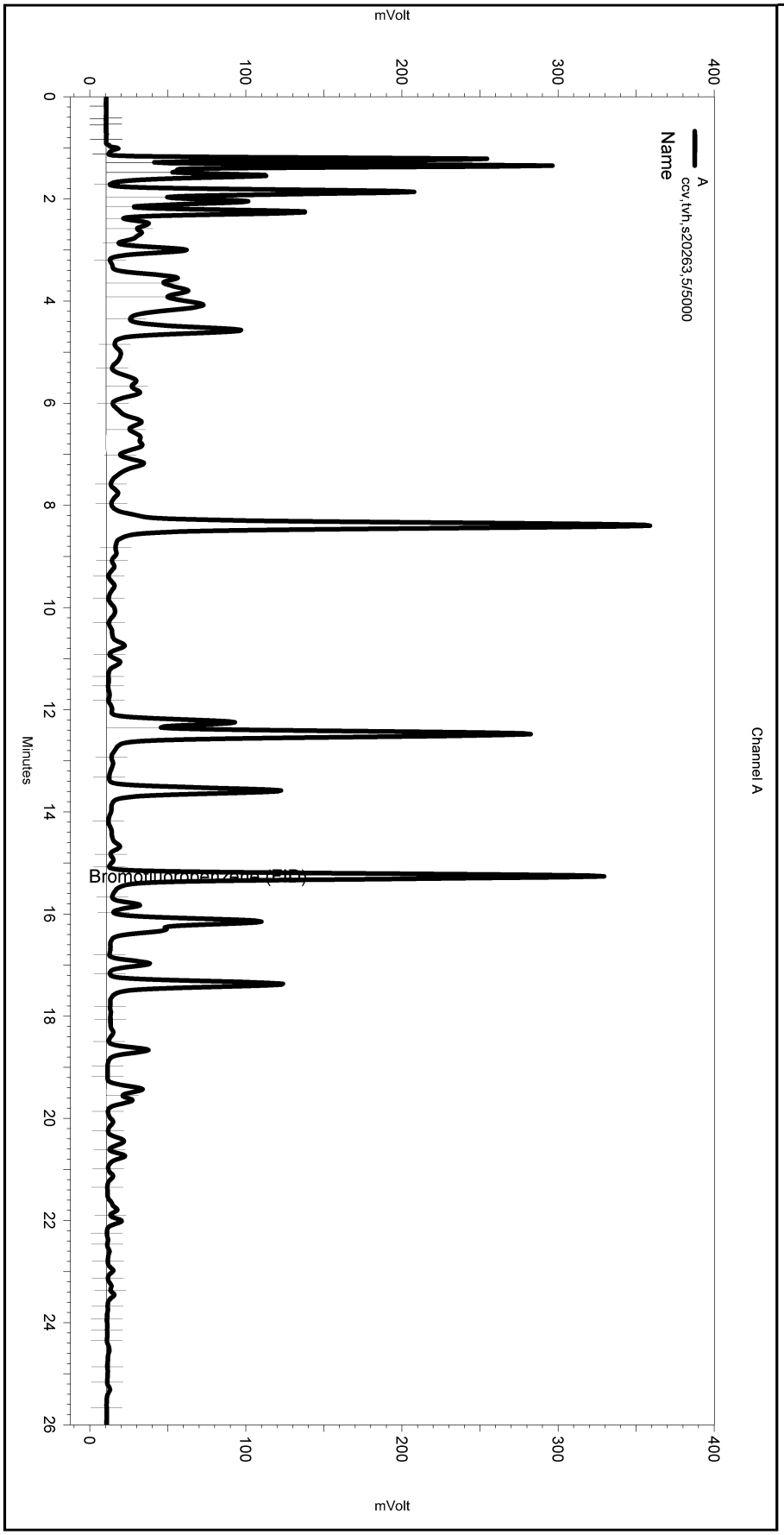
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.950		0.000 BDL
Benzene	3.450	3.450	22235	96.176
Toluene	6.850	6.833	162788	769.558
Ethylbenzene	10.483	10.483	27587	154.049
m,p-Xylenes	10.833	10.833	124048	549.464
o-Xylene	11.683	11.683	43333	224.237
Bromofluorobenzene (PID)	12.583	12.583	247126	1256.091

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ccv,tvh,s20263,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-006**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 2:05:11 PM
Analysis Date: 9/10/2012 2:33:51 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\254-006_1A52.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 GCVOA Water
EPA 8015D

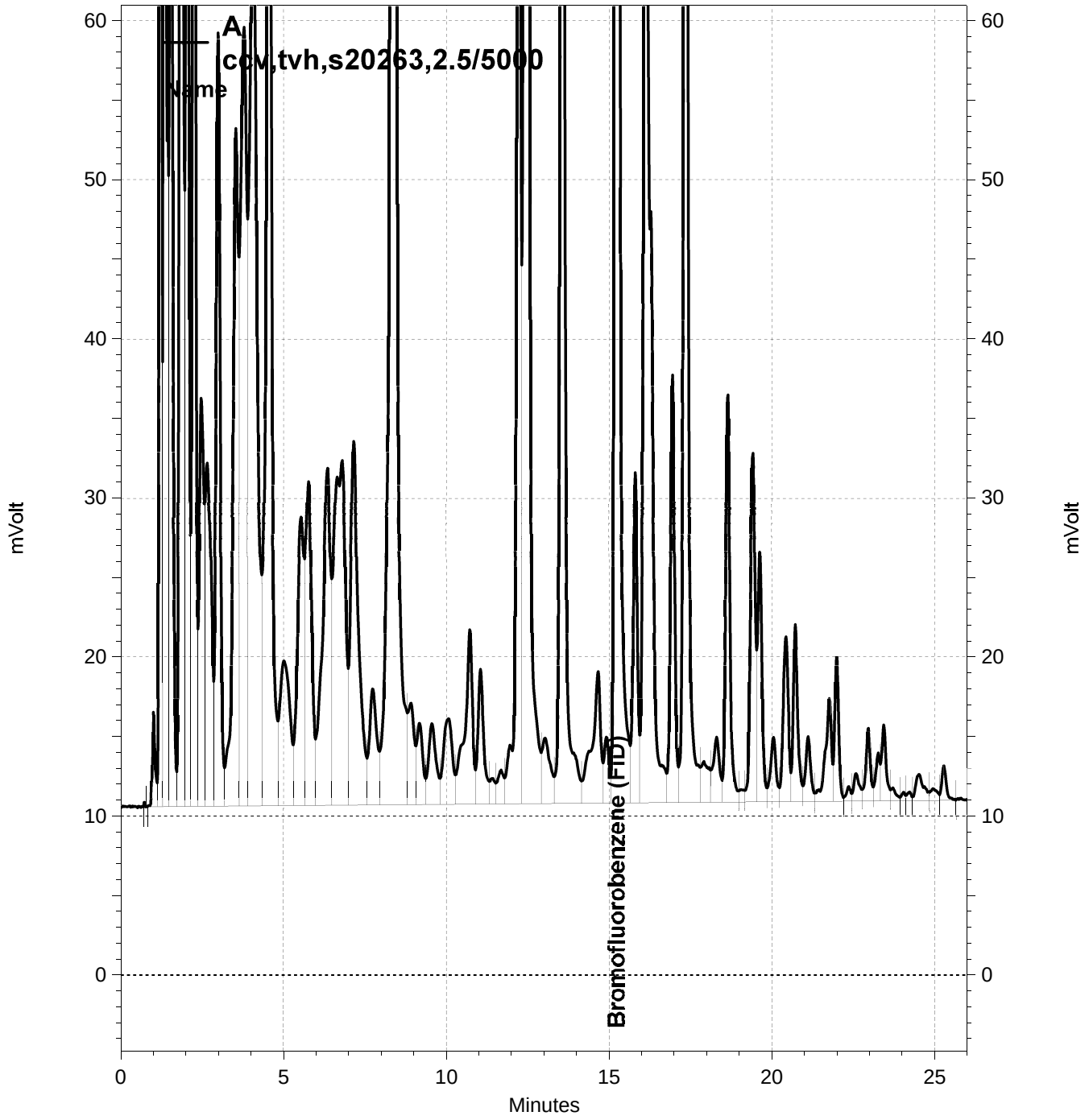
Inst : GC07 Run Name : QC655589 IDF : 1.0
Seqnum : 322366282009.3 File : 254_009 Time : 10-SEP-2012 17:34
Cal : 322265478001 Caldate : 02-JUL-2012
Standards: S20263 (2000X), S20276 (5000X)

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	2977.2	3057.2	5000	5134	ng	3	20	u
Bromofluorobenzene (FID)	A	2747.0	2712.2	900.0	888.6	ng	-1	20	u

DJA 09/11/12 : ccv/lcs,qc655589,190357 [general version]

Analyst: DJA Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use



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Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ccv,tvh,s20263,2.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-009**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 5:34:43 PM
Analysis Date: 9/10/2012 6:03:27 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.233	15.283	2441014	888.598
GAS:6-8			7029309	0.000
GAS:6-10			16700278	5322.412
GAS:8-10			9670969	0.000
GAS:6-12			19204100	5206.793
GAS:7-12			15285966	5134.287

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.100		0.000 BDL
Benzene	4.567	4.567	38366	86.184
Toluene	8.367	8.383	245279	563.563
Ethylbenzene	12.233	12.250	42087	117.984
m,p-Xylenes	12.450	12.467	201125	407.157
o-Xylene	13.567	13.583	71409	184.479
Bromofluorobenzene (PID)	15.233	15.250	374123	1099.093

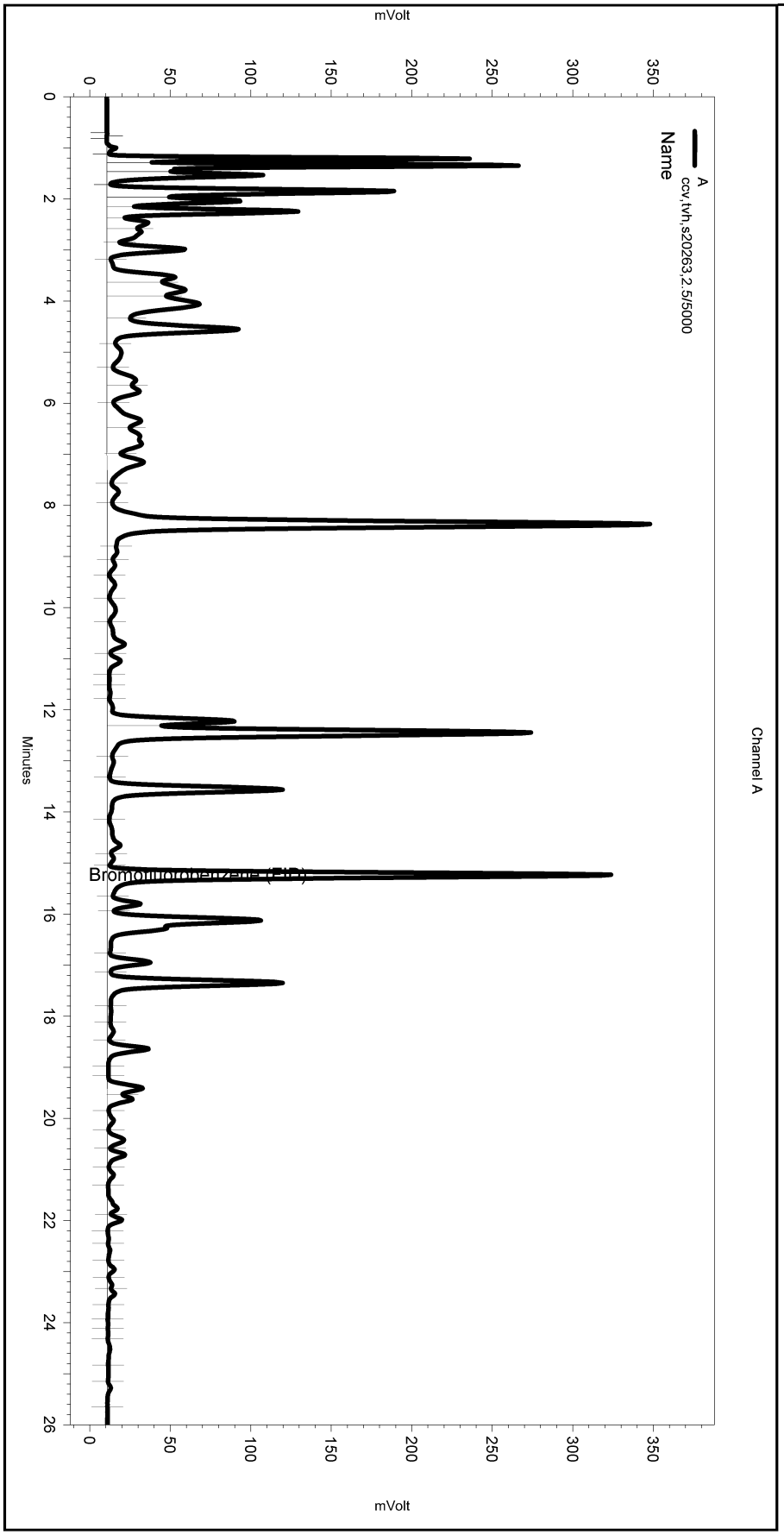
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.950		0.000 BDL
Benzene	3.450	3.450	20884	90.332
Toluene	6.833	6.833	148664	702.789
Ethylbenzene	10.466	10.483	25184	140.630
m,p-Xylenes	10.816	10.833	112991	500.488
o-Xylene	11.683	11.683	40896	211.626
Bromofluorobenzene (PID)	12.583	12.583	228769	1162.786

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ccv,tvh,s20263,2.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-009**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/10/2012 5:34:43 PM
Analysis Date: 9/10/2012 6:03:27 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\254-009_1A55.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

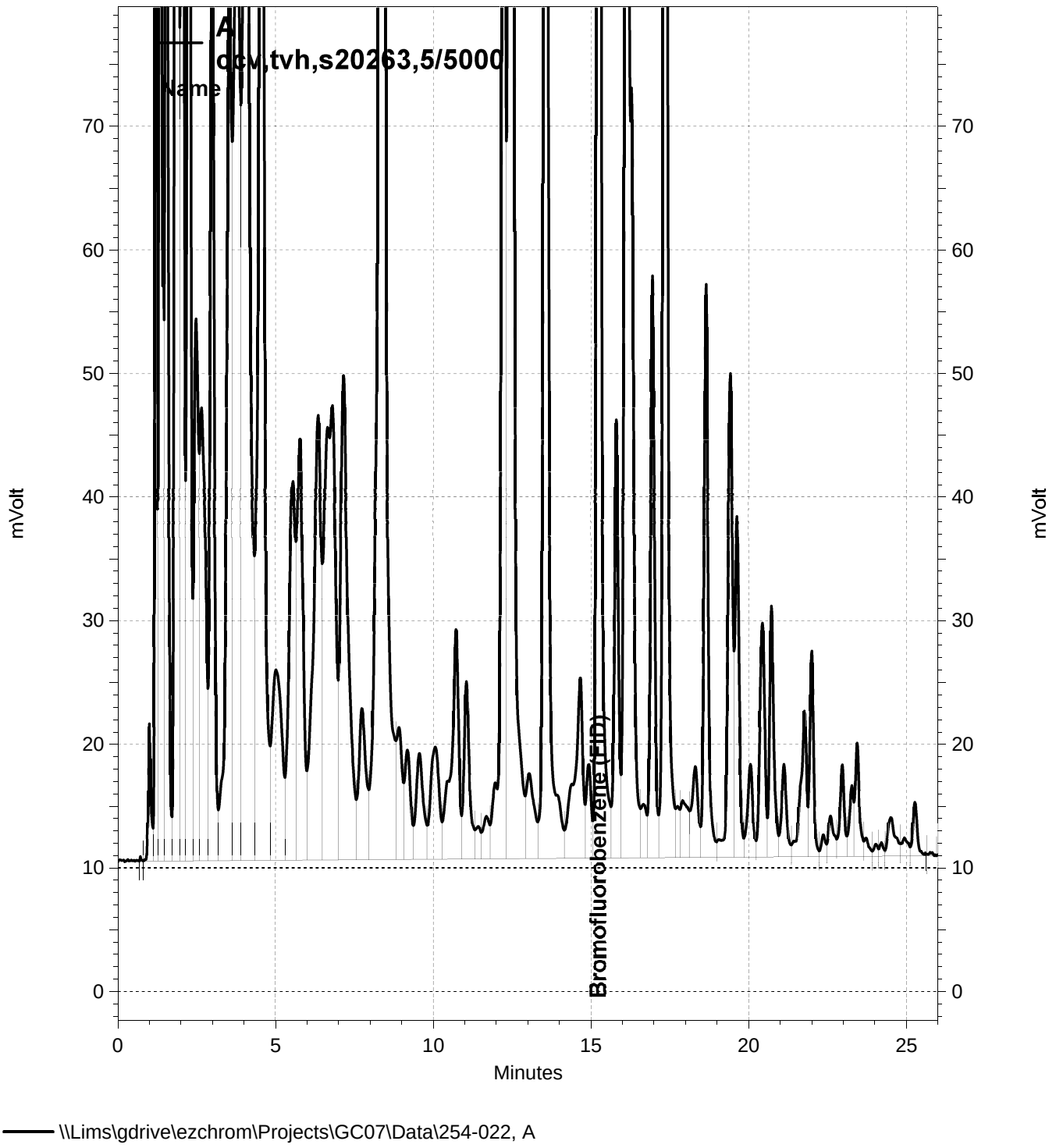
None

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCVOA Water
EPA 8015D

Inst : GC07 Run Name : TVH IDF : 1.0
Seqnum : 322366282022.1 File : 254_022 Time : 11-SEP-2012 03:16
Cal : 322265478001 Caldate : 02-JUL-2012
Standards: S20263 (1000X), S20276 (5000X)

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	2977.2	2629.8	10000	8833	ng	-12	20	
Bromofluorobenzene (FID)	A	2747.0	2615.4	900.0	856.9	ng	-5	20	

Analyst: DJA Date: 09/11/12 Reviewer: EAH Date: 09/11/12



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Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ccv,tvh,s20263,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-022**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/11/2012 3:16:35 AM
Analysis Date: 9/11/2012 3:45:14 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}

GC07

TVH Instrument Results

Channel A: RTX-502.2 FID

A Results

Name	RT	Exp RT	Area	Concentration (ng)
Bromofluorobenzene (FID)	15.233	15.283	2353844	856.865
GAS:6-8			11931315	0.000
GAS:6-10			28470968	9073.754
GAS:8-10			16539652	0.000
GAS:6-12			32915646	8924.394
GAS:7-12			26297754	8832.950

BTXE Instrument Results

Channel B: RTX-502.2 PID

B Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		2.100		0.000 BDL
Benzene	4.567	4.567	69730	156.639
Toluene	8.367	8.383	463005	1063.819
Ethylbenzene	12.233	12.250	81488	228.439
m,p-Xylenes	12.450	12.467	375336	759.829
o-Xylene	13.567	13.583	132867	343.251
Bromofluorobenzene (PID)	15.233	15.250	397235	1166.991

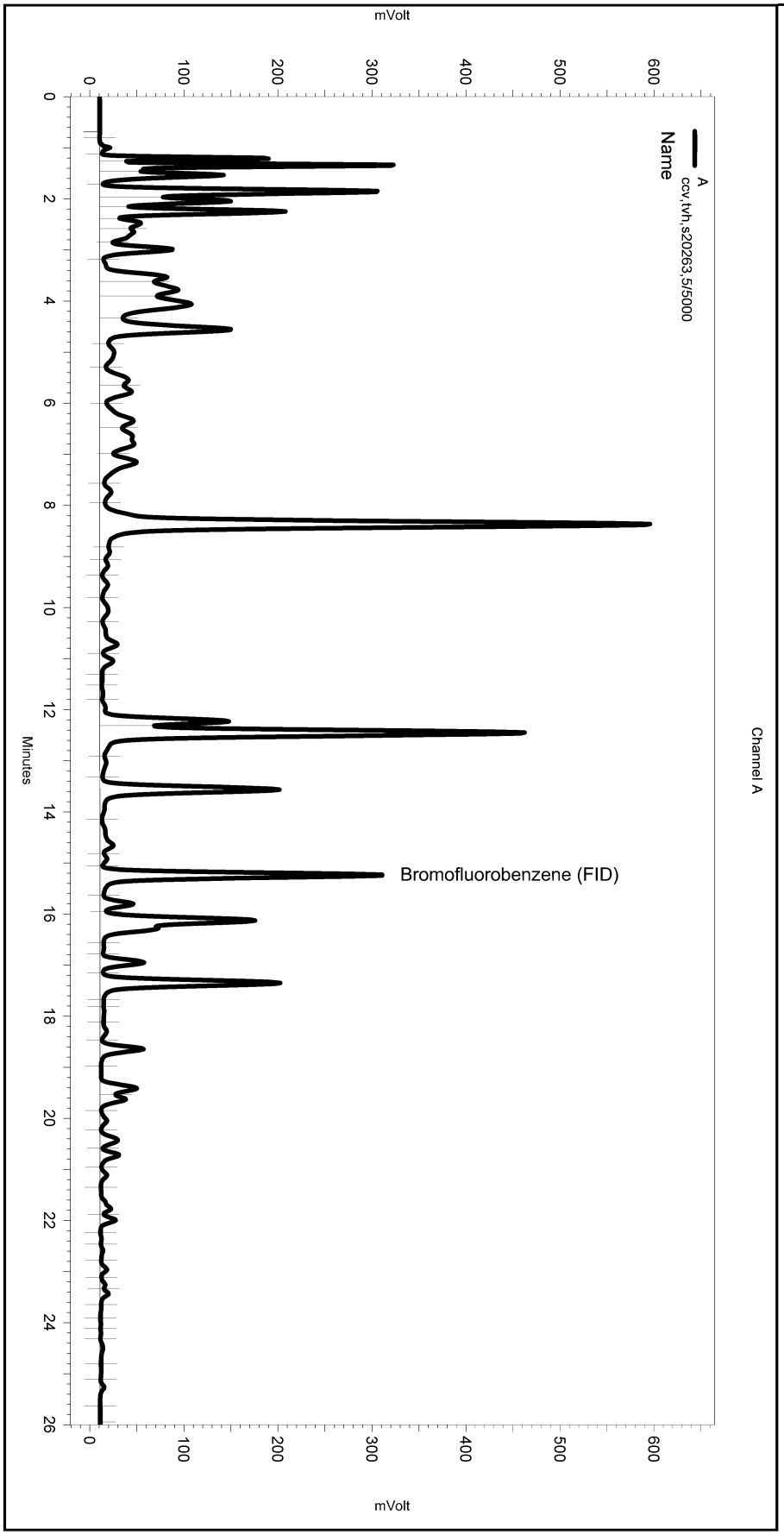
Channel C: RTX-1 PID

C Results

Name	RT	Exp RT	Area	Concentration (ng)
MTBE		1.950		0.000 BDL
Benzene	3.450	3.450	40890	176.867
Toluene	6.833	6.833	288286	1362.833
Ethylbenzene	10.466	10.483	49837	278.295
m,p-Xylenes	10.816	10.833	217962	965.451
o-Xylene	11.683	11.683	80290	415.480
Bromofluorobenzene (PID)	12.583	12.583	237273	1206.010

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\254.seq**
Sample Name: **ccv,tvh,s20263,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\254-022**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe251.met

Software Version 3.1.7
Run Date: 9/11/2012 3:16:35 AM
Analysis Date: 9/11/2012 3:45:14 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\254-022_1A62.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239403
ANALYTICAL REPORT
TPH-Extractables by GC

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
FB.09042012	239403-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
TPH-EXTRACTABLES BY GC (EPA 8015D)

Laboratory number:	**239403**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/04/12**
Samples Received:	**09/04/12**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 09/04/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015D):

Diesel C10-C24 was detected between the MDL and the RL in the method blank for batch 190233; this analyte was not detected in the sample at or above the RL.

No other analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 23403

Chain of Custody # _____

Project No: CA0007611.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: E Manton and D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None
1	EX36B116D.2	04/04/12	1150		X			1					X
2	EX36B116A.2	04/04/12	1155		X			1					X
3	EX36B116B.2	04/04/12	1140		X			1					X
4	EX36B116C.2	04/04/12	1200		X			1					X
5	EX36B015A.2	04/04/12	1250		X			1					X
6	EX36B163A.2	04/04/12	1315		X			2					X
7	FB.090420120	04/04/12	1455	X				9	3		1		5
8	EB.090420120	04/04/12	1505	X				3			1		2
	Temp Blank												

ANALYTICAL REQUEST

Big(2-Ethylhexyl)phthlate by 8270C	Copper by EPA 6010C	Mercury by EPA 7471B	Alpha-BHC by EPA 8081B	PCBs by 8082	TPHd by 8015	TPHg by 8015	SVOCs by 8270	Pesticides by 8081	Metals by 6010/7174
X									
X									
X									
X									
	X	X							
	X	X	X						
				X	X	X	X	X	X
							X	X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

RECEIVED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239403 Date Received 9/4/12 Number of coolers 1
Client ARCADIS Project CA000761.0001

Date Opened 9/4/12 By (print) EL (sign) [signature]
Date Logged in ~~EL~~ 9/6/12 By (print) ~~EL~~ JG (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? (YES) NO N/A
17. Did you document your preservative check? (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239403

Sample	pH: <2	>9	>12	Other
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
-008a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: EL
Date: 9/6/12

Results & QC Summary

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8015D
Field ID:	FB.09042012	Batch#:	190233
Matrix:	Water	Sampled:	09/04/12
Units:	ug/L	Received:	09/04/12
Diln Fac:	1.000	Prepared:	09/06/12

Type: SAMPLE Analyzed: 09/07/12
Lab ID: 239403-007

Analyte	Result	LOQ	DL
Diesel C10-C24	16 J	52	10
Motor Oil C24-C36	100 U	310	66

Surrogate	%REC	Limits
o-Terphenyl	89	61-134

Type: BLANK Analyzed: 09/10/12
Lab ID: QC655032

Analyte	Result	LOQ	DL
Diesel C10-C24	30 J	50	16
Motor Oil C24-C36	100 U	300	84

Surrogate	%REC	Limits
o-Terphenyl	103	61-134

J= Estimated value
U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8015D
Matrix:	Water	Batch#:	190233
Units:	ug/L	Prepared:	09/06/12
Diln Fac:	1.000	Analyzed:	09/07/12

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC655033

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,142	86	60-120

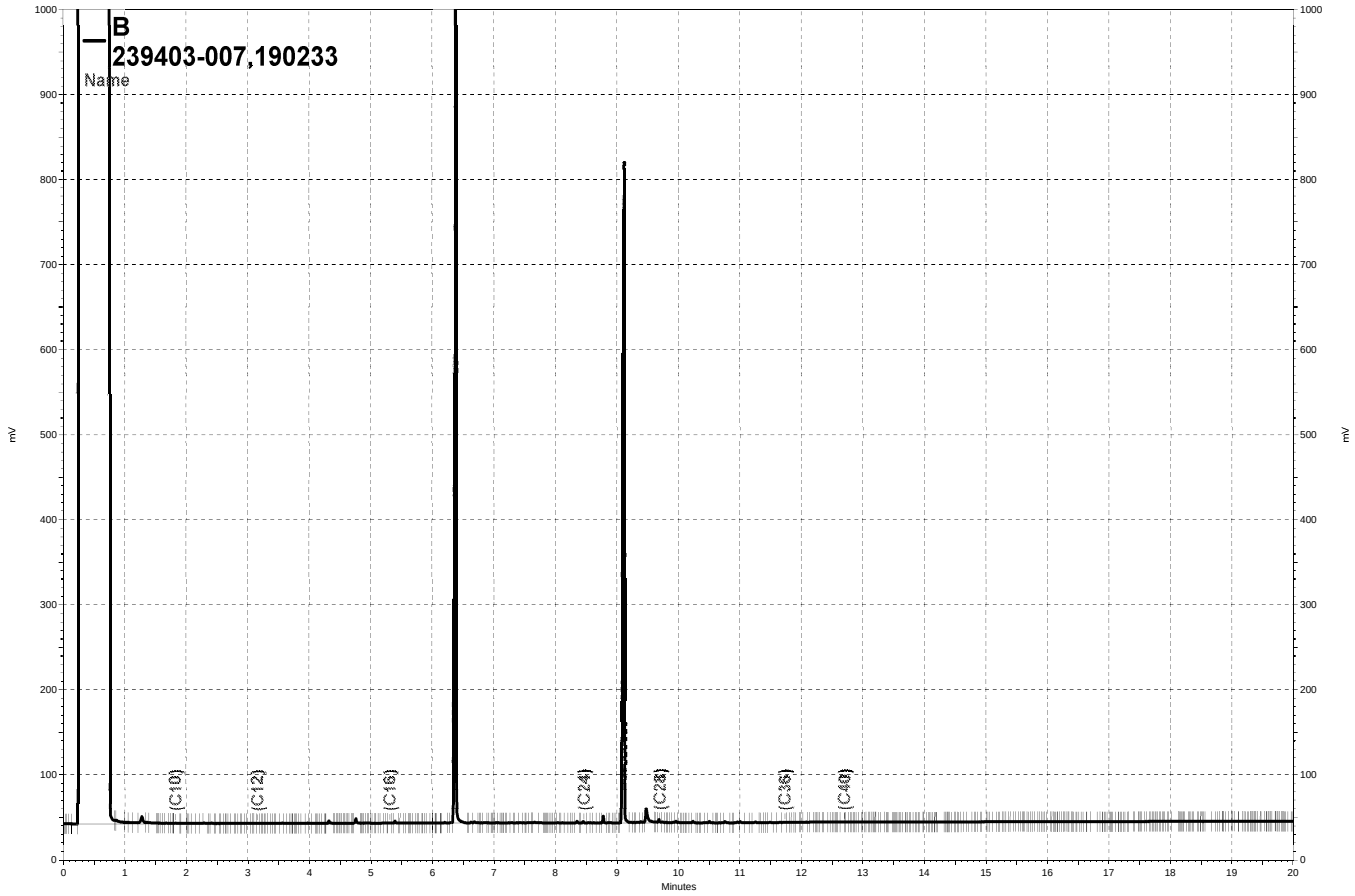
Surrogate	%REC	Limits
o-Terphenyl	118	61-134

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC655034

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,972	79	60-120	8	35

Surrogate	%REC	Limits
o-Terphenyl	106	61-134

RPD= Relative Percent Difference



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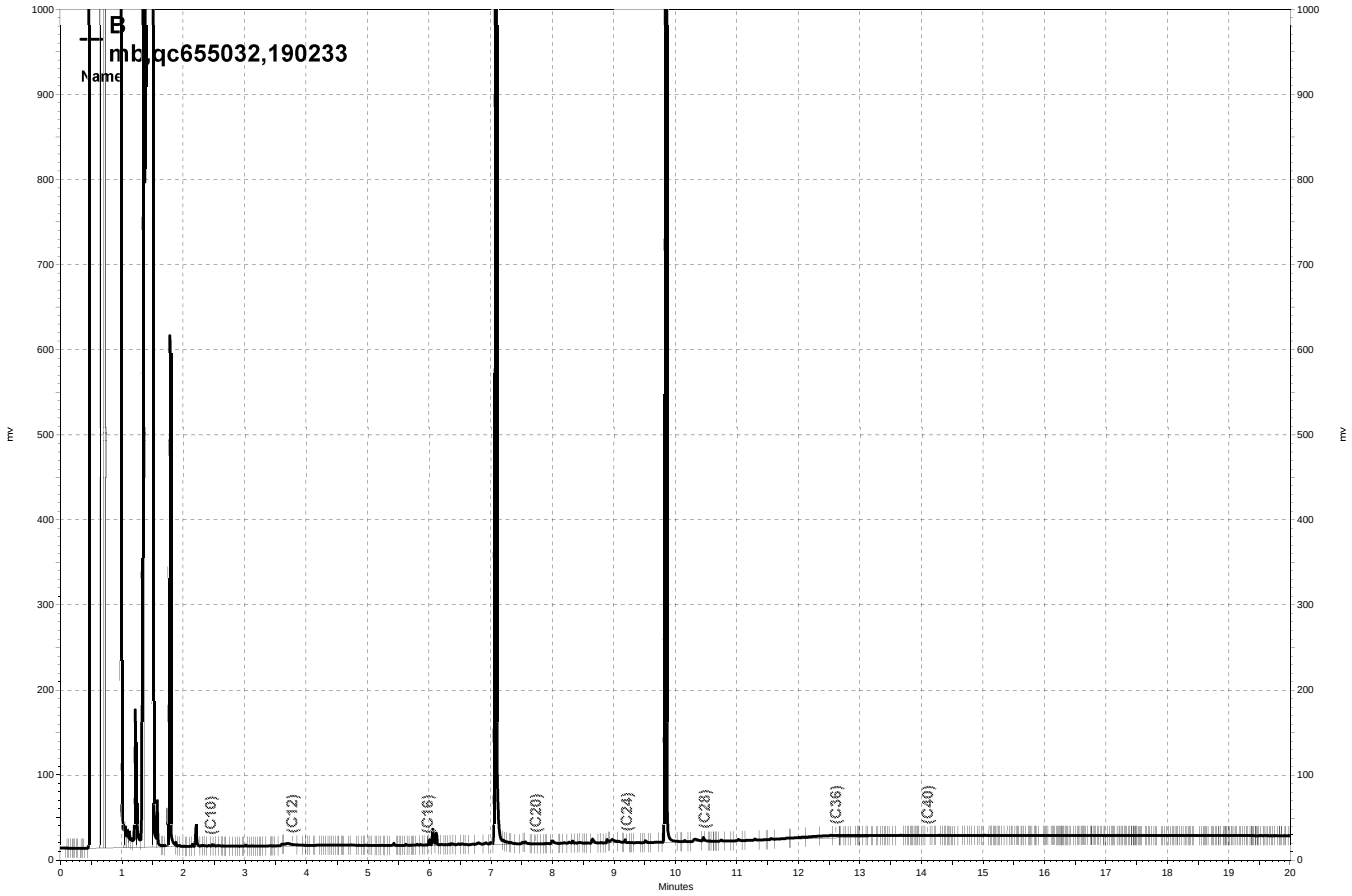

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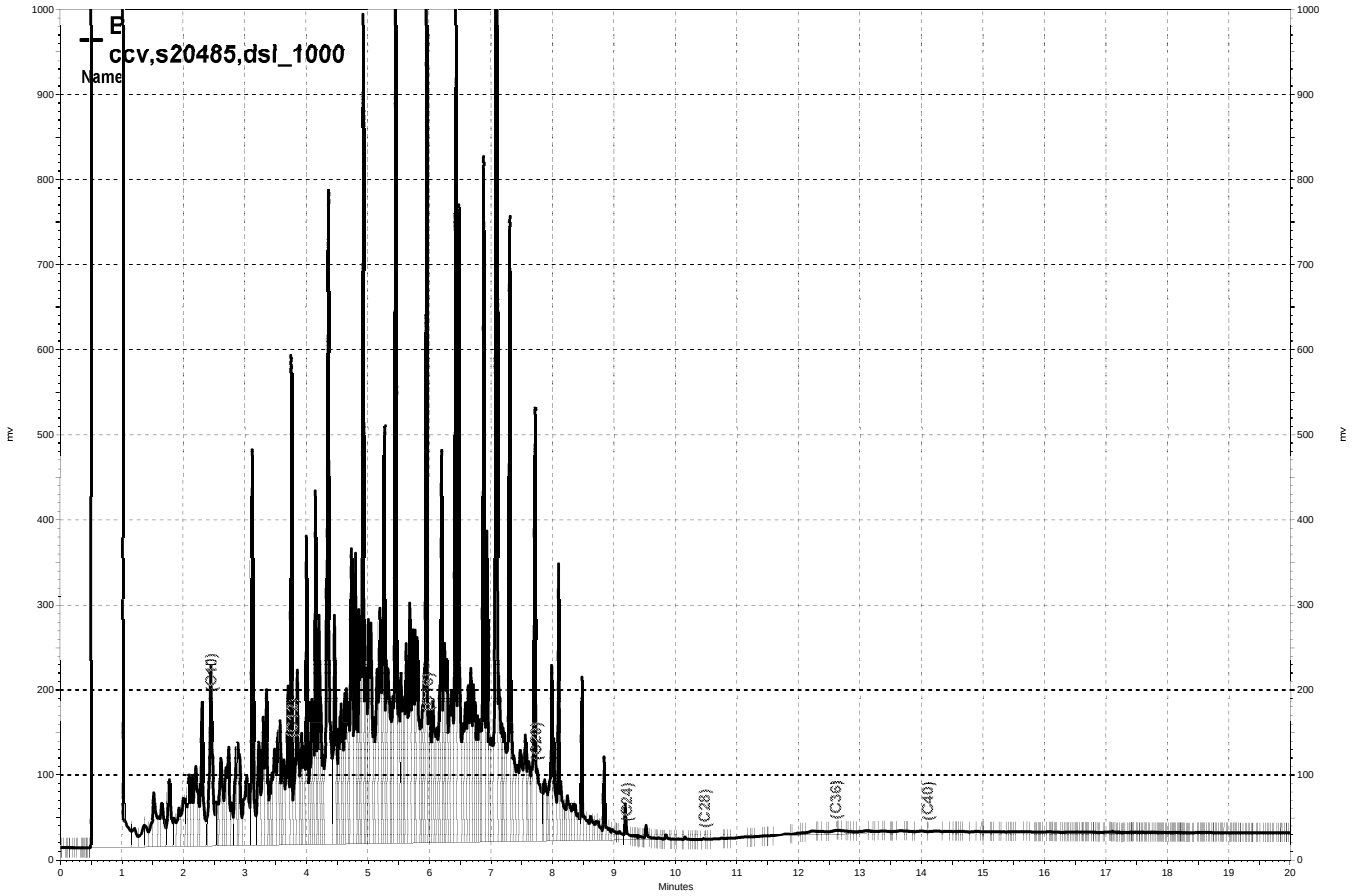

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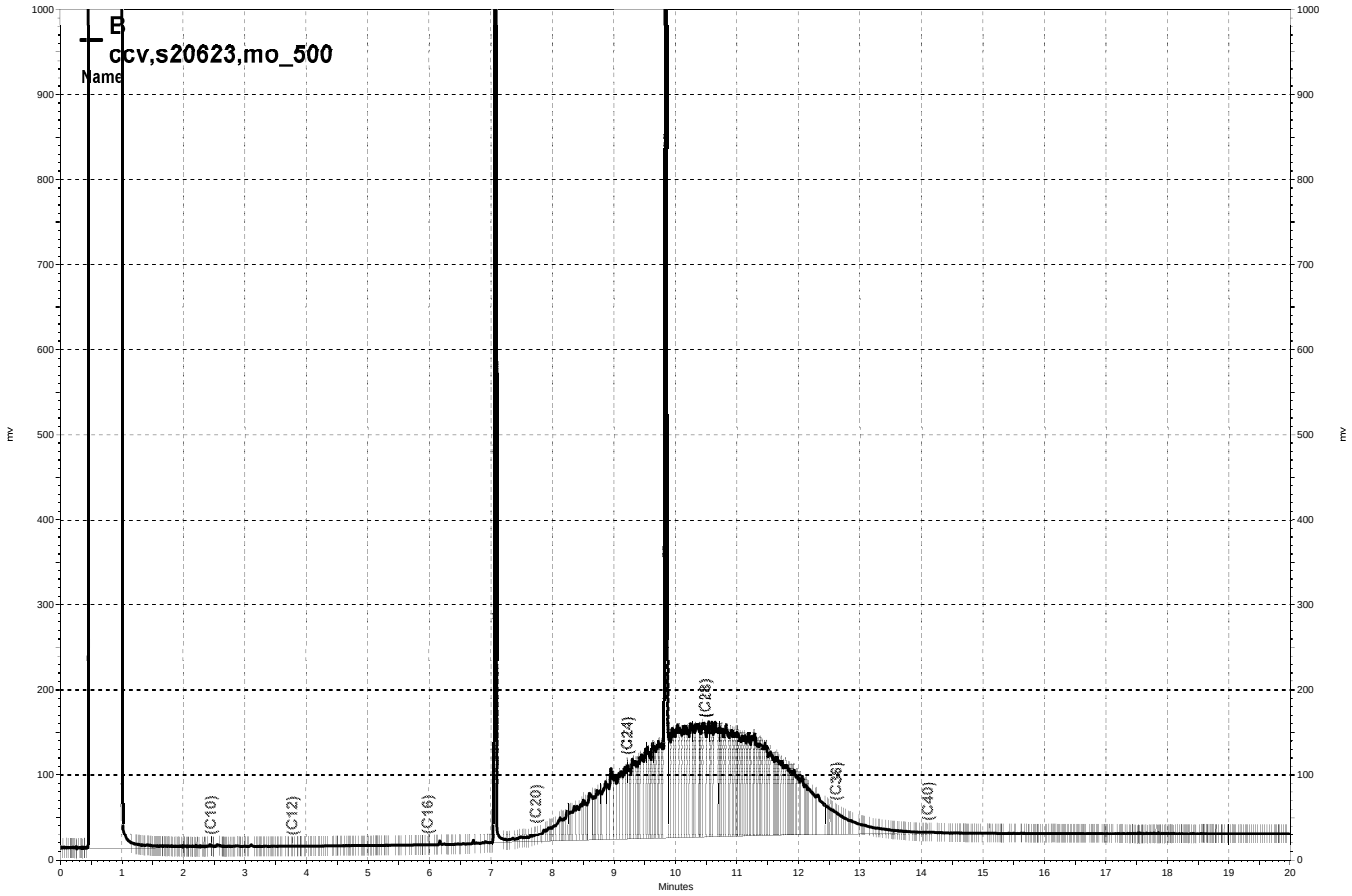

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CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC14B
Calnum : 222229527001
Units : mg/L

Name : OtpHex_159
Date : 07-JUN-2012 16:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	159_008	222229527008	HEX OTP_5	07-JUN-2012 16:14	S19347
L2	159_009	222229527009	HEX OTP_10	07-JUN-2012 16:42	S19348
L3	159_010	222229527010	HEX OTP_25	07-JUN-2012 17:10	S19349
L4	159_011	222229527011	HEX OTP_50	07-JUN-2012 17:38	S19350
L5	159_012	222229527012	HEX OTP_100	07-JUN-2012 18:05	S19351
L6	159_013	222229527013	HEX OTP_200	07-JUN-2012 18:33	S19352

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	B	33075	33093	32862	32539	33233	33768	AVRG		3.02E-5		33095	1	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	B	5.0000	0	10.000	0	25.000	-1	50.000	-2	100.00	0	200.00	2

MAC 06/11/12 : Corrected automatically drawn baseline in HEX OTP_25 (159_010).

MAC 06/11/12 : Corrected automatically drawn baseline in HEX OTP_50 (159_011).

MAC 06/11/12 : Corrected automatically drawn baseline in HEX OTP_100 (159_012).

MAC 06/11/12 : Corrected automatically drawn baseline in HEX OTP_200 (159_013).

Analyst: MAC Date: 06/11/12 Reviewer: EAH Date: 06/11/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

222229527001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC14B
Calnum : 222269858001
Units : mg/L

Name : DSL_187
Date : 05-JUL-2012 16:24
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	187_010	222269858010	DSL_10	05-JUL-2012 16:24	S19968
L2	187_011	222269858011	DSL_100	05-JUL-2012 16:51	S19945
L3	187_012	222269858012	DSL_500	05-JUL-2012 17:19	S19946
L4	187_013	222269858013	DSL_1000	05-JUL-2012 17:47	S19947
L5	187_014	222269858014	DSL_5000	05-JUL-2012 18:15	S19943
L6	187_015	222269858015	DSL_7500	05-JUL-2012 18:43	S19948

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C24	B	26729	29007	28272	29033	27717	28315	AVRG		3.55E-5		28179	3	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C24	B	10.000	-5	100.00	3	500.00	0	1000.0	3	5000.0	-2	7500.0	0

Analyst: MAC Date: 07/06/12 Reviewer: EAH Date: 07/06/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

222269858001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 GCSV Water
EPA 8015D

Inst : GC14B Name : DSL_187
Calnum : 222269858001 Cal Date : 05-JUL-2012

ICV 222269858018 (187_018 05-JUL-2012) stds: S20069

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C24	B	500.0	562.4	mg/L	12	20	

Analyst: MAC Date: 07/06/12 Reviewer: EAH Date: 07/06/12

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC14B
Calnum : 222295006001
Units : mg/L

Name : mo_204
Date : 22-JUL-2012 17:05
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	204_004	222295006004	MO_25	22-JUL-2012 17:05	S20089 (2X)
L2	204_005	222295006005	MO_50	22-JUL-2012 17:33	S20089
L3	204_006	222295006006	MO_250	22-JUL-2012 18:00	S19735
L4	204_007	222295006007	MO_500	22-JUL-2012 18:28	S19736
L5	204_008	222295006008	MO_1000	22-JUL-2012 18:56	S19737
L6	204_009	222295006009	MO_2500	22-JUL-2012 19:23	S19738 (2X)
L7	204_010	222295006010	MO_5000	22-JUL-2012 19:51	S19738

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	15878	16412	18522	19748	18978	18064	18739	AVRG		5.54E-5		18049	8	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Motor Oil C24-C36	B	25.000	-12	50.000	-9	250.00	3	500.00	9	1000.0	5	2500.0	0	5000.0	4

MAC 07/23/12 : Corrected automatically drawn baseline in multiple levels.

Analyst: MAC Date: 07/23/12 Reviewer: EAH Date: 07/24/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC15B
Calnum : 162269861001
Units : mg/L

Name : MO_187
Date : 05-JUL-2012 17:13
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	187b013	162269861013	MO_50	05-JUL-2012 17:40	S20089
L2	187b014	162269861014	MO_250	05-JUL-2012 18:08	S19735
L3	187b015	162269861015	MO_500	05-JUL-2012 18:36	S19736
L4	187b016	162269861016	MO_1000	05-JUL-2012 19:03	S19737
L5	187b017	162269861017	MO_2500	05-JUL-2012 19:31	S19738 (2X)
L6	187b018	162269861018	MO_5000	05-JUL-2012 19:59	S19738

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	36632	41825	42396	41873	39738	36092	AVRG		2.52E-5		39759	7	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	50.000	-8	250.00	5	500.00	7	1000.0	5	2500.0	0	5000.0	-9

SFL 07/06/12 : Corrected automatically drawn baseline on all level except MO_1000.

Analyst: SFL Date: 07/06/12 Reviewer: EAH Date: 07/06/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

162269861001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC15B
Calnum : 162276981001
Units : mg/L

Name : DSL_192
Date : 10-JUL-2012 18:17
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	192b013	162276981013	DSL_10	10-JUL-2012 18:17	S19968
L2	192b014	162276981014	DSL_100	10-JUL-2012 18:45	S19945
L3	192b015	162276981015	DSL_500	10-JUL-2012 19:13	S19946
L4	192b016	162276981016	DSL_1000	10-JUL-2012 19:41	S19947
L5	192b017	162276981017	DSL_5000	10-JUL-2012 20:08	S19943
L6	192b018	162276981018	DSL_7500	10-JUL-2012 20:36	S19948

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C24	48271	54425	53540	55563	52940	53037	AVRG		1.89E-5		52963	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C24	10.000	-9	100.00	3	500.00	1	1000.0	5	5000.0	0	7500.0	0

JDG 07/11/12 : Manually integrated fuel hump in multiple levels.

JDG 07/12/12 : RT has been fixed.

Analyst: JDG Date: 07/12/12 Reviewer: EAH Date: 07/12/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 GCSV Water
EPA 8015D

Inst : GC15B Name : DSL_192
Calnum : 162276981001 Cal Date : 10-JUL-2012

ICV 162276981020 (192b020 10-JUL-2012) stds: S19823

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C24	500.0	496.5	mg/L	-1	20	

Analyst: JDG Date: 07/11/12 Reviewer: EAH Date: 07/12/12

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC15B
Calnum : 162281280001
Units : mg/L

Name : OTP-HEX_195
Date : 13-JUL-2012 17:42
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	195b011	162281280011	HEXOTP_5	13-JUL-2012 17:42	S19347
L2	195b012	162281280012	HEXOTP_10	13-JUL-2012 18:09	S19348
L3	195b013	162281280013	HEXOTP_25	13-JUL-2012 18:37	S19349
L4	195b014	162281280014	HEXOTP_50	13-JUL-2012 19:04	S19350
L5	195b015	162281280015	HEXOTP_100	13-JUL-2012 19:32	S19351
L6	195b016	162281280016	HEXOTP_200	13-JUL-2012 20:00	S19352

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	62022	61944	61801	62655	63080	61712	AVRG		1.61E-5		62202	1	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.0000	0	10.000	0	25.000	-1	50.000	1	100.00	1	200.00	-1

JDG 07/16/12 : Corrected automatically drawn baseline in multiple levels.

Analyst: JDG Date: 07/16/12 Reviewer: EAH Date: 07/16/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC27A
Calnum : 972285785002
Units : mg/L

Name : dsl_198
Date : 16-JUL-2012 22:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	198a015	972285785015	DSL_10	16-JUL-2012 22:32	S19968
L2	198a016	972285785016	DSL_100	16-JUL-2012 22:57	S19945
L3	198a017	972285785017	DSL_500	16-JUL-2012 23:23	S19946
L4	198a018	972285785018	DSL_1000	16-JUL-2012 23:48	S19947
L5	198a019	972285785019	DSL_5000	17-JUL-2012 00:13	S19943
L6	198a020	972285785020	DSL_7500	17-JUL-2012 00:38	S19948

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C24	524267	417627	404818	409718	367507	386248	AVRG		2.39E-6		418364	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C24	10.000	**25**	100.00	0	500.00	-3	1000.0	-2	5000.0	-12	7500.0	-8

MAC 07/17/12 : Corrected automatically drawn baseline in all levels.

MAC 07/17/12 : cm did not need update. RT within one-hundredth of a second

MAC 07/17/12 : dsl c10-c14 %RSD above 20

Analyst: MAC Date: 07/17/12 Reviewer: EAH Date: 07/18/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 GCSV Water
EPA 8015D

Inst : GC27A Name : dsl_198
Calnum : 972285785002 Cal Date : 16-JUL-2012

ICV 972285785022 (198a022 17-JUL-2012) stds: S20069

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C24	500.0	461.8	mg/L	-8	20	

Analyst: MAC Date: 07/17/12 Reviewer: EAH Date: 07/17/12

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC27A
Calnum : 972287688001
Units : mg/L

Name : OtpHex_199
Date : 17-JUL-2012 17:07
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	199a006	972287688006	HEXOTP_5	17-JUL-2012 17:07	S20332
L2	199a007	972287688007	HEXOTP_10	17-JUL-2012 17:33	S20333
L3	199a008	972287688008	HEXOTP_25	17-JUL-2012 17:58	S20334
L4	199a009	972287688009	HEXOTP_50	17-JUL-2012 18:23	S20335
L5	199a010	972287688010	HEXOTP_100	17-JUL-2012 18:48	S20336
L6	199a011	972287688011	HEXOTP_200	17-JUL-2012 19:13	S20337

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	405848	417913	393873	414949	401451	440396	AVRG		2.42E-6		412405	4	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.0000	-2	10.000	1	25.000	-4	50.000	1	100.00	-3	200.00	7

MAC 07/18/12 : Corrected automatically drawn baseline in all levels.

Analyst: MAC Date: 07/18/12 Reviewer: CP Date: 07/18/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 222361903011.1 File : 251_011 Time : 07-SEP-2012 12:46
Standards: S20623

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	222295006001	22-JUL-2012	18049	16665	500.0	461.7	mg/L	-8	20	
o-Terphenyl	B	222229527001	07-JUN-2012	33095	29702	50.00	44.87	mg/L	-10	20	

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 222361903012.1 File : 251_012 Time : 07-SEP-2012 13:14
Standards: S20484

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	B	222269858001	05-JUL-2012	28179	25212	500.0	447.4	mg/L	-11	20	
o-Terphenyl	B	222229527001	07-JUN-2012	33095	29137	50.00	44.02	mg/L	-12	20	

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
Seqnum : 222361903029.1 File : 251_029 Time : 07-SEP-2012 23:12
Standards: S20485

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	B	222269858001	05-JUL-2012	28179	24887	1000	883.2	mg/L	-12	20	
o-Terphenyl	B	222229527001	07-JUN-2012	33095	29245	50.00	44.18	mg/L	-12	20	

SFL 09/08/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 222361903031.1 File : 251_031 Time : 08-SEP-2012 00:08
Standards: S20623

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	222295006001	22-JUL-2012	18049	15226	500.0	421.8	mg/L	-16	20	
o-Terphenyl	B	222229527001	07-JUN-2012	33095	29310	50.00	44.28	mg/L	-11	20	

SFL 09/08/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
Seqnum : 162365242023.1 File : 253b023 Time : 10-SEP-2012 00:37
Standards: S20485

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	162276981001	10-JUL-2012	52963	54836	1000	1035	mg/L	4	20	
o-Terphenyl	162281280001	13-JUL-2012	62202	67521	50.00	54.27	mg/L	9	20	

JDG 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 162365242024.1 File : 253b024 Time : 10-SEP-2012 01:05
Standards: S20623

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	162269861001	05-JUL-2012	39759	39539	500.0	497.2	mg/L	-1	20	
o-Terphenyl	162281280001	13-JUL-2012	62202	65815	50.00	52.90	mg/L	6	20	

JDG 09/10/12 : Manually integrated fuel hump. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 162365242039.1 File : 253b039 Time : 10-SEP-2012 08:02
Standards: S20484

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	162276981001	10-JUL-2012	52963	54759	500.0	517.0	mg/L	3	20	
o-Terphenyl	162281280001	13-JUL-2012	62202	64347	50.00	51.72	mg/L	3	20	

JDG 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 162365242040.1 File : 253b040 Time : 10-SEP-2012 08:31
Standards: S20623

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	162269861001	05-JUL-2012	39759	41017	500.0	515.8	mg/L	3	20	
o-Terphenyl	162281280001	13-JUL-2012	62202	65122	50.00	52.35	mg/L	5	20	

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC27A Run Name : DSL_500 IDF : 1.0
Seqnum : 972361903010.1 File : 251a010 Time : 07-SEP-2012 12:45
Standards: S20484

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	972285785002	16-JUL-2012	418364	371599	500.0	444.1	mg/L	-11	20	
o-Terphenyl	972287688001	17-JUL-2012	412405	411349	50.00	49.87	mg/L	0	20	

JDG 09/07/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC27A Run Name : DSL_250 IDF : 1.0
Seqnum : 972361903016.1 File : 251a016 Time : 07-SEP-2012 19:00
Standards: S20483

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	972285785002	16-JUL-2012	418364	371732	250.0	222.1	mg/L	-11	20	
o-Terphenyl	972287688001	17-JUL-2012	412405	409362	50.00	49.63	mg/L	-1	20	

SFL 09/08/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 162269861

Instrument : GC15B
Method : EPA 8015D

Begun : 07/05/12 09:41
SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	187b001	X	PRIMER			07/05/12 09:41	1.0		
002	187b002	X	CMARKER			07/05/12 10:09	1.0	1	
003	187b003	CCV	DSL_250			07/05/12 10:36	1.0	2	
004	187b004	CCV	MO_500			07/05/12 11:04	1.0	3	
005	187b005	X	IB			07/05/12 12:36	1.0		
006	187b006	X	CMARKER			07/05/12 13:04	1.0	1	
007	187b007	CCV	DSL_250			07/05/12 13:42	1.0	2	
008	187b008	CCV	MO_500			07/05/12 14:09	1.0	3	
009	187b009	X	CMARKER			07/05/12 14:37	1.0	4	
010	187b010	X	IB			07/05/12 16:18	1.0		
011	187b011	IB	CALIB			07/05/12 16:45	1.0		
012	187b012	ICAL	MO_25			07/05/12 17:13	1.0	5	
013	187b013	ICAL	MO_50			07/05/12 17:40	1.0	5	
014	187b014	ICAL	MO_250			07/05/12 18:08	1.0	6	
015	187b015	ICAL	MO_500			07/05/12 18:36	1.0	7	
016	187b016	ICAL	MO_1000			07/05/12 19:03	1.0	8	
017	187b017	ICAL	MO_2500			07/05/12 19:31	1.0	9	
018	187b018	ICAL	MO_5000			07/05/12 19:59	1.0	9	
019	187b019	IB	CALIB			07/05/12 20:27	1.0		
020	187b020	CMARKER	C8-C50			07/05/12 20:54	1.0	4	
021	187b021	IB	CALIB			07/05/12 21:22	1.0		

SFL 07/06/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 21.

Standards used: 1=S19277 2=S19822 3=S20033 4=S20262 5=S20089 6=S19735 7=S19736 8=S19737 9=S19738

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 162276981

Instrument : GC15B
Method : EPA 8015D
Begun : 07/10/12 08:21
SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	192b001	X	PRIMER			07/10/12 08:21	1.0		
002	192b002	X	CMARKER			07/10/12 08:49	1.0	1	
003	192b003	X	MO_500			07/10/12 09:17	1.0	2	
004	192b004	X	DSL_500			07/10/12 09:45	1.0	3	
005	192b005	X	CMARKER			07/10/12 12:07	1.0	1	
006	192b006	X	MO_500			07/10/12 12:34	1.0	2	
007	192b007	X	DSL_500			07/10/12 13:02	1.0	3	
008	192b008	CCV	DSL_500			07/10/12 14:41	1.0	3	
009	192b009	CCV	MO_500			07/10/12 15:08	1.0	2	
010	192b010	CCV	DSL_500			07/10/12 15:55	1.0	3	
011	192b011	CCV	DSL_250			07/10/12 16:49	1.0	4	
012	192b012	IB	CALIB			07/10/12 17:50	1.0		
013	192b013	ICAL	DSL_10			07/10/12 18:17	1.0	5	
014	192b014	ICAL	DSL_100			07/10/12 18:45	1.0	6	
015	192b015	ICAL	DSL_500			07/10/12 19:13	1.0	7	
016	192b016	ICAL	DSL_1000			07/10/12 19:41	1.0	8	
017	192b017	ICAL	DSL_5000			07/10/12 20:08	1.0	9	
018	192b018	ICAL	DSL_7500			07/10/12 20:36	1.0	10	
019	192b019	IB	CALIB			07/10/12 21:03	1.0		
020	192b020	ICV	DSL_500			07/10/12 21:31	1.0	11	
021	192b021	X	ICV			07/10/12 21:59	1.0	11	
022	192b022	IB	CALIB			07/10/12 22:27	1.0		
023	192b023	CMARKER	C8-C50			07/10/12 22:55	1.0	1	
024	192b024	IB	CALIB			07/10/12 23:23	1.0		

JDG 07/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 24.

Standards used: 1=S20262 2=S20033 3=S20069 4=S20066 5=S19968 6=S19945 7=S19946 8=S19947 9=S19943 10=S19948 11=S19823

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 162281280

Instrument : GC15B
Method : EPA 8015D
Begun : 07/13/12 08:00
SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	195b001	X	PRIMER			07/13/12 08:00	1.0		
002	195b002	X	CMARKER			07/13/12 08:28	1.0	1	
003	195b003	CCV	DSL_500			07/13/12 08:56	1.0	2	
004	195b004	CCV	MO_500			07/13/12 10:15	1.0	3	
005	195b005	LOQ	237608-007	Soil	188126	07/13/12 14:40	1.0		
006	195b006	BLANK	QC647456	Soil	188404	07/13/12 15:12	1.0		
007	195b007	CCV	MO_500			07/13/12 15:44	1.0	3	
008	195b008	CCV	DSL_250			07/13/12 16:12	1.0	4	
010	195b010	IB	CALIB			07/13/12 17:14	1.0		
011	195b011	ICAL	HEXOTP_5			07/13/12 17:42	1.0	5	
012	195b012	ICAL	HEXOTP_10			07/13/12 18:09	1.0	6	
013	195b013	ICAL	HEXOTP_25			07/13/12 18:37	1.0	7	
014	195b014	ICAL	HEXOTP_50			07/13/12 19:04	1.0	8	
015	195b015	ICAL	HEXOTP_100			07/13/12 19:32	1.0	9	
016	195b016	ICAL	HEXOTP_200			07/13/12 20:00	1.0	10	
017	195b017	IB	CALIB			07/13/12 20:28	1.0		

JDG 07/13/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 8.

JDG 07/16/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 9 through 17.

Standards used: 1=S20262 2=S20069 3=S20033 4=S20066 5=S19347 6=S19348 7=S19349 8=S19350 9=S19351 10=S19352

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 162365242

Instrument : GC15B
Method : EPA 8015D

Begun : 09/09/12 15:22
SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	253b001	X	PRIMER				09/09/12 15:22	1.0		
002	253b002	X	CMARKER				09/09/12 15:50	1.0	1	
003	253b003	CCV	DSL_250				09/09/12 16:17	1.0	2	
004	253b004	CCV	MO_500				09/09/12 16:45	1.0	3	
007	253b007	BLANK	QC655332		Soil	190299	09/09/12 17:13	1.0		
008	253b008	BLANK	QC655332	S	Soil	190299	09/09/12 17:40	1.0		
009	253b009	LCS	QC655333	S	Soil	190299	09/09/12 18:08	1.0		
010	253b010	MSS	239425-003	S	Soil	190299	09/09/12 18:36	1.0		1:BUNKC:12-40=10000
011	253b011	MS	QC655334	S	Soil	190299	09/09/12 19:03	1.0		1:BUNKC:12-40=11000
012	253b012	MSD	QC655335	S	Soil	190299	09/09/12 19:31	1.0		1:BUNKC:12-40=11000
013	253b013	SAMPLE	239464-002	S	Soil	190299	09/09/12 19:58	5.0		8:BUNKC:12-40=22000
014	253b014	SAMPLE	239464-004	S	Soil	190299	09/09/12 20:26	10.0		2:BUNKC:12-40=19000
015	253b015	X	IB				09/09/12 20:54	1.0		
016	253b016	SAMPLE	239464-008	S	Soil	190299	09/09/12 21:22	5.0		6:BUNKC:12-40=20000
017	253b017	SAMPLE	239464-006	S	Soil	190299	09/09/12 21:50	5.0		4:BUNKC:12-40=19000
018	253b018	X	IB				09/09/12 22:18	1.0		
019	253b019	SAMPLE	239464-011	S	Soil	190299	09/09/12 22:45	5.0		8:BUNKC:12-40=25000
020	253b020	SAMPLE	239464-009	S	Soil	190299	09/09/12 23:13	10.0		10:BUNKC:12-40=33000
021	253b021	X	IB				09/09/12 23:41	1.0		
022	253b022	SAMPLE	239464-013	S	Soil	190299	09/10/12 00:09	5.0		7:BUNKC:12-40=21000
023	253b023	CCV	DSL_1000				09/10/12 00:37	1.0	4	
024	253b024	CCV	MO_500				09/10/12 01:05	1.0	3	
025	253b025	CCV	HYFL_500				09/10/12 01:32	1.0	5	
026	253b026	CCV	BUNK_500				09/10/12 02:00	1.0	6	
027	253b027	BLANK	QC655032		Water	190233	09/10/12 02:28	1.0		
028	253b028	SAMPLE	239382-002	S	Water	190233	09/10/12 02:56	1.0		
029	253b029	SAMPLE	239458-010		Soil	190299	09/10/12 03:24	1.0		
030	253b030	SAMPLE	239458-005		Soil	190299	09/10/12 03:52	5.0		
031	253b031	SAMPLE	239458-015		Soil	190299	09/10/12 04:19	5.0		
032	253b032	SAMPLE	239458-020		Soil	190299	09/10/12 04:47	5.0		
033	253b033	SAMPLE	239409-030	S	Soil	190207	09/10/12 05:15	200.0		
034	253b034	SAMPLE	239409-033	S	Soil	190207	09/10/12 05:43	200.0		
035	253b035	SAMPLE	239409-034	S	Soil	190207	09/10/12 06:11	100.0		
036	253b036	SAMPLE	239409-035	S	Soil	190207	09/10/12 06:39	100.0		
037	253b037	SAMPLE	239409-036	S	Soil	190207	09/10/12 07:07	200.0		
038	253b038	X	CMARKER				09/10/12 07:34	1.0	1	
039	253b039	CCV	DSL_500				09/10/12 08:02	1.0	7	
040	253b040	CCV	MO_500				09/10/12 08:31	1.0	3	
041	253b041	CCV	BUNK_500				09/10/12 08:59	1.0	6	
042	253b042	CCV	HYFL_500				09/10/12 09:27	1.0	5	
043	253b043	BLANK	QC655352	S	Water	190304	09/10/12 10:29	1.0		
044	253b044	BLANK	QC655332		Soil	190299	09/10/12 10:57	1.0		
045	253b045	SAMPLE	239315-001	S	Water	190304	09/10/12 11:24	1.0		
046	253b046	SAMPLE	239464-006	S	Soil	190299	09/10/12 11:52	50.0		
047	253b047	SAMPLE	239464-008	S	Soil	190299	09/10/12 12:20	50.0		
048	253b048	CCV	DSL_250				09/10/12 12:59	1.0	2	
049	253b049	CCV	MO_500				09/10/12 13:26	1.0	3	
050	253b050	CCV	BUNK_500				09/10/12 13:54	1.0	6	
051	253b051	CCV	HYFL_500				09/10/12 14:22	1.0	5	
052	253b052	SAMPLE	239475-002		Soil	190330	09/10/12 15:27	1.0		
054	253b054	SAMPLE	239465-002		Water	190304	09/10/12 16:06	1.0		
055	253b055	SAMPLE	239465-003		Water	190304	09/10/12 16:34	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 162365242

Instrument : GC15B
Method : EPA 8015D
Begun : 09/09/12 15:22
SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
056	253b056	SAMPLE	239465-004		Water	190304	09/10/12 17:02	1.0		
057	253b057	SAMPLE	239465-005		Water	190304	09/10/12 17:29	1.0		
058	253b058	SAMPLE	239465-007		Water	190304	09/10/12 17:57	1.0		
059	253b059	SAMPLE	239469-007		Water	190304	09/10/12 18:25	1.0		
060	253b060	SAMPLE	239469-003		Water	190304	09/10/12 18:52	1.0		
061	253b061	SAMPLE	239425-006	S	Soil	190299	09/10/12 19:20	1.0		
062	253b062	X	CMARKER				09/10/12 19:47	1.0	1	
063	253b063	CCV	DSL_500				09/10/12 20:15	1.0	7	
064	253b064	CCV	MO_500				09/10/12 20:43	1.0	3	
065	253b065	CCV	DSL_500				09/10/12 21:11	1.0	7	
066	253b066	CCV	MO_500				09/10/12 21:39	1.0	3	
067	253b067	BLANK	QC655313		Soil	190294	09/10/12 22:07	1.0		
068	253b068	LCS	QC655314		Soil	190294	09/10/12 22:35	1.0		
069	253b069	MSS	239368-009		Soil	190294	09/10/12 23:03	3.0		
070	253b070	MS	QC655315		Soil	190294	09/10/12 23:31	3.0		
071	253b071	MSD	QC655316		Soil	190294	09/10/12 23:59	3.0		
072	253b072	SAMPLE	239357-010		Soil	190330	09/11/12 00:27	1.0		
073	253b073	SAMPLE	239357-011		Soil	190330	09/11/12 00:55	1.0		
074	253b074	SAMPLE	239357-012		Soil	190330	09/11/12 01:22	1.0		
075	253b075	SAMPLE	239357-014		Soil	190330	09/11/12 01:50	1.0		
076	253b076	SAMPLE	239368-001		Soil	190294	09/11/12 02:18	1.0		
077	253b077	SAMPLE	239368-002		Soil	190294	09/11/12 02:46	1.0		
078	253b078	SAMPLE	239368-003		Soil	190294	09/11/12 03:14	5.0		
079	253b079	CCV	DSL_1000				09/11/12 03:41	1.0	4	
080	253b080	CCV	MO_500				09/11/12 04:09	1.0	3	

JDG 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 42.

JDG 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 43 through 51.

JDG 09/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 52 through 80.

JDG 09/11/12 : Vial#53 did not run.

Standards used: 1=S20262 2=S20483 3=S20623 4=S20485 5=S19451 6=S20384 7=S20484

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 222229527

Instrument : GC14B
Method : EPA 8015D
Begun : 06/07/12 09:27
SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	159_001	X	PRIMER			06/07/12 09:27	1.0		
002	159_002	X	IB			06/07/12 09:54	1.0		
003	159_003	X	IB			06/07/12 10:22	1.0		
004	159_004	X	IB			06/07/12 10:50	1.0		
005	159_005	CHECK	DSL_10			06/07/12 11:18	1.0	1	
006	159_006	CCV	MO_500			06/07/12 12:55	1.0	2	
007	159_007	IB	CALIB			06/07/12 15:46	1.0		
008	159_008	ICAL	HEX OTP_5			06/07/12 16:14	1.0	3	
009	159_009	ICAL	HEX OTP_10			06/07/12 16:42	1.0	4	
010	159_010	ICAL	HEX OTP_25			06/07/12 17:10	1.0	5	
011	159_011	ICAL	HEX OTP_50			06/07/12 17:38	1.0	6	
012	159_012	ICAL	HEX OTP_100			06/07/12 18:05	1.0	7	
013	159_013	ICAL	HEX OTP_200			06/07/12 18:33	1.0	8	
014	159_014	IB	CALIB			06/07/12 19:01	1.0		
015	159_015	ICAL	DSL_10			06/07/12 19:29	1.0	1	
016	159_016	ICAL	DSL_100			06/07/12 19:56	1.0	9	
017	159_017	ICAL	DSL_500			06/07/12 20:24	1.0	10	
018	159_018	ICAL	DSL_1000			06/07/12 20:52	1.0	11	
019	159_019	ICAL	DSL_5000			06/07/12 21:19	1.0	12	
020	159_020	ICAL	DSL_7500			06/07/12 21:47	1.0	13	
021	159_021	IB	CALIB			06/07/12 22:15	1.0		
022	159_022	ICV	DSL_500			06/07/12 22:43	1.0	14	
023	159_023	X	ICV			06/07/12 23:11	1.0	14	
024	159_024	IB	CALIB			06/07/12 23:38	1.0		
025	159_025	ICAL	MO_25			06/08/12 00:06	1.0	15	
026	159_026	ICAL	MO_50			06/08/12 00:34	1.0	15	
027	159_027	ICAL	MO_250			06/08/12 01:02	1.0	16	
028	159_028	ICAL	MO_500			06/08/12 01:30	1.0	17	
029	159_029	ICAL	MO_1000			06/08/12 01:58	1.0	18	
030	159_030	ICAL	MO_2500			06/08/12 02:26	1.0	19	
031	159_031	ICAL	MO_5000			06/08/12 02:54	1.0	19	
032	159_032	IB	CALIB			06/08/12 03:22	1.0		
033	159_033	CMARKER	C8-C50			06/08/12 03:50	1.0	20	
034	159_034	IB	CALIB			06/08/12 04:18	1.0		

MAC 06/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 34.

Standards used: 1=S19968 2=S19781 3=S19347 4=S19348 5=S19349 6=S19350 7=S19351 8=S19352 9=S19945 10=S19946 11=S19947 12=S19943 13=S19948 14=S19823 15=S19734 16=S19735 17=S19736 18=S19737 19=S19738 20=S19277

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 222269858

Instrument : GC14B
Method : EPA 8015D

Begun : 07/05/12 09:38
SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	187_001	X	PRIMER			07/05/12 09:38	1.0		
002	187_002	X	CMARKER			07/05/12 10:06	1.0	1	
003	187_003	CCV	DSL_500			07/05/12 10:34	1.0	2	
004	187_004	CCV	MO_500			07/05/12 11:02	1.0	3	
005	187_005	X	IB			07/05/12 12:02	1.0		
006	187_006	X	CMARKER			07/05/12 12:30	1.0	1	
007	187_007	CCV	DSL_500			07/05/12 13:43	1.0	2	
008	187_008	CCV	MO_500			07/05/12 14:11	1.0	3	
009	187_009	IB	CALIB			07/05/12 15:56	1.0		
010	187_010	ICAL	DSL_10			07/05/12 16:24	1.0	4	
011	187_011	ICAL	DSL_100			07/05/12 16:51	1.0	5	
012	187_012	ICAL	DSL_500			07/05/12 17:19	1.0	6	
013	187_013	ICAL	DSL_1000			07/05/12 17:47	1.0	7	
014	187_014	ICAL	DSL_5000			07/05/12 18:15	1.0	8	
015	187_015	ICAL	DSL_7500			07/05/12 18:43	1.0	9	
016	187_016	IB	CALIB			07/05/12 19:11	1.0		
017	187_017	X	DSL_500			07/05/12 19:39	1.0	2	
018	187_018	ICV	DSL_500			07/05/12 20:07	1.0	2	
019	187_019	IB	CALIB			07/05/12 20:34	1.0		
020	187_020	ICAL	MO_25			07/05/12 21:02	1.0	10	
021	187_021	ICAL	MO_50			07/05/12 21:30	1.0	10	
022	187_022	ICAL	MO_250			07/05/12 21:58	1.0	11	
023	187_023	ICAL	MO_500			07/05/12 22:26	1.0	12	
024	187_024	ICAL	MO_1000			07/05/12 22:54	1.0	13	
025	187_025	ICAL	MO_2500			07/05/12 23:22	1.0	14	
026	187_026	ICAL	MO_5000			07/05/12 23:50	1.0	14	
027	187_027	IB	CALIB			07/06/12 00:18	1.0		
028	187_028	CMARKER	C8-C50			07/06/12 00:46	1.0	1	
029	187_029	IB	CALIB			07/06/12 01:14	1.0		

Standards used: 1=S19277 2=S20069 3=S20033 4=S19968 5=S19945 6=S19946 7=S19947 8=S19943 9=S19948 10=S20089 11=S19735 12=S19736 13=S19737 14=S19738

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 222295006

Instrument : GC14B
Method : EPA 8015D
Begun : 07/22/12 15:42
SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	204_001	X	PRIMER			07/22/12 15:42	1.0		
002	204_002	X	IB			07/22/12 16:09	1.0		
003	204_003	IB	CALIB			07/22/12 16:37	1.0		
004	204_004	ICAL	MO_25			07/22/12 17:05	1.0	1	
005	204_005	ICAL	MO_50			07/22/12 17:33	1.0	1	
006	204_006	ICAL	MO_250			07/22/12 18:00	1.0	2	
007	204_007	ICAL	MO_500			07/22/12 18:28	1.0	3	
008	204_008	ICAL	MO_1000			07/22/12 18:56	1.0	4	
009	204_009	ICAL	MO_2500			07/22/12 19:23	1.0	5	
010	204_010	ICAL	MO_5000			07/22/12 19:51	1.0	5	
011	204_011	IB	CALIB			07/22/12 20:18	1.0		
012	204_012	CMARKER	C8-C50			07/22/12 20:46	1.0	6	
013	204_013	IB	CALIB			07/22/12 21:13	1.0		

Standards used: 1=S20089 2=S19735 3=S19736 4=S19737 5=S19738 6=S20262

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 222361903

Instrument : GC14B
Method : EPA 8015D

Begun : 09/07/12 07:43
SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	251_001	X	IB				09/07/12 07:43	1.0		
002	251_002	X	CMARKER				09/07/12 08:11	1.0	1	
003	251_003	CCV	MO_500				09/07/12 08:39	1.0	2	
004	251_004	CCV	DSL_250				09/07/12 09:07	1.0	3	
005	251_005	CCV	BUNK_500				09/07/12 09:35	1.0	4	
006	251_006	SAMPLE	239409-018	S	Soil	190248	09/07/12 10:20	50.0		
007	251_007	SAMPLE	239409-023	S	Soil	190248	09/07/12 10:48	50.0		
008	251_008	SAMPLE	239409-025	S	Soil	190248	09/07/12 11:16	50.0		
009	251_009	SAMPLE	239409-026	S	Soil	190248	09/07/12 11:44	50.0		
010	251_010	SAMPLE	239409-017	S	Soil	190248	09/07/12 12:11	50.0		
011	251_011	CCV	MO_500				09/07/12 12:46	1.0	2	
012	251_012	CCV	DSL_500				09/07/12 13:14	1.0	5	
013	251_013	CCV	BUNK_500				09/07/12 13:42	1.0	4	
014	251_014	BLANK	QC655032	S	Water	190233	09/07/12 16:15	1.0		
015	251_015	SAMPLE	239382-001	S	Water	190233	09/07/12 16:43	1.0		
016	251_016	SAMPLE	239409-046		Water	190233	09/07/12 17:10	1.0		
017	251_017	X	IB				09/07/12 17:38	1.0		
018	251_018	BLANK	QC655032		Water	190233	09/07/12 18:06	1.0		
019	251_019	SAMPLE	239382-002	S	Water	190233	09/07/12 18:34	1.0		
020	251_020	SAMPLE	239375-001		Water	190233	09/07/12 19:01	1.0		
021	251_021	SAMPLE	239376-001		Water	190233	09/07/12 19:29	1.0		
022	251_022	SAMPLE	239377-001		Water	190233	09/07/12 19:57	1.0		
023	251_023	SAMPLE	239403-007		Water	190233	09/07/12 20:24	1.0		
024	251_024	SAMPLE	239220-006		Soil	190097	09/07/12 20:52	1.0		
025	251_025	SAMPLE	239314-025	S	Soil	190207	09/07/12 21:20	1.0		
026	251_026	SAMPLE	239299-005	S	Water	190189	09/07/12 21:48	10.0		1:BUNKC:12-40=5300
027	251_027	X	CMARKER				09/07/12 22:16	1.0	1	
028	251_028	X	MO_500				09/07/12 22:44	1.0	2	
029	251_029	CCV	DSL_1000				09/07/12 23:12	1.0	6	
030	251_030	CCV	BUNK_500				09/07/12 23:40	1.0	4	
031	251_031	CCV	MO_500				09/08/12 00:08	1.0	2	
032	251_032	X	CCV				09/08/12 00:36	1.0	6	
033	251_033	X	CCV				09/08/12 01:04	1.0	4	

JDG 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 8.

JDG 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 14.

SFL 09/08/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 15 through 33.

Standards used: 1=S20262 2=S20623 3=S20483 4=S20384 5=S20484 6=S20485

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 972285785

Instrument : GC27A
Method : EPA 8015D
Begun : 07/16/12 11:05
SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	198a001	X	IB			07/16/12 11:05	1.0		
002	198a002	CMARKER	C8-C50			07/16/12 11:30	1.0	1	
003	198a003	CCV	MO_500			07/16/12 11:55	1.0	2	
004	198a004	CCV	DSL_500			07/16/12 12:20	1.0	3	
005	198a005	CCV	MO_500			07/16/12 16:06	1.0	2	
006	198a006	CCV	DSL_1000			07/16/12 16:31	1.0	4	1:BUNKC:12-40=5400
007	198a007	IB	CALIB			07/16/12 19:10	1.0		
008	198a008	ICAL	HEXOTP_5			07/16/12 19:35	1.0	5	
009	198a009	ICAL	HEXOTP_10			07/16/12 20:00	1.0	6	
010	198a010	ICAL	HEXOTP_25			07/16/12 20:25	1.0	7	
011	198a011	ICAL	HEXOTP_50			07/16/12 20:51	1.0	8	
012	198a012	ICAL	HEXOTP_100			07/16/12 21:16	1.0	9	
013	198a013	ICAL	HEXOTP_200			07/16/12 21:41	1.0	10	
014	198a014	IB	CALIB			07/16/12 22:07	1.0		
015	198a015	ICAL	DSL_10			07/16/12 22:32	1.0	11	
016	198a016	ICAL	DSL_100			07/16/12 22:57	1.0	12	
017	198a017	ICAL	DSL_500			07/16/12 23:23	1.0	13	
018	198a018	ICAL	DSL_1000			07/16/12 23:48	1.0	14	
019	198a019	ICAL	DSL_5000			07/17/12 00:13	1.0	15	
020	198a020	ICAL	DSL_7500			07/17/12 00:38	1.0	16	
021	198a021	IB	CALIB			07/17/12 01:03	1.0		
022	198a022	ICV	DSL_500			07/17/12 01:29	1.0	3	
023	198a023	X	ICV			07/17/12 01:54	1.0	3	
024	198a024	IB	CALIB			07/17/12 02:19	1.0		
025	198a025	CMARKER	C8-C50			07/17/12 02:44	1.0	1	
026	198a026	IB	CALIB			07/17/12 03:09	1.0		

Standards used: 1=S20262 2=S20033 3=S20069 4=S20068 5=S19347 6=S19348 7=S19349 8=S19350 9=S19351 10=S19352 11=S19968 12=S19945 13=S19946 14=S19947 15=S19943 16=S19948

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 972287688

Instrument : GC27A
Method : EPA 8015D
Begun : 07/17/12 17:07
SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
006	199a006	ICAL	HEXOTP_5			07/17/12 17:07	1.0	1	
007	199a007	ICAL	HEXOTP_10			07/17/12 17:33	1.0	2	
008	199a008	ICAL	HEXOTP_25			07/17/12 17:58	1.0	3	
009	199a009	ICAL	HEXOTP_50			07/17/12 18:23	1.0	4	
010	199a010	ICAL	HEXOTP_100			07/17/12 18:48	1.0	5	
011	199a011	ICAL	HEXOTP_200			07/17/12 19:13	1.0	6	
012	199a012	X	CALIB			07/17/12 19:38	1.0		
013	199a013	X	CMARKER			07/17/12 20:03	1.0	7	
014	199a014	X	CALIB			07/17/12 20:28	1.0		

MAC 07/18/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 6 through 14.

Standards used: 1=S20332 2=S20333 3=S20334 4=S20335 5=S20336 6=S20337 7=S20262

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 972361903

Instrument : GC27A
Method : EPA 8015D
Begun : 09/07/12 07:43
SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	251a001	X	IB				09/07/12 07:43	1.0	
002	251a002	X	CMARKER				09/07/12 08:08	1.0	1
003	251a003	CCV	DSL_250				09/07/12 08:33	1.0	2
004	251a004	CCV	MO_500				09/07/12 08:58	1.0	3
005	251a005	CCV	BUNK_500				09/07/12 09:57	1.0	4
006	251a006	SAMPLE	239409-028	S	Soil	190248	09/07/12 10:35	50.0	
007	251a007	SAMPLE	239409-019	S	Soil	190248	09/07/12 11:01	100.0	
008	251a008	SAMPLE	239409-020	S	Soil	190248	09/07/12 11:26	100.0	
009	251a009	SAMPLE	239409-005	S	Soil	190248	09/07/12 11:51	3.0	
010	251a010	CCV	DSL_500				09/07/12 12:45	1.0	5
011	251a011	CCV	MO_500				09/07/12 13:10	1.0	3
012	251a012	CCV	BUNK_500				09/07/12 13:35	1.0	4
013	251a013	BS	QC655033	S	Water	190233	09/07/12 16:16	1.0	
014	251a014	BSD	QC655034	S	Water	190233	09/07/12 16:41	1.0	
015	251a015	X	CMARKER				09/07/12 18:35	1.0	1
016	251a016	CCV	DSL_250				09/07/12 19:00	1.0	2
017	251a017	X	CCV				09/07/12 19:25	1.0	2

JDG 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 7.

JDG 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 8 through 12.

JDG 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 13 through 14.

SFL 09/08/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 15 through 17.

Standards used: 1=S20262 2=S20483 3=S20623 4=S20384 5=S20484

SAMPLE PREPARATION SUMMARY

Batch # : 190233
Started By : RDG
Prep Date : 06-SEP-2012 16:45
Method : 3520C
Spike #1 ID : S20632
Spike #2 ID : S20611
Analysis : TEHM
Finished By : MAW
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239375-001		Water	500	2.5	1	0.005	7	.5				TEHM	
239376-001		Water	500	2.5	1	0.005	7	.5				TEHM	
239377-001		Water	500	2.5	1	0.005	7	.5				TEHM	
239382-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
239382-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
239403-007		Water	480	2.5	1	0.005208	7	.5				TEHM	Prepped 06-SEP-2012 18:15
239409-046		Water	480	2.5	1	0.005208	9	.5			3630C	(rebatched)	See comment 1 below
QC655032	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEHM	
QC655033	BS	Water	500	2.5	1	0.005		.5	.5		3630C	TEHM	
QC655034	BSD	Water	500	2.5	1	0.005		.5	.5		3630C	TEHM	

Comment 1: Prepped 06-SEP-2012 18:30; sediment

JDG 09/11/12 : Matrix spikes were not performed for this analysis in batch 190233 because matrix or site history indicated the recoveries would be non-meaningful.

Analyst: JDG Date: 09/11/12 Reviewer: SFL Date: 09/11/12

TEH (8015) Water Prep Log

Curtis & Tompkins, Lt

LIMS Batch No: 190233
LIMS Analysis: TEH
Date Extracted: 9.6.12

Extraction Method:
☒ EPA 3520c cont. L/L
☐ _____

Cleanup Method (if need
☒ EPA 3630c Silica

	Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)		Comment
	239375-001	B	☒ 500 ☐	☒7 ☐	☑2.5 ☐		☒ ≤2pH	
	239376-001	C	☒ 500 ☐	☒7 ☐	☒2.5 ☐		☒ ≤2pH	
	239377-001	G	☒ 500 ☐	☒7 ☐	☒2.5 ☐		☒ ≤2pH	
	239382-001	E	☒ 500 ☐	☒7 ☐	☒2.5 ☐	X	☒ ≤2pH	
5	239382-002	E	☒ 500 ☐	☑7 ☐	☒2.5 ☐		☒ ≤2pH	
	MB QC655032		☒ 500 ☐	☐7 ☐ N/A	☒2.5 ☐		☒ ≤2pH	
	BS 33		☒ 500 ☐	☐7 ☐	☒2.5 ☐		☒ ≤2pH	
	BSD 34		☒ 500 ☐	☐7 ☐	☒2.5 ☐		☒ ≤2pH	
	239403-007	I	☐ 500 ☒ 480	☒7 ☐	☒2.5 ☐		☒ ≤2pH	added @ 18:15
10	239489-846	G	☐ 500 ☒ 480	☐7 ☒ 9	☒2.5 ☐	X	☒ ≤2pH	added @ 18:30; sedim
			☐ 500 ☐	☐7 ☐	~~☑2.5~~ MAW 9/7/12		☐ ≤2pH	
			☐ 500 ☐	☐7 ☐	☑2.5 ☐		☐ ≤2pH	
			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	
			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	
15			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	
			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	
			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	
			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	
			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	
20			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	
			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	
			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	
			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	
			☐ 500 ☐	☐7 ☐	☐ 2.5 ☐		☐ ≤2pH	

	Mfg & Lot# / LIMS # / Time	Date/ In
0.5 mL of TEH_SURR was added to all samples	S20632D	9/6/12 H
0.5 mL of TEH_SP was added to all spikes	S20611E	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS1147979	
☑ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM52160	
Extraction Start Time:	1645 / 18:15 / 18:30	
Extraction End Time:	1315	TFB 9/7
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	MAW 9/7
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EMVB154	
Concentrated to final volume at temperature (degrees C)	100	
Relinquished to TEH Department	✓	

Raquel de Cruz 09/06/12
Extraction Chemist **Date**

Contined from Page _____
Continued on Page 1

09/10/12
Reviewed by **Date**

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: MAW
Cleanup Date: 9/7/12

Benchbook # **BK 3352**
Page 33

Sample #	Extraction Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
239382-001	190233	☒ 1.0 ☐	☒ 1.0 ☐	
-002		☒ 1.0 ☐	☒ 1.0 ☐	
MB QC655032		☒ 1.0 ☐	☒ 1.0 ☐	
BS 3		☒ 1.0 ☐	☒ 1.0 ☐	
BSD 4		☒ 1.0 ☐	☒ 1.0 ☐	
239409-046		☒ 1.0 ☐	☒ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
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		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	
		☐ 1.0 ☐	☐ 1.0 ☐	

9/10/12

☒ Extracts were cleaned up using C&T assembled 1.0 g columns
o Extracts were cleaned up using _____ g cartridges
Extracts were eluted with 4.0 mL CH_2Cl_2
Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
I12X009	JAO for MAW 09/10/12
N/A	
EM52160	
✓	

9/7/12
Extraction Chemist / Date

Continued from page ____
Continued on page 1

9/10/12
Reviewed by / Date

Case Narrative Addendum: Manual Integrations for 239403 GCSV (Water)

For CCV DSL_1000 (GC15B 253b023):
Corrected automatically drawn baseline.

For CCV DSL_1000 (GC14B 251_029):
Corrected automatically drawn baseline.

For CCV DSL_250 (GC27A 251a016):
Corrected automatically drawn baseline.

For CCV DSL_500 (GC27A 251a010):
Corrected automatically drawn baseline.

For CCV DSL_500 (GC15B 253b039):
Corrected automatically drawn baseline.

For CCV MO_500 (GC14B 251_031):
Corrected automatically drawn baseline.

For CCV MO_500 (GC15B 253b024):
Manually integrated fuel hump.

For BLANK QC655032 (GC15B 253b027):
Corrected automatically drawn baseline.

For BSD QC655034 (GC27A 251a014):
Corrected automatically drawn baseline for spike & dup.

For Calibration GC14B (222229527001):
Corrected automatically drawn baseline in HEX OTP_25 (159_010).
Corrected automatically drawn baseline in HEX OTP_50 (159_011).
Corrected automatically drawn baseline in HEX OTP_100 (159_012).
Corrected automatically drawn baseline in HEX OTP_200 (159_013).

For ICV DSL_500 (GC14B 187_018):
Corrected automatically drawn baseline.

For Calibration GC15B (162276981001):
Manually integrated fuel hump in multiple levels.

For ICV DSL_500 (GC15B 192b020):
Corrected automatically drawn baseline.

For Calibration GC15B (162281280001):
Corrected automatically drawn baseline in multiple levels.

For Calibration GC27A (972285785002):
Corrected automatically drawn baseline in all levels.

For ICV DSL_500 (GC27A 198a022):
Corrected automatically drawn baseline.

For Calibration GC27A (972287688001):
Corrected automatically drawn baseline in all levels.

For Calibration GC14B (222295006001):
Corrected automatically drawn baseline in multiple levels.

Sample Raw Data

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8015D

Inst	: GC14B	Lab ID	: 239403-007	Client ID	: FB.09042012
Seqnum	: 222361903023	Matrix	: Water	Acct	: ARCSF (JG)
File	: 251_023	Batch	: 190233	Time	: 07-SEP-2012 20:24
IDF	: 1.0	Raw Units	: mg/L	Units	: ug/L

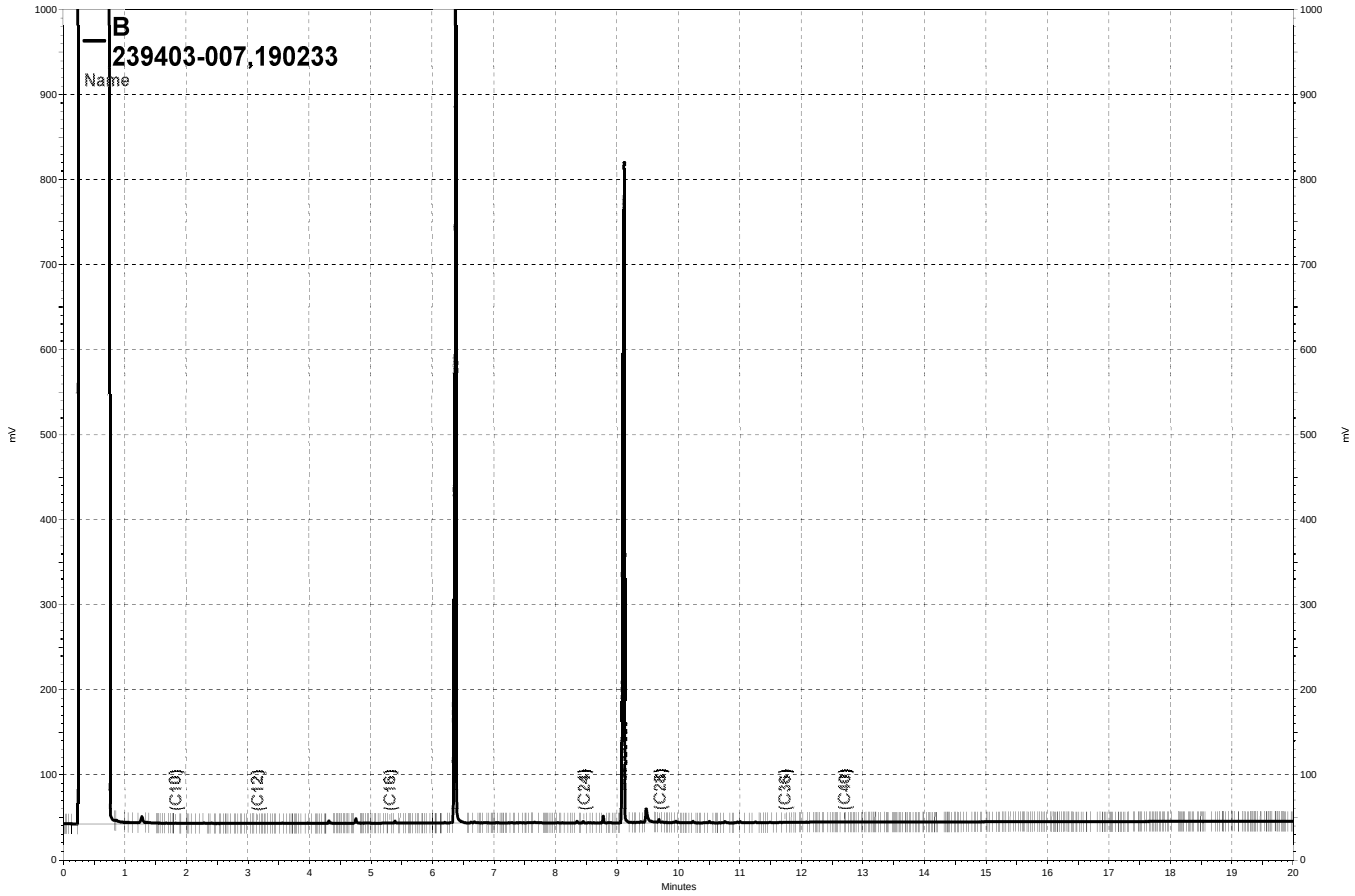
480.00 mL --> 2.5 ml = 0.005208 ml/ml PDF

Analyte	Ch	Cal	Raw	Result	RL	Blank	Flags
Diesel C10-C24	B	222269858001	2.998	16 J	52	30	u
Motor Oil C24-C36	B	222295006001	6.185	ND	310		u

Surrogate	Ch	Cal	Raw	Spiked	Result	%Rec	Limits	Flags
o-Terphenyl	B	222229527001	44.29	260.4	230.7	89	61-134	u

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b023, B

Sample Name: **239403-007,190233**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b023**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh251.met
Run Date: 9/7/2012 8:24:46 PM
Analysis Date: 9/8/2012 3:38:05 PM
Instrument: GC14B Vial: 23 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	37836	1.412
JP8:10-16	37836	1.409
KER:10-16	37836	1.452
JP5:10-16	37836	1.297
DSL:10-20	1525370	57.506
DSL:10-22	1539896	55.376
DSL:10-24	1550401	55.020
DSL:12-22	1526998	66.040
DSL:10-28	2833957	100.151
DSL:12-24	1537503	65.445
DSL:12-32	2845427	120.357
BUNKC:12-40	2858689	375.706
TROIL:12-40	2858689	41.265
HYFL:12-40	2858689	113.060
MO:22-32	1318429	74.668
MO:20-36	1341730	61.734
MO:22-36	1327204	64.229
MO:24-36	1316699	72.952
DSL:10-12	12898	0.000
DSL:12-16	24938	0.000
DSL:16-24	1512565	150.888
MO:28-40	37630	3.502
MO:28-36	33143	3.284
CREOSOTE:10-36	2867100	0.000
DSL:12-14	5761	0.000
DSL:14-16	19177	0.000
DSL:16-18	7666	0.000
DSL:18-20	1479868	0.000
DSL:20-22	14526	0.000
DSL:22-24	10505	0.000
CRUDE:10-40	2871587	152.104
HYFL:24-36	1316699	77.535
MINOIL:12-40	2858689	70.491

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

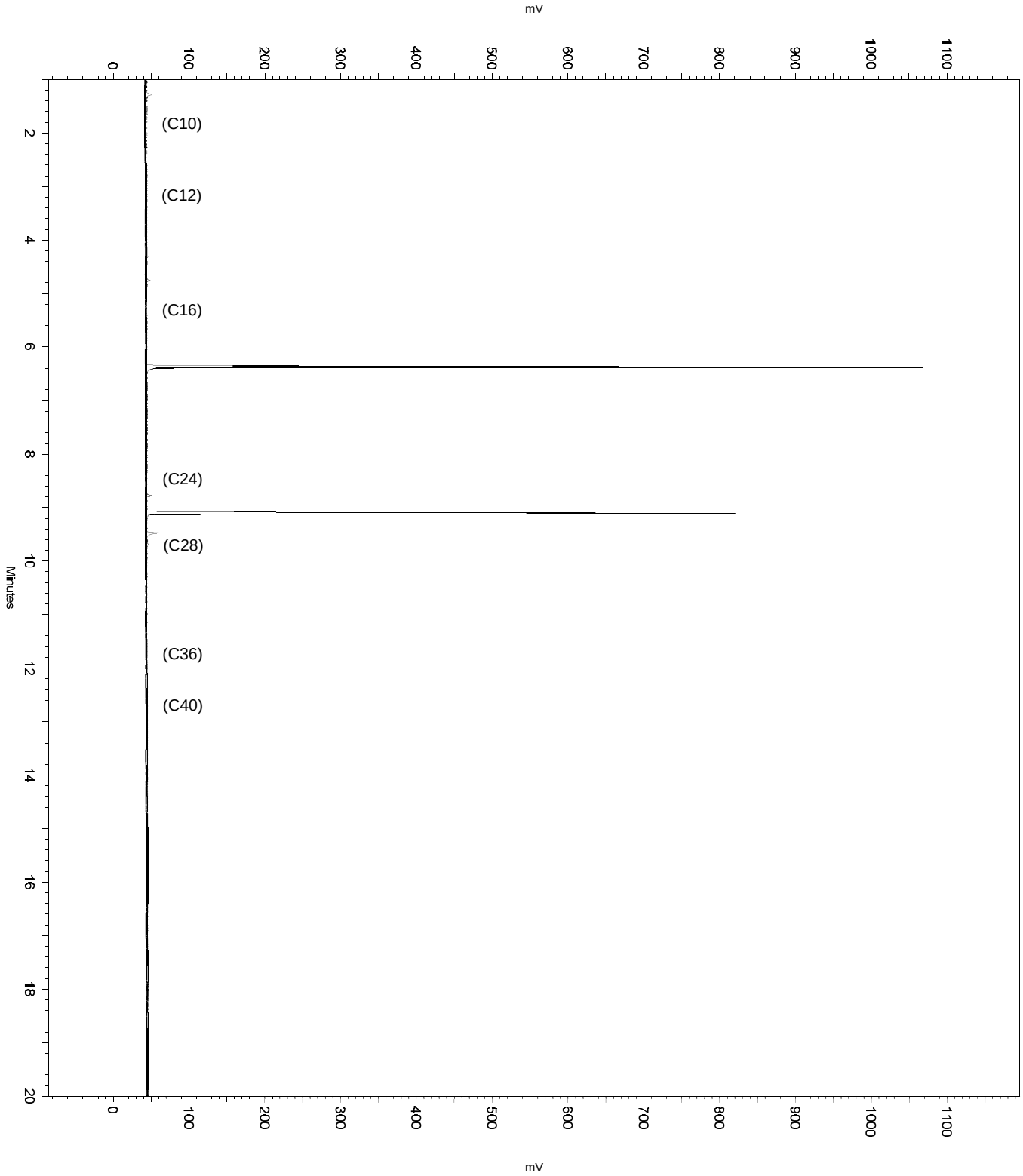
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **239403-007,190233**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b023**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh251.met
Run Date: 9/7/2012 8:24:46 PM
Analysis Date: 9/8/2012 3:38:05 PM
Instrument: GC14B Vial: 23 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



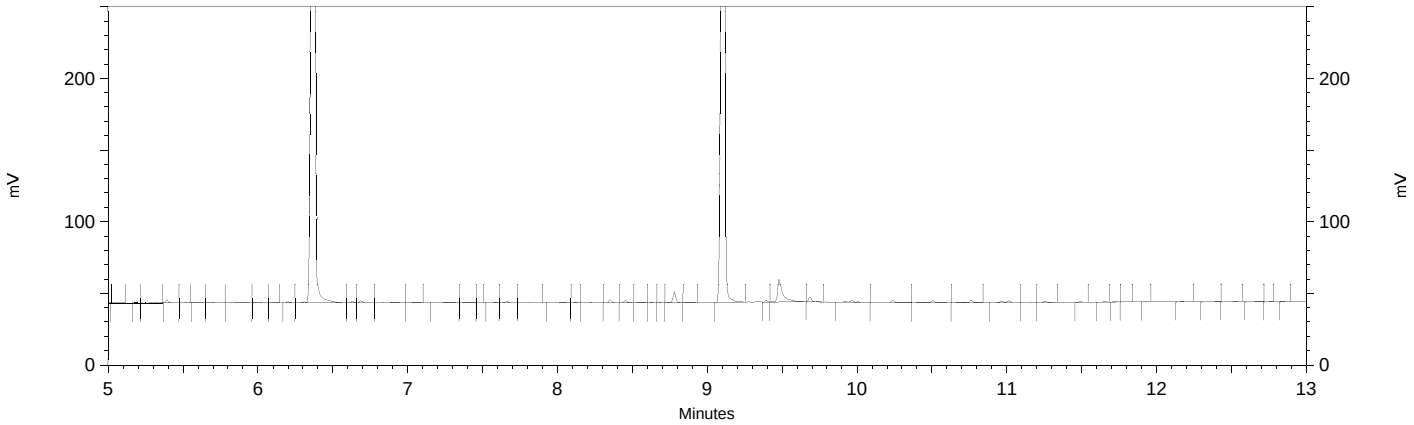
Sample Name: **239403-007,190233**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b023**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr248.met
Run Date: 9/7/2012 8:24:46 PM
Analysis Date: 9/8/2012 3:34:45 PM
Instrument: GC14B Vial: 23 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.380	1465934	44.295
Hexacosane	9.115	1205066	43.178



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

QC Raw Data

CURTIS & TOMPKINS BLANK USER REPORT FOR 239403 GCSV Water
EPA 8015D

Inst : GC15B Lab ID : QC655032
Seqnum : 162365242027.2 Matrix : Water
File : 253b027 Batch : 190233 Time : 10-SEP-2012 02:28
IDF : 1.0 Raw Units : mg/L Units : ug/L

500.00 mL --> 2.5 ml = 0.005 ml/ml PDF

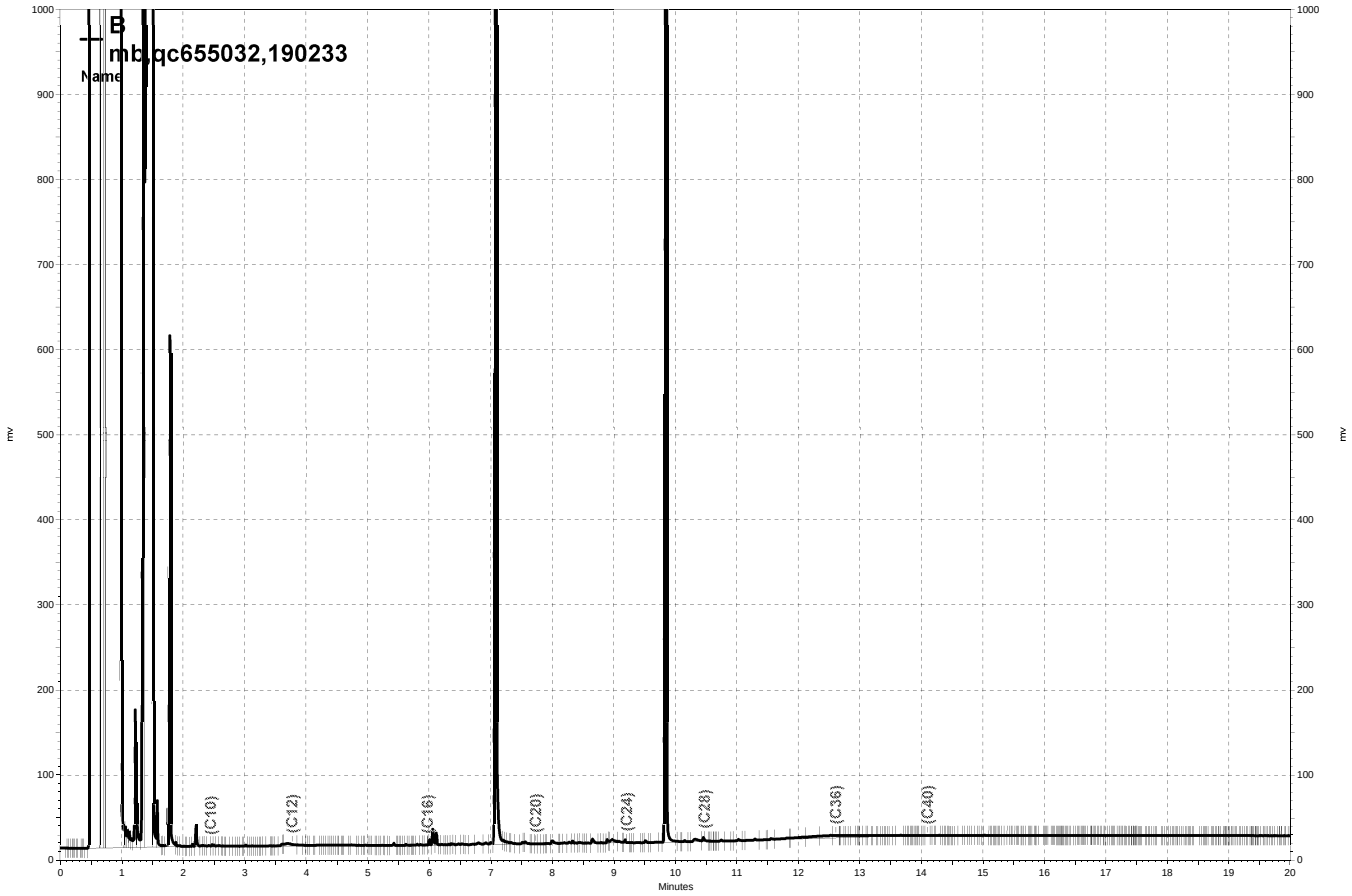
Analyte	Cal	Raw	Result	RL	Flags
Diesel C10-C24	162276981001	6.018	30 J	50	u
Motor Oil C24-C36	162269861001	4.923	ND	300	u

Surrogate	Cal	Raw	Spiked	Result	%Rec	Limits	Flags
o-Terphenyl	162281280001	51.60	250.0	258.0	103	61-134	u

JDG 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b027, B

Sample Name: **mb,qc655032,190233**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 2:28:25 AM
Analysis Date: 9/10/2012 8:48:31 AM
Instrument: GC15B Vial: 27 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	107582	2.353
JP8:10-16	107582	2.726
KER:10-16	107582	2.517
JP5:10-16	107582	2.155
DSL:10-20	3438326	70.644
DSL:10-22	3471876	66.726
DSL:10-24	3528120	66.615
DSL:12-22	3425063	75.379
DSL:10-28	6398418	120.025
DSL:12-24	3481307	75.078
DSL:12-32	6373979	136.026
BUNKC:12-40	6605125	468.266
TROIL:12-40	6605125	95.444
HYFL:12-40	6605125	131.289
MO:20-36	3109851	66.867
MO:22-36	3076301	68.889
MO:24-36	3020057	75.958
DSL:10-12	46813	0.000
DSL:12-16	60769	0.000
DSL:16-24	3420538	155.958
MO:28-36	149759	6.245
MO:28-40	253520	9.218
MO:22-32	2948916	82.164
CREOSOTE:10-36	6548177	105.730
DSL:12-14	44866	0.000
DSL:14-16	15903	0.000
DSL:16-18	75592	0.000
DSL:18-20	3255152	0.000
DSL:20-22	33550	0.000
DSL:22-24	56244	0.000
CRUDE:10-40	6651938	185.636
DSL:10-14	91679	4.981
DSL:14-28	6306739	180.698
MINOIL:12-40	6605125	115.183
DSL:12-28	6351605	132.910
HYFL:24-36	3020057	88.951

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

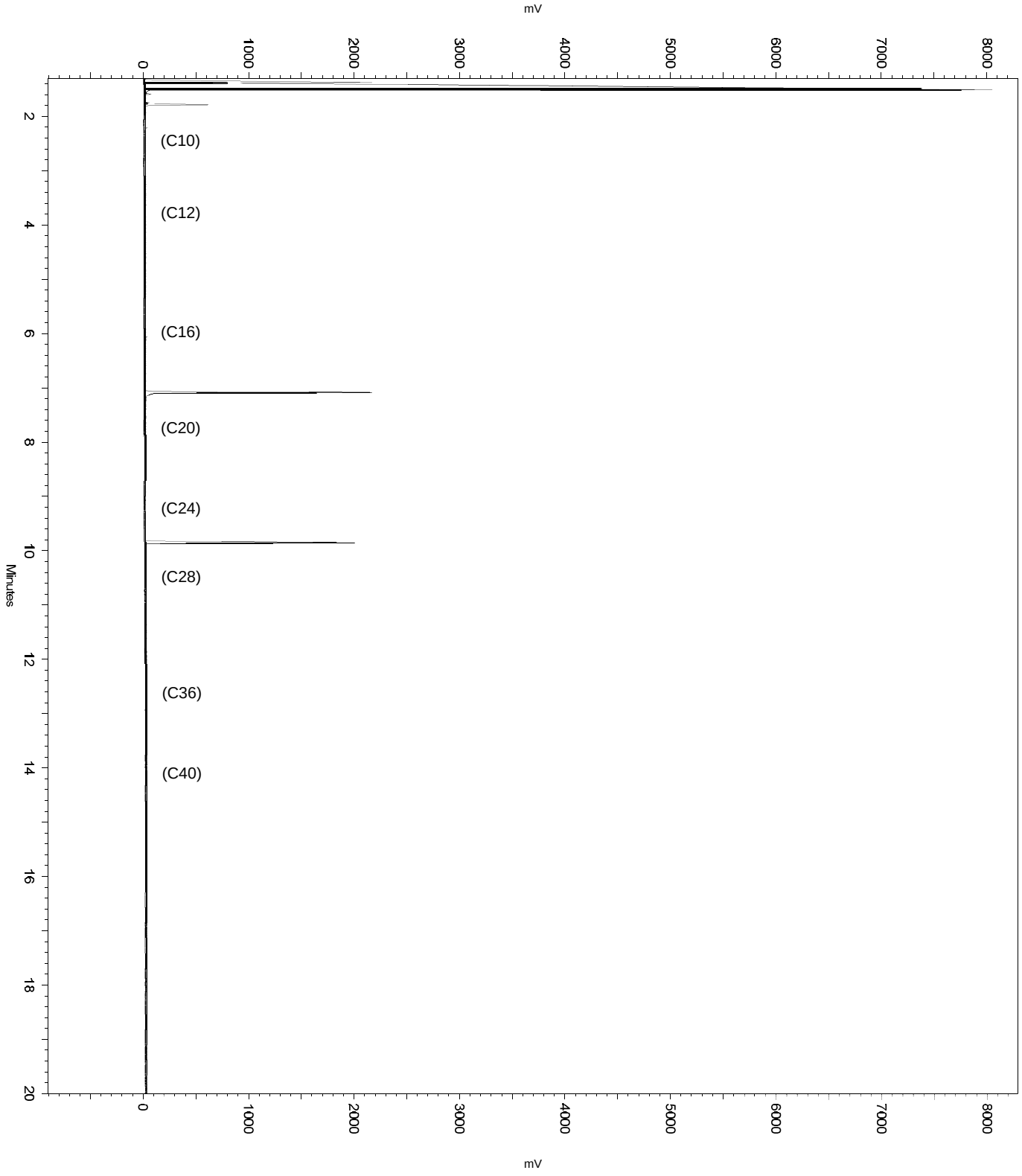
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b027

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

Yes	Reset Baseline	2.343	0	0

Sample Name: **mb,qc655032,190233**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 2:28:25 AM
Analysis Date: 9/10/2012 8:48:31 AM
Instrument: GC15B Vial: 27 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



Sample Name: **mb,qc655032,190233**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 2:28:25 AM
Analysis Date: 9/10/2012 8:48:17 AM
Instrument: GC15B Vial: 27 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	198076	4.333
JP8:10-16	198076	5.020
KER:10-16	198076	4.634
JP5:10-16	198076	3.967
DSL:10-20	3528820	72.503
DSL:10-22	3562370	68.466
DSL:10-24	3618614	68.324
DSL:12-22	3450767	75.944
DSL:10-28	6488912	121.723
DSL:12-24	3507011	75.632
DSL:12-32	6399683	136.574
BUNKC:12-40	6630829	470.088
TROIL:12-40	6630829	95.815
HYFL:12-40	6630829	131.800
MO:20-36	3109851	66.867
MO:22-36	3076301	68.889
MO:24-36	3020057	75.958
DSL:10-12	111603	0.000
DSL:12-16	86473	0.000
DSL:16-24	3420538	155.958
MO:28-36	149759	6.245
MO:28-40	253520	9.218
MO:22-32	2948916	82.164
CREOSOTE:10-36	6638671	107.191
DSL:12-14	67418	0.000
DSL:14-16	19055	0.000
DSL:16-18	75592	0.000
DSL:18-20	3255152	0.000
DSL:20-22	33550	0.000
DSL:22-24	56244	0.000
CRUDE:10-40	6742432	188.162
DSL:10-14	179021	9.726
DSL:14-28	6309891	180.788
MINOIL:12-40	6630829	115.631
DSL:12-28	6377309	133.448
HYFL:24-36	3020057	88.951

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

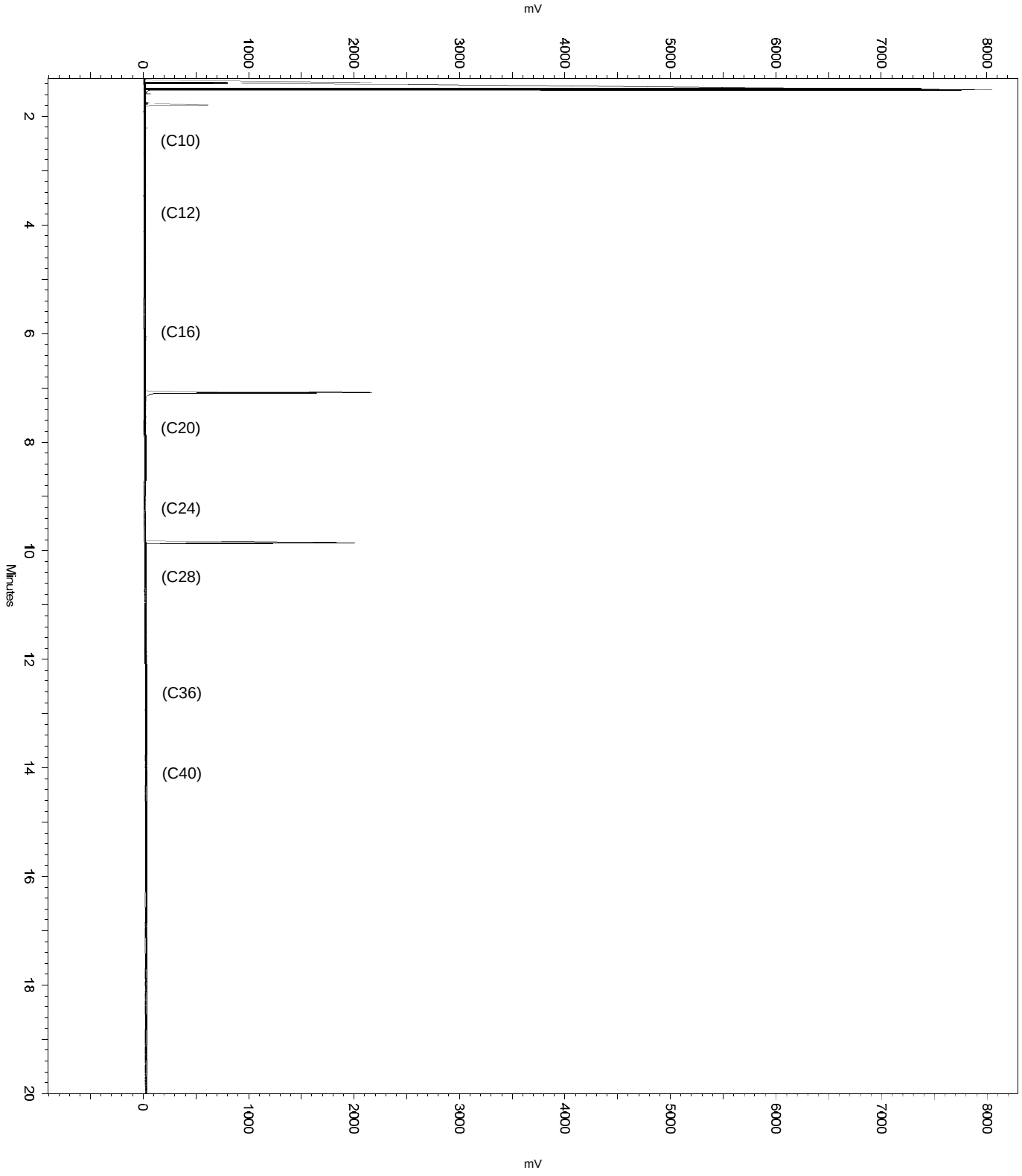
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b027

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **mb,qc655032,190233**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 2:28:25 AM
Analysis Date: 9/10/2012 8:48:17 AM
Instrument: GC15B Vial: 27 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



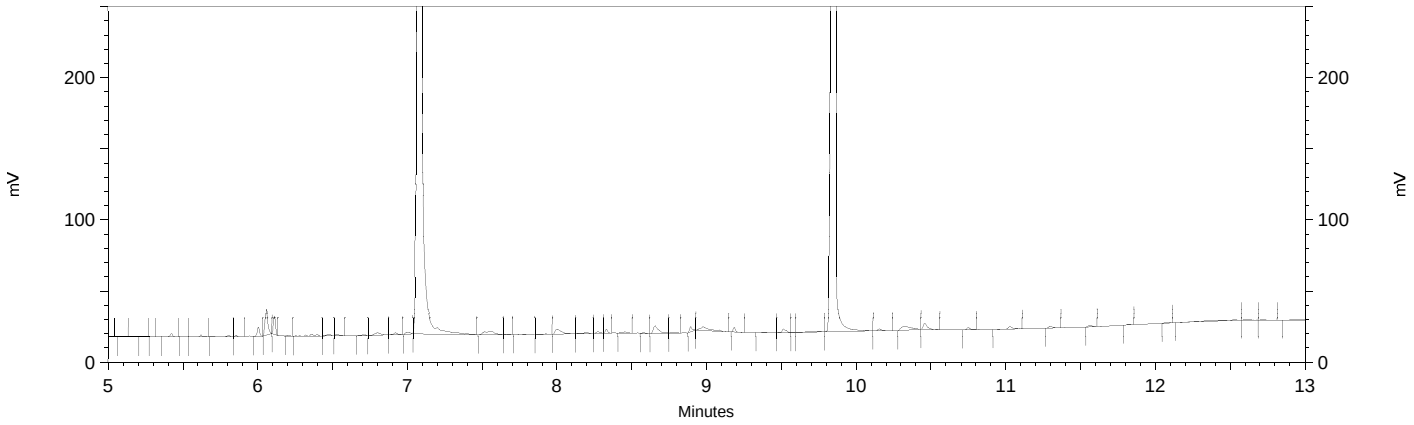
Sample Name: **mb,qc655032,190233**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr234.met
Run Date: 9/10/2012 2:28:25 AM
Analysis Date: 9/10/2012 2:48:34 AM
Instrument: GC15B Vial: 27 Operator: lims2k3\teh2
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.090	3209371	51.596
Hexacosane	9.857	2824335	56.818



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10079\253b027_F36F.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 GCSV Water
EPA 8015D

Type : BS
Inst : GC27A
Seqnum : 972361903013.3
File : 251a013
IDF : 1.0
Lab ID : QC655033 (S)
Matrix : Water
Batch : 190233
Time : 07-SEP-2012 16:16
Cal : 972285785002
Cal : 972287688001
Units : ug/L

Type : BSD
Inst : GC27A
Seqnum : 972361903014.3
File : 251a014
IDF : 1.0
Lab ID : QC655034 (S)
Matrix : Water
Batch : 190233
Time : 07-SEP-2012 16:41
Cal : 972285785002
Cal : 972287688001

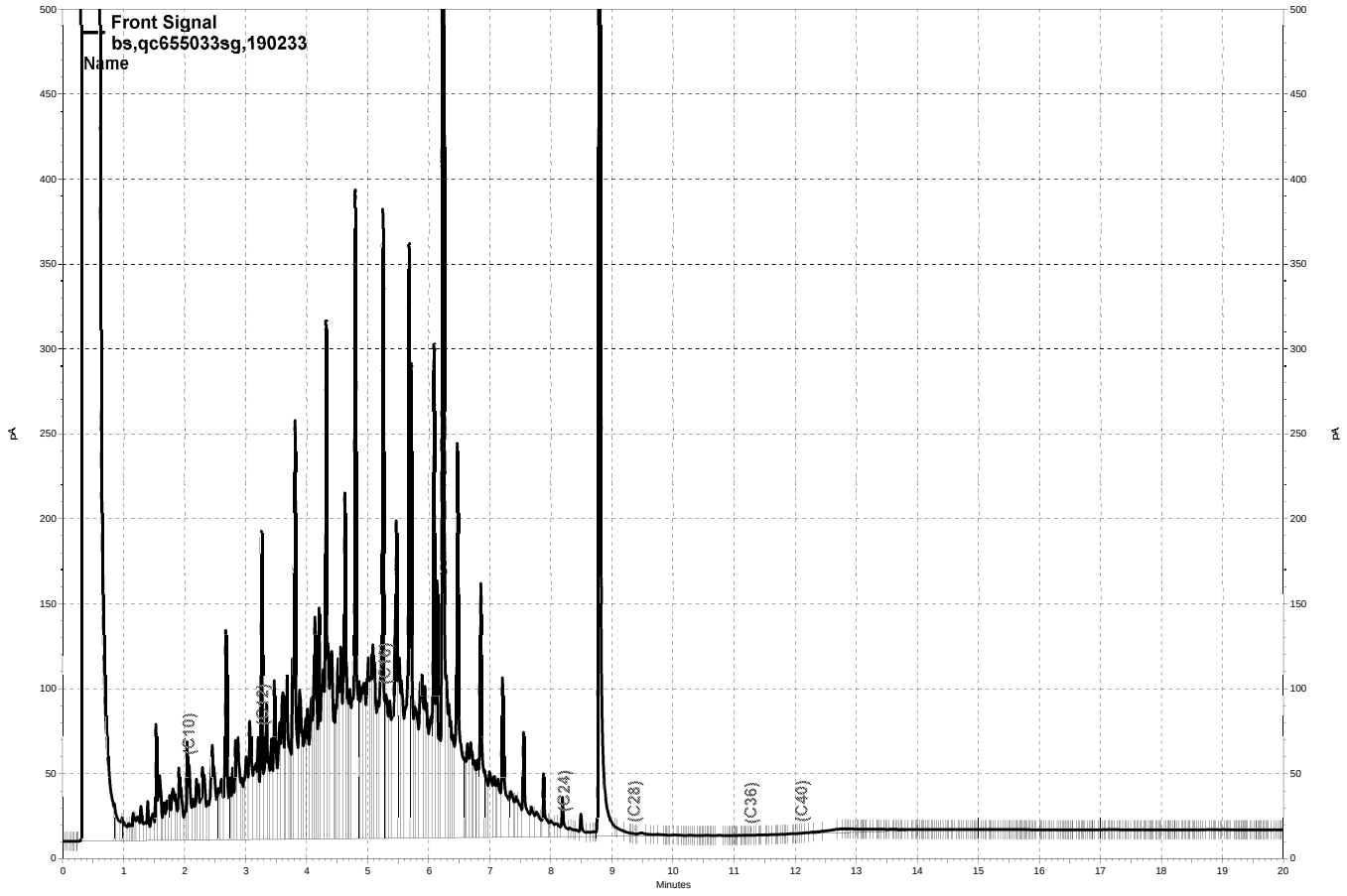
BS: 500.00 mL --> 2.5 ml = 0.005 ml/ml PDF
BSD: 500.00 mL --> 2.5 ml = 0.005 ml/ml PDF

Analyte	Spiked	BS Raw	BS Result	%Rec	BSD Raw	BSD Result	%Rec	Limits	RPD	Lim	Flags
Diesel C10-C24	2500	428.4	2142	86	394.5	1972	79	60-120	8	35	u
o-Terphenyl	250.0	58.82	294.1	118	52.82	264.1	106	61-134			u

JDG 09/07/12 : Corrected automatically drawn baseline for spike & dup. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use



\\lims\gdrive\ezchrom\Projects\GC27\Data\251a013.dat, Front Signal

Sample Name: **bs,qc655033sg,190233**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a013.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh251.met**
Run Date: 9/7/2012 4:16:16 PM
Analysis Date: 9/7/2012 5:03:59 PM
Instrument: GC27A Vial: 13 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		105006287	444.288
JP8:10-16		105006287	0.000
KER:10-16		105006287	465.599
JP5:10-16		105006287	338.585
DSL:10-20		190201012	489.252
DSL:10-22		200322980	487.088
DSL:10-24		203483084	486.378
DSL:12-22		177670213	513.918
DSL:10-28		223101720	530.471
DSL:12-24		180830317	512.536
DSL:12-32		200708315	564.639
BUNKC:12-40		200786073	2234.305
HYFL:12-40		200786073	1320.837
MO:22-32		23038102	94.360
MO:20-36		33190105	108.718
MO:22-36		23068137	79.814
MO:24-36		19908033	78.974
MO:28-36		289397	2.064
MO:28-40		337120	2.220
DSL:10-12		22652767	0.000
DSL:12-16		82353520	0.000
DSL:16-24		98476797	636.434
DSL:10-14		61397577	372.494
DSL:14-28		161704143	632.288
TROIL:12-40		200786073	644.967
MINOIL:12-40		200786073	527.709
CRUDE:10-40		223438840	1494.438

---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

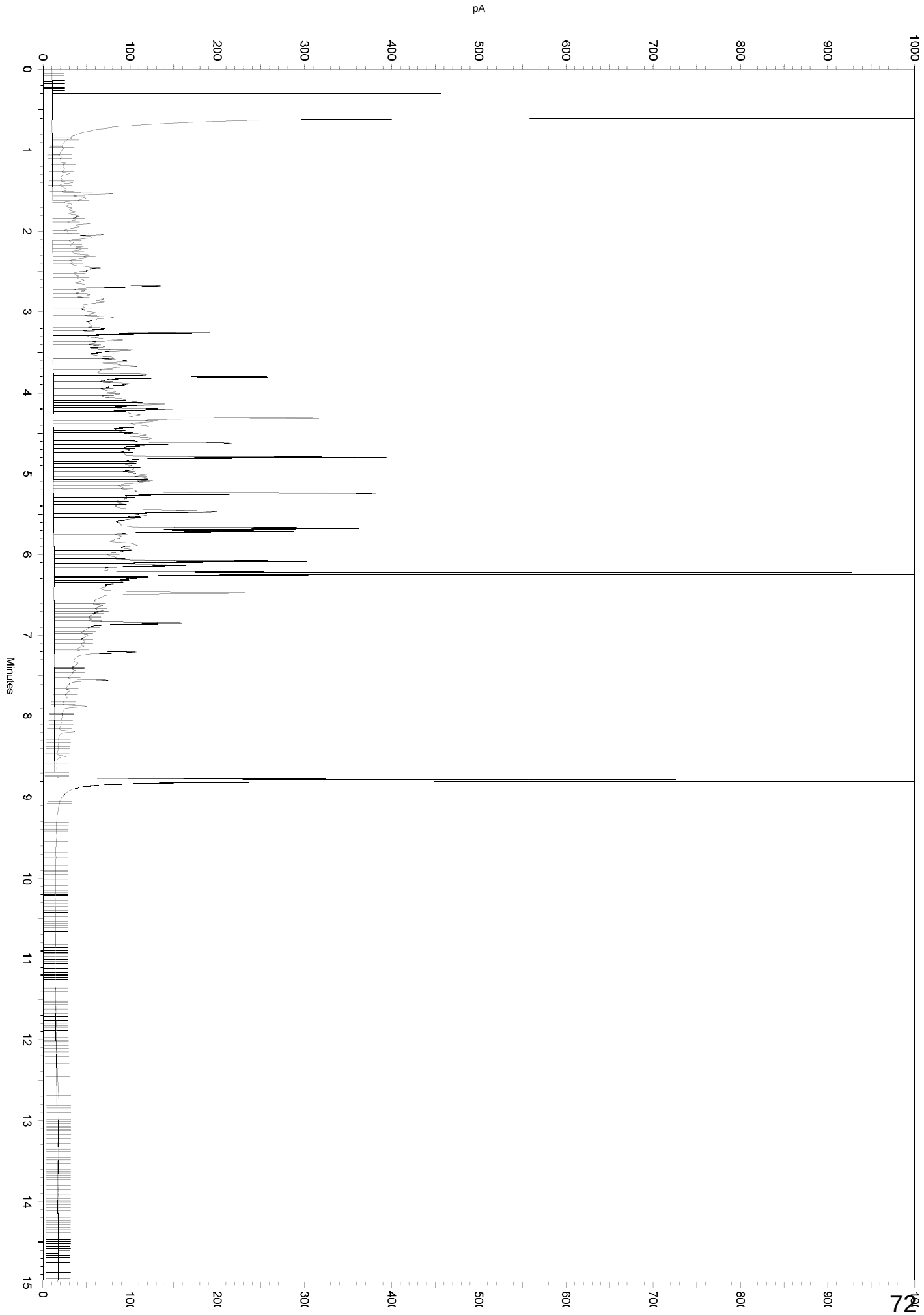
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a013.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Baseline	6.194	6.425	0
No	Manual Peak	8.701	9.383	0
Yes	Move BL Start	1.062	0.15	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Sample Name: **bs,qc655033sg,190233**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a013.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh251.met**
Run Date: 9/7/2012 4:16:16 PM
Analysis Date: 9/7/2012 5:03:51 PM
Instrument: GC27A Vial: 13 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		96480749	408.216
JP8:10-16		96480749	0.000
KER:10-16		96480749	427.797
JP5:10-16		96480749	311.095
DSL:10-20		179011887	460.470
DSL:10-22		188248651	457.729
DSL:10-24		190847797	456.176
DSL:12-22		169348202	489.846
DSL:10-28		209863280	498.994
DSL:12-24		171947348	487.359
DSL:12-32		191098265	537.603
BUNKC:12-40		191176023	2127.366
HYFL:12-40		191176023	1257.619
MO:22-32		21750063	89.084
MO:20-36		31016862	101.599
MO:22-36		21780098	75.357
MO:24-36		19180952	76.090
MO:28-36		165469	1.180
MO:28-40		213192	1.404
DSL:10-12		18900449	0.000
DSL:12-16		77580300	0.000
DSL:16-24		94367048	609.874
DSL:10-14		54866189	332.869
DSL:14-28		154997091	606.063
TROIL:12-40		191176023	614.098
MINOIL:12-40		191176023	502.452
CRUDE:10-40		210076472	1405.066

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

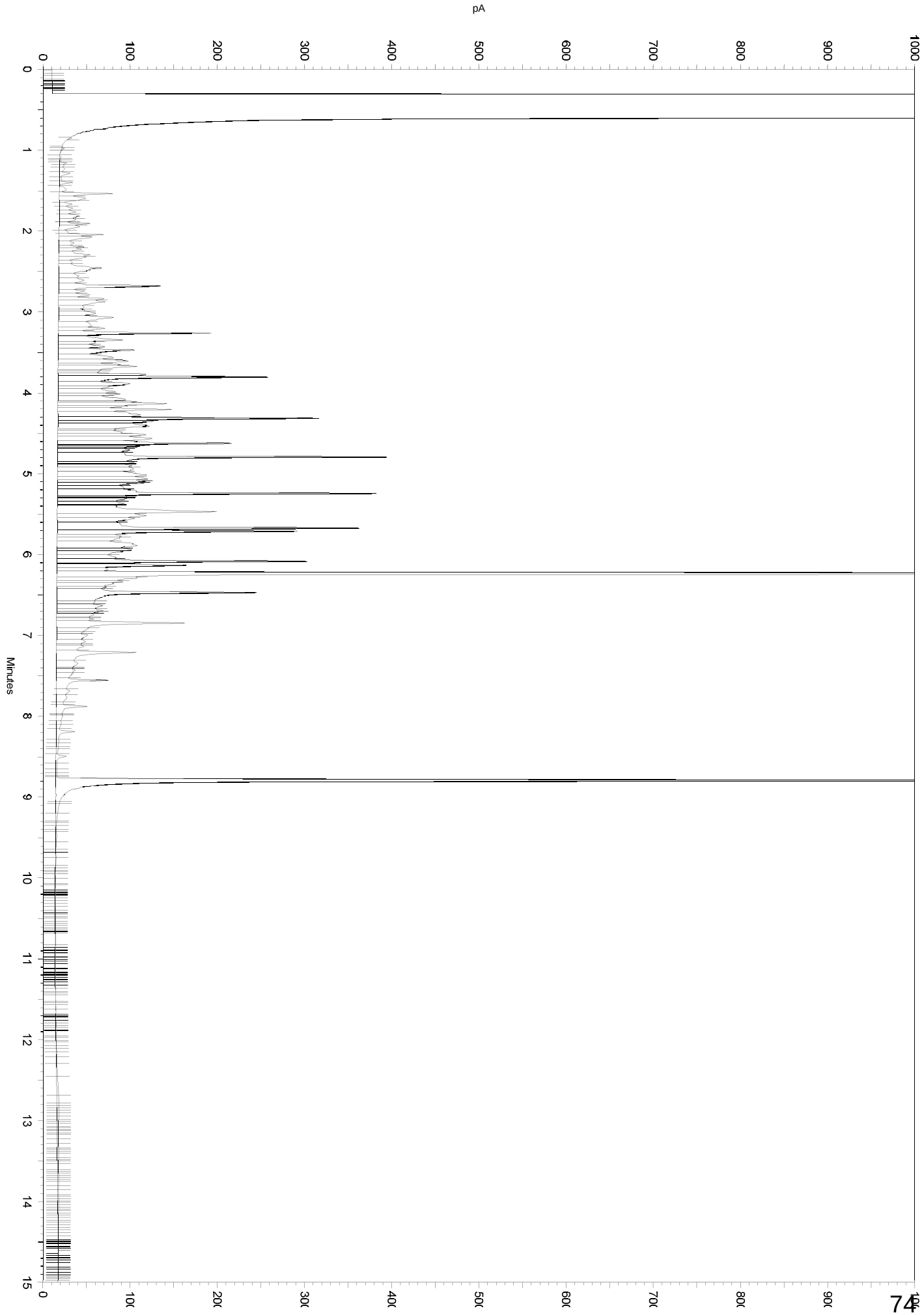
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a013.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Baseline	6.194	6.425	0
No	Manual Peak	8.701	9.383	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

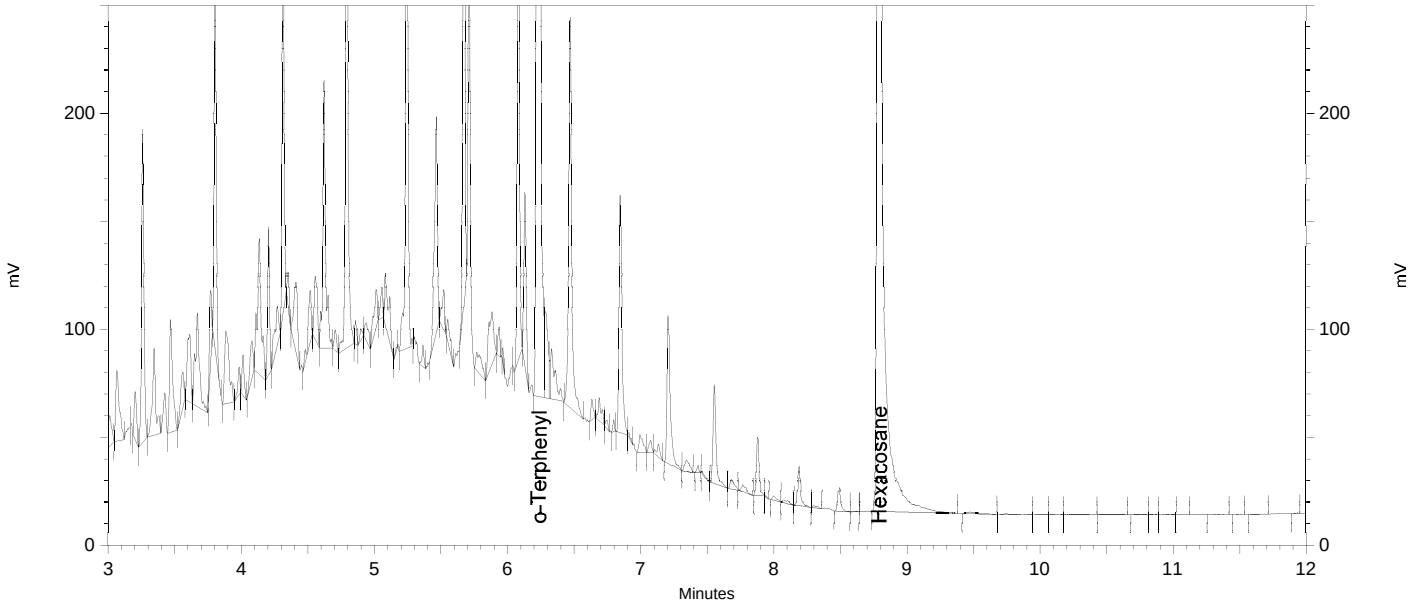
Sample Name: **bs,qc655033sg,190233**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a013.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_233.met**
Run Date: 9/7/2012 4:16:16 PM
Analysis Date: 9/7/2012 5:03:12 PM
Instrument: GC27A Vial: 13 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.240	24258882	58.823
Hexacosane	8.795	18280413	50.446



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a013.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	6.194	6.425	0
Yes	Manual Peak	8.701	9.383	0

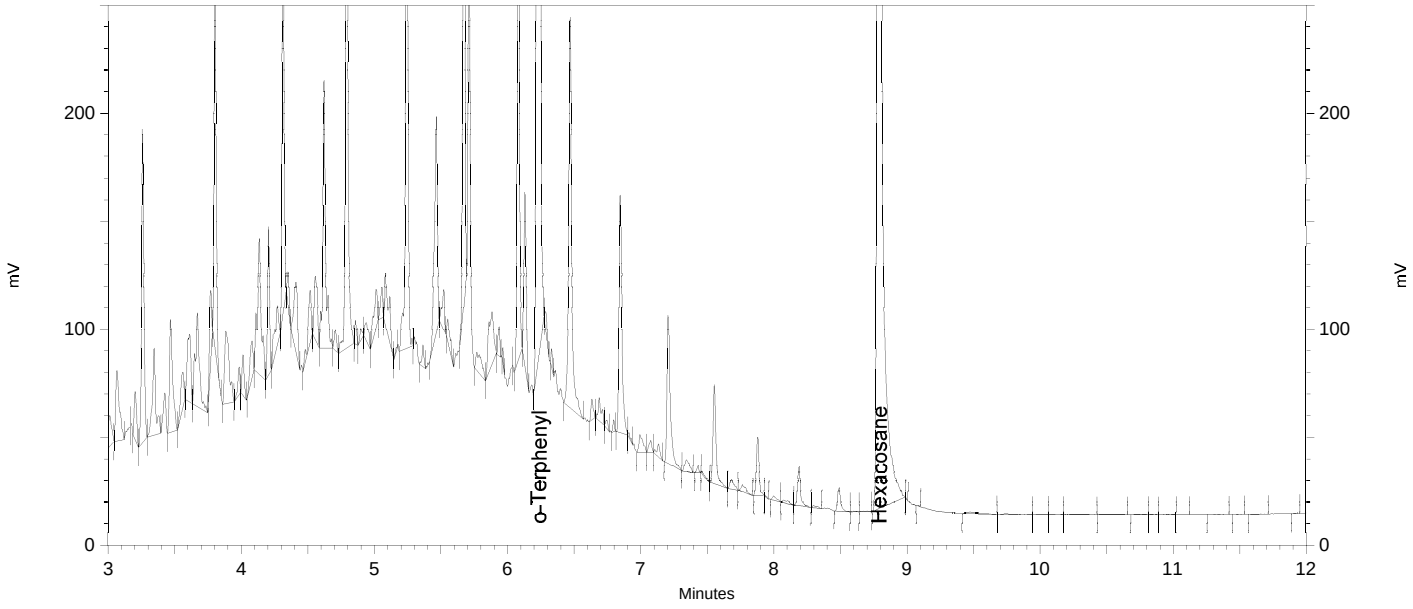
Sample Name: **bs,qc655033sg,190233**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a013.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_233.met**
Run Date: 9/7/2012 4:16:16 PM
Analysis Date: 9/7/2012 4:36:15 PM
Instrument: GC27A Vial: 13 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.240	23568207	57.148
Hexacosane	8.795	17547199	48.422



---< General Method Parameters >---

No items selected for this section

---< TST >---

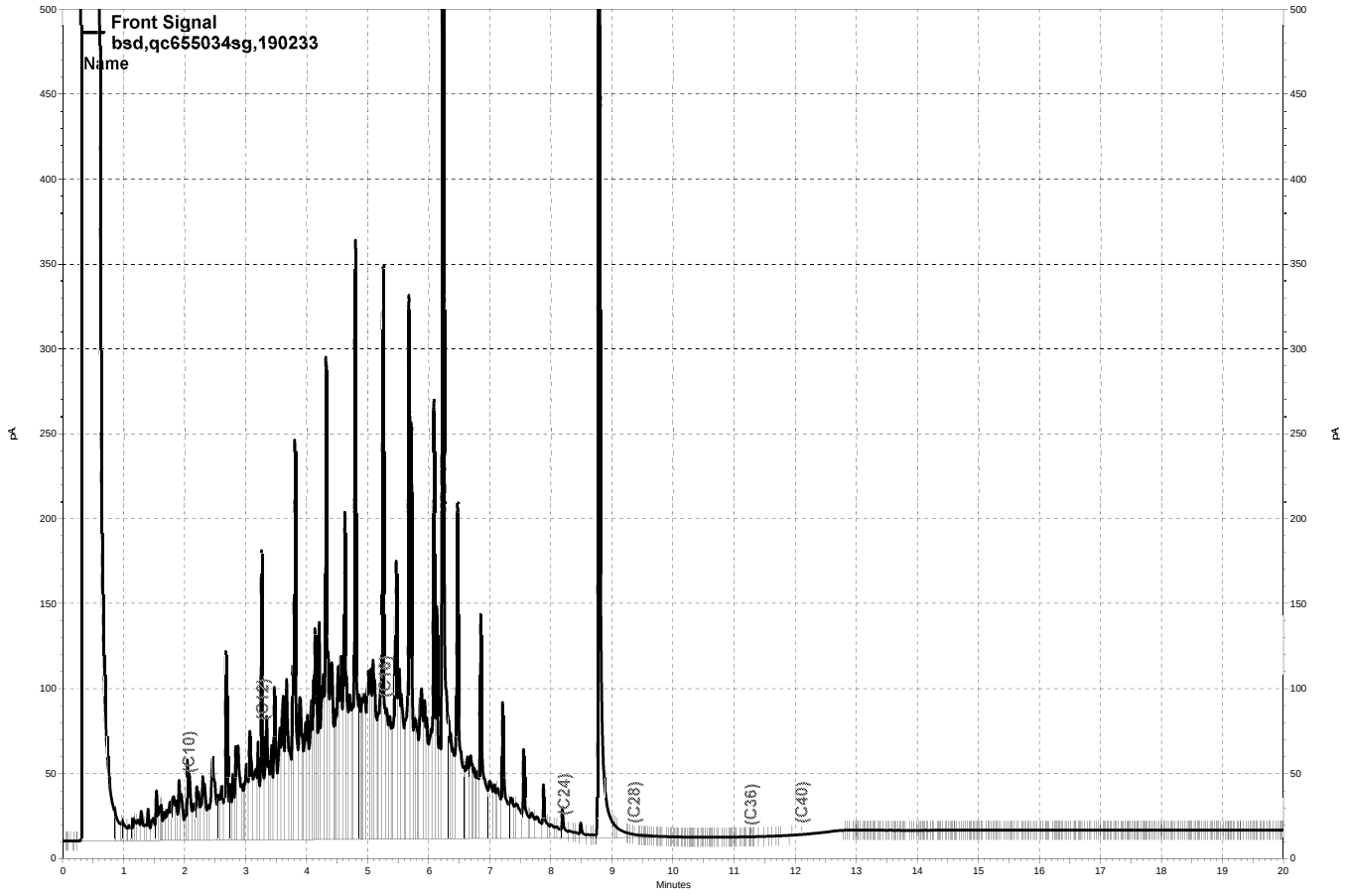
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10001\251a013.dat_D05F.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\lims\gdrive\ezchrom\Projects\GC27\Data\251a014.dat, Front Signal

Sample Name: **bsd,qc655034sg,190233**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a014.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh251.met**
Run Date: 9/7/2012 4:41:18 PM
Analysis Date: 9/7/2012 5:04:11 PM
Instrument: GC27A Vial: 14 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		98287870	415.862
JP8:10-16		98287870	0.000
KER:10-16		98287870	435.810
JP5:10-16		98287870	316.922
DSL:10-20		176005832	452.738
DSL:10-22		183948149	447.272
DSL:10-24		186819896	446.549
DSL:12-22		163414944	472.684
DSL:10-28		203715436	484.376
DSL:12-24		166286691	471.315
DSL:12-32		183397715	515.940
BUNKC:12-40		183413852	2040.990
HYFL:12-40		183413852	1206.557
MO:22-32		19982771	81.846
MO:20-36		27935975	91.507
MO:22-36		19993658	69.176
MO:24-36		17121911	67.921
MO:28-36		226371	1.614
MO:28-40		231621	1.525
DSL:10-12		20533205	0.000
DSL:12-16		77754665	0.000
DSL:16-24		88532026	572.163
DSL:10-14		57359885	347.998
DSL:14-28		146355551	572.273
TROIL:12-40		183413852	589.164
MINOIL:12-40		183413852	482.051
CRUDE:10-40		203947057	1364.070

---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

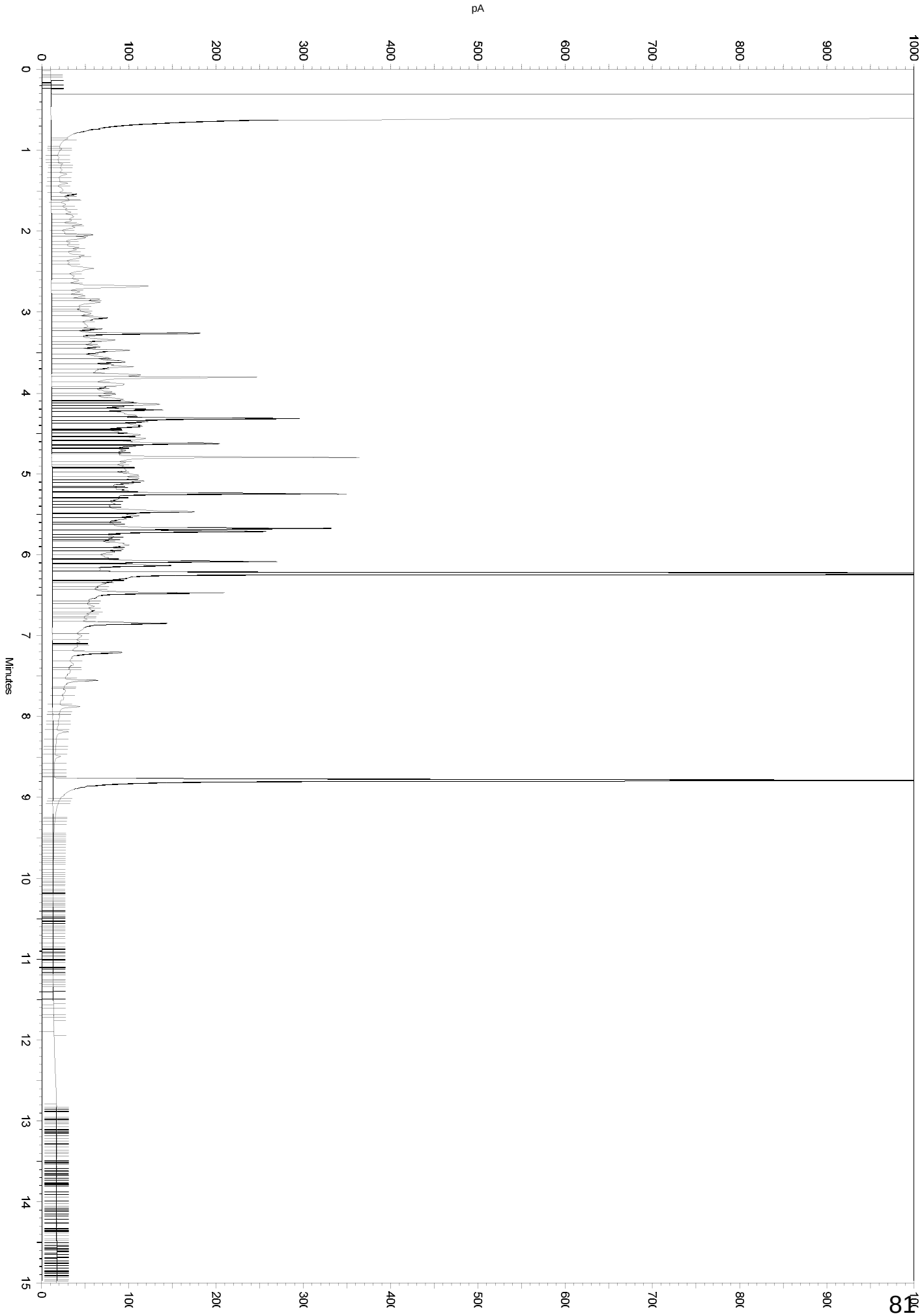
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a014.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Baseline	6.199	6.39	0
No	Split Peak	6.282	0	0
No	Reassign Peak	6.296	6.246	0

Yes	Move BL Start	1.067	0.166	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Sample Name: **bsd,qc655034sg,190233**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a014.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh251.met**
Run Date: 9/7/2012 4:41:18 PM
Analysis Date: 9/7/2012 5:04:05 PM
Instrument: GC27A Vial: 14 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		90557317	383.154
JP8:10-16		90557317	0.000
KER:10-16		90557317	401.532
JP5:10-16		90557317	291.996
DSL:10-20		165766757	426.400
DSL:10-22		172997339	420.645
DSL:10-24		175327342	419.078
DSL:12-22		155877710	450.882
DSL:10-28		191638508	455.661
DSL:12-24		158207713	448.416
DSL:12-32		174618128	491.241
BUNKC:12-40		174634265	1943.293
HYFL:12-40		174634265	1148.802
MO:22-32		18740418	76.757
MO:20-36		25981887	85.106
MO:22-36		18751305	64.878
MO:24-36		16421302	65.142
MO:28-36		110136	0.785
MO:28-40		115386	0.760
DSL:10-12		17119629	0.000
DSL:12-16		73437688	0.000
DSL:16-24		84770025	547.850
DSL:10-14		51447207	312.126
DSL:14-28		140191301	548.170
TROIL:12-40		174634265	560.962
MINOIL:12-40		174634265	458.976
CRUDE:10-40		191753894	1282.518

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

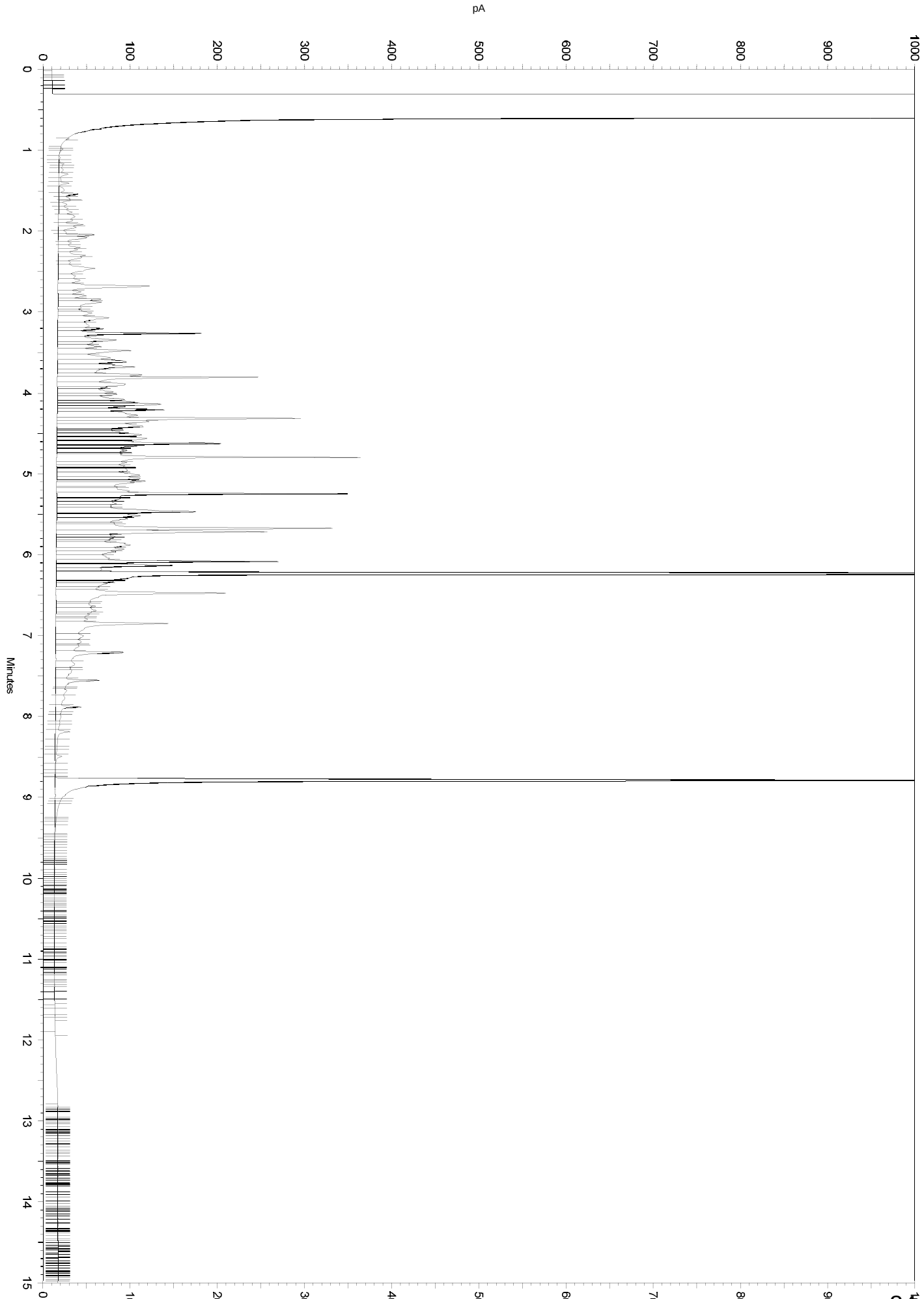
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a014.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Baseline	6.199	6.39	0
No	Split Peak	6.282	0	0
No	Reassign Peak	6.296	6.246	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

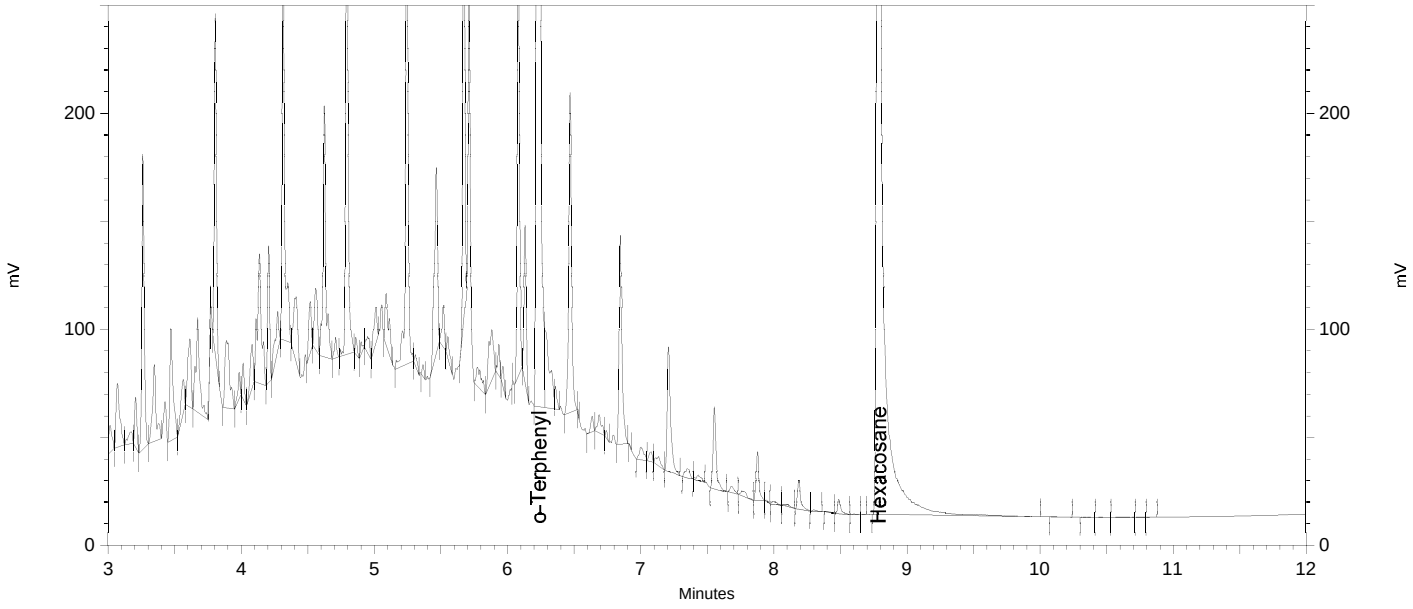
Sample Name: **bsd,qc655034sg,190233**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a014.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_233.met**
Run Date: 9/7/2012 4:41:18 PM
Analysis Date: 9/7/2012 5:03:33 PM
Instrument: GC27A Vial: 14 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.238	21782773	52.819
Hexacosane	8.790	15953541	44.024



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a014.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	6.199	6.39	0
Yes	Split Peak	6.282	0	0
Yes	Reassign Peak	6.296	6.246	0

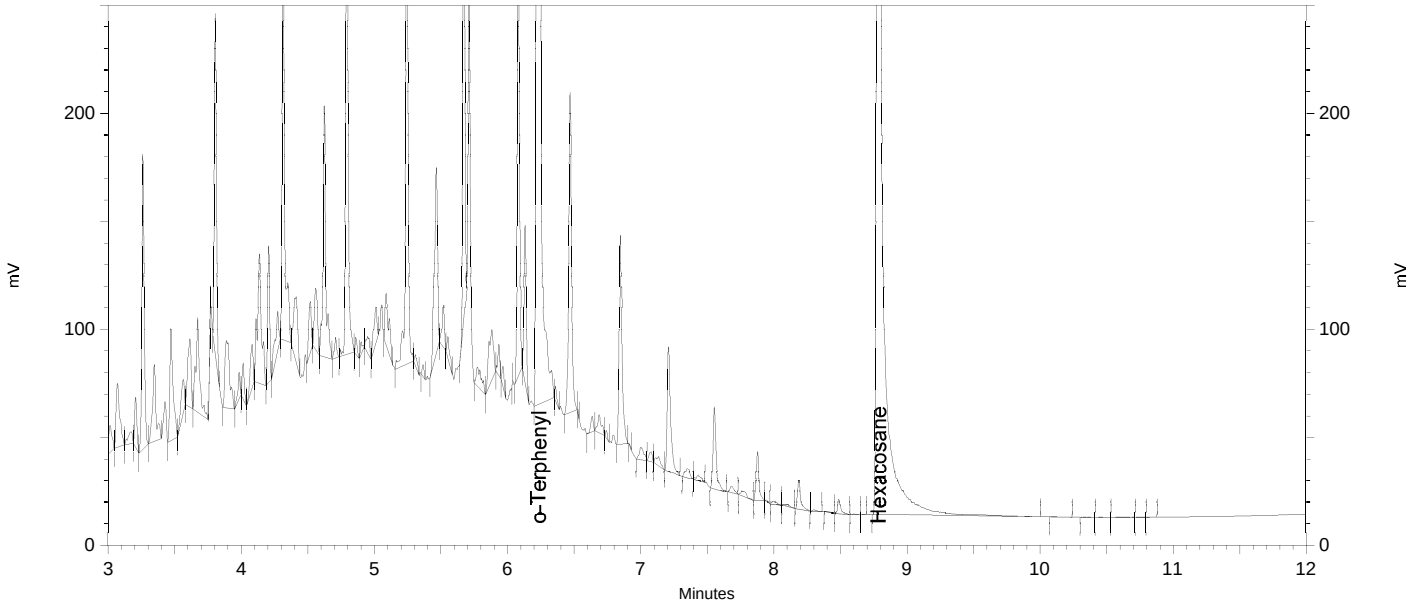
Sample Name: **bsd,qc655034sg,190233**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a014.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_233.met**
Run Date: 9/7/2012 4:41:18 PM
Analysis Date: 9/7/2012 5:01:19 PM
Instrument: GC27A Vial: 14 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.238	22256009	53.966
Hexacosane	8.790	15953541	44.024



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10001\251a014.dat_D060.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Initial Calibration Raw Data

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC14B
Calnum : 222229527001
Units : mg/L

Name : OtpHex_159
Date : 07-JUN-2012 16:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	159_008	222229527008	HEX OTP_5	07-JUN-2012 16:14	S19347
L2	159_009	222229527009	HEX OTP_10	07-JUN-2012 16:42	S19348
L3	159_010	222229527010	HEX OTP_25	07-JUN-2012 17:10	S19349
L4	159_011	222229527011	HEX OTP_50	07-JUN-2012 17:38	S19350
L5	159_012	222229527012	HEX OTP_100	07-JUN-2012 18:05	S19351
L6	159_013	222229527013	HEX OTP_200	07-JUN-2012 18:33	S19352

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	B	33075	33093	32862	32539	33233	33768	AVRG		3.02E-5		33095	1	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	B	5.0000	0	10.000	0	25.000	-1	50.000	-2	100.00	0	200.00	2

MAC 06/11/12 : Corrected automatically drawn baseline in HEX OTP_25 (159_010).

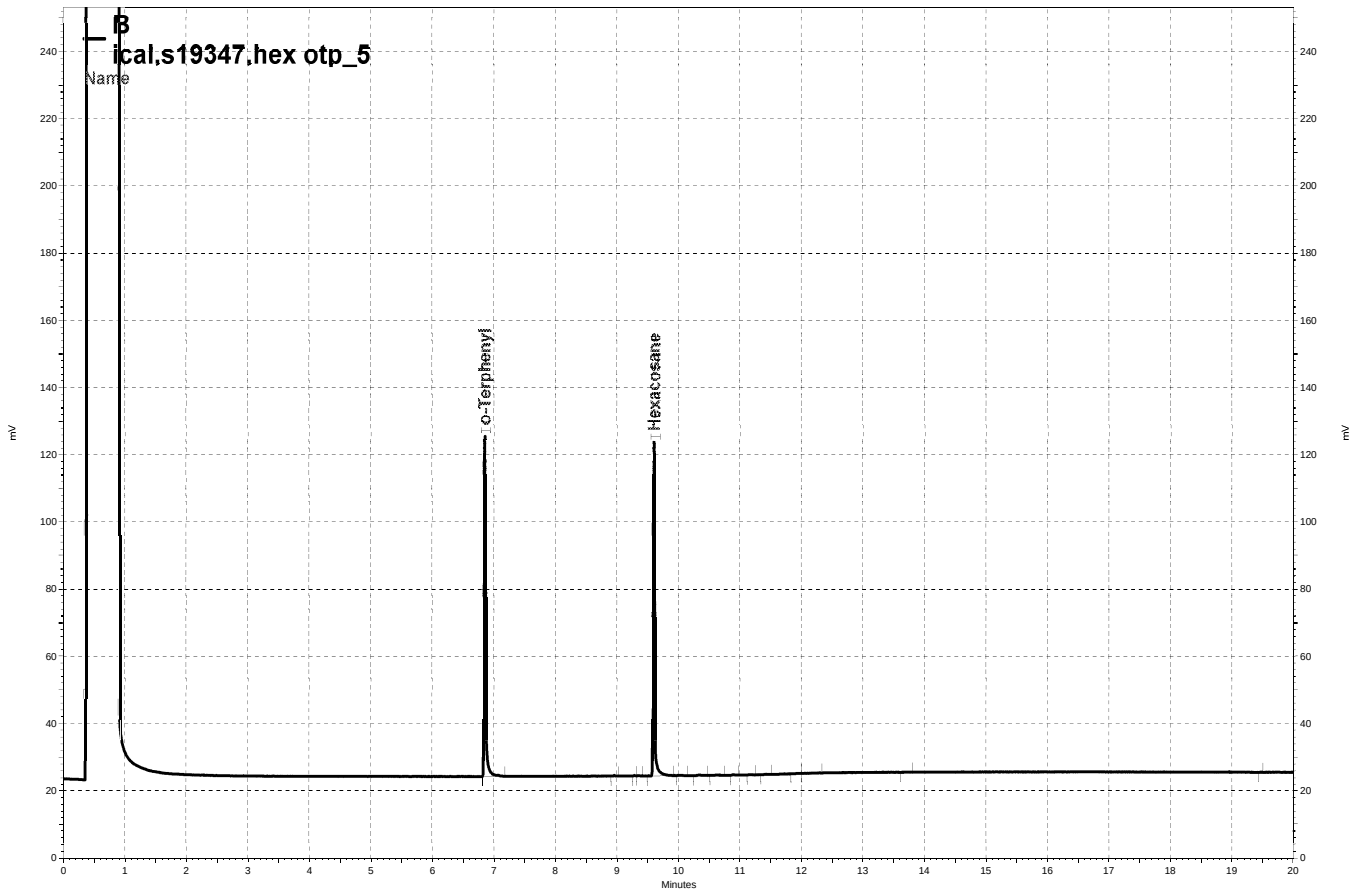
MAC 06/11/12 : Corrected automatically drawn baseline in HEX OTP_50 (159_011).

MAC 06/11/12 : Corrected automatically drawn baseline in HEX OTP_100 (159_012).

MAC 06/11/12 : Corrected automatically drawn baseline in HEX OTP_200 (159_013).

Analyst: MAC Date: 06/11/12 Reviewer: EAH Date: 06/11/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b008, B

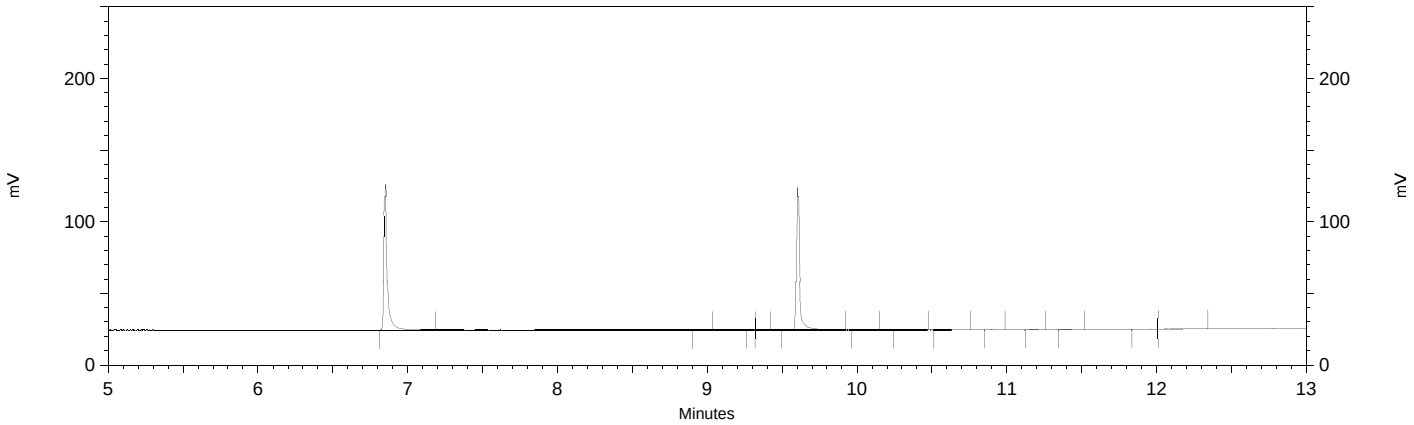
Sample Name: **ical,s19347,hex otp_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\159.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr159.met
Run Date: 6/7/2012 4:14:36 PM
Analysis Date: 6/11/2012 10:38:17 AM
Instrument: GC14B Vial: 8 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.853	165373	5.000 CAL
Hexacosane	9.603	147606	5.000 CAL



---< General Method Parameters >---

No items selected for this section

---< B >---

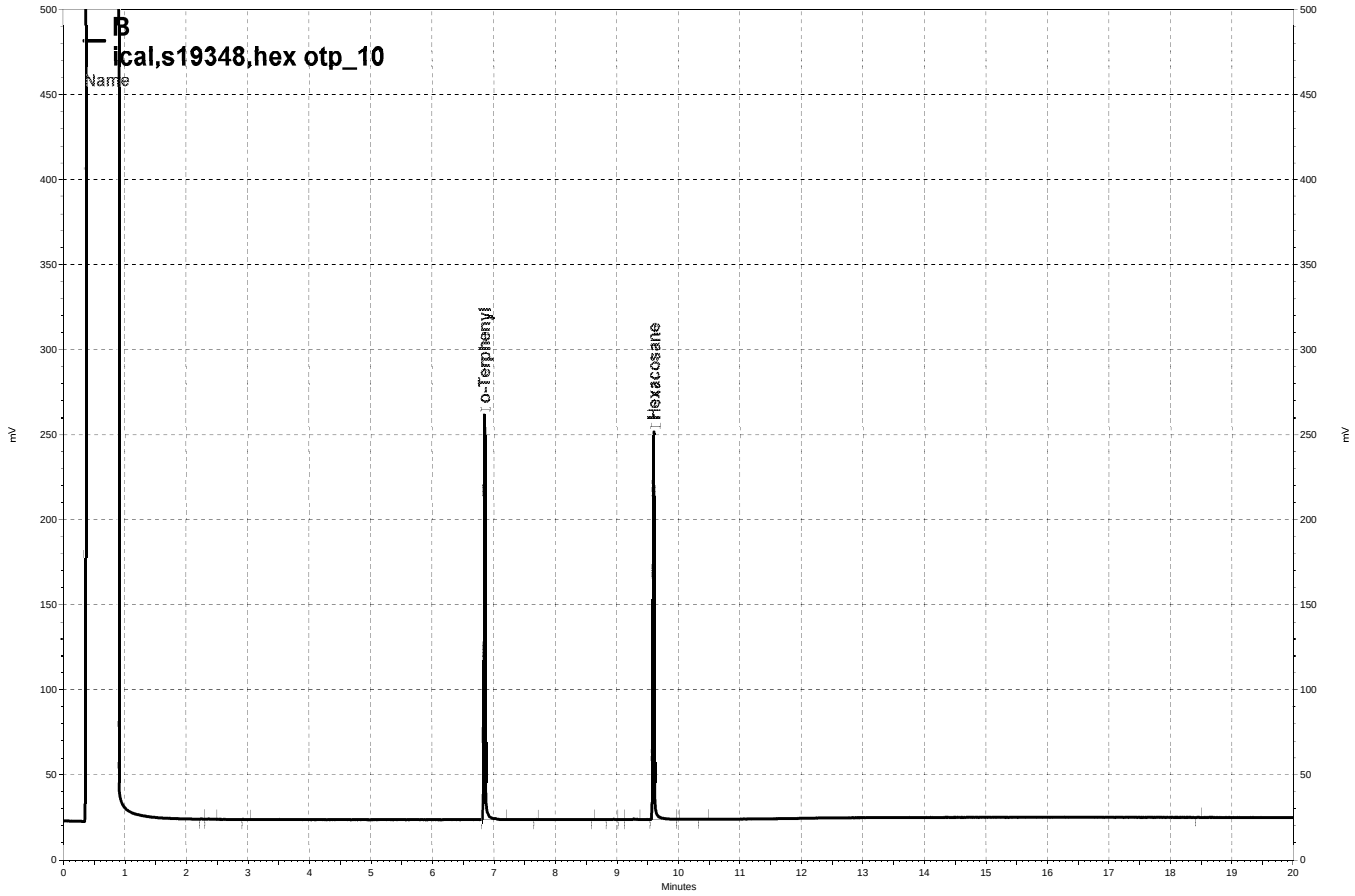
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b009, B

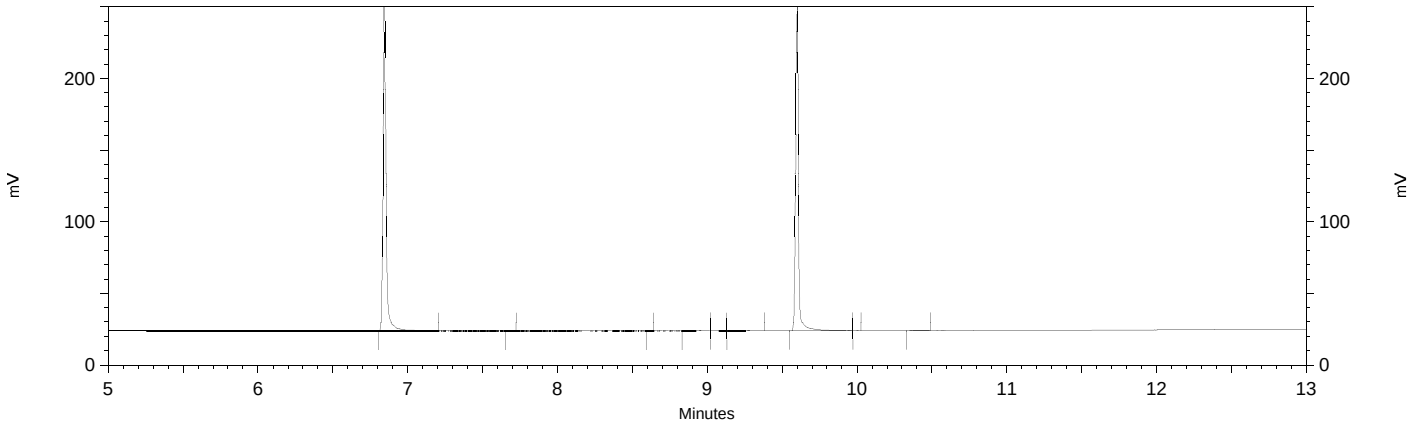
Sample Name: **ical,s19348,hex otp_10**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\159.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr159.met
Run Date: 6/7/2012 4:42:20 PM
Analysis Date: 6/11/2012 11:52:25 AM
Instrument: GC14B Vial: 9 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.848	330931	10.000 CAL
Hexacosane	9.600	293644	10.000 CAL



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

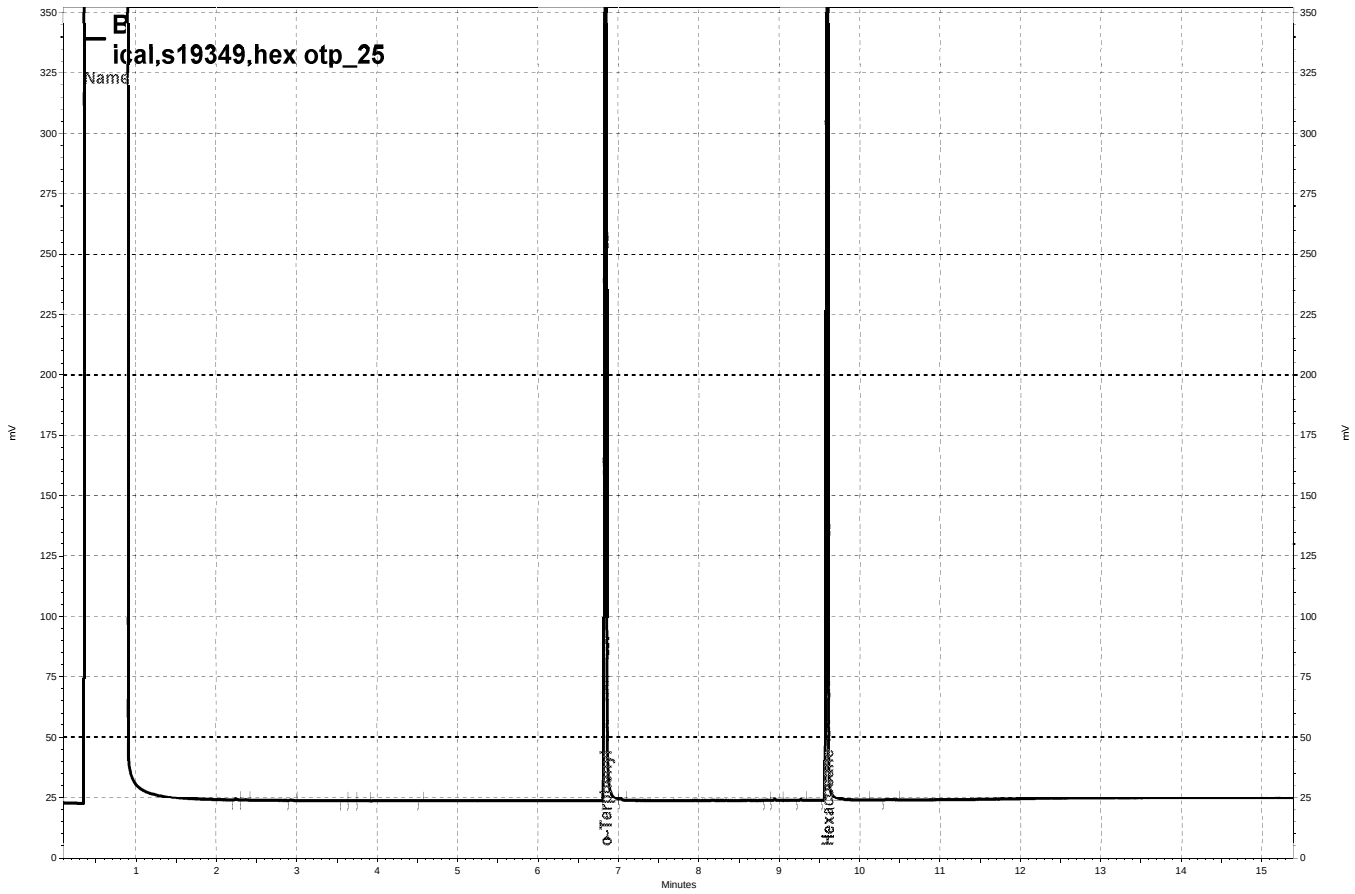
Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b010, B

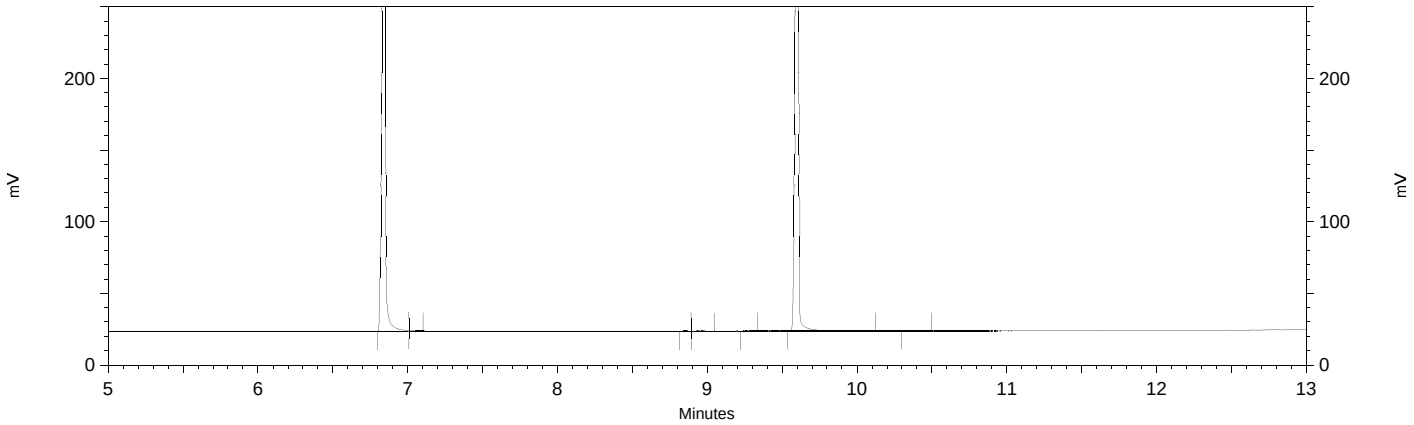
Sample Name: **ical,s19349,hex otp_25**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\159.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr159.met
Run Date: 6/7/2012 5:10:15 PM
Analysis Date: 6/11/2012 10:40:31 AM
Instrument: GC14B Vial: 10 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.845	821541	23.516
Hexacosane	9.603	734734	24.424



---< General Method Parameters >----------

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Move BL Stop	7.008	7.106	0

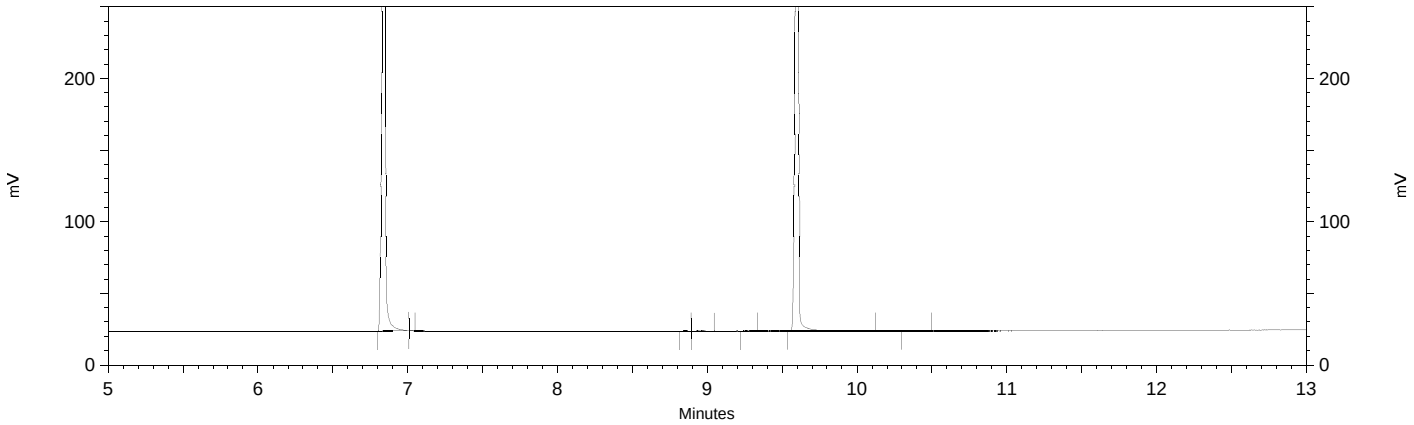
Sample Name: **ical,s19349,hex otp_25**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\159.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr159.met
Run Date: 6/7/2012 5:10:15 PM
Analysis Date: 6/11/2012 10:40:07 AM
Instrument: GC14B Vial: 10 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.845	817745	25.000 CAL
Hexacosane	9.603	734734	25.000 CAL



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

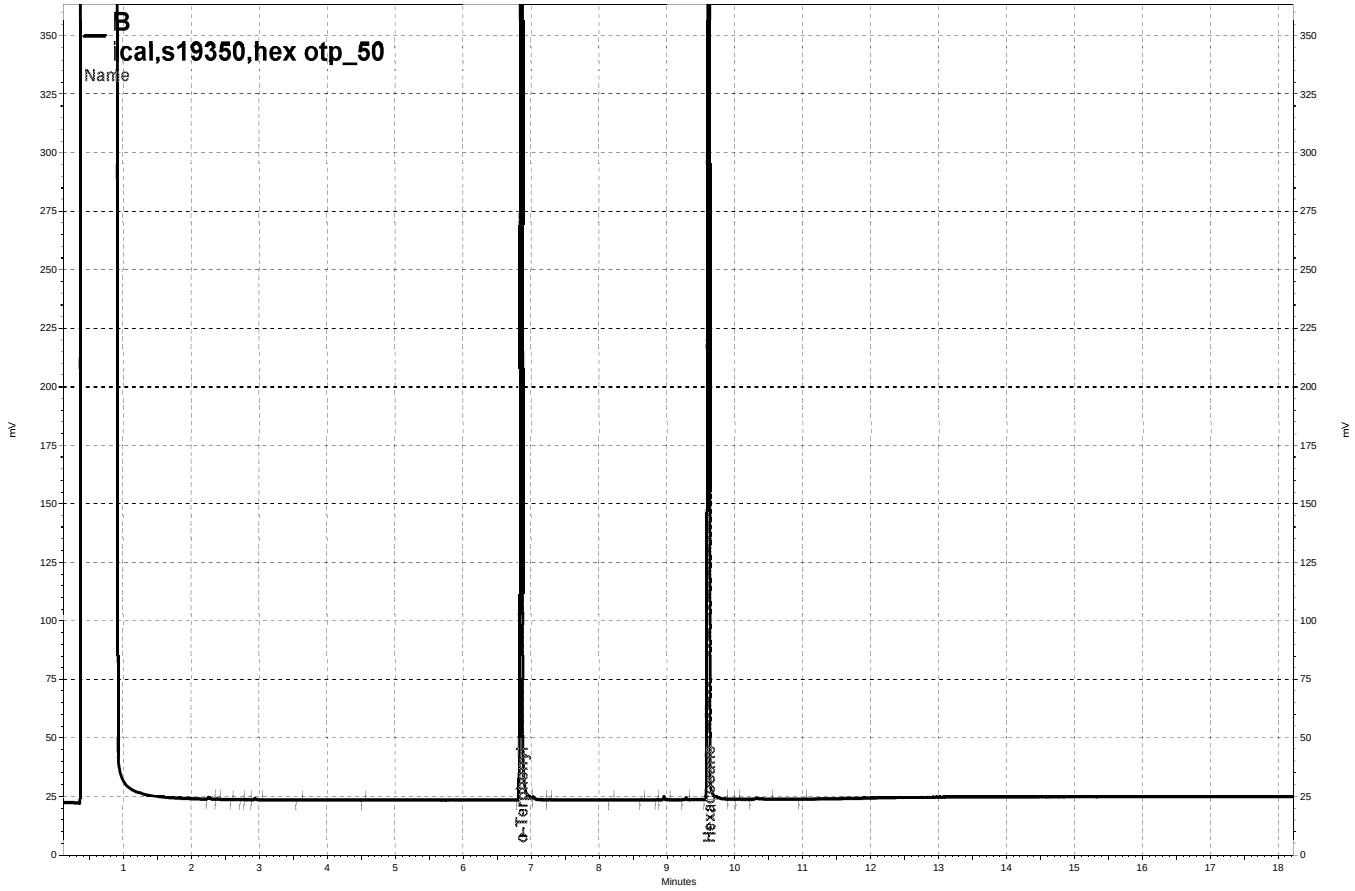
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b011, B

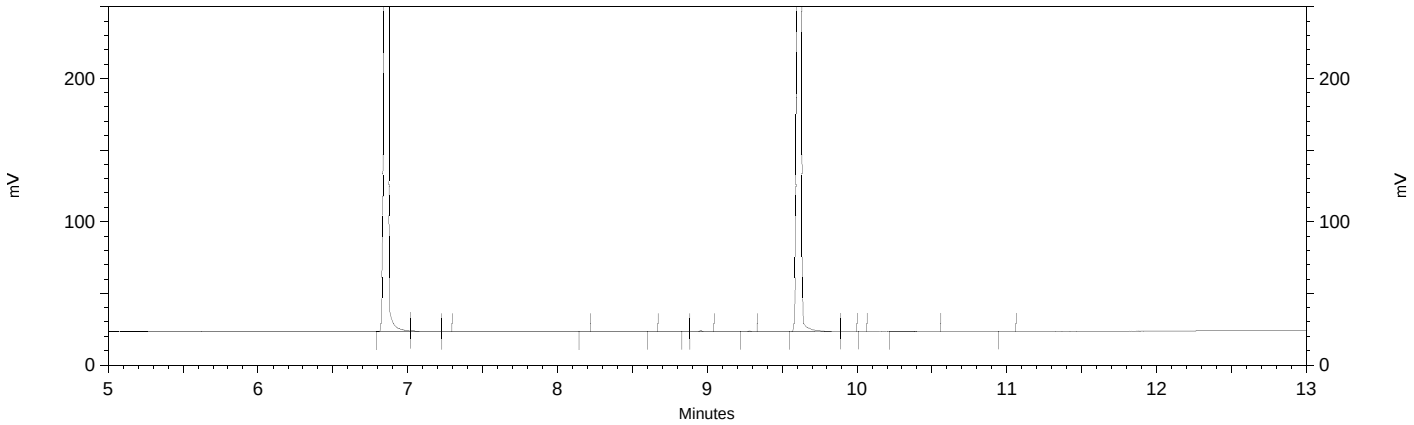
Sample Name: **ical,s19350,hex otp_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\159.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr159.met
Run Date: 6/7/2012 5:38:02 PM
Analysis Date: 6/11/2012 10:41:17 AM
Instrument: GC14B Vial: 11 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.867	1626951	47.523
Hexacosane	9.623	1385426	46.981



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.02	0	0

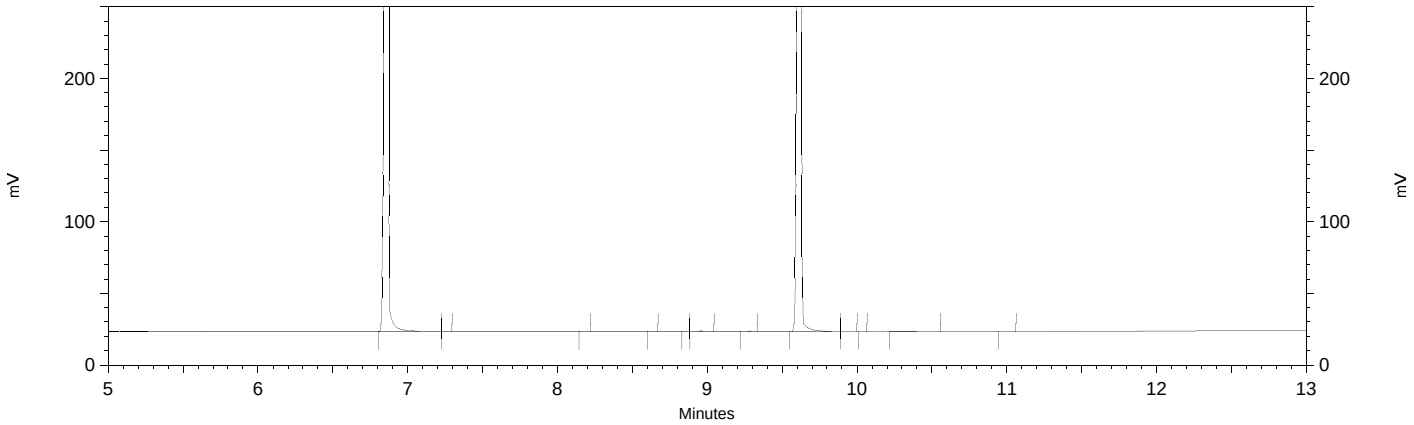
Sample Name: **ical,s19350,hex otp_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\159.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr159.met
Run Date: 6/7/2012 5:38:02 PM
Analysis Date: 6/11/2012 10:41:04 AM
Instrument: GC14B Vial: 11 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.867	1630438	50.000 CAL
Hexacosane	9.623	1385426	50.000 CAL



---< General Method Parameters >---

No items selected for this section

---< B >---

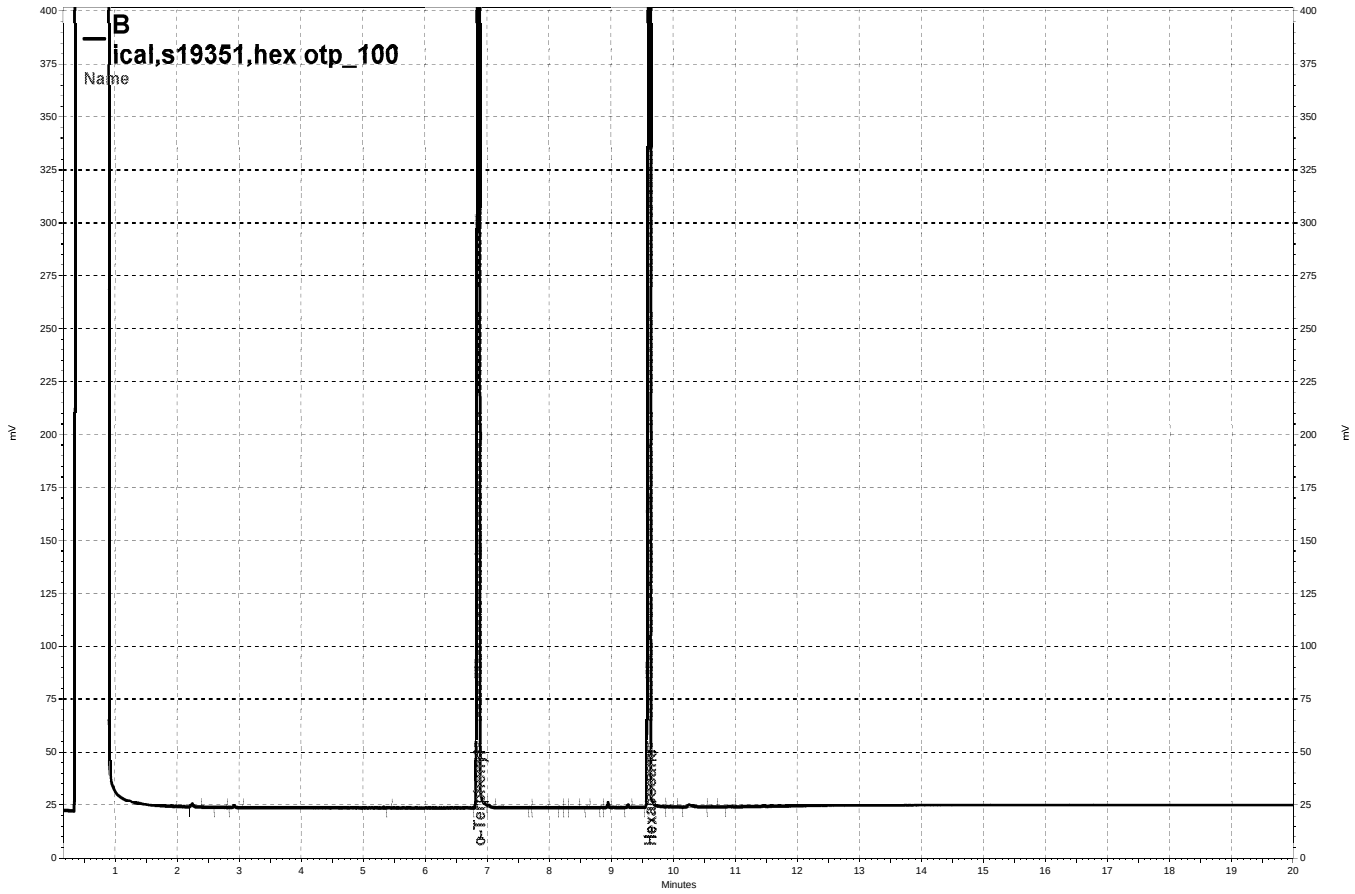
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b012, B

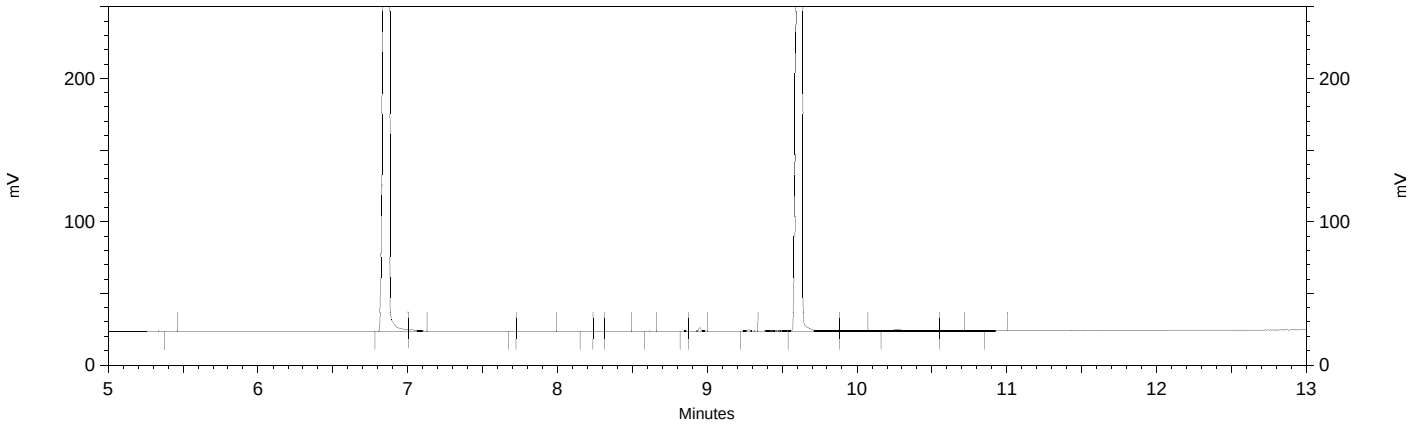
Sample Name: **ical,s19351,hex otp_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\159.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr159.met
Run Date: 6/7/2012 6:05:51 PM
Analysis Date: 6/11/2012 10:41:51 AM
Instrument: GC14B Vial: 12 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.877	3323290	99.085
Hexacosane	9.630	2609640	91.479



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.007	0	0

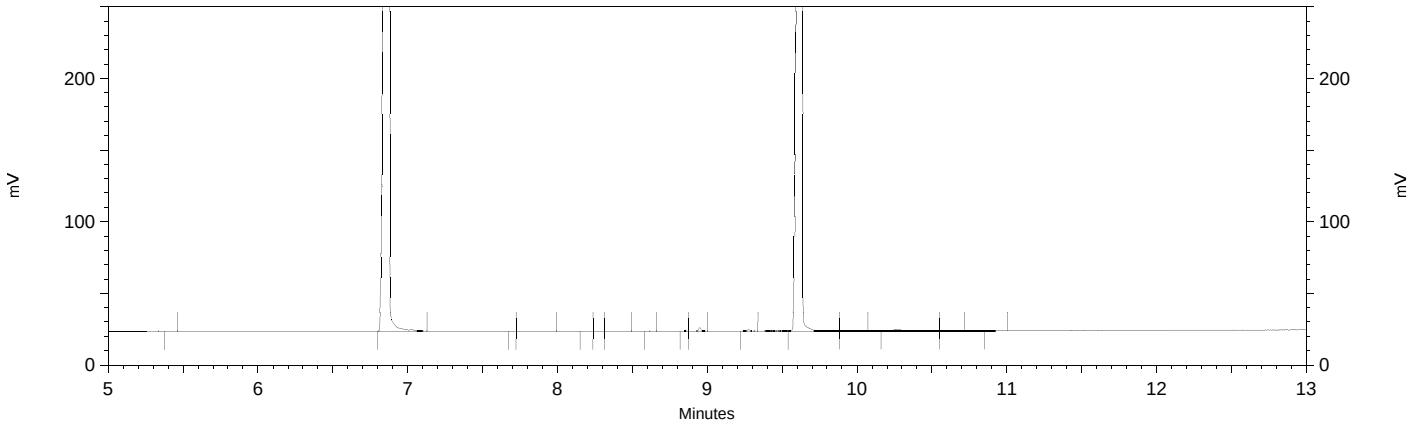
Sample Name: **ical,s19351,hex otp_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\159.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr159.met
Run Date: 6/7/2012 6:05:51 PM
Analysis Date: 6/11/2012 10:41:40 AM
Instrument: GC14B Vial: 12 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.877	3327077	100.000 CAL
Hexacosane	9.630	2609640	100.000 CAL



---< General Method Parameters >---

No items selected for this section

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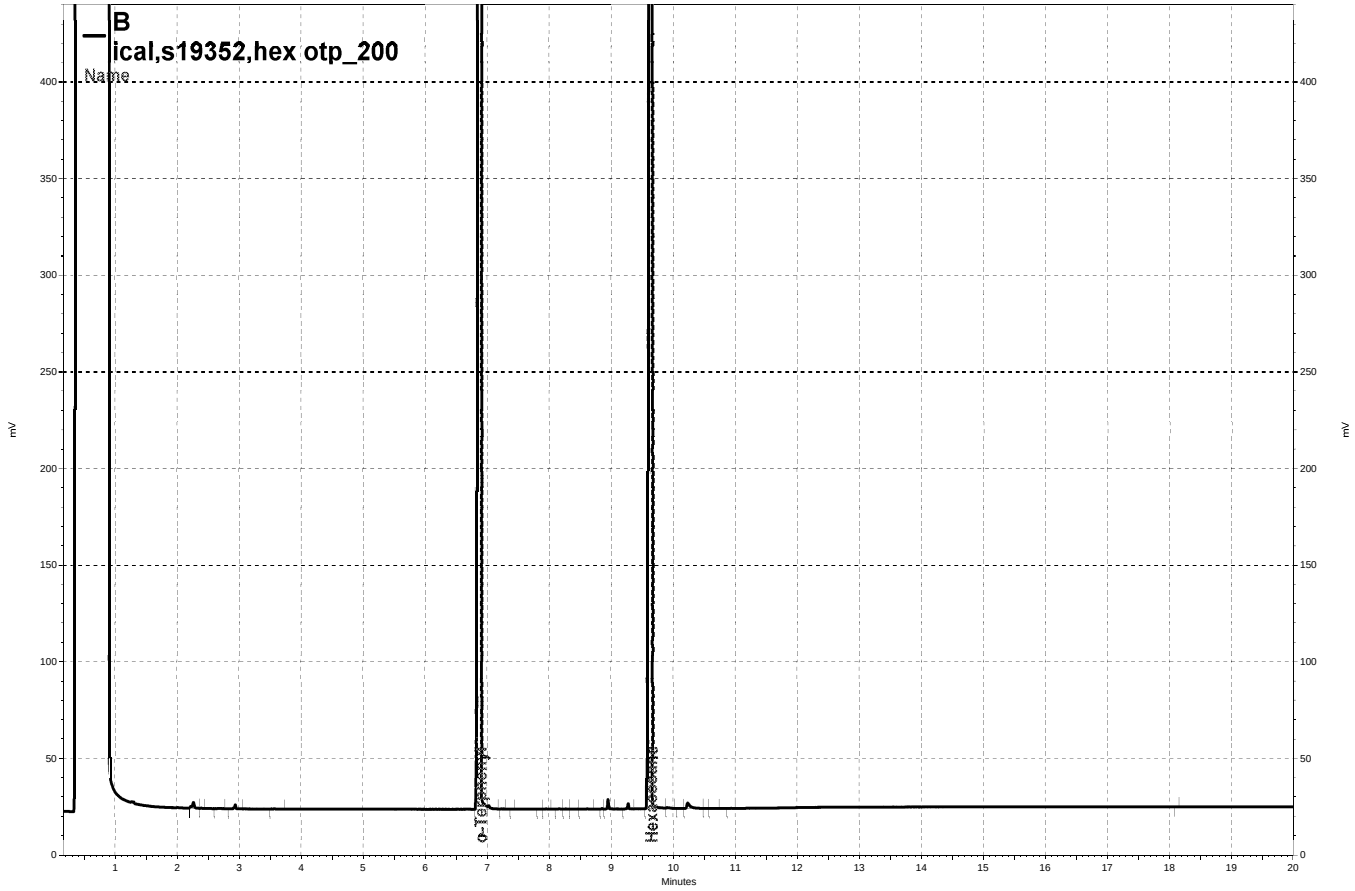
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b013, B

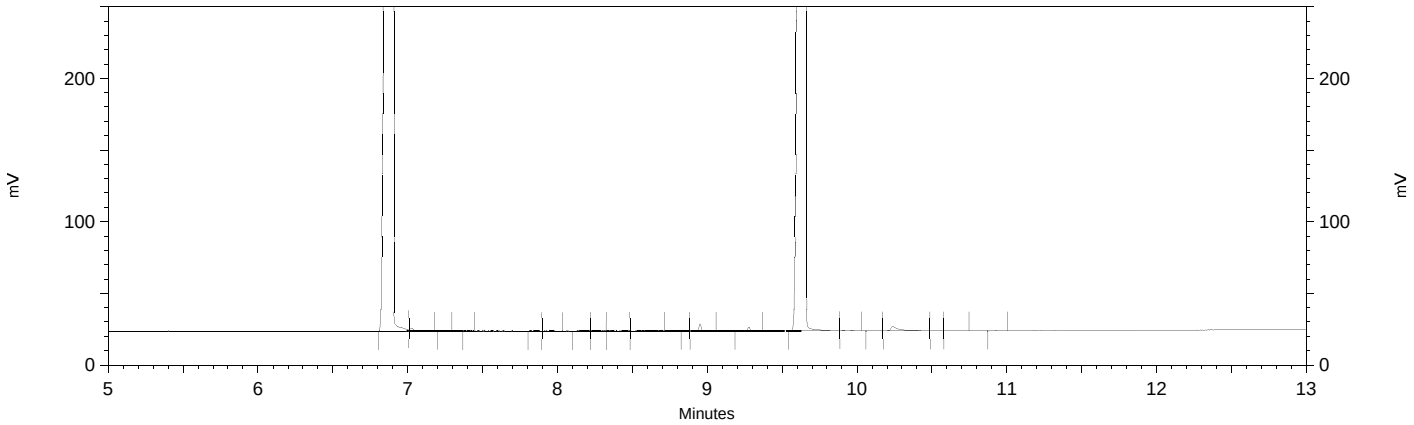
Sample Name: **ical,s19352,hex otp_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\159.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr159.met
Run Date: 6/7/2012 6:33:36 PM
Analysis Date: 6/11/2012 10:42:28 AM
Instrument: GC14B Vial: 13 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.903	6753670	204.155
Hexacosane	9.655	5075245	181.847



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Move BL Stop	7.01	7.183	0

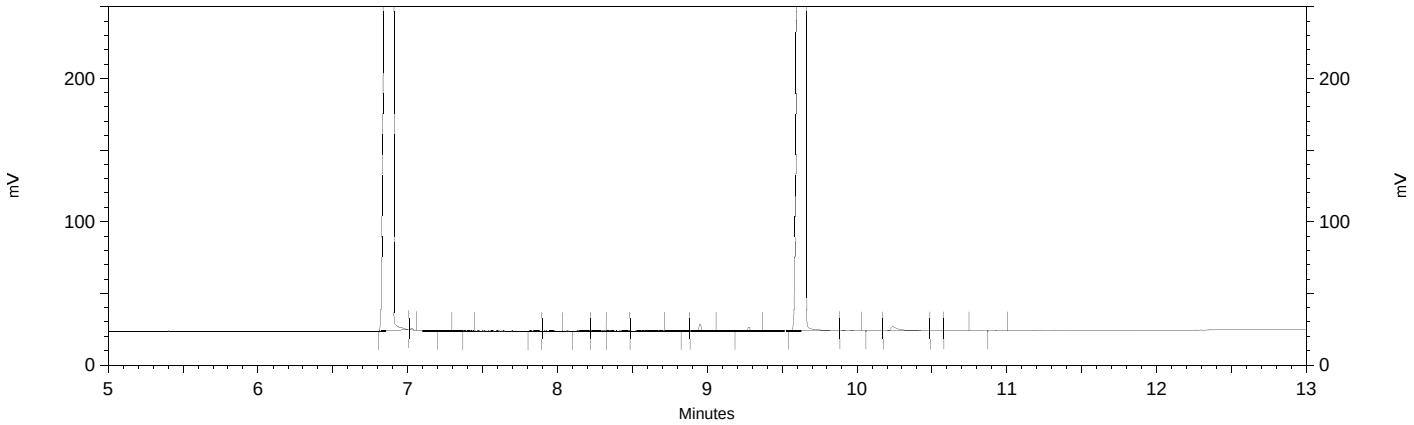
Sample Name: **ical,s19352,hex otp_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\159.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr159.met
Run Date: 6/7/2012 6:33:36 PM
Analysis Date: 6/11/2012 10:42:10 AM
Instrument: GC14B Vial: 13 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.903	6745835	200.000 CAL
Hexacosane	9.655	5075245	200.000 CAL



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\159b013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC14B
Calnum : 222269858001
Units : mg/L

Name : DSL_187
Date : 05-JUL-2012 16:24
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	187_010	222269858010	DSL_10	05-JUL-2012 16:24	S19968
L2	187_011	222269858011	DSL_100	05-JUL-2012 16:51	S19945
L3	187_012	222269858012	DSL_500	05-JUL-2012 17:19	S19946
L4	187_013	222269858013	DSL_1000	05-JUL-2012 17:47	S19947
L5	187_014	222269858014	DSL_5000	05-JUL-2012 18:15	S19943
L6	187_015	222269858015	DSL_7500	05-JUL-2012 18:43	S19948

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C24	B	26729	29007	28272	29033	27717	28315	AVRG		3.55E-5		28179	3	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C24	B	10.000	-5	100.00	3	500.00	0	1000.0	3	5000.0	-2	7500.0	0

Analyst: MAC Date: 07/06/12 Reviewer: EAH Date: 07/06/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

222269858001

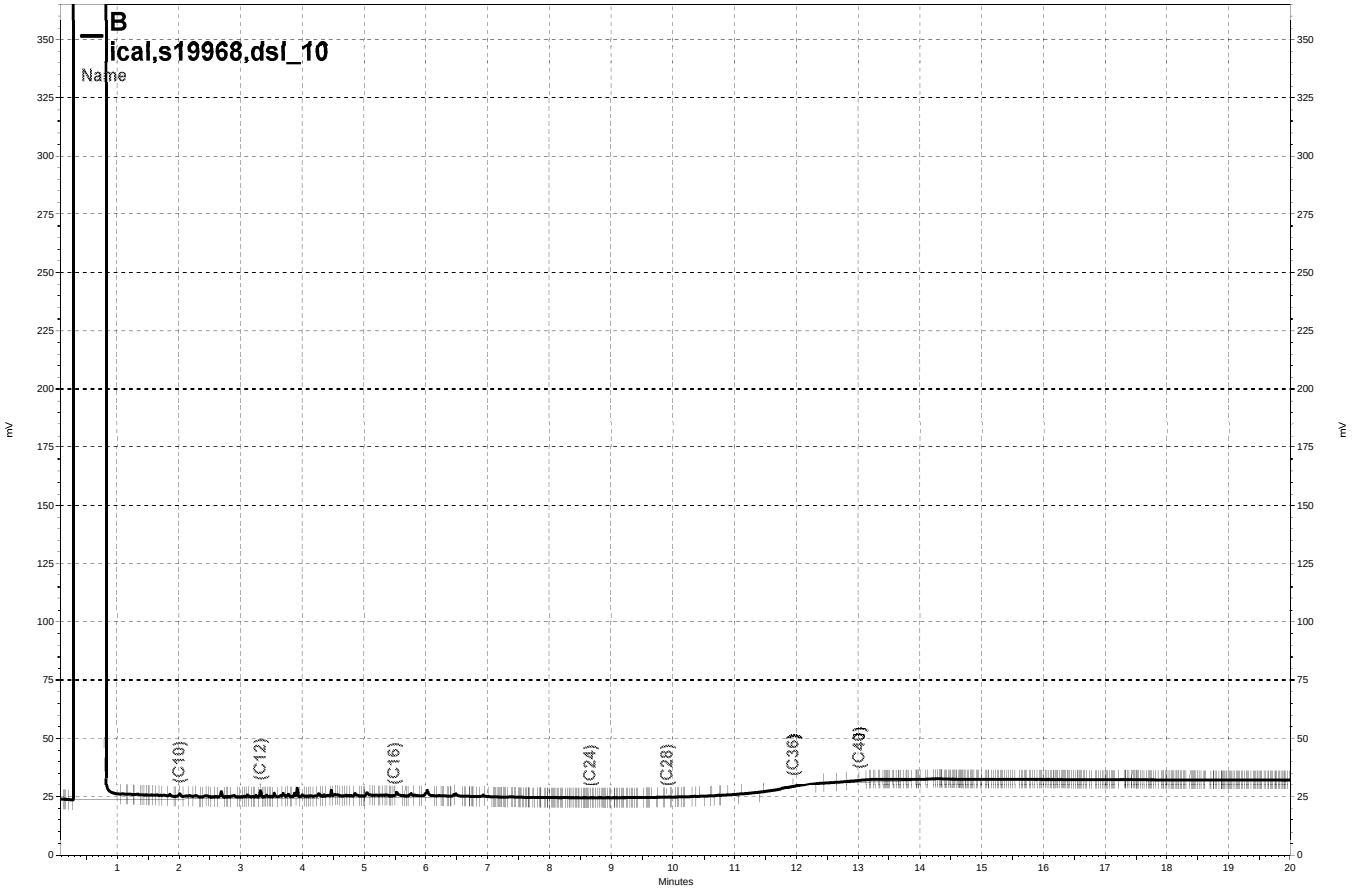
CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 GCSV Water
EPA 8015D

Inst : GC14B Name : DSL_187
Calnum : 222269858001 Cal Date : 05-JUL-2012

ICV 222269858018 (187_018 05-JUL-2012) stds: S20069

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C24	B	500.0	562.4	mg/L	12	20	

Analyst: MAC Date: 07/06/12 Reviewer: EAH Date: 07/06/12



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b010, B

Sample Name: **ical,s19968,dsl_10**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 4:24:00 PM
Analysis Date: 7/6/2012 1:04:26 PM
Instrument: GC14B Vial: 10 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	210503	0.000 CAL
JP8:10-16	210503	0.000 CAL
KER:10-16	210503	0.000 CAL
JP5:10-16	210503	0.000 CAL
DSL:10-20	263264	10.000 CAL
DSL:10-22	265737	10.000 CAL
DSL:10-24	267286	10.000 CAL
DSL:12-22	187261	10.000 CAL
DSL:10-28	269453	10.000 CAL
DSL:12-24	188810	10.000 CAL
DSL:12-32	192555	10.000 CAL
BUNKC:12-40	201523	0.000 CAL
TROIL:12-40	201523	0.000 CAL
HYFL:12-40	201523	0.000 CAL
MO:22-32	5294	0.000 CAL
MO:20-36	8024	0.000 CAL
MO:22-36	5551	0.000 CAL
MO:24-36	4002	0.000 CAL
DSL:10-12	78476	0.000 CAL
DSL:12-16	132027	0.000 CAL
DSL:16-24	56783	10.000 CAL
MO:28-40	10546	0.000 CAL
MO:28-36	1835	0.000 CAL
CREOSOTE:10-36	271288	0.000 CAL
DSL:12-14	70221	0.000 CAL
DSL:14-16	61806	0.000 CAL
DSL:16-18	48667	0.000 CAL
DSL:18-20	4094	0.000 CAL
DSL:20-22	2473	0.000 CAL
DSL:22-24	1549	0.000 CAL
CRUDE:10-40	279999	0.000 CAL
HYFL:24-36	4002	0.000 CAL
MINOIL:12-40	201523	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

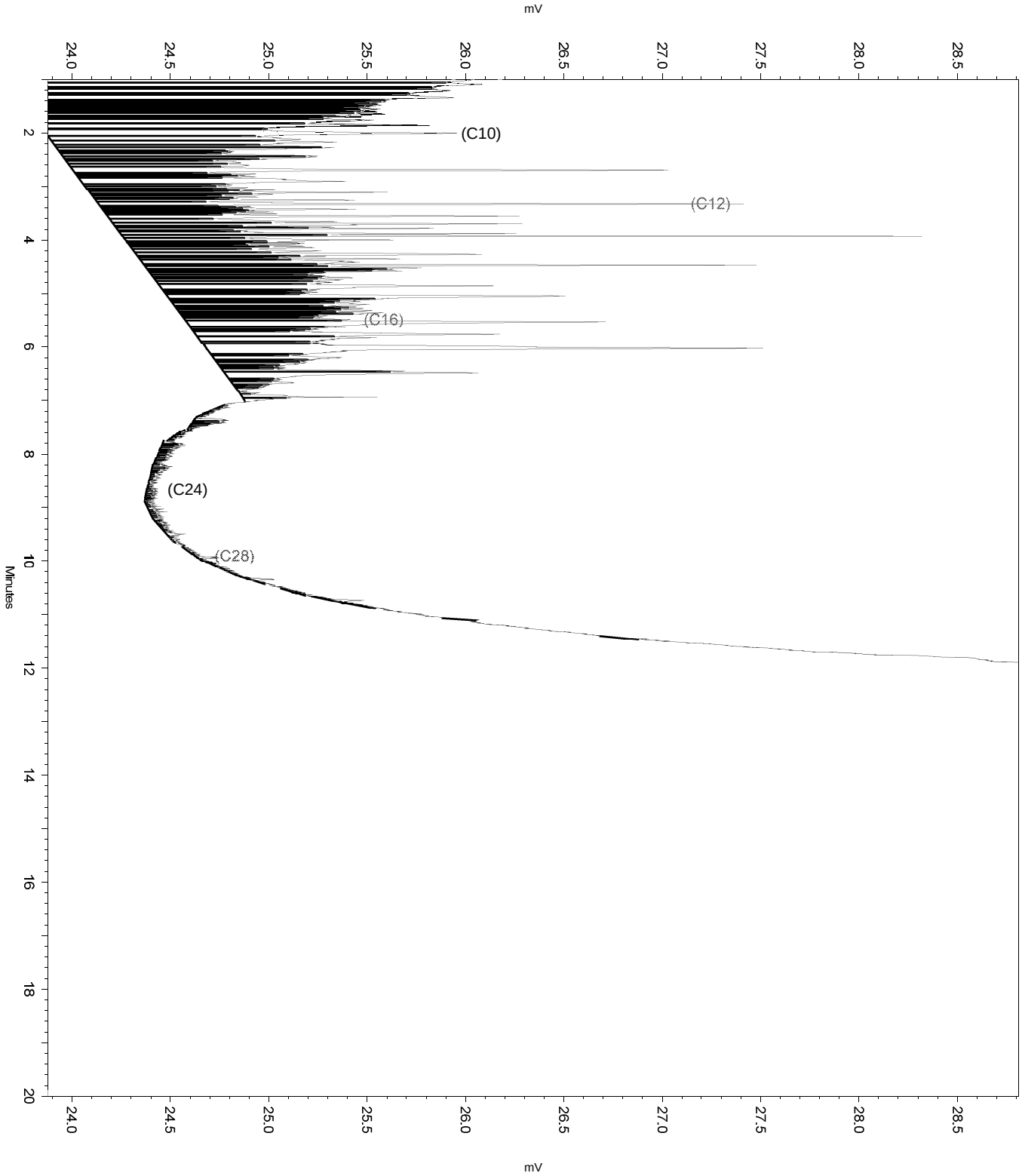
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19968,dsl_10**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 4:24:00 PM
Analysis Date: 7/6/2012 1:04:26 PM
Instrument: GC14B Vial: 10 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



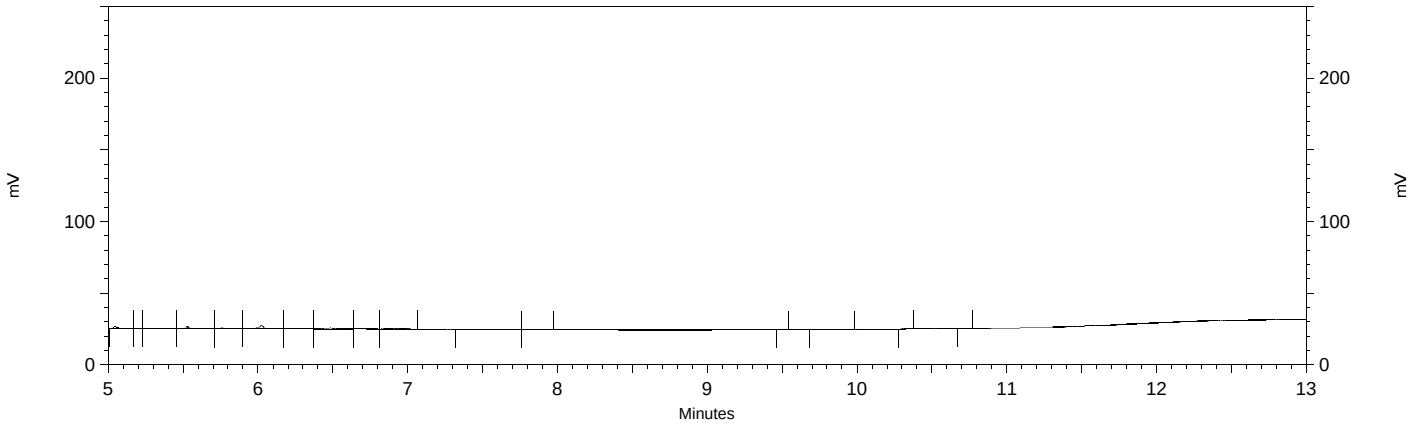
Sample Name: **ical,s19968,dsl_10**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr178.met
Run Date: 7/5/2012 4:24:00 PM
Analysis Date: 7/5/2012 4:44:09 PM
Instrument: GC14B Vial: 10 Operator: lims2k3\teh1
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl			0.000 BDL
Hexacosane			0.000 BDL



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

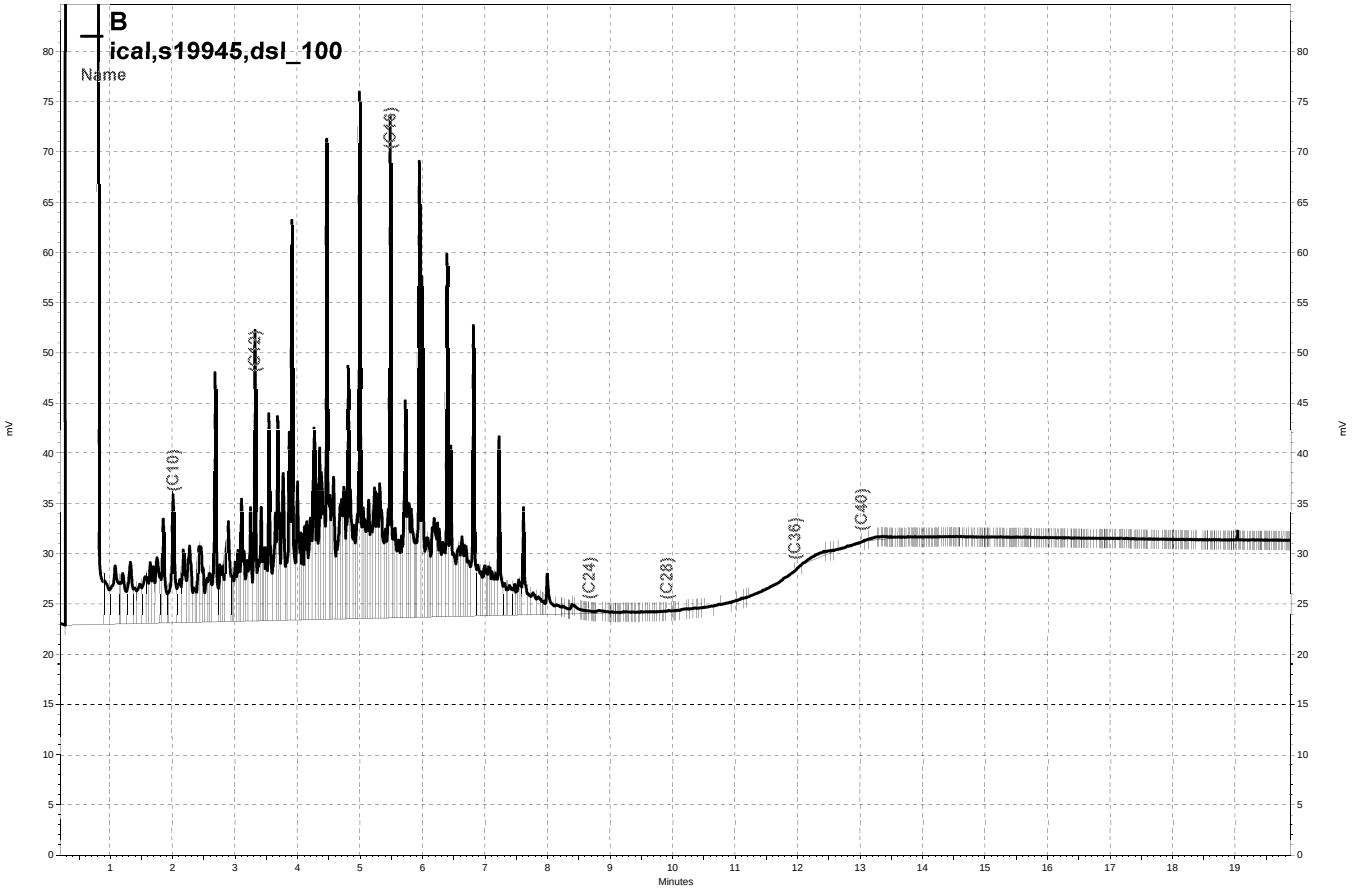
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10063\187b010_ADBD.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b011, B

Sample Name: **ical,s19945,dsl_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 4:51:56 PM
Analysis Date: 7/6/2012 1:04:50 PM
Instrument: GC14B Vial: 11 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	1816302	0.000 CAL
JP8:10-16	1816302	0.000 CAL
KER:10-16	1816302	0.000 CAL
JP5:10-16	1816302	0.000 CAL
DSL:10-20	2726302	100.000 CAL
DSL:10-22	2866745	100.000 CAL
DSL:10-24	2900692	100.000 CAL
DSL:12-22	2430602	100.000 CAL
DSL:10-28	2907016	100.000 CAL
DSL:12-24	2464549	100.000 CAL
DSL:12-32	2472199	100.000 CAL
BUNKC:12-40	2481800	0.000 CAL
TROIL:12-40	2481800	0.000 CAL
HYFL:12-40	2481800	0.000 CAL
MO:22-32	41597	0.000 CAL
MO:20-36	182772	0.000 CAL
MO:22-36	42329	0.000 CAL
MO:24-36	8382	0.000 CAL
DSL:10-12	436143	0.000 CAL
DSL:12-16	1380159	0.000 CAL
DSL:16-24	1084390	100.000 CAL
MO:28-40	10927	0.000 CAL
MO:28-36	2058	0.000 CAL
CREOSOTE:10-36	2909074	0.000 CAL
DSL:12-14	681604	0.000 CAL
DSL:14-16	698555	0.000 CAL
DSL:16-18	679043	0.000 CAL
DSL:18-20	230957	0.000 CAL
DSL:20-22	140443	0.000 CAL
DSL:22-24	33947	0.000 CAL
CRUDE:10-40	2917943	0.000 CAL
HYFL:24-36	8382	0.000 CAL
MINOIL:12-40	2481800	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

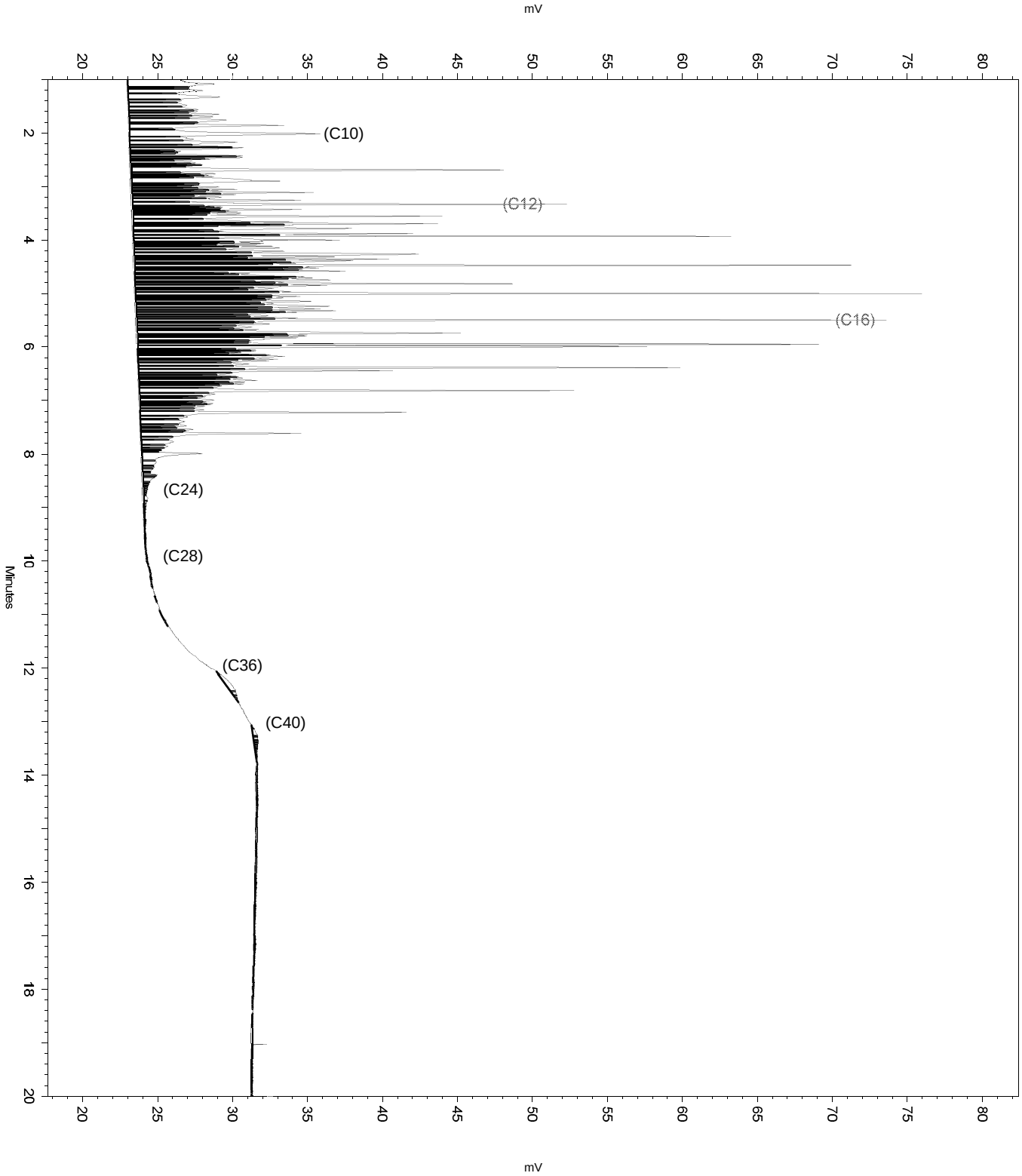
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19945,dsl_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 4:51:56 PM
Analysis Date: 7/6/2012 1:04:50 PM
Instrument: GC14B Vial: 11 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



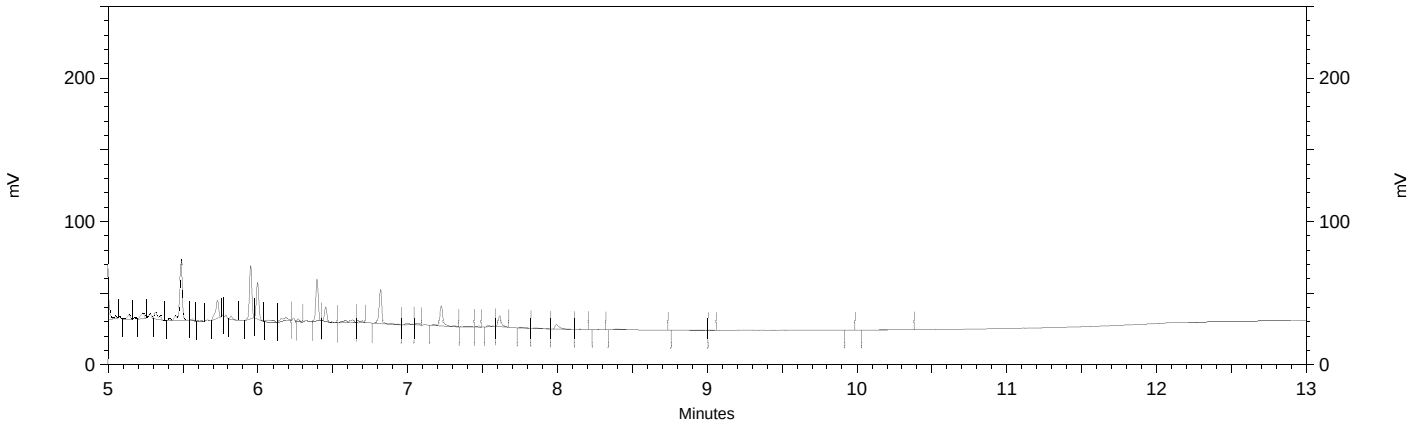
Sample Name: **ical,s19945,dsl_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr178.met
Run Date: 7/5/2012 4:51:56 PM
Analysis Date: 7/5/2012 5:12:05 PM
Instrument: GC14B Vial: 11 Operator: lims2k3\teh1
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.820	33798	1.021
Hexacosane			0.000 BDL



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

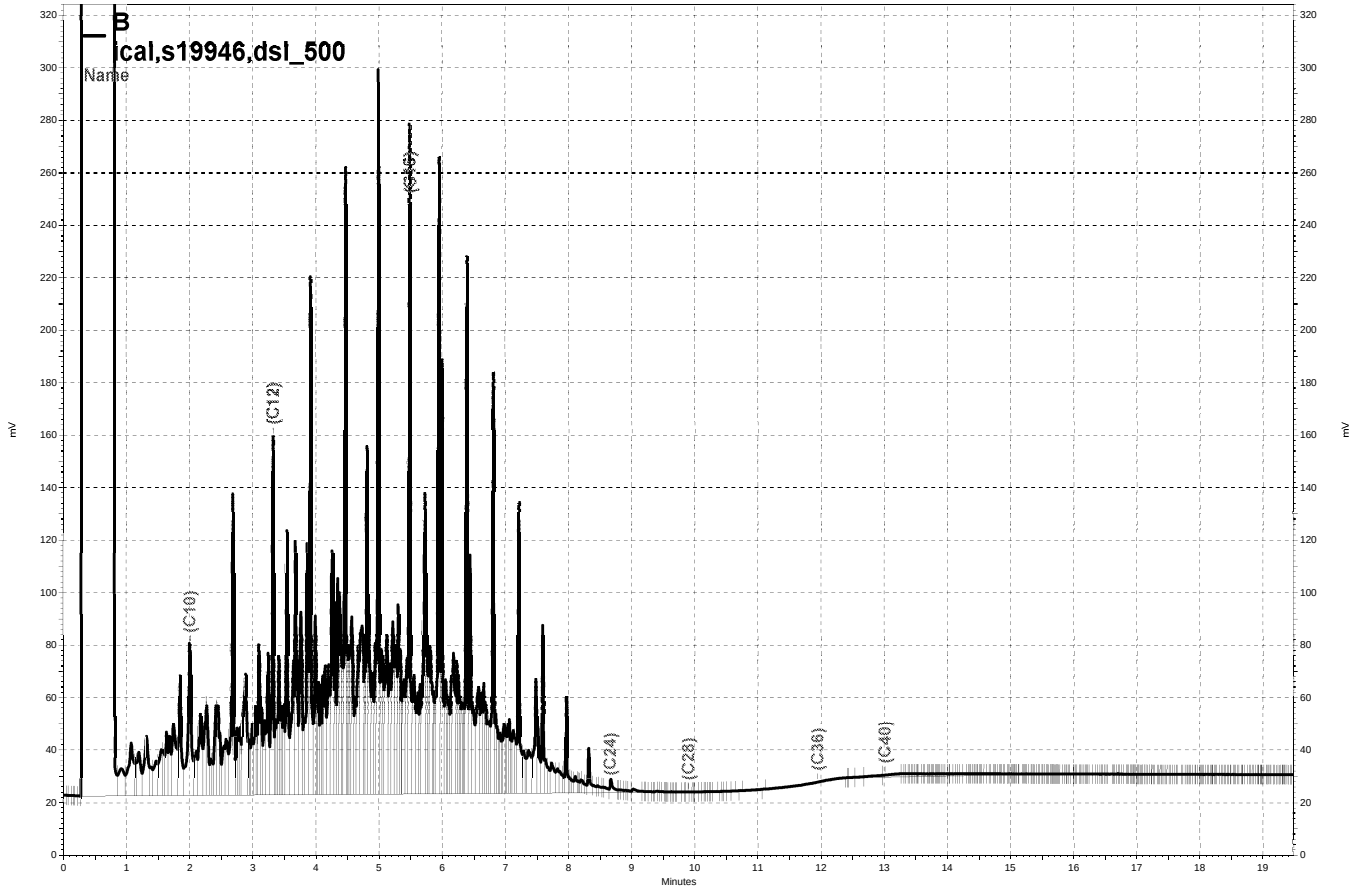
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10063\187b011_ADBE.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b012, B

Sample Name: **ical,s19946,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 5:19:54 PM
Analysis Date: 7/6/2012 1:05:15 PM
Instrument: GC14B Vial: 12 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	8948046	0.000 CAL
JP8:10-16	8948046	0.000 CAL
KER:10-16	8948046	0.000 CAL
JP5:10-16	8948046	0.000 CAL
DSL:10-20	13373421	500.000 CAL
DSL:10-22	13936362	500.000 CAL
DSL:10-24	14135754	500.000 CAL
DSL:12-22	11938148	500.000 CAL
DSL:10-28	14175677	500.000 CAL
DSL:12-24	12137540	500.000 CAL
DSL:12-32	12178710	500.000 CAL
BUNKC:12-40	12190113	0.000 CAL
TROIL:12-40	12190113	0.000 CAL
HYFL:12-40	12190113	0.000 CAL
MO:22-32	240562	0.000 CAL
MO:20-36	803703	0.000 CAL
MO:22-36	240762	0.000 CAL
MO:24-36	41370	0.000 CAL
DSL:10-12	1998214	0.000 CAL
DSL:12-16	6949832	0.000 CAL
DSL:16-24	5187708	500.000 CAL
MO:28-40	12650	0.000 CAL
MO:28-36	1447	0.000 CAL
CREOSOTE:10-36	14177124	0.000 CAL
DSL:12-14	3029941	0.000 CAL
DSL:14-16	3919891	0.000 CAL
DSL:16-18	3028115	0.000 CAL
DSL:18-20	1397260	0.000 CAL
DSL:20-22	562941	0.000 CAL
DSL:22-24	199392	0.000 CAL
CRUDE:10-40	14188327	0.000 CAL
HYFL:24-36	41370	0.000 CAL
MINOIL:12-40	12190113	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

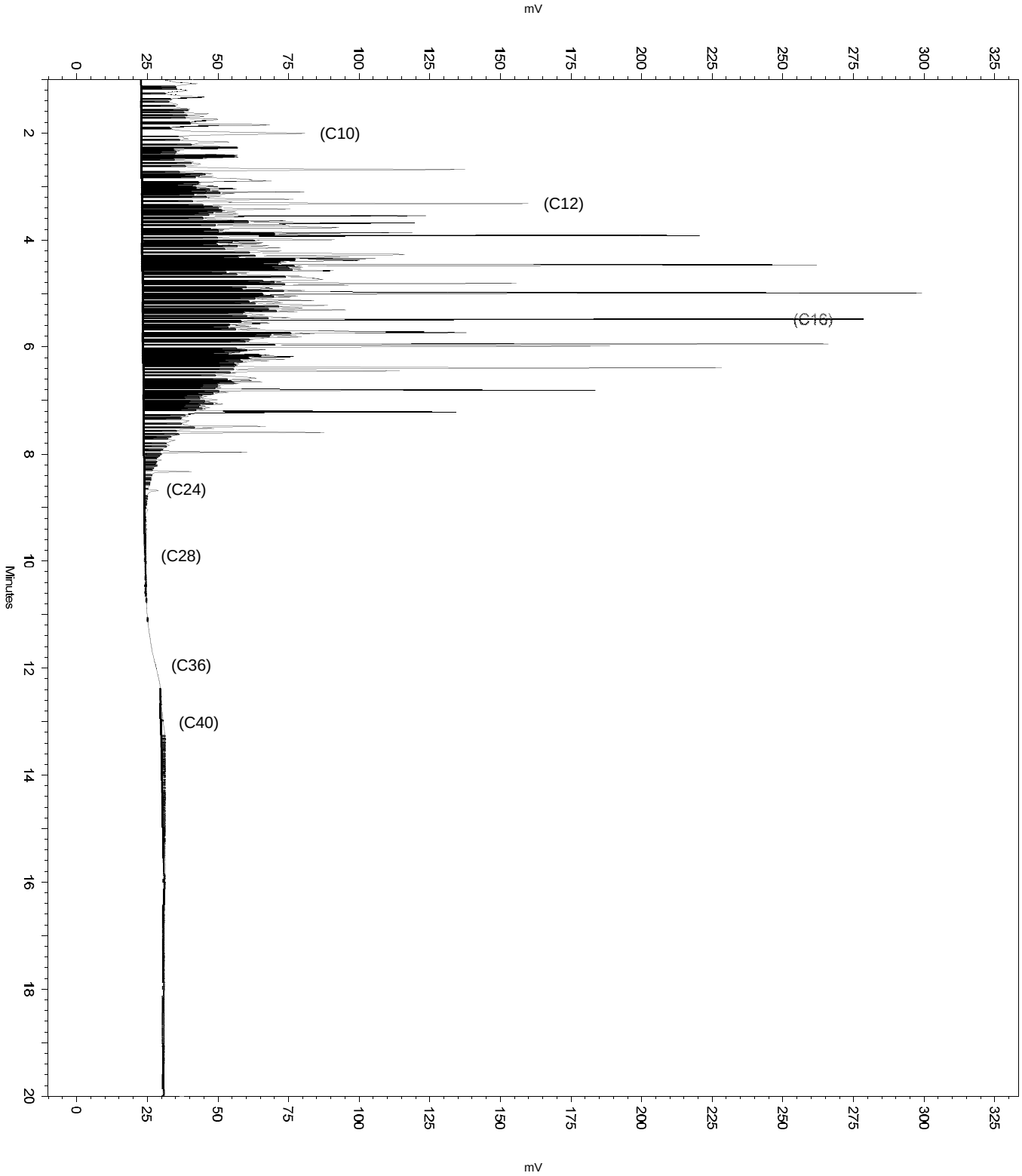
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19946,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 5:19:54 PM
Analysis Date: 7/6/2012 1:05:15 PM
Instrument: GC14B Vial: 12 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



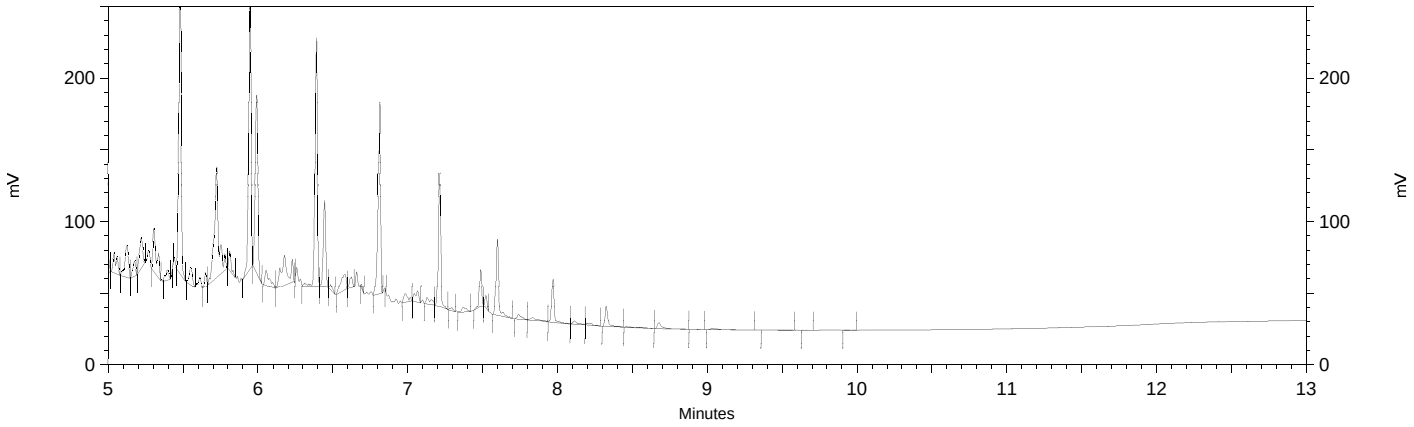
Sample Name: **ical,s19946,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr178.met
Run Date: 7/5/2012 5:19:54 PM
Analysis Date: 7/5/2012 5:40:02 PM
Instrument: GC14B Vial: 12 Operator: lims2k3\teh1
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.810	154785	4.677
Hexacosane	9.632	152	0.005



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

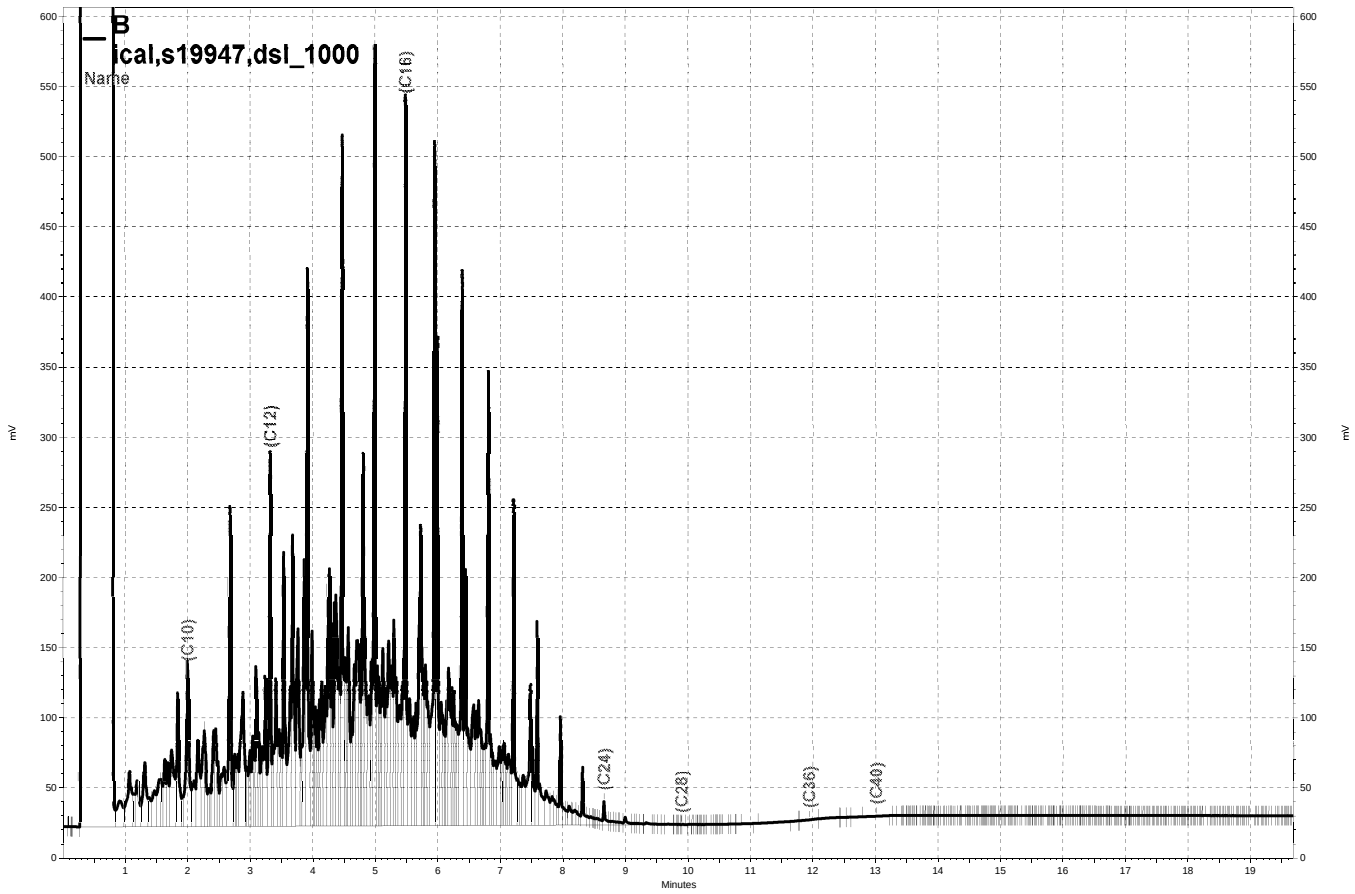
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10063\187b012_ADBF.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b013, B

Sample Name: **ical,s19947,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 5:47:45 PM
Analysis Date: 7/6/2012 1:05:34 PM
Instrument: GC14B Vial: 13 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	18186548	0.000 CAL
JP8:10-16	18186548	0.000 CAL
KER:10-16	18186548	0.000 CAL
JP5:10-16	18186548	0.000 CAL
DSL:10-20	27355116	1000.000 CAL
DSL:10-22	28686100	1000.000 CAL
DSL:10-24	29032812	1000.000 CAL
DSL:12-22	24654568	1000.000 CAL
DSL:10-28	29101540	1000.000 CAL
DSL:12-24	25001280	1000.000 CAL
DSL:12-32	25071666	1000.000 CAL
BUNKC:12-40	25097120	0.000 CAL
TROIL:12-40	25097120	0.000 CAL
HYFL:12-40	25097120	0.000 CAL
MO:22-32	417094	0.000 CAL
MO:20-36	1749005	0.000 CAL
MO:22-36	418019	0.000 CAL
MO:24-36	71306	0.000 CAL
DSL:10-12	4031537	0.000 CAL
DSL:12-16	14155012	0.000 CAL
DSL:16-24	10846274	1000.000 CAL
MO:28-40	27114	0.000 CAL
MO:28-36	2581	0.000 CAL
CREOSOTE:10-36	29104120	0.000 CAL
DSL:12-14	6254904	0.000 CAL
DSL:14-16	7900108	0.000 CAL
DSL:16-18	6255308	0.000 CAL
DSL:18-20	2913267	0.000 CAL
DSL:20-22	1330986	0.000 CAL
DSL:22-24	346713	0.000 CAL
CRUDE:10-40	29128652	0.000 CAL
HYFL:24-36	71306	0.000 CAL
MINOIL:12-40	25097120	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

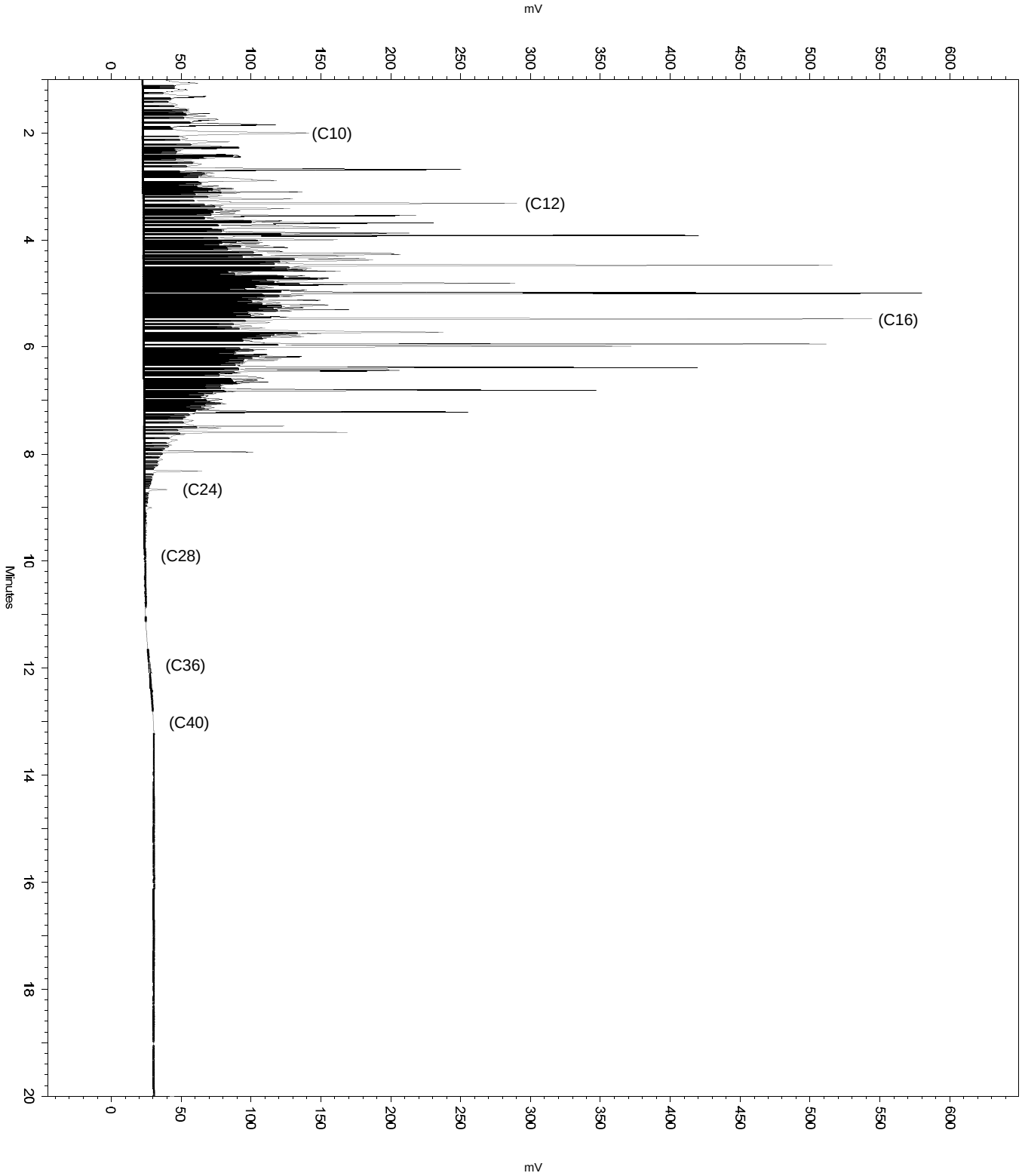
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19947,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 5:47:45 PM
Analysis Date: 7/6/2012 1:05:34 PM
Instrument: GC14B Vial: 13 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



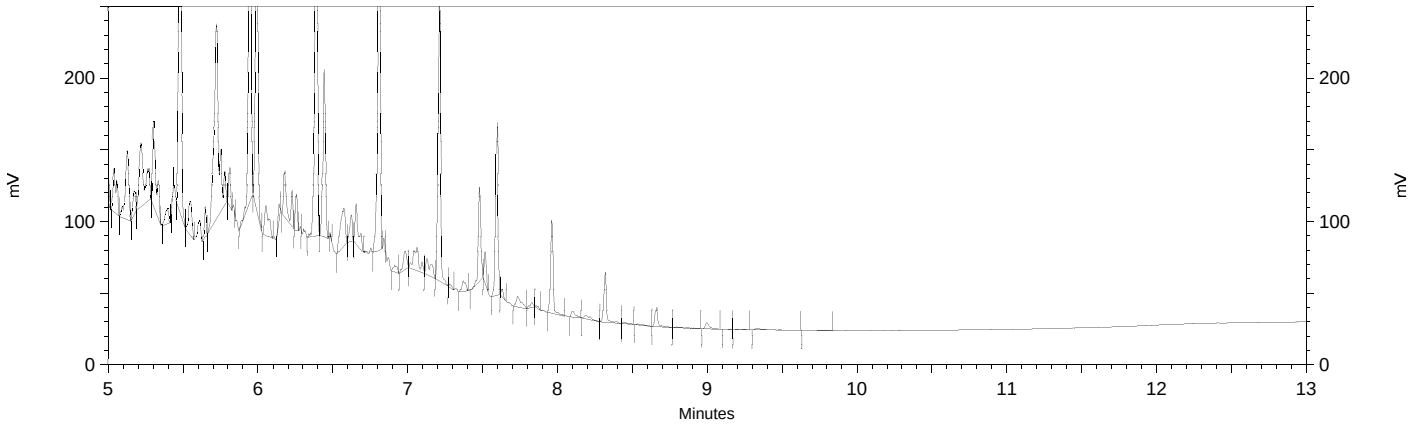
Sample Name: **ical,s19947,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr178.met
Run Date: 7/5/2012 5:47:45 PM
Analysis Date: 7/5/2012 6:07:55 PM
Instrument: GC14B Vial: 13 Operator: lims2k3\teh1
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.810	317156	9.583
Hexacosane			0.000 BDL



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

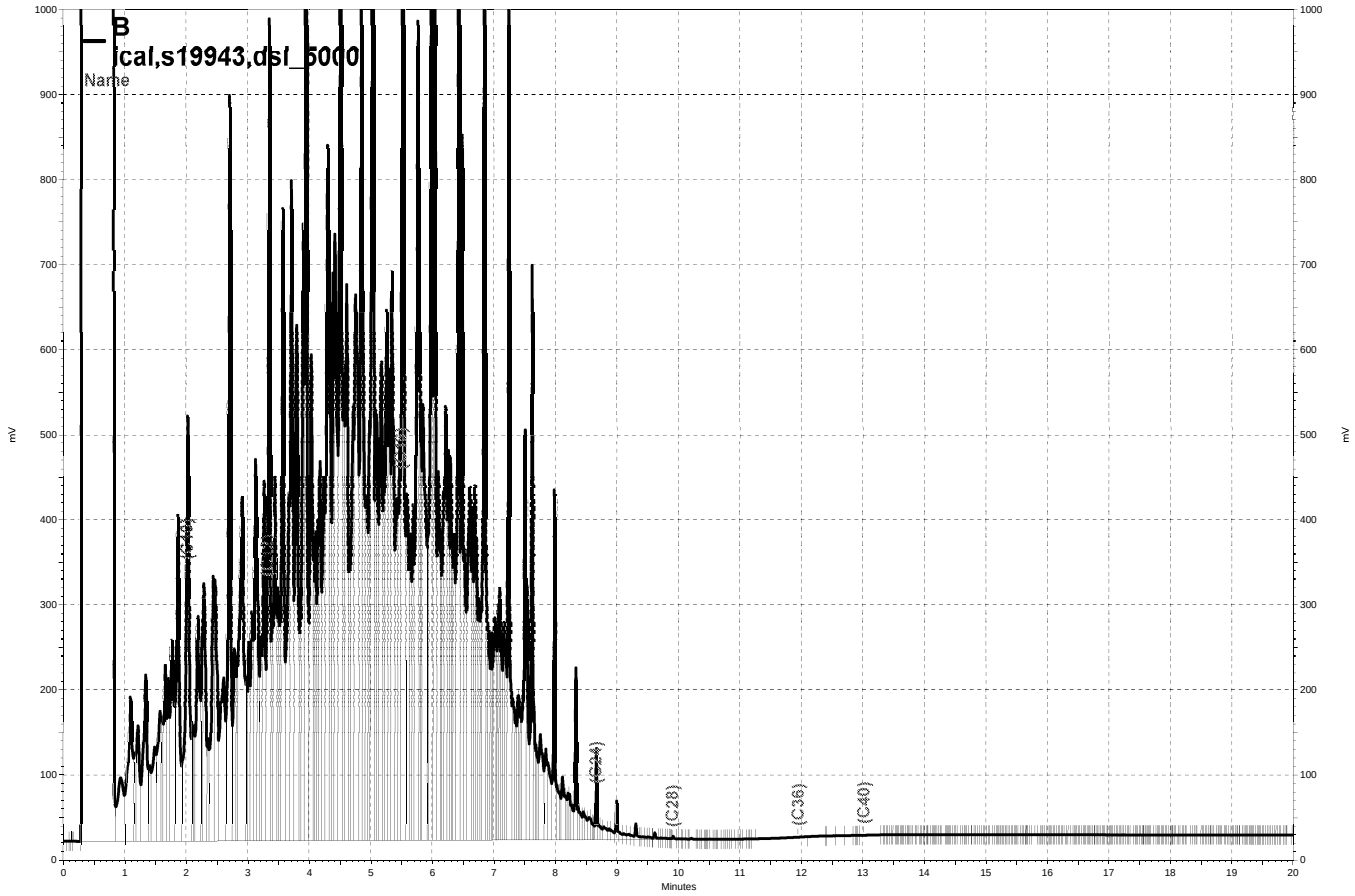
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10063\187b013_ADC0.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b014, B

Sample Name: **ical,s19943,dsl_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 6:15:37 PM
Analysis Date: 7/6/2012 1:06:08 PM
Instrument: GC14B Vial: 14 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	82475624	0.000 CAL
JP8:10-16	82475624	0.000 CAL
KER:10-16	82475624	0.000 CAL
JP5:10-16	82475624	0.000 CAL
DSL:10-20	128246224	5000.000 CAL
DSL:10-22	136261104	5000.000 CAL
DSL:10-24	138586048	5000.000 CAL
DSL:12-22	118333288	5000.000 CAL
DSL:10-28	139210032	5000.000 CAL
DSL:12-24	120658208	5000.000 CAL
DSL:12-32	121306480	5000.000 CAL
BUNKC:12-40	121326568	0.000 CAL
TROIL:12-40	121326568	0.000 CAL
HYFL:12-40	121326568	0.000 CAL
MO:22-32	2973192	0.000 CAL
MO:20-36	10988991	0.000 CAL
MO:22-36	2974086	0.000 CAL
MO:24-36	649160	0.000 CAL
DSL:10-12	17927836	0.000 CAL
DSL:12-16	64547784	0.000 CAL
DSL:16-24	56110444	5000.000 CAL
MO:28-40	44399	0.000 CAL
MO:28-36	25207	0.000 CAL
CREOSOTE:10-36	139235232	0.000 CAL
DSL:12-14	31163740	0.000 CAL
DSL:14-16	33384048	0.000 CAL
DSL:16-18	33415116	0.000 CAL
DSL:18-20	12355485	0.000 CAL
DSL:20-22	8014905	0.000 CAL
DSL:22-24	2324926	0.000 CAL
CRUDE:10-40	139254416	0.000 CAL
HYFL:24-36	649160	0.000 CAL
MINOIL:12-40	121326568	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

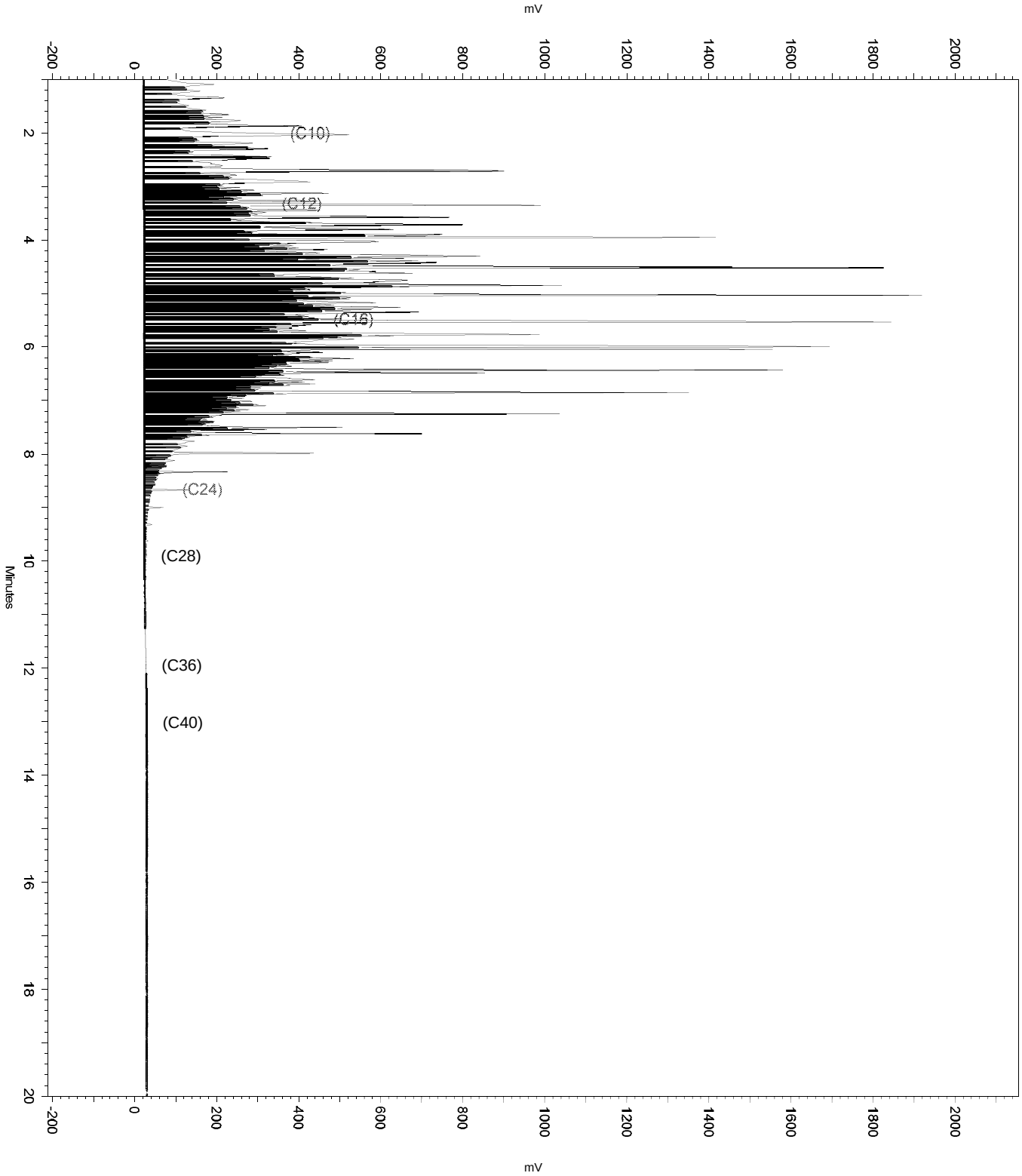
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19943,dsl_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 6:15:37 PM
Analysis Date: 7/6/2012 1:06:08 PM
Instrument: GC14B Vial: 14 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



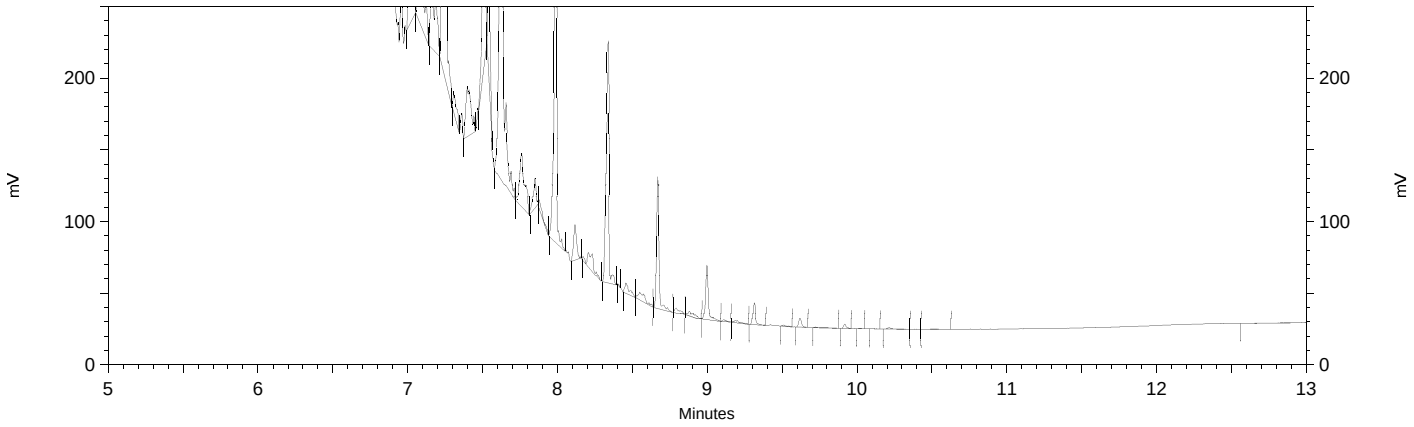
Sample Name: **ical,s19943,dsl_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr178.met
Run Date: 7/5/2012 6:15:37 PM
Analysis Date: 7/5/2012 6:35:46 PM
Instrument: GC14B Vial: 14 Operator: lims2k3\teh1
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.855	1699994	51.367
Hexacosane	9.620	8379	0.300



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

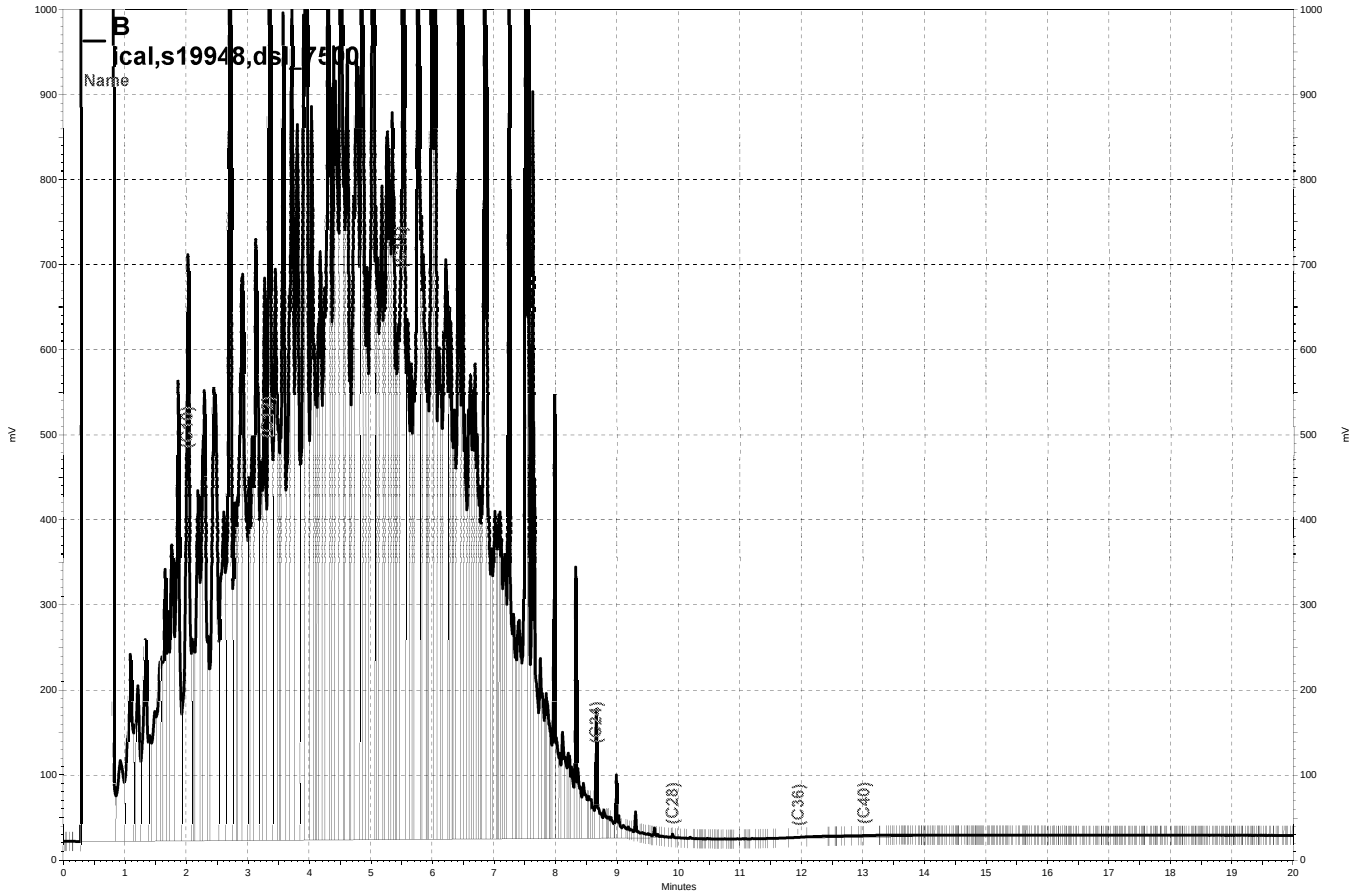
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10063\187b014_ADC1.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b015, B

Sample Name: **ical,s19948,dsl_7500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 6:43:31 PM
Analysis Date: 7/6/2012 1:06:20 PM
Instrument: GC14B Vial: 15 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	128512272	0.000 CAL
JP8:10-16	128512272	0.000 CAL
KER:10-16	128512272	0.000 CAL
JP5:10-16	128512272	0.000 CAL
DSL:10-20	193590656	7500.000 CAL
DSL:10-22	208470096	7500.000 CAL
DSL:10-24	212365552	7500.000 CAL
DSL:12-22	176285264	7500.000 CAL
DSL:10-28	213528480	7500.000 CAL
DSL:12-24	180180720	7500.000 CAL
DSL:12-32	181360304	7500.000 CAL
BUNKC:12-40	181493536	0.000 CAL
TROIL:12-40	181493536	0.000 CAL
HYFL:12-40	181493536	0.000 CAL
MO:22-32	5075046	0.000 CAL
MO:20-36	19966658	0.000 CAL
MO:22-36	5087220	0.000 CAL
MO:24-36	1191771	0.000 CAL
DSL:10-12	32184844	0.000 CAL
DSL:12-16	96327440	0.000 CAL
DSL:16-24	83853256	7500.000 CAL
MO:28-40	149893	0.000 CAL
MO:28-36	28815	0.000 CAL
CREOSOTE:10-36	213557280	0.000 CAL
DSL:12-14	48827752	0.000 CAL
DSL:14-16	47499688	0.000 CAL
DSL:16-18	47439940	0.000 CAL
DSL:18-20	17638424	0.000 CAL
DSL:20-22	14879452	0.000 CAL
DSL:22-24	3895449	0.000 CAL
CRUDE:10-40	213678368	0.000 CAL
HYFL:24-36	1191771	0.000 CAL
MINOIL:12-40	181493536	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

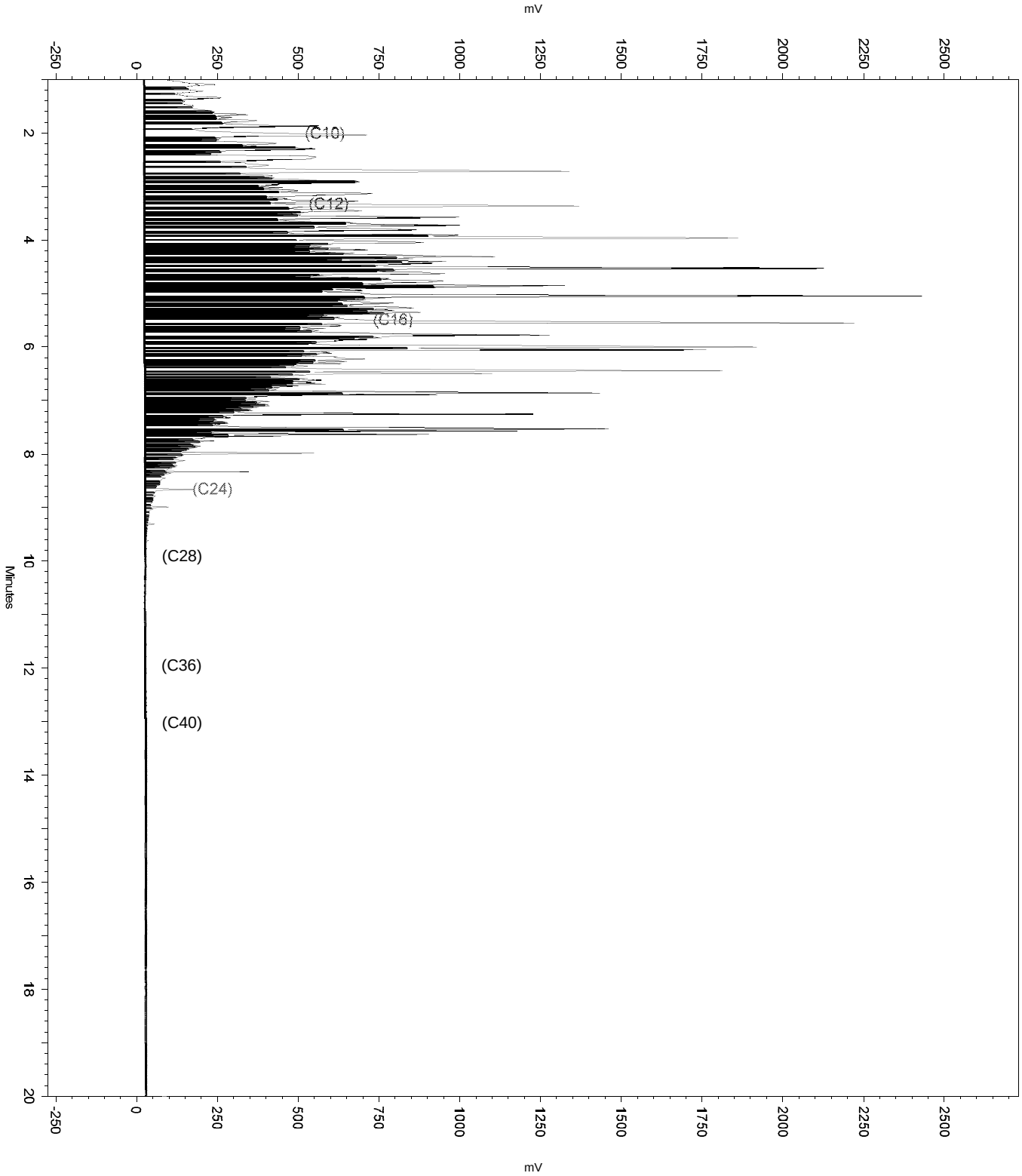
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19948,dsl_7500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 6:43:31 PM
Analysis Date: 7/6/2012 1:06:20 PM
Instrument: GC14B Vial: 15 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



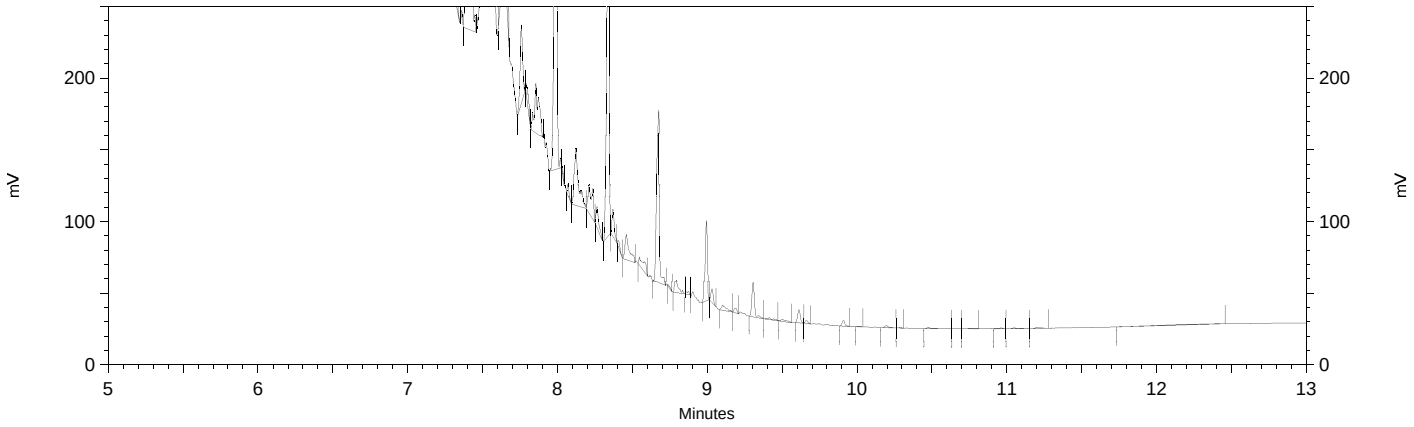
Sample Name: **ical,s19948,dsl_7500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr178.met
Run Date: 7/5/2012 6:43:31 PM
Analysis Date: 7/5/2012 7:03:40 PM
Instrument: GC14B Vial: 15 Operator: lims2k3\teh1
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.863	2690054	81.283
Hexacosane	9.613	10863	0.389



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

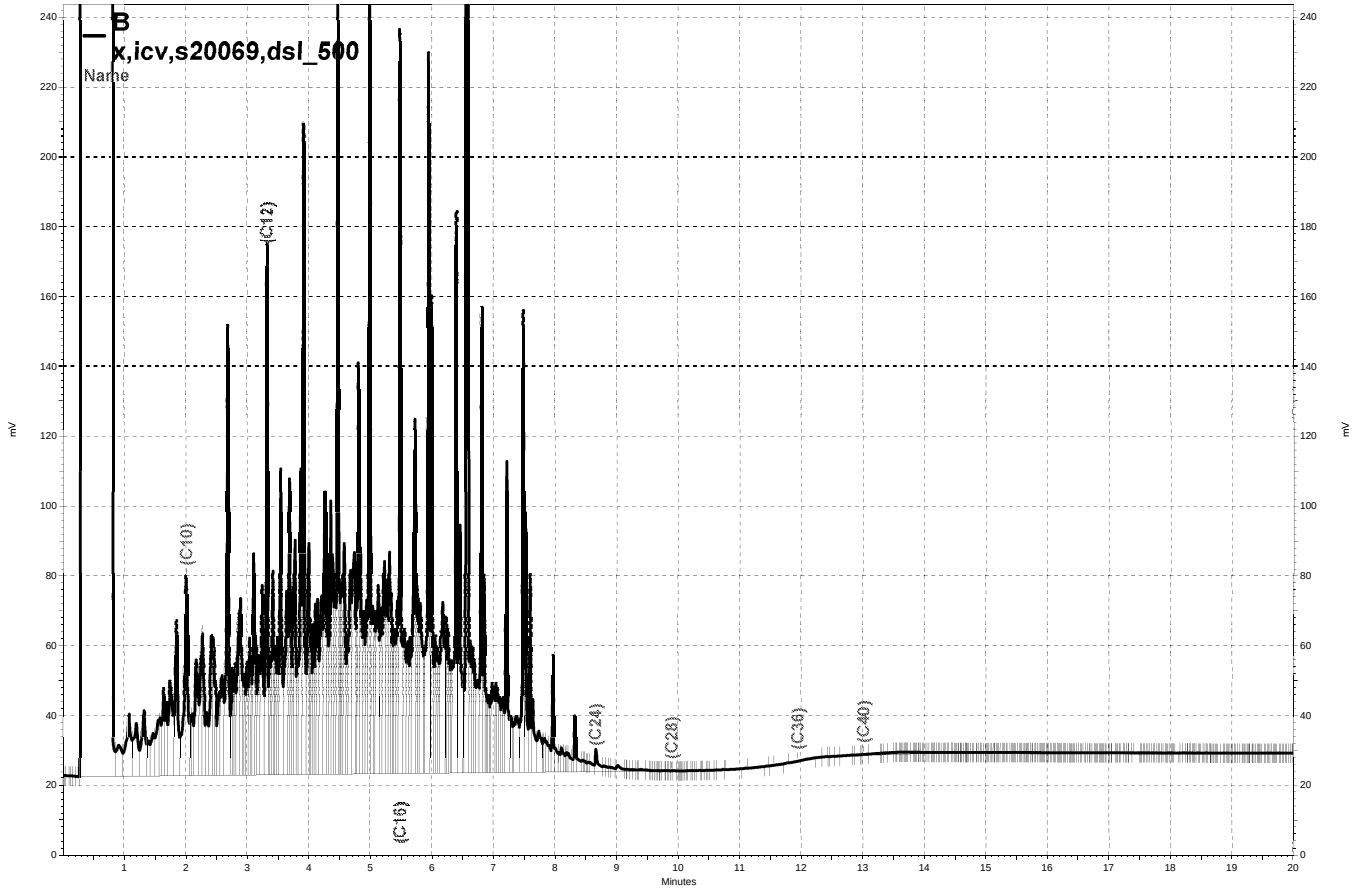
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10063\187b015_ADC2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b018, B

Sample Name: **x,icv,s20069,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b018**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 8:07:00 PM
Analysis Date: 7/6/2012 1:56:09 PM
Instrument: GC14B Vial: 18 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	9379237	350.075
JP8:10-16	9379237	349.363
KER:10-16	9379237	359.952
JP5:10-16	9379237	321.535
DSL:10-20	15010532	565.892
DSL:10-22	15808969	568.504
DSL:10-24	15974324	566.893
DSL:12-22	13501639	583.921
DSL:10-28	16028956	566.458
DSL:12-24	13666994	581.745
DSL:12-32	13723277	580.473
BUNKC:12-40	13728809	1165.698
TROIL:12-40	13728809	198.176
HYFL:12-40	13728809	542.968
MO:22-32	221638	16.407
MO:20-36	1020737	62.753
MO:22-36	222300	14.435
MO:24-36	56945	4.264
DSL:10-12	2307330	0.000
DSL:12-16	7071907	0.000
DSL:16-24	6595087	657.903
MO:28-40	7183	0.942
MO:28-36	2313	0.332
CREOSOTE:10-36	16031269	0.000
DSL:12-14	3384029	0.000
DSL:14-16	3687878	0.000
DSL:16-18	2721631	0.000
DSL:18-20	2909664	0.000
DSL:20-22	798437	0.000
DSL:22-24	165355	0.000
CRUDE:10-40	16036139	849.415
HYFL:24-36	56945	3.353
MINOIL:12-40	13728809	338.532

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

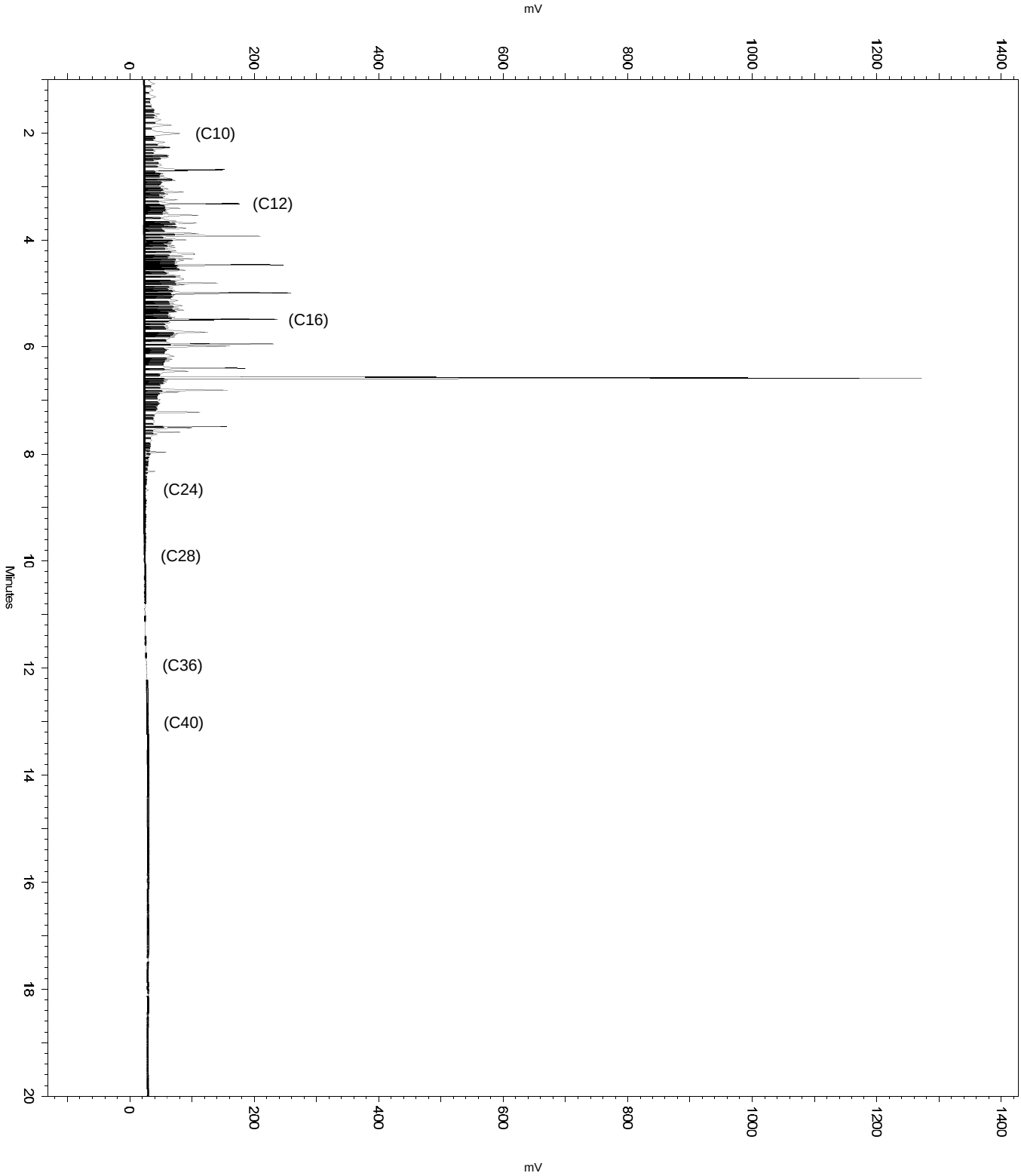
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Move BL Stop	6.83	6.9	0

Sample Name: **x,icv,s20069,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b018**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh187b.met
Run Date: 7/5/2012 8:07:00 PM
Analysis Date: 7/6/2012 1:56:09 PM
Instrument: GC14B Vial: 18 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



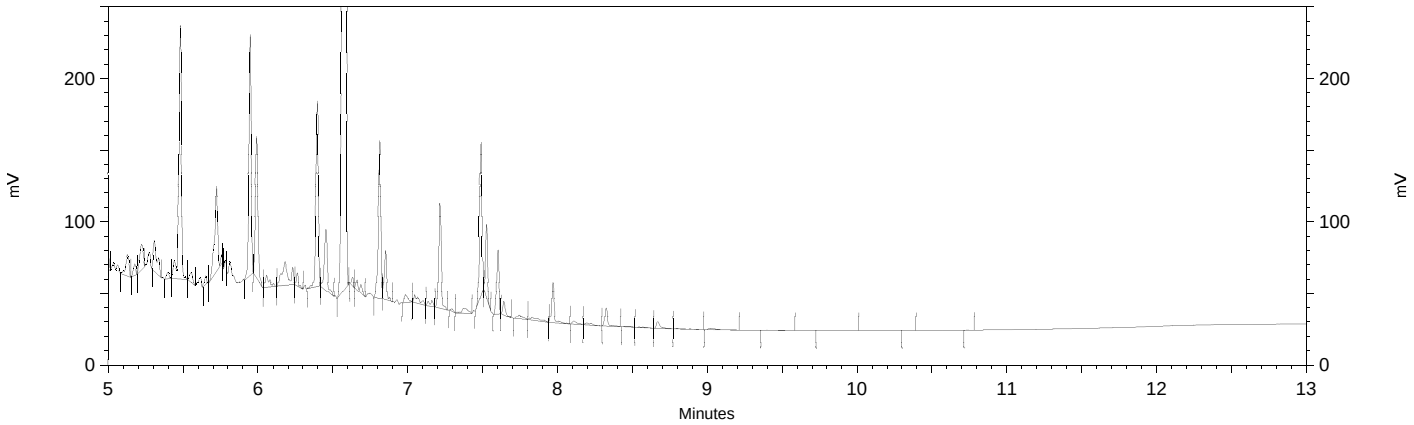
Sample Name: **x,ccv,s20069,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b018**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr178.met
Run Date: 7/5/2012 8:07:00 PM
Analysis Date: 7/6/2012 1:08:24 PM
Instrument: GC14B Vial: 18 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.810	126442	3.821
Hexacosane			0.000 BDL



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Move BL Stop	6.83	6.9	0

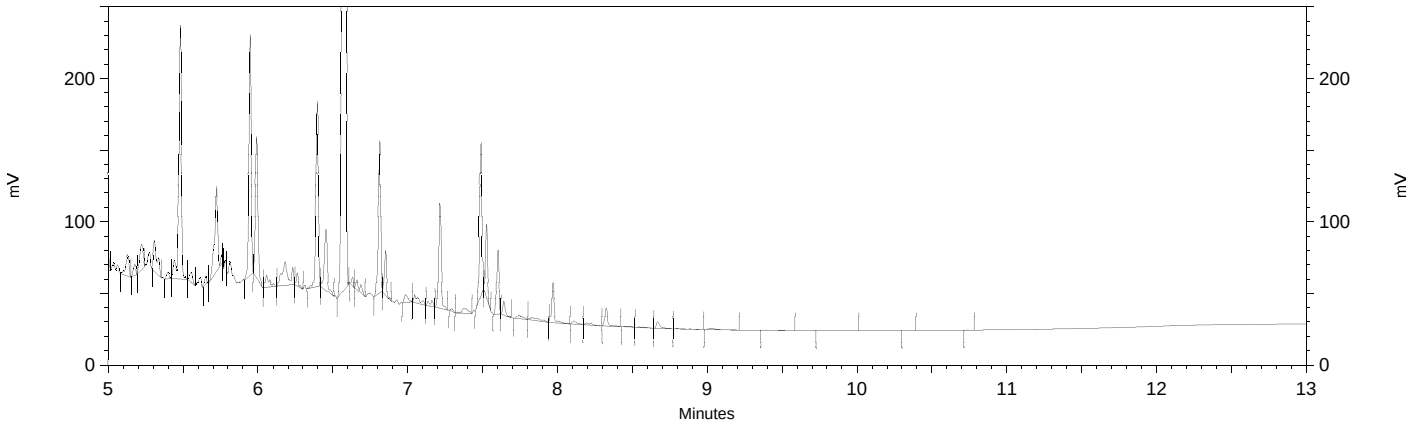
Sample Name: **x,icv,s20069,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b018**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr178.met
Run Date: 7/5/2012 8:07:00 PM
Analysis Date: 7/6/2012 1:08:09 PM
Instrument: GC14B Vial: 18 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.810	117923	3.563
Hexacosane			0.000 BDL



---< General Method Parameters >----------

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\187b018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC14B
Calnum : 222295006001
Units : mg/L

Name : mo_204
Date : 22-JUL-2012 17:05
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	204_004	222295006004	MO_25	22-JUL-2012 17:05	S20089 (2X)
L2	204_005	222295006005	MO_50	22-JUL-2012 17:33	S20089
L3	204_006	222295006006	MO_250	22-JUL-2012 18:00	S19735
L4	204_007	222295006007	MO_500	22-JUL-2012 18:28	S19736
L5	204_008	222295006008	MO_1000	22-JUL-2012 18:56	S19737
L6	204_009	222295006009	MO_2500	22-JUL-2012 19:23	S19738 (2X)
L7	204_010	222295006010	MO_5000	22-JUL-2012 19:51	S19738

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	15878	16412	18522	19748	18978	18064	18739	AVRG		5.54E-5		18049	8	0.995	20	

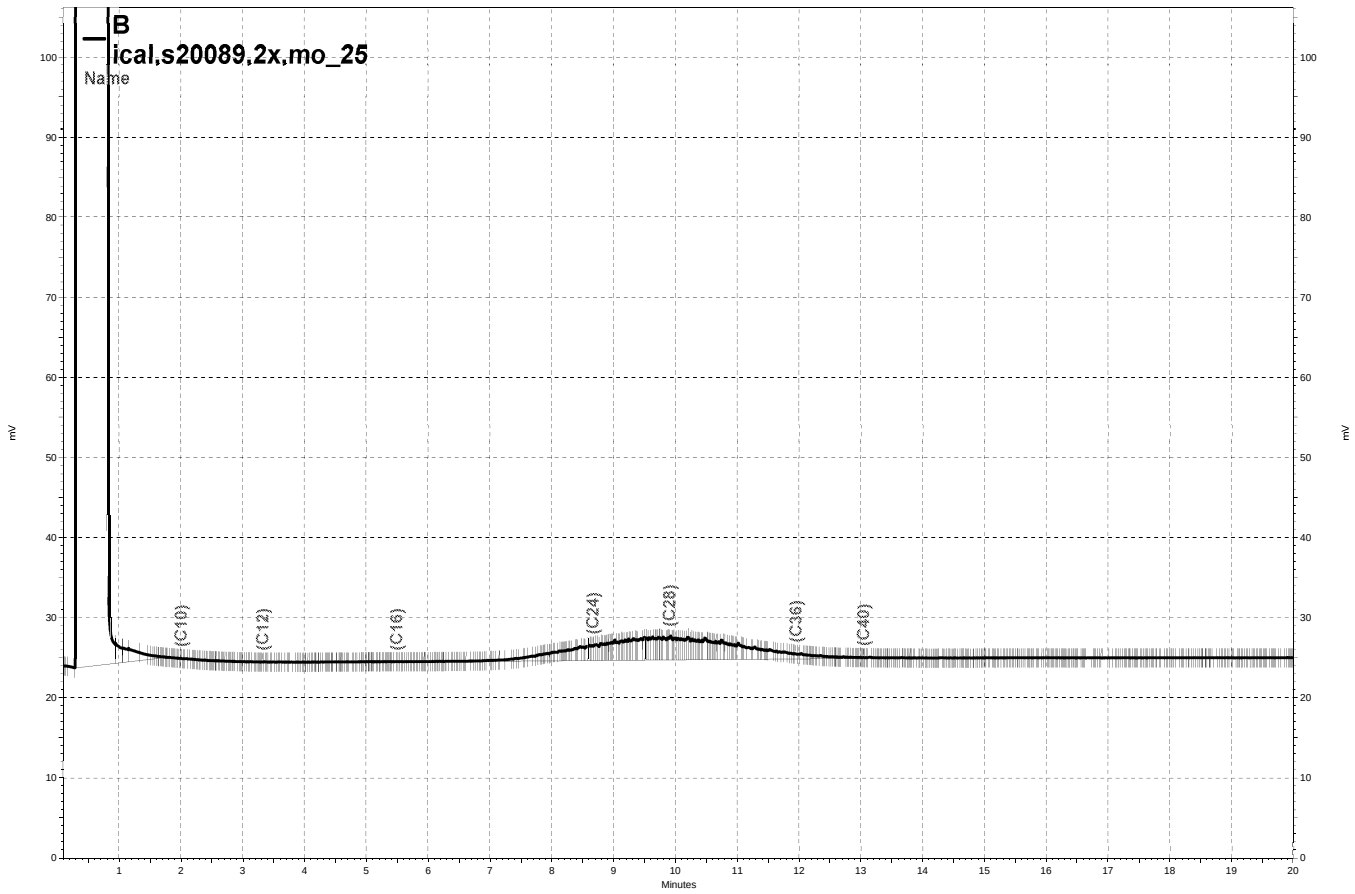
Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Motor Oil C24-C36	B	25.000	-12	50.000	-9	250.00	3	500.00	9	1000.0	5	2500.0	0	5000.0	4

MAC 07/23/12 : Corrected automatically drawn baseline in multiple levels.

Analyst: MAC Date: 07/23/12 Reviewer: EAH Date: 07/24/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

222295006001



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b004, B

Sample Name: **ical,s20089,2x,mo_25**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b004**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 5:05:21 PM
Analysis Date: 7/23/2012 12:54:56 PM
Instrument: GC14B Vial: 4 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	5550	0.000 CAL
JP8:10-16	5550	0.000 CAL
KER:10-16	5550	0.000 CAL
JP5:10-16	5550	0.000 CAL
DSL:10-20	9823	0.000 CAL
DSL:10-22	33162	0.000 CAL
DSL:10-24	92855	0.000 CAL
DSL:12-22	31415	0.000 CAL
DSL:10-28	268507	0.000 CAL
DSL:12-24	91108	0.000 CAL
DSL:12-32	420150	0.000 CAL
BUNKC:12-40	507463	0.000 CAL
TROIL:12-40	507463	0.000 CAL
HYFL:12-40	507463	0.000 CAL
MO:22-32	389480	25.000 CAL
MO:20-36	479994	25.000 CAL
MO:22-36	457400	25.000 CAL
MO:24-36	396962	25.000 CAL
DSL:10-12	1747	0.000 CAL
DSL:12-16	3803	0.000 CAL
DSL:16-24	87305	0.000 CAL
MO:28-40	240703	25.000 CAL
MO:28-36	221310	25.000 CAL
CREOSOTE:10-36	489817	0.000 CAL
DSL:12-14	1600	0.000 CAL
DSL:14-16	2203	0.000 CAL
DSL:16-18	1465	0.000 CAL
DSL:18-20	2808	0.000 CAL
DSL:20-22	23339	0.000 CAL
DSL:22-24	60438	0.000 CAL
CRUDE:10-40	509210	0.000 CAL
HYFL:24-36	396962	0.000 CAL
MINOIL:12-40	507463	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

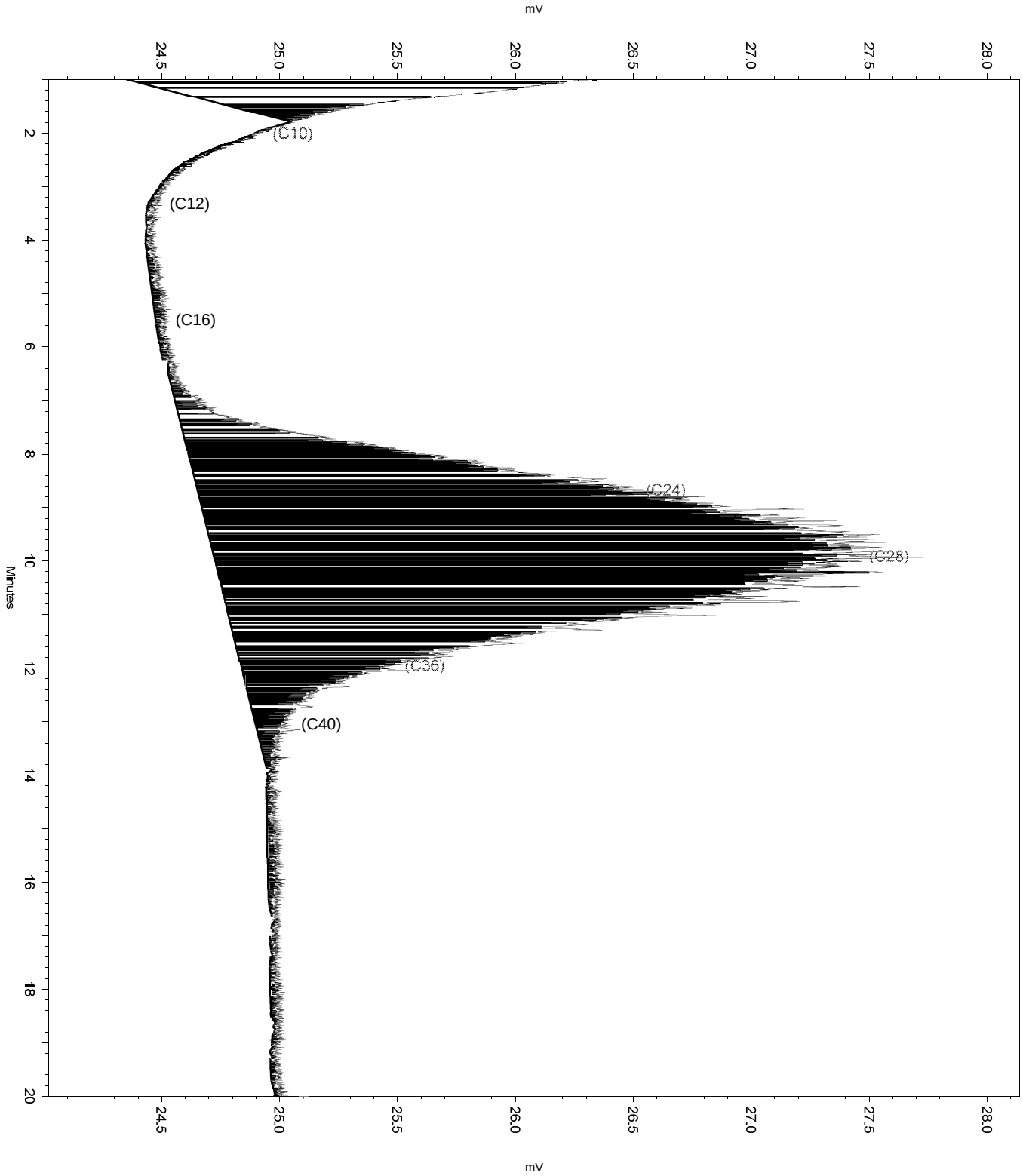
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s20089,2x,mo_25**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b004**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 5:05:21 PM
Analysis Date: 7/23/2012 12:54:56 PM
Instrument: GC14B Vial: 4 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



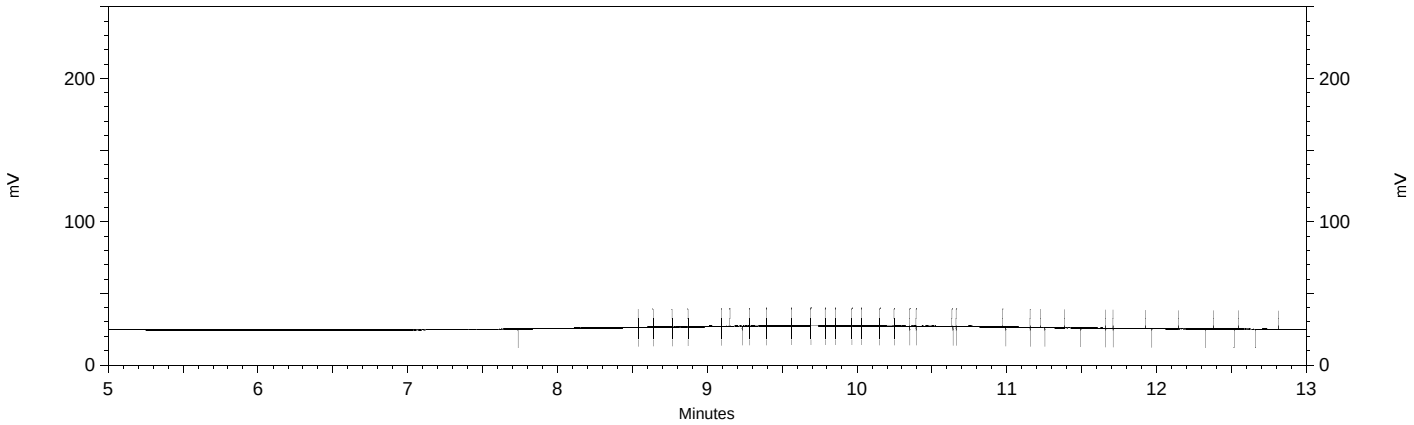
Sample Name: **ical,s20089,2x,mo_25**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b004**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr205.met
Run Date: 7/22/2012 5:05:21 PM
Analysis Date: 7/23/2012 12:47:04 PM
Instrument: GC14B Vial: 4 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl			0.000 BDL
Hexacosane	9.322	987	0.000 CAL



---< General Method Parameters >---

No items selected for this section

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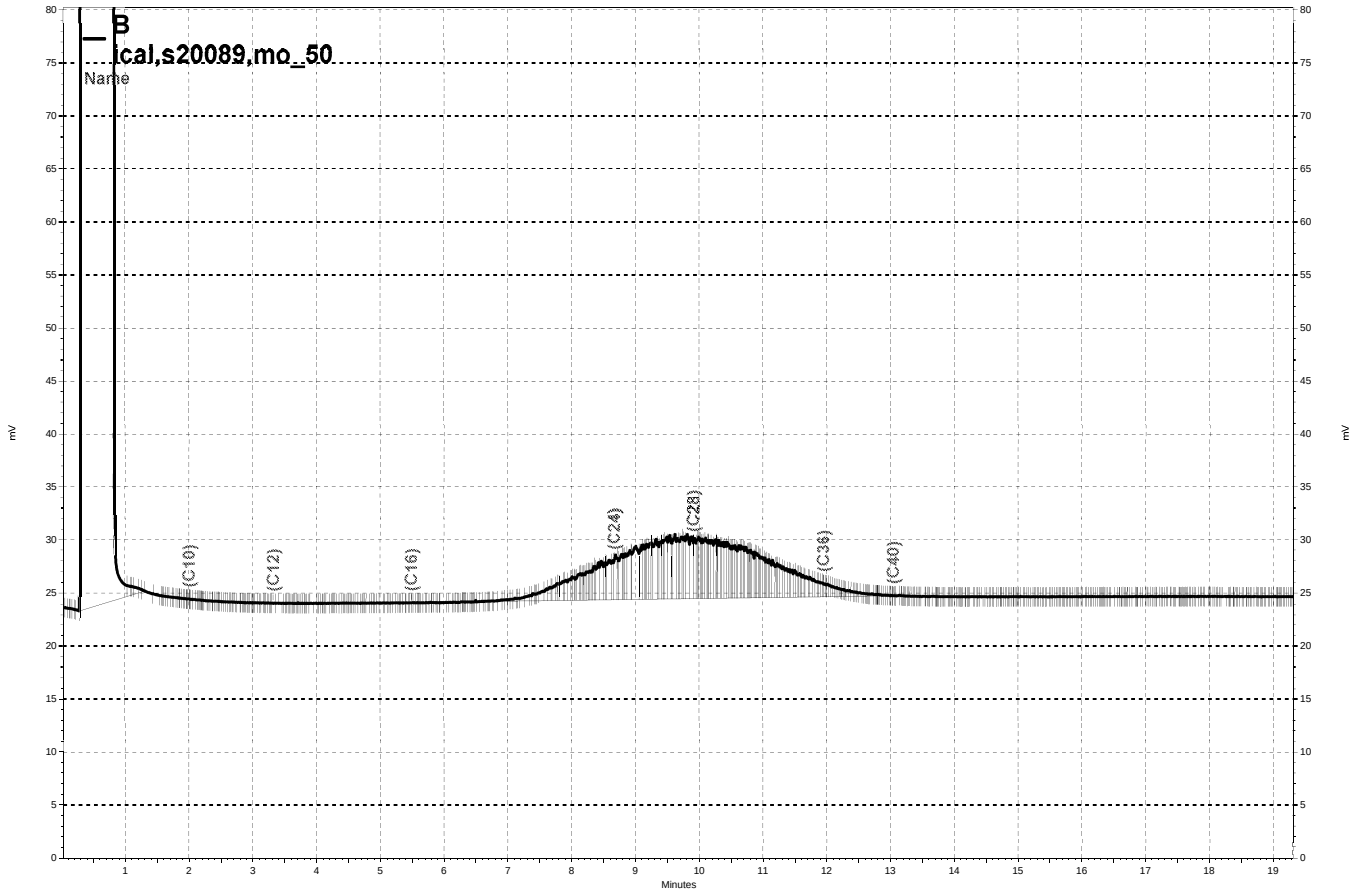
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b005, B

Sample Name: **ical,s20089,mo_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b005**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 5:33:01 PM
Analysis Date: 7/23/2012 12:55:01 PM
Instrument: GC14B Vial: 5 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	5220	0.000 CAL
JP8:10-16	5220	0.000 CAL
KER:10-16	5220	0.000 CAL
JP5:10-16	5220	0.000 CAL
DSL:10-20	11551	0.000 CAL
DSL:10-22	55613	0.000 CAL
DSL:10-24	175091	0.000 CAL
DSL:12-22	53740	0.000 CAL
DSL:10-28	545975	0.000 CAL
DSL:12-24	173218	0.000 CAL
DSL:12-32	859141	0.000 CAL
BUNKC:12-40	1020640	0.000 CAL
TROIL:12-40	1020640	0.000 CAL
HYFL:12-40	1020640	0.000 CAL
MO:22-32	805401	50.000 CAL
MO:20-36	984145	50.000 CAL
MO:22-36	940083	50.000 CAL
MO:24-36	820605	50.000 CAL
DSL:10-12	1873	0.000 CAL
DSL:12-16	3347	0.000 CAL
DSL:16-24	169871	0.000 CAL
MO:28-40	476538	50.000 CAL
MO:28-36	449721	50.000 CAL
CREOSOTE:10-36	995696	0.000 CAL
DSL:12-14	1424	0.000 CAL
DSL:14-16	1923	0.000 CAL
DSL:16-18	1819	0.000 CAL
DSL:18-20	4512	0.000 CAL
DSL:20-22	44062	0.000 CAL
DSL:22-24	119478	0.000 CAL
CRUDE:10-40	1022513	0.000 CAL
HYFL:24-36	820605	0.000 CAL
MINOIL:12-40	1020640	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

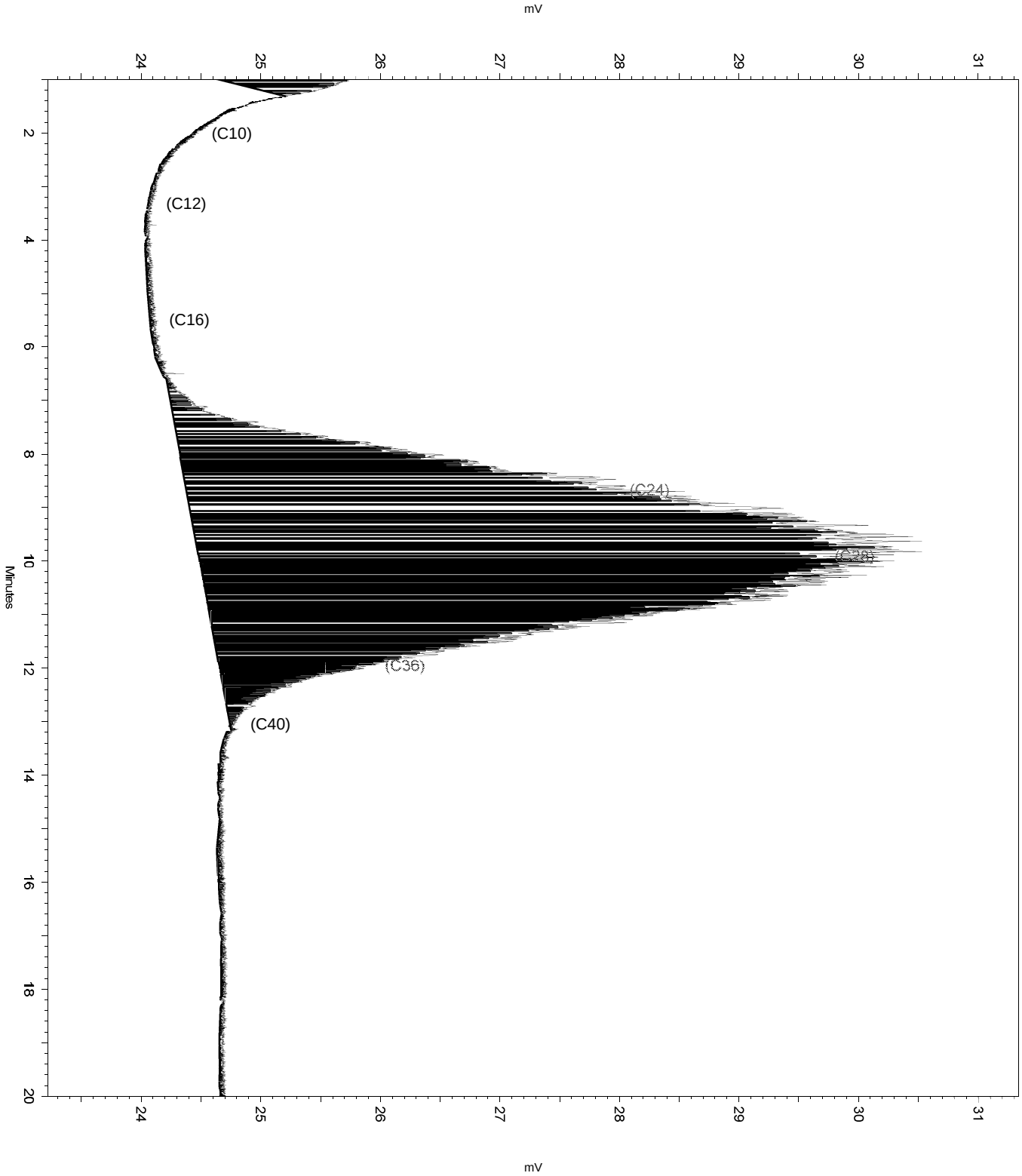
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b005

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Move BL Stop	12.202	13.178	0

Sample Name: **ical,s20089,mo_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b005**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 5:33:01 PM
Analysis Date: 7/23/2012 12:55:01 PM
Instrument: GC14B Vial: 5 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



Sample Name: **ical,s20089,mo_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b005**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 5:33:01 PM
Analysis Date: 7/23/2012 12:50:49 PM
Instrument: GC14B Vial: 5 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	5220	0.000 CAL
JP8:10-16	5220	0.000 CAL
KER:10-16	5220	0.000 CAL
JP5:10-16	5220	0.000 CAL
DSL:10-20	10351	0.000 CAL
DSL:10-22	49096	0.000 CAL
DSL:10-24	159497	0.000 CAL
DSL:12-22	47223	0.000 CAL
DSL:10-28	505480	0.000 CAL
DSL:12-24	157624	0.000 CAL
DSL:12-32	787309	0.000 CAL
BUNKC:12-40	893069	0.000 CAL
TROIL:12-40	893069	0.000 CAL
HYFL:12-40	893069	0.000 CAL
MO:22-32	740086	50.000 CAL
MO:20-36	878728	50.000 CAL
MO:22-36	839983	50.000 CAL
MO:24-36	729582	50.000 CAL
DSL:10-12	1873	0.000 CAL
DSL:12-16	3347	0.000 CAL
DSL:16-24	154277	0.000 CAL
MO:28-40	389462	50.000 CAL
MO:28-36	383599	50.000 CAL
CREOSOTE:10-36	889079	0.000 CAL
DSL:12-14	1424	0.000 CAL
DSL:14-16	1923	0.000 CAL
DSL:16-18	1819	0.000 CAL
DSL:18-20	3312	0.000 CAL
DSL:20-22	38745	0.000 CAL
DSL:22-24	110401	0.000 CAL
CRUDE:10-40	894942	0.000 CAL
HYFL:24-36	729582	0.000 CAL
MINOIL:12-40	893069	0.000 CAL

---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

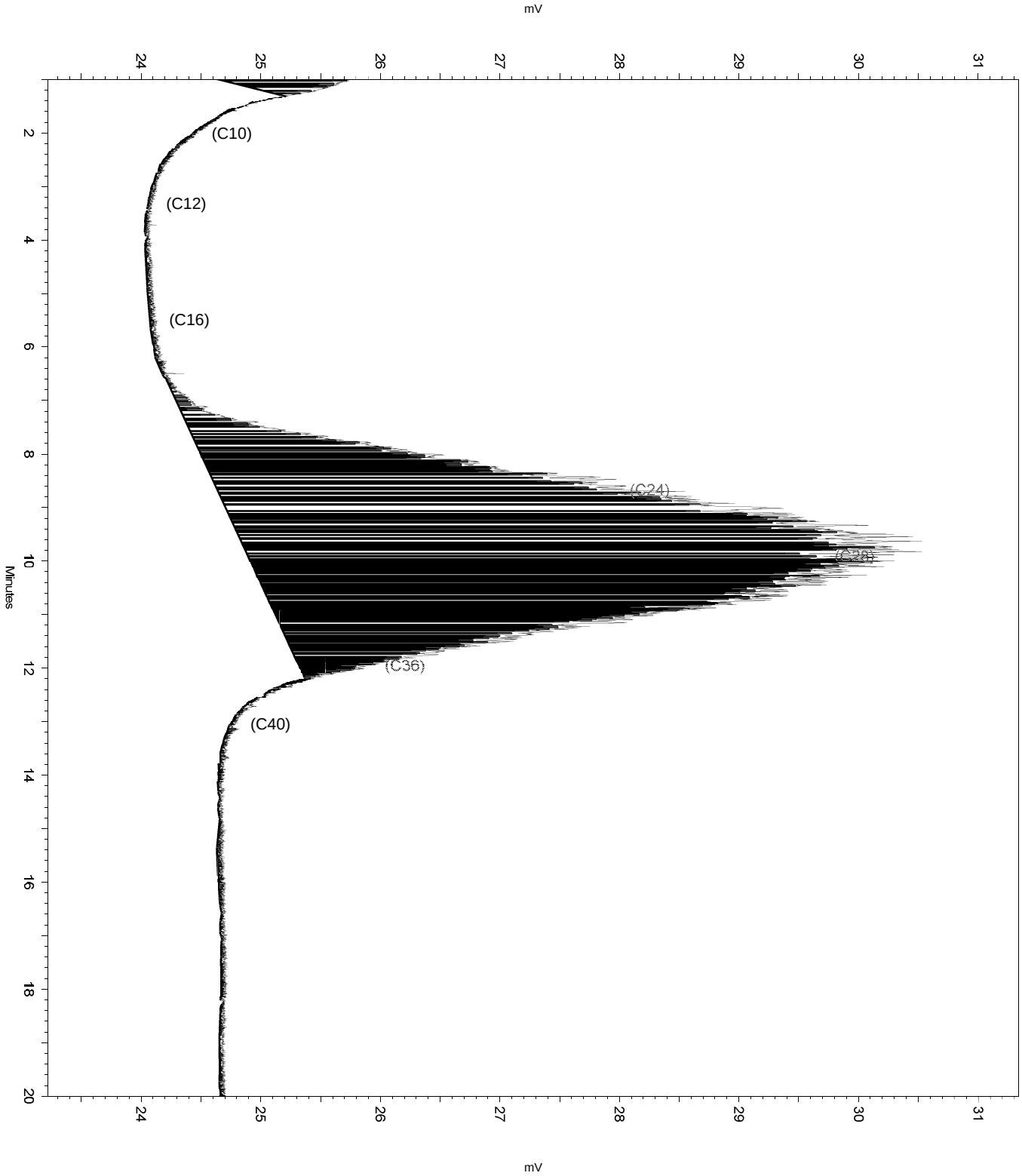
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b005

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s20089,mo_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b005**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 5:33:01 PM
Analysis Date: 7/23/2012 12:50:49 PM
Instrument: GC14B Vial: 5 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



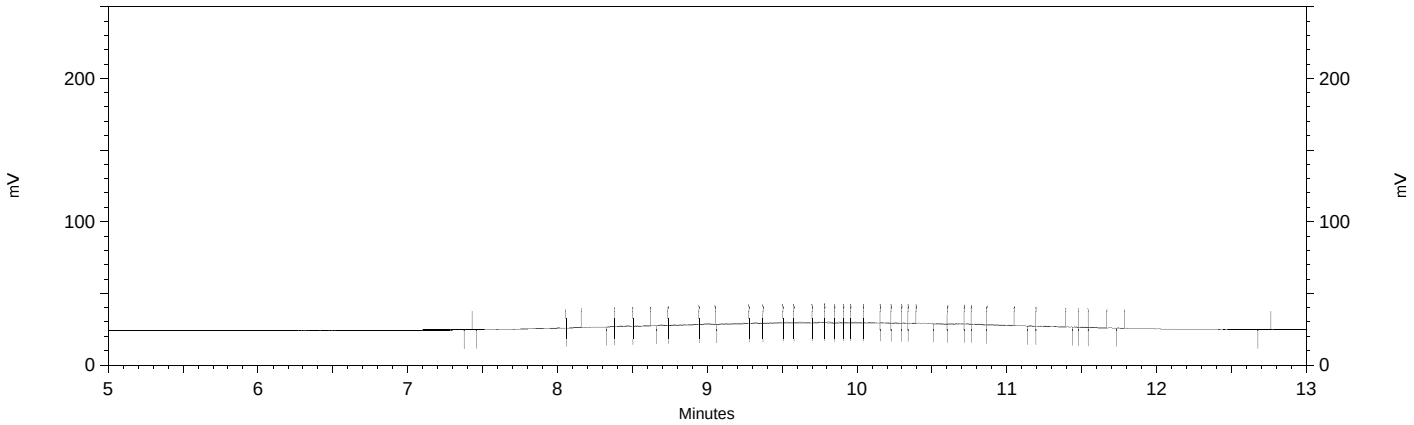
Sample Name: **ical,s20089,mo_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b005**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr205.met
Run Date: 7/22/2012 5:33:01 PM
Analysis Date: 7/23/2012 12:47:12 PM
Instrument: GC14B Vial: 5 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl			0.000 BDL
Hexacosane	9.322	1902	0.000 CAL



---< General Method Parameters >---

No items selected for this section

---< B >---

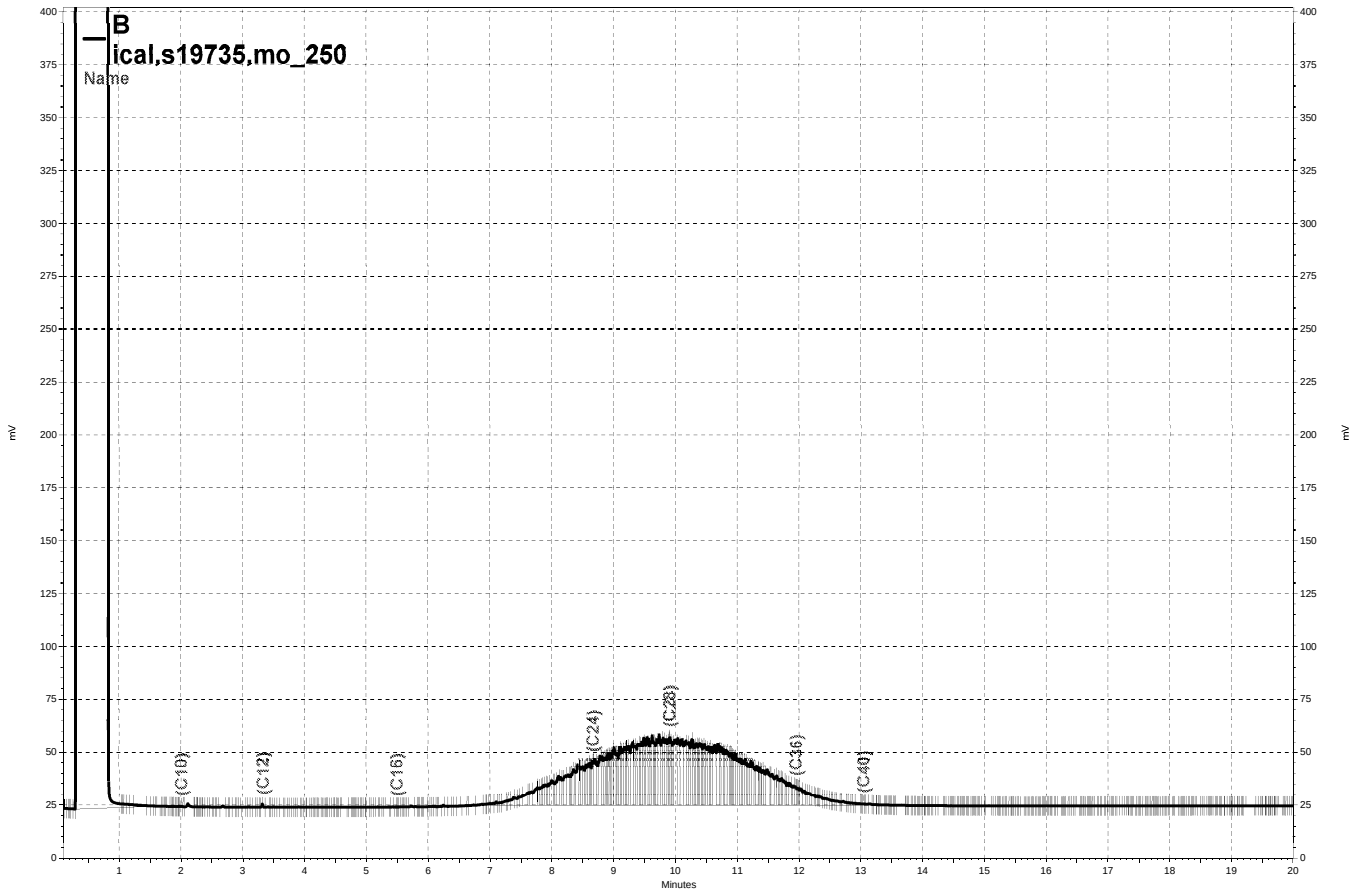
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b005

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b006, B

Sample Name: **ical,s19735,mo_250**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b006**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 6:00:43 PM
Analysis Date: 7/23/2012 12:55:06 PM
Instrument: GC14B Vial: 6 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	13056	0.000 CAL
JP8:10-16	13056	0.000 CAL
KER:10-16	13056	0.000 CAL
JP5:10-16	13056	0.000 CAL
DSL:10-20	36653	0.000 CAL
DSL:10-22	288823	0.000 CAL
DSL:10-24	933985	0.000 CAL
DSL:12-22	280061	0.000 CAL
DSL:10-28	2903063	0.000 CAL
DSL:12-24	925223	0.000 CAL
DSL:12-32	4701953	0.000 CAL
BUNKC:12-40	5764608	0.000 CAL
TROIL:12-40	5764608	0.000 CAL
HYFL:12-40	5764608	0.000 CAL
MO:22-32	4421892	250.000 CAL
MO:20-36	5527946	250.000 CAL
MO:22-36	5275776	250.000 CAL
MO:24-36	4630614	250.000 CAL
DSL:10-12	8762	0.000 CAL
DSL:12-16	4294	0.000 CAL
DSL:16-24	920929	0.000 CAL
MO:28-40	2870307	250.000 CAL
MO:28-36	2661536	250.000 CAL
CREOSOTE:10-36	5564599	0.000 CAL
DSL:12-14	3094	0.000 CAL
DSL:14-16	1200	0.000 CAL
DSL:16-18	3953	0.000 CAL
DSL:18-20	19644	0.000 CAL
DSL:20-22	252170	0.000 CAL
DSL:22-24	645162	0.000 CAL
CRUDE:10-40	5773370	0.000 CAL
HYFL:24-36	4630614	0.000 CAL
MINOIL:12-40	5764608	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

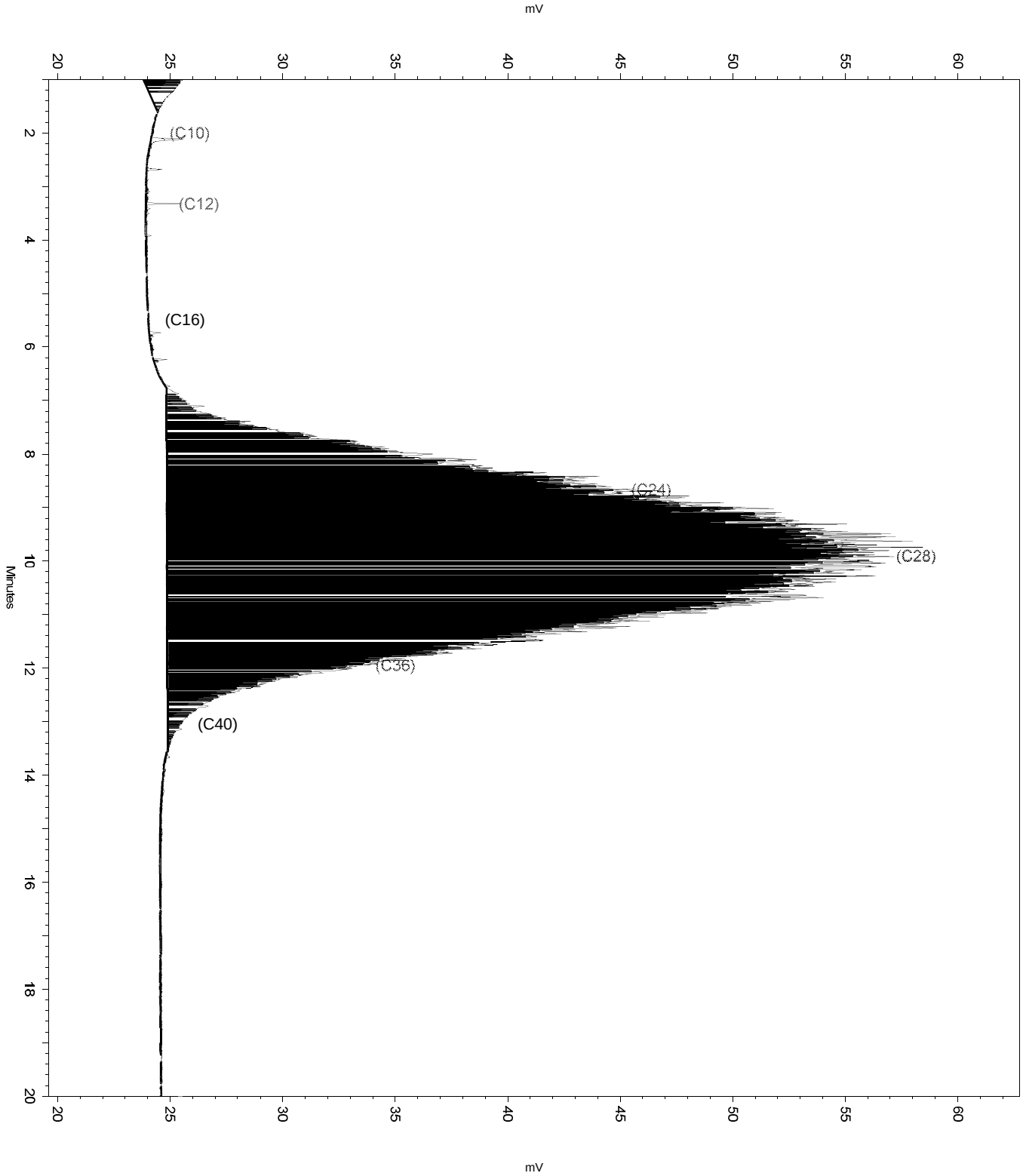
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Move BL Stop	11.877	13.561	0

Sample Name: **ical,s19735,mo_250**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b006**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 6:00:43 PM
Analysis Date: 7/23/2012 12:55:06 PM
Instrument: GC14B Vial: 6 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



Sample Name: **ical,s19735,mo_250**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b006**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 6:00:43 PM
Analysis Date: 7/23/2012 12:50:53 PM
Instrument: GC14B Vial: 6 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	13056	0.000 CAL
JP8:10-16	13056	0.000 CAL
KER:10-16	13056	0.000 CAL
JP5:10-16	13056	0.000 CAL
DSL:10-20	27205	0.000 CAL
DSL:10-22	213523	0.000 CAL
DSL:10-24	741955	0.000 CAL
DSL:12-22	204761	0.000 CAL
DSL:10-28	2384825	0.000 CAL
DSL:12-24	733193	0.000 CAL
DSL:12-32	3756979	0.000 CAL
BUNKC:12-40	4165552	0.000 CAL
TROIL:12-40	4165552	0.000 CAL
HYFL:12-40	4165552	0.000 CAL
MO:22-32	3552218	250.000 CAL
MO:20-36	4130742	250.000 CAL
MO:22-36	3944424	250.000 CAL
MO:24-36	3415992	250.000 CAL
DSL:10-12	8762	0.000 CAL
DSL:12-16	4294	0.000 CAL
DSL:16-24	728899	0.000 CAL
MO:28-40	1789489	250.000 CAL
MO:28-36	1773122	250.000 CAL
CREOSOTE:10-36	4157947	0.000 CAL
DSL:12-14	3094	0.000 CAL
DSL:14-16	1200	0.000 CAL
DSL:16-18	3953	0.000 CAL
DSL:18-20	10196	0.000 CAL
DSL:20-22	186318	0.000 CAL
DSL:22-24	528432	0.000 CAL
CRUDE:10-40	4174314	0.000 CAL
HYFL:24-36	3415992	0.000 CAL
MINOIL:12-40	4165552	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

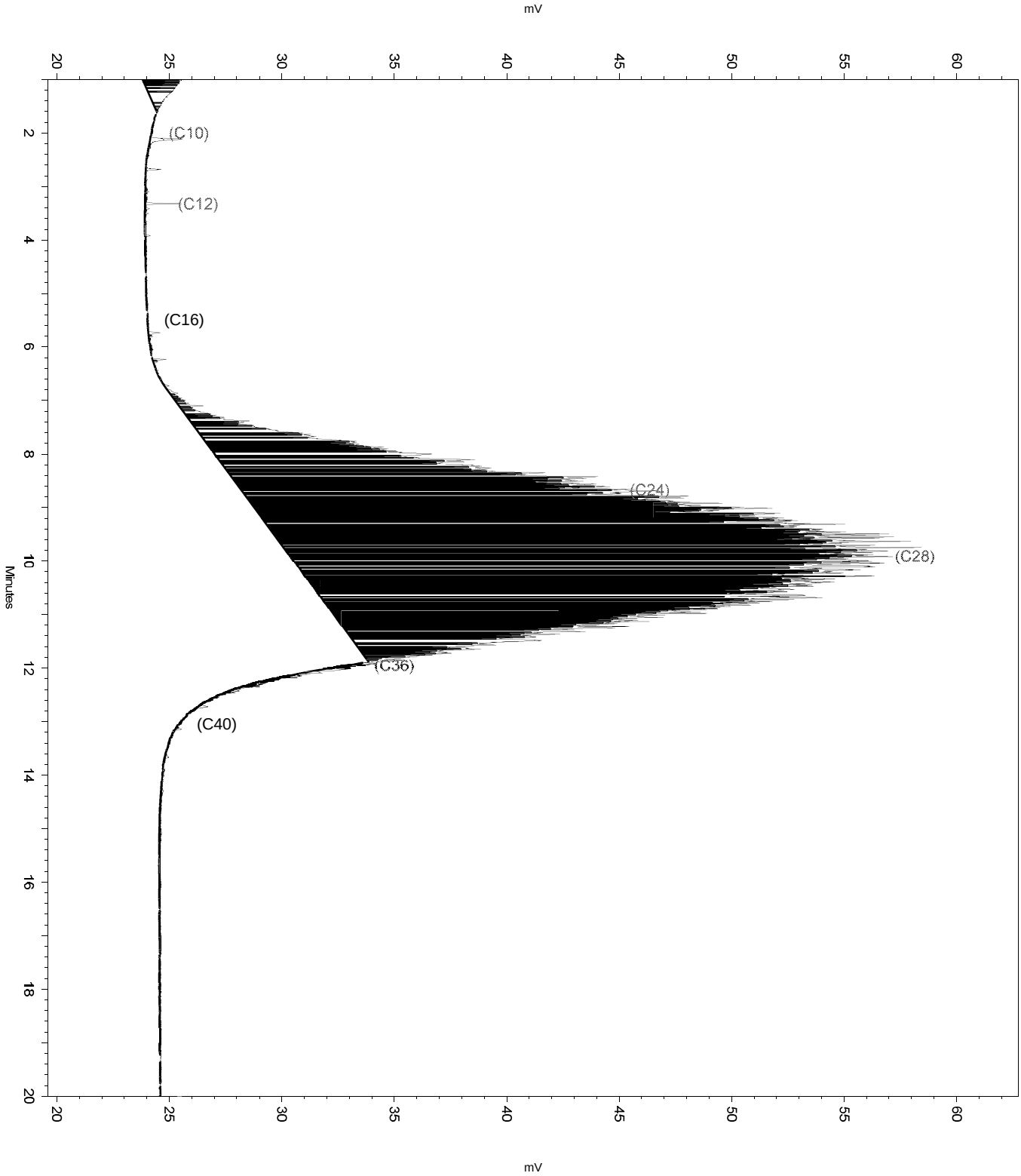
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19735,mo_250**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b006**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 6:00:43 PM
Analysis Date: 7/23/2012 12:50:53 PM
Instrument: GC14B Vial: 6 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



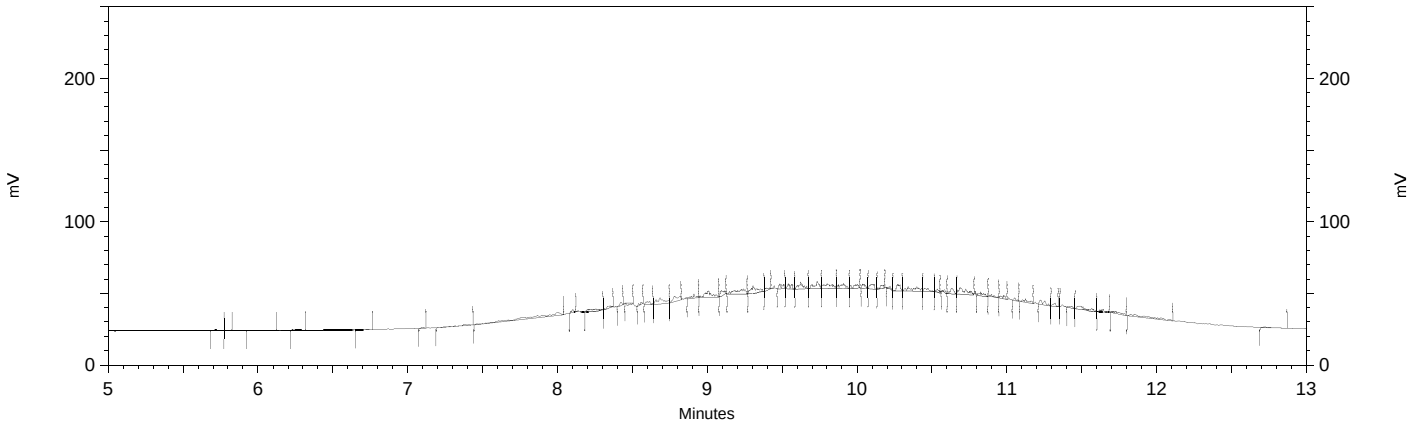
Sample Name: **ical,s19735,mo_250**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b006**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr205.met
Run Date: 7/22/2012 6:00:43 PM
Analysis Date: 7/23/2012 12:47:17 PM
Instrument: GC14B Vial: 6 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl			0.000 BDL
Hexacosane	9.310	14012	0.000 CAL



---< General Method Parameters >---

No items selected for this section

---< B >---

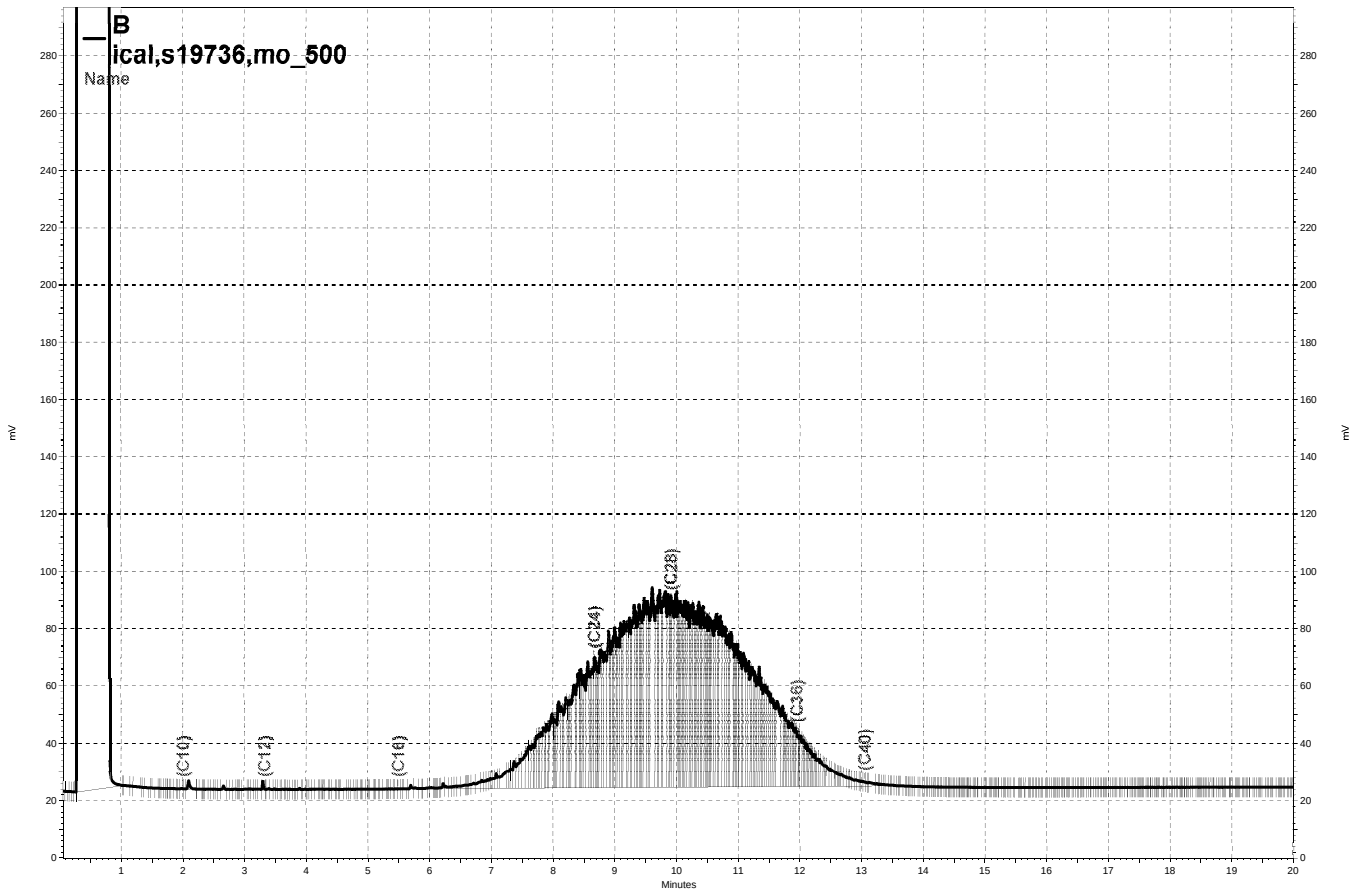
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b007, B

Sample Name: **ical,s19736,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b007**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 6:28:22 PM
Analysis Date: 7/23/2012 12:55:10 PM
Instrument: GC14B Vial: 7 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	22840	0.000 CAL
JP8:10-16	22840	0.000 CAL
KER:10-16	22840	0.000 CAL
JP5:10-16	22840	0.000 CAL
DSL:10-20	129076	0.000 CAL
DSL:10-22	704477	0.000 CAL
DSL:10-24	2090665	0.000 CAL
DSL:12-22	688812	0.000 CAL
DSL:10-28	6271459	0.000 CAL
DSL:12-24	2075000	0.000 CAL
DSL:12-32	10074665	0.000 CAL
BUNKC:12-40	12402002	0.000 CAL
TROIL:12-40	12402002	0.000 CAL
HYFL:12-40	12402002	0.000 CAL
MO:22-32	9385853	500.000 CAL
MO:20-36	11835635	500.000 CAL
MO:22-36	11260234	500.000 CAL
MO:24-36	9874046	500.000 CAL
DSL:10-12	15665	0.000 CAL
DSL:12-16	7175	0.000 CAL
DSL:16-24	2067825	0.000 CAL
MO:28-40	6146208	500.000 CAL
MO:28-36	5693252	500.000 CAL
CREOSOTE:10-36	11964711	0.000 CAL
DSL:12-14	5411	0.000 CAL
DSL:14-16	1764	0.000 CAL
DSL:16-18	16835	0.000 CAL
DSL:18-20	89401	0.000 CAL
DSL:20-22	575401	0.000 CAL
DSL:22-24	1386188	0.000 CAL
CRUDE:10-40	12417667	0.000 CAL
HYFL:24-36	9874046	0.000 CAL
MINOIL:12-40	12402002	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

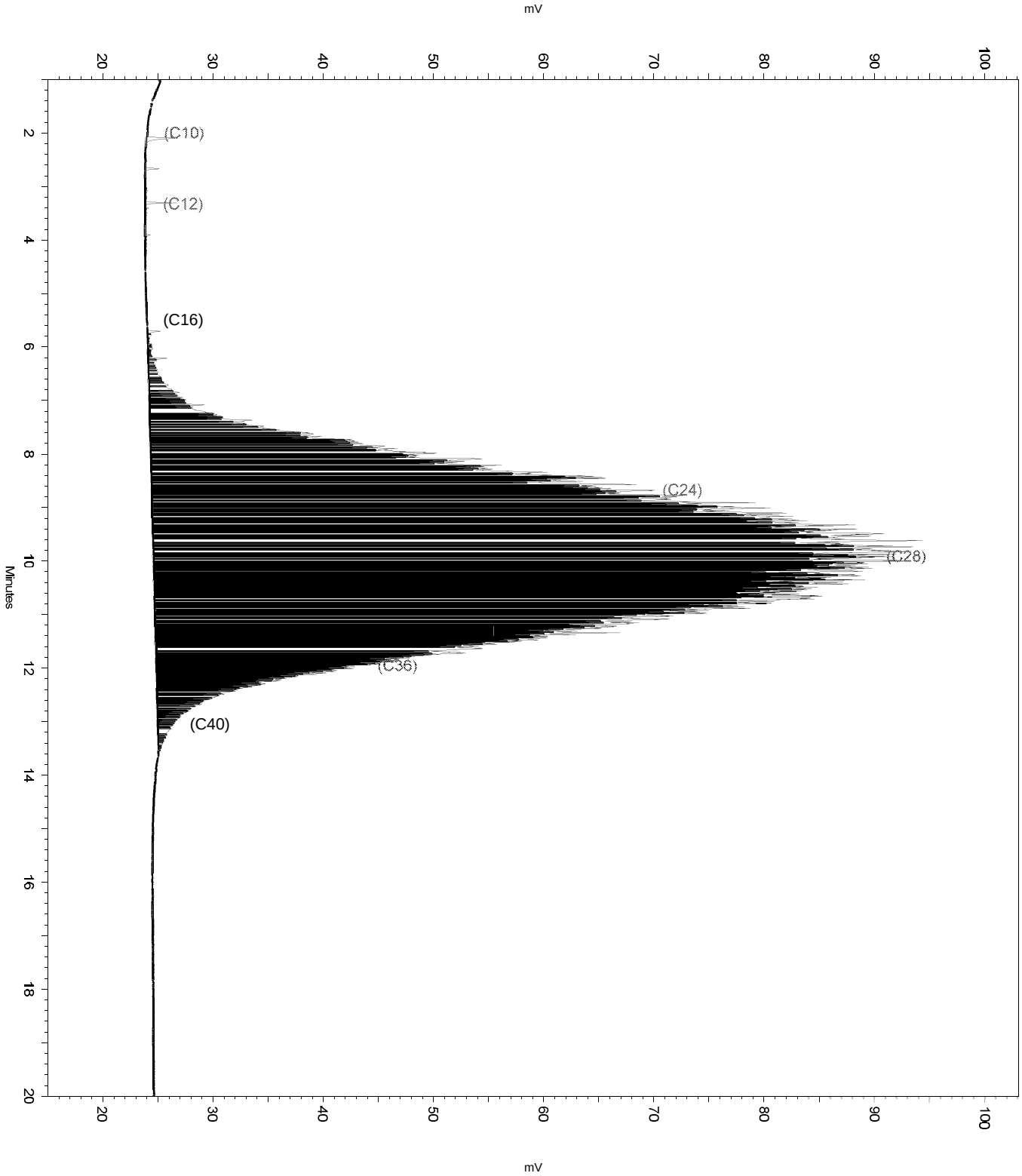
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19736,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b007**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 6:28:22 PM
Analysis Date: 7/23/2012 12:55:10 PM
Instrument: GC14B Vial: 7 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



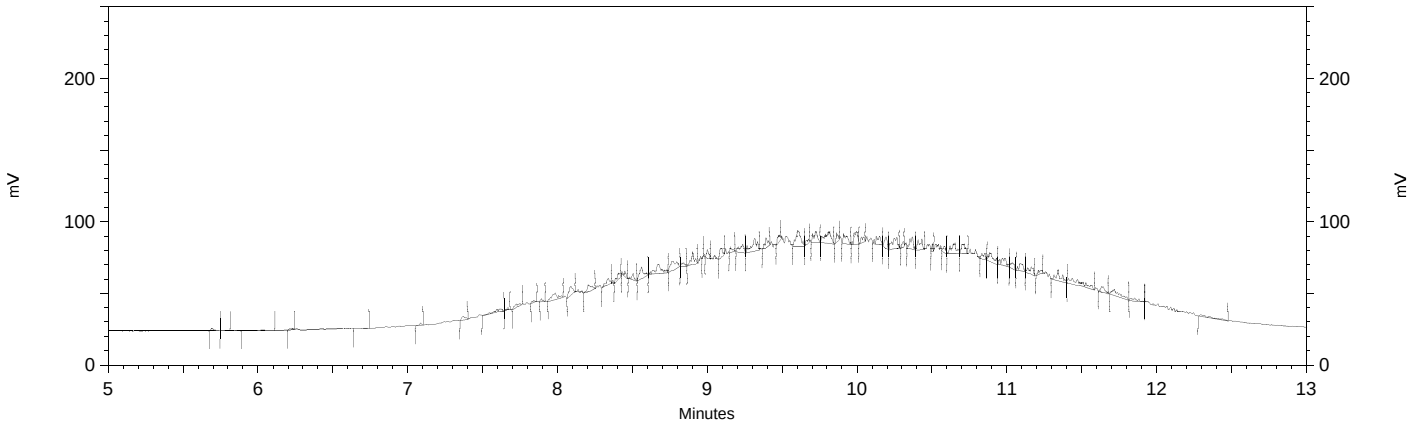
Sample Name: **ical,s19736,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b007**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr205.met
Run Date: 7/22/2012 6:28:22 PM
Analysis Date: 7/23/2012 12:47:22 PM
Instrument: GC14B Vial: 7 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl			0.000 BDL
Hexacosane	9.318	21108	0.000 CAL



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

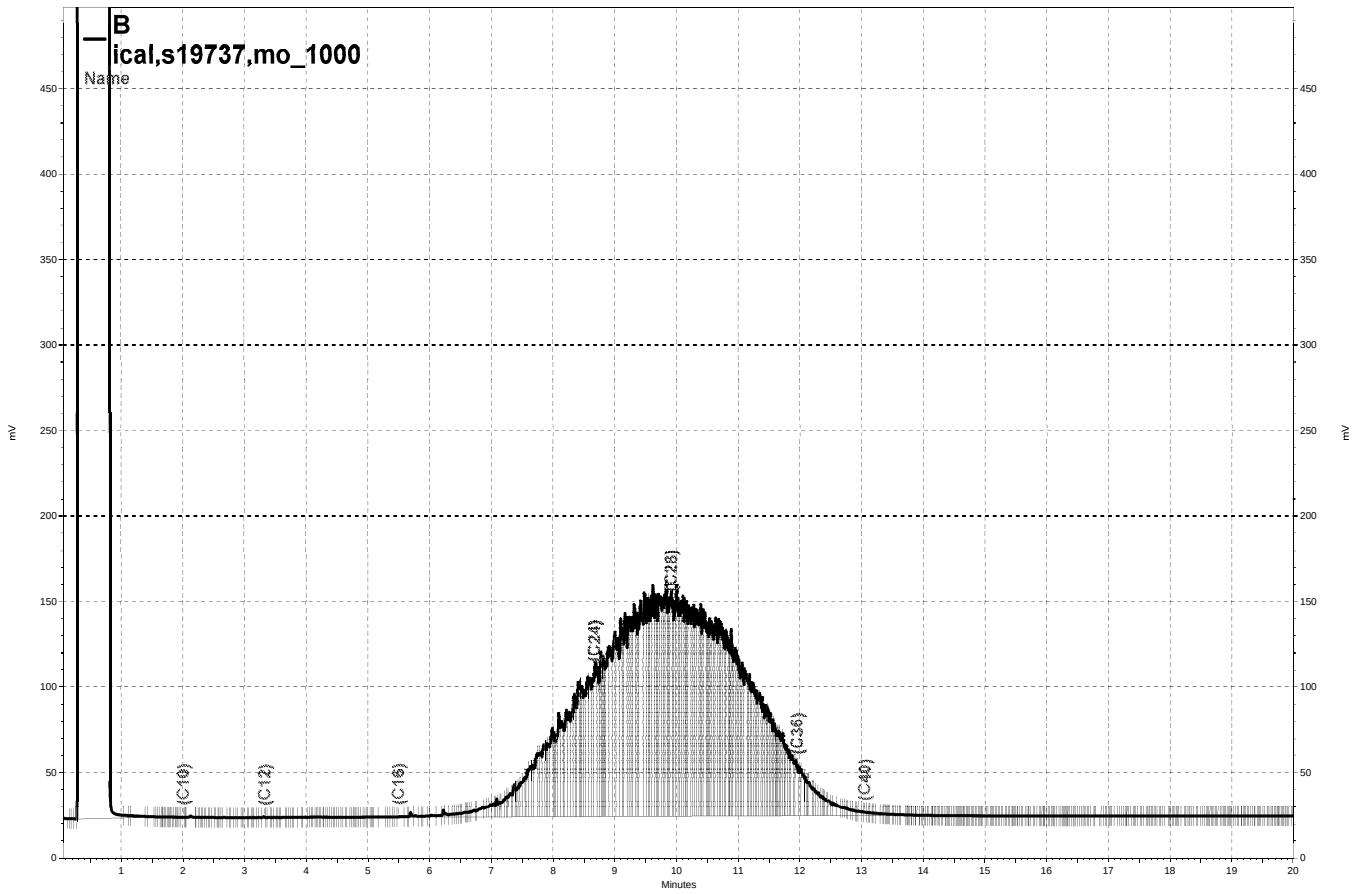
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b008, B

Sample Name: **ical,s19737,mo_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 6:56:01 PM
Analysis Date: 7/23/2012 12:55:15 PM
Instrument: GC14B Vial: 8 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	14027	0.000 CAL
JP8:10-16	14027	0.000 CAL
KER:10-16	14027	0.000 CAL
JP5:10-16	14027	0.000 CAL
DSL:10-20	288597	0.000 CAL
DSL:10-22	1406977	0.000 CAL
DSL:10-24	4084760	0.000 CAL
DSL:12-22	1401930	0.000 CAL
DSL:10-28	12188544	0.000 CAL
DSL:12-24	4079713	0.000 CAL
DSL:12-32	19544956	0.000 CAL
BUNKC:12-40	23675286	0.000 CAL
TROIL:12-40	23675286	0.000 CAL
HYFL:12-40	23675286	0.000 CAL
MO:22-32	18143028	1000.000 CAL
MO:20-36	22773944	1000.000 CAL
MO:22-36	21655568	1000.000 CAL
MO:24-36	18977780	1000.000 CAL
DSL:10-12	5047	0.000 CAL
DSL:12-16	8980	0.000 CAL
DSL:16-24	4070733	0.000 CAL
MO:28-40	11491789	1000.000 CAL
MO:28-36	10874000	1000.000 CAL
CREOSOTE:10-36	23062544	0.000 CAL
DSL:12-14	5151	0.000 CAL
DSL:14-16	3829	0.000 CAL
DSL:16-18	44141	0.000 CAL
DSL:18-20	230429	0.000 CAL
DSL:20-22	1118380	0.000 CAL
DSL:22-24	2677783	0.000 CAL
CRUDE:10-40	23680334	0.000 CAL
HYFL:24-36	18977780	0.000 CAL
MINOIL:12-40	23675286	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

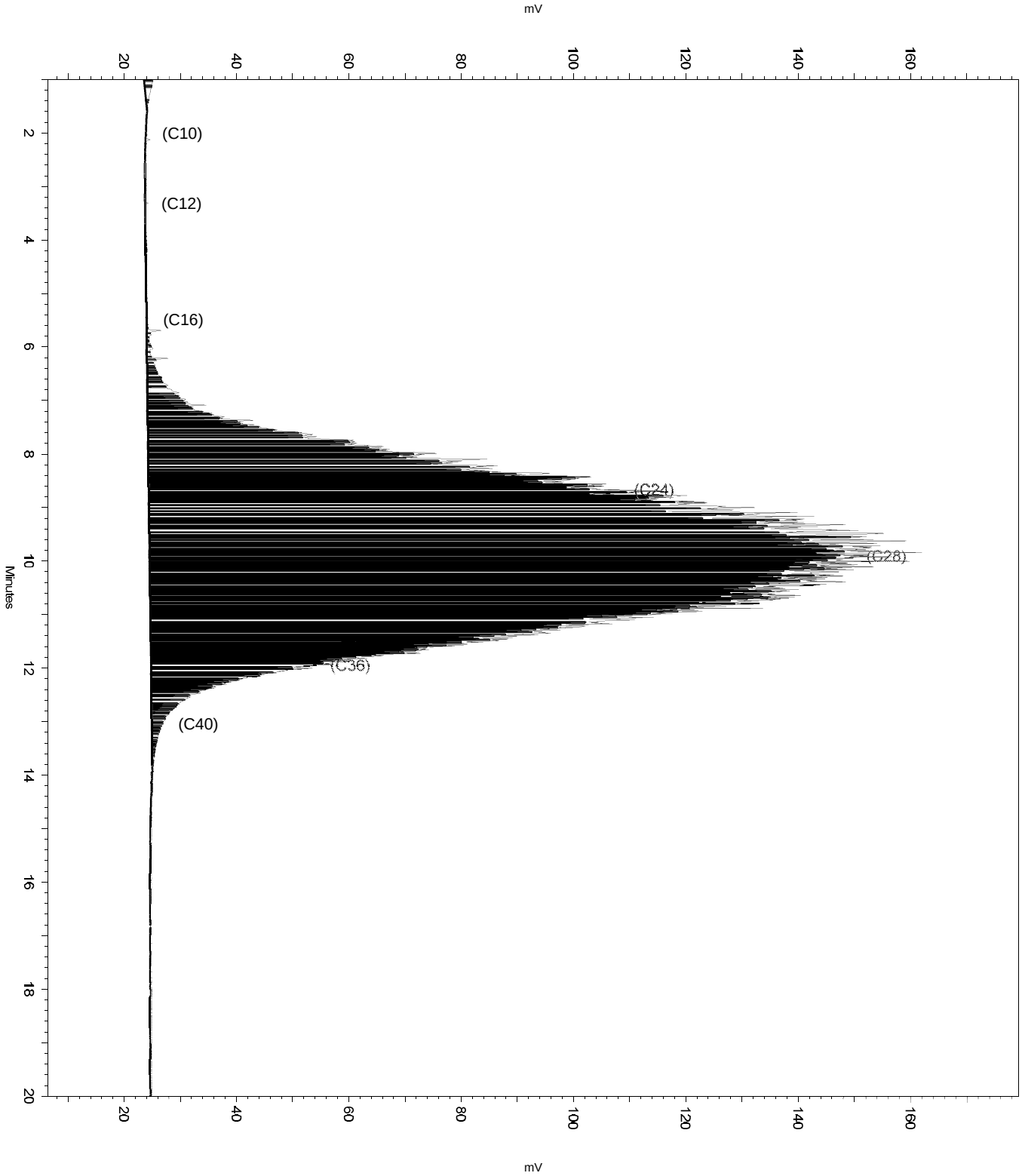
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19737,mo_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 6:56:01 PM
Analysis Date: 7/23/2012 12:55:15 PM
Instrument: GC14B Vial: 8 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



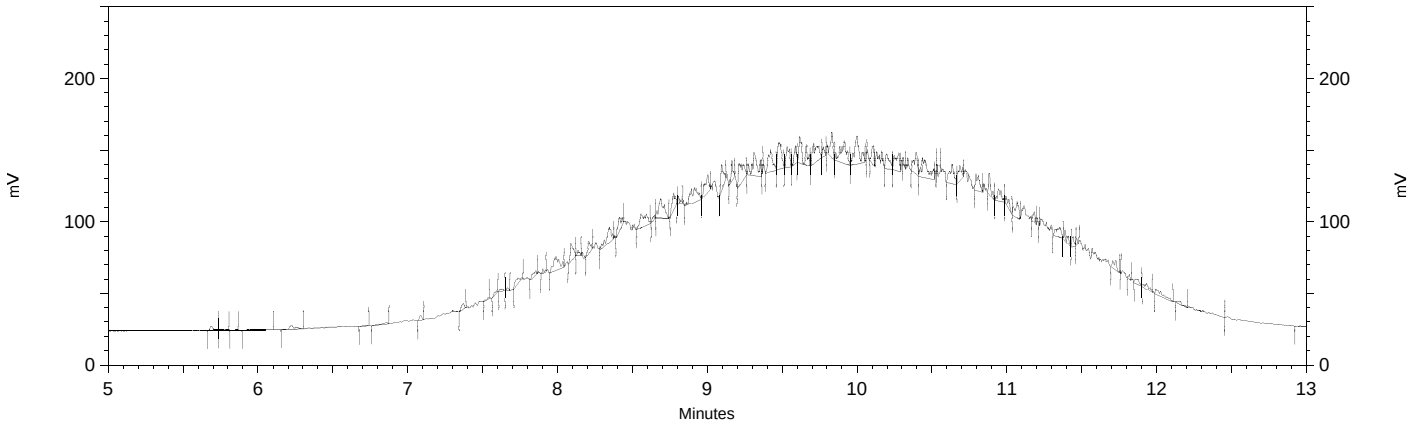
Sample Name: **ical,s19737,mo_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr205.met
Run Date: 7/22/2012 6:56:01 PM
Analysis Date: 7/23/2012 12:47:26 PM
Instrument: GC14B Vial: 8 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl			0.000 BDL
Hexacosane	9.317	42179	0.000 CAL



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

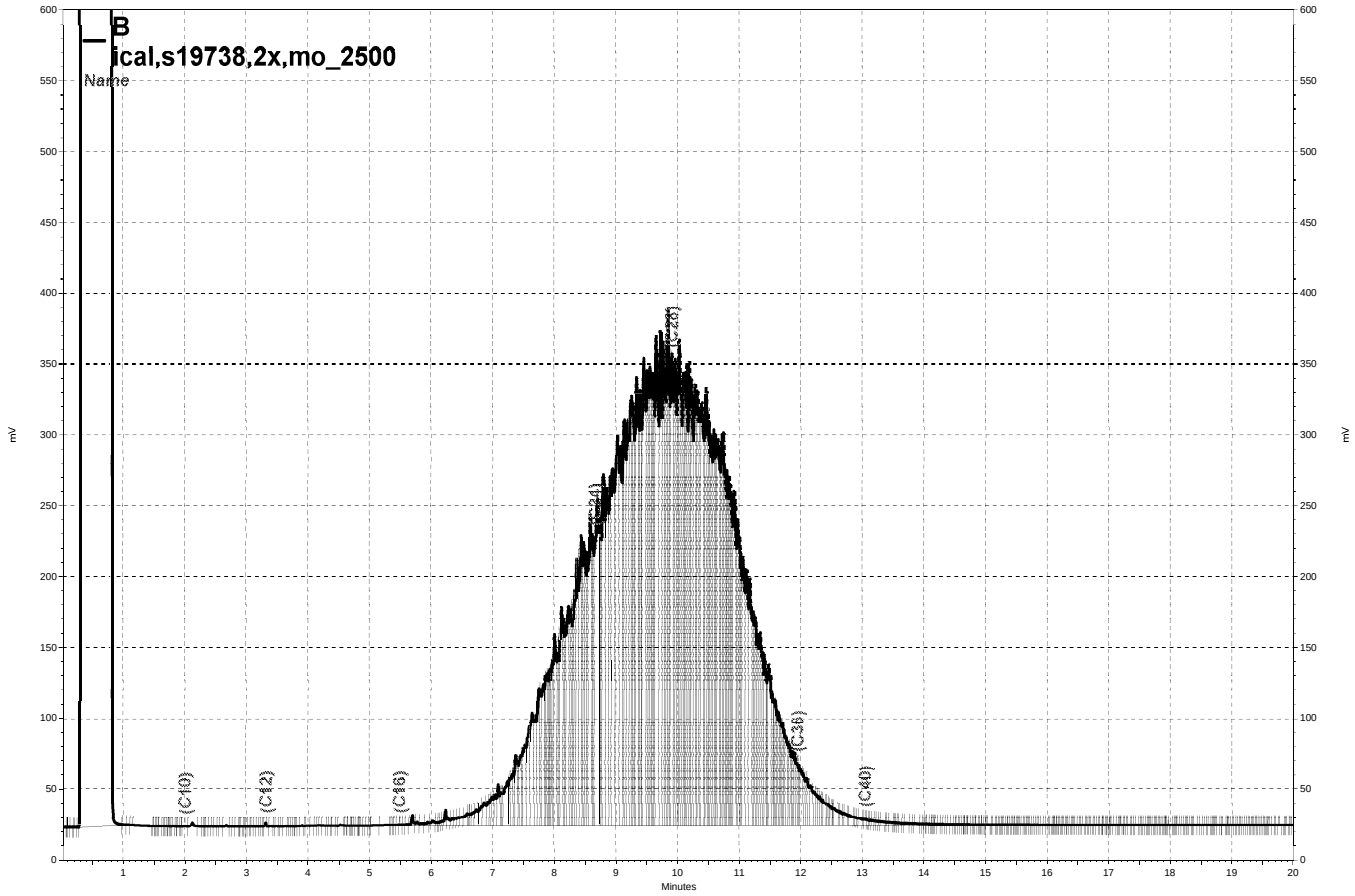
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b009, B

Sample Name: **ical,s19738,2x,mo_2500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 7:23:37 PM
Analysis Date: 7/23/2012 12:55:20 PM
Instrument: GC14B Vial: 9 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	51203	0.000 CAL
JP8:10-16	51203	0.000 CAL
KER:10-16	51203	0.000 CAL
JP5:10-16	51203	0.000 CAL
DSL:10-20	787966	0.000 CAL
DSL:10-22	4022029	0.000 CAL
DSL:10-24	10462411	0.000 CAL
DSL:12-22	4007367	0.000 CAL
DSL:10-28	30878638	0.000 CAL
DSL:12-24	10447749	0.000 CAL
DSL:12-32	49364900	0.000 CAL
BUNKC:12-40	56599856	0.000 CAL
TROIL:12-40	56599856	0.000 CAL
HYFL:12-40	56599856	0.000 CAL
MO:22-32	45505732	2500.000 CAL
MO:20-36	54833812	2500.000 CAL
MO:22-36	51747948	2500.000 CAL
MO:24-36	45159364	2500.000 CAL
DSL:10-12	14662	0.000 CAL
DSL:12-16	36541	0.000 CAL
DSL:16-24	10411208	0.000 CAL
MO:28-40	25735876	2500.000 CAL
MO:28-36	24743128	2500.000 CAL
CREOSOTE:10-36	55621780	0.000 CAL
DSL:12-14	12274	0.000 CAL
DSL:14-16	24267	0.000 CAL
DSL:16-18	154767	0.000 CAL
DSL:18-20	581996	0.000 CAL
DSL:20-22	3234063	0.000 CAL
DSL:22-24	6588582	0.000 CAL
CRUDE:10-40	56614520	0.000 CAL
HYFL:24-36	45159364	0.000 CAL
MINOIL:12-40	56599856	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

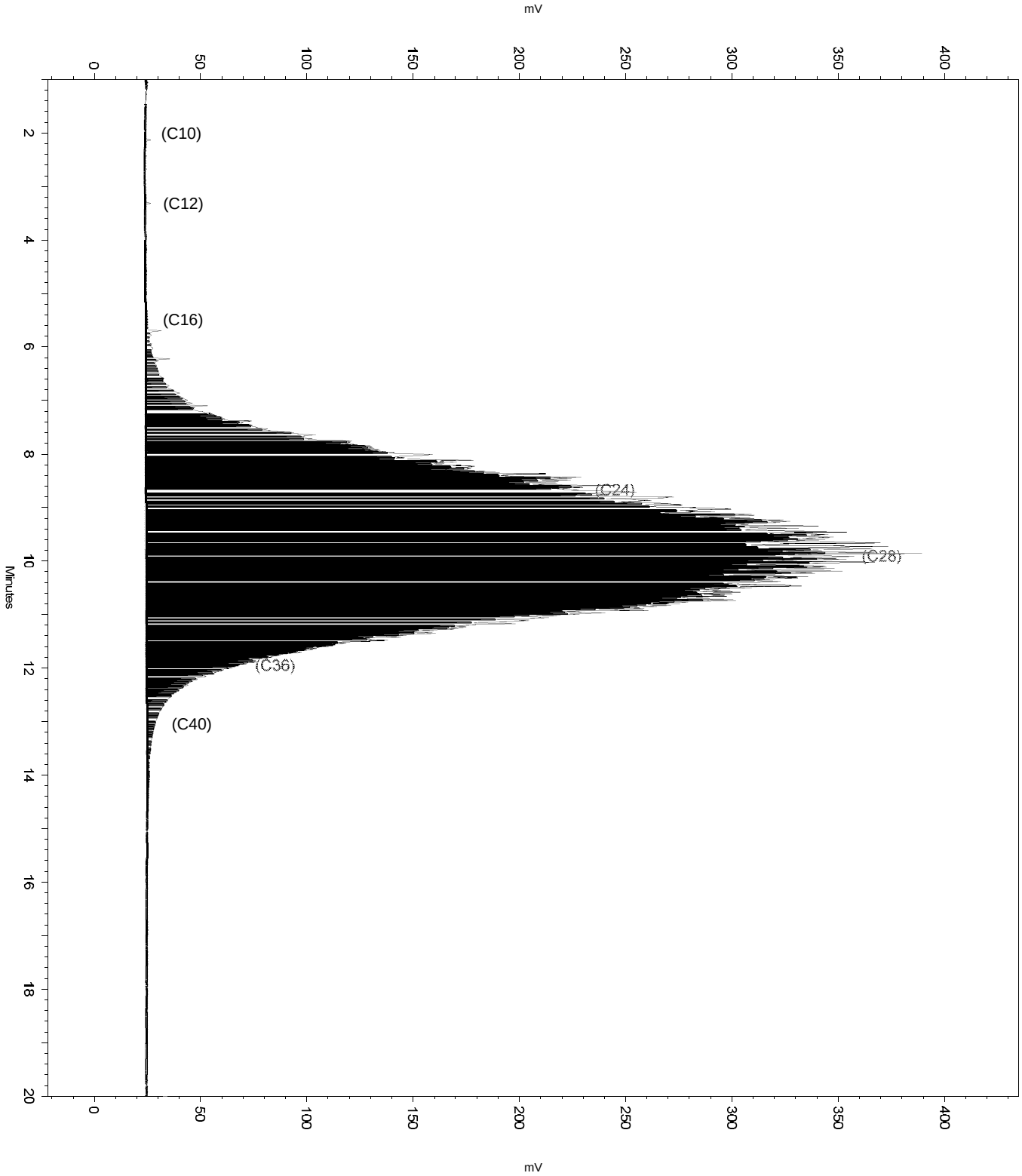
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19738,2x,mo_2500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 7:23:37 PM
Analysis Date: 7/23/2012 12:55:20 PM
Instrument: GC14B Vial: 9 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



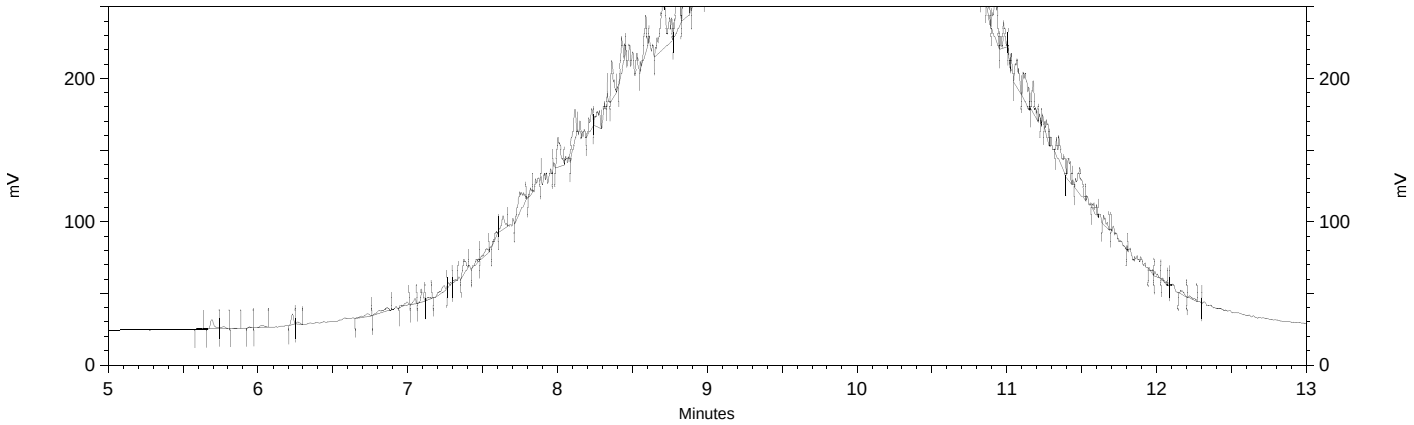
Sample Name: **ical,s19738,2x,mo_2500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr205.met
Run Date: 7/22/2012 7:23:37 PM
Analysis Date: 7/23/2012 12:47:31 PM
Instrument: GC14B Vial: 9 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl			0.000 BDL
Hexacosane	9.347	78235	0.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

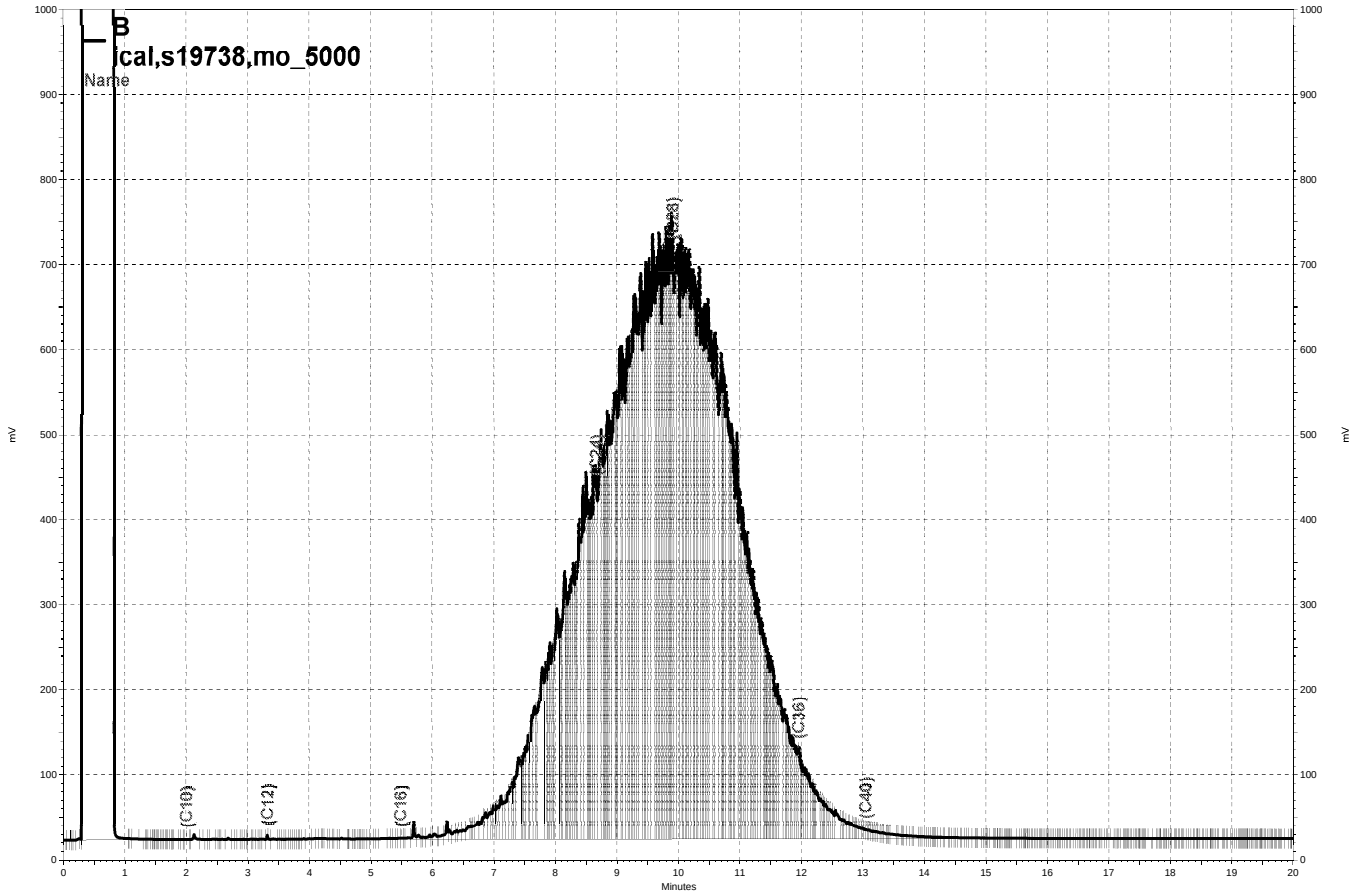
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b010, B

Sample Name: **ical,s19738,mo_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 7:51:17 PM
Analysis Date: 7/23/2012 12:55:25 PM
Instrument: GC14B Vial: 10 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	106177	0.000 CAL
JP8:10-16	106177	0.000 CAL
KER:10-16	106177	0.000 CAL
JP5:10-16	106177	0.000 CAL
DSL:10-20	1470096	0.000 CAL
DSL:10-22	7679895	0.000 CAL
DSL:10-24	21604128	0.000 CAL
DSL:12-22	7650160	0.000 CAL
DSL:10-28	65359540	0.000 CAL
DSL:12-24	21574392	0.000 CAL
DSL:12-32	102974120	0.000 CAL
BUNKC:12-40	117870200	0.000 CAL
TROIL:12-40	117870200	0.000 CAL
HYFL:12-40	117870200	0.000 CAL
MO:22-32	95547528	5000.000 CAL
MO:20-36	113829120	5000.000 CAL
MO:22-36	107842896	5000.000 CAL
MO:24-36	93695088	5000.000 CAL
DSL:10-12	29735	0.000 CAL
DSL:12-16	76442	0.000 CAL
DSL:16-24	21497948	0.000 CAL
MO:28-40	52540376	5000.000 CAL
MO:28-36	49939676	5000.000 CAL
CREOSOTE:10-36	115299216	0.000 CAL
DSL:12-14	33982	0.000 CAL
DSL:14-16	42460	0.000 CAL
DSL:16-18	237240	0.000 CAL
DSL:18-20	1126679	0.000 CAL
DSL:20-22	6209799	0.000 CAL
DSL:22-24	14147808	0.000 CAL
CRUDE:10-40	117899928	0.000 CAL
HYFL:24-36	93695088	0.000 CAL
MINOIL:12-40	117870200	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

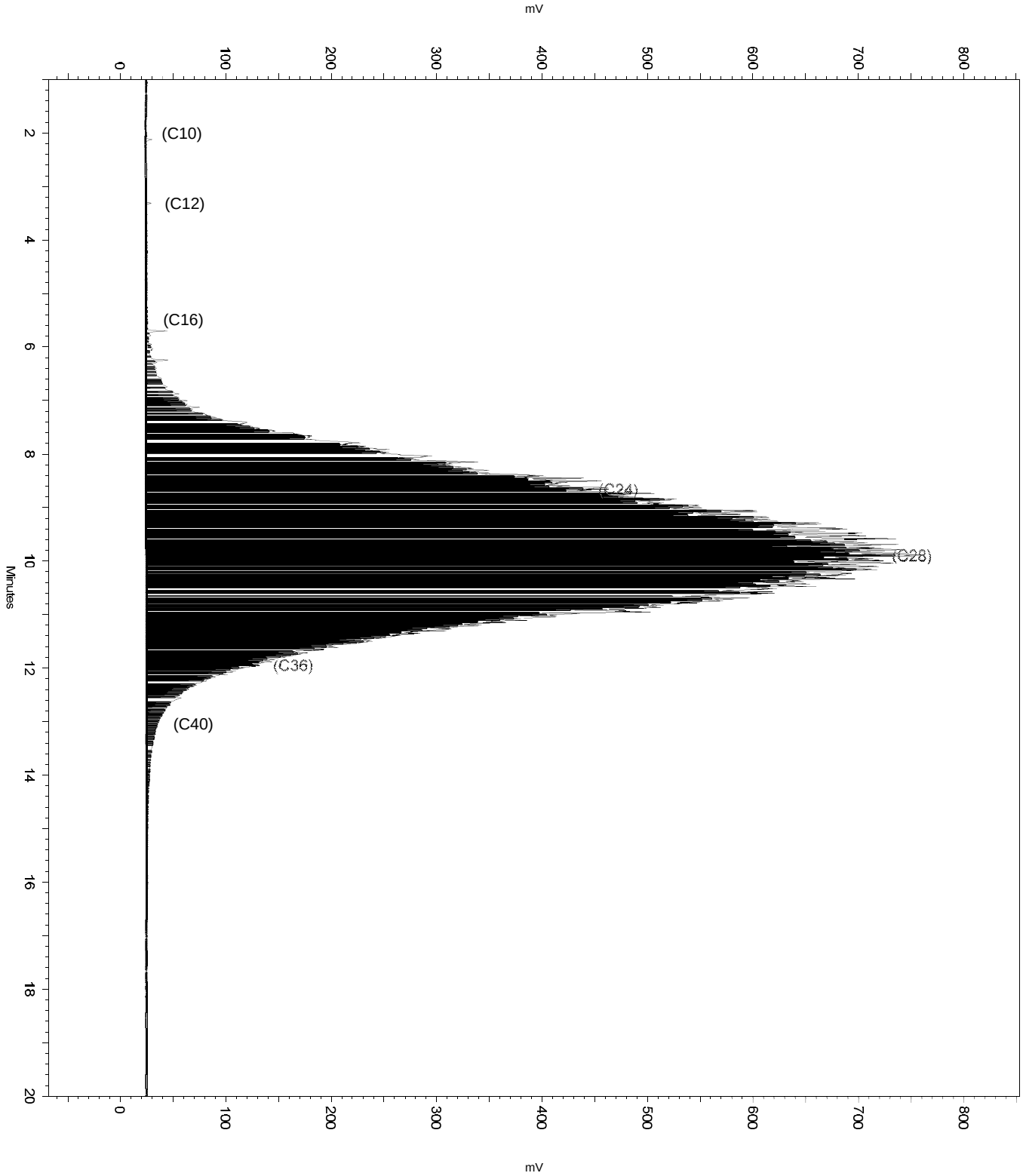
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19738,mo_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh205.met
Run Date: 7/22/2012 7:51:17 PM
Analysis Date: 7/23/2012 12:55:25 PM
Instrument: GC14B Vial: 10 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



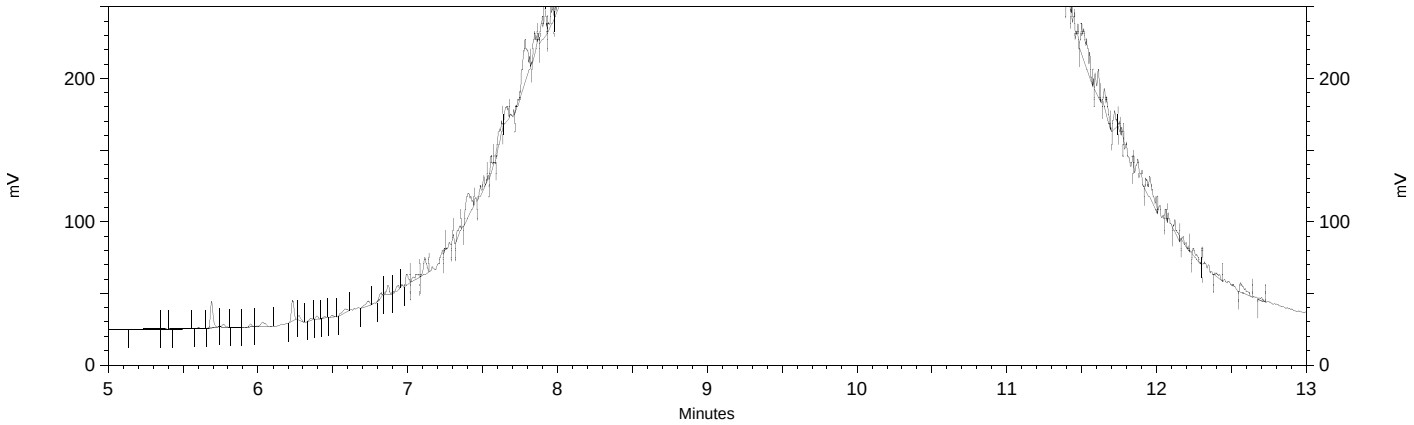
Sample Name: **ical,s19738,mo_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr205.met
Run Date: 7/22/2012 7:51:17 PM
Analysis Date: 7/23/2012 12:47:35 PM
Instrument: GC14B Vial: 10 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.588	5861	0.000 CAL
Hexacosane	9.295	154651	0.000 CAL



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC15B
Calnum : 162269861001
Units : mg/L

Name : MO_187
Date : 05-JUL-2012 17:13
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	187b013	162269861013	MO_50	05-JUL-2012 17:40	S20089
L2	187b014	162269861014	MO_250	05-JUL-2012 18:08	S19735
L3	187b015	162269861015	MO_500	05-JUL-2012 18:36	S19736
L4	187b016	162269861016	MO_1000	05-JUL-2012 19:03	S19737
L5	187b017	162269861017	MO_2500	05-JUL-2012 19:31	S19738 (2X)
L6	187b018	162269861018	MO_5000	05-JUL-2012 19:59	S19738

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	36632	41825	42396	41873	39738	36092	AVRG		2.52E-5		39759	7	0.995	20	

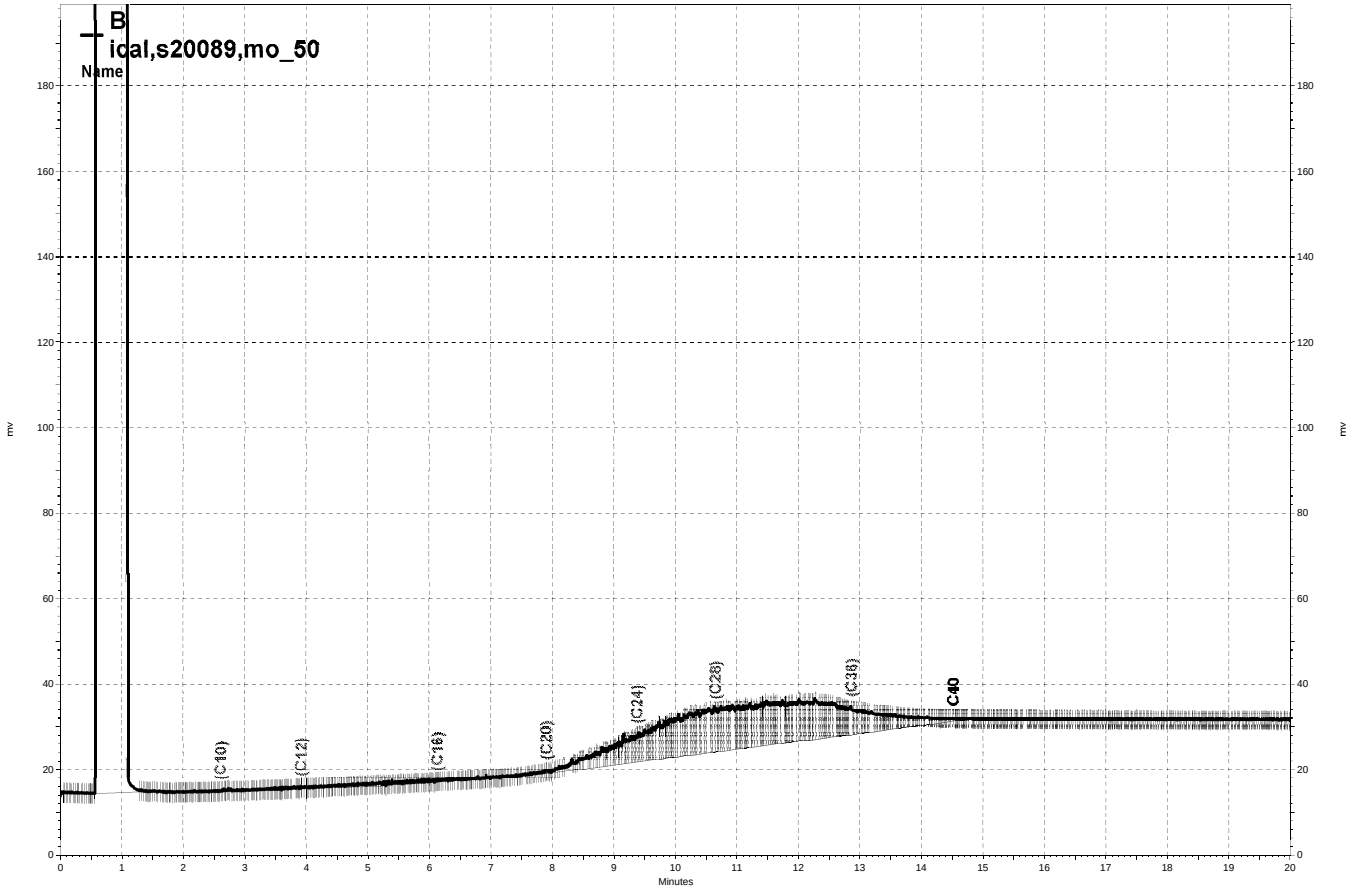
Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	50.000	-8	250.00	5	500.00	7	1000.0	5	2500.0	0	5000.0	-9

SFL 07/06/12 : Corrected automatically drawn baseline on all level except MO_1000.

Analyst: SFL Date: 07/06/12 Reviewer: EAH Date: 07/06/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

162269861001



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b013, B

Sample Name: **ical,s20089,mo_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 5:40:54 PM
Analysis Date: 7/6/2012 2:23:45 PM
Instrument: GC15B Vial: 13 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	85153	0.000 CAL
JP8:10-16	85153	0.000 CAL
KER:10-16	85153	0.000 CAL
JP5:10-16	85153	0.000 CAL
DSL:10-20	121040	0.000 CAL
DSL:10-22	196024	0.000 CAL
DSL:10-24	391886	0.000 CAL
DSL:12-22	173427	0.000 CAL
DSL:10-28	1033252	0.000 CAL
DSL:12-24	369289	0.000 CAL
DSL:12-32	1664031	0.000 CAL
BUNKC:12-40	2487916	0.000 CAL
TROIL:12-40	2487916	0.000 CAL
HYFL:12-40	2487916	0.000 CAL
MO:20-36	2102459	50.000 CAL
MO:22-36	2027475	50.000 CAL
MO:24-36	1831613	50.000 CAL
DSL:10-12	22597	0.000 CAL
DSL:12-16	62556	0.000 CAL
DSL:16-24	306733	0.000 CAL
MO:28-36	1190247	50.000 CAL
MO:28-40	1477261	50.000 CAL
MO:22-32	1490604	50.000 CAL
CREOSOTE:10-36	2223499	0.000 CAL
DSL:12-14	32115	0.000 CAL
DSL:14-16	30441	0.000 CAL
DSL:16-18	16353	0.000 CAL
DSL:18-20	19534	0.000 CAL
DSL:20-22	74984	0.000 CAL
DSL:22-24	195862	0.000 CAL
CRUDE:10-40	2510513	0.000 CAL
DSL:10-14	54712	0.000 CAL
DSL:14-28	978540	0.000 CAL
MINOIL:12-40	2487916	0.000 CAL
DSL:12-28	1010655	0.000 CAL
HYFL:24-36	1831613	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

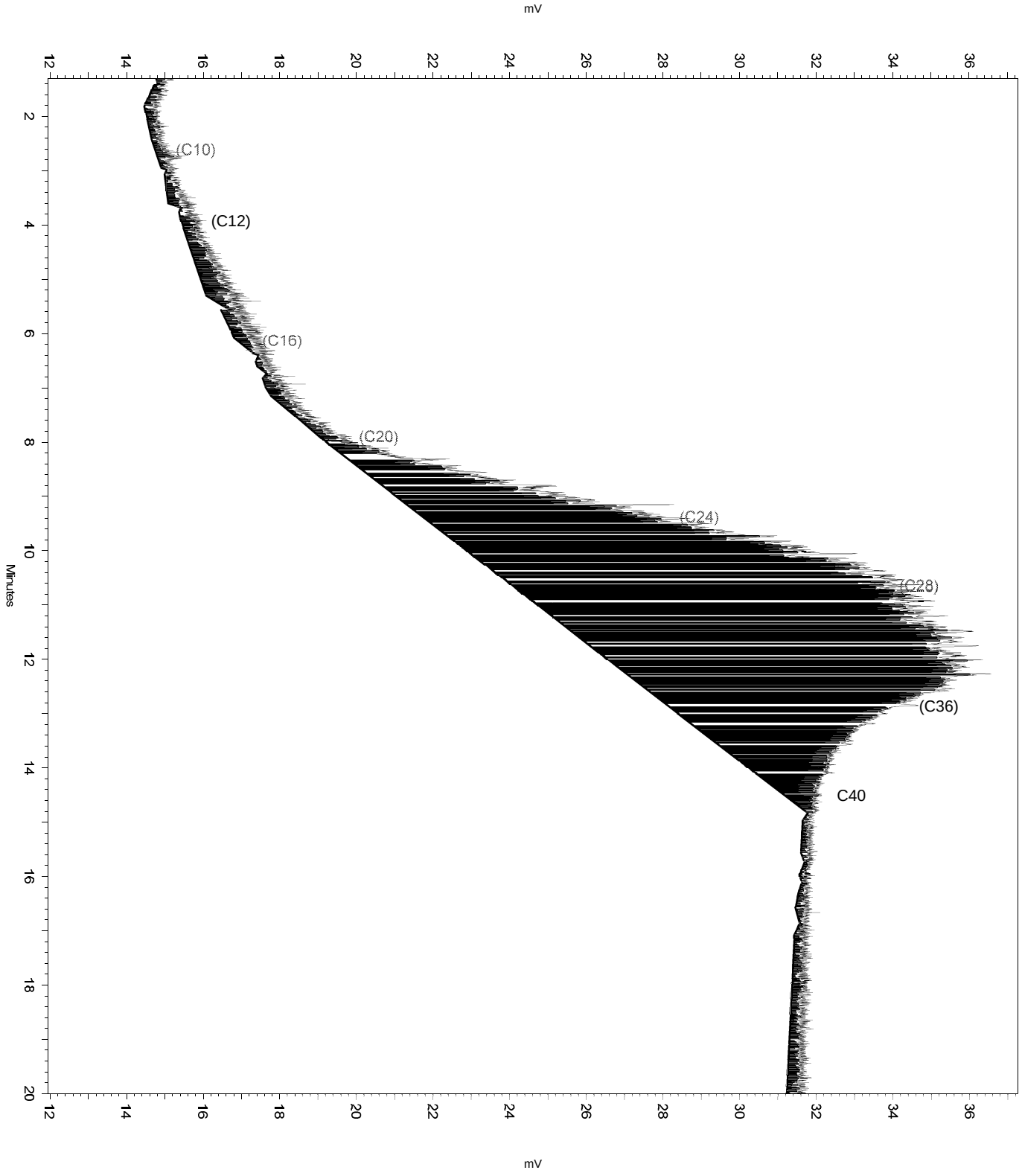
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

Yes	Move BL Start	14.767	7.994	0

Sample Name: **ical,s20089,mo_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 5:40:54 PM
Analysis Date: 7/6/2012 2:23:45 PM
Instrument: GC15B Vial: 13 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



Sample Name: **ical,s20089,mo_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 5:40:54 PM
Analysis Date: 7/6/2012 2:20:00 PM
Instrument: GC15B Vial: 13 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	85153	0.000 CAL
JP8:10-16	85153	0.000 CAL
KER:10-16	85153	0.000 CAL
JP5:10-16	85153	0.000 CAL
DSL:10-20	121040	0.000 CAL
DSL:10-22	146076	0.000 CAL
DSL:10-24	179933	0.000 CAL
DSL:12-22	123479	0.000 CAL
DSL:10-28	261245	0.000 CAL
DSL:12-24	157336	0.000 CAL
DSL:12-32	418820	0.000 CAL
BUNKC:12-40	685153	0.000 CAL
TROIL:12-40	685153	0.000 CAL
HYFL:12-40	685153	0.000 CAL
MO:20-36	528956	50.000 CAL
MO:22-36	503920	50.000 CAL
MO:24-36	470063	50.000 CAL
DSL:10-12	22597	0.000 CAL
DSL:12-16	62556	0.000 CAL
DSL:16-24	94780	0.000 CAL
MO:28-36	388751	50.000 CAL
MO:28-40	446505	50.000 CAL
MO:22-32	295341	50.000 CAL
CREOSOTE:10-36	649996	0.000 CAL
DSL:12-14	32115	0.000 CAL
DSL:14-16	30441	0.000 CAL
DSL:16-18	16353	0.000 CAL
DSL:18-20	19534	0.000 CAL
DSL:20-22	25036	0.000 CAL
DSL:22-24	33857	0.000 CAL
CRUDE:10-40	707750	0.000 CAL
DSL:10-14	54712	0.000 CAL
DSL:14-28	206533	0.000 CAL
MINOIL:12-40	685153	0.000 CAL
DSL:12-28	238648	0.000 CAL
HYFL:24-36	470063	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

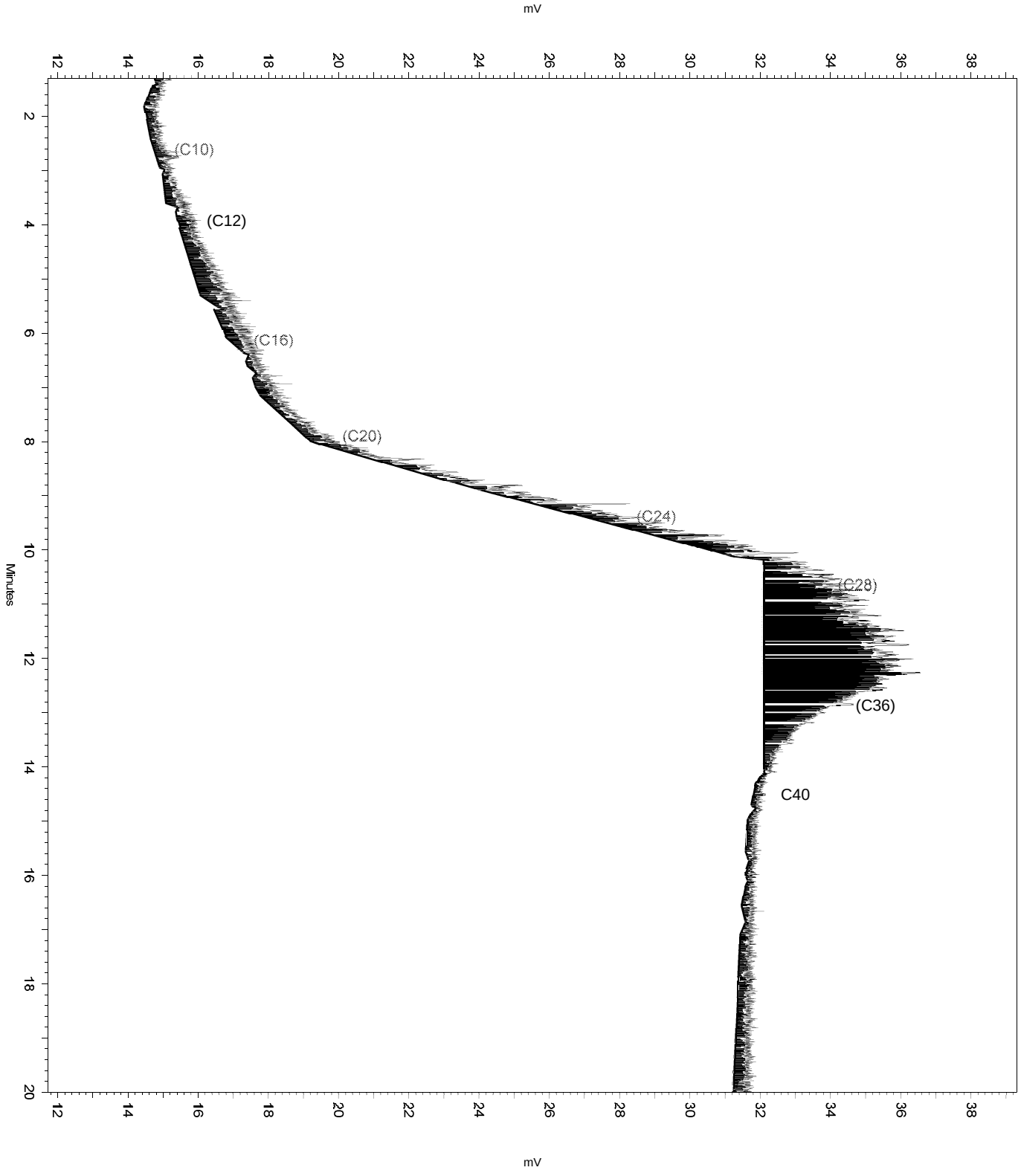
Manual Integration Fixes
==========

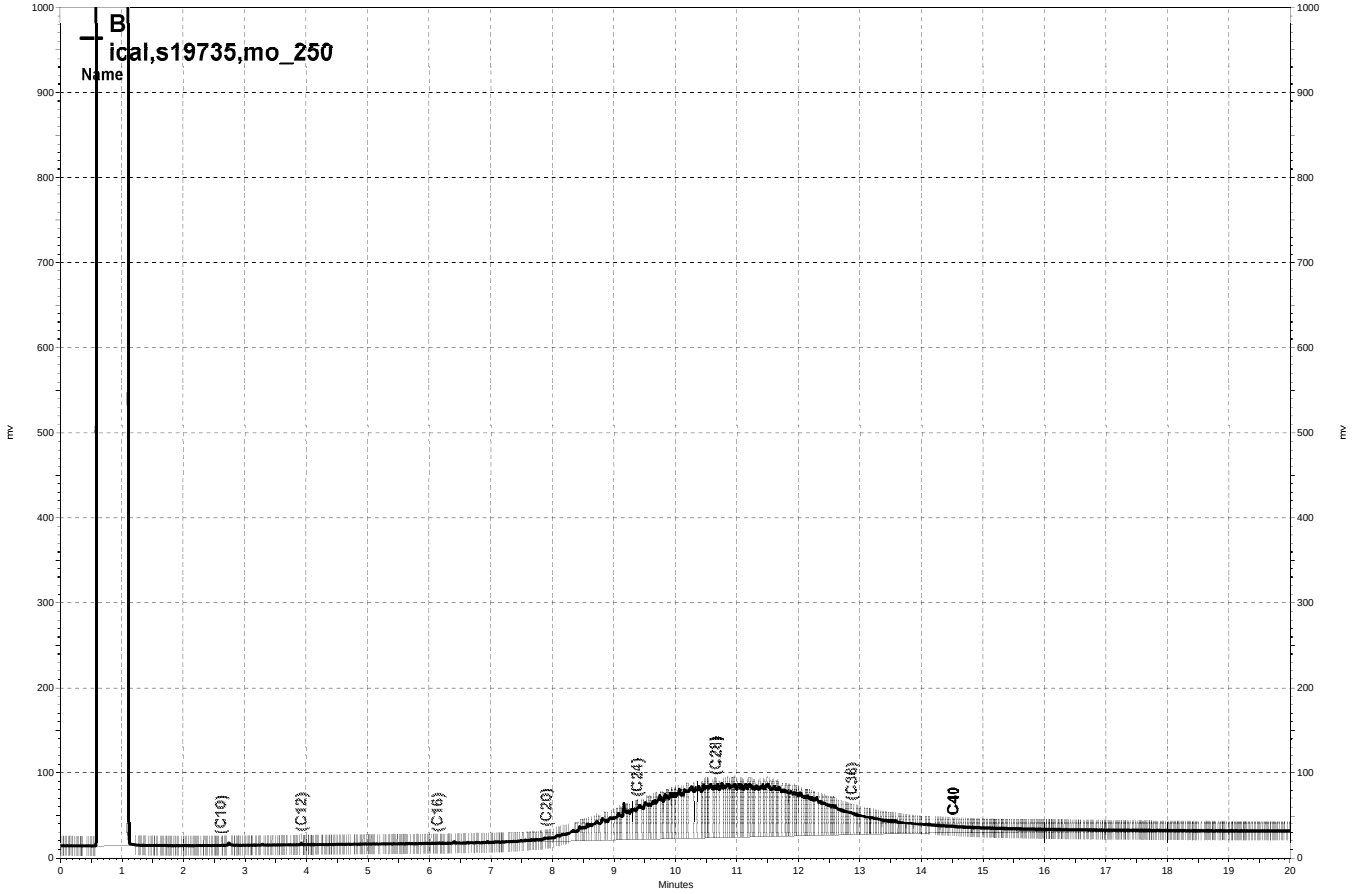
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s20089,mo_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 5:40:54 PM
Analysis Date: 7/6/2012 2:20:00 PM
Instrument: GC15B Vial: 13 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1





\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b014, B

Sample Name: **ical,s19735,mo_250**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 6:08:28 PM
Analysis Date: 7/6/2012 2:23:50 PM
Instrument: GC15B Vial: 14 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	81038	0.000 CAL
JP8:10-16	81038	0.000 CAL
KER:10-16	81038	0.000 CAL
JP5:10-16	81038	0.000 CAL
DSL:10-20	175397	0.000 CAL
DSL:10-22	610463	0.000 CAL
DSL:10-24	1805765	0.000 CAL
DSL:12-22	580612	0.000 CAL
DSL:10-28	5753217	0.000 CAL
DSL:12-24	1775914	0.000 CAL
DSL:12-32	9516725	0.000 CAL
BUNKC:12-40	13567095	0.000 CAL
TROIL:12-40	13567095	0.000 CAL
HYFL:12-40	13567095	0.000 CAL
MO:20-36	12086552	250.000 CAL
MO:22-36	11651486	250.000 CAL
MO:24-36	10456184	250.000 CAL
DSL:10-12	29851	0.000 CAL
DSL:12-16	51187	0.000 CAL
DSL:16-24	1724727	0.000 CAL
MO:28-36	6508732	250.000 CAL
MO:28-40	7843729	250.000 CAL
MO:22-32	8936113	250.000 CAL
CREOSOTE:10-36	12261949	0.000 CAL
DSL:12-14	27035	0.000 CAL
DSL:14-16	24152	0.000 CAL
DSL:16-18	29220	0.000 CAL
DSL:18-20	65139	0.000 CAL
DSL:20-22	435066	0.000 CAL
DSL:22-24	1195302	0.000 CAL
CRUDE:10-40	13596946	0.000 CAL
DSL:10-14	56886	0.000 CAL
DSL:14-28	5696331	0.000 CAL
MINOIL:12-40	13567095	0.000 CAL
DSL:12-28	5723366	0.000 CAL
HYFL:24-36	10456184	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

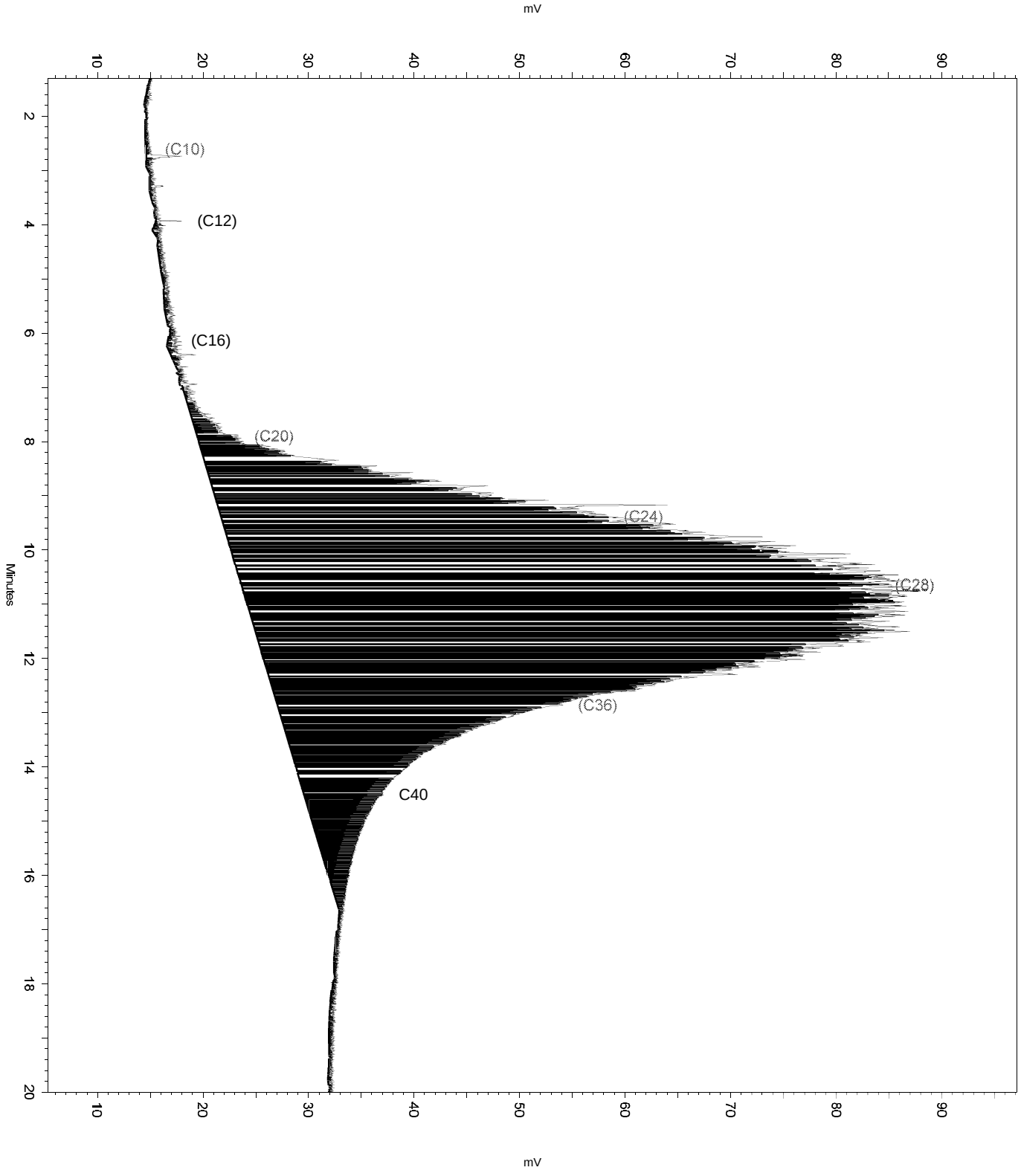
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

Yes	Move BL Start	16.038	6.971	0

Sample Name: **ical,s19735,mo_250**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 6:08:28 PM
Analysis Date: 7/6/2012 2:23:50 PM
Instrument: GC15B Vial: 14 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



Sample Name: **ical,s19735,mo_250**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 6:08:28 PM
Analysis Date: 7/6/2012 2:20:26 PM
Instrument: GC15B Vial: 14 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	81038	0.000 CAL
JP8:10-16	81038	0.000 CAL
KER:10-16	81038	0.000 CAL
JP5:10-16	81038	0.000 CAL
DSL:10-20	135916	0.000 CAL
DSL:10-22	286513	0.000 CAL
DSL:10-24	856533	0.000 CAL
DSL:12-22	256662	0.000 CAL
DSL:10-28	2875330	0.000 CAL
DSL:12-24	826682	0.000 CAL
DSL:12-32	4240146	0.000 CAL
BUNKC:12-40	4454882	0.000 CAL
TROIL:12-40	4454882	0.000 CAL
HYFL:12-40	4454882	0.000 CAL
MO:20-36	4322411	250.000 CAL
MO:22-36	4171814	250.000 CAL
MO:24-36	3601794	250.000 CAL
DSL:10-12	29851	0.000 CAL
DSL:12-16	51187	0.000 CAL
DSL:16-24	775495	0.000 CAL
MO:28-36	1582997	250.000 CAL
MO:28-40	1609403	250.000 CAL
MO:22-32	3983484	250.000 CAL
CREOSOTE:10-36	4458327	0.000 CAL
DSL:12-14	27035	0.000 CAL
DSL:14-16	24152	0.000 CAL
DSL:16-18	30168	0.000 CAL
DSL:18-20	24710	0.000 CAL
DSL:20-22	150597	0.000 CAL
DSL:22-24	570020	0.000 CAL
CRUDE:10-40	4484733	0.000 CAL
DSL:10-14	56886	0.000 CAL
DSL:14-28	2818444	0.000 CAL
MINOIL:12-40	4454882	0.000 CAL
DSL:12-28	2845479	0.000 CAL
HYFL:24-36	3601794	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

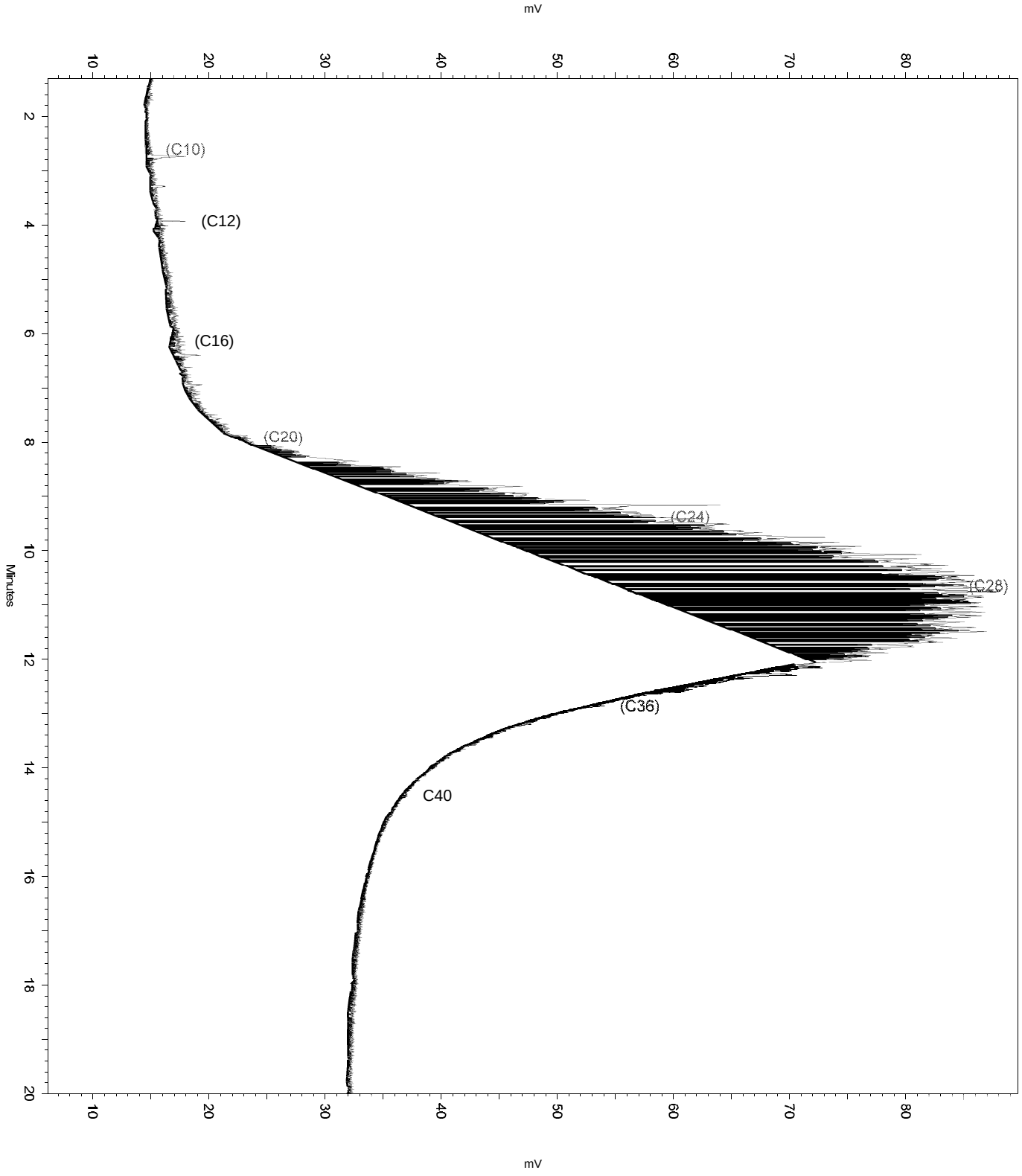
Manual Integration Fixes
==========

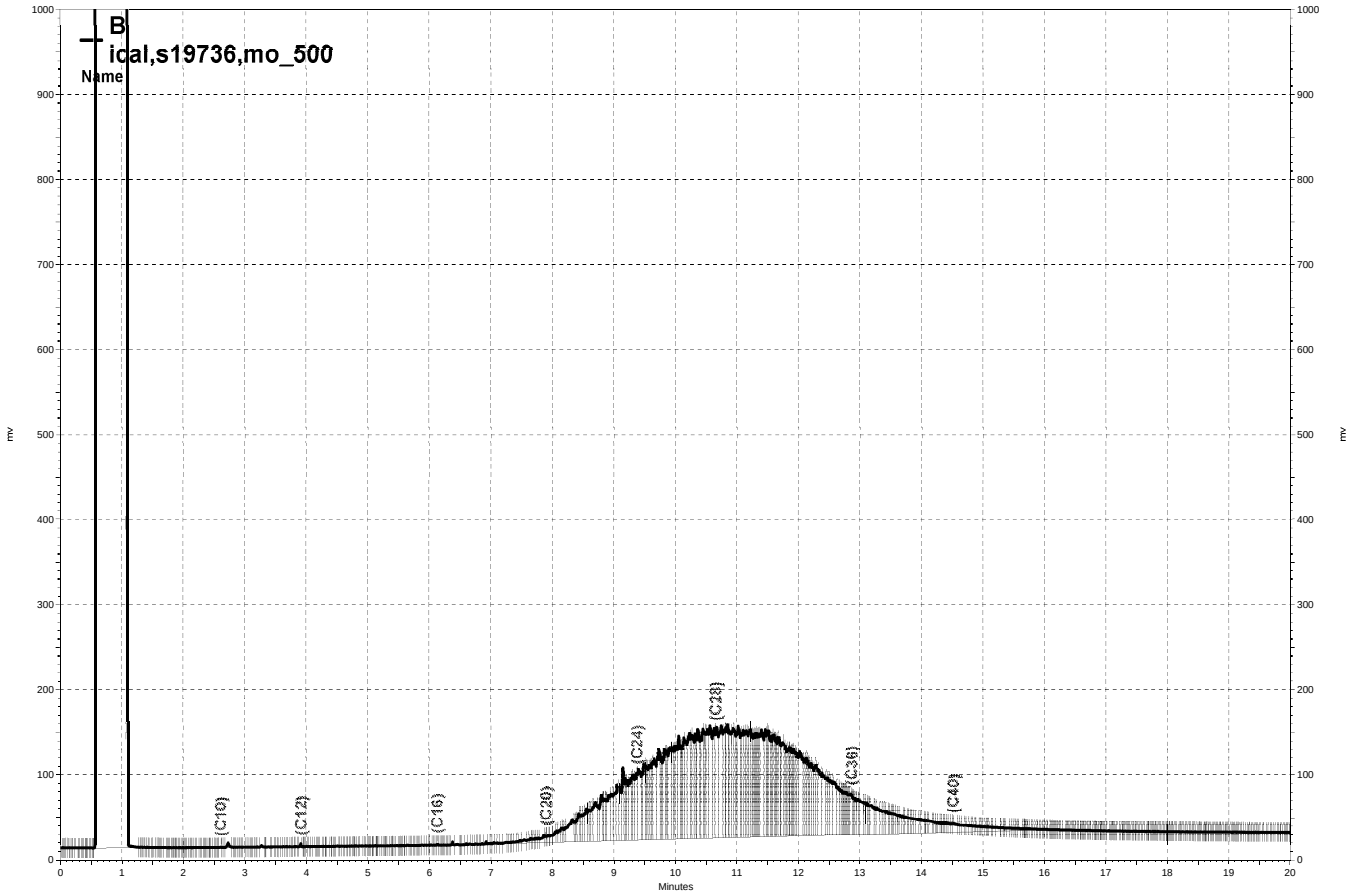
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19735,mo_250**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 6:08:28 PM
Analysis Date: 7/6/2012 2:20:26 PM
Instrument: GC15B Vial: 14 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1





\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b015, B

Sample Name: **ical,s19736,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 6:36:15 PM
Analysis Date: 7/6/2012 2:23:55 PM
Instrument: GC15B Vial: 15 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	86659	0.000 CAL
JP8:10-16	86659	0.000 CAL
KER:10-16	86659	0.000 CAL
JP5:10-16	86659	0.000 CAL
DSL:10-20	251793	0.000 CAL
DSL:10-22	1240679	0.000 CAL
DSL:10-24	3746574	0.000 CAL
DSL:12-22	1195761	0.000 CAL
DSL:10-28	11785143	0.000 CAL
DSL:12-24	3701656	0.000 CAL
DSL:12-32	19859728	0.000 CAL
BUNKC:12-40	27037742	0.000 CAL
TROIL:12-40	27037742	0.000 CAL
HYFL:12-40	27037742	0.000 CAL
MO:20-36	24692744	500.000 CAL
MO:22-36	23703860	500.000 CAL
MO:24-36	21197960	500.000 CAL
DSL:10-12	44918	0.000 CAL
DSL:12-16	41741	0.000 CAL
DSL:16-24	3659915	0.000 CAL
MO:28-36	13159389	500.000 CAL
MO:28-40	15297515	500.000 CAL
MO:22-32	18663968	500.000 CAL
CREOSOTE:10-36	24944536	0.000 CAL
DSL:12-14	20885	0.000 CAL
DSL:14-16	20856	0.000 CAL
DSL:16-18	26279	0.000 CAL
DSL:18-20	138855	0.000 CAL
DSL:20-22	988886	0.000 CAL
DSL:22-24	2505895	0.000 CAL
CRUDE:10-40	27082658	0.000 CAL
DSL:10-14	65803	0.000 CAL
DSL:14-28	11719340	0.000 CAL
MINOIL:12-40	27037742	0.000 CAL
DSL:12-28	11740225	0.000 CAL
HYFL:24-36	21197960	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

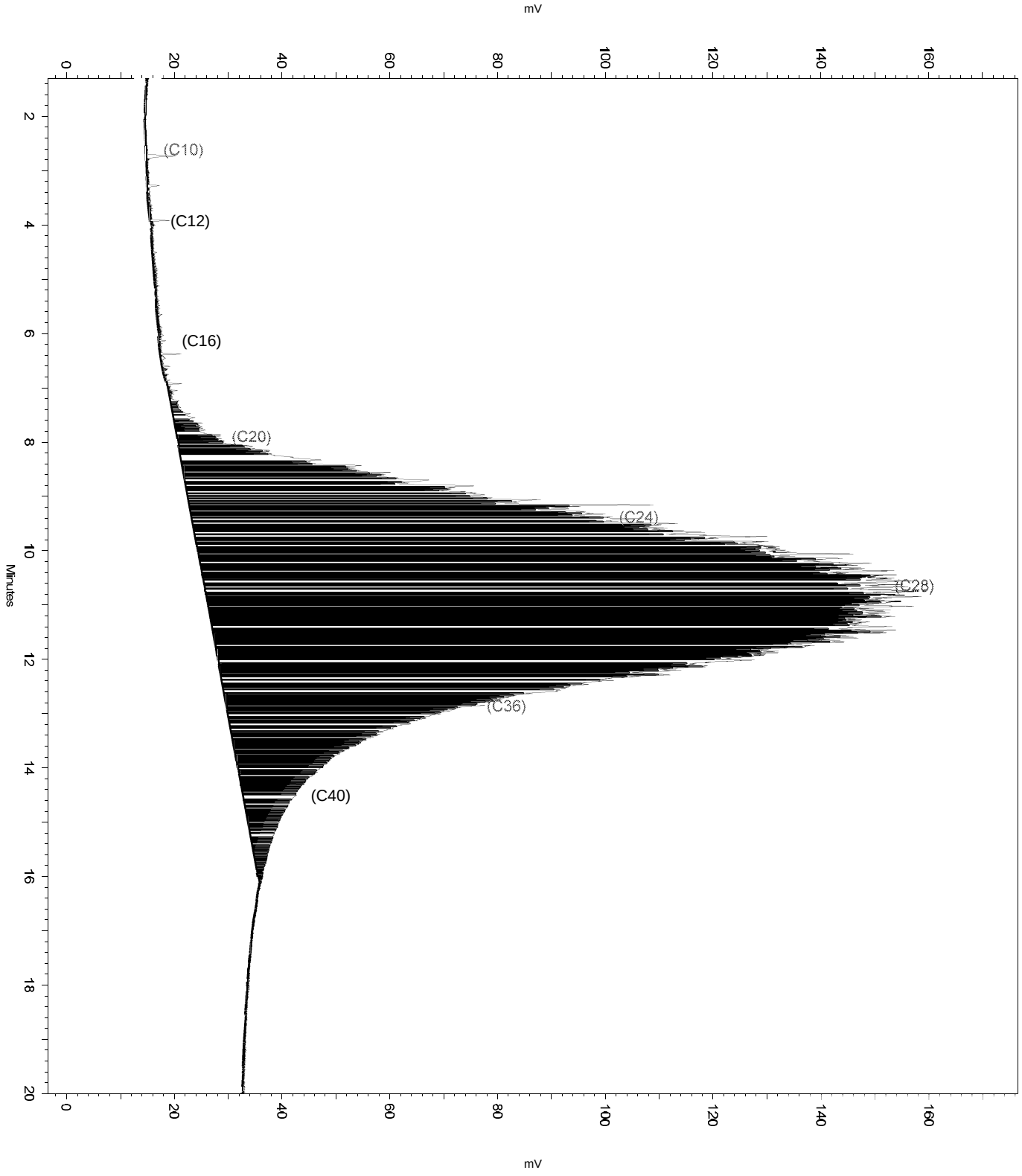
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

Yes	Move BL Start	15.92	6.884	0

Sample Name: **ical,s19736,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 6:36:15 PM
Analysis Date: 7/6/2012 2:23:55 PM
Instrument: GC15B Vial: 15 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



Sample Name: **ical,s19736,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 6:36:15 PM
Analysis Date: 7/6/2012 2:20:56 PM
Instrument: GC15B Vial: 15 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	86659	0.000 CAL
JP8:10-16	86659	0.000 CAL
KER:10-16	86659	0.000 CAL
JP5:10-16	86659	0.000 CAL
DSL:10-20	196171	0.000 CAL
DSL:10-22	1014083	0.000 CAL
DSL:10-24	3254423	0.000 CAL
DSL:12-22	969165	0.000 CAL
DSL:10-28	10581826	0.000 CAL
DSL:12-24	3209505	0.000 CAL
DSL:12-32	17766200	0.000 CAL
BUNKC:12-40	22188124	0.000 CAL
TROIL:12-40	22188124	0.000 CAL
HYFL:12-40	22188124	0.000 CAL
MO:20-36	21521692	500.000 CAL
MO:22-36	20703780	500.000 CAL
MO:24-36	18463448	500.000 CAL
DSL:10-12	44918	0.000 CAL
DSL:12-16	41741	0.000 CAL
DSL:16-24	3167764	0.000 CAL
MO:28-36	11136048	500.000 CAL
MO:28-40	11651225	500.000 CAL
MO:22-32	16797036	500.000 CAL
CREOSOTE:10-36	21717864	0.000 CAL
DSL:12-14	20885	0.000 CAL
DSL:14-16	20856	0.000 CAL
DSL:16-18	27458	0.000 CAL
DSL:18-20	82054	0.000 CAL
DSL:20-22	817912	0.000 CAL
DSL:22-24	2240340	0.000 CAL
CRUDE:10-40	22233044	0.000 CAL
DSL:10-14	65803	0.000 CAL
DSL:14-28	10516023	0.000 CAL
MINOIL:12-40	22188124	0.000 CAL
DSL:12-28	10536908	0.000 CAL
HYFL:24-36	18463448	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

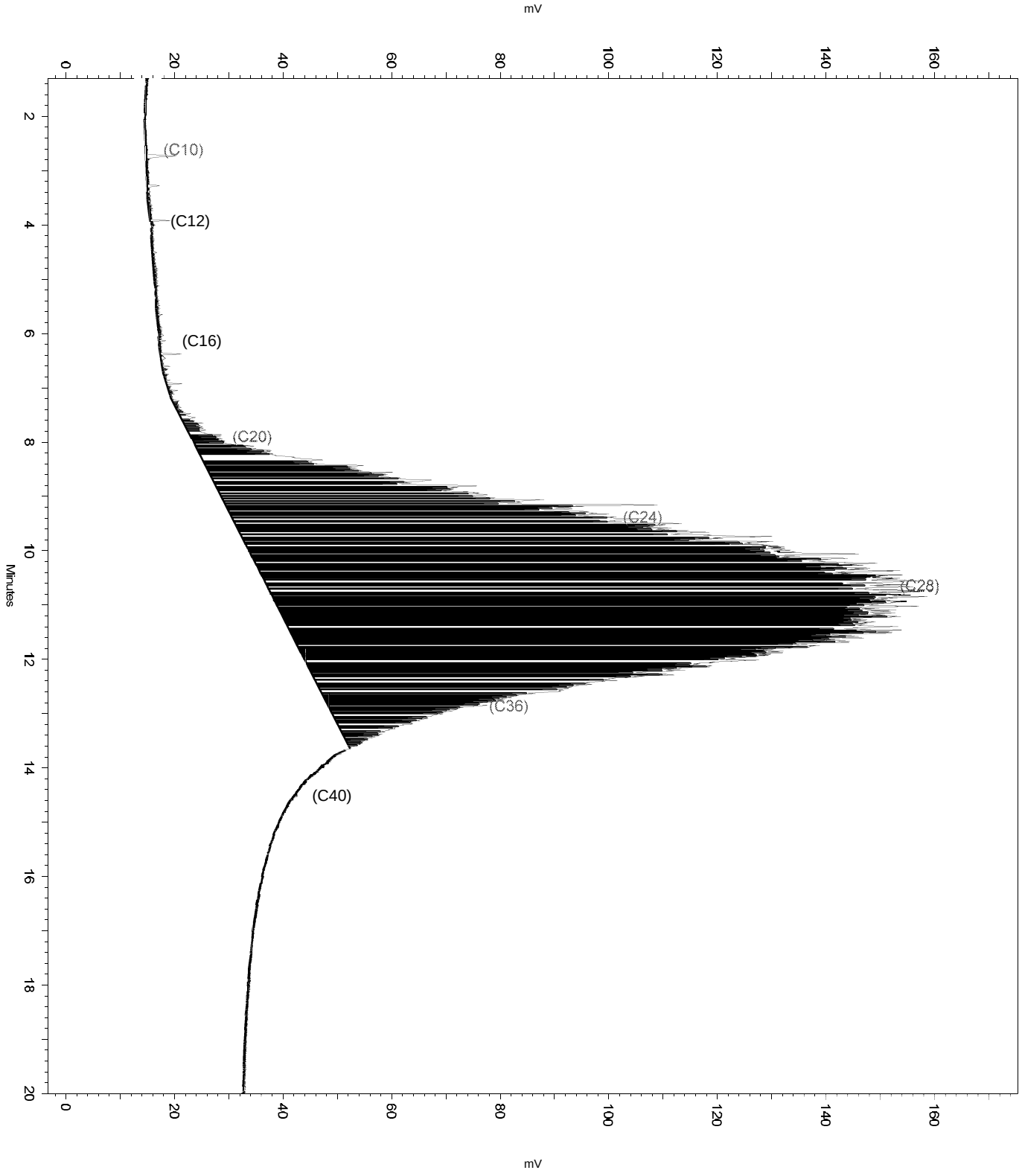
Manual Integration Fixes
==========

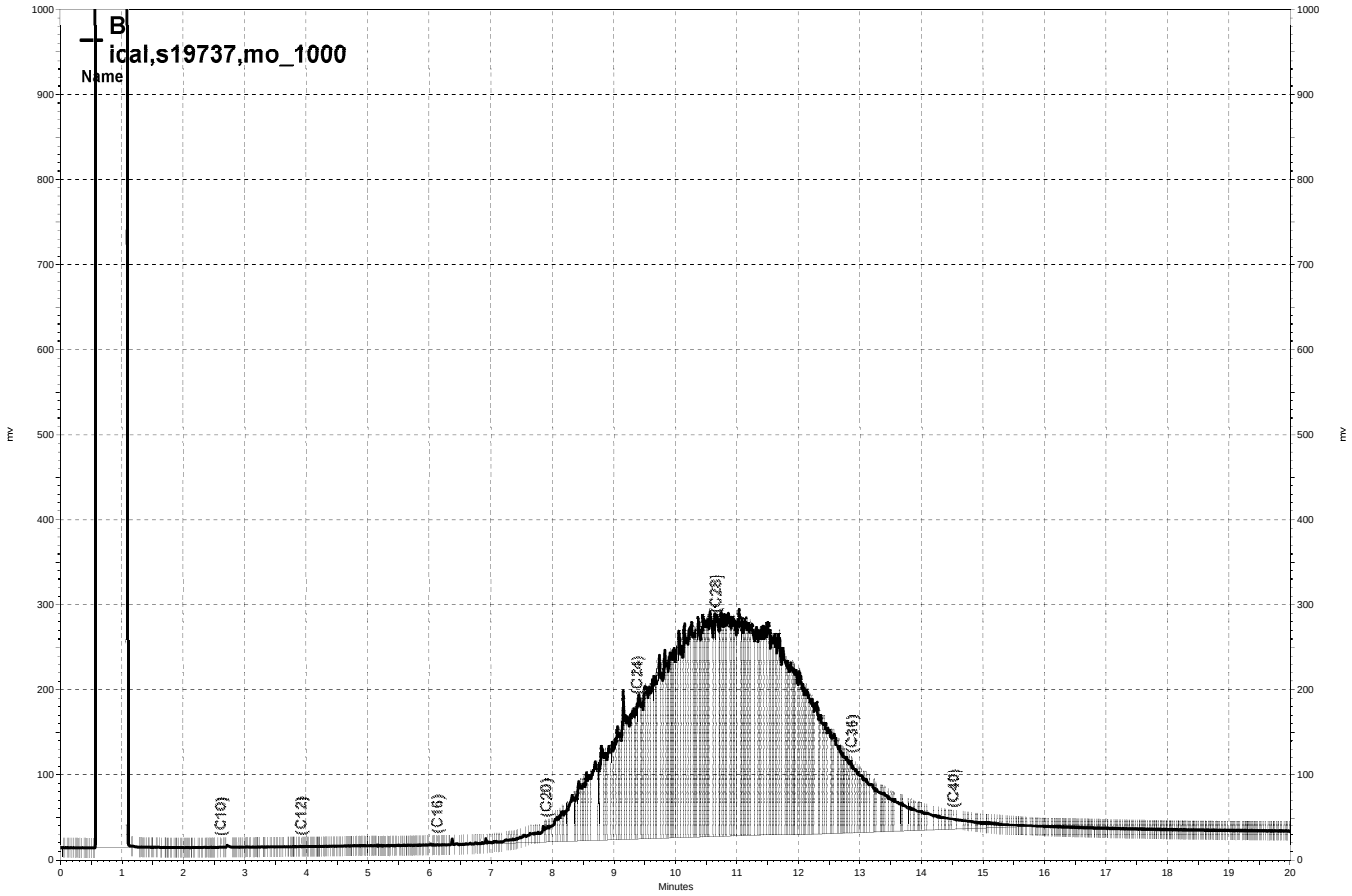
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19736,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 6:36:15 PM
Analysis Date: 7/6/2012 2:20:56 PM
Instrument: GC15B Vial: 15 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1





\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b016, B

Sample Name: **ical,s19737,mo_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 7:03:51 PM
Analysis Date: 7/6/2012 2:24:00 PM
Instrument: GC15B Vial: 16 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	76727	0.000 CAL
JP8:10-16	76727	0.000 CAL
KER:10-16	76727	0.000 CAL
JP5:10-16	76727	0.000 CAL
DSL:10-20	477756	0.000 CAL
DSL:10-22	2358642	0.000 CAL
DSL:10-24	7661316	0.000 CAL
DSL:12-22	2336483	0.000 CAL
DSL:10-28	24015522	0.000 CAL
DSL:12-24	7639157	0.000 CAL
DSL:12-32	40312616	0.000 CAL
BUNKC:12-40	53046800	0.000 CAL
TROIL:12-40	53046800	0.000 CAL
HYFL:12-40	53046800	0.000 CAL
MO:20-36	49056980	1000.000 CAL
MO:22-36	47176100	1000.000 CAL
MO:24-36	41873420	1000.000 CAL
DSL:10-12	22159	0.000 CAL
DSL:12-16	54568	0.000 CAL
DSL:16-24	7584589	0.000 CAL
MO:28-36	25519220	1000.000 CAL
MO:28-40	29053432	1000.000 CAL
MO:22-32	37976136	1000.000 CAL
CREOSOTE:10-36	49534740	0.000 CAL
DSL:12-14	25755	0.000 CAL
DSL:14-16	28813	0.000 CAL
DSL:16-18	58654	0.000 CAL
DSL:18-20	342375	0.000 CAL
DSL:20-22	1880886	0.000 CAL
DSL:22-24	5302674	0.000 CAL
CRUDE:10-40	53068960	0.000 CAL
DSL:10-14	47914	0.000 CAL
DSL:14-28	23967606	0.000 CAL
MINOIL:12-40	53046800	0.000 CAL
DSL:12-28	23993362	0.000 CAL
HYFL:24-36	41873420	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

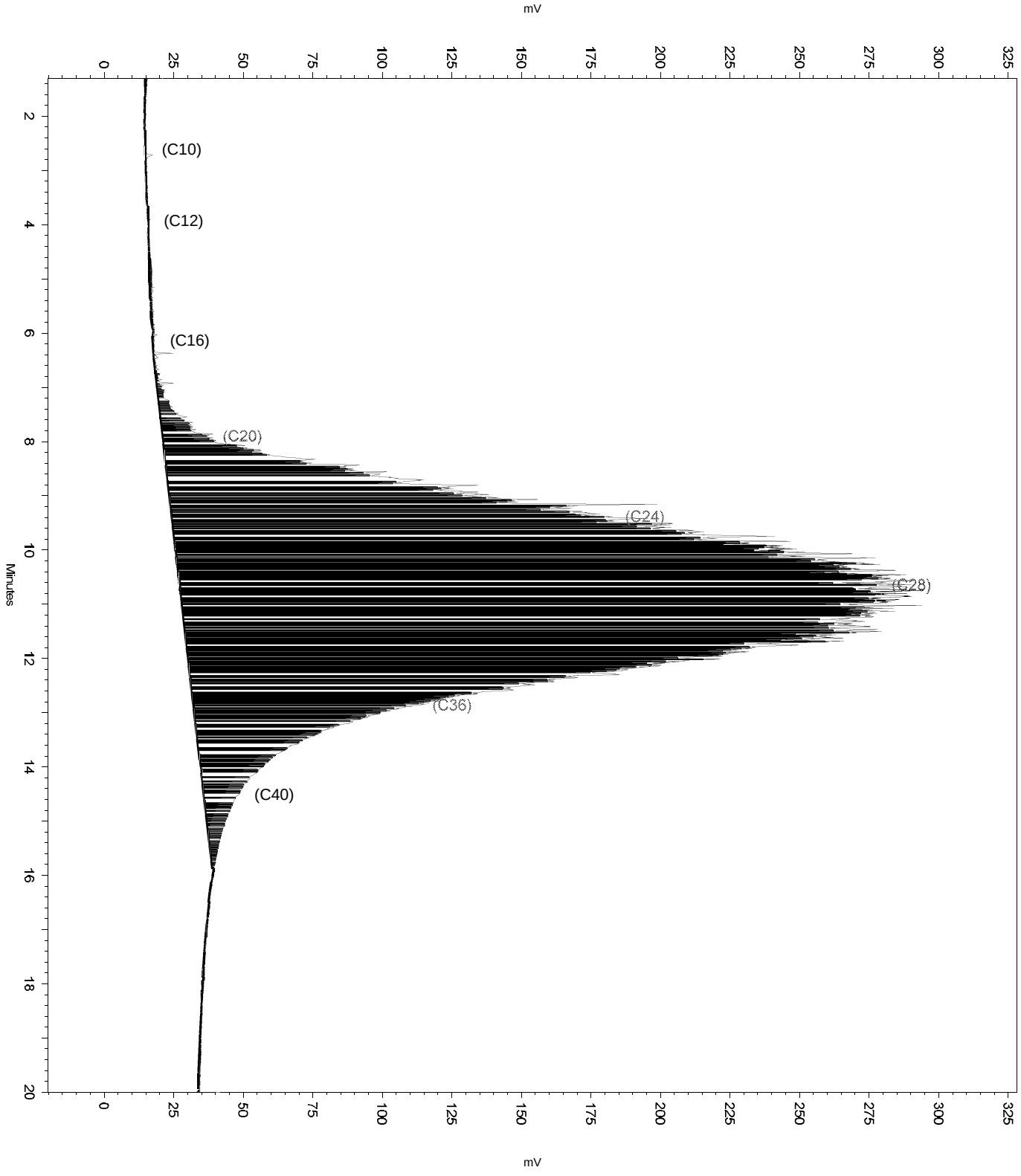
Manual Integration Fixes
==========

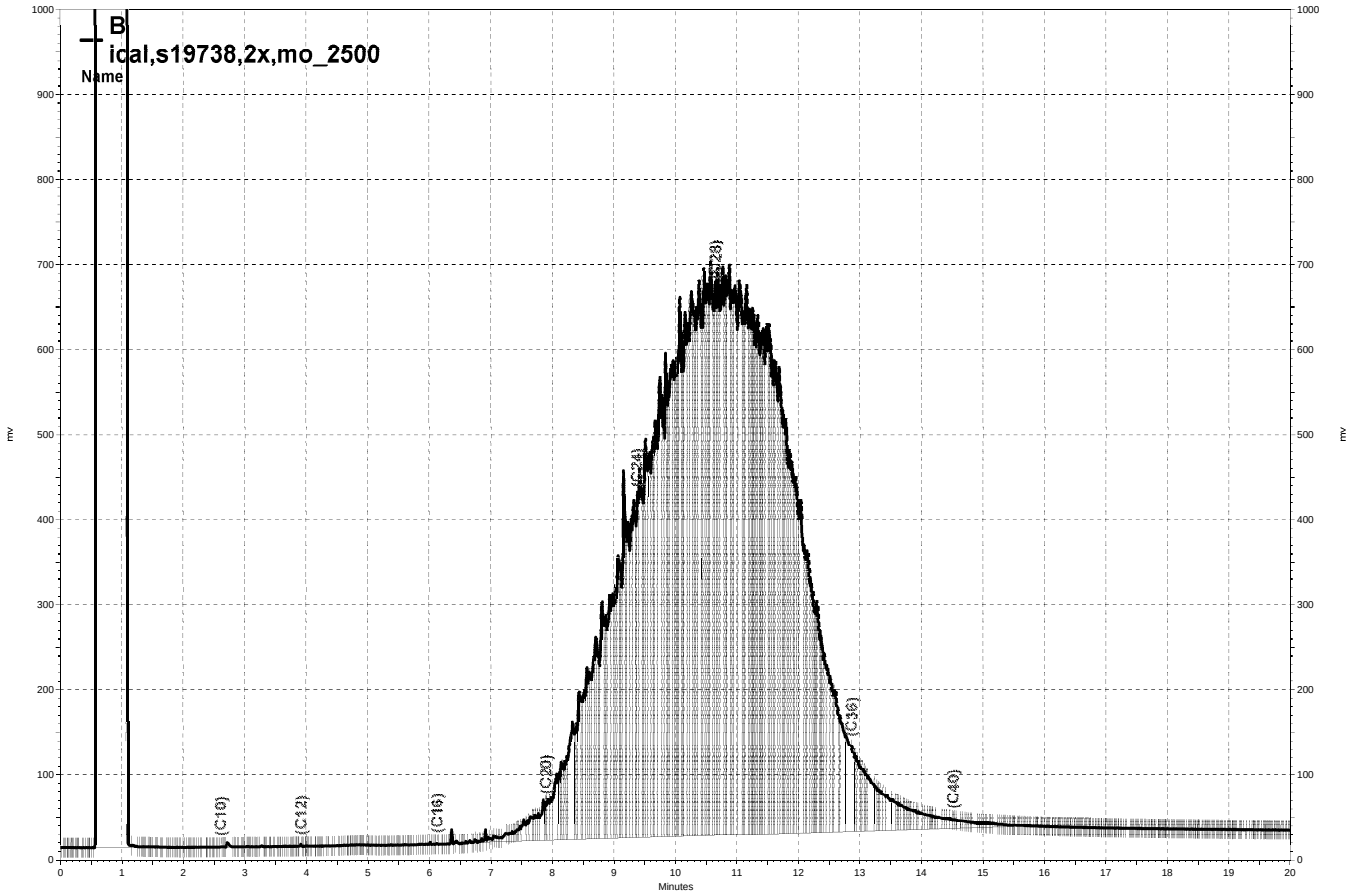
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19737,mo_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 7:03:51 PM
Analysis Date: 7/6/2012 2:24:00 PM
Instrument: GC15B Vial: 16 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1





\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b017, B

Sample Name: **ical,s19738,2x,mo_2500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b017**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 7:31:54 PM
Analysis Date: 7/6/2012 2:24:05 PM
Instrument: GC15B Vial: 17 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	112827	0.000 CAL
JP8:10-16	112827	0.000 CAL
KER:10-16	112827	0.000 CAL
JP5:10-16	112827	0.000 CAL
DSL:10-20	1131813	0.000 CAL
DSL:10-22	6086296	0.000 CAL
DSL:10-24	18950944	0.000 CAL
DSL:12-22	6044813	0.000 CAL
DSL:10-28	61428820	0.000 CAL
DSL:12-24	18909460	0.000 CAL
DSL:12-32	100648088	0.000 CAL
BUNKC:12-40	121465904	0.000 CAL
TROIL:12-40	121465904	0.000 CAL
HYFL:12-40	121465904	0.000 CAL
MO:20-36	117162912	2500.000 CAL
MO:22-36	112208416	2500.000 CAL
MO:24-36	99343776	2500.000 CAL
DSL:10-12	41483	0.000 CAL
DSL:12-16	71344	0.000 CAL
DSL:16-24	18838116	0.000 CAL
MO:28-36	56865912	2500.000 CAL
MO:28-40	60078564	2500.000 CAL
MO:22-32	94603256	2500.000 CAL
CREOSOTE:10-36	118294736	0.000 CAL
DSL:12-14	40948	0.000 CAL
DSL:14-16	30396	0.000 CAL
DSL:16-18	108650	0.000 CAL
DSL:18-20	910336	0.000 CAL
DSL:20-22	4954483	0.000 CAL
DSL:22-24	12864648	0.000 CAL
CRUDE:10-40	121507392	0.000 CAL
DSL:10-14	82431	0.000 CAL
DSL:14-28	61346388	0.000 CAL
MINOIL:12-40	121465904	0.000 CAL
DSL:12-28	61387332	0.000 CAL
HYFL:24-36	99343776	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

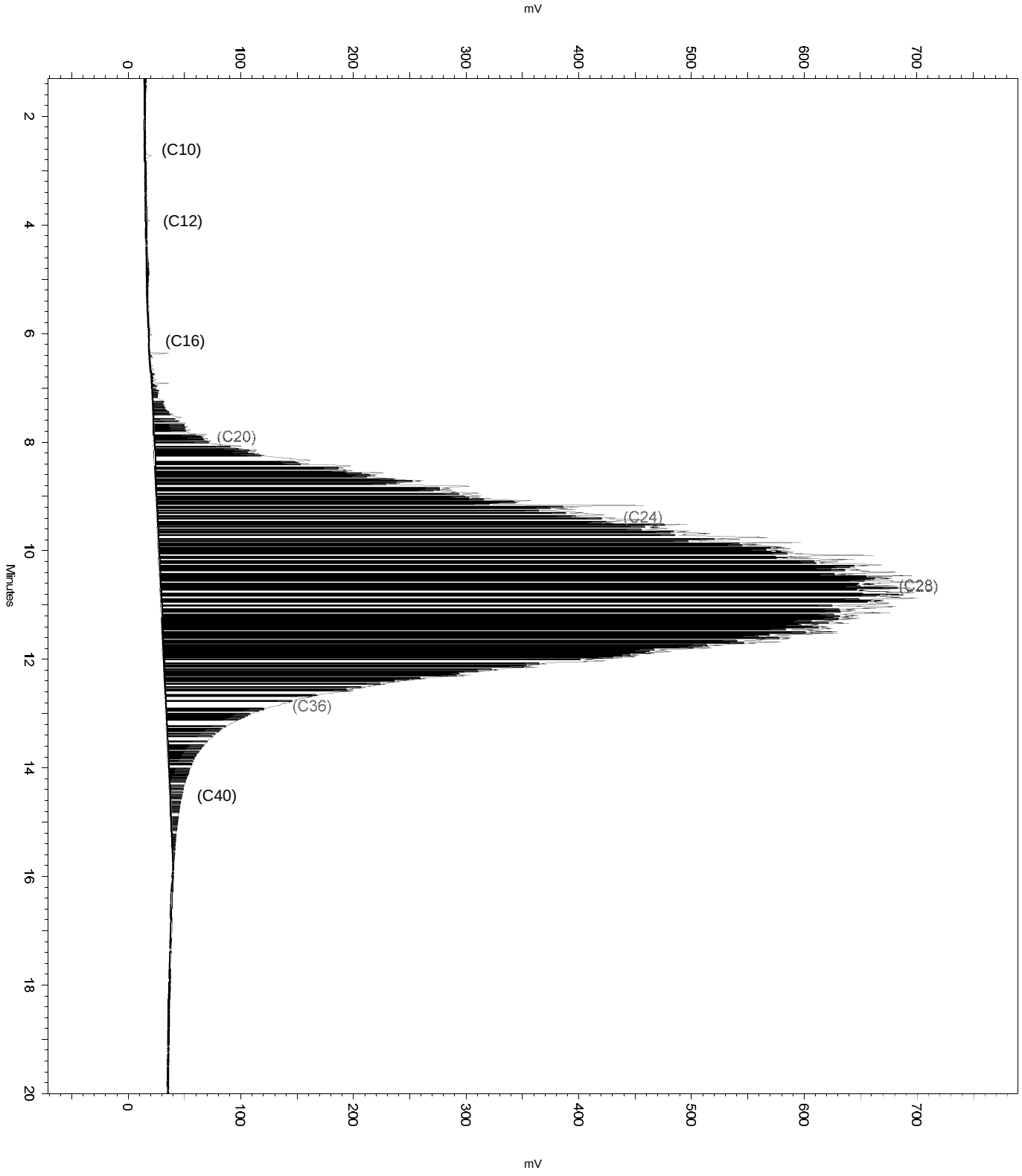
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

Yes	Move BL Start	15.4	6.721	0

Sample Name: **ical,s19738,2x,mo_2500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b017**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 7:31:54 PM
Analysis Date: 7/6/2012 2:24:05 PM
Instrument: GC15B Vial: 17 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



Sample Name: **ical,s19738,2x,mo_2500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b017**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 7:31:54 PM
Analysis Date: 7/6/2012 2:21:35 PM
Instrument: GC15B Vial: 17 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	112827	0.000 CAL
JP8:10-16	112827	0.000 CAL
KER:10-16	112827	0.000 CAL
JP5:10-16	112827	0.000 CAL
DSL:10-20	1082208	0.000 CAL
DSL:10-22	5919433	0.000 CAL
DSL:10-24	18602456	0.000 CAL
DSL:12-22	5877950	0.000 CAL
DSL:10-28	60594848	0.000 CAL
DSL:12-24	18560972	0.000 CAL
DSL:12-32	99245312	0.000 CAL
BUNKC:12-40	118097280	0.000 CAL
TROIL:12-40	118097280	0.000 CAL
HYFL:12-40	118097280	0.000 CAL
MO:20-36	115057056	2500.000 CAL
MO:22-36	110219824	2500.000 CAL
MO:24-36	97536800	2500.000 CAL
DSL:10-12	41483	0.000 CAL
DSL:12-16	71344	0.000 CAL
DSL:16-24	18489628	0.000 CAL
MO:28-36	55544416	2500.000 CAL
MO:28-40	57543928	2500.000 CAL
MO:22-32	93367368	2500.000 CAL
CREOSOTE:10-36	116139264	0.000 CAL
DSL:12-14	40948	0.000 CAL
DSL:14-16	30396	0.000 CAL
DSL:16-18	111848	0.000 CAL
DSL:18-20	857533	0.000 CAL
DSL:20-22	4837225	0.000 CAL
DSL:22-24	12683022	0.000 CAL
CRUDE:10-40	118138768	0.000 CAL
DSL:10-14	82431	0.000 CAL
DSL:14-28	60512416	0.000 CAL
MINOIL:12-40	118097280	0.000 CAL
DSL:12-28	60553360	0.000 CAL
HYFL:24-36	97536800	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

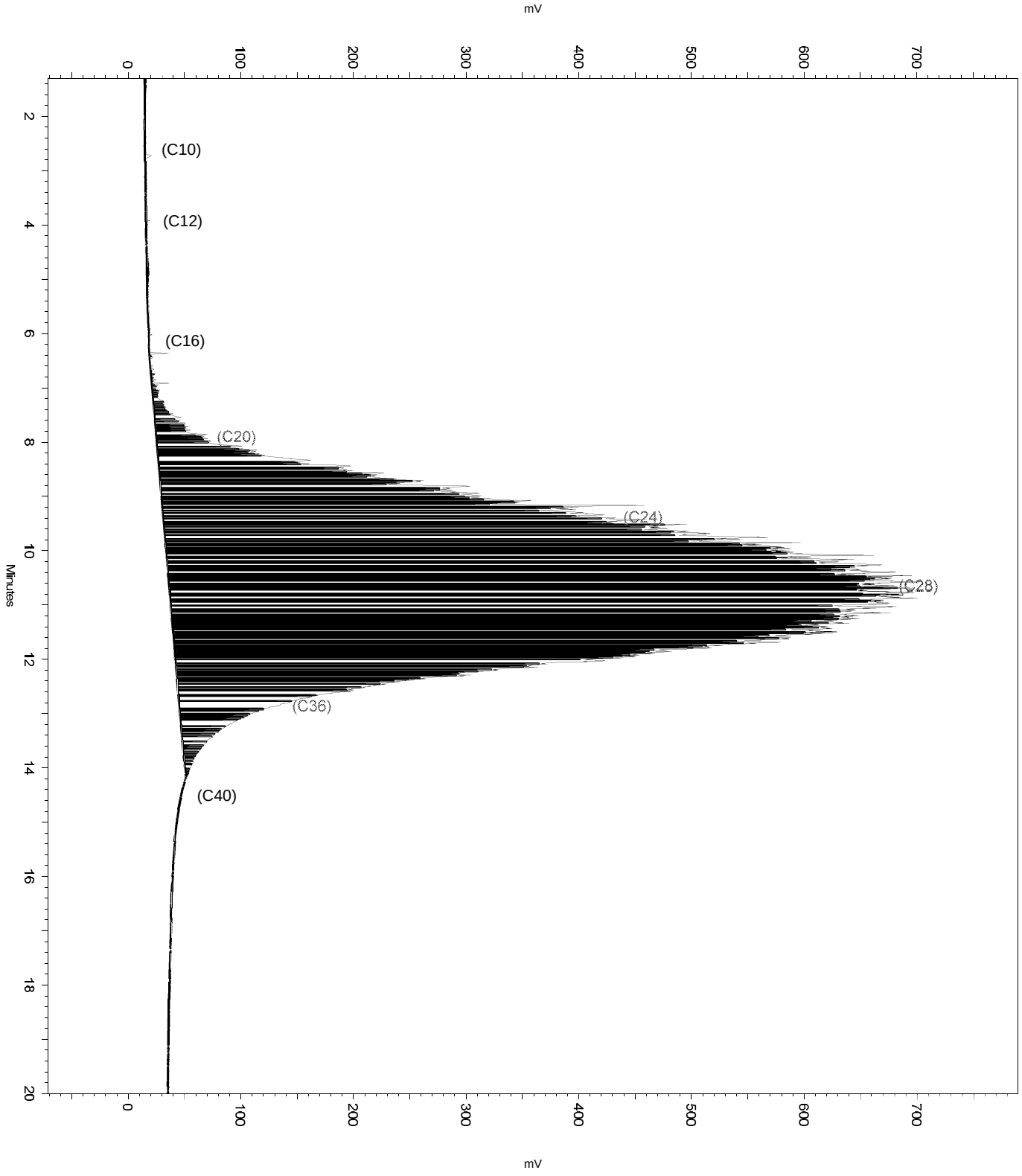
Manual Integration Fixes
==========

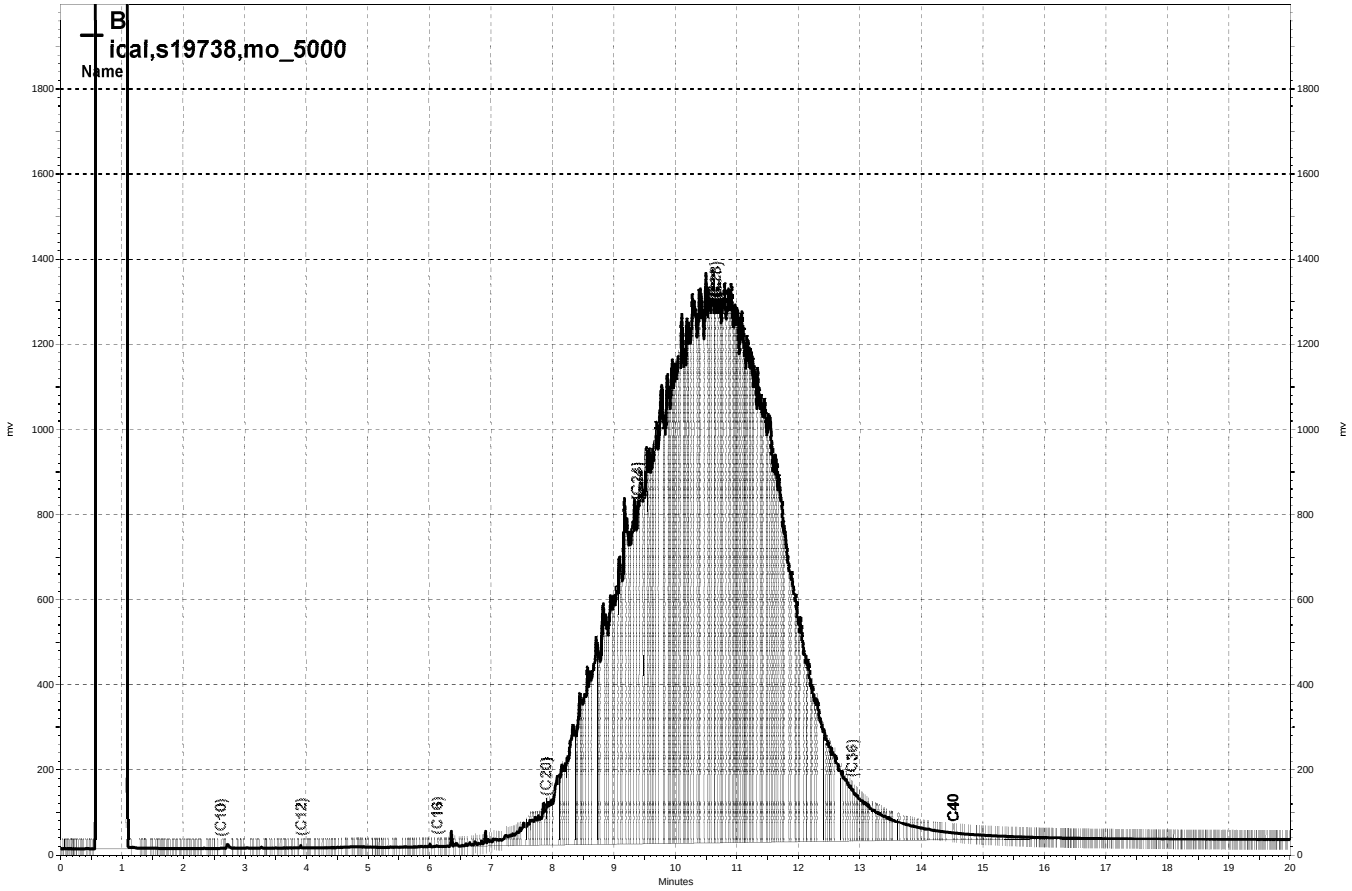
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19738,2x,mo_2500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b017**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 7:31:54 PM
Analysis Date: 7/6/2012 2:21:35 PM
Instrument: GC15B Vial: 17 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1





\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b018, B

Sample Name: **ical,s19738,mo_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b018**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 7:59:49 PM
Analysis Date: 7/6/2012 2:24:10 PM
Instrument: GC15B Vial: 18 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	155920	0.000 CAL
JP8:10-16	155920	0.000 CAL
KER:10-16	155920	0.000 CAL
JP5:10-16	155920	0.000 CAL
DSL:10-20	2495576	0.000 CAL
DSL:10-22	12650499	0.000 CAL
DSL:10-24	38751148	0.000 CAL
DSL:12-22	12598056	0.000 CAL
DSL:10-28	121956480	0.000 CAL
DSL:12-24	38698704	0.000 CAL
DSL:12-32	195809600	0.000 CAL
BUNKC:12-40	223969568	0.000 CAL
TROIL:12-40	223969568	0.000 CAL
HYFL:12-40	223969568	0.000 CAL
MO:20-36	216716208	5000.000 CAL
MO:22-36	206561296	5000.000 CAL
MO:24-36	180460656	5000.000 CAL
DSL:10-12	52443	0.000 CAL
DSL:12-16	103477	0.000 CAL
DSL:16-24	38595228	0.000 CAL
MO:28-36	97255304	5000.000 CAL
MO:28-40	102065568	5000.000 CAL
MO:22-32	183211552	5000.000 CAL
CREOSOTE:10-36	219211792	0.000 CAL
DSL:12-14	63334	0.000 CAL
DSL:14-16	40143	0.000 CAL
DSL:16-18	288341	0.000 CAL
DSL:18-20	2051315	0.000 CAL
DSL:20-22	10154923	0.000 CAL
DSL:22-24	26100648	0.000 CAL
CRUDE:10-40	224022016	0.000 CAL
DSL:10-14	115777	0.000 CAL
DSL:14-28	121840704	0.000 CAL
MINOIL:12-40	223969568	0.000 CAL
DSL:12-28	121904032	0.000 CAL
HYFL:24-36	180460656	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

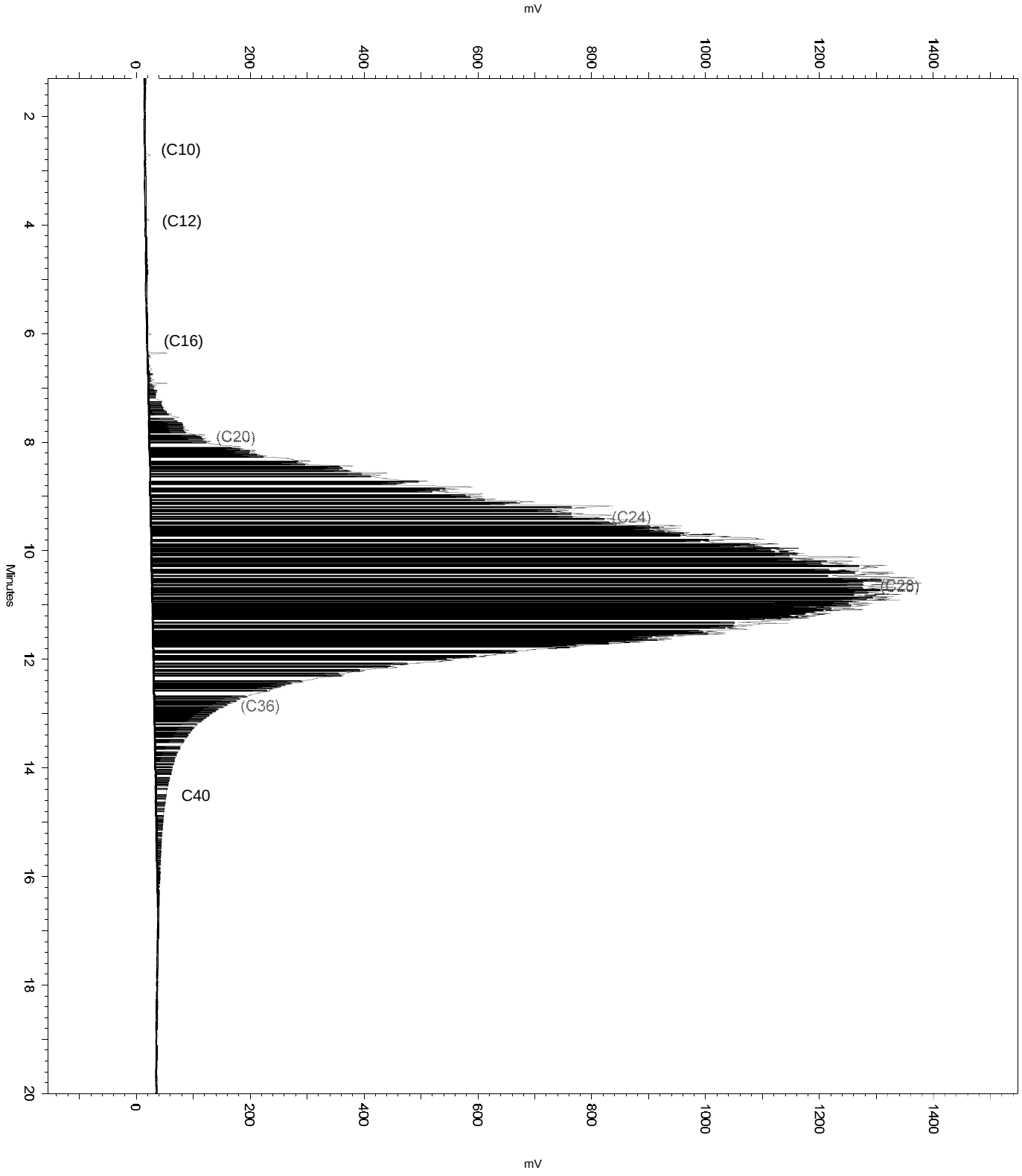
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

Yes	Move BL Start	16.33	6.32	0

Sample Name: **ical,s19738,mo_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b018**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 7:59:49 PM
Analysis Date: 7/6/2012 2:24:10 PM
Instrument: GC15B Vial: 18 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



Sample Name: **ical,s19738,mo_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b018**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 7:59:49 PM
Analysis Date: 7/6/2012 2:21:56 PM
Instrument: GC15B Vial: 18 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	155920	0.000 CAL
JP8:10-16	155920	0.000 CAL
KER:10-16	155920	0.000 CAL
JP5:10-16	155920	0.000 CAL
DSL:10-20	2461645	0.000 CAL
DSL:10-22	12559348	0.000 CAL
DSL:10-24	38576712	0.000 CAL
DSL:12-22	12506905	0.000 CAL
DSL:10-28	121574968	0.000 CAL
DSL:12-24	38524272	0.000 CAL
DSL:12-32	195181760	0.000 CAL
BUNKC:12-40	222466384	0.000 CAL
TROIL:12-40	222466384	0.000 CAL
HYFL:12-40	222466384	0.000 CAL
MO:20-36	215814288	5000.000 CAL
MO:22-36	205716592	5000.000 CAL
MO:24-36	179699248	5000.000 CAL
DSL:10-12	52443	0.000 CAL
DSL:12-16	103477	0.000 CAL
DSL:16-24	38420792	0.000 CAL
MO:28-36	96700992	5000.000 CAL
MO:28-40	100943808	5000.000 CAL
MO:22-32	182674848	5000.000 CAL
CREOSOTE:10-36	218275952	0.000 CAL
DSL:12-14	63334	0.000 CAL
DSL:14-16	40143	0.000 CAL
DSL:16-18	287752	0.000 CAL
DSL:18-20	2017973	0.000 CAL
DSL:20-22	10097703	0.000 CAL
DSL:22-24	26017364	0.000 CAL
CRUDE:10-40	222518832	0.000 CAL
DSL:10-14	115777	0.000 CAL
DSL:14-28	121459192	0.000 CAL
MINOIL:12-40	222466384	0.000 CAL
DSL:12-28	121522520	0.000 CAL
HYFL:24-36	179699248	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

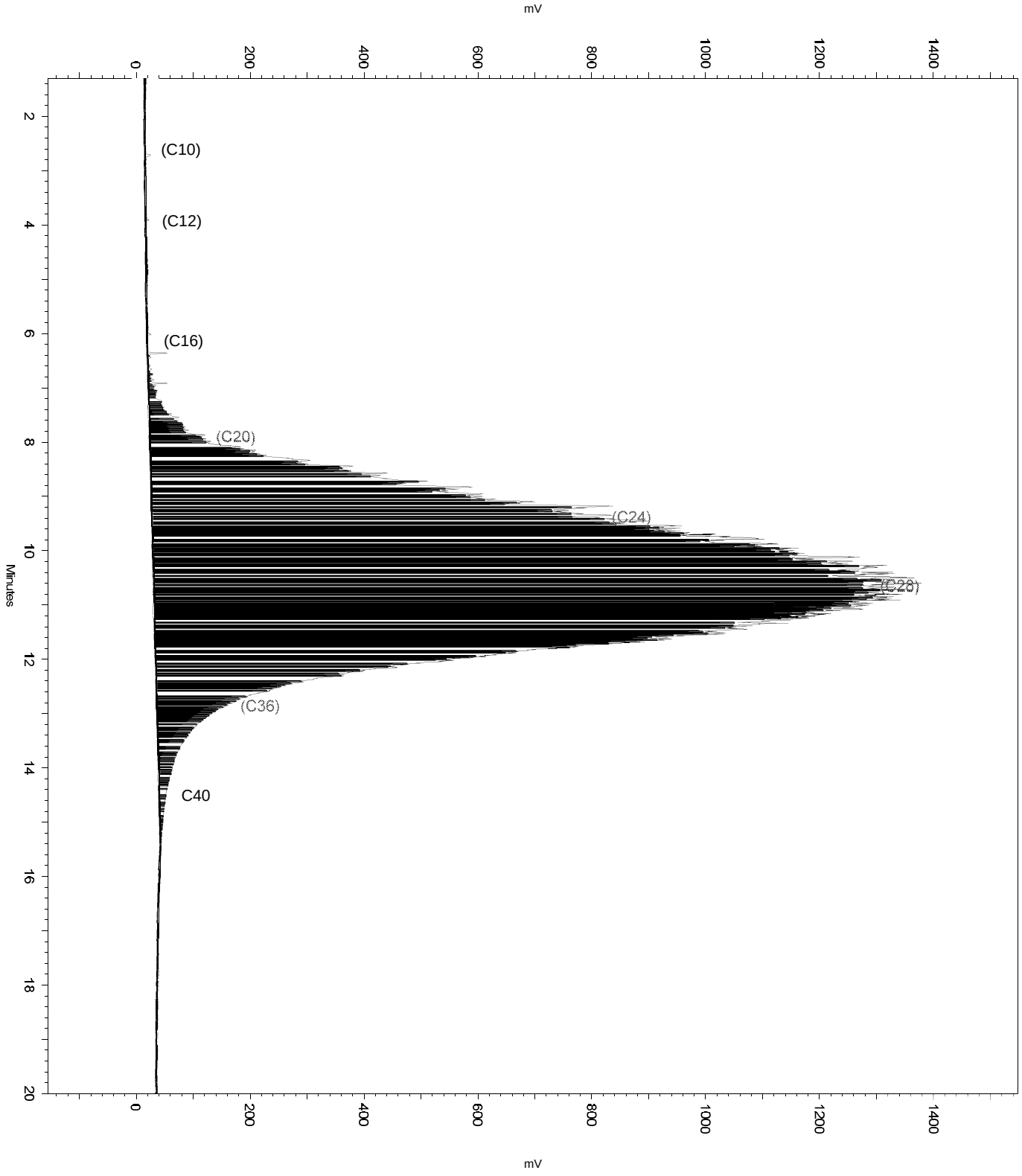
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19738,mo_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\187b018**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\187.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh187.met
Run Date: 7/5/2012 7:59:49 PM
Analysis Date: 7/6/2012 2:21:56 PM
Instrument: GC15B Vial: 18 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC15B
Calnum : 162276981001
Units : mg/L

Name : DSL_192
Date : 10-JUL-2012 18:17
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	192b013	162276981013	DSL_10	10-JUL-2012 18:17	S19968
L2	192b014	162276981014	DSL_100	10-JUL-2012 18:45	S19945
L3	192b015	162276981015	DSL_500	10-JUL-2012 19:13	S19946
L4	192b016	162276981016	DSL_1000	10-JUL-2012 19:41	S19947
L5	192b017	162276981017	DSL_5000	10-JUL-2012 20:08	S19943
L6	192b018	162276981018	DSL_7500	10-JUL-2012 20:36	S19948

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C24	48271	54425	53540	55563	52940	53037	AVRG		1.89E-5		52963	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C24	10.000	-9	100.00	3	500.00	1	1000.0	5	5000.0	0	7500.0	0

JDG 07/11/12 : Manually integrated fuel hump in multiple levels.

JDG 07/12/12 : RT has been fixed.

Analyst: JDG Date: 07/12/12 Reviewer: EAH Date: 07/12/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

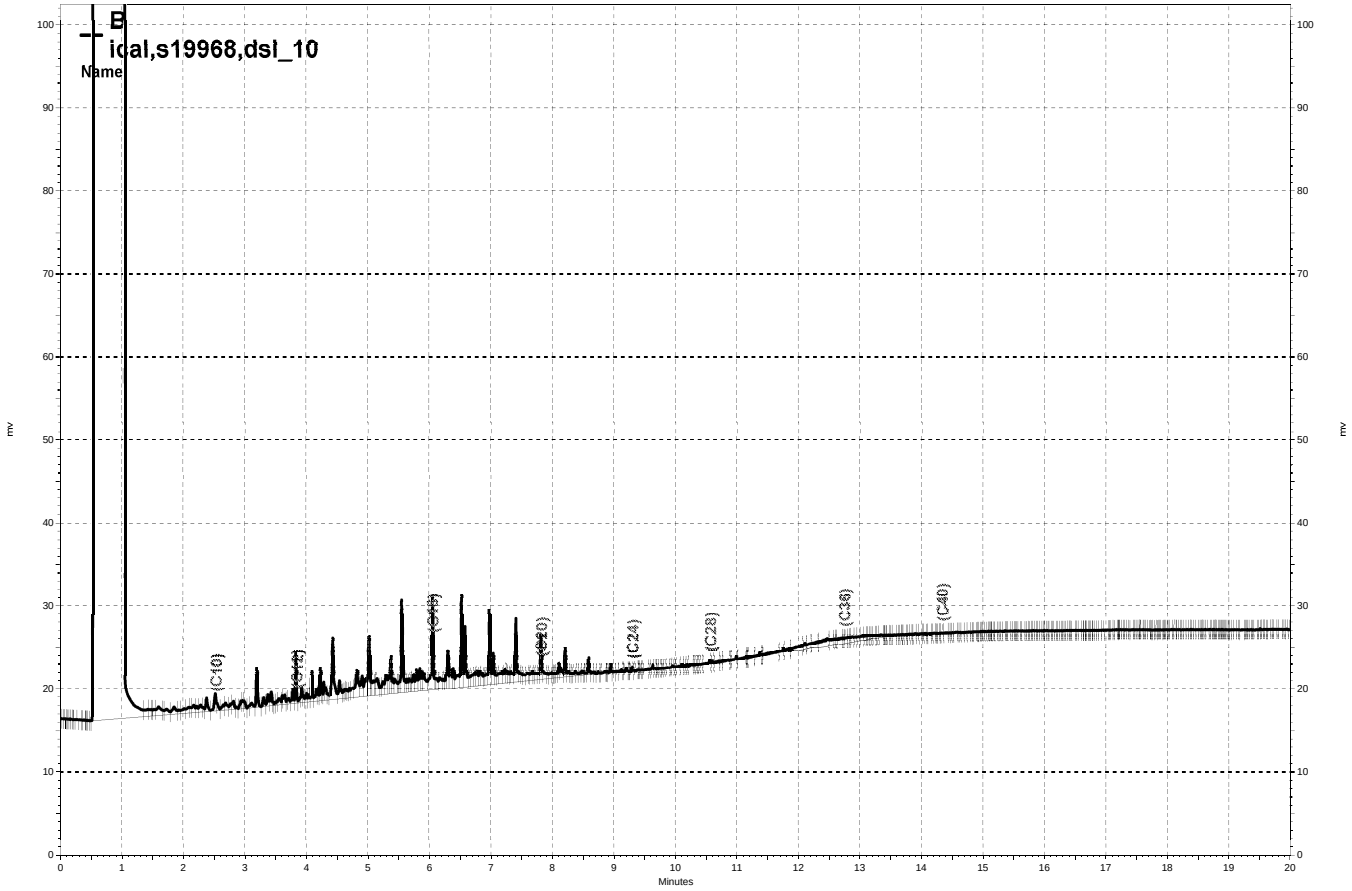
CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 GCSV Water
EPA 8015D

Inst : GC15B Name : DSL_192
Calnum : 162276981001 Cal Date : 10-JUL-2012

ICV 162276981020 (192b020 10-JUL-2012) stds: S19823

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C24	500.0	496.5	mg/L	-1	20	

Analyst: JDG Date: 07/11/12 Reviewer: EAH Date: 07/12/12



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b013, B

Sample Name: **ical,s19968,dsl_10**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 6:17:46 PM
Analysis Date: 7/11/2012 3:38:25 PM
Instrument: GC15B Vial: 13 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	275756	0.000 CAL
JP8:10-16	275756	0.000 CAL
KER:10-16	275756	0.000 CAL
JP5:10-16	275756	0.000 CAL
DSL:10-20	444564	10.000 CAL
DSL:10-22	474906	10.000 CAL
DSL:10-24	482710	10.000 CAL
DSL:12-22	422880	10.000 CAL
DSL:10-28	487104	10.000 CAL
DSL:12-24	430684	10.000 CAL
DSL:12-32	439762	10.000 CAL
BUNKC:12-40	494892	0.000 CAL
TROIL:12-40	494892	0.000 CAL
HYFL:12-40	494892	0.000 CAL
MO:20-36	79780	0.000 CAL
MO:22-36	49438	0.000 CAL
MO:24-36	41634	0.000 CAL
DSL:10-12	52026	0.000 CAL
DSL:12-16	223730	0.000 CAL
DSL:16-24	206954	10.000 CAL
MO:28-36	37240	0.000 CAL
MO:28-40	59814	0.000 CAL
MO:22-32	16882	0.000 CAL
CREOSOTE:10-36	524344	0.000 CAL
DSL:12-14	103030	0.000 CAL
DSL:14-16	120700	0.000 CAL
DSL:16-18	103724	0.000 CAL
DSL:18-20	65084	0.000 CAL
DSL:20-22	30342	0.000 CAL
DSL:22-24	7804	0.000 CAL
CRUDE:10-40	546918	0.000 CAL
DSL:10-14	155056	10.000 CAL
DSL:14-28	332048	10.000 CAL
MINOIL:12-40	494892	0.000 CAL
DSL:12-28	491144	10.000 CAL
HYFL:24-36	41634	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

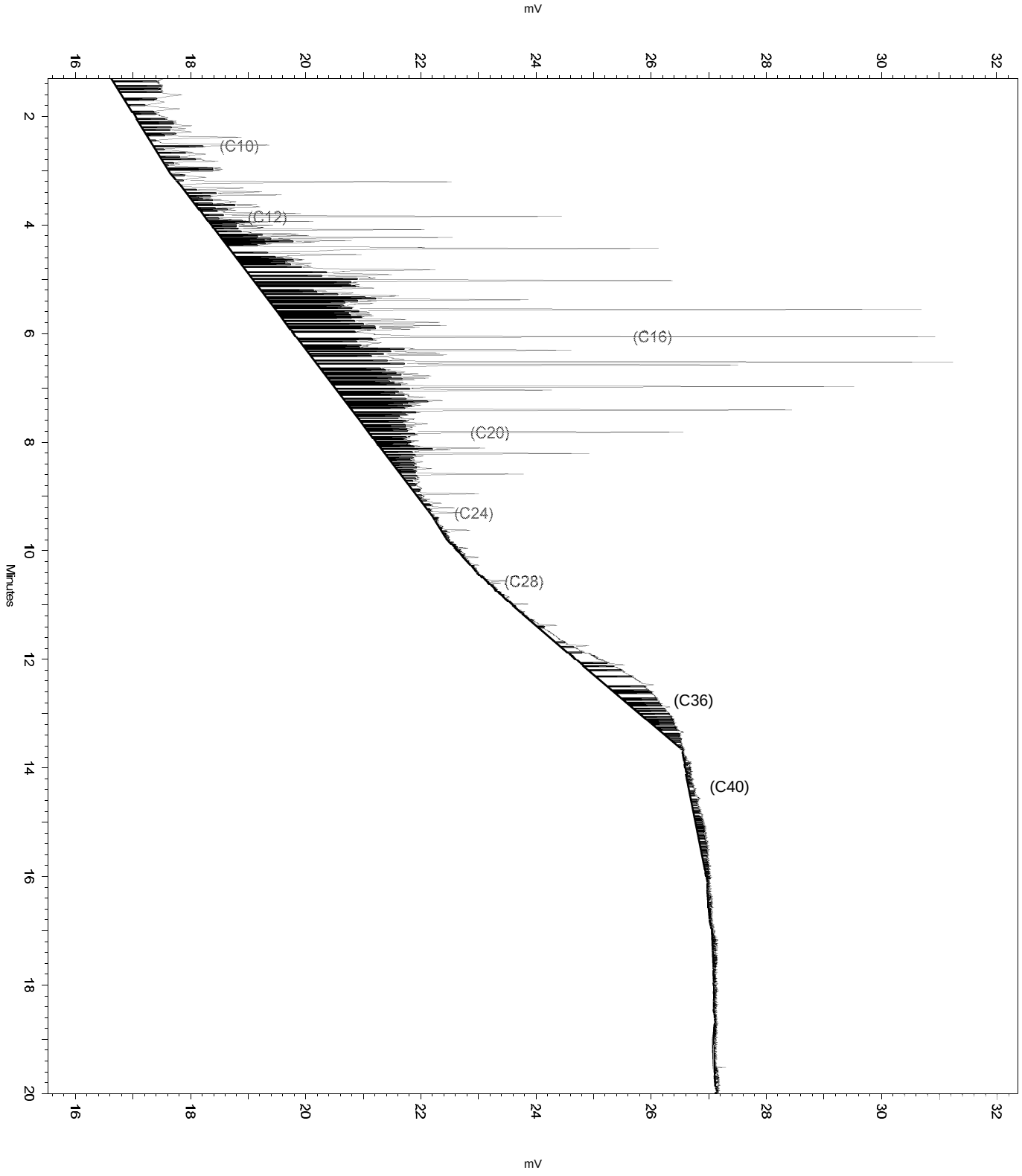
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

Yes	Move BL Stop	3.87	9.347	0

Sample Name: **ical,s19968,dsl_10**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 6:17:46 PM
Analysis Date: 7/11/2012 3:38:25 PM
Instrument: GC15B Vial: 13 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



Sample Name: **ical,s19968,dsl_10**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 6:17:46 PM
Analysis Date: 7/11/2012 3:36:11 PM
Instrument: GC15B Vial: 13 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	169683	0.000 CAL
JP8:10-16	169683	0.000 CAL
KER:10-16	169683	0.000 CAL
JP5:10-16	169683	0.000 CAL
DSL:10-20	264595	10.000 CAL
DSL:10-22	282070	10.000 CAL
DSL:10-24	287098	10.000 CAL
DSL:12-22	233927	10.000 CAL
DSL:10-28	291492	10.000 CAL
DSL:12-24	238955	10.000 CAL
DSL:12-32	248033	10.000 CAL
BUNKC:12-40	303163	0.000 CAL
TROIL:12-40	303163	0.000 CAL
HYFL:12-40	303163	0.000 CAL
MO:20-36	64137	0.000 CAL
MO:22-36	46662	0.000 CAL
MO:24-36	41634	0.000 CAL
DSL:10-12	48143	0.000 CAL
DSL:12-16	121540	0.000 CAL
DSL:16-24	117415	10.000 CAL
MO:28-36	37240	0.000 CAL
MO:28-40	59814	0.000 CAL
MO:22-32	14106	0.000 CAL
CREOSOTE:10-36	328732	0.000 CAL
DSL:12-14	66010	0.000 CAL
DSL:14-16	55530	0.000 CAL
DSL:16-18	57193	0.000 CAL
DSL:18-20	37719	0.000 CAL
DSL:20-22	17475	0.000 CAL
DSL:22-24	5028	0.000 CAL
CRUDE:10-40	351306	0.000 CAL
DSL:10-14	114153	10.000 CAL
DSL:14-28	177339	10.000 CAL
MINOIL:12-40	303163	0.000 CAL
DSL:12-28	299415	10.000 CAL
HYFL:24-36	41634	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

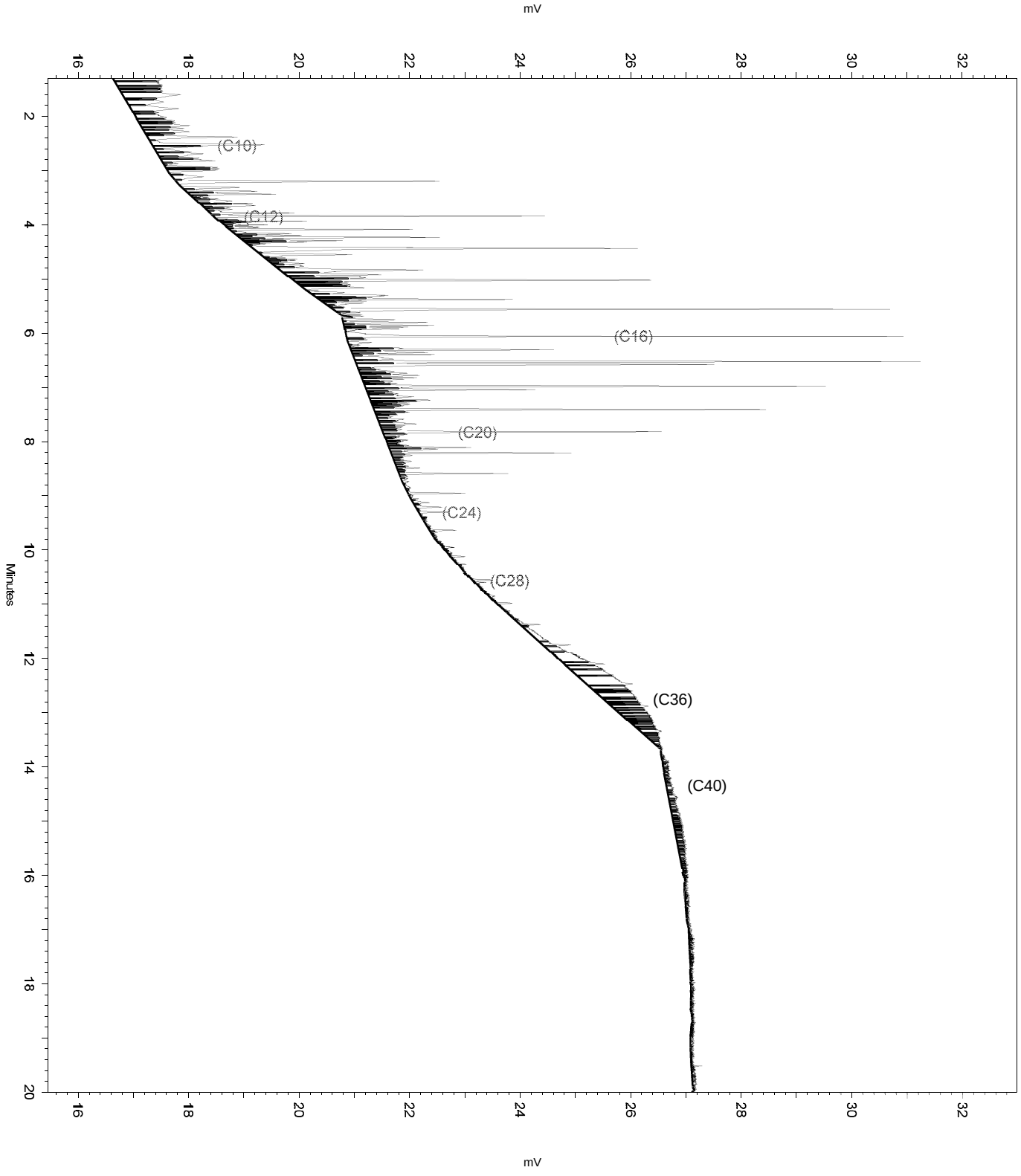
Manual Integration Fixes
==========

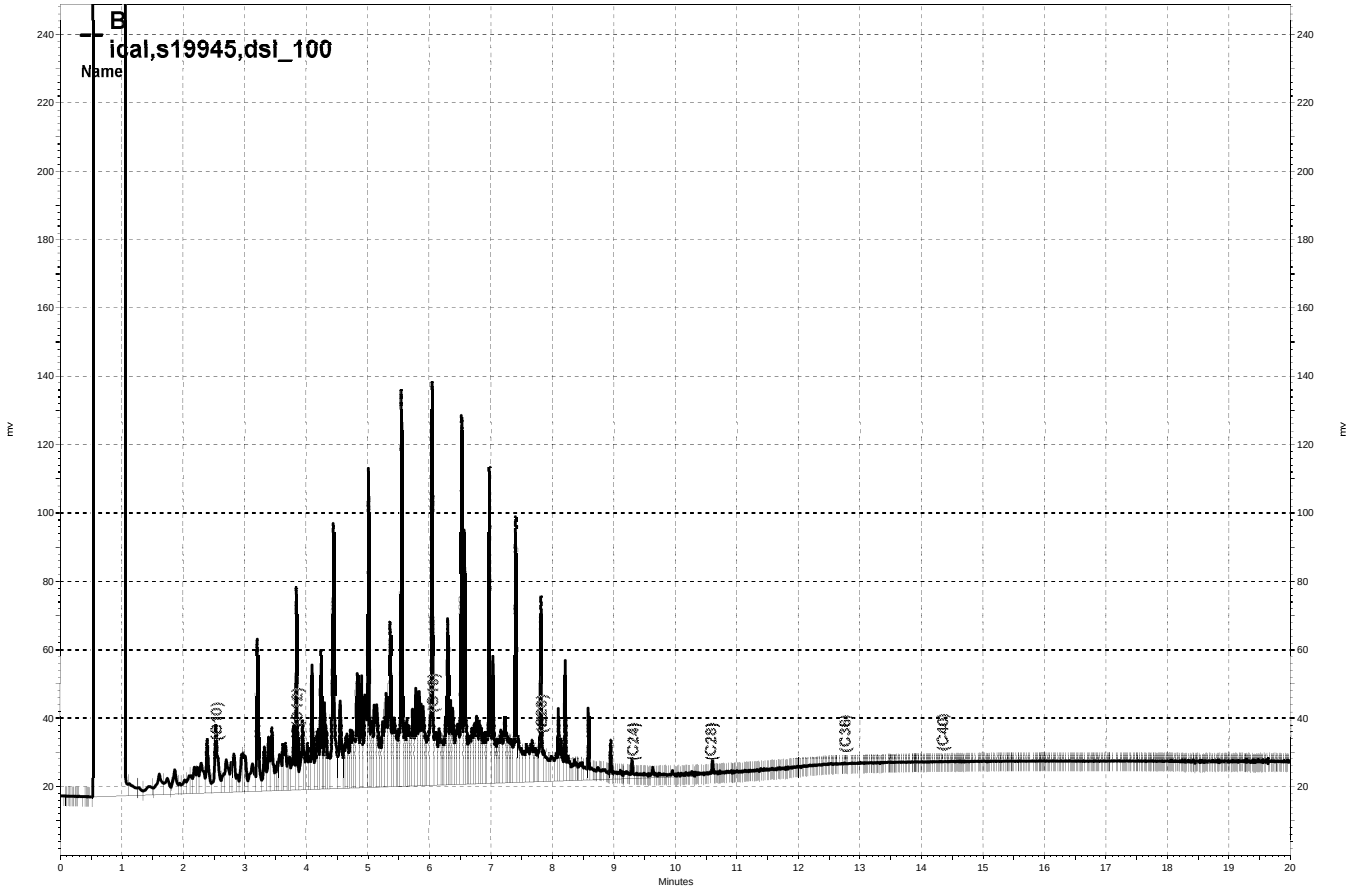
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19968,dsl_10**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 6:17:46 PM
Analysis Date: 7/11/2012 3:36:11 PM
Instrument: GC15B Vial: 13 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1





\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b014, B

Sample Name: **ical,s19945,dsl_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 6:45:22 PM
Analysis Date: 7/11/2012 3:38:30 PM
Instrument: GC15B Vial: 14 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	3217730	0.000 CAL
JP8:10-16	3217730	0.000 CAL
KER:10-16	3217730	0.000 CAL
JP5:10-16	3217730	0.000 CAL
DSL:10-20	5018316	100.000 CAL
DSL:10-22	5338180	100.000 CAL
DSL:10-24	5442540	100.000 CAL
DSL:12-22	4649443	100.000 CAL
DSL:10-28	5502738	100.000 CAL
DSL:12-24	4753803	100.000 CAL
DSL:12-32	4842128	100.000 CAL
BUNKC:12-40	4893841	0.000 CAL
TROIL:12-40	4893841	0.000 CAL
HYFL:12-40	4893841	0.000 CAL
MO:20-36	534818	0.000 CAL
MO:22-36	214954	0.000 CAL
MO:24-36	110594	0.000 CAL
DSL:10-12	688737	0.000 CAL
DSL:12-16	2528993	0.000 CAL
DSL:16-24	2224810	100.000 CAL
MO:28-36	50396	0.000 CAL
MO:28-40	79840	0.000 CAL
MO:22-32	192685	0.000 CAL
CREOSOTE:10-36	5553134	0.000 CAL
DSL:12-14	1209608	0.000 CAL
DSL:14-16	1319385	0.000 CAL
DSL:16-18	1107662	0.000 CAL
DSL:18-20	692924	0.000 CAL
DSL:20-22	319864	0.000 CAL
DSL:22-24	104360	0.000 CAL
CRUDE:10-40	5582578	0.000 CAL
DSL:10-14	1898345	100.000 CAL
DSL:14-28	3604393	100.000 CAL
MINOIL:12-40	4893841	0.000 CAL
DSL:12-28	4874727	100.000 CAL
HYFL:24-36	110594	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

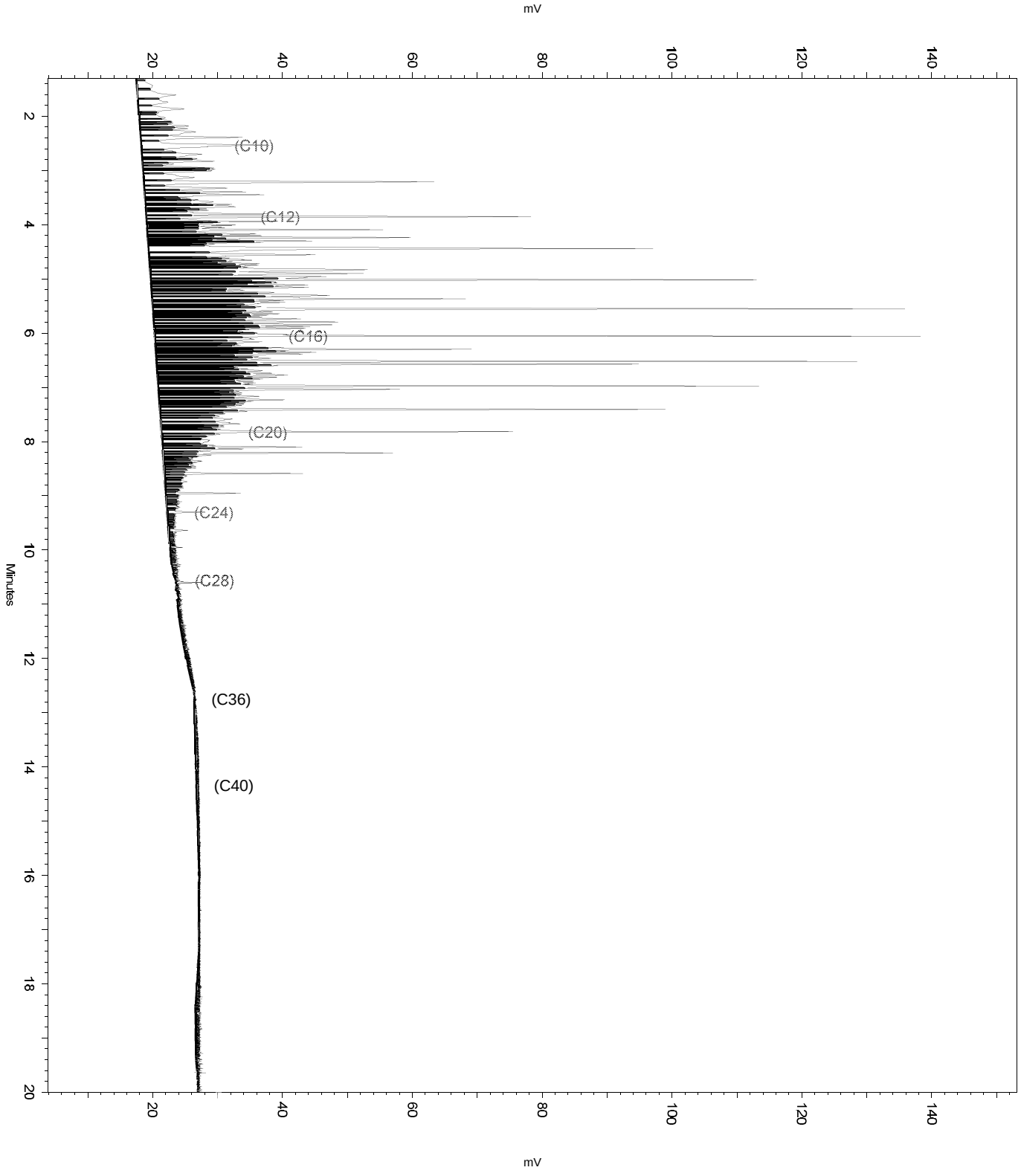
Manual Integration Fixes
==========

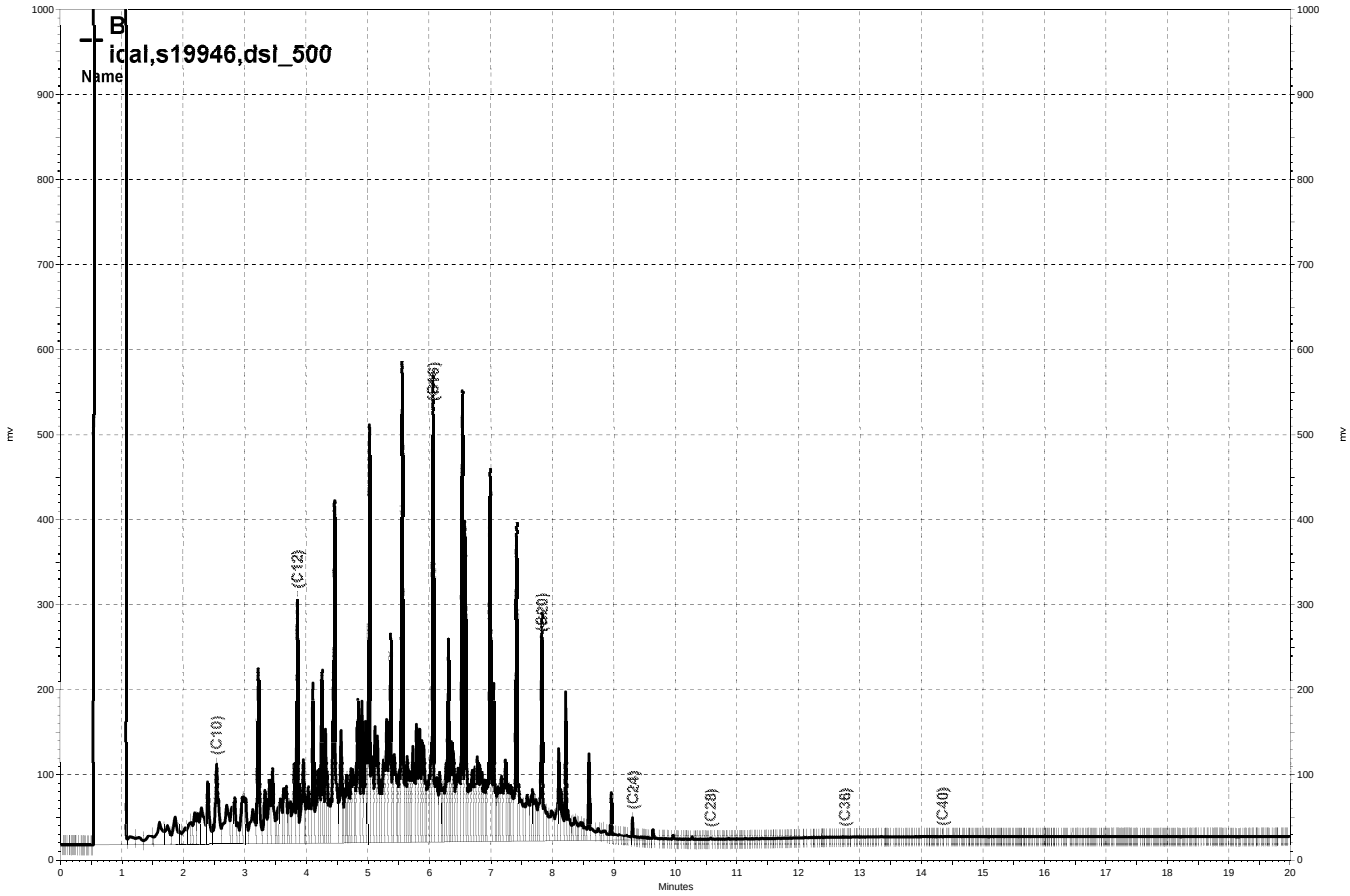
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19945,dsl_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 6:45:22 PM
Analysis Date: 7/11/2012 3:38:30 PM
Instrument: GC15B Vial: 14 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1





\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b015, B

Sample Name: **ical,s19946,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 7:13:30 PM
Analysis Date: 7/11/2012 3:38:35 PM
Instrument: GC15B Vial: 15 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	16026658	0.000 CAL
JP8:10-16	16026658	0.000 CAL
KER:10-16	16026658	0.000 CAL
JP5:10-16	16026658	0.000 CAL
DSL:10-20	24856516	500.000 CAL
DSL:10-22	26362510	500.000 CAL
DSL:10-24	26770004	500.000 CAL
DSL:12-22	23289058	500.000 CAL
DSL:10-28	26866296	500.000 CAL
DSL:12-24	23696552	500.000 CAL
DSL:12-32	23811680	500.000 CAL
BUNKC:12-40	23861936	0.000 CAL
TROIL:12-40	23861936	0.000 CAL
HYFL:12-40	23861936	0.000 CAL
MO:20-36	2044927	0.000 CAL
MO:22-36	538936	0.000 CAL
MO:24-36	131439	0.000 CAL
DSL:10-12	3073451	0.000 CAL
DSL:12-16	12953207	0.000 CAL
DSL:16-24	10743347	500.000 CAL
MO:28-36	35146	0.000 CAL
MO:28-40	69095	0.000 CAL
MO:22-32	522628	0.000 CAL
CREOSOTE:10-36	26901436	0.000 CAL
DSL:12-14	6421861	0.000 CAL
DSL:14-16	6531346	0.000 CAL
DSL:16-18	5446224	0.000 CAL
DSL:18-20	3383635	0.000 CAL
DSL:20-22	1505991	0.000 CAL
DSL:22-24	407497	0.000 CAL
CRUDE:10-40	26935388	0.000 CAL
DSL:10-14	9495312	500.000 CAL
DSL:14-28	17370980	500.000 CAL
MINOIL:12-40	23861936	0.000 CAL
DSL:12-28	23846104	500.000 CAL
HYFL:24-36	131439	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

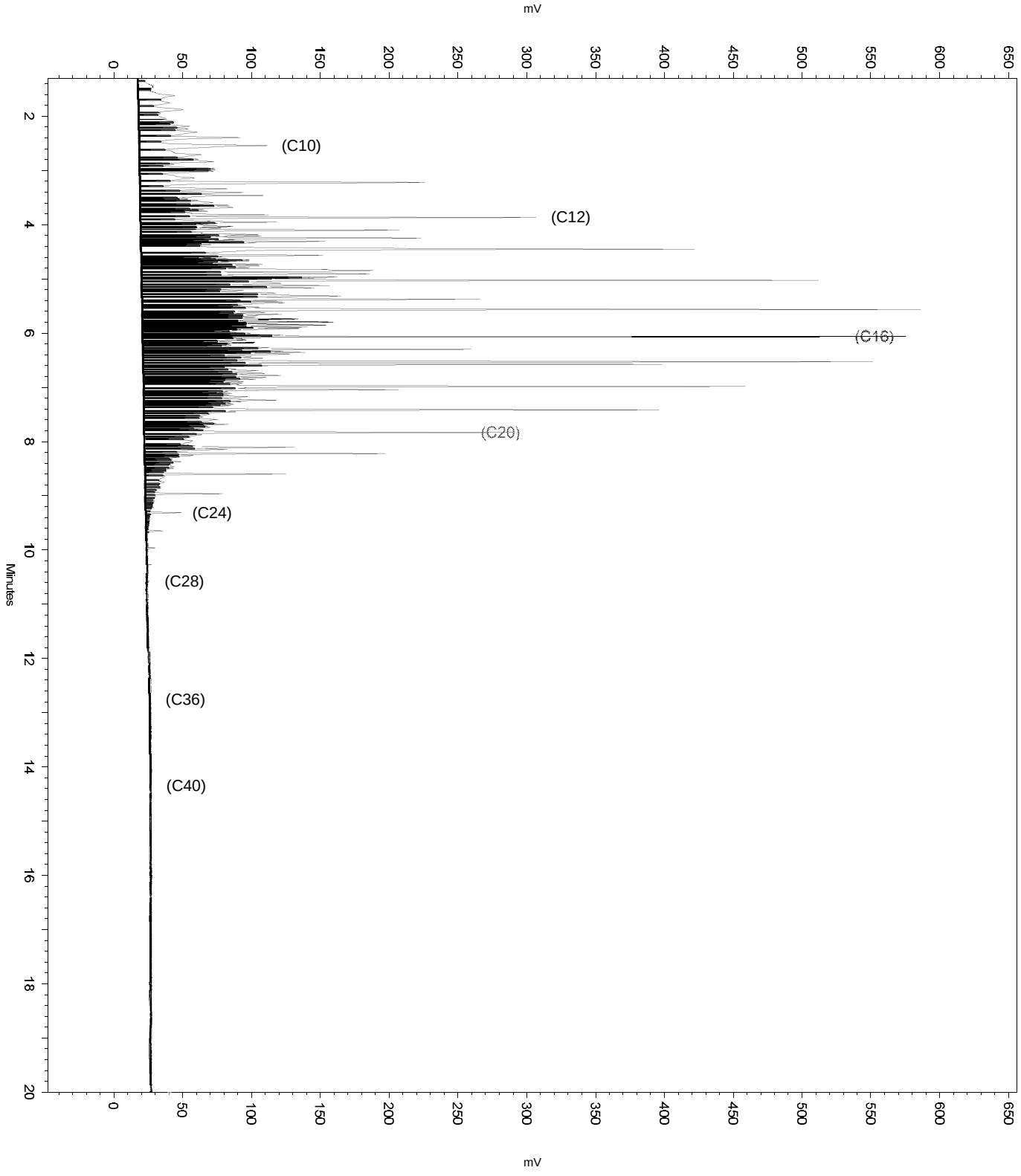
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

Yes	Move BL Stop	9.075	10.338	0

Sample Name: **ical,s19946,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 7:13:30 PM
Analysis Date: 7/11/2012 3:38:35 PM
Instrument: GC15B Vial: 15 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



Sample Name: **ical,s19946,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 7:13:30 PM
Analysis Date: 7/11/2012 3:37:20 PM
Instrument: GC15B Vial: 15 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	15524205	0.000 CAL
JP8:10-16	15524205	0.000 CAL
KER:10-16	15524205	0.000 CAL
JP5:10-16	15524205	0.000 CAL
DSL:10-20	23922062	500.000 CAL
DSL:10-22	25205168	500.000 CAL
DSL:10-24	25409940	500.000 CAL
DSL:12-22	22255692	500.000 CAL
DSL:10-28	25457304	500.000 CAL
DSL:12-24	22460464	500.000 CAL
DSL:12-32	22526664	500.000 CAL
BUNKC:12-40	22576920	0.000 CAL
TROIL:12-40	22576920	0.000 CAL
HYFL:12-40	22576920	0.000 CAL
MO:20-36	1570398	0.000 CAL
MO:22-36	287288	0.000 CAL
MO:24-36	82511	0.000 CAL
DSL:10-12	2949477	0.000 CAL
DSL:12-16	12574728	0.000 CAL
DSL:16-24	9885746	500.000 CAL
MO:28-36	35146	0.000 CAL
MO:28-40	69095	0.000 CAL
MO:22-32	270980	0.000 CAL
CREOSOTE:10-36	25492444	0.000 CAL
DSL:12-14	6242218	0.000 CAL
DSL:14-16	6332510	0.000 CAL
DSL:16-18	5232789	0.000 CAL
DSL:18-20	3165070	0.000 CAL
DSL:20-22	1283110	0.000 CAL
DSL:22-24	204777	0.000 CAL
CRUDE:10-40	25526396	0.000 CAL
DSL:10-14	9191695	500.000 CAL
DSL:14-28	16265621	500.000 CAL
MINOIL:12-40	22576920	0.000 CAL
DSL:12-28	22561088	500.000 CAL
HYFL:24-36	82511	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

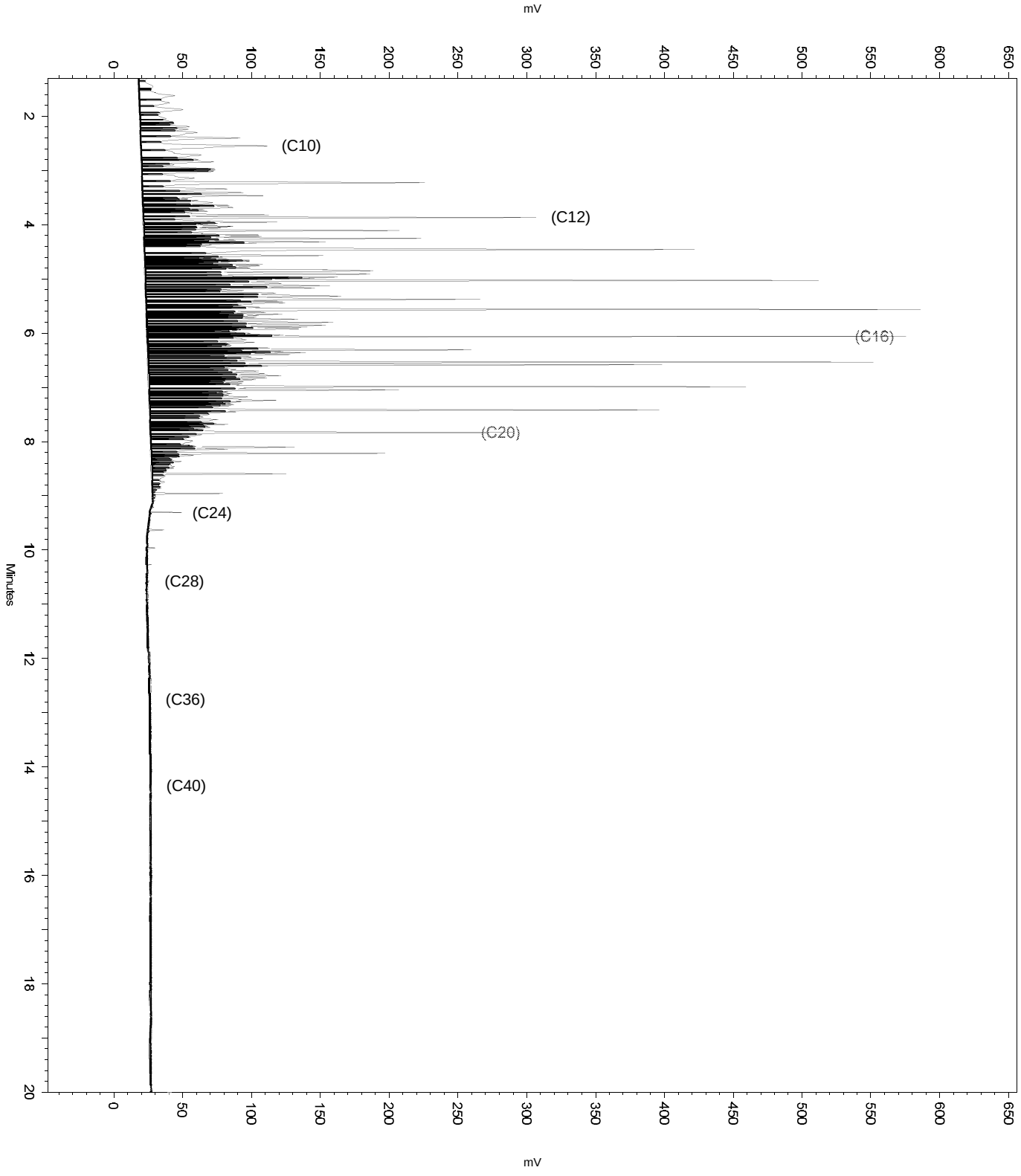
Manual Integration Fixes
==========

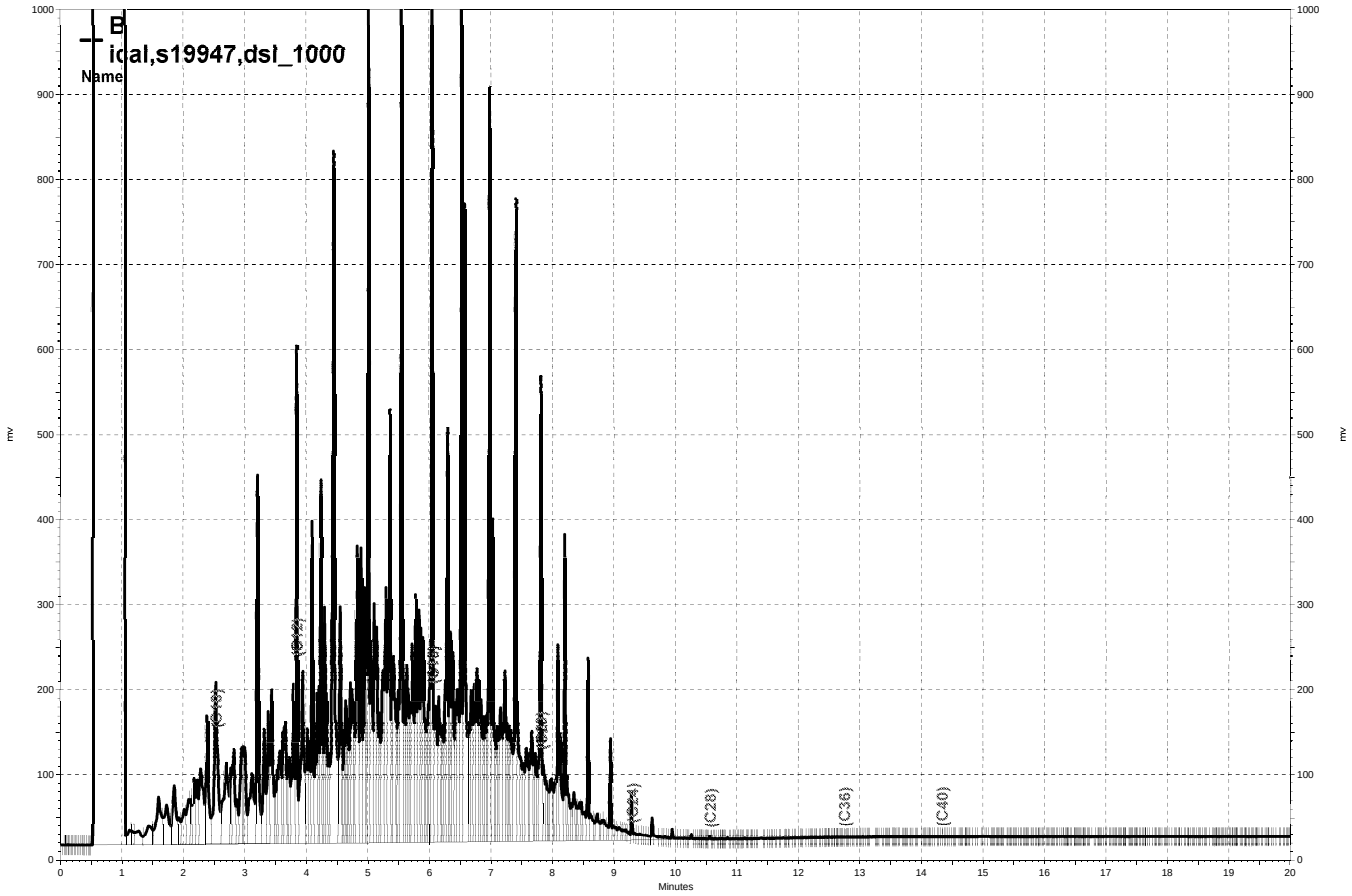
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19946,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 7:13:30 PM
Analysis Date: 7/11/2012 3:37:20 PM
Instrument: GC15B Vial: 15 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1





\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b016, B

Sample Name: **ical,s19947,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 7:41:06 PM
Analysis Date: 7/11/2012 3:38:40 PM
Instrument: GC15B Vial: 16 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	33265520	0.000 CAL
JP8:10-16	33265520	0.000 CAL
KER:10-16	33265520	0.000 CAL
JP5:10-16	33265520	0.000 CAL
DSL:10-20	51536784	1000.000 CAL
DSL:10-22	54678752	1000.000 CAL
DSL:10-24	55563008	1000.000 CAL
DSL:12-22	47450448	1000.000 CAL
DSL:10-28	55806072	1000.000 CAL
DSL:12-24	48334704	1000.000 CAL
DSL:12-32	48598916	1000.000 CAL
BUNKC:12-40	48638312	0.000 CAL
TROIL:12-40	48638312	0.000 CAL
HYFL:12-40	48638312	0.000 CAL
MO:20-36	4316739	0.000 CAL
MO:22-36	1174767	0.000 CAL
MO:24-36	290508	0.000 CAL
DSL:10-12	7228308	0.000 CAL
DSL:12-16	26037216	0.000 CAL
DSL:16-24	22297494	1000.000 CAL
MO:28-36	47448	0.000 CAL
MO:28-40	60539	0.000 CAL
MO:22-32	1148466	0.000 CAL
CREOSOTE:10-36	55853516	0.000 CAL
DSL:12-14	12505134	0.000 CAL
DSL:14-16	13532083	0.000 CAL
DSL:16-18	11264329	0.000 CAL
DSL:18-20	7006933	0.000 CAL
DSL:20-22	3141972	0.000 CAL
DSL:22-24	884259	0.000 CAL
CRUDE:10-40	55866616	0.000 CAL
DSL:10-14	19733440	1000.000 CAL
DSL:14-28	36072632	1000.000 CAL
MINOIL:12-40	48638312	0.000 CAL
DSL:12-28	48632800	1000.000 CAL
HYFL:24-36	290508	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

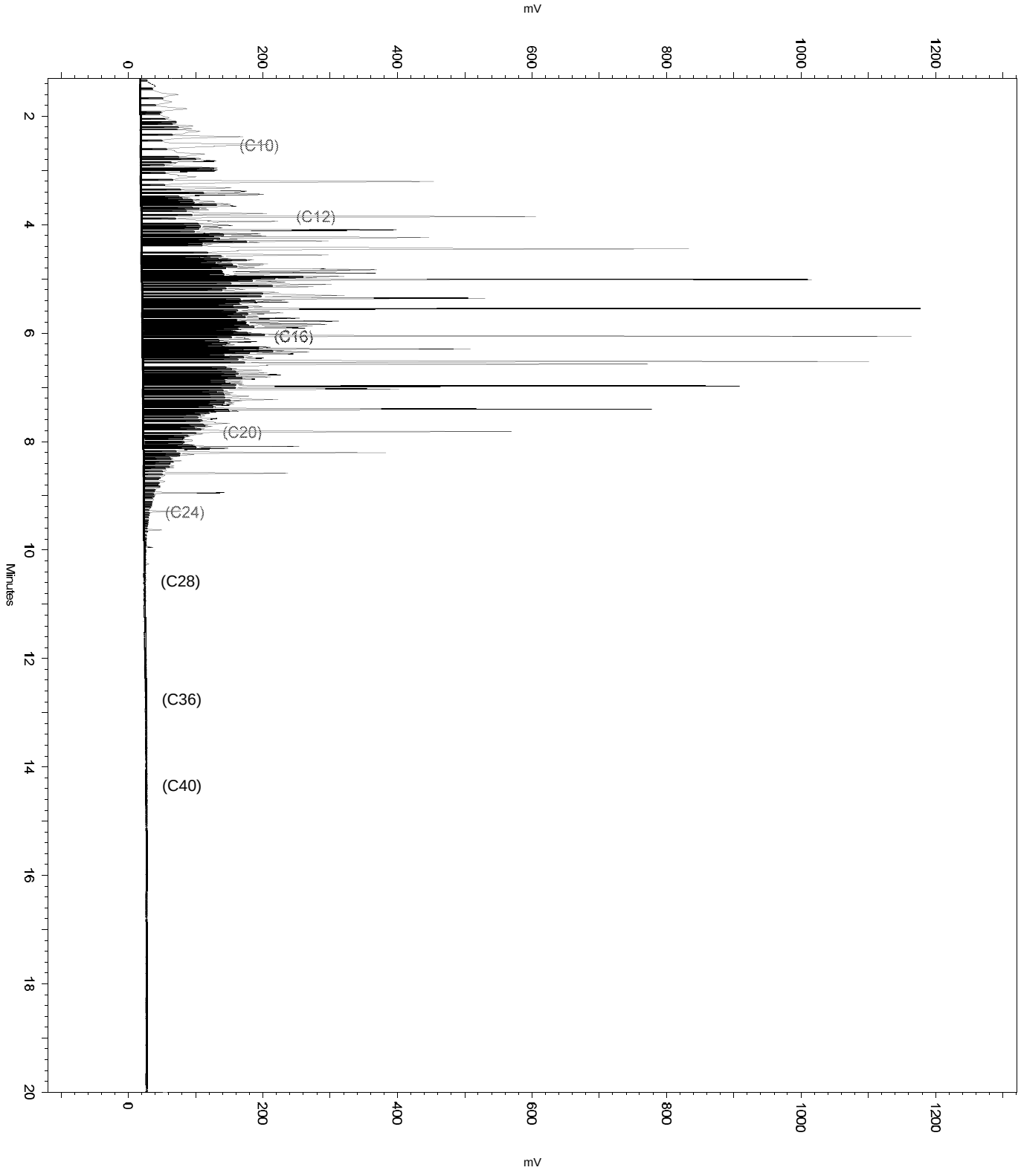
Manual Integration Fixes
==========

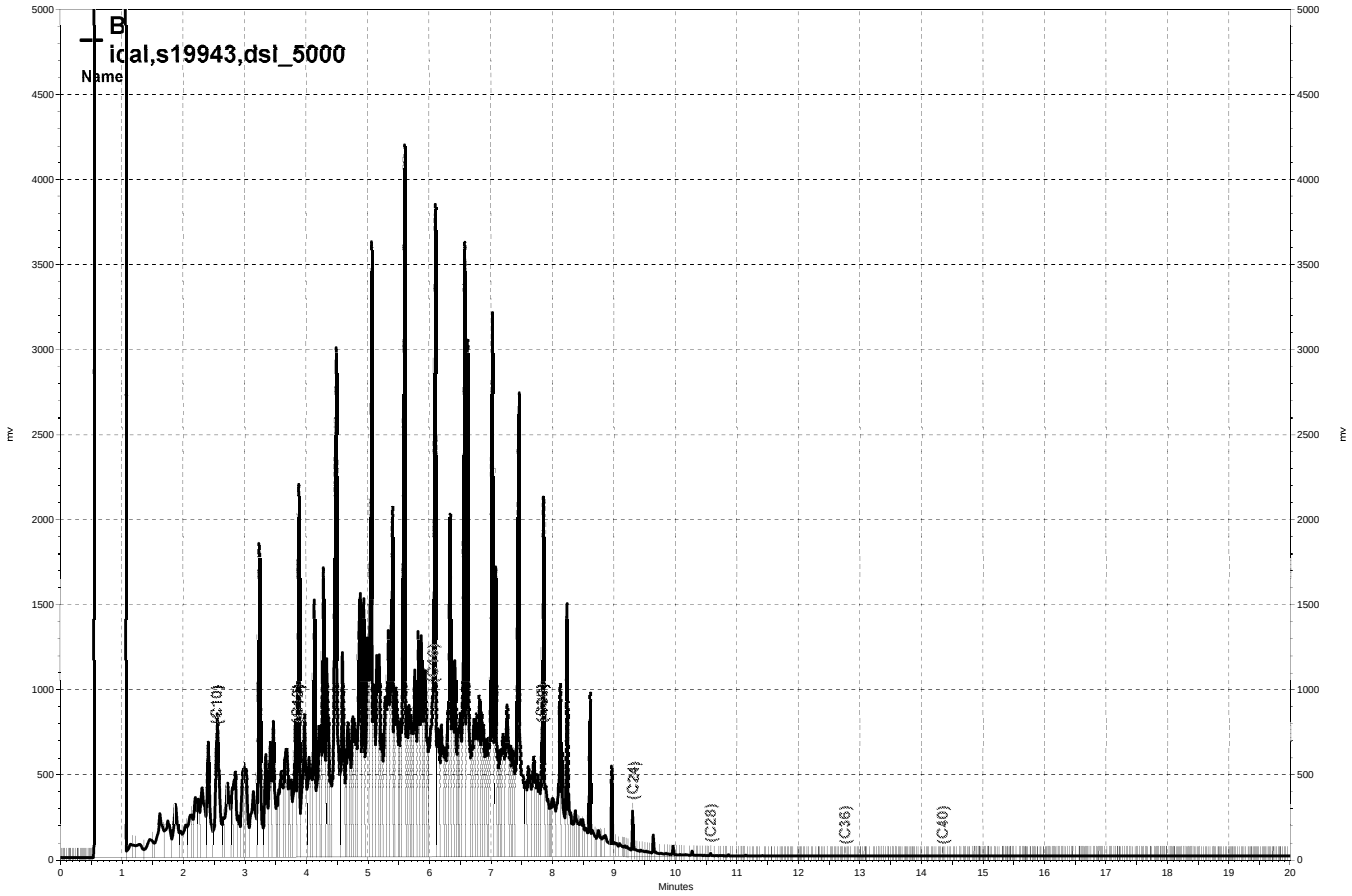
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19947,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 7:41:06 PM
Analysis Date: 7/11/2012 3:38:40 PM
Instrument: GC15B Vial: 16 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1





\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b017, B

Sample Name: **ical,s19943,dsl_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b017**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 8:08:36 PM
Analysis Date: 7/11/2012 3:38:45 PM
Instrument: GC15B Vial: 17 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	150246848	0.000 CAL
JP8:10-16	150246848	0.000 CAL
KER:10-16	150246848	0.000 CAL
JP5:10-16	150246848	0.000 CAL
DSL:10-20	241951168	5000.000 CAL
DSL:10-22	259187888	5000.000 CAL
DSL:10-24	264701088	5000.000 CAL
DSL:12-22	225422832	5000.000 CAL
DSL:10-28	265961504	5000.000 CAL
DSL:12-24	230936032	5000.000 CAL
DSL:12-32	232282384	5000.000 CAL
BUNKC:12-40	232309504	0.000 CAL
TROIL:12-40	232309504	0.000 CAL
HYFL:12-40	232309504	0.000 CAL
MO:20-36	24109232	0.000 CAL
MO:22-36	6872496	0.000 CAL
MO:24-36	1359303	0.000 CAL
DSL:10-12	33765048	0.000 CAL
DSL:12-16	116481800	0.000 CAL
DSL:16-24	114454264	5000.000 CAL
MO:28-36	98891	0.000 CAL
MO:28-40	113076	0.000 CAL
MO:22-32	6859550	0.000 CAL
CREOSOTE:10-36	266060368	0.000 CAL
DSL:12-14	56865376	0.000 CAL
DSL:14-16	59616428	0.000 CAL
DSL:16-18	56135796	0.000 CAL
DSL:18-20	35568536	0.000 CAL
DSL:20-22	17236734	0.000 CAL
DSL:22-24	5513193	0.000 CAL
CRUDE:10-40	266074560	0.000 CAL
DSL:10-14	90630424	5000.000 CAL
DSL:14-28	175331072	5000.000 CAL
MINOIL:12-40	232309504	0.000 CAL
DSL:12-28	232301520	5000.000 CAL
HYFL:24-36	1359303	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

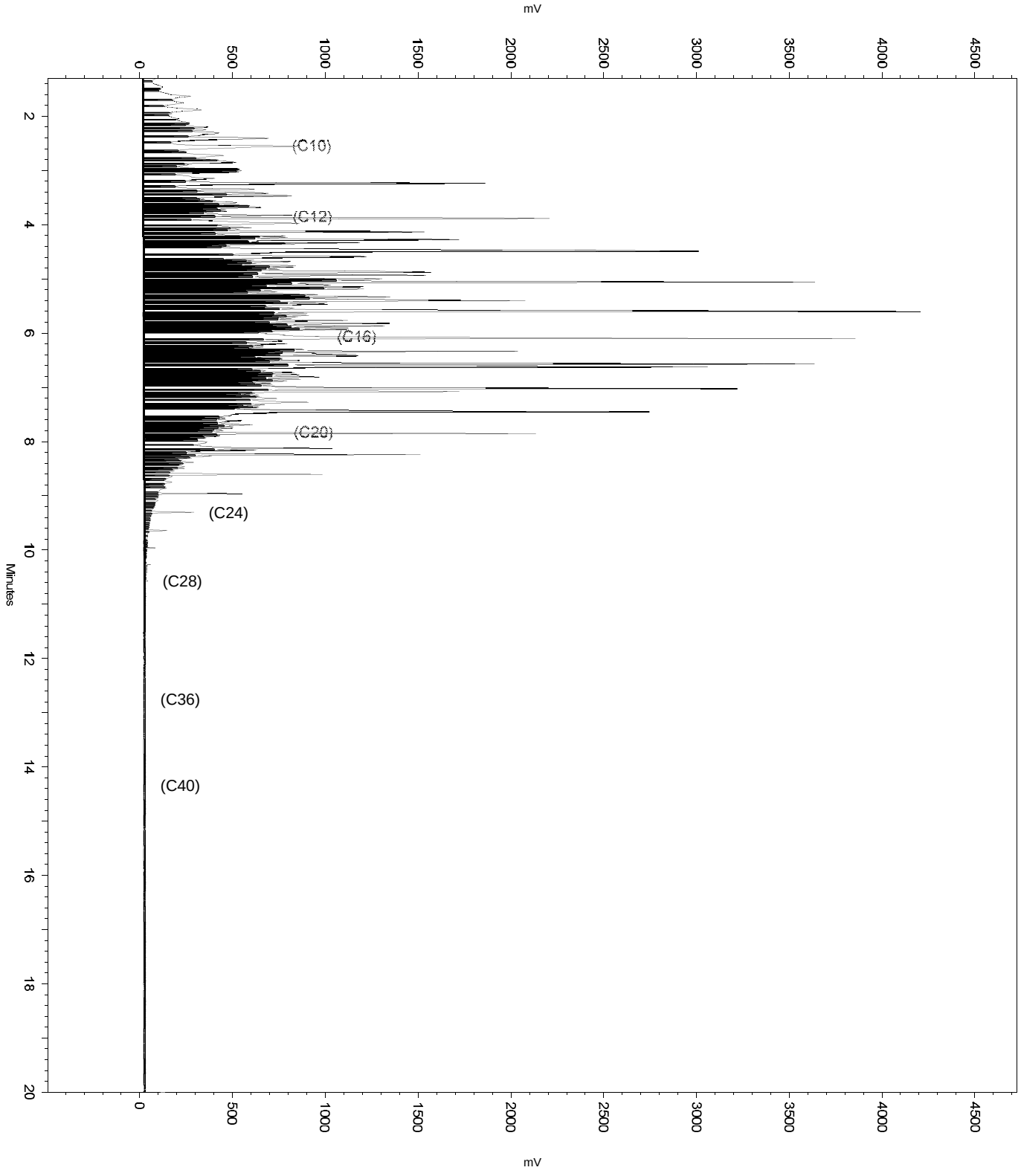
Manual Integration Fixes
==========

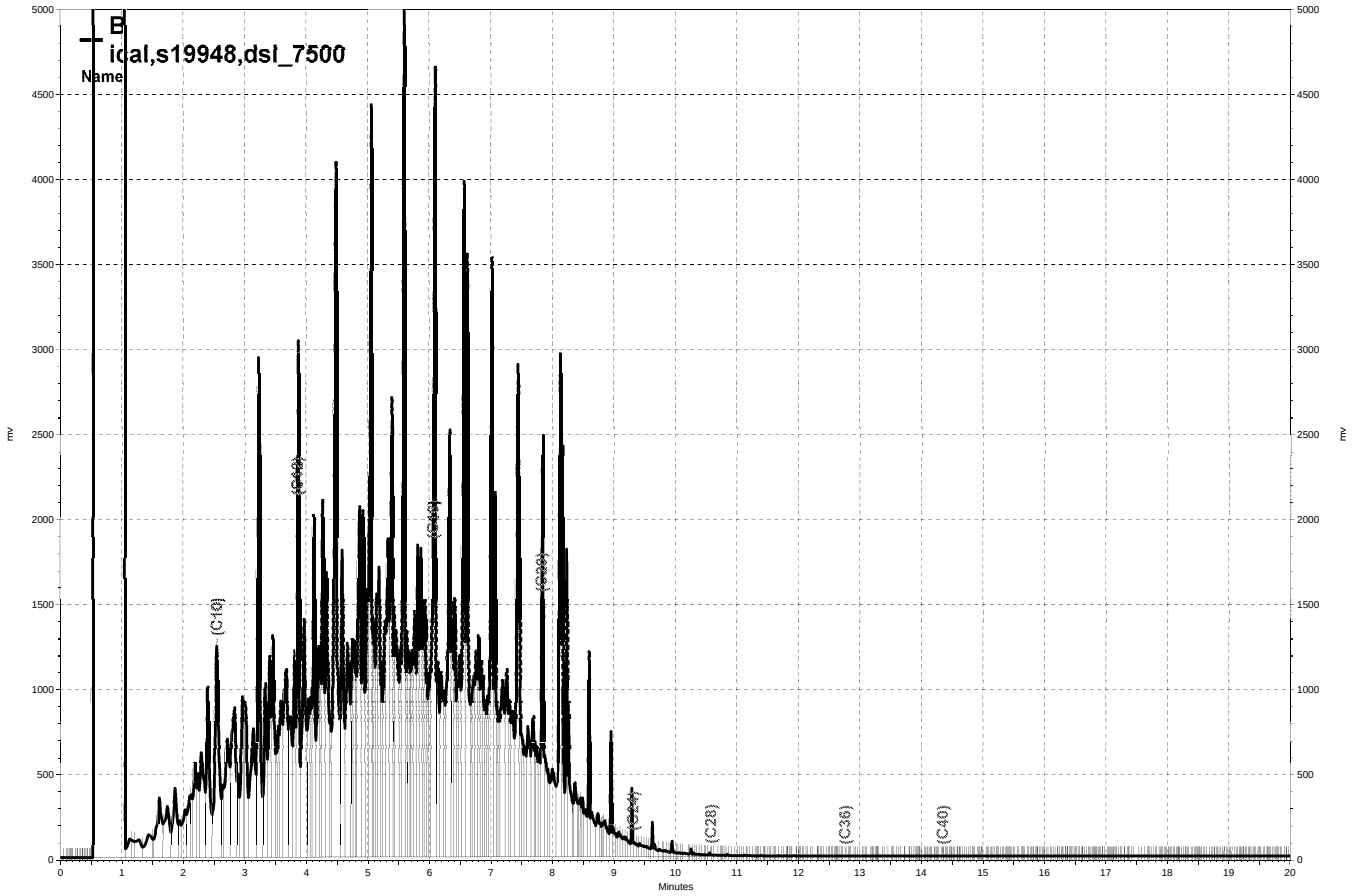
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19943,dsl_5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b017**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 8:08:36 PM
Analysis Date: 7/11/2012 3:38:45 PM
Instrument: GC15B Vial: 17 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1





\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b018, B

Sample Name: **ical,s19948,dsl_7500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b018**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 8:36:00 PM
Analysis Date: 7/11/2012 3:38:50 PM
Instrument: GC15B Vial: 18 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	232958208	0.000 CAL
JP8:10-16	232958208	0.000 CAL
KER:10-16	232958208	0.000 CAL
JP5:10-16	232958208	0.000 CAL
DSL:10-20	358104960	7500.000 CAL
DSL:10-22	390568288	7500.000 CAL
DSL:10-24	397776416	7500.000 CAL
DSL:12-22	335501664	7500.000 CAL
DSL:10-28	400390240	7500.000 CAL
DSL:12-24	342709792	7500.000 CAL
DSL:12-32	345566208	7500.000 CAL
BUNKC:12-40	345646656	0.000 CAL
TROIL:12-40	345646656	0.000 CAL
HYFL:12-40	345646656	0.000 CAL
MO:20-36	42598576	0.000 CAL
MO:22-36	10135230	0.000 CAL
MO:24-36	2927163	0.000 CAL
DSL:10-12	55066712	0.000 CAL
DSL:12-16	177891520	0.000 CAL
DSL:16-24	164818224	7500.000 CAL
MO:28-36	313385	0.000 CAL
MO:28-40	323065	0.000 CAL
MO:22-32	10064487	0.000 CAL
CREOSOTE:10-36	400703552	0.000 CAL
DSL:12-14	88201096	0.000 CAL
DSL:14-16	89690432	0.000 CAL
DSL:16-18	75407520	0.000 CAL
DSL:18-20	49739268	0.000 CAL
DSL:20-22	32463344	0.000 CAL
DSL:22-24	7208067	0.000 CAL
CRUDE:10-40	400713280	0.000 CAL
DSL:10-14	143267792	7500.000 CAL
DSL:14-28	257122448	7500.000 CAL
MINOIL:12-40	345646656	0.000 CAL
DSL:12-28	345642912	7500.000 CAL
HYFL:24-36	2927163	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

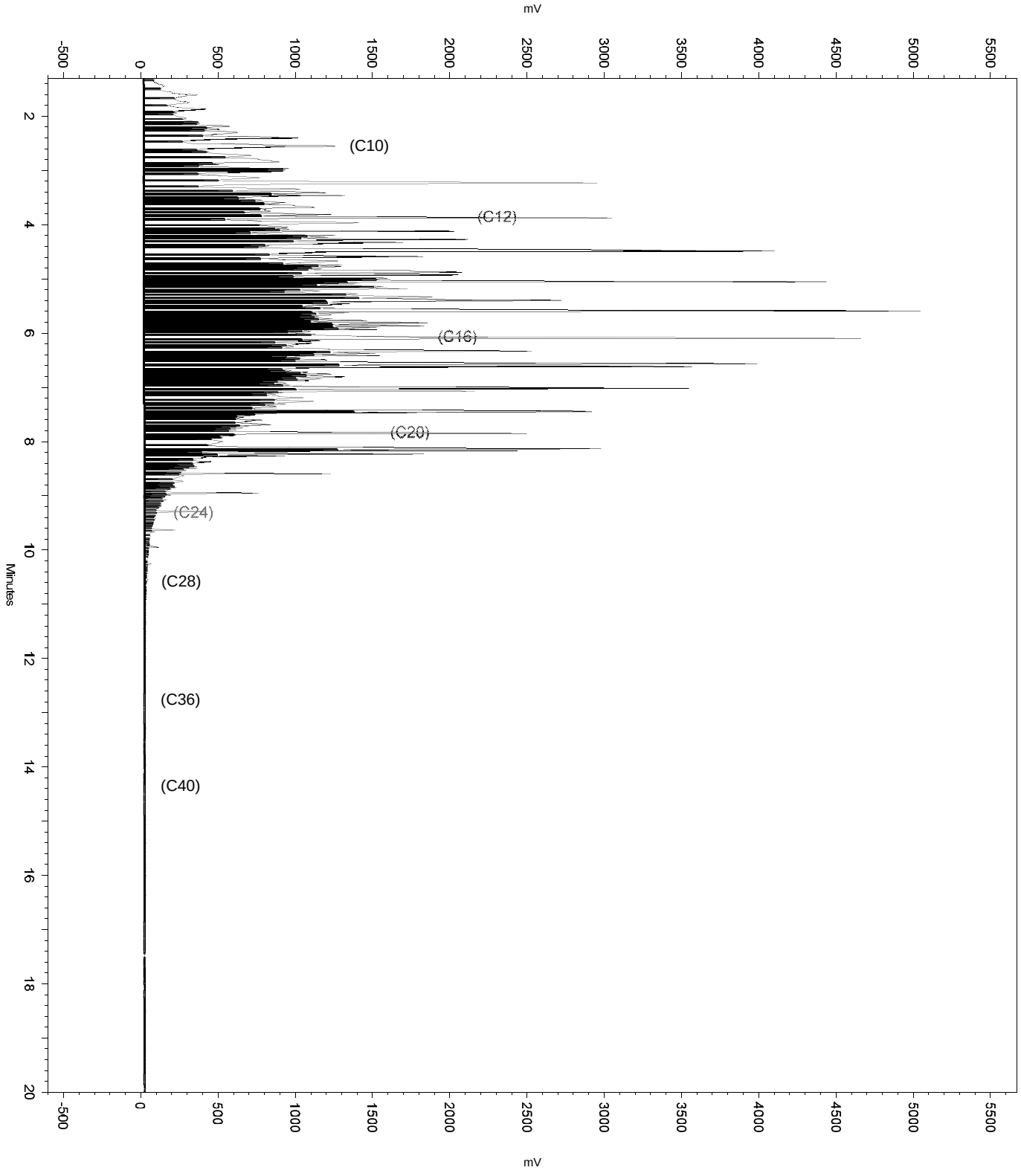
Manual Integration Fixes
==========

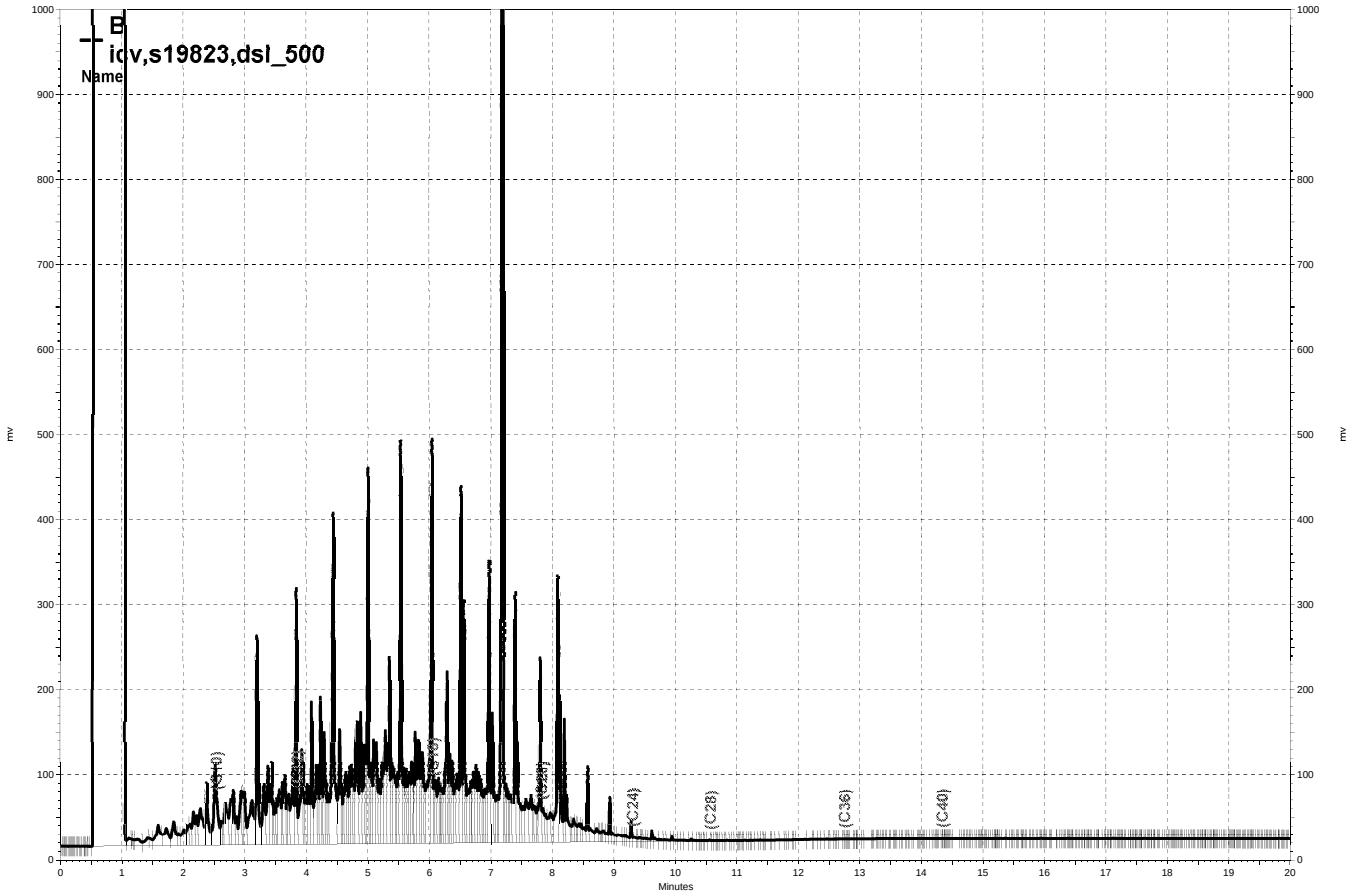
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19948,dsl_7500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b018**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 8:36:00 PM
Analysis Date: 7/11/2012 3:38:50 PM
Instrument: GC15B Vial: 18 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1





\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b020, B

Sample Name: **icv,s19823,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b020**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 9:31:20 PM
Analysis Date: 7/11/2012 3:47:55 PM
Instrument: GC15B Vial: 20 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	16153483	353.374
JP8:10-16	16153483	409.353
KER:10-16	16153483	351.620
JP5:10-16	16153483	305.949
DSL:10-20	27139130	557.602
DSL:10-22	28970252	556.782
DSL:10-24	29432088	555.713
DSL:12-22	24922936	548.502
DSL:10-28	29567376	554.641
DSL:12-24	25384772	547.447
DSL:12-32	25525368	544.731
BUNKC:12-40	25556444	1287.670
TROIL:12-40	25556444	369.290
HYFL:12-40	25556444	507.983
MO:20-36	2453476	52.754
MO:22-36	622353	13.937
MO:24-36	160514	4.037
DSL:10-12	4047319	0.000
DSL:12-16	12106164	0.000
DSL:16-24	13278615	605.434
MO:28-36	25236	1.052
MO:28-40	36390	1.323
MO:22-32	602425	16.785
CREOSOTE:10-36	29592616	477.817
DSL:12-14	5987049	0.000
DSL:14-16	6119115	0.000
DSL:16-18	4850884	0.000
DSL:18-20	6134769	0.000
DSL:20-22	1831123	0.000
DSL:22-24	461839	0.000
CRUDE:10-40	29603760	826.156
DSL:10-14	10034368	545.141
DSL:14-28	19533016	559.652
MINOIL:12-40	25556444	420.830
DSL:12-28	25552836	534.703
HYFL:24-36	160514	4.728

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

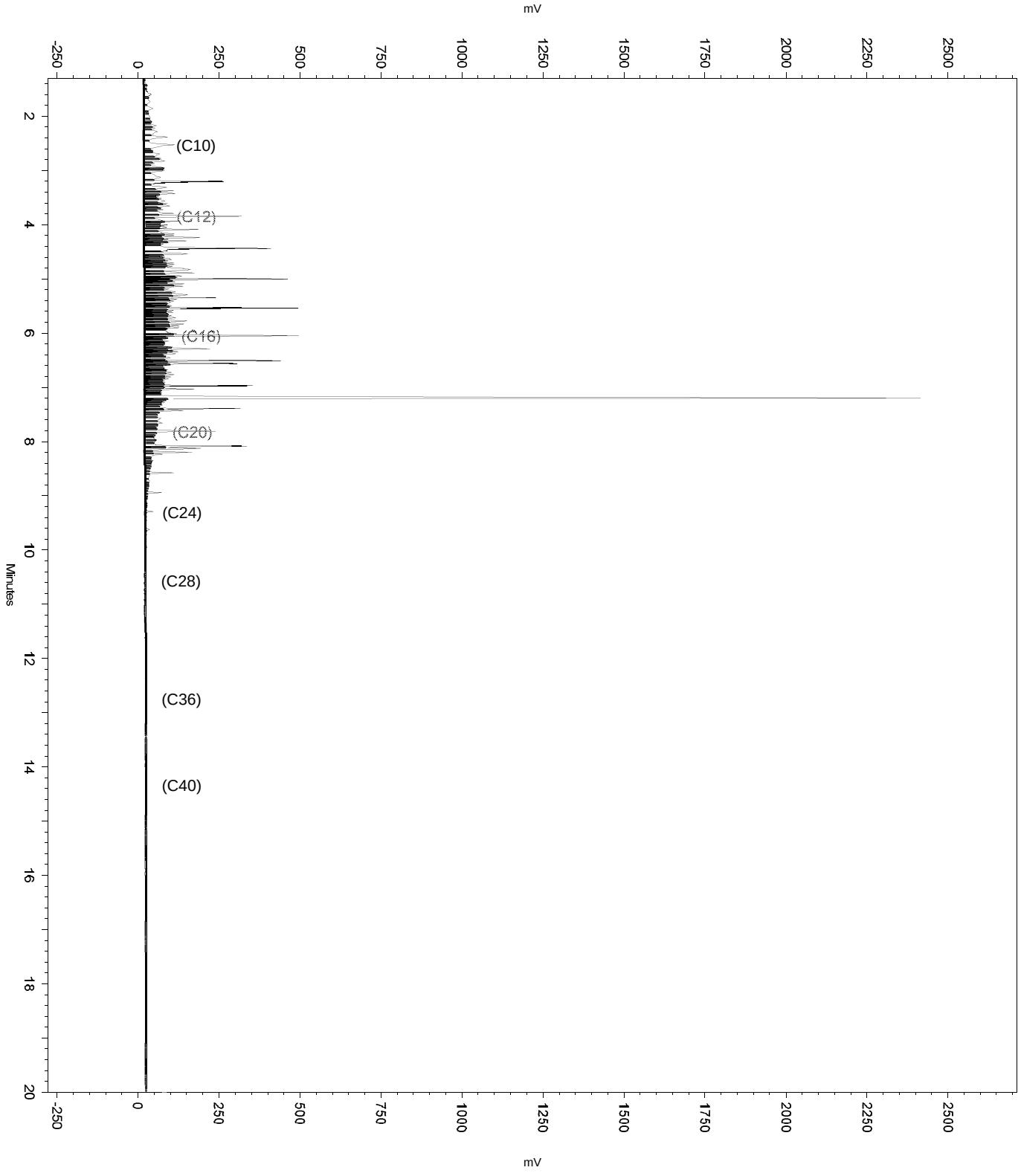
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

Yes	Move BL Start	1.337	0.389	0
No	Manual Baseline	7.134	7.349	0
No	Split Peak	7.21	0	0

Sample Name: **icv,s19823,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b020**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 9:31:20 PM
Analysis Date: 7/11/2012 3:47:55 PM
Instrument: GC15B Vial: 20 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



Sample Name: **icv,s19823,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b020**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 9:31:20 PM
Analysis Date: 7/11/2012 3:47:48 PM
Instrument: GC15B Vial: 20 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	15641286	342.169
JP8:10-16	15641286	396.373
KER:10-16	15641286	340.471
JP5:10-16	15641286	296.248
DSL:10-20	26476460	543.987
DSL:10-22	28265760	543.242
DSL:10-24	28701084	541.911
DSL:12-22	24439024	537.852
DSL:10-28	28819116	540.605
DSL:12-24	24874348	536.439
DSL:12-32	24997688	533.471
BUNKC:12-40	25028764	1261.083
TROIL:12-40	25028764	361.665
HYFL:12-40	25028764	497.494
MO:20-36	2367900	50.914
MO:22-36	578596	12.957
MO:24-36	143274	3.604
DSL:10-12	3826738	0.000
DSL:12-16	11814548	0.000
DSL:16-24	13059802	595.458
MO:28-36	25236	1.052
MO:28-40	36390	1.323
MO:22-32	558668	15.566
CREOSOTE:10-36	28844356	465.736
DSL:12-14	5819626	0.000
DSL:14-16	5994922	0.000
DSL:16-18	4761933	0.000
DSL:18-20	6073243	0.000
DSL:20-22	1789304	0.000
DSL:22-24	435322	0.000
CRUDE:10-40	28855500	805.274
DSL:10-14	9646364	524.062
DSL:14-28	19172756	549.330
MINOIL:12-40	25028764	412.141
DSL:12-28	25025156	523.662
HYFL:24-36	143274	4.220

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

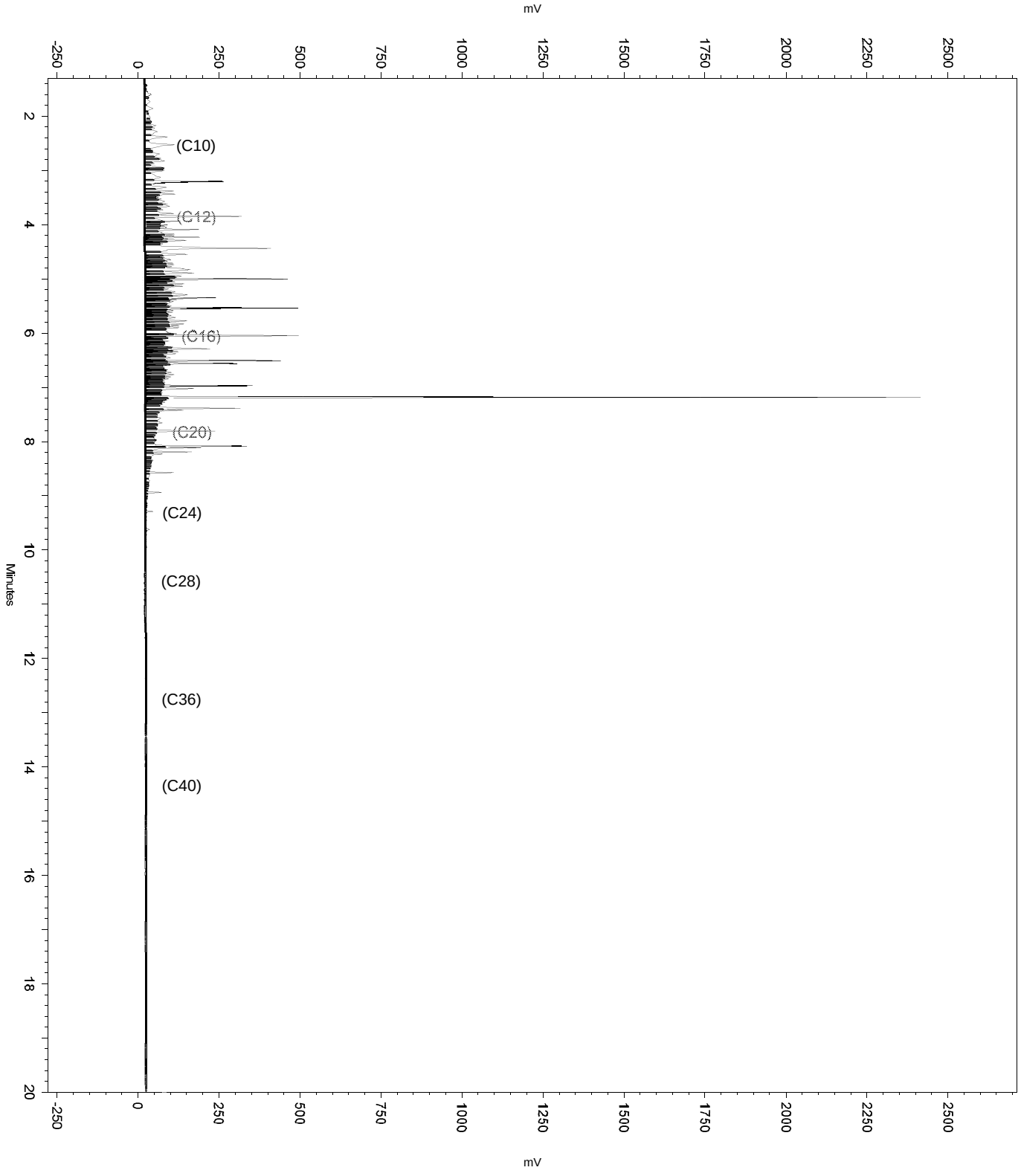
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

No	Manual Baseline	7.134	7.349	0
No	Split Peak	7.21	0	0

Sample Name: **icv,s19823,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b020**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh192.met
Run Date: 7/10/2012 9:31:20 PM
Analysis Date: 7/11/2012 3:47:48 PM
Instrument: GC15B Vial: 20 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



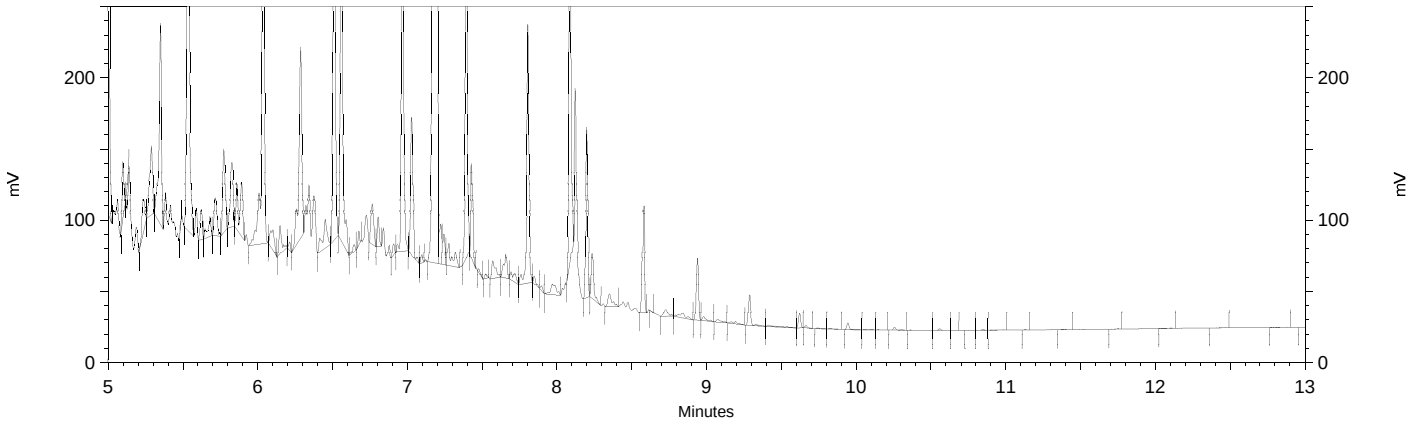
Sample Name: **icv,s19823,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b020**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr191.met
Run Date: 7/10/2012 9:31:20 PM
Analysis Date: 7/11/2012 3:33:17 PM
Instrument: GC15B Vial: 20 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.197	3138630	58.535
Hexacosane	9.943	5607	0.202



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	7.134	7.349	0
Yes	Split Peak	7.21	0	0

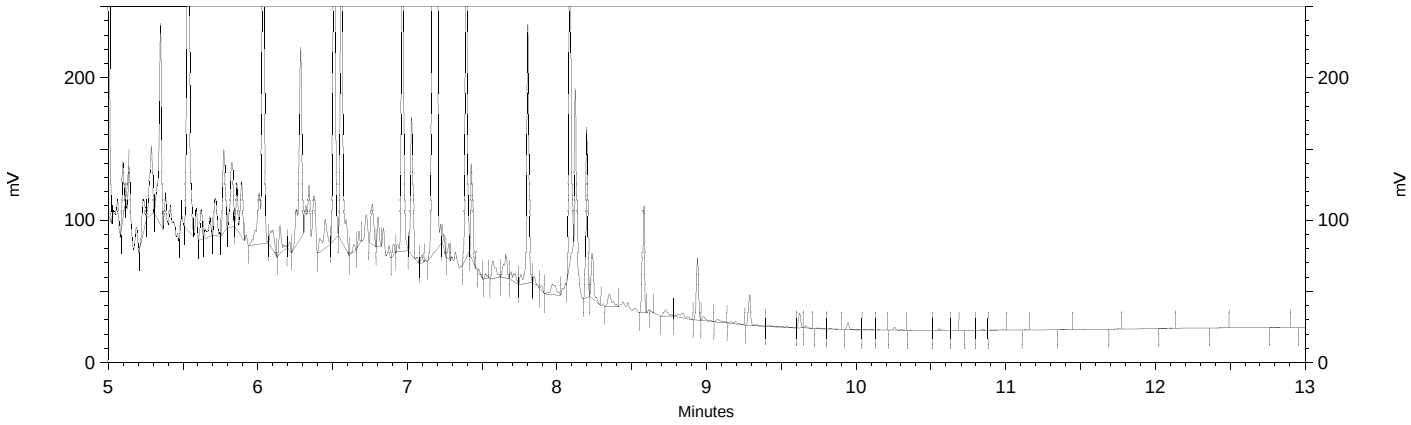
Sample Name: **icv,s19823,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b020**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\192.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr191.met
Run Date: 7/10/2012 9:31:20 PM
Analysis Date: 7/11/2012 3:33:03 PM
Instrument: GC15B Vial: 20 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.197	3122264	58.230
Hexacosane	9.943	5607	0.202



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\192b020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC15B
Calnum : 162281280001
Units : mg/L

Name : OTP-HEX_195
Date : 13-JUL-2012 17:42
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	195b011	162281280011	HEXOTP_5	13-JUL-2012 17:42	S19347
L2	195b012	162281280012	HEXOTP_10	13-JUL-2012 18:09	S19348
L3	195b013	162281280013	HEXOTP_25	13-JUL-2012 18:37	S19349
L4	195b014	162281280014	HEXOTP_50	13-JUL-2012 19:04	S19350
L5	195b015	162281280015	HEXOTP_100	13-JUL-2012 19:32	S19351
L6	195b016	162281280016	HEXOTP_200	13-JUL-2012 20:00	S19352

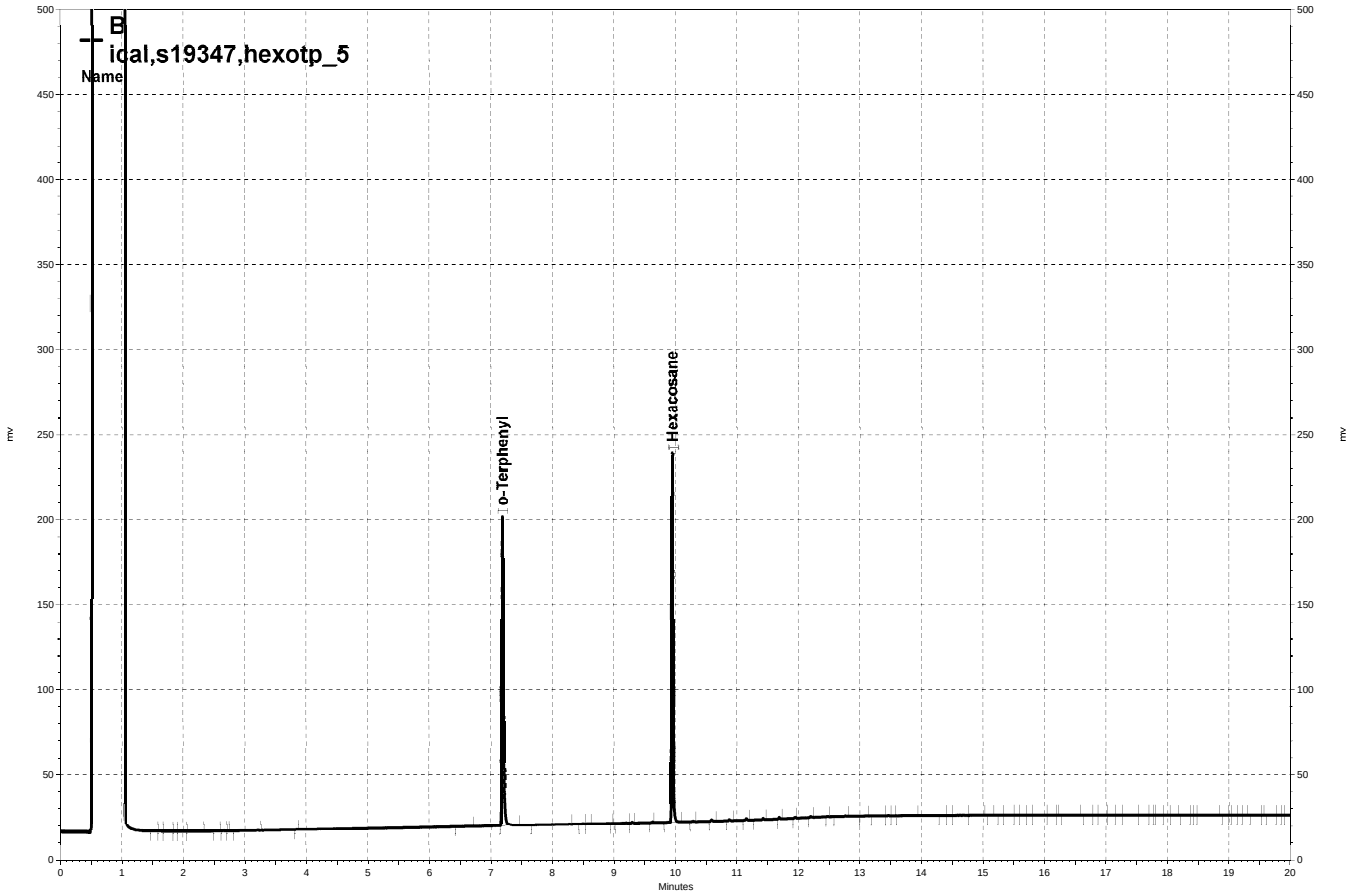
Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	62022	61944	61801	62655	63080	61712	AVRG		1.61E-5		62202	1	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.0000	0	10.000	0	25.000	-1	50.000	1	100.00	1	200.00	-1

JDG 07/16/12 : Corrected automatically drawn baseline in multiple levels.

Analyst: JDG Date: 07/16/12 Reviewer: EAH Date: 07/16/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b011, B

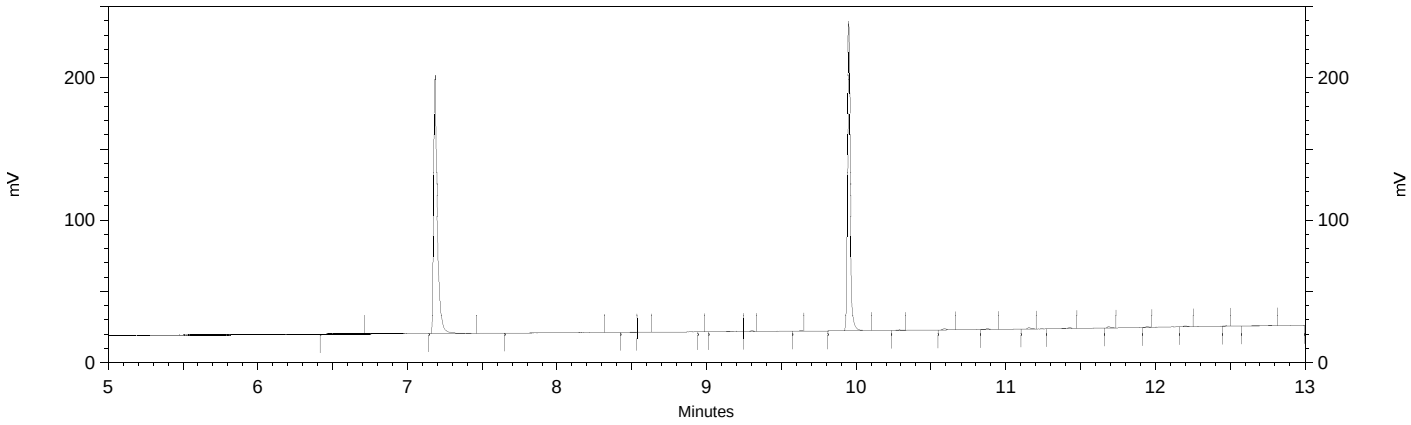
Sample Name: **ical,s19347,hexotp_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\195.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr195.met
Run Date: 7/13/2012 5:42:15 PM
Analysis Date: 7/16/2012 9:51:39 AM
Instrument: GC15B Vial: 11 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.188	310112	5.000 CAL
Hexacosane	9.950	278384	5.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

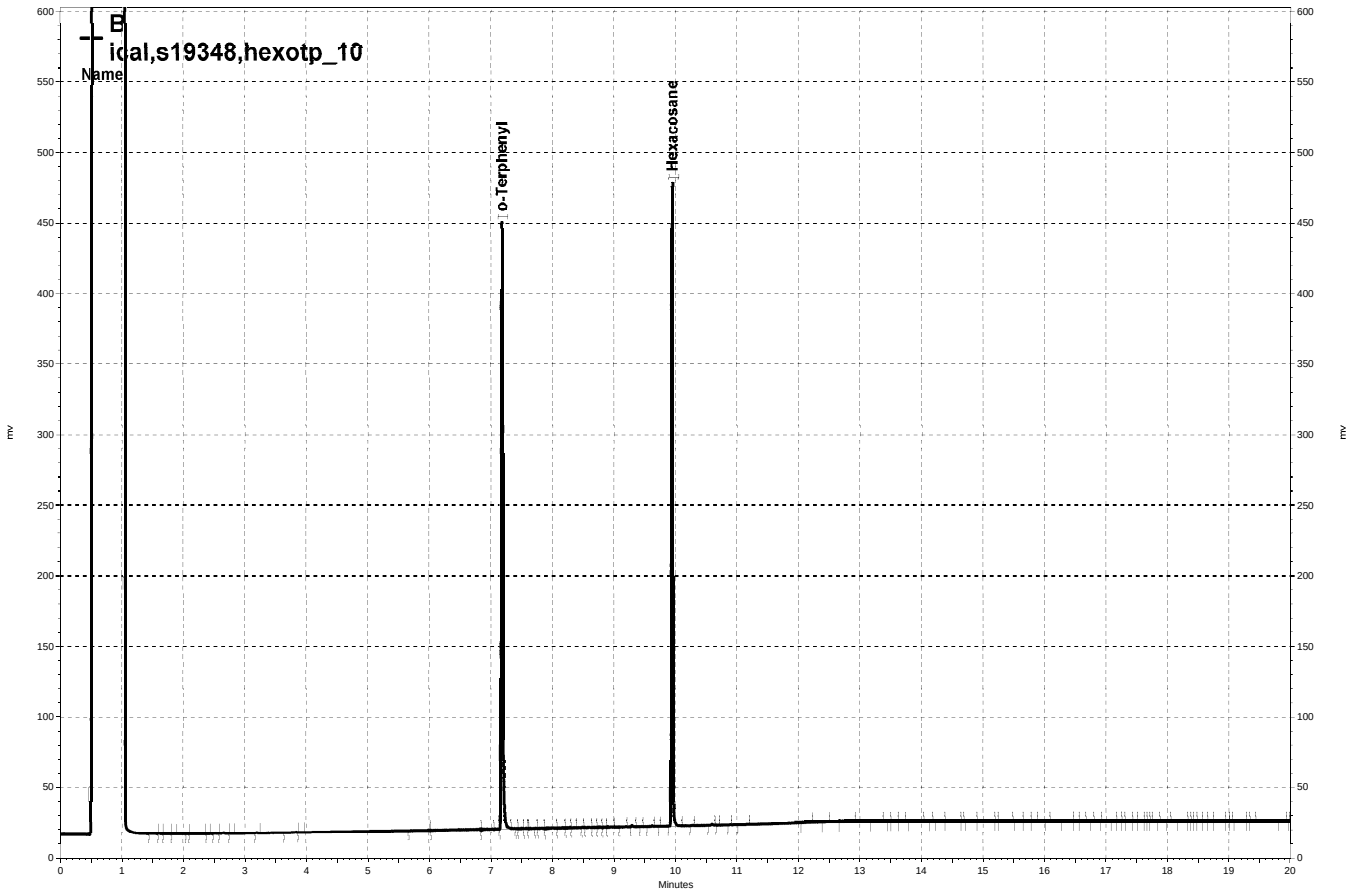
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b012, B

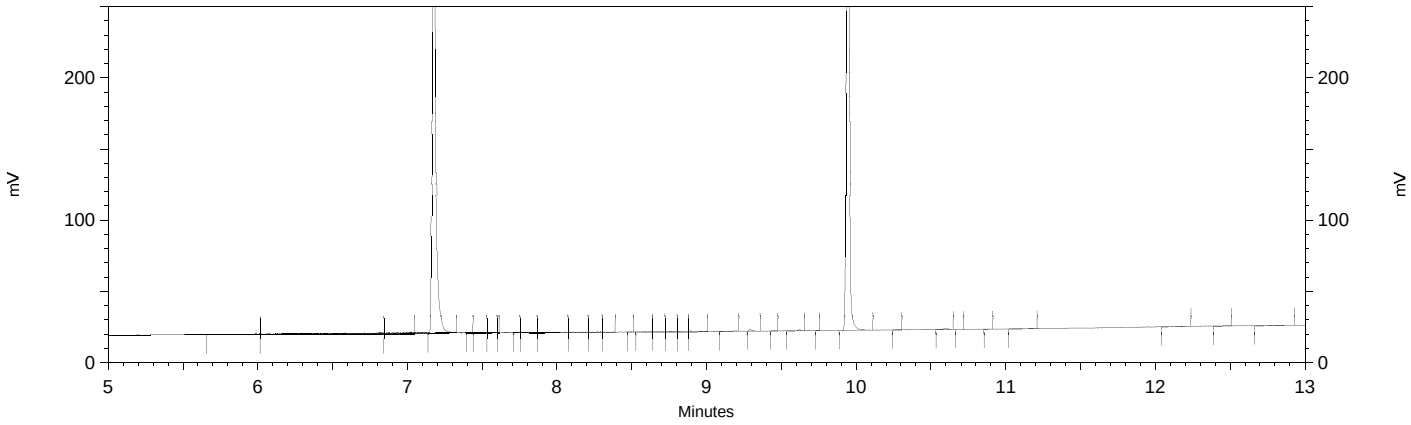
Sample Name: **ical,s19348,hexotp_10**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\195.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr195.met
Run Date: 7/13/2012 6:09:46 PM
Analysis Date: 7/16/2012 9:51:44 AM
Instrument: GC15B Vial: 12 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.180	619438	10.000 CAL
Hexacosane	9.947	551509	10.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	7.139	7.332	0

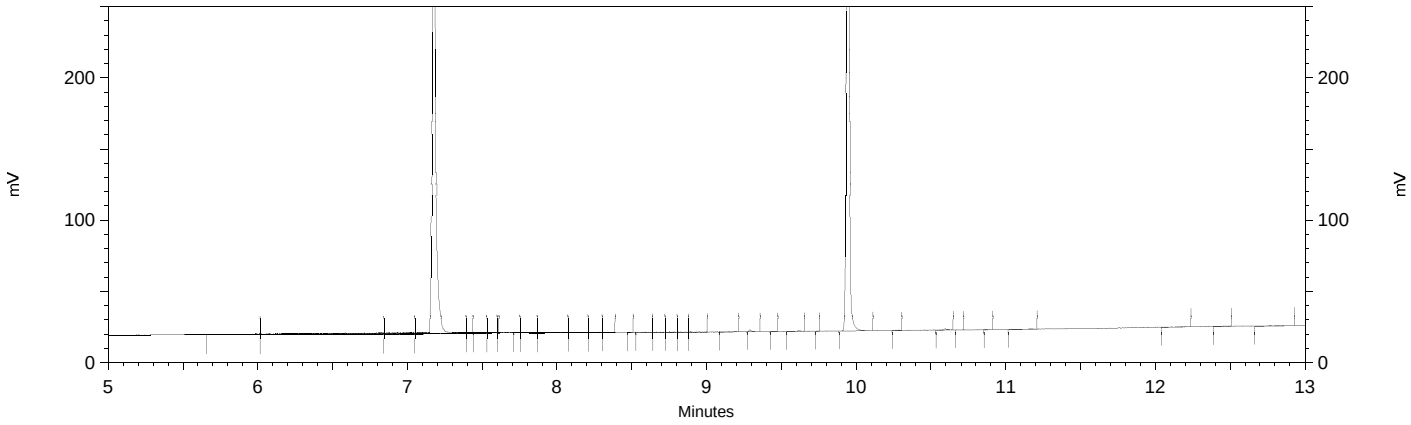
Sample Name: **ical,s19348,hexotp_10**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\195.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr195.met
Run Date: 7/13/2012 6:09:46 PM
Analysis Date: 7/16/2012 9:42:59 AM
Instrument: GC15B Vial: 12 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.180	625089	10.000 CAL
Hexacosane	9.947	551509	10.000 CAL



---< General Method Parameters >----------

No items selected for this section

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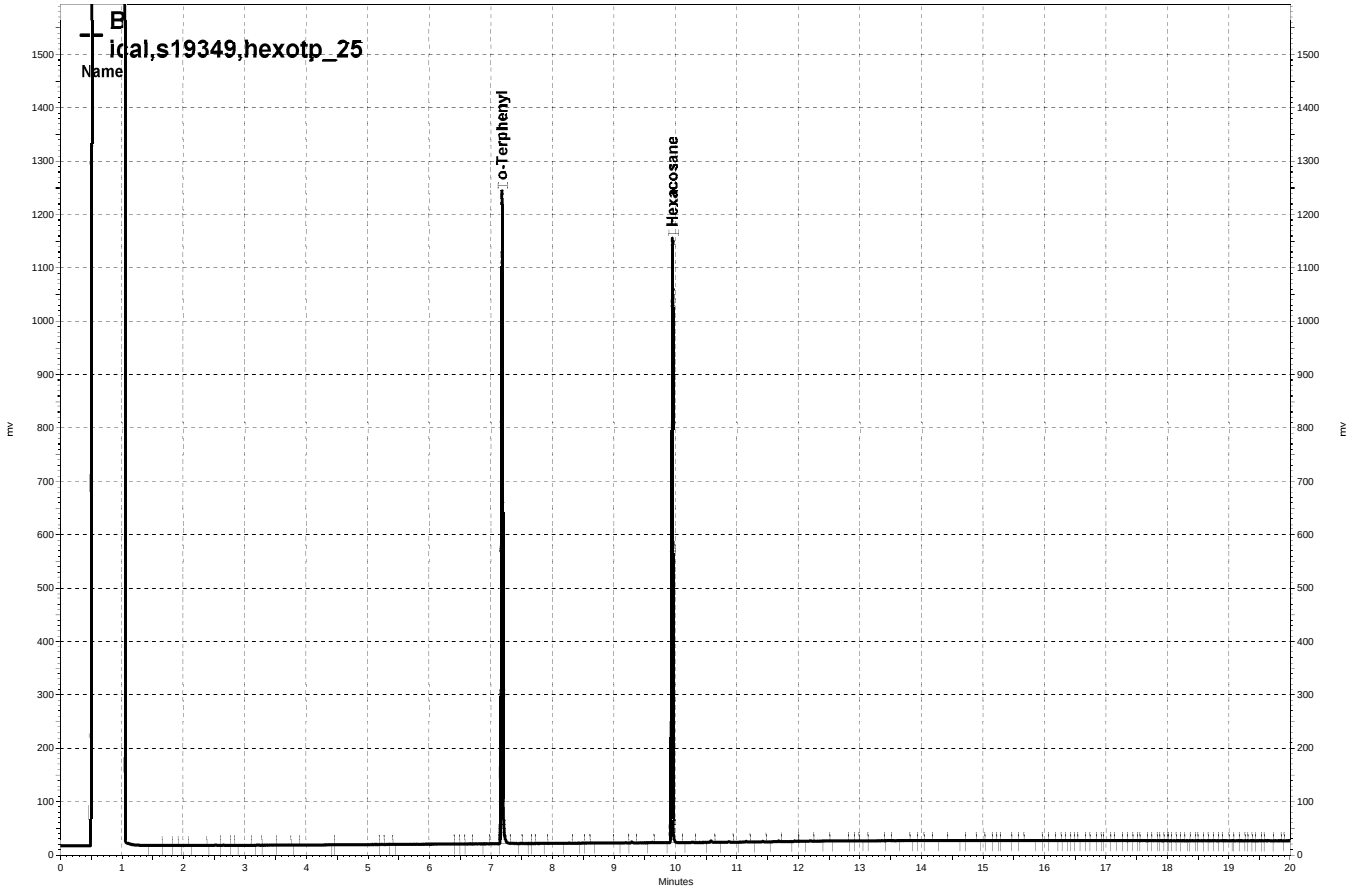
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b013, B

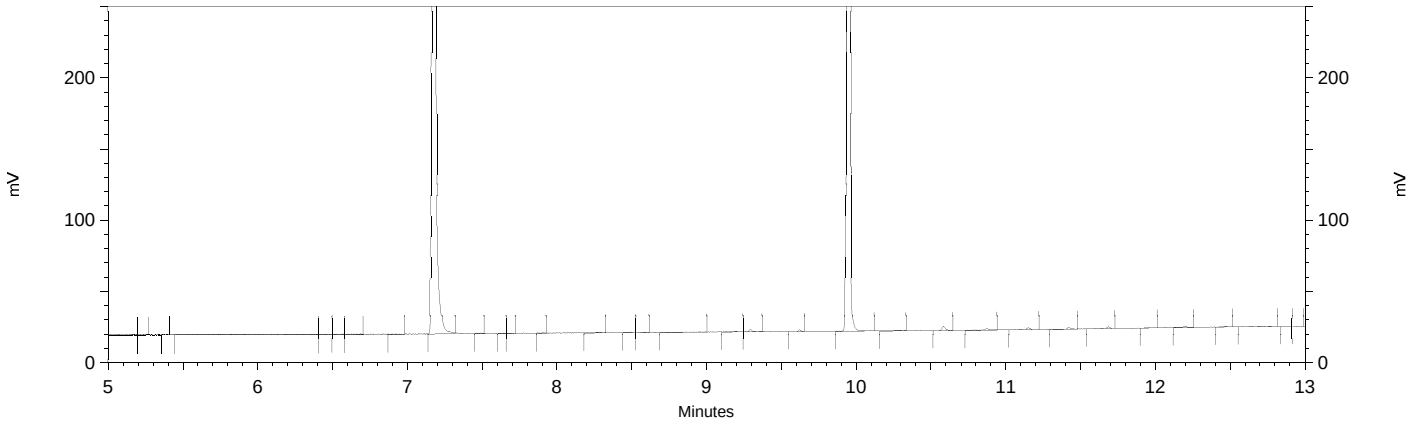
Sample Name: **ical,s19349,hexotp_25**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\195.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr195.met
Run Date: 7/13/2012 6:37:18 PM
Analysis Date: 7/16/2012 9:51:49 AM
Instrument: GC15B Vial: 13 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.185	1545028	25.000 CAL
Hexacosane	9.953	1375750	25.000 CAL



---< General Method Parameters >----------

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	7.138	7.32	0

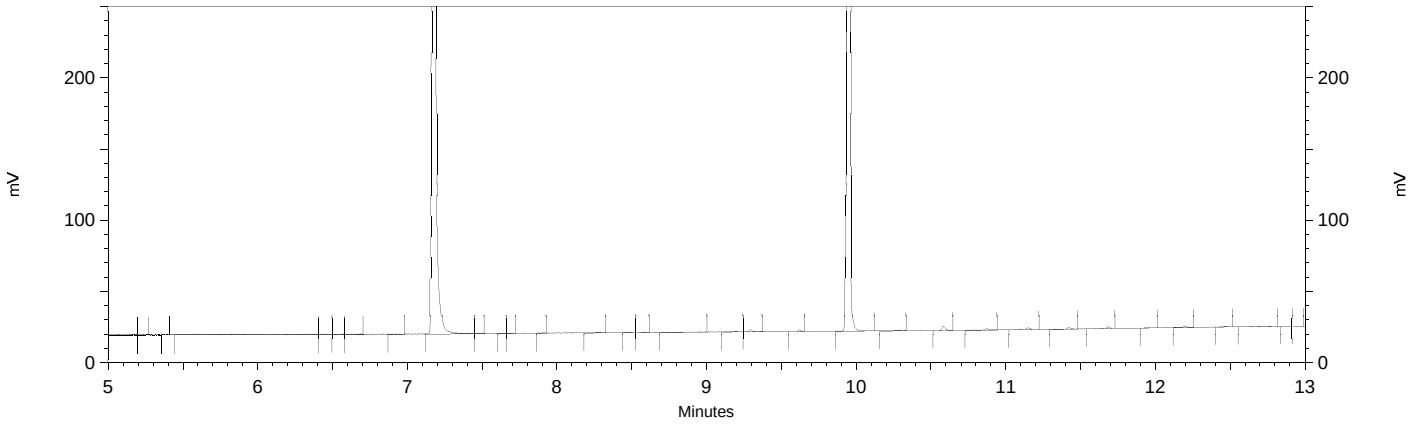
Sample Name: **ical,s19349,hexotp_25**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\195.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr195.met
Run Date: 7/13/2012 6:37:18 PM
Analysis Date: 7/16/2012 9:43:21 AM
Instrument: GC15B Vial: 13 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.185	1551436	25.000 CAL
Hexacosane	9.953	1375750	25.000 CAL



---< General Method Parameters >----------

No items selected for this section

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No items selected for this section

Integration Events
==========

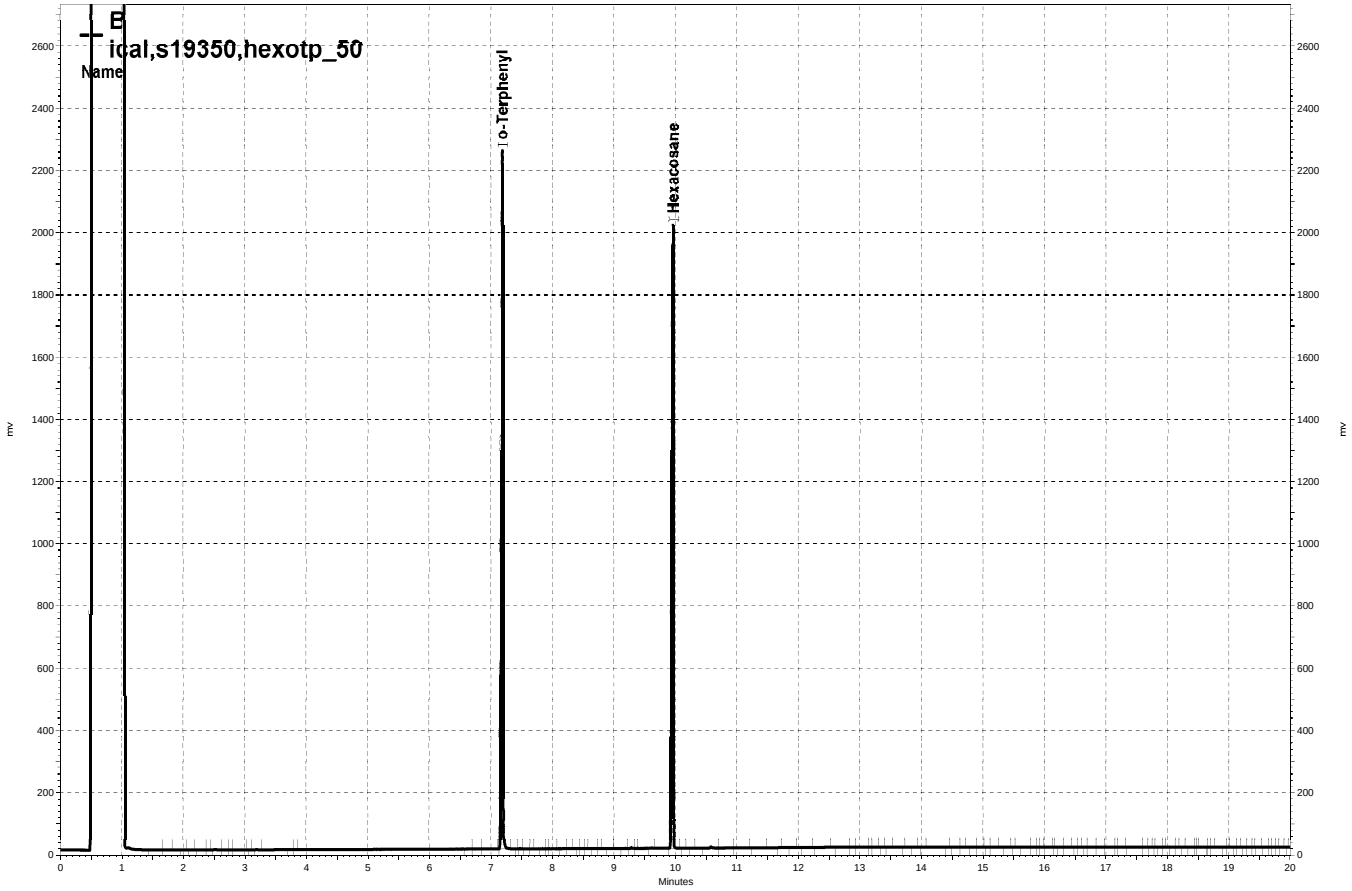
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b014, B

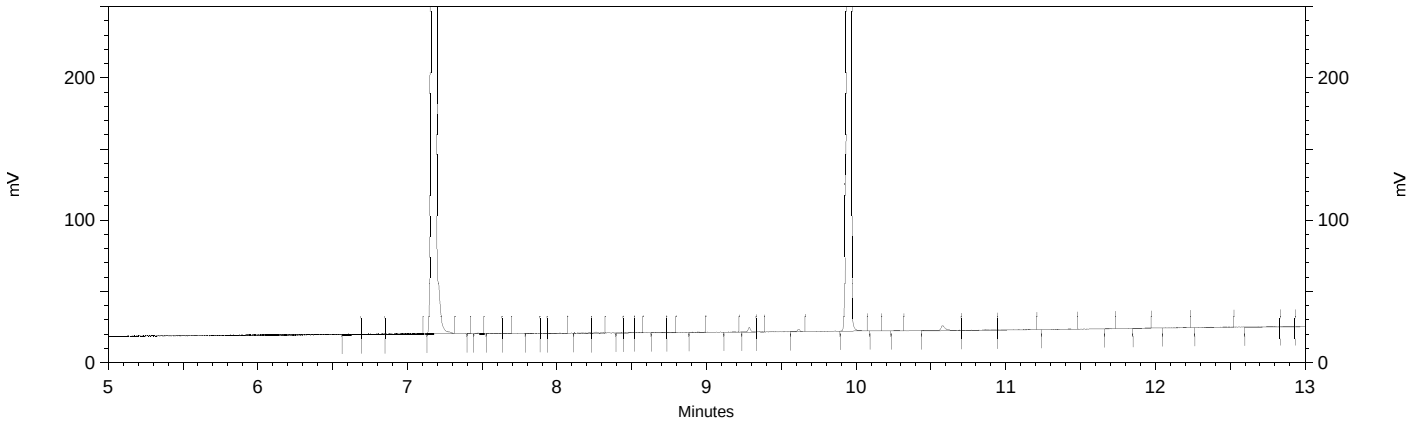
Sample Name: **ical,s19350,hexotp_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\195.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr195.met
Run Date: 7/13/2012 7:04:52 PM
Analysis Date: 7/16/2012 9:51:52 AM
Instrument: GC15B Vial: 14 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.190	3132756	50.000 CAL
Hexacosane	9.962	2685133	50.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	7.133	7.32	0
Yes	Manual Peak	9.891	10.074	0

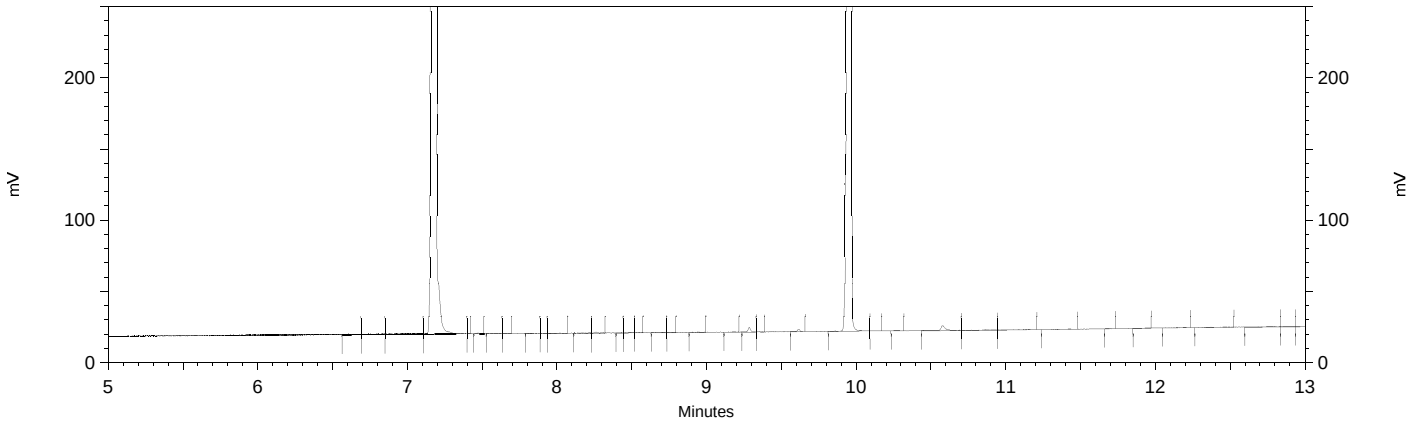
Sample Name: **ical,s19350,hexotp_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\195.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr195.met
Run Date: 7/13/2012 7:04:52 PM
Analysis Date: 7/16/2012 9:43:55 AM
Instrument: GC15B Vial: 14 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.190	3137528	50.000 CAL
Hexacosane	9.962	2686442	50.000 CAL



---< General Method Parameters >---

No items selected for this section

---< B >---

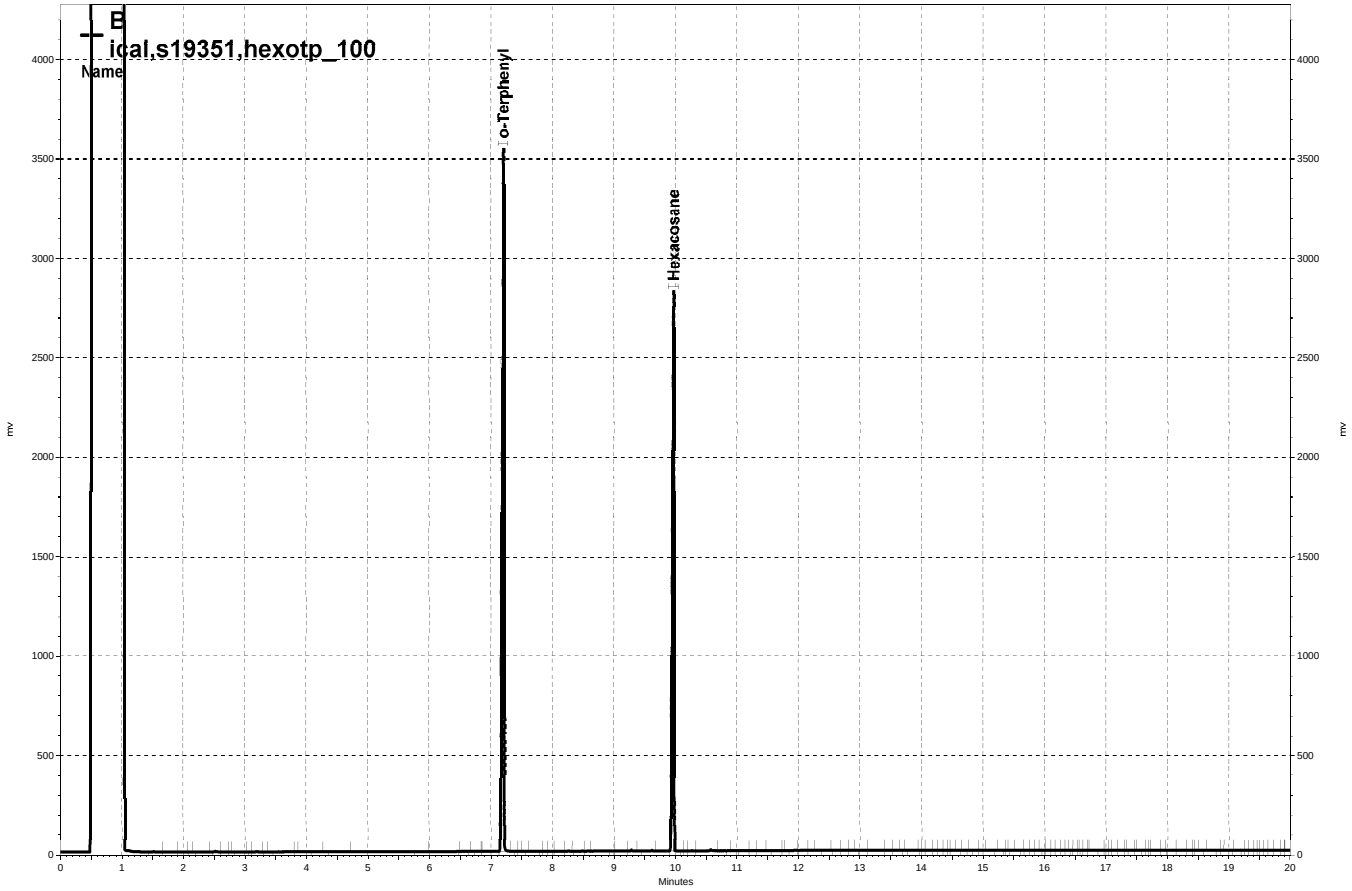
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b015, B

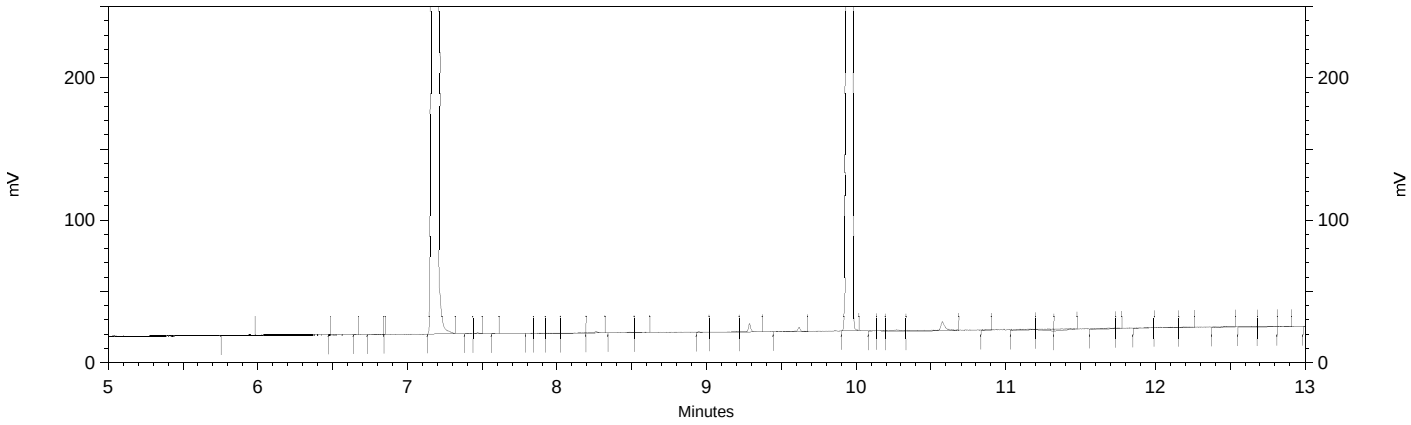
Sample Name: **ical,s19351,hexotp_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\195.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr195.met
Run Date: 7/13/2012 7:32:31 PM
Analysis Date: 7/16/2012 9:51:55 AM
Instrument: GC15B Vial: 15 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.207	6308047	100.000 CAL
Hexacosane	9.973	4481767	100.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	7.135	7.323	0
Yes	Manual Peak	9.901	10.018	0

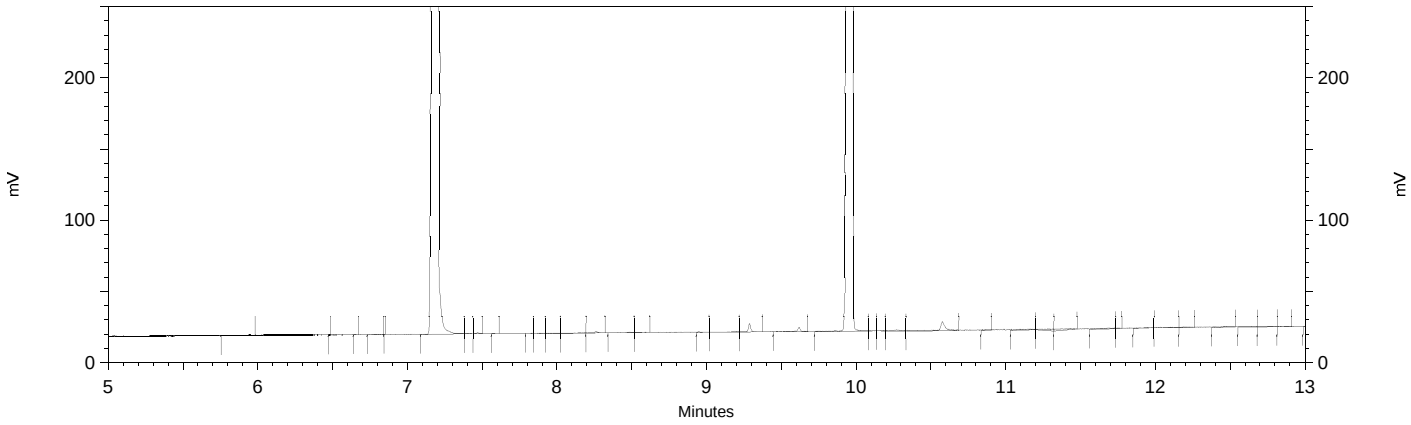
Sample Name: **ical,s19351,hexotp_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b015**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\195.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr195.met
Run Date: 7/13/2012 7:32:31 PM
Analysis Date: 7/16/2012 9:44:37 AM
Instrument: GC15B Vial: 15 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.207	6311466	100.000 CAL
Hexacosane	9.973	4488089	100.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< B >----------

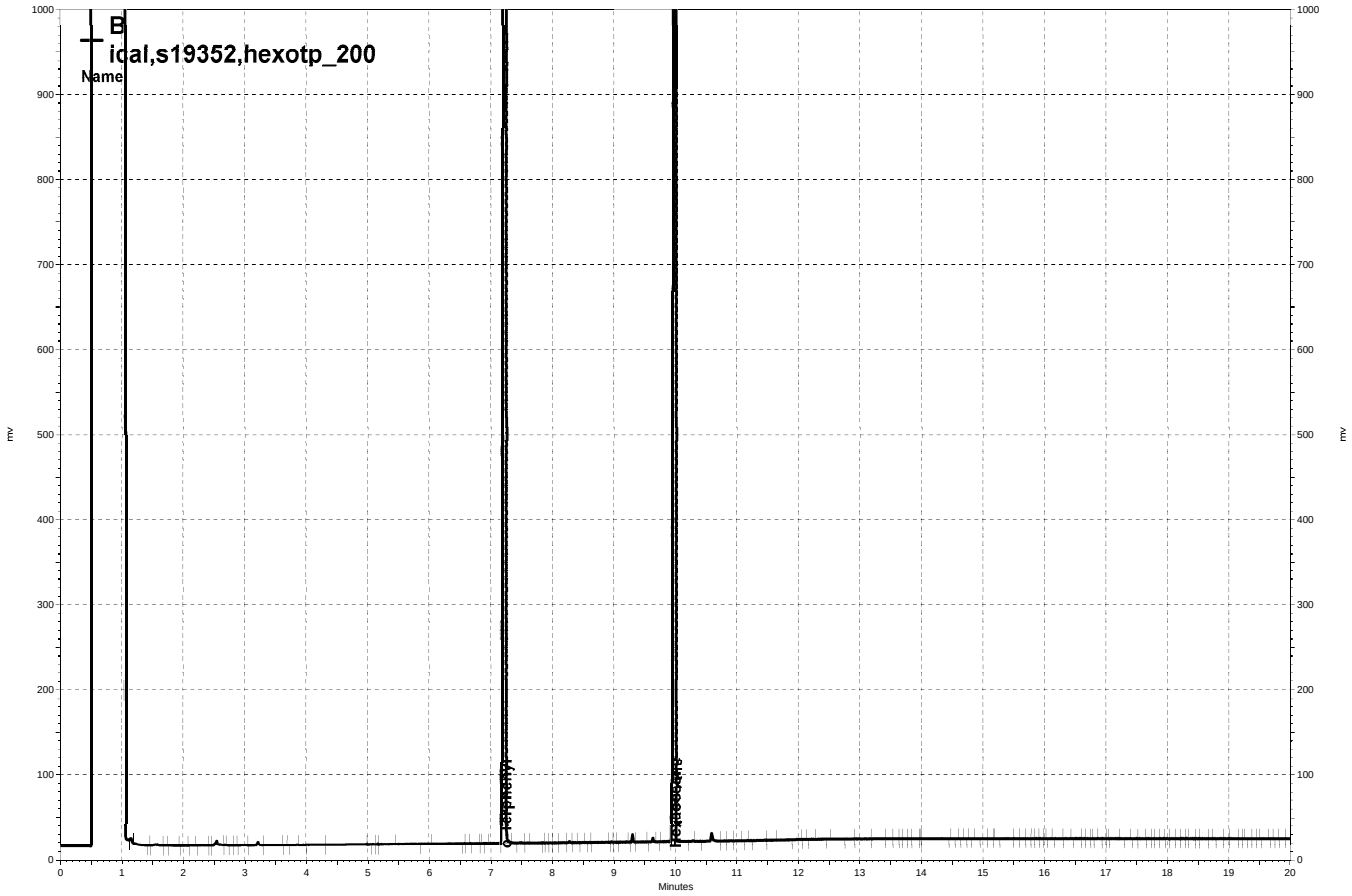
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b016, B

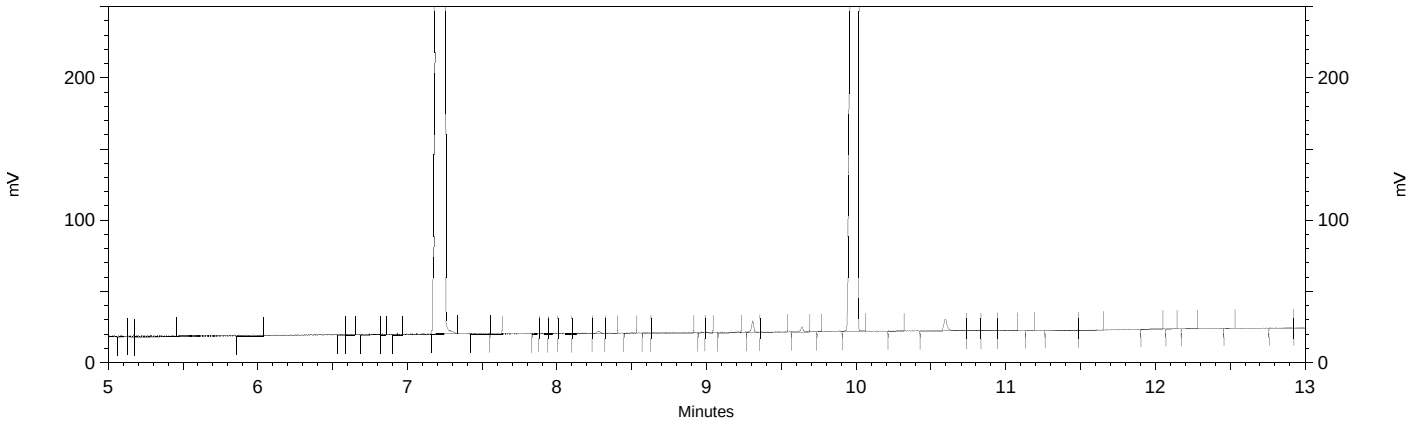
Sample Name: **ical,s19352,hexotp_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\195.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr195.met
Run Date: 7/13/2012 8:00:25 PM
Analysis Date: 7/16/2012 9:51:58 AM
Instrument: GC15B Vial: 16 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.250	12342364	200.000 CAL
Hexacosane	10.007	6774173	200.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	7.161	7.34	0
Yes	Manual Peak	9.908	10.063	0

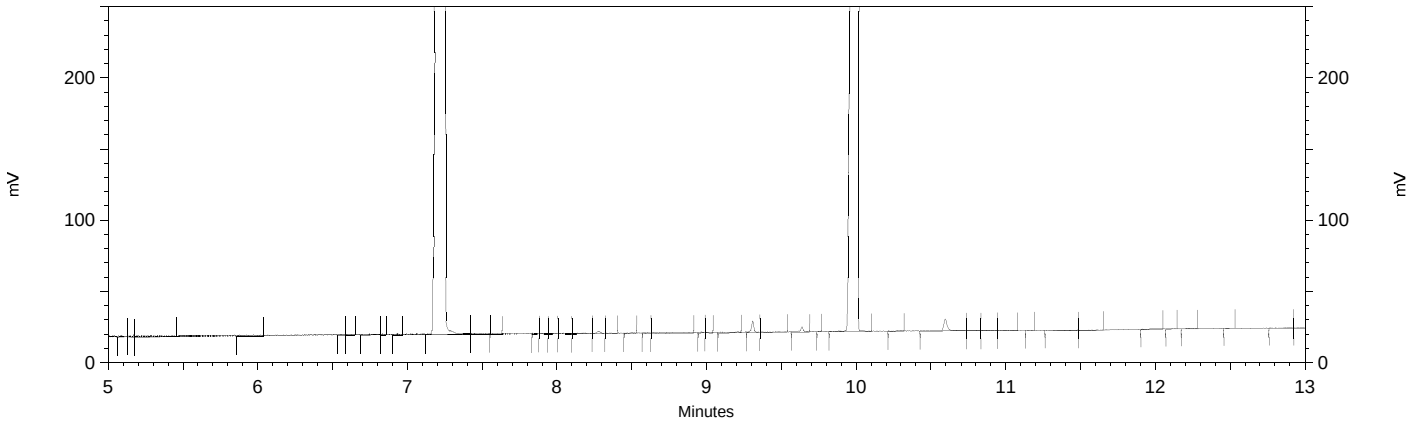
Sample Name: **ical,s19352,hexotp_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\195.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr195.met
Run Date: 7/13/2012 8:00:25 PM
Analysis Date: 7/16/2012 9:46:20 AM
Instrument: GC15B Vial: 16 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.250	12349642	200.000 CAL
Hexacosane	10.007	6777551	200.000 CAL



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\195b016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC27A
Calnum : 972285785002
Units : mg/L

Name : dsl_198
Date : 16-JUL-2012 22:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	198a015	972285785015	DSL_10	16-JUL-2012 22:32	S19968
L2	198a016	972285785016	DSL_100	16-JUL-2012 22:57	S19945
L3	198a017	972285785017	DSL_500	16-JUL-2012 23:23	S19946
L4	198a018	972285785018	DSL_1000	16-JUL-2012 23:48	S19947
L5	198a019	972285785019	DSL_5000	17-JUL-2012 00:13	S19943
L6	198a020	972285785020	DSL_7500	17-JUL-2012 00:38	S19948

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C24	524267	417627	404818	409718	367507	386248	AVRG		2.39E-6		418364	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C24	10.000	**25**	100.00	0	500.00	-3	1000.0	-2	5000.0	-12	7500.0	-8

MAC 07/17/12 : Corrected automatically drawn baseline in all levels.

MAC 07/17/12 : cm did not need update. RT within one-hundredth of a second

MAC 07/17/12 : dsl c10-c14 %RSD above 20

Analyst: MAC Date: 07/17/12 Reviewer: EAH Date: 07/18/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

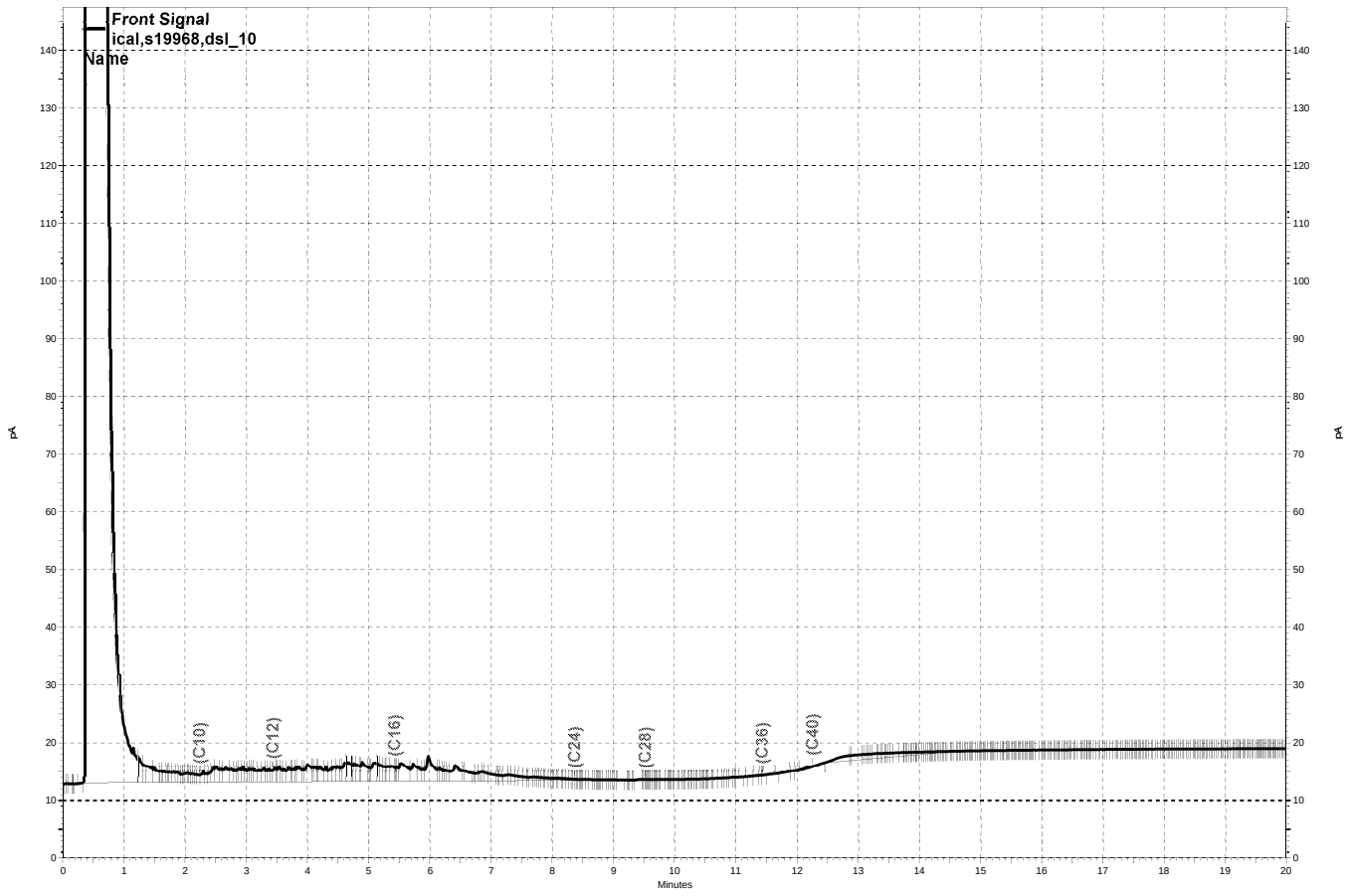
CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 GCSV Water
EPA 8015D

Inst : GC27A Name : dsl_198
Calnum : 972285785002 Cal Date : 16-JUL-2012

ICV 972285785022 (198a022 17-JUL-2012) stds: S20069

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C24	500.0	461.8	mg/L	-8	20	

Analyst: MAC Date: 07/17/12 Reviewer: EAH Date: 07/17/12



\\lims\gdrive\ezchrom\Projects\GC27\Data\198a015.dat, Front Signal

Sample Name: **ical,s19968,dsl_10**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a015.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/16/2012 10:32:26 PM
Analysis Date: 7/17/2012 12:55:36 PM
Instrument: GC27 (Offline)A Vial: 15 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		3472232	0.000 CAL
JP8:10-16		3472232	0.000 CAL
KER:10-16		3472232	0.000 CAL
JP5:10-16		3472232	0.000 CAL
DSL:10-20		4911780	10.000 CAL
DSL:10-22		5129409	10.000 CAL
DSL:10-24		5242665	10.000 CAL
DSL:12-22		3987618	10.000 CAL
DSL:10-28		5281503	10.000 CAL
DSL:12-24		4100874	10.000 CAL
DSL:12-32		4157947	10.000 CAL
BUNKC:12-40		4168580	0.000 CAL
HYFL:12-40		4168580	0.000 CAL
MO:22-32		170329	0.000 CAL
MO:20-36		394571	0.000 CAL
MO:22-36		176942	0.000 CAL
MO:24-36		63686	0.000 CAL
MO:28-36		24848	0.000 CAL
MO:28-40		28868	0.000 CAL
DSL:10-12		1141791	0.000 CAL
DSL:12-16		2330441	0.000 CAL
DSL:16-24		1770433	10.000 CAL
DSL:10-14		2321254	10.000 CAL
DSL:14-28		2960249	10.000 CAL
TROIL:12-40		4168580	0.000 CAL
MINOIL:12-40		4168580	0.000 CAL
CRUDE:10-40		5310371	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

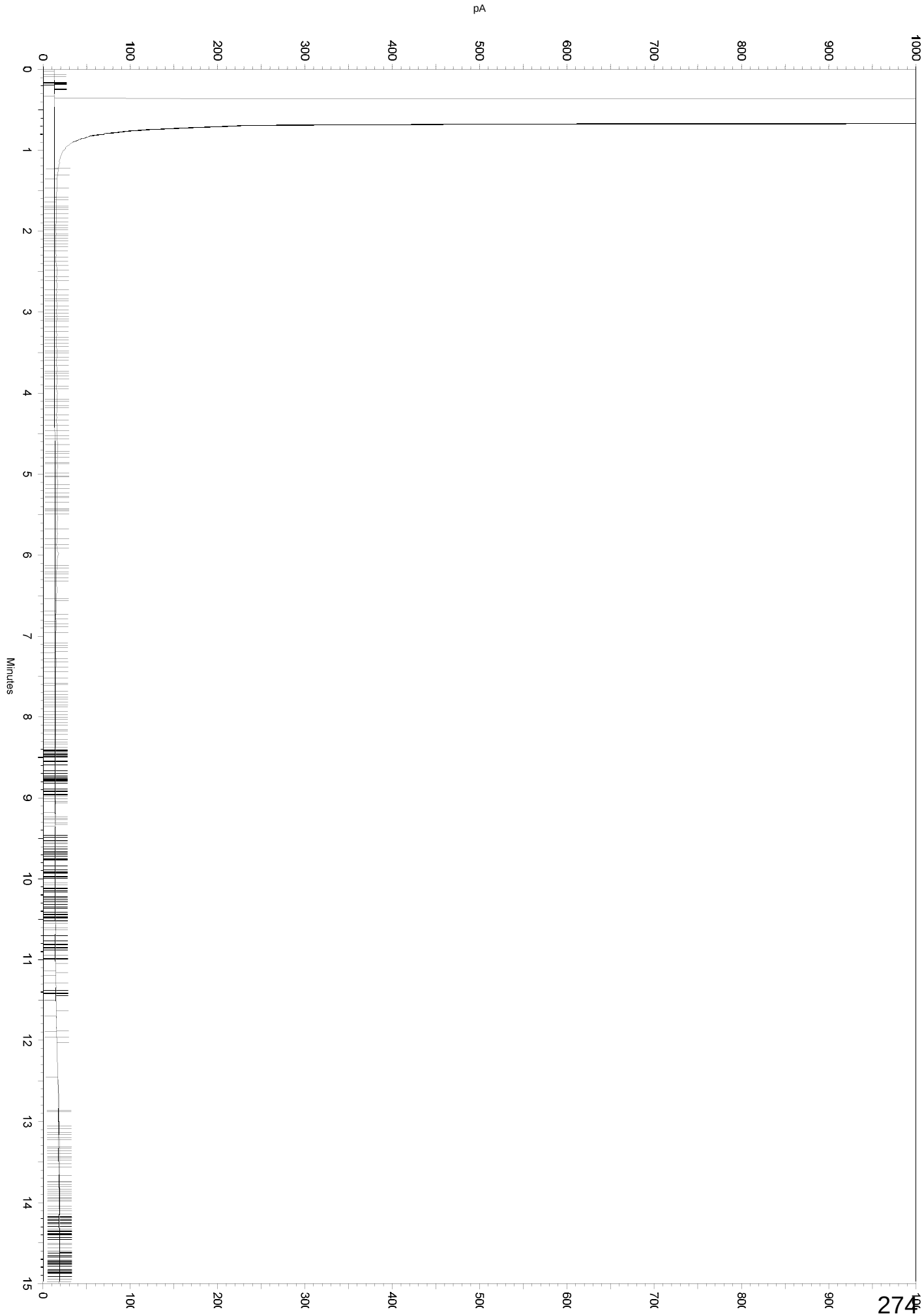
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a015.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Move BL Start	9.065	6.817	0
Yes	Move BL Stop	9.182	9.065	0
Yes	Move BL Start	9.265	0.333	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Sample Name: **ical,s19968,dsl_10**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a015.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/16/2012 10:32:26 PM
Analysis Date: 7/17/2012 12:48:45 PM
Instrument: GC27 (Offline)A Vial: 15 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		1474756	0.000 CAL
JP8:10-16		1474756	0.000 CAL
KER:10-16		1474756	0.000 CAL
JP5:10-16		1474756	0.000 CAL
DSL:10-20		1888696	10.000 CAL
DSL:10-22		1914079	10.000 CAL
DSL:10-24		1942592	10.000 CAL
DSL:12-22		1453289	10.000 CAL
DSL:10-28		1964260	10.000 CAL
DSL:12-24		1481802	10.000 CAL
DSL:12-32		1521705	10.000 CAL
BUNKC:12-40		1532338	0.000 CAL
HYFL:12-40		1532338	0.000 CAL
MO:22-32		68416	0.000 CAL
MO:20-36		100412	0.000 CAL
MO:22-36		75029	0.000 CAL
MO:24-36		46516	0.000 CAL
MO:28-36		24848	0.000 CAL
MO:28-40		28868	0.000 CAL
DSL:10-12		460790	0.000 CAL
DSL:12-16		1013966	0.000 CAL
DSL:16-24		467836	10.000 CAL
DSL:10-14		941218	10.000 CAL
DSL:14-28		1023042	10.000 CAL
TROIL:12-40		1532338	0.000 CAL
MINOIL:12-40		1532338	0.000 CAL
CRUDE:10-40		1993128	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

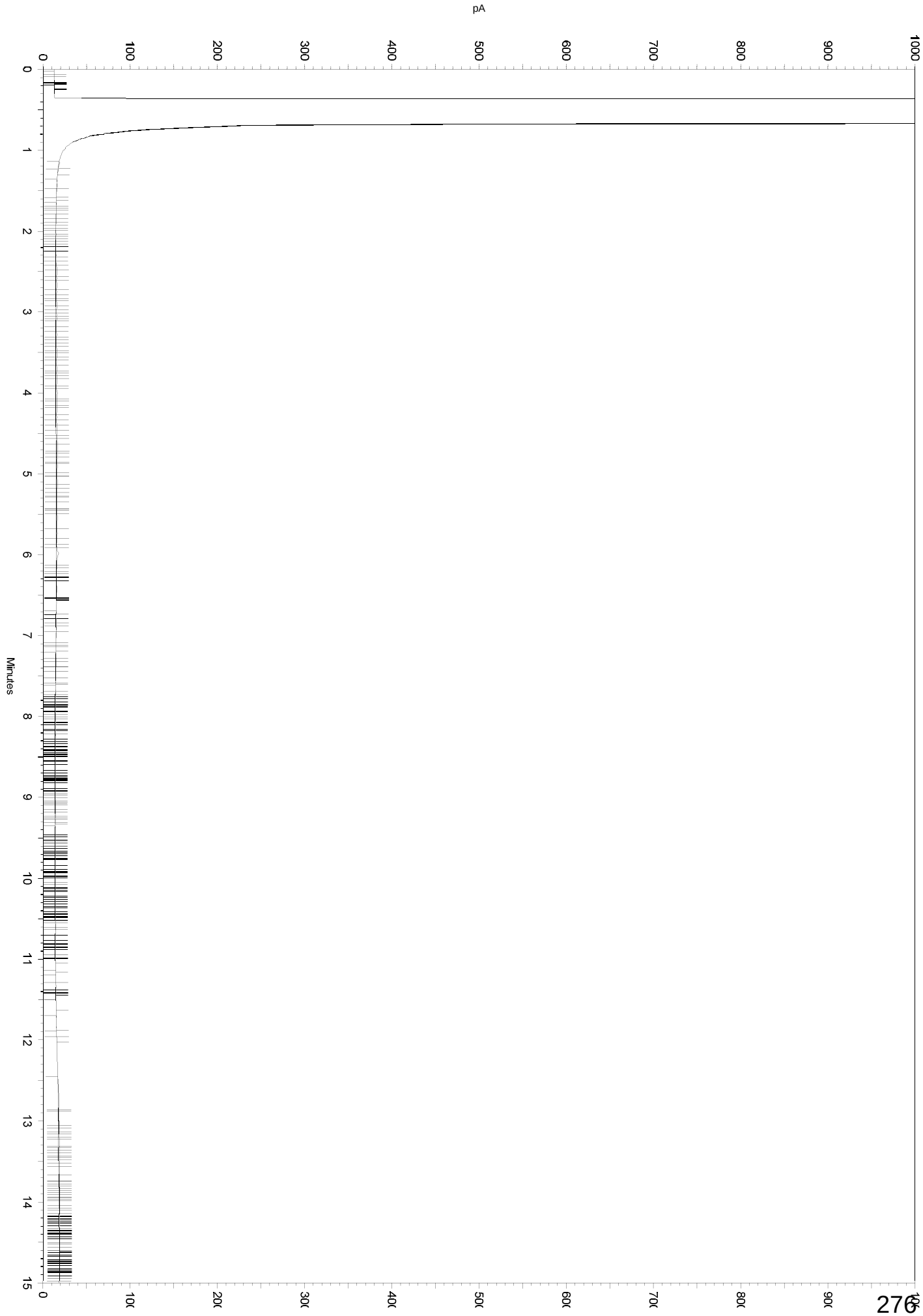
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a015.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

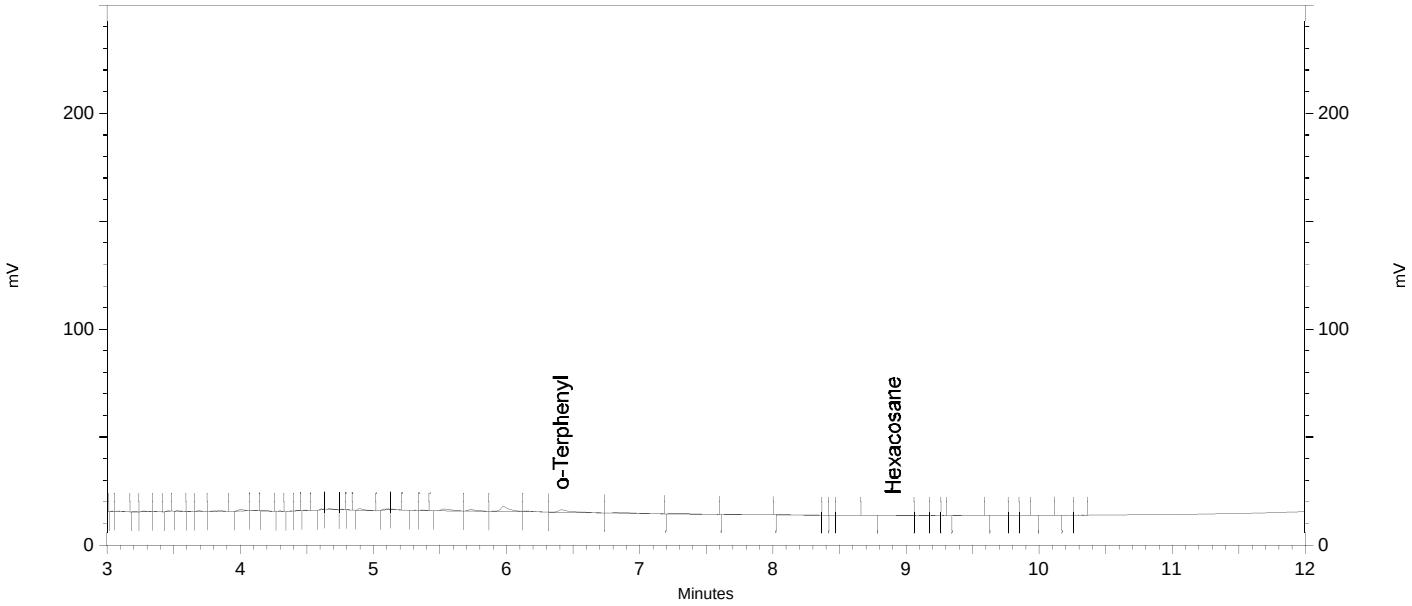
Sample Name: **ical,s19968,dsl_10**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a015.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_198a.met**
Run Date: 7/16/2012 10:32:26 PM
Analysis Date: 7/16/2012 10:52:28 PM
Instrument: GC27A Vial: 15 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.415	65611	0.211
Hexacosane	8.903	4859	0.022



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

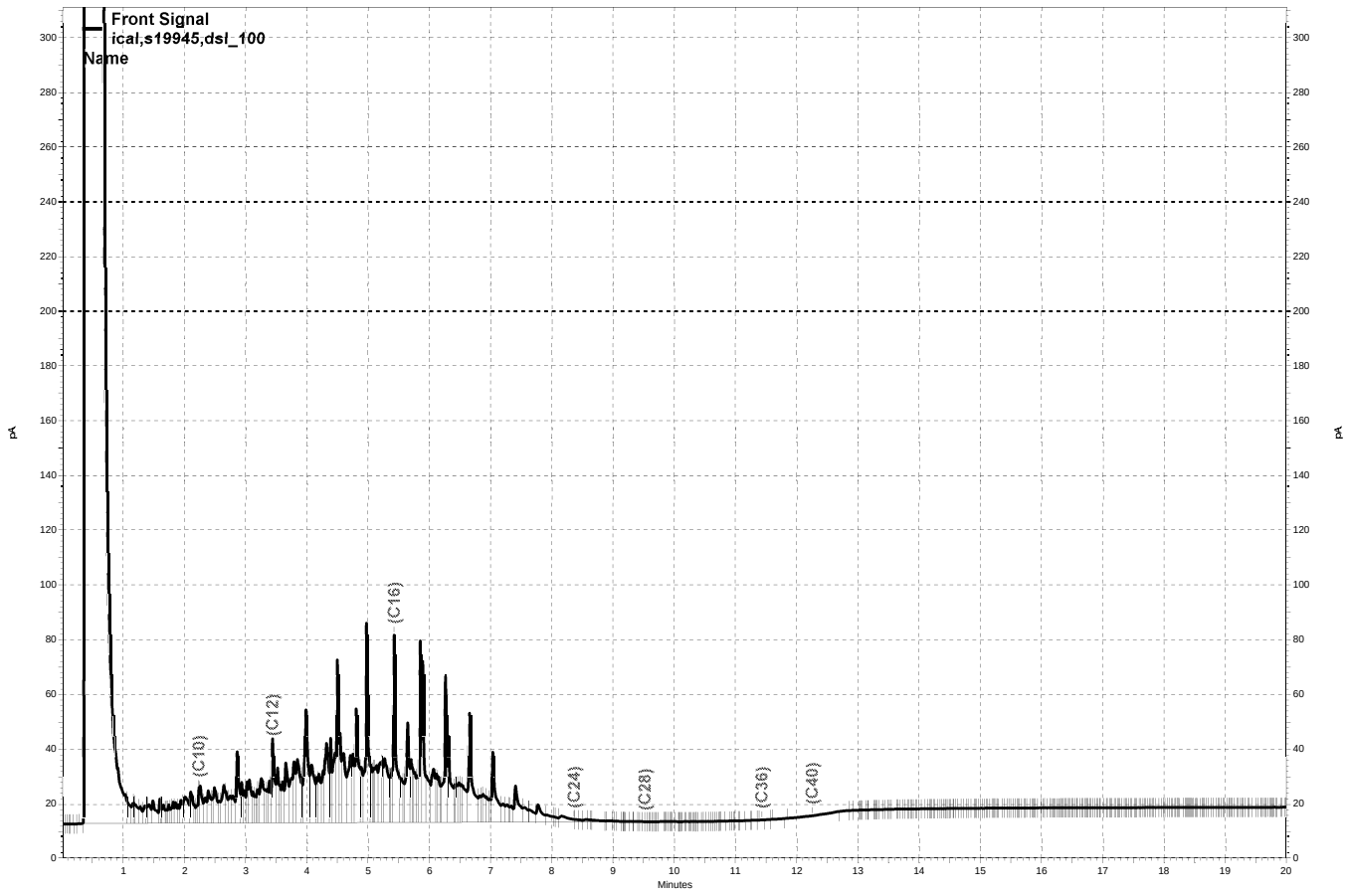
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10001\198a015.dat_A473.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None



\\lims\gdrive\ezchrom\Projects\GC27\Data\198a016.dat, Front Signal

Sample Name: **ical,s19945,dsl_100**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a016.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/16/2012 10:57:45 PM
Analysis Date: 7/17/2012 12:55:52 PM
Instrument: GC27 (Offline)A Vial: 16 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		26933983	0.000 CAL
JP8:10-16		26933983	0.000 CAL
KER:10-16		26933983	0.000 CAL
JP5:10-16		26933983	0.000 CAL
DSL:10-20		38770002	100.000 CAL
DSL:10-22		41090964	100.000 CAL
DSL:10-24		41762728	100.000 CAL
DSL:12-22		34974979	100.000 CAL
DSL:10-28		41957584	100.000 CAL
DSL:12-24		35646743	100.000 CAL
DSL:12-32		35858812	100.000 CAL
BUNKC:12-40		35869756	0.000 CAL
HYFL:12-40		35869756	0.000 CAL
MO:22-32		883833	0.000 CAL
MO:20-36		3213731	0.000 CAL
MO:22-36		892769	0.000 CAL
MO:24-36		221005	0.000 CAL
MO:28-36		26149	0.000 CAL
MO:28-40		28157	0.000 CAL
DSL:10-12		6115985	0.000 CAL
DSL:12-16		20817998	0.000 CAL
DSL:16-24		14828745	100.000 CAL
DSL:10-14		16370810	100.000 CAL
DSL:14-28		25586774	100.000 CAL
TROIL:12-40		35869756	0.000 CAL
MINOIL:12-40		35869756	0.000 CAL
CRUDE:10-40		41985741	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

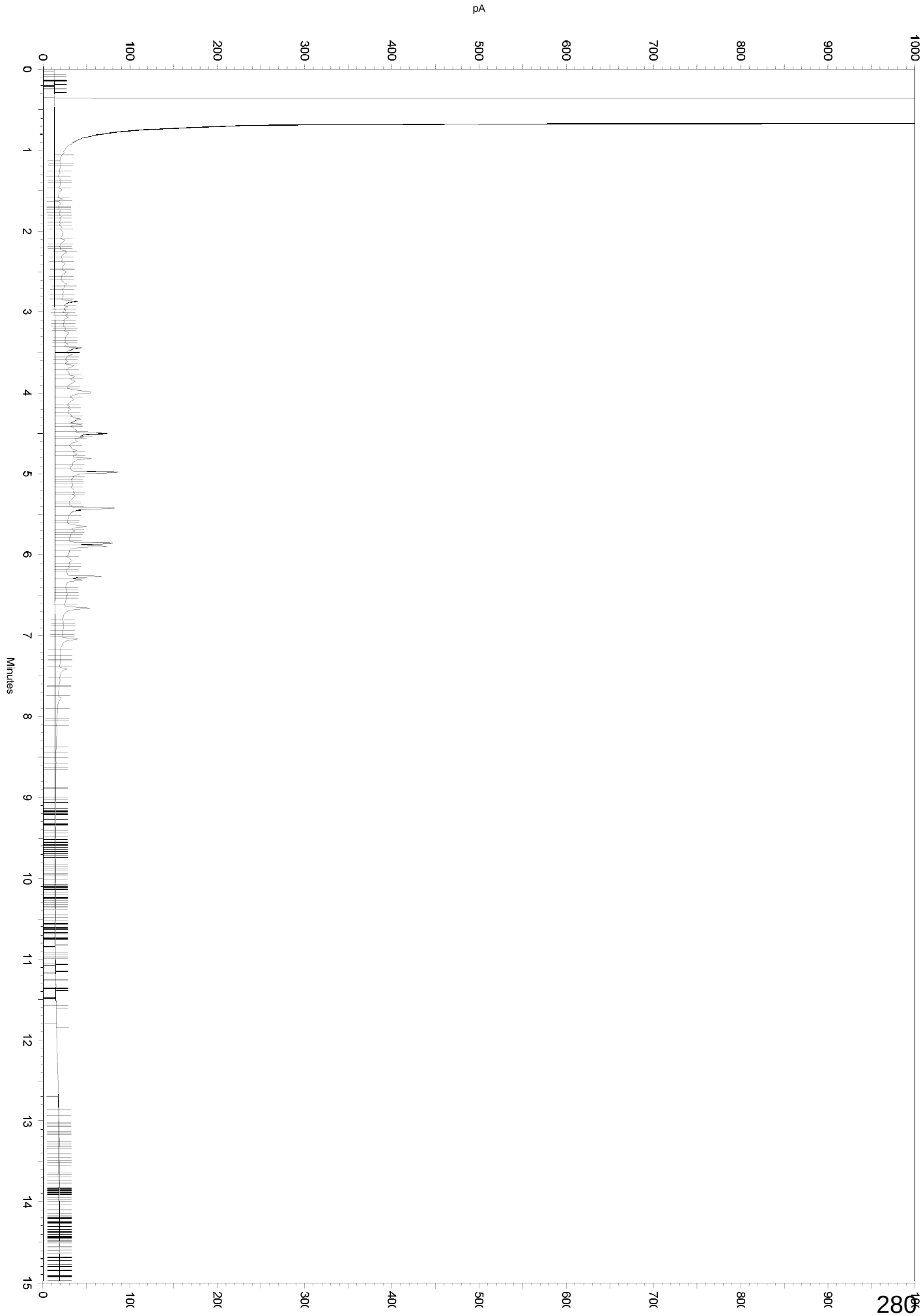
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a016.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Move BL Start	9.165	0.345	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Sample Name: **ical,s19945,dsl_100**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a016.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/16/2012 10:57:45 PM
Analysis Date: 7/17/2012 12:48:48 PM
Instrument: GC27 (Offline)A Vial: 16 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		22869531	0.000 CAL
JP8:10-16		22869531	0.000 CAL
KER:10-16		22869531	0.000 CAL
JP5:10-16		22869531	0.000 CAL
DSL:10-20		33675974	100.000 CAL
DSL:10-22		35674131	100.000 CAL
DSL:10-24		36161153	100.000 CAL
DSL:12-22		31320600	100.000 CAL
DSL:10-28		36244219	100.000 CAL
DSL:12-24		31807622	100.000 CAL
DSL:12-32		31907901	100.000 CAL
BUNKC:12-40		31918845	0.000 CAL
HYFL:12-40		31918845	0.000 CAL
MO:22-32		587301	0.000 CAL
MO:20-36		2594394	0.000 CAL
MO:22-36		596237	0.000 CAL
MO:24-36		109215	0.000 CAL
MO:28-36		26149	0.000 CAL
MO:28-40		28157	0.000 CAL
DSL:10-12		4353531	0.000 CAL
DSL:12-16		18516000	0.000 CAL
DSL:16-24		13291622	100.000 CAL
DSL:10-14		13262874	100.000 CAL
DSL:14-28		22981345	100.000 CAL
TROIL:12-40		31918845	0.000 CAL
MINOIL:12-40		31918845	0.000 CAL
CRUDE:10-40		36272376	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

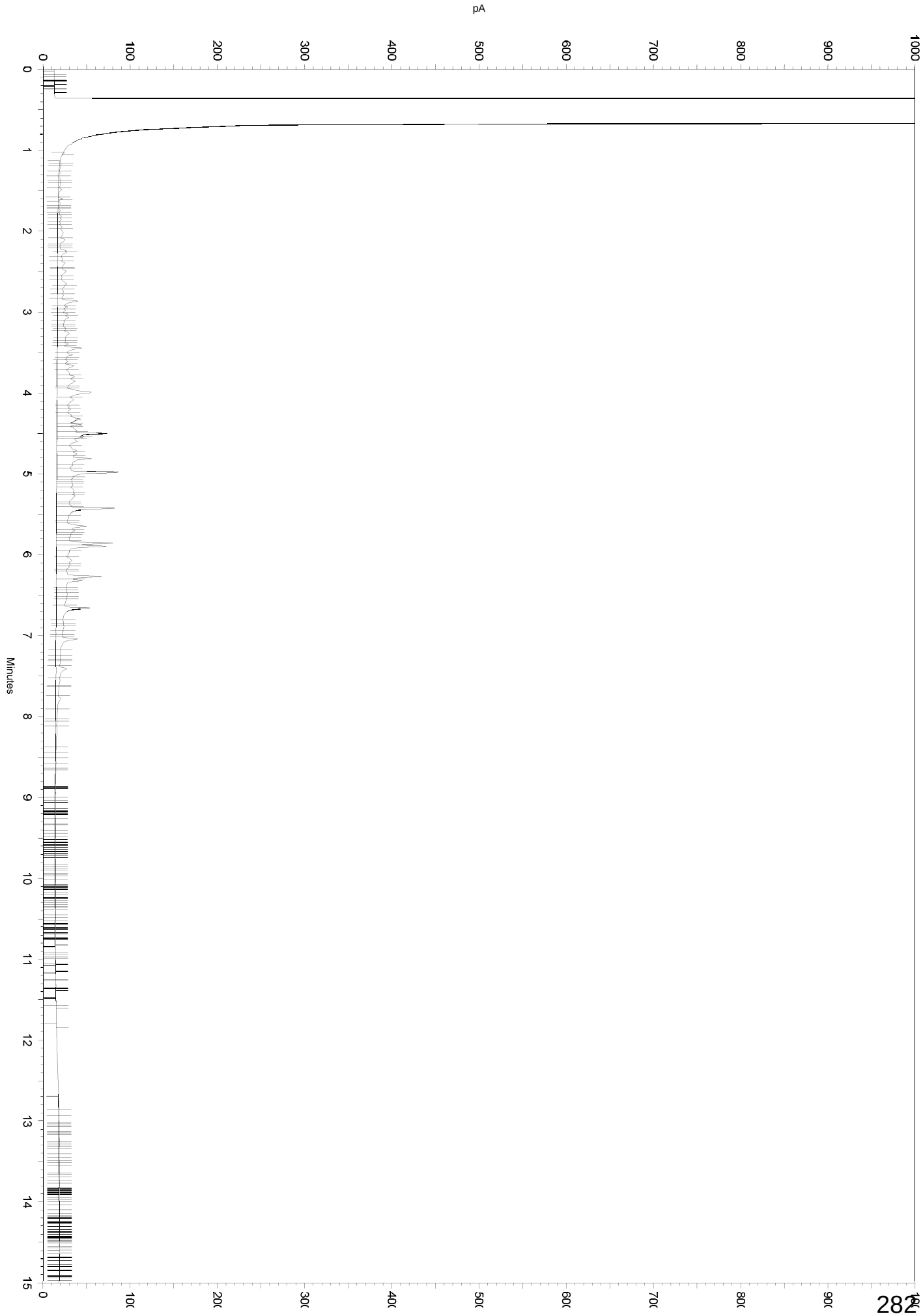
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a016.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

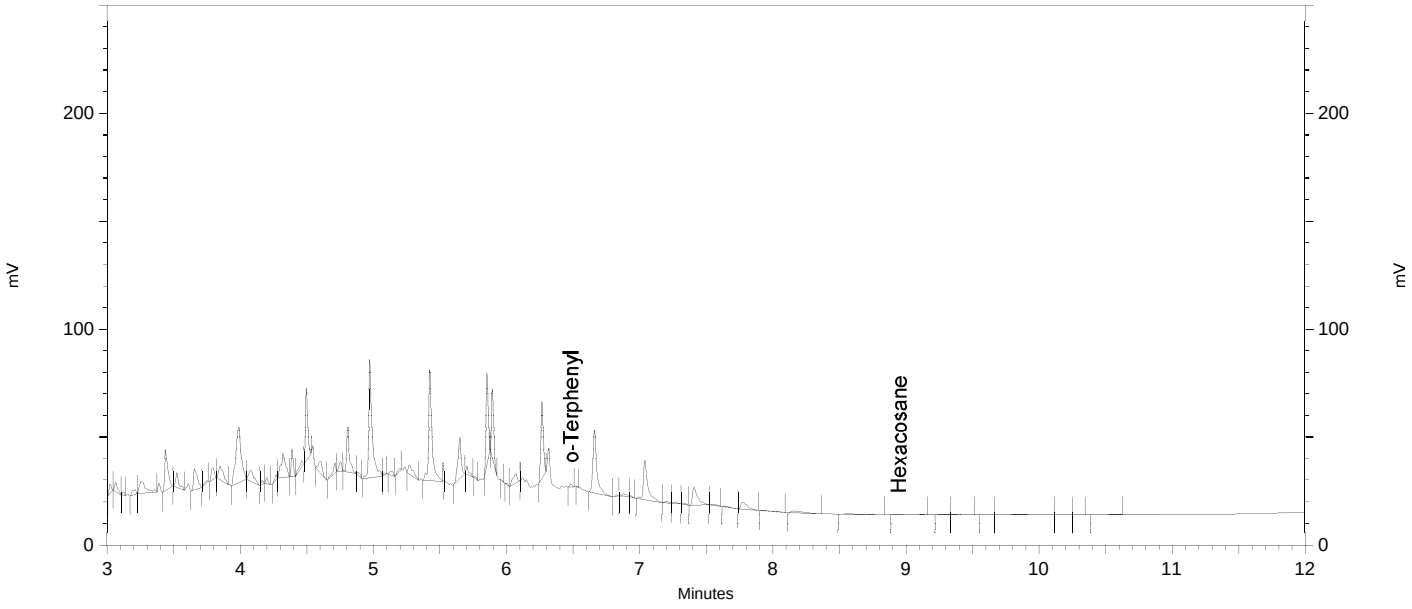
Sample Name: **ical,s19945,dsl_100**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a016.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_198a.met**
Run Date: 7/16/2012 10:57:45 PM
Analysis Date: 7/16/2012 11:17:46 PM
Instrument: GC27A Vial: 16 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.487	13166	0.042
Hexacosane	8.948	6108	0.028



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

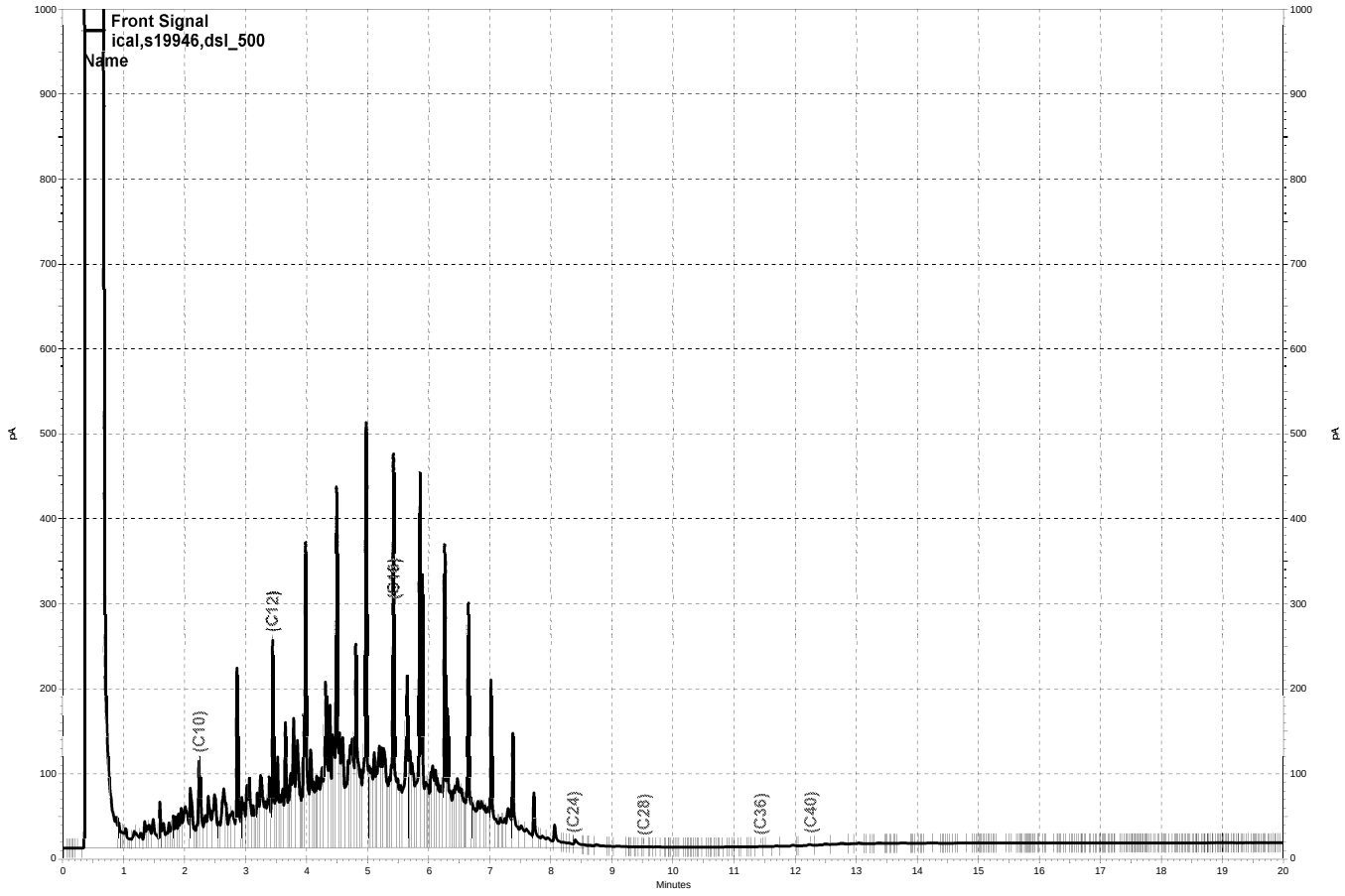
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10001\198a016.dat_A474.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None



\\lims\gdrive\ezchrom\Projects\GC27\Data\198a017.dat, Front Signal

Sample Name: **ical,s19946,dsl_500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a017.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/16/2012 11:23:19 PM
Analysis Date: 7/17/2012 12:56:03 PM
Instrument: GC27 (Offline)A Vial: 17 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		127117313	0.000 CAL
JP8:10-16		127117313	0.000 CAL
KER:10-16		127117313	0.000 CAL
JP5:10-16		127117313	0.000 CAL
DSL:10-20		190098610	500.000 CAL
DSL:10-22		198876963	500.000 CAL
DSL:10-24		202409049	500.000 CAL
DSL:12-22		171916727	500.000 CAL
DSL:10-28		203390911	500.000 CAL
DSL:12-24		175448813	500.000 CAL
DSL:12-32		176492299	500.000 CAL
BUNKC:12-40		176654020	0.000 CAL
HYFL:12-40		176654020	0.000 CAL
MO:22-32		4575572	0.000 CAL
MO:20-36		13375425	0.000 CAL
MO:22-36		4597072	0.000 CAL
MO:24-36		1064986	0.000 CAL
MO:28-36		83124	0.000 CAL
MO:28-40		223345	0.000 CAL
DSL:10-12		26960236	0.000 CAL
DSL:12-16		100157077	0.000 CAL
DSL:16-24		75291736	500.000 CAL
DSL:10-14		77993795	500.000 CAL
DSL:14-28		125397116	500.000 CAL
TROIL:12-40		176654020	0.000 CAL
MINOIL:12-40		176654020	0.000 CAL
CRUDE:10-40		203614256	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

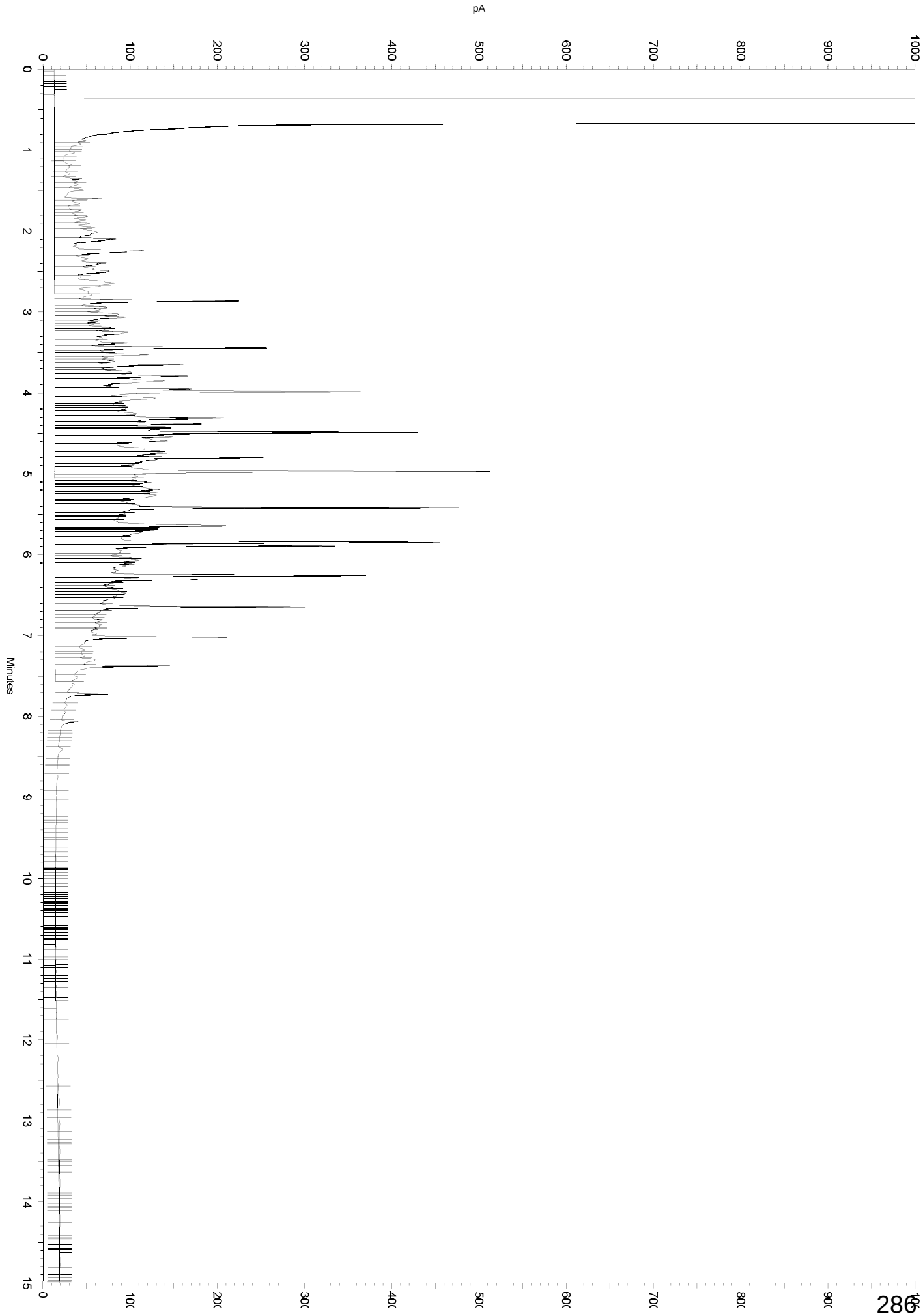
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a017.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Move BL Start	9.958	0.316	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Sample Name: **ical,s19946,dsl_500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a017.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/16/2012 11:23:19 PM
Analysis Date: 7/17/2012 12:48:51 PM
Instrument: GC27 (Offline)A Vial: 17 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		117025930	0.000 CAL
JP8:10-16		117025930	0.000 CAL
KER:10-16		117025930	0.000 CAL
JP5:10-16		117025930	0.000 CAL
DSL:10-20		177040319	500.000 CAL
DSL:10-22		185039512	500.000 CAL
DSL:10-24		187950495	500.000 CAL
DSL:12-22		162352238	500.000 CAL
DSL:10-28		188424766	500.000 CAL
DSL:12-24		165263221	500.000 CAL
DSL:12-32		165752256	500.000 CAL
BUNKC:12-40		165913977	0.000 CAL
HYFL:12-40		165913977	0.000 CAL
MO:22-32		3400018	0.000 CAL
MO:20-36		11420711	0.000 CAL
MO:22-36		3421518	0.000 CAL
MO:24-36		510535	0.000 CAL
MO:28-36		36264	0.000 CAL
MO:28-40		176485	0.000 CAL
DSL:10-12		22687274	0.000 CAL
DSL:12-16		94338656	0.000 CAL
DSL:16-24		70924565	500.000 CAL
DSL:10-14		70287810	500.000 CAL
DSL:14-28		118136956	500.000 CAL
TROIL:12-40		165913977	0.000 CAL
MINOIL:12-40		165913977	0.000 CAL
CRUDE:10-40		188601251	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

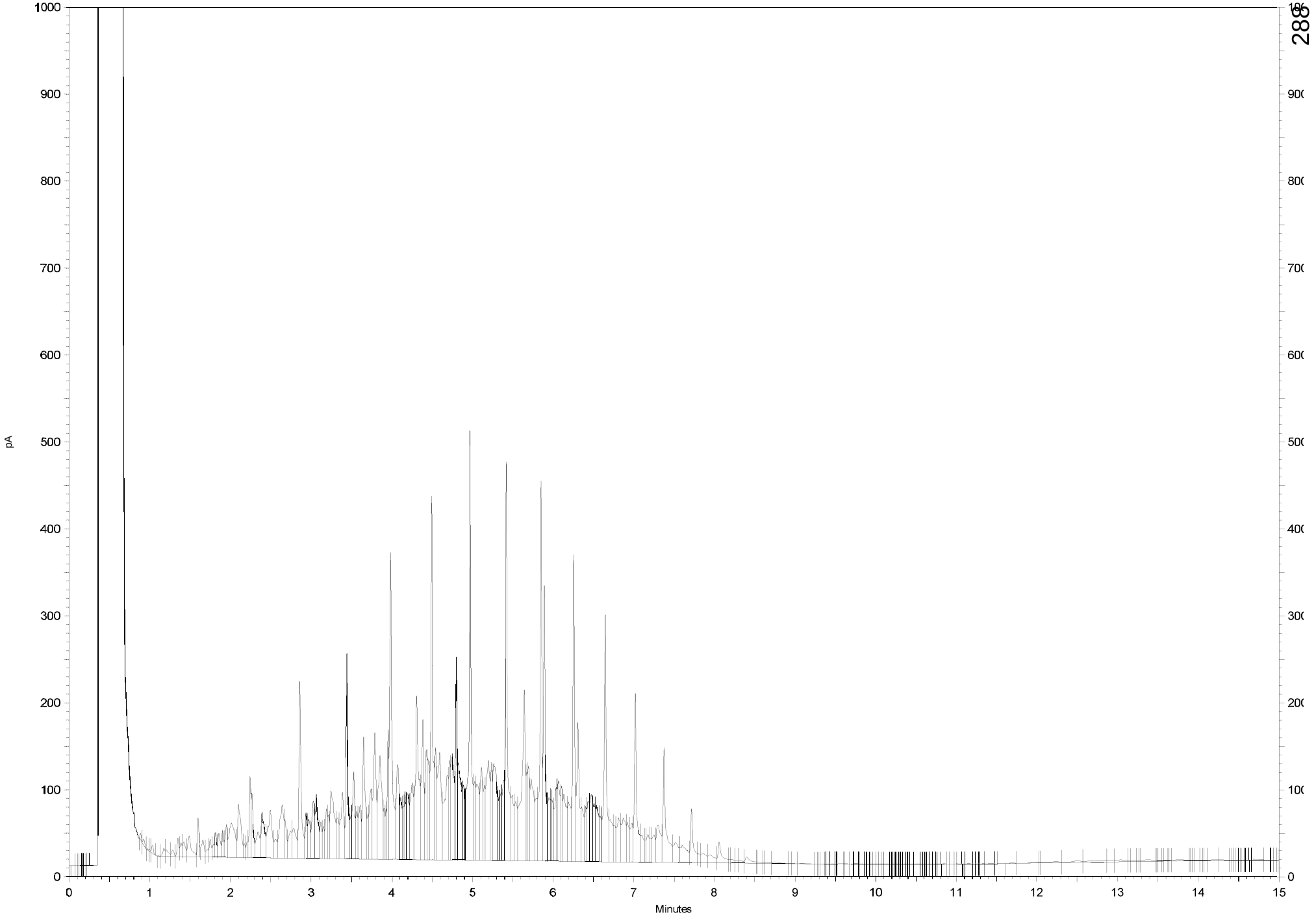
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a017.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				


pA
1000
900
800
700
600
500
400
300
200
100
0
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Minutes

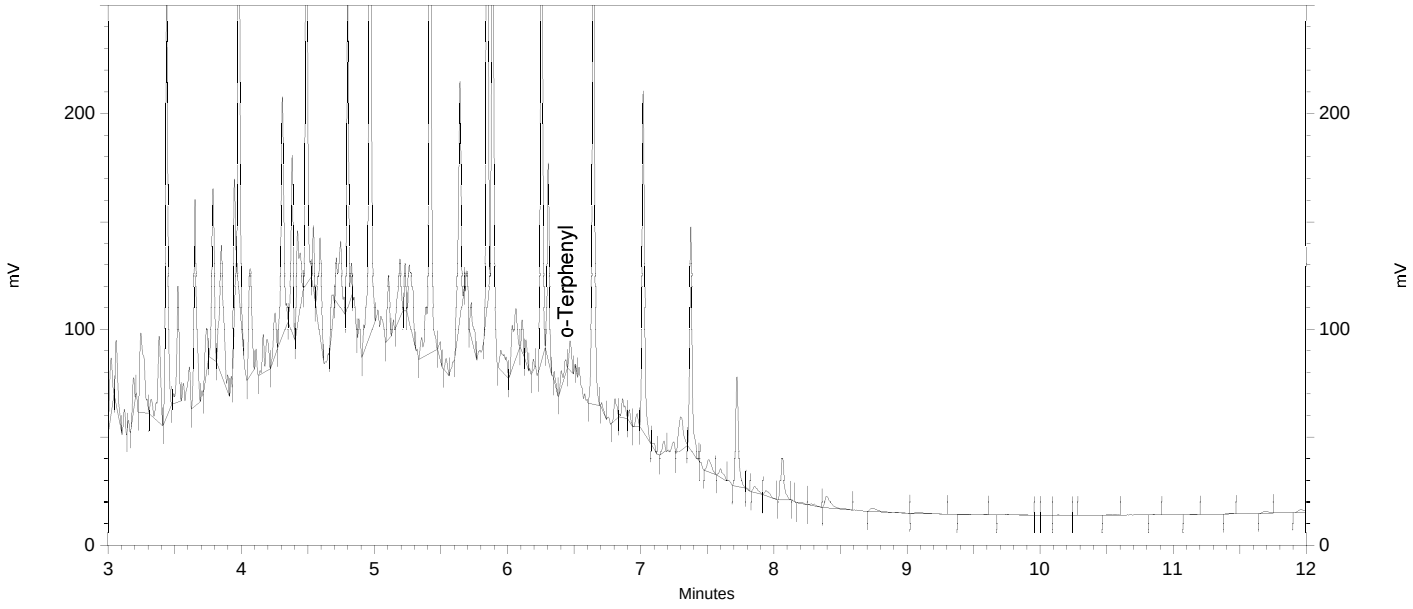
Sample Name: **ical,s19946,dsl_500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a017.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_198a.met**
Run Date: 7/16/2012 11:23:19 PM
Analysis Date: 7/16/2012 11:43:21 PM
Instrument: GC27A Vial: 17 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.437	121768	0.391
Hexacosane			0.000 BDL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

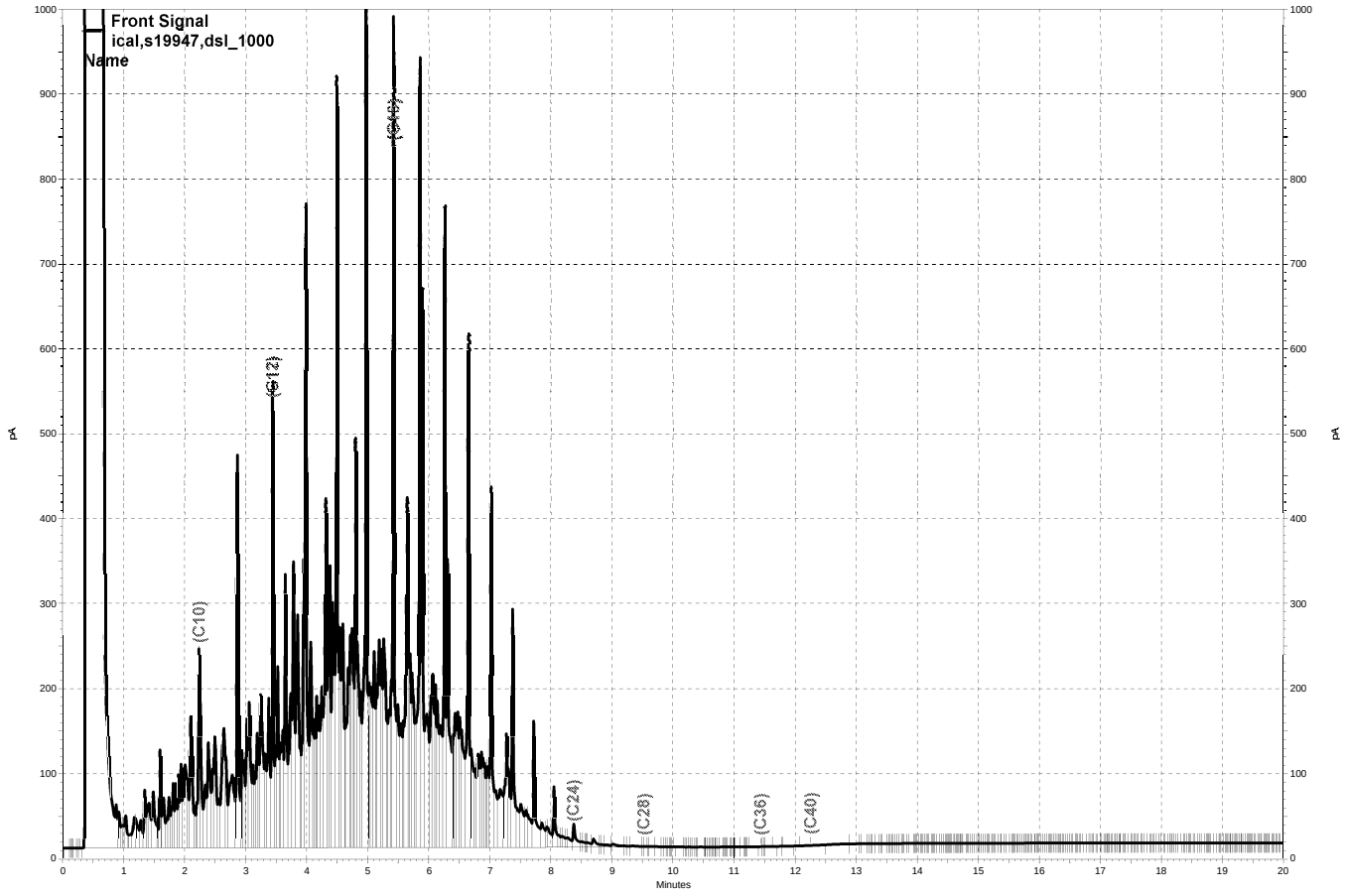
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10001\198a017.dat_A475.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\lims\gdrive\ezchrom\Projects\GC27\Data\198a018.dat, Front Signal

Sample Name: **ical,s19947,dsl_1000**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a018.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/16/2012 11:48:38 PM
Analysis Date: 7/17/2012 12:56:16 PM
Instrument: GC27 (Offline)A Vial: 18 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		256694493	0.000 CAL
JP8:10-16		256694493	0.000 CAL
KER:10-16		256694493	0.000 CAL
JP5:10-16		256694493	0.000 CAL
DSL:10-20		384410768	1000.000 CAL
DSL:10-22		405409313	1000.000 CAL
DSL:10-24		409717551	1000.000 CAL
DSL:12-22		351268173	1000.000 CAL
DSL:10-28		411857873	1000.000 CAL
DSL:12-24		355576411	1000.000 CAL
DSL:12-32		357846790	1000.000 CAL
BUNKC:12-40		357862667	0.000 CAL
HYFL:12-40		357862667	0.000 CAL
MO:22-32		6578617	0.000 CAL
MO:20-36		27587162	0.000 CAL
MO:22-36		6588617	0.000 CAL
MO:24-36		2280379	0.000 CAL
MO:28-36		140057	0.000 CAL
MO:28-40		145934	0.000 CAL
DSL:10-12		54141140	0.000 CAL
DSL:12-16		202553353	0.000 CAL
DSL:16-24		153023058	1000.000 CAL
DSL:10-14		158008149	1000.000 CAL
DSL:14-28		253849724	1000.000 CAL
TROIL:12-40		357862667	0.000 CAL
MINOIL:12-40		357862667	0.000 CAL
CRUDE:10-40		412003807	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

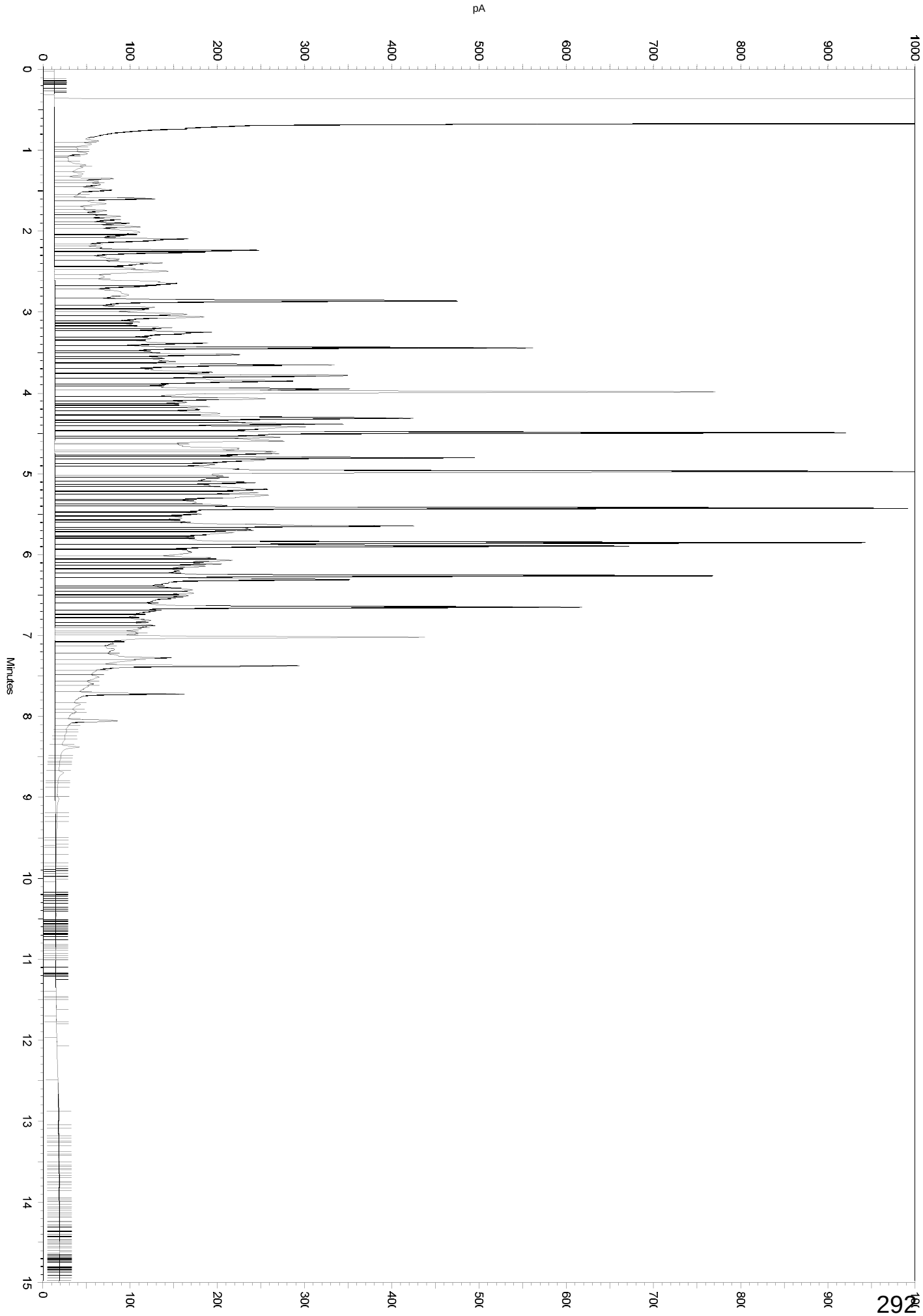
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a018.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Move BL Start	10.402	0.319	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
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5
6
7
8
9
10
11
12
13
14
15

Sample Name: **ical,s19947,dsl_1000**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a018.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/16/2012 11:48:38 PM
Analysis Date: 7/17/2012 12:48:54 PM
Instrument: GC27 (Offline)A Vial: 18 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		241223486	0.000 CAL
JP8:10-16		241223486	0.000 CAL
KER:10-16		241223486	0.000 CAL
JP5:10-16		241223486	0.000 CAL
DSL:10-20		364304781	1000.000 CAL
DSL:10-22		383818500	1000.000 CAL
DSL:10-24		387374825	1000.000 CAL
DSL:12-22		336198998	1000.000 CAL
DSL:10-28		388584580	1000.000 CAL
DSL:12-24		339755323	1000.000 CAL
DSL:12-32		340989621	1000.000 CAL
BUNKC:12-40		341005371	0.000 CAL
HYFL:12-40		341005371	0.000 CAL
MO:22-32		4790623	0.000 CAL
MO:20-36		24314215	0.000 CAL
MO:22-36		4800496	0.000 CAL
MO:24-36		1244171	0.000 CAL
MO:28-36		34416	0.000 CAL
MO:28-40		40293	0.000 CAL
DSL:10-12		47619502	0.000 CAL
DSL:12-16		193603984	0.000 CAL
DSL:16-24		146151339	1000.000 CAL
DSL:10-14		146208183	1000.000 CAL
DSL:14-28		242376397	1000.000 CAL
TROIL:12-40		341005371	0.000 CAL
MINOIL:12-40		341005371	0.000 CAL
CRUDE:10-40		388624873	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

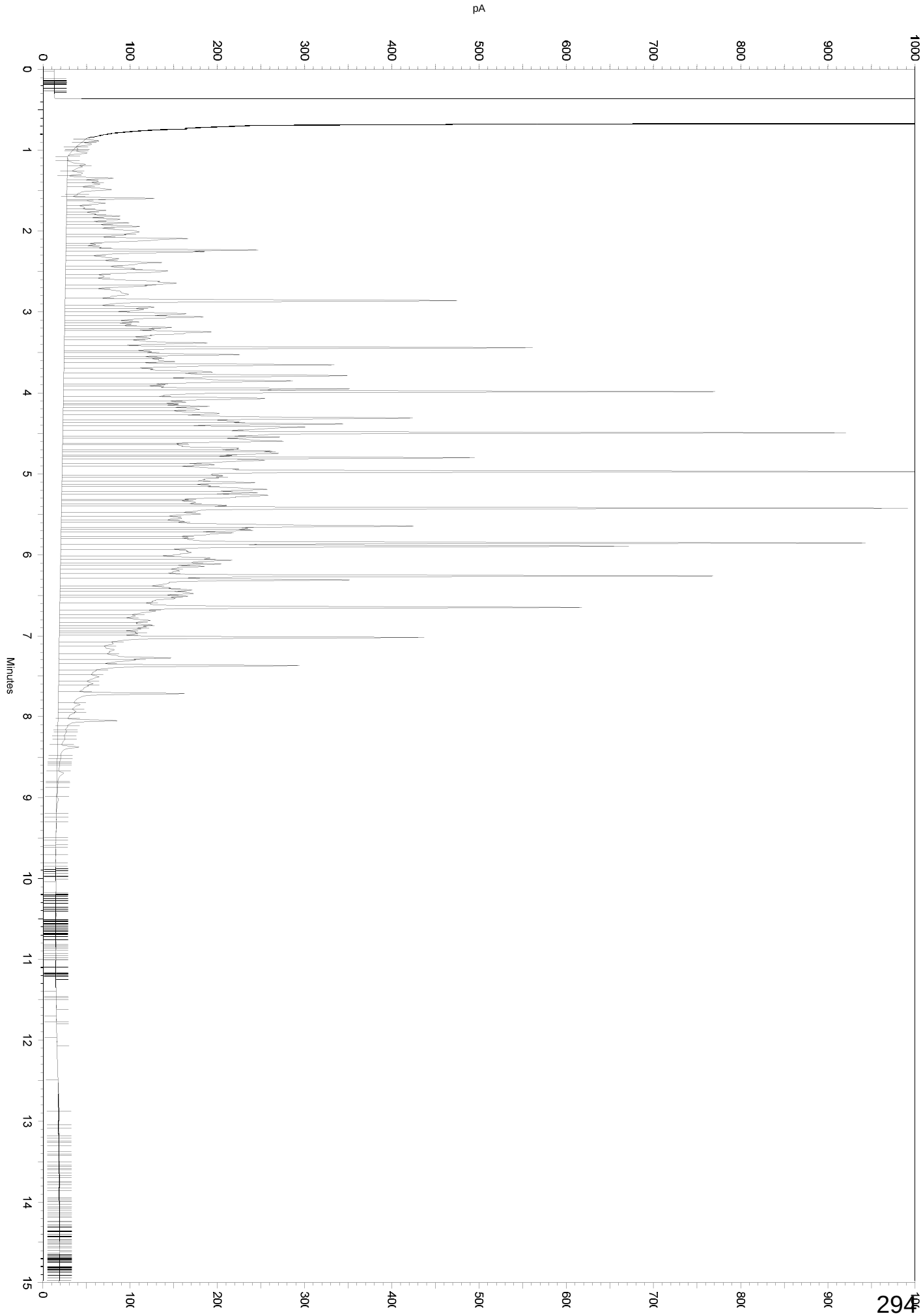
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a018.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

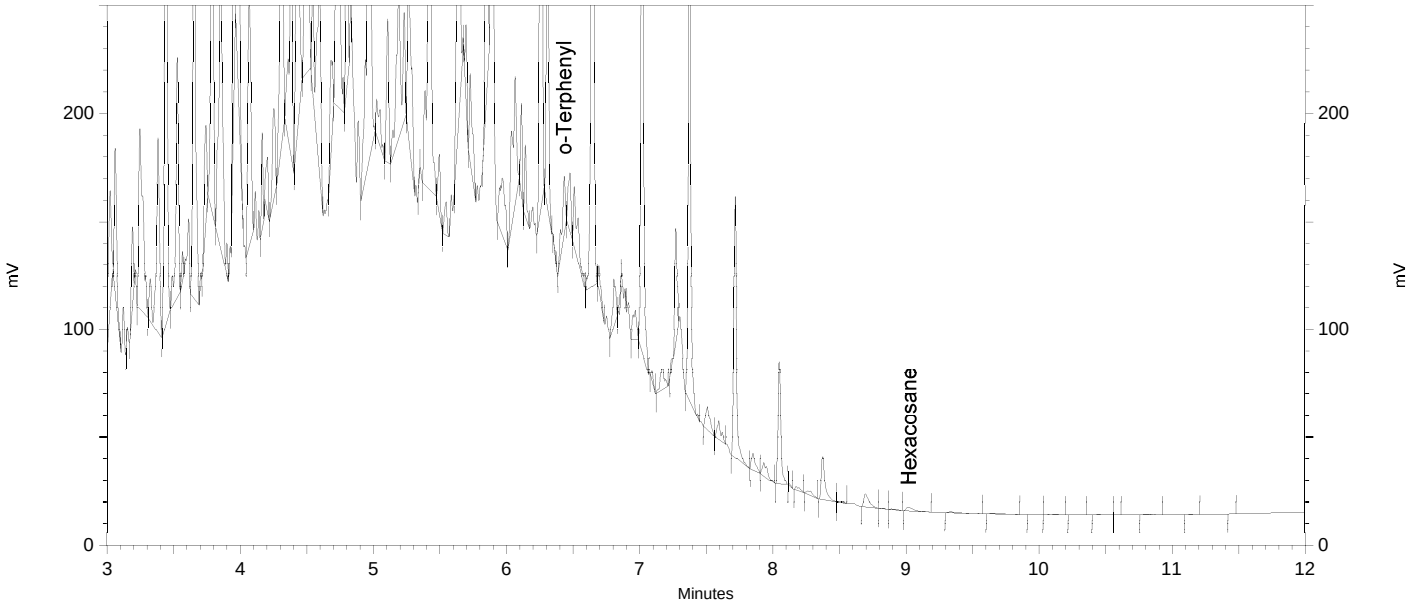
Sample Name: **ical,s19947,dsl_1000**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a018.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_198a.met**
Run Date: 7/16/2012 11:48:38 PM
Analysis Date: 7/17/2012 12:08:39 AM
Instrument: GC27A Vial: 18 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.433	353878	1.137
Hexacosane	9.022	50459	0.232



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

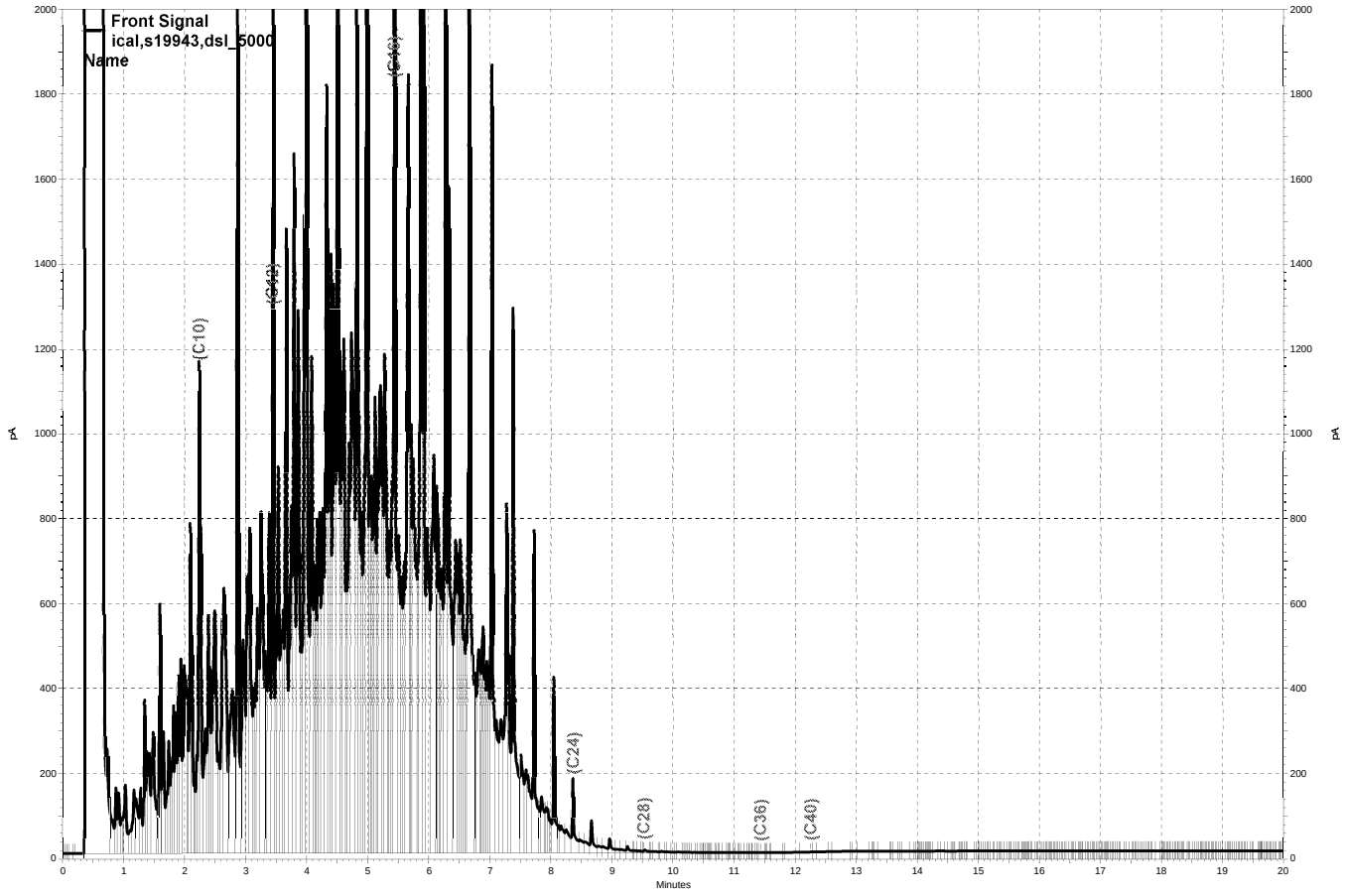
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10001\198a018.dat_A476.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\lims\gdrive\ezchrom\Projects\GC27\Data\198a019.dat, Front Signal

Sample Name: **ical,s19943,dsl_5000**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a019.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/17/2012 12:13:45 AM
Analysis Date: 7/17/2012 12:56:26 PM
Instrument: GC27 (Offline)A Vial: 19 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		1090696921	0.000 CAL
JP8:10-16		1090696921	0.000 CAL
KER:10-16		1090696921	0.000 CAL
JP5:10-16		1090696921	0.000 CAL
DSL:10-20		1692346858	5000.000 CAL
DSL:10-22		1813199884	5000.000 CAL
DSL:10-24		1837533955	5000.000 CAL
DSL:12-22		1574025493	5000.000 CAL
DSL:10-28		1844412176	5000.000 CAL
DSL:12-24		1598359564	5000.000 CAL
DSL:12-32		1606115910	5000.000 CAL
BUNKC:12-40		1606221570	0.000 CAL
HYFL:12-40		1606221570	0.000 CAL
MO:22-32		32090417	0.000 CAL
MO:20-36		153013170	0.000 CAL
MO:22-36		32160144	0.000 CAL
MO:24-36		7826073	0.000 CAL
MO:28-36		947852	0.000 CAL
MO:28-40		983785	0.000 CAL
DSL:10-12		239174391	0.000 CAL
DSL:12-16		851522530	0.000 CAL
DSL:16-24		746837034	5000.000 CAL
DSL:10-14		649836955	5000.000 CAL
DSL:14-28		1194575221	5000.000 CAL
TROIL:12-40		1606221570	0.000 CAL
MINOIL:12-40		1606221570	0.000 CAL
CRUDE:10-40		1845395961	0.000 CAL

---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

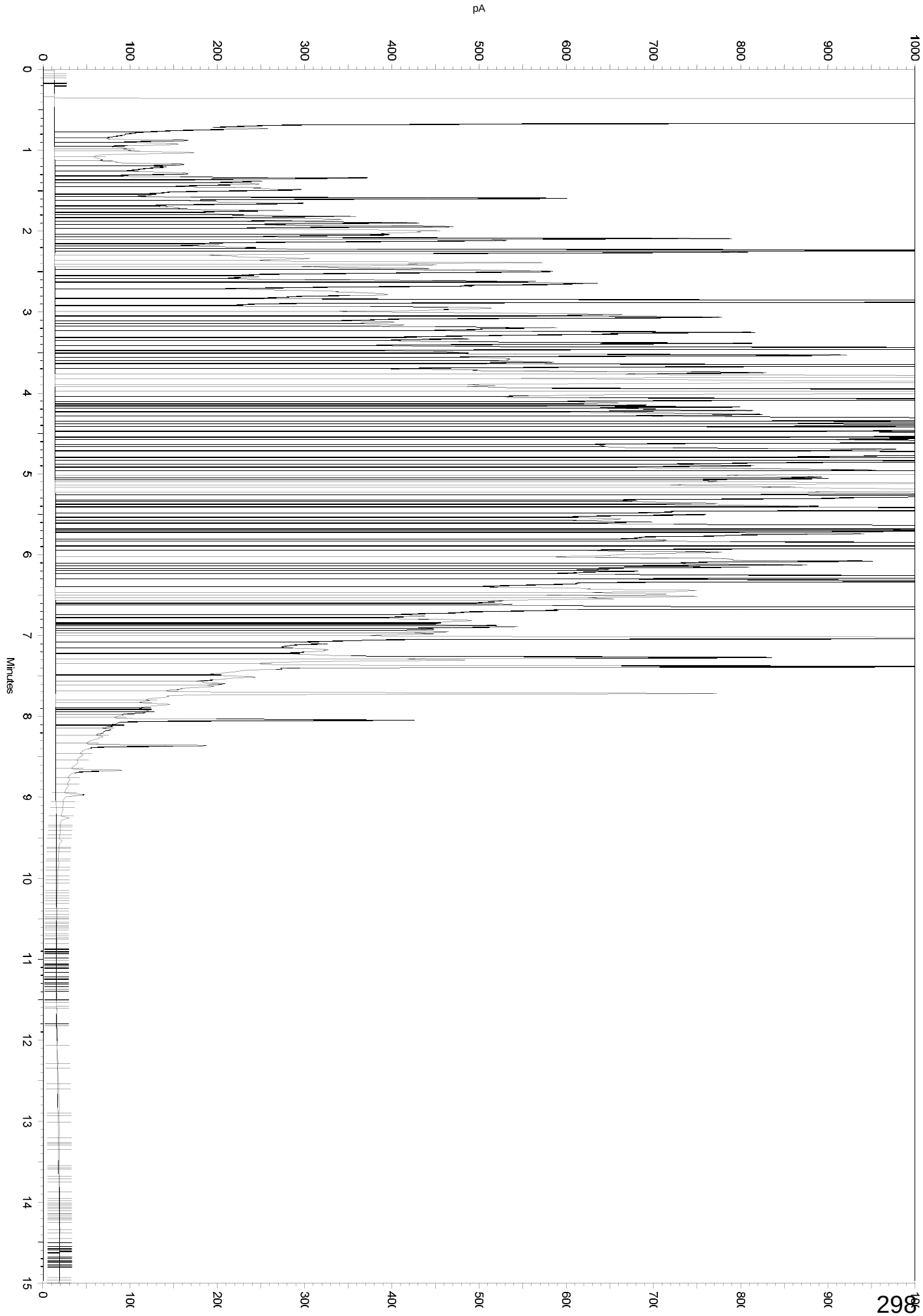
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a019.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Move BL Start	11.018	0.34	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
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1
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14
15

Sample Name: **ical,s19943,dsl_5000**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a019.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/17/2012 12:13:45 AM
Analysis Date: 7/17/2012 12:48:57 PM
Instrument: GC27 (Offline)A Vial: 19 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		1045120338	0.000 CAL
JP8:10-16		1045120338	0.000 CAL
KER:10-16		1045120338	0.000 CAL
JP5:10-16		1045120338	0.000 CAL
DSL:10-20		1632350503	5000.000 CAL
DSL:10-22		1748128475	5000.000 CAL
DSL:10-24		1769355225	5000.000 CAL
DSL:12-22		1528391561	5000.000 CAL
DSL:10-28		1773320234	5000.000 CAL
DSL:12-24		1549618311	5000.000 CAL
DSL:12-32		1553724316	5000.000 CAL
BUNKC:12-40		1553782840	0.000 CAL
HYFL:12-40		1553782840	0.000 CAL
MO:22-32		25332755	0.000 CAL
MO:20-36		141133318	0.000 CAL
MO:22-36		25355346	0.000 CAL
MO:24-36		4128596	0.000 CAL
MO:28-36		163587	0.000 CAL
MO:28-40		199520	0.000 CAL
DSL:10-12		219736914	0.000 CAL
DSL:12-16		825383424	0.000 CAL
DSL:16-24		724234887	5000.000 CAL
DSL:10-14		615380736	5000.000 CAL
DSL:14-28		1157939498	5000.000 CAL
TROIL:12-40		1553782840	0.000 CAL
MINOIL:12-40		1553782840	0.000 CAL
CRUDE:10-40		1773519754	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

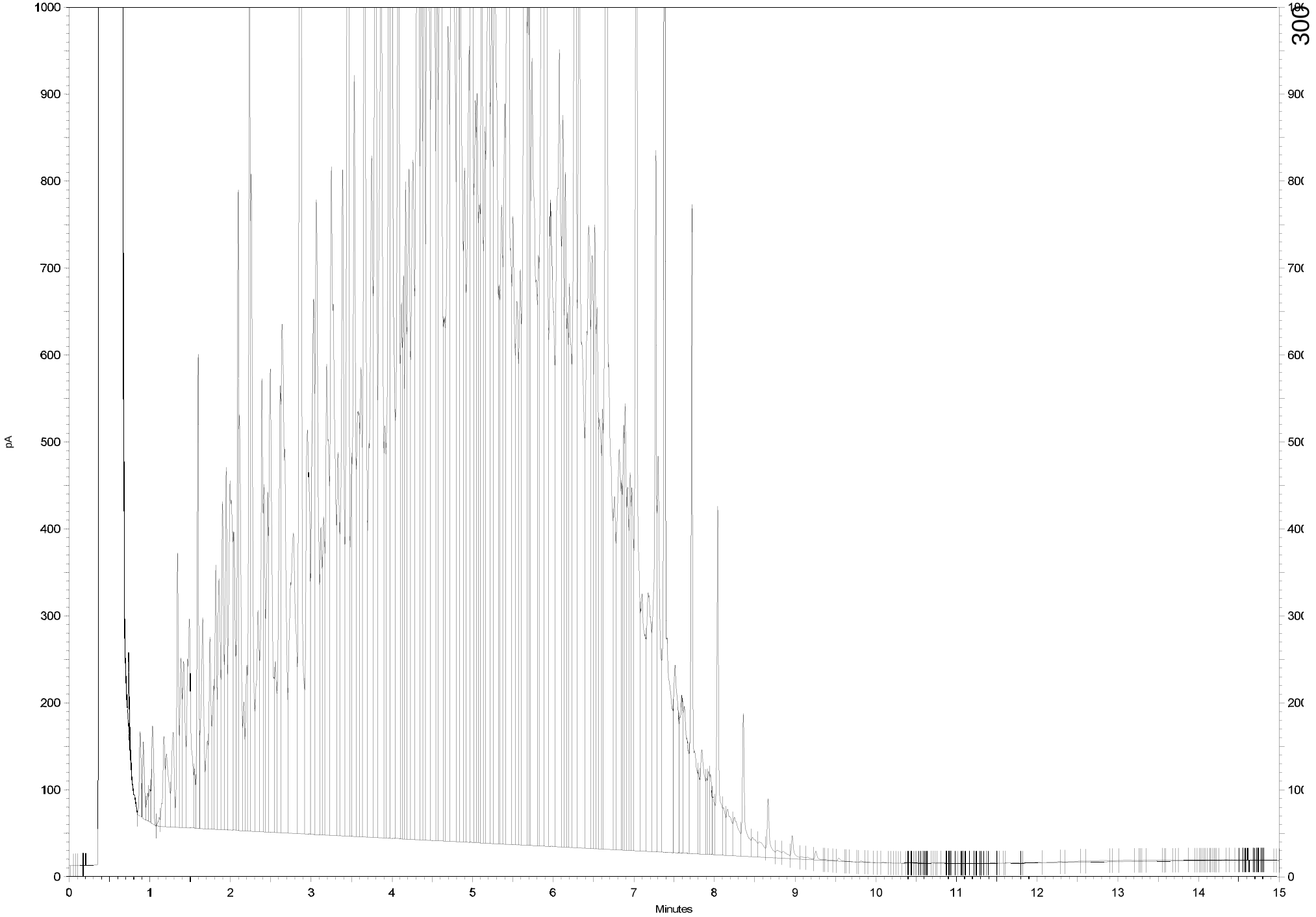
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a019.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				


pA
1000
900
800
700
600
500
400
300
200
100
0
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Minutes

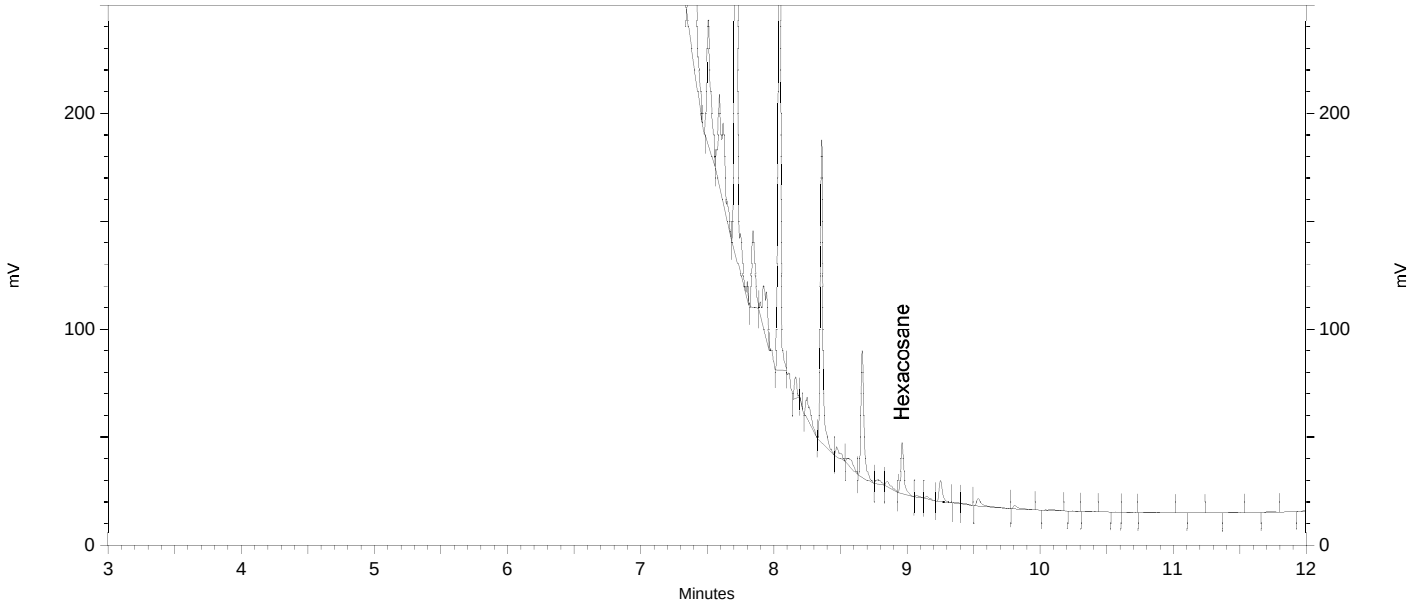
Sample Name: **ical,s19943,dsl_5000**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a019.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_198a.met**
Run Date: 7/17/2012 12:13:45 AM
Analysis Date: 7/17/2012 12:33:48 AM
Instrument: GC27A Vial: 19 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.438	2693034	8.655
Hexacosane	8.963	301651	1.390



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

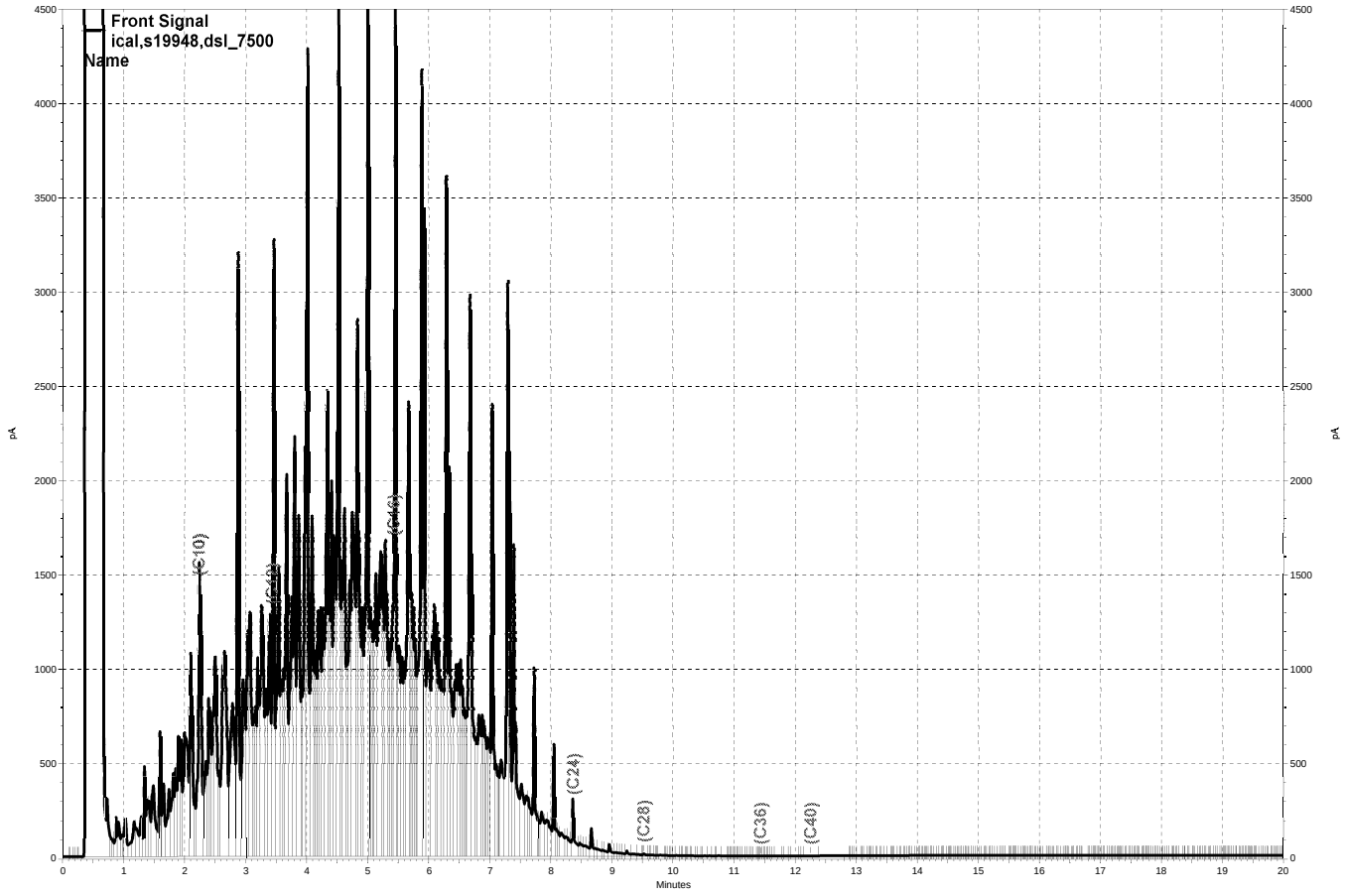
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10001\198a019.dat_A477.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\lims\gdrive\ezchrom\Projects\GC27\Data\198a020.dat, Front Signal

Sample Name: **ical,s19948,dsl_7500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a020.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/17/2012 12:38:49 AM
Analysis Date: 7/17/2012 12:56:43 PM
Instrument: GC27 (Offline)A Vial: 20 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		1771203657	0.000 CAL
JP8:10-16		1771203657	0.000 CAL
KER:10-16		1771203657	0.000 CAL
JP5:10-16		1771203657	0.000 CAL
DSL:10-20		2629494537	7500.000 CAL
DSL:10-22		2834590737	7500.000 CAL
DSL:10-24		2896861731	7500.000 CAL
DSL:12-22		2369134243	7500.000 CAL
DSL:10-28		2911400595	7500.000 CAL
DSL:12-24		2431405237	7500.000 CAL
DSL:12-32		2447564531	7500.000 CAL
BUNKC:12-40		2447801600	0.000 CAL
HYFL:12-40		2447801600	0.000 CAL
MO:22-32		78430288	0.000 CAL
MO:20-36		283752821	0.000 CAL
MO:22-36		78656621	0.000 CAL
MO:24-36		16385627	0.000 CAL
MO:28-36		1846763	0.000 CAL
MO:28-40		1857499	0.000 CAL
DSL:10-12		465456494	0.000 CAL
DSL:12-16		1305747163	0.000 CAL
DSL:16-24		1125658074	7500.000 CAL
DSL:10-14		1118796459	7500.000 CAL
DSL:14-28		1792604136	7500.000 CAL
TROIL:12-40		2447801600	0.000 CAL
MINOIL:12-40		2447801600	0.000 CAL
CRUDE:10-40		2913258094	0.000 CAL

---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

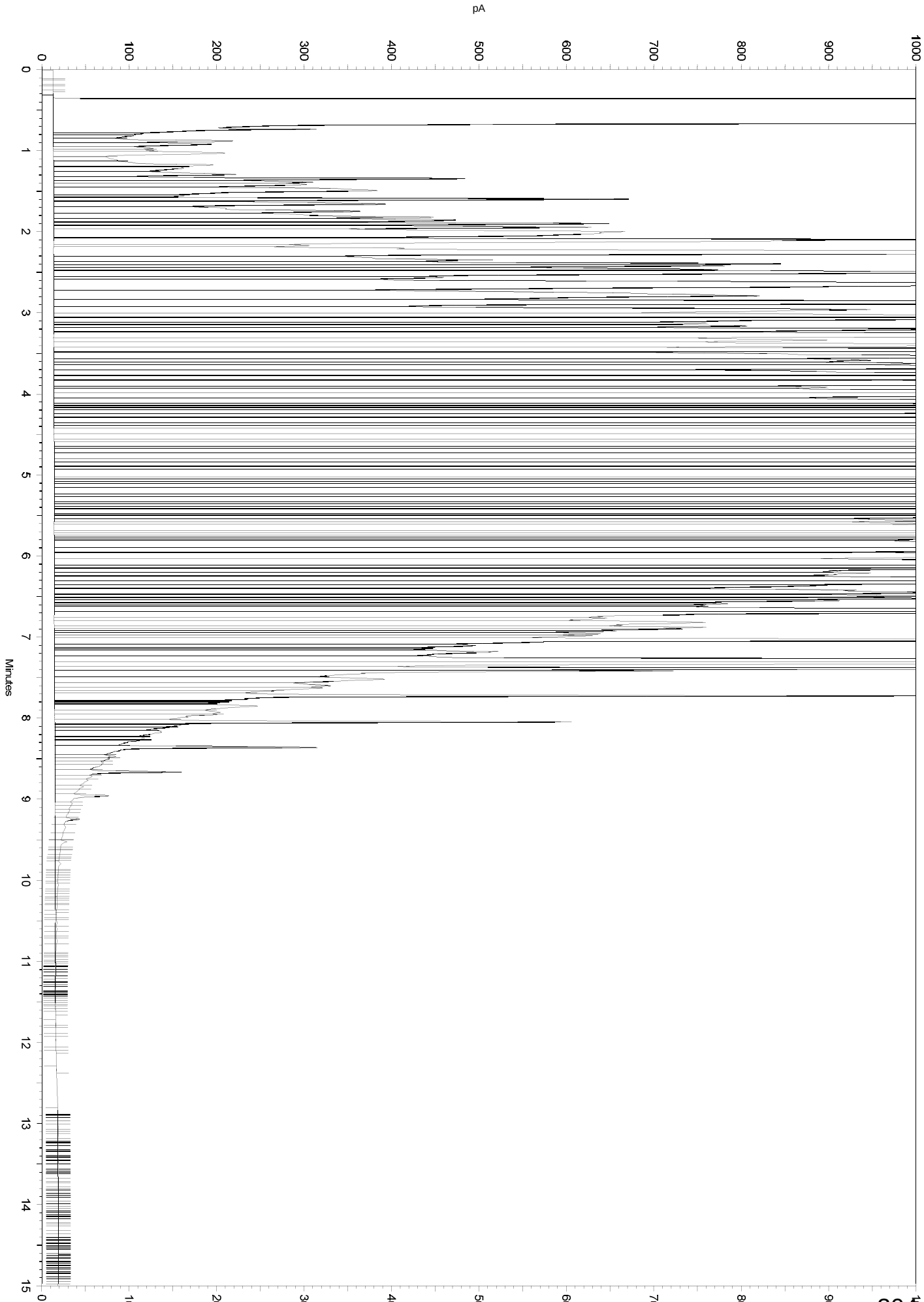
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a020.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Move BL Start	11.22	0.315	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Sample Name: **ical,s19948,dsl_7500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a020.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/17/2012 12:38:49 AM
Analysis Date: 7/17/2012 12:49:00 PM
Instrument: GC27 (Offline)A Vial: 20 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		1708675868	0.000 CAL
JP8:10-16		1708675868	0.000 CAL
KER:10-16		1708675868	0.000 CAL
JP5:10-16		1708675868	0.000 CAL
DSL:10-20		2547432812	7500.000 CAL
DSL:10-22		2746409469	7500.000 CAL
DSL:10-24		2803471628	7500.000 CAL
DSL:12-22		2308528650	7500.000 CAL
DSL:10-28		2813611909	7500.000 CAL
DSL:12-24		2365590809	7500.000 CAL
DSL:12-32		2376013932	7500.000 CAL
BUNKC:12-40		2376099077	0.000 CAL
HYFL:12-40		2376099077	0.000 CAL
MO:22-32		67485282	0.000 CAL
MO:20-36		266536348	0.000 CAL
MO:22-36		67559691	0.000 CAL
MO:24-36		10497532	0.000 CAL
MO:28-36		357251	0.000 CAL
MO:28-40		367987	0.000 CAL
DSL:10-12		437880819	0.000 CAL
DSL:12-16		1270795049	0.000 CAL
DSL:16-24		1094795760	7500.000 CAL
DSL:10-14		1071127179	7500.000 CAL
DSL:14-28		1742484730	7500.000 CAL
TROIL:12-40		2376099077	0.000 CAL
MINOIL:12-40		2376099077	0.000 CAL
CRUDE:10-40		2813979896	0.000 CAL

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

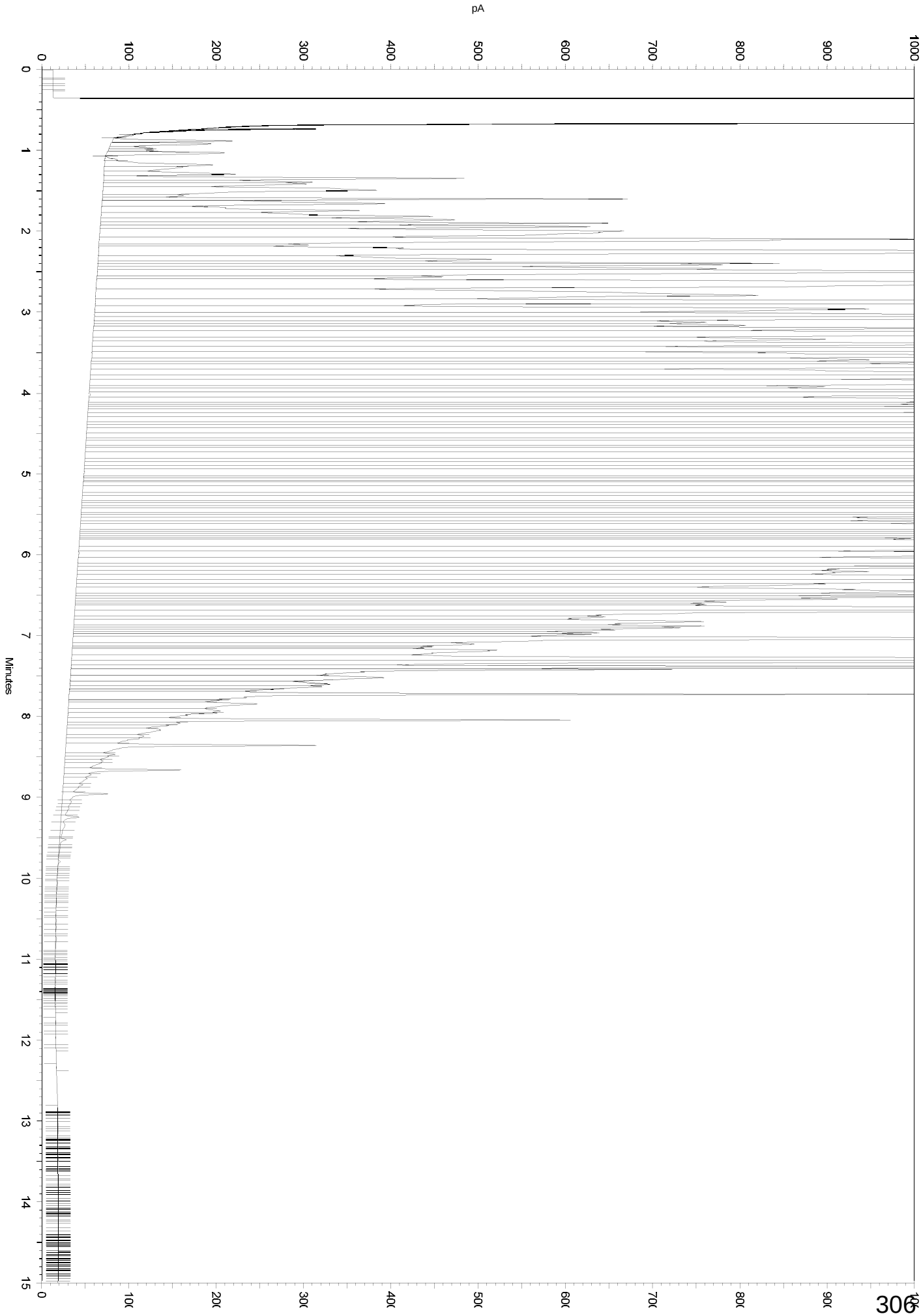
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a020.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

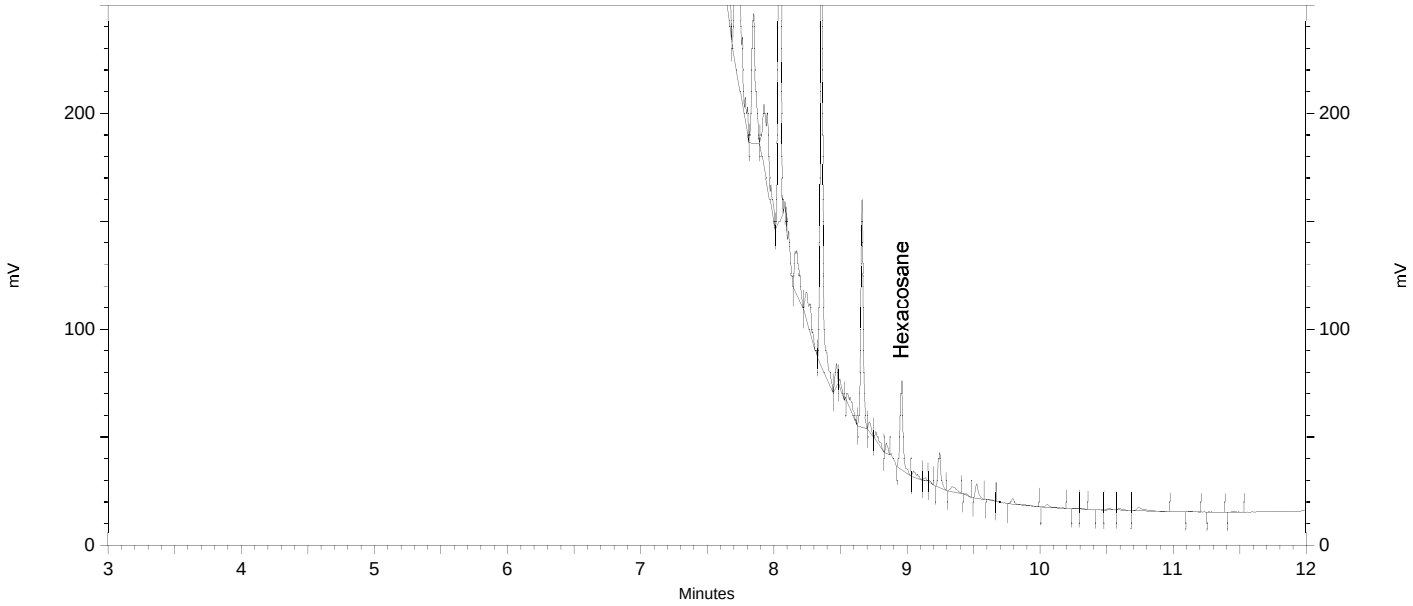
Sample Name: **ical,s19948,dsl_7500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a020.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_198a.met**
Run Date: 7/17/2012 12:38:49 AM
Analysis Date: 7/17/2012 12:58:51 AM
Instrument: GC27A Vial: 20 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.450	3102636	9.971
Hexacosane	8.958	481154	2.217



---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

Integration Events
==========

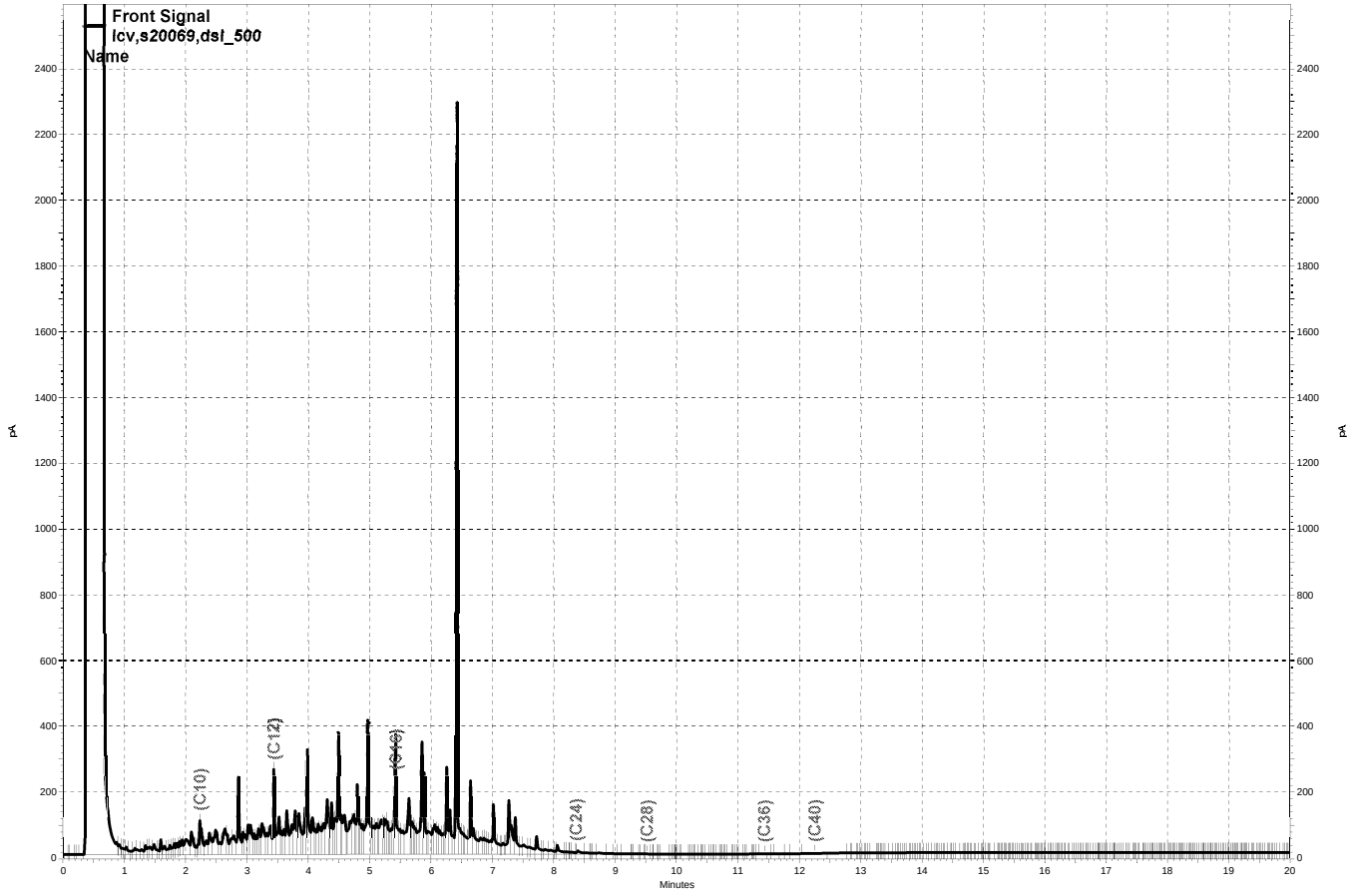
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10001\198a020.dat_A478.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None



\\lims\gdrive\ezchrom\Projects\GC27\Data\198a022.dat, Front Signal

Sample Name: **icv,s20069,dsl_500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a022.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/17/2012 1:29:05 AM
Analysis Date: 7/17/2012 1:07:57 PM
Instrument: GC27 (Offline)A Vial: 22 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		124234574	525.645
JP8:10-16		124234574	0.000
KER:10-16		124234574	550.858
JP5:10-16		124234574	400.586
DSL:10-20		200399088	515.484
DSL:10-22		212060409	515.628
DSL:10-24		214594548	512.937
DSL:12-22		181480761	524.940
DSL:10-28		215827389	513.175
DSL:12-24		184014900	521.562
DSL:12-32		185308704	521.316
BUNKC:12-40		185324876	3077.615
HYFL:12-40		185324876	1219.129
MO:22-32		3827943	18.616
MO:20-36		15500131	62.477
MO:22-36		3838810	16.416
MO:24-36		1304671	6.513
MO:28-36		71830	0.701
MO:28-40		77135	0.710
DSL:10-12		30579648	0.000
DSL:12-16		93654926	0.000
DSL:16-24		90359974	583.977
DSL:10-14		79728046	483.704
DSL:14-28		136099343	532.170
TROIL:12-40		185324876	595.303
MINOIL:12-40		185324876	0.000
CRUDE:10-40		215904524	1444.046

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

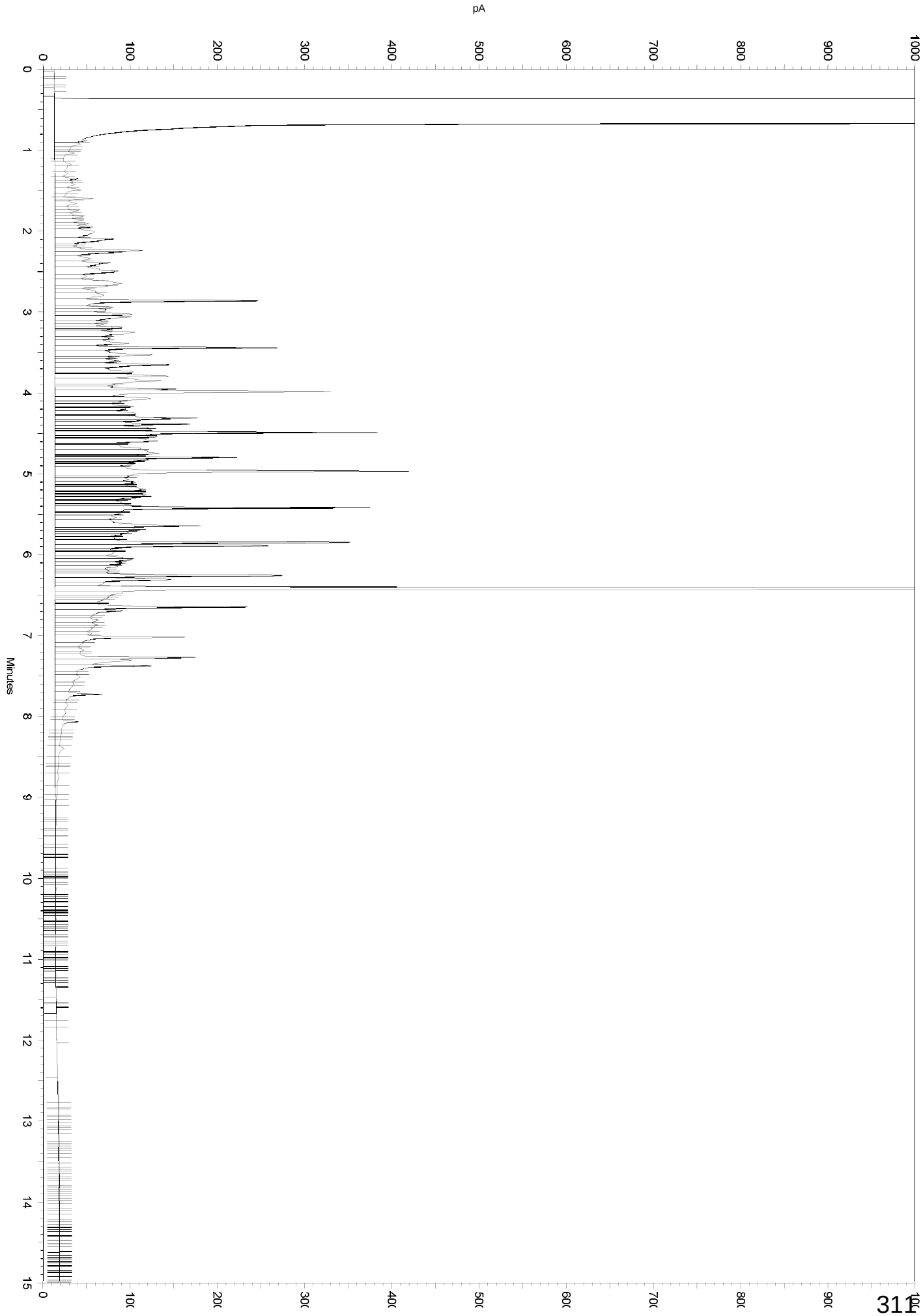
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a022.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Peak	6.377	6.595	0
No	Split Peak	6.455	0	0
Yes	Move BL Start	10.075	0.331	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Sample Name: **icv,s20069,dsl_500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a022.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh198b.met**
Run Date: 7/17/2012 1:29:05 AM
Analysis Date: 7/17/2012 1:07:20 PM
Instrument: GC27 (Offline)A Vial: 22 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		114951836	486.369
JP8:10-16		114951836	0.000
KER:10-16		114951836	509.698
JP5:10-16		114951836	370.654
DSL:10-20		188318114	484.408
DSL:10-22		199148786	484.233
DSL:10-24		201186733	480.889
DSL:12-22		172491225	498.937
DSL:10-28		201860127	479.965
DSL:12-24		174529172	494.677
DSL:12-32		175216263	492.924
BUNKC:12-40		175232435	2910.014
HYFL:12-40		175232435	1152.737
MO:22-32		2725038	13.252
MO:20-36		13566577	54.683
MO:22-36		2735905	11.699
MO:24-36		697958	3.484
MO:28-36		24564	0.240
MO:28-40		29869	0.275
DSL:10-12		26657561	0.000
DSL:12-16		88294275	0.000
DSL:16-24		86234897	557.318
DSL:10-14		72663258	440.842
DSL:14-28		129196869	505.180
TROIL:12-40		175232435	562.884
MINOIL:12-40		175232435	0.000
CRUDE:10-40		201889996	1350.312

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

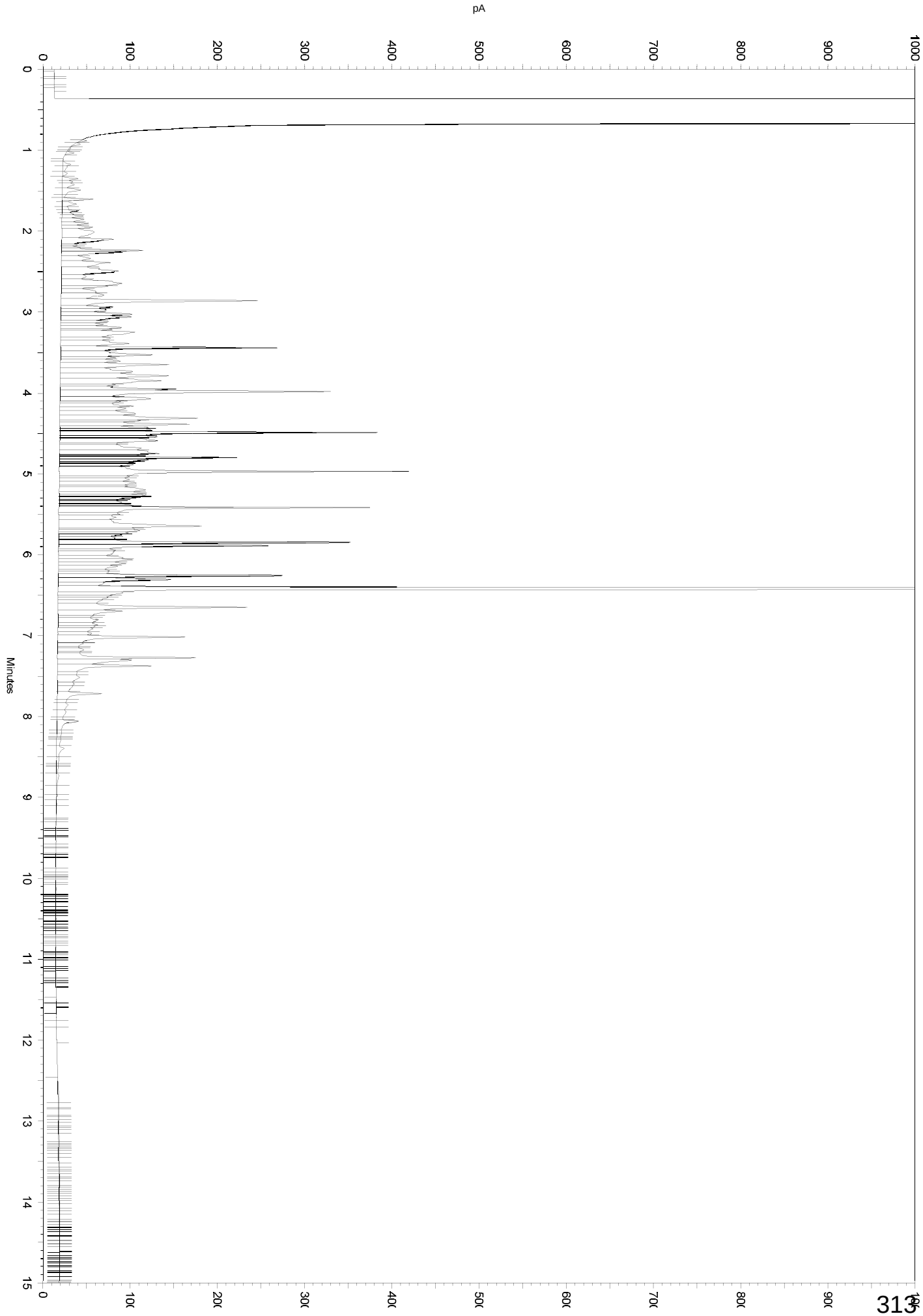
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a022.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Peak	6.377	6.595	0
No	Split Peak	6.455	0	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
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6
7
8
9
10
11
12
13
14
15

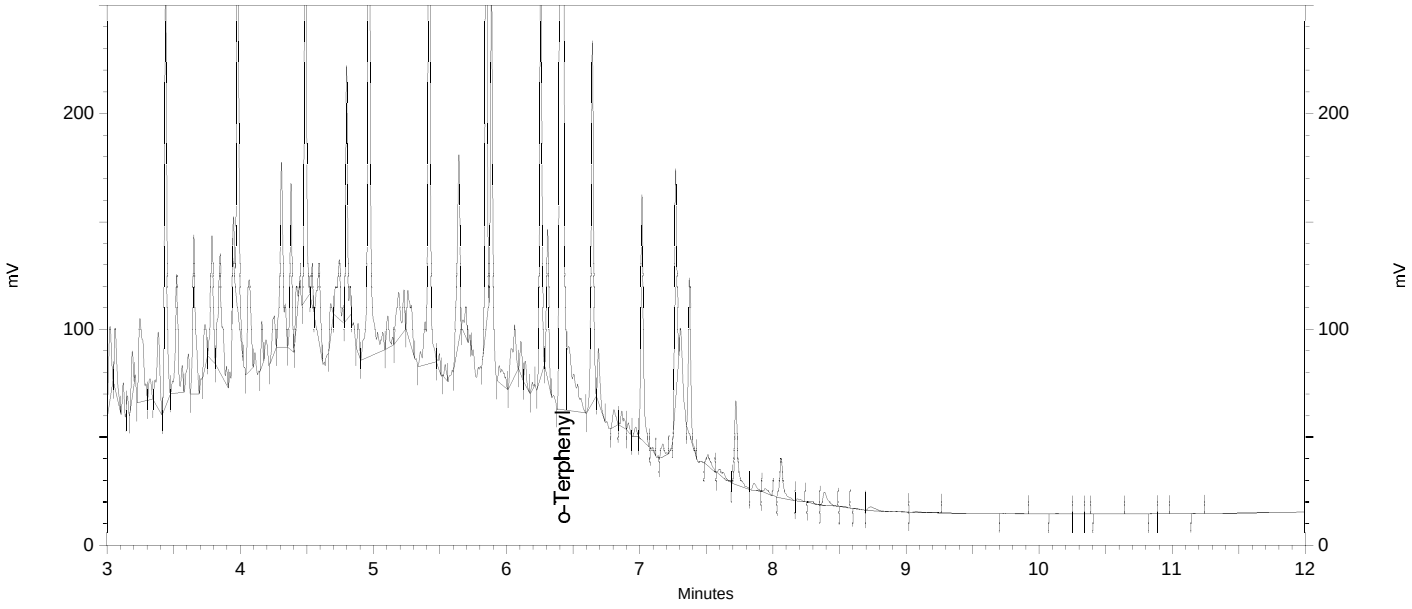
Sample Name: **icv,s20069,dsl_500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a022.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_198b.met**
Run Date: 7/17/2012 1:29:05 AM
Analysis Date: 7/17/2012 1:06:36 PM
Instrument: GC27 (Offline)A Vial: 22 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.422	21398264	49.738
Hexacosane			0.000 BDL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a022.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	6.377	6.595	0
Yes	Split Peak	6.455	0	0

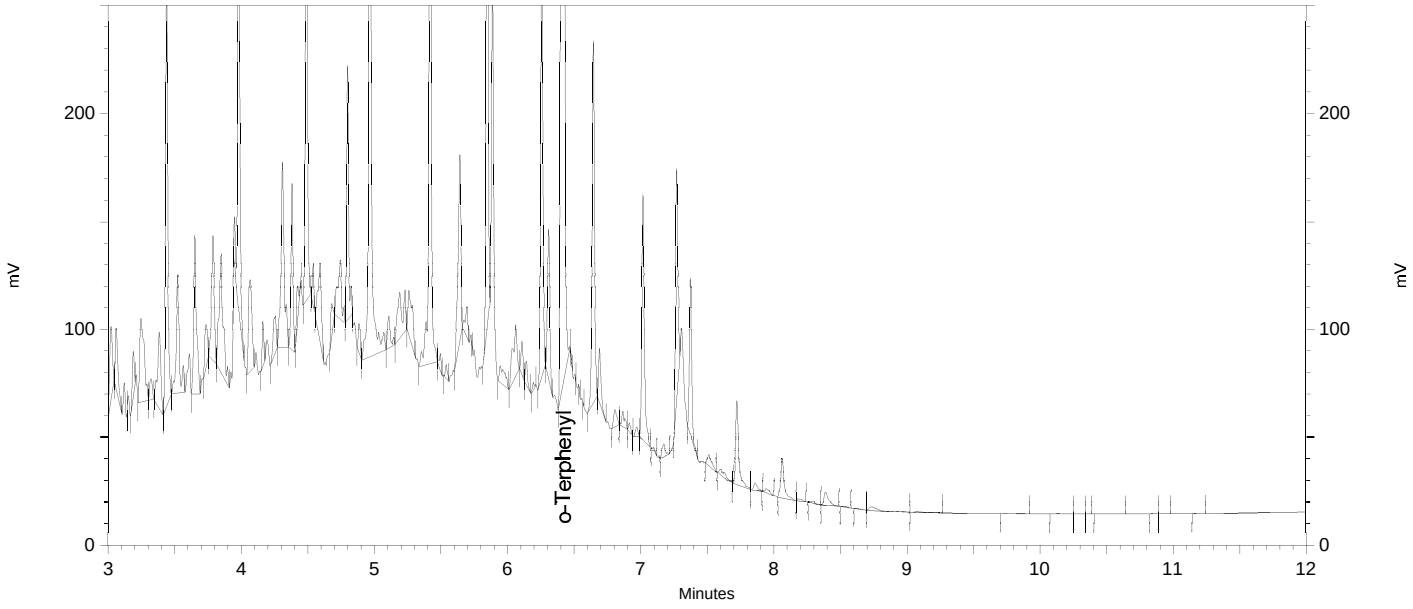
Sample Name: **icv,s20069,dsl_500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\198a022.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\198.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_198b.met**
Run Date: 7/17/2012 1:29:05 AM
Analysis Date: 7/17/2012 1:05:12 PM
Instrument: GC27 (Offline)A Vial: 22 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.422	21003414	48.820
Hexacosane			0.000 BDL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\198a022.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 GCSV Water: EPA 8015D

Inst : GC27A
Calnum : 972287688001
Units : mg/L

Name : OtpHex_199
Date : 17-JUL-2012 17:07
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	199a006	972287688006	HEXOTP_5	17-JUL-2012 17:07	S20332
L2	199a007	972287688007	HEXOTP_10	17-JUL-2012 17:33	S20333
L3	199a008	972287688008	HEXOTP_25	17-JUL-2012 17:58	S20334
L4	199a009	972287688009	HEXOTP_50	17-JUL-2012 18:23	S20335
L5	199a010	972287688010	HEXOTP_100	17-JUL-2012 18:48	S20336
L6	199a011	972287688011	HEXOTP_200	17-JUL-2012 19:13	S20337

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	405848	417913	393873	414949	401451	440396	AVRG		2.42E-6		412405	4	0.995	20	

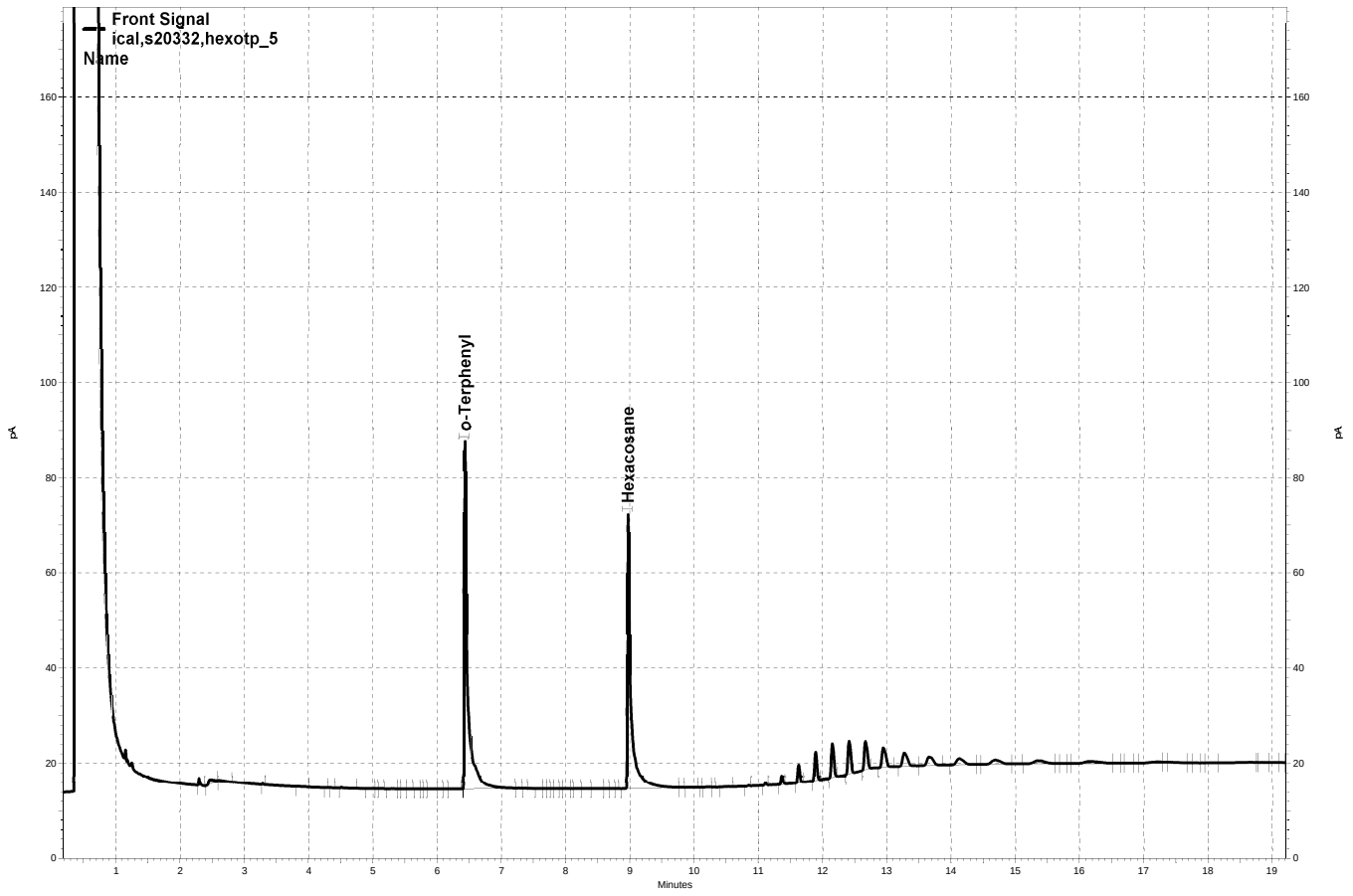
Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.0000	-2	10.000	1	25.000	-4	50.000	1	100.00	-3	200.00	7

MAC 07/18/12 : Corrected automatically drawn baseline in all levels.

Analyst: MAC Date: 07/18/12 Reviewer: CP Date: 07/18/12

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

972287688001



\\lims\gdrive\ezchrom\Projects\GC27\Data\199a006.dat, Front Signal

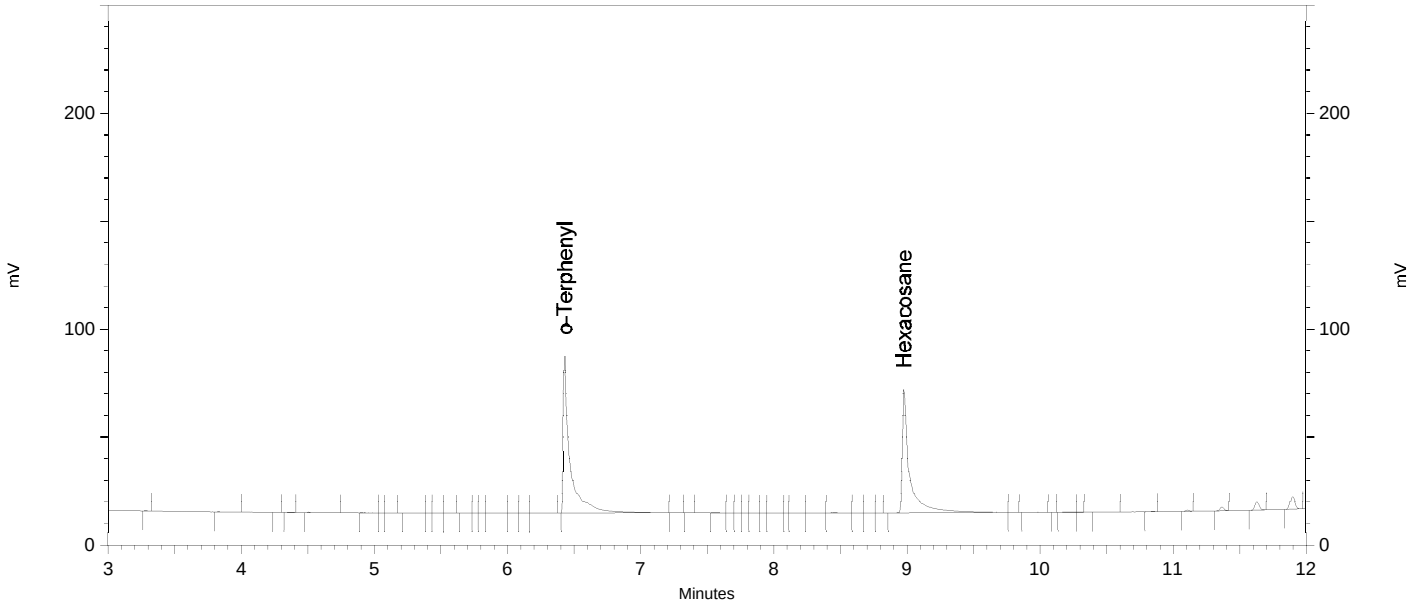
Sample Name: **ical,s20332,hexotp_5**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a006.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 5:07:56 PM
Analysis Date: 7/18/2012 11:07:51 AM
Instrument: GC27 (Offline)A Vial: 6 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.433	2029241	5.000 CAL
Hexacosane	8.977	1664029	5.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a006.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	6.403	7.215	0

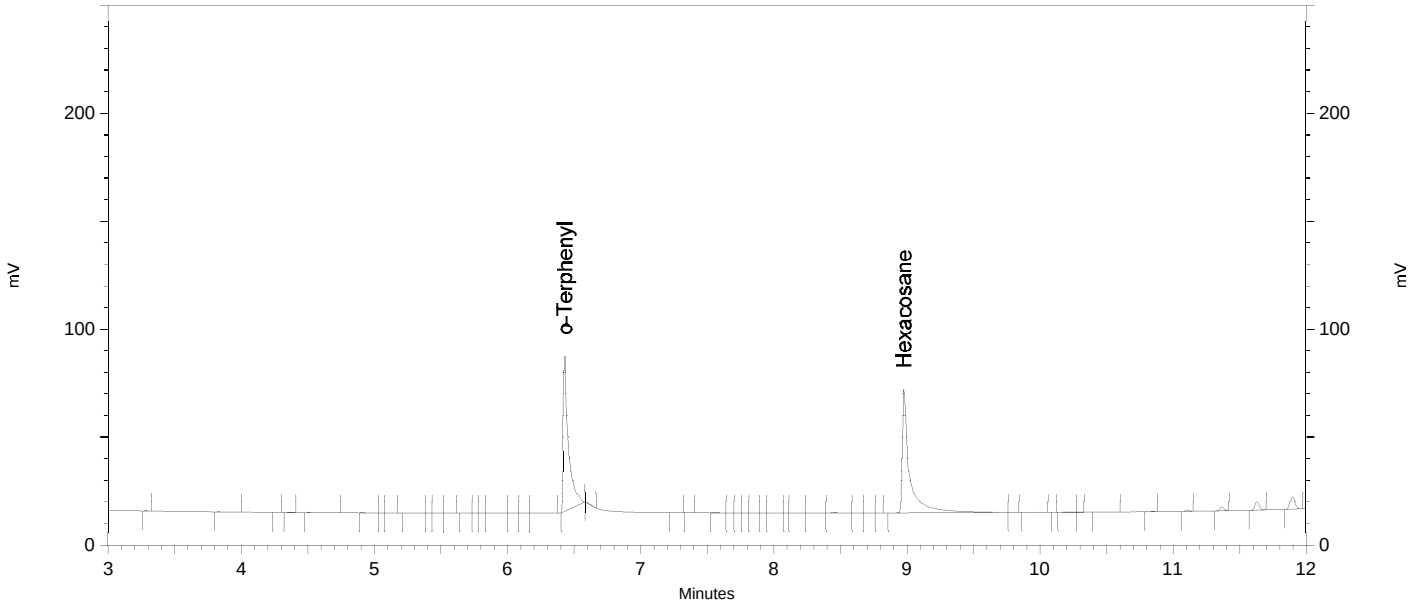
Sample Name: **ical,s20332,hexotp_5**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a006.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 5:07:56 PM
Analysis Date: 7/18/2012 11:04:07 AM
Instrument: GC27 (Offline)A Vial: 6 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.433	1561281	5.000 CAL
Hexacosane	8.977	1664029	5.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

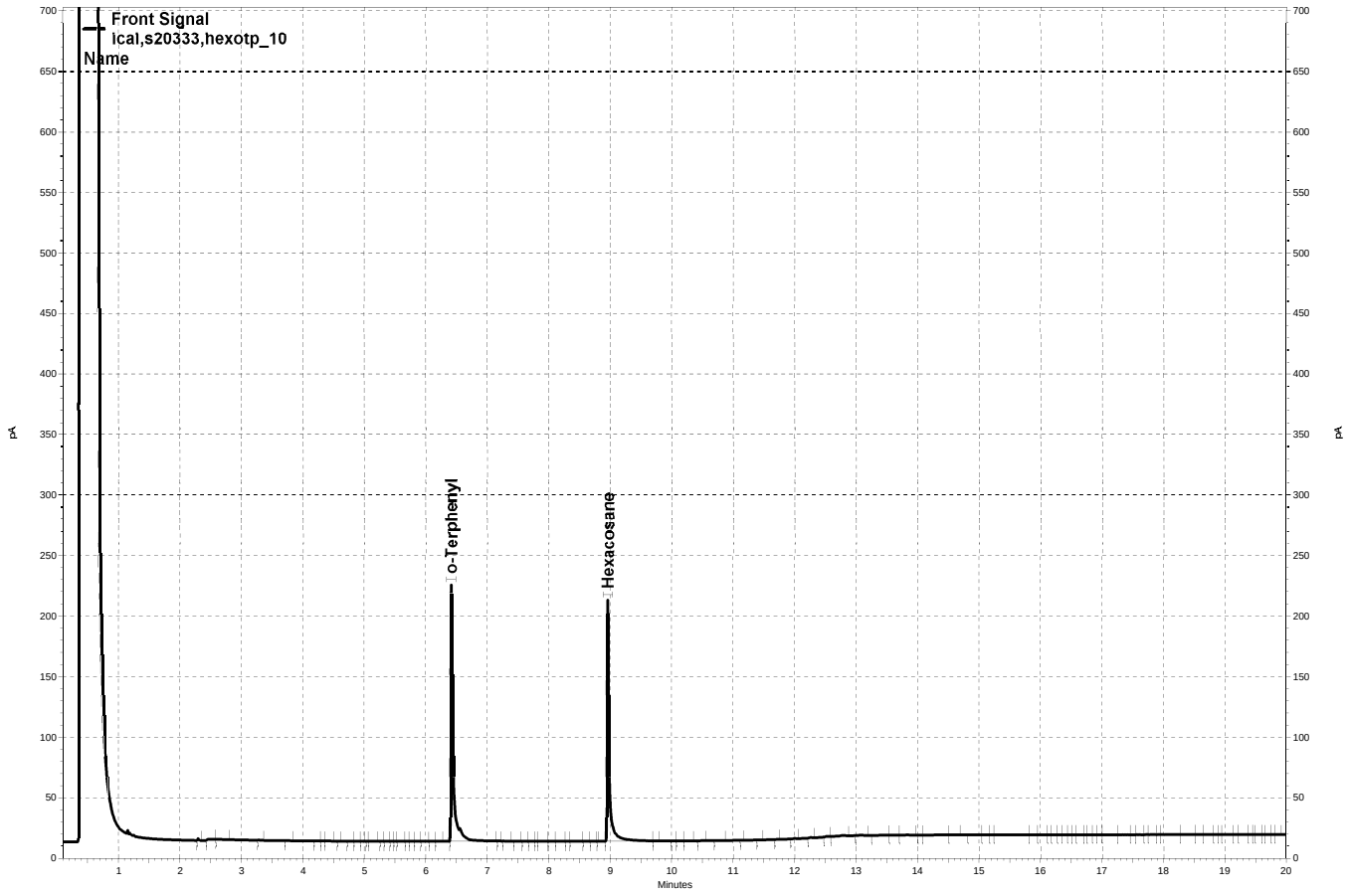
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a006.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\lims\gdrive\ezchrom\Projects\GC27\Data\199a007.dat, Front Signal

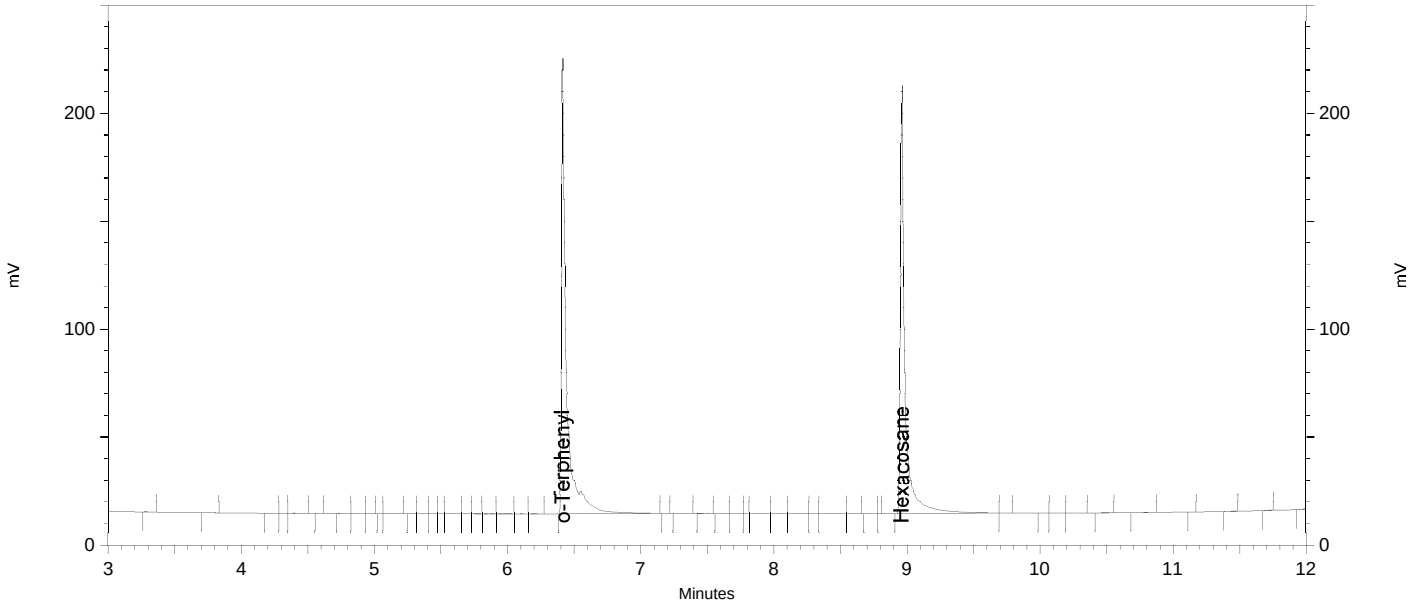
Sample Name: **ical,s20333,hexotp_10**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a007.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 5:33:02 PM
Analysis Date: 7/18/2012 11:08:12 AM
Instrument: GC27 (Offline)A Vial: 7 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.417	4179131	10.000 CAL
Hexacosane	8.962	3564640	10.000 CAL



---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a007.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	6.386	7.147	0

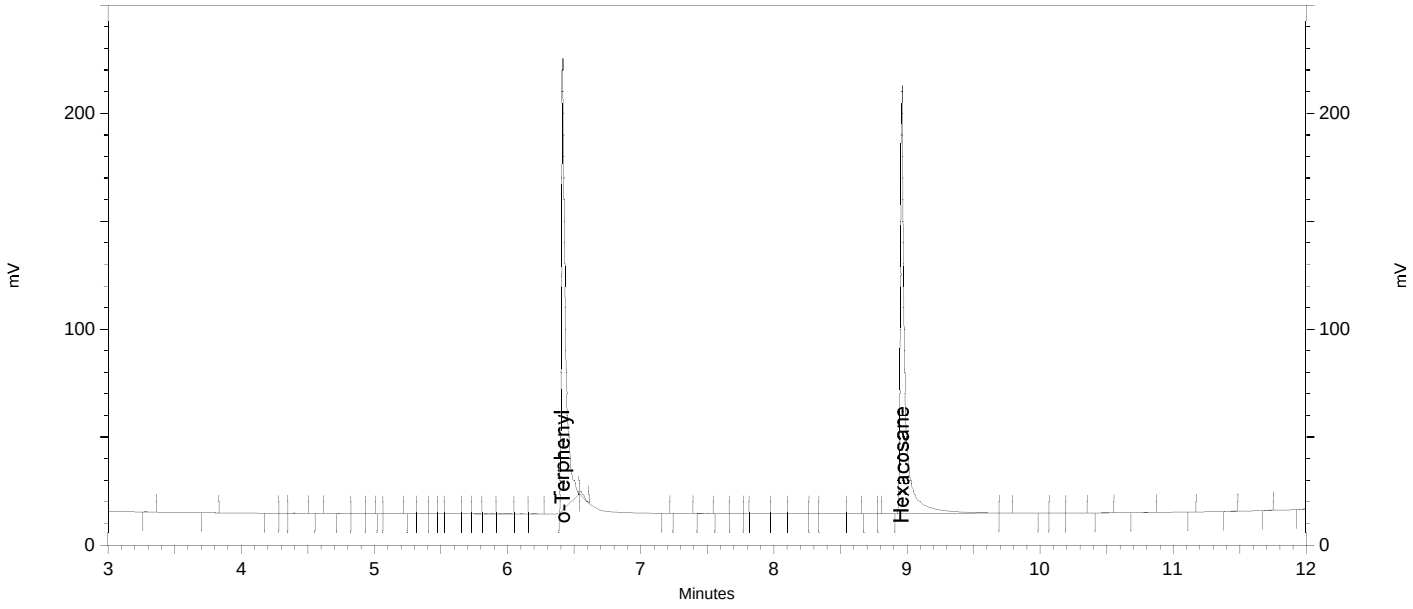
Sample Name: **ical,s20333,hexotp_10**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a007.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 5:33:02 PM
Analysis Date: 7/18/2012 11:04:10 AM
Instrument: GC27 (Offline)A Vial: 7 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.417	3379567	10.000 CAL
Hexacosane	8.962	3564640	10.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

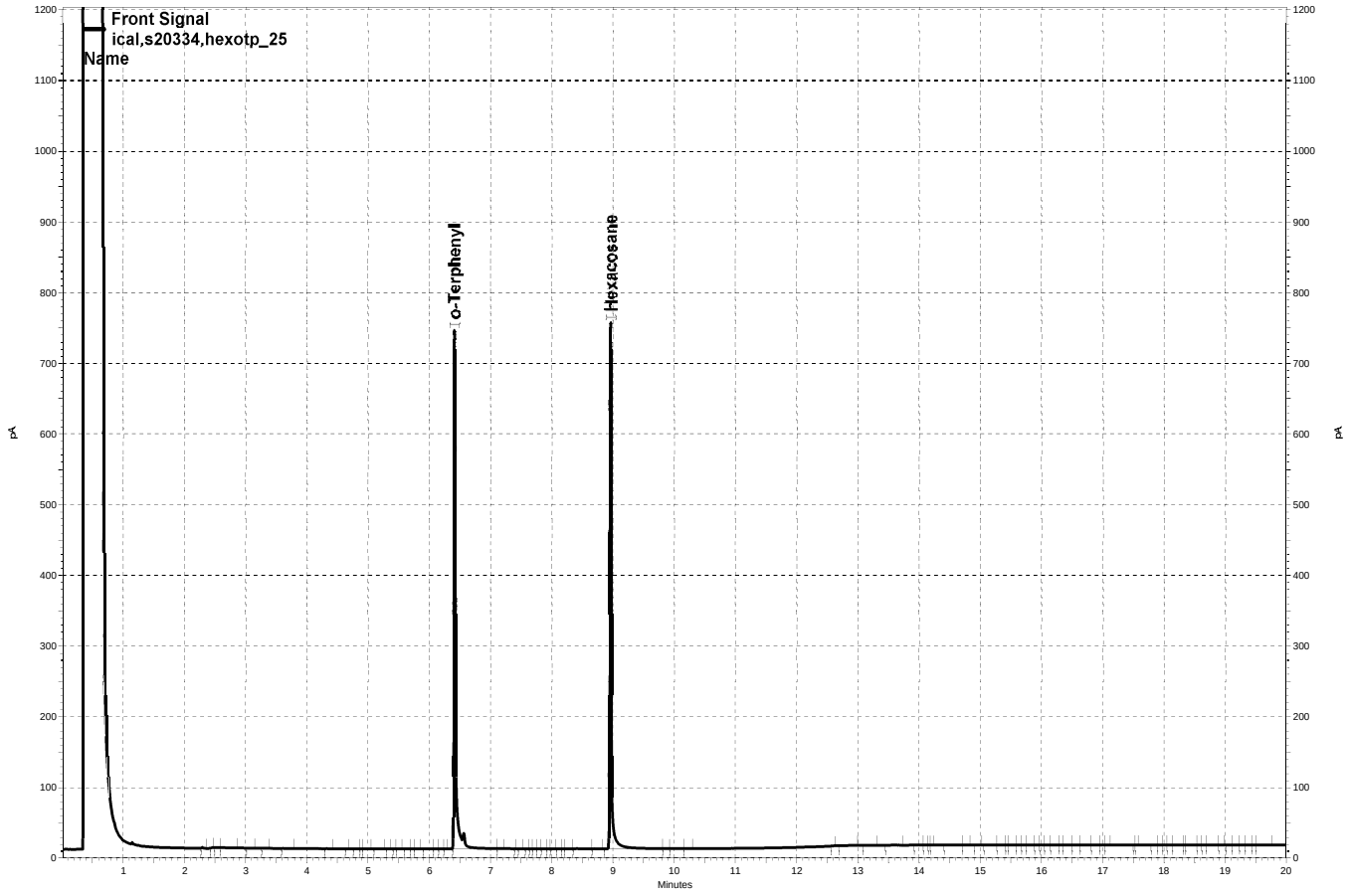
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a007.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\lims\gdrive\ezchrom\Projects\GC27\Data\199a008.dat, Front Signal

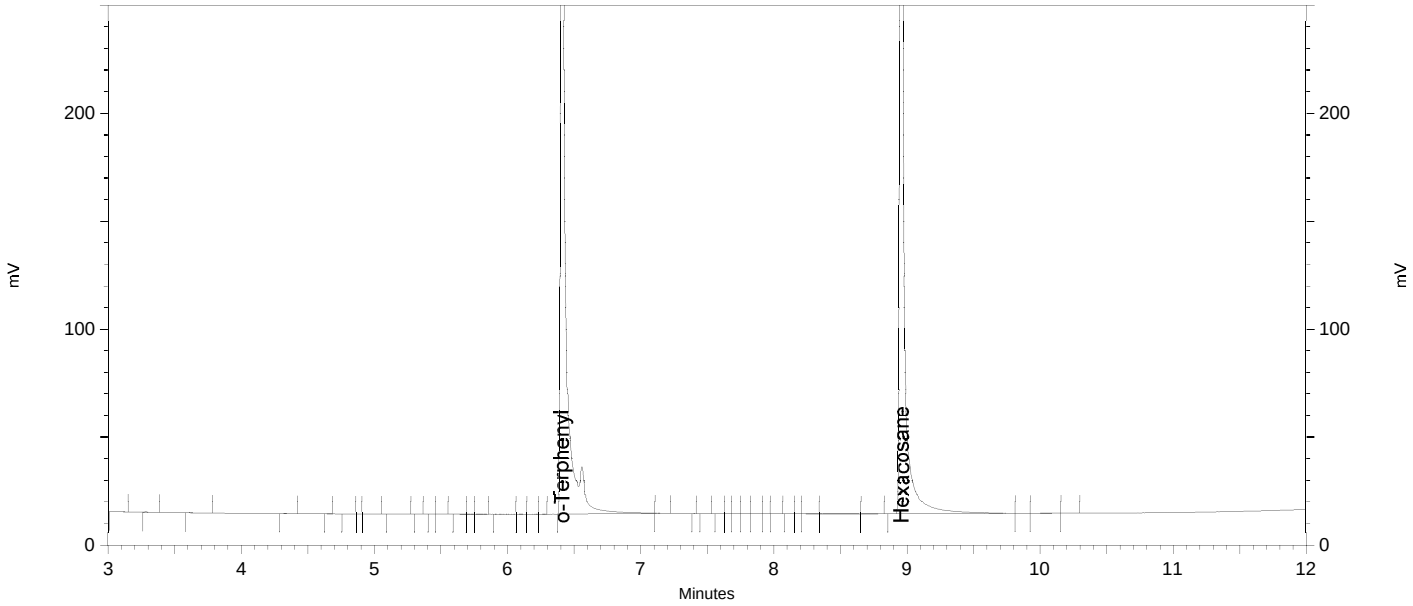
Sample Name: **ical,s20334,hexotp_25**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a008.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 5:58:11 PM
Analysis Date: 7/18/2012 11:08:24 AM
Instrument: GC27 (Offline)A Vial: 8 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.410	9846816	25.000 CAL
Hexacosane	8.960	9511647	25.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a008.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	6.379	7.108	0

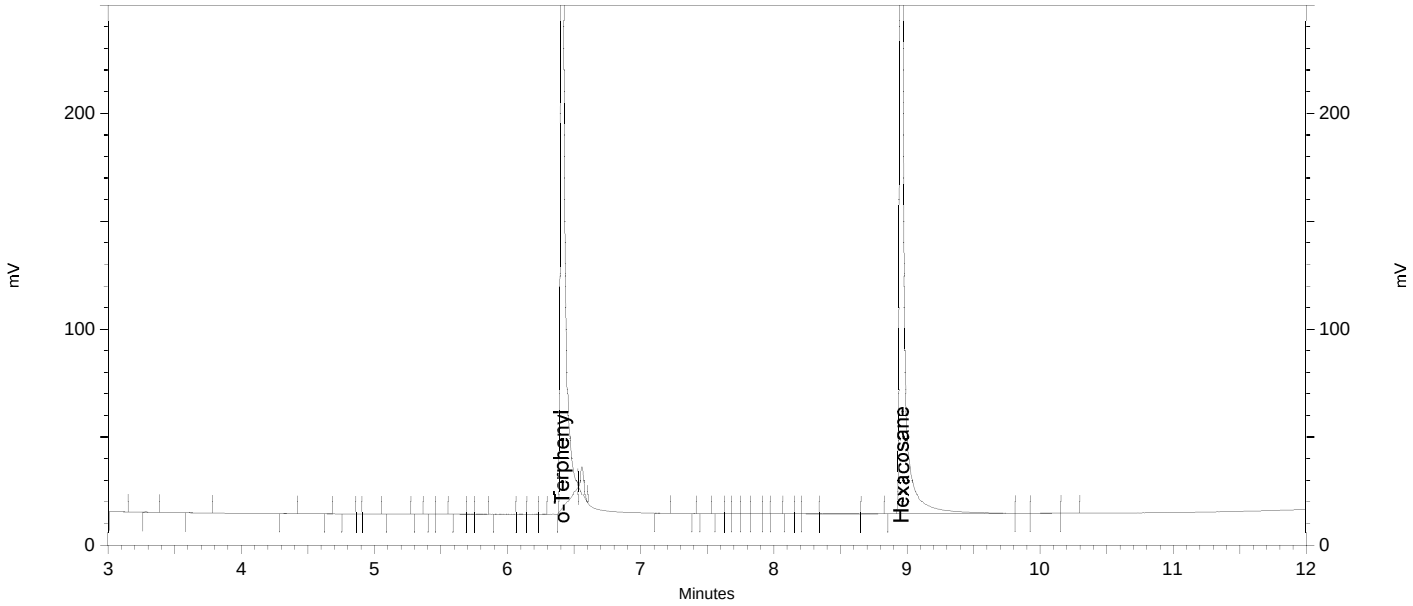
Sample Name: **ical,s20334,hexotp_25**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a008.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 5:58:11 PM
Analysis Date: 7/18/2012 11:04:12 AM
Instrument: GC27 (Offline)A Vial: 8 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.410	8723498	25.000 CAL
Hexacosane	8.960	9511647	25.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

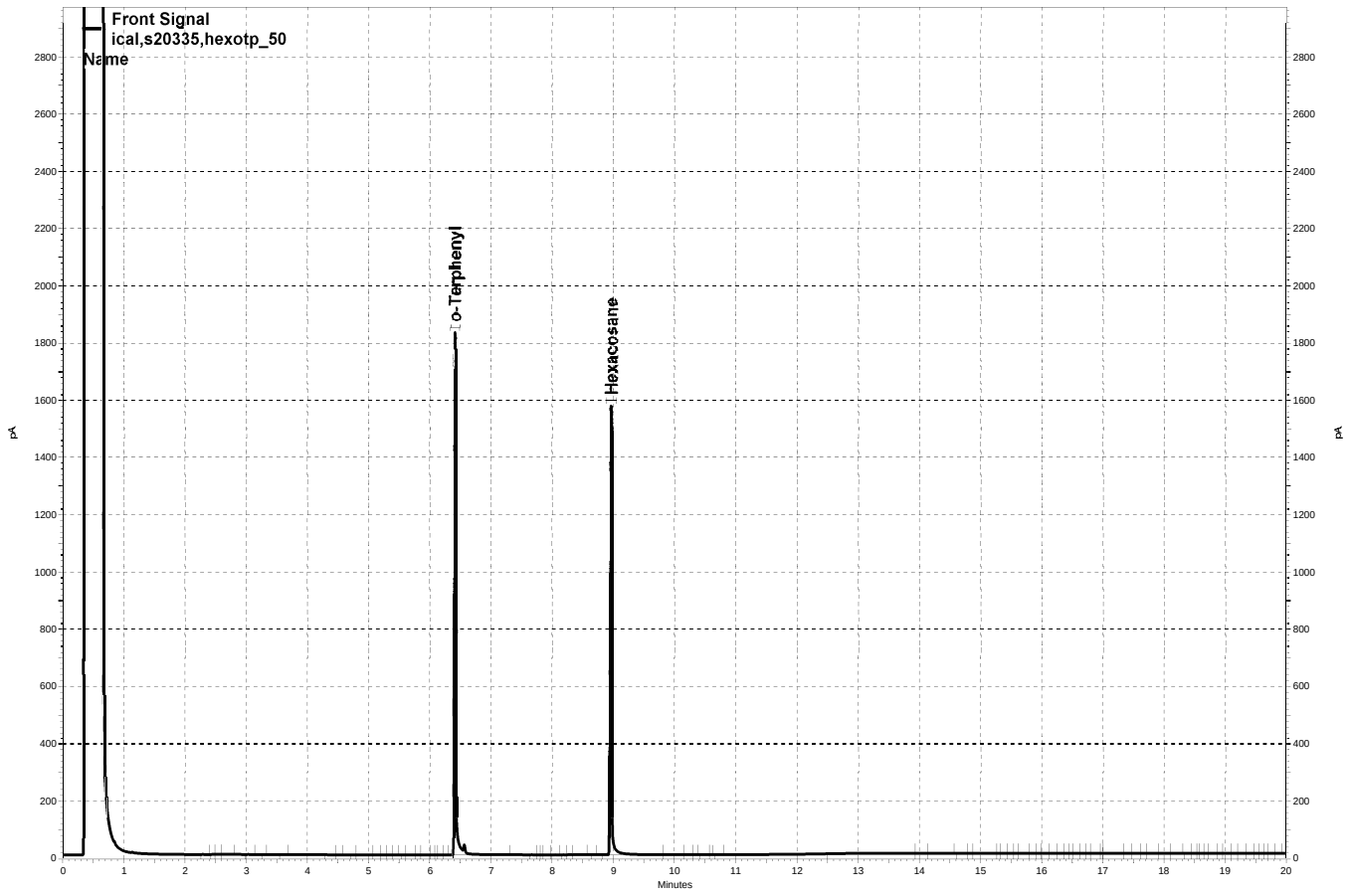
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a008.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\lims\gdrive\ezchrom\Projects\GC27\Data\199a009.dat, Front Signal

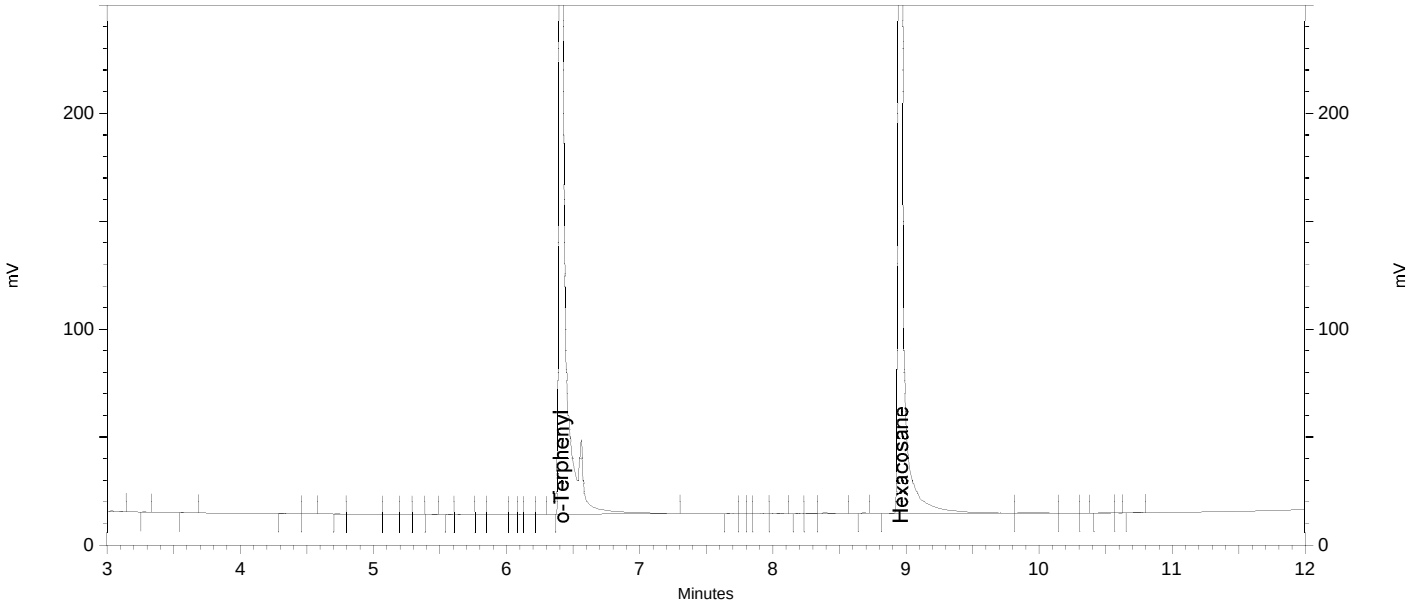
Sample Name: **ical,s20335,hexotp_50**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a009.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 6:23:20 PM
Analysis Date: 7/18/2012 11:08:35 AM
Instrument: GC27 (Offline)A Vial: 9 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.415	20747464	50.000 CAL
Hexacosane	8.963	18476297	50.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a009.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	6.371	7.306	0

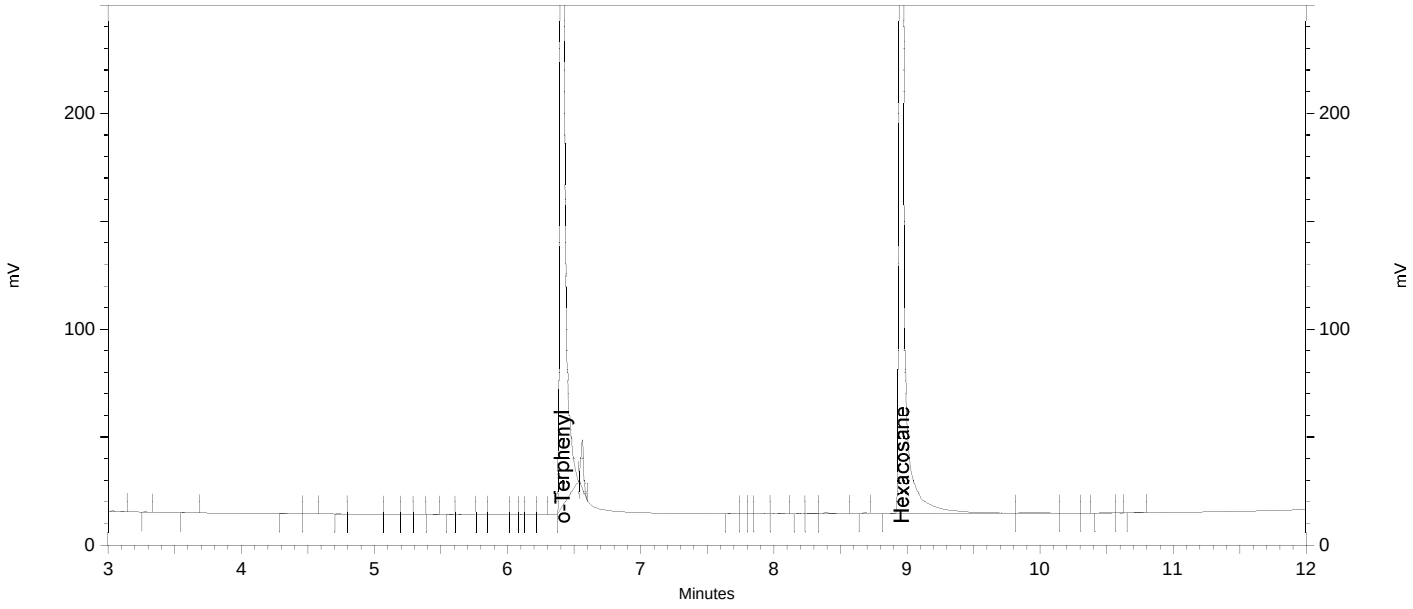
Sample Name: **ical,s20335,hexotp_50**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a009.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 6:23:20 PM
Analysis Date: 7/18/2012 11:04:15 AM
Instrument: GC27 (Offline)A Vial: 9 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.415	19249806	50.000 CAL
Hexacosane	8.963	18476297	50.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

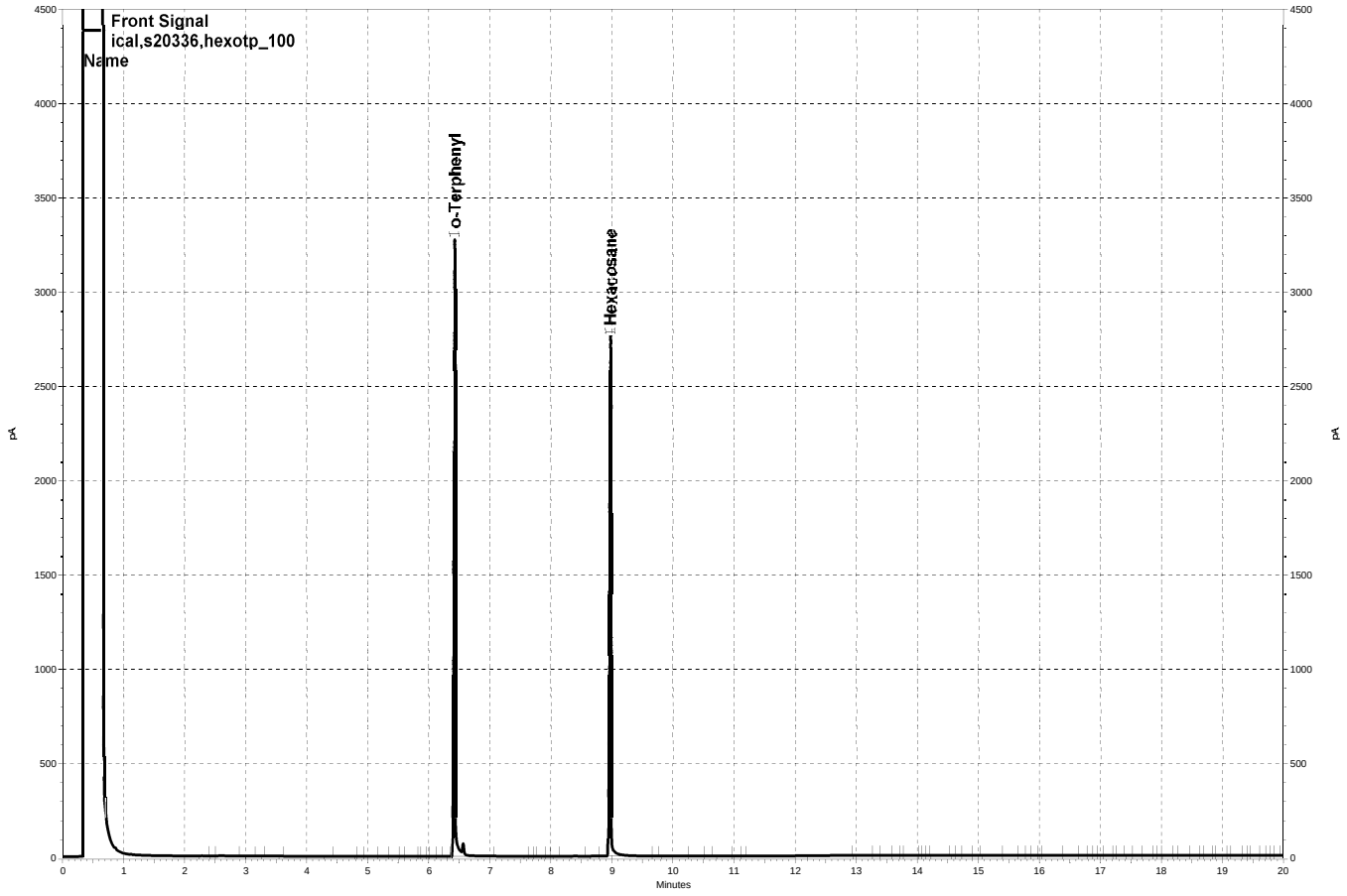
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a009.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\lims\gdrive\ezchrom\Projects\GC27\Data\199a010.dat, Front Signal

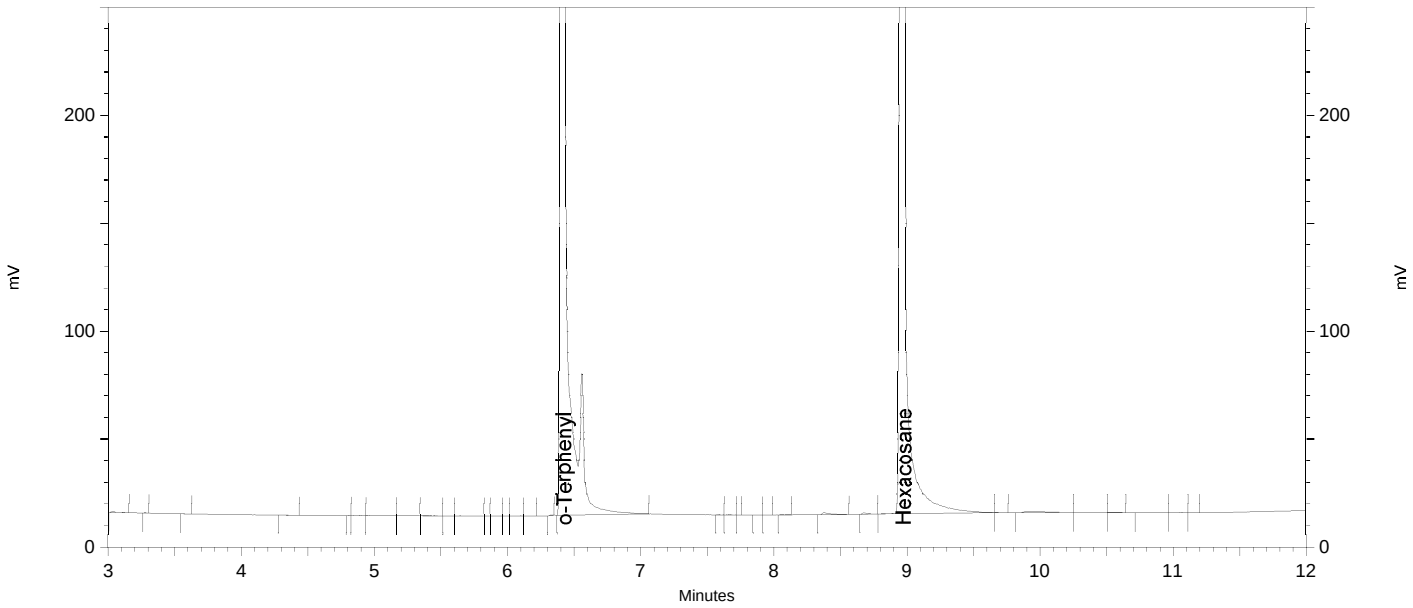
Sample Name: **ical,s20336,hexotp_100**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a010.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 6:48:31 PM
Analysis Date: 7/18/2012 11:08:43 AM
Instrument: GC27 (Offline)A Vial: 10 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.427	40145122	100.000 CAL
Hexacosane	8.977	34819928	100.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a010.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	6.371	7.064	0

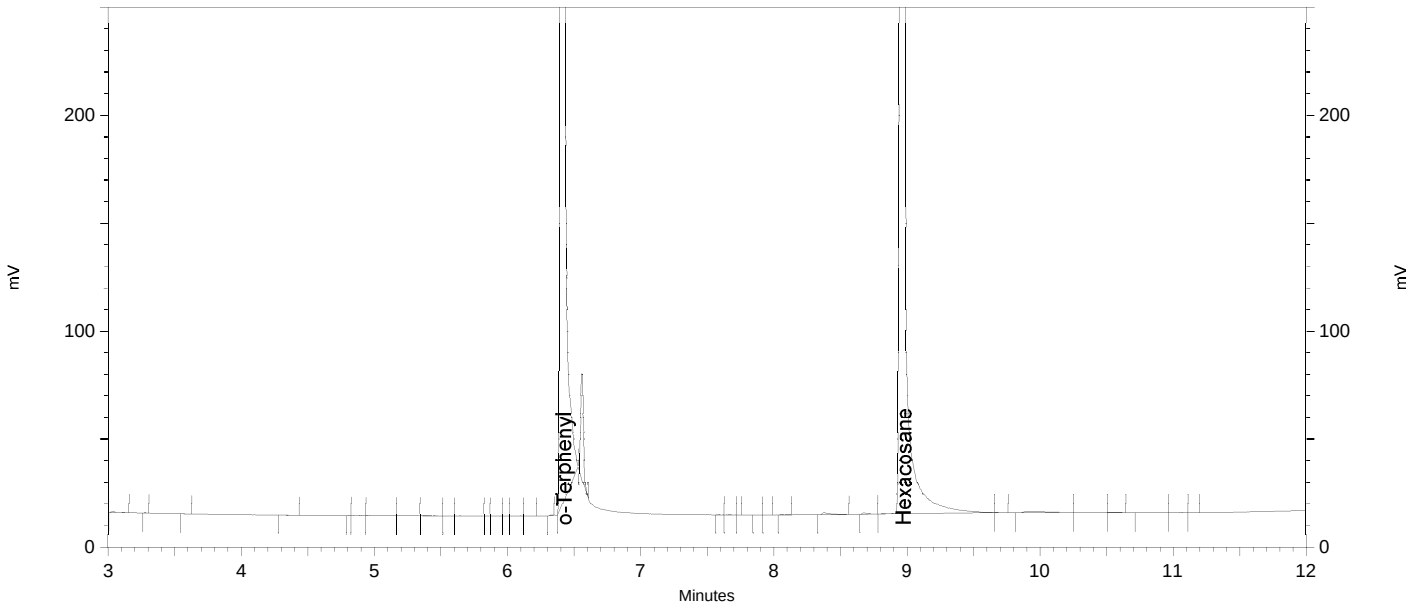
Sample Name: **ical,s20336,hexotp_100**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a010.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 6:48:31 PM
Analysis Date: 7/18/2012 11:04:17 AM
Instrument: GC27 (Offline)A Vial: 10 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.427	37928221	100.000 CAL
Hexacosane	8.977	34819928	100.000 CAL



---< General Method Parameters >----------

No items selected for this section

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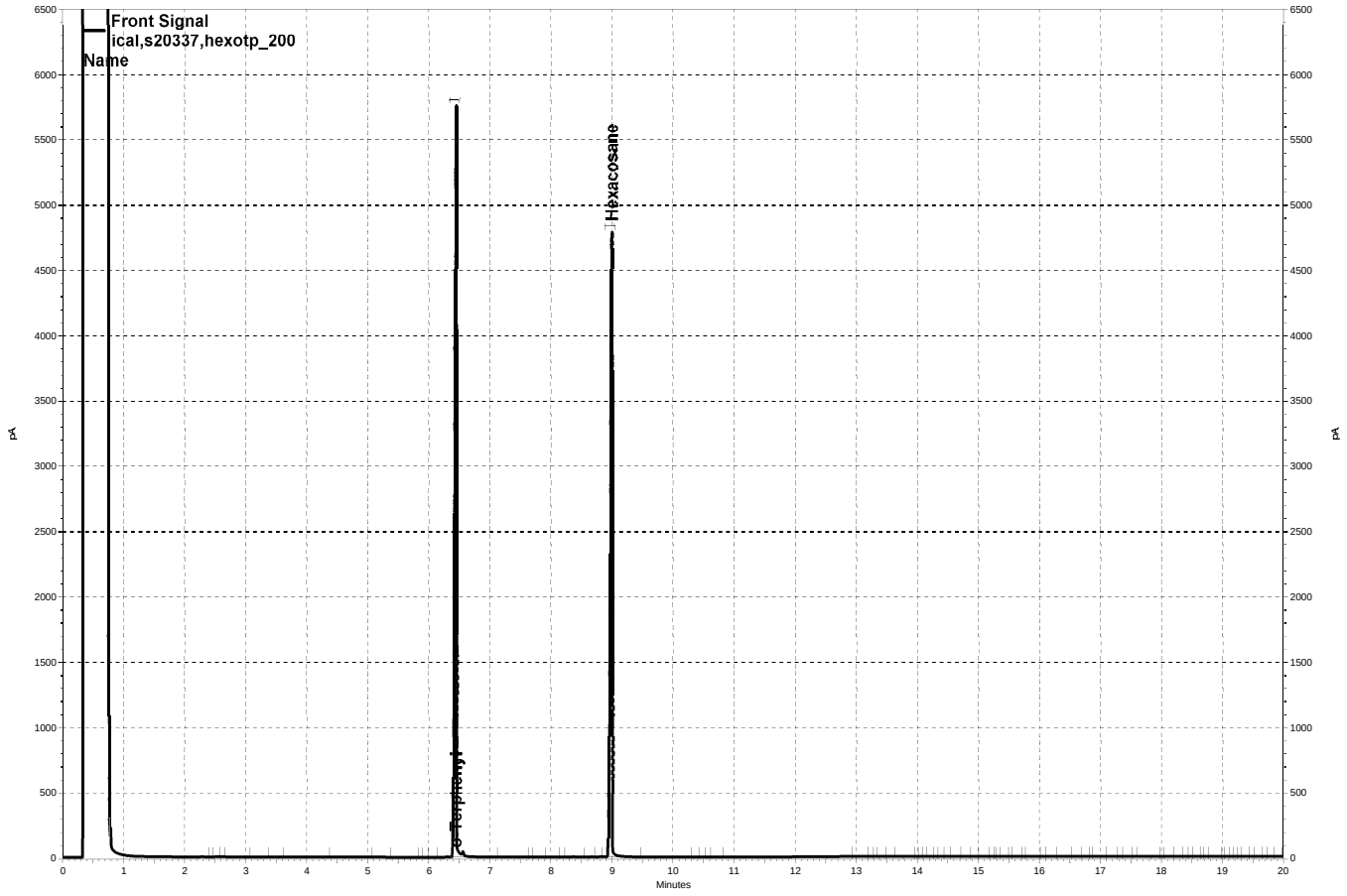
No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a010.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				



\\lims\gdrive\ezchrom\Projects\GC27\Data\199a011.dat, Front Signal

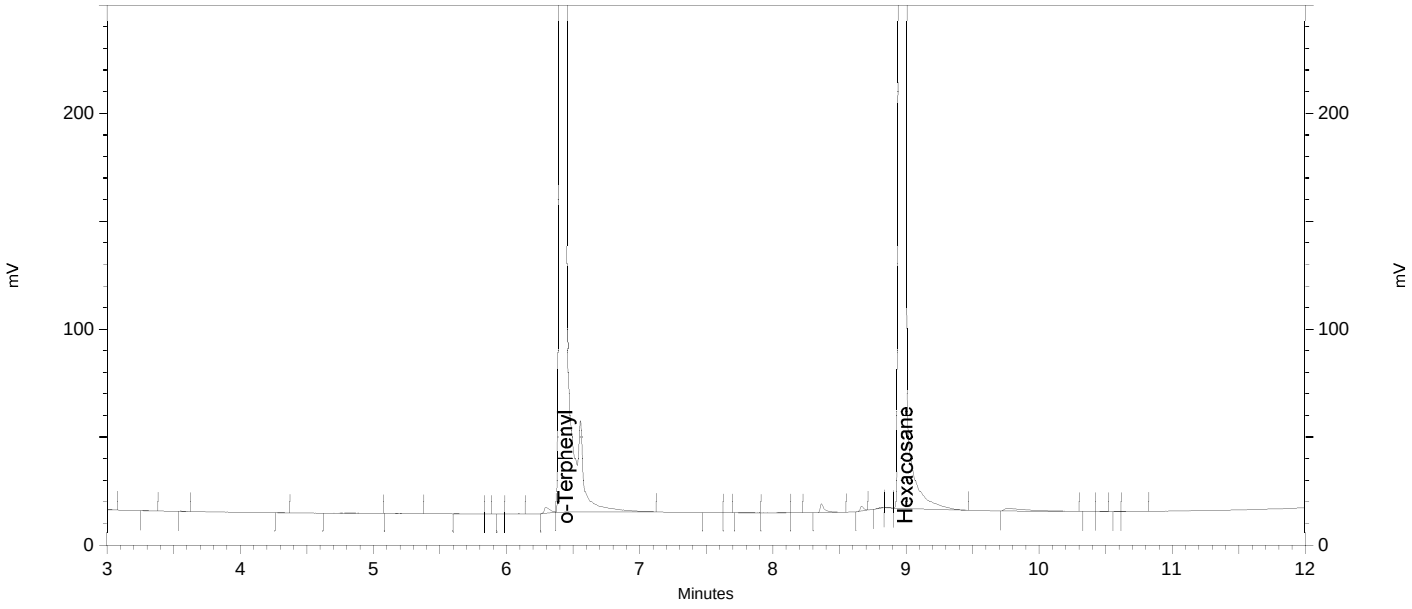
Sample Name: **ical,s20337,hexotp_200**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a011.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 7:13:37 PM
Analysis Date: 7/18/2012 11:08:50 AM
Instrument: GC27 (Offline)A Vial: 11 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.445	88079223	200.000 CAL
Hexacosane	8.997	77362766	200.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a011.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	6.371	7.127	0

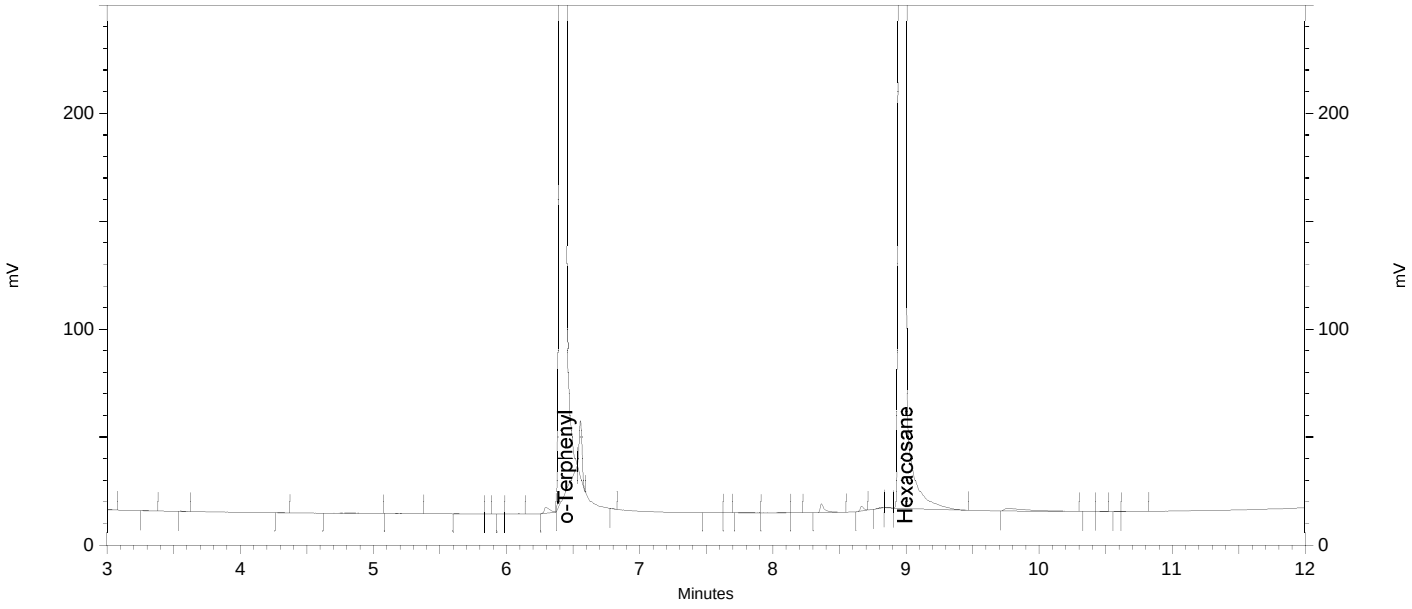
Sample Name: **ical,s20337,hexotp_200**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\199a011.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\199.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_199.met**
Run Date: 7/17/2012 7:13:37 PM
Analysis Date: 7/18/2012 11:04:20 AM
Instrument: GC27 (Offline)A Vial: 11 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.445	86178752	200.000 CAL
Hexacosane	8.997	77362766	200.000 CAL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

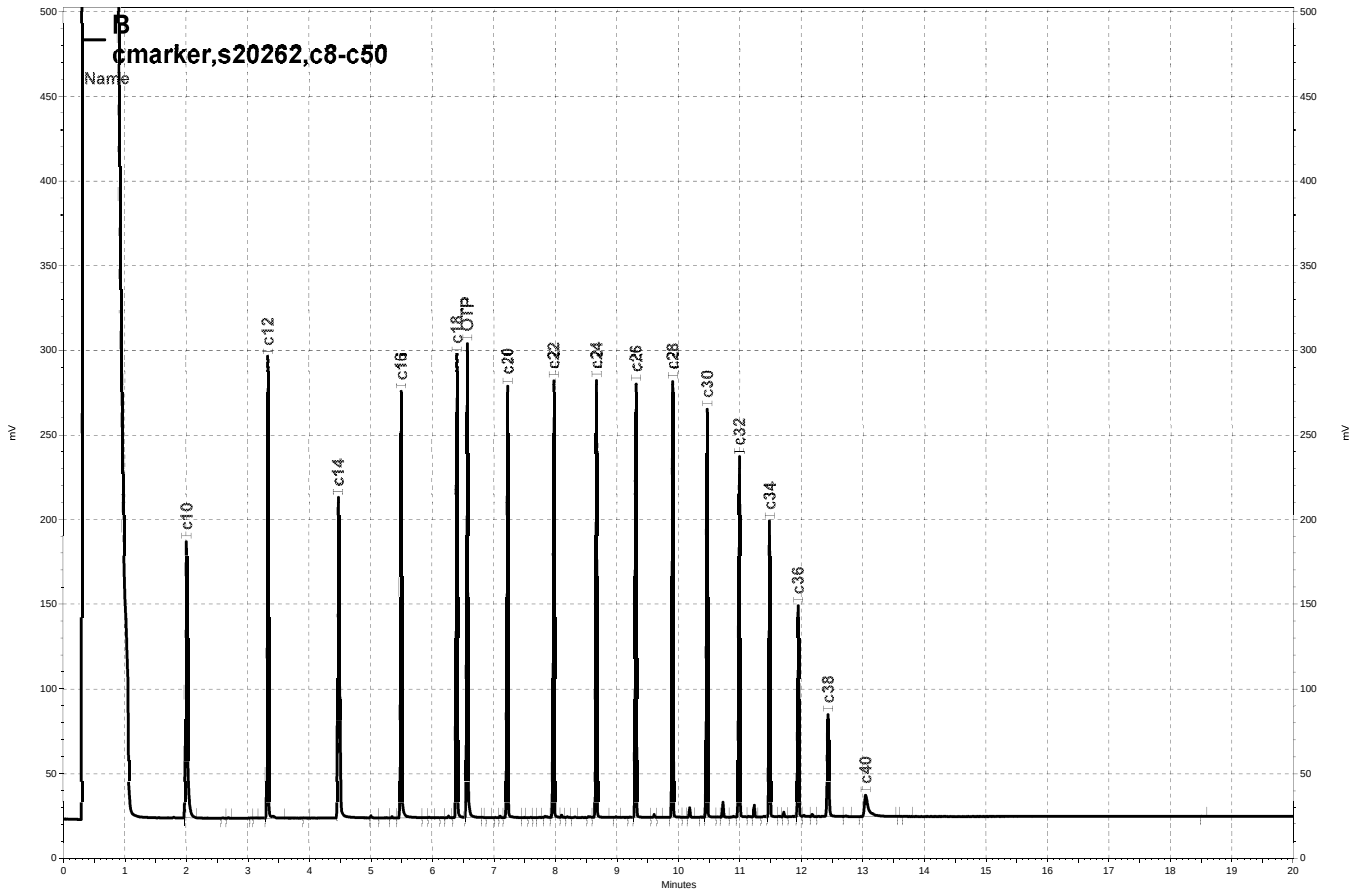
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\199a011.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b012, B

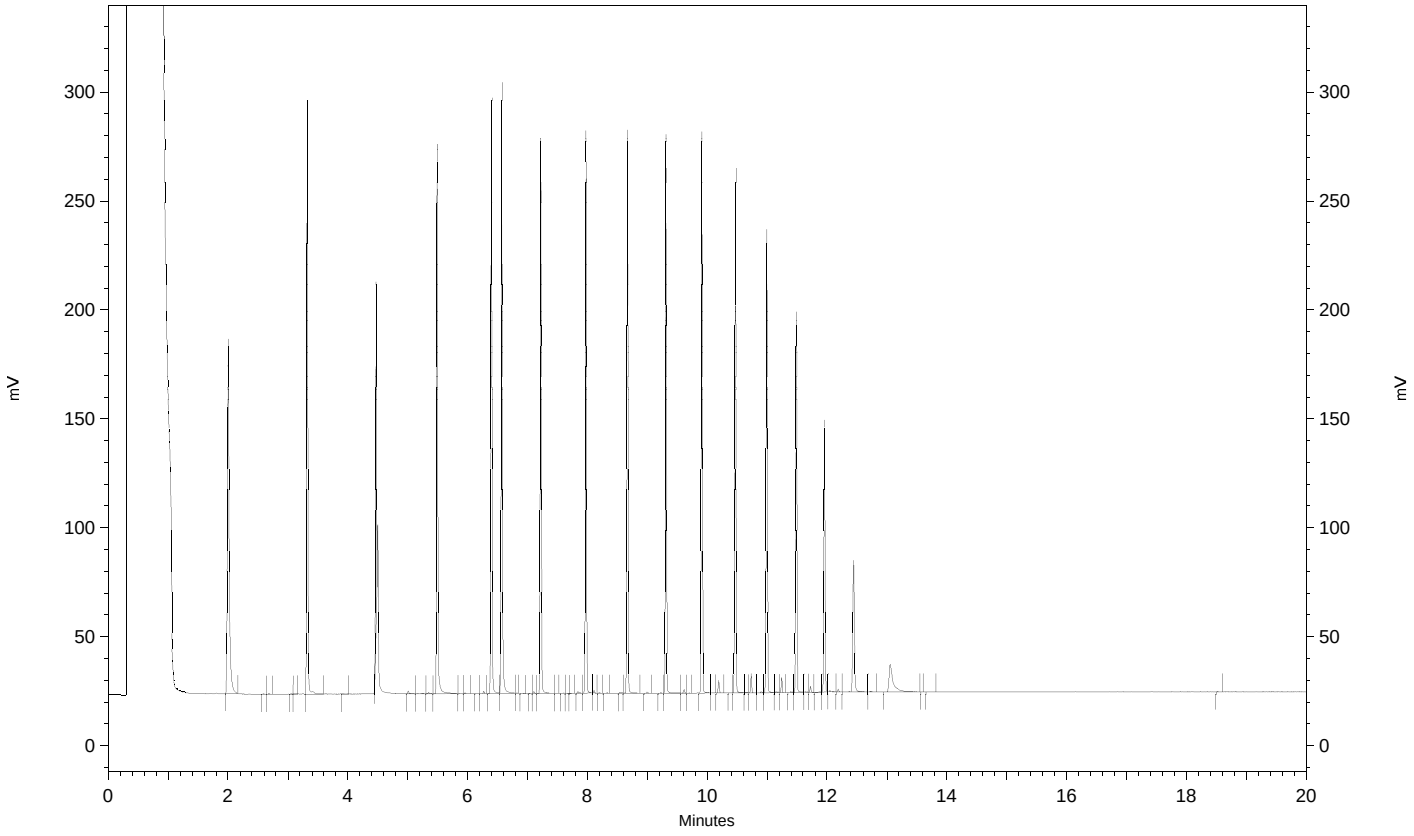
Sample Name: **cmarker,s20262,c8-c50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\204b012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\204.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\cm204.met
Run Date: 7/22/2012 8:46:27 PM
Analysis Date: 7/23/2012 1:03:41 PM
Instrument: GC14B Vial: 12 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

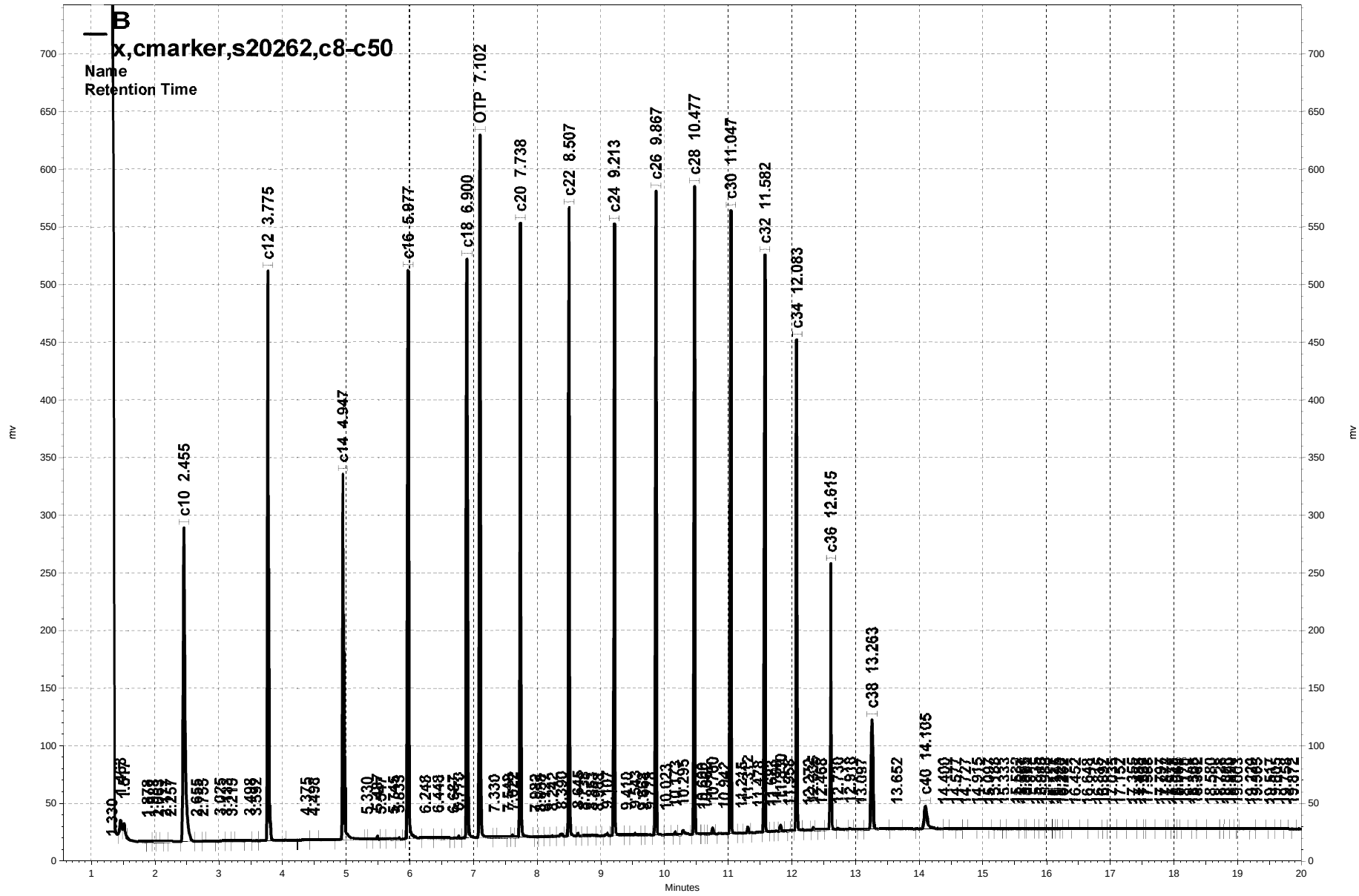
GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
c10	2.007	327099	0.000
c12	3.327	335052	0.000
c14	4.472	162987	0.000
c16	5.493	335593	0.000
c18	6.398	330626	0.000
OTP	6.570	361074	0.000
c20	7.223	322247	0.000
c22	7.975	310066	0.000
c24	8.670	316702	0.000
c26	9.312	315672	0.000
c28	9.908	305736	0.000
c30	10.470	296550	0.000
c32	10.993	261550	0.000
c34	11.485	217606	0.000
c36	11.952	160370	0.000
c38	12.437	113715	0.000
c40	13.047	60208	0.000




B
x,cmarker,s20262,c8-c50
Name
Retention Time
mv
Minutes
c10 2.455
c12 3.775
c14 4.947
c16 5.977
c18 6.900
OTP 7.102
c20 7.738
c22 8.507
c24 9.213
c26 9.867
c28 10.477
c30 11.047
c32 11.582
c34 12.083
c36 12.615
c38 13.263
c40 14.105
\\Lims\gdrive\ezchrom\Projects\GC15B\Data\234b007, B

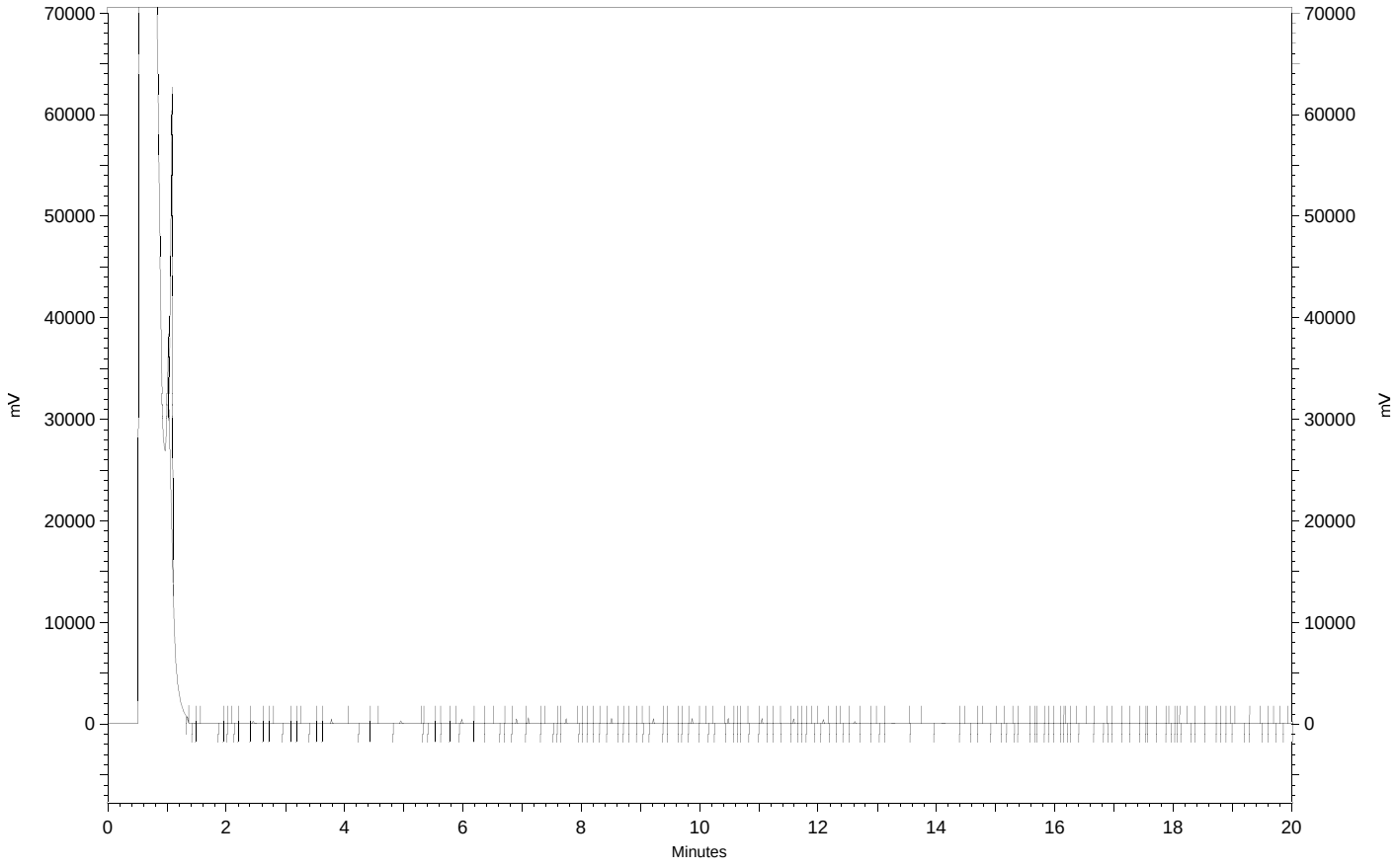
Sample Name: **x,cmarker,s20262,c8-c50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\234b007**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\234.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\cm234.met
Run Date: 8/21/2012 2:10:48 PM
Analysis Date: 8/21/2012 2:49:40 PM
Instrument: GC15B Vial: 7 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

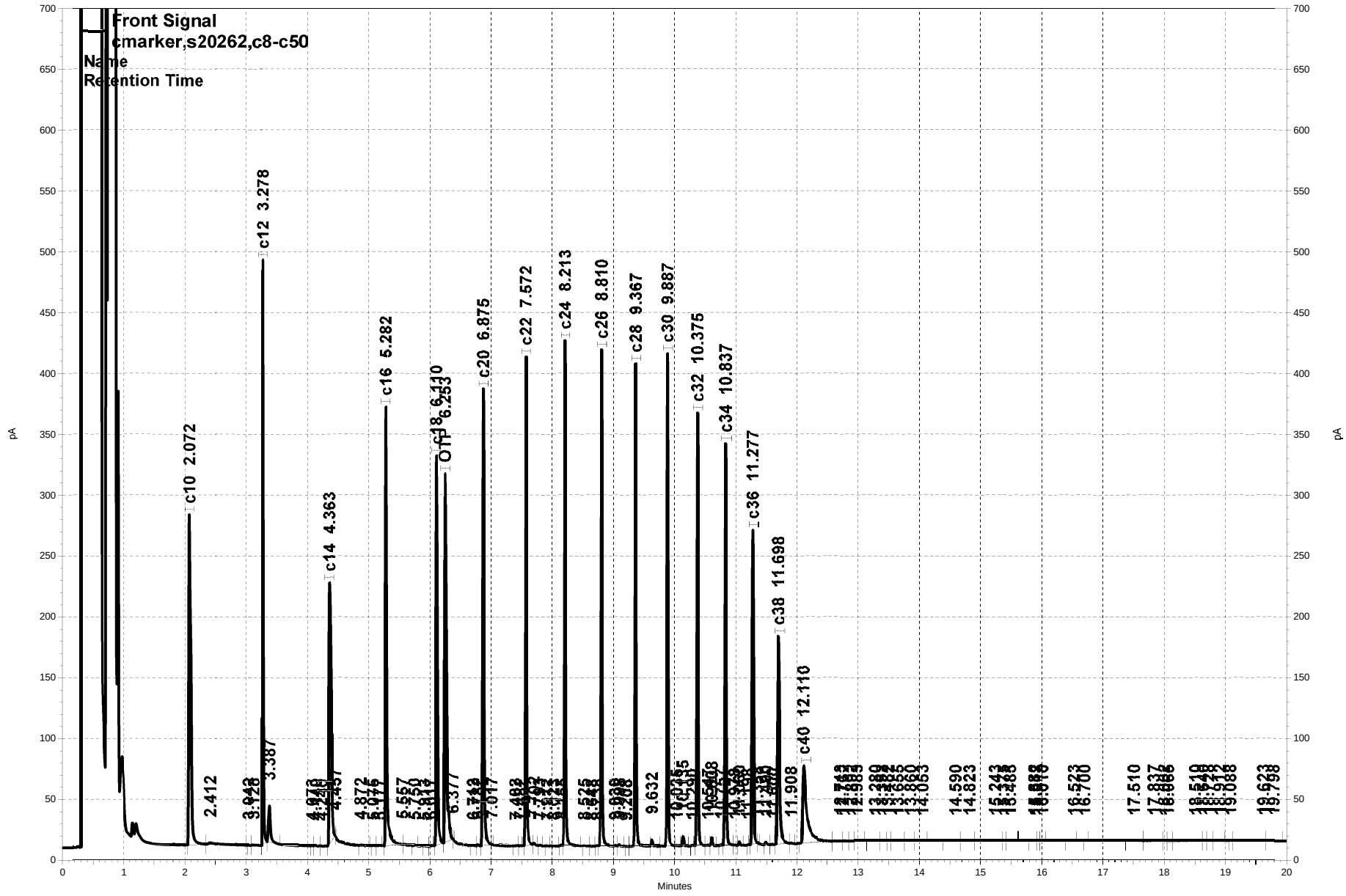
GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
c10	2.455	568088	0.000
c12	3.775	581710	0.000
c14	4.947	601818	0.000
c16	5.977	595739	0.000
c18	6.900	613639	0.000
OTP	7.102	671455	0.000
c20	7.738	612977	0.000
c22	8.507	599188	0.000
c24	9.213	615937	0.000
c26	9.867	619608	0.000
c28	10.477	610728	0.000
c30	11.047	610741	0.000
c32	11.582	573010	0.000
c34	12.083	490312	0.000
c36	12.615	329520	0.000
c38	13.263	180820	0.000
c40	14.105	67277	0.000





\\lims\gdrive\ezchrom\Projects\GC27\Data\237a015.dat, Front Signal

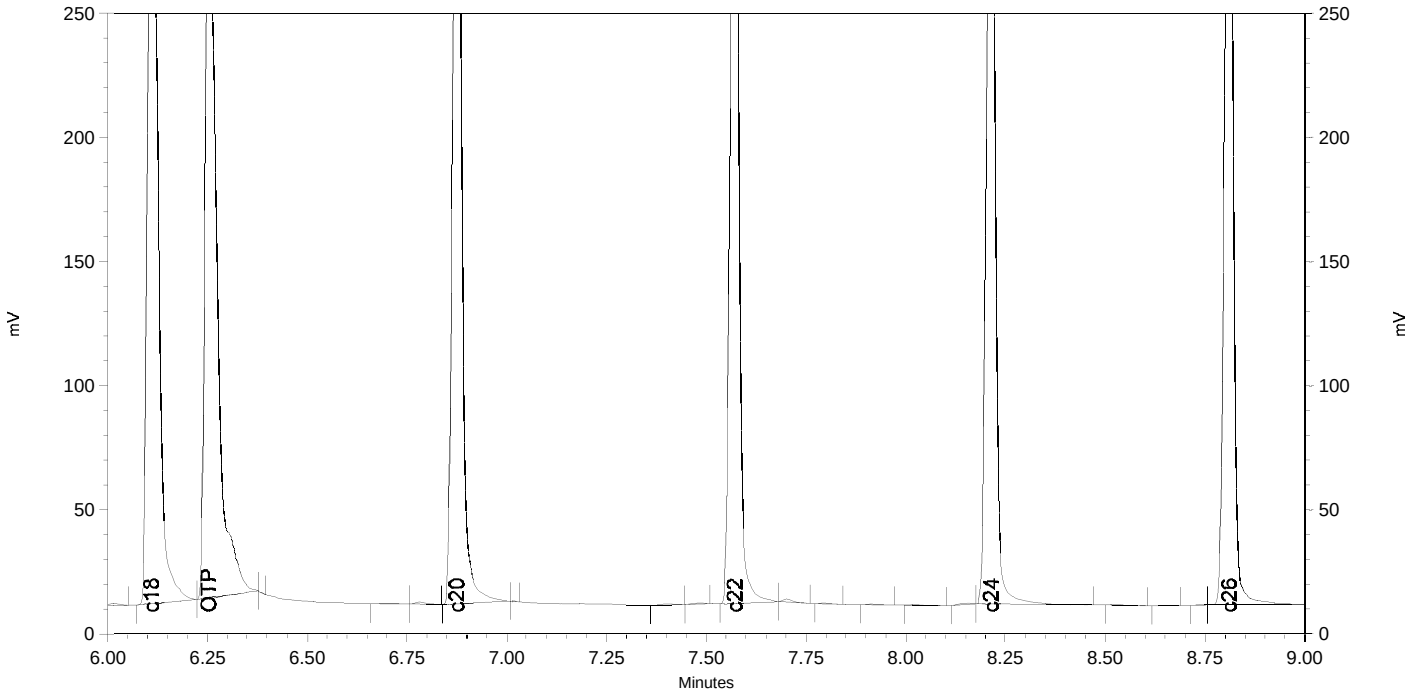
Sample Name: **cmarker,s20262,c8-c50**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\237a015.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\237.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-cm233a.met**
Run Date: 8/24/2012 8:03:38 PM
Analysis Date: 8/26/2012 1:04:29 PM
Instrument: GC27A Vial: 15 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
c10	2.072	4656211	0.000
c12	3.278	3906535	0.000
c14	4.363	4069009	0.000
c16	5.282	4545227	0.000
c18	6.110	4493839	0.000
OTP	6.253	4689827	0.000
c20	6.875	4490376	0.000
c22	7.572	4381244	0.000
c24	8.213	4509134	0.000
c26	8.810	4472130	0.000
c28	9.367	4369510	0.000
c30	9.887	4311599	0.000
c32	10.375	4027993	0.000
c34	10.837	3737657	0.000
c36	11.277	3230986	0.000
c38	11.698	2947003	0.000
c40	12.110	2286389	0.000


250
200
150
100
50
0
mV
c18
OTP
c20
c22
c24
c26
6.00
6.25
6.50
6.75
7.00
7.25
7.50
7.75
8.00
8.25
8.50
8.75
9.00
Minutes

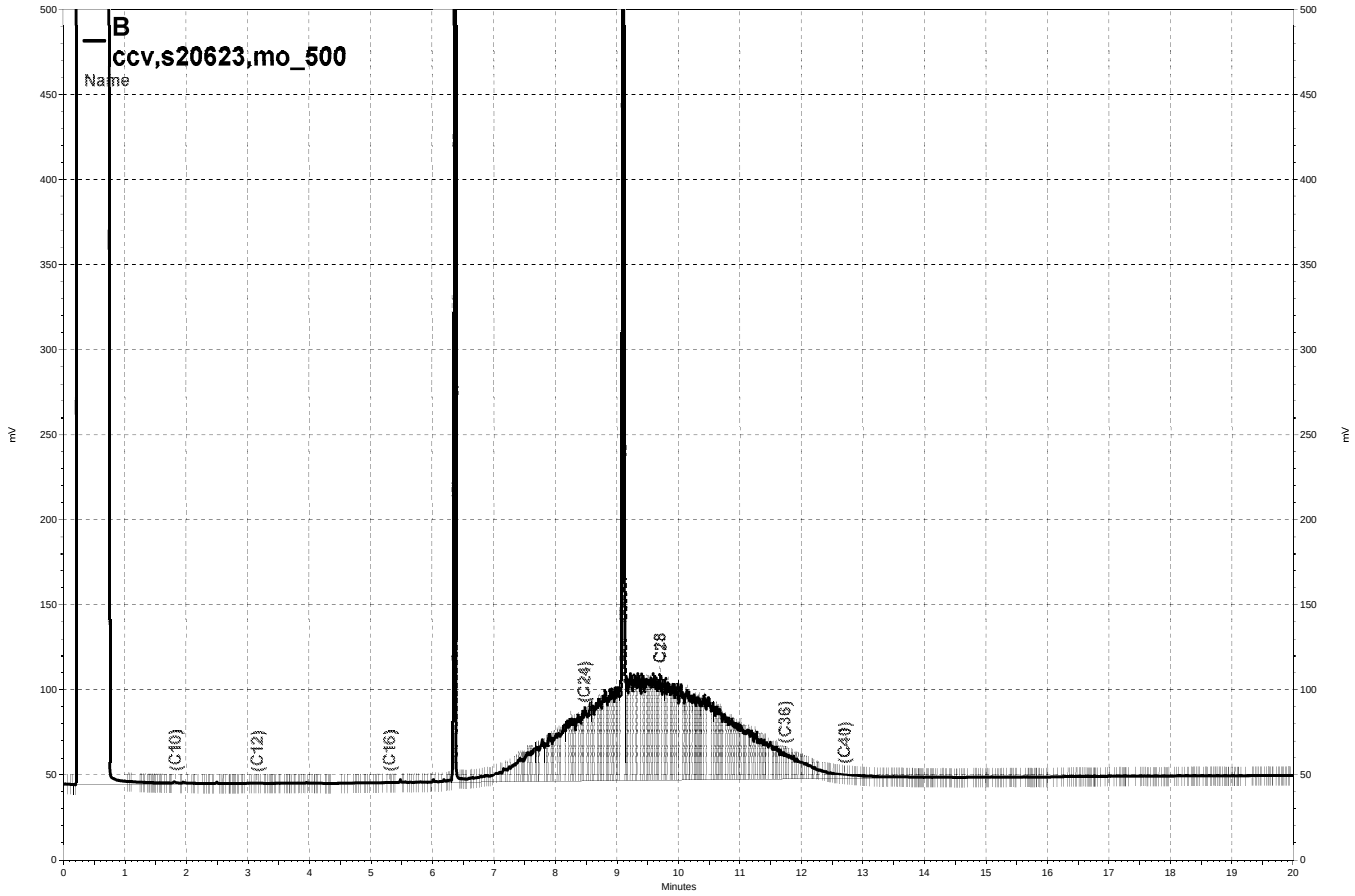
Continuing Calibration Verification Raw Data

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 222361903011.1 File : 251_011 Time : 07-SEP-2012 12:46
Standards: S20623

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	222295006001	22-JUL-2012	18049	16665	500.0	461.7	mg/L	-8	20	
o-Terphenyl	B	222229527001	07-JUN-2012	33095	29702	50.00	44.87	mg/L	-10	20	

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b011, B

Sample Name: **ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh251.met
Run Date: 9/7/2012 12:46:58 PM
Analysis Date: 9/7/2012 1:24:18 PM
Instrument: GC14B Vial: 11 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	61240	2.286
JP8:10-16	61240	2.281
KER:10-16	61240	2.350
JP5:10-16	61240	2.099
DSL:10-20	1665392	62.785
DSL:10-22	2178597	78.344
DSL:10-24	3462704	122.884
DSL:12-22	2148059	92.900
DSL:10-28	8572307	302.943
DSL:12-24	3432166	146.093
DSL:12-32	11498939	486.387
BUNKC:12-40	13355053	1755.203
TROIL:12-40	13355053	192.781
HYFL:12-40	13355053	528.186
MO:22-32	9350880	529.575
MO:20-36	11311991	520.471
MO:22-36	10798786	522.602
MO:24-36	9514679	527.164
DSL:10-12	30538	0.000
DSL:12-16	30702	0.000
DSL:16-24	3401464	339.318
MO:28-40	4966498	462.143
MO:28-36	4558290	451.708
CREOSOTE:10-36	12977383	0.000
DSL:12-14	21467	0.000
DSL:14-16	9235	0.000
DSL:16-18	22560	0.000
DSL:18-20	1581592	0.000
DSL:20-22	513205	0.000
DSL:22-24	1284107	0.000
CRUDE:10-40	13385591	709.019
HYFL:24-36	9514679	560.281
MINOIL:12-40	13355053	329.315

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

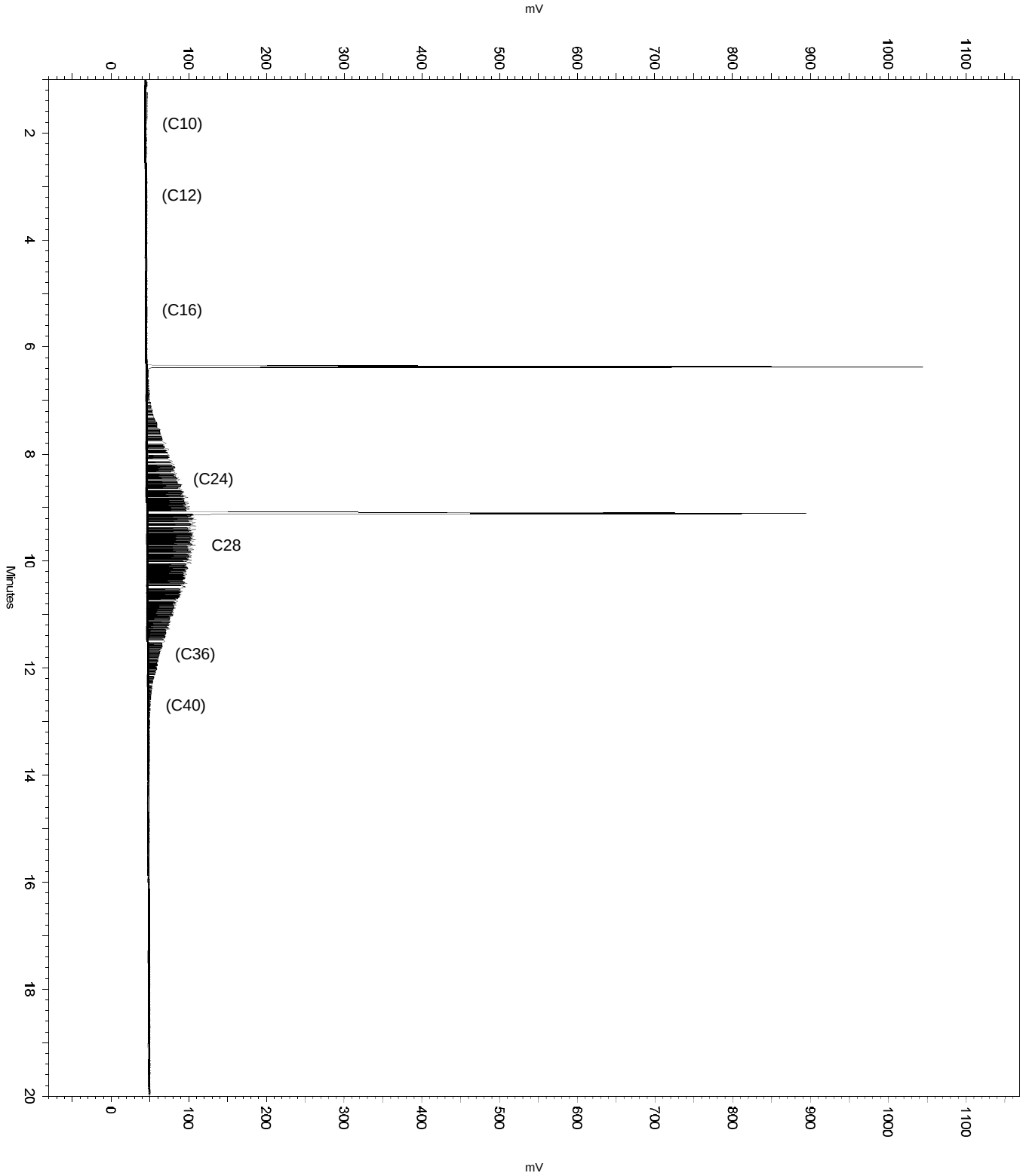
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh251.met
Run Date: 9/7/2012 12:46:58 PM
Analysis Date: 9/7/2012 1:24:18 PM
Instrument: GC14B Vial: 11 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



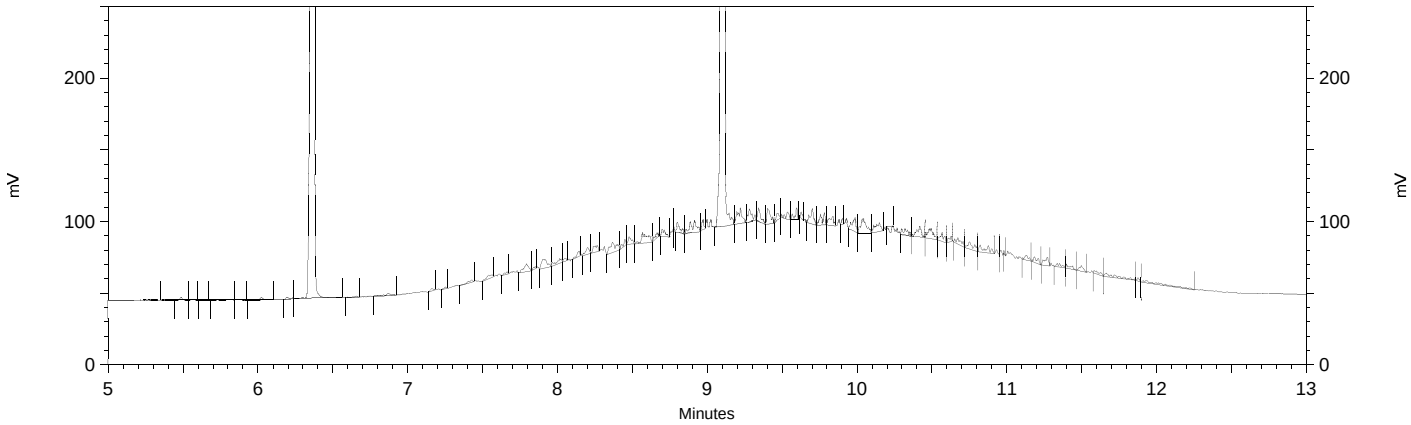
Sample Name: **ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr248.met
Run Date: 9/7/2012 12:46:58 PM
Analysis Date: 9/7/2012 1:07:07 PM
Instrument: GC14B Vial: 11 Operator: lims2k3\teh1
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.375	1485116	44.874
Hexacosane	9.110	1182040	42.353



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10063\251b011_E6EB.tmp

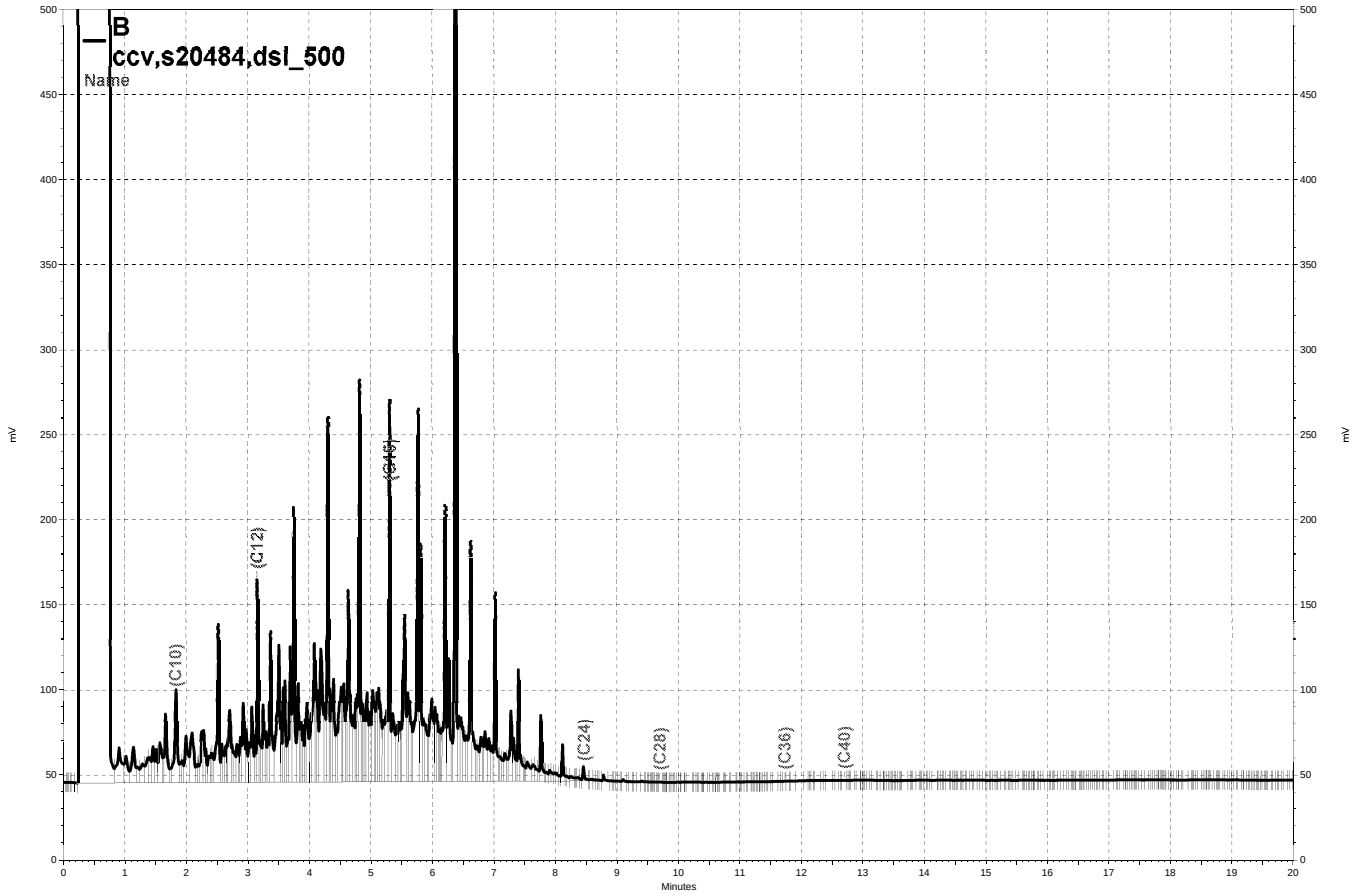
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 222361903012.1 File : 251_012 Time : 07-SEP-2012 13:14
Standards: S20484

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	B	222269858001	05-JUL-2012	28179	25212	500.0	447.4	mg/L	-11	20	
o-Terphenyl	B	222229527001	07-JUN-2012	33095	29137	50.00	44.02	mg/L	-12	20	

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b012, B

Sample Name: **ccv,s20484,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh251.met
Run Date: 9/7/2012 1:14:44 PM
Analysis Date: 9/7/2012 2:20:59 PM
Instrument: GC14B Vial: 12 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	7835380	292.451
JP8:10-16	7835380	291.857
KER:10-16	7835380	300.702
JP5:10-16	7835380	268.610
DSL:10-20	13284776	500.831
DSL:10-22	13915196	500.402
DSL:10-24	14062954	499.062
DSL:12-22	12181149	526.812
DSL:10-28	14082076	497.656
DSL:12-24	12328907	524.788
DSL:12-32	12353554	522.536
BUNKC:12-40	12390030	1628.373
TROIL:12-40	12390030	178.851
HYFL:12-40	12390030	490.020
MO:22-32	172405	9.764
MO:20-36	811039	37.316
MO:22-36	180619	8.741
MO:24-36	32861	1.821
DSL:10-12	1734047	0.000
DSL:12-16	6101333	0.000
DSL:16-24	6227574	621.241
MO:28-40	42001	3.908
MO:28-36	13739	1.361
CREOSOTE:10-36	14095815	0.000
DSL:12-14	3090091	0.000
DSL:14-16	3011242	0.000
DSL:16-18	2476659	0.000
DSL:18-20	2972737	0.000
DSL:20-22	630420	0.000
DSL:22-24	147758	0.000
CRUDE:10-40	14124077	748.135
HYFL:24-36	32861	1.935
MINOIL:12-40	12390030	305.519

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

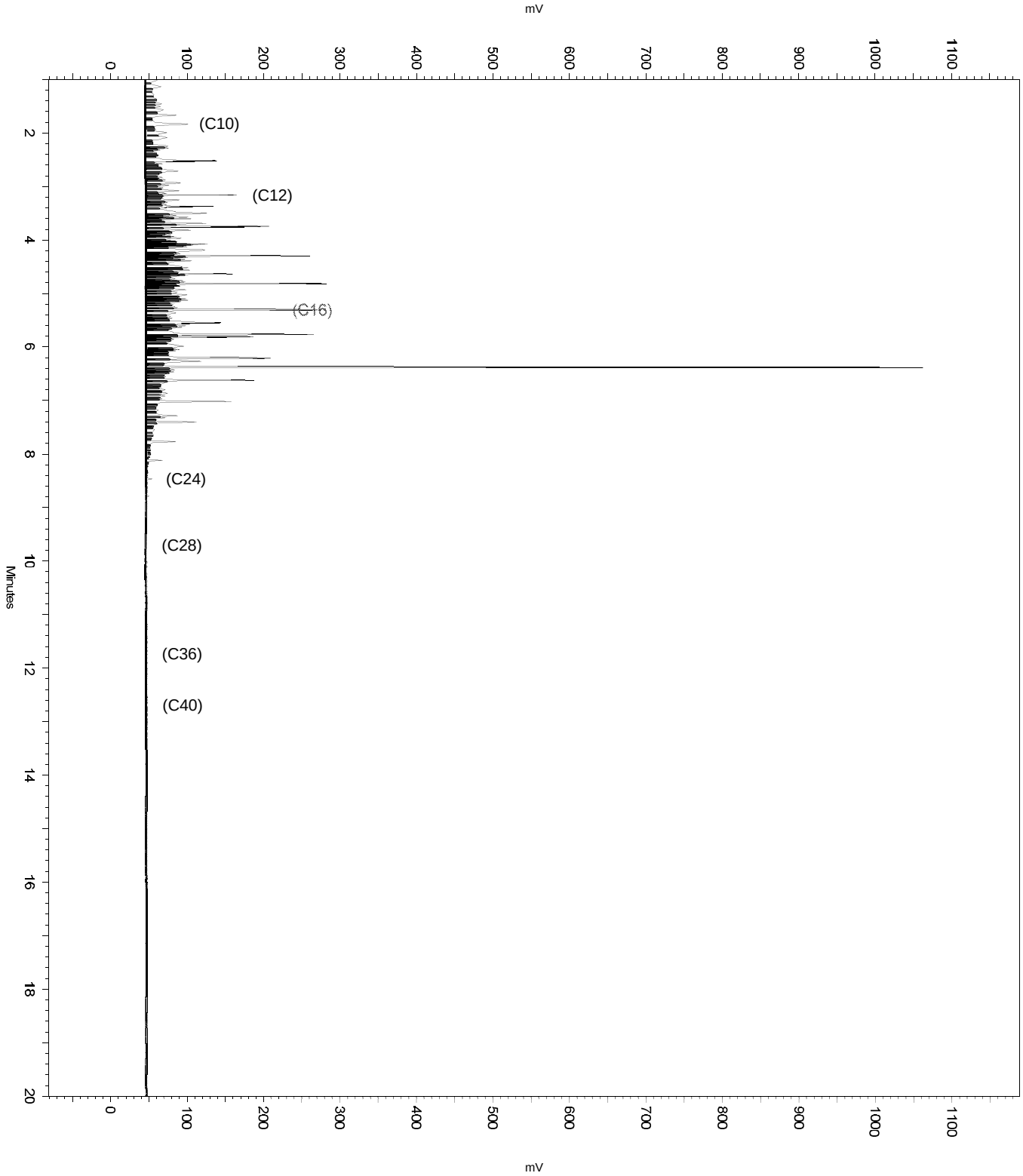
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ccv,s20484,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh251.met
Run Date: 9/7/2012 1:14:44 PM
Analysis Date: 9/7/2012 2:20:59 PM
Instrument: GC14B Vial: 12 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



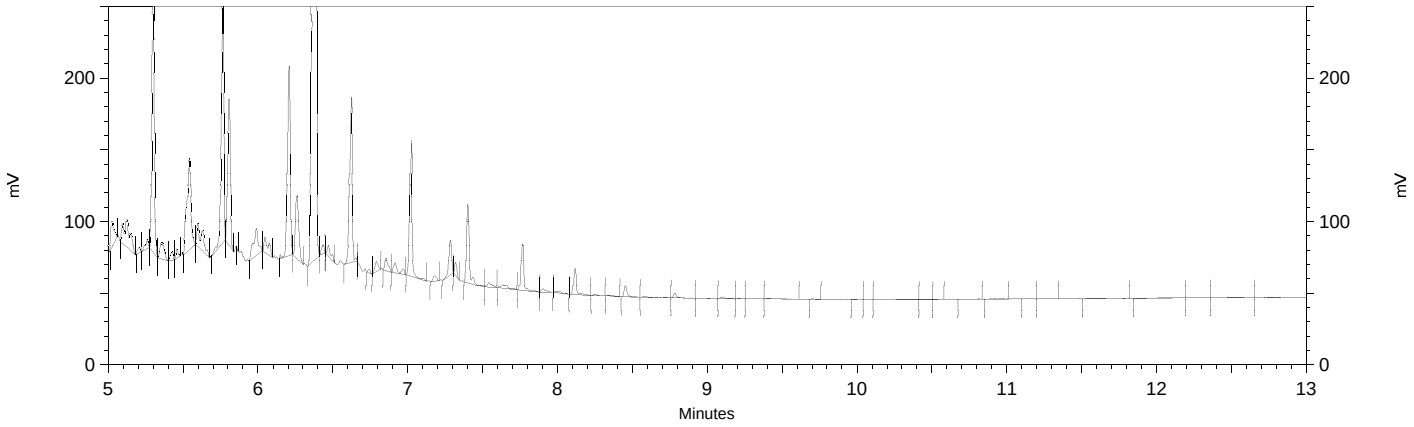
Sample Name: **ccv,s20484,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr248.met
Run Date: 9/7/2012 1:14:44 PM
Analysis Date: 9/7/2012 1:34:54 PM
Instrument: GC14B Vial: 12 Operator: lims2k3\teh1
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.387	1456862	44.021
Hexacosane	9.102	2216	0.079



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10063\251b012_E6EC.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

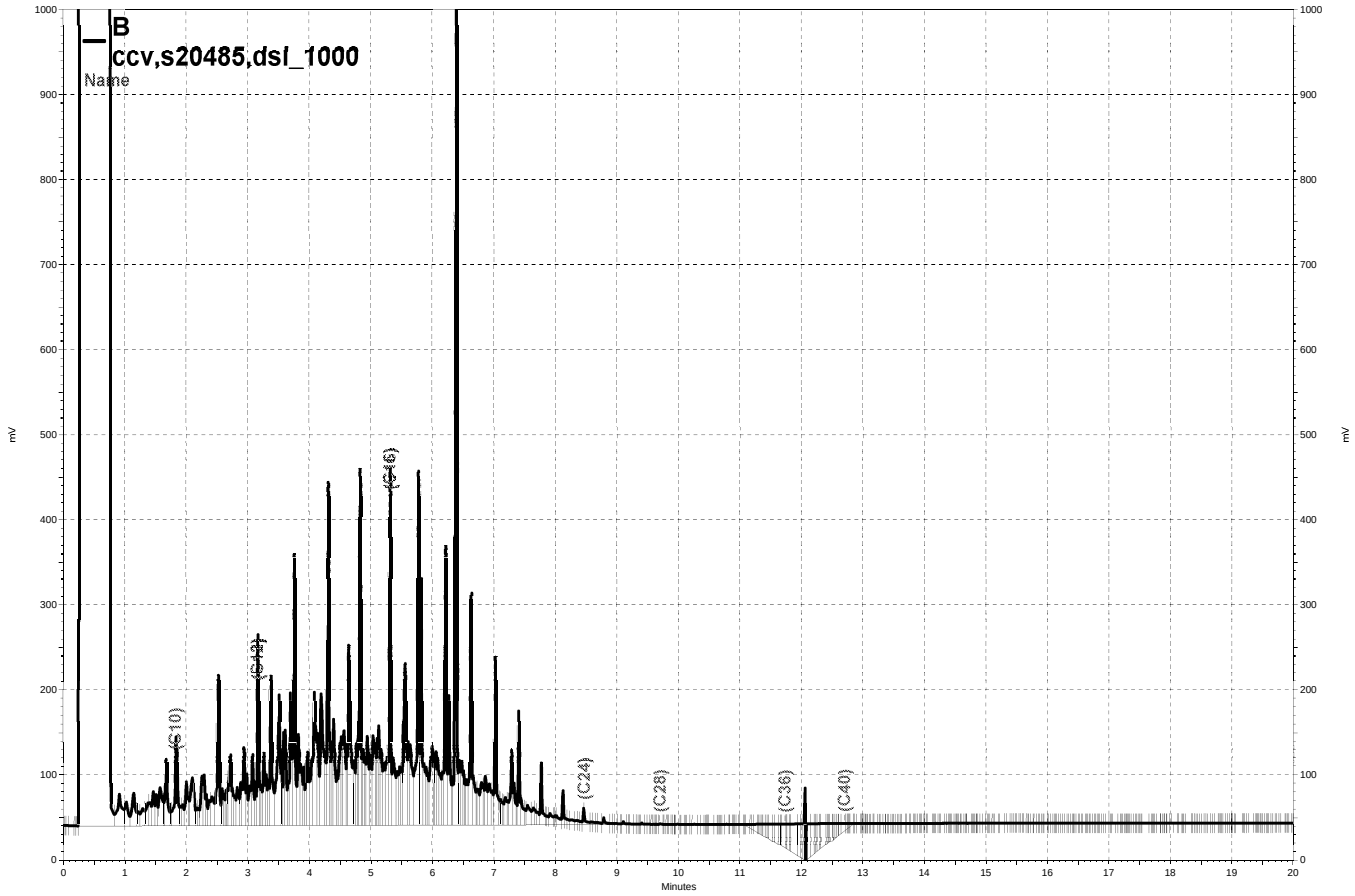
CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
Seqnum : 222361903029.1 File : 251_029 Time : 07-SEP-2012 23:12
Standards: S20485

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	B	222269858001	05-JUL-2012	28179	24887	1000	883.2	mg/L	-12	20	
o-Terphenyl	B	222229527001	07-JUN-2012	33095	29245	50.00	44.18	mg/L	-12	20	

SFL 09/08/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b029, B

Sample Name: **ccv,s20485,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b029**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh251.met
Run Date: 9/7/2012 11:12:49 PM
Analysis Date: 9/8/2012 3:38:41 PM
Instrument: GC14B Vial: 29 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	14718208	549.349
JP8:10-16	14718208	548.232
KER:10-16	14718208	564.848
JP5:10-16	14718208	504.564
DSL:10-20	24727080	932.202
DSL:10-22	26004134	935.130
DSL:10-24	26348824	935.060
DSL:12-22	22649638	979.554
DSL:10-28	26448808	934.692
DSL:12-24	22994328	978.770
DSL:12-32	23108028	977.433
BUNKC:12-40	25323576	3328.179
TROIL:12-40	25323576	365.547
HYFL:12-40	25323576	1001.535
MO:22-32	458380	25.960
MO:20-36	2334929	107.431
MO:22-36	1057876	51.195
MO:24-36	713185	39.514
DSL:10-12	3354494	0.000
DSL:12-16	11363714	0.000
DSL:16-24	11630619	1160.231
MO:28-40	2229261	207.437
MO:28-36	613207	60.766
CREOSOTE:10-36	27062020	0.000
DSL:12-14	5449484	0.000
DSL:14-16	5914230	0.000
DSL:16-18	4986000	0.000
DSL:18-20	5022875	0.000
DSL:20-22	1277053	0.000
DSL:22-24	344691	0.000
CRUDE:10-40	28678072	1519.043
HYFL:24-36	713185	41.997
MINOIL:12-40	25323576	624.441

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

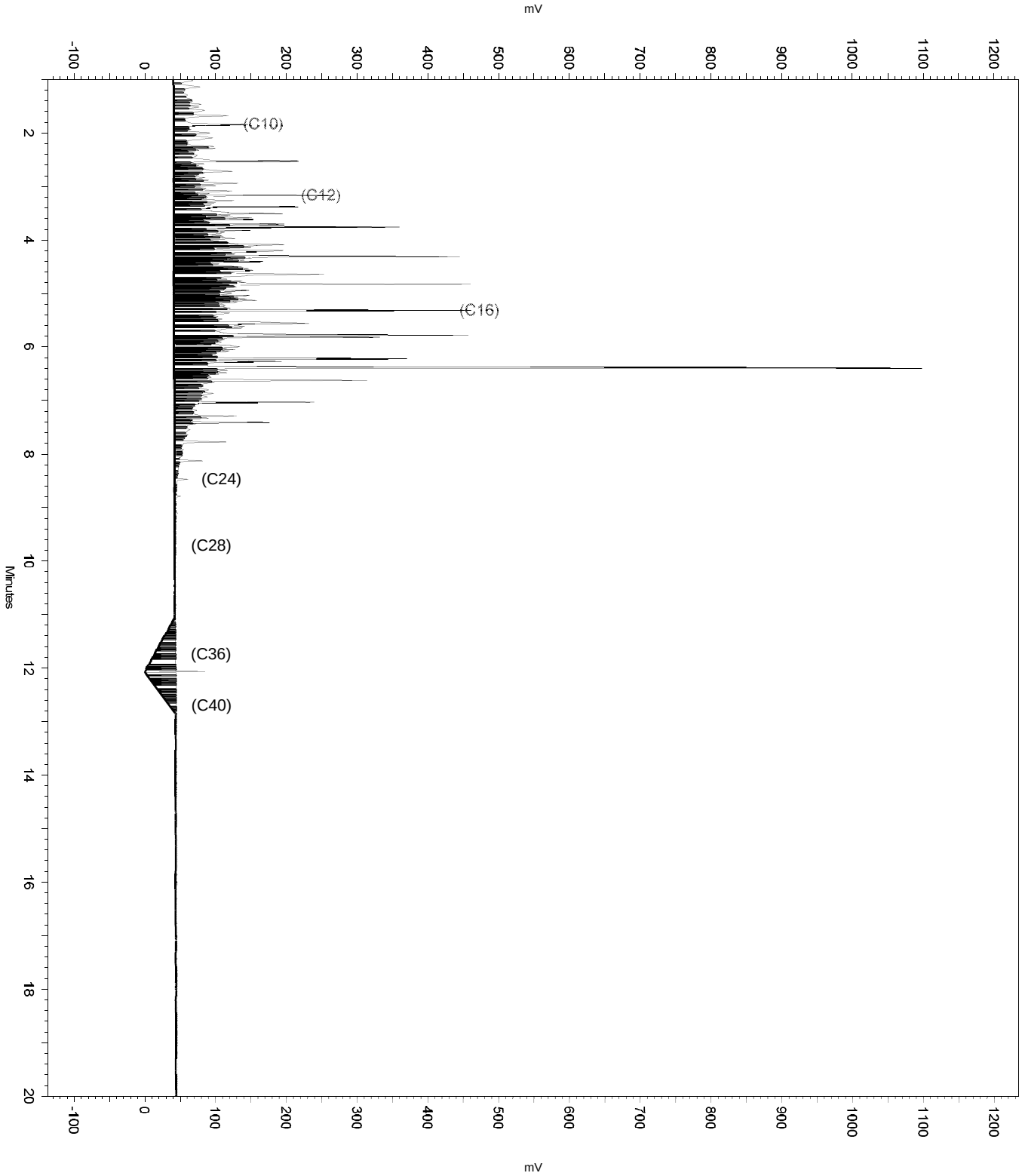
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b029

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Peak	6.343	6.421	0

Sample Name: **ccv,s20485,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b029**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh251.met
Run Date: 9/7/2012 11:12:49 PM
Analysis Date: 9/8/2012 3:38:41 PM
Instrument: GC14B Vial: 29 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



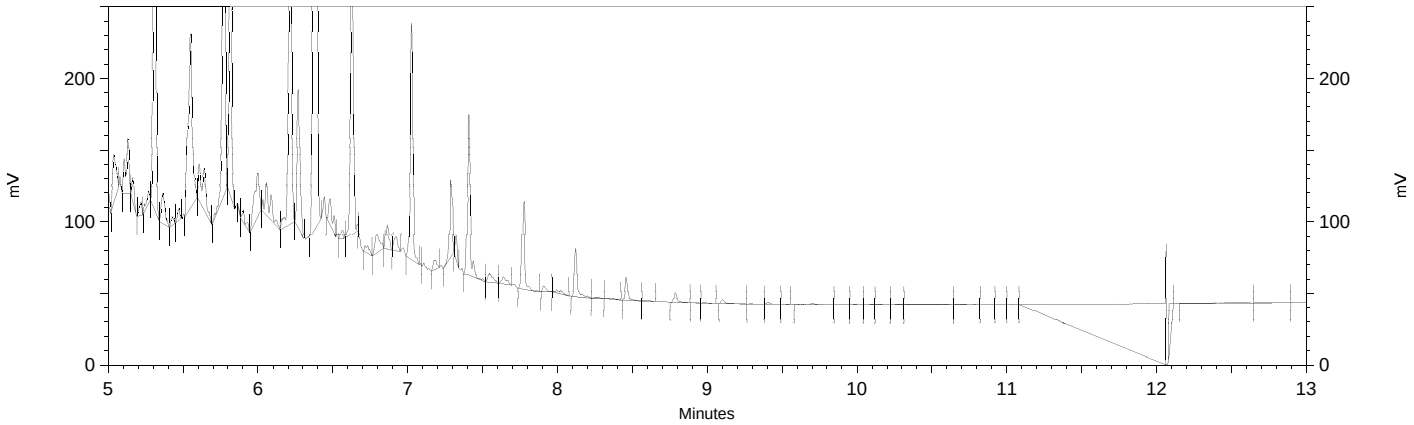
Sample Name: **ccv,s20485,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b029**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr248.met
Run Date: 9/7/2012 11:12:49 PM
Analysis Date: 9/8/2012 3:36:36 PM
Instrument: GC14B Vial: 29 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.395	1462265	44.184
Hexacosane	9.103	5003	0.179



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b029

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	6.343	6.421	0

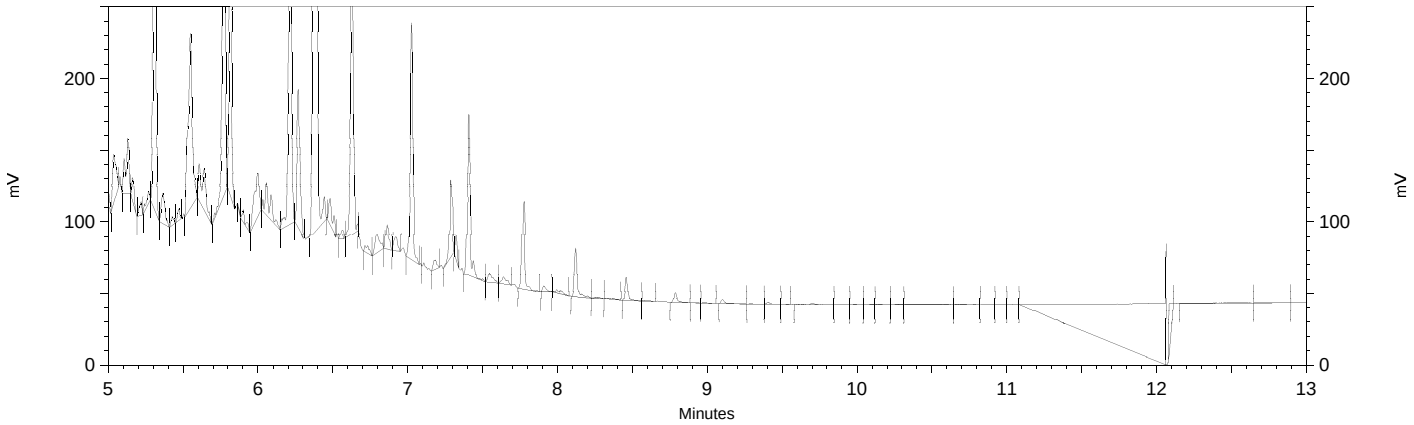
Sample Name: **ccv,s20485,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b029**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr248.met
Run Date: 9/7/2012 11:12:49 PM
Analysis Date: 9/8/2012 3:36:30 PM
Instrument: GC14B Vial: 29 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.395	1493611	45.131
Hexacosane	9.103	5003	0.179



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b029

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

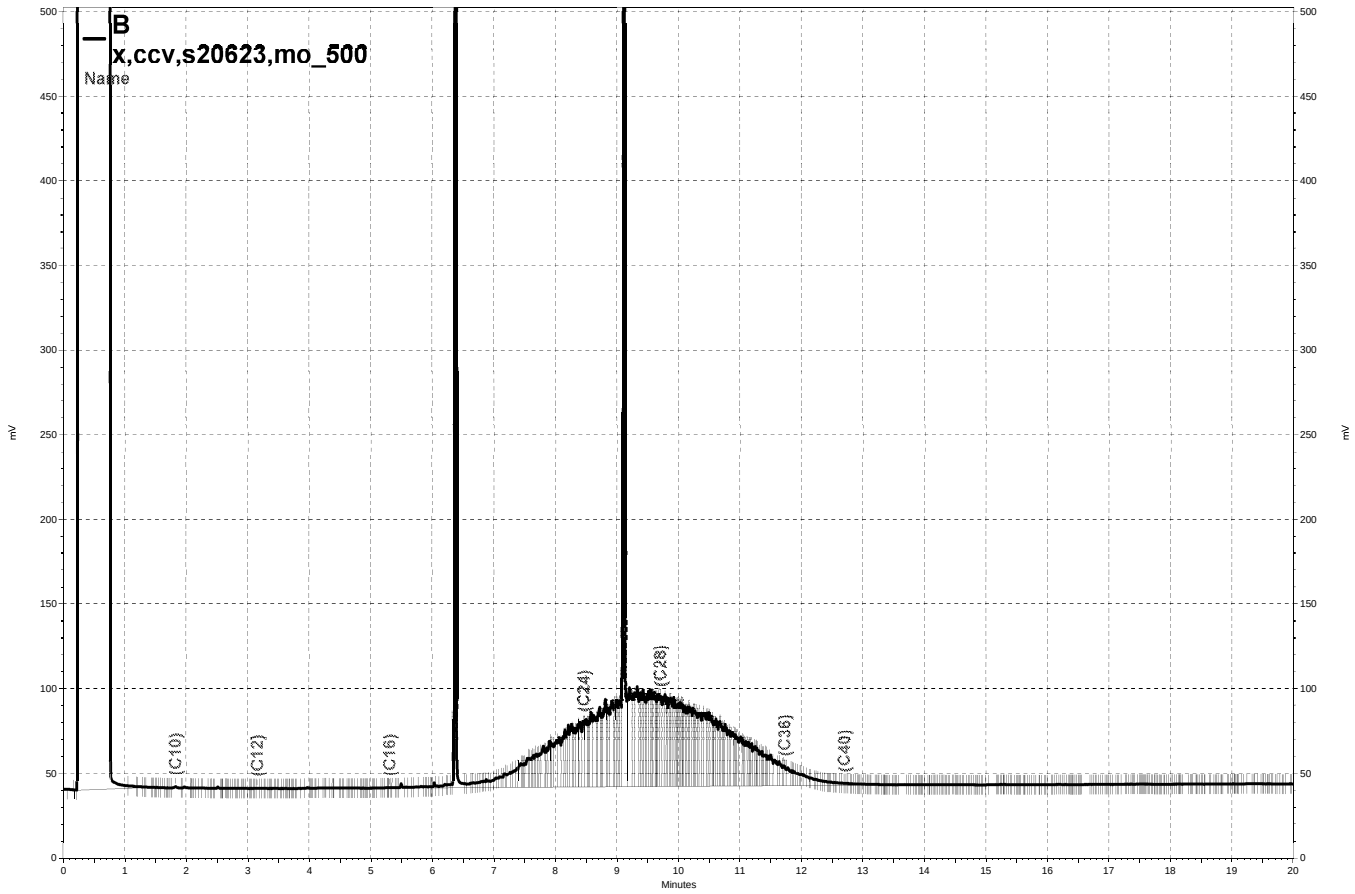
CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 222361903031.1 File : 251_031 Time : 08-SEP-2012 00:08
Standards: S20623

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	222295006001	22-JUL-2012	18049	15226	500.0	421.8	mg/L	-16	20	
o-Terphenyl	B	222229527001	07-JUN-2012	33095	29310	50.00	44.28	mg/L	-11	20	

SFL 09/08/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b031, B

Sample Name: **x,ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b031**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh251.met
Run Date: 9/8/2012 12:08:56 AM
Analysis Date: 9/8/2012 3:40:37 PM
Instrument: GC14B Vial: 31 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	18386	0.686
JP8:10-16	18386	0.685
KER:10-16	18386	0.706
JP5:10-16	18386	0.630
DSL:10-20	1635640	61.663
DSL:10-22	2171323	78.083
DSL:10-24	3405326	120.847
DSL:12-22	2162544	93.526
DSL:10-28	8022255	283.504
DSL:12-24	3396547	144.576
DSL:12-32	10870713	459.814
BUNKC:12-40	12321503	1619.367
TROIL:12-40	12321503	177.862
HYFL:12-40	12321503	487.310
MO:22-32	8708169	493.176
MO:20-36	10452692	480.934
MO:22-36	9917009	479.929
MO:24-36	8683006	481.085
DSL:10-12	8779	0.000
DSL:12-16	9607	0.000
DSL:16-24	3386940	337.870
MO:28-40	4308027	400.871
MO:28-36	4066077	402.931
CREOSOTE:10-36	12088332	0.000
DSL:12-14	5035	0.000
DSL:14-16	4572	0.000
DSL:16-18	37121	0.000
DSL:18-20	1580133	0.000
DSL:20-22	535683	0.000
DSL:22-24	1234003	0.000
CRUDE:10-40	12330282	653.120
HYFL:24-36	8683006	511.307
MINOIL:12-40	12321503	303.830

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

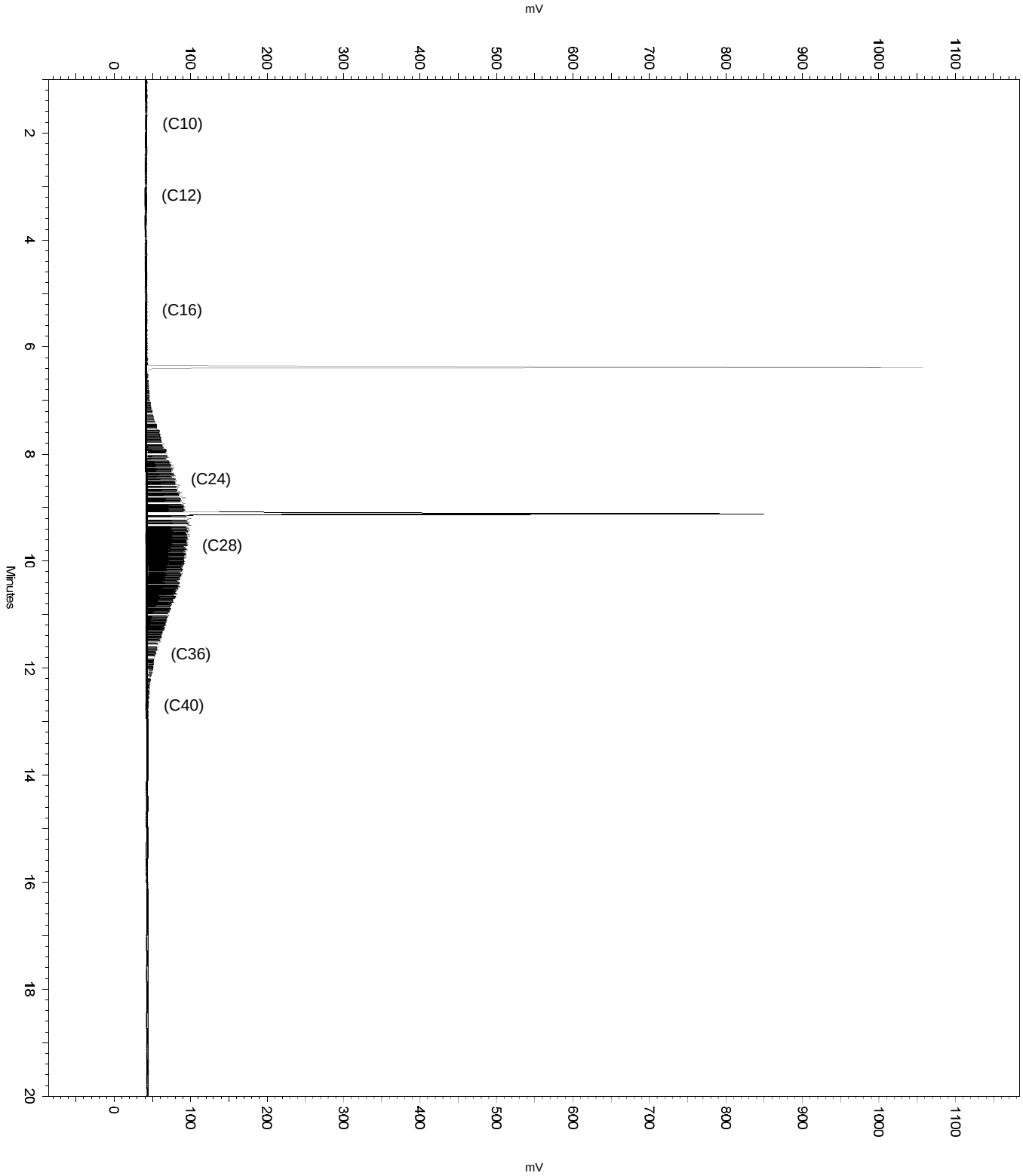
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	2.27	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b031

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Peak	9.073	9.15	0

Sample Name: **x,ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b031**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bteh251.met
Run Date: 9/8/2012 12:08:56 AM
Analysis Date: 9/8/2012 3:40:37 PM
Instrument: GC14B Vial: 31 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1



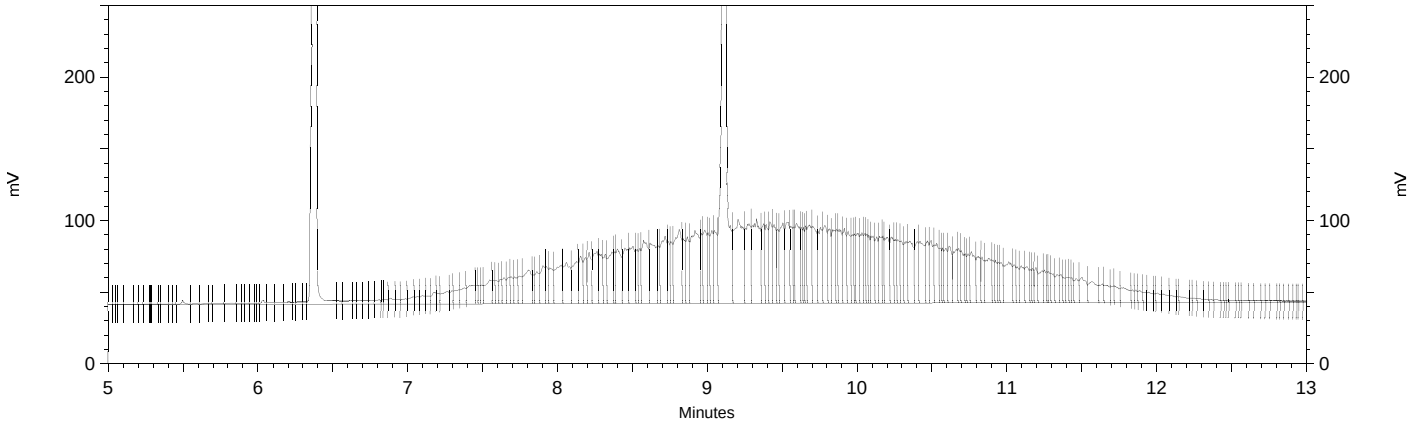
Sample Name: **x,ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b031**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC14B\Sequence\251.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC14B\Method\bothsurr248.met
Run Date: 9/8/2012 12:08:56 AM
Analysis Date: 9/8/2012 3:40:37 PM
Instrument: GC14B Vial: 31 Operator: Teh 1. Analyst (lims2k3\teh1)
Sample Amount: 1

GC14

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
C10			0.000 BDL
C12			0.000 BDL
C16			0.000 BDL
C24			0.000 BDL
C28			0.000 BDL
C36			0.000 BDL
C40			0.000 BDL



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Integration Off	0	2	0
Yes	Valley to Valley	0	20	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC14B\Data\251b031

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Peak	9.073	9.15	0

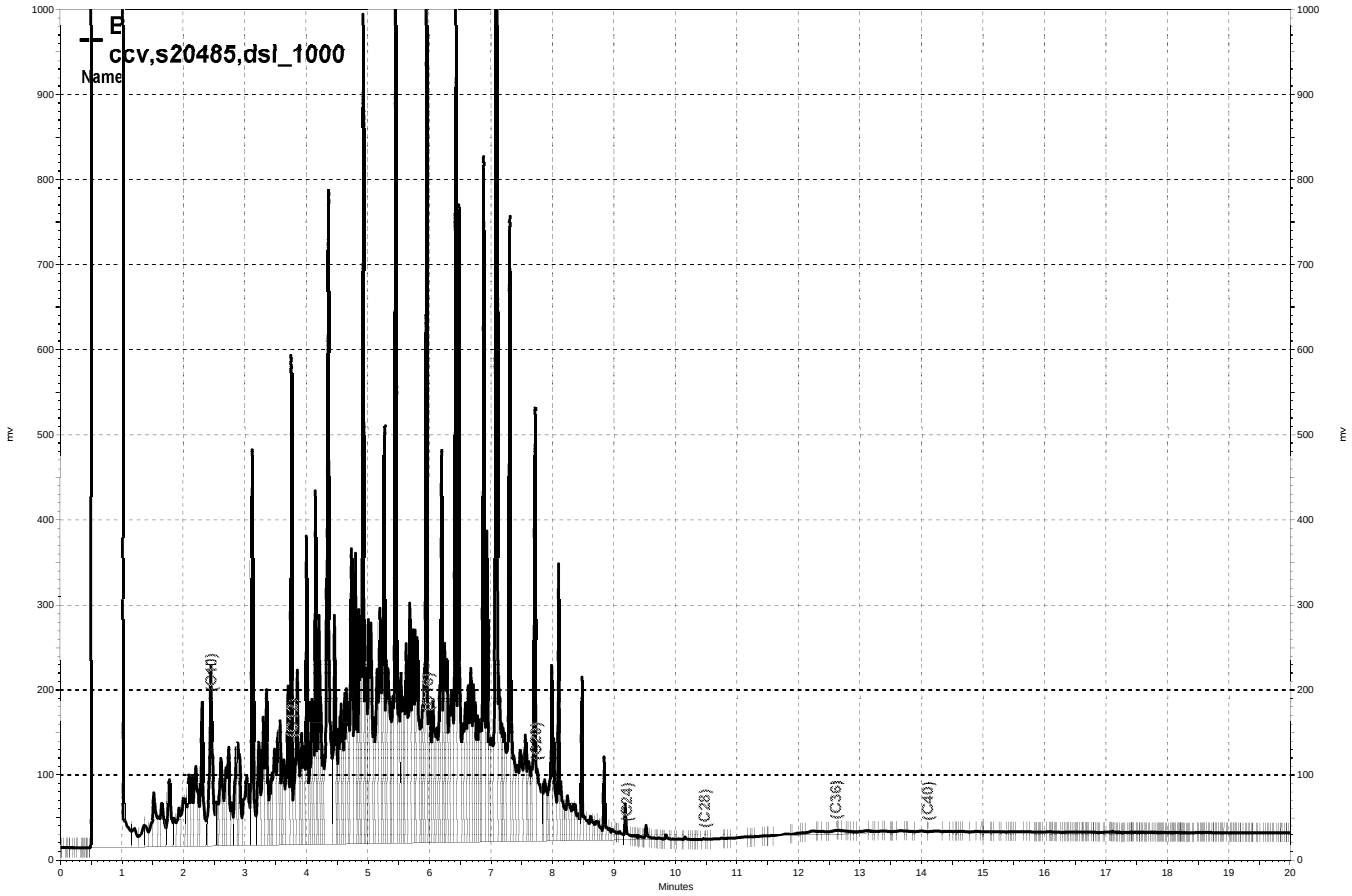
CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
Seqnum : 162365242023.1 File : 253b023 Time : 10-SEP-2012 00:37
Standards: S20485

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	162276981001	10-JUL-2012	52963	54836	1000	1035	mg/L	4	20	
o-Terphenyl	162281280001	13-JUL-2012	62202	67521	50.00	54.27	mg/L	9	20	

JDG 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b023, B

Sample Name: **ccv,s20485,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b023**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 12:37:17 AM
Analysis Date: 9/10/2012 8:25:43 AM
Instrument: GC15B Vial: 23 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	32974036	721.341
JP8:10-16	32974036	835.611
KER:10-16	32974036	771.395
JP5:10-16	32974036	660.420
DSL:10-20	54404944	1117.807
DSL:10-22	57416180	1103.487
DSL:10-24	58212016	1099.112
DSL:12-22	50273892	1106.424
DSL:10-28	58329348	1094.174
DSL:12-24	51069728	1101.368
DSL:12-32	51220264	1093.081
BUNKC:12-40	51563748	3655.576
TROIL:12-40	51563748	745.094
HYFL:12-40	51563748	1024.927
MO:20-36	4168175	89.623
MO:22-36	1156940	25.908
MO:24-36	361105	9.082
DSL:10-12	7142287	0.000
DSL:12-16	25831748	0.000
DSL:16-24	25237980	1150.718
MO:28-36	243785	10.167
MO:28-40	376689	13.697
MO:22-32	946361	26.368
CREOSOTE:10-36	58573132	945.752
DSL:12-14	12319020	0.000
DSL:14-16	13512733	0.000
DSL:16-18	11237733	0.000
DSL:18-20	10193178	0.000
DSL:20-22	3011235	0.000
DSL:22-24	795835	0.000
CRUDE:10-40	58706036	1638.316
DSL:10-14	19461308	1057.282
DSL:14-28	38868044	1113.631
MINOIL:12-40	51563748	899.192
DSL:12-28	51187060	1071.110
HYFL:24-36	361105	10.636

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

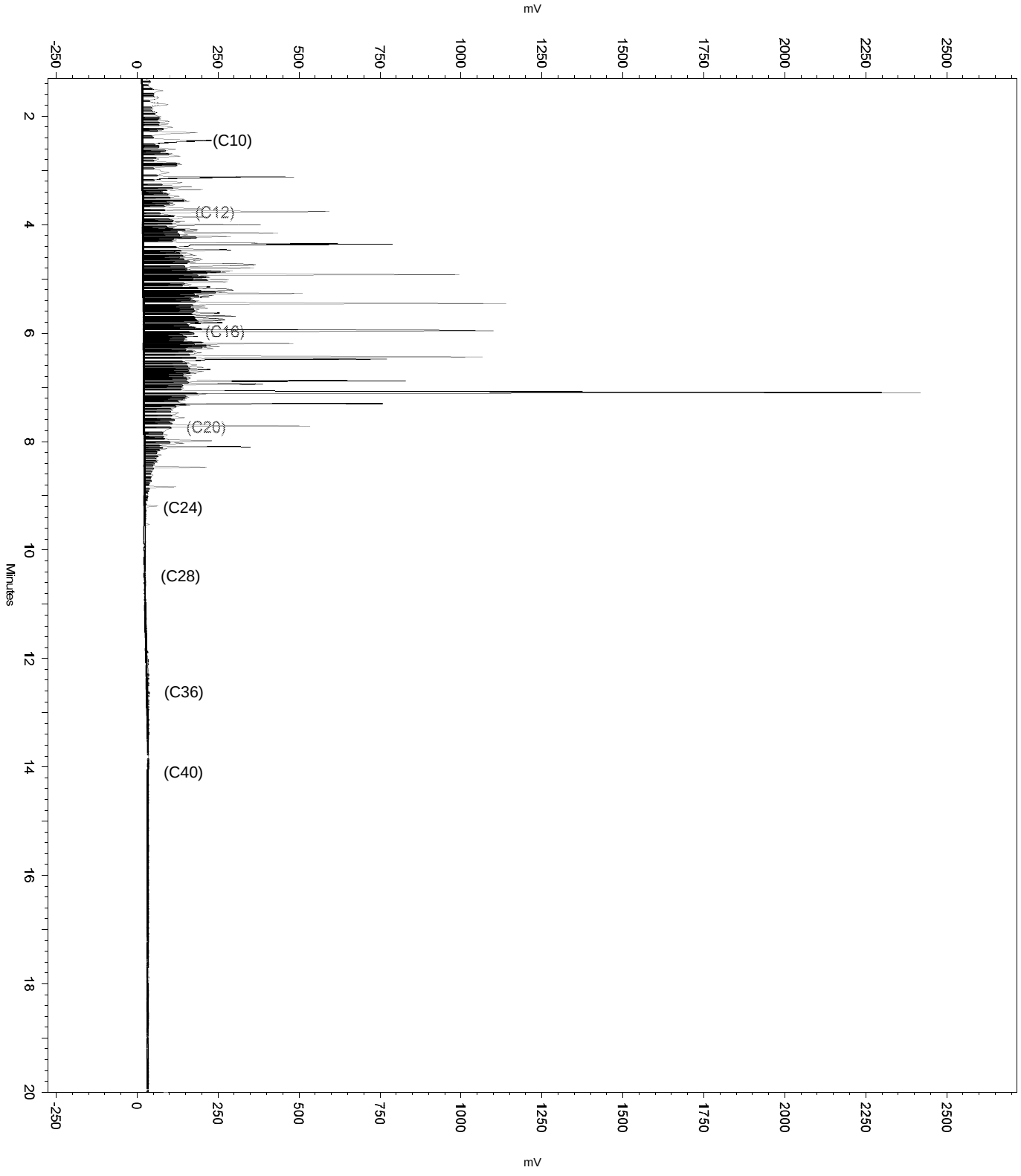
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

No	Manual Baseline	7.048	7.215	0
No	Split Peak	7.115	0	0

Sample Name: **ccv,s20485,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b023**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 12:37:17 AM
Analysis Date: 9/10/2012 8:25:43 AM
Instrument: GC15B Vial: 23 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



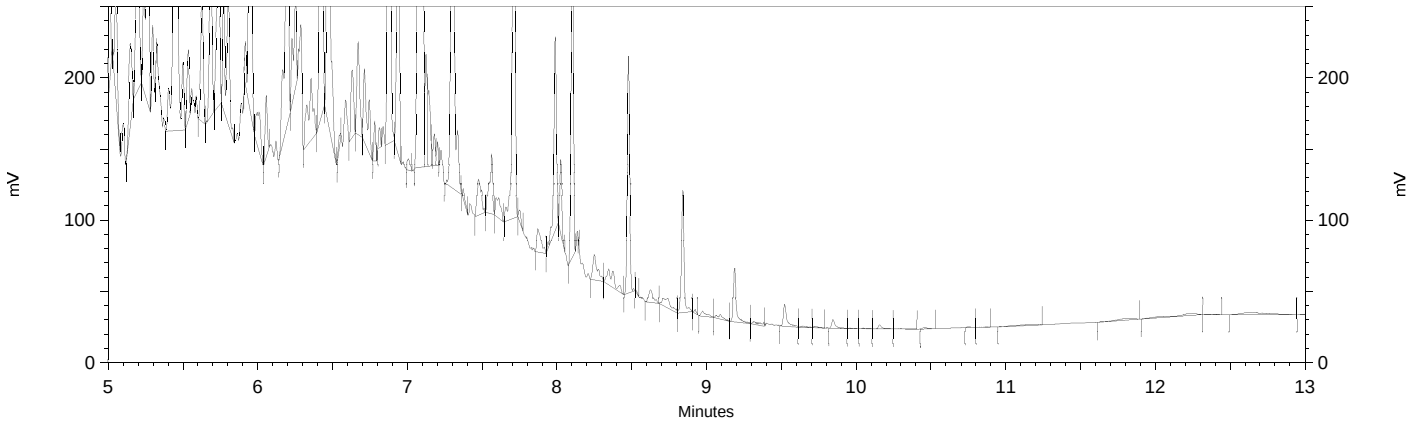
Sample Name: **ccv,s20485,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b023**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr234.met
Run Date: 9/10/2012 12:37:17 AM
Analysis Date: 9/10/2012 8:22:23 AM
Instrument: GC15B Vial: 23 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.102	3376025	54.275
Hexacosane	9.845	10344	0.208



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	7.048	7.215	0
Yes	Split Peak	7.115	0	0

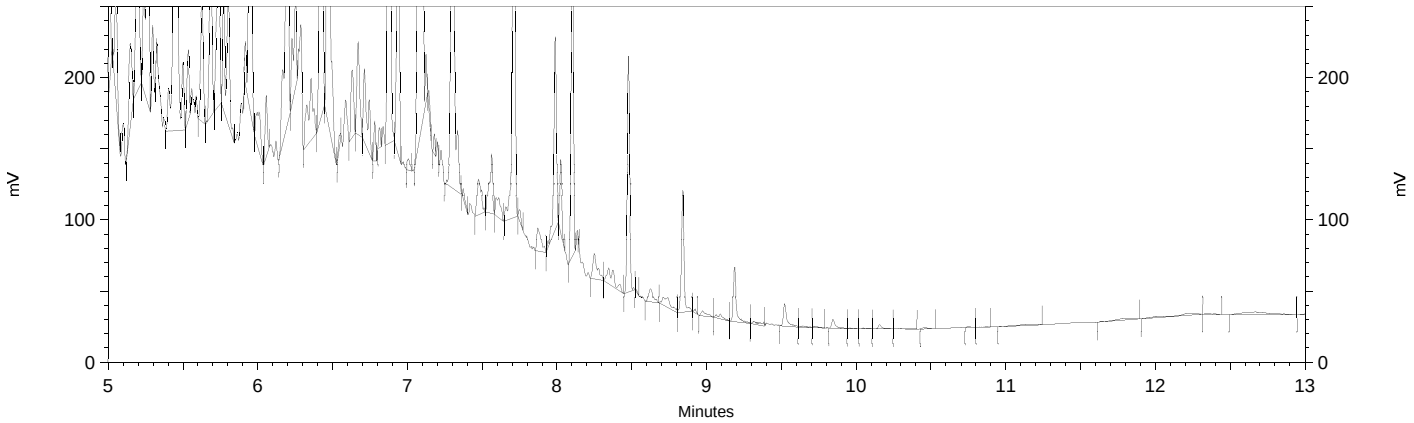
Sample Name: **ccv,s20485,dsl_1000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b023**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr234.met
Run Date: 9/10/2012 12:37:17 AM
Analysis Date: 9/10/2012 12:57:25 AM
Instrument: GC15B Vial: 23 Operator: lims2k3\teh2
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.102	3321089	53.392
Hexacosane	9.845	10344	0.208



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10079\253b023_F36B.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

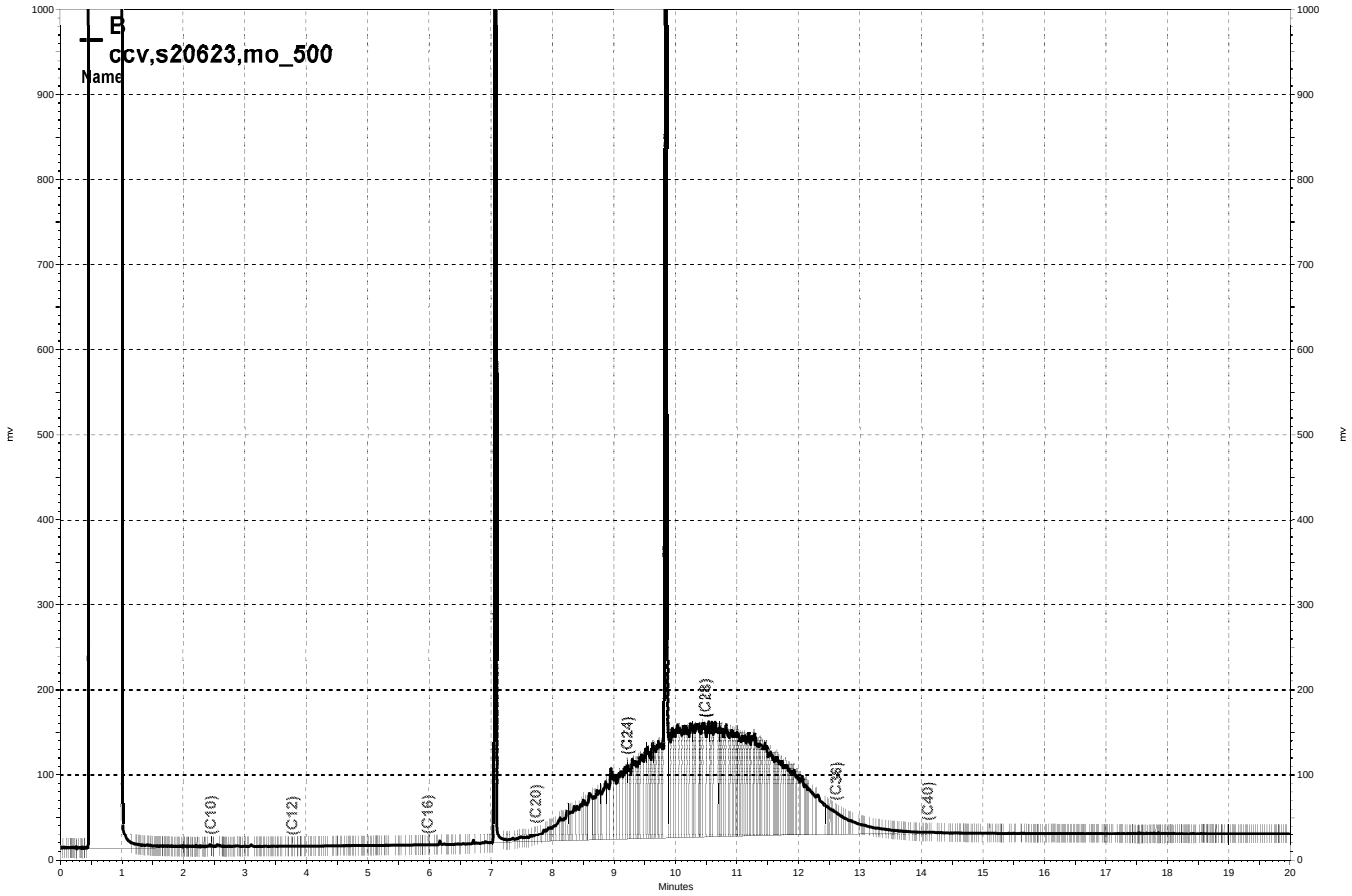
CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 162365242024.1 File : 253b024 Time : 10-SEP-2012 01:05
Standards: S20623

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	162269861001	05-JUL-2012	39759	39539	500.0	497.2	mg/L	-1	20	
o-Terphenyl	162281280001	13-JUL-2012	62202	65815	50.00	52.90	mg/L	6	20	

JDG 09/10/12 : Manually integrated fuel hump. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b024, B

Sample Name: **ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 1:05:08 AM
Analysis Date: 9/10/2012 8:25:55 AM
Instrument: GC15B Vial: 24 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	64359	1.408
JP8:10-16	64359	1.631
KER:10-16	64359	1.506
JP5:10-16	64359	1.289
DSL:10-20	3517723	72.275
DSL:10-22	4657299	89.509
DSL:10-24	7267088	137.211
DSL:12-22	4602140	101.284
DSL:10-28	18521080	347.429
DSL:12-24	7211929	155.532
DSL:12-32	26090956	556.802
BUNKC:12-40	30326442	2149.973
TROIL:12-40	30326442	438.216
HYFL:12-40	30326442	602.796
MO:20-36	26192392	563.184
MO:22-36	25052816	561.020
MO:24-36	22443028	564.472
DSL:10-12	55159	0.000
DSL:12-16	9200	0.000
DSL:16-24	7202729	328.406
MO:28-36	11189042	466.614
MO:28-40	11860533	431.258
MO:22-32	21488816	598.729
CREOSOTE:10-36	29710116	479.715
DSL:12-14	4990	0.000
DSL:14-16	4210	0.000
DSL:16-18	19050	0.000
DSL:18-20	3434314	0.000
DSL:20-22	1139576	0.000
DSL:22-24	2609789	0.000
CRUDE:10-40	30381602	847.863
DSL:10-14	60149	3.268
DSL:14-28	18460932	528.935
MINOIL:12-40	30326442	528.846
DSL:12-28	18465920	386.407
HYFL:24-36	22443028	661.026

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

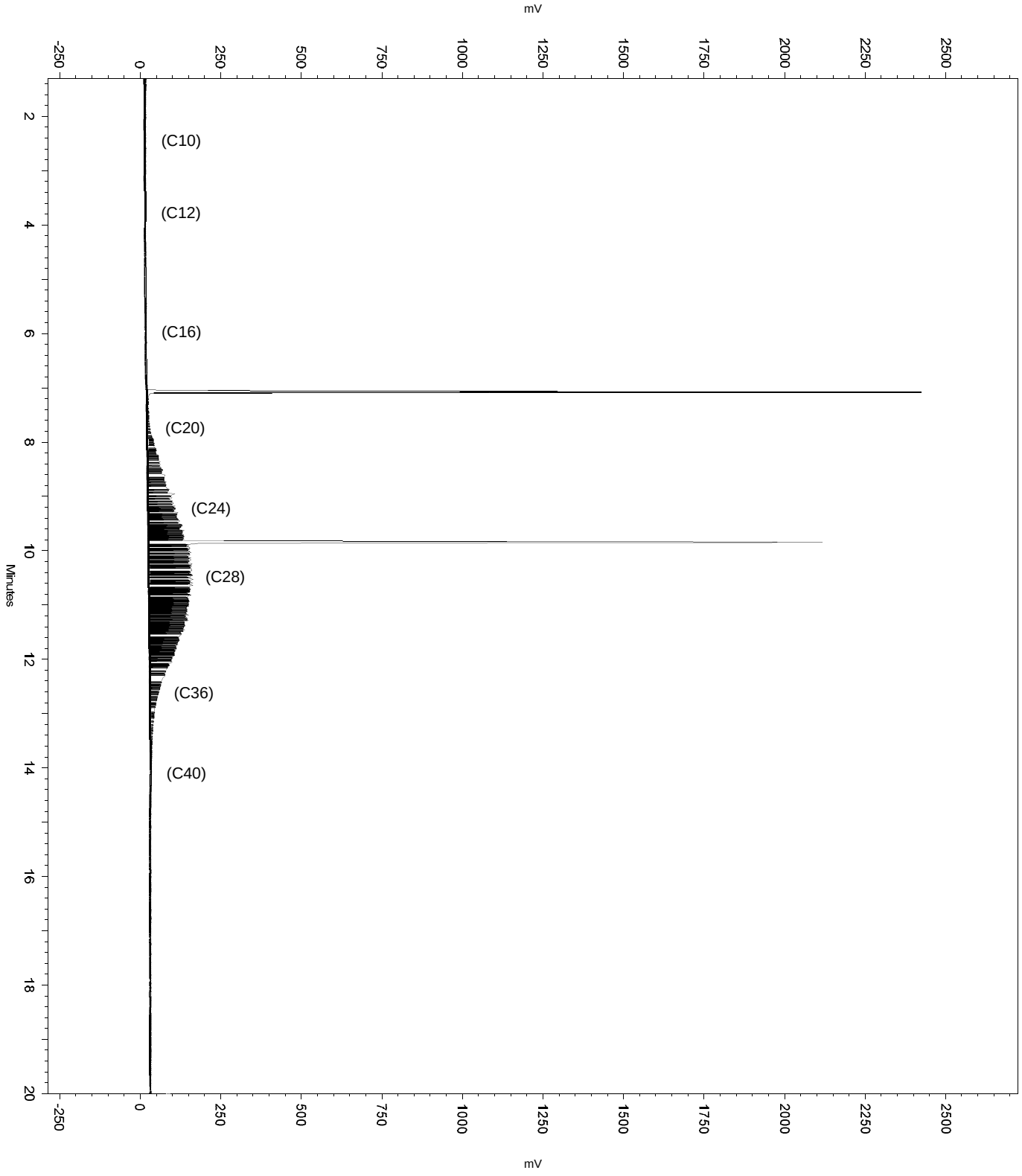
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

Yes	Move BL Stop	7.617	14.129	0

Sample Name: **ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 1:05:08 AM
Analysis Date: 9/10/2012 8:25:55 AM
Instrument: GC15B Vial: 24 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



Sample Name: **ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 1:05:08 AM
Analysis Date: 9/10/2012 8:25:48 AM
Instrument: GC15B Vial: 24 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	64359	1.408
JP8:10-16	64359	1.631
KER:10-16	64359	1.506
JP5:10-16	64359	1.289
DSL:10-20	3408211	70.025
DSL:10-22	3537694	67.991
DSL:10-24	4251401	80.272
DSL:12-22	3482535	76.643
DSL:10-28	12616947	236.676
DSL:12-24	4196242	90.496
DSL:12-32	18440856	393.542
BUNKC:12-40	21205276	1503.333
TROIL:12-40	21205276	306.415
HYFL:12-40	21205276	421.495
MO:20-36	17639828	379.288
MO:22-36	17510344	392.118
MO:24-36	16796636	422.458
DSL:10-12	55159	0.000
DSL:12-16	9200	0.000
DSL:16-24	4187042	190.907
MO:28-36	8431091	351.600
MO:28-40	8643480	314.283
MO:22-32	14958320	416.774
CREOSOTE:10-36	21048044	339.852
DSL:12-14	4990	0.000
DSL:14-16	4210	0.000
DSL:16-18	19050	0.000
DSL:18-20	3324802	0.000
DSL:20-22	129483	0.000
DSL:22-24	713707	0.000
CRUDE:10-40	21260436	593.317
DSL:10-14	60149	3.268
DSL:14-28	12556798	359.772
MINOIL:12-40	21205276	369.787
DSL:12-28	12561788	262.861
HYFL:24-36	16796636	494.719

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

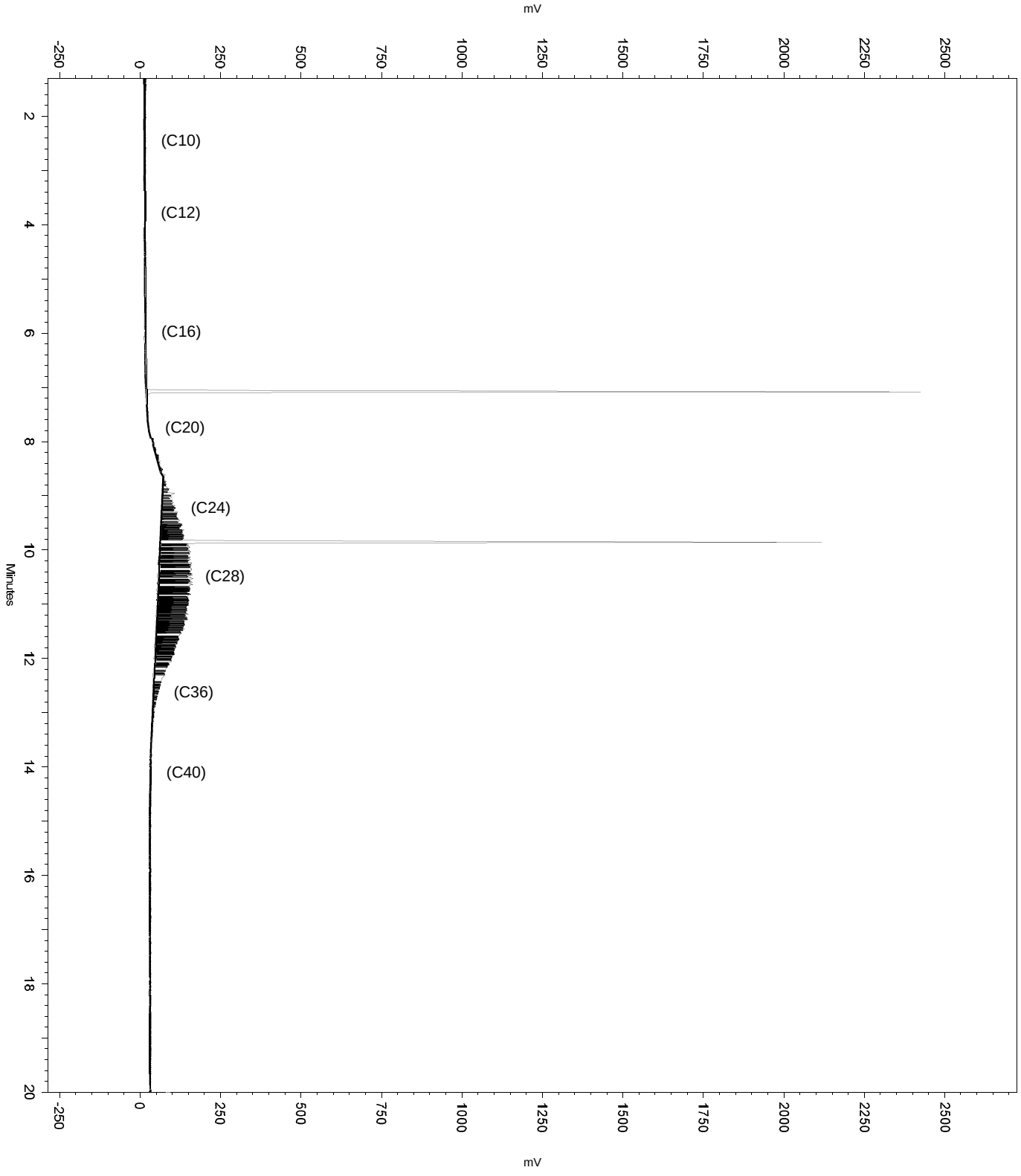
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 1:05:08 AM
Analysis Date: 9/10/2012 8:25:48 AM
Instrument: GC15B Vial: 24 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



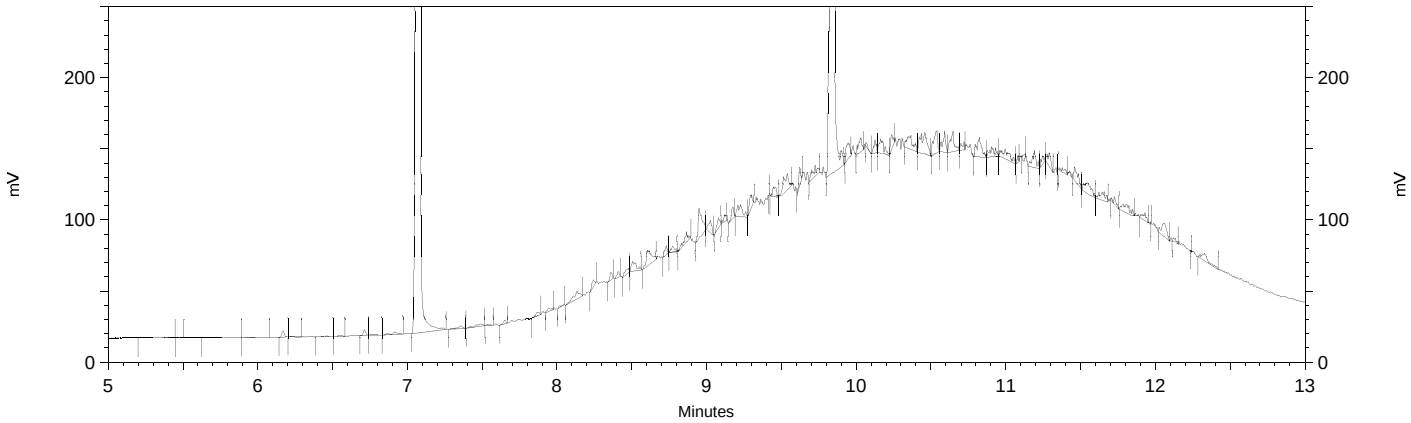
Sample Name: **ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr234.met
Run Date: 9/10/2012 1:05:08 AM
Analysis Date: 9/10/2012 1:25:17 AM
Instrument: GC15B Vial: 24 Operator: lims2k3\teh2
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.083	3290747	52.904
Hexacosane	9.852	2673616	53.786



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10079\253b024_F36C.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

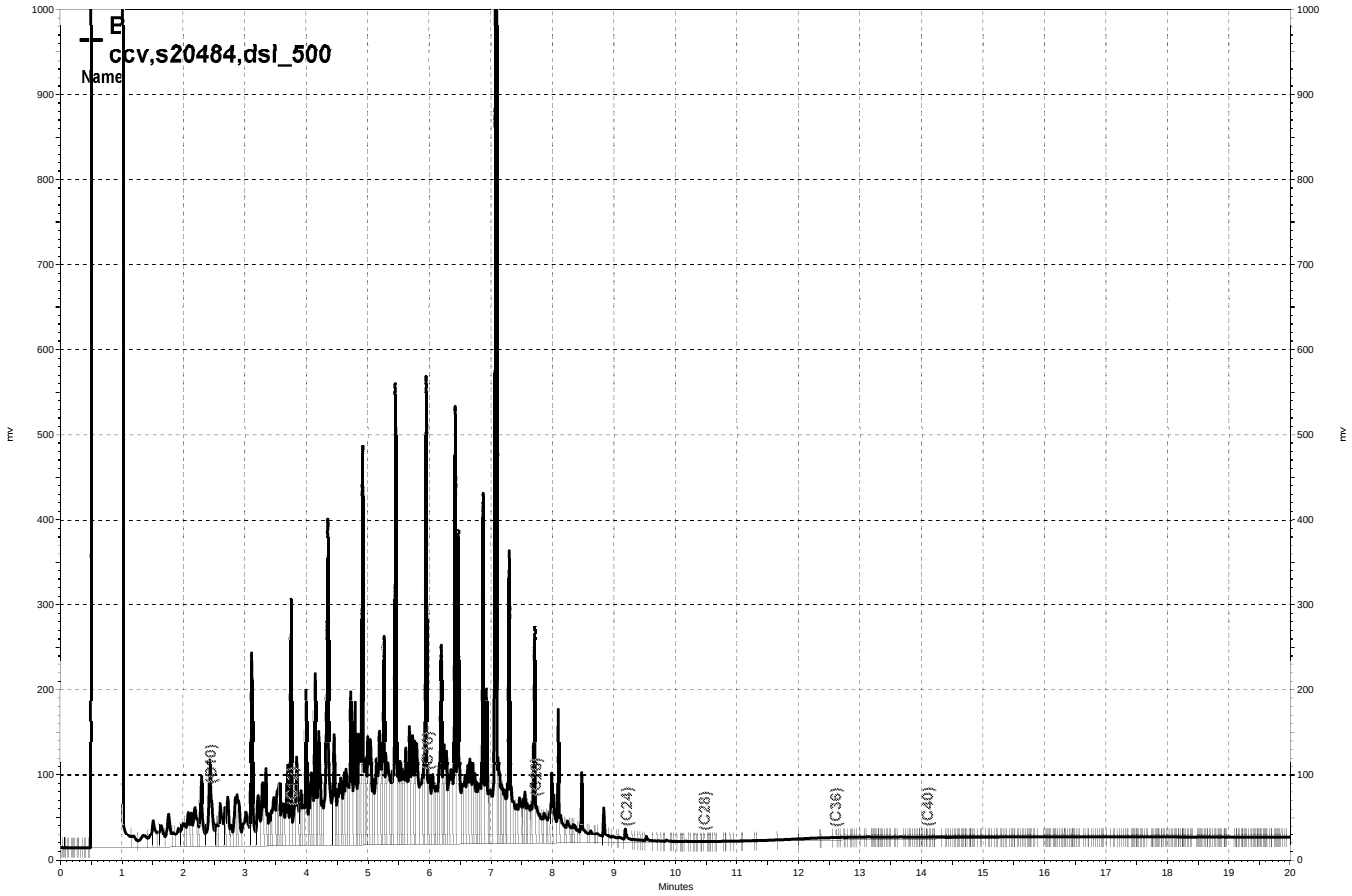
CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 162365242039.1 File : 253b039 Time : 10-SEP-2012 08:02
Standards: S20484

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	162276981001	10-JUL-2012	52963	54759	500.0	517.0	mg/L	3	20	
o-Terphenyl	162281280001	13-JUL-2012	62202	64347	50.00	51.72	mg/L	3	20	

JDG 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b039, B

Sample Name: **ccv,s20484,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b039**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 8:02:44 AM
Analysis Date: 9/10/2012 9:22:08 AM
Instrument: GC15B Vial: 39 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	16423036	359.271
JP8:10-16	16423036	416.184
KER:10-16	16423036	384.201
JP5:10-16	16423036	328.929
DSL:10-20	28653260	588.711
DSL:10-22	30212052	580.648
DSL:10-24	30596796	577.704
DSL:12-22	26635524	586.192
DSL:10-28	30682458	575.559
DSL:12-24	27020268	582.718
DSL:12-32	27114360	578.642
BUNKC:12-40	27519518	1950.977
TROIL:12-40	27519518	397.656
HYFL:12-40	27519518	547.002
MO:20-36	2167455	46.604
MO:22-36	608661	13.630
MO:24-36	223917	5.632
DSL:10-12	3576526	0.000
DSL:12-16	12846510	0.000
DSL:16-24	14173758	646.248
MO:28-36	138251	5.765
MO:28-40	413586	15.038
MO:22-32	478839	13.342
CREOSOTE:10-36	30820708	497.647
DSL:12-14	6112269	0.000
DSL:14-16	6734241	0.000
DSL:16-18	5598241	0.000
DSL:18-20	6631979	0.000
DSL:20-22	1558794	0.000
DSL:22-24	384744	0.000
CRUDE:10-40	31096046	867.801
DSL:10-14	9688795	526.367
DSL:14-28	20993662	601.502
MINOIL:12-40	27519518	479.898
DSL:12-28	27105930	567.203
HYFL:24-36	223917	6.595

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

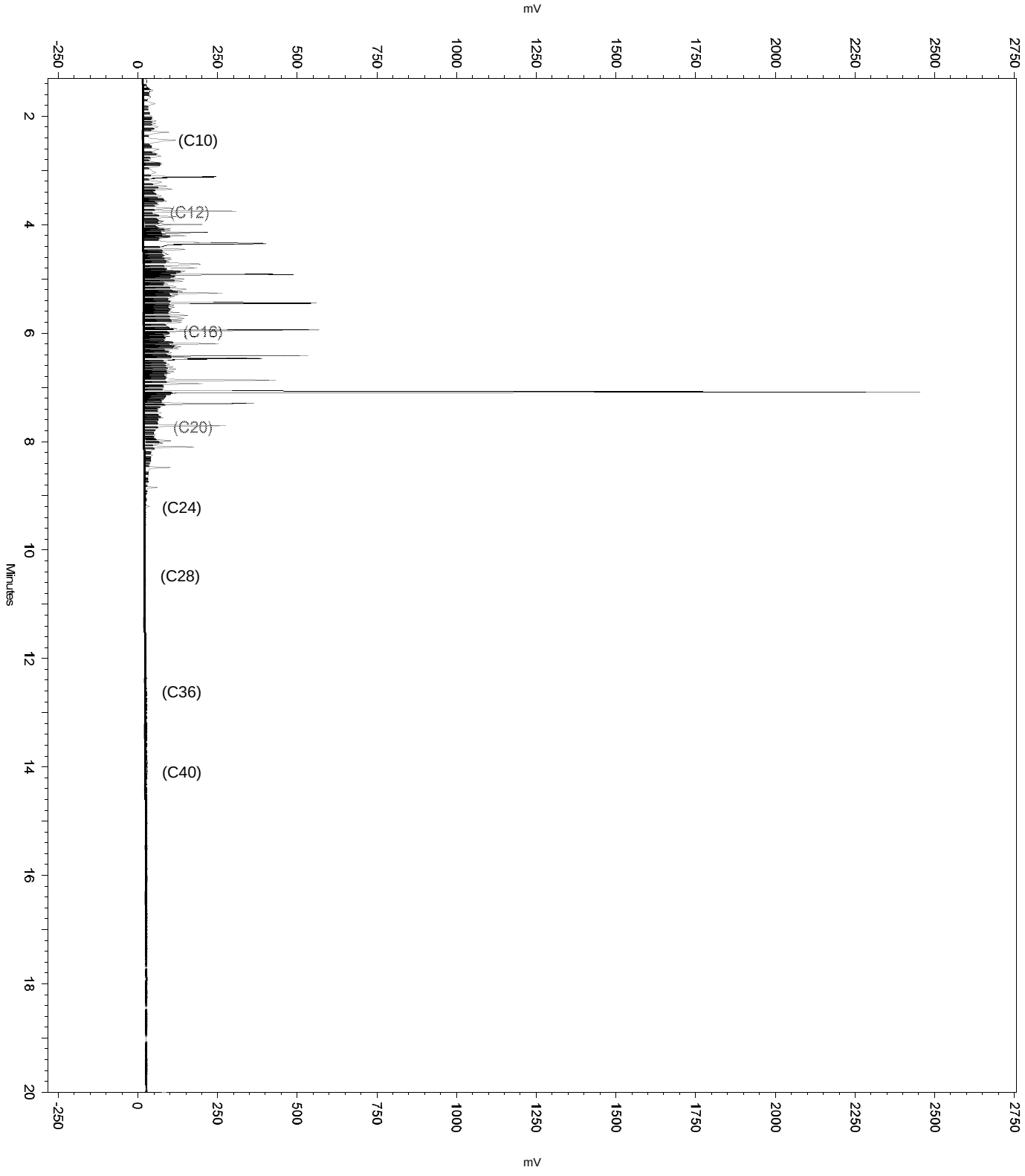
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b039

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

No	Manual Baseline	7.032	7.21	0
No	Split Peak	7.109	0	0
No	Reassign Peak	7.115	7.089	0

Sample Name: **ccv,s20484,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b039**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 8:02:44 AM
Analysis Date: 9/10/2012 9:22:08 AM
Instrument: GC15B Vial: 39 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



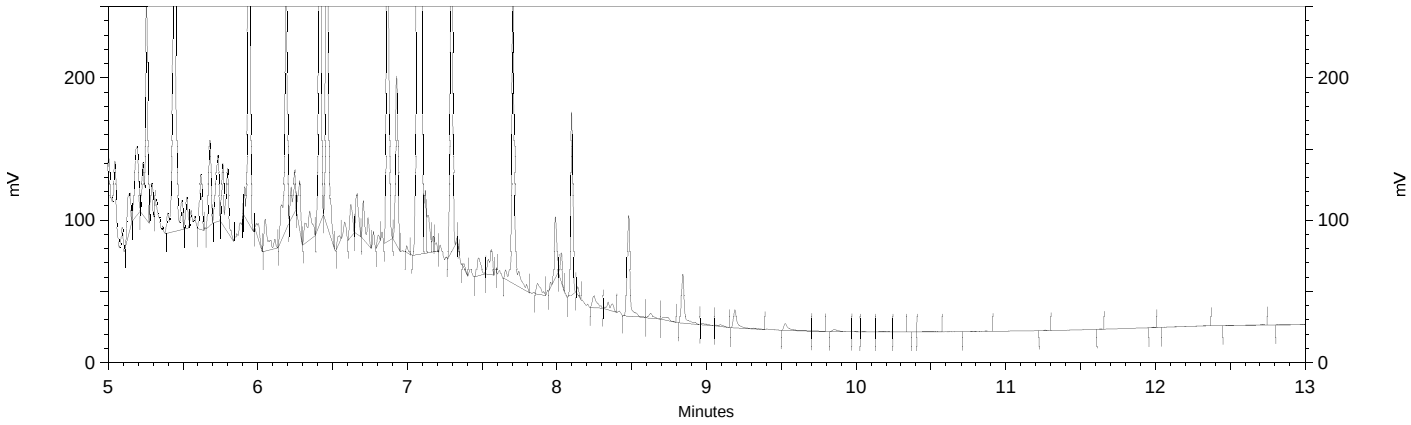
Sample Name: **ccv,s20484,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b039**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr234.met
Run Date: 9/10/2012 8:02:44 AM
Analysis Date: 9/10/2012 9:21:37 AM
Instrument: GC15B Vial: 39 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.093	3217363	51.724
Hexacosane	9.857	3632	0.073



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b039

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	7.032	7.21	0
Yes	Split Peak	7.109	0	0
Yes	Reassign Peak	7.115	7.089	0

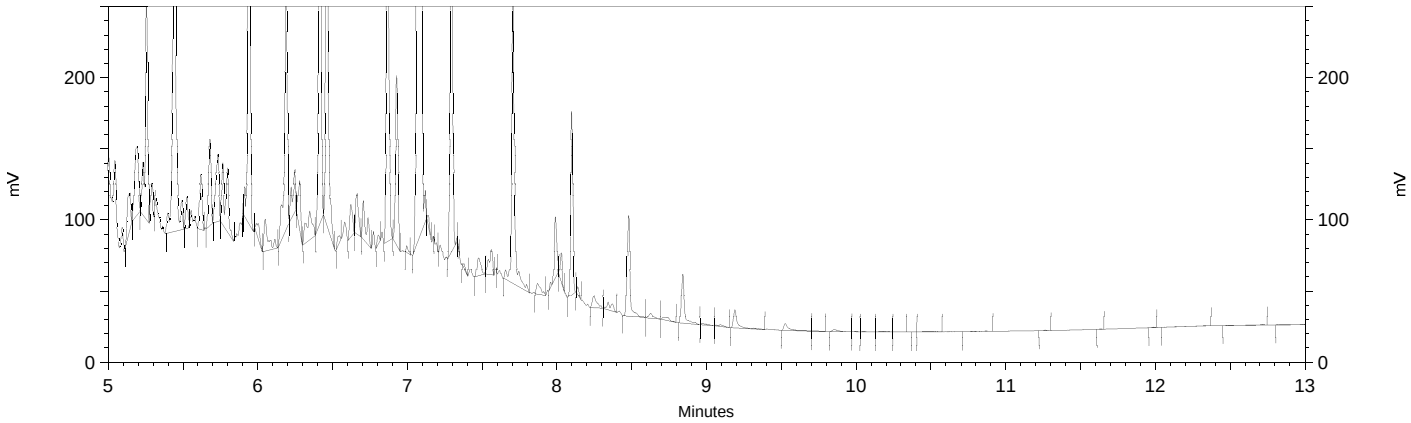
Sample Name: **ccv,s20484,dsl_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b039**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr234.met
Run Date: 9/10/2012 8:02:44 AM
Analysis Date: 9/10/2012 8:22:53 AM
Instrument: GC15B Vial: 39 Operator: lims2k3\teh2
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.093	3192816	51.329
Hexacosane	9.857	3632	0.073



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10079\253b039_F37B.tmp

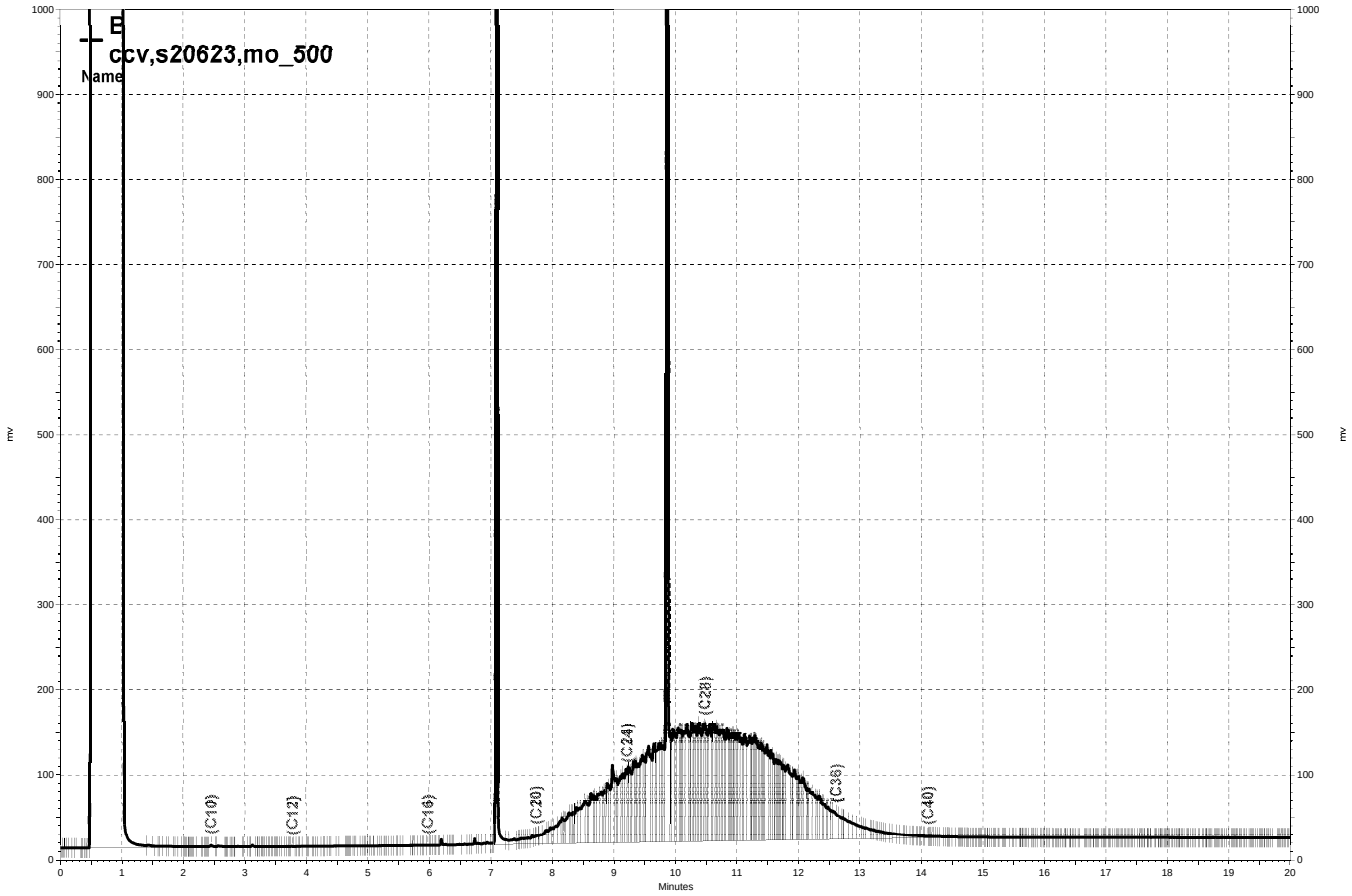
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 162365242040.1 File : 253b040 Time : 10-SEP-2012 08:31
Standards: S20623

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	162269861001	05-JUL-2012	39759	41017	500.0	515.8	mg/L	3	20	
o-Terphenyl	162281280001	13-JUL-2012	62202	65122	50.00	52.35	mg/L	5	20	

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b040, B

Sample Name: **ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 8:31:05 AM
Analysis Date: 9/10/2012 9:22:22 AM
Instrument: GC15B Vial: 40 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Name	Area	Concentration (ppm)
JETA:10-16	32205	0.705
JP8:10-16	32205	0.816
KER:10-16	32205	0.753
JP5:10-16	32205	0.645
DSL:10-20	3535816	72.647
DSL:10-22	4544899	87.349
DSL:10-24	7354013	138.853
DSL:12-22	4520133	99.479
DSL:10-28	18608760	349.073
DSL:12-24	7329247	158.062
DSL:12-32	26618016	568.049
BUNKC:12-40	31296268	2218.728
TROIL:12-40	31296268	452.230
HYFL:12-40	31296268	622.073
MO:20-36	26947424	579.419
MO:22-36	25938340	580.850
MO:24-36	23129228	581.731
DSL:10-12	24766	0.000
DSL:12-16	7439	0.000
DSL:16-24	7321808	333.836
MO:28-36	11874487	495.199
MO:28-40	12712282	462.228
MO:22-32	22097884	615.699
CREOSOTE:10-36	30483240	492.198
DSL:12-14	4036	0.000
DSL:14-16	3403	0.000
DSL:16-18	35622	0.000
DSL:18-20	3467989	0.000
DSL:20-22	1009083	0.000
DSL:22-24	2809114	0.000
CRUDE:10-40	31321036	874.080
DSL:10-14	28802	1.565
DSL:14-28	18579956	532.345
MINOIL:12-40	31296268	545.759
DSL:12-28	18583992	388.878
HYFL:24-36	23129228	681.236

---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.3	0	0
Yes	Force Peak Stop	1.5	0	0

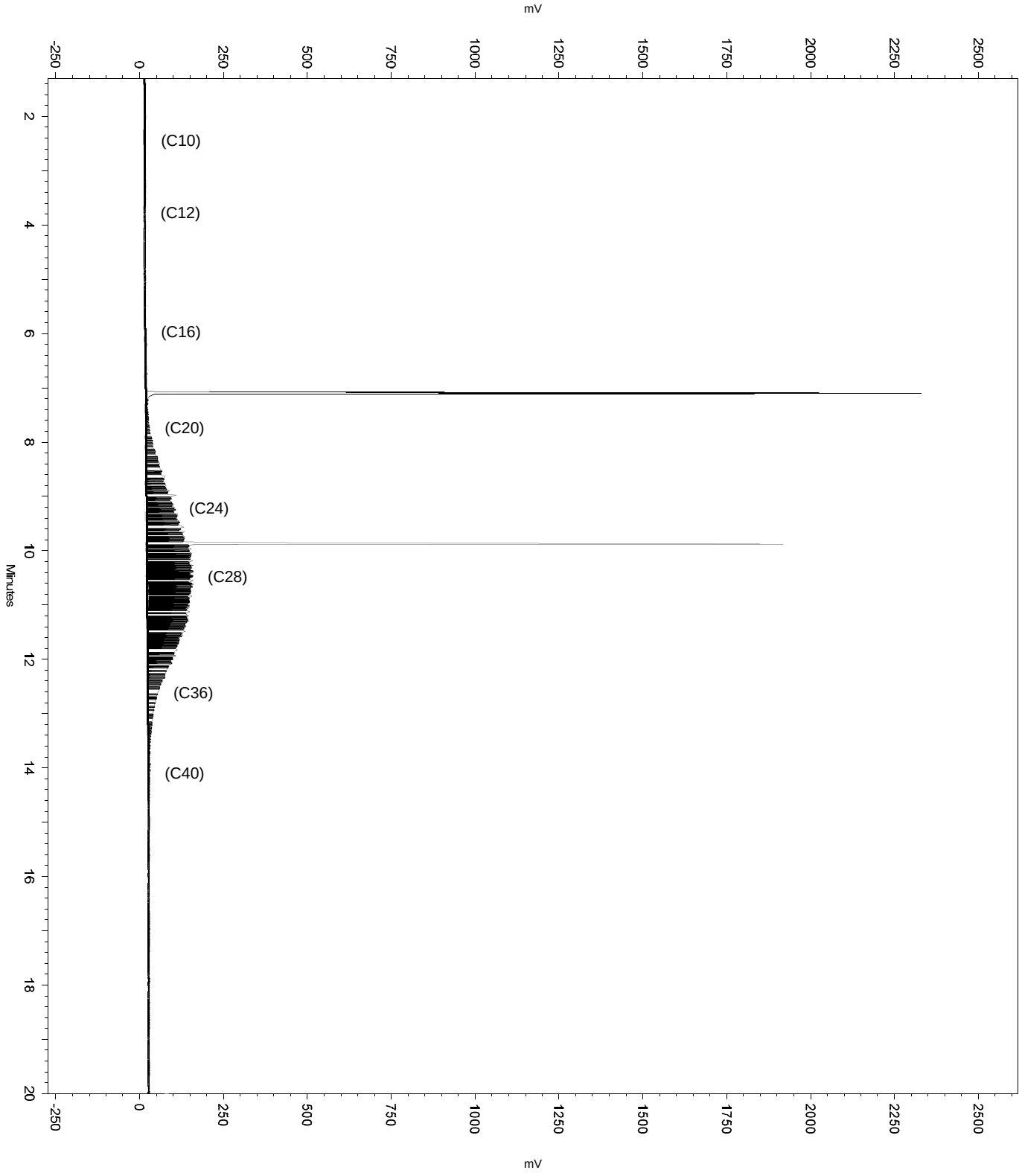
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bteh234.met
Run Date: 9/10/2012 8:31:05 AM
Analysis Date: 9/10/2012 9:22:22 AM
Instrument: GC15B Vial: 40 Operator: Teh 2. analyst (lims2k3\teh2)
Sample Amount: 1



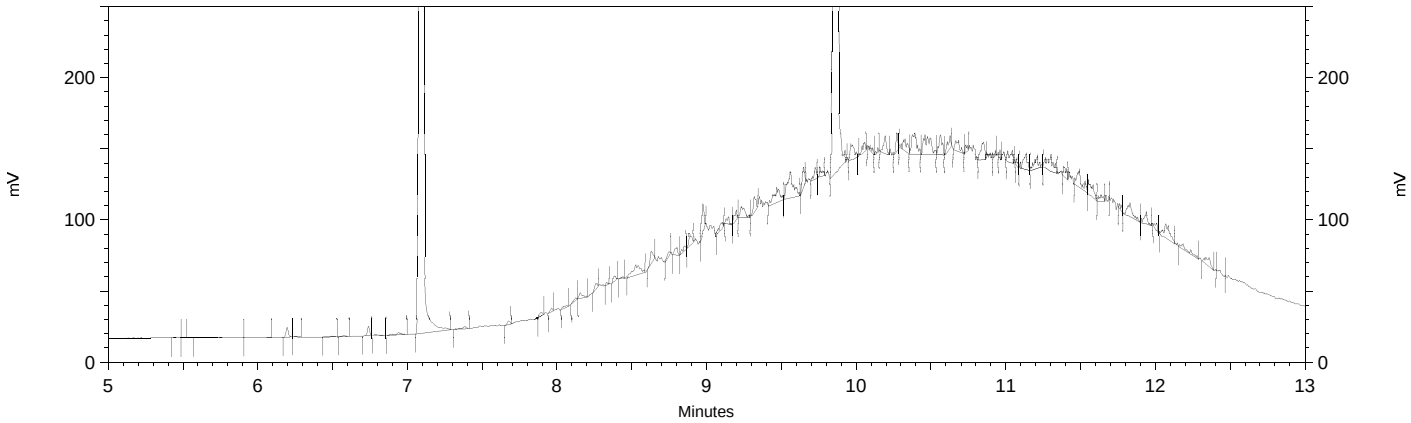
Sample Name: **ccv,s20623,mo_500**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Data\253b040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC15B\Sequence\253.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC15B\Method\bothsurr234.met
Run Date: 9/10/2012 8:31:05 AM
Analysis Date: 9/10/2012 8:51:13 AM
Instrument: GC15B Vial: 40 Operator: lims2k3\teh2
Sample Amount: 1

GC15

TEH - FID Instrument Results

B Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	7.105	3256114	52.347
Hexacosane	9.873	2620556	52.719



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	10
Yes	Valley to Valley	0	20	0
Yes	Integration Off	0	1	0
Yes	Shoulder Sensitivity	0	20	500

Manual Integration Fixes
==========
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10079\253b040_F37C.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

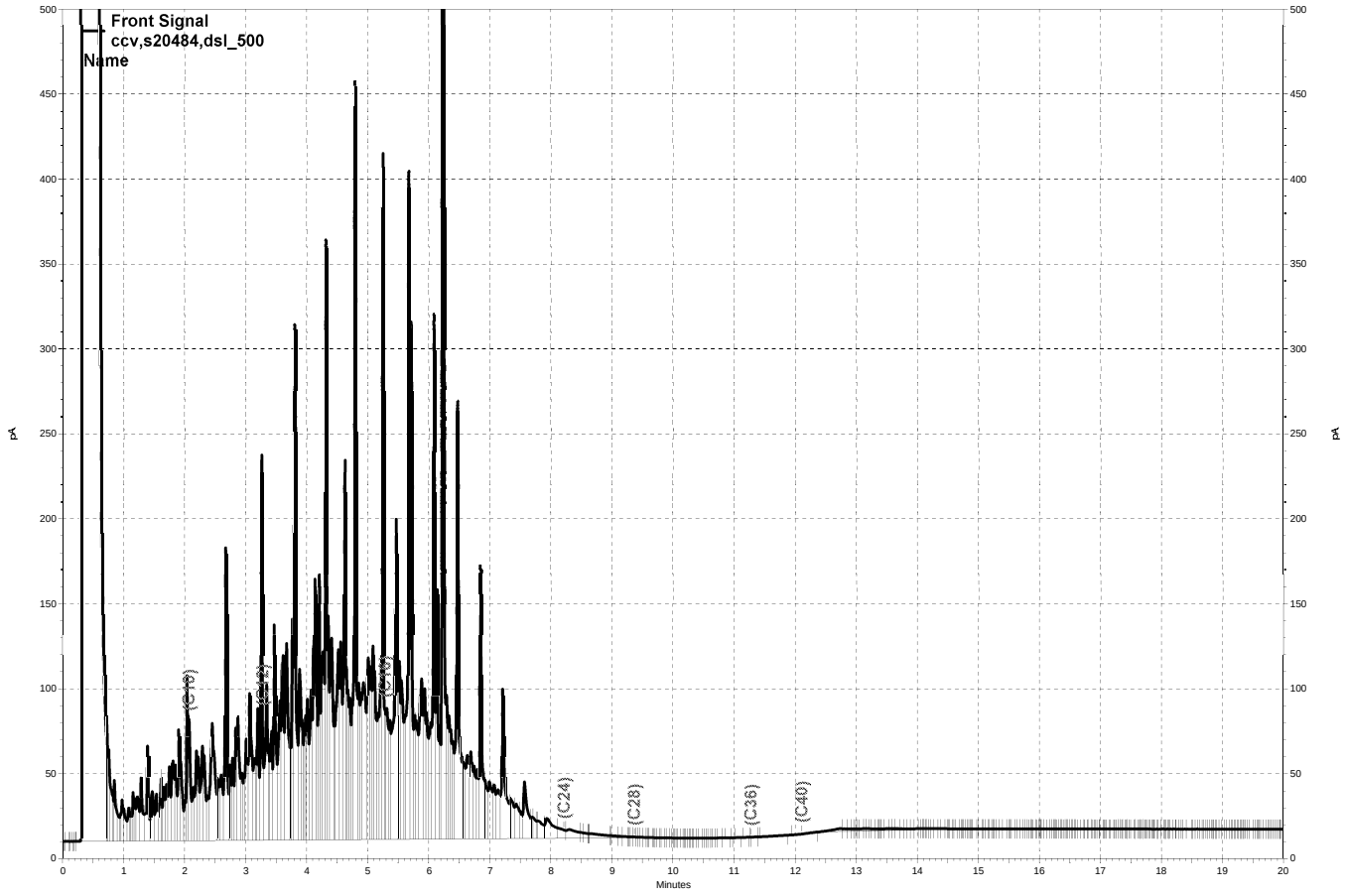
CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC27A Run Name : DSL_500 IDF : 1.0
Seqnum : 972361903010.1 File : 251a010 Time : 07-SEP-2012 12:45
Standards: S20484

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	972285785002	16-JUL-2012	418364	371599	500.0	444.1	mg/L	-11	20	
o-Terphenyl	972287688001	17-JUL-2012	412405	411349	50.00	49.87	mg/L	0	20	

JDG 09/07/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12



\\lims\gdrive\ezchrom\Projects\GC27\Data\251a010.dat, Front Signal

Sample Name: **ccv,s20484,dsl_500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a010.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh251.met**
Run Date: 9/7/2012 12:45:21 PM
Analysis Date: 9/7/2012 1:25:25 PM
Instrument: GC27 (Offline)A Vial: 10 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		114834223	485.871
JP8:10-16		114834223	0.000
KER:10-16		114834223	509.177
JP5:10-16		114834223	370.275
DSL:10-20		195142864	501.963
DSL:10-22		204139503	496.368
DSL:10-24		206366746	493.271
DSL:12-22		176369521	510.156
DSL:10-28		207513538	493.407
DSL:12-24		178596764	506.206
DSL:12-32		179775961	505.751
BUNKC:12-40		179782782	2000.584
HYFL:12-40		179782782	1182.671
MO:22-32		3406440	13.952
MO:20-36		12407406	40.642
MO:22-36		3410767	11.801
MO:24-36		1183524	4.695
MO:28-36		36732	0.262
MO:28-40		39226	0.258
DSL:10-12		27769982	0.000
DSL:12-16		87064241	0.000
DSL:16-24		91532523	591.555
DSL:10-14		71427979	433.348
DSL:14-28		136085559	532.116
TROIL:12-40		179782782	577.500
MINOIL:12-40		179782782	472.508
CRUDE:10-40		207552764	1388.186

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

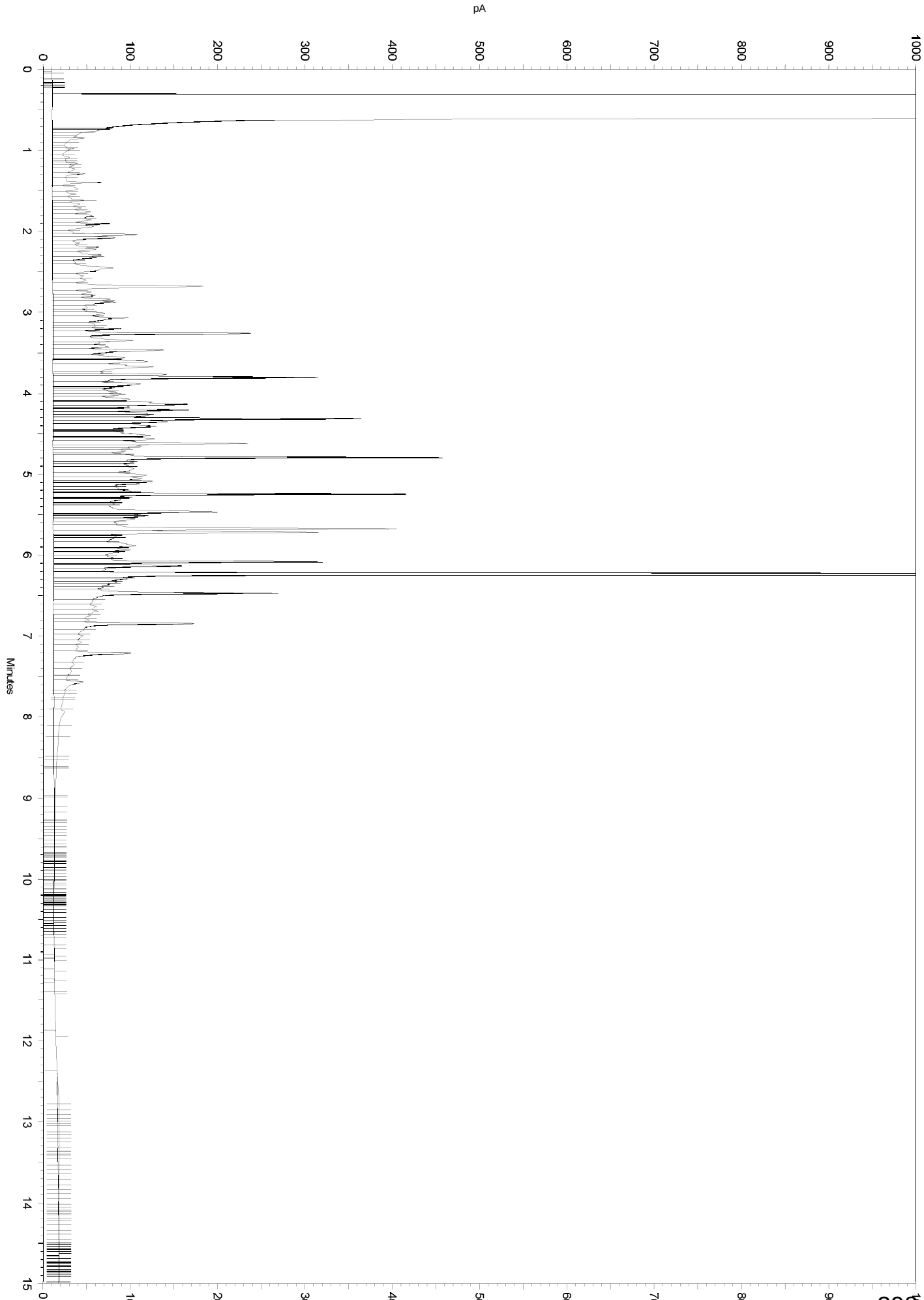
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a010.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Baseline	6.2	6.385	0
Yes	Move BL Start	1.06	0.166	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Sample Name: **ccv,s20484,dsl_500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a010.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh251.met**
Run Date: 9/7/2012 12:45:21 PM
Analysis Date: 9/7/2012 1:25:18 PM
Instrument: GC27 (Offline)A Vial: 10 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		102822358	435.048
JP8:10-16		102822358	0.000
KER:10-16		102822358	455.916
JP5:10-16		102822358	331.543
DSL:10-20		179511478	461.755
DSL:10-22		187396998	455.658
DSL:10-24		189014793	451.795
DSL:12-22		165009831	477.297
DSL:10-28		189555394	450.708
DSL:12-24		166627626	472.281
DSL:12-32		167176289	470.305
BUNKC:12-40		167183110	1860.378
HYFL:12-40		167183110	1099.786
MO:22-32		2166458	8.873
MO:20-36		10056305	32.940
MO:22-36		2170785	7.511
MO:24-36		552990	2.194
MO:28-36		12389	0.088
MO:28-40		14883	0.098
DSL:10-12		22387167	0.000
DSL:12-16		80435191	0.000
DSL:16-24		86192435	557.043
DSL:10-14		62151365	377.067
DSL:14-28		127404029	498.170
TROIL:12-40		167183110	537.028
MINOIL:12-40		167183110	439.393
CRUDE:10-40		189570277	1267.913

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

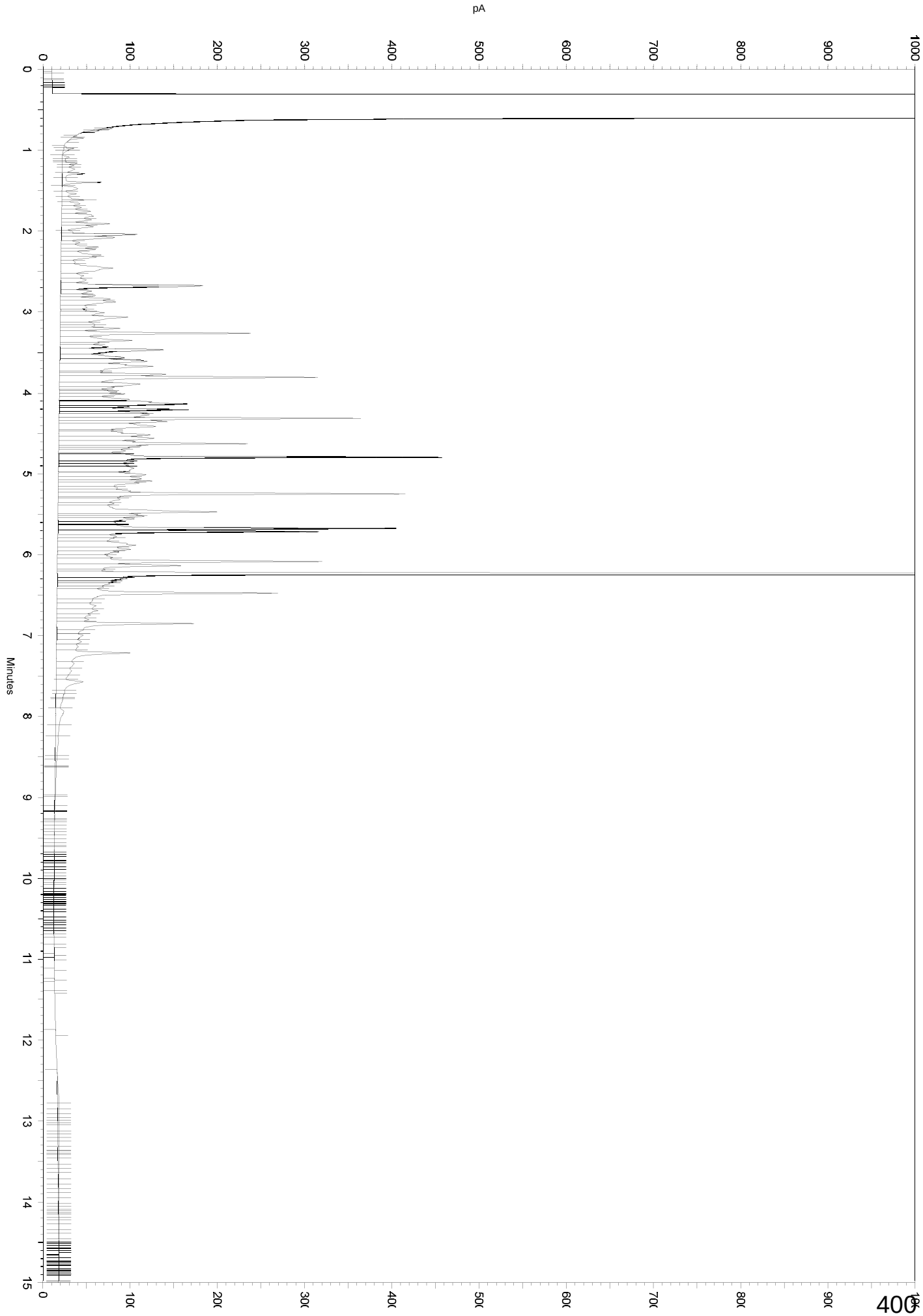
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a010.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Baseline	6.2	6.385	0


pA
0
100
200
300
400
500
600
700
800
900
1000
Minutes
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

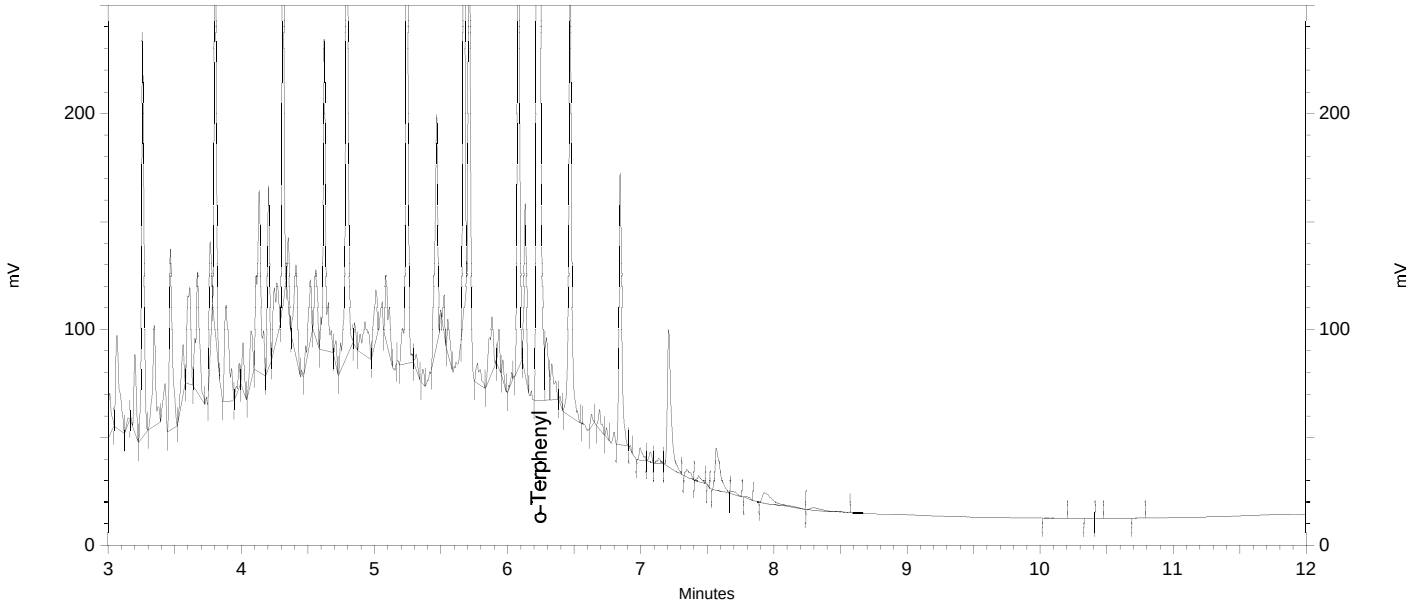
Sample Name: **ccv,s20484,dsl_500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a010.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_233.met**
Run Date: 9/7/2012 12:45:21 PM
Analysis Date: 9/7/2012 1:25:02 PM
Instrument: GC27 (Offline)A Vial: 10 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.240	20567455	49.872
Hexacosane			0.000 BDL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a010.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	6.2	6.385	0

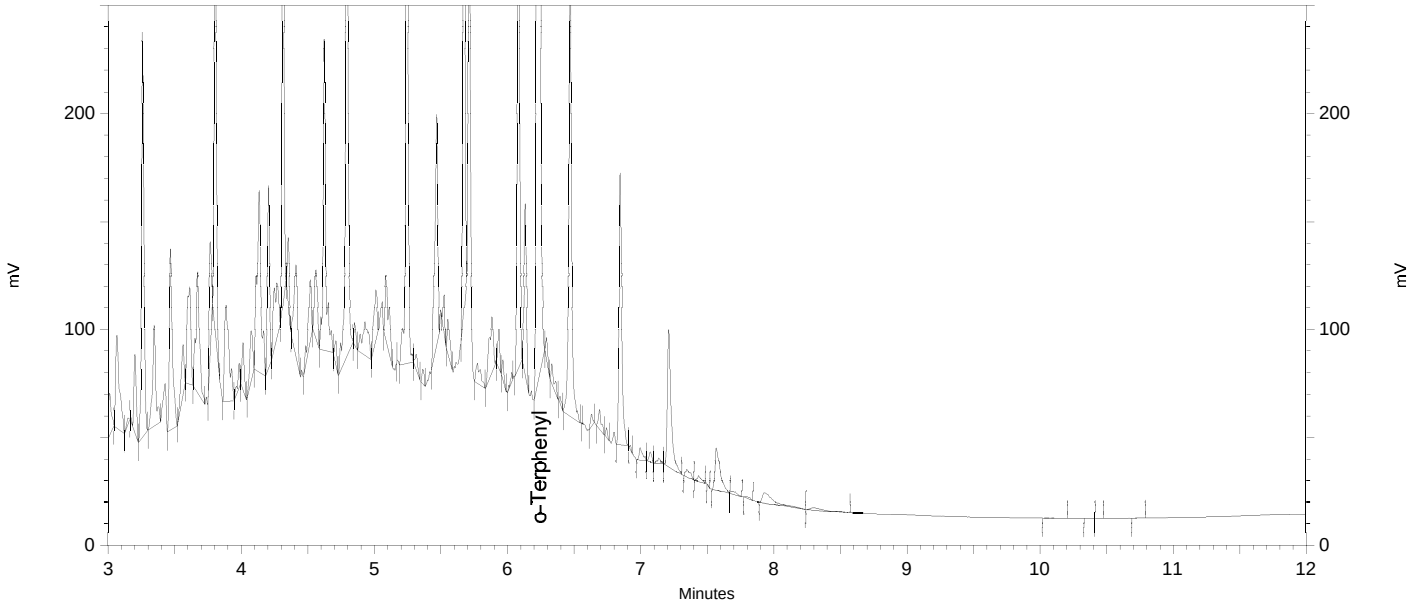
Sample Name: **ccv,s20484,dsl_500**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a010.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_233.met**
Run Date: 9/7/2012 12:45:21 PM
Analysis Date: 9/7/2012 1:05:23 PM
Instrument: GC27A Vial: 10 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.240	20134830	48.823
Hexacosane			0.000 BDL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10001\251a010.dat_D05C.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

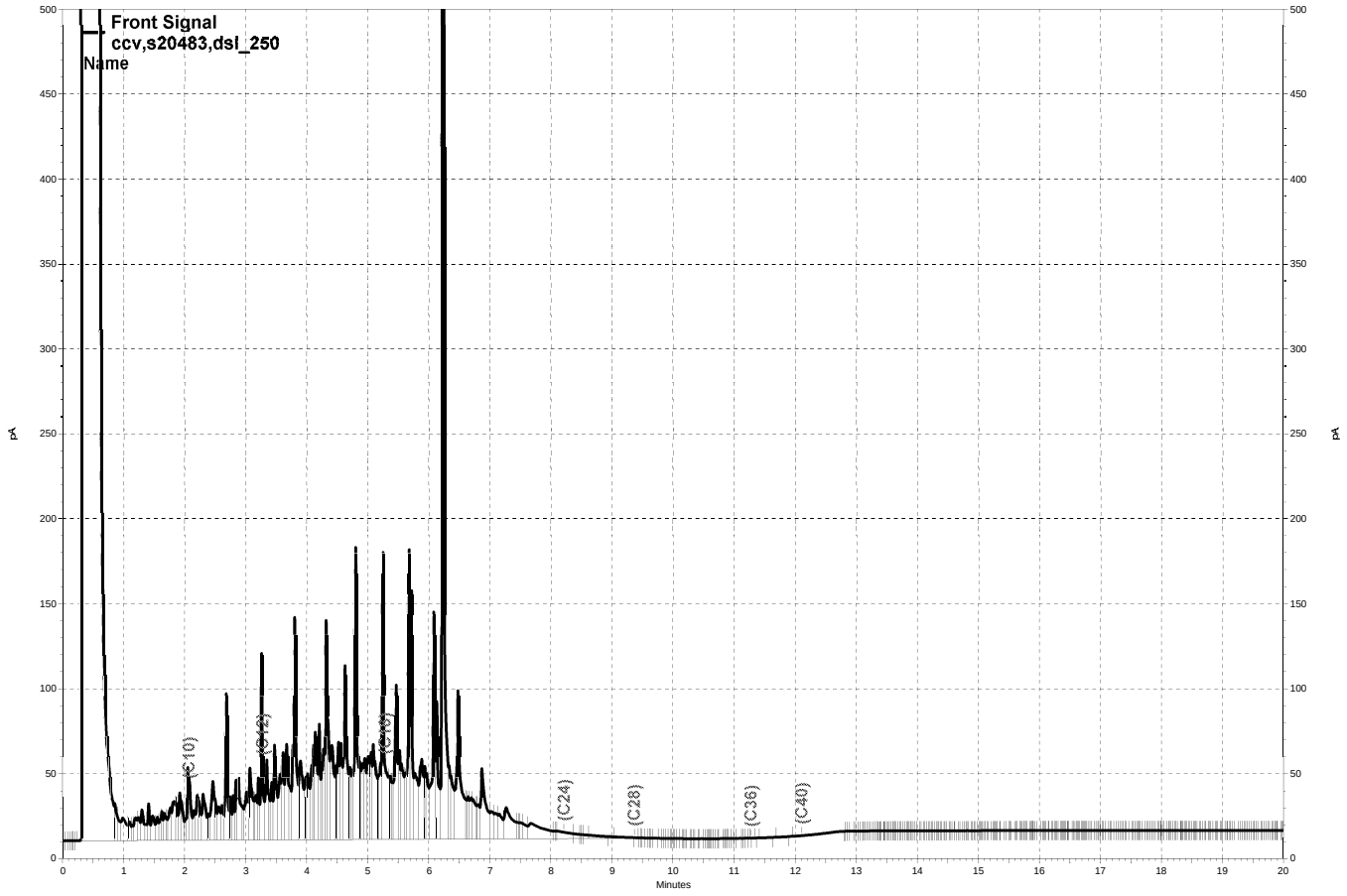
CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 GCSV Water
EPA 8015D

Inst : GC27A Run Name : DSL_250 IDF : 1.0
Seqnum : 972361903016.1 File : 251a016 Time : 07-SEP-2012 19:00
Standards: S20483

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C24	972285785002	16-JUL-2012	418364	371732	250.0	222.1	mg/L	-11	20	
o-Terphenyl	972287688001	17-JUL-2012	412405	409362	50.00	49.63	mg/L	-1	20	

SFL 09/08/12 : Corrected automatically drawn baseline. [general version]

Analyst: SFL Date: 09/11/12 Reviewer: EAH Date: 09/11/12



\\lims\gdrive\ezchrom\Projects\GC27\Data\251a016.dat, Front Signal

Sample Name: **ccv,s20483,dsl_250**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a016.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh251.met**
Run Date: 9/7/2012 7:00:25 PM
Analysis Date: 9/8/2012 3:44:13 PM
Instrument: GC27A Vial: 16 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		57855794	244.792
JP8:10-16		57855794	0.000
KER:10-16		57855794	256.533
JP5:10-16		57855794	186.552
DSL:10-20		108054296	277.947
DSL:10-22		111579925	271.308
DSL:10-24		113400994	271.058
DSL:12-22		97476820	281.955
DSL:10-28		113716533	270.385
DSL:12-24		99297889	281.445
DSL:12-32		99645736	280.326
BUNKC:12-40		99657718	1108.970
HYFL:12-40		99657718	655.582
MO:22-32		2168916	8.883
MO:20-36		5703551	18.683
MO:22-36		2177922	7.535
MO:24-36		356853	1.416
MO:28-36		41314	0.295
MO:28-40		44290	0.292
DSL:10-12		14103105	0.000
DSL:12-16		43752689	0.000
DSL:16-24		55545200	358.977
DSL:10-14		35330160	214.345
DSL:14-28		78386373	306.503
TROIL:12-40		99657718	320.122
MINOIL:12-40		99657718	261.922
CRUDE:10-40		113760823	760.873

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

Integration Events
==========

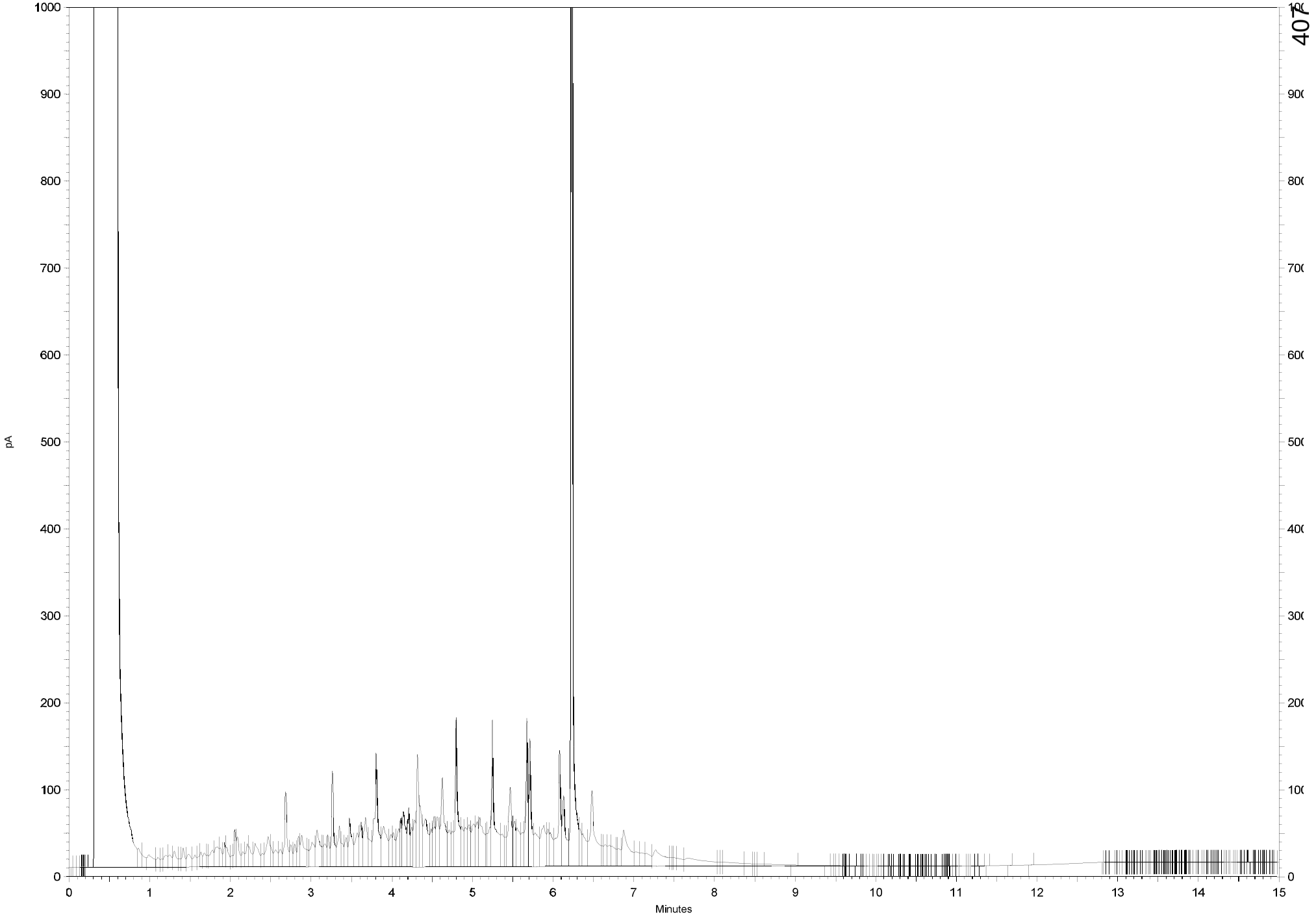
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a016.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Peak	6.186	6.424	0
No	Split Peak	6.322	0	0
No	Move BL Stop	6.357	6.423	0

Yes	Move BL Stop	0.235	9.76	0


pA
1000
900
800
700
600
500
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300
200
100
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0
1
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8
9
10
11
12
13
14
15
Minutes

Sample Name: **ccv,s20483,dsl_250**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a016.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\ateh251.met**
Run Date: 9/7/2012 7:00:25 PM
Analysis Date: 9/8/2012 3:44:04 PM
Instrument: GC27A Vial: 16 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
JETA:10-16		48796698	206.462
JP8:10-16		48796698	0.000
KER:10-16		48796698	216.365
JP5:10-16		48796698	157.342
DSL:10-20		95985281	246.902
DSL:10-22		98645147	239.857
DSL:10-24		99628971	238.139
DSL:12-22		88453610	255.855
DSL:10-28		99668497	236.983
DSL:12-24		89437434	253.497
DSL:12-32		89485488	251.743
BUNKC:12-40		89497470	995.909
HYFL:12-40		89497470	588.744
MO:22-32		1031878	4.226
MO:20-36		3700750	12.122
MO:22-36		1040884	3.601
MO:24-36		57060	0.226
MO:28-36		17534	0.125
MO:28-40		20510	0.135
DSL:10-12		10191537	0.000
DSL:12-16		38605161	0.000
DSL:16-24		50832273	328.518
DSL:10-14		28523236	173.048
DSL:14-28		71145261	278.189
TROIL:12-40		89497470	287.485
MINOIL:12-40		89497470	235.219
CRUDE:10-40		99689007	666.755

---< General Method Parameters >---

No items selected for this section

---< TST >---

No items selected for this section

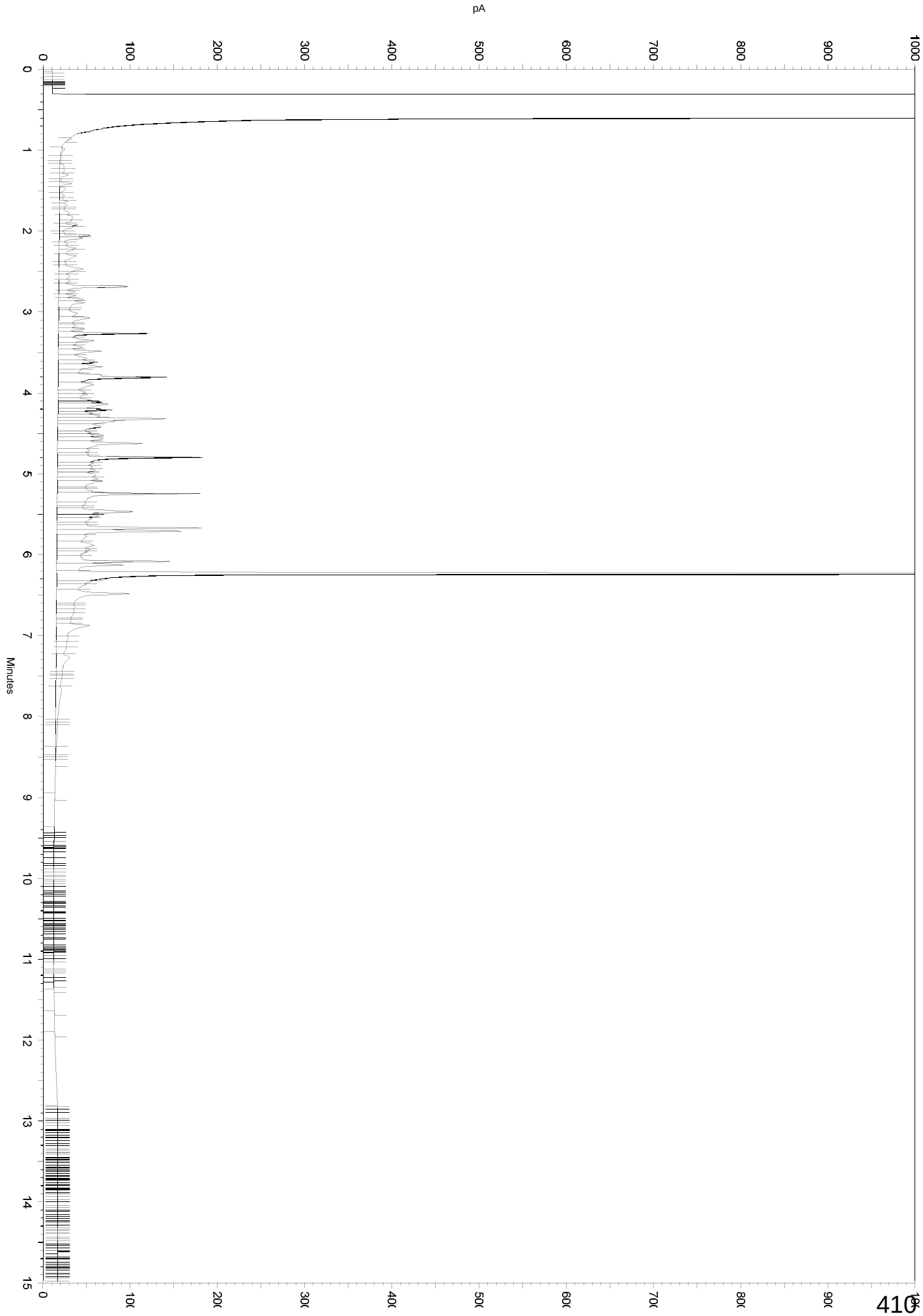
Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Force Peak Stop	1.616	0	0
Yes	Reset Baseline	14.625	0	0

Manual Integration Fixes
==========

Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a016.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Manual Peak	6.186	6.424	0
No	Split Peak	6.322	0	0
No	Move BL Stop	6.357	6.423	0


pA
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500
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700
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900
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Minutes
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12
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14
15

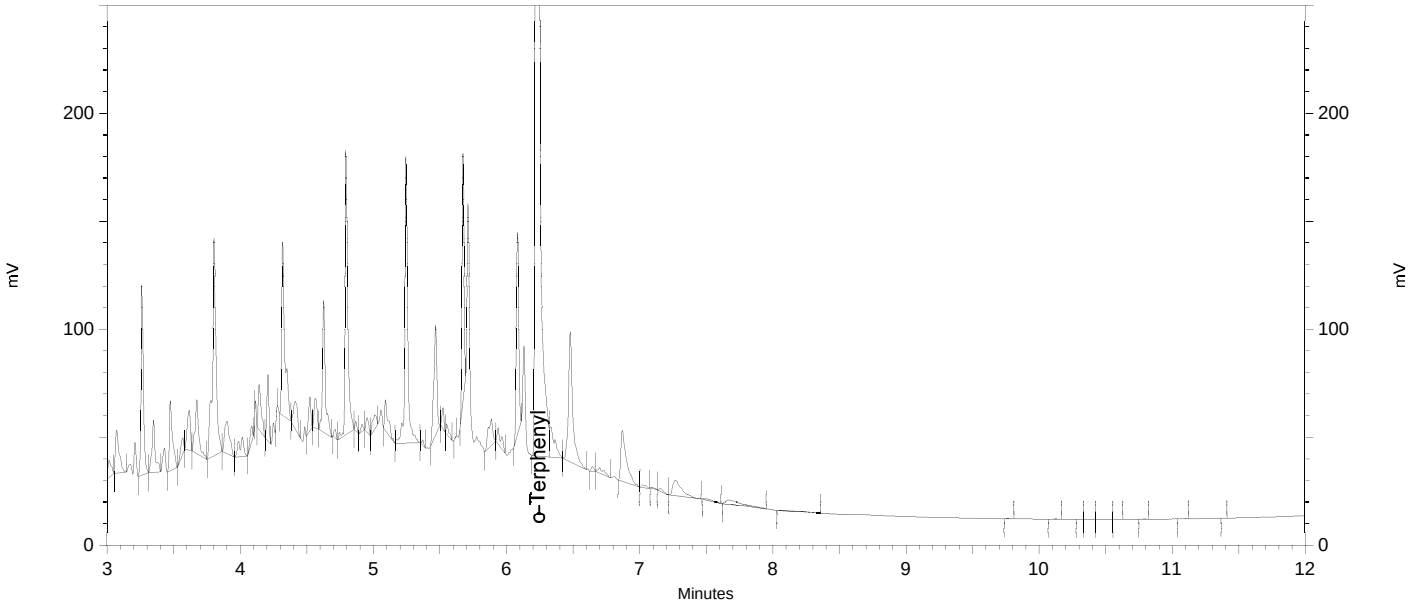
Sample Name: **ccv,s20483,dsl_250**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a016.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_233.met**
Run Date: 9/7/2012 7:00:25 PM
Analysis Date: 9/8/2012 3:43:43 PM
Instrument: GC27A Vial: 16 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.237	20468083	49.631
Hexacosane			0.000 BDL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a016.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	6.186	6.424	0
Yes	Split Peak	6.322	0	0
Yes	Move BL Stop	6.357	6.423	0

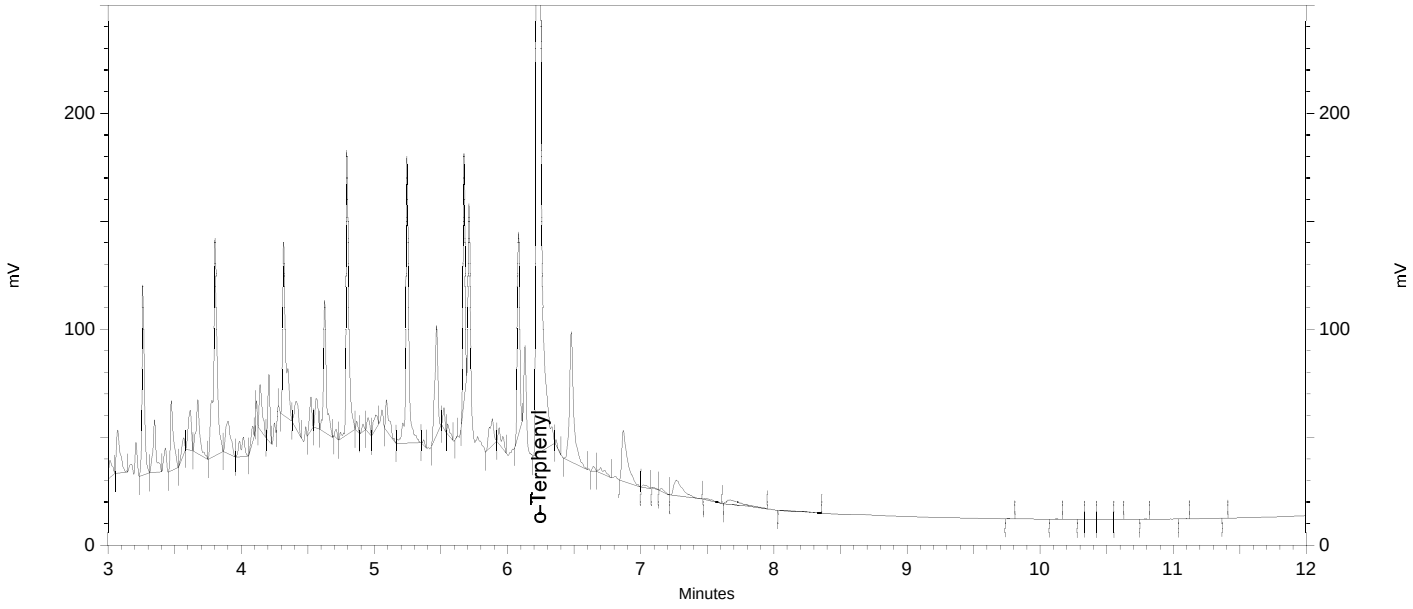
Sample Name: **ccv,s20483,dsl_250**
Data File: **\\lims\gdrive\ezchrom\Projects\GC27\Data\251a016.dat**
Sequence File: **G:\ezchrom\Projects\GC27\Sequence\251.seq**
Software Version 3.3.1
Method Name: **G:\ezchrom\Projects\GC27\Method\a-bothsurr_233.met**
Run Date: 9/7/2012 7:00:25 PM
Analysis Date: 9/8/2012 3:43:20 PM
Instrument: GC27A Vial: 16 Operator: System
Sample Amount: 1

GC27a

TEH - FID Instrument Results

Front Signal Results

Component Name	Retention Time	Area	Concentration (ppm)
o-Terphenyl	6.237	20411691	49.494
Hexacosane			0.000 BDL



---< General Method Parameters >----------

No items selected for this section

---< TST >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	100
Yes	Valley to Valley	0	15	0
Yes	Shoulder Sensitivity	0	15	500
Yes	Integration Off	0	2	0

Manual Integration Fixes
==========
Data File: \\lims\gdrive\ezchrom\Projects\GC27\Data\251a016.dat

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239403
ANALYTICAL REPORT
Semivolatile Organics by GC/MS
Matrix: Water

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
FB.09042012	239403-007
EB.09042012	239403-008

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
SEMIVOLATILE ORGANICS BY GC/MS (EPA 8270D)
WATER

Laboratory number:	**239403**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/04/12**
Samples Received:	**09/04/12**

This data package contains sample and QC results for two water samples, requested for the above referenced project on 09/04/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Semivolatile Organics by GC/MS (EPA 8270D) Water:

No analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 23403

Chain of Custody # _____

Project No: CA0007611.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: E Manton and D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None
1	EX36B116D.2	04/04/12	1150		X			1					X
2	EX36B116A.2	04/04/12	1155		X			1					X
3	EX36B116B.2	04/04/12	1140		X			1					X
4	EX36B116C.2	04/04/12	1200		X			1					X
5	EX36B015A.2	04/04/12	1250		X			1					X
6	EX36B163A.2	04/04/12	1315		X			2					X
7	FB.090420120	04/04/12	1455	X				9	3		1		5
8	EB.090420120	04/04/12	1505	X				3			1		2
	Temp Blank												

ANALYTICAL REQUEST

Big(2)-Ethylhexyl)phthlate by 8270D	Copper by EPA 6010C	Mercury by EPA 7471B	Alpha-BHC by EPA 8081B	PCBs by 8082	TPHg by 8015	TPHd by 8015	SVOCs by 8270	Pesticides by 8081	Metals by 6010/7174
X									
X									
X									
X									
	X	X							
	X	X	X						
				X	X	X	X	X	X
							X	X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

RECEIVED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239403 Date Received 9/4/12 Number of coolers 1
Client ARCADIS Project CA000761.0001

Date Opened 9/4/12 By (print) EL (sign) [signature]
Date Logged in ~~EL~~ 9/6/12 By (print) ~~EL~~ JG (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? (YES) NO N/A
17. Did you document your preservative check? (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239403

Sample	pH: <2	>9	>12	Other
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
-008a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: EL
Date: 9/6/12

Results & QC Summary

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8270D
Matrix:	Water	Sampled:	09/04/12
Units:	ug/L	Received:	09/04/12
Diln Fac:	1.000	Prepared:	09/07/12
Batch#:	190277	Analyzed:	09/10/12

Field ID: FB.09042012 Lab ID: 239403-007
Type: SAMPLE

Analyte	Result	LOQ	DL
Naphthalene	2.5 U	10	1.9
3,3'-Dichlorobenzidine	2.5 U	20	1.0
Benzo(a)anthracene	2.5 U	10	1.6
bis(2-Ethylhexyl)phthalate	2.5 U	10	1.8
Benzo(b)fluoranthene	2.5 U	10	1.7
Benzo(k)fluoranthene	2.5 U	10	2.0
Benzo(a)pyrene	2.5 U	10	1.6
Indeno(1,2,3-cd)pyrene	2.5 U	10	1.8
Dibenz(a,h)anthracene	2.5 U	10	1.8

Surrogate	%REC	Limits
Nitrobenzene-d5	77	55-120
2-Fluorobiphenyl	71	51-120
Terphenyl-d14	74	23-120

Field ID: EB.09042012 Lab ID: 239403-008
Type: SAMPLE

Analyte	Result	LOQ	DL
Naphthalene	2.4 U	9.6	1.8
3,3'-Dichlorobenzidine	2.4 U	19	1.0
Benzo(a)anthracene	2.4 U	9.6	1.5
bis(2-Ethylhexyl)phthalate	2.4 U	9.6	1.8
Benzo(b)fluoranthene	2.4 U	9.6	1.7
Benzo(k)fluoranthene	2.4 U	9.6	1.9
Benzo(a)pyrene	2.4 U	9.6	1.5
Indeno(1,2,3-cd)pyrene	2.4 U	9.6	1.7
Dibenz(a,h)anthracene	2.4 U	9.6	1.7

Surrogate	%REC	Limits
Nitrobenzene-d5	74	55-120
2-Fluorobiphenyl	66	51-120
Terphenyl-d14	70	23-120

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8270D
Matrix:	Water	Sampled:	09/04/12
Units:	ug/L	Received:	09/04/12
Diln Fac:	1.000	Prepared:	09/07/12
Batch#:	190277	Analyzed:	09/10/12

Type: BLANK Lab ID: QC655235

Analyte	Result	LOQ	DL
Naphthalene	2.5 U	10	1.9
3,3'-Dichlorobenzidine	2.5 U	20	1.0
Benzo(a)anthracene	2.5 U	10	1.6
bis(2-Ethylhexyl)phthalate	2.5 U	10	1.8
Benzo(b)fluoranthene	2.5 U	10	1.7
Benzo(k)fluoranthene	2.5 U	10	2.0
Benzo(a)pyrene	2.5 U	10	1.6
Indeno(1,2,3-cd)pyrene	2.5 U	10	1.8
Dibenz(a,h)anthracene	2.5 U	10	1.8

Surrogate	%REC	Limits
Nitrobenzene-d5	70	55-120
2-Fluorobiphenyl	63	51-120
Terphenyl-d14	70	23-120

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8270D
Matrix:	Water	Batch#:	190277
Units:	ug/L	Prepared:	09/07/12
Diln Fac:	1.000	Analyzed:	09/10/12

Type: BS Lab ID: QC655236

Analyte	Spiked	Result	%REC	Limits
Naphthalene	30.00	25.16	84	61-120
3,3'-Dichlorobenzidine	80.00	63.02	79	47-120
Benzo(a)anthracene	30.00	29.79	99	65-120
bis(2-Ethylhexyl)phthalate	30.00	24.46	82	54-124
Benzo(b)fluoranthene	30.00	29.38	98	61-120
Benzo(k)fluoranthene	30.00	28.89	96	60-120
Benzo(a)pyrene	30.00	26.66	89	62-120
Indeno(1,2,3-cd)pyrene	30.00	30.13	100	58-120
Dibenz(a,h)anthracene	30.00	30.46	102	59-120

Surrogate	%REC	Limits
Nitrobenzene-d5	81	55-120
2-Fluorobiphenyl	81	51-120
Terphenyl-d14	102	23-120

Type: BSD Lab ID: QC655237

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	30.00	26.24	87	61-120	4	21
3,3'-Dichlorobenzidine	80.00	63.32	79	47-120	0	25
Benzo(a)anthracene	30.00	30.00	100	65-120	1	21
bis(2-Ethylhexyl)phthalate	30.00	30.61	102	54-124	22	33
Benzo(b)fluoranthene	30.00	29.66	99	61-120	1	30
Benzo(k)fluoranthene	30.00	28.77	96	60-120	0	29
Benzo(a)pyrene	30.00	26.58	89	62-120	0	20
Indeno(1,2,3-cd)pyrene	30.00	29.84	99	58-120	1	27
Dibenz(a,h)anthracene	30.00	30.22	101	59-120	1	28

Surrogate	%REC	Limits
Nitrobenzene-d5	85	55-120
2-Fluorobiphenyl	86	51-120
Terphenyl-d14	103	23-120

RPD= Relative Percent Difference

CURTIS & TOMPKINS DFTPP TUNE FOR 239403 MSBNA Water
EPA 8270D

Inst : MSBNA09 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 582094282007 File : rc507 Time : 05-MAR-2012 13:16

Standards: S18710

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	153635	45.79	
68	< 2% of mass 69	2789	1.70	
69		164381	100.00	
70	< 2% of mass 69	652	0.40	
127	40% - 60% of mass 198	177834	53.00	
197	< 1% of mass 198	0	0.00	
198		335509	100.00	
199	5% - 9% of mass 198	22354	6.66	
275	10% - 30% of mass 198	78080	23.27	
365	> 1% of mass 198	7746	2.31	
441	Present, < mass 443	40000	75.25	
442	> 40% and < 100% of mass 198	277525	82.72	
443	17% - 23% of mass 442	53154	19.15	

Analyst: KMH Date: 03/05/12 Reviewer: LW Date: 03/06/12

PEM Report

File Name : G:\msbna09\030512\RC507.D
Date Acquired : 5 Mar 2012 1:16 pm
Sample Name : TUN,S18710
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA09 BNA DFTPP/PEM
Inst. Name : MSBNA09
AcquisitionMeth: DFTPP09.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.155	5.50	400557
Benzidine	1.099	7.36	3182657
4,4'-DDT		8.40	1337610
4,4'-DDE		7.60	3911
4,4'-DDD		8.02	120409

% Breakdown: 4,4'-DDT	LIMIT <=20%	9%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.2	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	1.1	PASS
	8270D <=2	1	PASS

Mon Mar 05 13:25:24 2012

CURTIS & TOMPKINS DFTPP TUNE FOR 239403 MSBNA Water
EPA 8270D

Inst : MSBNA09 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 582366461001 File : ria01 Time : 10-SEP-2012 11:41

Standards: S20011

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	98303	46.27	
68	< 2% of mass 69	1612	1.56	
69		103089	100.00	
70	< 2% of mass 69	431	0.42	
127	40% - 60% of mass 198	115813	54.52	
197	< 1% of mass 198	0	0.00	
198		212437	100.00	
199	5% - 9% of mass 198	14126	6.65	
275	10% - 30% of mass 198	52976	24.94	
365	> 1% of mass 198	5572	2.62	
441	Present, < mass 443	28208	77.43	
442	> 40% and < 100% of mass 198	193386	91.03	
443	17% - 23% of mass 442	36429	18.84	

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

PEM Report

File Name : G:\msbna09\091012\RIA01.D
Date Acquired : 10 Sep 2012 11:41 am
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA09 BNA DFTPP/PEM
Inst. Name : MSBNA09
AcquisitionMeth: DFTPP09.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.798	4.68	229055
Benzidine	0.974	6.53	1898793
4,4'-DDT		7.55	935026
4,4'-DDE		6.76	4626
4,4'-DDD		7.17	32267

% Breakdown: 4,4'-DDT	LIMIT <=20%	4%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.8	PASS
	8270D <=2	2	PASS
Tailing: Benzidine	8270C <3.0	1.0	PASS
	8270D <=2	1	PASS

Mon Sep 10 11:52:32 2012

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 MSBNA Water: EPA 8270D

Inst : MSBNA09
Calnum : 582094282001
Units : ug/mL

Name : 6PTBNA9
Date : 05-MAR-2012 13:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	rc508	582094282008	ICAL	05-MAR-2012 13:32	S19015
L2	rc509	582094282009	ICAL	05-MAR-2012 14:02	S19016
L3	rc510	582094282010	ICAL	05-MAR-2012 14:32	S19017
L4	rc511	582094282011	ICAL	05-MAR-2012 15:02	S19018
L5	rc512	582094282012	ICAL	05-MAR-2012 15:32	S19019
L6	rc513	582094282013	ICAL	05-MAR-2012 16:02	S19020
L7	rc514	582094282014	ICAL	05-MAR-2012 16:32	S19021
L8	rc515	582094282015	ICAL	05-MAR-2012 17:01	S19022
L9	rc516	582094282016	ICAL	05-MAR-2012 17:32	S19023

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene	1.2492	1.2089	1.2426	1.2161	1.2056	1.1841	1.0878	1.0327	1.0237	AVRG		0.86118		1.1612	8	20	0.700	0.99	
3,3'-Dichlorobenzidine			0.3930	0.4029	0.4009	0.3966	0.3886	0.3866	0.3832	AVRG		2.54374		0.3931	2	20	0.010	0.99	
Benzo(a)anthracene	1.2159	1.1703	1.1796	1.1847	1.1822	1.1566	1.1148	1.1286	1.1456	AVRG		0.85891		1.1643	3	20	0.800	0.99	
bis(2-Ethylhexyl)phthalate			1.0264	1.0273	1.0157	0.9817	0.8796	0.7994	0.7225	AVRG		1.08485		0.9218	13	20	0.010	0.99	
Benzo(b)fluoranthene	1.0471	1.0706	1.1345	1.1704	1.1466	1.1730	1.1396	1.1950	1.2389	AVRG		0.87245		1.1462	5	20	0.700	0.99	
Benzo(k)fluoranthene	1.1532	1.1693	1.2108	1.2102	1.2256	1.2087	1.1939	1.1769	1.1847	AVRG		0.83851		1.1926	2	20	0.700	0.99	
Benzo(a)pyrene	0.8899	0.9223	0.9775	1.0115	1.0227	1.0229	1.0206	1.0309	1.0536	AVRG		1.00537		0.9947	5	20	0.700	0.99	
Indeno(1,2,3-cd)pyrene	0.9208	0.9126	1.0102	1.0784	1.0982	1.0879	1.0713	1.1083	1.1222	AVRG		0.95644		1.0455	8	20	0.500	0.99	
Dibenz(a,h)anthracene	0.7890	0.7951	0.8790	0.9373	0.9548	0.9477	0.9336	0.9584	0.9819	AVRG		1.10068		0.9085	8	20	0.400	0.99	
Nitrobenzene-d5	0.5341m	0.5341m	0.5807	0.5768	0.5806	0.5811	0.5552	0.5346	0.5377	AVRG		1.79472		0.5572	4	20	0.05	0.99	
2-Fluorobiphenyl	1.7842	1.6745	1.7040	1.6471	1.6379	1.5880	1.4493	1.3712	1.3426	AVRG		0.63386		1.5776	10	20	0.05	0.99	
Terphenyl-d14	0.9948	0.9620	0.9752	0.9639	0.9650	0.9406	0.9056	0.8937	0.8989	AVRG		1.05887		0.9444	4	20	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Naphthalene	2.0000	8	5.0000	4	10.000	7	16.000	5	20.000	4	25.000	2	40.000	-6	50.000	-11	60.000	-12
3,3'-Dichlorobenzidine					20.000	0	32.000	2	40.000	2	50.000	1	80.000	-1	100.00	-2	120.00	-3
Benzo(a)anthracene	2.0000	4	5.0000	1	10.000	1	16.000	2	20.000	2	25.000	-1	40.000	-4	50.000	-3	60.000	-2
bis(2-Ethylhexyl)phthalate					10.000	11	16.000	11	20.000	10	25.000	7	40.000	-5	50.000	-13	60.000	**-22**
Benzo(b)fluoranthene	2.0000	-9	5.0000	-7	10.000	-1	16.000	2	20.000	0	25.000	2	40.000	-1	50.000	4	60.000	8
Benzo(k)fluoranthene	2.0000	-3	5.0000	-2	10.000	2	16.000	1	20.000	3	25.000	1	40.000	0	50.000	-1	60.000	-1
Benzo(a)pyrene	2.0000	-11	5.0000	-7	10.000	-2	16.000	2	20.000	3	25.000	3	40.000	3	50.000	4	60.000	6
Indeno(1,2,3-cd)pyrene	2.0000	-12	5.0000	-13	10.000	-3	16.000	3	20.000	5	25.000	4	40.000	2	50.000	6	60.000	7
Dibenz(a,h)anthracene	2.0000	-13	5.0000	-12	10.000	-3	16.000	3	20.000	5	25.000	4	40.000	3	50.000	5	60.000	8
Nitrobenzene-d5	2.0000	-4	5.0000	-4	10.000	4	16.000	4	20.000	4	25.000	4	40.000	0	50.000	-4	60.000	-3
2-Fluorobiphenyl	2.0000	13	5.0000	6	10.000	8	16.000	4	20.000	4	25.000	1	40.000	-8	50.000	-13	60.000	-15
Terphenyl-d14	2.0000	5	5.0000	2	10.000	3	16.000	2	20.000	2	25.000	0	40.000	-4	50.000	-5	60.000	-5

KMH 03/06/12 [Aniline]: Picked or reassigned peak in all levels.

KMH 03/06/12 [Nitrobenzene-d5]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [Benzoic acid]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [Benzo(g,h,i)perylene]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline in ICAL (rc516).

LLH 04/18/12 : cut 2loops of column to get better peak resolution for 2,4-Dinitrophenol

LLH 04/18/12 : cut another loop, 2,4-Dinitrophenol pweak was still bad for LOD

KMH 04/23/12 : 3/8/12 cut 1 loop and primed, for failing low 2,4-Dinitrophenol, benzoic acid and pentachlorophenol

KMH 04/23/12 : 3/15/12 cut 1 loop and primed, for failing low 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, benzoic acid and pentachlorophenol

KMH 04/27/12 : 4/27/12 cut 1 loop, pentachlorophenol was failing low in the ccv

LLH 07/03/12 : cut about a loop of column...2,4-Dinitrophenol is still fails for LOD

LLH 07/12/12 : cut 2 loops of column...still no 2,4-Dinitrophenol at 2X RL for LOD...primed then baked out

LLH 09/13/12 : cut 2 loops of column then primed...CCV failed 24DNP min RF and PCP at -22%D

Analyst: KMH Date: 03/06/12 Reviewer: LW Date: 03/07/12

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

582094282001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 MSBNA Water
EPA 8270D

Inst : MSBNA09 Name : 6PTBNA9
Calnum : 582094282001 Cal Date : 05-MAR-2012

ICV 582094282017 (rc517 05-MAR-2012) stds: S19392

Analyte	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	40.00	35.71	ug/mL	-11	30	
3,3'-Dichlorobenzidine	60.00	59.59	ug/mL	-1	30	
Benzo(a)anthracene	40.00	38.25	ug/mL	-4	30	
bis(2-Ethylhexyl)phthalate	40.00	36.84	ug/mL	-8	30	
Benzo(b)fluoranthene	40.00	40.69	ug/mL	2	30	
Benzo(k)fluoranthene	40.00	38.21	ug/mL	-4	30	
Benzo(a)pyrene	40.00	43.59	ug/mL	9	30	
Indeno(1,2,3-cd)pyrene	40.00	40.79	ug/mL	2	30	
Dibenz(a,h)anthracene	40.00	39.07	ug/mL	-2	30	

Analyst: KMH Date: 03/06/12 Reviewer: LW Date: 03/07/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 MSBNA Water
EPA 8270D

Inst : MSBNA09 IDF : 1.0
Seqnum : 582366461002.1 File : ria02 Time : 10-SEP-2012 11:57
Cal : 582094282001 Caldate : 05-MAR-2012
Standards: S20249

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Naphthalene	1.1612	1.1318	20.00	19.49	ug/mL	-3	20	0.7000	i ***
3,3'-Dichlorobenzidine	0.3931	0.4225	40.00	42.99	ug/mL	7	20	0.0100	i ***
Benzo(a)anthracene	1.1643	1.0962	20.00	18.83	ug/mL	-6	20	0.8000	i ***
bis(2-Ethylhexyl)phthalate	0.9218	0.7575	20.00	16.44	ug/mL	-18	20	0.0100	i ***
Benzo(b)fluoranthene	1.1462	1.0997	20.00	19.19	ug/mL	-4	20	0.7000	i ***
Benzo(k)fluoranthene	1.1926	1.0998	20.00	18.44	ug/mL	-8	20	0.7000	i ***
Benzo(a)pyrene	0.9947	0.9488	20.00	19.08	ug/mL	-5	20	0.7000	i m ***
Indeno(1,2,3-cd)pyrene	1.0455	1.0856	20.00	20.77	ug/mL	4	20	0.5000	i ***
Dibenz(a,h)anthracene	0.9085	0.9273	20.00	20.41	ug/mL	2	20	0.4000	i ***
Nitrobenzene-d5	0.5572	0.5533	20.00	19.86	ug/mL	-1	20	0.0500	i ***
2-Fluorobiphenyl	1.5776	1.5289	20.00	19.38	ug/mL	-3	20	0.0500	i ***
Terphenyl-d14	0.9444	0.8739	20.00	18.51	ug/mL	-7	20	0.0500	i ***

ISTD (ICAL rc513)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
1,4-Dichlorobenzene-d4	378619	284294	-24.91	6.22	5.43	**-0.79 ***
Naphthalene-d8	1433957	1046042	-27.05	7.71	6.90	**-0.81 ***
Acenaphthene-d10	858429	606004	-29.41	9.87	9.03	**-0.84 ***
Phenanthrene-d10	1561563	1089116	-30.25	11.72	10.86	**-0.86 ***
Chrysene-d12	1416731	1080213	-23.75	15.16	14.13	**-1.03 ***
Perylene-d12	1178841	993497	-15.72	18.17	16.42	**-1.75 ***

LLH 09/10/12 [Aniline]: Picked or reassigned peak. [general version]

LLH 09/10/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 [Benzo(a)pyrene]: Corrected fronting or tailing peak integration. [general version]

LLH 09/10/12 : see ICAL narrations for IStd RT drfit

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

i=ISTD failure m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 582366461

Date : 09/10/12 Reference : rc513
Sequence : MSBNA09 ria Analyzed : 03/05/12 16:02

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		ICAL STD	378619	6.22	1433957	7.71	858429	9.87	1561563	11.72	1416731	15.16	1178841	18.17
		LOWER LIMIT	189310	5.72	716979	7.21	429215	9.37	780782	11.22	708366	14.66	589421	17.67
		UPPER LIMIT	757238	6.72	2867914	8.21	1716858	10.37	3123126	12.22	2833462	15.66	2357682	18.67
002	CCV		284294	5.43 *	1046042	6.90 *	606004	9.03 *	1089116	10.86 *	1080213	14.13 *	993497	16.42 *

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 582366461

Date : 09/10/12
Sequence : MSBNA09 ria

Reference : ria02
Analyzed : 09/10/12 11:57

#	Type	Sample ID	NAPHD8	RT	ACEND10	RT	CHYD12	RT	PERYD12	RT	DCBZ14D4	RT	PHEND10	RT
		CCV+CCV/BS+CCV/LCS+ICV+ICV/BS+ICV/CCV+ICV/LCS+RCCV STD	1046042	6.90	606004	9.03	1080213	14.13	993497	16.42	284294	5.43	1089116	10.86
		LOWER LIMIT	523021	6.40	303002	8.53	540107	13.63	496749	15.92	142147	4.93	544558	10.36
		UPPER LIMIT	2092084	7.40	1212008	9.53	2160426	14.63	1986994	16.92	568588	5.93	2178232	11.36
003	BLANK	QC655235	1246327	6.90	715610	9.03	1448209	14.13	1333696	16.42	322966	5.43	1300177	10.86
004	BS	QC655236	1184935	6.90	703700	9.03	1315395	14.14	1272490	16.43	313052	5.43	1356540	10.86
005	BSD	QC655237	1146412	6.90	678299	9.03	1255234	14.13	1205973	16.42	299219	5.43	1317836	10.86
006	SAMPLE	239328-005	1241338	6.90	691039	9.03	1455160	14.13	425321 *	16.40	326477	5.43	1308770	10.86
007	SAMPLE	239403-007	1240037	6.90	712713	9.03	1472180	14.13	1279788	16.42	324724	5.43	1291178	10.86
008	SAMPLE	239403-008	1225550	6.90	705092	9.03	1416179	14.13	1244057	16.42	314835	5.43	1259012	10.86
009	BS	QC655236	1011754	6.90	585407	9.03	1021379	14.13	960928	16.42	274699	5.43	1075465	10.86
010	BSD	QC655237	978875	6.90	553937	9.03	976104	14.13	921032	16.42	260457	5.43	1019717	10.86
011	SAMPLE	239404-015	1247756	6.90	709234	9.03	1444815	14.13	1239171	16.42	322809	5.43	1281468	10.86

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 582094282

Instrument : MSBNA09 Begun : 03/05/12 11:22
Method : EPA 8270D SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	rc501	TUN	DFTPP/PEM			03/05/12 11:22	1.0	1	t
002	rc502	TUN	DFTPP/PEM			03/05/12 11:44	1.0	1	t
003	rc503	TUN	DFTPP/PEM			03/05/12 12:02	1.0	1	t
004	rc504	TUN	DFTPP/PEM			03/05/12 12:17	1.0	1	t
005	rc505	TUN	DFTPP/PEM			03/05/12 12:31	1.0	1	
006	rc506	CCV	RTCHECK			03/05/12 12:47	1.0	2	
007	rc507	TUN	DFTPP/PEM			03/05/12 13:16	1.0	1	
008	rc508	ICAL	ICAL			03/05/12 13:32	1.0	3	
009	rc509	ICAL	ICAL			03/05/12 14:02	1.0	4	
010	rc510	ICAL	ICAL			03/05/12 14:32	1.0	5	
011	rc511	ICAL	ICAL			03/05/12 15:02	1.0	6	
012	rc512	ICAL	ICAL			03/05/12 15:32	1.0	2	
013	rc513	ICAL	ICAL			03/05/12 16:02	1.0	7	
014	rc514	ICAL	ICAL			03/05/12 16:32	1.0	8	
015	rc515	ICAL	ICAL			03/05/12 17:01	1.0	9	
016	rc516	ICAL	ICAL			03/05/12 17:32	1.0	10	
017	rc517	ICV	ICV			03/05/12 18:02	1.0	11	

KMH 03/06/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Standards used: 1=S18710 2=S19019 3=S19015 4=S19016 5=S19017 6=S19018 7=S19020 8=S19021 9=S19022 10=S19023 11=S19392
Flags used: t=tune failure
Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 582366461

Instrument : MSBNA09 Begun : 09/10/12 11:41
Method : EPA 8270D SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ria01	TUN	DFTPP/PEM			09/10/12 11:41	1.0	1	
002	ria02	CCV				09/10/12 11:57	1.0	2	
003	ria03	BLANK	QC655235	Water	190277	09/10/12 12:28	1.0	3	
004	ria04	BS	QC655236	Water	190277	09/10/12 12:59	1.0	3	
005	ria05	BSD	QC655237	Water	190277	09/10/12 13:30	1.0	3	
006	ria06	SAMPLE	239328-005	Water	190277	09/10/12 14:00	1.0	3	spk
007	ria07	SAMPLE	239403-007	Water	190277	09/10/12 14:30	1.0	3	
008	ria08	SAMPLE	239403-008	Water	190277	09/10/12 15:01	1.0	3	
009	ria09	BS	QC655236	Water	190277	09/10/12 15:31	1.0	3	
010	ria10	BSD	QC655237	Water	190277	09/10/12 16:01	1.0	3	
011	ria11	SAMPLE	239404-015	Water	190277	09/10/12 16:32	1.0	3	

LLH 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 011.

Standards used: 1=S20011 2=S20249 3=S18805

Flags used: spk=5% spike rule

SAMPLE PREPARATION SUMMARY

Batch # : 190277 Analysis : 8270-1
Started By : TFB Prep Date : 07-SEP-2012 14:15 Finished By : MAW
Method : 3520C SOP Version : 8270_3520_rv16 Units : mL
Spike #1 ID : S20014 Spike #2 ID : S20576

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239328-005		Water	1000	1	1	0.001	7	.4				8270-1	re-ex
239403-007		Water	1000	1	1	0.001	5	.4				8270-1	
239403-008		Water	1040	1	1	0.0009615	5	.4				8270-1	
239404-015		Water	1060	1	1	0.0009434	5	.4				8270-1	
QC655235	BLANK	Water	1000	1	1	0.001		.4				8270-1	
QC655236	BS	Water	1000	1	1	0.001		.4	1			8270-1	
QC655237	BSD	Water	1000	1	1	0.001		.4	1			8270-1	

LLH 09/10/12 : Matrix spikes were not performed for this analysis in batch 190277 due to insufficient sample amount.

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

BNA (8270 & 625) Water Prep Log

Curtis & Tompkins, Ltd.

Page 68 **BK3315**

LIMS Batch No: 190277 Extraction Method:
LIMS Analysis: 8270-1 ☒ EPA 3520c cont. L/L
Date Extracted: 9/7/12 ☐ _____

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Confirmed pH <2	Comments
239328-005	I	1000	☒7 ☐	☒1.0 ☐	☒ ≤2	
239403-007	F	1000	☐7 ☒S	☒1.0 ☐	☒ ≤2	
↓ -008	B	1040	☐7 ☒S	☒1.0 ☐	☒ ≤2	
239404-015	B	1060	☐7 ☒S	☒1.0 ☐	☒ ≤2	
MB QC655235	NA	1000	☐7 ☒NA	☒1.0 ☐	☒ ≤2	
BS 6	↓	1000	☐7 ☒	☒1.0 ☐	☒ ≤2	
BSD 7	↓	1000	☐7 ☒	☒1.0 ☐	☒ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	
			☐7 ☐	☐ 1.0 ☐	☐ ≤2	JDE 9/10/12

	Lot# / LIMS # / Time	Date/ Initials
0.4 mL of surrogate solution was added to all samples	S20014A	TEB 9/7/12
1.0 mL of matrix spiking solution was added to all spikes	S20576C	↓
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS114779	
Cont. L/L extracted with 450mL of CH_2Cl_2	EM52160	↓
Extraction Start Time:	1415	
Extraction End Time:	0830	SR 9/8/12
pH of all samples adjusted to pH ≥ 11 with 10 N NaOH	N/A	MAW 9/8/12
Extraction Start Time:	↓	↓
Extraction End Time:	↓	
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EMVB15H	
Concentrated to final volume at temperature (degrees C)	70	
Relinquished to BNA department	✓	↓

9/7/12
Extraction Chemist **Date**

Contined from Page 1
Continued on Page _____

9/10/12
Reviewed by **Date**

Case Narrative Addendum: Manual Integrations for 239403 MSBNA (Water)

For CCV (MSBNA09 ria02):
Aniline: Picked or reassigned peak.
bis(2-Chloroethyl)ether: Corrected automatically drawn baseline.
Benzo(a)pyrene: Corrected fronting or tailing peak integration.

For BSD QC655237 (MSBNA09 ria10):
Resorcinol: Corrected automatically drawn baseline for spike & dup.
Aniline: Picked or reassigned peak for spike & dup.
bis(2-Chloroethyl)ether: Corrected automatically drawn baseline for spike & dup.
Benzo(a)pyrene: Corrected fronting or tailing peak integration for spike & dup.
Pyridine: Corrected automatically drawn baseline for spike.

For Calibration MSBNA09 (582094282001):
Aniline: Picked or reassigned peak in all levels.
bis(2-Chloroethyl)ether: Corrected automatically drawn baseline in ICAL (rc516).
Benzoic acid: Corrected automatically drawn baseline in multiple levels.
Benzo(g,h,i)perylene: Corrected automatically drawn baseline in multiple levels.
Nitrobenzene-d5: Corrected automatically drawn baseline in multiple levels.

For ICV (MSBNA09 rc517):
Aniline: Picked or reassigned peak.

Sample Raw Data

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA09	Lab ID	: 239403-007	Client ID	: FB.09042012
Seqnum	: 582366461007	Matrix	: Water	Acct	: ARCSF (JG)
File	: ria07	Batch	: 190277	Time	: 10-SEP-2012 14:30
Cal	: 582094282001	Caldate	: 05-MAR-2012		
IDF	: 1.0	Raw Units	: ug/mL	Units	: ug/L

1000.00 mL --> 1.0 ml = 0.001 ml/ml PDF

Analyte	Raw	Result	RL	Blank	Flags
Naphthalene	0	ND	10		u
3,3'-Dichlorobenzidine	0	ND	20		u
Benzo(a)anthracene	0.07570	ND	10		u
bis(2-Ethylhexyl)phthalate	0.7232	ND	10		u
Benzo(b)fluoranthene	0	ND	10		u
Benzo(k)fluoranthene	0	ND	10		u
Benzo(a)pyrene	0.1196	ND	10		u
Indeno(1,2,3-cd)pyrene	0	ND	10		u
Dibenz(a,h)anthracene	0	ND	10		u

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	31.00	40.00	31.00	77	55-120	u
2-Fluorobiphenyl	28.57	40.00	28.57	71	51-120	u
Terphenyl-d14	29.50	40.00	29.50	74	23-120	u

ISTD (CCV ria02)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	1046042	1240037	18.55	6.90	6.90	0.00
Acenaphthene-d10	606004	712713	17.61	9.03	9.03	0.00
Chrysene-d12	1080213	1472180	36.29	14.13	14.13	0.00
Perylene-d12	993497	1279788	28.82	16.42	16.42	0.00

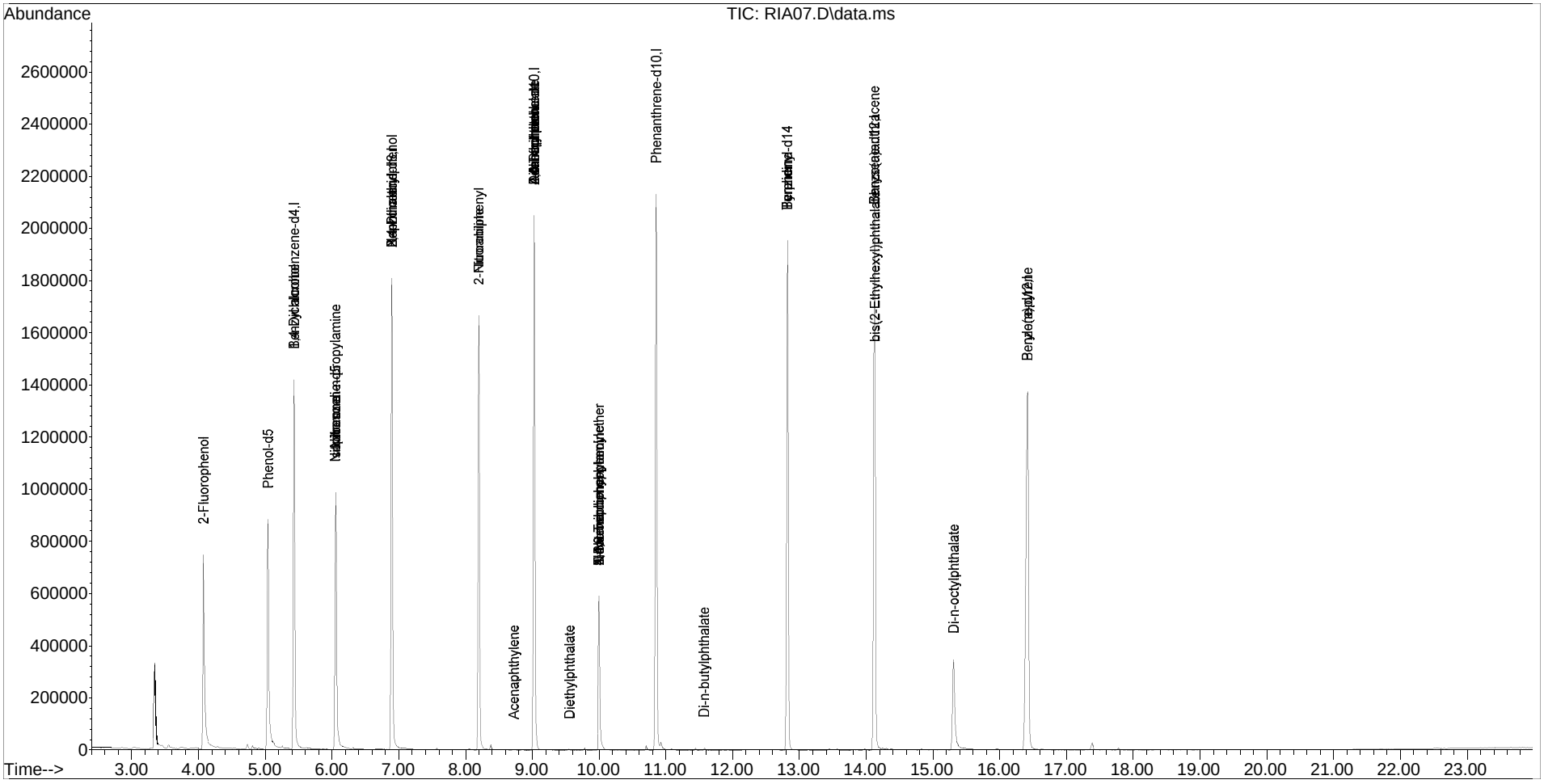
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

u=use

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA07.D
Acq On : 10 Sep 2012 2:30 pm
Operator :
Sample : S,239403-007
Misc : 190277,1,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 10 14:52:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA07.D
Acq On : 10 Sep 2012 2:30 pm
Operator :
Sample : S,239403-007
Misc : 190277,1,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 10 14:52:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	5.434	152	324724	40.0000	ug/mL	0.00
19) Naphthalene-d8	6.898	136	1240037	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.028	164	712713	40.0000	ug/mL	0.00
58) Phenanthrene-d10	10.857	188	1291178	40.0000	ug/mL	0.00
70) Chrysene-d12	14.127	240	1472180	40.0000	ug/mL	0.00
79) Perylene-d12	16.421	264	1279788	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	0.000	79	0	N.D.		
3) N-Nitrosodimethylamine	0.000	42	0	N.D.		
4) 2-Fluorophenol	4.081	112	416550	30.9719	ug/mL	80
5) Phenol-d5	5.046	99	566982	30.4785	ug/mL	80
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	5.434	108	1304	0.1398	ug/mL #	1
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.057	70	77298	7.4050	ug/mL #	67
18) Hexachloroethane	0.000	117	0	N.D.		
20) Nitrobenzene-d5	6.057	82	535393	30.9952	ug/mL #	79
21) Nitrobenzene	6.057	77	1921	0.1266	ug/mL #	43
22) Isophorone	6.057	82	537244	18.2023	ug/mL	66
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	6.898	107	8238	0.6550	ug/mL #	22
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	6.898	105	1509	37.4190	ug/mL #	1
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	0.000	128	0	N.D.		
30) 4-Chloroaniline	0.000	127	0	N.D.		
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	0.000	142	0	N.D.		
35) 1-Methylnaphthalene	0.000	142	0	N.D.		
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA07.D
Acq On : 10 Sep 2012 2:30 pm
Operator :
Sample : S,239403-007
Misc : 190277,1,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 10 14:52:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.204	172	802967	28.5652	ug/mL	98
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	8.204	65	1548	0.1751	ug/mL #	1
43) Dimethylphthalate	9.028	163	107266	4.2343	ug/mL #	1
44) 2,6-Dinitrotoluene	9.028	165	92048	15.3683	ug/mL #	16
45) Acenaphthylene	8.728	152	1932	0.0526	ug/mL #	1
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.028	154	2223	0.0967	ug/mL #	7
48) 2,4-Dinitrophenol	0.000	184	0	N.D.		
49) 4-Nitrophenol	9.028	109	1450	0.3652	ug/mL #	35
50) Dibenzofuran	0.000	168	0	N.D.		
51) 2,4-Dinitrotoluene	9.028	165	92048	11.2792	ug/mL #	15
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	9.569	149	1261	0.0454	ug/mL	86
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.		
55) Fluorene	9.998	166	5295	0.2038	ug/mL #	73
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	9.998	330	84173	32.1559	ug/mL	89
59) 4,6-Dinitro-2-methylphenol	0.000	198	0	N.D.		
60) N-Nitrosodiphenylamine	9.998	169	3778	0.1887	ug/mL #	30
61) Azobenzene	0.000	77	0	N.D.		
62) 4-Bromophenyl-phenylether	9.998	248	5971	0.8686	ug/mL #	1
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	0.000	178	0	N.D.		
66) Anthracene	0.000	178	0	N.D.		
67) Carbazole	0.000	167	0	N.D.		
68) Di-n-butylphthalate	11.580	149	7705	0.1660	ug/mL	98
69) Fluoranthene	0.000	202	0	N.D.		
71) Benzidine	12.827	184	13925	0.6480	ug/mL #	1
72) Pyrene	12.827	202	3298	0.0670	ug/mL #	57
73) Terphenyl-d14	12.827	244	1025334	29.4989	ug/mL	99
74) Butylbenzylphthalate	0.000	149	0	N.D.		
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.		
76) Benzo(a)anthracene	14.127	228	3243	0.0757	ug/mL	74
77) bis(2-Ethylhexyl)phthalate	14.139	149	24535	0.7232	ug/mL	97
78) Chrysene	14.127	228	3243	0.0779	ug/mL	77
80) Di-n-octylphthalate	15.316	149	1662	0.0267	ug/mL #	1
81) Benzo(b)fluoranthene	0.000	252	0	N.D.		
82) Benzo(k)fluoranthene	0.000	252	0	N.D.		
83) Benzo(a)pyrene	16.421	252	3807	0.1196	ug/mL	94
84) Indeno(1,2,3-cd)pyrene	0.000	276	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA07.D
Acq On : 10 Sep 2012 2:30 pm
Operator :
Sample : S,239403-007
Misc : 190277,1,
ALS Vial : 7 Sample Multiplier: 1

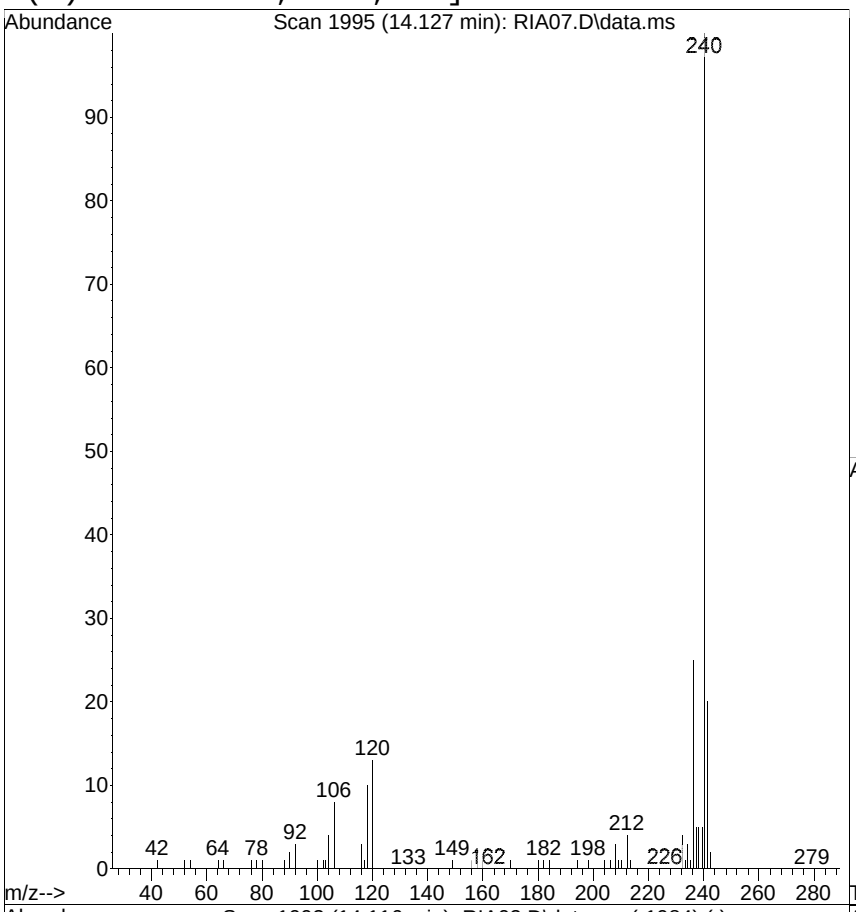
Quant Time: Sep 10 14:52:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	0.000	276	0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)anthracene; <RL; u]

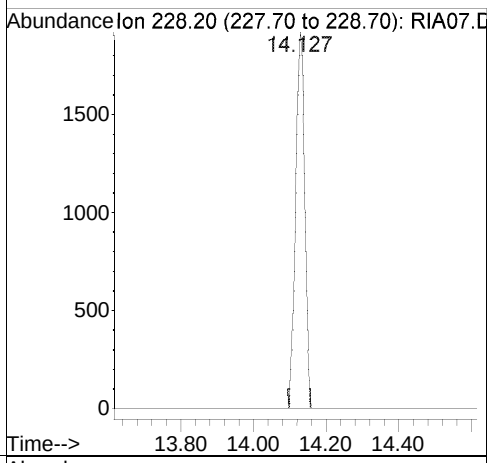
Raw



#76
Benzo(a)anthracene
Concen: 0.0757 ug/mL
RT: 14.127 min Scan# 1995
Delta R.T. 0.012 min
Lab File: RIA07.D
Acq: 10 Sep 2012 2:30 pm

Tgt Ion:228 Resp: 3243

Ion	Ratio	Lower	Upper
228	100		
229	24.8	0.0	40.0
226	8.3	8.0	48.0



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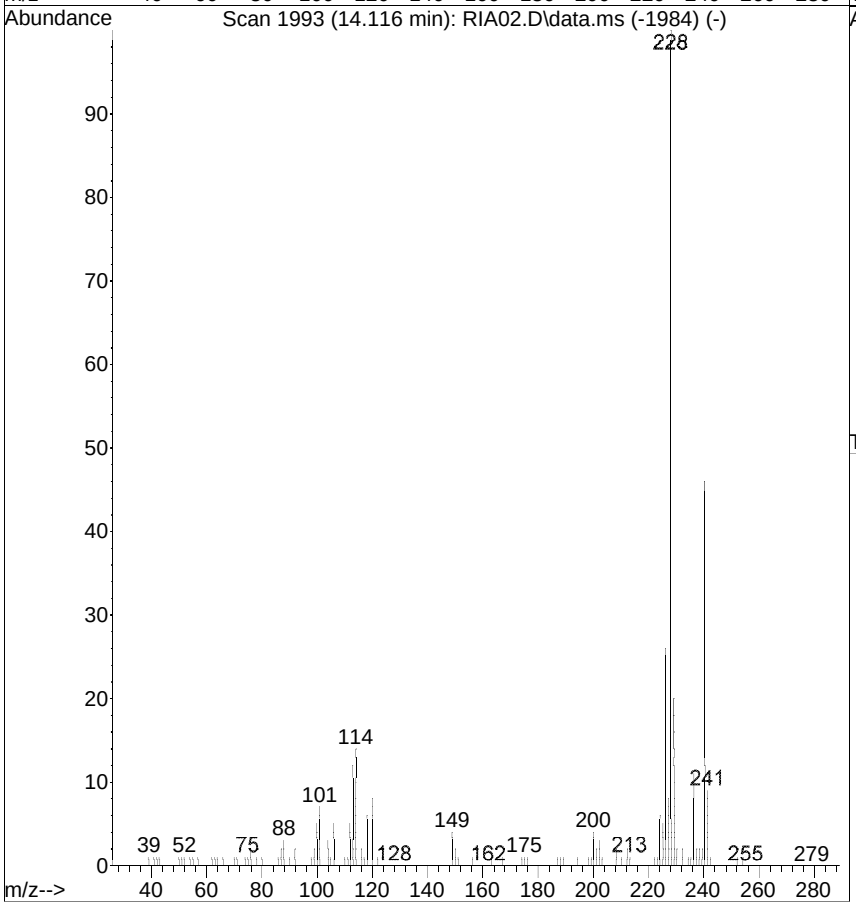
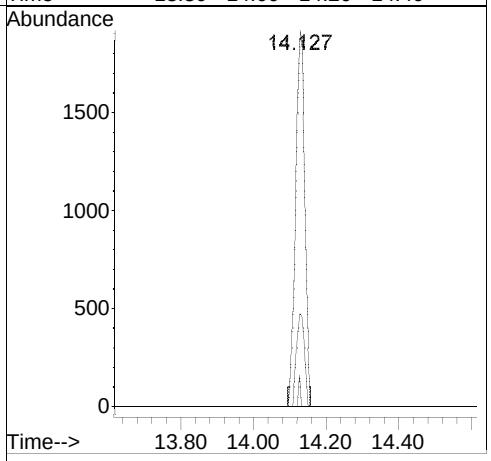
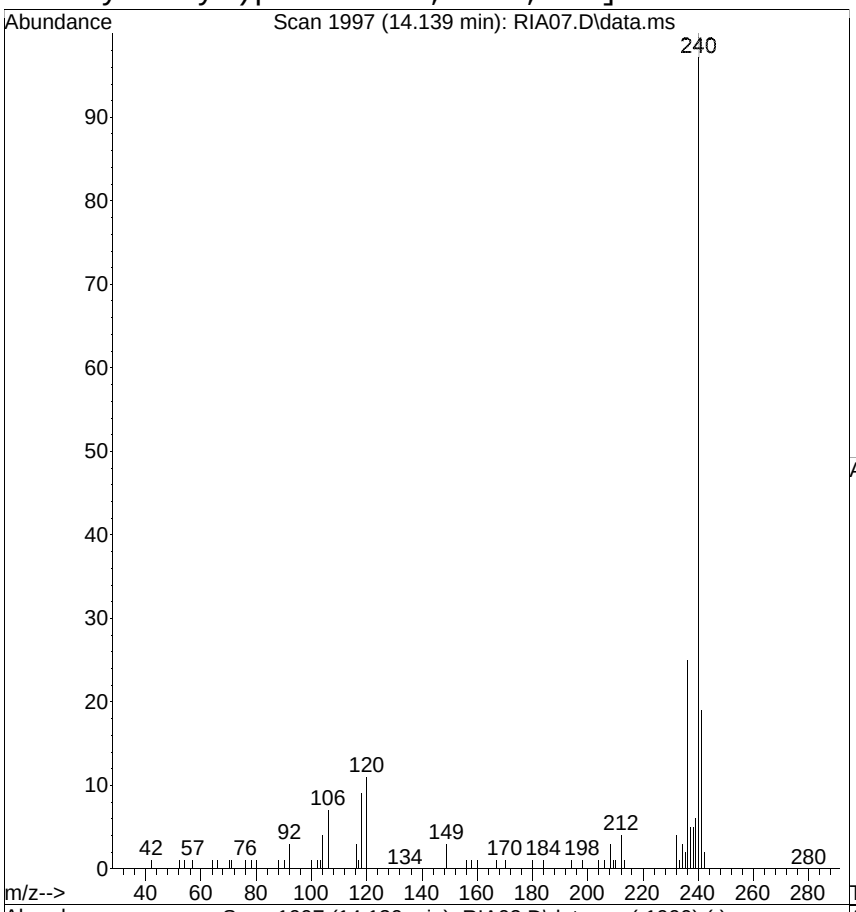




[bis(2-Ethylhexyl)phthalate; <RL; u]

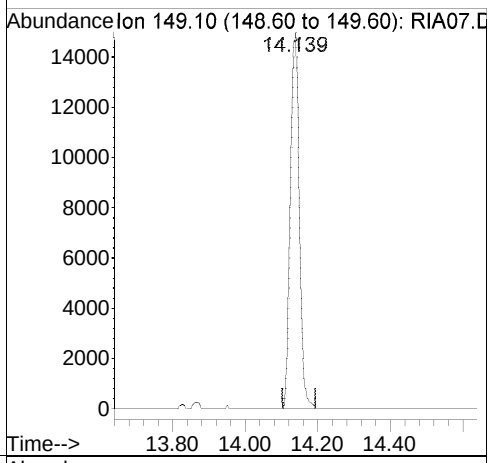
Raw



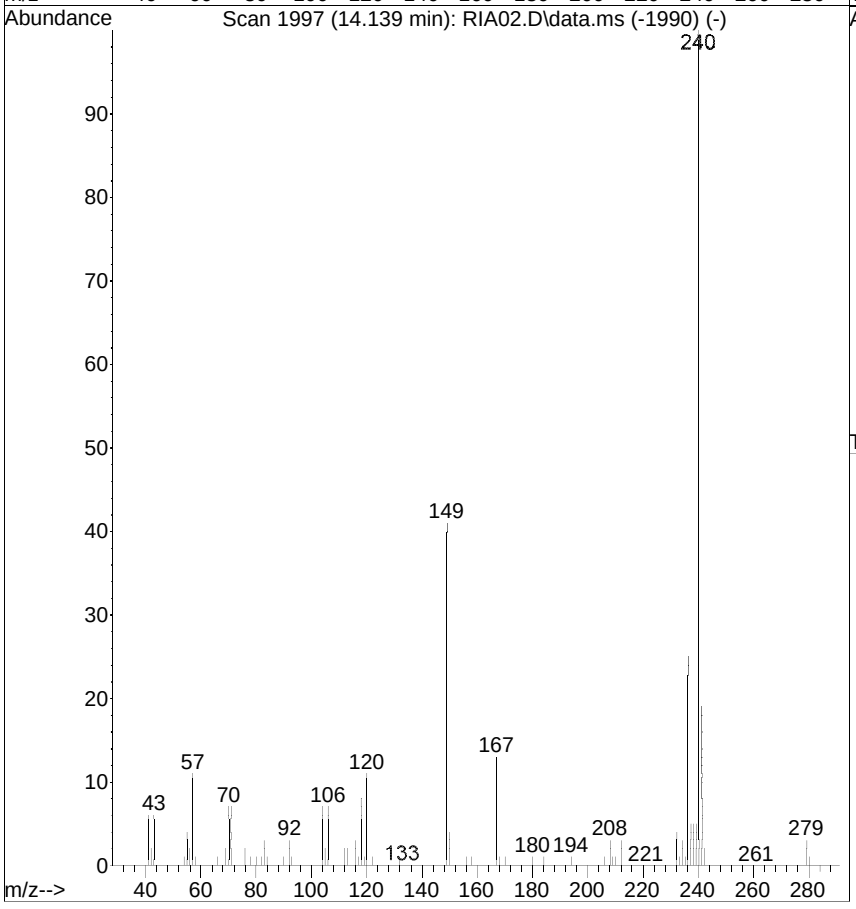
#77
bis(2-Ethylhexyl)phthalate
Concen: 0.7232 ug/mL
RT: 14.139 min Scan# 1997
Delta R.T. 0.000 min
Lab File: RIA07.D
Acq: 10 Sep 2012 2:30 pm

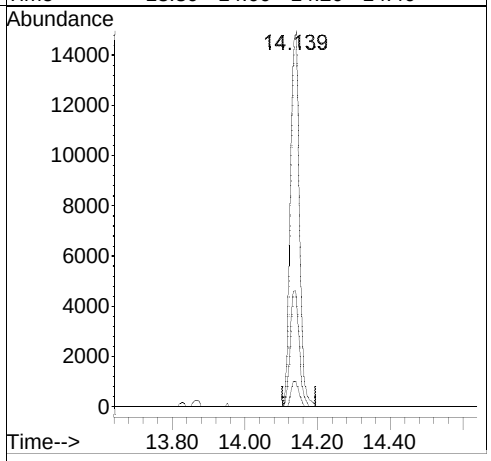
Tgt Ion:149 Resp: 24535

Ion	Ratio	Lower	Upper
149	100		
167	30.9	9.0	49.0
279	6.9	0.0	27.0



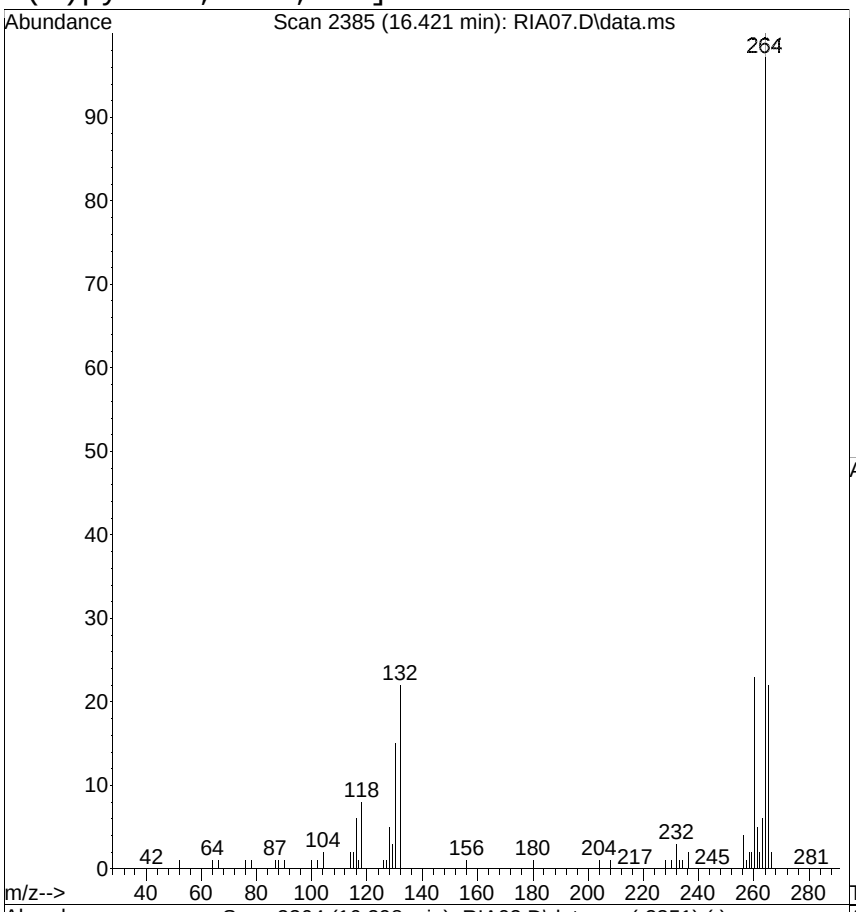
Ref





[Benzo(a)pyrene; <RL; u]

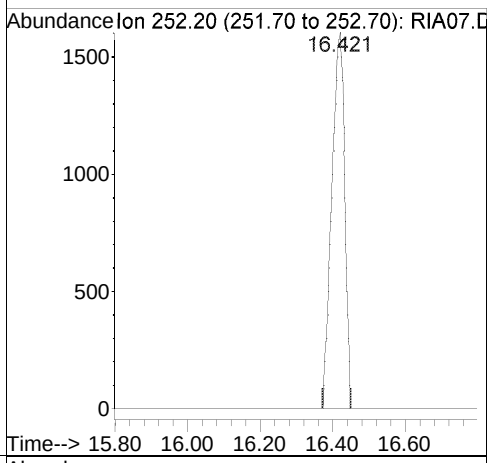
Raw



#83
Benzo(a)pyrene
Concen: 0.1196 ug/mL
RT: 16.421 min Scan# 2385
Delta R.T. 0.124 min
Lab File: RIA07.D
Acq: 10 Sep 2012 2:30 pm

Tgt Ion:252 Resp: 3807

Ion	Ratio	Lower	Upper
252	100		
253	24.9	2.6	42.6
125	20.1	0.0	36.8



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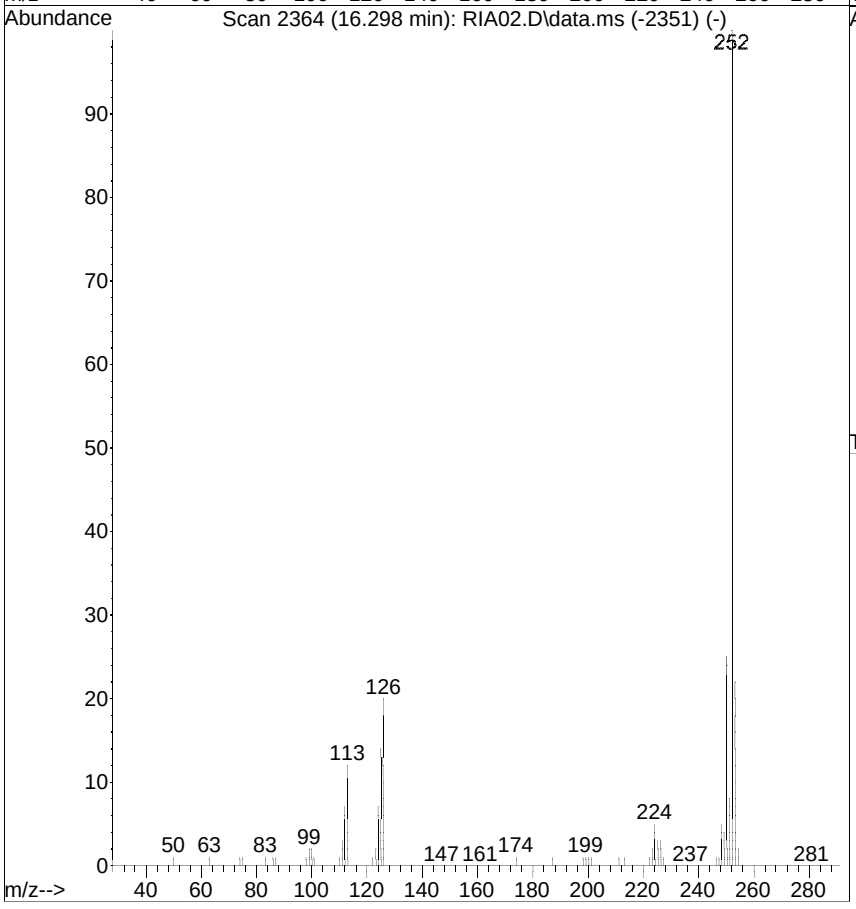
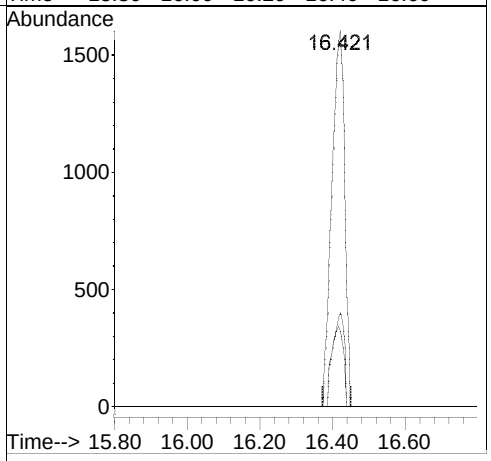




CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA09	Lab ID	: 239403-008	Client ID	: EB.09042012
Seqnum	: 582366461008	Matrix	: Water	Acct	: ARCSF (JG)
File	: ria08	Batch	: 190277	Time	: 10-SEP-2012 15:01
Cal	: 582094282001	Caldate	: 05-MAR-2012		
IDF	: 1.0	Raw Units	: ug/mL	Units	: ug/L

1040.00 mL --> 1.0 ml = 0.0009615 ml/ml PDF

Analyte	Raw	Result	RL	Blank	Flags
Naphthalene	0	ND	9.6		u
3,3'-Dichlorobenzidine	0	ND	19		u
Benzo(a)anthracene	0.07940	ND	9.6		u
bis(2-Ethylhexyl)phthalate	0.6547	ND	9.6		u
Benzo(b)fluoranthene	0	ND	9.6		u
Benzo(k)fluoranthene	0	ND	9.6		u
Benzo(a)pyrene	0.1227	ND	9.6		u
Indeno(1,2,3-cd)pyrene	0	ND	9.6		u
Dibenz(a,h)anthracene	0	ND	9.6		u

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	29.47	38.46	28.34	74	55-120	u
2-Fluorobiphenyl	26.45	38.46	25.44	66	51-120	u
Terphenyl-d14	28.19	38.46	27.11	70	23-120	u

ISTD (CCV ria02)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	1046042	1225550	17.16	6.90	6.90	0.00
Acenaphthene-d10	606004	705092	16.35	9.03	9.03	0.00
Chrysene-d12	1080213	1416179	31.10	14.13	14.13	0.00
Perylene-d12	993497	1244057	25.22	16.42	16.42	0.00

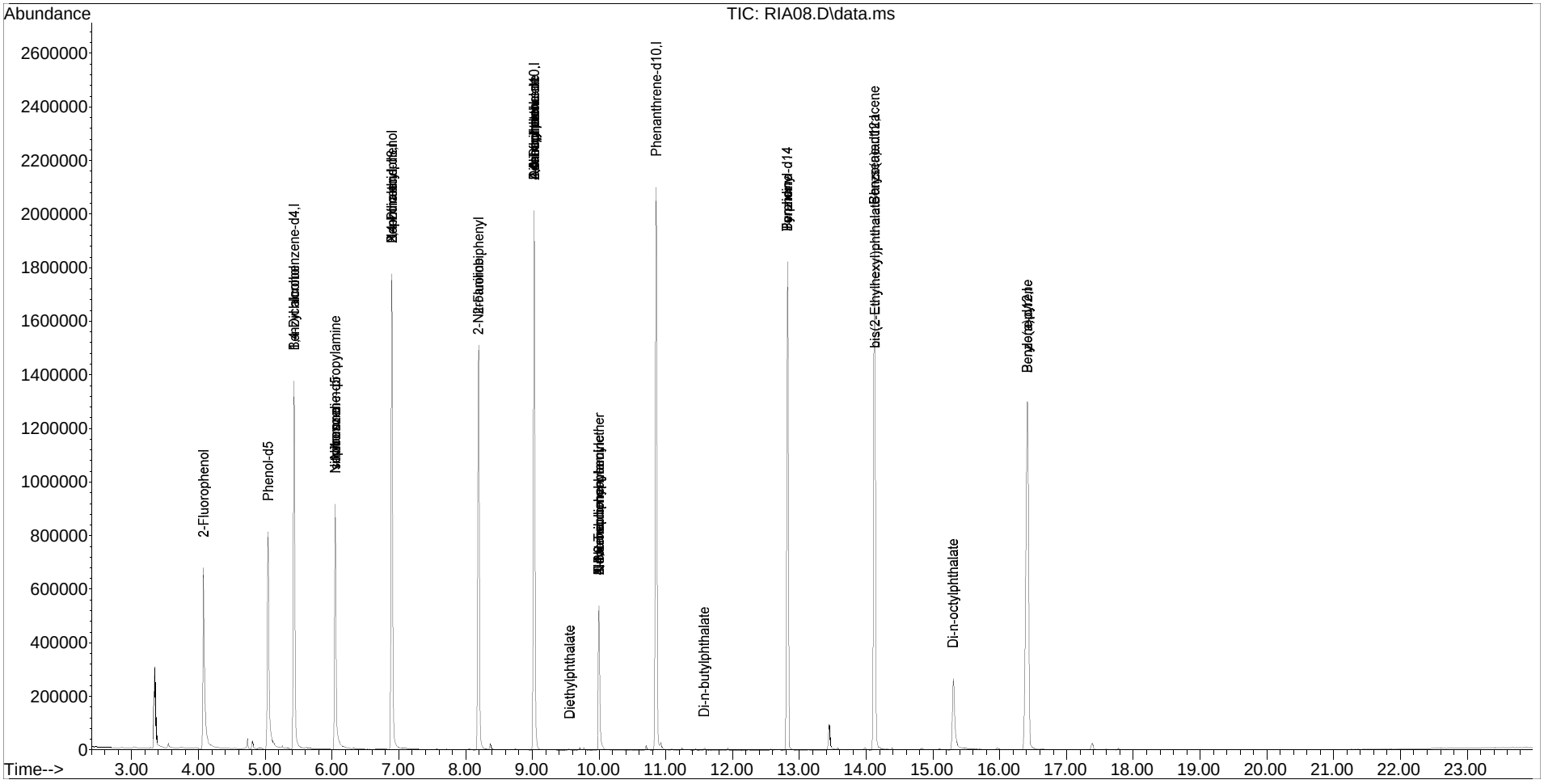
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

u=use

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA08.D
Acq On : 10 Sep 2012 3:01 pm
Operator :
Sample : S,239403-008
Misc : 190277,1,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 10 15:23:30 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA08.D
Acq On : 10 Sep 2012 3:01 pm
Operator :
Sample : S,239403-008
Misc : 190277,1,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 10 15:23:30 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	5.434	152	314835	40.0000	ug/mL	0.00
19) Naphthalene-d8	6.898	136	1225550	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.028	164	705092	40.0000	ug/mL	0.00
58) Phenanthrene-d10	10.857	188	1259012	40.0000	ug/mL	0.00
70) Chrysene-d12	14.127	240	1416179	40.0000	ug/mL	0.00
79) Perylene-d12	16.421	264	1244057	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	0.000	79	0	N.D.		
3) N-Nitrosodimethylamine	0.000	42	0	N.D.		
4) 2-Fluorophenol	4.081	112	384298	29.4714	ug/mL	81
5) Phenol-d5	5.046	99	530062	29.3888	ug/mL	80
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	5.434	108	1463	0.1617	ug/mL #	1
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.057	70	71549	7.0696	ug/mL #	67
18) Hexachloroethane	0.000	117	0	N.D.		
20) Nitrobenzene-d5	6.057	82	503128	29.4716	ug/mL #	79
21) Nitrobenzene	6.057	77	1669	0.1113	ug/mL #	42
22) Isophorone	6.057	82	504647	17.3000	ug/mL	66
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	6.898	107	8206	0.6602	ug/mL #	21
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	6.898	105	1420	37.4138	ug/mL #	1
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	0.000	128	0	N.D.		
30) 4-Chloroaniline	0.000	127	0	N.D.		
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	0.000	142	0	N.D.		
35) 1-Methylnaphthalene	0.000	142	0	N.D.		
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA08.D
Acq On : 10 Sep 2012 3:01 pm
Operator :
Sample : S,239403-008
Misc : 190277,1,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 10 15:23:30 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.204	172	735690	26.4548	ug/mL	98
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	8.198	65	1466	0.1676	ug/mL #	1
43) Dimethylphthalate	9.028	163	106401	4.2455	ug/mL #	1
44) 2,6-Dinitrotoluene	9.028	165	90641	15.2970	ug/mL #	16
45) Acenaphthylene	0.000	152	0	N.D.		
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.028	154	2271	0.0998	ug/mL #	7
48) 2,4-Dinitrophenol	0.000	184	0	N.D.		
49) 4-Nitrophenol	9.028	109	1417	0.3607	ug/mL #	33
50) Dibenzofuran	0.000	168	0	N.D.		
51) 2,4-Dinitrotoluene	9.028	165	90641	11.2269	ug/mL #	15
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	9.569	149	1346	0.0490	ug/mL	88
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.		
55) Fluorene	9.998	166	4745	0.1846	ug/mL #	72
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	9.998	330	73621	28.4288	ug/mL	92
59) 4,6-Dinitro-2-methylphenol	0.000	198	0	N.D.		
60) N-Nitrosodiphenylamine	9.998	169	3483	0.1784	ug/mL #	30
61) Azobenzene	0.000	77	0	N.D.		
62) 4-Bromophenyl-phenylether	9.998	248	5218	0.7785	ug/mL #	1
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	0.000	178	0	N.D.		
66) Anthracene	0.000	178	0	N.D.		
67) Carbazole	0.000	167	0	N.D.		
68) Di-n-butylphthalate	11.580	149	7972	0.1762	ug/mL	97
69) Fluoranthene	0.000	202	0	N.D.		
71) Benzidine	12.827	184	12713	0.6150	ug/mL #	1
72) Pyrene	12.827	202	2914	0.0615	ug/mL #	59
73) Terphenyl-d14	12.827	244	942701	28.1940	ug/mL	99
74) Butylbenzylphthalate	0.000	149	0	N.D.		
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.		
76) Benzo(a)anthracene	14.127	228	3274	0.0794	ug/mL #	65
77) bis(2-Ethylhexyl)phthalate	14.139	149	21368	0.6547	ug/mL	97
78) Chrysene	14.127	228	3274	0.0817	ug/mL #	68
80) Di-n-octylphthalate	15.310	149	1731	0.0287	ug/mL #	1
81) Benzo(b)fluoranthene	0.000	252	0	N.D.		
82) Benzo(k)fluoranthene	0.000	252	0	N.D.		
83) Benzo(a)pyrene	16.421	252	3795	0.1227	ug/mL	87
84) Indeno(1,2,3-cd)pyrene	0.000	276	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA08.D
Acq On : 10 Sep 2012 3:01 pm
Operator :
Sample : S,239403-008
Misc : 190277,1,
ALS Vial : 8 Sample Multiplier: 1

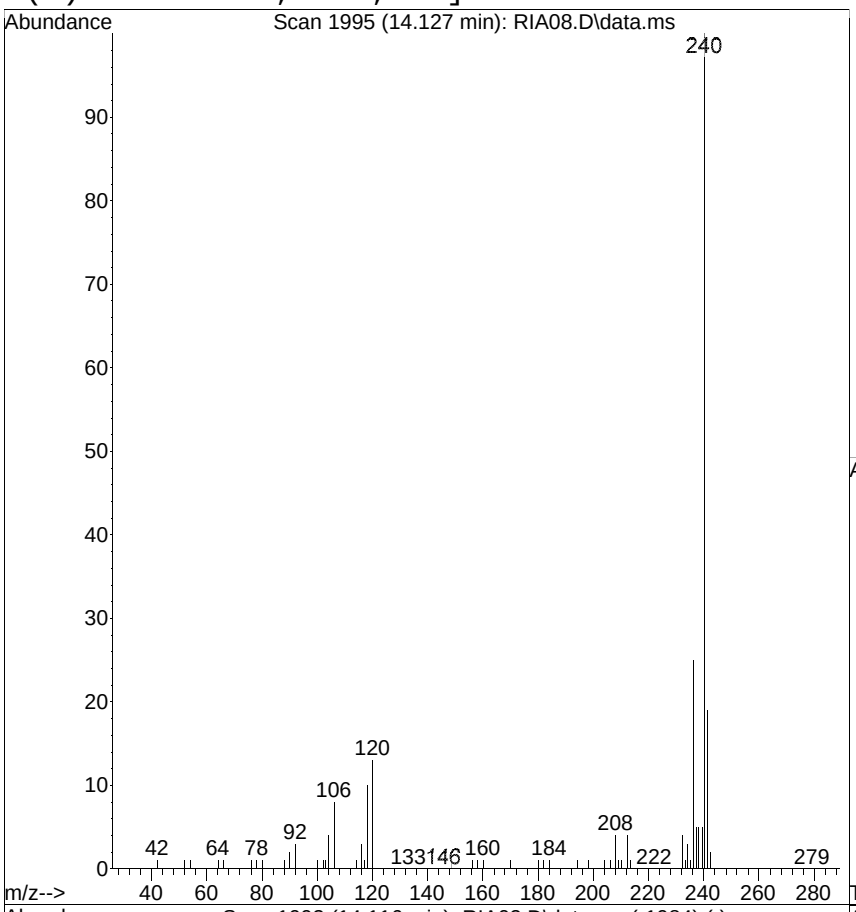
Quant Time: Sep 10 15:23:30 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	0.000	276	0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)anthracene; <RL; u]

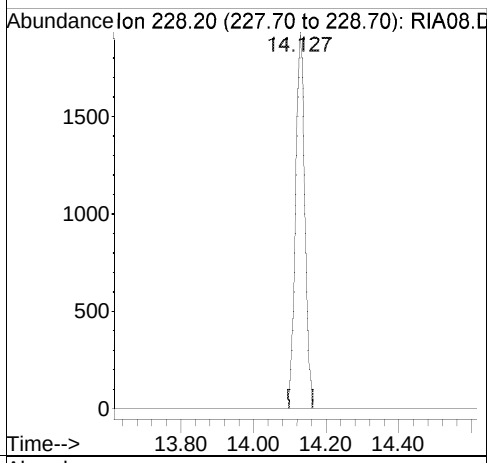
Raw



#76
Benzo(a)anthracene
Concen: 0.0794 ug/mL
RT: 14.127 min Scan# 1995
Delta R.T. 0.012 min
Lab File: RIA08.D
Acq: 10 Sep 2012 3:01 pm

Tgt Ion:228 Resp: 3274

Ion	Ratio	Lower	Upper
228	100		
229	24.6	0.0	40.0
226	0.0	8.0	48.0#



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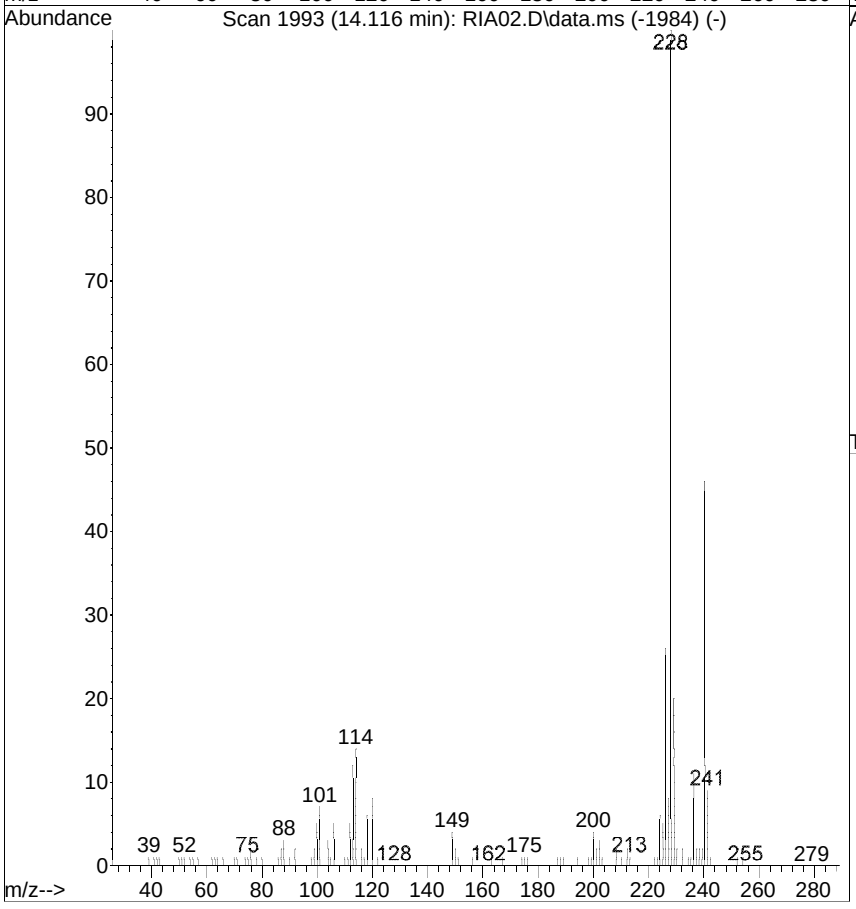
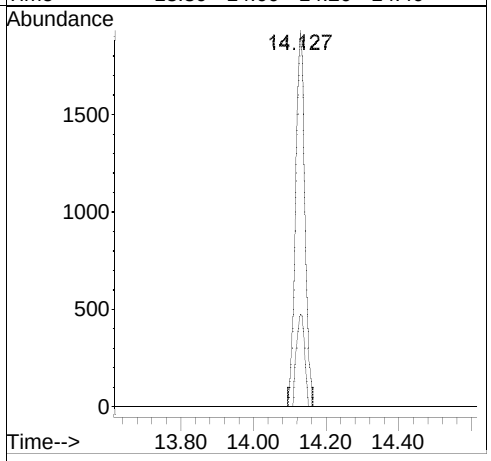
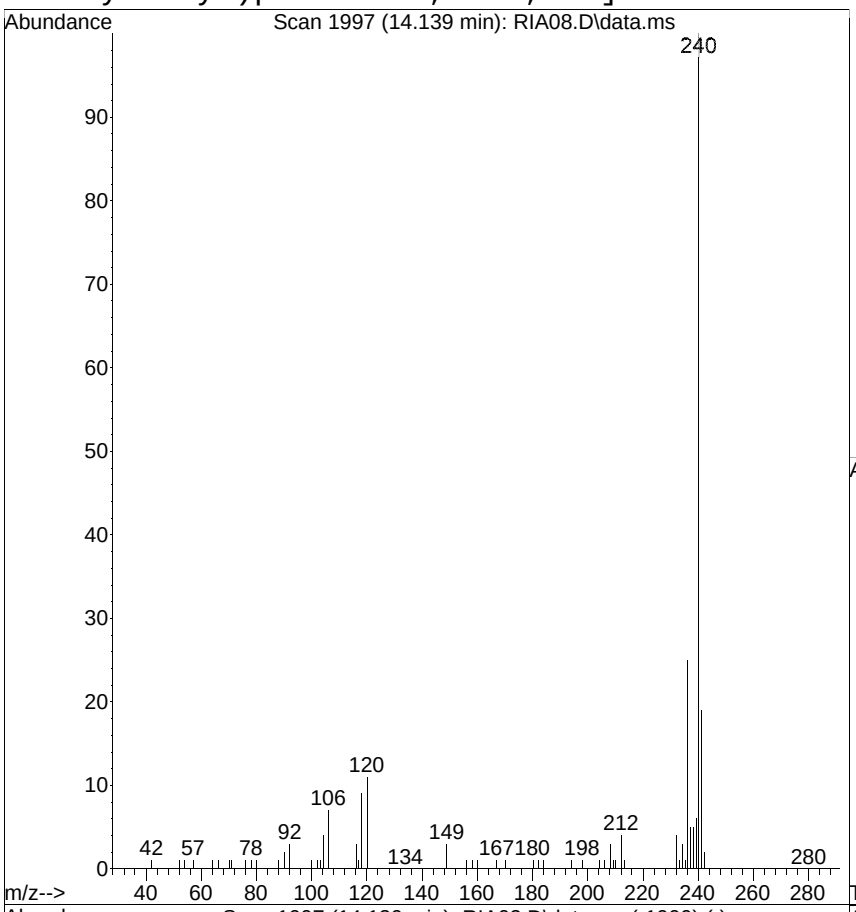




[bis(2-Ethylhexyl)phthalate; <RL; u]

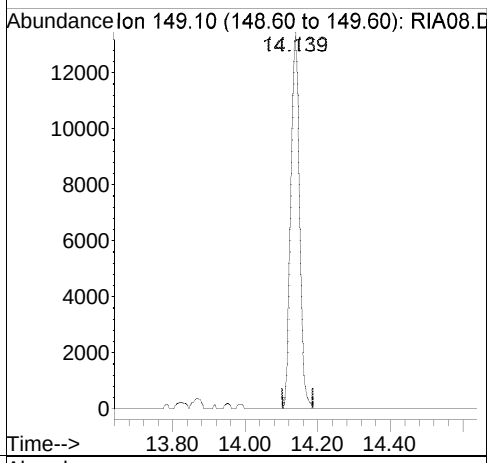
Raw



#77
bis(2-Ethylhexyl)phthalate
Concen: 0.6547 ug/mL
RT: 14.139 min Scan# 1997
Delta R.T. -0.000 min
Lab File: RIA08.D
Acq: 10 Sep 2012 3:01 pm

Tgt Ion:149 Resp: 21368

Ion	Ratio	Lower	Upper
149	100		
167	31.2	9.0	49.0
279	7.1	0.0	27.0



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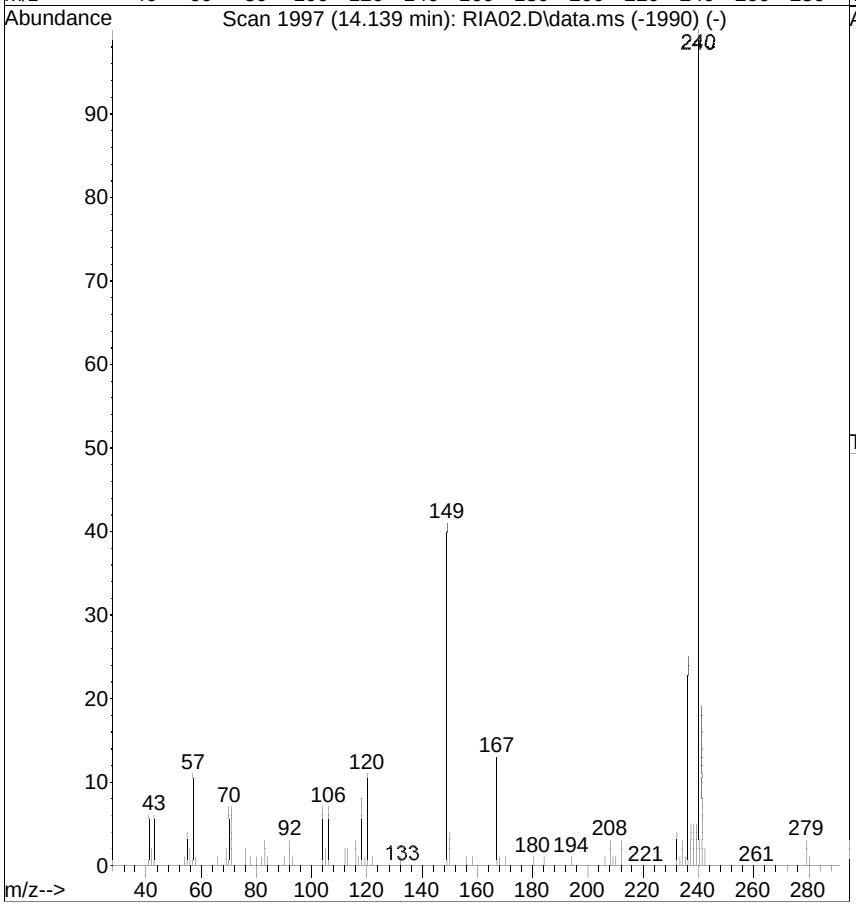
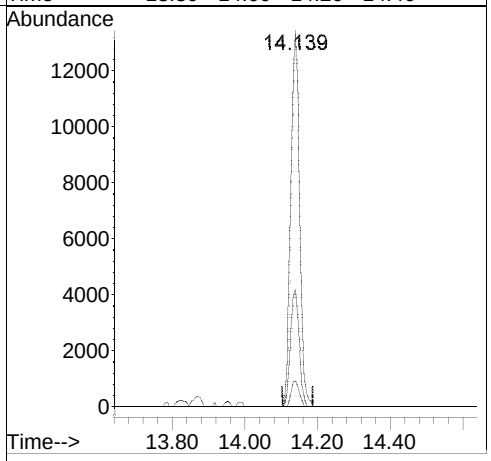
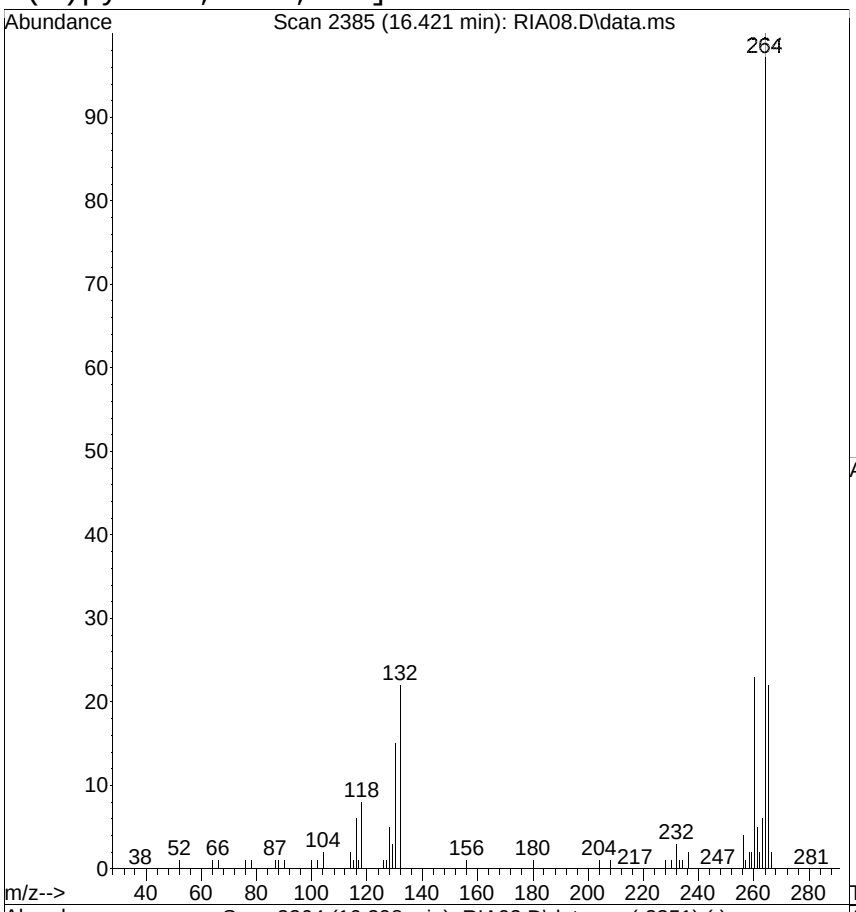




[Benzo(a)pyrene; <RL; u]

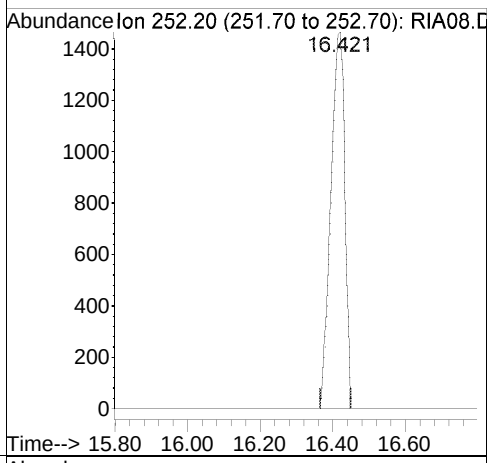
Raw



#83
Benzo(a)pyrene
Concen: 0.1227 ug/mL
RT: 16.421 min Scan# 2385
Delta R.T. 0.123 min
Lab File: RIA08.D
Acq: 10 Sep 2012 3:01 pm

Tgt Ion:252 Resp: 3795

Ion	Ratio	Lower	Upper
252	100		
253	28.2	2.6	42.6
125	23.2	0.0	36.8



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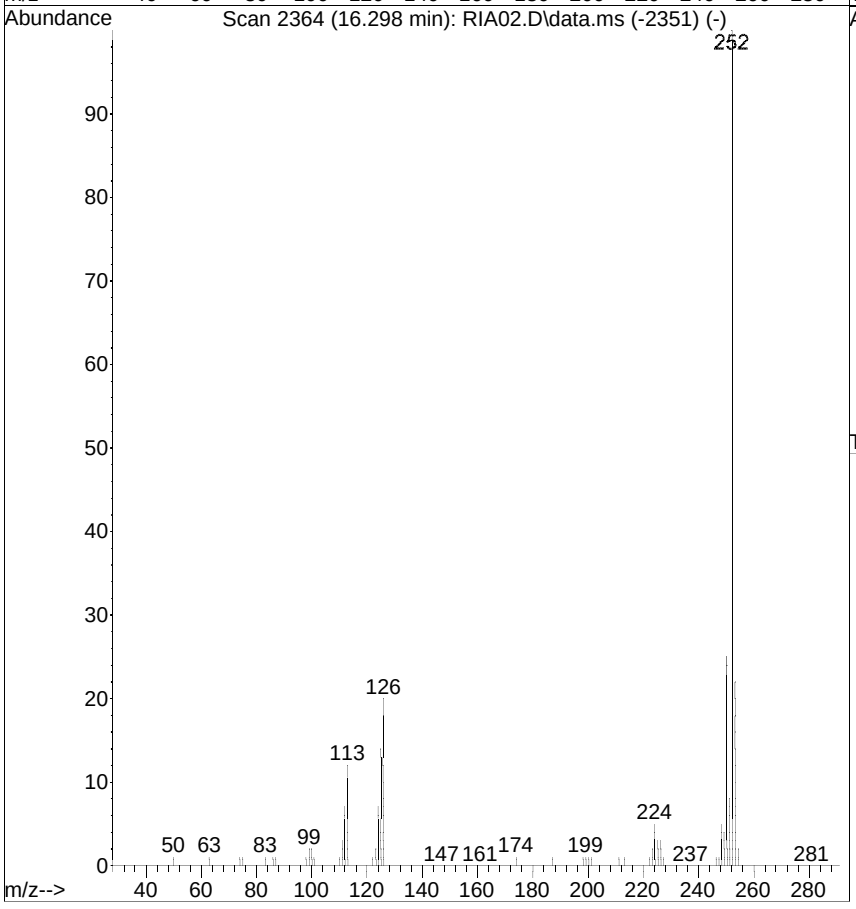
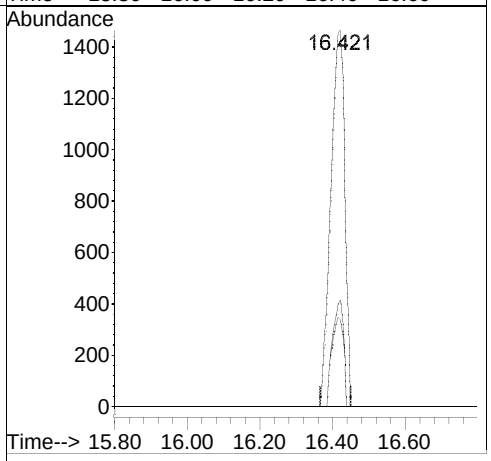




QC Raw Data

CURTIS & TOMPKINS BLANK USER REPORT FOR 239403 MSBNA Water
EPA 8270D

Inst : MSBNA09 Lab ID : QC655235
Seqnum : 582366461003.2 Matrix : Water
File : ria03 Batch : 190277 Time : 10-SEP-2012 12:28
Cal : 582094282001 Caldate : 05-MAR-2012
IDF : 1.0 Raw Units : ug/mL Units : ug/L

1000.00 mL --> 1.0 ml = 0.001 ml/ml PDF

Analyte	Raw	Result	RL	Flags
Naphthalene	0	ND	10	u
3,3'-Dichlorobenzidine	0	ND	20	u
Benzo(a)anthracene	0.07630	ND	10	u
bis(2-Ethylhexyl)phthalate	0.8548	ND	10	u
Benzo(b)fluoranthene	0	ND	10	u
Benzo(k)fluoranthene	0	ND	10	u
Benzo(a)pyrene	0.1154	ND	10	u
Indeno(1,2,3-cd)pyrene	0	ND	10	u
Dibenz(a,h)anthracene	0	ND	10	u

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	28.08	40.00	28.08	70	55-120	u
2-Fluorobiphenyl	25.21	40.00	25.21	63	51-120	u
Terphenyl-d14	27.84	40.00	27.84	70	23-120	u

ISTD (CCV ria02)	CCV Area	BLANK Area	%Drift	CCV RT	BLANK RT	Drift
Naphthalene-d8	1046042	1246327	19.15	6.90	6.90	0.00
Acenaphthene-d10	606004	715610	18.09	9.03	9.03	0.00
Chrysene-d12	1080213	1448209	34.07	14.13	14.13	0.00
Perylene-d12	993497	1333696	34.24	16.42	16.42	0.00

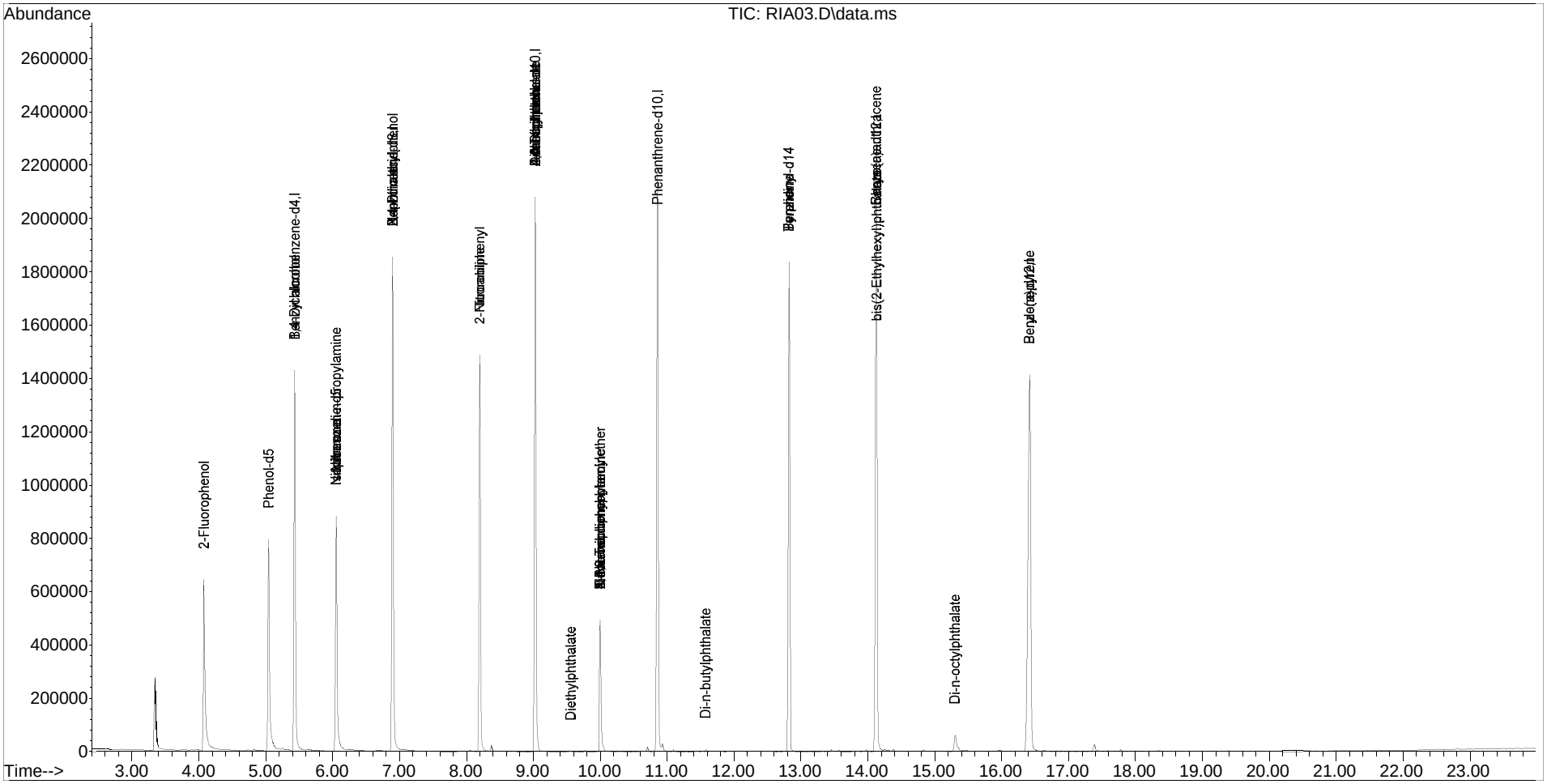
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

u=use

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA03.D
Acq On : 10 Sep 2012 12:28 pm
Operator :
Sample : MB,QC655235
Misc : 190277,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 12:50:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA03.D
Acq On : 10 Sep 2012 12:28 pm
Operator :
Sample : MB,QC655235
Misc : 190277,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 12:50:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	5.434	152	322966	40.0000	ug/mL	0.00
19) Naphthalene-d8	6.898	136	1246327	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.028	164	715610	40.0000	ug/mL	0.00
58) Phenanthrene-d10	10.857	188	1300177	40.0000	ug/mL	0.00
70) Chrysene-d12	14.127	240	1448209	40.0000	ug/mL	0.00
79) Perylene-d12	16.421	264	1333696	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	0.000	79	0	N.D.		
3) N-Nitrosodimethylamine	0.000	42	0	N.D.		
4) 2-Fluorophenol	4.081	112	365273	27.3071	ug/mL	82
5) Phenol-d5	5.046	99	509592	27.5426	ug/mL	80
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	5.434	108	1507	0.1624	ug/mL #	1
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.057	70	69438	6.6883	ug/mL #	67
18) Hexachloroethane	0.000	117	0	N.D.		
20) Nitrobenzene-d5	6.057	82	487532	28.0819	ug/mL #	79
21) Nitrobenzene	6.057	77	1623	0.1064	ug/mL #	44
22) Isophorone	6.057	82	487638	16.4382	ug/mL	66
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	6.898	107	8247	0.6524	ug/mL #	22
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	6.898	105	1473	37.4158	ug/mL #	1
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	0.000	128	0	N.D.		
30) 4-Chloroaniline	0.000	127	0	N.D.		
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	0.000	142	0	N.D.		
35) 1-Methylnaphthalene	0.000	142	0	N.D.		
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA03.D
Acq On : 10 Sep 2012 12:28 pm
Operator :
Sample : MB,QC655235
Misc : 190277,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 12:50:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.204	172	711510	25.2092	ug/mL	97
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	8.204	65	1350	0.1521	ug/mL #	1
43) Dimethylphthalate	9.028	163	108689	4.2731	ug/mL #	1
44) 2,6-Dinitrotoluene	9.028	165	91662	15.2419	ug/mL #	16
45) Acenaphthylene	0.000	152	0	N.D.		
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.028	154	2271	0.0984	ug/mL #	7
48) 2,4-Dinitrophenol	0.000	184	0	N.D.		
49) 4-Nitrophenol	9.028	109	1407	0.3529	ug/mL #	31
50) Dibenzofuran	0.000	168	0	N.D.		
51) 2,4-Dinitrotoluene	9.028	165	91662	11.1865	ug/mL #	15
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	9.569	149	1736	0.0622	ug/mL	89
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.		
55) Fluorene	9.998	166	4370	0.1675	ug/mL #	68
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	9.998	330	68495	26.0607	ug/mL	92
59) 4,6-Dinitro-2-methylphenol	0.000	198	0	N.D.		
60) N-Nitrosodiphenylamine	9.998	169	3085	0.1530	ug/mL #	30
61) Azobenzene	0.000	77	0	N.D.		
62) 4-Bromophenyl-phenylether	9.998	248	5093	0.7358	ug/mL #	1
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	0.000	178	0	N.D.		
66) Anthracene	0.000	178	0	N.D.		
67) Carbazole	0.000	167	0	N.D.		
68) Di-n-butylphthalate	11.580	149	8407	0.1799	ug/mL	98
69) Fluoranthene	0.000	202	0	N.D.		
71) Benzidine	12.827	184	13027	0.6162	ug/mL #	1
72) Pyrene	12.827	202	2965	0.0612	ug/mL #	56
73) Terphenyl-d14	12.827	244	951966	27.8414	ug/mL	98
74) Butylbenzylphthalate	0.000	149	0	N.D.		
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.		
76) Benzo(a)anthracene	14.127	228	3216	0.0763	ug/mL	74
77) bis(2-Ethylhexyl)phthalate	14.139	149	28529	0.8548	ug/mL	97
78) Chrysene	14.127	228	3216	0.0785	ug/mL	77
80) Di-n-octylphthalate	15.310	149	1124	0.0174	ug/mL #	1
81) Benzo(b)fluoranthene	0.000	252	0	N.D.		
82) Benzo(k)fluoranthene	0.000	252	0	N.D.		
83) Benzo(a)pyrene	16.421	252	3827	0.1154	ug/mL	87
84) Indeno(1,2,3-cd)pyrene	0.000	276	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\091012\
Data File : RIA03.D
Acq On : 10 Sep 2012 12:28 pm
Operator :
Sample : MB,QC655235
Misc : 190277,1,
ALS Vial : 3 Sample Multiplier: 1

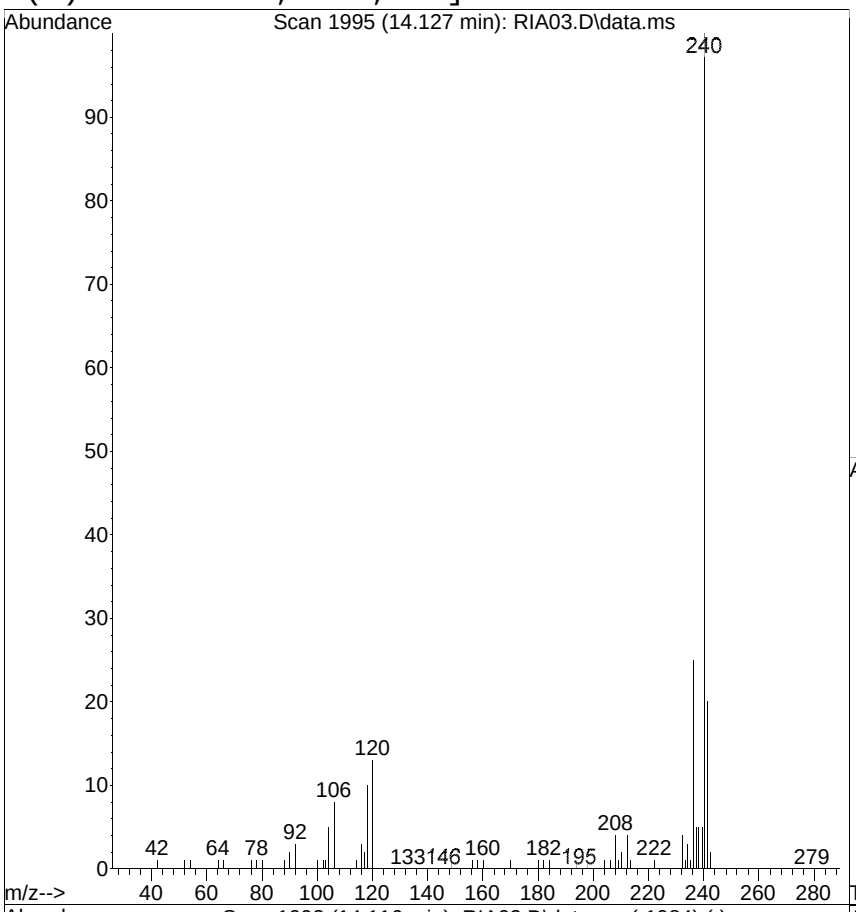
Quant Time: Sep 10 12:50:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	0.000	276	0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)anthracene; <RL; u]

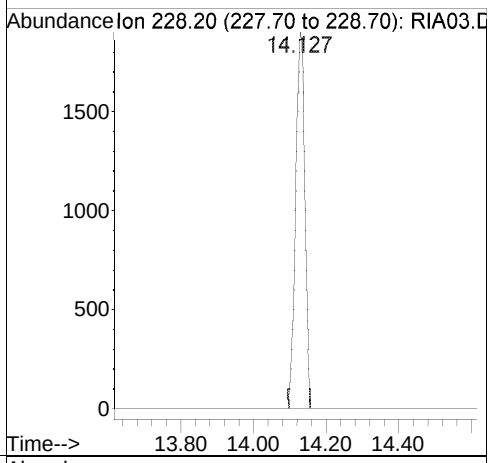
Raw



#76
Benzo(a)anthracene
Concen: 0.0763 ug/mL
RT: 14.127 min Scan# 1995
Delta R.T. 0.012 min
Lab File: RIA03.D
Acq: 10 Sep 2012 12:28 pm

Tgt Ion:228 Resp: 3216

Ion	Ratio	Lower	Upper
228	100		
229	24.3	0.0	40.0
226	8.3	8.0	48.0



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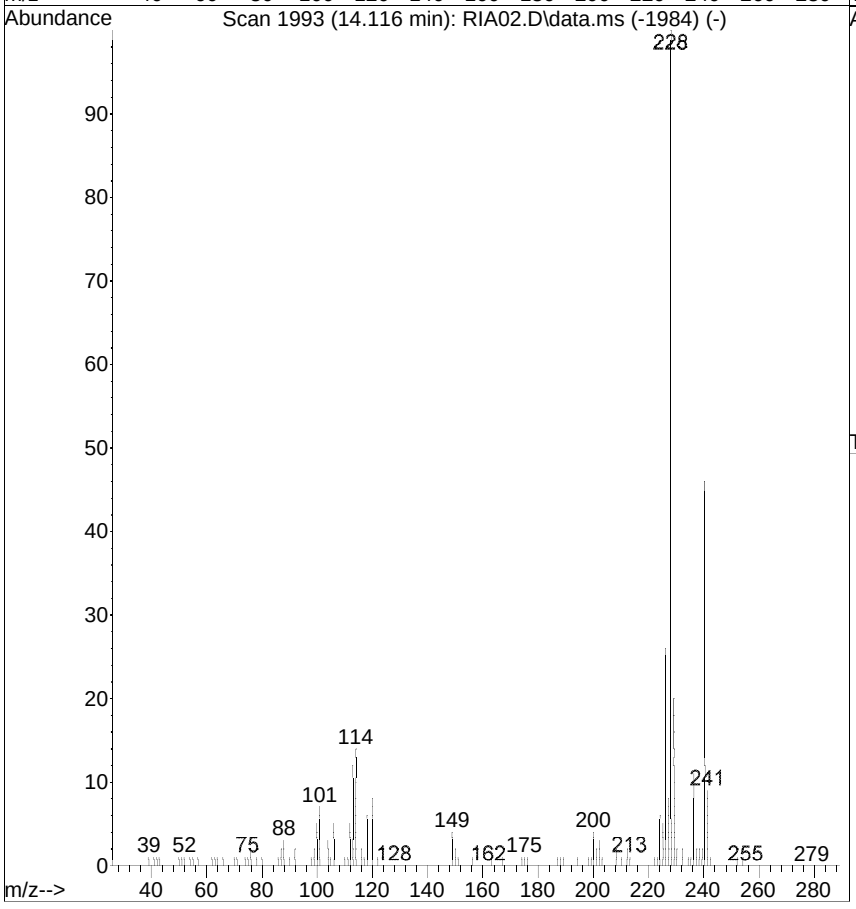
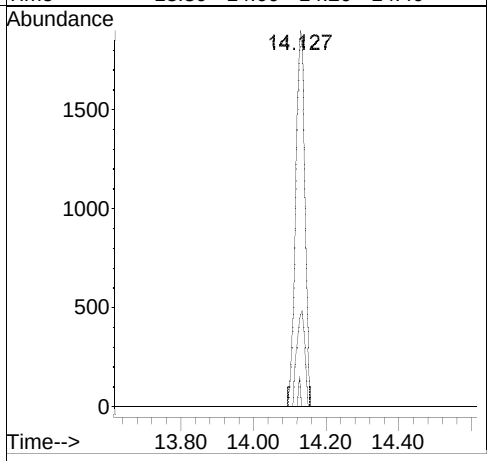
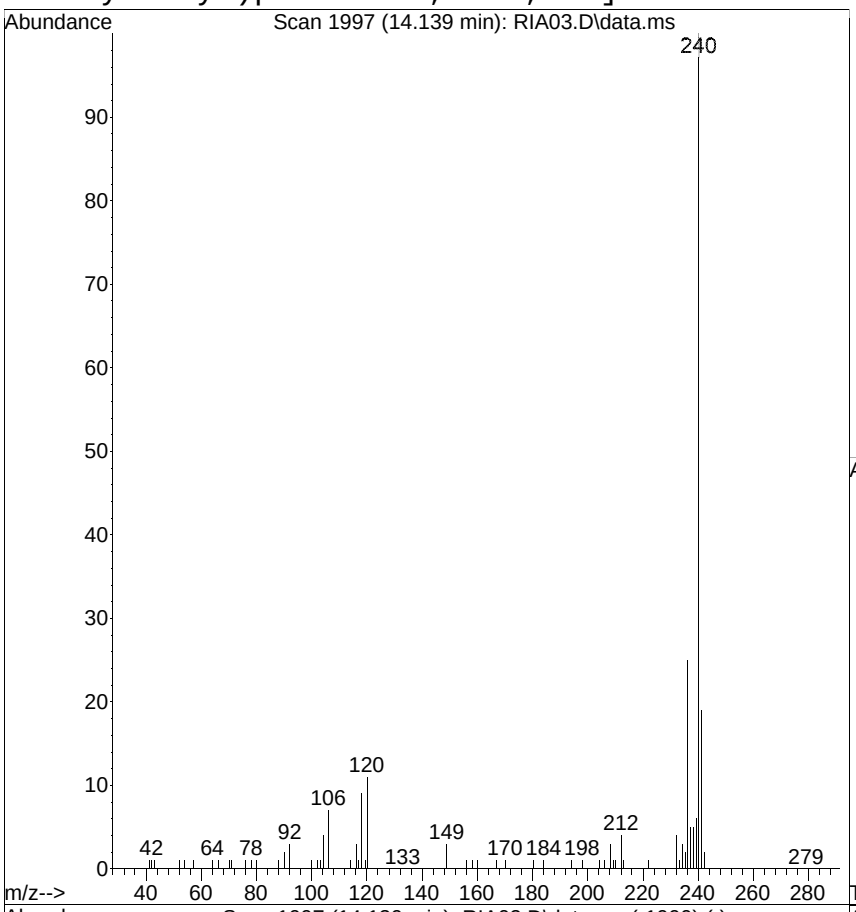




[bis(2-Ethylhexyl)phthalate; <RL; u]

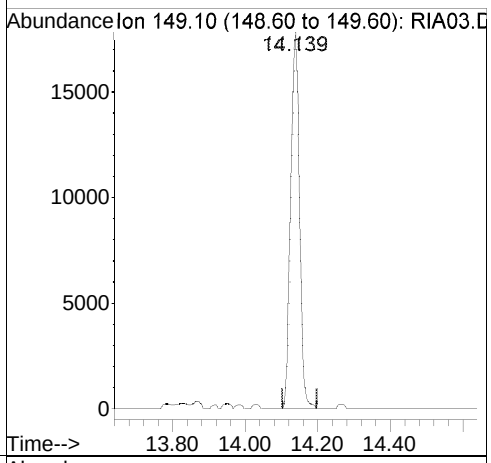
Raw



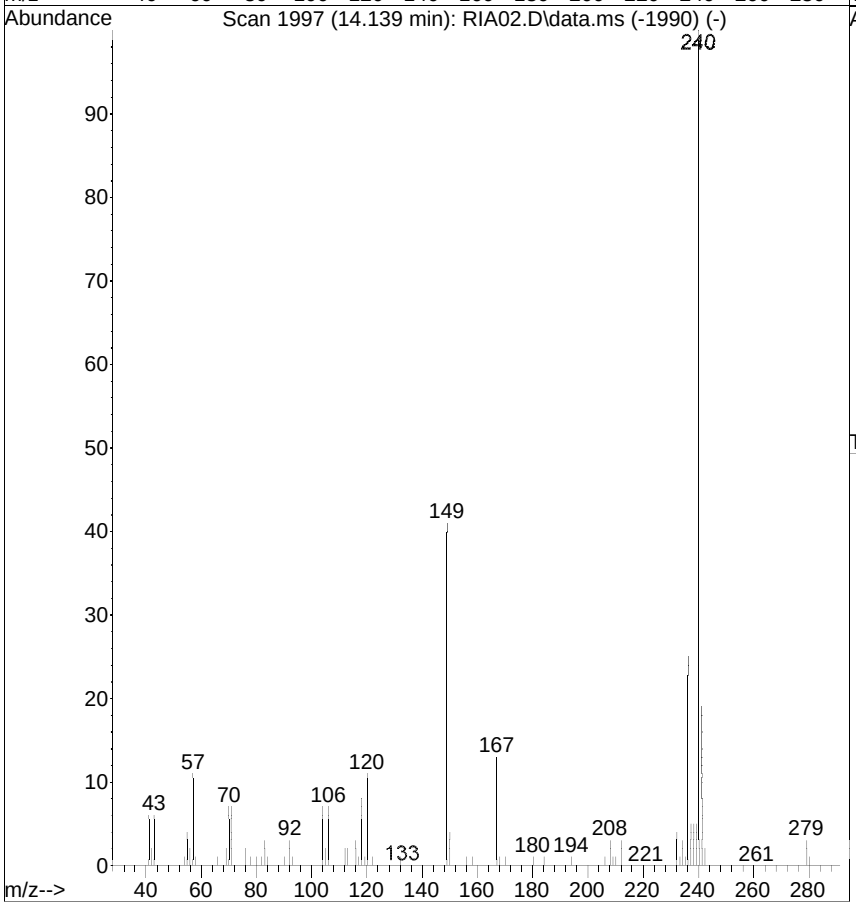
#77
bis(2-Ethylhexyl)phthalate
Concen: 0.8548 ug/mL
RT: 14.139 min Scan# 1997
Delta R.T. -0.000 min
Lab File: RIA03.D
Acq: 10 Sep 2012 12:28 pm

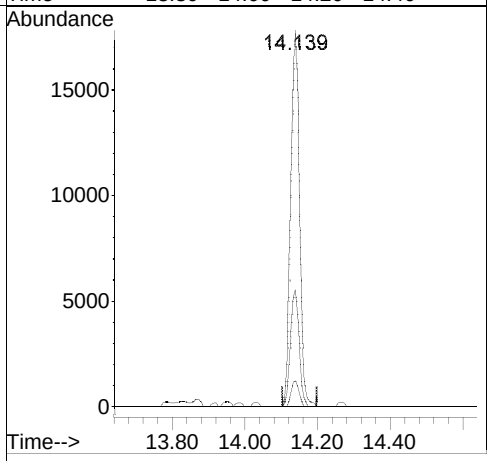
Tgt Ion:149 Resp: 28529

Ion	Ratio	Lower	Upper
149	100		
167	31.1	9.0	49.0
279	7.1	0.0	27.0



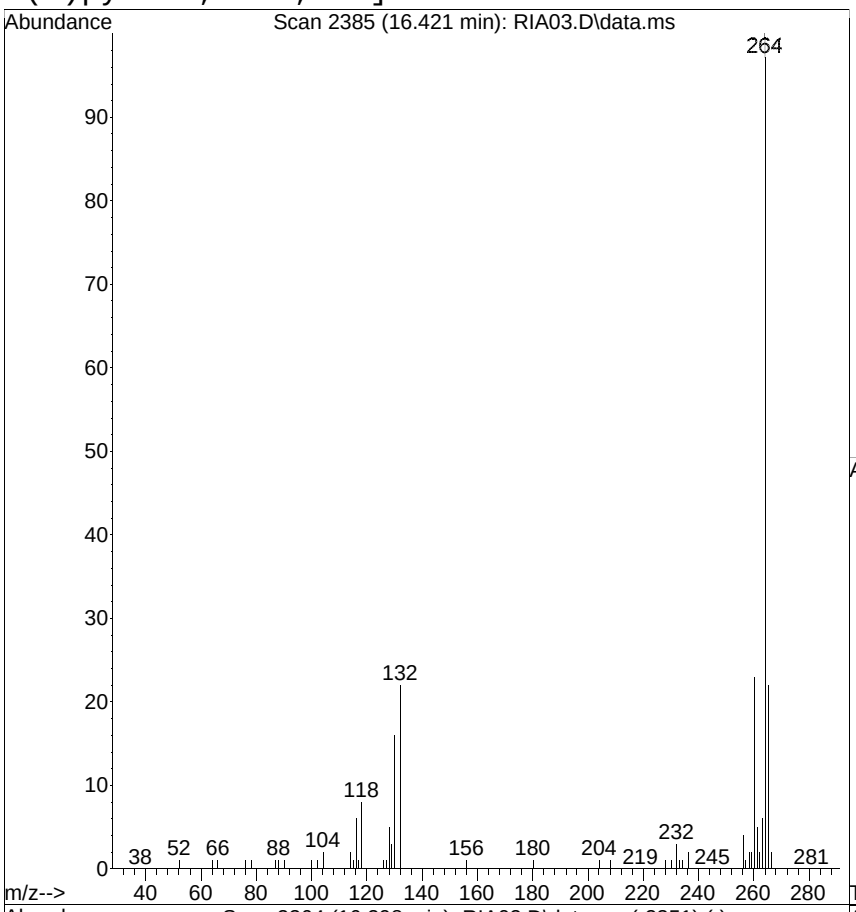
Ref





[Benzo(a)pyrene; <RL; u]

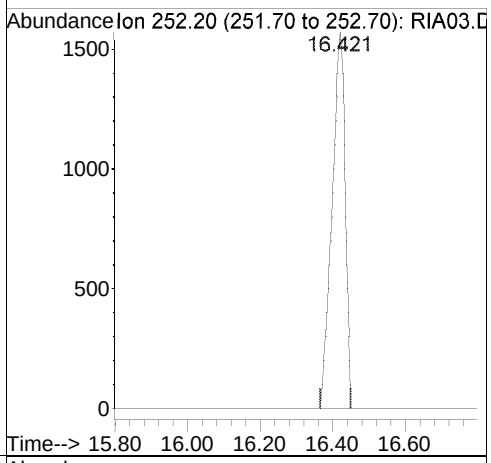
Raw



#83
Benzo(a)pyrene
Concen: 0.1154 ug/mL
RT: 16.421 min Scan# 2385
Delta R.T. 0.123 min
Lab File: RIA03.D
Acq: 10 Sep 2012 12:28 pm

Tgt Ion:252 Resp: 3827

Ion	Ratio	Lower	Upper
252	100		
253	26.8	2.6	42.6
125	24.5	0.0	36.8



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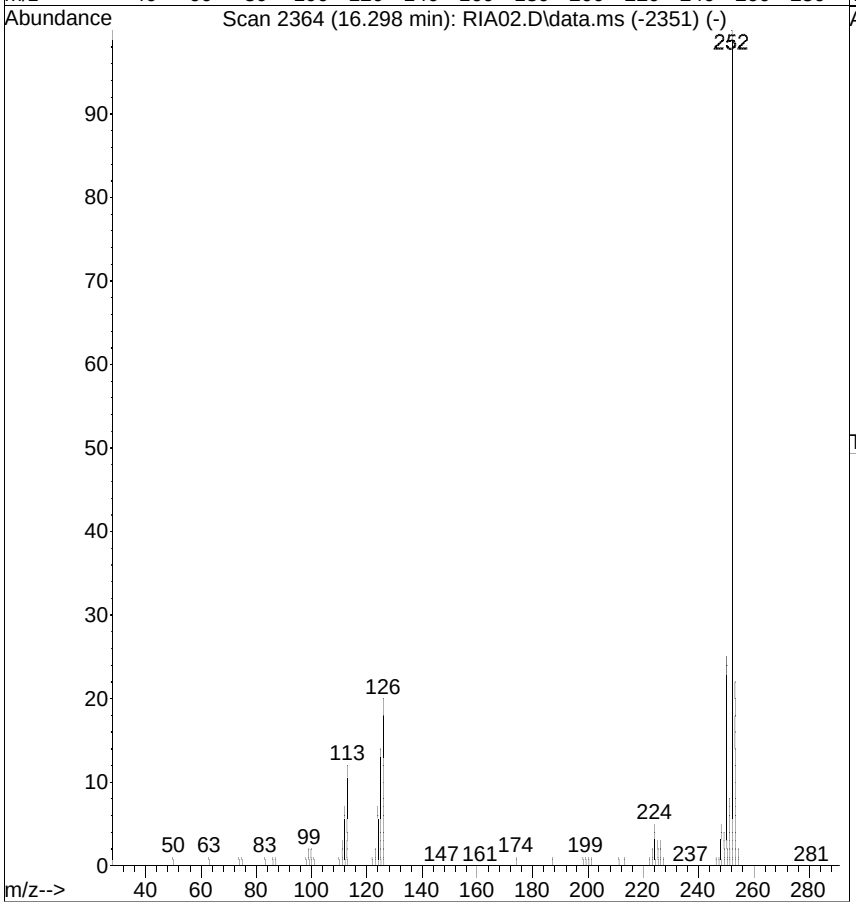
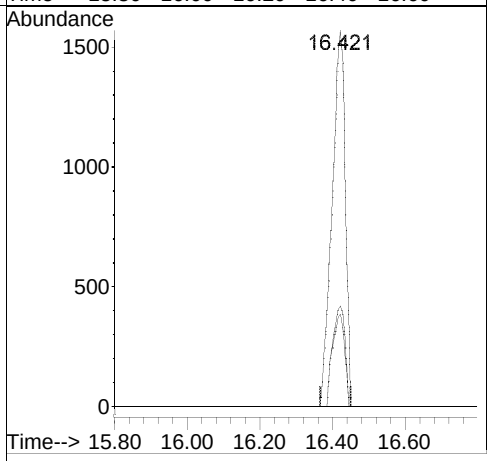




CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 MSBNA Water
EPA 8270D

Type : BS
Inst : MSBNA09
Seqnum : 582366461009.2
File : ria09
IDF : 1.0
Lab ID : QC655236
Matrix : Water
Batch : 190277
Time : 10-SEP-2012 15:31
Cal : 582094282001
Units : ug/L

Type : BSD
Inst : MSBNA09
Seqnum : 582366461010.2
File : ria10
IDF : 1.0
Lab ID : QC655237
Matrix : Water
Batch : 190277
Time : 10-SEP-2012 16:01
Cal : 582094282001

BS: 1000.00 mL --> 1.0 ml = 0.001 ml/ml PDF
BSD: 1000.00 mL --> 1.0 ml = 0.001 ml/ml PDF

Analyte	Spiked	BS Raw	BS Result	%Rec	BSD Raw	BSD Result	%Rec	Limits	RPD	Lim	Flags
Naphthalene	30.00	25.16	25.16	84	26.24	26.24	87	61-120	4	21	u
3,3'-Dichlorobenzidine	80.00	63.02	63.02	79	63.32	63.32	79	47-120	0	25	u
Benzo(a)anthracene	30.00	29.79	29.79	99	30.00	30.00	100	65-120	1	21	u
bis(2-Ethylhexyl)phthalate	30.00	24.46	24.46	82	30.61	30.61	102	54-124	22	33	u
Benzo(b)fluoranthene	30.00	29.38	29.38	98	29.66	29.66	99	61-120	1	30	u
Benzo(k)fluoranthene	30.00	28.89	28.89	96	28.77	28.77	96	60-120	0	29	u
Benzo(a)pyrene	30.00	26.66	26.66	89	26.58	26.58	89	62-120	0	20	m u
Indeno(1,2,3-cd)pyrene	30.00	30.13	30.13	100	29.84	29.84	99	58-120	1	27	u
Dibenz(a,h)anthracene	30.00	30.46	30.46	102	30.22	30.22	101	59-120	1	28	u
Nitrobenzene-d5	40.00	32.59	32.59	81	34.17	34.17	85	55-120			u
2-Fluorobiphenyl	40.00	32.54	32.54	81	34.36	34.36	86	51-120			u
Terphenyl-d14	40.00	40.70	40.70	102	41.16	41.16	103	23-120			u

ISTD (CCV ria02)	CCV Area	BS Area	%Drift	CCV RT	BS RT	Drift
Naphthalene-d8	1046042	1011754	-3.28	6.90	6.90	0.00
Acenaphthene-d10	606004	585407	-3.40	9.03	9.03	0.00
Chrysene-d12	1080213	1021379	-5.45	14.13	14.13	0.00
Perylene-d12	993497	960928	-3.28	16.42	16.42	0.00

ISTD (CCV ria02)	CCV Area	BSD Area	%Drift	CCV RT	BSD RT	Drift
Naphthalene-d8	1046042	978875	-6.42	6.90	6.90	0.00
Acenaphthene-d10	606004	553937	-8.59	9.03	9.03	0.00
Chrysene-d12	1080213	976104	-9.64	14.13	14.13	0.00
Perylene-d12	993497	921032	-7.29	16.42	16.42	0.00

LLH 09/10/12 [2,4,6-Tribromophenol]: surr out high in the BSD for job 239328 only, not reported from this batch [general version]

LLH 09/10/12 [Pyridine]: Corrected automatically drawn baseline for spike. [general version]

LLH 09/10/12 [Aniline]: Picked or reassigned peak for spike & dup. [general version]

LLH 09/10/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline for spike & dup. [general version]

LLH 09/10/12 [Resorcinol]: Corrected automatically drawn baseline for spike & dup. [general version]

LLH 09/10/12 [Benzo(a)pyrene]: Corrected fronting or tailing peak integration for spike & dup. [general version]

LLH 09/10/12 [Benzidine]: qdeleted due to no peak found at expected RT [general version]

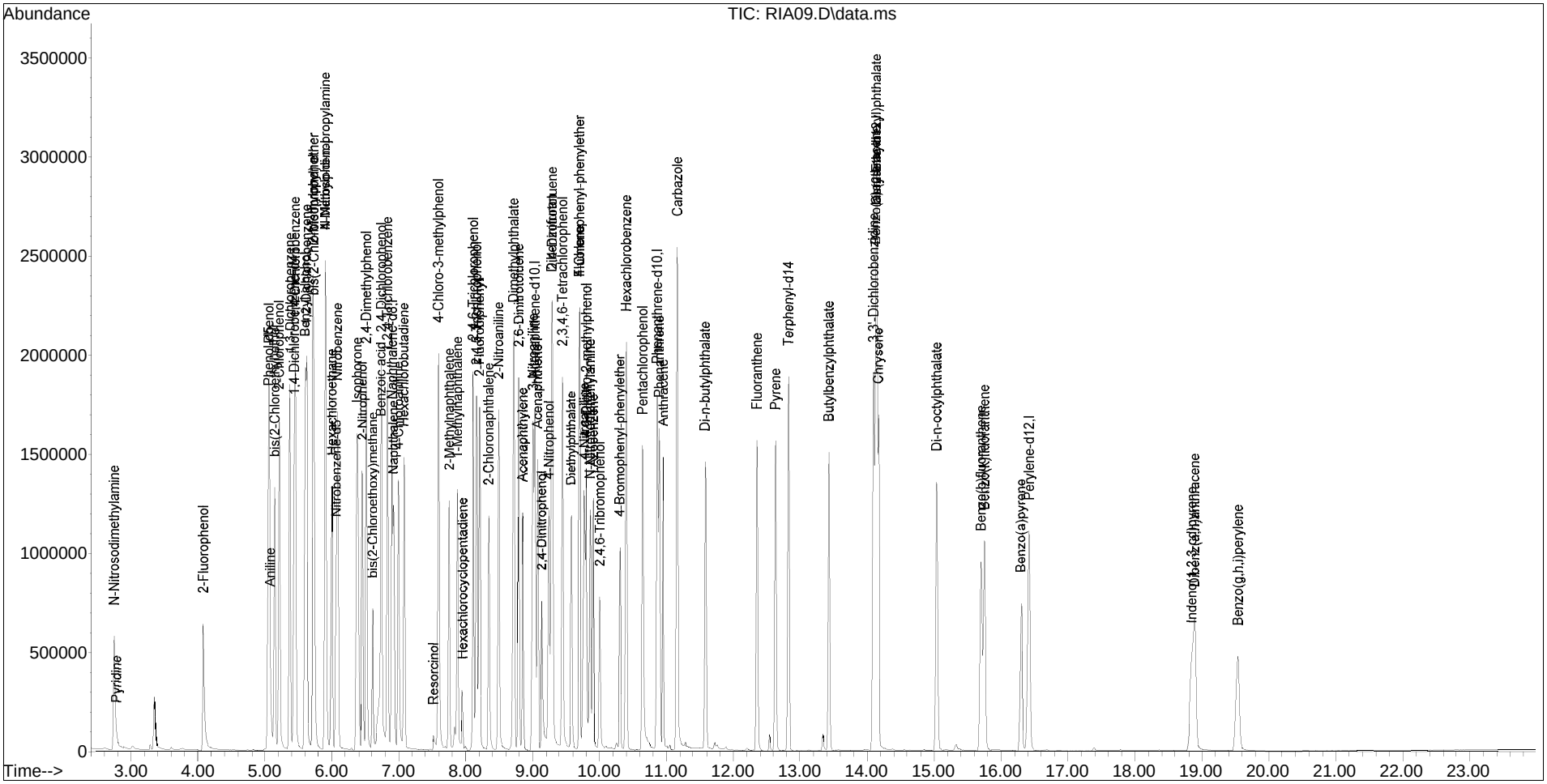
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

m=manual integration u=use

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA09.D
Acq On : 10 Sep 2012 3:31 pm
Operator :
Sample : BS,QC655236
Misc : 190277,1,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 10 16:11:32 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA09.D
Acq On : 10 Sep 2012 3:31 pm
Operator :
Sample : BS,QC655236
Misc : 190277,1,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 10 16:11:32 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	5.434	152	274699	40.0000	ug/mL		0.00
19) Naphthalene-d8	6.898	136	1011754	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.033	164	585407	40.0000	ug/mL		0.00
58) Phenanthrene-d10	10.857	188	1075465	40.0000	ug/mL		0.00
70) Chrysene-d12	14.133	240	1021379	40.0000	ug/mL		0.00
79) Perylene-d12	16.415	264	960928	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	2.793	79	3482m	0.2271	ug/mL		
3) N-Nitrosodimethylamine	2.751	42	400354	68.3950	ug/mL	#	62
4) 2-Fluorophenol	4.081	112	374706	32.9343	ug/mL		81
5) Phenol-d5	5.051	99	474357	30.1430	ug/mL		81
6) Phenol	5.069	94	872144	60.0424	ug/mL		74
7) Aniline	5.087	93	99750m	5.3624	ug/mL		
8) bis(2-Chloroethyl)ether	5.145	93	682830m	61.2592	ug/mL		
9) 2-Chlorophenol	5.216	128	682432	66.2903	ug/mL		96
10) 1,3-Dichlorobenzene	5.375	146	639836	61.2818	ug/mL		94
11) 1,4-Dichlorobenzene	5.451	146	646797	62.1620	ug/mL		90
12) Benzyl alcohol	5.604	108	479310	60.7319	ug/mL		97
13) 1,2-Dichlorobenzene	5.622	146	611314	60.8882	ug/mL		94
14) 2-Methylphenol	5.722	107	486980	56.5706	ug/mL		89
15) bis(2-Chloroisopropyl) ether	5.740	45	753610	44.6521	ug/mL		86
16) 4-Methylphenol	5.904	107	622945	48.0634	ug/mL		92
17) N-Nitroso-di-n-propylamine	5.898	70	447863	50.7179	ug/mL	#	78
18) Hexachloroethane	6.004	117	237911	55.8895	ug/mL		99
20) Nitrobenzene-d5	6.063	82	459253	32.5861	ug/mL	#	79
21) Nitrobenzene	6.087	77	803888	64.9247	ug/mL		96
22) Isophorone	6.375	82	1604842	66.6417	ug/mL		99
23) 2-Nitrophenol	6.457	139	370624	74.2525	ug/mL		94
24) 2,4-Dimethylphenol	6.516	107	591945	57.6854	ug/mL		94
25) bis(2-Chloroethoxy)methane	6.610	93	359507	26.4615	ug/mL		95
26) Benzoic acid	6.734	105	358488	68.8379	ug/mL		95
27) 2,4-Dichlorophenol	6.745	162	509956	67.0497	ug/mL		99
28) 1,2,4-Trichlorobenzene	6.834	180	497266	66.2827	ug/mL		95
29) Naphthalene	6.928	128	739002	25.1609	ug/mL		97
30) 4-Chloroaniline	6.998	127	605700	49.4465	ug/mL		89
31) Hexachlorobutadiene	7.075	225	240339	61.3132	ug/mL		98
32) Resorcinol	7.522	110	73755m	6.4648	ug/mL		
33) 4-Chloro-3-methylphenol	7.592	107	631087	66.3570	ug/mL		88
34) 2-Methylnaphthalene	7.757	142	515408	26.3846	ug/mL		94
35) 1-Methylnaphthalene	7.875	142	508810	26.6904	ug/mL		93
37) Hexachlorocyclopentadiene	7.951	237	55394	12.9417	ug/mL		98
38) 2,4,6-Trichlorophenol	8.116	196	385363	73.4545	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA09.D
Acq On : 10 Sep 2012 3:31 pm
Operator :
Sample : BS,QC655236
Misc : 190277,1,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 10 16:11:32 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.163	196	432400	76.8617	ug/mL		87
40) 2-Fluorobiphenyl	8.204	172	751284	32.5388	ug/mL		97
41) 2-Chloronaphthalene	8.351	162	485263	27.7756	ug/mL		96
42) 2-Nitroaniline	8.492	65	519389	71.5332	ug/mL		99
43) Dimethylphthalate	8.722	163	1543823	74.1940	ug/mL		99
44) 2,6-Dinitrotoluene	8.792	165	372015	75.6188	ug/mL		94
45) Acenaphthylene	8.851	152	790237	26.2018	ug/mL		99
46) 3-Nitroaniline	9.004	138	417154	70.3243	ug/mL	#	79
47) Acenaphthene	9.069	154	473142	25.0548	ug/mL		96
48) 2,4-Dinitrophenol	9.139	184	188719	89.0294	ug/mL	#	1
49) 4-Nitrophenol	9.245	109	264348	81.0528	ug/mL		99
50) Dibenzofuran	9.280	168	683624	26.3781	ug/mL		68
51) 2,4-Dinitrotoluene	9.298	165	497100	74.1593	ug/mL		95
52) 2,3,4,6-Tetrachlorophenol	9.451	232	358378	84.3391	ug/mL		88
53) Diethylphthalate	9.580	149	674130	29.5291	ug/mL		99
54) 4-Chlorophenyl-phenylether	9.704	204	263130	27.2337	ug/mL	#	72
55) Fluorene	9.704	166	558677	26.1740	ug/mL		89
56) 4-Nitroaniline	9.775	138	436150	74.6404	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.004	330	102563	47.7019	ug/mL		89
59) 4,6-Dinitro-2-methylphenol	9.804	198	291380	92.4875	ug/mL		91
60) N-Nitrosodiphenylamine	9.857	169	427443	25.6331	ug/mL		89
61) Azobenzene	9.904	77	786928	26.5489	ug/mL		97
62) 4-Bromophenyl-phenylether	10.304	248	165746	28.9479	ug/mL	#	75
63) Hexachlorobenzene	10.398	284	446956	86.9430	ug/mL		91
64) Pentachlorophenol	10.639	266	294283	87.8138	ug/mL		98
65) Phenanthrene	10.886	178	883714	27.8553	ug/mL		97
66) Anthracene	10.951	178	895089	27.5981	ug/mL		95
67) Carbazole	11.163	167	1983136	72.0435	ug/mL		86
68) Di-n-butylphthalate	11.580	149	1167489	30.2041	ug/mL		98
69) Fluoranthene	12.351	202	981656	30.1622	ug/mL		98
71) Benzidine	0.000	184	0m	N.D.			
72) Pyrene	12.633	202	987803	28.9226	ug/mL		93
73) Terphenyl-d14	12.827	244	981585	40.7044	ug/mL		99
74) Butylbenzylphthalate	13.427	149	521585	30.0305	ug/mL		89
75) 3,3'-Dichlorobenzidine	14.092	252	632594	63.0190	ug/mL		99
76) Benzo(a)anthracene	14.115	228	885635	29.7902	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.139	149	575743	24.4608	ug/mL		94
78) Chrysene	14.163	228	890989	30.8467	ug/mL		95
80) Di-n-octylphthalate	15.033	149	1280350	27.4420	ug/mL		95
81) Benzo(b)fluoranthene	15.704	252	809088	29.3837	ug/mL		96
82) Benzo(k)fluoranthene	15.757	252	827705	28.8903	ug/mL		93
83) Benzo(a)pyrene	16.298	252	636950m	26.6562	ug/mL		
84) Indeno(1,2,3-cd)pyrene	18.845	276	756718	30.1272	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA09.D
Acq On : 10 Sep 2012 3:31 pm
Operator :
Sample : BS,QC655236
Misc : 190277,1,
ALS Vial : 9 Sample Multiplier: 1

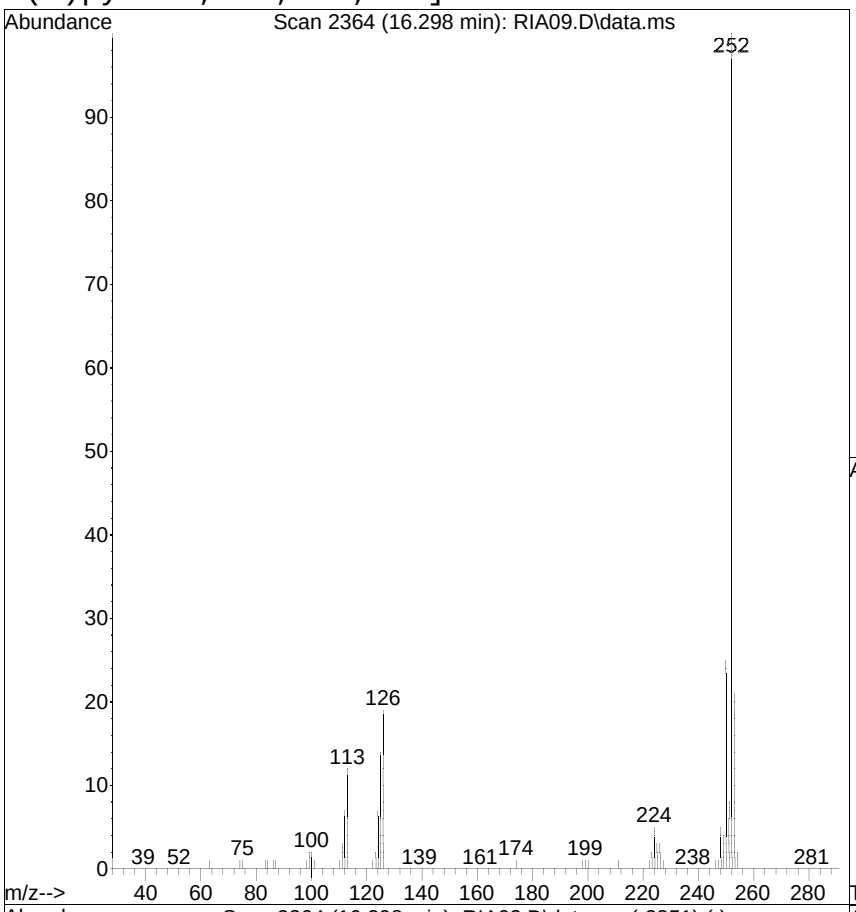
Quant Time: Sep 10 16:11:32 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	18.897	278	664828	30.4607	ug/mL	97
86) Benzo(g,h,i)perylene	19.539	276	640374	29.4178	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)pyrene; 27; MI; u]

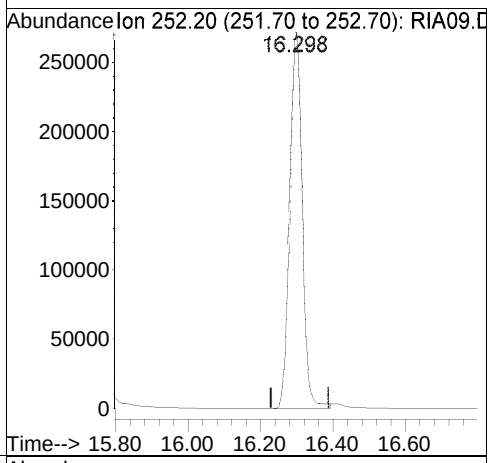
Raw



#83
Benzo(a)pyrene
Concen: 26.6562 ug/mL m
RT: 16.298 min Scan# 2364
Delta R.T. -0.000 min
Lab File: RIA09.D
Acq: 10 Sep 2012 3:31 pm

Tgt Ion:252 Resp: 636950

Ion	Ratio	Lower	Upper
252	100		
253	21.8	2.6	42.6
125	14.0	0.0	36.8



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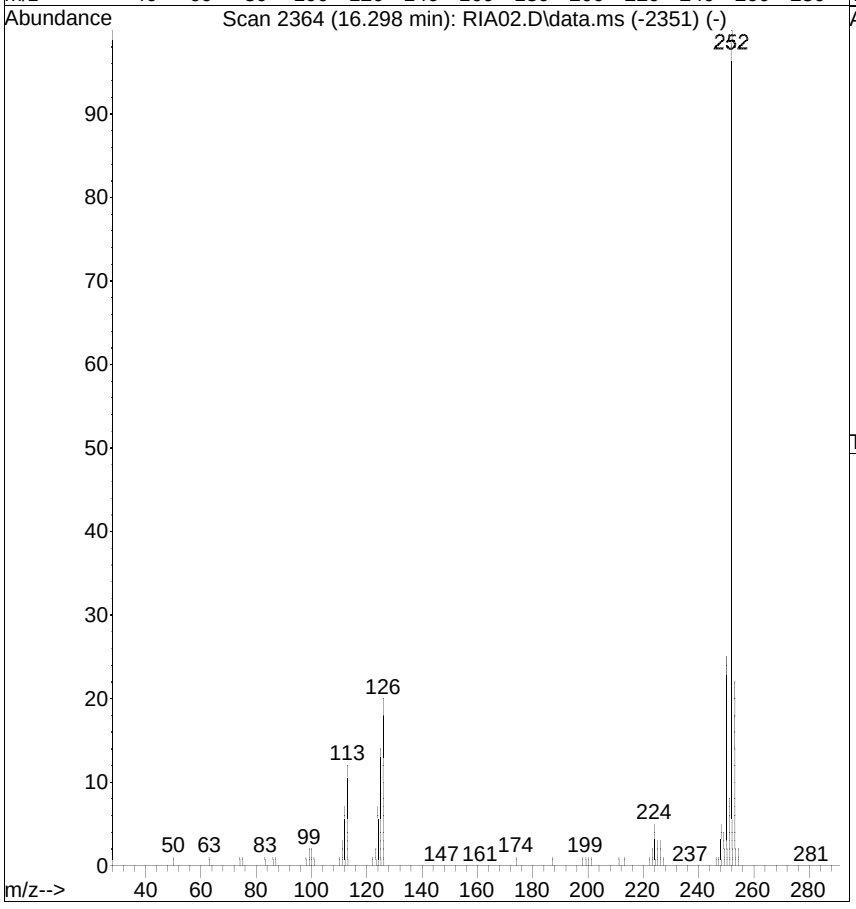
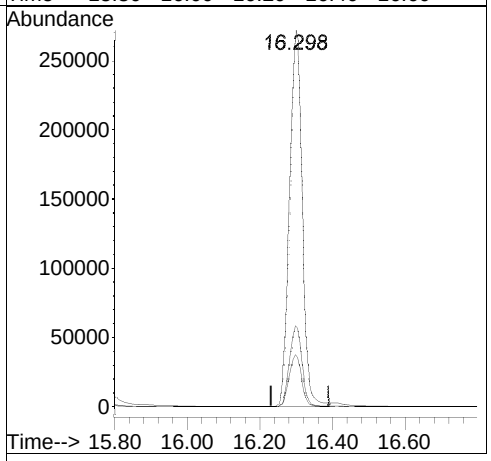
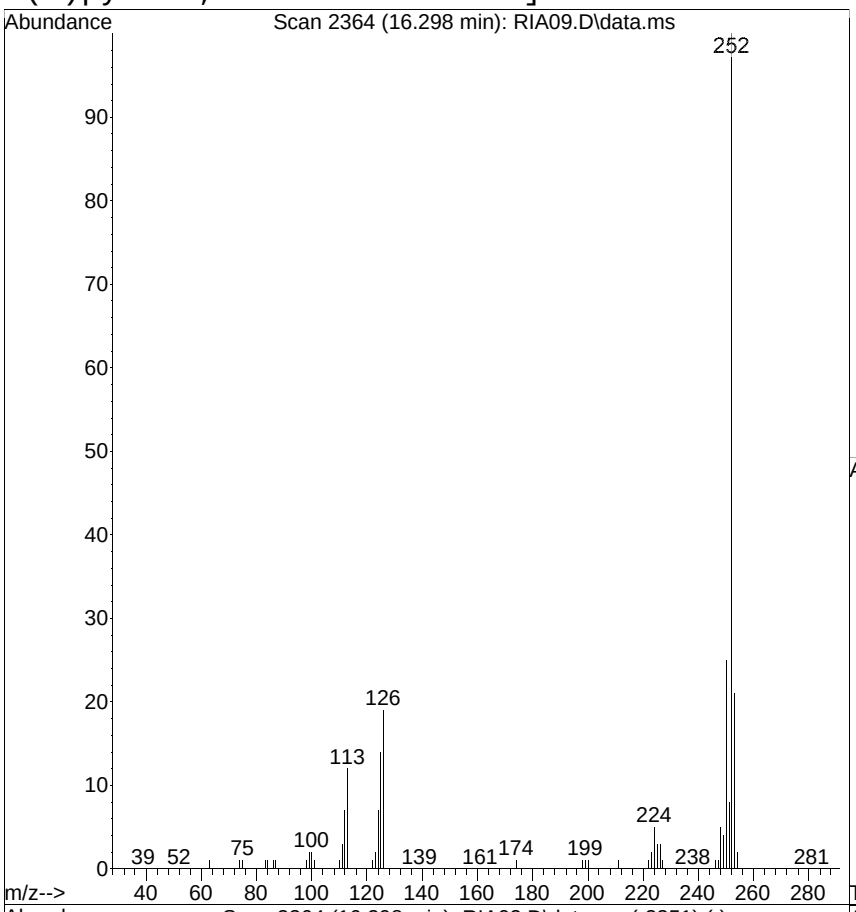




[Benzo(a)pyrene; before version]

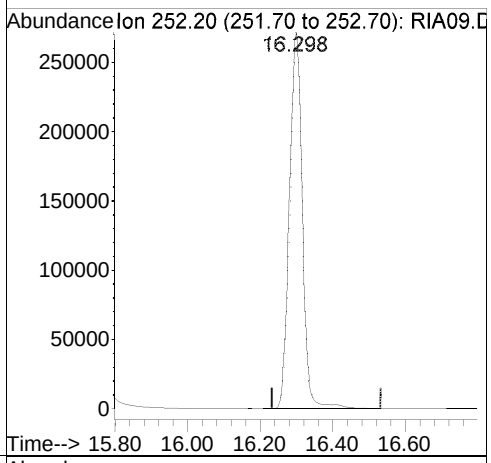
Raw



#83
Benzo(a)pyrene
Concen: 27.0425 ug/mL
RT: 16.298 min Scan# 2364
Delta R.T. -0.000 min
Lab File: RIA09.D
Acq: 10 Sep 2012 3:31 pm

Tgt Ion:252 Resp: 646179

Ion	Ratio	Lower	Upper
252	100		
253	21.5	2.6	42.6
125	13.8	0.0	36.8



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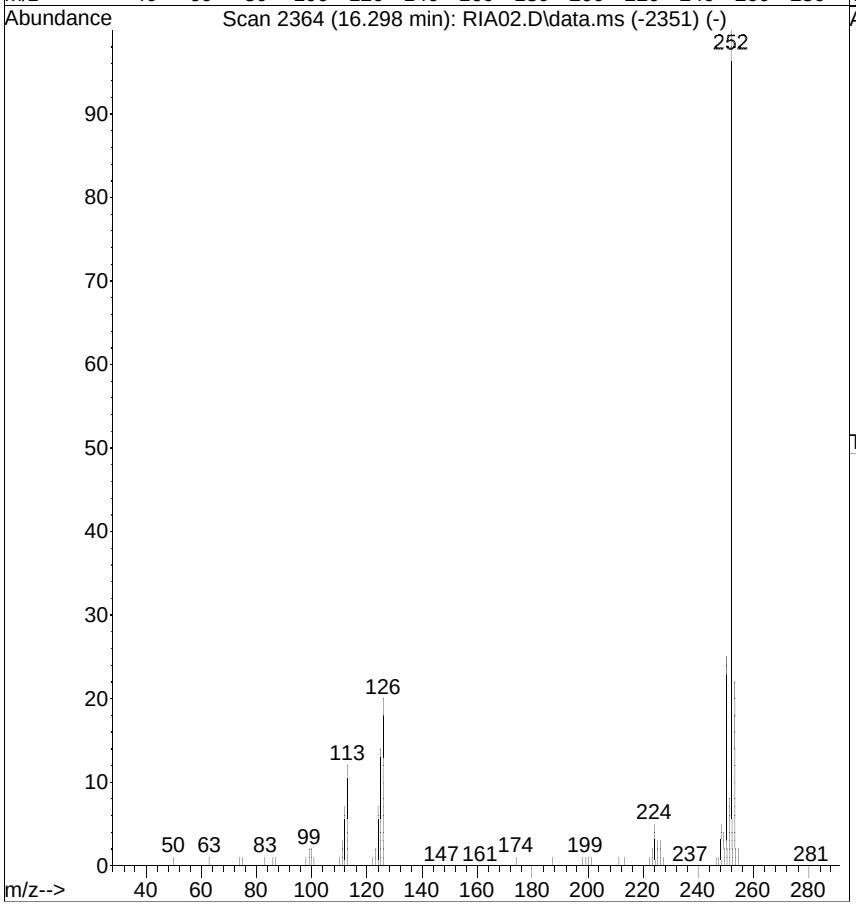
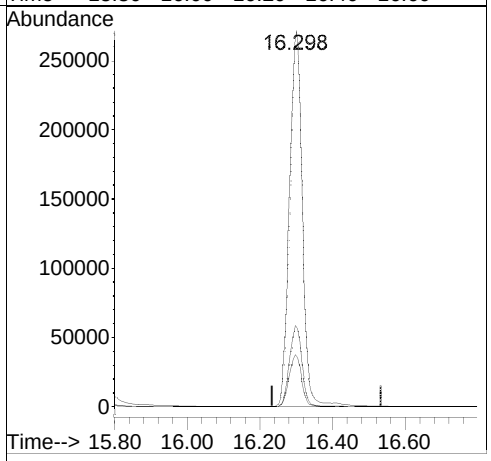
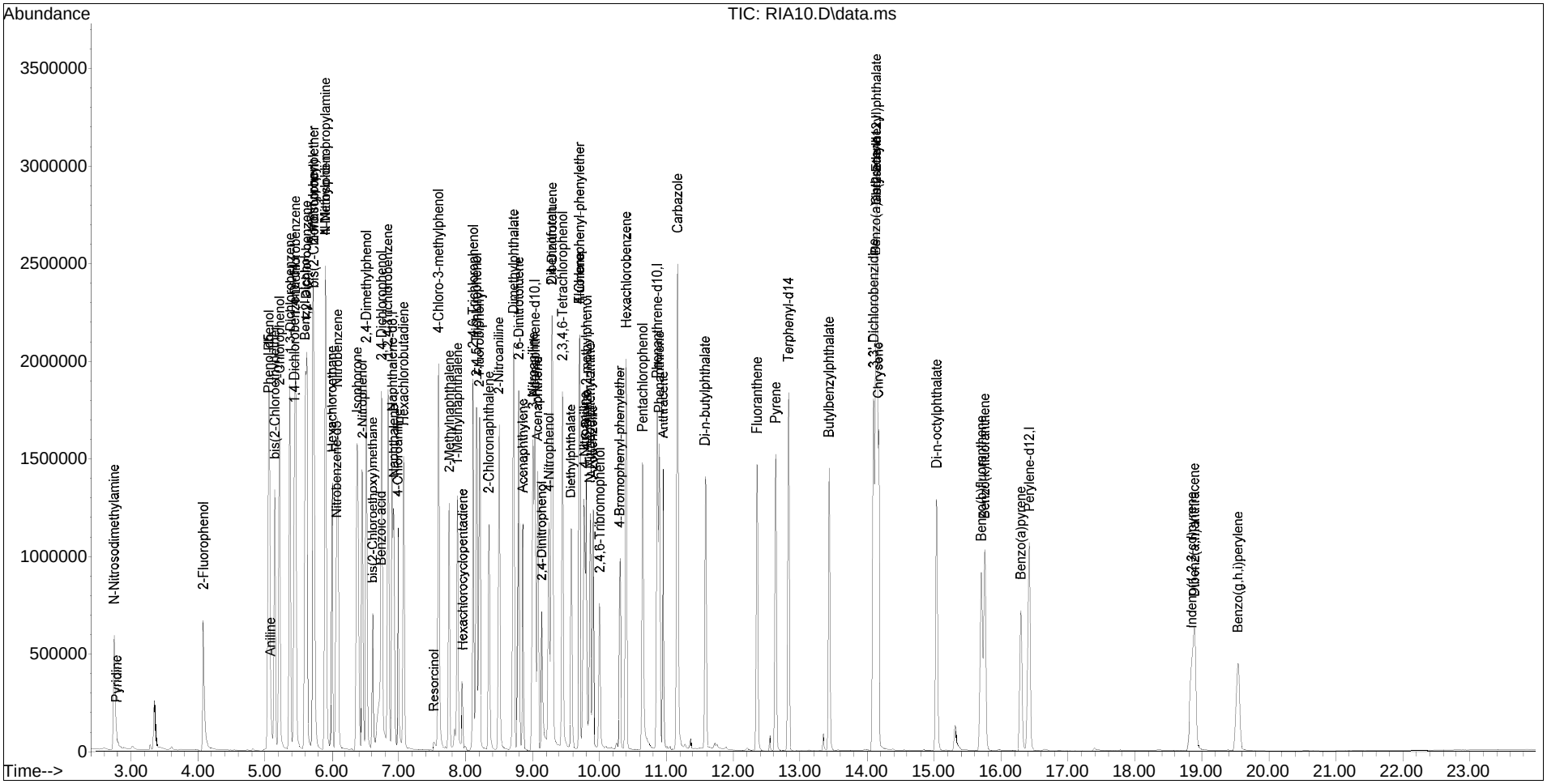




Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA10.D
Acq On : 10 Sep 2012 4:01 pm
Operator :
Sample : BSD,QC655237
Misc : 190277,1,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 10 16:30:03 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA10.D
Acq On : 10 Sep 2012 4:01 pm
Operator :
Sample : BSD,QC655237
Misc : 190277,1,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 10 16:30:03 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	5.434	152	260457	40.0000	ug/mL		0.00
19) Naphthalene-d8	6.898	136	978875	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.034	164	553937	40.0000	ug/mL		0.00
58) Phenanthrene-d10	10.857	188	1019717	40.0000	ug/mL		0.00
70) Chrysene-d12	14.133	240	976104	40.0000	ug/mL		0.00
79) Perylene-d12	16.415	264	921032	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	2.793	79	1549	0.1065	ug/mL		74
3) N-Nitrosodimethylamine	2.752	42	405290	73.0243	ug/mL	#	64
4) 2-Fluorophenol	4.081	112	388514	36.0152	ug/mL		81
5) Phenol-d5	5.051	99	483530	32.4061	ug/mL		81
6) Phenol	5.069	94	884876	64.2500	ug/mL		74
7) Aniline	5.093	93	74745m	4.2379	ug/mL		
8) bis(2-Chloroethyl)ether	5.146	93	696967m	65.9465	ug/mL		
9) 2-Chlorophenol	5.216	128	705187	72.2463	ug/mL		95
10) 1,3-Dichlorobenzene	5.375	146	658831	66.5515	ug/mL		94
11) 1,4-Dichlorobenzene	5.451	146	663349	67.2388	ug/mL		90
12) Benzyl alcohol	5.604	108	486576	65.0237	ug/mL		97
13) 1,2-Dichlorobenzene	5.628	146	627806	65.9500	ug/mL		95
14) 2-Methylphenol	5.722	107	494189	60.5472	ug/mL		88
15) bis(2-Chloroisopropyl) ether	5.740	45	763521	47.7130	ug/mL		86
16) 4-Methylphenol	5.904	107	627906	51.0953	ug/mL		92
17) N-Nitroso-di-n-propylamine	5.898	70	441592	52.7422	ug/mL	#	78
18) Hexachloroethane	6.004	117	241531	59.8425	ug/mL		99
20) Nitrobenzene-d5	6.063	82	465972	34.1734	ug/mL	#	79
21) Nitrobenzene	6.087	77	809418	67.5670	ug/mL		96
22) Isophorone	6.375	82	1567320	67.2696	ug/mL		99
23) 2-Nitrophenol	6.457	139	372454	77.1255	ug/mL		94
24) 2,4-Dimethylphenol	6.516	107	604266	60.8640	ug/mL		94
25) bis(2-Chloroethoxy)methane	6.610	93	348719	26.5296	ug/mL		96
26) Benzoic acid	6.728	105	314121	65.8640	ug/mL		94
27) 2,4-Dichlorophenol	6.745	162	518457	70.4571	ug/mL		99
28) 1,2,4-Trichlorobenzene	6.834	180	506329	69.7577	ug/mL		95
29) Naphthalene	6.928	128	745570	26.2372	ug/mL		97
30) 4-Chloroaniline	6.993	127	497512	41.9787	ug/mL		88
31) Hexachlorobutadiene	7.075	225	244489	64.4669	ug/mL		98
32) Resorcinol	7.528	110	47696m	4.3211	ug/mL		
33) 4-Chloro-3-methylphenol	7.592	107	632869	68.7795	ug/mL		87
34) 2-Methylnaphthalene	7.757	142	516638	27.3360	ug/mL		95
35) 1-Methylnaphthalene	7.875	142	503389	27.2930	ug/mL		93
37) Hexachlorocyclopentadiene	7.951	237	66662	16.4590	ug/mL		96
38) 2,4,6-Trichlorophenol	8.110	196	377469	76.0374	ug/mL		94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA10.D
Acq On : 10 Sep 2012 4:01 pm
Operator :
Sample : BSD,QC655237
Misc : 190277,1,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 10 16:30:03 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.163	196	422128	79.2987	ug/mL		86
40) 2-Fluorobiphenyl	8.204	172	750713	34.3612	ug/mL		97
41) 2-Chloronaphthalene	8.351	162	481507	29.1263	ug/mL		97
42) 2-Nitroaniline	8.492	65	505240	73.5377	ug/mL		100
43) Dimethylphthalate	8.716	163	1501868	76.2783	ug/mL		98
44) 2,6-Dinitrotoluene	8.792	165	363088	77.9971	ug/mL		94
45) Acenaphthylene	8.857	152	772543	27.0703	ug/mL		98
46) 3-Nitroaniline	9.004	138	402739	71.7514	ug/mL	#	79
47) Acenaphthene	9.069	154	465509	26.0510	ug/mL		96
48) 2,4-Dinitrophenol	9.139	184	175954	87.9442	ug/mL	#	1
49) 4-Nitrophenol	9.245	109	253870	82.2623	ug/mL		98
50) Dibenzofuran	9.281	168	664765	27.1077	ug/mL		70
51) 2,4-Dinitrotoluene	9.298	165	482751	76.1101	ug/mL		96
52) 2,3,4,6-Tetrachlorophenol	9.451	232	343371	85.3982	ug/mL		89
53) Diethylphthalate	9.581	149	654328	30.2901	ug/mL		99
54) 4-Chlorophenyl-phenylether	9.704	204	254046	27.7873	ug/mL	#	71
55) Fluorene	9.704	166	542656	26.8677	ug/mL		88
56) 4-Nitroaniline	9.775	138	415448	75.1367	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.004	330	99278	48.7973	ug/mL	#	88
59) 4,6-Dinitro-2-methylphenol	9.804	198	283698	94.9722	ug/mL		90
60) N-Nitrosodiphenylamine	9.857	169	417441	26.4019	ug/mL		89
61) Azobenzene	9.898	77	763959	27.1830	ug/mL		95
62) 4-Bromophenyl-phenylether	10.304	248	160781	29.6159	ug/mL	#	75
63) Hexachlorobenzene	10.398	284	433622	88.9607	ug/mL		91
64) Pentachlorophenol	10.645	266	280609	88.3112	ug/mL		98
65) Phenanthrene	10.886	178	859771	28.5822	ug/mL		97
66) Anthracene	10.951	178	850346	27.6519	ug/mL		95
67) Carbazole	11.163	167	1873105	71.7664	ug/mL		87
68) Di-n-butylphthalate	11.580	149	1125526	30.7104	ug/mL		98
69) Fluoranthene	12.357	202	951287	30.8271	ug/mL		97
71) Benzidine	0.000	184	0m	N.D.			
72) Pyrene	12.633	202	948335	29.0549	ug/mL		93
73) Terphenyl-d14	12.827	244	948624	41.1622	ug/mL		99
74) Butylbenzylphthalate	13.427	149	508671	30.6454	ug/mL		89
75) 3,3'-Dichlorobenzidine	14.092	252	607434	63.3193	ug/mL		99
76) Benzo(a)anthracene	14.116	228	852437	30.0035	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.139	149	688519	30.6090	ug/mL		94
78) Chrysene	14.163	228	843868	30.5705	ug/mL		95
80) Di-n-octylphthalate	15.033	149	1233502	27.5831	ug/mL		95
81) Benzo(b)fluoranthene	15.704	252	782729	29.6577	ug/mL		96
82) Benzo(k)fluoranthene	15.751	252	789926	28.7660	ug/mL		94
83) Benzo(a)pyrene	16.298	252	608818m	26.5826	ug/mL		
84) Indeno(1,2,3-cd)pyrene	18.845	276	718375	29.8396	ug/mL		96

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA10.D
Acq On : 10 Sep 2012 4:01 pm
Operator :
Sample : BSD,QC655237
Misc : 190277,1,
ALS Vial : 10 Sample Multiplier: 1

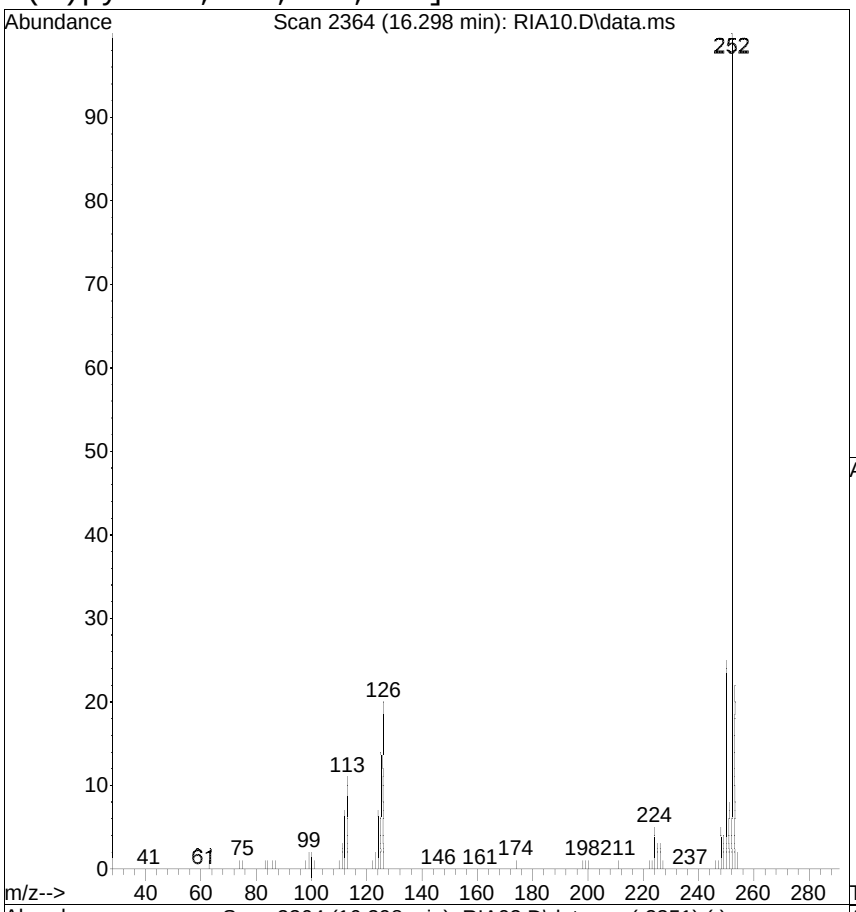
Quant Time: Sep 10 16:30:03 2012
Quant Method : G:\msbna09\091012\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	18.892	278	632194	30.2202	ug/mL	97
86) Benzo(g,h,i)perylene	19.533	276	608834	29.1804	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)pyrene; 27; MI; u]

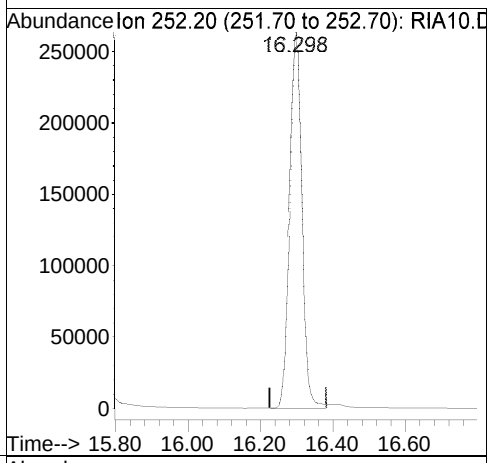
Raw



#83
Benzo(a)pyrene
Concen: 26.5826 ug/mL m
RT: 16.298 min Scan# 2364
Delta R.T. -0.000 min
Lab File: RIA10.D
Acq: 10 Sep 2012 4:01 pm

Tgt Ion:252 Resp: 608818

Ion	Ratio	Lower	Upper
252	100		
253	21.9	2.6	42.6
125	14.0	0.0	36.8



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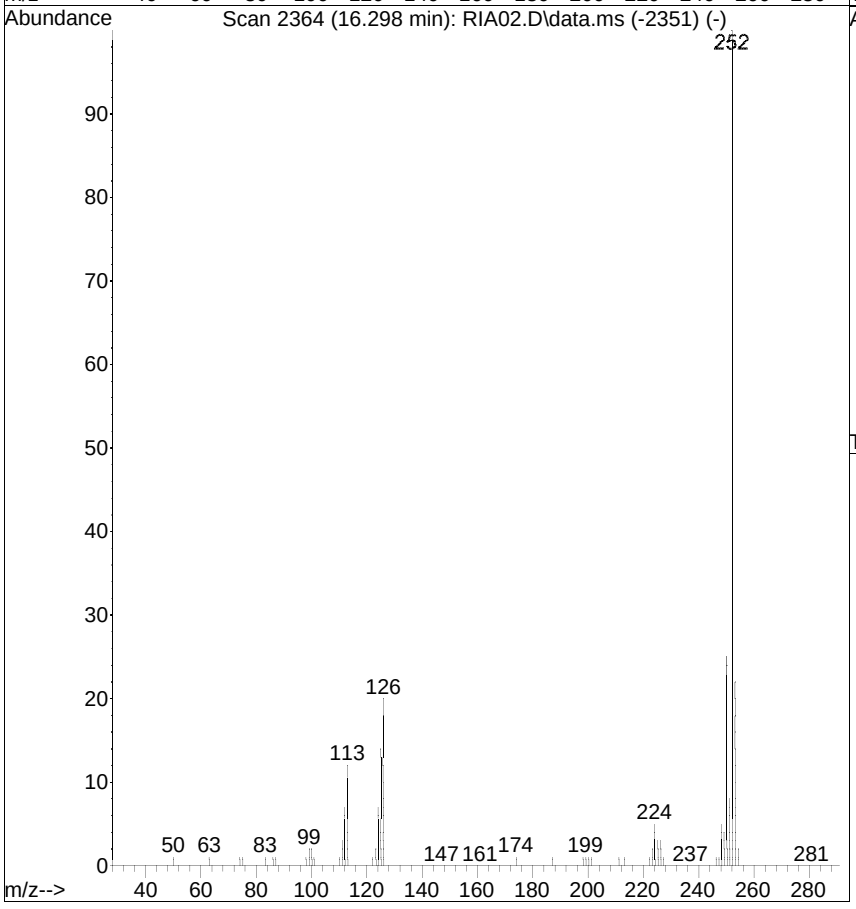
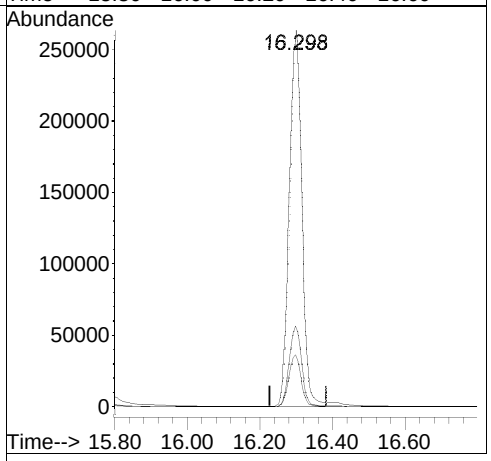
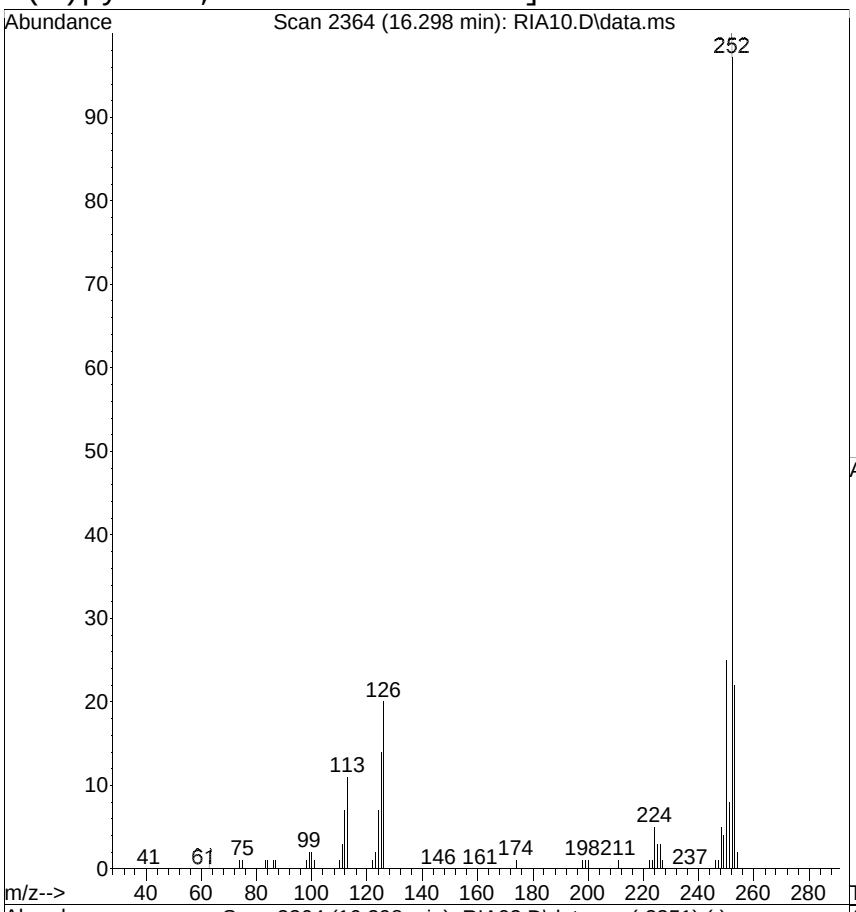




[Benzo(a)pyrene; before version]

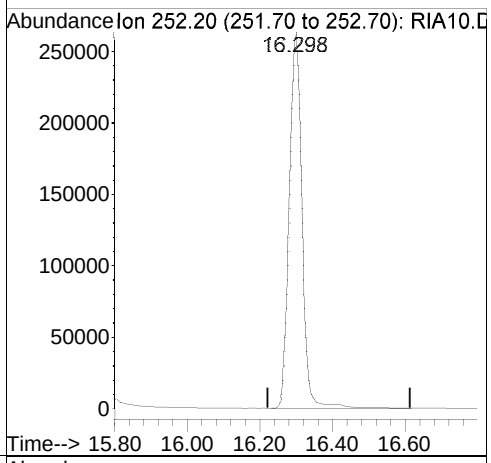
Raw



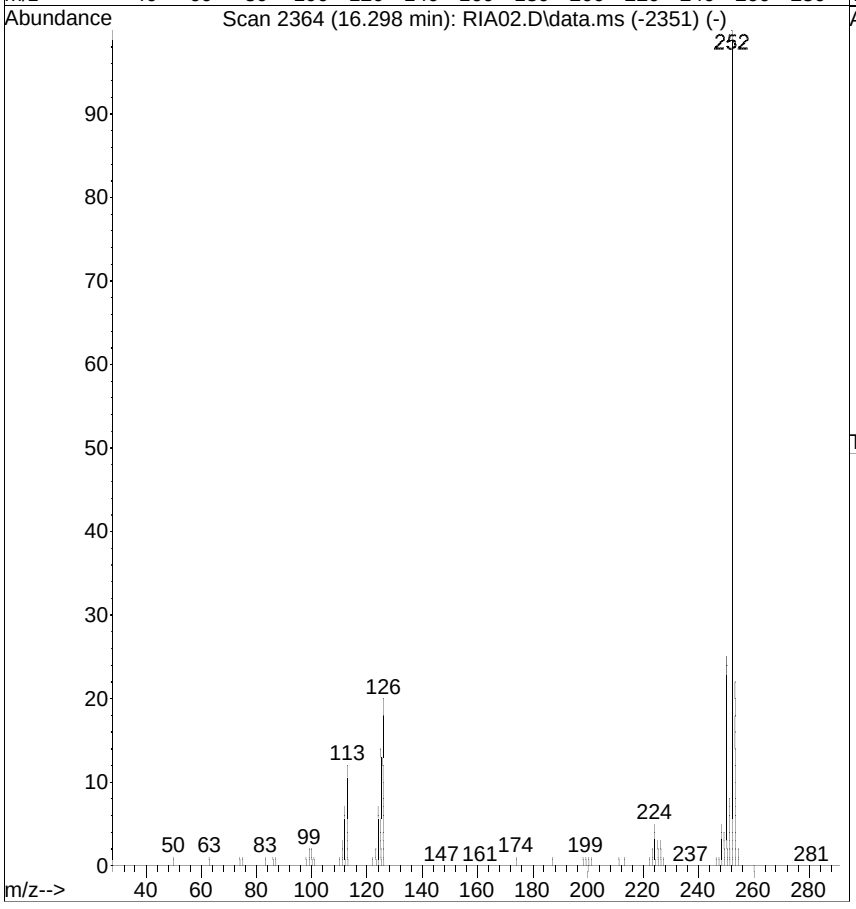
#83
Benzo(a)pyrene
Concen: 27.0446 ug/mL
RT: 16.298 min Scan# 2364
Delta R.T. -0.000 min
Lab File: RIA10.D
Acq: 10 Sep 2012 4:01 pm

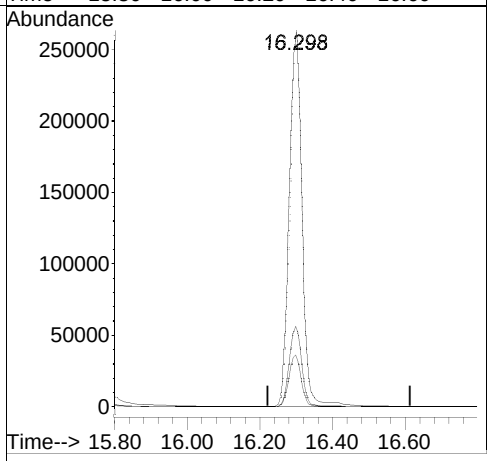
Tgt Ion:252 Resp: 619400

Ion	Ratio	Lower	Upper
252	100		
253	21.5	2.6	42.6
125	13.7	0.0	36.8



Ref





Initial Calibration Raw Data

CURTIS & TOMPKINS DFTPP TUNE FOR 239403 MSBNA Water
EPA 8270D

Inst : MSBNA09 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 582094282007 File : rc507 Time : 05-MAR-2012 13:16

Standards: S18710

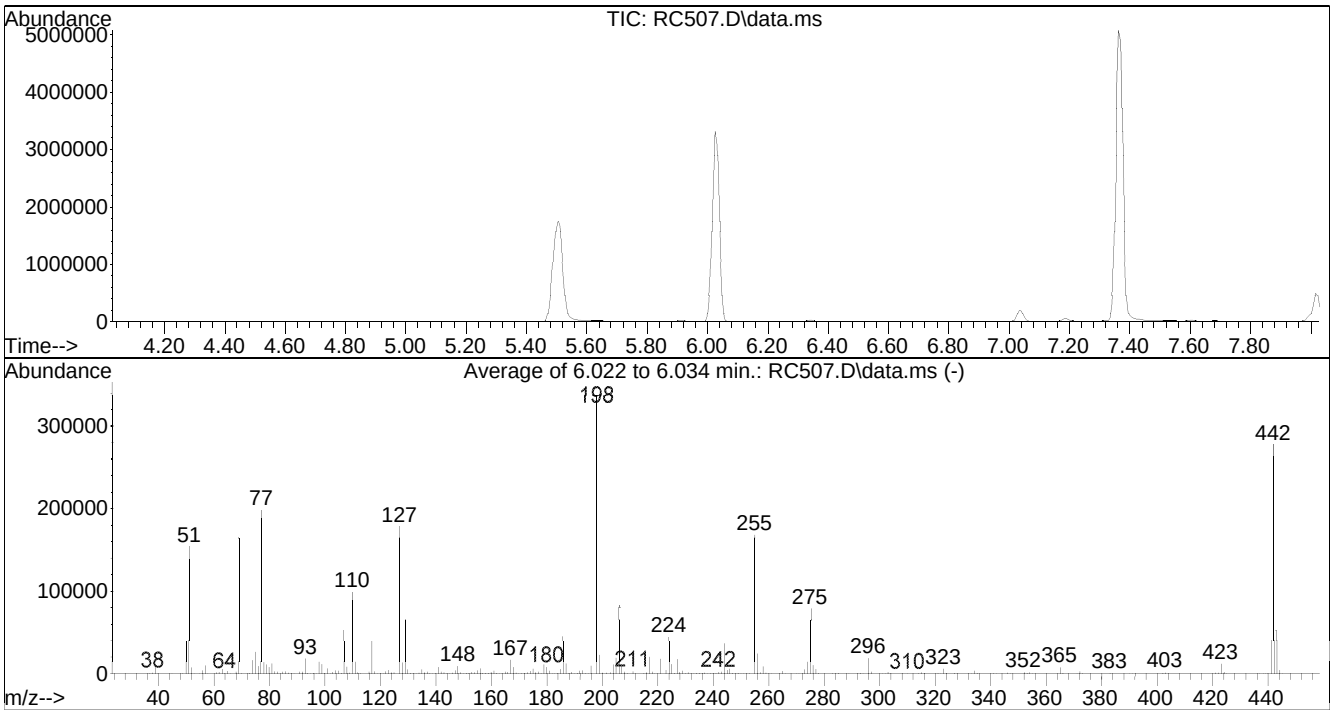
Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	153635	45.79	
68	< 2% of mass 69	2789	1.70	
69		164381	100.00	
70	< 2% of mass 69	652	0.40	
127	40% - 60% of mass 198	177834	53.00	
197	< 1% of mass 198	0	0.00	
198		335509	100.00	
199	5% - 9% of mass 198	22354	6.66	
275	10% - 30% of mass 198	78080	23.27	
365	> 1% of mass 198	7746	2.31	
441	Present, < mass 443	40000	75.25	
442	> 40% and < 100% of mass 198	277525	82.72	
443	17% - 23% of mass 442	53154	19.15	

Analyst: KMH Date: 03/05/12 Reviewer: LW Date: 03/06/12

Data Path : G:\msbna09\030512\
Data File : RC507.D
Acq On : 5 Mar 2012 1:16 pm
Operator :
Sample : TUN,S18710
Misc : DFTPP/PEM
ALS Vial : 3 Sample Multiplier: 1

Integration File: normal.p

Method : G:\msbna09\030512\DFTPP09.M
Title : MSBNA09 BNA DFTPP/PEM
Last Update : Mon Mar 05 11:53:20 2012



AutoFind: Scans 583, 584, 585; Background Corrected with Scan 576

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.8	153635	PASS
68	69	0.00	2	1.7	2789	PASS
69	198	0.00	100	49.0	164381	PASS
70	69	0.00	2	0.4	652	PASS
127	198	40	60	53.0	177834	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	335509	PASS
199	198	5	9	6.7	22354	PASS
275	198	10	30	23.3	78080	PASS
365	198	1	100	2.3	7746	PASS
441	443	0.01	100	75.3	40000	PASS
442	198	40	100	82.7	277525	PASS
443	442	17	23	19.2	53154	PASS

PEM Report

File Name : G:\msbna09\030512\RC507.D
Date Acquired : 5 Mar 2012 1:16 pm
Sample Name : TUN,S18710
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA09 BNA DFTPP/PEM
Inst. Name : MSBNA09
AcquisitionMeth: DFTPP09.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.155	5.50	400557
Benzidine	1.099	7.36	3182657
4,4'-DDT		8.40	1337610
4,4'-DDE		7.60	3911
4,4'-DDD		8.02	120409

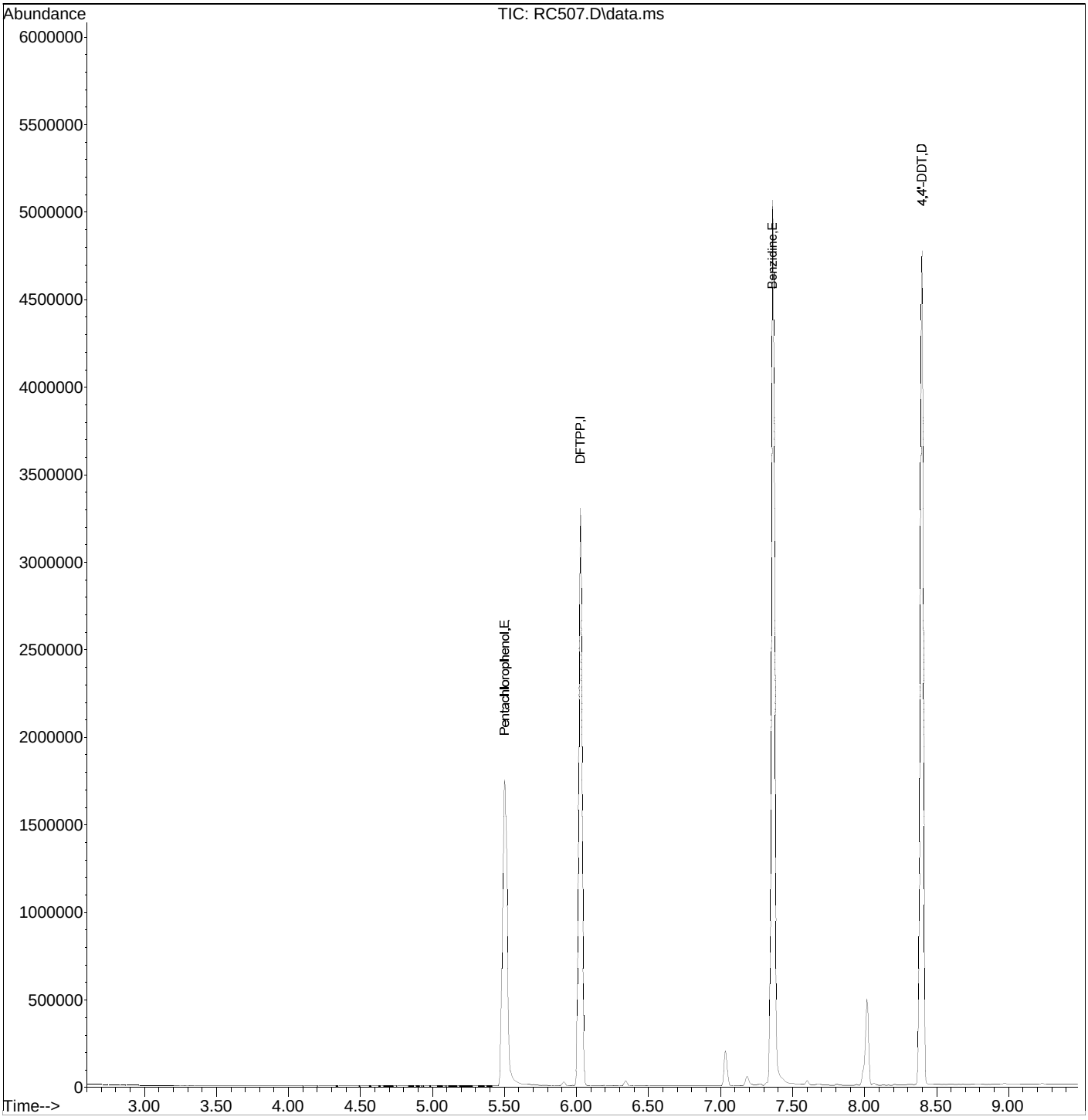
% Breakdown: 4,4'-DDT	LIMIT <=20%	9%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.2	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	1.1	PASS
	8270D <=2	1	PASS

Mon Mar 05 13:25:24 2012

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\030512\
Data File : RC507.D
Acq On : 5 Mar 2012 1:16 pm
Operator :
Sample : TUN,S18710
Misc : DFTPP/PEM
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 05 13:24:10 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP09.M
Quant Title : MSBNA09 BNA DFTPP/PEM
QLast Update : Mon Mar 05 11:53:20 2012
Response via : Continuing Cal File: G:\msbna09\030512\RC501.D



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\030512\
Data File : RC507.D
Acq On : 5 Mar 2012 1:16 pm
Operator :
Sample : TUN,S18710
Misc : DFTPP/PEM
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 05 13:24:10 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP09.M
Quant Title : MSBNA09 BNA DFTPP/PEM
QLast Update : Mon Mar 05 11:53:20 2012
Response via : Continuing Cal File: G:\msbna09\030512\RC501.D

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
2) DFTPP	6.028	198	599427	50.0000	ug/mL	0.00
4) 4,4'-DDT	8.398	235	1337610	50.0000	ug/mL	-0.01
Target Compounds						Qvalue
1) Pentachlorophenol	5.504	266	400557	60.5064	ug/mL	99
3) Benzidine	7.363	184	3182657	51.0116	ug/mL	96
5) 4,4'-DDE	7.604	246	3911	No CC lev		
6) 4,4'-DDD	8.016	235	120409	No CC lev		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS DFTPP TUNE FOR 239403 MSBNA Water
EPA 8270D

Inst : MSBNA09 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 582366461001 File : ria01 Time : 10-SEP-2012 11:41

Standards: S20011

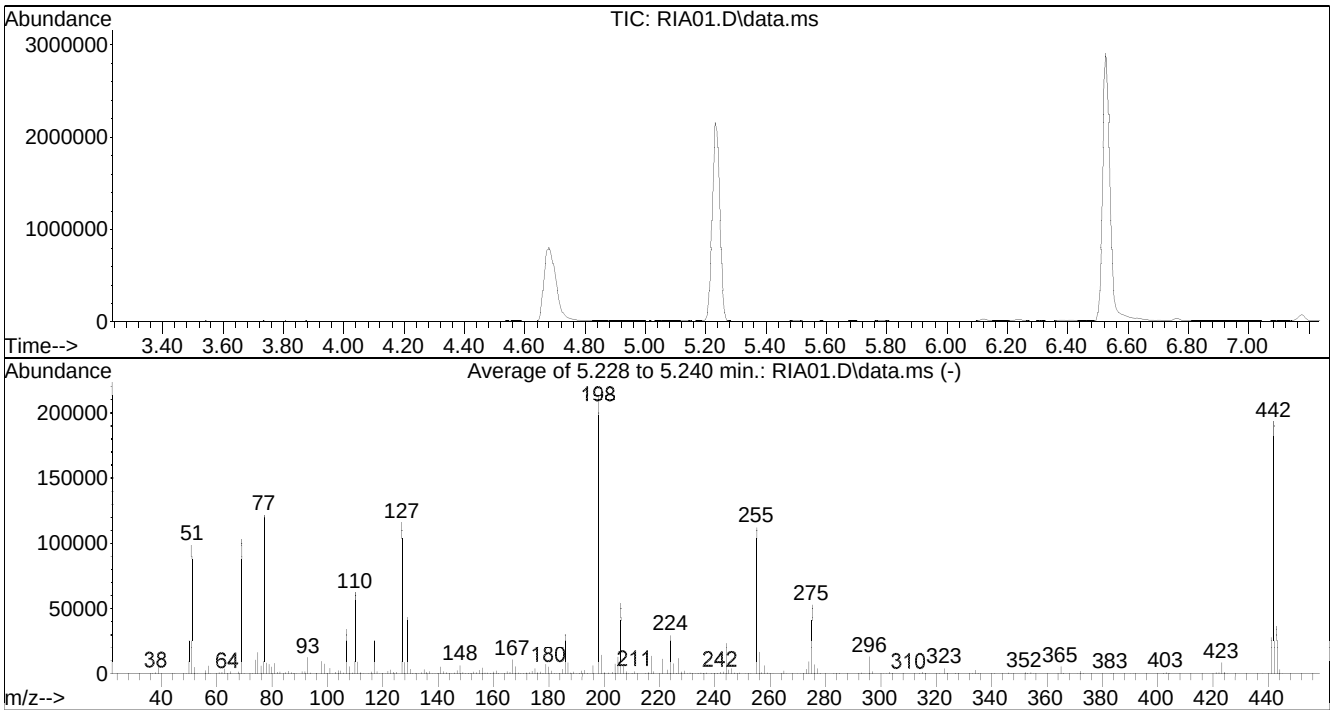
Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	98303	46.27	
68	< 2% of mass 69	1612	1.56	
69		103089	100.00	
70	< 2% of mass 69	431	0.42	
127	40% - 60% of mass 198	115813	54.52	
197	< 1% of mass 198	0	0.00	
198		212437	100.00	
199	5% - 9% of mass 198	14126	6.65	
275	10% - 30% of mass 198	52976	24.94	
365	> 1% of mass 198	5572	2.62	
441	Present, < mass 443	28208	77.43	
442	> 40% and < 100% of mass 198	193386	91.03	
443	17% - 23% of mass 442	36429	18.84	

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

Data Path : G:\msbna09\091012\
Data File : RIA01.D
Acq On : 10 Sep 2012 11:41 am
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Integration File: normal.p

Method : C:\msdchem\1\METHODS\DFTPP09.M
Title : MSBNA09 BNA DFTPP/PEM
Last Update : Fri Sep 07 15:46:36 2012



AutoFind: Scans 448, 449, 450; Background Corrected with Scan 441

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.3	98303	PASS
68	69	0.00	2	1.6	1612	PASS
69	198	0.00	100	48.5	103089	PASS
70	69	0.00	2	0.4	431	PASS
127	198	40	60	54.5	115813	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	212437	PASS
199	198	5	9	6.6	14126	PASS
275	198	10	30	24.9	52976	PASS
365	198	1	100	2.6	5572	PASS
441	443	0.01	100	77.4	28208	PASS
442	198	40	100	91.0	193386	PASS
443	442	17	23	18.8	36429	PASS

PEM Report

File Name : G:\msbna09\091012\RIA01.D
Date Acquired : 10 Sep 2012 11:41 am
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA09 BNA DFTPP/PEM
Inst. Name : MSBNA09
AcquisitionMeth: DFTPP09.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.798	4.68	229055
Benzidine	0.974	6.53	1898793
4,4'-DDT		7.55	935026
4,4'-DDE		6.76	4626
4,4'-DDD		7.17	32267

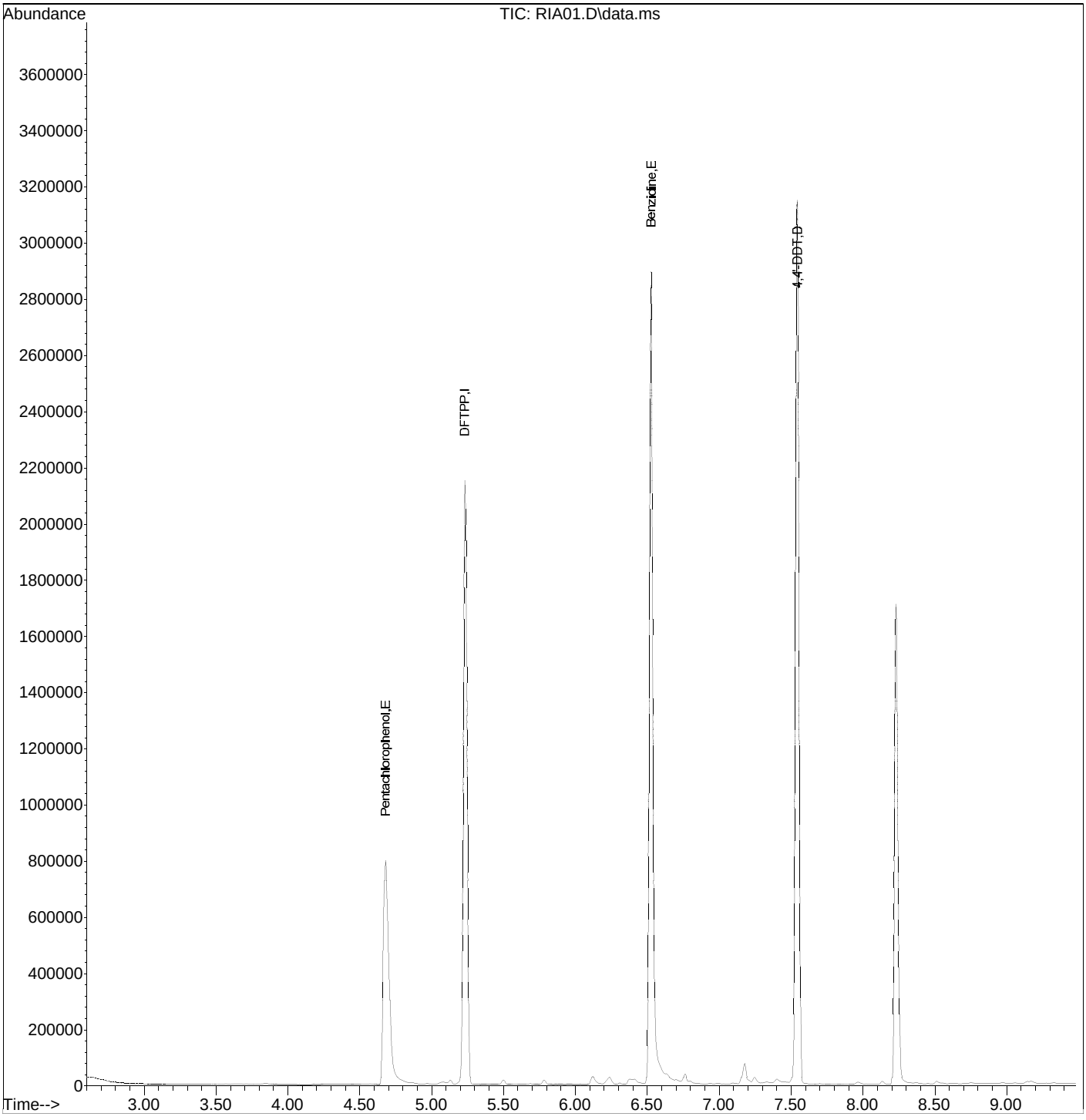
% Breakdown: 4,4'-DDT	LIMIT <=20%	4%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.8	PASS
	8270D <=2	2	PASS
Tailing: Benzidine	8270C <3.0	1.0	PASS
	8270D <=2	1	PASS

Mon Sep 10 11:52:32 2012

Quantitation Report (Not Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA01.D
Acq On : 10 Sep 2012 11:41 am
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 11:52:24 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP09.M
Quant Title : MSBNA09 BNA DFTPP/PEM
QLast Update : Mon Sep 10 11:52:15 2012
Response via : Continuing Cal File: G:\msbna09\091012\RIA01.D



Quantitation Report (Not Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA01.D
Acq On : 10 Sep 2012 11:41 am
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 11:52:24 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP09.M
Quant Title : MSBNA09 BNA DFTPP/PEM
QLast Update : Mon Sep 10 11:52:15 2012
Response via : Continuing Cal File: G:\msbna09\091012\RIA01.D

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
2) DFTPP	5.234	198	400257	50.0000	ug/mL	0.00
4) 4,4'-DDT	7.545	235	935026	50.0000	ug/mL	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	4.681	266	229055	50.0000	ug/mL	98
3) Benzidine	6.528	184	1898793	50.0000	ug/mL	98
5) 4,4'-DDE	6.763	246	4626	No CC lev		
6) 4,4'-DDD	7.175	235	32267	No CC lev		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 MSBNA Water: EPA 8270D

Inst : MSBNA09
Calnum : 582094282001
Units : ug/mL

Name : 6PTBNA9
Date : 05-MAR-2012 13:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	rc508	582094282008	ICAL	05-MAR-2012 13:32	S19015
L2	rc509	582094282009	ICAL	05-MAR-2012 14:02	S19016
L3	rc510	582094282010	ICAL	05-MAR-2012 14:32	S19017
L4	rc511	582094282011	ICAL	05-MAR-2012 15:02	S19018
L5	rc512	582094282012	ICAL	05-MAR-2012 15:32	S19019
L6	rc513	582094282013	ICAL	05-MAR-2012 16:02	S19020
L7	rc514	582094282014	ICAL	05-MAR-2012 16:32	S19021
L8	rc515	582094282015	ICAL	05-MAR-2012 17:01	S19022
L9	rc516	582094282016	ICAL	05-MAR-2012 17:32	S19023

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene	1.2492	1.2089	1.2426	1.2161	1.2056	1.1841	1.0878	1.0327	1.0237	AVRG		0.86118		1.1612	8	20	0.700	0.99	
3,3'-Dichlorobenzidine			0.3930	0.4029	0.4009	0.3966	0.3886	0.3866	0.3832	AVRG		2.54374		0.3931	2	20	0.010	0.99	
Benzo(a)anthracene	1.2159	1.1703	1.1796	1.1847	1.1822	1.1566	1.1148	1.1286	1.1456	AVRG		0.85891		1.1643	3	20	0.800	0.99	
bis(2-Ethylhexyl)phthalate			1.0264	1.0273	1.0157	0.9817	0.8796	0.7994	0.7225	AVRG		1.08485		0.9218	13	20	0.010	0.99	
Benzo(b)fluoranthene	1.0471	1.0706	1.1345	1.1704	1.1466	1.1730	1.1396	1.1950	1.2389	AVRG		0.87245		1.1462	5	20	0.700	0.99	
Benzo(k)fluoranthene	1.1532	1.1693	1.2108	1.2102	1.2256	1.2087	1.1939	1.1769	1.1847	AVRG		0.83851		1.1926	2	20	0.700	0.99	
Benzo(a)pyrene	0.8899	0.9223	0.9775	1.0115	1.0227	1.0229	1.0206	1.0309	1.0536	AVRG		1.00537		0.9947	5	20	0.700	0.99	
Indeno(1,2,3-cd)pyrene	0.9208	0.9126	1.0102	1.0784	1.0982	1.0879	1.0713	1.1083	1.1222	AVRG		0.95644		1.0455	8	20	0.500	0.99	
Dibenz(a,h)anthracene	0.7890	0.7951	0.8790	0.9373	0.9548	0.9477	0.9336	0.9584	0.9819	AVRG		1.10068		0.9085	8	20	0.400	0.99	
Nitrobenzene-d5	0.5341m	0.5341m	0.5807	0.5768	0.5806	0.5811	0.5552	0.5346	0.5377	AVRG		1.79472		0.5572	4	20	0.05	0.99	
2-Fluorobiphenyl	1.7842	1.6745	1.7040	1.6471	1.6379	1.5880	1.4493	1.3712	1.3426	AVRG		0.63386		1.5776	10	20	0.05	0.99	
Terphenyl-d14	0.9948	0.9620	0.9752	0.9639	0.9650	0.9406	0.9056	0.8937	0.8989	AVRG		1.05887		0.9444	4	20	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Naphthalene	2.0000	8	5.0000	4	10.000	7	16.000	5	20.000	4	25.000	2	40.000	-6	50.000	-11	60.000	-12
3,3'-Dichlorobenzidine					20.000	0	32.000	2	40.000	2	50.000	1	80.000	-1	100.00	-2	120.00	-3
Benzo(a)anthracene	2.0000	4	5.0000	1	10.000	1	16.000	2	20.000	2	25.000	-1	40.000	-4	50.000	-3	60.000	-2
bis(2-Ethylhexyl)phthalate					10.000	11	16.000	11	20.000	10	25.000	7	40.000	-5	50.000	-13	60.000	**-22**
Benzo(b)fluoranthene	2.0000	-9	5.0000	-7	10.000	-1	16.000	2	20.000	0	25.000	2	40.000	-1	50.000	4	60.000	8
Benzo(k)fluoranthene	2.0000	-3	5.0000	-2	10.000	2	16.000	1	20.000	3	25.000	1	40.000	0	50.000	-1	60.000	-1
Benzo(a)pyrene	2.0000	-11	5.0000	-7	10.000	-2	16.000	2	20.000	3	25.000	3	40.000	3	50.000	4	60.000	6
Indeno(1,2,3-cd)pyrene	2.0000	-12	5.0000	-13	10.000	-3	16.000	3	20.000	5	25.000	4	40.000	2	50.000	6	60.000	7
Dibenz(a,h)anthracene	2.0000	-13	5.0000	-12	10.000	-3	16.000	3	20.000	5	25.000	4	40.000	3	50.000	5	60.000	8
Nitrobenzene-d5	2.0000	-4	5.0000	-4	10.000	4	16.000	4	20.000	4	25.000	4	40.000	0	50.000	-4	60.000	-3
2-Fluorobiphenyl	2.0000	13	5.0000	6	10.000	8	16.000	4	20.000	4	25.000	1	40.000	-8	50.000	-13	60.000	-15
Terphenyl-d14	2.0000	5	5.0000	2	10.000	3	16.000	2	20.000	2	25.000	0	40.000	-4	50.000	-5	60.000	-5

KMH 03/06/12 [Aniline]: Picked or reassigned peak in all levels.

KMH 03/06/12 [Nitrobenzene-d5]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [Benzoic acid]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [Benzo(g,h,i)perylene]: Corrected automatically drawn baseline in multiple levels.

KMH 03/06/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline in ICAL (rc516).

LLH 04/18/12 : cut 2loops of column to get better peak resolution for 2,4-Dinitrophenol

LLH 04/18/12 : cut another loop, 2,4-Dinitrophenol pweak was still bad for LOD

KMH 04/23/12 : 3/8/12 cut 1 loop and primed, for failing low 2,4-Dinitrophenol, benzoic acid and pentachlorophenol

KMH 04/23/12 : 3/15/12 cut 1 loop and primed, for failing low 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, benzoic acid and pentachlorophenol

KMH 04/27/12 : 4/27/12 cut 1 loop, pentachlorophenol was failing low in the ccv

LLH 07/03/12 : cut about a loop of column...2,4-Dinitrophenol is still fails for LOD

LLH 07/12/12 : cut 2 loops of column...still no 2,4-Dinitrophenol at 2X RL for LOD...primed then baked out

LLH 09/13/12 : cut 2 loops of column then primed...CCV failed 24DNP min RF and PCP at -22%D

Analyst: KMH Date: 03/06/12 Reviewer: LW Date: 03/07/12

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

582094282001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 MSBNA Water
EPA 8270D

Inst : MSBNA09 Name : 6PTBNA9
Calnum : 582094282001 Cal Date : 05-MAR-2012

ICV 582094282017 (rc517 05-MAR-2012) stds: S19392

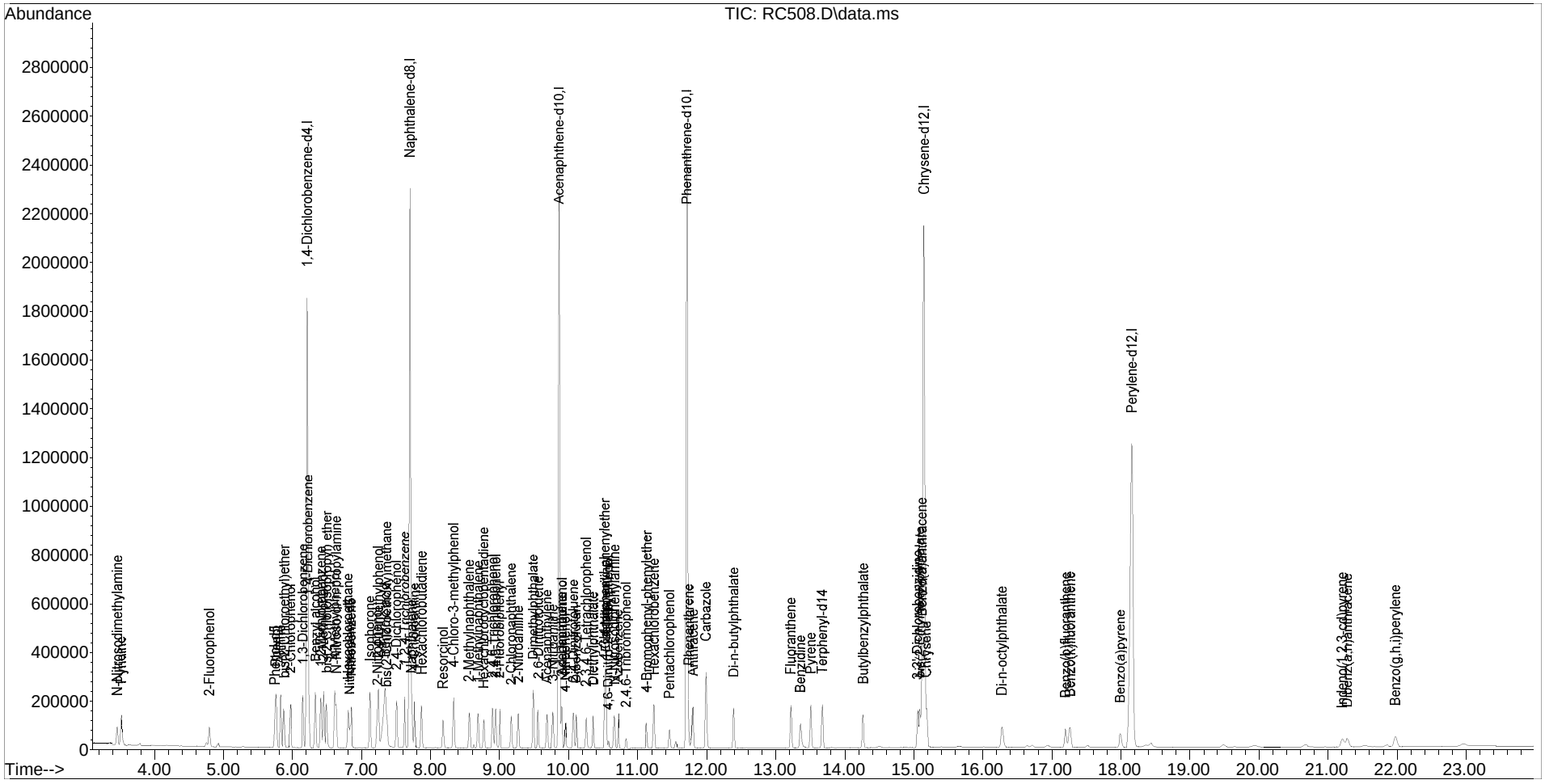
Analyte	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	40.00	35.71	ug/mL	-11	30	
3,3'-Dichlorobenzidine	60.00	59.59	ug/mL	-1	30	
Benzo(a)anthracene	40.00	38.25	ug/mL	-4	30	
bis(2-Ethylhexyl)phthalate	40.00	36.84	ug/mL	-8	30	
Benzo(b)fluoranthene	40.00	40.69	ug/mL	2	30	
Benzo(k)fluoranthene	40.00	38.21	ug/mL	-4	30	
Benzo(a)pyrene	40.00	43.59	ug/mL	9	30	
Indeno(1,2,3-cd)pyrene	40.00	40.79	ug/mL	2	30	
Dibenz(a,h)anthracene	40.00	39.07	ug/mL	-2	30	

Analyst: KMH Date: 03/06/12 Reviewer: LW Date: 03/07/12

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC508.D
Acq On : 5 Mar 2012 1:32 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 06 10:31:22 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC508.D
Acq On : 5 Mar 2012 1:32 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 06 10:31:22 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.210	152	374241	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.704	136	1393093	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.863	164	754473	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.716	188	1398048	40.0000	ug/mL	0.00
70) Chrysene-d12	15.151	240	1393187	40.0000	ug/mL	0.00
79) Perylene-d12	18.162	264	1196814	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.516	79	81129	3.4442	ug/mL	90
3) N-Nitrosodimethylamine	3.463	42	33837	3.6779	ug/mL	# 54
4) 2-Fluorophenol	4.798	112	30811	1.7132	ug/mL	87
5) Phenol-d5	5.745	99	43786	1.8344	ug/mL	78
6) Phenol	5.763	94	86593	3.9653	ug/mL	79
7) Aniline	5.834	93	107194m	3.7194	ug/mL	
8) bis(2-Chloroethyl)ether	5.881	93	69730	3.9809	ug/mL	95
9) 2-Chlorophenol	5.975	128	60781	3.9706	ug/mL	96
10) 1,3-Dichlorobenzene	6.151	146	66100	4.3484	ug/mL	94
11) 1,4-Dichlorobenzene	6.228	146	67140	4.1618	ug/mL	90
12) Benzyl alcohol	6.334	108	43892	3.6856	ug/mL	98
13) 1,2-Dichlorobenzene	6.410	146	63534	4.2038	ug/mL	95
14) 2-Methylphenol	6.445	107	51722	4.1083	ug/mL	92
15) bis(2-Chloroisopropyl) ether	6.493	45	111757	3.6831	ug/mL	91
16) 4-Methylphenol	6.616	107	74430	3.9596	ug/mL	93
17) N-Nitroso-di-n-propylamine	6.634	70	49241	3.6546	ug/mL	80
18) Hexachloroethane	6.804	117	26043	4.0611	ug/mL	88
20) Nitrobenzene-d5	6.834	82	37201m	1.8695	ug/mL	
21) Nitrobenzene	6.851	77	73233	4.0475	ug/mL	98
22) Isophorone	7.128	82	135776	3.8805	ug/mL	99
23) 2-Nitrophenol	7.234	139	23108	3.2018	ug/mL	96
24) 2,4-Dimethylphenol	7.251	107	62849	4.4787	ug/mL	91
25) bis(2-Chloroethoxy)methane	7.363	93	40479	1.9636	ug/mL	98
26) Benzoic acid	7.340	105	169827m	14.2624	ug/mL	
27) 2,4-Dichlorophenol	7.510	162	44842	4.1631	ug/mL	97
28) 1,2,4-Trichlorobenzene	7.628	180	48020	4.6097	ug/mL	97
29) Naphthalene	7.728	128	87012	1.9658	ug/mL	98
30) 4-Chloroaniline	7.769	127	68689	3.9408	ug/mL	88
31) Hexachlorobutadiene	7.875	225	24733	4.5668	ug/mL	97
32) Resorcinol	8.187	110	47936	3.1776	ug/mL	94
33) 4-Chloro-3-methylphenol	8.334	107	54183	4.1392	ug/mL	88
34) 2-Methylnaphthalene	8.563	142	57023	2.0001	ug/mL	96
35) 1-Methylnaphthalene	8.692	142	54777	1.9677	ug/mL	94
37) Hexachlorocyclopentadiene	8.769	237	21737	3.9276	ug/mL	97
38) 2,4,6-Trichlorophenol	8.904	196	28179	4.0486	ug/mL	93

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC508.D
Acq On : 5 Mar 2012 1:32 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 06 10:31:22 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	8.945	196	31987	4.2199	ug/mL #	84
40) 2-Fluorobiphenyl	9.004	172	67305	2.1929	ug/mL	96
41) 2-Chloronaphthalene	9.169	162	51012	2.1015	ug/mL	95
42) 2-Nitroaniline	9.275	65	35982	3.4706	ug/mL	94
43) Dimethylphthalate	9.486	163	123021	4.4055	ug/mL	98
44) 2,6-Dinitrotoluene	9.563	165	22691	3.4495	ug/mL	96
45) Acenaphthylene	9.686	152	82701	2.0381	ug/mL	97
46) 3-Nitroaniline	9.775	138	27175	3.3696	ug/mL	86
47) Acenaphthene	9.898	154	51872	2.0784	ug/mL	97
48) 2,4-Dinitrophenol	9.904	184	1413	0.5025	ug/mL #	1
49) 4-Nitrophenol	9.957	109	14747	3.4096	ug/mL #	85
50) Dibenzofuran	10.110	168	73875	2.1765	ug/mL	75
51) 2,4-Dinitrotoluene	10.069	165	30768	3.4579	ug/mL	97
52) 2,3,4,6-Tetrachlorophenol	10.257	232	18935	3.5588	ug/mL	88
53) Diethylphthalate	10.357	149	66564	2.2392	ug/mL	100
54) 4-Chlorophenyl-phenylether	10.522	204	27874	2.3473	ug/mL #	68
55) Fluorene	10.539	166	62546	2.2030	ug/mL	88
56) 4-Nitroaniline	10.533	138	29905	3.7330	ug/mL #	1
57) 2,4,6-Tribromophenol	10.833	330	4236	1.2433	ug/mL	98
59) 4,6-Dinitro-2-methylphenol	10.575	198	4796	0.9573	ug/mL	77
60) N-Nitrosodiphenylamine	10.663	169	45076	1.9527	ug/mL	89
61) Azobenzene	10.722	77	85160	1.9126	ug/mL	94
62) 4-Bromophenyl-phenylether	11.133	248	14770	1.8805	ug/mL #	74
63) Hexachlorobenzene	11.239	284	28137	3.5996	ug/mL #	67
64) Pentachlorophenol	11.469	266	10770	2.1457	ug/mL	99
65) Phenanthrene	11.739	178	93864	1.9304	ug/mL	97
66) Anthracene	11.804	178	94639	1.9626	ug/mL	96
67) Carbazole	11.986	167	178535	4.0283	ug/mL	88
68) Di-n-butylphthalate	12.392	149	119725	2.0387	ug/mL	98
69) Fluoranthene	13.221	202	96563	1.8858	ug/mL	98
71) Benzidine	13.363	184	66410	3.3961	ug/mL	92
72) Pyrene	13.510	202	99425	1.8770	ug/mL	94
73) Terphenyl-d14	13.674	244	69295	2.0273	ug/mL	90
74) Butylbenzylphthalate	14.268	149	45400	1.6291	ug/mL	89
75) 3,3'-Dichlorobenzidine	15.057	252	50039	3.0840	ug/mL	97
76) Benzo(a)anthracene	15.121	228	84701	1.8621	ug/mL	98
77) bis(2-Ethylhexyl)phthalate	15.092	149	65585	1.6058	ug/mL	96
78) Chrysene	15.186	228	83119	1.8597	ug/mL	95
80) Di-n-octylphthalate	16.280	149	86432	1.4322	ug/mL	87
81) Benzo(b)fluoranthene	17.204	252	62657	1.6780	ug/mL	99
82) Benzo(k)fluoranthene	17.268	252	69006	1.8482	ug/mL	96
83) Benzo(a)pyrene	17.992	252	53255	1.6448	ug/mL	98
84) Indeno(1,2,3-cd)pyrene	21.209	276	55104	1.5065	ug/mL	97

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC508.D
Acq On : 5 Mar 2012 1:32 pm
Operator :
Sample : ICAL,S19015
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

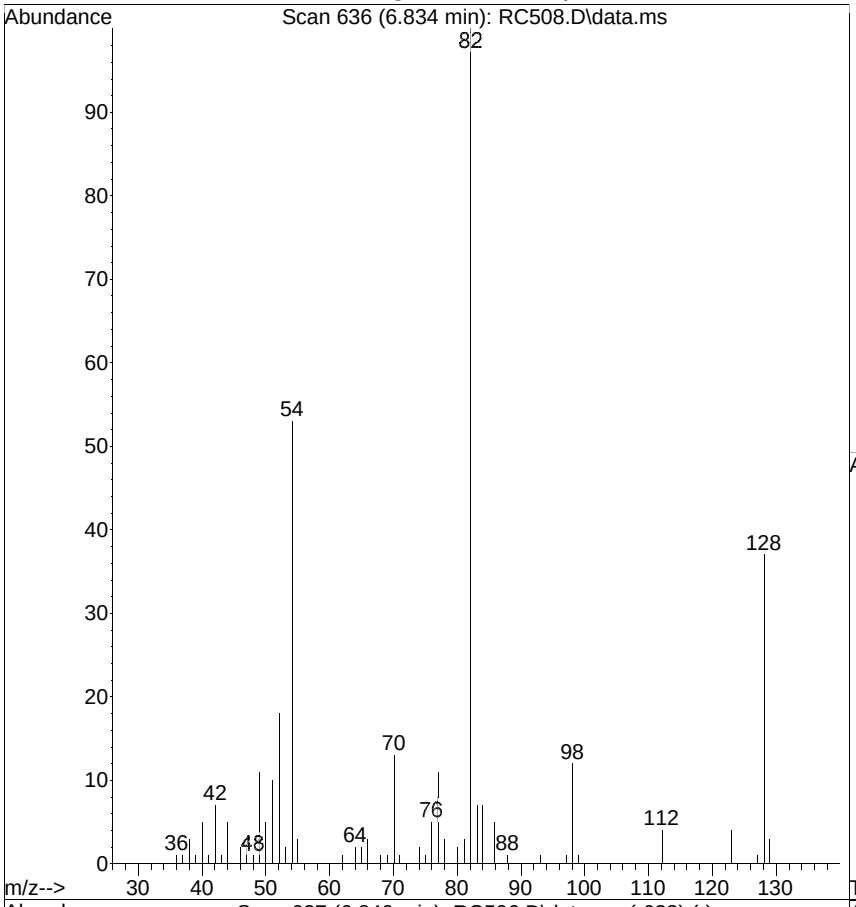
Quant Time: Mar 06 10:31:22 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.280	278	47216	1.4851	ug/mL	96
86) Benzo(g,h,i)perylene	21.980	276	50765	1.5879	ug/mL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Nitrobenzene-d5; 2.000 ug/mL; response=37201; MI]

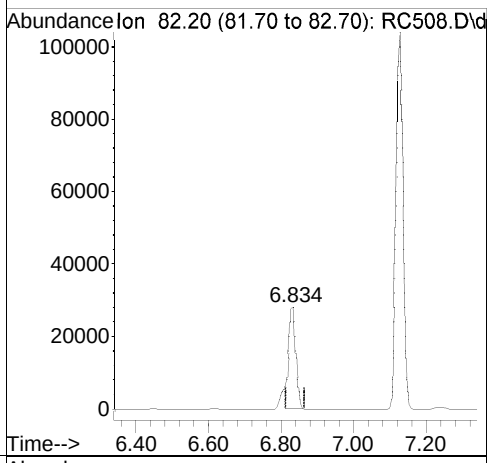
Raw



#20
Nitrobenzene-d5
Concen: 1.8695 ug/mL m
RT: 6.834 min Scan# 636
Delta R.T. -0.006 min
Lab File: RC508.D
Acq: 5 Mar 2012 1:32 pm

Tgt Ion: 82 Resp: 37201

Ion	Ratio	Lower	Upper
82	100		
128	36.9	15.0	55.0
54	53.2	56.0	96.0#



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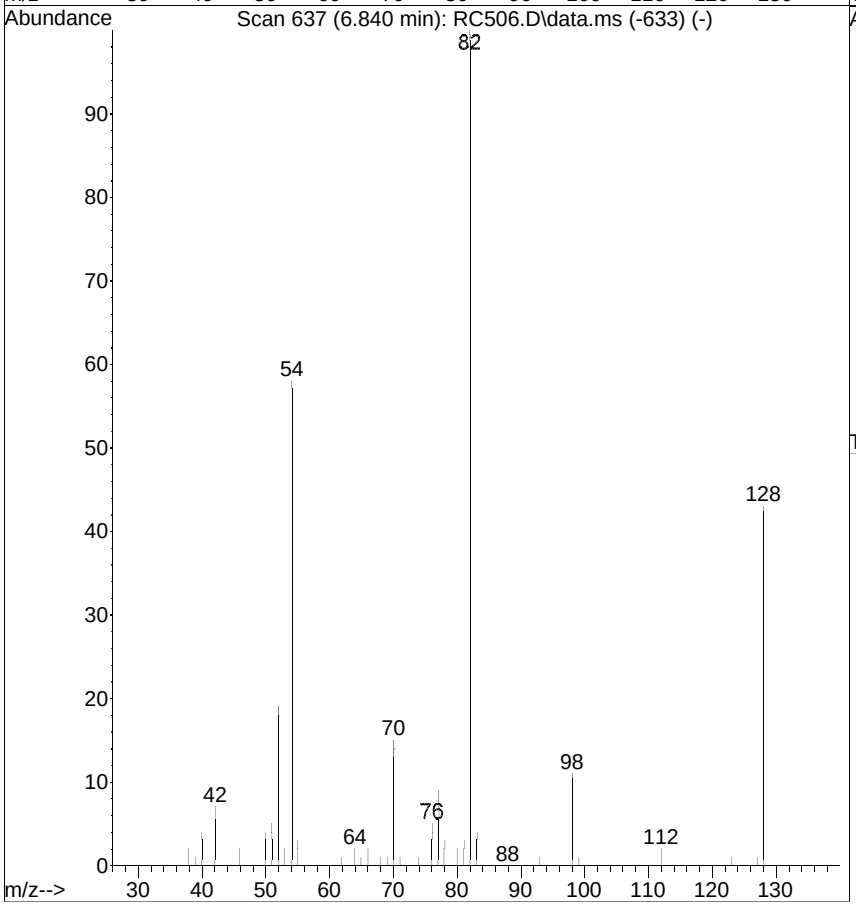
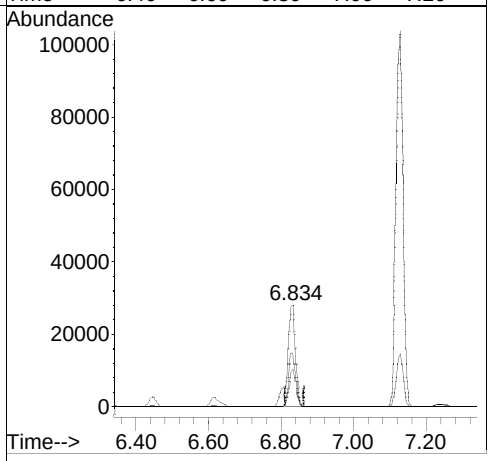
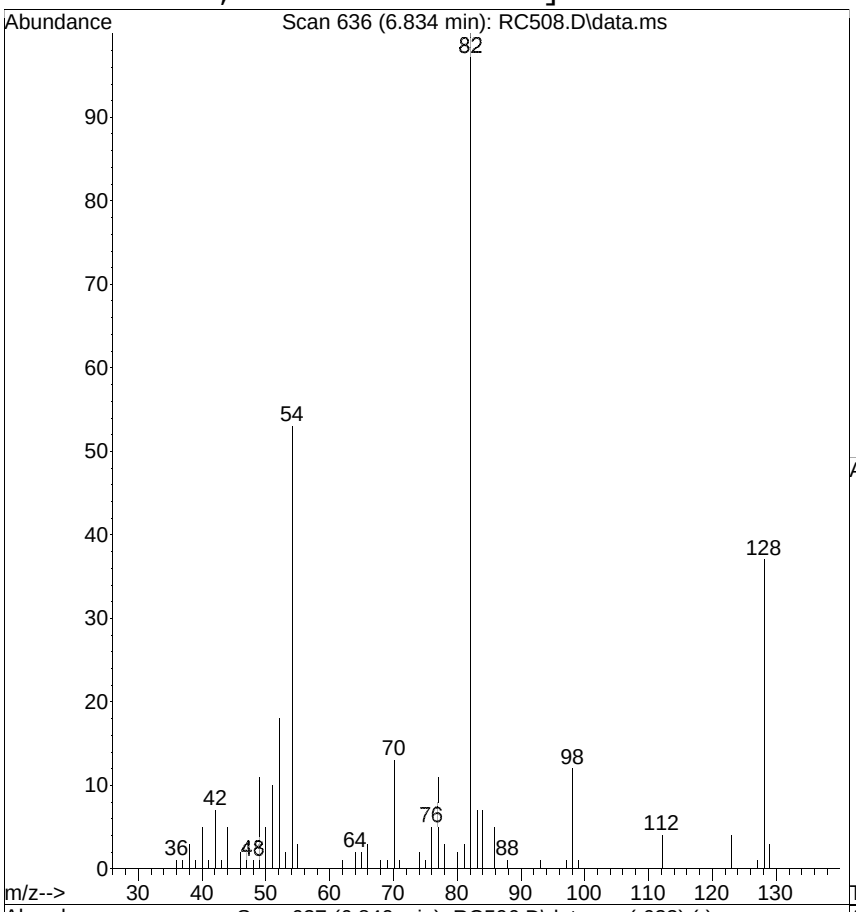




[Nitrobenzene-d5; before version]

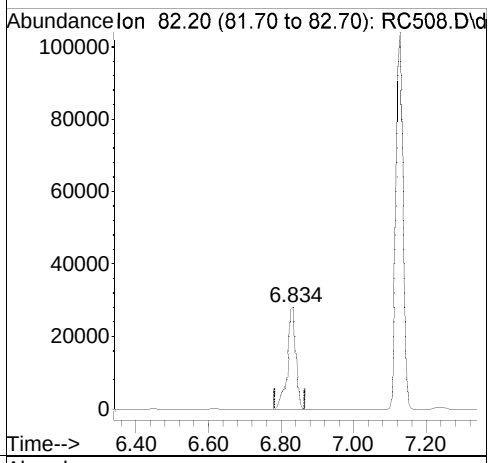
Raw



#20
Nitrobenzene-d5
Concen: 2.2114 ug/mL
RT: 6.834 min Scan# 636
Delta R.T. -0.006 min
Lab File: RC508.D
Acq: 5 Mar 2012 1:32 pm

Tgt Ion: 82 Resp: 44004

Ion	Ratio	Lower	Upper
82	100		
128	36.9	15.0	55.0
54	53.2	56.0	96.0#



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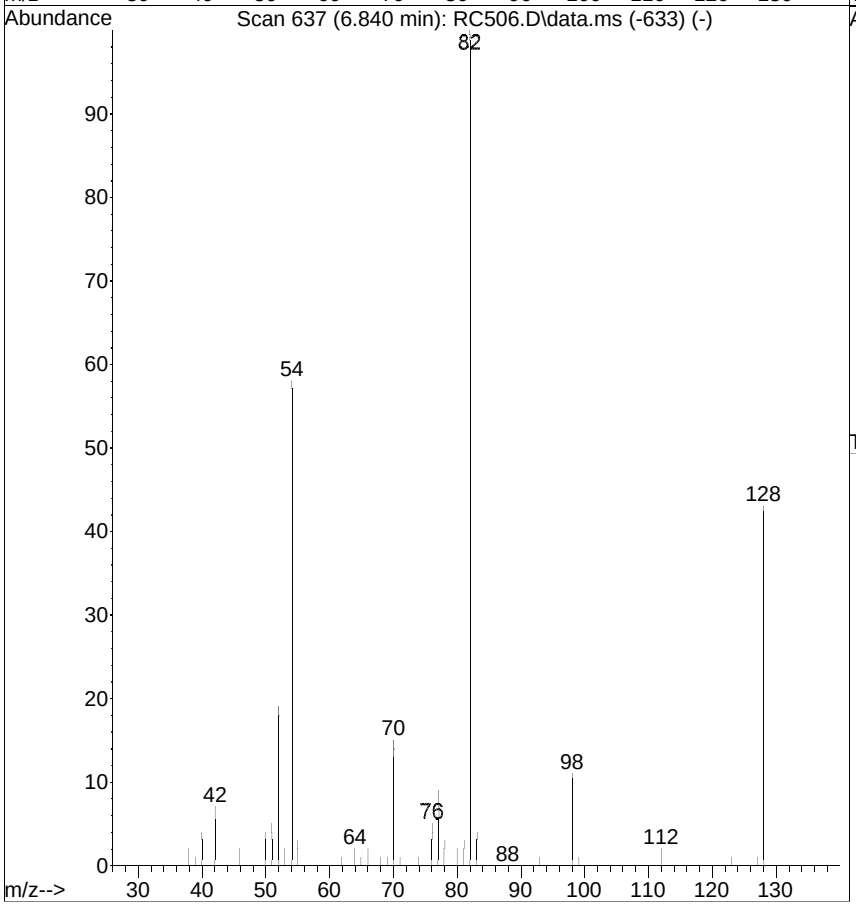
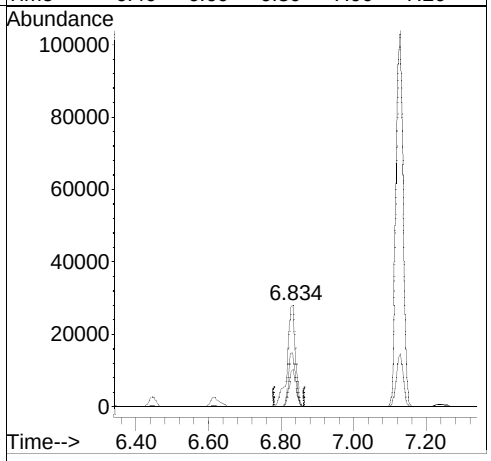
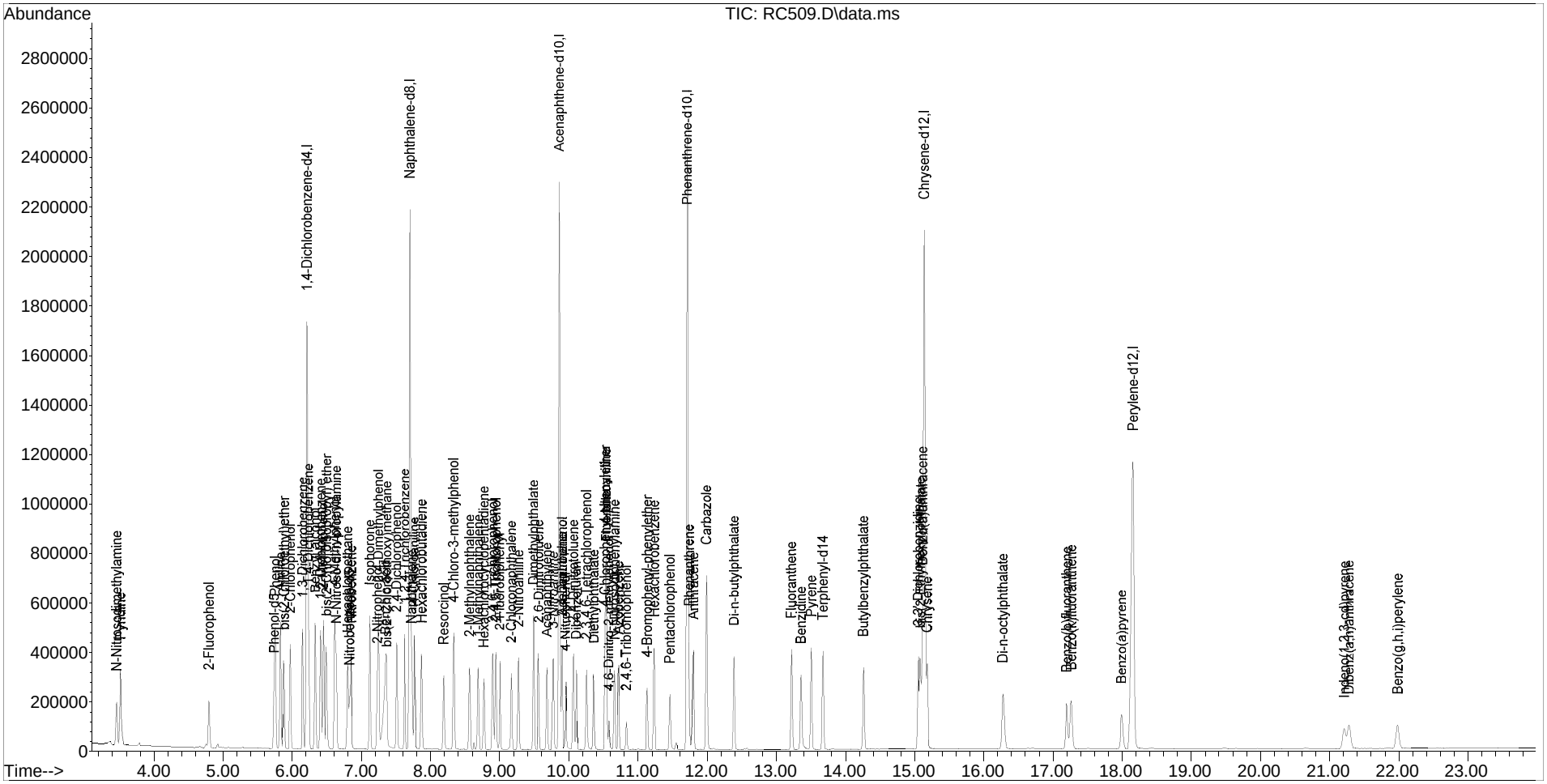




Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC509.D
Acq On : 5 Mar 2012 2:02 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 06 10:32:12 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC509.D
Acq On : 5 Mar 2012 2:02 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 06 10:32:12 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.210	152	354379	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.704	136	1332315	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.863	164	727952	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.716	188	1362943	40.0000	ug/mL	0.00
70) Chrysene-d12	15.145	240	1304208	40.0000	ug/mL	-0.01
79) Perylene-d12	18.162	264	1102857	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.516	79	196630	8.8154	ug/mL	90
3) N-Nitrosodimethylamine	3.463	42	76855	8.8220	ug/mL	# 52
4) 2-Fluorophenol	4.798	112	73312	4.3049	ug/mL	85
5) Phenol-d5	5.745	99	101676	4.4985	ug/mL	78
6) Phenol	5.763	94	198005	9.5753	ug/mL	78
7) Aniline	5.834	93	247160m	9.0566	ug/mL	
8) bis(2-Chloroethyl)ether	5.881	93	159016	9.5871	ug/mL	95
9) 2-Chlorophenol	5.975	128	140743	9.7096	ug/mL	96
10) 1,3-Dichlorobenzene	6.151	146	150499	10.4555	ug/mL	94
11) 1,4-Dichlorobenzene	6.234	146	152047	9.9532	ug/mL	90
12) Benzyl alcohol	6.334	108	101674	9.0160	ug/mL	99
13) 1,2-Dichlorobenzene	6.410	146	143748	10.0442	ug/mL	94
14) 2-Methylphenol	6.445	107	117267	9.8366	ug/mL	92
15) bis(2-Chloroisopropyl) ether	6.492	45	253108	8.8091	ug/mL	91
16) 4-Methylphenol	6.616	107	171708	9.6468	ug/mL	92
17) N-Nitroso-di-n-propylamine	6.640	70	113555	8.9002	ug/mL	79
18) Hexachloroethane	6.804	117	60620	9.9828	ug/mL	87
20) Nitrobenzene-d5	6.834	82	88942m	4.6736	ug/mL	
21) Nitrobenzene	6.857	77	170676	9.8633	ug/mL	98
22) Isophorone	7.128	82	315927	9.4413	ug/mL	98
23) 2-Nitrophenol	7.234	139	55785	8.0821	ug/mL	96
24) 2,4-Dimethylphenol	7.251	107	142920	10.6492	ug/mL	93
25) bis(2-Chloroethoxy)methane	7.369	93	91711	4.6518	ug/mL	98
26) Benzoic acid	7.351	105	216413m	19.0039	ug/mL	
27) 2,4-Dichlorophenol	7.510	162	103528	10.0499	ug/mL	97
28) 1,2,4-Trichlorobenzene	7.628	180	108479	10.8886	ug/mL	96
29) Naphthalene	7.728	128	201331	4.7561	ug/mL	98
30) 4-Chloroaniline	7.769	127	170178	10.2088	ug/mL	88
31) Hexachlorobutadiene	7.875	225	55708	10.7554	ug/mL	98
32) Resorcinol	8.192	110	124344	8.6187	ug/mL	94
33) 4-Chloro-3-methylphenol	8.334	107	128868	10.2936	ug/mL	87
34) 2-Methylnaphthalene	8.569	142	129657	4.7552	ug/mL	95
35) 1-Methylnaphthalene	8.692	142	125938	4.7304	ug/mL	93
37) Hexachlorocyclopentadiene	8.769	237	52189	9.7735	ug/mL	98
38) 2,4,6-Trichlorophenol	8.904	196	66543	9.9089	ug/mL	94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC509.D
Acq On : 5 Mar 2012 2:02 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 06 10:32:12 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	8.945	196	75228	10.2860	ug/mL #	83
40) 2-Fluorobiphenyl	9.004	172	152371	5.1454	ug/mL	98
41) 2-Chloronaphthalene	9.169	162	117101	4.9998	ug/mL	95
42) 2-Nitroaniline	9.275	65	90390	9.0362	ug/mL	94
43) Dimethylphthalate	9.486	163	289849	10.7578	ug/mL	98
44) 2,6-Dinitrotoluene	9.563	165	58921	9.2836	ug/mL	96
45) Acenaphthylene	9.686	152	195171	4.9850	ug/mL	98
46) 3-Nitroaniline	9.781	138	72253	9.2856	ug/mL #	81
47) Acenaphthene	9.904	154	121836	5.0595	ug/mL	95
48) 2,4-Dinitrophenol	9.904	184	5923	2.1831	ug/mL #	1
49) 4-Nitrophenol	9.957	109	38493	9.2242	ug/mL #	84
50) Dibenzofuran	10.110	168	172568	5.2694	ug/mL	76
51) 2,4-Dinitrotoluene	10.069	165	82742	9.6378	ug/mL	97
52) 2,3,4,6-Tetrachlorophenol	10.257	232	47986	9.3473	ug/mL	88
53) Diethylphthalate	10.363	149	156426	5.4539	ug/mL	99
54) 4-Chlorophenyl-phenylether	10.522	204	61844	5.3976	ug/mL #	66
55) Fluorene	10.539	166	144170	5.2630	ug/mL	89
56) 4-Nitroaniline	10.533	138	75234	9.7335	ug/mL #	1
57) 2,4,6-Tribromophenol	10.833	330	11419	3.4738	ug/mL	96
59) 4,6-Dinitro-2-methylphenol	10.580	198	18187	3.7236	ug/mL	92
60) N-Nitrosodiphenylamine	10.663	169	108079	4.8027	ug/mL	88
61) Azobenzene	10.722	77	200046	4.6087	ug/mL	94
62) 4-Bromophenyl-phenylether	11.133	248	34730	4.5357	ug/mL #	72
63) Hexachlorobenzene	11.239	284	64453	8.4579	ug/mL #	65
64) Pentachlorophenol	11.469	266	29466	6.0217	ug/mL	98
65) Phenanthrene	11.739	178	218365	4.6066	ug/mL	97
66) Anthracene	11.804	178	220690	4.6945	ug/mL	96
67) Carbazole	11.986	167	403531	9.3394	ug/mL	87
68) Di-n-butylphthalate	12.392	149	280411	4.8979	ug/mL	98
69) Fluoranthene	13.221	202	223346	4.4742	ug/mL	98
71) Benzidine	13.363	184	181262	9.9019	ug/mL	92
72) Pyrene	13.510	202	229235	4.6228	ug/mL	94
73) Terphenyl-d14	13.674	244	156826	4.9012	ug/mL	90
74) Butylbenzylphthalate	14.263	149	108708	4.1669	ug/mL	86
75) 3,3'-Dichlorobenzidine	15.057	252	121544	8.0020	ug/mL	98
76) Benzo(a)anthracene	15.121	228	190787	4.4805	ug/mL	98
77) bis(2-Ethylhexyl)phthalate	15.092	149	158612	4.1484	ug/mL	97
78) Chrysene	15.186	228	188610	4.5078	ug/mL	95
80) Di-n-octylphthalate	16.280	149	227091	4.0837	ug/mL	89
81) Benzo(b)fluoranthene	17.204	252	147593	4.2894	ug/mL	98
82) Benzo(k)fluoranthene	17.268	252	161201	4.6852	ug/mL	96
83) Benzo(a)pyrene	17.992	252	127149	4.2616	ug/mL	99
84) Indeno(1,2,3-cd)pyrene	21.215	276	125808	3.7326	ug/mL	95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC509.D
Acq On : 5 Mar 2012 2:02 pm
Operator :
Sample : ICAL,S19016
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

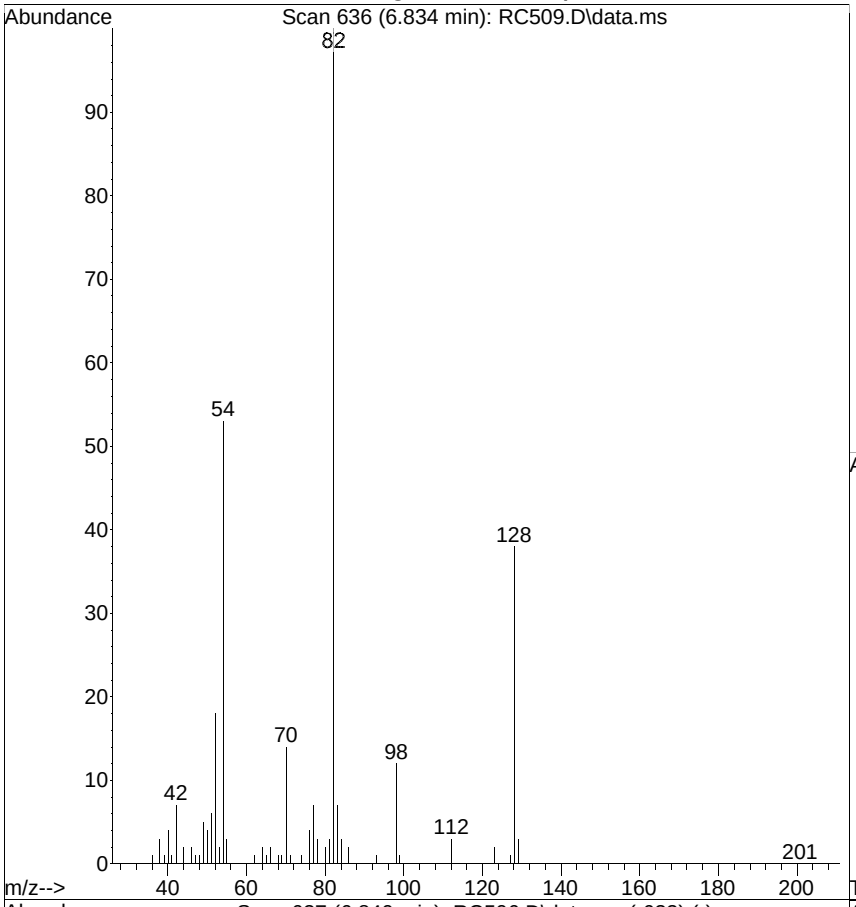
Quant Time: Mar 06 10:32:12 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.280	278	109609	3.7413	ug/mL	97
86) Benzo(g,h,i)perylene	21.986	276	112087	3.8048	ug/mL	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Nitrobenzene-d5; 5.000 ug/mL; response=88942; MI]

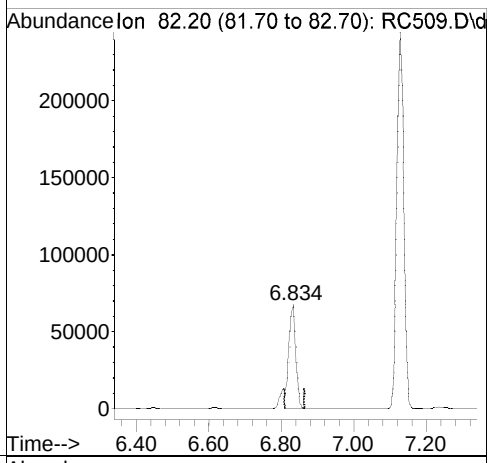
Raw



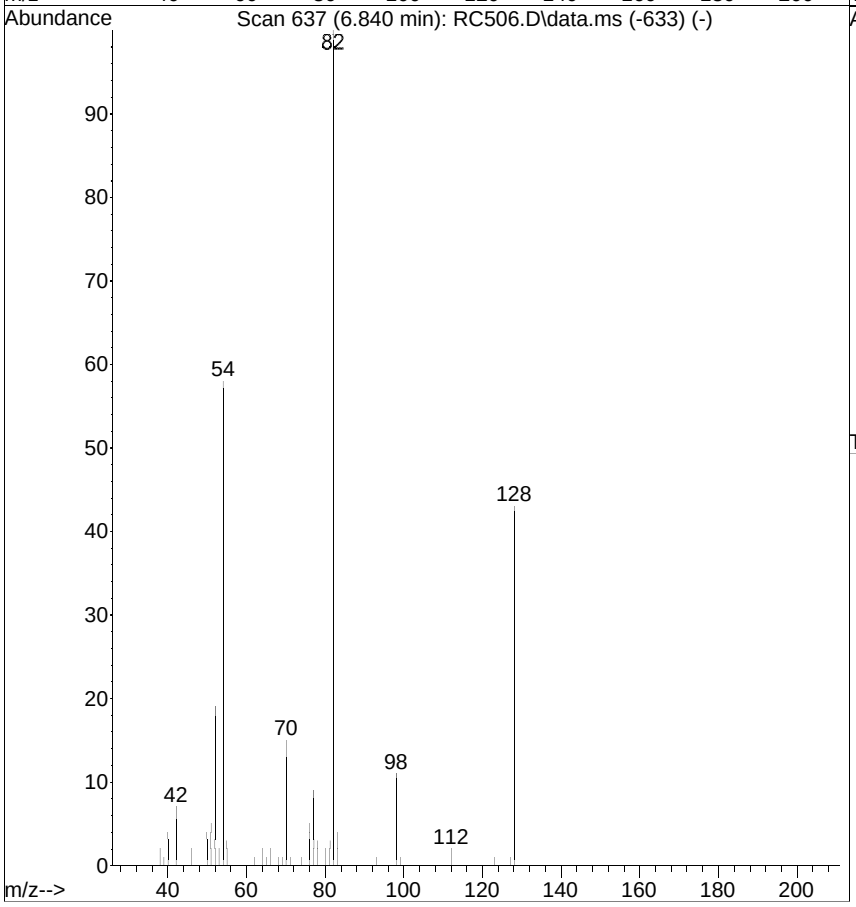
#20
Nitrobenzene-d5
Concen: 4.6736 ug/mL m
RT: 6.834 min Scan# 636
Delta R.T. -0.006 min
Lab File: RC509.D
Acq: 5 Mar 2012 2:02 pm

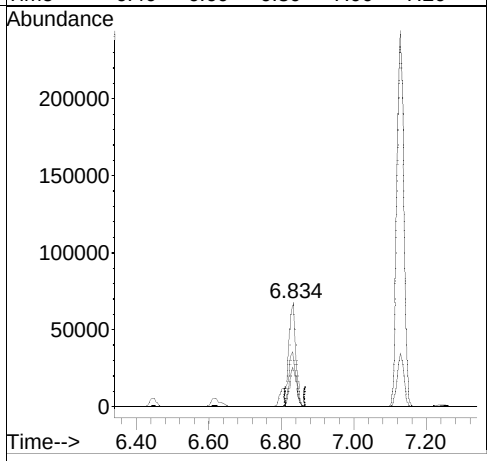
Tgt Ion: 82 Resp: 88942

Ion	Ratio	Lower	Upper
82	100		
128	38.2	15.0	55.0
54	53.5	56.0	96.0#



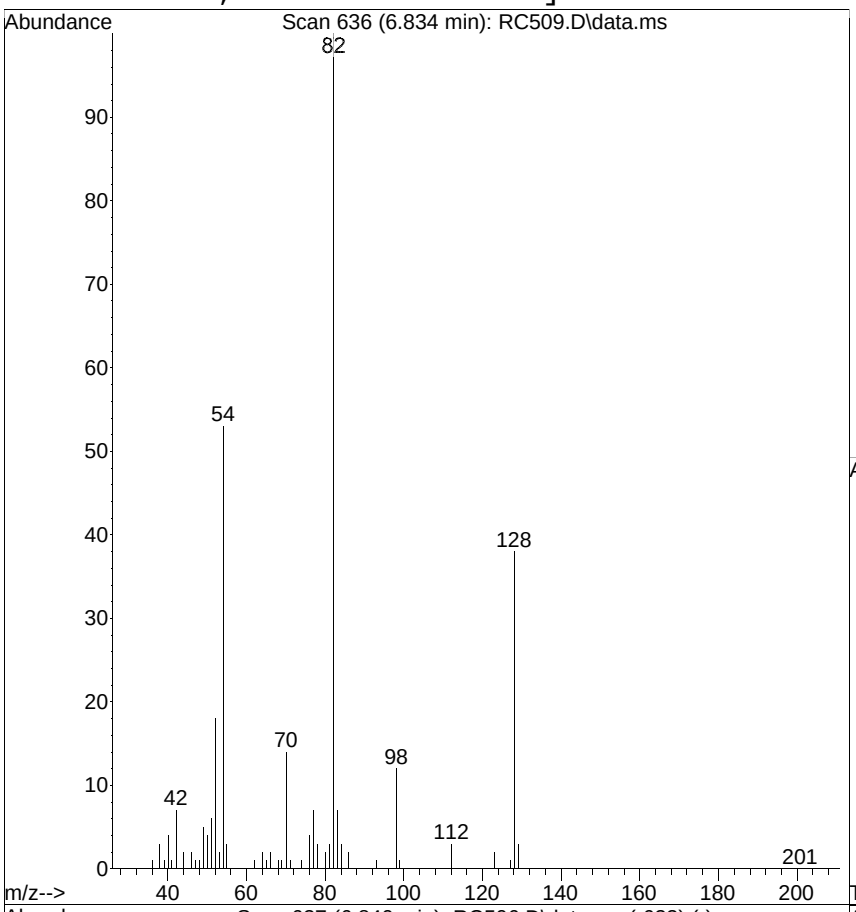
Ref





[Nitrobenzene-d5; before version]

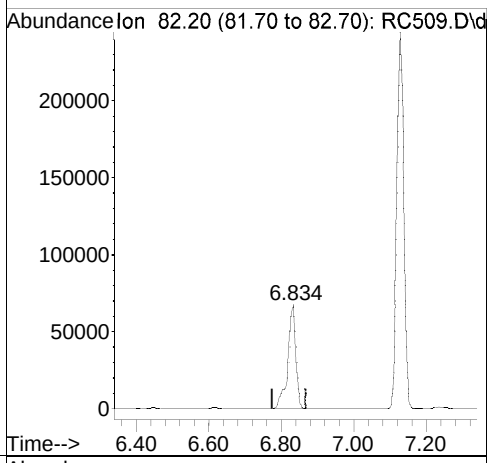
Raw



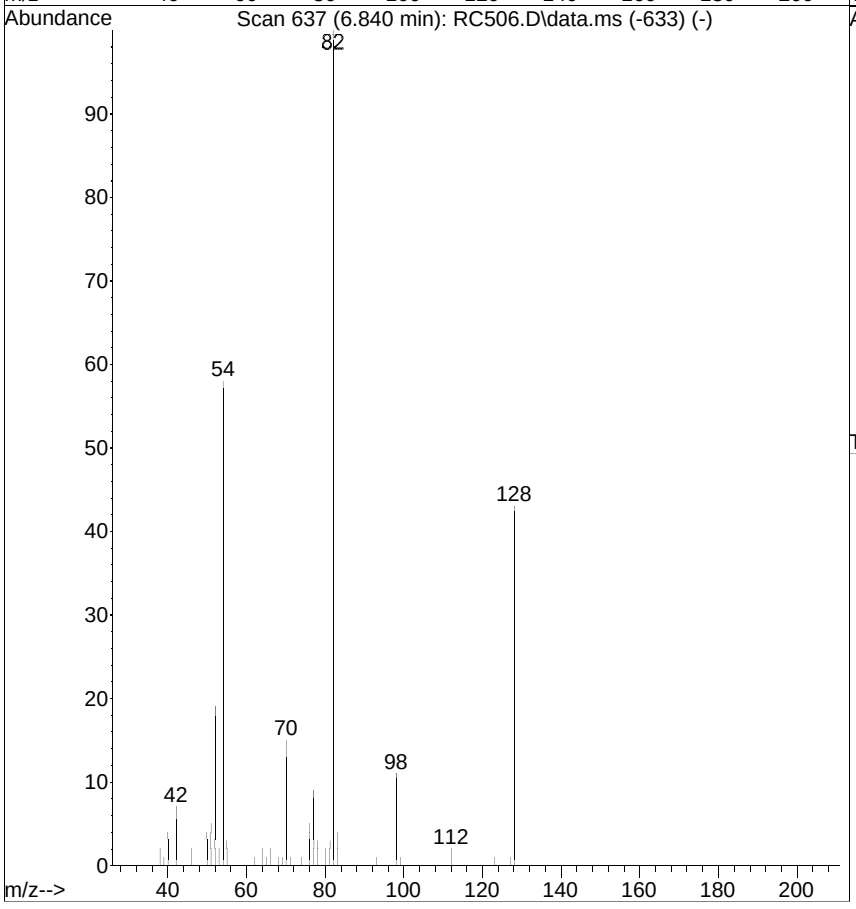
#20
Nitrobenzene-d5
Concen: 5.3897 ug/mL
RT: 6.834 min Scan# 636
Delta R.T. -0.006 min
Lab File: RC509.D
Acq: 5 Mar 2012 2:02 pm

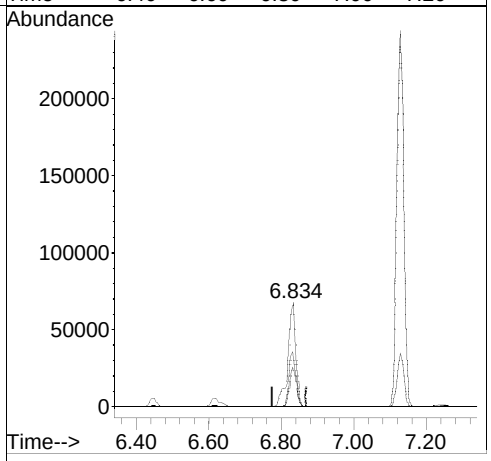
Tgt Ion: 82 Resp: 102571

Ion	Ratio	Lower	Upper
82	100		
128	38.2	15.0	55.0
54	53.5	56.0	96.0#



Ref

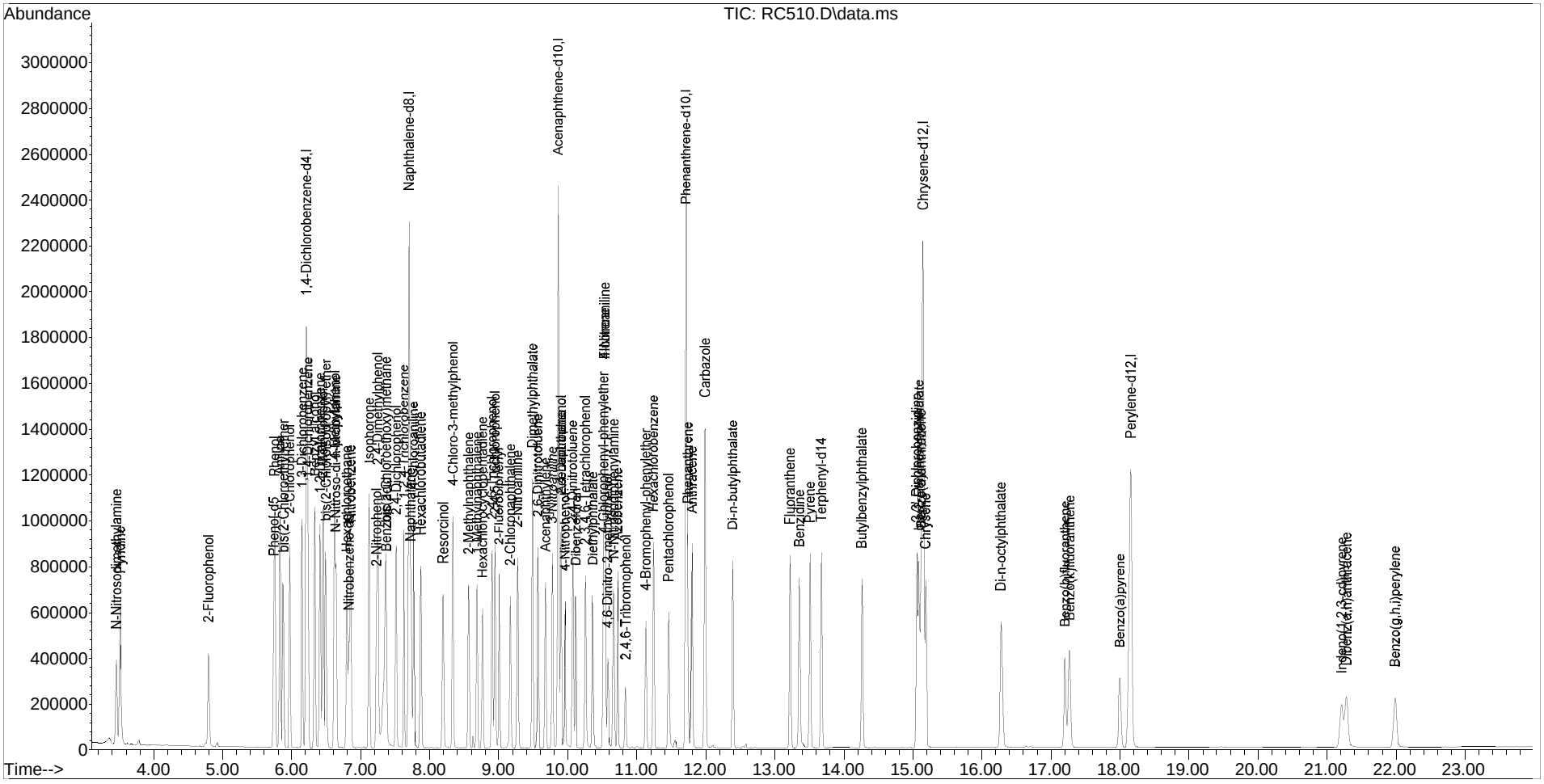




Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC510.D
Acq On : 5 Mar 2012 2:32 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 06 10:32:46 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC510.D
Acq On : 5 Mar 2012 2:32 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 06 10:32:46 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.210	152	374789	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.704	136	1391589	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.863	164	784860	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1463793	40.0000	ug/mL		0.00
70) Chrysene-d12	15.151	240	1364969	40.0000	ug/mL		0.00
79) Perylene-d12	18.162	264	1134992	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	422328	17.9030	ug/mL		90
3) N-Nitrosodimethylamine	3.463	42	164629	17.8683	ug/mL	#	50
4) 2-Fluorophenol	4.798	112	156760	8.7038	ug/mL		85
5) Phenol-d5	5.751	99	219829	9.1964	ug/mL		77
6) Phenol	5.763	94	422735	19.3298	ug/mL		77
7) Aniline	5.834	93	527700m	18.2832	ug/mL		
8) bis(2-Chloroethyl)ether	5.881	93	333715	19.0240	ug/mL		96
9) 2-Chlorophenol	5.975	128	298414	19.4660	ug/mL		96
10) 1,3-Dichlorobenzene	6.151	146	311937	20.4908	ug/mL		93
11) 1,4-Dichlorobenzene	6.234	146	311074	19.2543	ug/mL		89
12) Benzyl alcohol	6.340	108	216555	18.1574	ug/mL		97
13) 1,2-Dichlorobenzene	6.410	146	299977	19.8191	ug/mL		95
14) 2-Methylphenol	6.451	107	248919	19.7428	ug/mL		92
15) bis(2-Chloroisopropyl) ether	6.492	45	520763	17.1375	ug/mL		91
16) 4-Methylphenol	6.622	107	360643	19.1580	ug/mL		93
17) N-Nitroso-di-n-propylamine	6.640	70	247786	18.3632	ug/mL	#	79
18) Hexachloroethane	6.804	117	127937	19.9210	ug/mL		87
20) Nitrobenzene-d5	6.834	82	202022	10.1633	ug/mL	#	79
21) Nitrobenzene	6.857	77	371280	20.5422	ug/mL		98
22) Isophorone	7.134	82	690824	19.7654	ug/mL		99
23) 2-Nitrophenol	7.234	139	132352	18.3584	ug/mL		97
24) 2,4-Dimethylphenol	7.251	107	297002	21.1875	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.369	93	193635	9.4034	ug/mL		98
26) Benzoic acid	7.375	105	361970	30.4319	ug/mL		95
27) 2,4-Dichlorophenol	7.516	162	220746	20.5159	ug/mL		97
28) 1,2,4-Trichlorobenzene	7.628	180	226438	21.7607	ug/mL		96
29) Naphthalene	7.728	128	432299	9.7774	ug/mL		98
30) 4-Chloroaniline	7.769	127	364552	20.9376	ug/mL		88
31) Hexachlorobutadiene	7.875	225	117528	21.7243	ug/mL		97
32) Resorcinol	8.198	110	300842	19.9641	ug/mL		95
33) 4-Chloro-3-methylphenol	8.339	107	283515	21.6818	ug/mL		87
34) 2-Methylnaphthalene	8.569	142	279556	9.8162	ug/mL		94
35) 1-Methylnaphthalene	8.692	142	273358	9.8303	ug/mL		93
37) Hexachlorocyclopentadiene	8.769	237	116977	20.3180	ug/mL		96
38) 2,4,6-Trichlorophenol	8.904	196	147652	20.3926	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC510.D
Acq On : 5 Mar 2012 2:32 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 06 10:32:46 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	8.945	196	164314	20.8377	ug/mL #	81
40) 2-Fluorobiphenyl	9.010	172	334356	10.4721	ug/mL	97
41) 2-Chloronaphthalene	9.169	162	253856	10.0528	ug/mL	95
42) 2-Nitroaniline	9.275	65	214239	19.8644	ug/mL	92
43) Dimethylphthalate	9.492	163	628461	21.6343	ug/mL	98
44) 2,6-Dinitrotoluene	9.569	165	140105	20.4743	ug/mL	95
45) Acenaphthylene	9.686	152	432312	10.2413	ug/mL	98
46) 3-Nitroaniline	9.780	138	166099	19.7985	ug/mL #	84
47) Acenaphthene	9.904	154	268695	10.3490	ug/mL	94
48) 2,4-Dinitrophenol	9.904	184	24370	8.3310	ug/mL #	1
49) 4-Nitrophenol	9.963	109	91303	20.2927	ug/mL #	82
50) Dibenzofuran	10.116	168	377722	10.6976	ug/mL	77
51) 2,4-Dinitrotoluene	10.069	165	192691	20.8174	ug/mL	95
52) 2,3,4,6-Tetrachlorophenol	10.257	232	116879	21.1164	ug/mL	88
53) Diethylphthalate	10.363	149	345819	11.1831	ug/mL	100
54) 4-Chlorophenyl-phenylether	10.522	204	139911	11.3258	ug/mL #	66
55) Fluorene	10.539	166	309414	10.4762	ug/mL	89
56) 4-Nitroaniline	10.539	138	166435	19.9714	ug/mL #	1
57) 2,4,6-Tribromophenol	10.839	330	28863	8.1438	ug/mL	91
59) 4,6-Dinitro-2-methylphenol	10.580	198	62323	11.8810	ug/mL	91
60) N-Nitrosodiphenylamine	10.663	169	241470	9.9909	ug/mL	88
61) Azobenzene	10.722	77	448088	9.6118	ug/mL	94
62) 4-Bromophenyl-phenylether	11.133	248	78805	9.5829	ug/mL #	73
63) Hexachlorobenzene	11.239	284	140468	17.1630	ug/mL #	67
64) Pentachlorophenol	11.469	266	78762	14.9868	ug/mL	98
65) Phenanthrene	11.739	178	467479	9.1824	ug/mL	97
66) Anthracene	11.804	178	478777	9.4828	ug/mL	96
67) Carbazole	11.992	167	859868	18.5299	ug/mL	88
68) Di-n-butylphthalate	12.392	149	596812	9.7062	ug/mL	97
69) Fluoranthene	13.221	202	474865	8.8574	ug/mL	98
71) Benzidine	13.363	184	423134	22.0858	ug/mL	93
72) Pyrene	13.510	202	483789	9.3220	ug/mL	93
73) Terphenyl-d14	13.674	244	332770	9.9370	ug/mL	90
74) Butylbenzylphthalate	14.263	149	243607	8.9221	ug/mL	86
75) 3,3'-Dichlorobenzidine	15.057	252	268230	16.8732	ug/mL	97
76) Benzo(a)anthracene	15.121	228	402540	9.0325	ug/mL	98
77) bis(2-Ethylhexyl)phthalate	15.092	149	350238	8.7525	ug/mL	97
78) Chrysene	15.186	228	396542	9.0555	ug/mL	95
80) Di-n-octylphthalate	16.280	149	541816	9.4673	ug/mL	90
81) Benzo(b)fluoranthene	17.209	252	321911	9.0906	ug/mL	98
82) Benzo(k)fluoranthene	17.274	252	343553	9.7024	ug/mL	96
83) Benzo(a)pyrene	18.003	252	277357	9.0329	ug/mL	98
84) Indeno(1,2,3-cd)pyrene	21.221	276	286651	8.2638	ug/mL	96

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC510.D
Acq On : 5 Mar 2012 2:32 pm
Operator :
Sample : ICAL,S19017
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 06 10:32:46 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

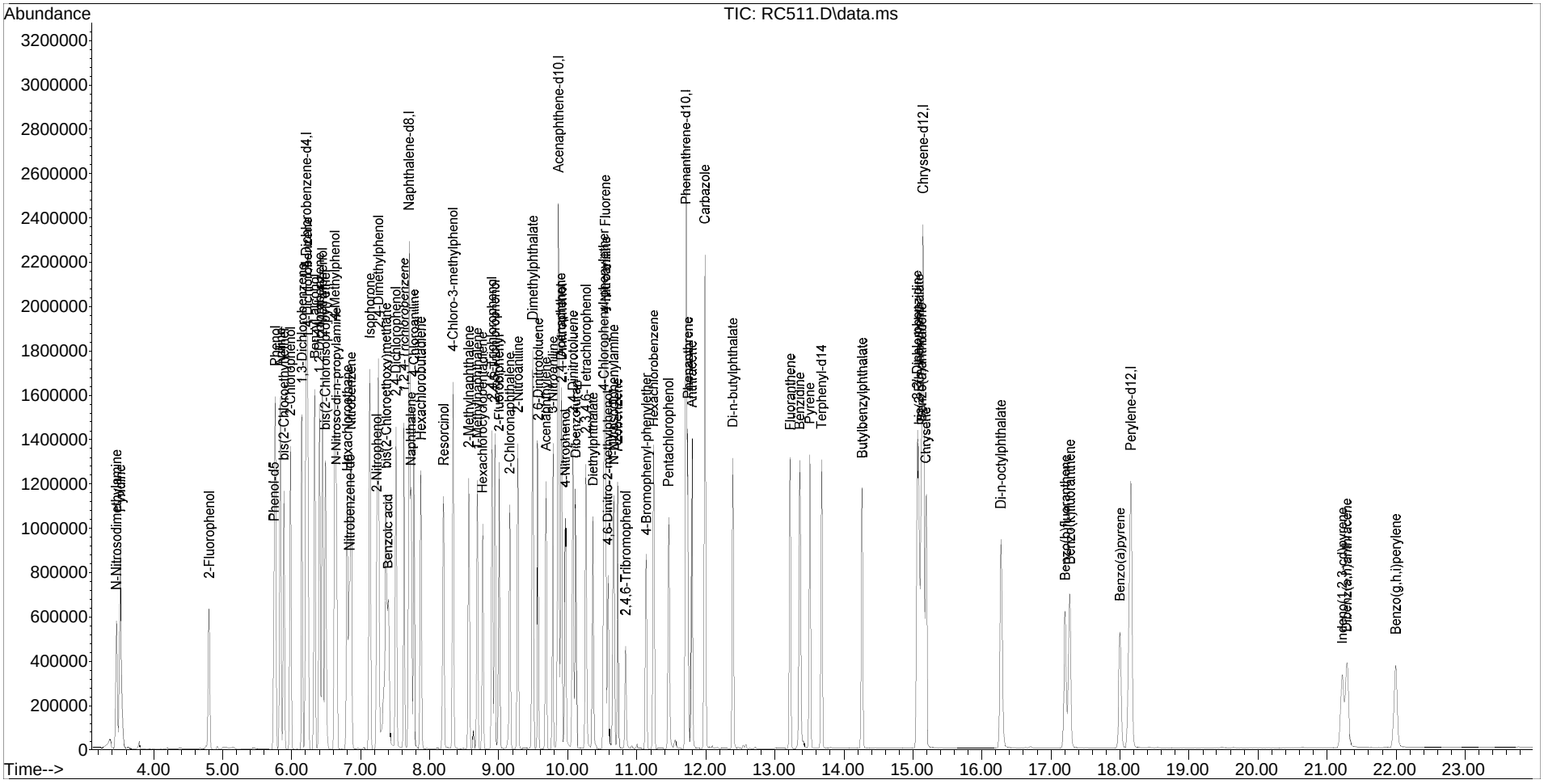
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.286	278	249407	8.2719	ug/mL	97
86) Benzo(g,h,i)perylene	21.991	276	251026	8.2798	ug/mL	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC511.D
Acq On : 5 Mar 2012 3:02 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 06 10:36:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC511.D
Acq On : 5 Mar 2012 3:02 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 06 10:36:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	379125	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.704	136	1426005	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.869	164	833316	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1531896	40.0000	ug/mL		0.00
70) Chrysene-d12	15.151	240	1406068	40.0000	ug/mL		0.00
79) Perylene-d12	18.162	264	1160385	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	689677	28.9018	ug/mL		92
3) N-Nitrosodimethylamine	3.463	42	268956	28.8578	ug/mL	#	50
4) 2-Fluorophenol	4.804	112	258525	14.1899	ug/mL		82
5) Phenol-d5	5.751	99	361304	14.9421	ug/mL		77
6) Phenol	5.769	94	682608	30.8556	ug/mL		79
7) Aniline	5.840	93	856972m	29.3520	ug/mL		
8) bis(2-Chloroethyl)ether	5.887	93	528046	29.7579	ug/mL		97
9) 2-Chlorophenol	5.975	128	477267	30.7767	ug/mL		96
10) 1,3-Dichlorobenzene	6.157	146	494578	32.1167	ug/mL		94
11) 1,4-Dichlorobenzene	6.234	146	499809	30.5825	ug/mL		90
12) Benzyl alcohol	6.340	108	355644	29.4784	ug/mL		98
13) 1,2-Dichlorobenzene	6.410	146	478484	31.2513	ug/mL		93
14) 2-Methylphenol	6.451	107	400975	31.4392	ug/mL		92
15) bis(2-Chloroisopropyl) ether	6.493	45	810064	26.3531	ug/mL		92
16) 4-Methylphenol	6.628	107	582392	30.5838	ug/mL		93
17) N-Nitroso-di-n-propylamine	6.651	70	412525	30.2223	ug/mL	#	76
18) Hexachloroethane	6.810	117	204848	31.5320	ug/mL		91
20) Nitrobenzene-d5	6.840	82	328980	16.1509	ug/mL	#	78
21) Nitrobenzene	6.863	77	604964	32.6636	ug/mL		97
22) Isophorone	7.140	82	1148967	32.0802	ug/mL		98
23) 2-Nitrophenol	7.234	139	229306	31.0391	ug/mL		97
24) 2,4-Dimethylphenol	7.257	107	493116	34.3288	ug/mL		94
25) bis(2-Chloroethoxy)methane	7.369	93	318995	15.1173	ug/mL		98
26) Benzoic acid	7.404	105	653824	53.6423	ug/mL		95
27) 2,4-Dichlorophenol	7.516	162	361464	32.7833	ug/mL		97
28) 1,2,4-Trichlorobenzene	7.634	180	362892	34.0322	ug/mL		95
29) Naphthalene	7.734	128	693670	15.3102	ug/mL		98
30) 4-Chloroaniline	7.775	127	599479	33.5994	ug/mL		88
31) Hexachlorobutadiene	7.881	225	191121	34.4748	ug/mL		97
32) Resorcinol	8.204	110	532004	34.4522	ug/mL		95
33) 4-Chloro-3-methylphenol	8.339	107	465223	34.7192	ug/mL		86
34) 2-Methylnaphthalene	8.569	142	464881	15.9296	ug/mL		95
35) 1-Methylnaphthalene	8.692	142	456559	16.0221	ug/mL		94
37) Hexachlorocyclopentadiene	8.769	237	202563	33.1377	ug/mL		98
38) 2,4,6-Trichlorophenol	8.904	196	249190	32.4150	ug/mL		94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC511.D
Acq On : 5 Mar 2012 3:02 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 06 10:36:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.945	196	268459	32.0654	ug/mL	#	81
40) 2-Fluorobiphenyl	9.010	172	549018	16.1955	ug/mL		97
41) 2-Chloronaphthalene	9.169	162	427480	15.9440	ug/mL		95
42) 2-Nitroaniline	9.281	65	363108	31.7098	ug/mL		95
43) Dimethylphthalate	9.498	163	1021629	33.1237	ug/mL		99
44) 2,6-Dinitrotoluene	9.575	165	236709	32.5801	ug/mL		94
45) Acenaphthylene	9.686	152	724943	16.1749	ug/mL		98
46) 3-Nitroaniline	9.786	138	283273	31.8018	ug/mL	#	83
47) Acenaphthene	9.904	154	446692	16.2043	ug/mL		94
48) 2,4-Dinitrophenol	9.910	184	59670	19.2123	ug/mL	#	1
49) 4-Nitrophenol	9.969	109	155052	32.4575	ug/mL	#	83
50) Dibenzofuran	10.116	168	638844	17.0409	ug/mL		76
51) 2,4-Dinitrotoluene	10.075	165	329069	33.4837	ug/mL		96
52) 2,3,4,6-Tetrachlorophenol	10.263	232	202819	34.5124	ug/mL		88
53) Diethylphthalate	10.363	149	570711	17.3824	ug/mL		99
54) 4-Chlorophenyl-phenylether	10.528	204	233399	17.7950	ug/mL	#	68
55) Fluorene	10.545	166	506156	16.1411	ug/mL		89
56) 4-Nitroaniline	10.551	138	275968	31.1893	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.839	330	50354	13.3814	ug/mL		93
59) 4,6-Dinitro-2-methylphenol	10.586	198	131603	23.9730	ug/mL		90
60) N-Nitrosodiphenylamine	10.669	169	400823	15.8469	ug/mL		88
61) Azobenzene	10.722	77	735793	15.0816	ug/mL		93
62) 4-Bromophenyl-phenylether	11.139	248	132336	15.3769	ug/mL	#	75
63) Hexachlorobenzene	11.245	284	237911	27.7767	ug/mL		75
64) Pentachlorophenol	11.469	266	145694	26.4902	ug/mL		98
65) Phenanthrene	11.745	178	752919	14.1317	ug/mL		97
66) Anthracene	11.804	178	773849	14.6456	ug/mL		96
67) Carbazole	11.992	167	1354483	27.8911	ug/mL		87
68) Di-n-butylphthalate	12.392	149	964535	14.9893	ug/mL		97
69) Fluoranthene	13.227	202	775520	13.8223	ug/mL		99
71) Benzidine	13.363	184	717135	36.3373	ug/mL		93
72) Pyrene	13.510	202	778771	14.5673	ug/mL		93
73) Terphenyl-d14	13.674	244	542130	15.7156	ug/mL		91
74) Butylbenzylphthalate	14.269	149	406469	14.4518	ug/mL		89
75) 3,3'-Dichlorobenzidine	15.063	252	453230	27.6774	ug/mL		98
76) Benzo(a)anthracene	15.127	228	666335	14.5147	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.092	149	577787	14.0170	ug/mL		97
78) Chrysene	15.192	228	647052	14.3442	ug/mL		95
80) Di-n-octylphthalate	16.280	149	930203	15.8980	ug/mL		92
81) Benzo(b)fluoranthene	17.215	252	543223	15.0046	ug/mL		98
82) Benzo(k)fluoranthene	17.280	252	561719	15.5166	ug/mL		96
83) Benzo(a)pyrene	18.004	252	469487	14.9556	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.227	276	500551	14.1145	ug/mL		97

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC511.D
Acq On : 5 Mar 2012 3:02 pm
Operator :
Sample : ICAL,S19018
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 06 10:36:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

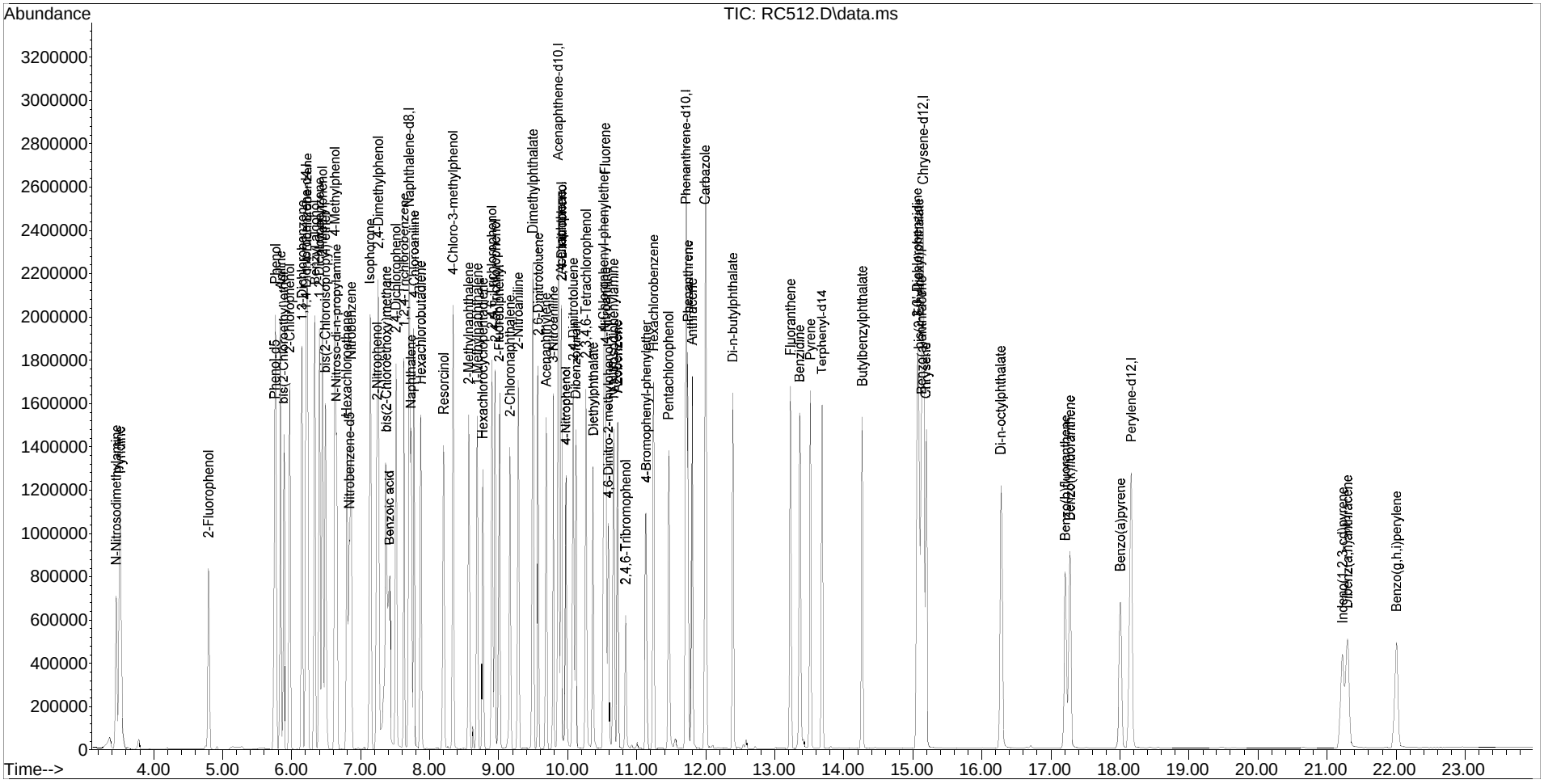
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.292	278	435044	14.1131	ug/mL	98
86) Benzo(g,h,i)perylene	22.003	276	432070m	13.9395	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC512.D
Acq On : 5 Mar 2012 3:32 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 06 10:36:16 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC512.D
Acq On : 5 Mar 2012 3:32 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 06 10:36:16 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.210	152	391906	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.704	136	1477367	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.863	164	863657	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1599553	40.0000	ug/mL		0.00
70) Chrysene-d12	15.151	240	1449090	40.0000	ug/mL		0.00
79) Perylene-d12	18.168	264	1212186	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	890731	36.1099	ug/mL		92
3) N-Nitrosodimethylamine	3.463	42	345580	35.8700	ug/mL	#	51
4) 2-Fluorophenol	4.799	112	334577	17.7653	ug/mL		85
5) Phenol-d5	5.757	99	465323	18.6163	ug/mL		76
6) Phenol	5.769	94	866302	37.8820	ug/mL		78
7) Aniline	5.840	93	1095137m	36.2860	ug/mL		
8) bis(2-Chloroethyl)ether	5.887	93	669439	36.4957	ug/mL		98
9) 2-Chlorophenol	5.975	128	610576	38.0891	ug/mL		97
10) 1,3-Dichlorobenzene	6.157	146	623931	39.1952	ug/mL		94
11) 1,4-Dichlorobenzene	6.234	146	624985	36.9947	ug/mL		89
12) Benzyl alcohol	6.346	108	455311	36.5088	ug/mL		96
13) 1,2-Dichlorobenzene	6.410	146	600673	37.9524	ug/mL		94
14) 2-Methylphenol	6.451	107	515556	39.1049	ug/mL		93
15) bis(2-Chloroisopropyl) ether	6.493	45	997500	31.3925	ug/mL		93
16) 4-Methylphenol	6.628	107	743442	37.7680	ug/mL		92
17) N-Nitroso-di-n-propylamine	6.651	70	528474	37.4542	ug/mL	#	76
18) Hexachloroethane	6.804	117	259489	38.6402	ug/mL		88
20) Nitrobenzene-d5	6.840	82	428852	20.3220	ug/mL	#	78
21) Nitrobenzene	6.863	77	766972	39.9712	ug/mL		97
22) Isophorone	7.140	82	1475930	39.7766	ug/mL		99
23) 2-Nitrophenol	7.240	139	300493	39.2610	ug/mL		95
24) 2,4-Dimethylphenol	7.257	107	626427	42.0933	ug/mL		94
25) bis(2-Chloroethoxy)methane	7.369	93	416831	19.0670	ug/mL		98
26) Benzoic acid	7.422	105	867316	68.6841	ug/mL		95
27) 2,4-Dichlorophenol	7.516	162	462741	40.5097	ug/mL		97
28) 1,2,4-Trichlorobenzene	7.634	180	458424	41.4967	ug/mL		95
29) Naphthalene	7.734	128	890535	18.9719	ug/mL		98
30) 4-Chloroaniline	7.775	127	762254	41.2372	ug/mL		89
31) Hexachlorobutadiene	7.881	225	242359	42.1974	ug/mL		97
32) Resorcinol	8.204	110	689627	43.1071	ug/mL		96
33) 4-Chloro-3-methylphenol	8.340	107	592802	42.7023	ug/mL		87
34) 2-Methylnaphthalene	8.569	142	598094	19.7818	ug/mL		94
35) 1-Methylnaphthalene	8.692	142	583543	19.7664	ug/mL		94
37) Hexachlorocyclopentadiene	8.769	237	264490	41.7484	ug/mL		98
38) 2,4,6-Trichlorophenol	8.904	196	325949	40.9104	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC512.D
Acq On : 5 Mar 2012 3:32 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 06 10:36:16 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.951	196	347609	40.0606	ug/mL	#	83
40) 2-Fluorobiphenyl	9.010	172	707274	20.1310	ug/mL		97
41) 2-Chloronaphthalene	9.169	162	545945	19.6471	ug/mL		95
42) 2-Nitroaniline	9.281	65	465570	39.2294	ug/mL		95
43) Dimethylphthalate	9.498	163	1303225	40.7694	ug/mL		98
44) 2,6-Dinitrotoluene	9.575	165	309387	41.0873	ug/mL		94
45) Acenaphthylene	9.686	152	935142	20.1319	ug/mL		99
46) 3-Nitroaniline	9.792	138	368236	39.8879	ug/mL	#	81
47) Acenaphthene	9.904	154	578985	20.2655	ug/mL		94
48) 2,4-Dinitrophenol	9.910	184	94861	29.4699	ug/mL	#	5
49) 4-Nitrophenol	9.975	109	203251	41.0525	ug/mL		84
50) Dibenzofuran	10.116	168	811676	20.8905	ug/mL		76
51) 2,4-Dinitrotoluene	10.081	165	418275	41.0655	ug/mL		96
52) 2,3,4,6-Tetrachlorophenol	10.263	232	266314	43.7249	ug/mL		89
53) Diethylphthalate	10.369	149	730440	21.4658	ug/mL		99
54) 4-Chlorophenyl-phenylether	10.528	204	300559	22.1104	ug/mL	#	69
55) Fluorene	10.545	166	654880	20.1501	ug/mL		88
56) 4-Nitroaniline	10.557	138	362653	39.5463	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.839	330	67723	17.3649	ug/mL		93
59) 4,6-Dinitro-2-methylphenol	10.592	198	188651	32.9113	ug/mL		88
60) N-Nitrosodiphenylamine	10.669	169	514580	19.4839	ug/mL		88
61) Azobenzene	10.722	77	936221	18.3781	ug/mL		94
62) 4-Bromophenyl-phenylether	11.139	248	171533	19.0884	ug/mL	#	75
63) Hexachlorobenzene	11.245	284	309527	34.6095	ug/mL		78
64) Pentachlorophenol	11.469	266	197263	34.3494	ug/mL		98
65) Phenanthrene	11.745	178	958818	17.2351	ug/mL		97
66) Anthracene	11.804	178	985088	17.8549	ug/mL		95
67) Carbazole	11.992	167	1697116	33.4683	ug/mL		87
68) Di-n-butylphthalate	12.392	149	1220712	18.1680	ug/mL		98
69) Fluoranthene	13.227	202	976502	16.6683	ug/mL		99
71) Benzidine	13.363	184	889944	43.7548	ug/mL		92
72) Pyrene	13.516	202	982148	17.8261	ug/mL		93
73) Terphenyl-d14	13.680	244	699193	19.6669	ug/mL		94
74) Butylbenzylphthalate	14.269	149	514501	17.7498	ug/mL		88
75) 3,3'-Dichlorobenzidine	15.069	252	580941	34.4231	ug/mL		98
76) Benzo(a)anthracene	15.127	228	856558	18.1043	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.092	149	735887	17.3225	ug/mL		98
78) Chrysene	15.192	228	829641	17.8459	ug/mL		95
80) Di-n-octylphthalate	16.280	149	1213362	19.8513	ug/mL		92
81) Benzo(b)fluoranthene	17.215	252	694962	18.3755	ug/mL		99
82) Benzo(k)fluoranthene	17.280	252	742824	19.6425	ug/mL		97
83) Benzo(a)pyrene	18.009	252	619870	18.9023	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.233	276	665594	17.9663	ug/mL		97

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC512.D
Acq On : 5 Mar 2012 3:32 pm
Operator :
Sample : ICAL,S19019
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 06 10:36:16 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

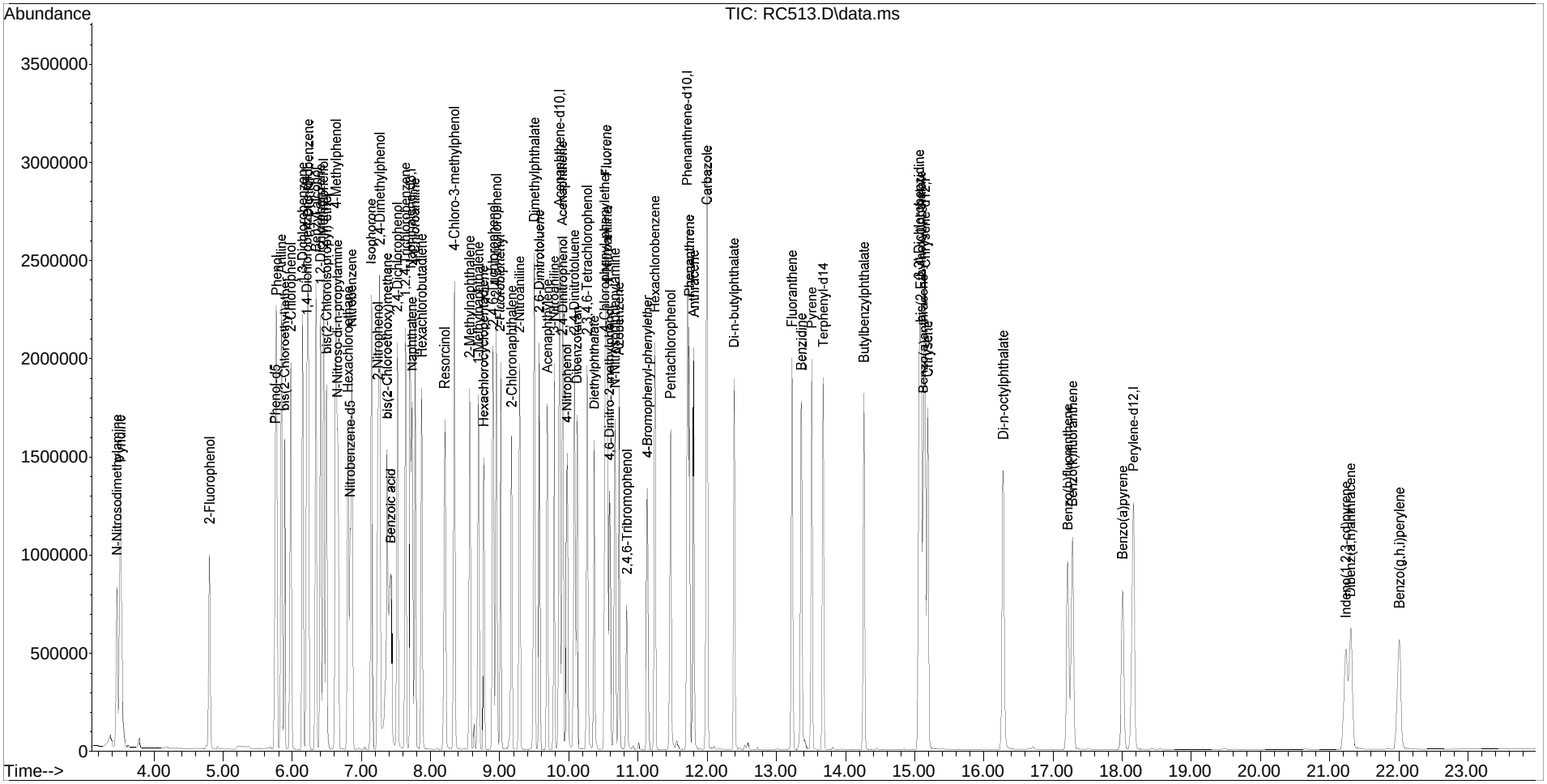
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.297	278	578711	17.9715	ug/mL	98
86) Benzo(g,h,i)perylene	22.009	276	572625m	17.6847	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC513.D
Acq On : 5 Mar 2012 4:02 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 06 10:38:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC513.D
Acq On : 5 Mar 2012 4:02 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 06 10:38:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	378619	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.710	136	1433957	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.869	164	858429	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1561563	40.0000	ug/mL		0.00
70) Chrysene-d12	15.157	240	1416731	40.0000	ug/mL		0.00
79) Perylene-d12	18.168	264	1178841	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	1064240	44.6580	ug/mL		93
3) N-Nitrosodimethylamine	3.469	42	409575	44.0043	ug/mL	#	48
4) 2-Fluorophenol	4.804	112	399515	21.9579	ug/mL		82
5) Phenol-d5	5.757	99	551994	22.8588	ug/mL		76
6) Phenol	5.775	94	1012924	45.8479	ug/mL		79
7) Aniline	5.840	93	1280964m	43.9327	ug/mL		
8) bis(2-Chloroethyl)ether	5.893	93	788731	44.5081	ug/mL		99
9) 2-Chlorophenol	5.981	128	727472	46.9740	ug/mL		100
10) 1,3-Dichlorobenzene	6.157	146	731320	47.5536	ug/mL		94
11) 1,4-Dichlorobenzene	6.234	146	735295	45.0516	ug/mL		90
12) Benzyl alcohol	6.345	108	547232	45.4193	ug/mL		96
13) 1,2-Dichlorobenzene	6.410	146	703930	46.0374	ug/mL		93
14) 2-Methylphenol	6.457	107	606790	47.6401	ug/mL		93
15) bis(2-Chloroisopropyl) ether	6.498	45	1134884	36.9695	ug/mL		94
16) 4-Methylphenol	6.634	107	882534	46.4075	ug/mL		93
17) N-Nitroso-di-n-propylamine	6.657	70	632911	46.4301	ug/mL	#	75
18) Hexachloroethane	6.810	117	306406	47.2278	ug/mL		91
20) Nitrobenzene-d5	6.840	82	520776	25.4251	ug/mL	#	78
21) Nitrobenzene	6.863	77	914281	49.0907	ug/mL		97
22) Isophorone	7.145	82	1769906	49.1433	ug/mL		99
23) 2-Nitrophenol	7.239	139	368167	49.5592	ug/mL		94
24) 2,4-Dimethylphenol	7.263	107	744382	51.5336	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.375	93	503069	23.7084	ug/mL		97
26) Benzoic acid	7.428	105	1009574	82.3701	ug/mL		95
27) 2,4-Dichlorophenol	7.522	162	555614	50.1125	ug/mL		98
28) 1,2,4-Trichlorobenzene	7.634	180	539909	50.3522	ug/mL		95
29) Naphthalene	7.734	128	1061212	23.2925	ug/mL		98
30) 4-Chloroaniline	7.775	127	895265	49.8992	ug/mL		89
31) Hexachlorobutadiene	7.881	225	285598	51.2311	ug/mL		98
32) Resorcinol	8.210	110	838326	53.9883	ug/mL		96
33) 4-Chloro-3-methylphenol	8.345	107	705506	52.3593	ug/mL		87
34) 2-Methylnaphthalene	8.569	142	718532	24.4847	ug/mL		95
35) 1-Methylnaphthalene	8.692	142	702109	24.5026	ug/mL		94
37) Hexachlorocyclopentadiene	8.769	237	319492	50.7374	ug/mL		97
38) 2,4,6-Trichlorophenol	8.910	196	388974	49.1181	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC513.D
Acq On : 5 Mar 2012 4:02 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 06 10:38:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.951	196	423685	49.1254	ug/mL	#	83
40) 2-Fluorobiphenyl	9.010	172	852015	24.3984	ug/mL		97
41) 2-Chloronaphthalene	9.175	162	654192	23.6860	ug/mL		96
42) 2-Nitroaniline	9.286	65	551310	46.7369	ug/mL		98
43) Dimethylphthalate	9.504	163	1538987	48.4380	ug/mL		99
44) 2,6-Dinitrotoluene	9.575	165	374231	50.0014	ug/mL		94
45) Acenaphthylene	9.692	152	1125865	24.3854	ug/mL		98
46) 3-Nitroaniline	9.792	138	446058	48.6120	ug/mL	#	81
47) Acenaphthene	9.910	154	698214	24.5876	ug/mL		91
48) 2,4-Dinitrophenol	9.916	184	126790	39.6290	ug/mL	#	88
49) 4-Nitrophenol	9.975	109	245234	49.8338	ug/mL	#	83
50) Dibenzofuran	10.116	168	982225	25.4340	ug/mL		76
51) 2,4-Dinitrotoluene	10.080	165	505314	49.9130	ug/mL		96
52) 2,3,4,6-Tetrachlorophenol	10.263	232	323341	53.4113	ug/mL		90
53) Diethylphthalate	10.369	149	864616	25.5637	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.528	204	360899	26.7110	ug/mL	#	68
55) Fluorene	10.545	166	778719	24.1065	ug/mL		89
56) 4-Nitroaniline	10.557	138	433271	47.5348	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.839	330	82991	21.4093	ug/mL		94
59) 4,6-Dinitro-2-methylphenol	10.592	198	238680	42.6522	ug/mL		89
60) N-Nitrosodiphenylamine	10.669	169	619765	24.0375	ug/mL		88
61) Azobenzene	10.727	77	1118011	22.4806	ug/mL		96
62) 4-Bromophenyl-phenylether	11.139	248	209537	23.8848	ug/mL	#	75
63) Hexachlorobenzene	11.245	284	379233	43.4352	ug/mL		79
64) Pentachlorophenol	11.475	266	247290	44.1082	ug/mL		98
65) Phenanthrene	11.745	178	1147045	21.1201	ug/mL		97
66) Anthracene	11.810	178	1180875	21.9243	ug/mL		95
67) Carbazole	11.998	167	1998551	40.3717	ug/mL		87
68) Di-n-butylphthalate	12.392	149	1434443	21.8684	ug/mL		97
69) Fluoranthene	13.227	202	1162046	20.3180	ug/mL		99
71) Benzidine	13.368	184	1049760	52.7911	ug/mL		92
72) Pyrene	13.516	202	1176731	21.8456	ug/mL		93
73) Terphenyl-d14	13.680	244	832859	23.9617	ug/mL		94
74) Butylbenzylphthalate	14.268	149	611936	21.5934	ug/mL		88
75) 3,3'-Dichlorobenzidine	15.068	252	702419	42.5718	ug/mL		99
76) Benzo(a)anthracene	15.127	228	1024150	22.1410	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.092	149	869272	20.9296	ug/mL		97
78) Chrysene	15.192	228	1001027	22.0243	ug/mL		95
80) Di-n-octylphthalate	16.286	149	1458409	24.5353	ug/mL		94
81) Benzo(b)fluoranthene	17.221	252	864250	23.4981	ug/mL		98
82) Benzo(k)fluoranthene	17.286	252	890522	24.2141	ug/mL		96
83) Benzo(a)pyrene	18.009	252	753673	23.6325	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.239	276	801556	22.2483	ug/mL		97

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC513.D
Acq On : 5 Mar 2012 4:02 pm
Operator :
Sample : ICAL,S19020
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 06 10:38:07 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

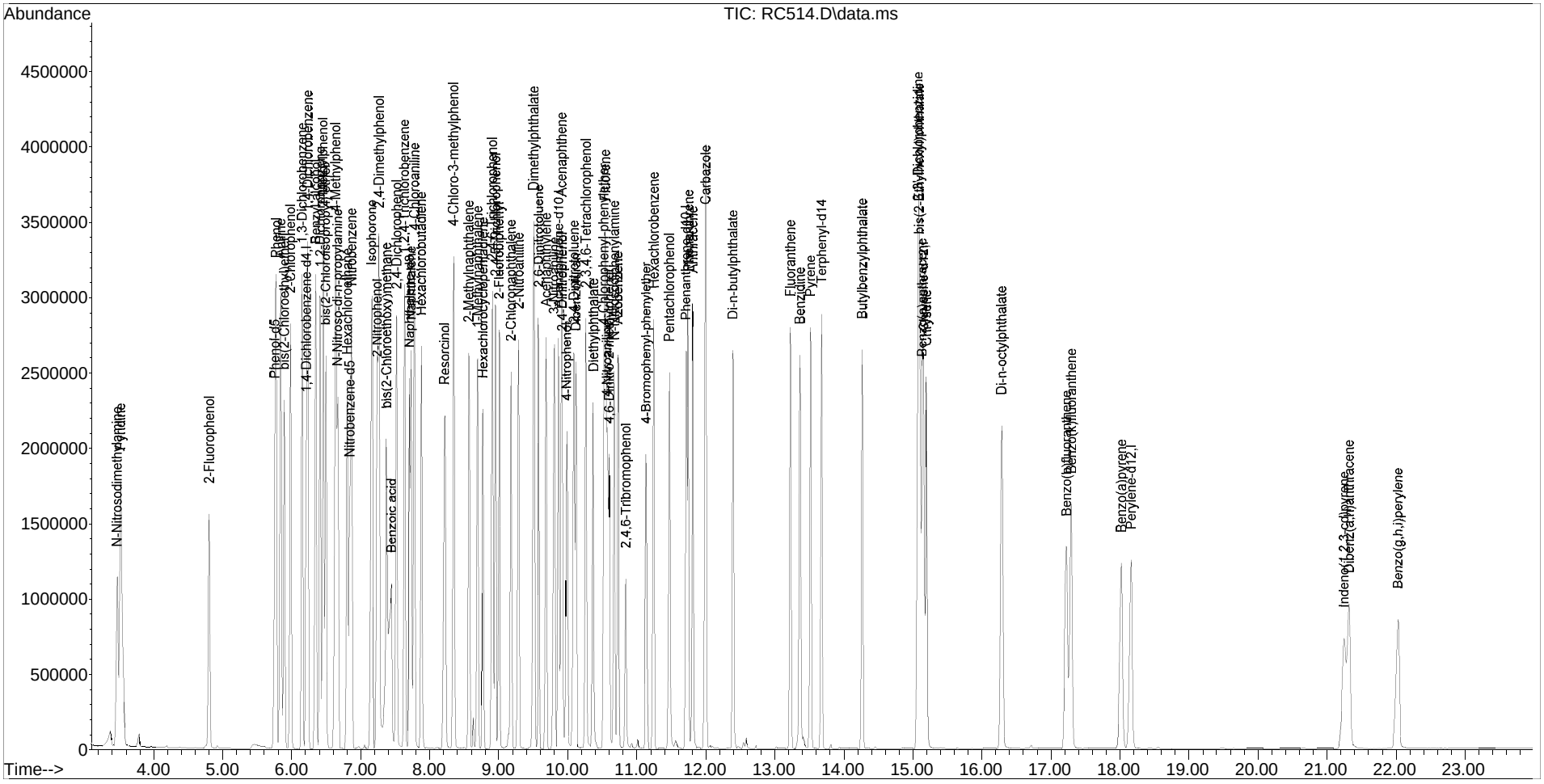
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.303	278	698224	22.2962	ug/mL	97
86) Benzo(g,h,i)perylene	22.015	276	683435m	21.7039	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC514.D
Acq On : 5 Mar 2012 4:32 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 06 10:39:19 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC514.D
Acq On : 5 Mar 2012 4:32 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 06 10:39:19 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	390419	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.710	136	1513638	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.869	164	899263	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1595684	40.0000	ug/mL		0.00
70) Chrysene-d12	15.157	240	1418851	40.0000	ug/mL		0.00
79) Perylene-d12	18.168	264	1181633	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	1698395	69.1146	ug/mL		95
3) N-Nitrosodimethylamine	3.469	42	638248	66.5002	ug/mL	#	48
4) 2-Fluorophenol	4.804	112	628965	33.5239	ug/mL		82
5) Phenol-d5	5.763	99	853058	34.2586	ug/mL		76
6) Phenol	5.781	94	1537532	67.4898	ug/mL		80
7) Aniline	5.846	93	1996795m	66.4134	ug/mL		
8) bis(2-Chloroethyl)ether	5.893	93	1154999	63.2067	ug/mL		99
9) 2-Chlorophenol	5.981	128	1094555	68.5409	ug/mL		99
10) 1,3-Dichlorobenzene	6.157	146	1083791	68.3429	ug/mL		94
11) 1,4-Dichlorobenzene	6.234	146	1073751	63.8005	ug/mL		90
12) Benzyl alcohol	6.351	108	865994	69.7036	ug/mL		96
13) 1,2-Dichlorobenzene	6.416	146	1047720	66.4504	ug/mL		95
14) 2-Methylphenol	6.457	107	913872	69.5811	ug/mL		93
15) bis(2-Chloroisopropyl) ether	6.498	45	1590867	50.2571	ug/mL		97
16) 4-Methylphenol	6.640	107	1398295	71.3061	ug/mL		93
17) N-Nitroso-di-n-propylamine	6.669	70	966702	68.7735	ug/mL	#	74
18) Hexachloroethane	6.810	117	439973	65.7654	ug/mL		96
20) Nitrobenzene-d5	6.845	82	840396	38.8695	ug/mL	#	76
21) Nitrobenzene	6.869	77	1380191	70.2058	ug/mL		95
22) Isophorone	7.163	82	2773759	72.9620	ug/mL		99
23) 2-Nitrophenol	7.240	139	590139	75.2571	ug/mL		94
24) 2,4-Dimethylphenol	7.269	107	1162174	76.2219	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.375	93	784379	35.0199	ug/mL		97
26) Benzoic acid	7.451	105	1360215	105.1364	ug/mL		95
27) 2,4-Dichlorophenol	7.528	162	862423	73.6898	ug/mL		99
28) 1,2,4-Trichlorobenzene	7.634	180	829171	73.2582	ug/mL		95
29) Naphthalene	7.734	128	1646529	34.2371	ug/mL		98
30) 4-Chloroaniline	7.781	127	1356245	71.6134	ug/mL		91
31) Hexachlorobutadiene	7.881	225	434427	73.8260	ug/mL		98
32) Resorcinol	8.222	110	1338202	81.6437	ug/mL		95
33) 4-Chloro-3-methylphenol	8.345	107	1057355	74.3410	ug/mL		87
34) 2-Methylnaphthalene	8.569	142	1100387	35.5228	ug/mL		95
35) 1-Methylnaphthalene	8.698	142	1079787	35.6993	ug/mL		93
37) Hexachlorocyclopentadiene	8.775	237	513931	77.9095	ug/mL		98
38) 2,4,6-Trichlorophenol	8.910	196	628403	75.7490	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC514.D
Acq On : 5 Mar 2012 4:32 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 06 10:39:19 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.957	196	646509	71.5576	ug/mL		87
40) 2-Fluorobiphenyl	9.010	172	1303260	35.6257	ug/mL		98
41) 2-Chloronaphthalene	9.175	162	1023073	35.3599	ug/mL		95
42) 2-Nitroaniline	9.292	65	840415	68.0104	ug/mL		97
43) Dimethylphthalate	9.510	163	2326293	69.8930	ug/mL		99
44) 2,6-Dinitrotoluene	9.581	165	582855	74.3397	ug/mL		94
45) Acenaphthylene	9.692	152	1727554	35.7185	ug/mL		99
46) 3-Nitroaniline	9.804	138	704139	73.2535	ug/mL	#	79
47) Acenaphthene	9.910	154	1097580	36.8962	ug/mL		94
48) 2,4-Dinitrophenol	9.922	184	243366	72.6115	ug/mL	#	56
49) 4-Nitrophenol	9.986	109	383730	74.4367	ug/mL		86
50) Dibenzofuran	10.122	168	1511025	37.3502	ug/mL		76
51) 2,4-Dinitrotoluene	10.092	165	786340	74.1447	ug/mL		93
52) 2,3,4,6-Tetrachlorophenol	10.269	232	518481	81.7565	ug/mL		89
53) Diethylphthalate	10.375	149	1306644	36.8786	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.528	204	563553	39.8159	ug/mL	#	69
55) Fluorene	10.545	166	1190534	35.1813	ug/mL		88
56) 4-Nitroaniline	10.575	138	696996	72.9961	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.845	330	138540	34.1166	ug/mL		90
59) 4,6-Dinitro-2-methylphenol	10.604	198	401896	70.2833	ug/mL		86
60) N-Nitrosodiphenylamine	10.675	169	940336	35.6909	ug/mL		88
61) Azobenzene	10.728	77	1650468	32.4774	ug/mL		96
62) 4-Bromophenyl-phenylether	11.139	248	333048	37.1519	ug/mL	#	76
63) Hexachlorobenzene	11.251	284	603870	67.6849	ug/mL		87
64) Pentachlorophenol	11.475	266	413797	72.2292	ug/mL		98
65) Phenanthrene	11.751	178	1708546	30.7861	ug/mL		97
66) Anthracene	11.810	178	1750031	31.7965	ug/mL		95
67) Carbazole	12.004	167	2903357	57.3951	ug/mL		87
68) Di-n-butylphthalate	12.392	149	2130993	31.7927	ug/mL		97
69) Fluoranthene	13.227	202	1751005	29.9611	ug/mL		99
71) Benzidine	13.369	184	1556108	78.1378	ug/mL		91
72) Pyrene	13.516	202	1771344	32.8353	ug/mL		93
73) Terphenyl-d14	13.680	244	1284973	36.9139	ug/mL		96
74) Butylbenzylphthalate	14.269	149	927817	32.6910	ug/mL		89
75) 3,3'-Dichlorobenzidine	15.074	252	1102750	66.7350	ug/mL		100
76) Benzo(a)anthracene	15.133	228	1581672	34.1429	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.092	149	1247952	30.0023	ug/mL		97
78) Chrysene	15.198	228	1531298	33.6409	ug/mL		95
80) Di-n-octylphthalate	16.286	149	2246500	37.7044	ug/mL		95
81) Benzo(b)fluoranthene	17.233	252	1346634	36.5271	ug/mL		98
82) Benzo(k)fluoranthene	17.298	252	1410810	38.2706	ug/mL		95
83) Benzo(a)pyrene	18.021	252	1205934	37.7245	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.250	276	1265867	35.0529	ug/mL		98

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC514.D
Acq On : 5 Mar 2012 4:32 pm
Operator :
Sample : ICAL,S19021
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 06 10:39:19 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

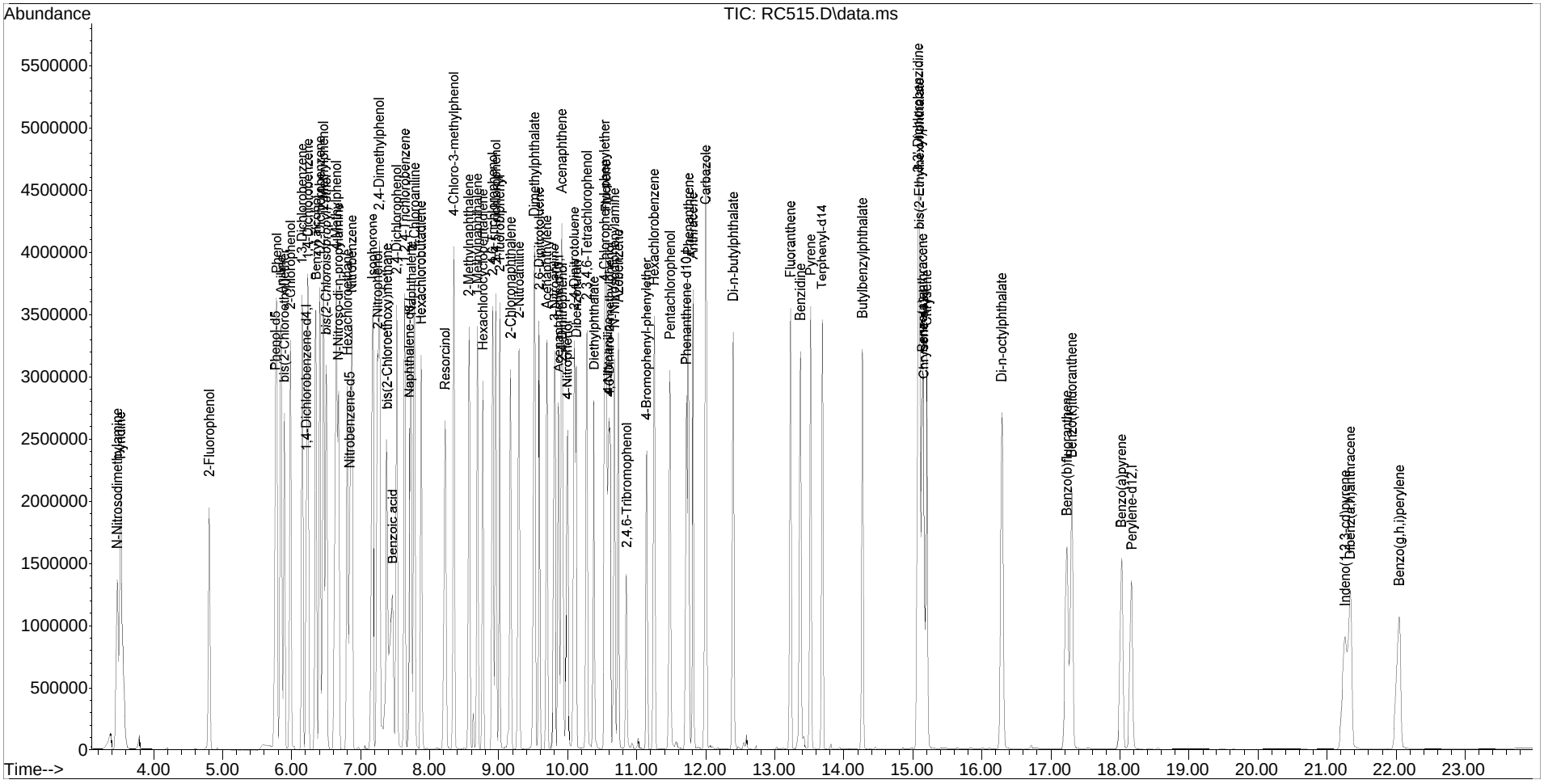
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.321	278	1103154	35.1435	ug/mL	97
86) Benzo(g,h,i)perylene	22.033	276	1076299m	34.0994	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC515.D
Acq On : 5 Mar 2012 5:01 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 06 10:39:50 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC515.D
Acq On : 5 Mar 2012 5:01 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 06 10:39:50 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	401220	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.710	136	1613643	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.869	164	970153	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.722	188	1687497	40.0000	ug/mL		0.00
70) Chrysene-d12	15.163	240	1494786	40.0000	ug/mL		0.00
79) Perylene-d12	18.174	264	1245024	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.522	79	2208323	87.4464	ug/mL		97
3) N-Nitrosodimethylamine	3.475	42	812931	82.4206	ug/mL	#	47
4) 2-Fluorophenol	4.805	112	808257	41.9205	ug/mL		81
5) Phenol-d5	5.769	99	1098052	42.9103	ug/mL		76
6) Phenol	5.787	94	1942875	82.9865	ug/mL		80
7) Aniline	5.851	93	2607693m	84.3970	ug/mL		
8) bis(2-Chloroethyl)ether	5.899	93	1412843	75.2357	ug/mL		97
9) 2-Chlorophenol	5.987	128	1376225	83.8591	ug/mL		97
10) 1,3-Dichlorobenzene	6.157	146	1344191	82.4816	ug/mL		94
11) 1,4-Dichlorobenzene	6.240	146	1311343	75.8202	ug/mL		90
12) Benzyl alcohol	6.363	108	1146935	89.8312	ug/mL		93
13) 1,2-Dichlorobenzene	6.416	146	1283616	79.2202	ug/mL		95
14) 2-Methylphenol	6.463	107	1148802	85.1137	ug/mL		94
15) bis(2-Chloroisopropyl) ether	6.504	45	1921619	59.0717	ug/mL		94
16) 4-Methylphenol	6.651	107	1881404	93.3595	ug/mL		92
17) N-Nitroso-di-n-propylamine	6.681	70	1215416	84.1398	ug/mL	#	72
18) Hexachloroethane	6.810	117	531648	77.3293	ug/mL		99
20) Nitrobenzene-d5	6.846	82	1078283	46.7814	ug/mL	#	76
21) Nitrobenzene	6.875	77	1744957	83.2594	ug/mL		94
22) Isophorone	7.175	82	3583429	88.4182	ug/mL		98
23) 2-Nitrophenol	7.246	139	776008	92.8269	ug/mL		90
24) 2,4-Dimethylphenol	7.269	107	1495456	92.0019	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.381	93	1015891	42.5452	ug/mL		98
26) Benzoic acid	7.469	105	1676158	121.5276	ug/mL		94
27) 2,4-Dichlorophenol	7.528	162	1111643	89.0978	ug/mL		99
28) 1,2,4-Trichlorobenzene	7.640	180	1050266	87.0415	ug/mL		95
29) Naphthalene	7.740	128	2083061	40.6297	ug/mL		97
30) 4-Chloroaniline	7.787	127	1727308	85.5540	ug/mL		92
31) Hexachlorobutadiene	7.881	225	549729	87.6306	ug/mL		98
32) Resorcinol	8.228	110	1781300	101.9419	ug/mL		95
33) 4-Chloro-3-methylphenol	8.351	107	1335819	88.0987	ug/mL		89
34) 2-Methylnaphthalene	8.575	142	1416273	42.8868	ug/mL		94
35) 1-Methylnaphthalene	8.698	142	1384033	42.9223	ug/mL		93
37) Hexachlorocyclopentadiene	8.775	237	683410	96.0314	ug/mL		98
38) 2,4,6-Trichlorophenol	8.916	196	800760	89.4720	ug/mL		96

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC515.D
Acq On : 5 Mar 2012 5:01 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 06 10:39:50 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.957	196	840129	86.1933	ug/mL		89
40) 2-Fluorobiphenyl	9.016	172	1662796	42.1325	ug/mL		98
41) 2-Chloronaphthalene	9.175	162	1323114	42.3885	ug/mL		96
42) 2-Nitroaniline	9.298	65	1069384	80.2161	ug/mL		94
43) Dimethylphthalate	9.516	163	2994290	83.3891	ug/mL		99
44) 2,6-Dinitrotoluene	9.587	165	759518	89.7935	ug/mL		92
45) Acenaphthylene	9.698	152	2229884	42.7357	ug/mL		99
46) 3-Nitroaniline	9.810	138	921913	88.9009	ug/mL	#	78
47) Acenaphthene	9.916	154	1425431	44.4158	ug/mL		94
48) 2,4-Dinitrophenol	9.928	184	357605	98.8998	ug/mL	#	27
49) 4-Nitrophenol	9.998	109	512198	92.0970	ug/mL		88
50) Dibenzofuran	10.128	168	1942081	44.4974	ug/mL		77
51) 2,4-Dinitrotoluene	10.098	165	1014407	88.6602	ug/mL		92
52) 2,3,4,6-Tetrachlorophenol	10.275	232	676614	98.8956	ug/mL		88
53) Diethylphthalate	10.381	149	1656260	43.3304	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.534	204	739474	48.4274	ug/mL	#	73
55) Fluorene	10.551	166	1542247	42.2446	ug/mL		88
56) 4-Nitroaniline	10.586	138	906812	88.0305	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.851	330	191444	43.6997	ug/mL	#	87
59) 4,6-Dinitro-2-methylphenol	10.610	198	543343	89.8496	ug/mL		86
60) N-Nitrosodiphenylamine	10.681	169	1224818	43.9592	ug/mL		88
61) Azobenzene	10.734	77	2083791	38.7733	ug/mL		99
62) 4-Bromophenyl-phenylether	11.145	248	441073	46.5252	ug/mL	#	78
63) Hexachlorobenzene	11.251	284	799615	84.7487	ug/mL		89
64) Pentachlorophenol	11.481	266	560720	92.5498	ug/mL		97
65) Phenanthrene	11.751	178	2181155	37.1637	ug/mL		97
66) Anthracene	11.816	178	2253941	38.7240	ug/mL		96
67) Carbazole	12.004	167	3694262	69.0567	ug/mL		87
68) Di-n-butylphthalate	12.398	149	2697106	38.0494	ug/mL		97
69) Fluoranthene	13.233	202	2280063	36.8911	ug/mL		97
71) Benzidine	13.375	184	2038702	97.1702	ug/mL		91
72) Pyrene	13.522	202	2303687	40.5339	ug/mL		93
73) Terphenyl-d14	13.680	244	1669908	45.5352	ug/mL		97
74) Butylbenzylphthalate	14.269	149	1187562	39.7173	ug/mL		89
75) 3,3'-Dichlorobenzidine	15.080	252	1444656	82.9849	ug/mL		99
76) Benzo(a)anthracene	15.139	228	2108818	43.2096	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.098	149	1493671	34.0855	ug/mL		96
78) Chrysene	15.204	228	2018162	42.0844	ug/mL		95
80) Di-n-octylphthalate	16.292	149	2922848	46.5582	ug/mL		97
81) Benzo(b)fluoranthene	17.239	252	1859792	47.8779	ug/mL		98
82) Benzo(k)fluoranthene	17.304	252	1831595	47.1554	ug/mL		96
83) Benzo(a)pyrene	18.027	252	1604311	47.6314	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.268	276	1724775	45.3286	ug/mL		97

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC515.D
Acq On : 5 Mar 2012 5:01 pm
Operator :
Sample : ICAL,S19022
Misc : ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 06 10:39:50 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

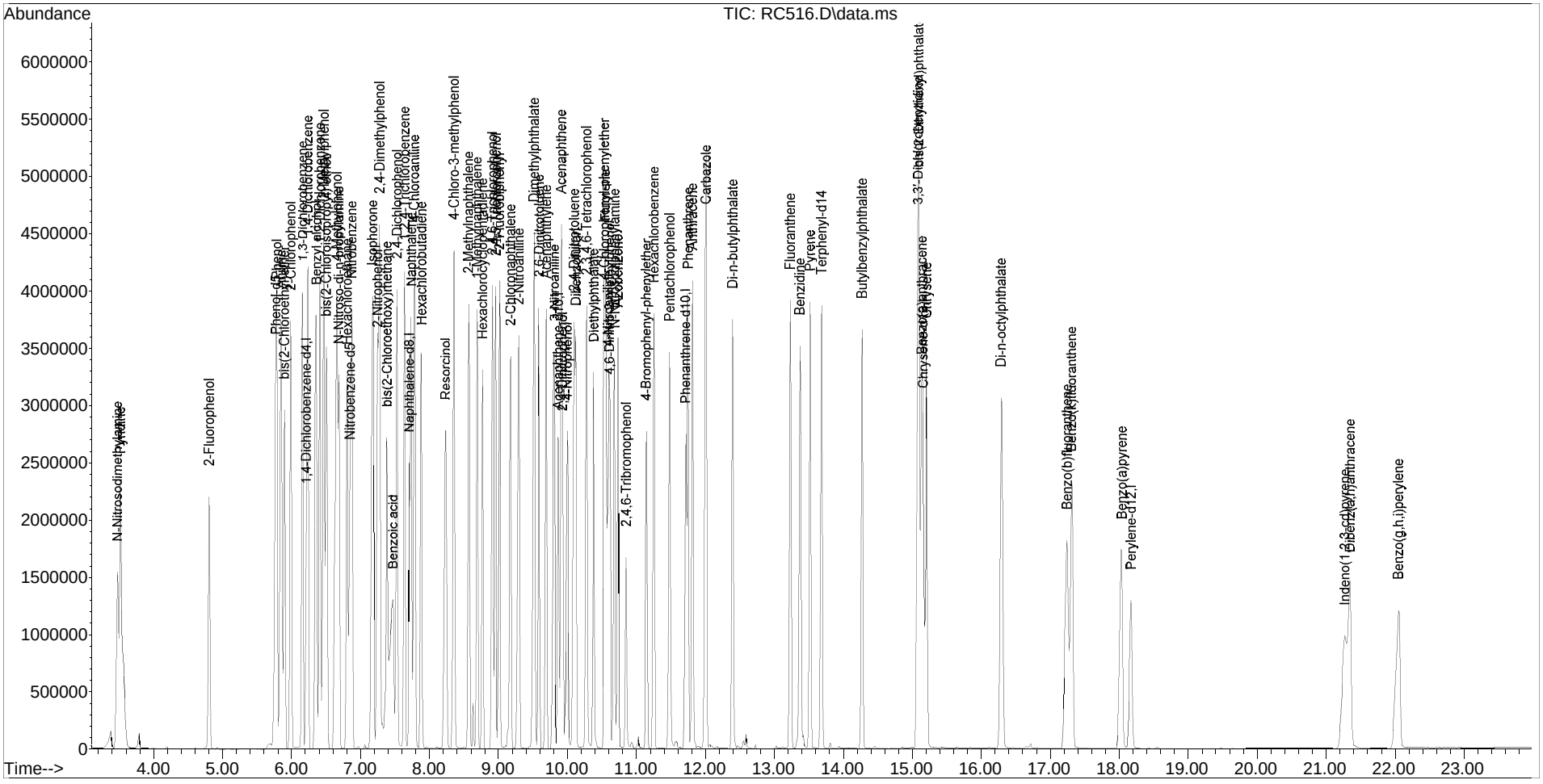
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.339	278	1491478	45.0952	ug/mL	98
86) Benzo(g,h,i)perylene	22.050	276	1475161	44.3566	ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC516.D
Acq On : 5 Mar 2012 5:32 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 06 10:42:18 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC516.D
Acq On : 5 Mar 2012 5:32 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 06 10:42:18 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	391057	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.710	136	1581791	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.875	164	957587	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.722	188	1633956	40.0000	ug/mL		0.00
70) Chrysene-d12	15.163	240	1423265	40.0000	ug/mL		0.00
79) Perylene-d12	18.174	264	1178448	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.522	79	2603314	105.7666	ug/mL		98
3) N-Nitrosodimethylamine	3.481	42	951502	98.9769	ug/mL	#	44
4) 2-Fluorophenol	4.804	112	945942	50.3366	ug/mL		81
5) Phenol-d5	5.775	99	1277514	51.2209	ug/mL		75
6) Phenol	5.793	94	2255654	98.8502	ug/mL		81
7) Aniline	5.851	93	3027102m	100.5171	ug/mL		
8) bis(2-Chloroethyl)ether	5.898	93	1649066m	90.0970	ug/mL		
9) 2-Chlorophenol	5.987	128	1605820	100.3922	ug/mL		96
10) 1,3-Dichlorobenzene	6.163	146	1529045	96.2629	ug/mL		95
11) 1,4-Dichlorobenzene	6.240	146	1485207	88.1045	ug/mL		91
12) Benzyl alcohol	6.369	108	1346062	108.1674	ug/mL		93
13) 1,2-Dichlorobenzene	6.416	146	1470199	93.0936	ug/mL		95
14) 2-Methylphenol	6.469	107	1338212	101.7236	ug/mL		94
15) bis(2-Chloroisopropyl) ether	6.504	45	2152292	67.8822	ug/mL		93
16) 4-Methylphenol	6.657	107	2261662	115.1454	ug/mL		93
17) N-Nitroso-di-n-propylamine	6.687	70	1392623	98.9129	ug/mL	#	72
18) Hexachloroethane	6.810	117	602334	89.8876	ug/mL		98
20) Nitrobenzene-d5	6.851	82	1275784	56.4645	ug/mL	#	75
21) Nitrobenzene	6.875	77	2003256	97.5087	ug/mL		94
22) Isophorone	7.181	82	4162141	104.7654	ug/mL		98
23) 2-Nitrophenol	7.245	139	920772	112.3617	ug/mL		90
24) 2,4-Dimethylphenol	7.275	107	1724781	108.2469	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.381	93	1178269	50.3392	ug/mL		97
26) Benzoic acid	7.475	105	1881751	139.1812	ug/mL		94
27) 2,4-Dichlorophenol	7.534	162	1314281	107.4604	ug/mL		99
28) 1,2,4-Trichlorobenzene	7.640	180	1223500	103.4402	ug/mL		96
29) Naphthalene	7.740	128	2429012	48.3315	ug/mL		97
30) 4-Chloroaniline	7.787	127	2004354	101.2753	ug/mL		92
31) Hexachlorobutadiene	7.887	225	630803	102.5792	ug/mL		97
32) Resorcinol	8.234	110	2090455	122.0435	ug/mL		94
33) 4-Chloro-3-methylphenol	8.357	107	1568644	105.5370	ug/mL		90
34) 2-Methylnaphthalene	8.575	142	1647563	50.8952	ug/mL		94
35) 1-Methylnaphthalene	8.698	142	1616755	51.1492	ug/mL		94
37) Hexachlorocyclopentadiene	8.775	237	786577	111.9787	ug/mL		98
38) 2,4,6-Trichlorophenol	8.916	196	955527	108.1658	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC516.D
Acq On : 5 Mar 2012 5:32 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 06 10:42:18 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.963	196	968692	100.6874	ug/mL		91
40) 2-Fluorobiphenyl	9.016	172	1928426	49.5044	ug/mL		99
41) 2-Chloronaphthalene	9.181	162	1533698	49.7798	ug/mL		95
42) 2-Nitroaniline	9.298	65	1209992	91.9544	ug/mL		95
43) Dimethylphthalate	9.522	163	3379432	95.3501	ug/mL		99
44) 2,6-Dinitrotoluene	9.592	165	888058	106.3678	ug/mL		87
45) Acenaphthylene	9.698	152	2596603	50.4169	ug/mL		99
46) 3-Nitroaniline	9.816	138	1078277	105.3437	ug/mL	#	76
47) Acenaphthene	9.916	154	1653867	52.2101	ug/mL		96
48) 2,4-Dinitrophenol	9.933	184	447629	125.4215	ug/mL	#	1
49) 4-Nitrophenol	10.004	109	592587	107.9498	ug/mL	#	87
50) Dibenzofuran	10.128	168	2243680	52.0823	ug/mL		78
51) 2,4-Dinitrotoluene	10.104	165	1189752	105.3501	ug/mL		90
52) 2,3,4,6-Tetrachlorophenol	10.275	232	804580	119.1427	ug/mL		88
53) Diethylphthalate	10.381	149	1900062	50.3609	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.533	204	865971	57.4557	ug/mL	#	73
55) Fluorene	10.551	166	1759092	48.8166	ug/mL		88
56) 4-Nitroaniline	10.598	138	1067785	105.0176	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.851	330	233874	54.0854	ug/mL	#	85
59) 4,6-Dinitro-2-methylphenol	10.616	198	650744	111.1361	ug/mL		85
60) N-Nitrosodiphenylamine	10.686	169	1419400	52.6121	ug/mL		88
61) Azobenzene	10.733	77	2336867	44.9071	ug/mL		99
62) 4-Bromophenyl-phenylether	11.145	248	520554	56.7083	ug/mL	#	79
63) Hexachlorobenzene	11.257	284	920849	100.7960	ug/mL		94
64) Pentachlorophenol	11.480	266	653983	111.4804	ug/mL		98
65) Phenanthrene	11.757	178	2475565	43.5621	ug/mL		97
66) Anthracene	11.816	178	2522587	44.7596	ug/mL		95
67) Carbazole	12.010	167	4195231	80.9910	ug/mL		86
68) Di-n-butylphthalate	12.398	149	3059638	44.5781	ug/mL		97
69) Fluoranthene	13.233	202	2570735	42.9570	ug/mL		98
71) Benzidine	13.374	184	2258904	113.0760	ug/mL		91
72) Pyrene	13.521	202	2639093	48.7689	ug/mL		93
73) Terphenyl-d14	13.686	244	1918988	54.9566	ug/mL		99
74) Butylbenzylphthalate	14.274	149	1353765	47.5510	ug/mL		93
75) 3,3'-Dichlorobenzidine	15.086	252	1636066	98.7026	ug/mL		99
76) Benzo(a)anthracene	15.139	228	2445783	52.6323	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.098	149	1542469	36.9679	ug/mL		95
78) Chrysene	15.210	228	2312373	50.6426	ug/mL		94
80) Di-n-octylphthalate	16.292	149	3395333	57.1399	ug/mL		97
81) Benzo(b)fluoranthene	17.245	252	2190000	59.5637	ug/mL		98
82) Benzo(k)fluoranthene	17.309	252	2094249	56.9636	ug/mL		96
83) Benzo(a)pyrene	18.039	252	1862480	58.4203	ug/mL		97
84) Indeno(1,2,3-cd)pyrene	21.274	276	1983671	55.0779	ug/mL		99

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC516.D
Acq On : 5 Mar 2012 5:32 pm
Operator :
Sample : ICAL,S19023
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 06 10:42:18 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Mar 05 13:24:41 2012
Response via : Initial Calibration

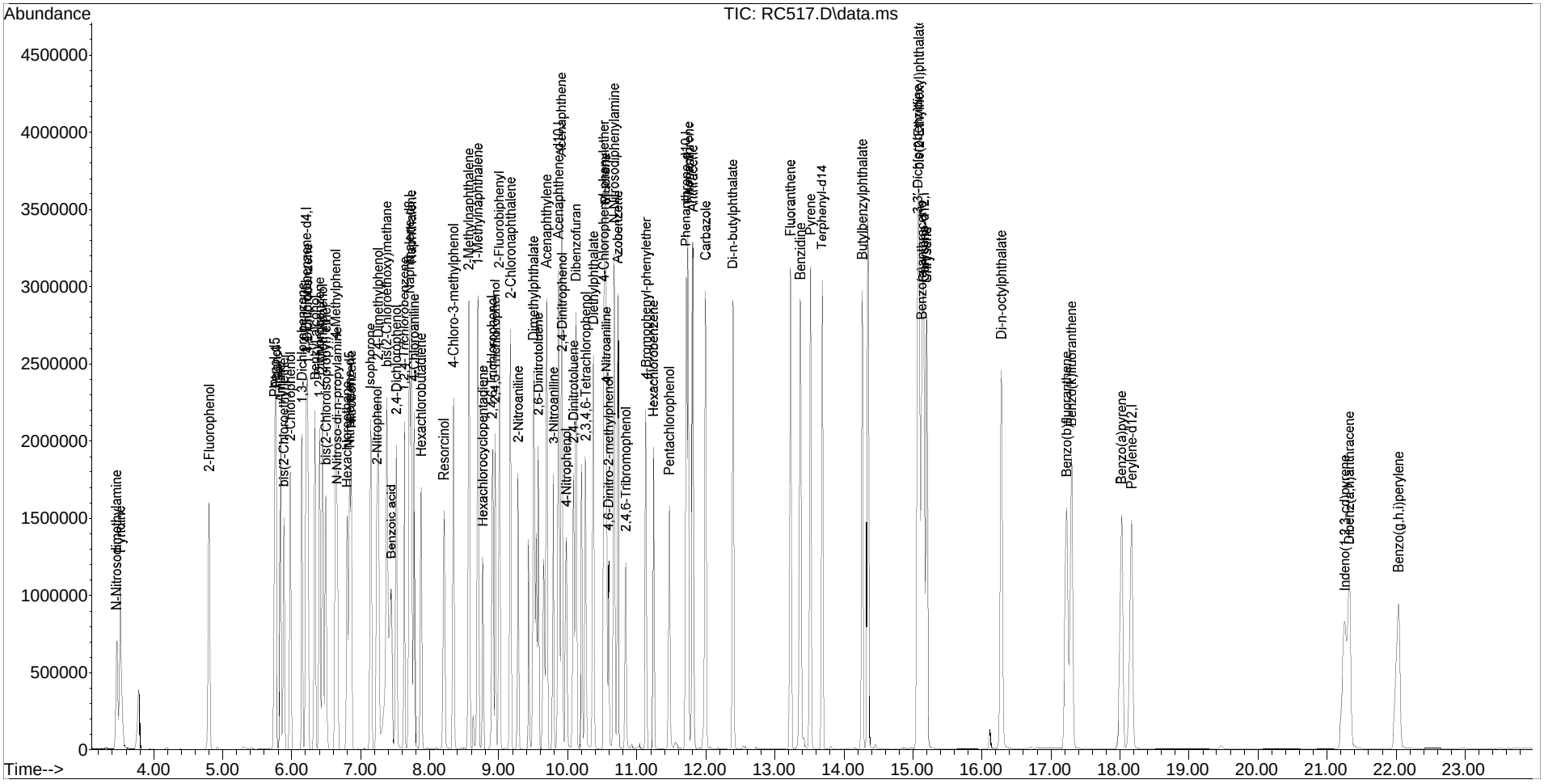
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.350	278	1735756	55.4459	ug/mL	99
86) Benzo(g,h,i)perylene	22.056	276	1674240	53.1868	ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC517.D
Acq On : 5 Mar 2012 6:02 pm
Operator :
Sample : ICV,S19392
Misc : ICV
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 06 11:06:05 2012
Quant Method : G:\msbna09\030512\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Tue Mar 06 11:01:02 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC517.D
Acq On : 5 Mar 2012 6:02 pm
Operator :
Sample : ICV,S19392
Misc : ICV
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 06 11:06:05 2012
Quant Method : G:\msbna09\030512\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Tue Mar 06 11:01:02 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.216	152	460144	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.710	136	1766548	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.869	164	1060873	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.716	188	1888495	40.0000	ug/mL		0.00
70) Chrysene-d12	15.163	240	1683811	40.0000	ug/mL		0.00
79) Perylene-d12	18.174	264	1421462	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.516	79	973841	37.9105	ug/mL		94
3) N-Nitrosodimethylamine	3.463	42	363942	37.1173	ug/mL	#	48
4) 2-Fluorophenol	4.804	112	692614	36.3423	ug/mL		80
5) Phenol-d5	5.757	99	941606	35.7202	ug/mL		76
6) Phenol	5.775	94	928180	38.1474	ug/mL		79
7) Aniline	5.840	93	1169104m	37.5197	ug/mL		
8) bis(2-Chloroethyl)ether	5.887	93	731510	39.1780	ug/mL		99
9) 2-Chlorophenol	5.981	128	686788	39.8269	ug/mL		99
10) 1,3-Dichlorobenzene	6.157	146	694957	39.7360	ug/mL		94
11) 1,4-Dichlorobenzene	6.234	146	693738	39.8030	ug/mL		90
12) Benzyl alcohol	6.346	108	503715	38.1020	ug/mL		95
13) 1,2-Dichlorobenzene	6.410	146	664816	39.5306	ug/mL		94
14) 2-Methylphenol	6.451	107	567253	39.3387	ug/mL		93
15) bis(2-Chloroisopropyl) ether	6.498	45	1012353	35.8088	ug/mL		95
16) 4-Methylphenol	6.634	107	769066	35.4235	ug/mL		94
17) N-Nitroso-di-n-propylamine	6.657	70	580043	39.2139	ug/mL	#	75
18) Hexachloroethane	6.804	117	282765	39.6556	ug/mL		89
20) Nitrobenzene-d5	6.840	82	877772	35.6707	ug/mL	#	76
21) Nitrobenzene	6.863	77	824377	38.1320	ug/mL		96
22) Isophorone	7.145	82	1643669	39.0911	ug/mL		99
23) 2-Nitrophenol	7.240	139	359865	41.2921	ug/mL		93
24) 2,4-Dimethylphenol	7.257	107	704188	39.3027	ug/mL		93
25) bis(2-Chloroethoxy)methane	7.375	93	865706	36.4945	ug/mL		97
26) Benzoic acid	7.445	105	1284857	102.0273	ug/mL		94
27) 2,4-Dichlorophenol	7.522	162	532356	40.0881	ug/mL		98
28) 1,2,4-Trichlorobenzene	7.634	180	546650	41.7321	ug/mL		95
29) Naphthalene	7.734	128	1831326	35.7105	ug/mL		97
30) 4-Chloroaniline	7.775	127	846903	39.5969	ug/mL		89
31) Hexachlorobutadiene	7.881	225	263629	38.5188	ug/mL		98
32) Resorcinol	8.210	110	789611	39.6392	ug/mL		95
33) 4-Chloro-3-methylphenol	8.345	107	671116	40.4152	ug/mL		88
34) 2-Methylnaphthalene	8.575	142	1249004	36.6196	ug/mL		94
35) 1-Methylnaphthalene	8.698	142	1203407	36.1544	ug/mL		93
37) Hexachlorocyclopentadiene	8.769	237	264831	34.1422	ug/mL		96
38) 2,4,6-Trichlorophenol	8.910	196	375629	39.5095	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC517.D
Acq On : 5 Mar 2012 6:02 pm
Operator :
Sample : ICV,S19392
Misc : ICV
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 06 11:06:05 2012
Quant Method : G:\msbna09\030512\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Tue Mar 06 11:01:02 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.951	196	407575	39.9785	ug/mL	#	84
40) 2-Fluorobiphenyl	9.010	172	1358671	32.4718	ug/mL		98
41) 2-Chloronaphthalene	9.175	162	1131850	35.7494	ug/mL		96
42) 2-Nitroaniline	9.286	65	501911	38.1449	ug/mL		99
43) Dimethylphthalate	9.510	163	1445141	38.3245	ug/mL		98
44) 2,6-Dinitrotoluene	9.581	165	355558	39.8817	ug/mL		93
45) Acenaphthylene	9.692	152	1948657	35.6536	ug/mL		99
46) 3-Nitroaniline	9.798	138	413956	38.5086	ug/mL	#	79
47) Acenaphthene	9.910	154	1174712	34.3262	ug/mL		95
48) 2,4-Dinitrophenol	9.922	184	131183	43.4329	ug/mL	#	32
49) 4-Nitrophenol	9.981	109	227272	38.4532	ug/mL	#	84
50) Dibenzofuran	10.122	168	1712738	36.4680	ug/mL		77
51) 2,4-Dinitrotoluene	10.086	165	471403	38.8069	ug/mL		95
52) 2,3,4,6-Tetrachlorophenol	10.269	232	323155	41.9656	ug/mL		89
53) Diethylphthalate	10.375	149	1445858	34.9484	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.528	204	631552	36.0695	ug/mL	#	69
55) Fluorene	10.551	166	1347547	34.8375	ug/mL		88
56) 4-Nitroaniline	10.563	138	383183	36.1858	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.845	330	154508	39.6543	ug/mL	#	88
59) 4,6-Dinitro-2-methylphenol	10.598	198	231210	41.7937	ug/mL		87
60) N-Nitrosodiphenylamine	10.675	169	1266594	43.2555	ug/mL		88
61) Azobenzene	10.728	77	1874468	36.0138	ug/mL		97
62) 4-Bromophenyl-phenylether	11.139	248	378421	37.6382	ug/mL	#	77
63) Hexachlorobenzene	11.245	284	350149	38.7885	ug/mL		78
64) Pentachlorophenol	11.475	266	235739	40.0599	ug/mL		98
65) Phenanthrene	11.751	178	1950107	35.0054	ug/mL		97
66) Anthracene	11.810	178	1998274	35.0871	ug/mL		96
67) Carbazole	11.998	167	1917924	39.6784	ug/mL		87
68) Di-n-butylphthalate	12.392	149	2383850	35.1215	ug/mL		97
69) Fluoranthene	13.227	202	2004925	35.0819	ug/mL		98
71) Benzidine	13.374	184	1826368	74.3028	ug/mL		91
72) Pyrene	13.522	202	2060396	36.5941	ug/mL		93
73) Terphenyl-d14	13.680	244	1372682	34.5285	ug/mL		96
74) Butylbenzylphthalate	14.269	149	1053769	36.8024	ug/mL		89
75) 3,3'-Dichlorobenzidine	15.074	252	986090	59.5877	ug/mL		100
76) Benzo(a)anthracene	15.133	228	1874583	38.2488	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	15.092	149	1429536	36.8410	ug/mL		97
78) Chrysene	15.204	228	1789905	37.5889	ug/mL		95
80) Di-n-octylphthalate	16.286	149	2598834	37.6548	ug/mL		96
81) Benzo(b)fluoranthene	17.233	252	1657385	40.6902	ug/mL		98
82) Benzo(k)fluoranthene	17.298	252	1619429	38.2115	ug/mL		96
83) Benzo(a)pyrene	18.027	252	1540626	43.5859	ug/mL		98
84) Indeno(1,2,3-cd)pyrene	21.262	276	1515512	40.7887	ug/mL		99

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\030512\
Data File : RC517.D
Acq On : 5 Mar 2012 6:02 pm
Operator :
Sample : ICV,S19392
Misc : ICV
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 06 11:06:05 2012
Quant Method : G:\msbna09\030512\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Tue Mar 06 11:01:02 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	21.327	278	1261486	39.0722	ug/mL	98
86) Benzo(g,h,i)perylene	22.039	276	1231976	38.2590	ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Continuing Calibration Verification Raw Data

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 MSBNA Water
EPA 8270D

Inst : MSBNA09 IDF : 1.0
Seqnum : 582366461002.1 File : ria02 Time : 10-SEP-2012 11:57
Cal : 582094282001 Caldate : 05-MAR-2012
Standards: S20249

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Naphthalene	1.1612	1.1318	20.00	19.49	ug/mL	-3	20	0.7000	i ***
3,3'-Dichlorobenzidine	0.3931	0.4225	40.00	42.99	ug/mL	7	20	0.0100	i ***
Benzo(a)anthracene	1.1643	1.0962	20.00	18.83	ug/mL	-6	20	0.8000	i ***
bis(2-Ethylhexyl)phthalate	0.9218	0.7575	20.00	16.44	ug/mL	-18	20	0.0100	i ***
Benzo(b)fluoranthene	1.1462	1.0997	20.00	19.19	ug/mL	-4	20	0.7000	i ***
Benzo(k)fluoranthene	1.1926	1.0998	20.00	18.44	ug/mL	-8	20	0.7000	i ***
Benzo(a)pyrene	0.9947	0.9488	20.00	19.08	ug/mL	-5	20	0.7000	i m ***
Indeno(1,2,3-cd)pyrene	1.0455	1.0856	20.00	20.77	ug/mL	4	20	0.5000	i ***
Dibenz(a,h)anthracene	0.9085	0.9273	20.00	20.41	ug/mL	2	20	0.4000	i ***
Nitrobenzene-d5	0.5572	0.5533	20.00	19.86	ug/mL	-1	20	0.0500	i ***
2-Fluorobiphenyl	1.5776	1.5289	20.00	19.38	ug/mL	-3	20	0.0500	i ***
Terphenyl-d14	0.9444	0.8739	20.00	18.51	ug/mL	-7	20	0.0500	i ***

ISTD (ICAL rc513)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
1,4-Dichlorobenzene-d4	378619	284294	-24.91	6.22	5.43	**-0.79 ***
Naphthalene-d8	1433957	1046042	-27.05	7.71	6.90	**-0.81 ***
Acenaphthene-d10	858429	606004	-29.41	9.87	9.03	**-0.84 ***
Phenanthrene-d10	1561563	1089116	-30.25	11.72	10.86	**-0.86 ***
Chrysene-d12	1416731	1080213	-23.75	15.16	14.13	**-1.03 ***
Perylene-d12	1178841	993497	-15.72	18.17	16.42	**-1.75 ***

LLH 09/10/12 [Aniline]: Picked or reassigned peak. [general version]

LLH 09/10/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 [Benzo(a)pyrene]: Corrected fronting or tailing peak integration. [general version]

LLH 09/10/12 : see ICAL narrations for IStd RT drfit

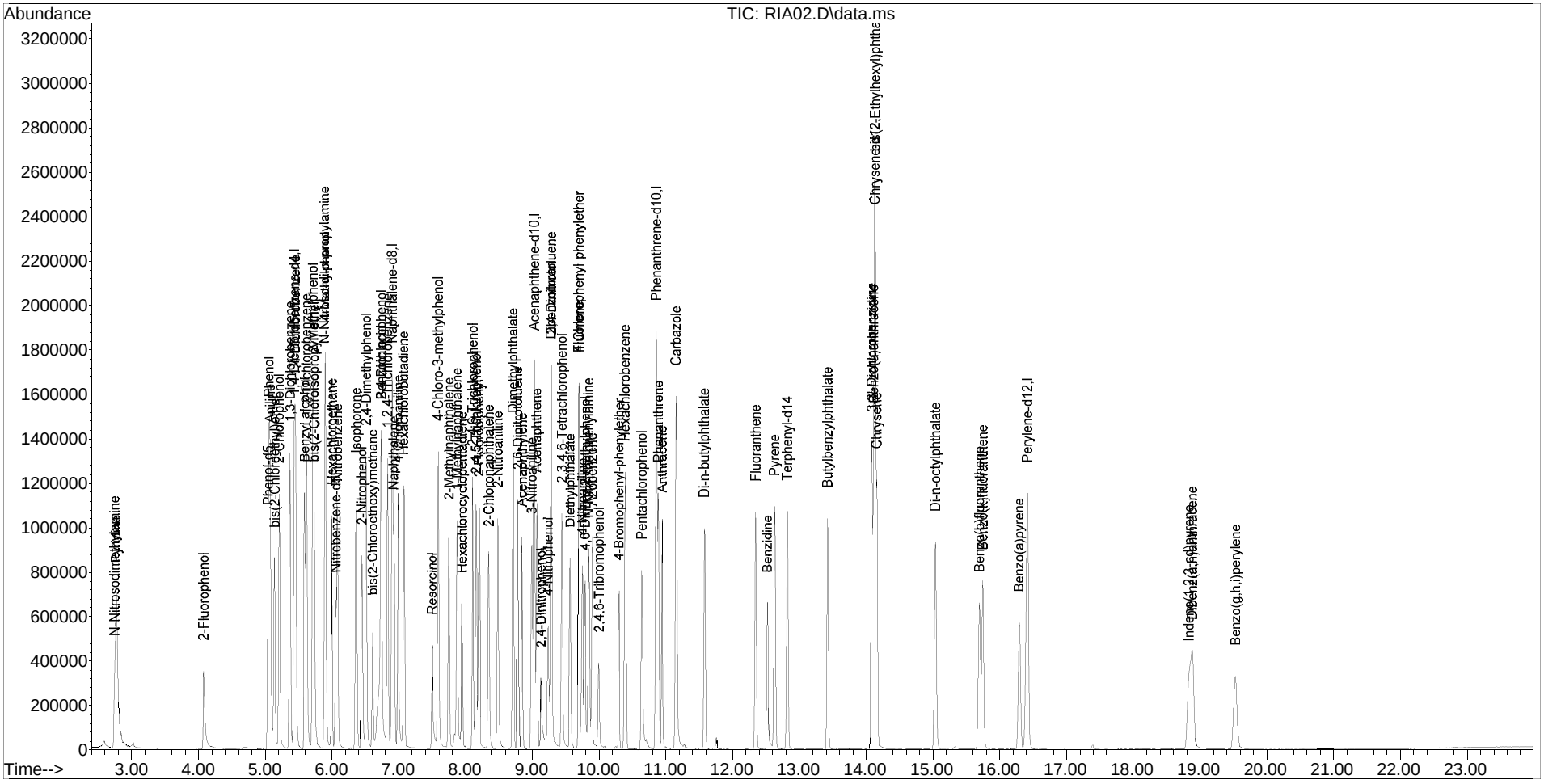
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

i=ISTD failure m=manual integration

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA02.D
Acq On : 10 Sep 2012 11:57 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 12:28:09 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA02.D
Acq On : 10 Sep 2012 11:57 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 12:28:09 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	5.434	152	284294	40.0000	ug/mL		0.00
19) Naphthalene-d8	6.898	136	1046042	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.034	164	606004	40.0000	ug/mL		0.00
58) Phenanthrene-d10	10.857	188	1089116	40.0000	ug/mL		0.00
70) Chrysene-d12	14.133	240	1080213	40.0000	ug/mL		0.00
79) Perylene-d12	16.421	264	993497	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	2.769	79	549993	34.6541	ug/mL		94
3) N-Nitrosodimethylamine	2.746	42	242936	40.1016	ug/mL	#	65
4) 2-Fluorophenol	4.087	112	224120	19.0339	ug/mL		81
5) Phenol-d5	5.051	99	287760	17.6686	ug/mL		82
6) Phenol	5.063	94	580258	38.5994	ug/mL	#	61
7) Aniline	5.081	93	648348m	33.6776	ug/mL		
8) bis(2-Chloroethyl)ether	5.146	93	453283m	39.2932	ug/mL		
9) 2-Chlorophenol	5.210	128	427790	40.1523	ug/mL		100
10) 1,3-Dichlorobenzene	5.375	146	446522	41.3233	ug/mL		94
11) 1,4-Dichlorobenzene	5.451	146	452980	42.0654	ug/mL		89
12) Benzyl alcohol	5.599	108	292724	35.8383	ug/mL		97
13) 1,2-Dichlorobenzene	5.622	146	426661	41.0621	ug/mL		94
14) 2-Methylphenol	5.722	107	336386	37.7578	ug/mL		88
15) bis(2-Chloroisopropyl) ether	5.740	45	536325	30.7052	ug/mL		92
16) 4-Methylphenol	5.898	107	446321	33.2738	ug/mL		92
17) N-Nitroso-di-n-propylamine	5.893	70	292728	32.0310	ug/mL	#	77
18) Hexachloroethane	6.004	117	185862	42.1886	ug/mL		95
20) Nitrobenzene-d5	6.063	82	289398	19.8611	ug/mL	#	79
21) Nitrobenzene	6.087	77	511092	39.9245	ug/mL		96
22) Isophorone	6.369	82	907952	36.4672	ug/mL		99
23) 2-Nitrophenol	6.451	139	225960	43.7860	ug/mL		98
24) 2,4-Dimethylphenol	6.510	107	407970	38.4537	ug/mL		95
25) bis(2-Chloroethoxy)methane	6.610	93	271981	19.3629	ug/mL		96
26) Benzoic acid	6.745	105	428193	73.7338	ug/mL		94
27) 2,4-Dichlorophenol	6.745	162	313117	39.8196	ug/mL		98
28) 1,2,4-Trichlorobenzene	6.834	180	327579	42.2331	ug/mL		95
29) Naphthalene	6.922	128	591941	19.4933	ug/mL		97
30) 4-Chloroaniline	6.993	127	493373	38.9564	ug/mL		88
31) Hexachlorobutadiene	7.075	225	187486	46.2620	ug/mL		97
32) Resorcinol	7.504	110	307053	26.0316	ug/mL		97
33) 4-Chloro-3-methylphenol	7.593	107	397643	40.4405	ug/mL		86
34) 2-Methylnaphthalene	7.757	142	397697	19.6915	ug/mL		94
35) 1-Methylnaphthalene	7.875	142	382001	19.3816	ug/mL		93
37) Hexachlorocyclopentadiene	7.951	237	131948	29.7792	ug/mL		97
38) 2,4,6-Trichlorophenol	8.110	196	215247	39.6340	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA02.D
Acq On : 10 Sep 2012 11:57 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 12:28:09 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.157	196	240398	41.2798	ug/mL	#	80
40) 2-Fluorobiphenyl	8.204	172	463255	19.3820	ug/mL		97
41) 2-Chloronaphthalene	8.351	162	366369	20.2575	ug/mL		97
42) 2-Nitroaniline	8.487	65	293863	39.0969	ug/mL		95
43) Dimethylphthalate	8.710	163	832699	38.6582	ug/mL		98
44) 2,6-Dinitrotoluene	8.787	165	197429	38.7670	ug/mL		94
45) Acenaphthylene	8.851	152	604025	19.3469	ug/mL		99
46) 3-Nitroaniline	8.998	138	222350	36.2100	ug/mL	#	80
47) Acenaphthene	9.069	154	349379	17.8722	ug/mL		96
48) 2,4-Dinitrophenol	9.134	184	84517	47.0607	ug/mL	#	1
49) 4-Nitrophenol	9.239	109	131514	38.9535	ug/mL		96
50) Dibenzofuran	9.281	168	495010	18.4511	ug/mL		69
51) 2,4-Dinitrotoluene	9.287	165	261704	37.7150	ug/mL		91
52) 2,3,4,6-Tetrachlorophenol	9.445	232	181846	41.3403	ug/mL		88
53) Diethylphthalate	9.575	149	459699	19.4519	ug/mL		100
54) 4-Chlorophenyl-phenylether	9.704	204	188780	18.8745	ug/mL	#	70
55) Fluorene	9.704	166	414034	18.7382	ug/mL		88
56) 4-Nitroaniline	9.757	138	229610	37.9587	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.004	330	47676	21.4204	ug/mL		92
59) 4,6-Dinitro-2-methylphenol	9.798	198	144468	45.2811	ug/mL		92
60) N-Nitrosodiphenylamine	9.851	169	315730	18.6966	ug/mL		89
61) Azobenzene	9.898	77	563775	18.7819	ug/mL		95
62) 4-Bromophenyl-phenylether	10.304	248	112069	19.3277	ug/mL	#	74
63) Hexachlorobenzene	10.392	284	224469	43.1170	ug/mL		77
64) Pentachlorophenol	10.639	266	134470	39.6228	ug/mL		99
65) Phenanthrene	10.886	178	607536	18.9100	ug/mL		97
66) Anthracene	10.951	178	624361	19.0095	ug/mL		96
67) Carbazole	11.157	167	1120109	40.1814	ug/mL		87
68) Di-n-butylphthalate	11.580	149	789843	20.1779	ug/mL		98
69) Fluoranthene	12.351	202	659159	19.9994	ug/mL		98
71) Benzidine	12.527	184	432391	27.4206	ug/mL		91
72) Pyrene	12.633	202	660165	18.2767	ug/mL		93
73) Terphenyl-d14	12.827	244	472003	18.5070	ug/mL		96
74) Butylbenzylphthalate	13.427	149	363573	19.7927	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.086	252	456355	42.9860	ug/mL		99
76) Benzo(a)anthracene	14.116	228	592082	18.8312	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.139	149	409125	16.4353	ug/mL		96
78) Chrysene	14.163	228	585231	19.1576	ug/mL		95
80) Di-n-octylphthalate	15.039	149	873925	18.1169	ug/mL		94
81) Benzo(b)fluoranthene	15.704	252	546252	19.1879	ug/mL		96
82) Benzo(k)fluoranthene	15.751	252	546312	18.4434	ug/mL		93
83) Benzo(a)pyrene	16.298	252	471303m	19.0773	ug/mL		
84) Indeno(1,2,3-cd)pyrene	18.839	276	539271	20.7662	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna09\091012\
Data File : RIA02.D
Acq On : 10 Sep 2012 11:57 am
Operator :
Sample : CCV,S20249
Misc :
ALS Vial : 2 Sample Multiplier: 1

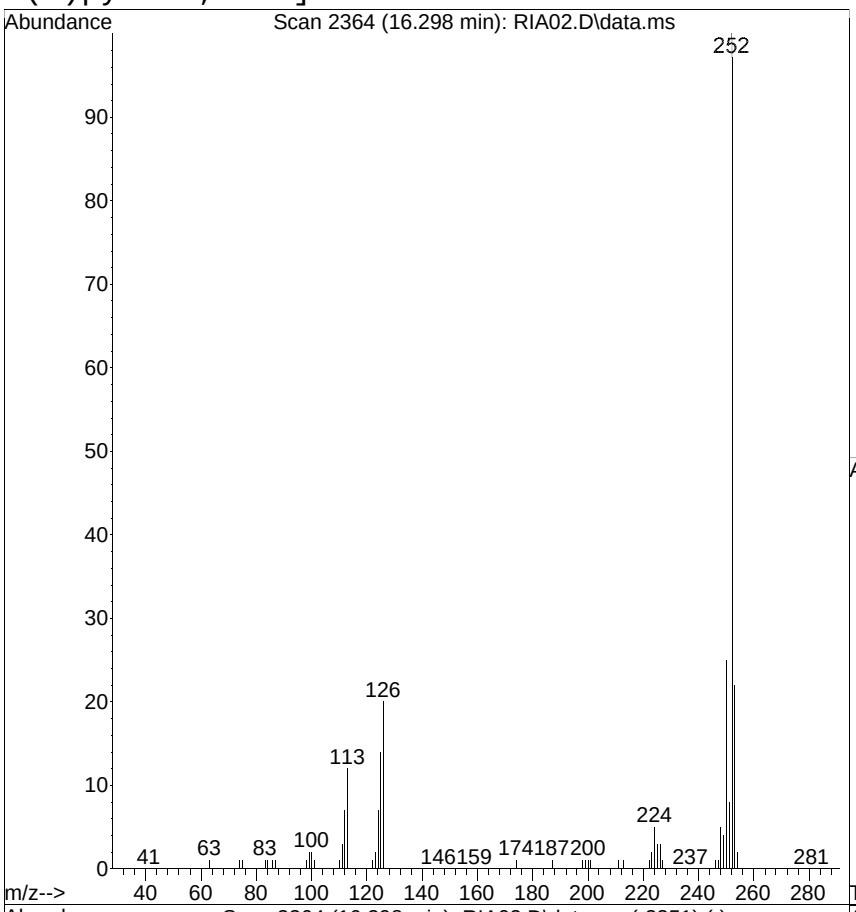
Quant Time: Sep 10 12:28:09 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA9.M
Quant Title : MSBNA09 BNA
QLast Update : Mon Sep 10 12:28:00 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	18.886	278	460646	20.4137	ug/mL	97
86) Benzo(g,h,i)perylene	19.533	276	448753	19.9392	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Benzo(a)pyrene; MI]

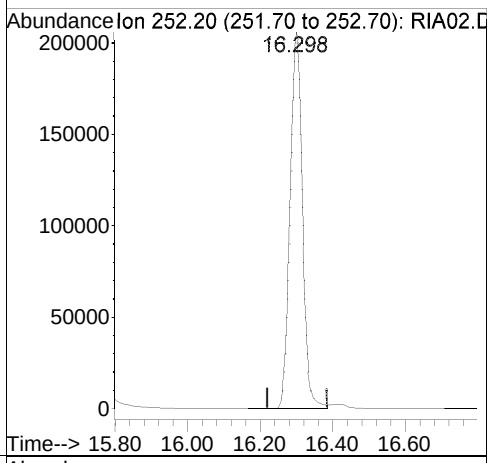
Raw



#83
Benzo(a)pyrene
Concen: 19.0773 ug/mL m
RT: 16.298 min Scan# 2364
Delta R.T. 0.000 min
Lab File: RIA02.D
Acq: 10 Sep 2012 11:57 am

Tgt Ion:252 Resp: 471303

Ion	Ratio	Lower	Upper
252	100		
253	22.0	2.6	42.6
125	14.3	0.0	36.8



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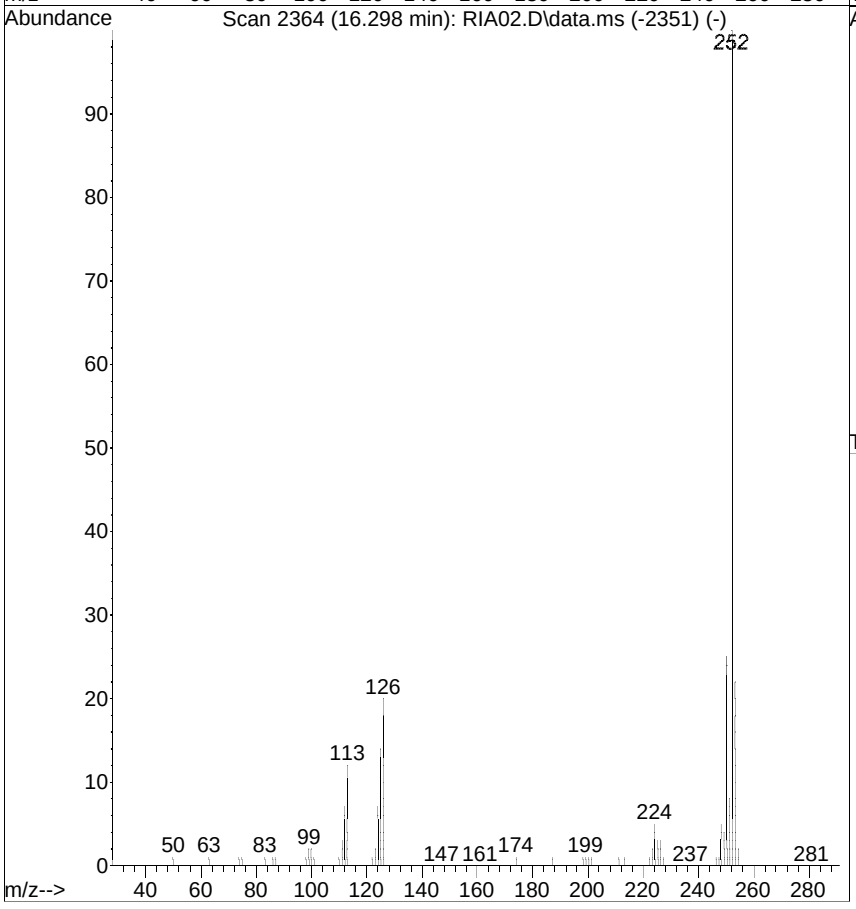
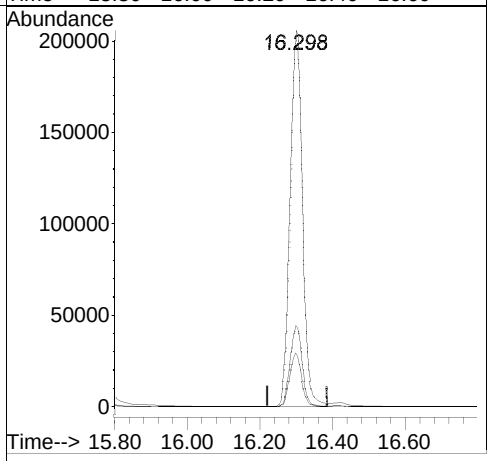
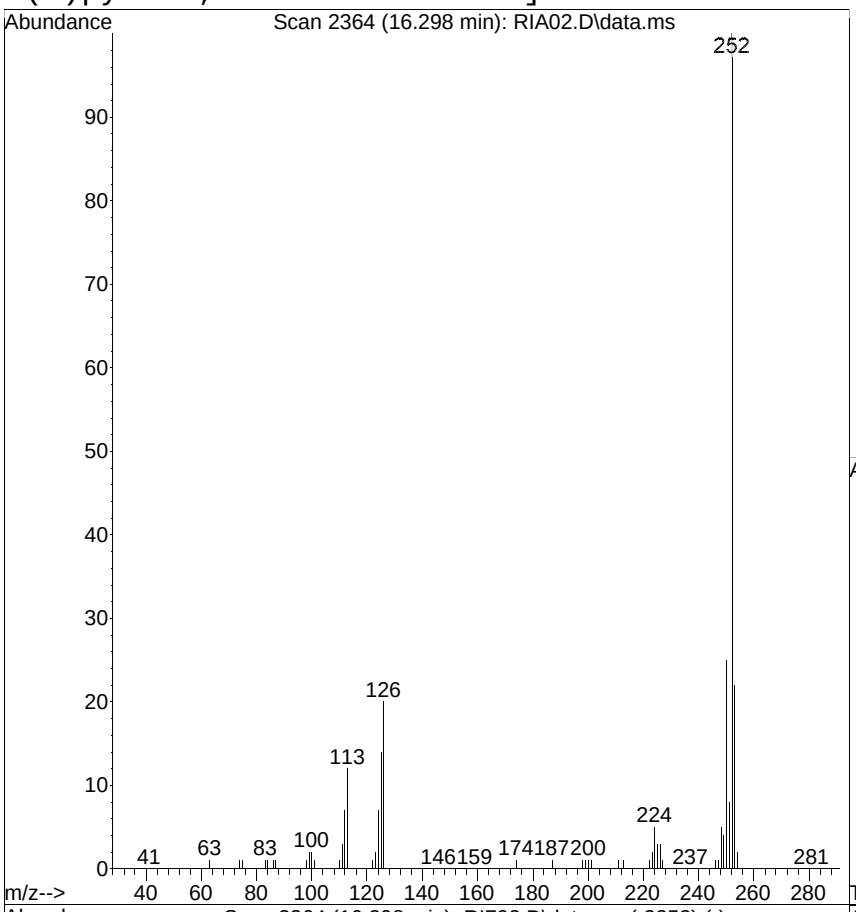




[Benzo(a)pyrene; before version]

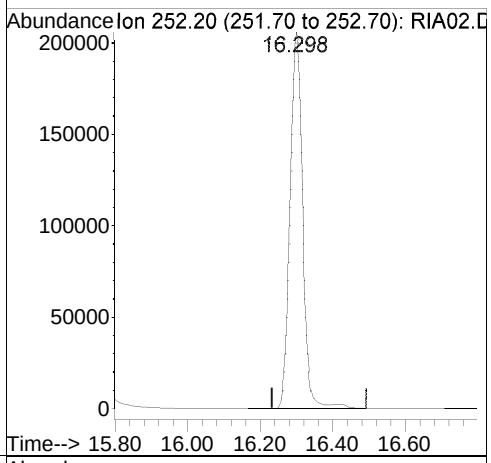
Raw



#83
Benzo(a)pyrene
Concen: 19.3909 ug/mL
RT: 16.298 min Scan# 2364
Delta R.T. 0.000 min
Lab File: RIA02.D
Acq: 10 Sep 2012 11:57 am

Tgt Ion:252 Resp: 479049

Ion	Ratio	Lower	Upper
252	100		
253	21.7	2.6	42.6
125	14.1	0.0	36.8



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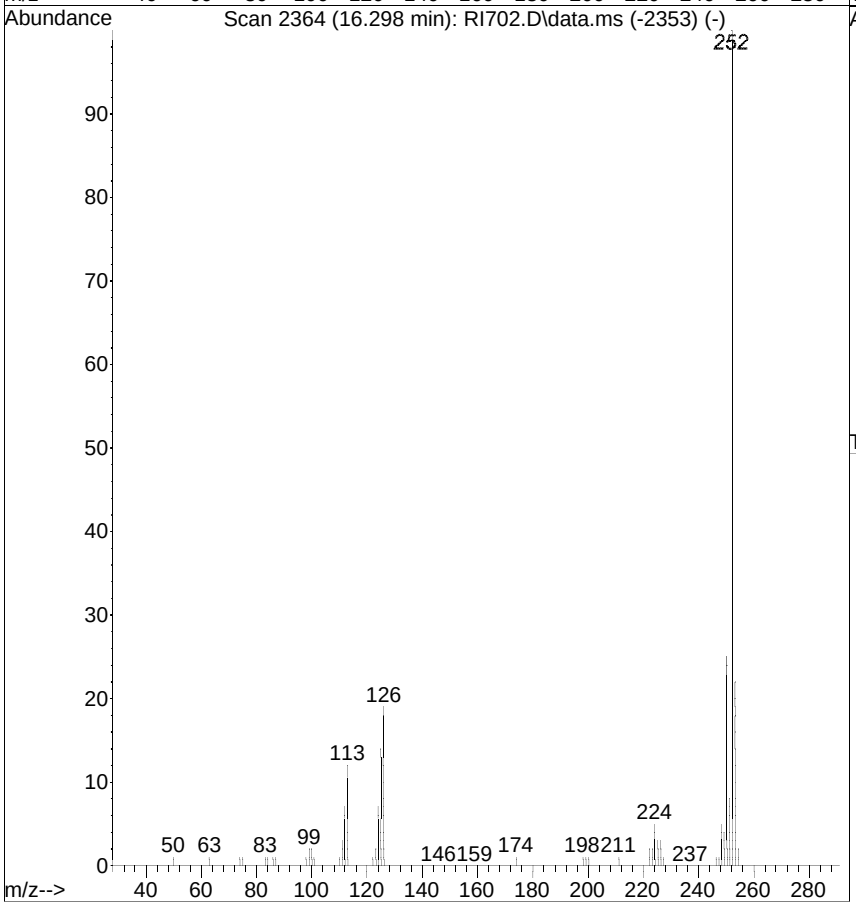
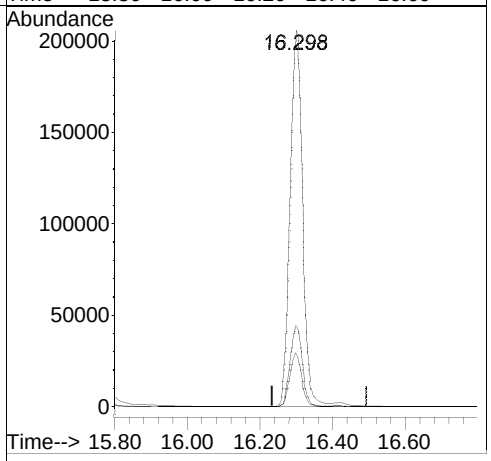




Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239403
ANALYTICAL REPORT
Semivolatile Organics by GC/MS
Matrix: Soil

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
EX36B116D.2	239403-001
EX36B116A.2	239403-002
EX36B116B.2	239403-003
EX36B116C.2	239403-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
SEMIVOLATILE ORGANICS BY GC/MS (EPA 8270D)
SOIL

Laboratory number:	**239403**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/04/12**
Samples Received:	**09/04/12**

This data package contains sample and QC results for four soil samples, requested for the above referenced project on 09/04/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Matrix spikes QC655183,QC655184 (batch 190266) were not reported because the parent sample required a dilution that would have diluted out the spikes.

Semivolatile Organics by GC/MS (EPA 8270D) Soil:

EX36B116D.2 (lab # 239403-001) and EX36B116B.2 (lab # 239403-003) were diluted due to the dark and viscous nature of the sample extracts.

No other analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 23403

Chain of Custody # _____

Project No: CA0007611.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: E Manton and D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None
1	EX36B116D.2	04/04/12	1150		X			1					X
2	EX36B116A.2	04/04/12	1155		X			1					X
3	EX36B116B.2	04/04/12	1140		X			1					X
4	EX36B116C.2	04/04/12	1200		X			1					X
5	EX36B015A.2	04/04/12	1250		X			1					X
6	EX36B163A.2	04/04/12	1315		X			2					X
7	FB.090420120	04/04/12	1455	X				9	3		1		5
8	EB.090420120	04/04/12	1505	X				3			1		2
	Temp Blank												

ANALYTICAL REQUEST

Big(2)-Ethylhexyl)phthlate by 8270D	Copper by EPA 6010C	Mercury by EPA 7471B	Alpha-BHC by EPA 8081B	PCBs by 8082	TPHd by 8015	TPHg by 8015	SVOCs by 8270	Pesticides by 8081	Metals by 6010/7174
X									
X									
X									
X									
	X	X							
	X	X	X						
				X	X	X	X	X	X
							X	X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

RECEIVED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 239403 Date Received 9/4/12 Number of coolers 1
Client ARCADIS Project CA000761.0001

Date Opened 9/4/12 By (print) EL (sign) [signature]
Date Logged in ~~EL~~ 9/6/12 By (print) JG (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? (YES) NO N/A
17. Did you document your preservative check? (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239403

Sample	pH: <2	>9	>12	Other
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
-008a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: EL
Date: 9/6/12

Page 1 of 1

Results & QC Summary

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8270D
Matrix:	Soil	Sampled:	09/04/12
Units:	ug/Kg	Received:	09/04/12
Basis:	dry	Prepared:	09/07/12
Batch#:	190266	Analyzed:	09/07/12

Field ID: EX36B116D.2 Moisture: 12%
Type: SAMPLE Diln Fac: 2.000
Lab ID: 239403-001

Analyte	Result	LOQ	DL
bis(2-Ethylhexyl)phthalate	75 U	750	33

Surrogate	%REC	Limits
Nitrobenzene-d5	79	48-120
2-Fluorobiphenyl	78	50-120
Terphenyl-d14	69	40-120

Field ID: EX36B116A.2 Moisture: 10%
Type: SAMPLE Diln Fac: 1.000
Lab ID: 239403-002

Analyte	Result	LOQ	DL
bis(2-Ethylhexyl)phthalate	37 U	370	16

Surrogate	%REC	Limits
Nitrobenzene-d5	63	48-120
2-Fluorobiphenyl	64	50-120
Terphenyl-d14	59	40-120

Field ID: EX36B116B.2 Moisture: 5%
Type: SAMPLE Diln Fac: 20.00
Lab ID: 239403-003

Analyte	Result	LOQ	DL
bis(2-Ethylhexyl)phthalate	700 U	7,000	310

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	50-120
Terphenyl-d14	DO	40-120

U= Not Detected at or above DL
DL= Detection Limit
DO= Diluted Out
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8270D
Matrix:	Soil	Sampled:	09/04/12
Units:	ug/Kg	Received:	09/04/12
Basis:	dry	Prepared:	09/07/12
Batch#:	190266	Analyzed:	09/07/12

Field ID:	EX36B116C.2	Moisture:	8%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	239403-004		

Analyte	Result	LOQ	DL
bis(2-Ethylhexyl)phthalate	36 U	360	16

Surrogate	%REC	Limits
Nitrobenzene-d5	70	48-120
2-Fluorobiphenyl	67	50-120
Terphenyl-d14	63	40-120

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC655181		

Analyte	Result	LOQ	DL
bis(2-Ethylhexyl)phthalate	33 U	330	15

Surrogate	%REC	Limits
Nitrobenzene-d5	57	48-120
2-Fluorobiphenyl	62	50-120
Terphenyl-d14	60	40-120

U= Not Detected at or above DL
DL= Detection Limit
DO= Diluted Out
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8270D
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC655182	Batch#:	190266
Matrix:	Soil	Prepared:	09/07/12
Units:	ug/Kg	Analyzed:	09/07/12

Analyte	Spiked	Result	%REC	Limits
bis(2-Ethylhexyl)phthalate	997.3	722.5	72	52-120

Surrogate	%REC	Limits
Nitrobenzene-d5	62	48-120
2-Fluorobiphenyl	59	50-120
Terphenyl-d14	73	40-120

CURTIS & TOMPKINS DFTPP TUNE FOR 239403 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 552359297001 File : yi501 Time : 05-SEP-2012 12:17

Standards: S20011

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	146194	49.89	
68	< 2% of mass 69	0	0.00	
69		109057	100.00	
70	< 2% of mass 69	364	0.33	
127	40% - 60% of mass 198	123514	42.15	
197	< 1% of mass 198	0	0.00	
198		293034	100.00	
199	5% - 9% of mass 198	20365	6.95	
275	10% - 30% of mass 198	68464	23.36	
365	> 1% of mass 198	7883	2.69	
441	Present, < mass 443	16728	30.51	
442	> 40% and < 100% of mass 198	271850	92.77	
443	17% - 23% of mass 442	54824	20.17	

Analyst: LLH Date: 09/05/12 Reviewer: LW Date: 09/07/12

PEM Report

File Name : G:\csinput.net\DATA\090512\YI501.D
Date Acquired : 5 Sep 2012 12:17 pm
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA06 BNA DFTPP/PEM
Inst. Name : MSBNA06
AcquisitionMeth: DFTPP06.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.450	5.48	656508
Benzidine	0.608	7.36	2454857
4,4'-DDT		8.39	1096537
4,4'-DDE		7.60	6357
4,4'-DDD		8.01	151666

% Breakdown: 4,4'-DDT	LIMIT <=20%	13%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.5	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	0.6	PASS
	8270D <=2	1	PASS

CURTIS & TOMPKINS DFTPP TUNE FOR 239403 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 552362420001 File : yi701 Time : 07-SEP-2012 16:20

Standards: S20011

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	143815	52.59	
68	< 2% of mass 69	0	0.00	
69		105229	100.00	
70	< 2% of mass 69	354	0.34	
127	40% - 60% of mass 198	116960	42.77	
197	< 1% of mass 198	0	0.00	
198		273450	100.00	
199	5% - 9% of mass 198	18880	6.90	
275	10% - 30% of mass 198	62941	23.02	
365	> 1% of mass 198	4859	1.78	
441	Present, < mass 443	23504	48.96	
442	> 40% and < 100% of mass 198	244650	89.47	
443	17% - 23% of mass 442	48008	19.62	

Analyst: LLH Date: 09/07/12 Reviewer: LW Date: 09/11/12

PEM Report

File Name : G:\msbna06\090712\YI701.D
Date Acquired : 7 Sep 2012 4:20 pm
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA06 BNA DFTPP/PEM
Inst. Name : MSBNA06
AcquisitionMeth: DFTPP06.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.313	5.48	682488
Benzidine	0.900	7.35	2217263
4,4'-DDT		8.39	1071849
4,4'-DDE		7.59	8081
4,4'-DDD		8.01	167142

% Breakdown: 4,4'-DDT	LIMIT <=20%	14%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.3	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	0.9	PASS
	8270D <=2	1	PASS

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 MSBNA Soil: EPA 8270D

Inst : MSBNA06
Calnum : 552359297001
Units : ug/mL

Name : 6PTBNA6
Date : 05-SEP-2012 12:37
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	yi502	552359297002	ICAL	05-SEP-2012 12:37	S20236
L2	yi503	552359297003	ICAL	05-SEP-2012 13:13	S20238
L3	yi504	552359297004	ICAL	05-SEP-2012 13:51	S20239
L4	yi505	552359297005	ICAL	05-SEP-2012 14:31	S20248
L5	yi506	552359297006	ICAL	05-SEP-2012 15:10	S20249
L6	yi507	552359297007	ICAL	05-SEP-2012 15:48	S20250
L7	yi508	552359297008	ICAL	05-SEP-2012 16:24	S20244
L8	yi509	552359297009	ICAL	05-SEP-2012 17:01	S20245
L9	yi510	552359297010	ICAL	05-SEP-2012 17:41	S20246

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
bis(2-Ethylhexyl)phthalate			0.9138	0.8784	0.8767	0.8150	0.7578	0.7136	0.6400	AVRG		1.25106		0.7993	13	20	0.010	0.99	
Nitrobenzene-d5	0.4260	0.4497	0.4136	0.4401	0.3985	0.3970	0.3897m	0.4000	0.3957	AVRG		2.42569		0.4123	5	20	0.05	0.99	
2-Fluorobiphenyl	1.7886	1.7963	1.7265	1.6409	1.6230	1.4710	1.3335	1.3103	1.2618	AVRG		0.64508		1.5502	14	20	0.05	0.99	
Terphenyl-d14	0.9000	0.9750	0.9652	0.9218	0.9603	0.9496	0.9239	0.8621	0.9522	AVRG		1.07013		0.9345	4	20	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
bis(2-Ethylhexyl)phthalate					10.000	14	16.000	10	20.000	10	25.000	2	40.000	-5	50.000	-11	60.000	-20
Nitrobenzene-d5	2.0000	3	5.0000	9	10.000	0	16.000	7	20.000	-3	25.000	-4	40.000	-5	50.000	-3	60.000	-4
2-Fluorobiphenyl	2.0000	15	5.0000	16	10.000	11	16.000	6	20.000	5	25.000	-5	40.000	-14	50.000	-15	60.000	-19
Terphenyl-d14	2.0000	-4	5.0000	4	10.000	3	16.000	-1	20.000	3	25.000	2	40.000	-1	50.000	-8	60.000	2

KMH 09/06/12 [1,4-Dichlorobenzene-d4]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [N-Nitrosodimethylamine]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Aniline]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [Benzoic acid]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [2,4,5-Trichlorophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [2,4-Dinitrophenol]: Picked or reassigned peak in ICAL (yi502).

KMH 09/06/12 [4-Nitroaniline]: Corrected automatically drawn baseline in ICAL (yi502).

KMH 09/06/12 [Dibenz(a,h)anthracene]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [N-Nitroso-di-n-propylamine]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [Indeno(1,2,3-cd)pyrene]: Combined split peak in multiple levels.

KMH 09/06/12 [Benzo(a)anthracene]: Corrected automatically drawn baseline in ICAL (yi505).

KMH 09/06/12 [4-Methylphenol]: Combined split peak in multiple levels.

KMH 09/06/12 [Nitrobenzene-d5]: Corrected automatically drawn baseline in ICAL (yi508).

KMH 09/06/12 [2,4-Dimethylphenol]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [2,4-Dichlorophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Aniline]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Isophorone]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [2-Nitrophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [4-Chloroaniline]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Anthracene]: Corrected automatically drawn baseline in ICAL (yi509).

KMH 09/06/12 [Benzo(b)fluoranthene]: Corrected automatically drawn baseline in ICAL (yi509).

KMH 09/06/12 [Benzo(k)fluoranthene]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [N-Nitroso-di-n-propylamine]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Naphthalene]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Hexachlorobutadiene]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Resorcinol]: Combined split peak in ICAL (yi510).

Analyst: KMH Date: 09/06/12 Reviewer: LW Date: 09/07/12

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

552359297001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Name : 6PTBNA6
Calnum : 552359297001 Cal Date : 05-SEP-2012

ICV 552359297011 (yi511 05-SEP-2012) stds: S19910

Analyte	Spiked	Quant	Units	%D	Max	Flags
bis(2-Ethylhexyl)phthalate	40.00	42.58	ug/mL	6	30	

Analyst: KMH Date: 09/06/12 Reviewer: LW Date: 09/07/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 MSBNA Soil
EPA 8270D

Inst : MSBNA06 IDF : 1.0
Seqnum : 552362420002.1 File : yi702 Time : 07-SEP-2012 16:37
Cal : 552359297001 Caldate : 05-SEP-2012
Standards: S20248

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
bis(2-Ethylhexyl)phthalate	0.7993	0.8911	16.00	17.84	ug/mL	11	20	0.0100	
Nitrobenzene-d5	0.4123	0.4393	16.00	17.05	ug/mL	7	20	0.0500	
2-Fluorobiphenyl	1.5502	1.6849	16.00	17.39	ug/mL	9	20	0.0500	
Terphenyl-d14	0.9345	1.0020	16.00	17.16	ug/mL	7	20	0.0500	

ISTD (ICAL yi507)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
1,4-Dichlorobenzene-d4	198812	223394	12.36	6.09	6.09	0.00
Naphthalene-d8	672821	743711	10.54	7.59	7.59	0.00
Acenaphthene-d10	377811	427044	13.03	9.75	9.74	-0.01
Phenanthrene-d10	744787	851335	14.31	11.60	11.60	0.01
Chrysene-d12	659674	784348	18.90	15.00	15.00	0.01
Perylene-d12	780304	923802	18.39	17.89	17.89	0.01

LLH 09/07/12 [Aniline]: Picked or reassigned peak. [general version]

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 552362420

Date : 09/07/12 Reference : yi507
Sequence : MSBNA06 yi7 Analyzed : 09/05/12 15:48

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		ICAL STD	198812	6.09	672821	7.59	377811	9.75	744787	11.60	659674	15.00	780304	17.89
		LOWER LIMIT	99406	5.59	336411	7.09	188906	9.25	372394	11.10	329837	14.50	390152	17.39
		UPPER LIMIT	397624	6.59	1345642	8.09	755622	10.25	1489574	12.10	1319348	15.50	1560608	18.39
002	CCV		223394	6.09	743711	7.59	427044	9.74	851335	11.60	784348	15.00	923802	17.89

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 552362420

Date : 09/07/12 Reference : yi702
Sequence : MSBNA06 yi7 Analyzed : 09/07/12 16:37

#	Type	Sample ID	NAPHD8	RT	ACEND10	RT	CHYD12	RT	DCBZ14D4	RT	PHEND10	RT	PERYD12	RT
		CCV+CCV/BS+CCV/LCS+ICV+ICV/BS+ICV/CCV+ICV/LCS+RCCV STD	743711	7.59	427044	9.74	784348	15.00	223394	6.09	851335	11.60	923802	17.89
		LOWER LIMIT	371856	7.09	213522	9.24	392174	14.50	111697	5.59	425668	11.10	461901	17.39
		UPPER LIMIT	1487422	8.09	854088	10.24	1568696	15.50	446788	6.59	1702670	12.10	1847604	18.39
003	BLANK	QC655181	824019	7.58	470081	9.74	910488	14.99	233318	6.10	865346	11.59	944393	17.88
004	LCS	QC655182	666881	7.59	417745	9.74	774652	15.00	200168	6.10	836823	11.59	936262	17.89
005	LCS	QC655182	655104	7.59	390783	9.74	764781	14.99	203762	6.10	815860	11.59	892102	17.88
006	SAMPLE	239416-001	784968	7.58	471900	9.74	881248	14.99	240276	6.10	859187	11.59	916380	17.88
007	SAMPLE	239403-004	800815	7.59	468564	9.74	915801	14.99	1258 *	6.27	897350	11.59	1001884	17.89
008	SAMPLE	239403-002	825366	7.58	474899	9.74	855206	14.99	1127 *	6.27	876269	11.59	874582	17.89
009	SAMPLE	239403-001	764789	7.58	439279	9.74	804063	14.99	1048 *	6.27	821593	11.59	727594	17.89
010	MSS	239403-003	880978	7.58	497328	9.74	854845	14.99	265539	6.09	910362	11.59	763163	17.88
011	SAMPLE	239404-005	833914	7.59	462247	9.74	744848	15.00	1149 *	6.27	821011	11.59	478997	17.90
012	SAMPLE	239404-006	817696	7.58	408686	9.74	709501	15.00	1105 *	6.27	725437	11.60	464592	17.89
013	SAMPLE	239404-008	876534	7.58	460513	9.74	755320	14.99	1090 *	6.27	800930	11.59	526692	17.88
014	SAMPLE	239404-009	767167	7.58	436220	9.74	609041	15.01	229902	6.09	758547	11.59	302155 *	17.91
015	SAMPLE	239404-010	727254	7.58	416933	9.74	635906	15.01	1216 *	6.27	791662	11.59	364209 *	17.90
016	SAMPLE	239404-011	782436	7.58	387779	9.74	661197	15.02	246166	6.09	751319	11.60	361035 *	17.90
017	SAMPLE	239425-003	788113	7.58	406516	9.74	709661	15.00	201621	6.10	768002	11.60	377376 *	17.89
018	SAMPLE	239425-006	797764	7.58	443293	9.74	670526	15.00	218744	6.10	829682	11.60	290387 *	17.88
019	SAMPLE	239410-020	838538	7.58	495656	9.74	763006	14.99	1122 *	6.27	932884	11.59	361359 *	17.86
020	SAMPLE	239410-021	802341	7.59	459861	9.74	586397	15.00	239138	6.10	802994	11.59	265916 *	17.89

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 552359297

Instrument : MSBNA06 Begun : 09/05/12 12:17
Method : EPA 8270D SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	yi501	TUN	DFTPP/PEM			09/05/12 12:17	1.0	1	
002	yi502	ICAL	ICAL			09/05/12 12:37	1.0	2	
003	yi503	ICAL	ICAL			09/05/12 13:13	1.0	3	
004	yi504	ICAL	ICAL			09/05/12 13:51	1.0	4	
005	yi505	ICAL	ICAL			09/05/12 14:31	1.0	5	
006	yi506	ICAL	ICAL			09/05/12 15:10	1.0	6	
007	yi507	ICAL	ICAL			09/05/12 15:48	1.0	7	
008	yi508	ICAL	ICAL			09/05/12 16:24	1.0	8	
009	yi509	ICAL	ICAL			09/05/12 17:01	1.0	9	
010	yi510	ICAL	ICAL			09/05/12 17:41	1.0	10	
011	yi511	ICV	ICV			09/05/12 18:20	1.0	11	
012	yi512	ICV	ICV			09/05/12 19:02	1.0	12 13	

KMH 09/06/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

Standards used: 1=S20011 2=S20236 3=S20238 4=S20239 5=S20248 6=S20249 7=S20250 8=S20244 9=S20245 10=S20246 11=S19910 12=S19898 13=S18805

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 552362420

Instrument : MSBNA06 Begun : 09/07/12 16:20
Method : EPA 8270D SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	yi701	TUN	DFTPP/PEM			09/07/12 16:20	1.0	1	
002	yi702	CCV				09/07/12 16:37	1.0	2	
003	yi703	BLANK	QC655181	Soil	190266	09/07/12 19:18	1.0	3	
004	yi704	LCS	QC655182	Soil	190266	09/07/12 19:55	1.0	3	1:MEPH4=50
005	yi705	LCS	QC655182	Soil	190266	09/07/12 20:33	2.0	3	
006	yi706	SAMPLE	239416-001	Soil	190266	09/07/12 21:14	1.0	3	
007	yi707	SAMPLE	239403-004	Soil	190266	09/07/12 21:54	1.0	3	2:PHENOLD5=4400
008	yi708	SAMPLE	239403-002	Soil	190266	09/07/12 22:34	1.0	3	3:PHENOLD5=4900
009	yi709	SAMPLE	239403-001	Soil	190266	09/07/12 23:15	2.0	3	4:PHENOLD5=2900
010	yi710	MSS	239403-003	Soil	190266	09/07/12 23:54	20.0	3	
011	yi711	SAMPLE	239404-005	Soil	190266	09/08/12 00:31	1.0	3	3:PHENOLD5=5100
012	yi712	SAMPLE	239404-006	Soil	190266	09/08/12 01:09	3.0	3	3:PHENOLD5=2000
013	yi713	SAMPLE	239404-008	Soil	190266	09/08/12 01:45	10.0	3	2:PHENOLD5=370
014	yi714	SAMPLE	239404-009	Soil	190266	09/08/12 02:26	2.0	3	
015	yi715	SAMPLE	239404-010	Soil	190266	09/08/12 03:05	10.0	3	6:PHENOL=2500
016	yi716	SAMPLE	239404-011	Soil	190266	09/08/12 03:46	10.0	3	
017	yi717	SAMPLE	239425-003	Soil	190266	09/08/12 04:24	3.0	3	<<t
018	yi718	SAMPLE	239425-006	Soil	190266	09/08/12 05:02	1.0	3	<<t
019	yi719	SAMPLE	239410-020	Soil	190266	09/08/12 05:38	25.0	3	<<t , 2:PH2F=140
020	yi720	SAMPLE	239410-021	Soil	190266	09/08/12 06:15	1.0	3	<<t

LLH 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 020.

Standards used: 1=S20011 2=S20248 3=S18805

Flags used: <<t=out of clock

SAMPLE PREPARATION SUMMARY

Batch # : 190266
Started By : ICK
Method : 3550B
Spike #1 ID : S20014
Prep Date : 07-SEP-2012 11:15
SOP Version : 8270_3550_rv11
Spike #2 ID : S20576
Analysis : 8270
Finished By : ICK
Units : g

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239403-001		Soil	30.15	1	1	0.03317		.4				8270	
239403-002		Soil	30.35	1	1	0.03295		.4				8270	
239403-003		Soil	30.24	1	1	0.03307		.4				8270	MSS
239403-004		Soil	30.14	1	1	0.03318		.4				8270	
239404-005		Soil	30.31	1	1	0.03299		.4				8270	
239404-006		Soil	30.06	1	1	0.03327		.4				8270	
239404-008		Soil	30.08	2	1	0.06649		.4				8270	Wouldn't Concentrate
239404-009		Soil	30	1	1	0.03333		.4				8270	
239404-010		Soil	30.12	2	1	0.0664		.4				8270	See comment 1 below
239404-011		Soil	30.41	2	1	0.06577		.4				8270	See comment 1 below
239410-011		Soil	30	1	1	0.03333		.4				8270	
239410-013		Soil	30.3	1	1	0.033		.4				8270	
239410-014		Soil	30.21	1	1	0.0331		.4				8270	
239410-015		Soil	30.06	1	1	0.03327		.4				8270	
239410-016		Soil	30.01	1	1	0.03332		.4				8270	
239410-020		Soil	30.17	2	1	0.06629		.4				8270	Wouldn't Concentrate
239410-021		Soil	30.07	1	1	0.03326		.4				8270	
239416-001		Soil	30.23	1	1	0.03308		.4				(rebatched)	
239425-003		Soil	30.3	1	1	0.033		.4				8270	
239425-006		Soil	30.3	1	1	0.033		.4				8270	
QC655181	BLANK	Soil	30.03	1	1	0.0333		.4				8270	
QC655182	LCS	Soil	30.08	1	1	0.03324		.4	1			8270	
QC655183	MS	Soil	30.09	1	1	0.03323		.4	1			8270	
QC655184	MSD	Soil	30.42	1	1	0.03287		.4	1			8270	

Comment 1: Heavy Sediment; Wouldn't Concentrate

LLH 09/10/12 : Matrix spikes QC655183,QC655184 (batch 190266) were not reported because the parent sample required a dilution that would have diluted out the spikes.

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

BNA Soil Prep Log

Curtis & Tompkins, Ltd.

Page: 75 **BK 3326**

LIMS Batch No: 190266
LIMS Analysis 8270
Date Extracted: 9/7/12

Extraction Method:
☒ EPA 3550b Sonication
☐ Other _____

Cleanup Method (if necessary):
☐ EPA 3640a GPC
☐ Other _____

	Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Cleanup (x if needed)	Comments
	239403-001	A	30.15	☒1.0 ☐		
	2		30.35	☒1.0 ☐		
	3		30.24	☒1.0 ☐		MSS
	4		30.14	☒1.0 ☐		
5	239404-005		30.31	☒1.0 ☐		
	6	↓	30.06	☒1.0 ☐		
	8	B	30.08	☐1.0 ☒2.0		Wouldn't conc.
	9		30.00	☒1.0 ☐		
	10	↓	30.12	☐1.0 ☒2.0		Heavy Sediment, Wouldn't conc.
10	11	A	30.41	☐1.0 ☒2.0		↓ ↓
	239410-011	B	30.00	☒1.0 ☐		
	13		30.30	☒1.0 ☐		
	14	↓	30.21	☒1.0 ☐		
	15	A	30.06	☒1.0 ☐		
15	16	↓	30.01	☒1.0 ☐		
	20	F	30.17	☐1.0 ☒2.0		Wouldn't Conc.
	21	B	30.07	☒1.0 ☐		
	239416-001		30.23	☒1.0 ☐		
	239425-003	↓	30.30	☒1.0 ☐		
20	6	↓	30.30	☒1.0 ☐		
	MB QC655181	N/A	30.03	☒1.0 ☐		
	LCS 2		30.08	☒1.0 ☐		
	MS 3		30.09	☒1.0 ☐		
	MSD 4	↓	30.42	☒1.0 ☐		
			TFB 9/10/12			

	Mfg & Lot # / LIMS # / Time	Date/Initials
Baked, CH_2Cl_2-rinsed granular Na_2SO_4 used for QC & to dry samples	EMVB15H	ICK 9/7/12
0.4 mL of surrogate solution was added to all samples	S20014A	
1.0 mL of matrix spiking solution was added to all spikes	S20576C	
≥100mL 1:1 CH_2Cl_2:Acetone was added to all: CH_2Cl_2	EM52160	
Acetone	EM52038	
Solvent was added at (time)	11:15	
☒ sonicated 3 times w/ ≥100mL ☐ soxhlet extractors on at:	✓	
soxhlets off at:	N/A	
Extracts filtered through baked, CH_2Cl_2-rinsed powdered Na_2SO_4	EM30416024	
Concentrated to final volume at temperature (degrees C)	70	
Relinquished to BNA department	✓	

9/7/12
Extraction Chemist / Date

Continued from page _____
Continued on page 1

TFB 9/10/12
Reviewed by / Date

TITLE PROJECT DATE

Continued from page

Sample ID	Weight(g)	Analysis	Batch #	Comments
239403-001A	30.15	8270	1902666	
2	30.35			
3	30.24			MSS
4	30.14			
239404-005	30.31			
6	30.06			
8B	30.08			
9	30.00			
10	30.12			
11A	30.41			
239410-011B	30.00			Rocky
13	30.30			
14	30.21			Rocky
15A	30.06			
16	30.01			
20F	30.17			
21B	30.07			
239416-001B	30.23			Wet Rocky
239425-003B	30.30			
6	30.30			
MB	30.03			EMVB15H
LCS	30.08			
MS	30.09			239403-003A
MSD	30.42			

ICK 9/7/12

Continued to page

SIGNATURE DATE

DISCLOSED TO AND UNDERSTOOD BY DATE

PROPRIETARY INFORMATION

Dilutions for 239403 MSBNA Soil
Curtis & Tompkins Laboratories

Type	Sample ID	IDFs
SAMPLE	239403-001	2X
SAMPLE	239403-003	20X

Case Narrative Addendum: Manual Integrations for 239403 MSBNA (Soil)

For CCV (MSBNA06 yi702):
Aniline: Picked or reassigned peak.

For BLANK QC655181 (MSBNA06 yi703):
1,4-Dichlorobenzene-d4: Picked or reassigned peak.

For LCS QC655182 (MSBNA06 yi704):
Aniline: Picked or reassigned peak.
Benzoic acid: Corrected automatically drawn baseline.
4-Chloroaniline: Corrected automatically drawn baseline.
2,4-Dinitrotoluene: Corrected automatically drawn baseline.
N-Nitroso-di-n-propylamine: Combined split peak.
2,4,5-Trichlorophenol: Corrected automatically drawn baseline.

For Calibration MSBNA06 (552359297001):
Resorcinol: Combined split peak in ICAL (yi510).
Aniline: Picked or reassigned peak in multiple levels.
Aniline: Corrected automatically drawn baseline in multiple levels.
Anthracene: Corrected automatically drawn baseline in ICAL (yi509).
bis(2-Chloroethyl)ether: Corrected automatically drawn baseline in multiple levels.
Benzo(a)anthracene: Corrected automatically drawn baseline in ICAL (yi505).
Benzoic acid: Corrected automatically drawn baseline in multiple levels.
Benzo(b)fluoranthene: Corrected automatically drawn baseline in ICAL (yi509).
Benzo(k)fluoranthene: Picked or reassigned peak in multiple levels.
4-Chloroaniline: Corrected automatically drawn baseline in multiple levels.
Dibenz(a,h)anthracene: Corrected automatically drawn baseline in multiple levels.
1,4-Dichlorobenzene-d4: Picked or reassigned peak in multiple levels.
2,4-Dichlorophenol: Corrected automatically drawn baseline in multiple levels.
2,4-Dimethylphenol: Picked or reassigned peak in multiple levels.
2,4-Dinitrophenol: Picked or reassigned peak in ICAL (yi502).
Hexachlorobutadiene: Corrected automatically drawn baseline in ICAL (yi510).
Indeno(1,2,3-cd)pyrene: Combined split peak in multiple levels.
Isophorone: Picked or reassigned peak in multiple levels.
4-Methylphenol: Combined split peak in multiple levels.
Naphthalene: Corrected automatically drawn baseline in ICAL (yi510).
N-Nitrosodimethylamine: Corrected automatically drawn baseline in multiple levels.
N-Nitroso-di-n-propylamine: Picked or reassigned peak in multiple levels.
N-Nitroso-di-n-propylamine: Corrected automatically drawn baseline in ICAL (yi510).
4-Nitroaniline: Corrected automatically drawn baseline in ICAL (yi502).
Nitrobenzene-d5: Corrected automatically drawn baseline in ICAL (yi508).
2-Nitrophenol: Corrected automatically drawn baseline in multiple levels.
2,4,5-Trichlorophenol: Corrected automatically drawn baseline in multiple levels.

For ICV (MSBNA06 yi511):
Aniline: Picked or reassigned peak.
Benzo(k)fluoranthene: Corrected automatically drawn baseline.

Sample Raw Data

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA06	Lab ID	: 239403-001	Client ID	: EX36B116D.2
Seqnum	: 552362420009	Matrix	: Soil	Acct	: ARCSF (JG)
File	: yi709	Batch	: 190266	Time	: 07-SEP-2012 23:15
Cal	: 552359297001	Caldate	: 05-SEP-2012		
IDF	: 2.0	Raw Units	: ug/mL	Units	: ug/Kg

30.15 g --> 1.0 ml = 0.03317 ml/g PDF

Analyte	Raw	Result	RL	Blank	Flags
bis(2-Ethylhexyl)phthalate	0.1528	ND	660		u

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	15.84	1327	1051	79	48-120	u
2-Fluorobiphenyl	15.63	1327	1036	78	50-120	u
Terphenyl-d14	13.85	1327	918.6	69	40-120	u

ISTD (CCV yi702)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	743711	764789	2.83	7.59	7.58	-0.01
Acenaphthene-d10	427044	439279	2.87	9.74	9.74	0.00
Chrysene-d12	784348	804063	2.51	15.00	14.99	-0.01

09/07/12 : Was diluted due to the dark and viscous nature of the sample extract.

(not in upper half)

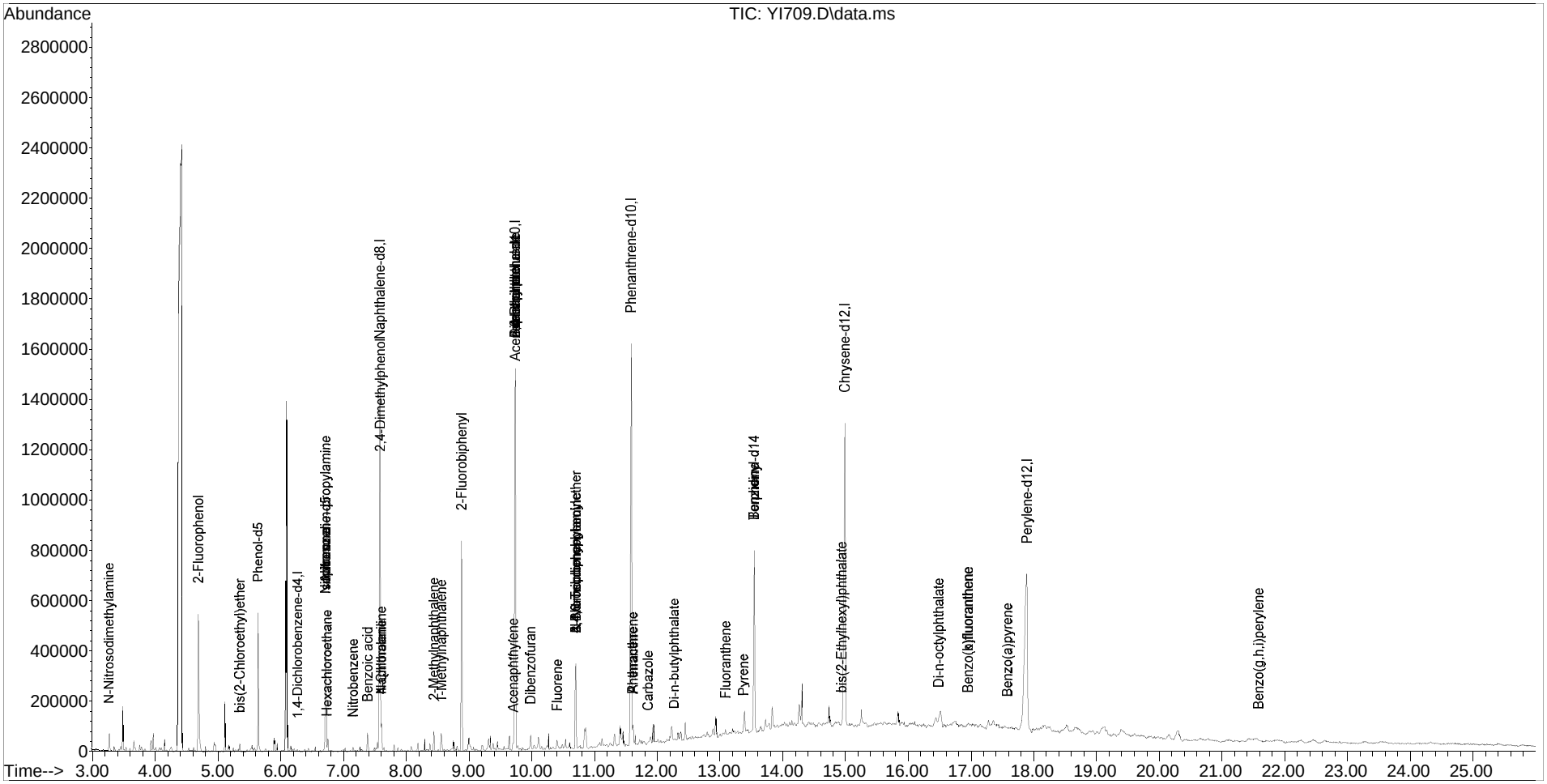
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

u=use

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI709.D
Acq On : 7 Sep 2012 11:15 pm
Operator :
Sample : S,239403-001
Misc : 190266,2, //DV
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 07 23:41:26 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI709.D
Acq On : 7 Sep 2012 11:15 pm
Operator :
Sample : S,239403-001
Misc : 190266,2, //DV
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 07 23:41:26 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.272	152	1048	40.0000	ug/mL	0.18
19) Naphthalene-d8	7.584	136	764789	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.739	164	439279	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	821593	40.0000	ug/mL	0.00
70) Chrysene-d12	14.990	240	804063	40.0000	ug/mL	0.00
79) Perylene-d12	17.890	264	727594	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	0.000	79	0	N.D.		
3) N-Nitrosodimethylamine	3.266	42	1134	30.8891	ug/mL	# 23
4) 2-Fluorophenol	4.694	112	125434	2784.6367	ug/mL	90
5) Phenol-d5	5.642	99	151917	2888.4682	ug/mL	84
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	5.353	93	5328	170.2894	ug/mL	# 25
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	0.000	108	0	N.D.		
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.719	70	17474	840.1140	ug/mL	88
18) Hexachloroethane	6.738	117	1134	73.6570	ug/mL	# 15
20) Nitrobenzene-d5	6.719	82	124876	15.8429	ug/mL	80
21) Nitrobenzene	7.161	77	1136	0.1706	ug/mL	# 48
22) Isophorone	6.719	82	124876	9.5732	ug/mL	67
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	7.589	107	1700	0.2785	ug/mL	# 27
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	7.387	105	1672	0.3313	ug/mL	# 39
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	7.609	128	35950	1.9179	ug/mL	97
30) 4-Chloroaniline	7.609	127	4684	0.5980	ug/mL	# 29
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	8.440	142	21769	1.5248	ug/mL	96
35) 1-Methylnaphthalene	8.565	142	18391	1.3397	ug/mL	91
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI709.D
Acq On : 7 Sep 2012 11:15 pm
Operator :
Sample : S,239403-001
Misc : 190266,2, //DV
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 07 23:41:26 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.888	172	266009	15.6252	ug/mL	100
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	0.000	65	0	N.D.		
43) Dimethylphthalate	9.739	163	72175	4.8201	ug/mL #	1
44) 2,6-Dinitrotoluene	9.739	165	58357	17.5258	ug/mL #	15
45) Acenaphthylene	9.710	152	1367	0.0642	ug/mL #	43
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.744	154	1351	0.1111	ug/mL #	7
48) 2,4-Dinitrophenol	0.000	184	0	N.D.		
49) 4-Nitrophenol	0.000	109	0	N.D.		
50) Dibenzofuran	9.984	168	12437	0.7395	ug/mL	83
51) 2,4-Dinitrotoluene	9.739	165	58357	13.7672	ug/mL #	14
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	0.000	149	0	N.D.		
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.		
55) Fluorene	10.412	166	6103	0.4231	ug/mL	88
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	10.710	330	38409	14.0933	ug/mL #	81
59) 4,6-Dinitro-2-methylphenol	0.000	198	0	N.D.		
60) N-Nitrosodiphenylamine	10.710	169	1182	0.1181	ug/mL #	18
61) Azobenzene	0.000	77	0	N.D.		
62) 4-Bromophenyl-phenylether	10.710	248	2229	0.4449	ug/mL #	1
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	11.614	178	27111	1.3614	ug/mL	97
66) Anthracene	11.614	178	27111	1.3385	ug/mL	93
67) Carbazole	11.860	167	3886	0.2279	ug/mL	85
68) Di-n-butylphthalate	12.273	149	1154	0.0449	ug/mL	68
69) Fluoranthene	13.091	202	8906	0.3322	ug/mL	94
71) Benzidine	13.552	184	3378	0.3044	ug/mL #	1
72) Pyrene	13.374	202	10282	0.3666	ug/mL	88
73) Terphenyl-d14	13.552	244	260127	13.8482	ug/mL	99
74) Butylbenzylphthalate	0.000	149	0	N.D.		
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.		
76) Benzo(a)anthracene	0.000	228	0	N.D.		
77) bis(2-Ethylhexyl)phthalate	14.942	149	2455	0.1528	ug/mL	96
78) Chrysene	0.000	228	0	N.D.		
80) Di-n-octylphthalate	16.491	149	1228	0.0475	ug/mL #	1
81) Benzo(b)fluoranthene	16.957	252	6142	0.2915	ug/mL #	66
82) Benzo(k)fluoranthene	16.957	252	6142	0.3168	ug/mL #	69
83) Benzo(a)pyrene	17.587	252	6581	0.3575	ug/mL	81
84) Indeno(1,2,3-cd)pyrene	0.000	276	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI709.D
Acq On : 7 Sep 2012 11:15 pm
Operator :
Sample : S,239403-001
Misc : 190266,2, //DV
ALS Vial : 9 Sample Multiplier: 1

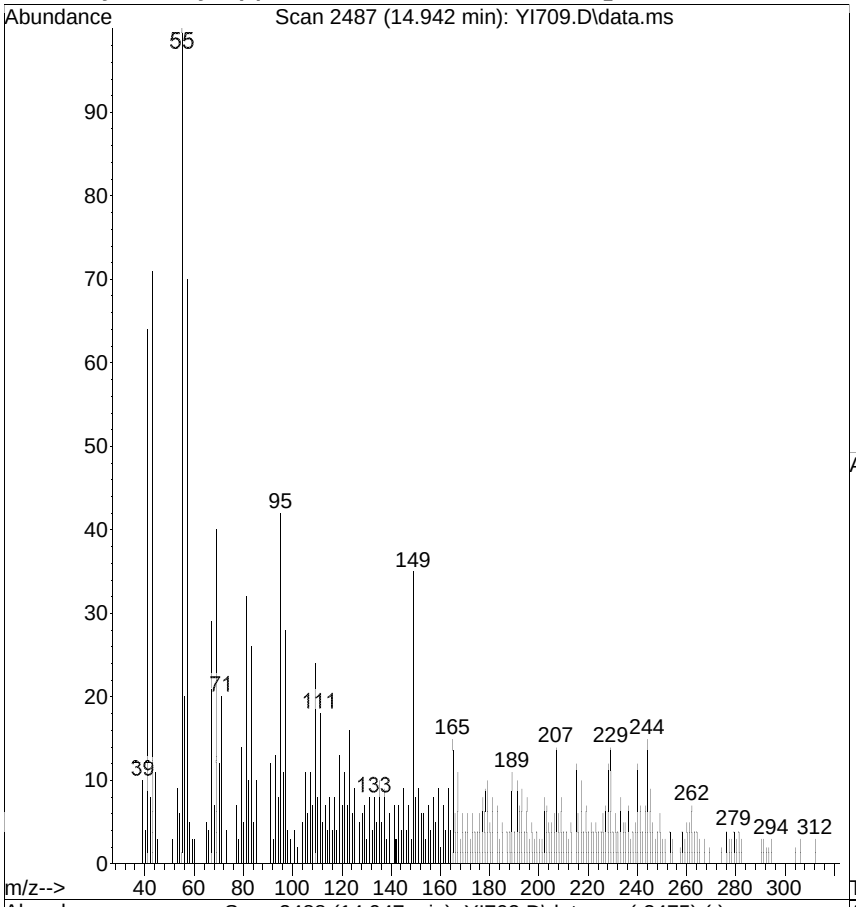
Quant Time: Sep 07 23:41:26 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	21.583	276	2516	0.1462	ug/mL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[bis(2-Ethylhexyl)phthalate; <RL; u]

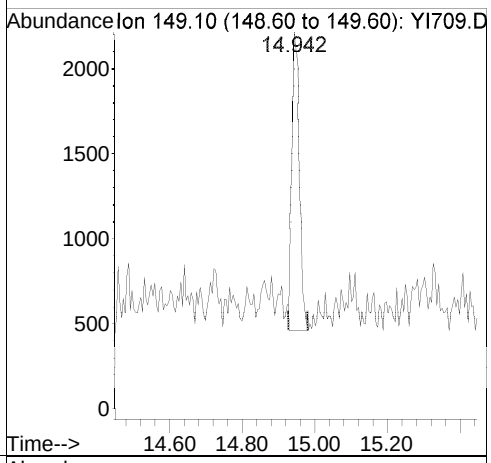
Raw



#77
bis(2-Ethylhexyl)phthalate
Concen: 0.1528 ug/mL
RT: 14.942 min Scan# 2487
Delta R.T. -0.005 min
Lab File: YI709.D
Acq: 7 Sep 2012 11:15 pm

Tgt Ion:149 Resp: 2455

Ion	Ratio	Lower	Upper
149	100		
167	30.4	9.0	49.0
279	10.3	0.0	27.0



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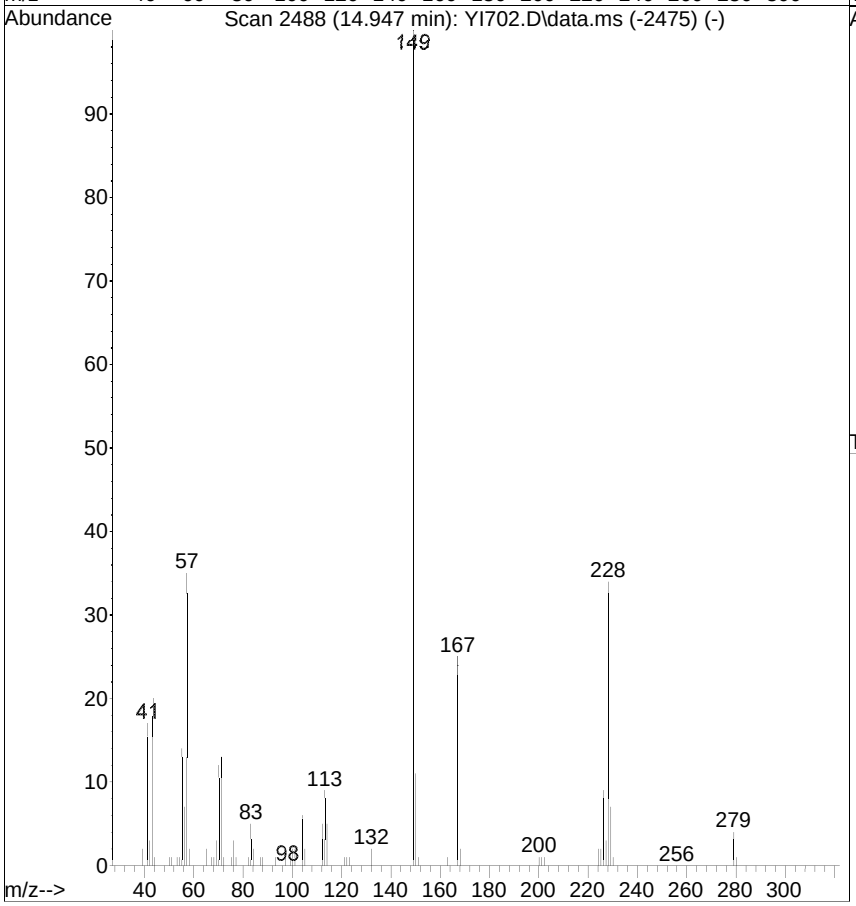
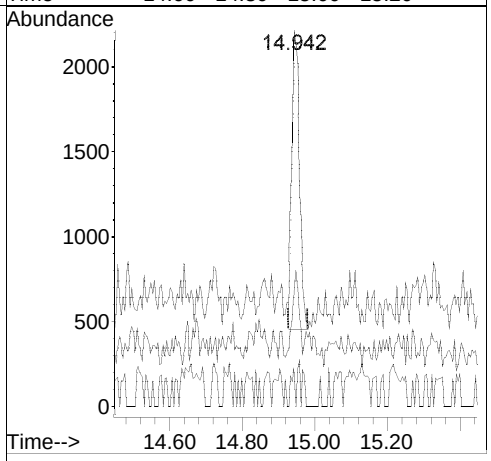




CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA06	Lab ID	: 239403-002	Client ID	: EX36B116A.2
Seqnum	: 552362420008	Matrix	: Soil	Acct	: ARCSF (JG)
File	: yi708	Batch	: 190266	Time	: 07-SEP-2012 22:34
Cal	: 552359297001	Caldate	: 05-SEP-2012		
IDF	: 1.0	Raw Units	: ug/mL	Units	: ug/Kg

30.35 g --> 1.0 ml = 0.03295 ml/g PDF

Analyte	Raw	Result	RL	Blank	Flags
bis(2-Ethylhexyl)phthalate	0.2337	ND	330		u

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	25.26	1318	832.1	63	48-120	u
2-Fluorobiphenyl	25.47	1318	839.4	64	50-120	u
Terphenyl-d14	23.70	1318	780.8	59	40-120	u

ISTD (CCV yi702)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	743711	825366	10.98	7.59	7.58	-0.01
Acenaphthene-d10	427044	474899	11.21	9.74	9.74	0.00
Chrysene-d12	784348	855206	9.03	15.00	14.99	-0.01

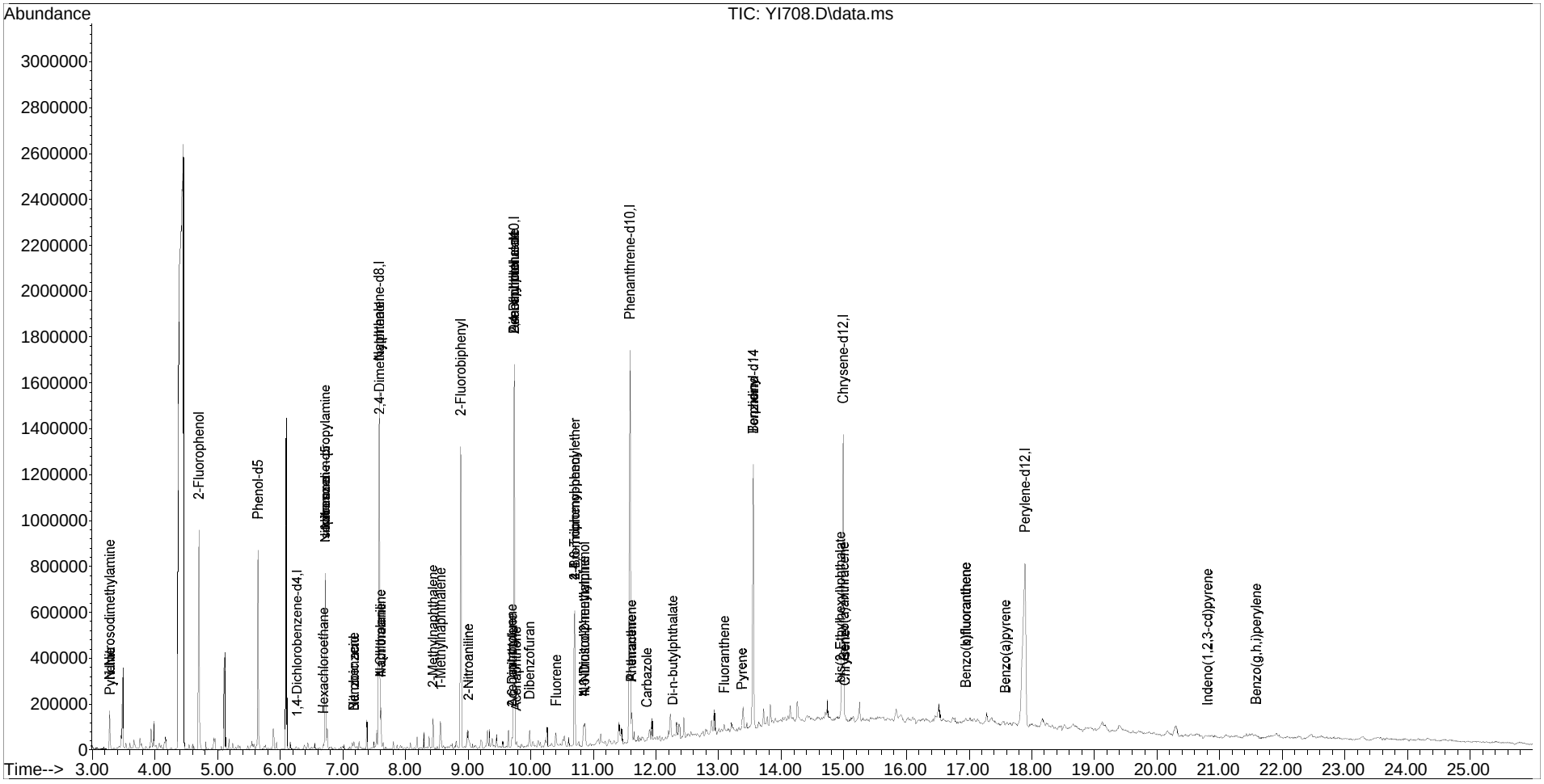
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

u=use

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI708.D
Acq On : 7 Sep 2012 10:34 pm
Operator :
Sample : S,239403-002
Misc : 190266,1,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 07 23:01:00 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI708.D
Acq On : 7 Sep 2012 10:34 pm
Operator :
Sample : S,239403-002
Misc : 190266,1,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 07 23:01:00 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.272	152	1127	40.0000	ug/mL	0.18
19) Naphthalene-d8	7.584	136	825366	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.739	164	474899	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	876269	40.0000	ug/mL	0.00
70) Chrysene-d12	14.990	240	855206	40.0000	ug/mL	0.00
79) Perylene-d12	17.890	264	874582	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.290	79	1020	19.8084	ug/mL	# 40
3) N-Nitrosodimethylamine	3.285	42	2606	66.0091	ug/mL	# 22
4) 2-Fluorophenol	4.709	112	218722	4515.2635	ug/mL	84
5) Phenol-d5	5.651	99	276219	4883.7355	ug/mL	80
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	0.000	108	0	N.D.		
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.724	70	30230	1351.5167	ug/mL	90
18) Hexachloroethane	6.695	117	1175	70.9702	ug/mL	# 15
20) Nitrobenzene-d5	6.724	82	214834	25.2553	ug/mL	83
21) Nitrobenzene	7.180	77	7000	0.9741	ug/mL	# 63
22) Isophorone	6.724	82	214834	15.2607	ug/mL	66
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	7.589	107	3437	0.5217	ug/mL	# 22
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	7.180	105	7995	1.4680	ug/mL	95
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	7.608	128	58470	2.8903	ug/mL	96
30) 4-Chloroaniline	7.608	127	8066	0.9543	ug/mL	# 30
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	8.440	142	37237	2.4169	ug/mL	100
35) 1-Methylnaphthalene	8.565	142	30136	2.0342	ug/mL	92
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI708.D
Acq On : 7 Sep 2012 10:34 pm
Operator :
Sample : S,239403-002
Misc : 190266,1,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 07 23:01:00 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.			
40) 2-Fluorobiphenyl	8.888	172	468857	25.4748	ug/mL		100
41) 2-Chloronaphthalene	0.000	162	0	N.D.			
42) 2-Nitroaniline	9.008	65	1206	0.2389	ug/mL	#	7
43) Dimethylphthalate	9.739	163	76528	4.7275	ug/mL	#	1
44) 2,6-Dinitrotoluene	9.705	165	1306	0.3628	ug/mL	#	42
45) Acenaphthylene	9.710	152	2220	0.0964	ug/mL	#	48
46) 3-Nitroaniline	0.000	138	0	N.D.			
47) Acenaphthene	9.777	154	1089	0.0828	ug/mL	#	30
48) 2,4-Dinitrophenol	0.000	184	0	N.D.			
49) 4-Nitrophenol	0.000	109	0	N.D.			
50) Dibenzofuran	9.984	168	20862	1.1475	ug/mL		81
51) 2,4-Dinitrotoluene	9.739	165	61716	13.4676	ug/mL	#	14
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.			
53) Diethylphthalate	0.000	149	0	N.D.			
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.			
55) Fluorene	10.412	166	10122	0.6492	ug/mL		86
56) 4-Nitroaniline	0.000	138	0	N.D.			
57) 2,4,6-Tribromophenol	10.710	330	70765	24.0181	ug/mL	#	80
59) 4,6-Dinitro-2-methylphenol	10.864	198	1857	0.7822	ug/mL	#	51
60) N-Nitrosodiphenylamine	10.864	169	2922	0.2738	ug/mL		88
61) Azobenzene	0.000	77	0	N.D.			
62) 4-Bromophenyl-phenylether	10.710	248	4099	0.7671	ug/mL	#	1
63) Hexachlorobenzene	0.000	284	0	N.D.			
64) Pentachlorophenol	0.000	266	0	N.D.			
65) Phenanthrene	11.614	178	48548	2.2858	ug/mL		96
66) Anthracene	11.614	178	48548	2.2472	ug/mL		93
67) Carbazole	11.860	167	6724	0.3697	ug/mL		84
68) Di-n-butylphthalate	12.273	149	3001	0.1095	ug/mL		92
69) Fluoranthene	13.091	202	12283	0.4296	ug/mL		95
71) Benzidine	13.557	184	6466	0.5478	ug/mL	#	1
72) Pyrene	13.374	202	16549	0.5547	ug/mL		90
73) Terphenyl-d14	13.557	244	473428	23.6963	ug/mL		98
74) Butylbenzylphthalate	0.000	149	0	N.D.			
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.			
76) Benzo(a)anthracene	15.005	228	2155	0.0878	ug/mL		77
77) bis(2-Ethylhexyl)phthalate	14.947	149	3994	0.2337	ug/mL		91
78) Chrysene	15.019	228	1947	0.0857	ug/mL		77
80) Di-n-octylphthalate	0.000	149	0	N.D.			
81) Benzo(b)fluoranthene	16.952	252	10502	0.4146	ug/mL		68
82) Benzo(k)fluoranthene	16.952	252	10502	0.4506	ug/mL		71
83) Benzo(a)pyrene	17.582	252	10440	0.4718	ug/mL		90
84) Indeno(1,2,3-cd)pyrene	20.809	276	2663	0.1070	ug/mL	#	78

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI708.D
Acq On : 7 Sep 2012 10:34 pm
Operator :
Sample : S,239403-002
Misc : 190266,1,
ALS Vial : 8 Sample Multiplier: 1

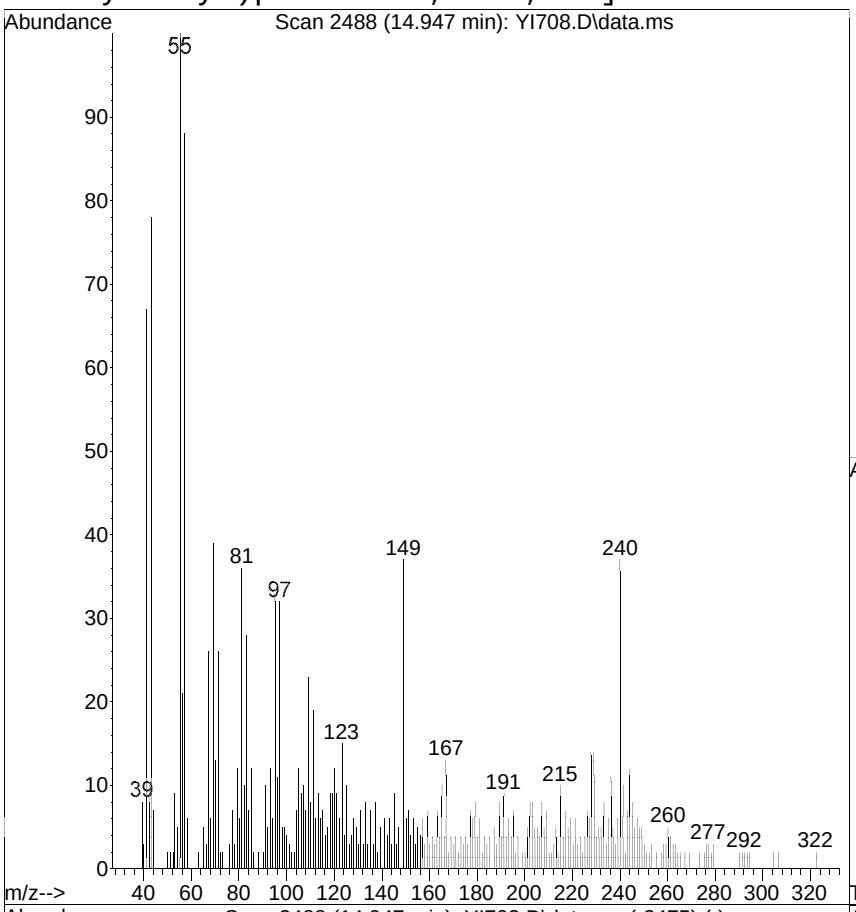
Quant Time: Sep 07 23:01:00 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	21.588	276	6568	0.3174	ug/mL	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[bis(2-Ethylhexyl)phthalate; <RL; u]

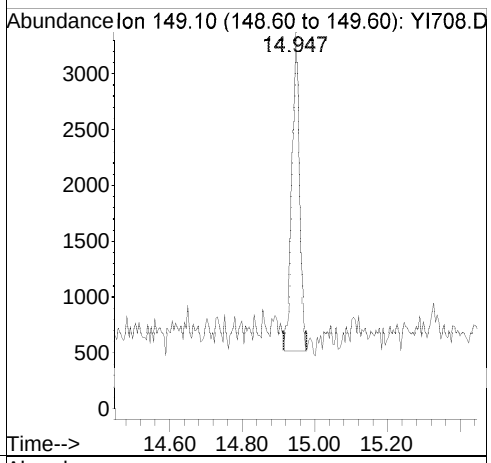
Raw



#77
bis(2-Ethylhexyl)phthalate
Concen: 0.2337 ug/mL
RT: 14.947 min Scan# 2488
Delta R.T. 0.000 min
Lab File: YI708.D
Acq: 7 Sep 2012 10:34 pm

Tgt Ion:149 Resp: 3994

Ion	Ratio	Lower	Upper
149	100		
167	34.6	9.0	49.0
279	7.9	0.0	27.0



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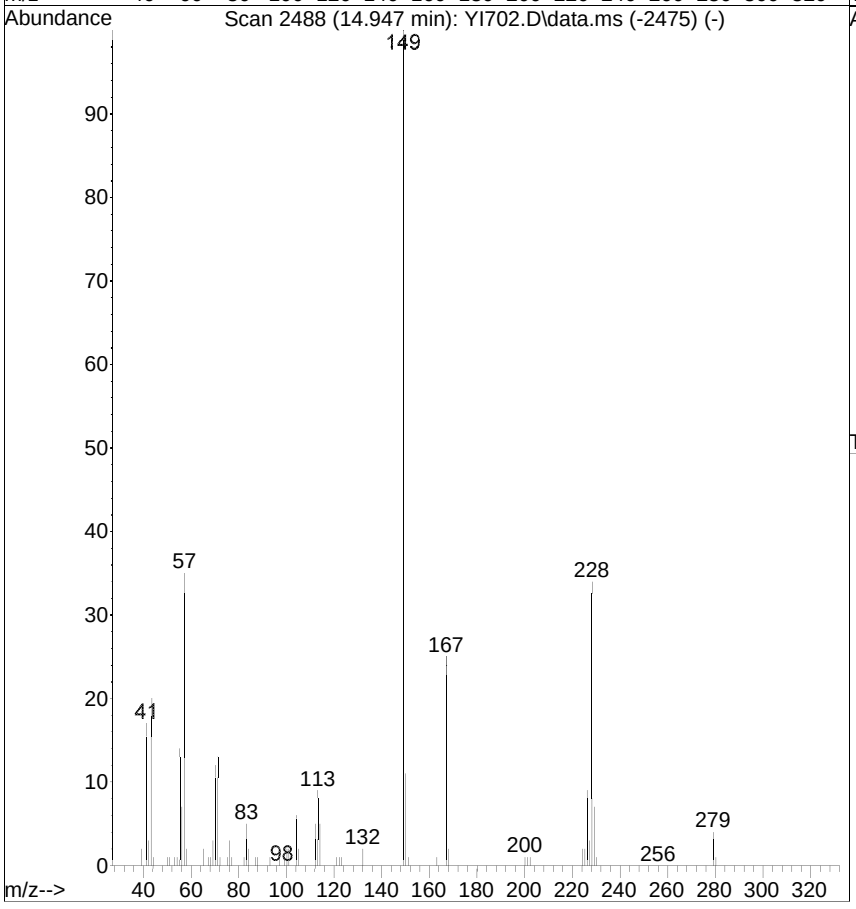
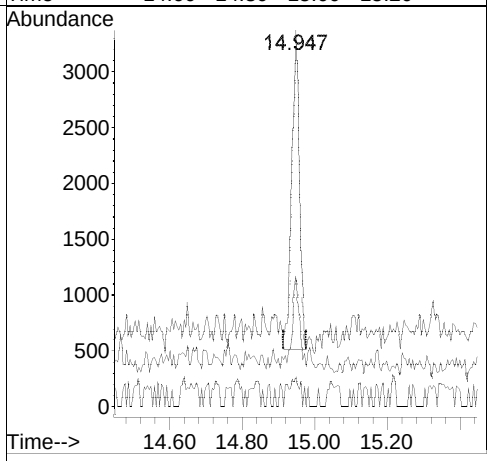




CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA06	Lab ID	: 239403-003	Client ID	: EX36B116B.2
Seqnum	: 552362420010	Matrix	: Soil	Acct	: ARCSF (JG)
File	: yi710	Batch	: 190266	Time	: 07-SEP-2012 23:54
Cal	: 552359297001	Caldate	: 05-SEP-2012		
IDF	: 20.0	Raw Units	: ug/mL	Units	: ug/Kg

30.24 g --> 1.0 ml = 0.03307 ml/g PDF

Analyte	Raw	Result	RL	Blank	Flags
bis(2-Ethylhexyl)phthalate	0.06920	ND	6600		u

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	1.651	1323	1092	DO	48-120	u
2-Fluorobiphenyl	1.818	1323	1202	DO	50-120	u
Terphenyl-d14	1.734	1323	1147	DO	40-120	u

ISTD (CCV yi702)	CCV Area	MSS Area	%Drift	CCV RT	MSS RT	Drift
1,4-Dichlorobenzene-d4	223394	265539	18.87	6.09	6.09	0.00
Naphthalene-d8	743711	880978	18.46	7.59	7.58	-0.01
Acenaphthene-d10	427044	497328	16.46	9.74	9.74	0.00
Phenanthrene-d10	851335	910362	6.93	11.60	11.59	-0.01
Chrysene-d12	784348	854845	8.99	15.00	14.99	-0.01
Perylene-d12	923802	763163	-17.39	17.89	17.88	-0.01

09/08/12 : Was diluted due to the dark and viscous nature of the sample extract.

(not in upper half)

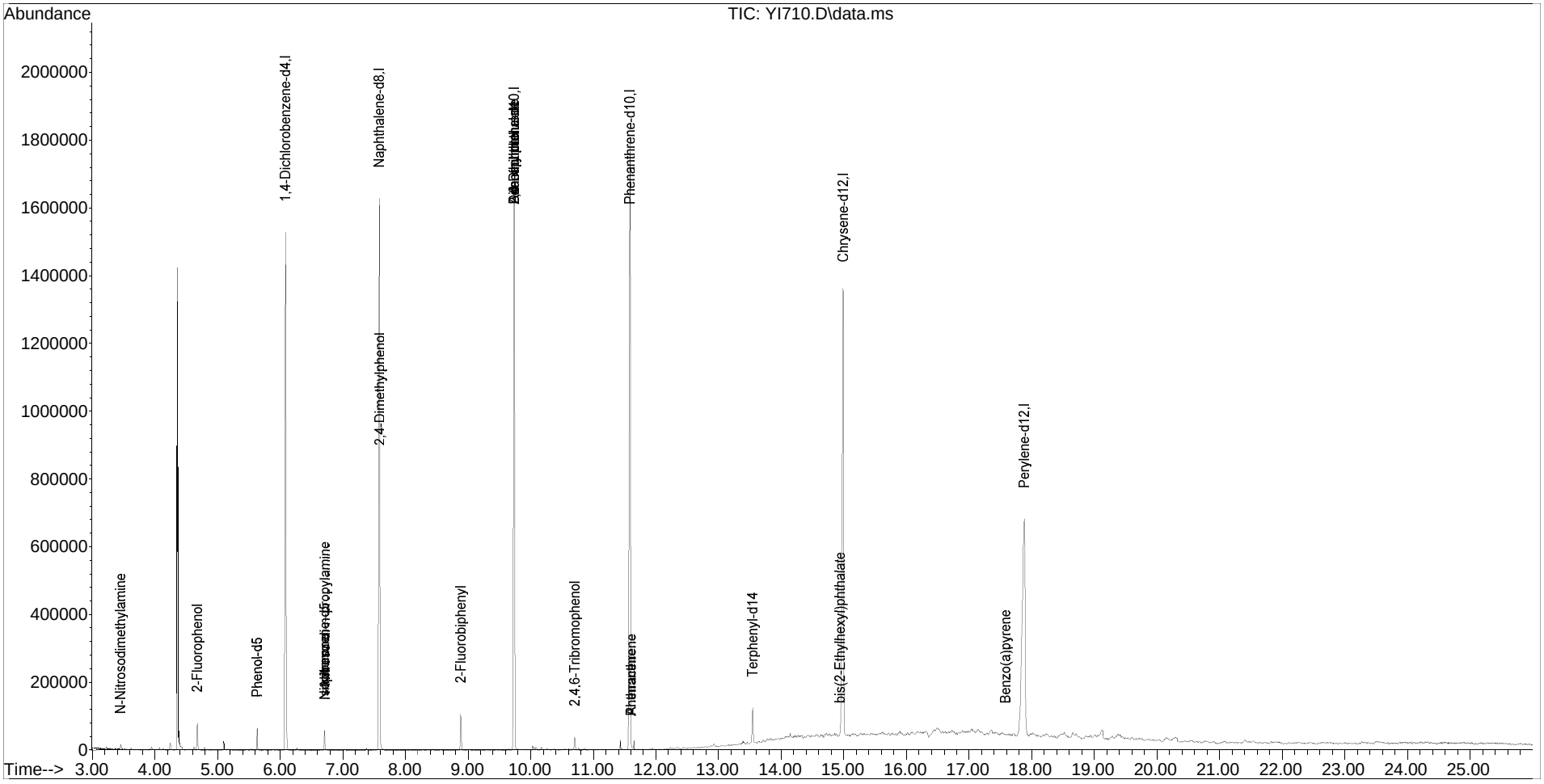
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

u=use

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI710.D
Acq On : 7 Sep 2012 11:54 pm
Operator :
Sample : MSS,239403-003
Misc : 190266,20, //DV
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 00:20:29 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI710.D
Acq On : 7 Sep 2012 11:54 pm
Operator :
Sample : MSS,239403-003
Misc : 190266,20, //DV
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 00:20:29 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.089	152	265539	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.580	136	880978	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.739	164	497328	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.591	188	910362	40.0000	ug/mL	0.00
70) Chrysene-d12	14.991	240	854845	40.0000	ug/mL	0.00
79) Perylene-d12	17.881	264	763163	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	0.000	79	0	N.D.		
3) N-Nitrosodimethylamine	3.459	42	1521	0.1635	ug/mL	# 23
4) 2-Fluorophenol	4.675	112	17799	1.5595	ug/mL	91
5) Phenol-d5	5.632	99	19513	1.4643	ug/mL	82
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	0.000	108	0	N.D.		
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.714	70	2033	0.3858	ug/mL	86
18) Hexachloroethane	0.000	117	0	N.D.		
20) Nitrobenzene-d5	6.710	82	14994	1.6514	ug/mL	80
21) Nitrobenzene	0.000	77	0	N.D.		
22) Isophorone	6.710	82	14994	0.9979	ug/mL	66
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	7.590	107	1113	0.1583	ug/mL	# 19
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	0.000	105	0	N.D.		
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	0.000	128	0	N.D.		
30) 4-Chloroaniline	0.000	127	0	N.D.		
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	0.000	142	0	N.D.		
35) 1-Methylnaphthalene	0.000	142	0	N.D.		
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI710.D
Acq On : 7 Sep 2012 11:54 pm
Operator :
Sample : MSS,239403-003
Misc : 190266,20, //DV
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 00:20:29 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.883	172	35032	1.8176	ug/mL	98
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	0.000	65	0	N.D.		
43) Dimethylphthalate	9.739	163	81258	4.7933	ug/mL #	1
44) 2,6-Dinitrotoluene	9.739	165	65761	17.4442	ug/mL #	15
45) Acenaphthylene	0.000	152	0	N.D.		
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.739	154	1511	0.1097	ug/mL #	7
48) 2,4-Dinitrophenol	0.000	184	0	N.D.		
49) 4-Nitrophenol	0.000	109	0	N.D.		
50) Dibenzofuran	0.000	168	0	N.D.		
51) 2,4-Dinitrotoluene	9.739	165	65761	13.7031	ug/mL #	14
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	0.000	149	0	N.D.		
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.		
55) Fluorene	0.000	166	0	N.D.		
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	10.706	330	4449	1.4419	ug/mL #	75
59) 4,6-Dinitro-2-methylphenol	0.000	198	0	N.D.		
60) N-Nitrosodiphenylamine	0.000	169	0	N.D.		
61) Azobenzene	0.000	77	0	N.D.		
62) 4-Bromophenyl-phenylether	0.000	248	0	N.D.		
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	11.610	178	1175	0.0533	ug/mL	88
66) Anthracene	11.610	178	1175	0.0524	ug/mL	84
67) Carbazole	0.000	167	0	N.D.		
68) Di-n-butylphthalate	0.000	149	0	N.D.		
69) Fluoranthene	0.000	202	0	N.D.		
71) Benzidine	0.000	184	0	N.D.		
72) Pyrene	0.000	202	0	N.D.		
73) Terphenyl-d14	13.548	244	34625	1.7338	ug/mL	97
74) Butylbenzylphthalate	0.000	149	0	N.D.		
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.		
76) Benzo(a)anthracene	0.000	228	0	N.D.		
77) bis(2-Ethylhexyl)phthalate	14.942	149	1182	0.0692	ug/mL	96
78) Chrysene	0.000	228	0	N.D.		
80) Di-n-octylphthalate	0.000	149	0	N.D.		
81) Benzo(b)fluoranthene	0.000	252	0	N.D.		
82) Benzo(k)fluoranthene	0.000	252	0	N.D.		
83) Benzo(a)pyrene	17.587	252	1552	0.0804	ug/mL #	29
84) Indeno(1,2,3-cd)pyrene	0.000	276	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI710.D
Acq On : 7 Sep 2012 11:54 pm
Operator :
Sample : MSS,239403-003
Misc : 190266,20, //DV
ALS Vial : 10 Sample Multiplier: 1

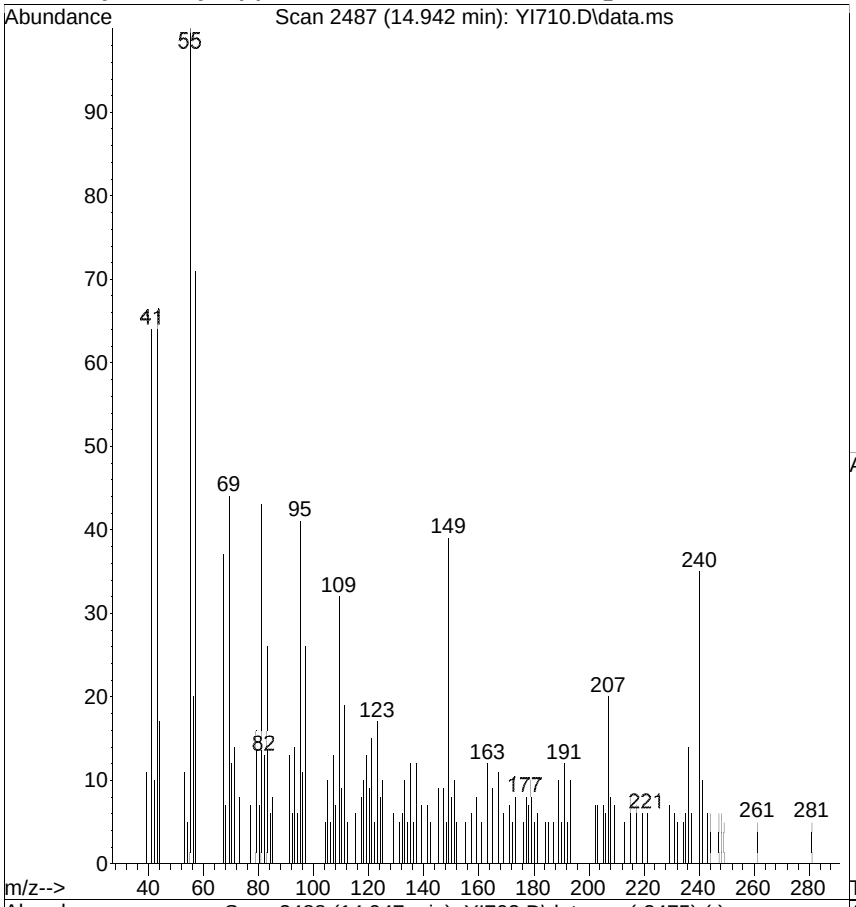
Quant Time: Sep 08 00:20:29 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	0.000	276	0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[bis(2-Ethylhexyl)phthalate; <RL; u]

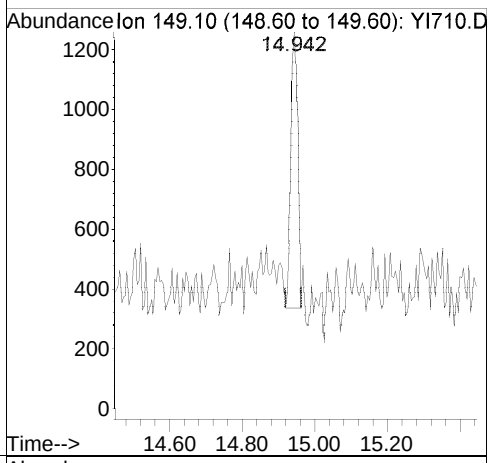
Raw



#77
bis(2-Ethylhexyl)phthalate
Concen: 0.0692 ug/mL
RT: 14.942 min Scan# 2487
Delta R.T. -0.004 min
Lab File: YI710.D
Acq: 7 Sep 2012 11:54 pm

Tgt Ion:149 Resp: 1182

Ion	Ratio	Lower	Upper
149	100		
167	29.2	9.0	49.0
279	0.0	0.0	27.0



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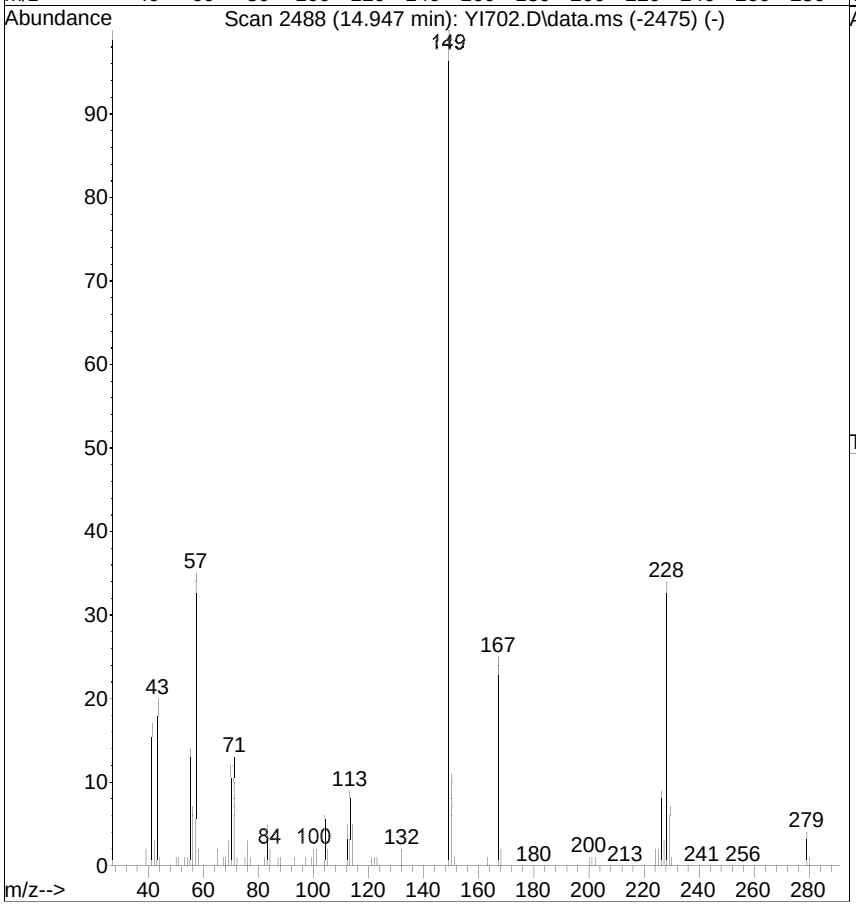
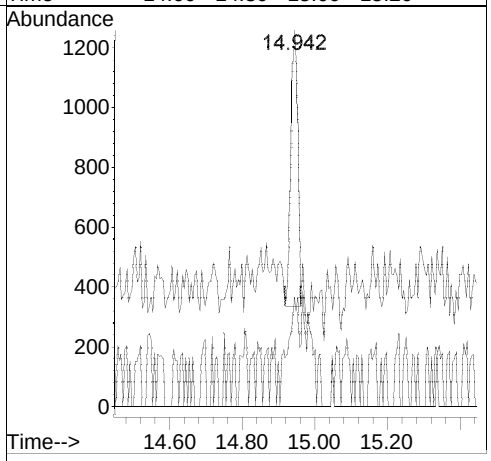




CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8270D

Inst	: MSBNA06	Lab ID	: 239403-004	Client ID	: EX36B116C.2
Seqnum	: 552362420007	Matrix	: Soil	Acct	: ARCSF (JG)
File	: yi707	Batch	: 190266	Time	: 07-SEP-2012 21:54
Cal	: 552359297001	Caldate	: 05-SEP-2012		
IDF	: 1.0	Raw Units	: ug/mL	Units	: ug/Kg

30.14 g --> 1.0 ml = 0.03318 ml/g PDF

Analyte	Raw	Result	RL	Blank	Flags
bis(2-Ethylhexyl)phthalate	0.1834	ND	330		u

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	28.15	1327	933.9	70	48-120	u
2-Fluorobiphenyl	26.61	1327	882.8	67	50-120	u
Terphenyl-d14	25.06	1327	831.6	63	40-120	u

ISTD (CCV yi702)	CCV Area	SAMPLE Area	%Drift	CCV RT	SAMPLE RT	Drift
Naphthalene-d8	743711	800815	7.68	7.59	7.59	0.00
Acenaphthene-d10	427044	468564	9.72	9.74	9.74	0.00
Chrysene-d12	784348	915801	16.76	15.00	14.99	-0.01

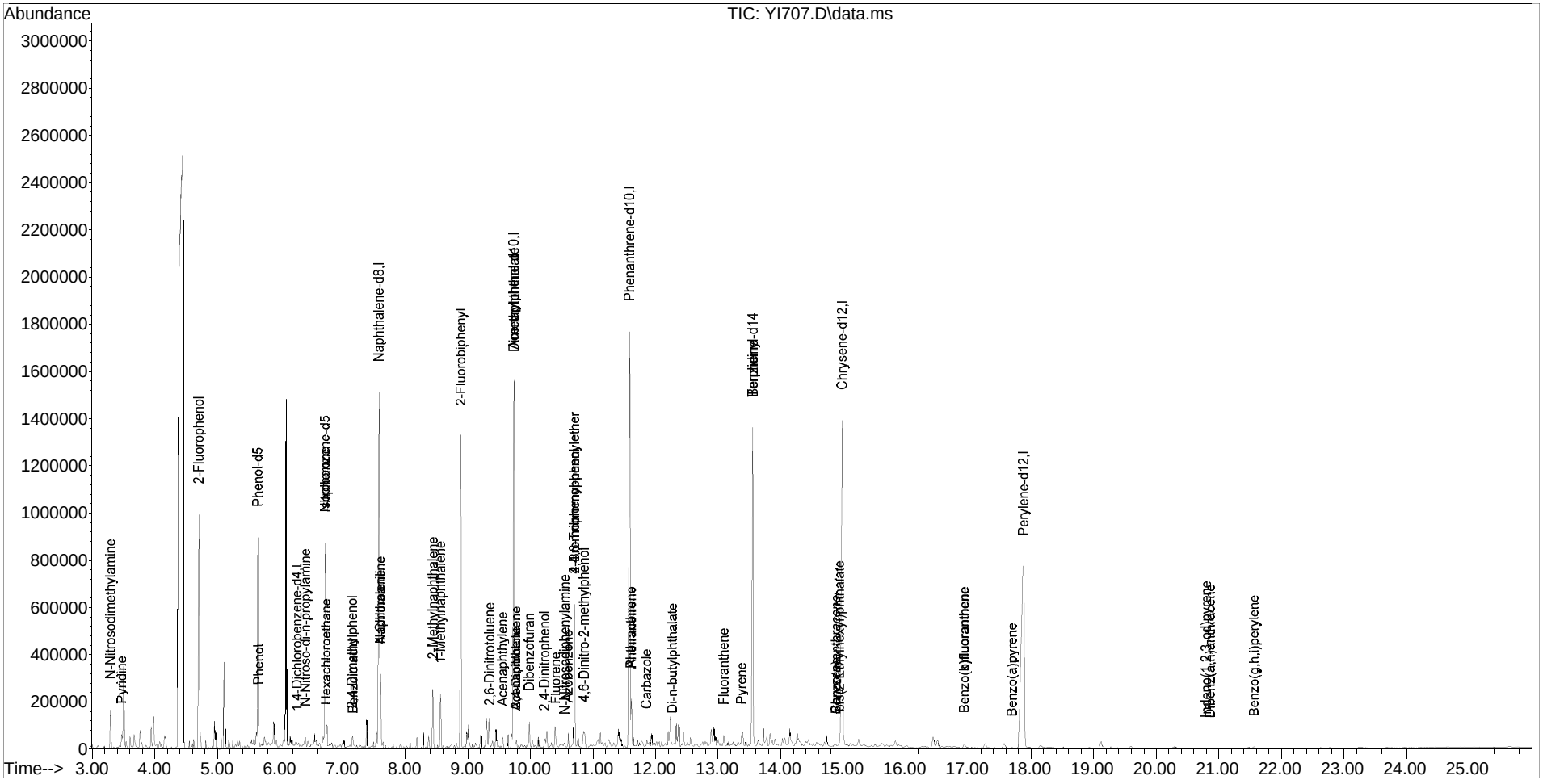
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

u=use

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI707.D
Acq On : 7 Sep 2012 9:54 pm
Operator :
Sample : S,239403-004
Misc : 190266,1,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 07 22:20:26 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI707.D
Acq On : 7 Sep 2012 9:54 pm
Operator :
Sample : S,239403-004
Misc : 190266,1,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 07 22:20:26 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.272	152	1258	40.0000	ug/mL	0.18
19) Naphthalene-d8	7.585	136	800815	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.739	164	468564	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	897350	40.0000	ug/mL	0.00
70) Chrysene-d12	14.985	240	915801	40.0000	ug/mL	0.00
79) Perylene-d12	17.885	264	1001884	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.468	79	2138	37.1963	ug/mL	# 19
3) N-Nitrosodimethylamine	3.290	42	3026	68.6659	ug/mL	# 18
4) 2-Fluorophenol	4.709	112	225758	4175.1978	ug/mL	88
5) Phenol-d5	5.651	99	280425	4441.7958	ug/mL	81
6) Phenol	5.661	94	1486	26.5353	ug/mL	# 1
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	0.000	108	0	N.D.		
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.406	70	1637	65.5655	ug/mL	77
18) Hexachloroethane	6.738	117	1673	90.5268	ug/mL	# 15
20) Nitrobenzene-d5	6.724	82	232306	28.1465	ug/mL	82
21) Nitrobenzene	6.724	77	1179	0.1691	ug/mL	# 53
22) Isophorone	6.724	82	232306	17.0078	ug/mL	67
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	7.152	107	1855	0.2902	ug/mL	90
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	7.171	105	3311	0.6266	ug/mL	93
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	7.609	128	107832	5.4939	ug/mL	97
30) 4-Chloroaniline	7.609	127	14185	1.7296	ug/mL	# 27
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	8.445	142	74084	4.9559	ug/mL	92
35) 1-Methylnaphthalene	8.566	142	59970	4.1721	ug/mL	91
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI707.D
Acq On : 7 Sep 2012 9:54 pm
Operator :
Sample : S,239403-004
Misc : 190266,1,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 07 22:20:26 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.		
40) 2-Fluorobiphenyl	8.893	172	483161	26.6069	ug/mL	100
41) 2-Chloronaphthalene	0.000	162	0	N.D.		
42) 2-Nitroaniline	0.000	65	0	N.D.		
43) Dimethylphthalate	9.744	163	75381	4.7196	ug/mL #	1
44) 2,6-Dinitrotoluene	9.349	165	1365	0.3843	ug/mL #	64
45) Acenaphthylene	9.556	152	1564	0.0689	ug/mL #	1
46) 3-Nitroaniline	0.000	138	0	N.D.		
47) Acenaphthene	9.773	154	1002	0.0772	ug/mL #	8
48) 2,4-Dinitrophenol	10.229	184	1225	12.9520	ug/mL #	1
49) 4-Nitrophenol	0.000	109	0	N.D.		
50) Dibenzofuran	9.984	168	32936	1.8361	ug/mL	82
51) 2,4-Dinitrotoluene	9.777	165	1259	0.2785	ug/mL #	41
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.		
53) Diethylphthalate	0.000	149	0	N.D.		
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.		
55) Fluorene	10.412	166	11341	0.7372	ug/mL	87
56) 4-Nitroaniline	0.000	138	0	N.D.		
57) 2,4,6-Tribromophenol	10.710	330	69489	23.9038	ug/mL #	80
59) 4,6-Dinitro-2-methylphenol	10.864	198	2072	0.8522	ug/mL #	43
60) N-Nitrosodiphenylamine	10.556	169	2049	0.1875	ug/mL #	59
61) Azobenzene	10.605	77	1108	0.0806	ug/mL #	1
62) 4-Bromophenyl-phenylether	10.710	248	3820	0.6981	ug/mL #	1
63) Hexachlorobenzene	0.000	284	0	N.D.		
64) Pentachlorophenol	0.000	266	0	N.D.		
65) Phenanthrene	11.614	178	68685	3.1579	ug/mL	96
66) Anthracene	11.614	178	68685	3.1047	ug/mL	94
67) Carbazole	11.860	167	11381	0.6111	ug/mL	83
68) Di-n-butylphthalate	12.273	149	3319	0.1183	ug/mL	94
69) Fluoranthene	13.091	202	11359	0.3879	ug/mL	91
71) Benzidine	13.557	184	6672	0.5278	ug/mL #	1
72) Pyrene	13.374	202	18366	0.5749	ug/mL	90
73) Terphenyl-d14	13.557	244	536224	25.0636	ug/mL	99
74) Butylbenzylphthalate	0.000	149	0	N.D.		
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.		
76) Benzo(a)anthracene	14.884	228	1017	0.0387	ug/mL #	1
77) bis(2-Ethylhexyl)phthalate	14.942	149	3357	0.1834	ug/mL	86
78) Chrysene	14.884	228	1017	0.0418	ug/mL #	1
80) Di-n-octylphthalate	0.000	149	0	N.D.		
81) Benzo(b)fluoranthene	16.943	252	13439	0.4631	ug/mL	89
82) Benzo(k)fluoranthene	16.943	252	13439	0.5034	ug/mL	88
83) Benzo(a)pyrene	17.698	252	4591	0.1811	ug/mL	89
84) Indeno(1,2,3-cd)pyrene	20.799	276	3699	0.1297	ug/mL	95

Quantitation Report (Not Reviewed)

Data Path : G:\csinput.net\DATA\090712\
Data File : YI707.D
Acq On : 7 Sep 2012 9:54 pm
Operator :
Sample : S,239403-004
Misc : 190266,1,
ALS Vial : 7 Sample Multiplier: 1

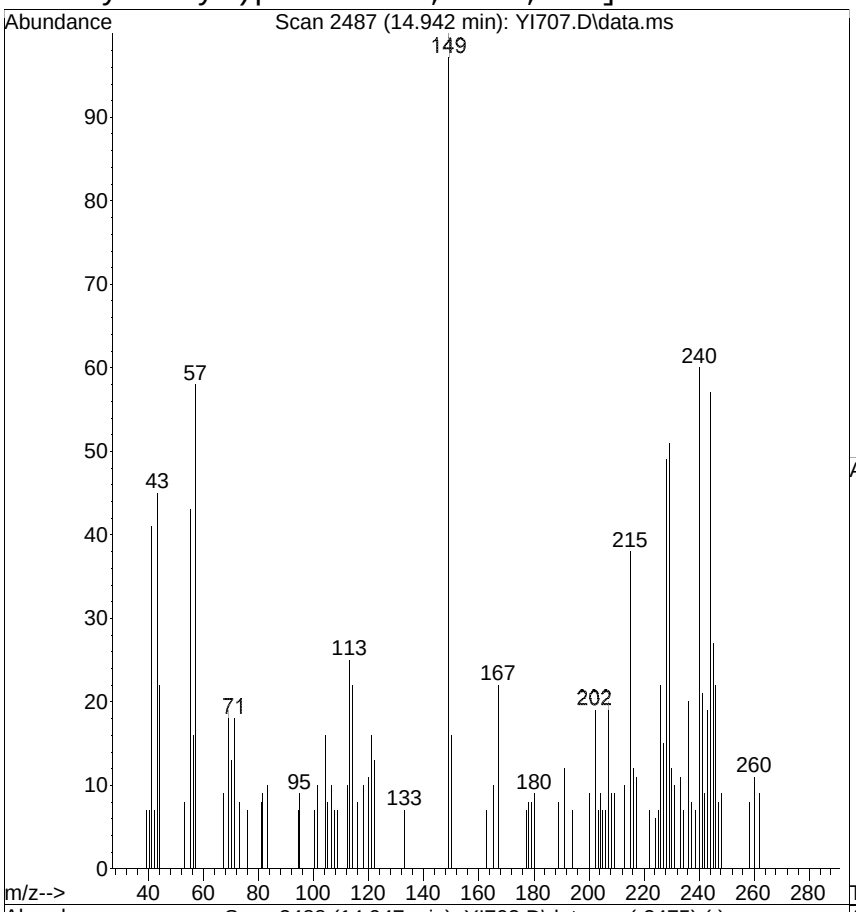
Quant Time: Sep 07 22:20:26 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.862	278	2170	0.0955	ug/mL #	42
86) Benzo(g,h,i)perylene	21.569	276	9867	0.4163	ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[bis(2-Ethylhexyl)phthalate; <RL; u]

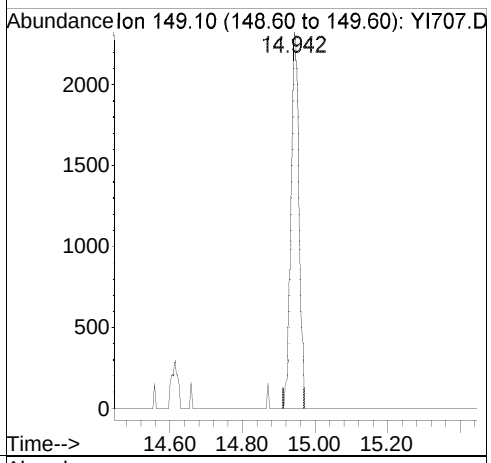
Raw



#77
bis(2-Ethylhexyl)phthalate
Concen: 0.1834 ug/mL
RT: 14.942 min Scan# 2487
Delta R.T. -0.005 min
Lab File: YI707.D
Acq: 7 Sep 2012 9:54 pm

Tgt Ion:149 Resp: 3357

Ion	Ratio	Lower	Upper
149	100		
167	22.3	9.0	49.0
279	0.0	0.0	27.0



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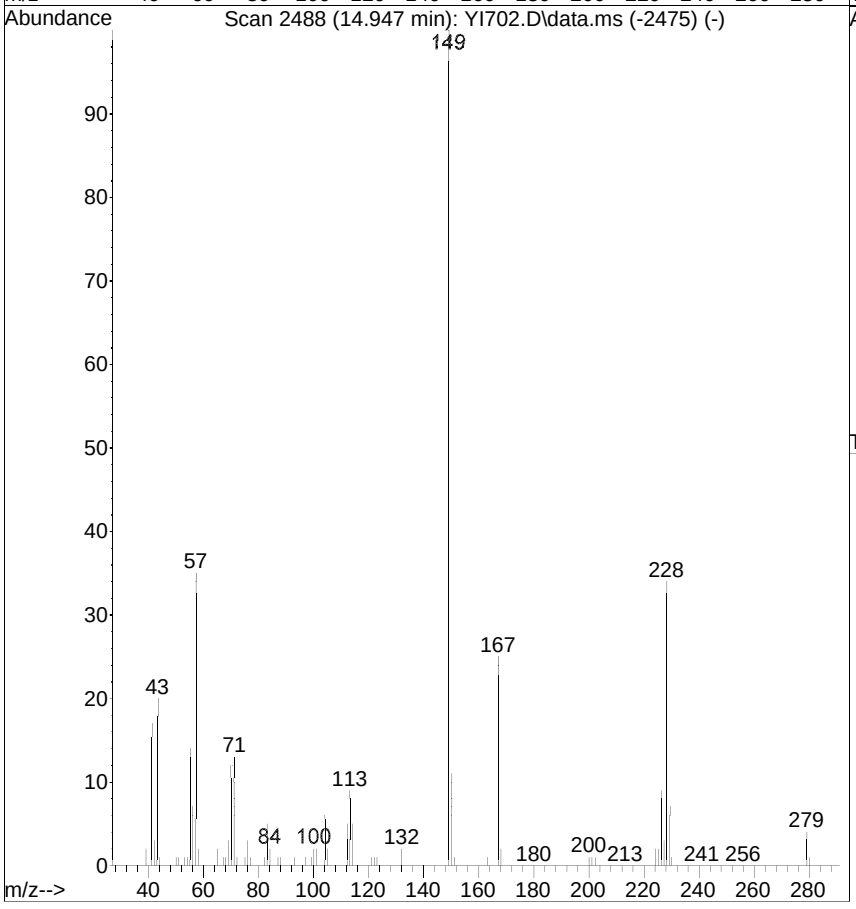
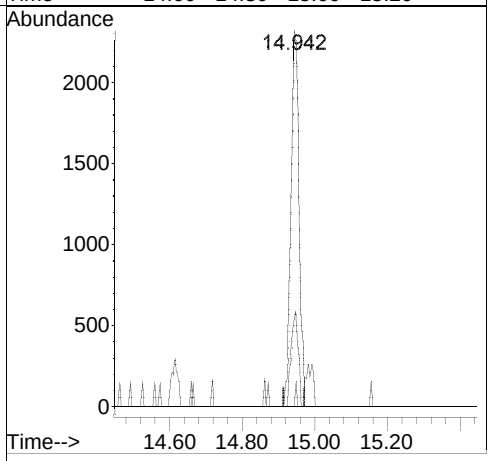




QC Raw Data

CURTIS & TOMPKINS BLANK USER REPORT FOR 239403 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Lab ID : QC655181
Seqnum : 552362420003.7 Matrix : Soil
File : yi703 Batch : 190266 Time : 07-SEP-2012 19:18
Cal : 552359297001 Caldate : 05-SEP-2012
IDF : 1.0 Raw Units : ug/mL Units : ug/Kg

30.03 g --> 1.0 ml = 0.0333 ml/g PDF

Analyte	Raw	Result	RL	Flags
bis(2-Ethylhexyl)phthalate	0.09210	ND	330	u

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Nitrobenzene-d5	22.67	1332	754.9	57	48-120	u
2-Fluorobiphenyl	24.65	1332	820.8	62	50-120	u
Terphenyl-d14	23.82	1332	793.3	60	40-120	u

ISTD (CCV yi702)	CCV Area	BLANK Area	%Drift	CCV RT	BLANK RT	Drift
Naphthalene-d8	743711	824019	10.80	7.59	7.58	-0.01
Acenaphthene-d10	427044	470081	10.08	9.74	9.74	0.00
Chrysene-d12	784348	910488	16.08	15.00	14.99	-0.01

LLH 09/10/12 [1,4-Dichlorobenzene-d4]: Picked or reassigned peak. [general version]

Analyst: LLH Date: 09/10/12 * Reviewer: LW Date: 09/11/12 *

u=use

Library Search Compound Report

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

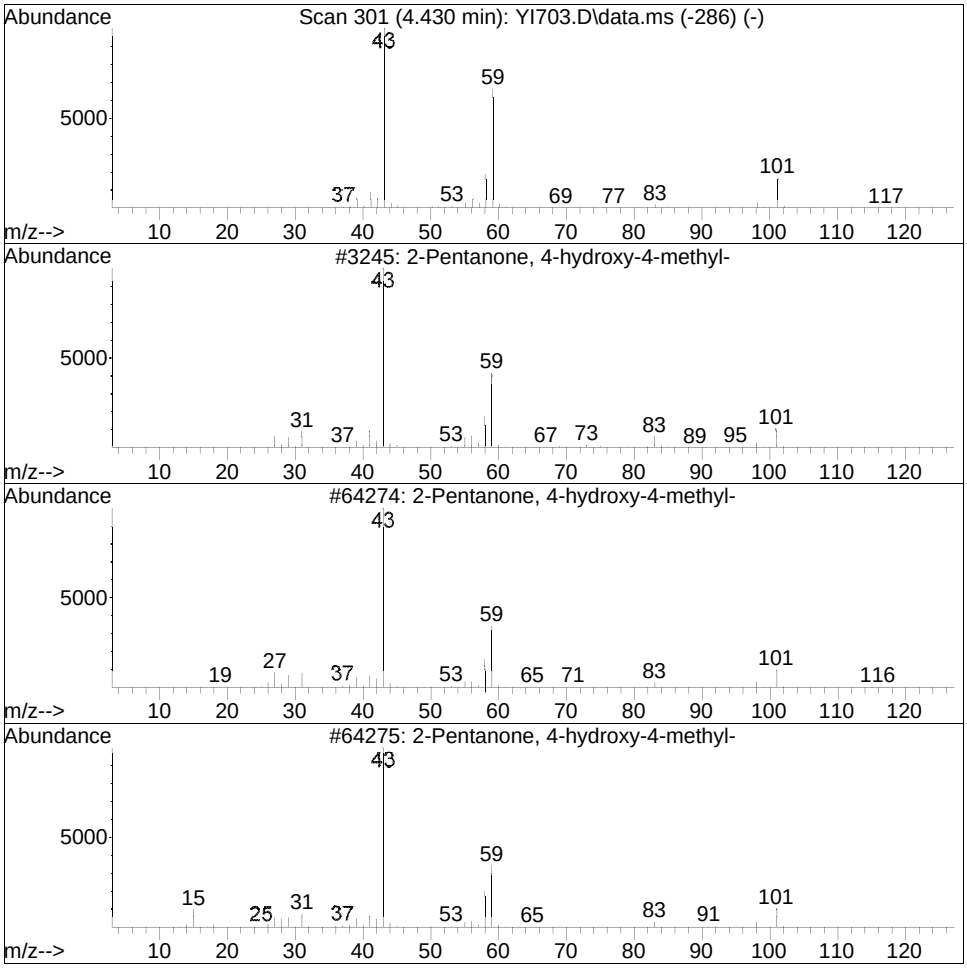
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA

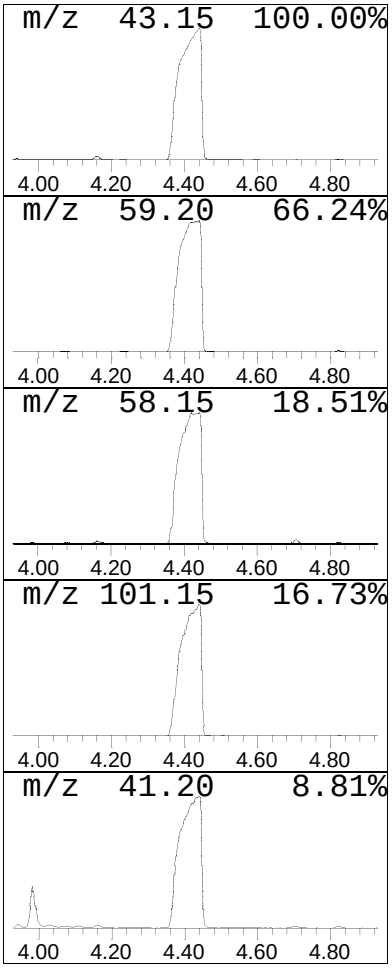
TIC Library : G:\bna\LIBRARY\nbs75k.l
TIC Integration Parameters: normal.p

ID: 2-Pentanone, 4-hydroxy-4-methyl-

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.430	84.86 ug/mL	2934320	1,4-Dichlorobenzene-d4	6.098

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
4	Propane, 2-methyl-2-(1-methyleth...	116	C7H16O	017348-59-3	36
5	3-Octanol	130	C8H18O	000589-98-0	33





Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

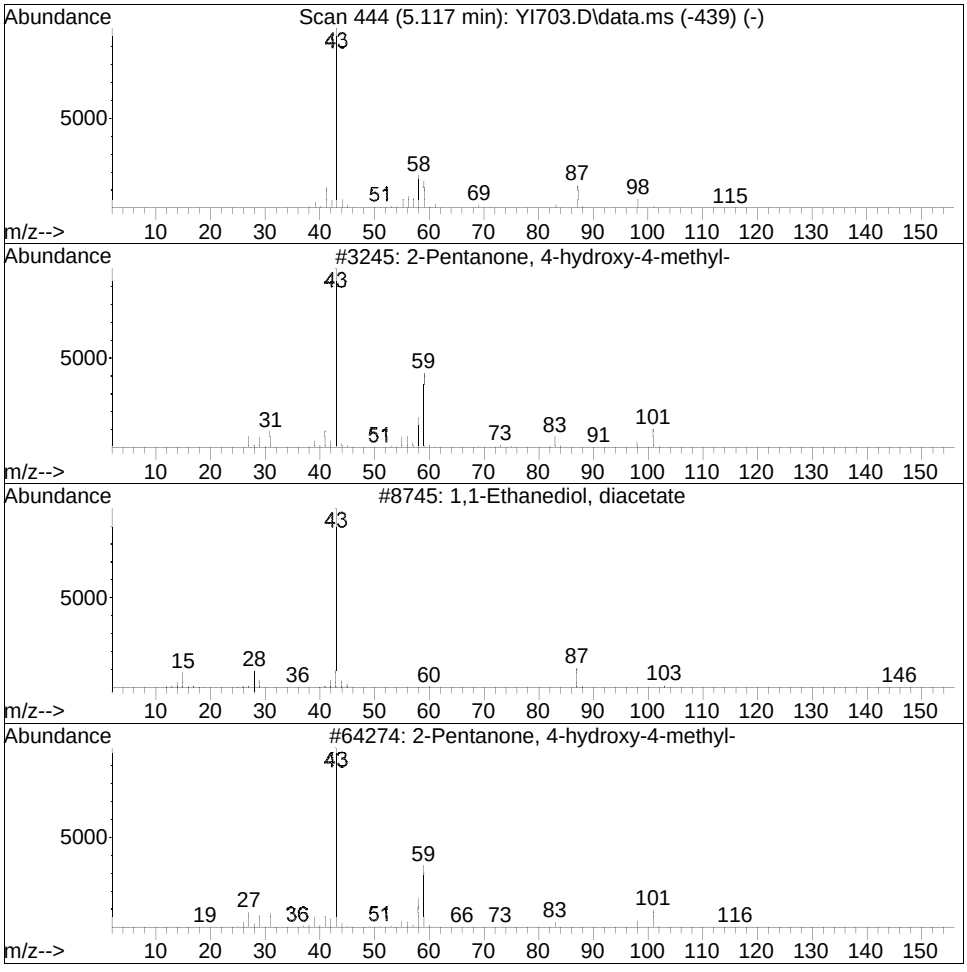
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA

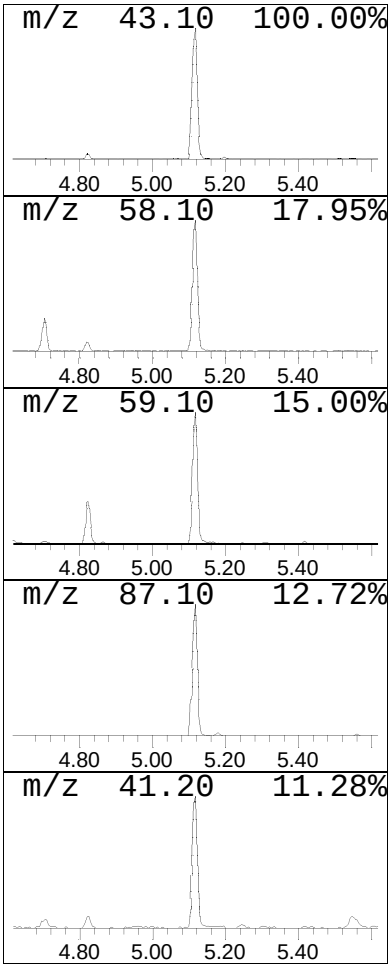
TIC Library : G:\bna\LIBRARY\nbs75k.l
TIC Integration Parameters: normal.p

ID: 2-Pentanone, 4-hydroxy-4-methyl-

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.117	8.87 ug/mL	306710	1,4-Dichlorobenzene-d4	6.098

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	1,1-Ethanediol, diacetate	146	C6H10O4	000542-10-9	17
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	9
4	Acetic acid, 1-methylpropyl ester	116	C6H12O2	000105-46-4	9
5	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	9





Tentatively Identified Compound (LSC) summary

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA

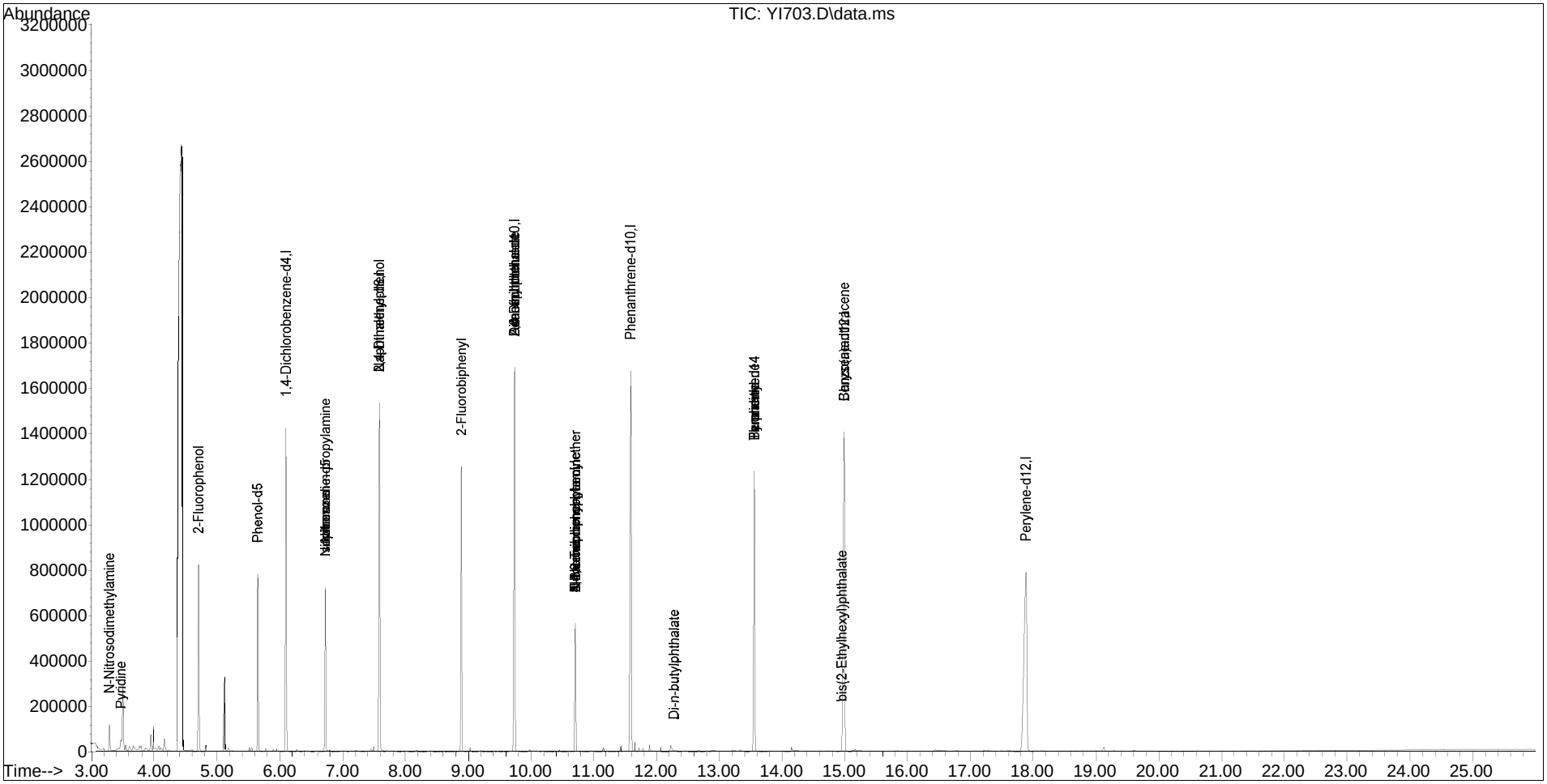
TIC Library : G:\bna\LIBRARY\nbs75k.l
TIC Integration Parameters: normal.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	4.430	84.9	ug/mL	2934320	1	6.098	1383070	40.0
2-Pentanone, 4-...	5.117	8.9	ug/mL	306710	1	6.098	1383070	40.0

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 10:40:58 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 10:40:58 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.098	152	233318m	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.584	136	824019	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.744	164	470081	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	865346	40.0000	ug/mL	0.00
70) Chrysene-d12	14.990	240	910488	40.0000	ug/mL	0.00
79) Perylene-d12	17.880	264	944393	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.463	79	1302	0.1221	ug/mL	# 36
3) N-Nitrosodimethylamine	3.285	42	2153	0.2634	ug/mL	# 21
4) 2-Fluorophenol	4.704	112	196370	19.5813	ug/mL	85
5) Phenol-d5	5.651	99	257179	21.9639	ug/mL	79
6) Phenol	0.000	94	0	N.D.		
7) Aniline	0.000	93	0	N.D.		
8) bis(2-Chloroethyl)ether	0.000	93	0	N.D.		
9) 2-Chlorophenol	0.000	128	0	N.D.		
10) 1,3-Dichlorobenzene	0.000	146	0	N.D.		
11) 1,4-Dichlorobenzene	0.000	146	0	N.D.		
12) Benzyl alcohol	0.000	108	0	N.D.		
13) 1,2-Dichlorobenzene	0.000	146	0	N.D.		
14) 2-Methylphenol	0.000	107	0	N.D.		
15) bis(2-Chloroisopropyl) ether	0.000	45	0	N.D.		
16) 4-Methylphenol	0.000	107	0	N.D.		
17) N-Nitroso-di-n-propylamine	6.724	70	27284	5.8921	ug/mL	90
18) Hexachloroethane	0.000	117	0	N.D.		
20) Nitrobenzene-d5	6.724	82	192527	22.6700	ug/mL	81
21) Nitrobenzene	0.000	77	0	N.D.		
22) Isophorone	6.724	82	192527	13.6985	ug/mL	66
23) 2-Nitrophenol	0.000	139	0	N.D.		
24) 2,4-Dimethylphenol	7.589	107	2252	0.3424	ug/mL	# 22
25) bis(2-Chloroethoxy)methane	0.000	93	0	N.D.		
26) Benzoic acid	0.000	105	0	N.D.		
27) 2,4-Dichlorophenol	0.000	162	0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.		
29) Naphthalene	0.000	128	0	N.D.		
30) 4-Chloroaniline	0.000	127	0	N.D.		
31) Hexachlorobutadiene	0.000	225	0	N.D.		
32) Resorcinol	0.000	110	0	N.D.		
33) 4-Chloro-3-methylphenol	0.000	107	0	N.D.		
34) 2-Methylnaphthalene	0.000	142	0	N.D.		
35) 1-Methylnaphthalene	0.000	142	0	N.D.		
37) Hexachlorocyclopentadiene	0.000	237	0	N.D.		
38) 2,4,6-Trichlorophenol	0.000	196	0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 10:40:58 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	0.000	196	0	N.D.			
40) 2-Fluorobiphenyl	8.892	172	449040	24.6481	ug/mL		99
41) 2-Chloronaphthalene	0.000	162	0	N.D.			
42) 2-Nitroaniline	0.000	65	0	N.D.			
43) Dimethylphthalate	9.744	163	76117	4.7503	ug/mL	#	1
44) 2,6-Dinitrotoluene	9.744	165	62256	17.4717	ug/mL	#	14
45) Acenaphthylene	0.000	152	0	N.D.			
46) 3-Nitroaniline	0.000	138	0	N.D.			
47) Acenaphthene	9.744	154	1550	0.1191	ug/mL	#	7
48) 2,4-Dinitrophenol	0.000	184	0	N.D.			
49) 4-Nitrophenol	0.000	109	0	N.D.			
50) Dibenzofuran	0.000	168	0	N.D.			
51) 2,4-Dinitrotoluene	9.744	165	62256	13.7247	ug/mL	#	14
52) 2,3,4,6-Tetrachlorophenol	0.000	232	0	N.D.			
53) Diethylphthalate	0.000	149	0	N.D.			
54) 4-Chlorophenyl-phenylether	0.000	204	0	N.D.			
55) Fluorene	10.710	166	3971	0.2573	ug/mL	#	80
56) 4-Nitroaniline	0.000	138	0	N.D.			
57) 2,4,6-Tribromophenol	10.710	330	67889	23.2781	ug/mL	#	81
59) 4,6-Dinitro-2-methylphenol	0.000	198	0	N.D.			
60) N-Nitrosodiphenylamine	10.710	169	2249	0.2134	ug/mL	#	8
61) Azobenzene	0.000	77	0	N.D.			
62) 4-Bromophenyl-phenylether	10.710	248	4096	0.7762	ug/mL	#	1
63) Hexachlorobenzene	0.000	284	0	N.D.			
64) Pentachlorophenol	0.000	266	0	N.D.			
65) Phenanthrene	0.000	178	0	N.D.			
66) Anthracene	0.000	178	0	N.D.			
67) Carbazole	0.000	167	0	N.D.			
68) Di-n-butylphthalate	12.278	149	2726	0.1007	ug/mL		92
69) Fluoranthene	13.557	202	1335	0.0473	ug/mL		84
71) Benzidine	13.557	184	6462	0.5142	ug/mL	#	1
72) Pyrene	13.557	202	1335	0.0420	ug/mL	#	40
73) Terphenyl-d14	13.557	244	506721	23.8228	ug/mL		99
74) Butylbenzylphthalate	0.000	149	0	N.D.			
75) 3,3'-Dichlorobenzidine	0.000	252	0	N.D.			
76) Benzo(a)anthracene	14.990	228	2135	0.0817	ug/mL	#	55
77) bis(2-Ethylhexyl)phthalate	14.947	149	1676	0.0921	ug/mL		95
78) Chrysene	14.990	228	2135	0.0883	ug/mL	#	58
80) Di-n-octylphthalate	0.000	149	0	N.D.			
81) Benzo(b)fluoranthene	0.000	252	0	N.D.			
82) Benzo(k)fluoranthene	0.000	252	0	N.D.			
83) Benzo(a)pyrene	0.000	252	0	N.D.			
84) Indeno(1,2,3-cd)pyrene	0.000	276	0	N.D.			

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI703.D
Acq On : 7 Sep 2012 7:18 pm
Operator :
Sample : MB,QC655181
Misc : 190266,1,
ALS Vial : 3 Sample Multiplier: 1

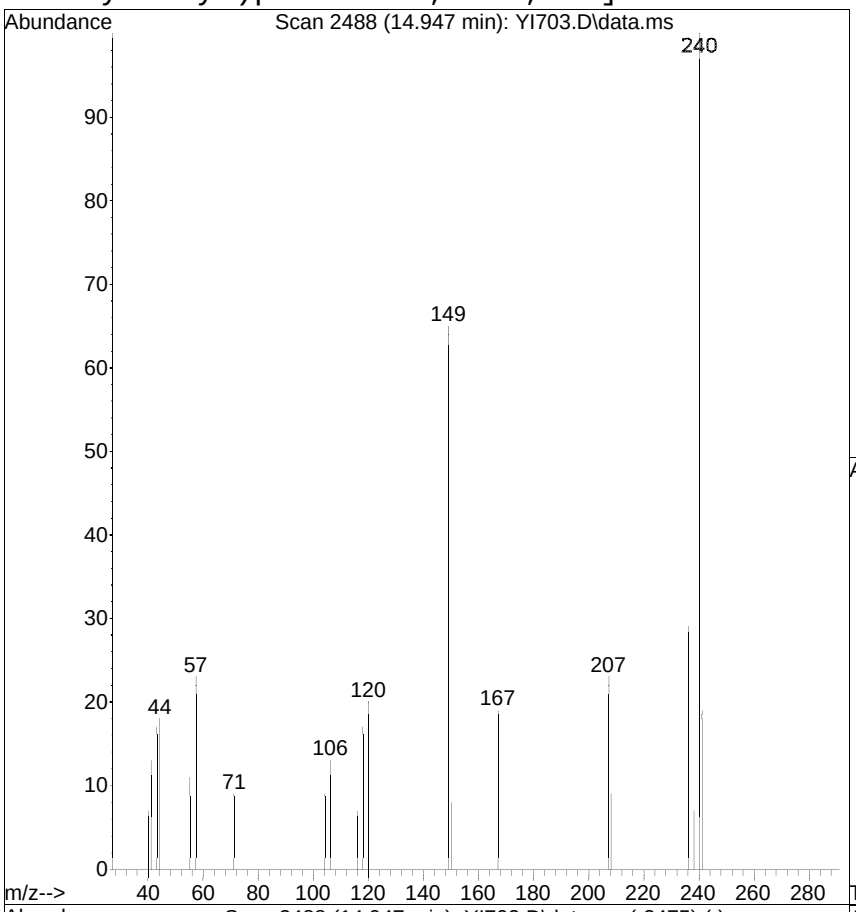
Quant Time: Sep 10 10:40:58 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	0.000	278	0	N.D.		
86) Benzo(g,h,i)perylene	0.000	276	0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[bis(2-Ethylhexyl)phthalate; <RL; u]

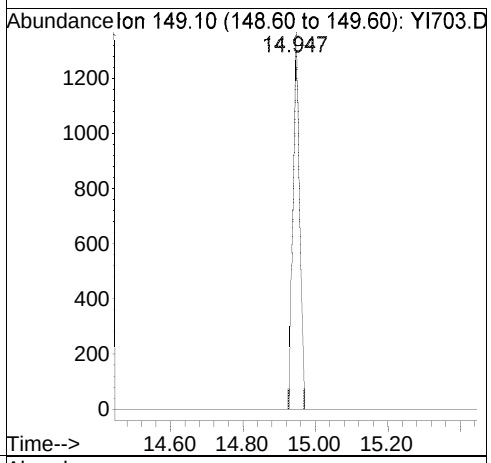
Raw



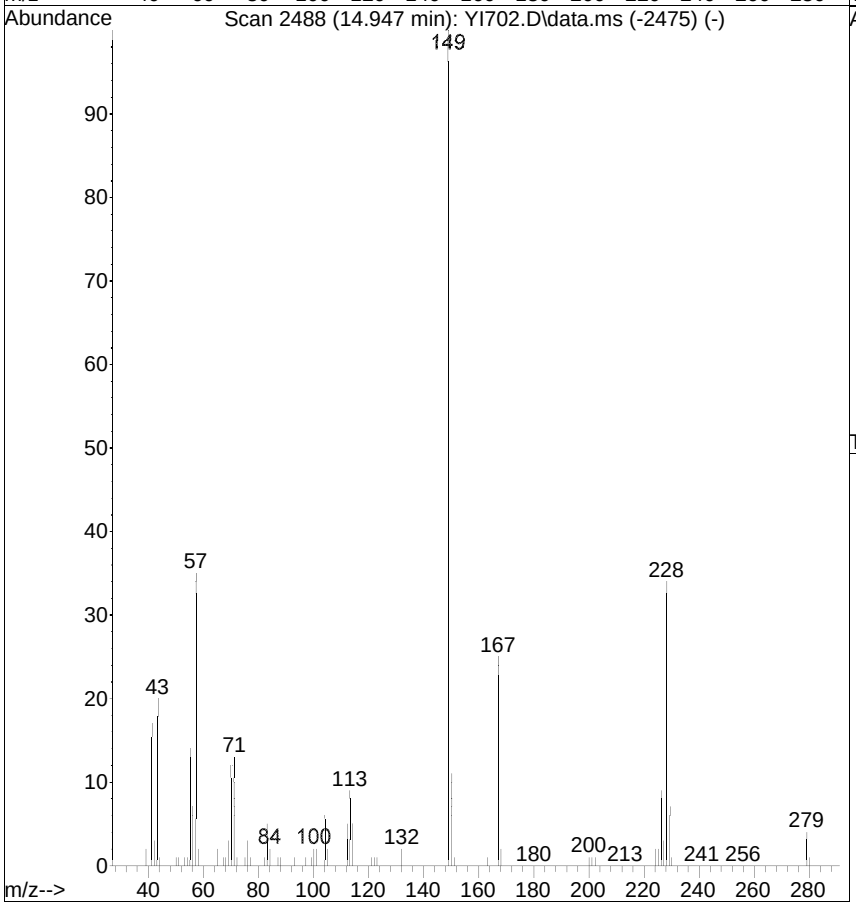
#77
bis(2-Ethylhexyl)phthalate
Concen: 0.0921 ug/mL
RT: 14.947 min Scan# 2488
Delta R.T. 0.000 min
Lab File: YI703.D
Acq: 7 Sep 2012 7:18 pm

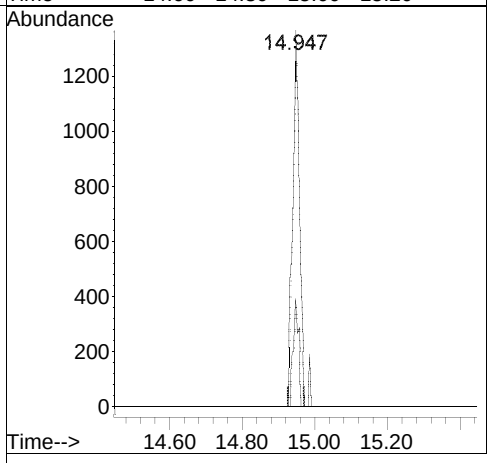
Tgt Ion:149 Resp: 1676

Ion	Ratio	Lower	Upper
149	100		
167	28.6	9.0	49.0
279	0.0	0.0	27.0



Ref





CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 MSBNA Soil
EPA 8270D

Type : LCS
Inst : MSBNA06
Seqnum : 552362420004.2
File : yi704
IDF : 1.0
Lab ID : QC655182
Matrix : Soil
Batch : 190266
Time : 07-SEP-2012 19:55
Cal : 552359297001
Units : ug/Kg

LCS: 30.08 g --> 1.0 ml = 0.03324 ml/g PDF

Analyte	Spiked	Raw	LCS	%Rec	Limits	Flags
bis(2-Ethylhexyl)phthalate	997.3	21.73	722.5	72	52-120	u
Nitrobenzene-d5	1330	24.82	825.2	62	48-120	u
2-Fluorobiphenyl	1330	23.58	784.0	59	50-120	u
Terphenyl-d14	1330	29.11	967.8	73	40-120	u

ISTD (CCV yi702)	CCV Area	LCS Area	%Drift	CCV RT	LCS RT	Drift
Naphthalene-d8	743711	666881	-10.33	7.59	7.59	0.00
Acenaphthene-d10	427044	417745	-2.18	9.74	9.74	0.00
Chrysene-d12	784348	774652	-1.24	15.00	15.00	0.01

LLH 09/10/12 [Aniline]: Picked or reassigned peak. [general version]

LLH 09/10/12 [N-Nitroso-di-n-propylamine]: Combined split peak. [general version]

LLH 09/10/12 [Benzoic acid]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 [4-Chloroaniline]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 [2,4,5-Trichlorophenol]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 [2,4-Dinitrotoluene]: Corrected automatically drawn baseline. [general version]

LLH 09/10/12 : combine runs [general version]

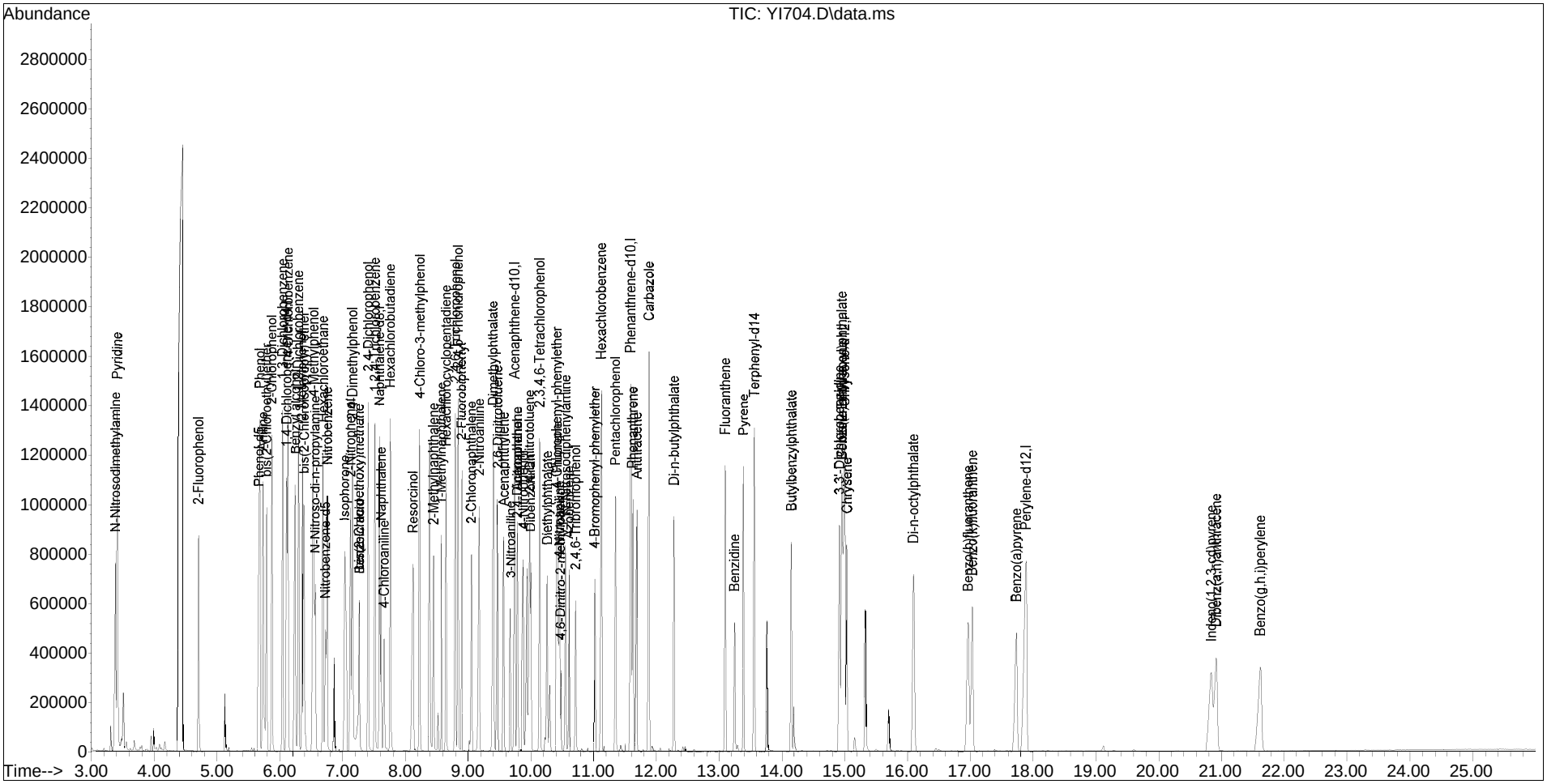
Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

u=use

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI704.D
Acq On : 7 Sep 2012 7:55 pm
Operator :
Sample : LCS,QC655182
Misc : 190266,1,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 14:23:46 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI704.D
Acq On : 7 Sep 2012 7:55 pm
Operator :
Sample : LCS,QC655182
Misc : 190266,1,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 14:23:46 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.104	152	200168	40.0000	ug/mL		0.01
19) Naphthalene-d8	7.590	136	666881	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.744	164	417745	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.591	188	836823	40.0000	ug/mL		0.00
70) Chrysene-d12	14.995	240	774652	40.0000	ug/mL		0.00
79) Perylene-d12	17.890	264	936262	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.411	79	405551	44.3429	ug/mL	#	21
3) N-Nitrosodimethylamine	3.387	42	353719	50.4449	ug/mL		86
4) 2-Fluorophenol	4.709	112	202888	23.5818	ug/mL		84
5) Phenol-d5	5.661	99	263241	26.2048	ug/mL		82
6) Phenol	5.685	94	448866	50.3742	ug/mL		74
7) Aniline	5.738	93	469602m	43.9780	ug/mL		
8) bis(2-Chloroethyl)ether	5.791	93	312913	52.3617	ug/mL	#	66
9) 2-Chlorophenol	5.873	128	348653	50.2668	ug/mL		97
10) 1,3-Dichlorobenzene	6.041	146	383274	48.8655	ug/mL		98
11) 1,4-Dichlorobenzene	6.123	146	345707	49.3788	ug/mL		94
12) Benzyl alcohol	6.248	108	218185	54.3169	ug/mL	#	85
13) 1,2-Dichlorobenzene	6.296	146	358813	52.2673	ug/mL		99
14) 2-Methylphenol	6.354	107	221486	51.1849	ug/mL		92
15) bis(2-Chloroisopropyl) ether	6.387	45	640891	43.3488	ug/mL		80
16) 4-Methylphenol	6.536	107	341834	50.1575	ug/mL		96
17) N-Nitroso-di-n-propylamine	6.565	70	214696m	54.0426	ug/mL		
18) Hexachloroethane	6.685	117	156918	53.3630	ug/mL		87
20) Nitrobenzene-d5	6.729	82	170609	24.8227	ug/mL		81
21) Nitrobenzene	6.758	77	297884	51.3016	ug/mL		86
22) Isophorone	7.037	82	626851	55.1106	ug/mL		98
23) 2-Nitrophenol	7.128	139	187358	54.2899	ug/mL		85
24) 2,4-Dimethylphenol	7.157	107	297528	55.8953	ug/mL		83
25) bis(2-Chloroethoxy)methane	7.263	93	146311	20.9677	ug/mL		95
26) Benzoic acid	7.277	105	113508m	25.7948	ug/mL		
27) 2,4-Dichlorophenol	7.412	162	308049	55.6983	ug/mL		93
28) 1,2,4-Trichlorobenzene	7.517	180	307202	50.0032	ug/mL		95
29) Naphthalene	7.614	128	325975	19.9434	ug/mL		96
30) 4-Chloroaniline	7.662	127	148609m	21.7595	ug/mL		
31) Hexachlorobutadiene	7.758	225	193054	52.3797	ug/mL		97
32) Resorcinol	8.123	110	383198	61.9903	ug/mL		83
33) 4-Chloro-3-methylphenol	8.234	107	284655	58.2310	ug/mL		90
34) 2-Methylnaphthalene	8.450	142	235484	18.9165	ug/mL		93
35) 1-Methylnaphthalene	8.571	142	250381	20.9172	ug/mL		94
37) Hexachlorocyclopentadiene	8.648	237	216549	49.4852	ug/mL		97
38) 2,4,6-Trichlorophenol	8.792	196	259090	52.3265	ug/mL		95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI704.D
Acq On : 7 Sep 2012 7:55 pm
Operator :
Sample : LCS,QC655182
Misc : 190266,1,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 14:23:46 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.835	196	264879m	52.4488	ug/mL		
40) 2-Fluorobiphenyl	8.893	172	381778	23.5814	ug/mL		99
41) 2-Chloronaphthalene	9.051	162	268125	20.7543	ug/mL		88
42) 2-Nitroaniline	9.177	65	237675	53.5308	ug/mL		92
43) Dimethylphthalate	9.398	163	771563	54.1838	ug/mL		97
44) 2,6-Dinitrotoluene	9.470	165	173654	54.8403	ug/mL		87
45) Acenaphthylene	9.566	152	400450	19.7750	ug/mL		98
46) 3-Nitroaniline	9.681	138	103018	27.8837	ug/mL	#	57
47) Acenaphthene	9.782	154	225856	19.5295	ug/mL		96
48) 2,4-Dinitrophenol	9.797	184	11093	18.2904	ug/mL	#	30
49) 4-Nitrophenol	9.879	109	94398	55.7152	ug/mL	#	71
50) Dibenzofuran	9.994	168	333196	20.8342	ug/mL		83
51) 2,4-Dinitrotoluene	9.980	165	218911m	54.3064	ug/mL		
52) 2,3,4,6-Tetrachlorophenol	10.143	232	211859	54.6121	ug/mL		88
53) Diethylphthalate	10.259	149	310020	21.6255	ug/mL		99
54) 4-Chlorophenyl-phenylether	10.408	204	156336	21.4038	ug/mL		85
55) Fluorene	10.422	166	278609	20.3128	ug/mL		86
56) 4-Nitroaniline	10.451	138	167934	51.3271	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.720	330	74065	28.5774	ug/mL	#	76
59) 4,6-Dinitro-2-methylphenol	10.475	198	43794	19.3154	ug/mL		92
60) N-Nitrosodiphenylamine	10.552	169	229445	22.5171	ug/mL		86
61) Azobenzene	10.605	77	285225	22.2420	ug/mL		96
62) 4-Bromophenyl-phenylether	11.018	248	106344	20.8394	ug/mL	#	87
63) Hexachlorobenzene	11.119	284	288599	54.5681	ug/mL		95
64) Pentachlorophenol	11.350	266	161601	45.4129	ug/mL		98
65) Phenanthrene	11.619	178	421821	20.7969	ug/mL		96
66) Anthracene	11.682	178	431199	20.9006	ug/mL		94
67) Carbazole	11.879	167	971053	55.9140	ug/mL		87
68) Di-n-butylphthalate	12.278	149	574098	21.9386	ug/mL		96
69) Fluoranthene	13.096	202	584925	21.4202	ug/mL		95
71) Benzidine	13.245	184	241816	22.6158	ug/mL		88
72) Pyrene	13.384	202	575173	21.2838	ug/mL		92
73) Terphenyl-d14	13.557	244	526846	29.1122	ug/mL		97
74) Butylbenzylphthalate	14.149	149	270700	21.0384	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.918	252	312740	31.6903	ug/mL		97
76) Benzo(a)anthracene	14.966	228	439850	19.7790	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.952	149	336413	21.7322	ug/mL		94
78) Chrysene	15.034	228	425824	20.6908	ug/mL		94
80) Di-n-octylphthalate	16.097	149	697925	20.9942	ug/mL		92
81) Benzo(b)fluoranthene	16.972	252	537404	19.8180	ug/mL		94
82) Benzo(k)fluoranthene	17.034	252	489124	19.6059	ug/mL		92
83) Benzo(a)pyrene	17.727	252	470051	19.8414	ug/mL		93
84) Indeno(1,2,3-cd)pyrene	20.838	276	585117	21.9585	ug/mL		85

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI704.D
Acq On : 7 Sep 2012 7:55 pm
Operator :
Sample : LCS,QC655182
Misc : 190266,1,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 14:23:46 2012
Quant Method : G:\msbna06\090712\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.910	278	457945	21.5599	ug/mL	93
86) Benzo(g,h,i)perylene	21.612	276	477468	21.5555	ug/mL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Initial Calibration Raw Data

CURTIS & TOMPKINS DFTPP TUNE FOR 239403 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 552359297001 File : yi501 Time : 05-SEP-2012 12:17

Standards: S20011

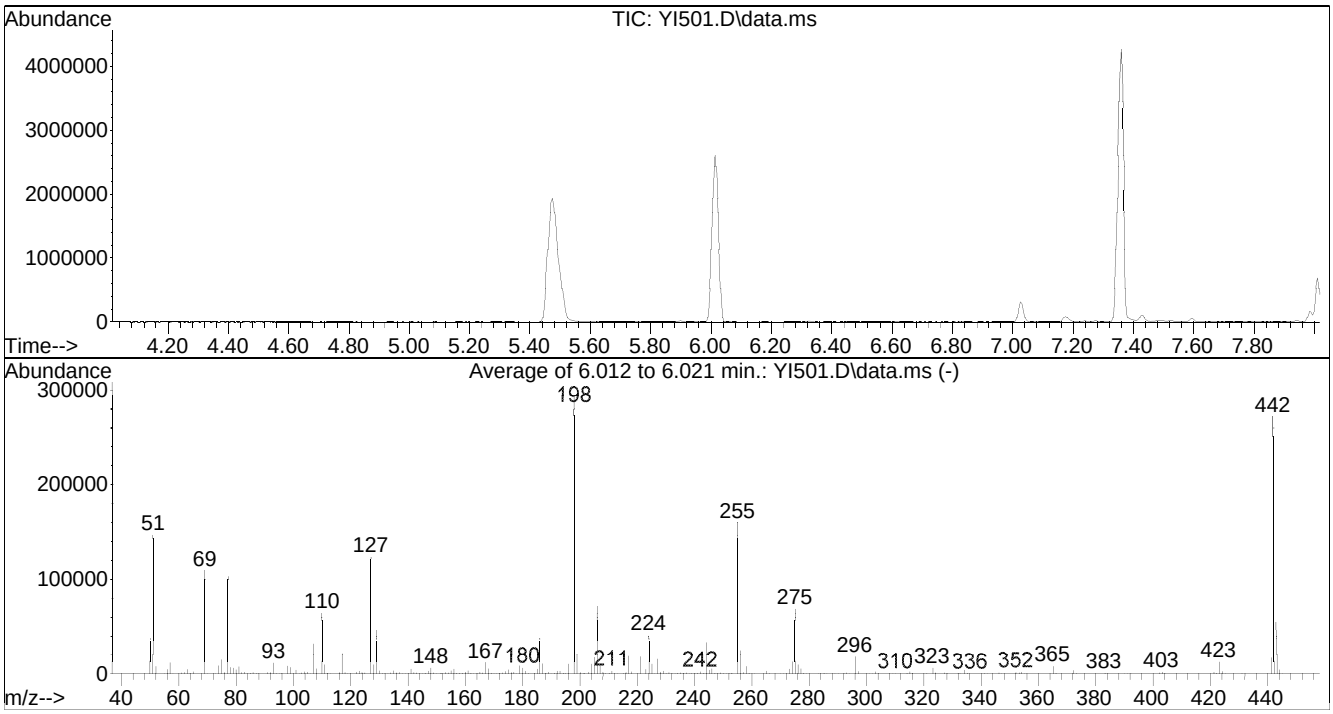
Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	146194	49.89	
68	< 2% of mass 69	0	0.00	
69		109057	100.00	
70	< 2% of mass 69	364	0.33	
127	40% - 60% of mass 198	123514	42.15	
197	< 1% of mass 198	0	0.00	
198		293034	100.00	
199	5% - 9% of mass 198	20365	6.95	
275	10% - 30% of mass 198	68464	23.36	
365	> 1% of mass 198	7883	2.69	
441	Present, < mass 443	16728	30.51	
442	> 40% and < 100% of mass 198	271850	92.77	
443	17% - 23% of mass 442	54824	20.17	

Analyst: LLH Date: 09/05/12 Reviewer: LW Date: 09/07/12

Data Path : G:\msbna06\090512\
Data File : YI501.D
Acq On : 5 Sep 2012 12:17 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Integration File: DDD.p

Method : C:\msdchem\1\METHODS\DFTPP06.M
Title : MSBNA06 BNA DFTPP/PEM
Last Update : Tue Sep 04 10:31:41 2012



AutoFind: Scans 630, 631, 632; Background Corrected with Scan 621

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.9	146194	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.2	109057	PASS
70	69	0.00	2	0.3	364	PASS
127	198	40	60	42.2	123514	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	293034	PASS
199	198	5	9	6.9	20365	PASS
275	198	10	30	23.4	68464	PASS
365	198	1	100	2.7	7883	PASS
441	443	0.01	100	30.5	16728	PASS
442	198	40	100	92.8	271850	PASS
443	442	17	23	20.2	54824	PASS

PEM Report

File Name : G:\csinput.net\DATA\090512\YI501.D
Date Acquired : 5 Sep 2012 12:17 pm
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA06 BNA DFTPP/PEM
Inst. Name : MSBNA06
AcquisitionMeth: DFTPP06.M

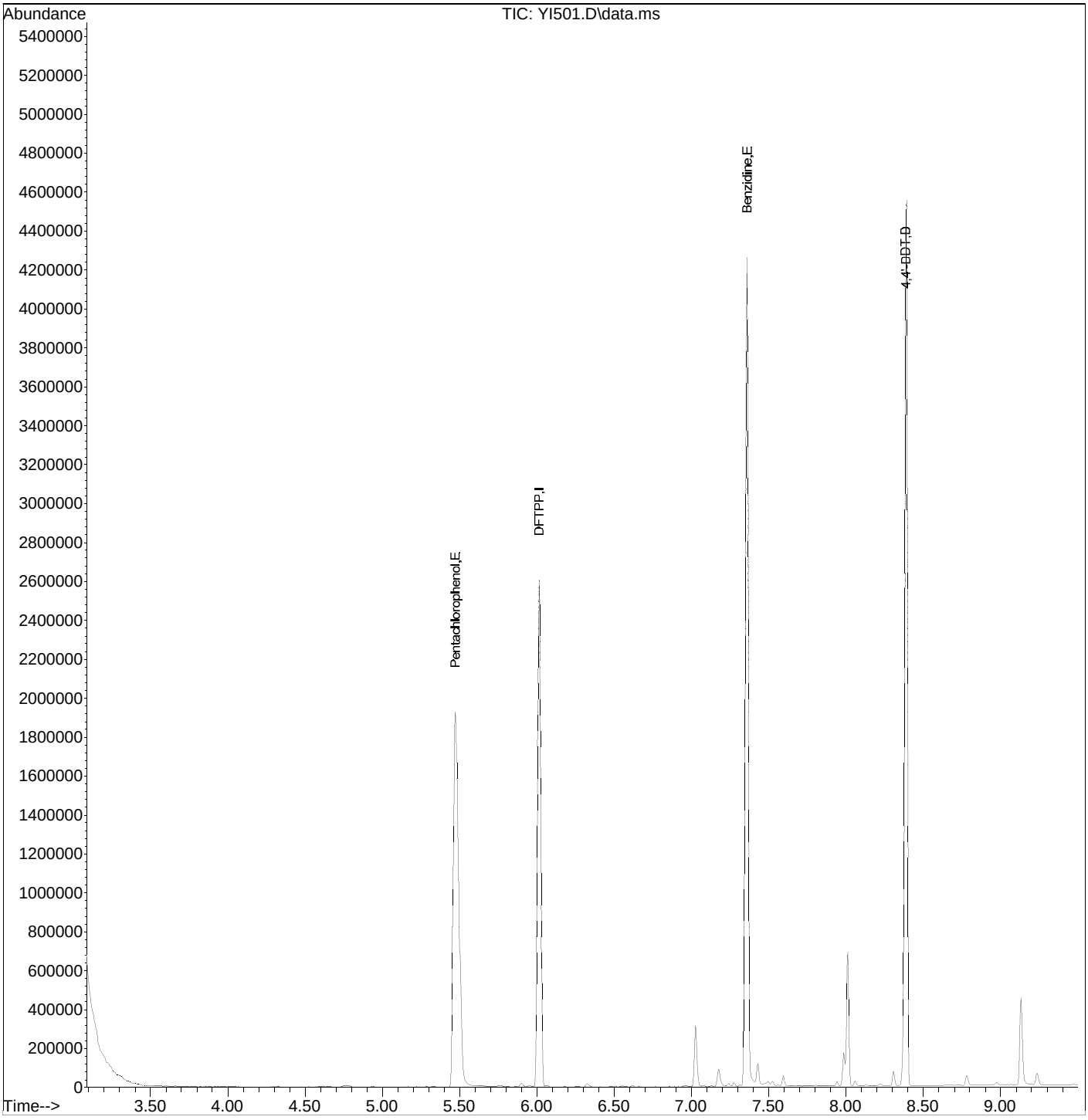
Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.450	5.48	656508
Benzidine	0.608	7.36	2454857
4,4'-DDT		8.39	1096537
4,4'-DDE		7.60	6357
4,4'-DDD		8.01	151666

% Breakdown: 4,4'-DDT	LIMIT <=20%	13%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.5	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	0.6	PASS
	8270D <=2	1	PASS

Quantitation Report (Not Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI501.D
Acq On : 5 Sep 2012 12:17 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 12:29:33 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP06.M
Quant Title : MSBNA06 BNA DFTPP/PEM
QLast Update : Wed Sep 05 12:29:24 2012
Response via : Continuing Cal File: G:\msbna06\090512\YI501.D



Quantitation Report (Not Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI501.D
Acq On : 5 Sep 2012 12:17 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 12:29:33 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP06.M
Quant Title : MSBNA06 BNA DFTPP/PEM
QLast Update : Wed Sep 05 12:29:24 2012
Response via : Continuing Cal File: G:\msbna06\090512\YI501.D

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
2) DFTPP	6.016	198	472733	50.0000	ug/mL	0.00
4) 4,4'-DDT	8.387	235	1096537	50.0000	ug/mL	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	5.477	266	656508	50.0000	ug/mL	97
3) Benzidine	7.360	184	2454857	50.0000	ug/mL	96
5) 4,4'-DDE	7.597	246	6357	No CC lev		
6) 4,4'-DDD	8.011	235	151666	No CC lev		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS DFTPP TUNE FOR 239403 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 552362420001 File : yi701 Time : 07-SEP-2012 16:20

Standards: S20011

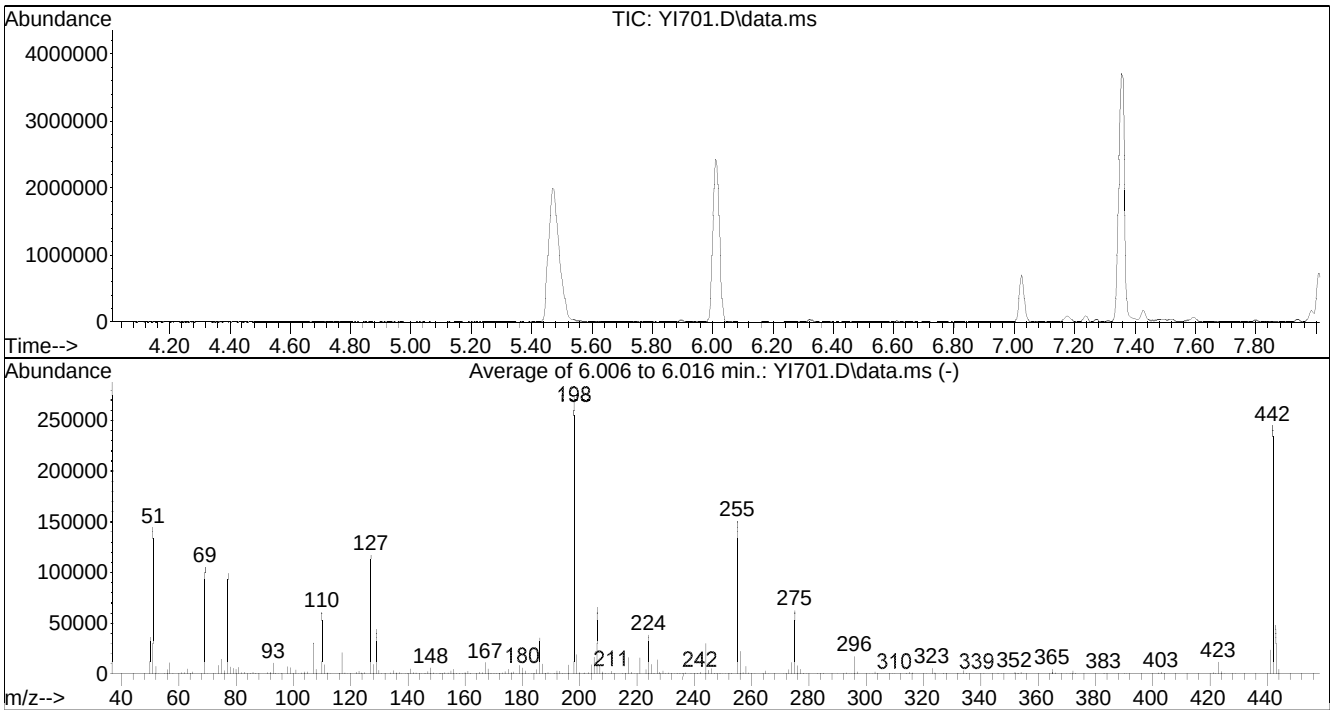
Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	143815	52.59	
68	< 2% of mass 69	0	0.00	
69		105229	100.00	
70	< 2% of mass 69	354	0.34	
127	40% - 60% of mass 198	116960	42.77	
197	< 1% of mass 198	0	0.00	
198		273450	100.00	
199	5% - 9% of mass 198	18880	6.90	
275	10% - 30% of mass 198	62941	23.02	
365	> 1% of mass 198	4859	1.78	
441	Present, < mass 443	23504	48.96	
442	> 40% and < 100% of mass 198	244650	89.47	
443	17% - 23% of mass 442	48008	19.62	

Analyst: LLH Date: 09/07/12 Reviewer: LW Date: 09/11/12

Data Path : G:\msbna06\090712\
Data File : YI701.D
Acq On : 7 Sep 2012 4:20 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Integration File: DDD.p

Method : C:\msdchem\1\METHODS\DFTPP06.M
Title : MSBNA06 BNA DFTPP/PEM
Last Update : Thu Sep 06 12:51:46 2012



AutoFind: Scans 629, 630, 631; Background Corrected with Scan 621

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	52.6	143815	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.5	105229	PASS
70	69	0.00	2	0.3	354	PASS
127	198	40	60	42.8	116960	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	273450	PASS
199	198	5	9	6.9	18880	PASS
275	198	10	30	23.0	62941	PASS
365	198	1	100	1.8	4859	PASS
441	443	0.01	100	49.0	23504	PASS
442	198	40	100	89.5	244650	PASS
443	442	17	23	19.6	48008	PASS

PEM Report

File Name : G:\msbna06\090712\YI701.D
Date Acquired : 7 Sep 2012 4:20 pm
Sample Name : TUN,S20011
Misc. Info : DFTPP/PEM
Calib. Title : MSBNA06 BNA DFTPP/PEM
Inst. Name : MSBNA06
AcquisitionMeth: DFTPP06.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.313	5.48	682488
Benzidine	0.900	7.35	2217263
4,4'-DDT		8.39	1071849
4,4'-DDE		7.59	8081
4,4'-DDD		8.01	167142

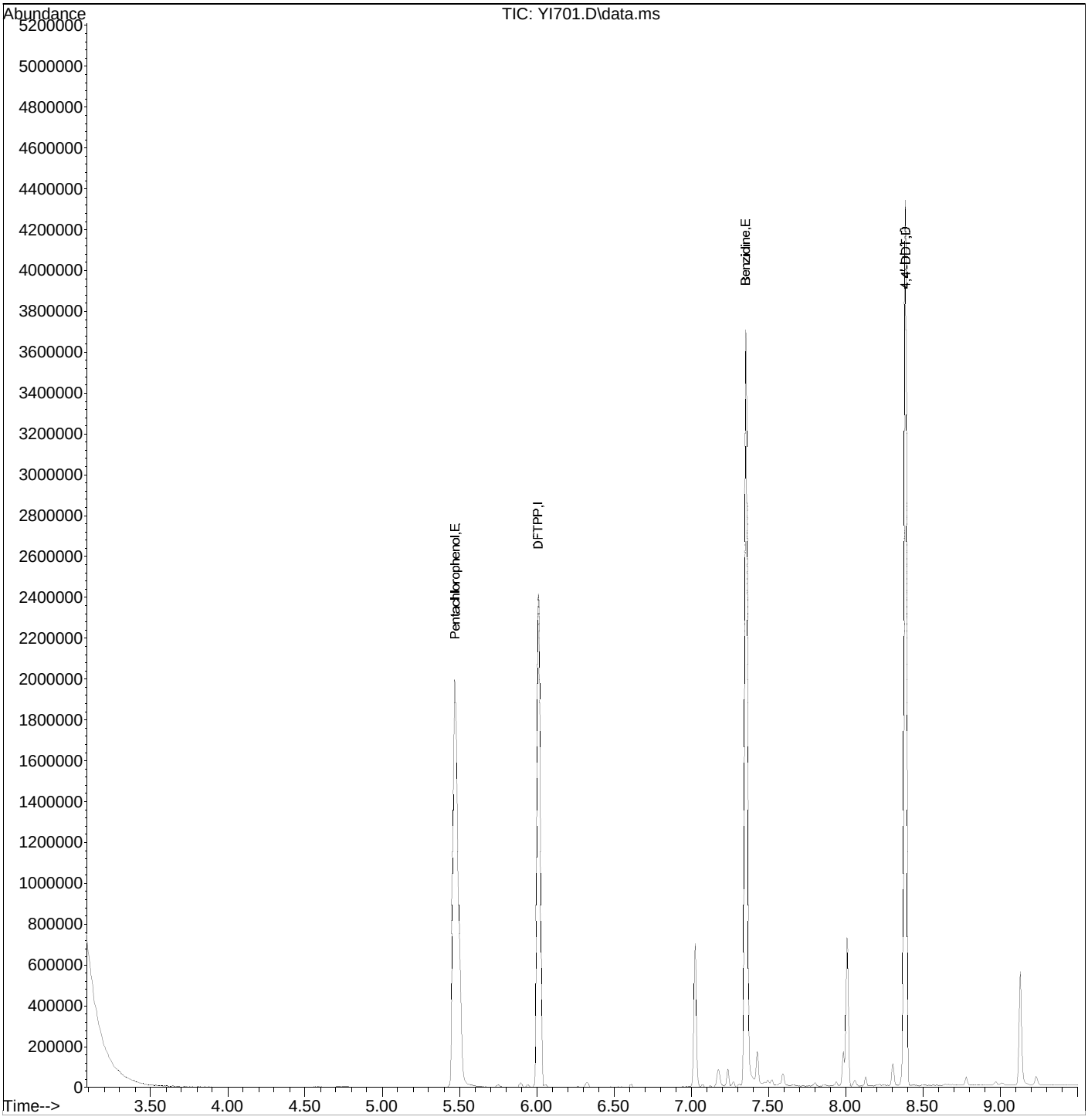
% Breakdown: 4,4'-DDT	LIMIT <=20%	14%	PASS
Tailing: Pentachlorophenol	8270C <5.0	1.3	PASS
	8270D <=2	1	PASS
Tailing: Benzidine	8270C <3.0	0.9	PASS
	8270D <=2	1	PASS

Fri Sep 07 16:34:42 2012

Quantitation Report (Not Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI701.D
Acq On : 7 Sep 2012 4:20 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 16:34:36 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP06.M
Quant Title : MSBNA06 BNA DFTPP/PEM
QLast Update : Fri Sep 07 16:34:24 2012
Response via : Continuing Cal File: G:\msbna06\090712\YI701.D



Quantitation Report (Not Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI701.D
Acq On : 7 Sep 2012 4:20 pm
Operator :
Sample : TUN,S20011
Misc : DFTPP/PEM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 16:34:36 2012
Quant Method : C:\msdchem\1\METHODS\DFTPP06.M
Quant Title : MSBNA06 BNA DFTPP/PEM
QLast Update : Fri Sep 07 16:34:24 2012
Response via : Continuing Cal File: G:\msbna06\090712\YI701.D

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
2) DFTPP	6.011	198	450633	50.0000	ug/mL	0.00
4) 4,4'-DDT	8.387	235	1071849	50.0000	ug/mL	0.00
Target Compounds						Qvalue
1) Pentachlorophenol	5.476	266	682488	50.0000	ug/mL	97
3) Benzidine	7.355	184	2217263	49.9842	ug/mL	96
5) 4,4'-DDE	7.592	246	8081	No CC lev		
6) 4,4'-DDD	8.010	235	167142	No CC lev		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 MSBNA Soil: EPA 8270D

Inst : MSBNA06
Calnum : 552359297001
Units : ug/mL

Name : 6PTBNA6
Date : 05-SEP-2012 12:37
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	yi502	552359297002	ICAL	05-SEP-2012 12:37	S20236
L2	yi503	552359297003	ICAL	05-SEP-2012 13:13	S20238
L3	yi504	552359297004	ICAL	05-SEP-2012 13:51	S20239
L4	yi505	552359297005	ICAL	05-SEP-2012 14:31	S20248
L5	yi506	552359297006	ICAL	05-SEP-2012 15:10	S20249
L6	yi507	552359297007	ICAL	05-SEP-2012 15:48	S20250
L7	yi508	552359297008	ICAL	05-SEP-2012 16:24	S20244
L8	yi509	552359297009	ICAL	05-SEP-2012 17:01	S20245
L9	yi510	552359297010	ICAL	05-SEP-2012 17:41	S20246

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
bis(2-Ethylhexyl)phthalate			0.9138	0.8784	0.8767	0.8150	0.7578	0.7136	0.6400	AVRG		1.25106		0.7993	13	20	0.010	0.99	
Nitrobenzene-d5	0.4260	0.4497	0.4136	0.4401	0.3985	0.3970	0.3897m	0.4000	0.3957	AVRG		2.42569		0.4123	5	20	0.05	0.99	
2-Fluorobiphenyl	1.7886	1.7963	1.7265	1.6409	1.6230	1.4710	1.3335	1.3103	1.2618	AVRG		0.64508		1.5502	14	20	0.05	0.99	
Terphenyl-d14	0.9000	0.9750	0.9652	0.9218	0.9603	0.9496	0.9239	0.8621	0.9522	AVRG		1.07013		0.9345	4	20	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
bis(2-Ethylhexyl)phthalate					10.000	14	16.000	10	20.000	10	25.000	2	40.000	-5	50.000	-11	60.000	-20
Nitrobenzene-d5	2.0000	3	5.0000	9	10.000	0	16.000	7	20.000	-3	25.000	-4	40.000	-5	50.000	-3	60.000	-4
2-Fluorobiphenyl	2.0000	15	5.0000	16	10.000	11	16.000	6	20.000	5	25.000	-5	40.000	-14	50.000	-15	60.000	-19
Terphenyl-d14	2.0000	-4	5.0000	4	10.000	3	16.000	-1	20.000	3	25.000	2	40.000	-1	50.000	-8	60.000	2

KMH 09/06/12 [1,4-Dichlorobenzene-d4]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [N-Nitrosodimethylamine]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Aniline]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [Benzoic acid]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [2,4,5-Trichlorophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [2,4-Dinitrophenol]: Picked or reassigned peak in ICAL (yi502).

KMH 09/06/12 [4-Nitroaniline]: Corrected automatically drawn baseline in ICAL (yi502).

KMH 09/06/12 [Dibenz(a,h)anthracene]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [N-Nitroso-di-n-propylamine]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [Indeno(1,2,3-cd)pyrene]: Combined split peak in multiple levels.

KMH 09/06/12 [Benzo(a)anthracene]: Corrected automatically drawn baseline in ICAL (yi505).

KMH 09/06/12 [4-Methylphenol]: Combined split peak in multiple levels.

KMH 09/06/12 [Nitrobenzene-d5]: Corrected automatically drawn baseline in ICAL (yi508).

KMH 09/06/12 [2,4-Dimethylphenol]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [2,4-Dichlorophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Aniline]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [bis(2-Chloroethyl)ether]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Isophorone]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [2-Nitrophenol]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [4-Chloroaniline]: Corrected automatically drawn baseline in multiple levels.

KMH 09/06/12 [Anthracene]: Corrected automatically drawn baseline in ICAL (yi509).

KMH 09/06/12 [Benzo(b)fluoranthene]: Corrected automatically drawn baseline in ICAL (yi509).

KMH 09/06/12 [Benzo(k)fluoranthene]: Picked or reassigned peak in multiple levels.

KMH 09/06/12 [N-Nitroso-di-n-propylamine]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Naphthalene]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Hexachlorobutadiene]: Corrected automatically drawn baseline in ICAL (yi510).

KMH 09/06/12 [Resorcinol]: Combined split peak in ICAL (yi510).

Analyst: KMH Date: 09/06/12 Reviewer: LW Date: 09/07/12

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

552359297001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 MSBNA Soil
EPA 8270D

Inst : MSBNA06 Name : 6PTBNA6
Calnum : 552359297001 Cal Date : 05-SEP-2012

ICV 552359297011 (yi511 05-SEP-2012) stds: S19910

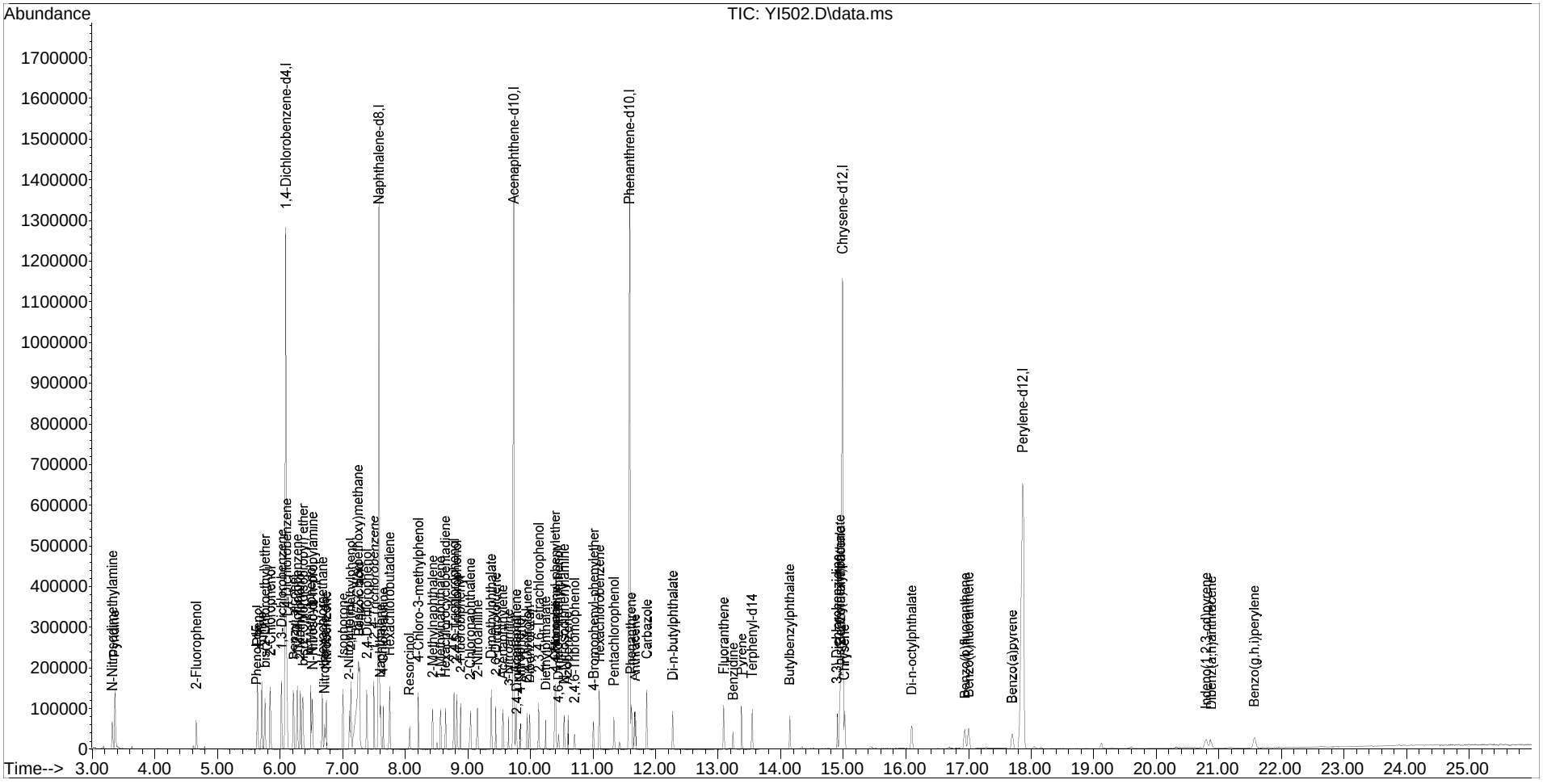
Analyte	Spiked	Quant	Units	%D	Max	Flags
bis(2-Ethylhexyl)phthalate	40.00	42.58	ug/mL	6	30	

Analyst: KMH Date: 09/06/12 Reviewer: LW Date: 09/07/12

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI502.D
Acq On : 5 Sep 2012 12:37 pm
Operator :
Sample : ICAL,S20236
Misc : ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 06 11:55:54 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI502.D
Acq On : 5 Sep 2012 12:37 pm
Operator :
Sample : ICAL,S20236
Misc : ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 06 11:55:54 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	231638m	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.584	136	713923	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.744	164	403539	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	720328	40.0000	ug/mL	0.00
70) Chrysene-d12	14.990	240	728355	40.0000	ug/mL	0.00
79) Perylene-d12	17.871	264	733762	40.0000	ug/mL	-0.01
Target Compounds						Qvalue
2) Pyridine	3.357	79	35706	4.2689	ug/mL	# 1
3) N-Nitrosodimethylamine	3.324	42	25988m	4.1107	ug/mL	
4) 2-Fluorophenol	4.670	112	17537	1.9238	ug/mL	86
5) Phenol-d5	5.632	99	22052	1.9899	ug/mL	80
6) Phenol	5.646	94	44277	4.4136	ug/mL	74
7) Aniline	5.714	93	49739m	4.2104	ug/mL	
8) bis(2-Chloroethyl)ether	5.767	93	32394	4.7495	ug/mL	# 66
9) 2-Chlorophenol	5.848	128	37008	4.7204	ug/mL	93
10) 1,3-Dichlorobenzene	6.031	146	42495	4.6688	ug/mL	97
11) 1,4-Dichlorobenzene	6.108	146	38710	4.7502	ug/mL	90
12) Benzyl alcohol	6.219	108	20065	4.3473	ug/mL	# 85
13) 1,2-Dichlorobenzene	6.286	146	37647	4.6835	ug/mL	99
14) 2-Methylphenol	6.329	107	21994	4.3063	ug/mL	97
15) bis(2-Chloroisopropyl) ether	6.377	45	76241	4.1589	ug/mL	76
16) 4-Methylphenol	6.502	107	32649	4.1518	ug/mL	95
17) N-Nitroso-di-n-propylamine	6.526	70	19721	4.3326	ug/mL	83
18) Hexachloroethane	6.680	117	15939	4.6031	ug/mL	87
20) Nitrobenzene-d5	6.714	82	15207	2.2354	ug/mL	82
21) Nitrobenzene	6.738	77	29159	4.8166	ug/mL	85
22) Isophorone	7.012	82	51909	4.3456	ug/mL	100
23) 2-Nitrophenol	7.113	139	14644	4.2051	ug/mL	86
24) 2,4-Dimethylphenol	7.137	107	28851	5.0603	ug/mL	85
25) bis(2-Chloroethoxy)methane	7.253	93	16828	2.2406	ug/mL	97
26) Benzoic acid	7.272	105	151352m	38.0276	ug/mL	
27) 2,4-Dichlorophenol	7.392	162	27016	4.5733	ug/mL	91
28) 1,2,4-Trichlorobenzene	7.507	180	32440	4.9465	ug/mL	95
29) Naphthalene	7.608	128	38689	2.2554	ug/mL	97
30) 4-Chloroaniline	7.652	127	27412	3.6919	ug/mL	90
31) Hexachlorobutadiene	7.753	225	18725	4.6951	ug/mL	95
32) Resorcinol	8.080	110	16281	2.4912	ug/mL	85
33) 4-Chloro-3-methylphenol	8.219	107	22907	4.4728	ug/mL	95
34) 2-Methylnaphthalene	8.445	142	28517	2.1680	ug/mL	93
35) 1-Methylnaphthalene	8.565	142	27369	2.1656	ug/mL	95
37) Hexachlorocyclopentadiene	8.642	237	16678	3.8875	ug/mL	97
38) 2,4,6-Trichlorophenol	8.782	196	20973	4.5149	ug/mL	94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI502.D
Acq On : 5 Sep 2012 12:37 pm
Operator :
Sample : ICAL,S20236
Misc : ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 06 11:55:54 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.820	196	21975m	4.6500	ug/mL		
40) 2-Fluorobiphenyl	8.888	172	36088	2.4220	ug/mL		98
41) 2-Chloronaphthalene	9.042	162	28128	2.3156	ug/mL		88
42) 2-Nitroaniline	9.157	65	17634	4.3455	ug/mL		87
43) Dimethylphthalate	9.373	163	62542	4.6584	ug/mL		96
44) 2,6-Dinitrotoluene	9.450	165	11839	4.1615	ug/mL		85
45) Acenaphthylene	9.561	152	43051	2.2990	ug/mL		97
46) 3-Nitroaniline	9.662	138	11828	3.5850	ug/mL	#	58
47) Acenaphthene	9.777	154	24127	2.2612	ug/mL		95
48) 2,4-Dinitrophenol	9.792	184	864m	13.8517	ug/mL		
49) 4-Nitrophenol	9.840	109	4751	3.0295	ug/mL	#	68
50) Dibenzofuran	9.989	168	36925	2.4335	ug/mL		87
51) 2,4-Dinitrotoluene	9.950	165	15143	4.1692	ug/mL	#	81
52) 2,3,4,6-Tetrachlorophenol	10.133	232	15029	4.1126	ug/mL		87
53) Diethylphthalate	10.249	149	29841	2.2322	ug/mL		96
54) 4-Chlorophenyl-phenylether	10.402	204	15822	2.2644	ug/mL		84
55) Fluorene	10.412	166	30205	2.3364	ug/mL		90
56) 4-Nitroaniline	10.417	138	10309m	3.4303	ug/mL		
57) 2,4,6-Tribromophenol	10.710	330	4828	2.0178	ug/mL	#	76
59) 4,6-Dinitro-2-methylphenol	10.455	198	3560	2.0149	ug/mL		87
60) N-Nitrosodiphenylamine	10.542	169	21941	2.5300	ug/mL		88
61) Azobenzene	10.600	77	28639	2.6177	ug/mL		96
62) 4-Bromophenyl-phenylether	11.013	248	9916	2.3648	ug/mL	#	85
63) Hexachlorobenzene	11.109	284	22721	5.0091	ug/mL		95
64) Pentachlorophenol	11.340	266	10870	3.6344	ug/mL		98
65) Phenanthrene	11.614	178	40556	2.3488	ug/mL		97
66) Anthracene	11.677	178	40599	2.3249	ug/mL		95
67) Carbazole	11.864	167	67108	4.6006	ug/mL		89
68) Di-n-butylphthalate	12.278	149	51251	2.2576	ug/mL		96
69) Fluoranthene	13.091	202	50834	2.2068	ug/mL		95
71) Benzidine	13.240	184	19539	1.9376	ug/mL		88
72) Pyrene	13.379	202	52231	2.0068	ug/mL		93
73) Terphenyl-d14	13.552	244	32776	1.9408	ug/mL		98
74) Butylbenzylphthalate	14.144	149	21367	1.7155	ug/mL		90
75) 3,3'-Dichlorobenzidine	14.904	252	28594	3.0369	ug/mL		98
76) Benzo(a)anthracene	14.956	228	45163	2.1623	ug/mL		97
77) bis(2-Ethylhexyl)phthalate	14.947	149	31606	2.1140	ug/mL		93
78) Chrysene	15.019	228	40511	2.1174	ug/mL		94
80) Di-n-octylphthalate	16.096	149	49696	1.8934	ug/mL		91
81) Benzo(b)fluoranthene	16.952	252	40075	1.8897	ug/mL		92
82) Benzo(k)fluoranthene	17.010	252	43212	2.2306	ug/mL		92
83) Benzo(a)pyrene	17.702	252	34750	1.8711	ug/mL		93
84) Indeno(1,2,3-cd)pyrene	20.804	276	34099	1.5681	ug/mL		87

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI502.D
Acq On : 5 Sep 2012 12:37 pm
Operator :
Sample : ICAL,S20236
Misc : ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 06 11:55:54 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

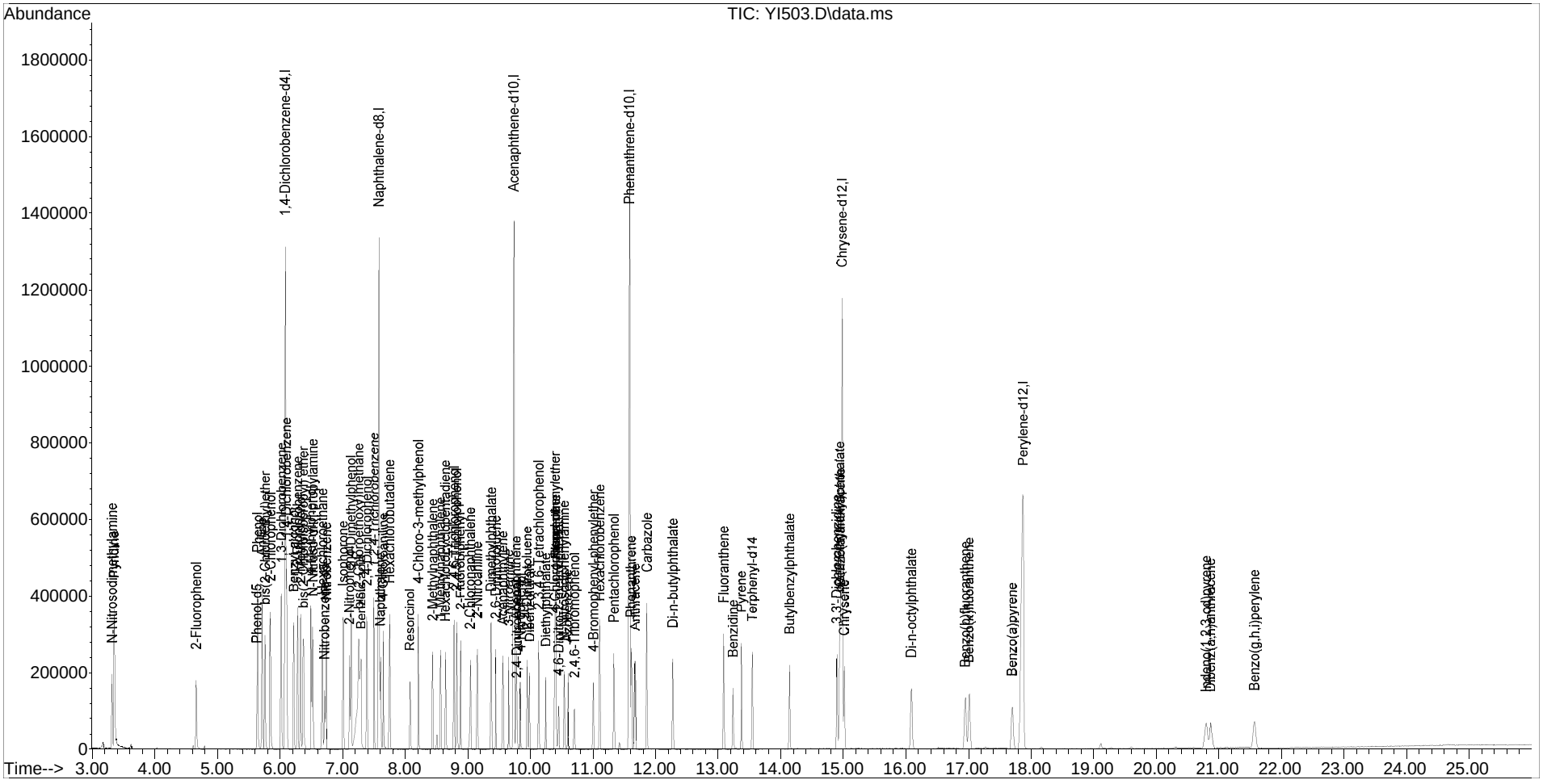
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.881	278	27490m	1.5746	ug/mL	
86) Benzo(g,h,i)perylene	21.569	276	31964	1.7662	ug/mL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI503.D
Acq On : 5 Sep 2012 1:13 pm
Operator :
Sample : ICAL,S20238
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 06 12:00:09 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI503.D
Acq On : 5 Sep 2012 1:13 pm
Operator :
Sample : ICAL,S20238
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 06 12:00:09 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.089	152	227995m	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.584	136	683476	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.739	164	396434	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	760120	40.0000	ug/mL	0.00
70) Chrysene-d12	14.985	240	716367	40.0000	ug/mL	0.00
79) Perylene-d12	17.875	264	764995	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.353	79	99021	12.0279	ug/mL	# 1
3) N-Nitrosodimethylamine	3.319	42	72672	11.6788	ug/mL	83
4) 2-Fluorophenol	4.670	112	46094	5.1373	ug/mL	85
5) Phenol-d5	5.632	99	55628	5.0999	ug/mL	82
6) Phenol	5.646	94	111684	11.3107	ug/mL	72
7) Aniline	5.714	93	130185m	11.1963	ug/mL	
8) bis(2-Chloroethyl)ether	5.767	93	77891	11.6026	ug/mL	# 64
9) 2-Chlorophenol	5.848	128	89631	11.6152	ug/mL	93
10) 1,3-Dichlorobenzene	6.031	146	103053	11.5032	ug/mL	98
11) 1,4-Dichlorobenzene	6.108	146	91021	11.3479	ug/mL	93
12) Benzyl alcohol	6.223	108	46692	10.2779	ug/mL	# 84
13) 1,2-Dichlorobenzene	6.286	146	88865	11.2320	ug/mL	99
14) 2-Methylphenol	6.334	107	54729	10.8868	ug/mL	93
15) bis(2-Chloroisopropyl) ether	6.377	45	186540	10.3383	ug/mL	75
16) 4-Methylphenol	6.502	107	81397	10.5161	ug/mL	94
17) N-Nitroso-di-n-propylamine	6.526	70	50274m	11.2214	ug/mL	
18) Hexachloroethane	6.680	117	38397	11.2661	ug/mL	87
20) Nitrobenzene-d5	6.714	82	38417	5.8988	ug/mL	80
21) Nitrobenzene	6.738	77	70978	12.2467	ug/mL	86
22) Isophorone	7.012	82	129660	11.3381	ug/mL	99
23) 2-Nitrophenol	7.113	139	37967	11.3880	ug/mL	87
24) 2,4-Dimethylphenol	7.137	107	66210	12.1302	ug/mL	84
25) bis(2-Chloroethoxy)methane	7.257	93	41120	5.7190	ug/mL	97
26) Benzoic acid	7.296	105	198028m	51.9716	ug/mL	
27) 2,4-Dichlorophenol	7.392	162	67468	11.9297	ug/mL	93
28) 1,2,4-Trichlorobenzene	7.507	180	77593	12.3585	ug/mL	97
29) Naphthalene	7.608	128	91477	5.5701	ug/mL	98
30) 4-Chloroaniline	7.652	127	74880	10.5341	ug/mL	90
31) Hexachlorobutadiene	7.753	225	44914	11.7633	ug/mL	98
32) Resorcinol	8.085	110	50952	8.1435	ug/mL	85
33) 4-Chloro-3-methylphenol	8.219	107	58312	11.8933	ug/mL	93
34) 2-Methylnaphthalene	8.445	142	71189	5.6532	ug/mL	93
35) 1-Methylnaphthalene	8.565	142	69034	5.7057	ug/mL	91
37) Hexachlorocyclopentadiene	8.642	237	42758	10.1452	ug/mL	97
38) 2,4,6-Trichlorophenol	8.782	196	50728	11.1160	ug/mL	90

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI503.D
Acq On : 5 Sep 2012 1:13 pm
Operator :
Sample : ICAL,S20238
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 06 12:00:09 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.820	196	54779	11.7991	ug/mL		98
40) 2-Fluorobiphenyl	8.888	172	89015	6.0811	ug/mL		99
41) 2-Chloronaphthalene	9.042	162	69788	5.8482	ug/mL		88
42) 2-Nitroaniline	9.157	65	43776	10.9810	ug/mL		92
43) Dimethylphthalate	9.378	163	148450	11.2555	ug/mL		96
44) 2,6-Dinitrotoluene	9.450	165	30948	11.0735	ug/mL		89
45) Acenaphthylene	9.561	152	109200	5.9360	ug/mL		98
46) 3-Nitroaniline	9.662	138	33458	10.3227	ug/mL	#	60
47) Acenaphthene	9.777	154	58885	5.6175	ug/mL		97
48) 2,4-Dinitrophenol	9.787	184	4989	16.7039	ug/mL	#	90
49) 4-Nitrophenol	9.845	109	14109	9.1578	ug/mL	#	74
50) Dibenzofuran	9.989	168	84263	5.6528	ug/mL		82
51) 2,4-Dinitrotoluene	9.950	165	39682	11.1211	ug/mL		86
52) 2,3,4,6-Tetrachlorophenol	10.133	232	37246	10.3747	ug/mL		87
53) Diethylphthalate	10.249	149	76562	5.8298	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.402	204	39731	5.7882	ug/mL		86
55) Fluorene	10.412	166	73694	5.8025	ug/mL		86
56) 4-Nitroaniline	10.417	138	30139	10.2083	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.710	330	12218	5.1978	ug/mL	#	79
59) 4,6-Dinitro-2-methylphenol	10.460	198	14492	7.7730	ug/mL		95
60) N-Nitrosodiphenylamine	10.542	169	52895	5.7801	ug/mL		86
61) Azobenzene	10.600	77	68078	5.8968	ug/mL		97
62) 4-Bromophenyl-phenylether	11.013	248	24632	5.5668	ug/mL	#	87
63) Hexachlorobenzene	11.109	284	52819	11.0350	ug/mL		97
64) Pentachlorophenol	11.340	266	31897	10.1066	ug/mL		97
65) Phenanthrene	11.614	178	100131	5.4955	ug/mL		97
66) Anthracene	11.677	178	101737	5.5210	ug/mL		95
67) Carbazole	11.864	167	169662	11.0224	ug/mL		88
68) Di-n-butylphthalate	12.278	149	131038	5.4701	ug/mL		96
69) Fluoranthene	13.091	202	131455	5.4081	ug/mL		94
71) Benzidine	13.240	184	69387	6.9958	ug/mL		89
72) Pyrene	13.379	202	132226	5.1653	ug/mL		93
73) Terphenyl-d14	13.552	244	87311	5.2565	ug/mL		99
74) Butylbenzylphthalate	14.144	149	59429	4.8513	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.904	252	82409	8.8988	ug/mL		97
76) Benzo(a)anthracene	14.956	228	108477	5.2805	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.947	149	80359	5.4648	ug/mL		93
78) Chrysene	15.019	228	98774	5.2491	ug/mL		95
80) Di-n-octylphthalate	16.091	149	133571	4.8812	ug/mL		86
81) Benzo(b)fluoranthene	16.947	252	113012	5.1113	ug/mL		95
82) Benzo(k)fluoranthene	17.010	252	112140	5.5524	ug/mL		94
83) Benzo(a)pyrene	17.698	252	96781	4.9984	ug/mL		93
84) Indeno(1,2,3-cd)pyrene	20.799	276	100934	4.4521	ug/mL		85

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI503.D
Acq On : 5 Sep 2012 1:13 pm
Operator :
Sample : ICAL,S20238
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 06 12:00:09 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Wed Sep 05 12:00:08 2012
Response via : Initial Calibration

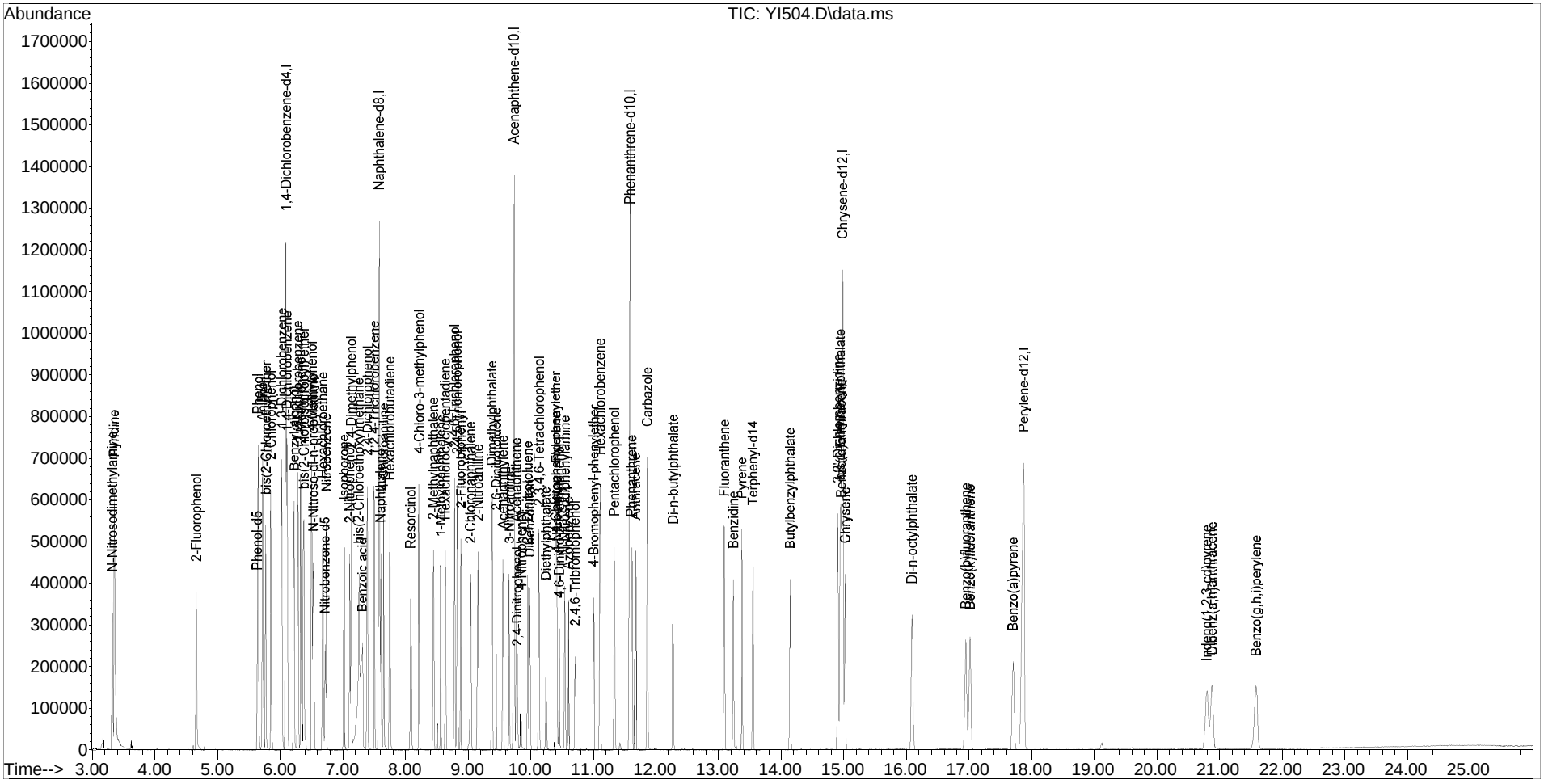
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.867	278	83548m	4.5903	ug/mL	
86) Benzo(g,h,i)perylene	21.574	276	84189	4.4619	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI504.D
Acq On : 5 Sep 2012 1:51 pm
Operator :
Sample : ICAL,S20239
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 06 12:00:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI504.D
Acq On : 5 Sep 2012 1:51 pm
Operator :
Sample : ICAL,S20239
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 06 12:00:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	218135	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.585	136	669302	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.744	164	374030	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.591	188	718704	40.0000	ug/mL	0.00
70) Chrysene-d12	14.986	240	701990	40.0000	ug/mL	0.00
79) Perylene-d12	17.876	264	768797	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.348	79	189573	14.9175	ug/mL	# 3
3) N-Nitrosodimethylamine	3.319	42	147508	17.9317	ug/mL	83
4) 2-Fluorophenol	4.671	112	96963	8.4272	ug/mL	82
5) Phenol-d5	5.637	99	110297	8.7014	ug/mL	81
6) Phenol	5.652	94	204449	20.5442	ug/mL	70
7) Aniline	5.719	93	241178m	20.4974	ug/mL	
8) bis(2-Chloroethyl)ether	5.772	93	140882	18.1873	ug/mL	# 62
9) 2-Chlorophenol	5.854	128	157944	17.7173	ug/mL	97
10) 1,3-Dichlorobenzene	6.031	146	179330	19.0752	ug/mL	99
11) 1,4-Dichlorobenzene	6.113	146	171666	21.9374	ug/mL	94
12) Benzyl alcohol	6.229	108	89759	17.7242	ug/mL	# 85
13) 1,2-Dichlorobenzene	6.286	146	161363	19.4282	ug/mL	99
14) 2-Methylphenol	6.334	107	105721	20.2601	ug/mL	91
15) bis(2-Chloroisopropyl) ether	6.383	45	348656	22.5451	ug/mL	76
16) 4-Methylphenol	6.512	107	144207	16.6325	ug/mL	97
17) N-Nitroso-di-n-propylamine	6.536	70	91614m	23.9290	ug/mL	
18) Hexachloroethane	6.681	117	69260	20.2711	ug/mL	88
20) Nitrobenzene-d5	6.719	82	69204	10.1756	ug/mL	81
21) Nitrobenzene	6.743	77	129005	24.1126	ug/mL	86
22) Isophorone	7.022	82	228403	19.6350	ug/mL	99
23) 2-Nitrophenol	7.118	139	75946	20.6410	ug/mL	84
24) 2,4-Dimethylphenol	7.142	107	116957	20.4691	ug/mL	85
25) bis(2-Chloroethoxy)methane	7.258	93	76208	11.4783	ug/mL	95
26) Benzoic acid	7.315	105	240120m	48.6576	ug/mL	
27) 2,4-Dichlorophenol	7.397	162	125124	22.3316	ug/mL	94
28) 1,2,4-Trichlorobenzene	7.508	180	135774	21.7111	ug/mL	94
29) Naphthalene	7.609	128	175485	9.4378	ug/mL	95
30) 4-Chloroaniline	7.657	127	150237	21.4478	ug/mL	91
31) Hexachlorobutadiene	7.758	225	81261	24.2132	ug/mL	98
32) Resorcinol	8.090	110	119212	25.0430	ug/mL	83
33) 4-Chloro-3-methylphenol	8.224	107	106211	20.5237	ug/mL	92
34) 2-Methylnaphthalene	8.446	142	132270	9.1727	ug/mL	93
35) 1-Methylnaphthalene	8.571	142	130198	8.5654	ug/mL	93
37) Hexachlorocyclopentadiene	8.643	237	82273	22.2426	ug/mL	97
38) 2,4,6-Trichlorophenol	8.782	196	99185	25.4535	ug/mL	95

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI504.D
Acq On : 5 Sep 2012 1:51 pm
Operator :
Sample : ICAL,S20239
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 06 12:00:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.825	196	105190	26.8948	ug/mL		93
40) 2-Fluorobiphenyl	8.888	172	161442	9.3818	ug/mL		100
41) 2-Chloronaphthalene	9.047	162	129822	10.6046	ug/mL		89
42) 2-Nitroaniline	9.162	65	84520	24.2794	ug/mL		91
43) Dimethylphthalate	9.383	163	282648	19.7314	ug/mL		97
44) 2,6-Dinitrotoluene	9.455	165	60598	19.6563	ug/mL		91
45) Acenaphthylene	9.561	152	202759	9.9460	ug/mL		98
46) 3-Nitroaniline	9.667	138	67818	17.2108	ug/mL	#	60
47) Acenaphthene	9.778	154	111988	9.4273	ug/mL		96
48) 2,4-Dinitrophenol	9.792	184	16236	22.4224	ug/mL	#	2
49) 4-Nitrophenol	9.855	109	30720	17.7520	ug/mL	#	73
50) Dibenzofuran	9.989	168	166626	7.5239	ug/mL		83
51) 2,4-Dinitrotoluene	9.956	165	75358	19.1685	ug/mL		85
52) 2,3,4,6-Tetrachlorophenol	10.138	232	75871	21.9979	ug/mL		89
53) Diethylphthalate	10.249	149	144397	10.1702	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.403	204	71464	10.5889	ug/mL	#	82
55) Fluorene	10.417	166	131429	8.7758	ug/mL		86
56) 4-Nitroaniline	10.427	138	60652	17.6624	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.711	330	24881	9.9866	ug/mL	#	83
59) 4,6-Dinitro-2-methylphenol	10.465	198	37463	18.6502	ug/mL		94
60) N-Nitrosodiphenylamine	10.547	169	100511	10.4266	ug/mL		86
61) Azobenzene	10.600	77	134563	11.3884	ug/mL		97
62) 4-Bromophenyl-phenylether	11.014	248	49697	10.8435	ug/mL	#	85
63) Hexachlorobenzene	11.110	284	101887	22.3738	ug/mL		94
64) Pentachlorophenol	11.341	266	63214	20.3052	ug/mL		97
65) Phenanthrene	11.615	178	188565	9.0943	ug/mL		96
66) Anthracene	11.677	178	198201	8.9999	ug/mL		96
67) Carbazole	11.865	167	331419	19.7751	ug/mL		87
68) Di-n-butylphthalate	12.278	149	258158	9.5845	ug/mL		96
69) Fluoranthene	13.096	202	262886	9.4330	ug/mL		93
71) Benzidine	13.240	184	179019	18.2863	ug/mL		89
72) Pyrene	13.379	202	249519	9.4777	ug/mL		93
73) Terphenyl-d14	13.553	244	169395	9.0610	ug/mL		98
74) Butylbenzylphthalate	14.144	149	116981	8.4965	ug/mL		88
75) 3,3'-Dichlorobenzidine	14.909	252	172640	18.7164	ug/mL		98
76) Benzo(a)anthracene	14.962	228	212620	9.4845	ug/mL		97
77) bis(2-Ethylhexyl)phthalate	14.947	149	160375	9.3826	ug/mL		95
78) Chrysene	15.024	228	190289	9.5154	ug/mL		95
80) Di-n-octylphthalate	16.092	149	274996	8.5904	ug/mL		89
81) Benzo(b)fluoranthene	16.953	252	222140	8.8849	ug/mL		96
82) Benzo(k)fluoranthene	17.020	252	226006	9.9925	ug/mL		91
83) Benzo(a)pyrene	17.708	252	197933	9.1307	ug/mL		96
84) Indeno(1,2,3-cd)pyrene	20.804	276	223856m	8.6488	ug/mL		

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI504.D
Acq On : 5 Sep 2012 1:51 pm
Operator :
Sample : ICAL,S20239
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 06 12:00:45 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

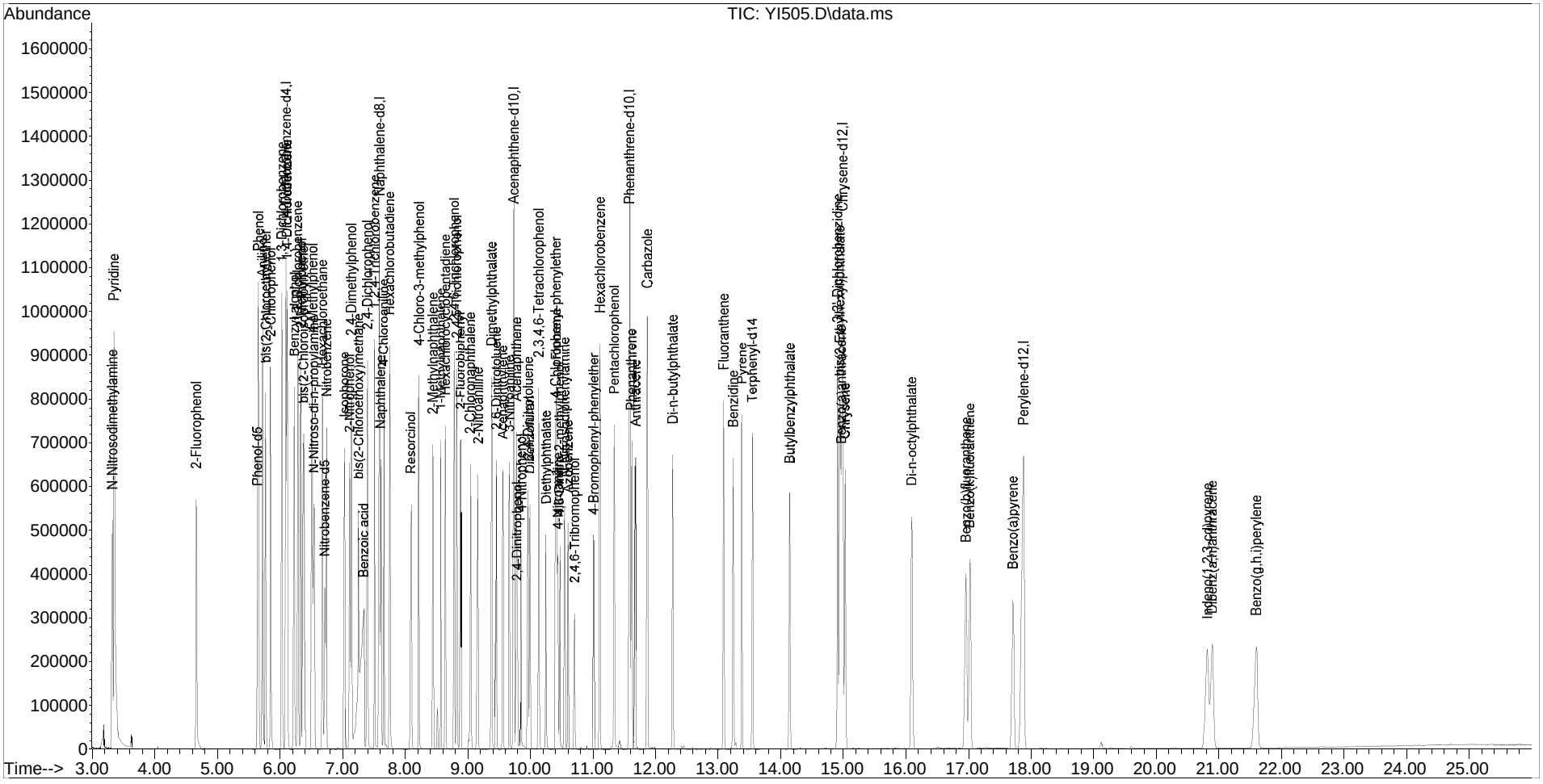
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.886	278	182369	9.0859	ug/mL	93
86) Benzo(g,h,i)perylene	21.588	276	183614	8.4823	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI505.D
Acq On : 5 Sep 2012 2:31 pm
Operator :
Sample : ICAL,S20248
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 06 11:25:25 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI505.D
Acq On : 5 Sep 2012 2:31 pm
Operator :
Sample : ICAL,S20248
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 06 11:25:25 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	193358	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.589	136	646177	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.744	164	375729	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.590	188	706326	40.0000	ug/mL		0.00
70) Chrysene-d12	14.990	240	687574	40.0000	ug/mL		0.00
79) Perylene-d12	17.880	264	762464	40.0000	ug/mL		0.00
Target Compounds							Qvalue
2) Pyridine	3.353	79	308445	27.3817	ug/mL	#	6
3) N-Nitrosodimethylamine	3.329	42	237537	32.5762	ug/mL		85
4) 2-Fluorophenol	4.670	112	147902	14.5016	ug/mL		91
5) Phenol-d5	5.642	99	170633	15.1864	ug/mL		83
6) Phenol	5.661	94	312116	35.3821	ug/mL		74
7) Aniline	5.723	93	366978m	35.1855	ug/mL		
8) bis(2-Chloroethyl)ether	5.776	93	214257	31.2040	ug/mL	#	66
9) 2-Chlorophenol	5.858	128	239724	30.3368	ug/mL		98
10) 1,3-Dichlorobenzene	6.031	146	273754	32.8504	ug/mL		98
11) 1,4-Dichlorobenzene	6.113	146	233649	33.6843	ug/mL		93
12) Benzyl alcohol	6.233	108	133243	29.6823	ug/mL		87
13) 1,2-Dichlorobenzene	6.286	146	236521	32.1264	ug/mL		98
14) 2-Methylphenol	6.339	107	147625	31.9157	ug/mL		92
15) bis(2-Chloroisopropyl) ether	6.382	45	458268	33.4301	ug/mL		78
16) 4-Methylphenol	6.522	107	217497	28.3001	ug/mL		95
17) N-Nitroso-di-n-propylamine	6.546	70	135521	39.9331	ug/mL		79
18) Hexachloroethane	6.680	117	104772	34.5943	ug/mL		88
20) Nitrobenzene-d5	6.719	82	113744	17.3233	ug/mL	#	78
21) Nitrobenzene	6.748	77	183183	35.4645	ug/mL		86
22) Isophorone	7.031	82	356840	31.7742	ug/mL		99
23) 2-Nitrophenol	7.118	139	112561	31.6872	ug/mL		88
24) 2,4-Dimethylphenol	7.147	107	174515	31.6356	ug/mL		85
25) bis(2-Chloroethoxy)methane	7.262	93	111287	17.3618	ug/mL		95
26) Benzoic acid	7.344	105	333807	70.0630	ug/mL		91
27) 2,4-Dichlorophenol	7.402	162	184468	34.1013	ug/mL		93
28) 1,2,4-Trichlorobenzene	7.512	180	201491	33.3727	ug/mL		95
29) Naphthalene	7.609	128	266358	14.8378	ug/mL		96
30) 4-Chloroaniline	7.657	127	224298	33.1666	ug/mL		87
31) Hexachlorobutadiene	7.758	225	122940	37.9432	ug/mL		97
32) Resorcinol	8.099	110	194776	36.7004	ug/mL		83
33) 4-Chloro-3-methylphenol	8.229	107	154299	30.8831	ug/mL		91
34) 2-Methylnaphthalene	8.445	142	199948	14.3623	ug/mL		96
35) 1-Methylnaphthalene	8.570	142	189778	13.6749	ug/mL		92
37) Hexachlorocyclopentadiene	8.647	237	134340	36.1547	ug/mL		98
38) 2,4,6-Trichlorophenol	8.787	196	147625	37.7132	ug/mL		94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI505.D
Acq On : 5 Sep 2012 2:31 pm
Operator :
Sample : ICAL,S20248
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 06 11:25:25 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.825	196	151903	38.6627	ug/mL		95
40) 2-Fluorobiphenyl	8.893	172	246608	16.5020	ug/mL		99
41) 2-Chloronaphthalene	9.046	162	199166	16.1954	ug/mL		89
42) 2-Nitroaniline	9.167	65	128282	36.6840	ug/mL		93
43) Dimethylphthalate	9.388	163	424564	29.5043	ug/mL		97
44) 2,6-Dinitrotoluene	9.460	165	92065	29.7283	ug/mL		91
45) Acenaphthylene	9.566	152	303704	14.8303	ug/mL		98
46) 3-Nitroaniline	9.676	138	107720	27.2135	ug/mL	#	61
47) Acenaphthene	9.782	154	174335	14.6094	ug/mL		96
48) 2,4-Dinitrophenol	9.797	184	34401	33.3835	ug/mL	#	1
49) 4-Nitrophenol	9.859	109	48265	27.7645	ug/mL	#	70
50) Dibenzofuran	9.994	168	244390	13.4955	ug/mL		83
51) 2,4-Dinitrotoluene	9.965	165	116844	29.5867	ug/mL	#	85
52) 2,3,4,6-Tetrachlorophenol	10.138	232	115086	33.2169	ug/mL		89
53) Diethylphthalate	10.253	149	217707	15.2642	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.407	204	107752	15.8936	ug/mL		84
55) Fluorene	10.417	166	199615	14.0683	ug/mL		86
56) 4-Nitroaniline	10.441	138	95369	27.6467	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.715	330	35505	14.1864	ug/mL	#	81
59) 4,6-Dinitro-2-methylphenol	10.470	198	63942	32.3901	ug/mL		90
60) N-Nitrosodiphenylamine	10.552	169	151331	15.9736	ug/mL		88
61) Azobenzene	10.604	77	187017	16.1051	ug/mL		97
62) 4-Bromophenyl-phenylether	11.018	248	71320	15.8342	ug/mL	#	88
63) Hexachlorobenzene	11.114	284	151184	33.7810	ug/mL		96
64) Pentachlorophenol	11.345	266	101567	33.1964	ug/mL		97
65) Phenanthrene	11.619	178	278503	13.6673	ug/mL		96
66) Anthracene	11.682	178	292658	13.5218	ug/mL		95
67) Carbazole	11.874	167	504941	30.6568	ug/mL		87
68) Di-n-butylphthalate	12.278	149	388859	14.6900	ug/mL		96
69) Fluoranthene	13.095	202	375075	13.6945	ug/mL		96
71) Benzidine	13.245	184	290313	30.2765	ug/mL		88
72) Pyrene	13.384	202	381717	14.8032	ug/mL		93
73) Terphenyl-d14	13.552	244	253512	13.8447	ug/mL		97
74) Butylbenzylphthalate	14.149	149	178864	13.2636	ug/mL		86
75) 3,3'-Dichlorobenzidine	14.913	252	283236	31.3503	ug/mL		98
76) Benzo(a)anthracene	14.966	228	319224m	14.5384	ug/mL		
77) bis(2-Ethylhexyl)phthalate	14.947	149	241573	14.4293	ug/mL		95
78) Chrysene	15.029	228	292343	14.9251	ug/mL		95
80) Di-n-octylphthalate	16.096	149	463569	14.6013	ug/mL		89
81) Benzo(b)fluoranthene	16.962	252	360754	14.5489	ug/mL		95
82) Benzo(k)fluoranthene	17.024	252	342240	15.2574	ug/mL		93
83) Benzo(a)pyrene	17.712	252	320441	14.9049	ug/mL		94
84) Indeno(1,2,3-cd)pyrene	20.823	276	367389m	14.3123	ug/mL		

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI505.D
Acq On : 5 Sep 2012 2:31 pm
Operator :
Sample : ICAL,S20248
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 06 11:25:25 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

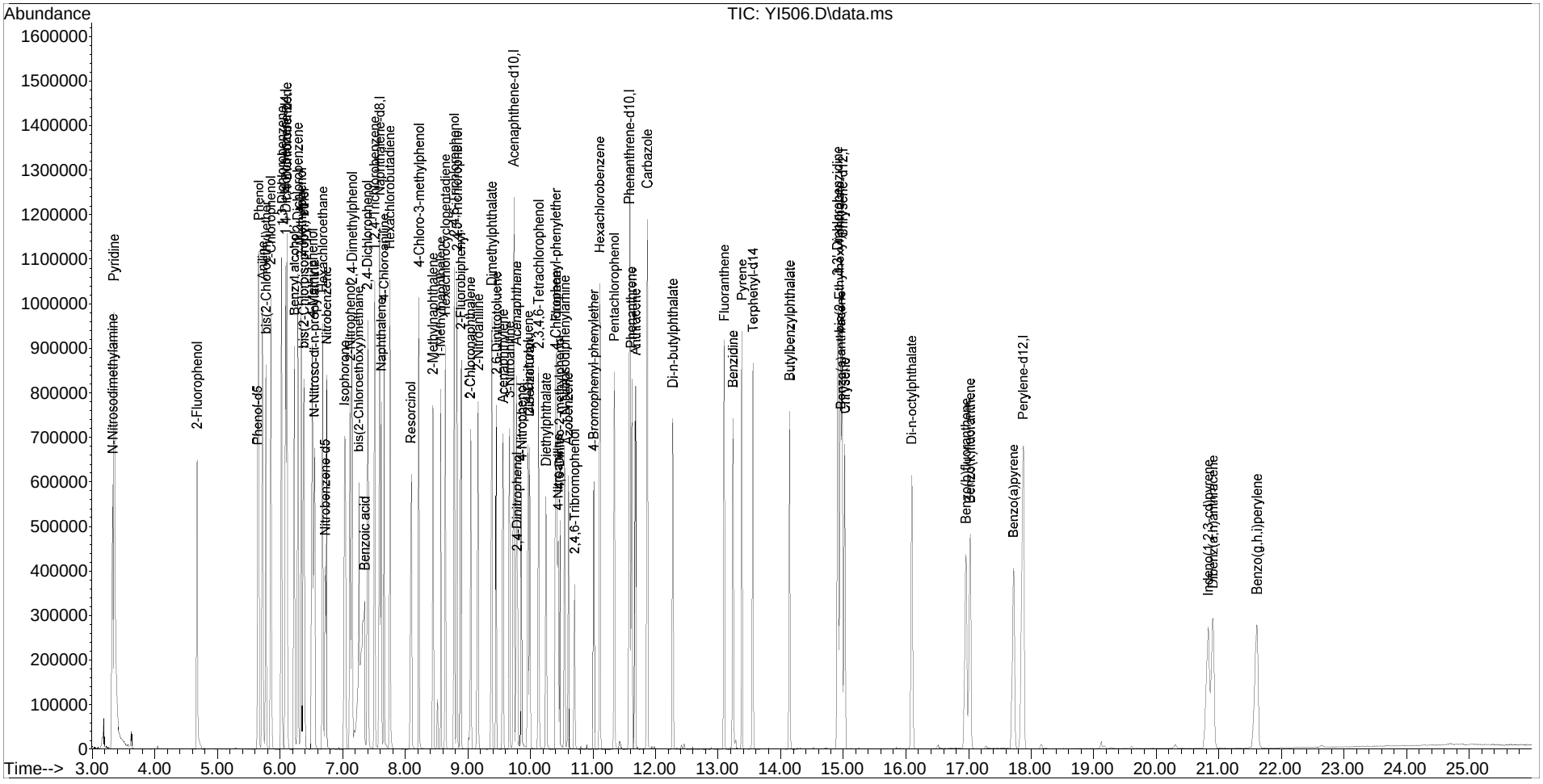
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.896	278	294348	14.7867	ug/mL	96
86) Benzo(g,h,i)perylene	21.602	276	303023	14.1149	ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI506.D
Acq On : 5 Sep 2012 3:10 pm
Operator :
Sample : ICAL,S20249
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 06 11:26:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI506.D
Acq On : 5 Sep 2012 3:10 pm
Operator :
Sample : ICAL,S20249
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 06 11:26:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	191972	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.589	136	633026	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.743	164	355418	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.590	188	699201	40.0000	ug/mL	0.00
70) Chrysene-d12	14.995	240	647001	40.0000	ug/mL	0.00
79) Perylene-d12	17.875	264	757873	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.352	79	359625	32.1557	ug/mL	# 7
3) N-Nitrosodimethylamine	3.333	42	288967	39.9155	ug/mL	84
4) 2-Fluorophenol	4.675	112	175440	17.3259	ug/mL	83
5) Phenol-d5	5.646	99	202018	18.1094	ug/mL	82
6) Phenol	5.666	94	356359	40.6892	ug/mL	73
7) Aniline	5.728	93	411699m	39.7583	ug/mL	
8) bis(2-Chloroethyl)ether	5.781	93	243880	35.7746	ug/mL	# 68
9) 2-Chlorophenol	5.858	128	280948	35.8103	ug/mL	96
10) 1,3-Dichlorobenzene	6.036	146	310554	37.5354	ug/mL	100
11) 1,4-Dichlorobenzene	6.113	146	278462	40.4346	ug/mL	93
12) Benzyl alcohol	6.238	108	156070	35.0184	ug/mL	87
13) 1,2-Dichlorobenzene	6.291	146	278157	38.0545	ug/mL	100
14) 2-Methylphenol	6.344	107	175578	38.2330	ug/mL	94
15) bis(2-Chloroisopropyl) ether	6.382	45	529053	38.8724	ug/mL	79
16) 4-Methylphenol	6.522	107	256492	33.6149	ug/mL	95
17) N-Nitroso-di-n-propylamine	6.555	70	157097	46.6249	ug/mL	82
18) Hexachloroethane	6.685	117	120035	39.9200	ug/mL	80
20) Nitrobenzene-d5	6.724	82	126118	19.6069	ug/mL	79
21) Nitrobenzene	6.748	77	223882	44.2443	ug/mL	88
22) Isophorone	7.036	82	432707	39.3301	ug/mL	99
23) 2-Nitrophenol	7.123	139	136069	39.1007	ug/mL	86
24) 2,4-Dimethylphenol	7.152	107	206035	38.1253	ug/mL	84
25) bis(2-Chloroethoxy)methane	7.262	93	133711	21.2935	ug/mL	94
26) Benzoic acid	7.353	105	384921	82.4698	ug/mL	92
27) 2,4-Dichlorophenol	7.402	162	210932	39.8035	ug/mL	93
28) 1,2,4-Trichlorobenzene	7.512	180	234037	39.5685	ug/mL	95
29) Naphthalene	7.613	128	309083	17.5755	ug/mL	96
30) 4-Chloroaniline	7.661	127	264316	39.8960	ug/mL	89
31) Hexachlorobutadiene	7.757	225	141033	44.4315	ug/mL	98
32) Resorcinol	8.104	110	226421	42.0182	ug/mL	83
33) 4-Chloro-3-methylphenol	8.229	107	186134	38.0288	ug/mL	94
34) 2-Methylnaphthalene	8.445	142	230935	16.9327	ug/mL	94
35) 1-Methylnaphthalene	8.570	142	231237	17.5694	ug/mL	96
37) Hexachlorocyclopentadiene	8.647	237	165793	47.1695	ug/mL	97
38) 2,4,6-Trichlorophenol	8.787	196	179772	48.5501	ug/mL	93

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI506.D
Acq On : 5 Sep 2012 3:10 pm
Operator :
Sample : ICAL,S20249
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 06 11:26:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.830	196	181652m	48.8766	ug/mL		
40) 2-Fluorobiphenyl	8.892	172	288427	21.5823	ug/mL		100
41) 2-Chloronaphthalene	9.046	162	234638	20.1702	ug/mL		89
42) 2-Nitroaniline	9.171	65	163369	49.3873	ug/mL		92
43) Dimethylphthalate	9.392	163	510588	37.5101	ug/mL		96
44) 2,6-Dinitrotoluene	9.465	165	110017	37.5552	ug/mL		87
45) Acenaphthylene	9.566	152	335638	17.3263	ug/mL		98
46) 3-Nitroaniline	9.681	138	131366	35.0838	ug/mL	#	59
47) Acenaphthene	9.782	154	203584	18.0354	ug/mL		96
48) 2,4-Dinitrophenol	9.796	184	43221	40.2239	ug/mL	#	1
49) 4-Nitrophenol	9.864	109	60457	36.7655	ug/mL	#	74
50) Dibenzofuran	9.994	168	290648	18.5960	ug/mL		83
51) 2,4-Dinitrotoluene	9.965	165	144864	38.7781	ug/mL		86
52) 2,3,4,6-Tetrachlorophenol	10.143	232	133788	40.8215	ug/mL		89
53) Diethylphthalate	10.253	149	252869	18.7427	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.407	204	130104	20.2872	ug/mL		85
55) Fluorene	10.422	166	238750	18.5183	ug/mL		86
56) 4-Nitroaniline	10.446	138	112289	34.4119	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.715	330	43792	18.4975	ug/mL	#	80
59) 4,6-Dinitro-2-methylphenol	10.474	198	74715	38.2328	ug/mL		94
60) N-Nitrosodiphenylamine	10.551	169	181204	19.3217	ug/mL		87
61) Azobenzene	10.604	77	227046	19.7515	ug/mL		97
62) 4-Bromophenyl-phenylether	11.018	248	87999	19.7363	ug/mL	#	87
63) Hexachlorobenzene	11.114	284	182583	41.2126	ug/mL		96
64) Pentachlorophenol	11.345	266	119011	39.2942	ug/mL		99
65) Phenanthrene	11.619	178	332200	16.4685	ug/mL		97
66) Anthracene	11.682	178	344320	16.0709	ug/mL		95
67) Carbazole	11.874	167	601290	36.8785	ug/mL		87
68) Di-n-butylphthalate	12.283	149	452954	17.2857	ug/mL		96
69) Fluoranthene	13.100	202	453439	16.7244	ug/mL		92
71) Benzidine	13.244	184	340200	37.7040	ug/mL		89
72) Pyrene	13.384	202	449439	18.5224	ug/mL		93
73) Terphenyl-d14	13.557	244	310653	18.0292	ug/mL		97
74) Butylbenzylphthalate	14.148	149	221502	17.4554	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.918	252	336793	39.6160	ug/mL		98
76) Benzo(a)anthracene	14.966	228	372083	18.0084	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.947	149	283620	18.0031	ug/mL		93
78) Chrysene	15.028	228	333932	18.1174	ug/mL		96
80) Di-n-octylphthalate	16.096	149	544931	17.2680	ug/mL		89
81) Benzo(b)fluoranthene	16.966	252	412593	16.7403	ug/mL		95
82) Benzo(k)fluoranthene	17.029	252	397274	17.8181	ug/mL		92
83) Benzo(a)pyrene	17.721	252	381888	17.8706	ug/mL		93
84) Indeno(1,2,3-cd)pyrene	20.833	276	447379m	17.5340	ug/mL		

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI506.D
Acq On : 5 Sep 2012 3:10 pm
Operator :
Sample : ICAL,S20249
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 06 11:26:47 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

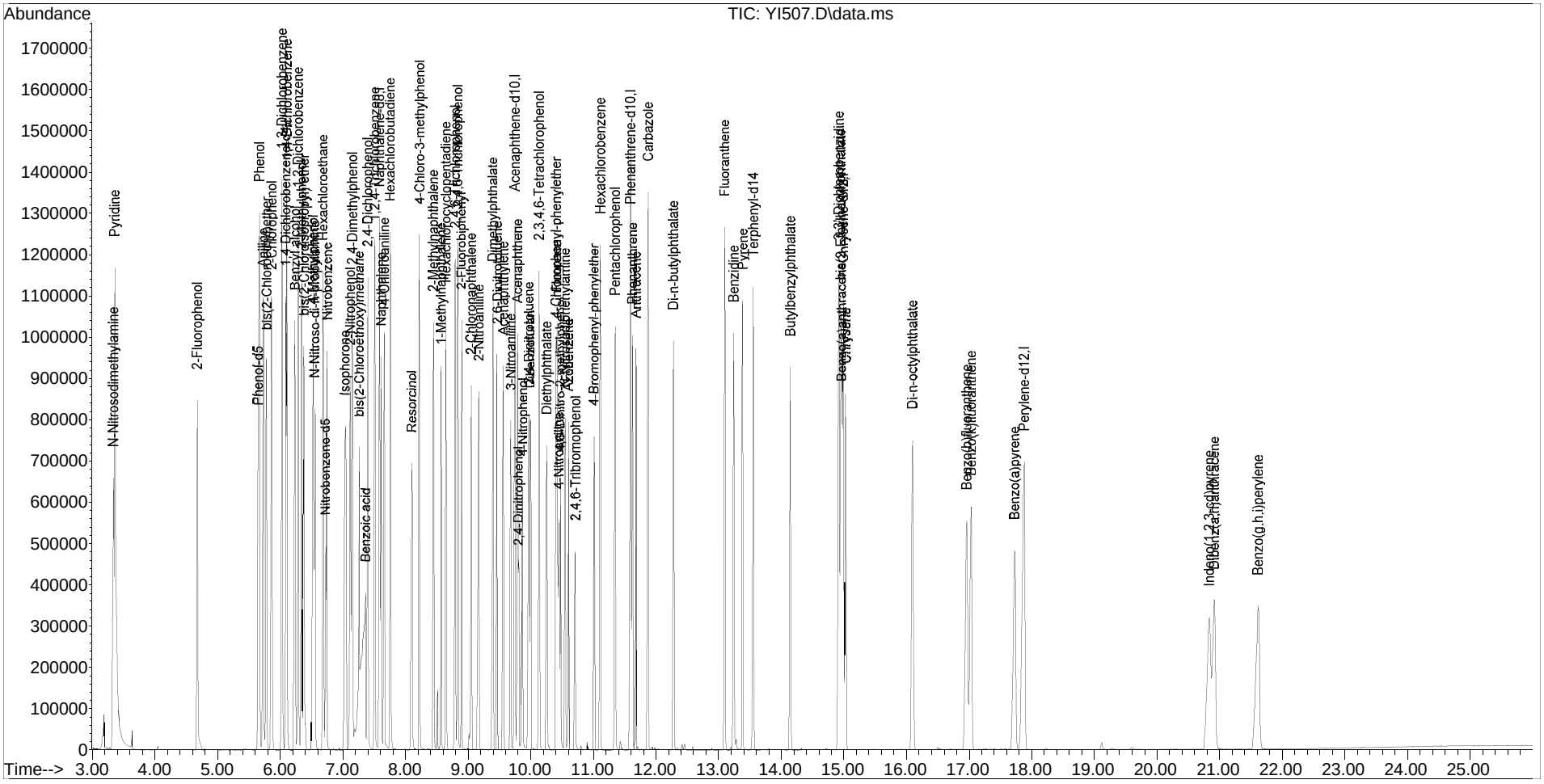
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.905	278	363056	18.3488	ug/mL	93
86) Benzo(g,h,i)perylene	21.612	276	373008	17.4800	ug/mL	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI507.D
Acq On : 5 Sep 2012 3:48 pm
Operator :
Sample : ICAL,S20250
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 06 11:28:21 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI507.D
Acq On : 5 Sep 2012 3:48 pm
Operator :
Sample : ICAL,S20250
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 06 11:28:21 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.093	152	198812	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.589	136	672821	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.748	164	377811	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.595	188	744787	40.0000	ug/mL	0.00
70) Chrysene-d12	14.995	240	659674	40.0000	ug/mL	0.00
79) Perylene-d12	17.885	264	780304	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.357	79	448308	38.7061	ug/mL	# 16
3) N-Nitrosodimethylamine	3.338	42	351461	46.8776	ug/mL	85
4) 2-Fluorophenol	4.675	112	219014	20.8850	ug/mL	84
5) Phenol-d5	5.651	99	250203	21.6572	ug/mL	82
6) Phenol	5.670	94	431752	47.6016	ug/mL	73
7) Aniline	5.728	93	515589m	48.0781	ug/mL	
8) bis(2-Chloroethyl)ether	5.786	93	287488	40.7206	ug/mL	# 67
9) 2-Chlorophenol	5.863	128	334472	41.1658	ug/mL	97
10) 1,3-Dichlorobenzene	6.036	146	373357	43.5736	ug/mL	100
11) 1,4-Dichlorobenzene	6.118	146	346955	48.6470	ug/mL	94
12) Benzyl alcohol	6.243	108	200481	43.4356	ug/mL	86
13) 1,2-Dichlorobenzene	6.291	146	341229	45.0772	ug/mL	99
14) 2-Methylphenol	6.348	107	209492	44.0485	ug/mL	92
15) bis(2-Chloroisopropyl) ether	6.387	45	642223	45.5642	ug/mL	80
16) 4-Methylphenol	6.531	107	327324	41.4220	ug/mL	94
17) N-Nitroso-di-n-propylamine	6.560	70	190303	54.5370	ug/mL	82
18) Hexachloroethane	6.685	117	142504	45.7620	ug/mL	79
20) Nitrobenzene-d5	6.728	82	166951	24.4198	ug/mL	81
21) Nitrobenzene	6.752	77	275499	51.2248	ug/mL	88
22) Isophorone	7.046	82	539349	46.1235	ug/mL	99
23) 2-Nitrophenol	7.123	139	170454	46.0845	ug/mL	87
24) 2,4-Dimethylphenol	7.156	107	263110	45.8070	ug/mL	# 81
25) bis(2-Chloroethoxy)methane	7.267	93	172281	25.8130	ug/mL	95
26) Benzoic acid	7.373	105	431805	87.0428	ug/mL	91
27) 2,4-Dichlorophenol	7.406	162	264471	46.9547	ug/mL	93
28) 1,2,4-Trichlorobenzene	7.517	180	292120	46.4674	ug/mL	95
29) Naphthalene	7.613	128	392159	20.9806	ug/mL	95
30) 4-Chloroaniline	7.666	127	323537	45.9465	ug/mL	91
31) Hexachlorobutadiene	7.757	225	177762	52.6904	ug/mL	98
32) Resorcinol	8.108	110	301343	50.5451	ug/mL	83
33) 4-Chloro-3-methylphenol	8.233	107	238093	45.7674	ug/mL	90
34) 2-Methylnaphthalene	8.450	142	302634	20.8774	ug/mL	94
35) 1-Methylnaphthalene	8.575	142	282650	20.6861	ug/mL	93
37) Hexachlorocyclopentadiene	8.647	237	197362	52.8231	ug/mL	97
38) 2,4,6-Trichlorophenol	8.791	196	220494	56.0183	ug/mL	93

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI507.D
Acq On : 5 Sep 2012 3:48 pm
Operator :
Sample : ICAL,S20250
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 06 11:28:21 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.830	196	222430	56.3014	ug/mL		95
40) 2-Fluorobiphenyl	8.892	172	347342	25.1988	ug/mL		99
41) 2-Chloronaphthalene	9.051	162	279604	22.6110	ug/mL		88
42) 2-Nitroaniline	9.176	65	202248	57.5168	ug/mL		91
43) Dimethylphthalate	9.397	163	621122	42.9259	ug/mL		96
44) 2,6-Dinitrotoluene	9.469	165	147953	47.5115	ug/mL		87
45) Acenaphthylene	9.566	152	431027	20.9317	ug/mL		98
46) 3-Nitroaniline	9.686	138	160126	40.2301	ug/mL	#	60
47) Acenaphthene	9.787	154	265835	22.1544	ug/mL		95
48) 2,4-Dinitrophenol	9.806	184	60406	48.9378	ug/mL	#	1
49) 4-Nitrophenol	9.873	109	75431	43.1527	ug/mL	#	74
50) Dibenzofuran	9.998	168	373726	24.0628	ug/mL		84
51) 2,4-Dinitrotoluene	9.974	165	186373	46.9325	ug/mL	#	84
52) 2,3,4,6-Tetrachlorophenol	10.143	232	177067	50.8246	ug/mL		89
53) Diethylphthalate	10.258	149	325436	22.6917	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.407	204	166903	24.4827	ug/mL		83
55) Fluorene	10.422	166	296916	22.3879	ug/mL		88
56) 4-Nitroaniline	10.450	138	151379	43.6417	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.720	330	58890	23.4004	ug/mL	#	78
59) 4,6-Dinitro-2-methylphenol	10.479	198	102622	49.2991	ug/mL		93
60) N-Nitrosodiphenylamine	10.556	169	226439	22.6673	ug/mL		87
61) Azobenzene	10.609	77	287171	23.4529	ug/mL		95
62) 4-Bromophenyl-phenylether	11.018	248	112919	23.7752	ug/mL	#	86
63) Hexachlorobenzene	11.119	284	226219	47.9367	ug/mL		94
64) Pentachlorophenol	11.350	266	157334	48.7679	ug/mL		97
65) Phenanthrene	11.624	178	429672	19.9969	ug/mL		96
66) Anthracene	11.681	178	432306	18.9426	ug/mL		94
67) Carbazole	11.879	167	737583	42.4688	ug/mL		86
68) Di-n-butylphthalate	12.283	149	577086	20.6749	ug/mL		96
69) Fluoranthene	13.100	202	599498	20.7582	ug/mL		93
71) Benzidine	13.249	184	471989	51.3051	ug/mL		89
72) Pyrene	13.389	202	573431	23.1784	ug/mL		93
73) Terphenyl-d14	13.557	244	391525	22.2861	ug/mL		99
74) Butylbenzylphthalate	14.148	149	274179	21.1915	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.923	252	407412	47.0020	ug/mL		98
76) Benzo(a)anthracene	14.966	228	455401	21.6174	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.951	149	336019	20.9194	ug/mL		94
78) Chrysene	15.033	228	428792	22.8171	ug/mL		95
80) Di-n-octylphthalate	16.101	149	693699	21.3503	ug/mL		92
81) Benzo(b)fluoranthene	16.971	252	576465	22.7169	ug/mL		95
82) Benzo(k)fluoranthene	17.039	252	507606	22.1121	ug/mL		92
83) Benzo(a)pyrene	17.726	252	492957	22.4050	ug/mL		94
84) Indeno(1,2,3-cd)pyrene	20.838	276	571064	21.7381	ug/mL		87

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI507.D
Acq On : 5 Sep 2012 3:48 pm
Operator :
Sample : ICAL,S20250
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 06 11:28:21 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

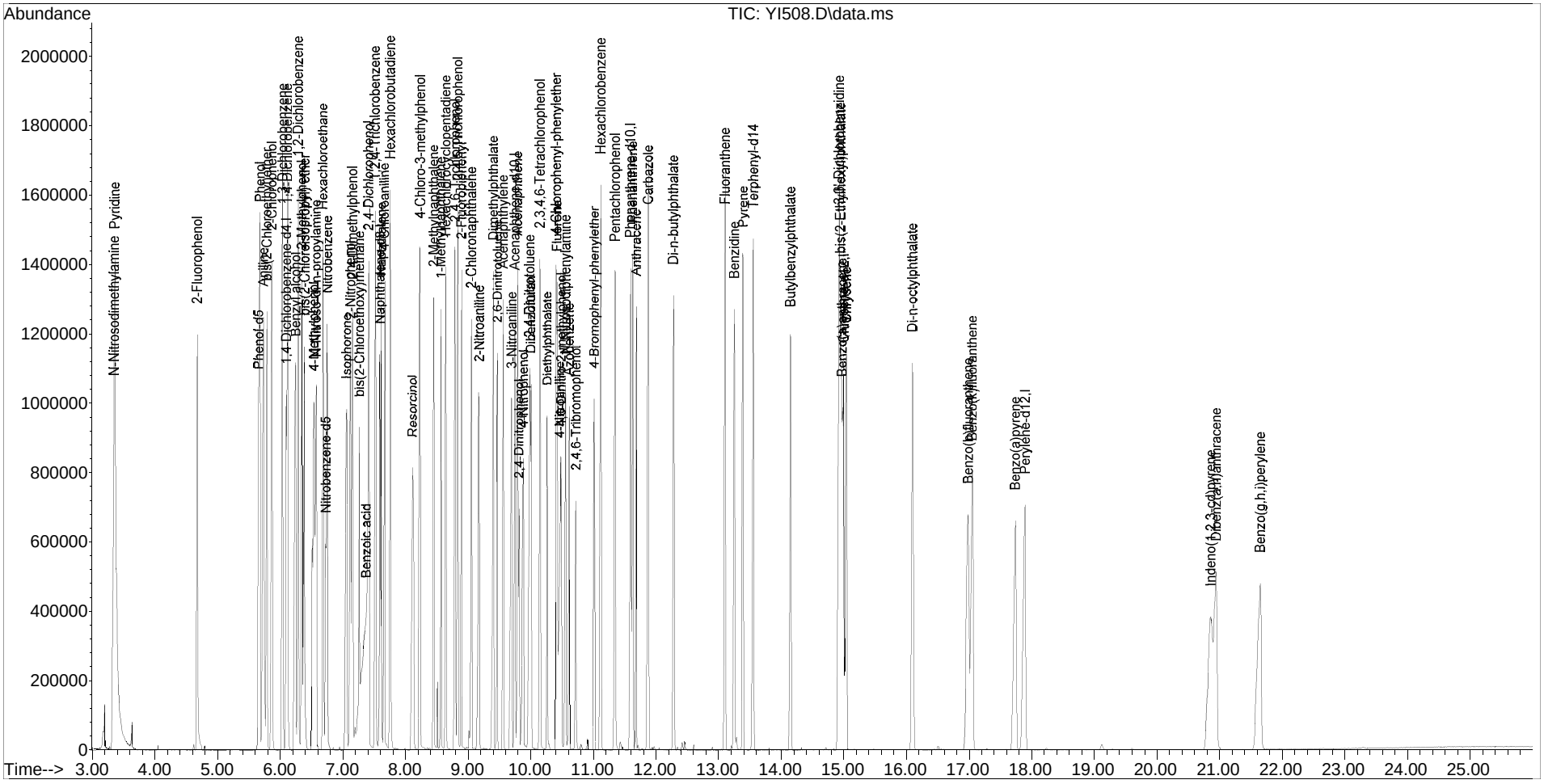
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.915	278	450517	22.1145	ug/mL	94
86) Benzo(g,h,i)perylene	21.617	276	479444	21.8220	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI508.D
Acq On : 5 Sep 2012 4:24 pm
Operator :
Sample : ICAL,S20244
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 06 12:05:59 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI508.D
Acq On : 5 Sep 2012 4:24 pm
Operator :
Sample : ICAL,S20244
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 06 12:05:59 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.098	152	188713	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.594	136	614544	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.748	164	369508	40.0000	ug/mL		0.00
58) Phenanthrene-d10	11.595	188	737908	40.0000	ug/mL		0.00
70) Chrysene-d12	15.000	240	614656	40.0000	ug/mL		0.00
79) Perylene-d12	17.890	264	771291	40.0000	ug/mL		0.01
Target Compounds							Qvalue
2) Pyridine	3.362	79	673021	61.2170	ug/mL	#	21
3) N-Nitrosodimethylamine	3.348	42	513793m	72.1967	ug/mL		
4) 2-Fluorophenol	4.680	112	329967	33.1492	ug/mL		84
5) Phenol-d5	5.661	99	360946	32.9149	ug/mL		81
6) Phenol	5.685	94	607249	70.5334	ug/mL		76
7) Aniline	5.738	93	731285m	71.8408	ug/mL		
8) bis(2-Chloroethyl)ether	5.791	93	396279	59.1339	ug/mL	#	68
9) 2-Chlorophenol	5.868	128	473165	61.3523	ug/mL		99
10) 1,3-Dichlorobenzene	6.041	146	539022	66.2745	ug/mL		99
11) 1,4-Dichlorobenzene	6.118	146	470985	69.5714	ug/mL		94
12) Benzyl alcohol	6.257	108	279983	63.9065	ug/mL	#	84
13) 1,2-Dichlorobenzene	6.296	146	461321	64.2030	ug/mL		98
14) 2-Methylphenol	6.353	107	278982	61.7989	ug/mL		92
15) bis(2-Chloroisopropyl) ether	6.392	45	774352	57.8785	ug/mL		83
16) 4-Methylphenol	6.541	107	493440m	65.7853	ug/mL		
17) N-Nitroso-di-n-propylamine	6.579	70	273121	82.4597	ug/mL		92
18) Hexachloroethane	6.685	117	193889	65.5952	ug/mL	#	78
20) Nitrobenzene-d5	6.733	82	239488m	38.3516	ug/mL		
21) Nitrobenzene	6.762	77	394037	80.2129	ug/mL		85
22) Isophorone	7.070	82	802252	75.1121	ug/mL		98
23) 2-Nitrophenol	7.132	139	240016	71.0452	ug/mL		83
24) 2,4-Dimethylphenol	7.161	107	350585m	66.8243	ug/mL		
25) bis(2-Chloroethoxy)methane	7.272	93	248512	40.7657	ug/mL		94
26) Benzoic acid	7.382	105	529937m	116.9543	ug/mL		
27) 2,4-Dichlorophenol	7.416	162	370526m	72.0222	ug/mL		
28) 1,2,4-Trichlorobenzene	7.517	180	406485	70.7911	ug/mL		94
29) Naphthalene	7.618	128	555347	32.5286	ug/mL		95
30) 4-Chloroaniline	7.671	127	465670	72.4024	ug/mL		91
31) Hexachlorobutadiene	7.762	225	242894	78.8235	ug/mL		97
32) Resorcinol	8.118	110	470341	80.5569	ug/mL		84
33) 4-Chloro-3-methylphenol	8.243	107	343895	72.3739	ug/mL		88
34) 2-Methylnaphthalene	8.455	142	437668	33.0560	ug/mL		95
35) 1-Methylnaphthalene	8.575	142	393989	34.8345	ug/mL		93
37) Hexachlorocyclopentadiene	8.652	237	286125	78.3009	ug/mL		97
38) 2,4,6-Trichlorophenol	8.796	196	312469	81.1691	ug/mL		94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI508.D
Acq On : 5 Sep 2012 4:24 pm
Operator :
Sample : ICAL,S20244
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 06 12:05:59 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.840	196	312990m	81.0041	ug/mL		
40) 2-Fluorobiphenyl	8.897	172	492742	39.8347	ug/mL		98
41) 2-Chloronaphthalene	9.056	162	421791	34.8759	ug/mL		87
42) 2-Nitroaniline	9.181	65	290688	84.5256	ug/mL		92
43) Dimethylphthalate	9.407	163	887504	62.7139	ug/mL		96
44) 2,6-Dinitrotoluene	9.479	165	207743	68.2107	ug/mL	#	81
45) Acenaphthylene	9.570	152	655441	32.5450	ug/mL		97
46) 3-Nitroaniline	9.700	138	251906	64.7110	ug/mL	#	57
47) Acenaphthene	9.792	154	363220	30.9505	ug/mL		96
48) 2,4-Dinitrophenol	9.816	184	106236	77.9907	ug/mL	#	1
49) 4-Nitrophenol	9.888	109	116956	68.4119	ug/mL	#	75
50) Dibenzofuran	10.003	168	519400	38.6170	ug/mL		85
51) 2,4-Dinitrotoluene	9.984	165	273478	70.4148	ug/mL	#	84
52) 2,3,4,6-Tetrachlorophenol	10.148	232	255764	75.0631	ug/mL		88
53) Diethylphthalate	10.268	149	480864	34.2827	ug/mL		99
54) 4-Chlorophenyl-phenylether	10.412	204	246331	36.9458	ug/mL		87
55) Fluorene	10.426	166	423855	36.8759	ug/mL		86
56) 4-Nitroaniline	10.475	138	219915	64.8248	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.725	330	88675	36.0275	ug/mL	#	78
59) 4,6-Dinitro-2-methylphenol	10.494	198	157117	76.1819	ug/mL		90
60) N-Nitrosodiphenylamine	10.561	169	332583	33.6030	ug/mL		87
61) Azobenzene	10.614	77	400923	33.0481	ug/mL		94
62) 4-Bromophenyl-phenylether	11.023	248	167687	35.6358	ug/mL	#	86
63) Hexachlorobenzene	11.124	284	340230	72.7683	ug/mL		94
64) Pentachlorophenol	11.355	266	242203	75.7742	ug/mL		96
65) Phenanthrene	11.624	178	656628	30.8443	ug/mL		97
66) Anthracene	11.686	178	656359	29.0282	ug/mL		95
67) Carbazole	11.884	167	1124402	65.3447	ug/mL		86
68) Di-n-butylphthalate	12.283	149	837571	30.2868	ug/mL		95
69) Fluoranthene	13.105	202	882717	30.8499	ug/mL		94
71) Benzidine	13.254	184	680850	79.4287	ug/mL		88
72) Pyrene	13.394	202	830342	36.0211	ug/mL		92
73) Terphenyl-d14	13.562	244	567886	34.6924	ug/mL		97
74) Butylbenzylphthalate	14.153	149	401111	33.2729	ug/mL		85
75) 3,3'-Dichlorobenzidine	14.932	252	630059	78.0120	ug/mL		97
76) Benzo(a)anthracene	14.976	228	656685	33.4553	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.952	149	465775	31.1214	ug/mL		94
78) Chrysene	15.043	228	633575	36.1834	ug/mL		95
80) Di-n-octylphthalate	16.101	149	1063853	33.1253	ug/mL		92
81) Benzo(b)fluoranthene	16.986	252	846385	33.7434	ug/mL		95
82) Benzo(k)fluoranthene	17.048	252	770806	33.9699	ug/mL		93
83) Benzo(a)pyrene	17.741	252	753536	34.6486	ug/mL		94
84) Indeno(1,2,3-cd)pyrene	20.862	276	890235	34.2837	ug/mL		86

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI508.D
Acq On : 5 Sep 2012 4:24 pm
Operator :
Sample : ICAL,S20244
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

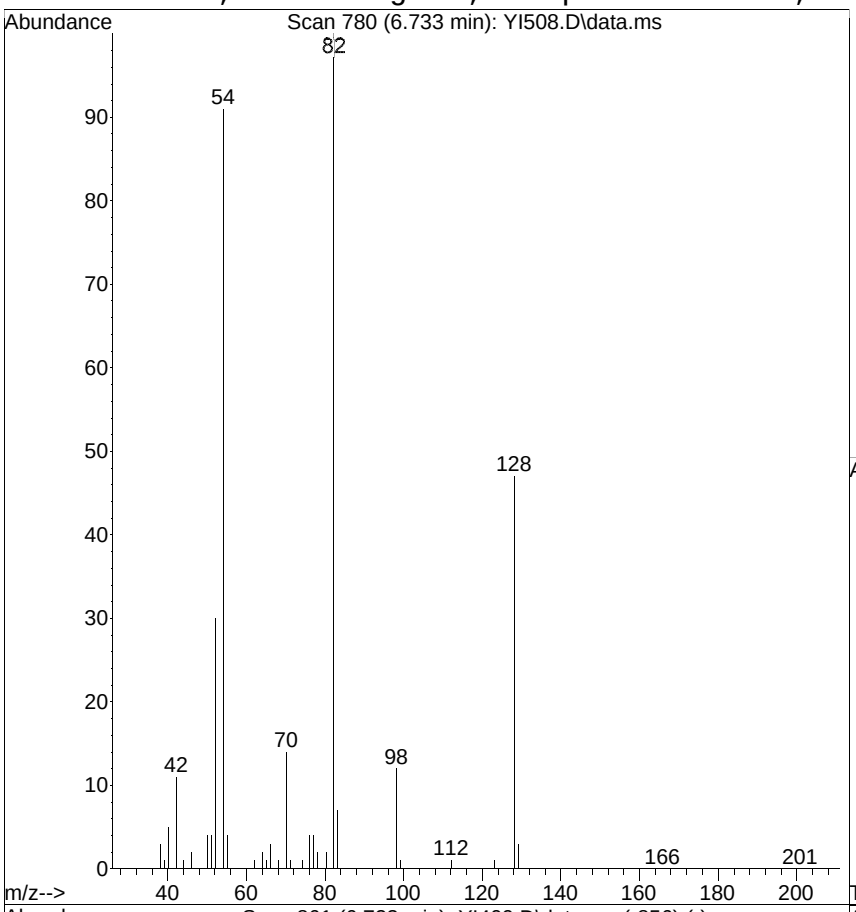
Quant Time: Sep 06 12:05:59 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.944	278	695127	34.5205	ug/mL	93
86) Benzo(g,h,i)perylene	21.650	276	734099	33.8031	ug/mL	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

[Nitrobenzene-d5; 40.00 ug/mL; response=239488; MI]

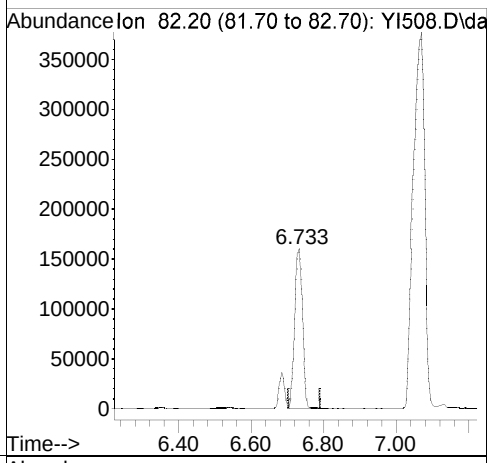
Raw



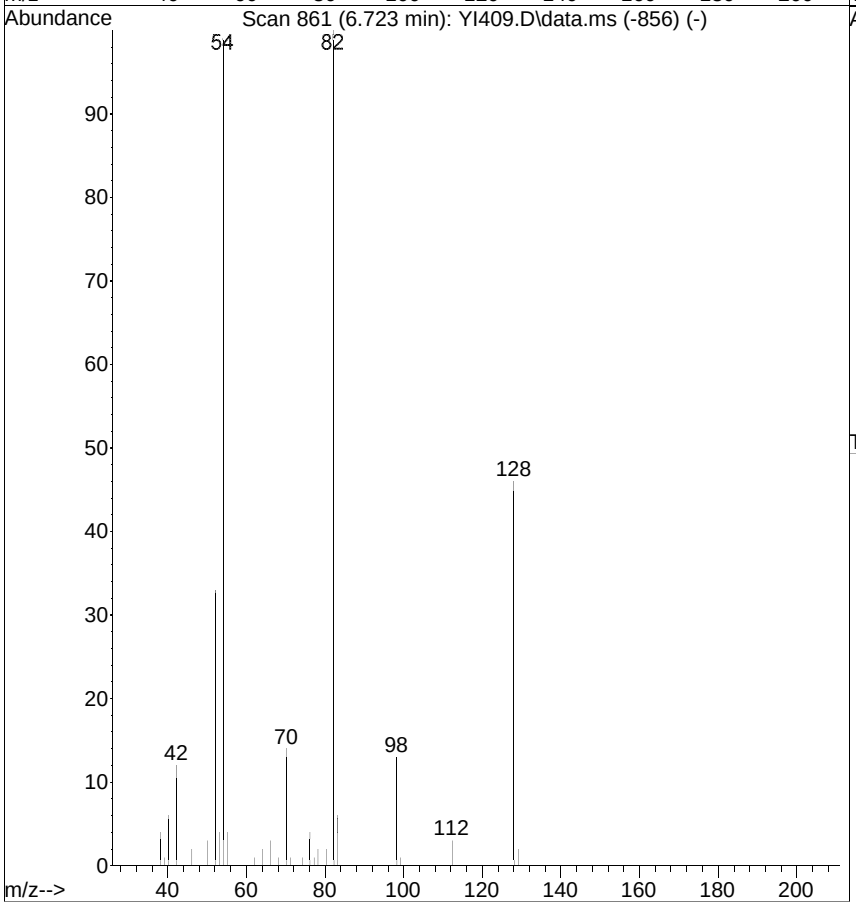
#20
Nitrobenzene-d5
Concen: 38.3516 ug/mL m
RT: 6.733 min Scan# 780
Delta R.T. 0.010 min
Lab File: YI508.D
Acq: 5 Sep 2012 4:24 pm

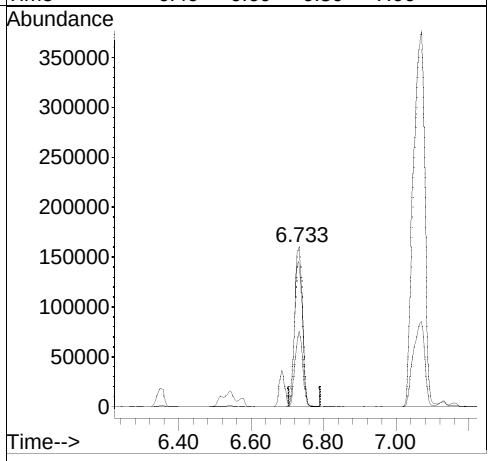
Tgt Ion: 82 Resp: 239488

Ion	Ratio	Lower	Upper
82	100		
128	47.2	15.0	55.0
54	91.2	56.0	96.0



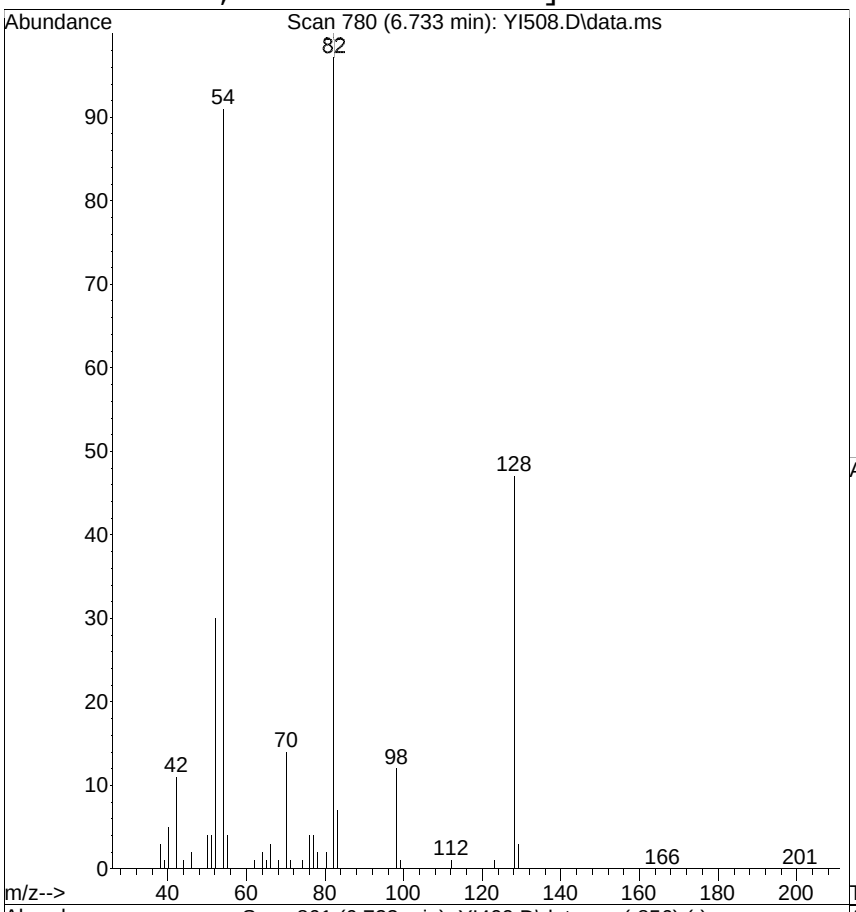
Ref





[Nitrobenzene-d5; before version]

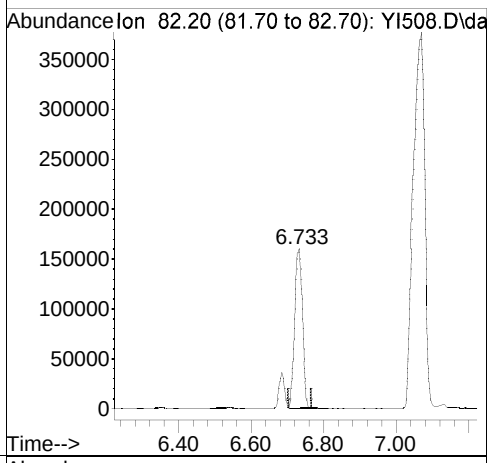
Raw



#20
Nitrobenzene-d5
Concen: 37.9557 ug/mL
RT: 6.733 min Scan# 780
Delta R.T. 0.010 min
Lab File: YI508.D
Acq: 5 Sep 2012 4:24 pm

Tgt Ion: 82 Resp: 237016

Ion	Ratio	Lower	Upper
82	100		
128	47.2	15.0	55.0
54	91.2	56.0	96.0



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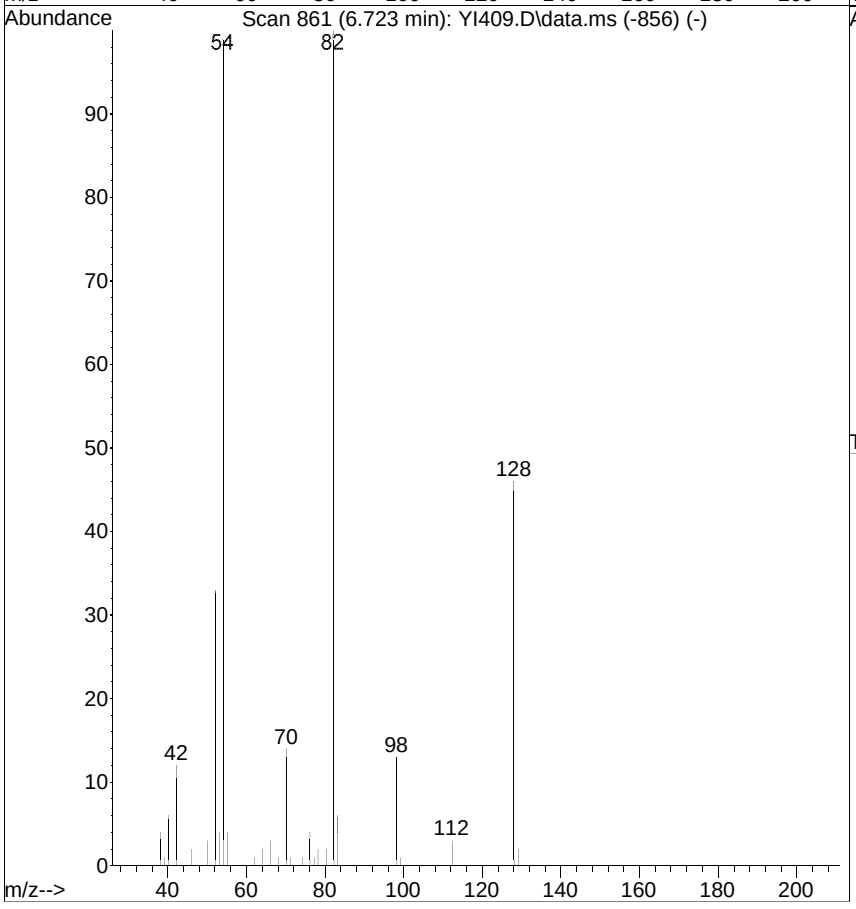
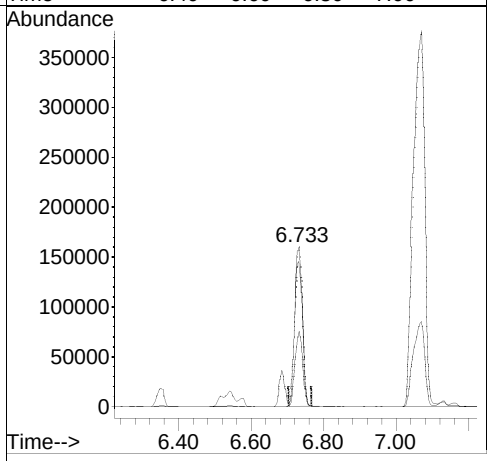
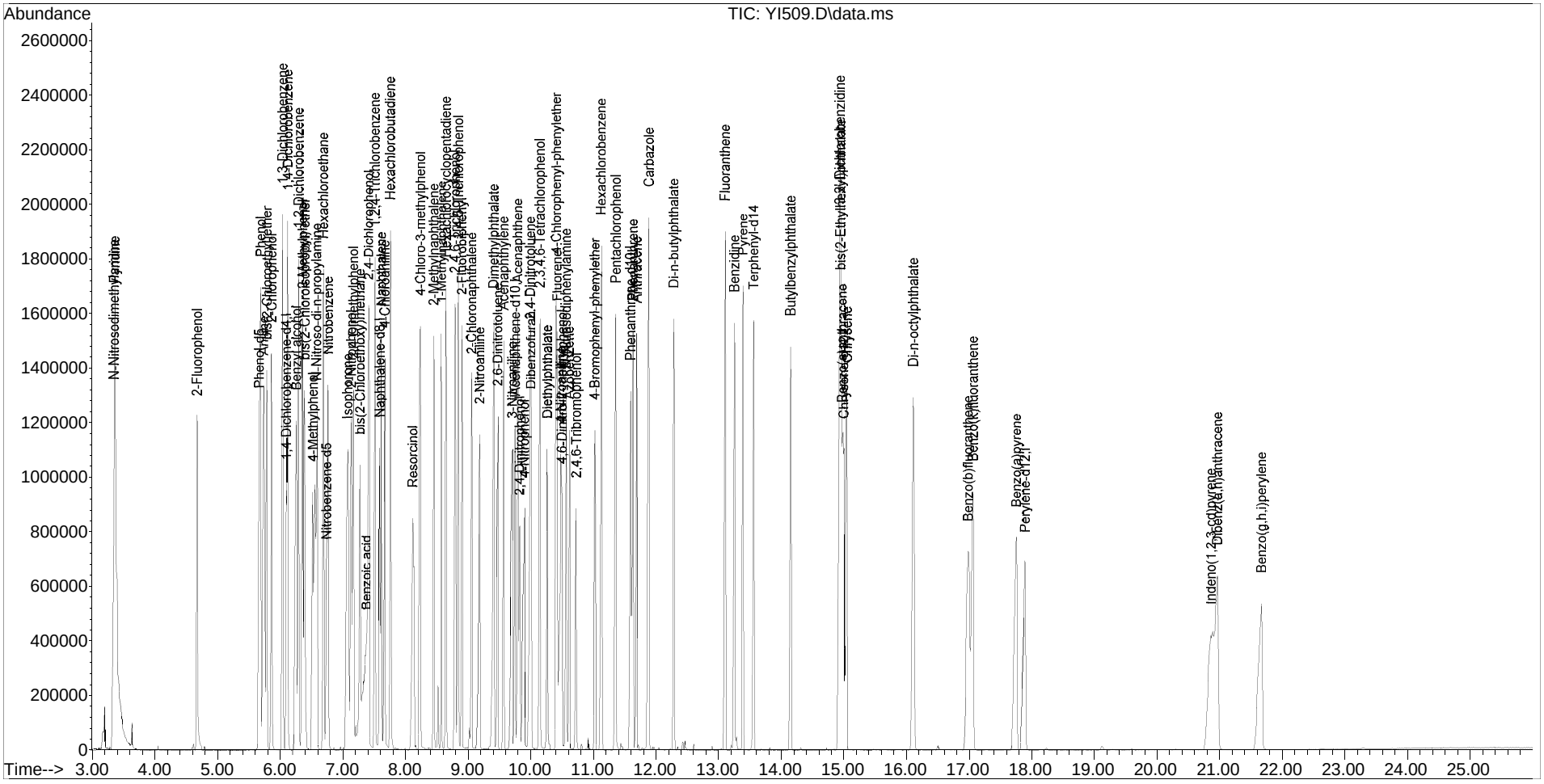




Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI509.D
Acq On : 5 Sep 2012 5:01 pm
Operator :
Sample : ICAL,S20245
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 06 11:51:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI509.D
Acq On : 5 Sep 2012 5:01 pm
Operator :
Sample : ICAL,S20245
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 06 11:51:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.098	152	180941	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.594	136	602072	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.753	164	361458	40.0000	ug/mL	0.01
58) Phenanthrene-d10	11.600	188	744739	40.0000	ug/mL	0.00
70) Chrysene-d12	15.005	240	620596	40.0000	ug/mL	0.01
79) Perylene-d12	17.899	264	776045	40.0000	ug/mL	0.02
Target Compounds						Qvalue
2) Pyridine	3.362	79	838625	79.5566	ug/mL	# 24
3) N-Nitrosodimethylamine	3.353	42	632538m	92.7002	ug/mL	
4) 2-Fluorophenol	4.685	112	366015	38.3501	ug/mL	80
5) Phenol-d5	5.670	99	449951	42.7938	ug/mL	80
6) Phenol	5.694	94	722314	87.5021	ug/mL	75
7) Aniline	5.743	93	925943m	94.8710	ug/mL	
8) bis(2-Chloroethyl)ether	5.795	93	486337m	75.6898	ug/mL	
9) 2-Chlorophenol	5.872	128	563492	76.2027	ug/mL	98
10) 1,3-Dichlorobenzene	6.041	146	634027	81.3041	ug/mL	99
11) 1,4-Dichlorobenzene	6.122	146	558113	85.9826	ug/mL	93
12) Benzyl alcohol	6.267	108	354344	84.3535	ug/mL	# 83
13) 1,2-Dichlorobenzene	6.300	146	550489	79.9035	ug/mL	99
14) 2-Methylphenol	6.363	107	351973	81.3165	ug/mL	90
15) bis(2-Chloroisopropyl) ether	6.397	45	910831	71.0038	ug/mL	85
16) 4-Methylphenol	6.526	107	615715m	85.6128	ug/mL	
17) N-Nitroso-di-n-propylamine	6.589	70	333266m	104.9403	ug/mL	
18) Hexachloroethane	6.690	117	232808	82.1451	ug/mL	# 68
20) Nitrobenzene-d5	6.738	82	301067	49.2116	ug/mL	83
21) Nitrobenzene	6.767	77	481218	99.9893	ug/mL	85
22) Isophorone	7.084	82	1039256m	99.3176	ug/mL	
23) 2-Nitrophenol	7.137	139	296102m	89.4623	ug/mL	
24) 2,4-Dimethylphenol	7.171	107	417543m	81.2357	ug/mL	
25) bis(2-Chloroethoxy)methane	7.277	93	304656	51.0108	ug/mL	94
26) Benzoic acid	7.382	105	557804m	125.6545	ug/mL	
27) 2,4-Dichlorophenol	7.421	162	445968m	88.4822	ug/mL	
28) 1,2,4-Trichlorobenzene	7.522	180	489848	87.0763	ug/mL	96
29) Naphthalene	7.623	128	684164	40.9040	ug/mL	96
30) 4-Chloroaniline	7.676	127	589948m	93.6252	ug/mL	
31) Hexachlorobutadiene	7.762	225	302482	100.1944	ug/mL	98
32) Resorcinol	8.123	110	591509	101.0808	ug/mL	84
33) 4-Chloro-3-methylphenol	8.248	107	412212	88.5485	ug/mL	84
34) 2-Methylnaphthalene	8.455	142	517730	39.9129	ug/mL	93
35) 1-Methylnaphthalene	8.580	142	500252	50.3296	ug/mL	93
37) Hexachlorocyclopentadiene	8.652	237	357856	100.1117	ug/mL	97
38) 2,4,6-Trichlorophenol	8.796	196	395151	104.9332	ug/mL	96

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI509.D
Acq On : 5 Sep 2012 5:01 pm
Operator :
Sample : ICAL,S20245
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 06 11:51:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.844	196	387410m	102.4975	ug/mL		
40) 2-Fluorobiphenyl	8.902	172	592006	51.4920	ug/mL		97
41) 2-Chloronaphthalene	9.061	162	516328	43.6435	ug/mL		87
42) 2-Nitroaniline	9.191	65	371380	110.3941	ug/mL		89
43) Dimethylphthalate	9.417	163	1155734	83.4868	ug/mL		96
44) 2,6-Dinitrotoluene	9.484	165	264146	88.6617	ug/mL	#	83
45) Acenaphthylene	9.575	152	783227	39.7561	ug/mL		97
46) 3-Nitroaniline	9.710	138	320258	84.1019	ug/mL	#	57
47) Acenaphthene	9.796	154	450887	39.2764	ug/mL		96
48) 2,4-Dinitrophenol	9.825	184	145817	104.3765	ug/mL	#	1
49) 4-Nitrophenol	9.902	109	143100	85.5686	ug/mL	#	75
50) Dibenzofuran	10.008	168	623061	51.4076	ug/mL		86
51) 2,4-Dinitrotoluene	9.994	165	336849	88.6631	ug/mL	#	82
52) 2,3,4,6-Tetrachlorophenol	10.157	232	322236	96.6779	ug/mL		89
53) Diethylphthalate	10.273	149	563385	41.0605	ug/mL		99
54) 4-Chlorophenyl-phenylether	10.417	204	301322	46.2002	ug/mL		89
55) Fluorene	10.431	166	540640	58.8593	ug/mL		87
56) 4-Nitroaniline	10.494	138	274769	82.7981	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.729	330	115124	47.8151	ug/mL	#	77
59) 4,6-Dinitro-2-methylphenol	10.508	198	201258	96.6896	ug/mL		86
60) N-Nitrosodiphenylamine	10.571	169	407830	40.8277	ug/mL		88
61) Azobenzene	10.619	77	502162	41.0136	ug/mL		93
62) 4-Bromophenyl-phenylether	11.028	248	212740	44.7955	ug/mL	#	87
63) Hexachlorobenzene	11.129	284	430199	91.1668	ug/mL		94
64) Pentachlorophenol	11.359	266	308856	95.7405	ug/mL		97
65) Phenanthrene	11.633	178	806843	37.5528	ug/mL		97
66) Anthracene	11.696	178	815972m	35.7562	ug/mL		
67) Carbazole	11.893	167	1405072	80.9069	ug/mL		87
68) Di-n-butylphthalate	12.287	149	1063820	38.1152	ug/mL		95
69) Fluoranthene	13.110	202	1101849	38.1551	ug/mL		94
71) Benzidine	13.259	184	883234	102.0528	ug/mL		88
72) Pyrene	13.394	202	1018465	43.7592	ug/mL		92
73) Terphenyl-d14	13.562	244	668807	40.4666	ug/mL		98
74) Butylbenzylphthalate	14.153	149	507443	41.6904	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.942	252	792878	97.2321	ug/mL		97
76) Benzo(a)anthracene	14.980	228	869959	43.8964	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.956	149	553550	36.6322	ug/mL		95
78) Chrysene	15.053	228	808680	45.7416	ug/mL		95
80) Di-n-octylphthalate	16.111	149	1333229	41.2586	ug/mL		94
81) Benzo(b)fluoranthene	16.991	252	1140354m	45.1847	ug/mL		
82) Benzo(k)fluoranthene	17.068	252	912921m	39.9866	ug/mL		
83) Benzo(a)pyrene	17.760	252	986161	45.0672	ug/mL		93
84) Indeno(1,2,3-cd)pyrene	20.871	276	1162834	44.5074	ug/mL		84

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI509.D
Acq On : 5 Sep 2012 5:01 pm
Operator :
Sample : ICAL,S20245
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 06 11:51:35 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

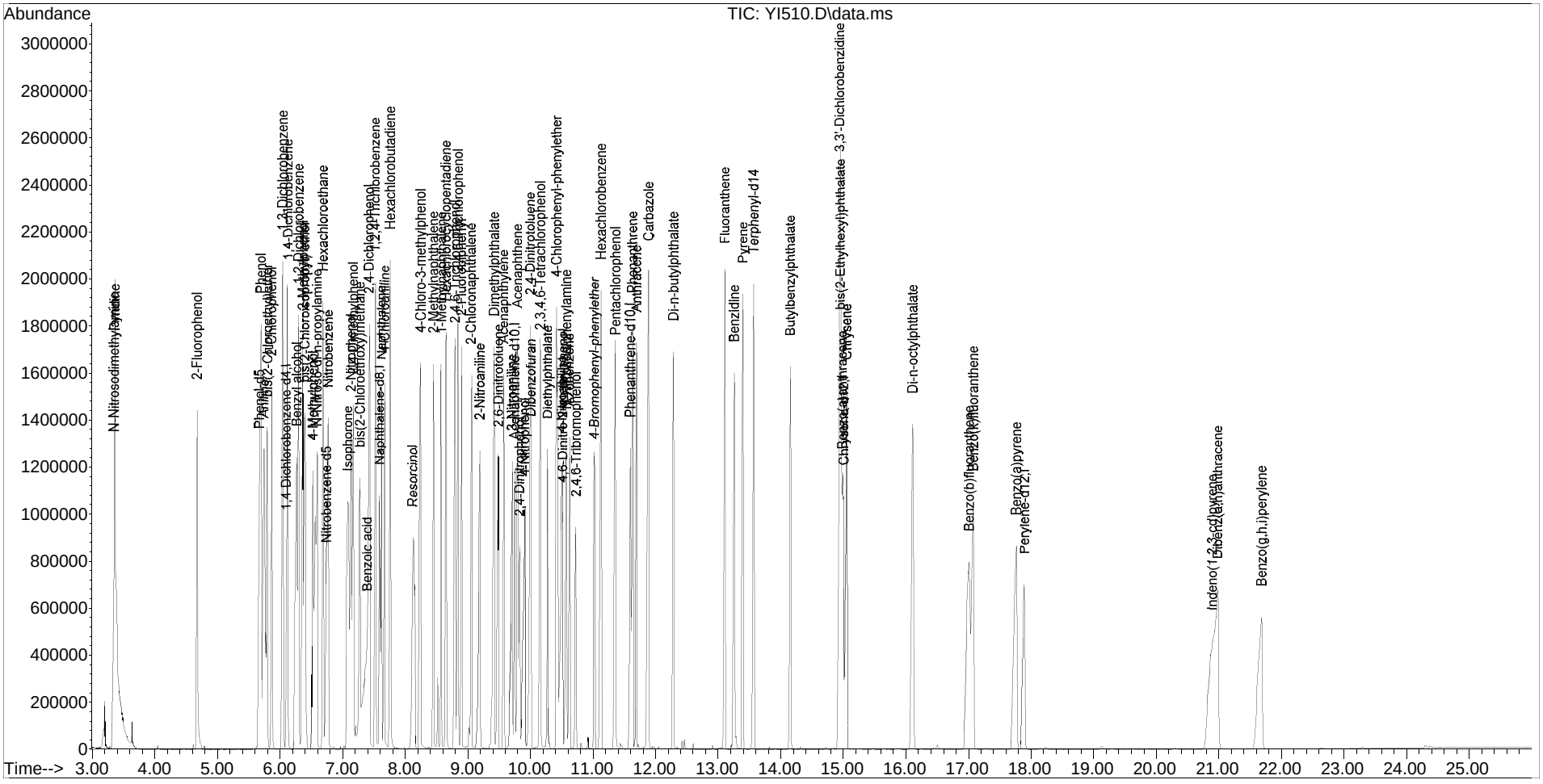
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.968	278	896211	44.2338	ug/mL	93
86) Benzo(g,h,i)perylene	21.670	276	913260	41.7953	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI510.D
Acq On : 5 Sep 2012 5:41 pm
Operator :
Sample : ICAL,S20246
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 06 12:10:43 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI510.D
Acq On : 5 Sep 2012 5:41 pm
Operator :
Sample : ICAL,S20246
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 06 12:10:43 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
1) 1,4-Dichlorobenzene-d4	6.098	152	175465	40.0000	ug/mL		0.00
19) Naphthalene-d8	7.594	136	583773	40.0000	ug/mL		0.00
36) Acenaphthene-d10	9.753	164	351713	40.0000	ug/mL		0.01
58) Phenanthrene-d10	11.600	188	720946	40.0000	ug/mL		0.00
70) Chrysene-d12	15.009	240	586434	40.0000	ug/mL		0.02
79) Perylene-d12	17.899	264	740417	40.0000	ug/mL		0.02
Target Compounds							Qvalue
2) Pyridine	3.367	79	967113	94.6089	ug/mL	#	31
3) N-Nitrosodimethylamine	3.352	42	719903	108.7964	ug/mL		87
4) 2-Fluorophenol	4.685	112	445984	48.1873	ug/mL		82
5) Phenol-d5	5.675	99	516345	50.6410	ug/mL		80
6) Phenol	5.699	94	839097	104.8217	ug/mL		76
7) Aniline	5.747	93	1052378m	111.1905	ug/mL		
8) bis(2-Chloroethyl)ether	5.800	93	504248m	80.9265	ug/mL		
9) 2-Chlorophenol	5.872	128	636554	88.7697	ug/mL		98
10) 1,3-Dichlorobenzene	6.045	146	719691	95.1694	ug/mL		99
11) 1,4-Dichlorobenzene	6.127	146	622590	98.9093	ug/mL		94
12) Benzyl alcohol	6.271	108	407034	99.9207	ug/mL	#	84
13) 1,2-Dichlorobenzene	6.300	146	603190	90.2854	ug/mL		99
14) 2-Methylphenol	6.368	107	399522	95.1823	ug/mL		91
15) bis(2-Chloroisopropyl) ether	6.401	45	1001925	80.5425	ug/mL		86
16) 4-Methylphenol	6.531	107	725473m	104.0224	ug/mL		
17) N-Nitroso-di-n-propylamine	6.598	70	372919m	121.0911	ug/mL		
18) Hexachloroethane	6.690	117	256839	93.4526	ug/mL	#	73
20) Nitrobenzene-d5	6.743	82	346520	58.4167	ug/mL		84
21) Nitrobenzene	6.776	77	541935	116.1351	ug/mL		83
22) Isophorone	7.089	82	1152908m	113.6326	ug/mL		
23) 2-Nitrophenol	7.142	139	340931m	106.2355	ug/mL		
24) 2,4-Dimethylphenol	7.176	107	488028m	97.9253	ug/mL		
25) bis(2-Chloroethoxy)methane	7.281	93	352407	60.8557	ug/mL		94
26) Benzoic acid	7.397	105	577796m	134.2379	ug/mL		
27) 2,4-Dichlorophenol	7.426	162	495364m	101.3634	ug/mL		
28) 1,2,4-Trichlorobenzene	7.527	180	569513	104.4111	ug/mL		97
29) Naphthalene	7.628	128	759885m	46.8552	ug/mL		
30) 4-Chloroaniline	7.680	127	670841m	109.8002	ug/mL		
31) Hexachlorobutadiene	7.767	225	336802m	115.0596	ug/mL		
32) Resorcinol	8.128	110	685509m	119.2142	ug/mL		
33) 4-Chloro-3-methylphenol	8.253	107	451387	100.0032	ug/mL		84
34) 2-Methylnaphthalene	8.460	142	590608	46.9584	ug/mL		94
35) 1-Methylnaphthalene	8.585	142	583290	71.0345	ug/mL		93
37) Hexachlorocyclopentadiene	8.657	237	399564	114.8768	ug/mL		97
38) 2,4,6-Trichlorophenol	8.806	196	450274	122.8842	ug/mL		93

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI510.D
Acq On : 5 Sep 2012 5:41 pm
Operator :
Sample : ICAL,S20246
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 06 12:10:43 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.849	196	436516m	118.6895	ug/mL		
40) 2-Fluorobiphenyl	8.902	172	665693	61.9995	ug/mL		98
41) 2-Chloronaphthalene	9.061	162	610337	53.0191	ug/mL		87
42) 2-Nitroaniline	9.195	65	427338	130.5474	ug/mL		89
43) Dimethylphthalate	9.426	163	1323688	98.2686	ug/mL		97
44) 2,6-Dinitrotoluene	9.493	165	302613	104.3876	ug/mL	#	78
45) Acenaphthylene	9.580	152	898606	46.8765	ug/mL		97
46) 3-Nitroaniline	9.715	138	370759	100.0615	ug/mL	#	58
47) Acenaphthene	9.796	154	512948	45.9205	ug/mL		96
48) 2,4-Dinitrophenol	9.830	184	171111	123.2926	ug/mL	#	1
49) 4-Nitrophenol	9.912	109	173412	106.5672	ug/mL	#	71
50) Dibenzofuran	10.013	168	690296	62.4678	ug/mL		87
51) 2,4-Dinitrotoluene	10.003	165	370068	100.1056	ug/mL	#	78
52) 2,3,4,6-Tetrachlorophenol	10.162	232	372697	114.9155	ug/mL		88
53) Diethylphthalate	10.277	149	668229	50.0511	ug/mL		99
54) 4-Chlorophenyl-phenylether	10.422	204	338704	53.3706	ug/mL		91
55) Fluorene	10.436	166	610691	Below	Cal		87
56) 4-Nitroaniline	10.508	138	287425	89.0116	ug/mL	#	2
57) 2,4,6-Tribromophenol	10.734	330	134378	57.3584	ug/mL	#	76
59) 4,6-Dinitro-2-methylphenol	10.518	198	237011	117.6242	ug/mL		83
60) N-Nitrosodiphenylamine	10.575	169	455164	47.0701	ug/mL		88
61) Azobenzene	10.624	77	574054	48.4326	ug/mL		93
62) 4-Bromophenyl-phenylether	11.032	248	246973	53.7200	ug/mL	#	89
63) Hexachlorobenzene	11.133	284	492418	107.7960	ug/mL		93
64) Pentachlorophenol	11.364	266	358597	114.8280	ug/mL		96
65) Phenanthrene	11.633	178	952414	45.7911	ug/mL		97
66) Anthracene	11.696	178	928803	42.0437	ug/mL		94
67) Carbazole	11.898	167	1651565	98.2391	ug/mL		86
68) Di-n-butylphthalate	12.292	149	1221547	45.2107	ug/mL		95
69) Fluoranthene	13.115	202	1294609	46.3096	ug/mL		93
71) Benzidine	13.264	184	991454	121.2304	ug/mL		88
72) Pyrene	13.398	202	1226462	55.7657	ug/mL		92
73) Terphenyl-d14	13.567	244	837577	53.6303	ug/mL		96
74) Butylbenzylphthalate	14.158	149	595929	51.8123	ug/mL		85
75) 3,3'-Dichlorobenzidine	14.947	252	918480	119.1963	ug/mL		96
76) Benzo(a)anthracene	14.985	228	938010	50.0873	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.961	149	562979	39.4265	ug/mL		95
78) Chrysene	15.057	228	928925	55.6039	ug/mL		95
80) Di-n-octylphthalate	16.115	149	1529300	49.6035	ug/mL		94
81) Benzo(b)fluoranthene	17.015	252	1410663	58.5849	ug/mL		95
82) Benzo(k)fluoranthene	17.077	252	1015482m	46.6191	ug/mL		
83) Benzo(a)pyrene	17.770	252	1174150	56.2402	ug/mL		94
84) Indeno(1,2,3-cd)pyrene	20.900	276	1318299	52.8858	ug/mL		87

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI510.D
Acq On : 5 Sep 2012 5:41 pm
Operator :
Sample : ICAL,S20246
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 06 12:10:43 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Tue Sep 04 17:02:50 2012
Response via : Initial Calibration

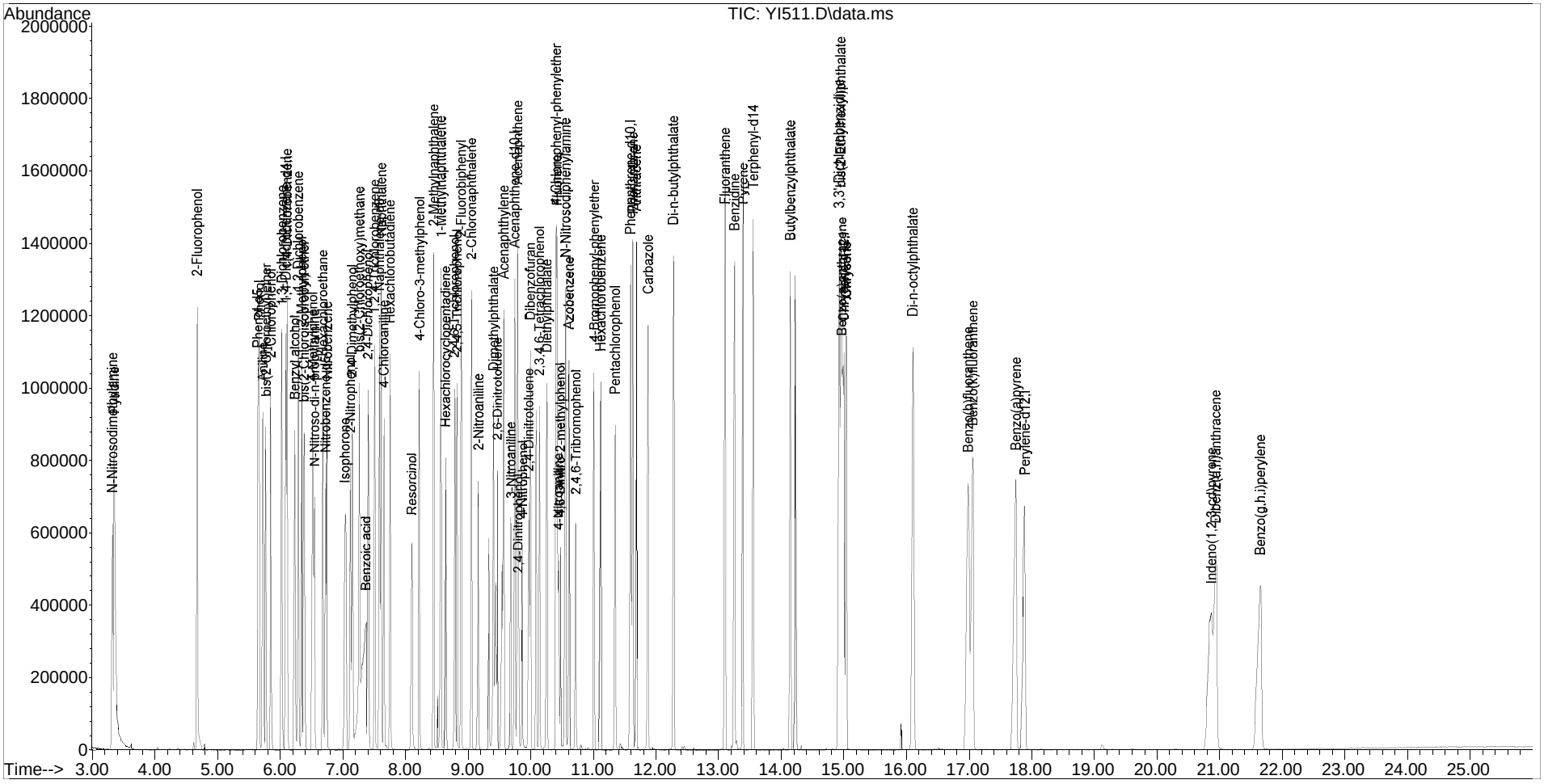
Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.987	278	1025324	53.0414	ug/mL	93
86) Benzo(g,h,i)perylene	21.689	276	1061592	50.9215	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI511.D
Acq On : 5 Sep 2012 6:20 pm
Operator :
Sample : ICV,S19910
Misc : ICV
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 06 13:21:23 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Thu Sep 06 13:19:30 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI511.D
Acq On : 5 Sep 2012 6:20 pm
Operator :
Sample : ICV,S19910
Misc : ICV
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 06 13:21:23 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Thu Sep 06 13:19:30 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	196630	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.589	136	629861	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.748	164	375741	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.595	188	718521	40.0000	ug/mL	0.00
70) Chrysene-d12	15.000	240	600926	40.0000	ug/mL	0.00
79) Perylene-d12	17.895	264	741119	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.353	79	383463	42.6822	ug/mL	# 1
3) N-Nitrosodimethylamine	3.328	42	307769	44.6815	ug/mL	82
4) 2-Fluorophenol	4.675	112	324214	38.3616	ug/mL	84
5) Phenol-d5	5.651	99	380663	38.5757	ug/mL	81
6) Phenol	5.670	94	347071	39.6510	ug/mL	72
7) Aniline	5.728	93	419096m	39.9543	ug/mL	
8) bis(2-Chloroethyl)ether	5.781	93	247335	42.1328	ug/mL	# 66
9) 2-Chlorophenol	5.858	128	280126	41.1136	ug/mL	96
10) 1,3-Dichlorobenzene	6.036	146	332490	43.1536	ug/mL	99
11) 1,4-Dichlorobenzene	6.113	146	292261	42.4960	ug/mL	93
12) Benzyl alcohol	6.238	108	163491	41.4333	ug/mL	88
13) 1,2-Dichlorobenzene	6.291	146	298019	44.1927	ug/mL	99
14) 2-Methylphenol	6.344	107	181301	42.6521	ug/mL	93
15) bis(2-Chloroisopropyl) ether	6.382	45	566745	39.0235	ug/mL	78
16) 4-Methylphenol	6.531	107	252890	37.7744	ug/mL	93
17) N-Nitroso-di-n-propylamine	6.560	70	164725	42.2102	ug/mL	80
18) Hexachloroethane	6.685	117	127257	44.0549	ug/mL	80
20) Nitrobenzene-d5	6.728	82	257857	39.7219	ug/mL	81
21) Nitrobenzene	6.752	77	238371	43.4651	ug/mL	87
22) Isophorone	7.041	82	457232	42.5609	ug/mL	99
23) 2-Nitrophenol	7.123	139	140554	43.1215	ug/mL	86
24) 2,4-Dimethylphenol	7.152	107	209824	41.7355	ug/mL	84
25) bis(2-Chloroethoxy)methane	7.267	93	271240	41.1557	ug/mL	93
26) Benzoic acid	7.373	105	439590	105.7688	ug/mL	92
27) 2,4-Dichlorophenol	7.406	162	219674	42.0537	ug/mL	93
28) 1,2,4-Trichlorobenzene	7.512	180	259278	44.6831	ug/mL	95
29) Naphthalene	7.618	128	590963	38.2805	ug/mL	95
30) 4-Chloroaniline	7.661	127	259918	40.2943	ug/mL	89
31) Hexachlorobutadiene	7.757	225	149283	42.8843	ug/mL	97
32) Resorcinol	8.108	110	248803	42.6147	ug/mL	82
33) 4-Chloro-3-methylphenol	8.234	107	197535	42.7842	ug/mL	89
34) 2-Methylnaphthalene	8.455	142	453884	38.6035	ug/mL	94
35) 1-Methylnaphthalene	8.575	142	400701	35.4427	ug/mL	93
37) Hexachlorocyclopentadiene	8.647	237	144146	36.6222	ug/mL	98
38) 2,4,6-Trichlorophenol	8.787	196	178447	40.0685	ug/mL	94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI511.D
Acq On : 5 Sep 2012 6:20 pm
Operator :
Sample : ICV,S19910
Misc : ICV
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 06 13:21:23 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Thu Sep 06 13:19:30 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.830	196	178554	39.3079	ug/mL		95
40) 2-Fluorobiphenyl	8.897	172	490252	33.6668	ug/mL		99
41) 2-Chloronaphthalene	9.056	162	445207	38.3139	ug/mL		87
42) 2-Nitroaniline	9.171	65	165794	41.5156	ug/mL		93
43) Dimethylphthalate	9.407	163	507704	39.6398	ug/mL		97
44) 2,6-Dinitrotoluene	9.474	165	117395	41.2180	ug/mL		85
45) Acenaphthylene	9.575	152	642151	35.2556	ug/mL		97
46) 3-Nitroaniline	9.691	138	127304	38.3092	ug/mL	#	57
47) Acenaphthene	9.792	154	387328	37.2358	ug/mL		97
48) 2,4-Dinitrophenol	9.806	184	49882	41.9721	ug/mL	#	1
49) 4-Nitrophenol	9.873	109	60951	39.9958	ug/mL	#	74
50) Dibenzofuran	9.998	168	542639	37.7234	ug/mL		84
51) 2,4-Dinitrotoluene	9.974	165	146938	40.5266	ug/mL	#	85
52) 2,3,4,6-Tetrachlorophenol	10.143	232	143825	41.2192	ug/mL		88
53) Diethylphthalate	10.263	149	478729	37.1269	ug/mL		98
54) 4-Chlorophenyl-phenylether	10.412	204	250096	38.0680	ug/mL		87
55) Fluorene	10.426	166	456965	37.0408	ug/mL		86
56) 4-Nitroaniline	10.450	138	118978	40.4294	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.725	330	85039	36.4796	ug/mL	#	76
59) 4,6-Dinitro-2-methylphenol	10.484	198	85656	43.9989	ug/mL		91
60) N-Nitrosodiphenylamine	10.561	169	415639	47.5056	ug/mL		88
61) Azobenzene	10.614	77	421403	38.2717	ug/mL		94
62) 4-Bromophenyl-phenylether	11.023	248	168278	38.4055	ug/mL	#	87
63) Hexachlorobenzene	11.119	284	184462	40.6205	ug/mL		96
64) Pentachlorophenol	11.350	266	134065	43.8778	ug/mL		99
65) Phenanthrene	11.629	178	675038	38.7609	ug/mL		96
66) Anthracene	11.691	178	668867	37.7585	ug/mL		95
67) Carbazole	11.879	167	627672	42.0925	ug/mL		87
68) Di-n-butylphthalate	12.283	149	893282	39.7563	ug/mL		95
69) Fluoranthene	13.105	202	907657	38.7115	ug/mL		95
71) Benzidine	13.259	184	743726	89.6656	ug/mL		88
72) Pyrene	13.394	202	909390	43.3797	ug/mL		92
73) Terphenyl-d14	13.562	244	554593	39.5049	ug/mL		97
74) Butylbenzylphthalate	14.153	149	425712	42.6506	ug/mL		87
75) 3,3'-Dichlorobenzidine	14.932	252	484445	63.2810	ug/mL		96
76) Benzo(a)anthracene	14.976	228	733988	42.5475	ug/mL		98
77) bis(2-Ethylhexyl)phthalate	14.956	149	511339	42.5820	ug/mL		95
78) Chrysene	15.043	228	649723	40.6969	ug/mL		95
80) Di-n-octylphthalate	16.106	149	1092939	41.5333	ug/mL		91
81) Benzo(b)fluoranthene	16.986	252	931360	43.3896	ug/mL		96
82) Benzo(k)fluoranthene	17.058	252	796163m	40.3162	ug/mL		
83) Benzo(a)pyrene	17.755	252	896055	47.7828	ug/mL		94
84) Indeno(1,2,3-cd)pyrene	20.876	276	950163	45.0472	ug/mL		86

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090512\
Data File : YI511.D
Acq On : 5 Sep 2012 6:20 pm
Operator :
Sample : ICV,S19910
Misc : ICV
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 06 13:21:23 2012
Quant Method : G:\msbna06\090512\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Thu Sep 06 13:19:30 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.943	278	732230	43.5503	ug/mL	93
86) Benzo(g,h,i)perylene	21.655	276	721048	41.1233	ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Continuing Calibration Verification Raw Data

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 MSBNA Soil
EPA 8270D

Inst : MSBNA06 IDF : 1.0
Seqnum : 552362420002.1 File : yi702 Time : 07-SEP-2012 16:37
Cal : 552359297001 Caldate : 05-SEP-2012
Standards: S20248

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
bis(2-Ethylhexyl)phthalate	0.7993	0.8911	16.00	17.84	ug/mL	11	20	0.0100	
Nitrobenzene-d5	0.4123	0.4393	16.00	17.05	ug/mL	7	20	0.0500	
2-Fluorobiphenyl	1.5502	1.6849	16.00	17.39	ug/mL	9	20	0.0500	
Terphenyl-d14	0.9345	1.0020	16.00	17.16	ug/mL	7	20	0.0500	

ISTD (ICAL yi507)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
1,4-Dichlorobenzene-d4	198812	223394	12.36	6.09	6.09	0.00
Naphthalene-d8	672821	743711	10.54	7.59	7.59	0.00
Acenaphthene-d10	377811	427044	13.03	9.75	9.74	-0.01
Phenanthrene-d10	744787	851335	14.31	11.60	11.60	0.01
Chrysene-d12	659674	784348	18.90	15.00	15.00	0.01
Perylene-d12	780304	923802	18.39	17.89	17.89	0.01

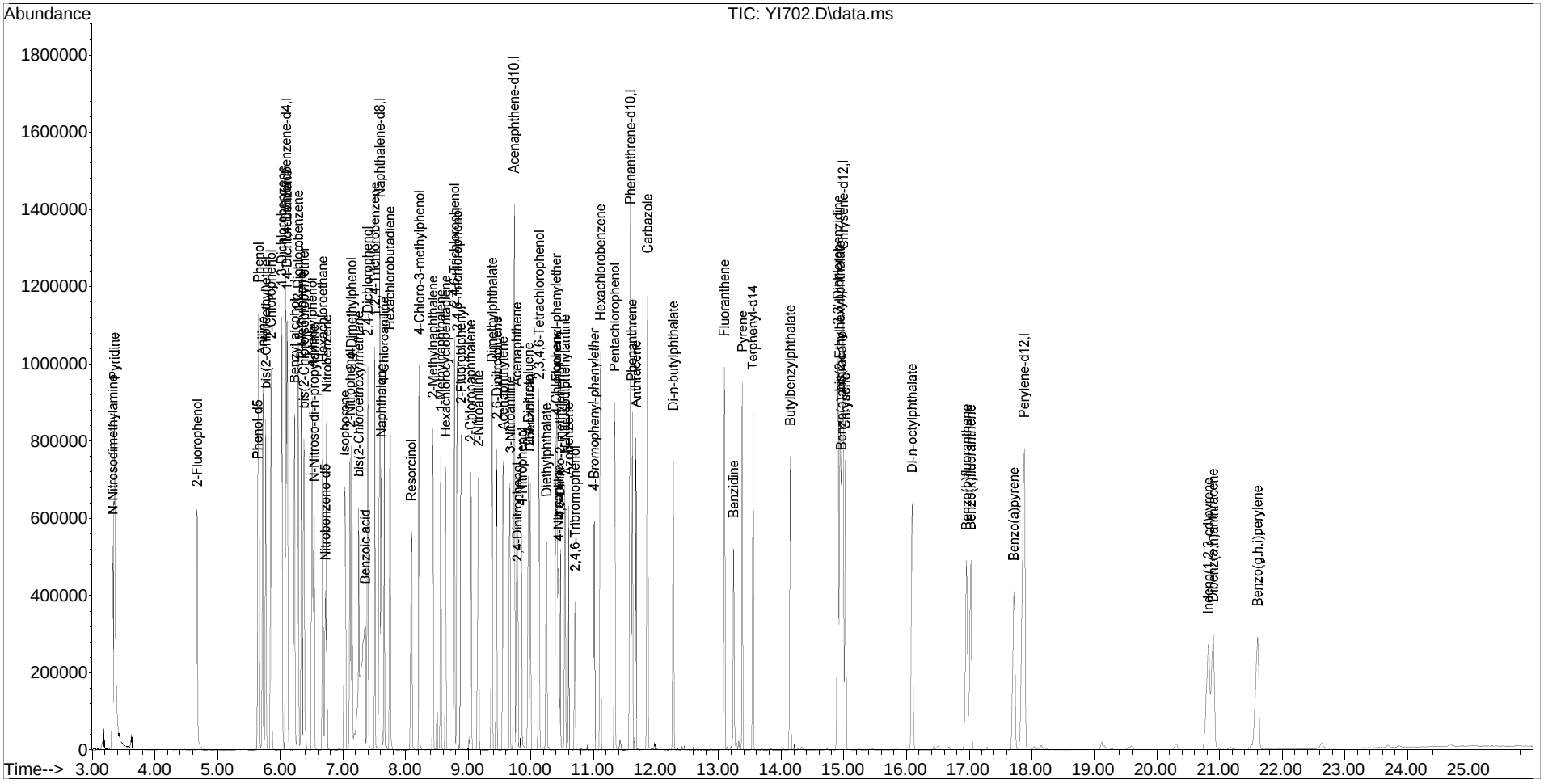
LLH 09/07/12 [Aniline]: Picked or reassigned peak. [general version]

Analyst: LLH Date: 09/10/12 Reviewer: LW Date: 09/11/12

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI702.D
Acq On : 7 Sep 2012 4:37 pm
Operator :
Sample : CCV,S20248
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 07 17:08:27 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI702.D
Acq On : 7 Sep 2012 4:37 pm
Operator :
Sample : CCV,S20248
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 07 17:08:27 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
1) 1,4-Dichlorobenzene-d4	6.094	152	223394	40.0000	ug/mL	0.00
19) Naphthalene-d8	7.589	136	743711	40.0000	ug/mL	0.00
36) Acenaphthene-d10	9.743	164	427044	40.0000	ug/mL	0.00
58) Phenanthrene-d10	11.595	188	851335	40.0000	ug/mL	0.00
70) Chrysene-d12	14.995	240	784348	40.0000	ug/mL	0.00
79) Perylene-d12	17.885	264	923802	40.0000	ug/mL	0.00
Target Compounds						Qvalue
2) Pyridine	3.357	79	329770	32.3082	ug/mL	# 16
3) N-Nitrosodimethylamine	3.333	42	251452	32.1319	ug/mL	84
4) 2-Fluorophenol	4.675	112	167427	17.4369	ug/mL	82
5) Phenol-d5	5.646	99	200966	17.9256	ug/mL	81
6) Phenol	5.661	94	356646	35.8634	ug/mL	71
7) Aniline	5.723	93	398029m	33.3997	ug/mL	
8) bis(2-Chloroethyl)ether	5.776	93	238101	35.7005	ug/mL	# 66
9) 2-Chlorophenol	5.858	128	272399	35.1897	ug/mL	97
10) 1,3-Dichlorobenzene	6.031	146	310993	35.5277	ug/mL	98
11) 1,4-Dichlorobenzene	6.113	146	258397	33.0707	ug/mL	94
12) Benzyl alcohol	6.238	108	159628	35.6076	ug/mL	# 86
13) 1,2-Dichlorobenzene	6.291	146	280814	36.6525	ug/mL	98
14) 2-Methylphenol	6.344	107	172901	35.8028	ug/mL	92
15) bis(2-Chloroisopropyl) ether	6.382	45	497523	30.1529	ug/mL	80
16) 4-Methylphenol	6.522	107	247337	32.5187	ug/mL	95
17) N-Nitroso-di-n-propylamine	6.550	70	152995	34.5075	ug/mL	82
18) Hexachloroethane	6.680	117	118455	36.0947	ug/mL	88
20) Nitrobenzene-d5	6.723	82	130682	17.0493	ug/mL	83
21) Nitrobenzene	6.748	77	221710	34.2384	ug/mL	86
22) Isophorone	7.036	82	426930	33.6567	ug/mL	98
23) 2-Nitrophenol	7.123	139	139133	36.1511	ug/mL	83
24) 2,4-Dimethylphenol	7.147	107	192485	32.4256	ug/mL	85
25) bis(2-Chloroethoxy)methane	7.262	93	134737	17.3143	ug/mL	94
26) Benzoic acid	7.363	105	427814	87.1777	ug/mL	91
27) 2,4-Dichlorophenol	7.402	162	216019	35.0234	ug/mL	94
28) 1,2,4-Trichlorobenzene	7.512	180	238210	34.7678	ug/mL	95
29) Naphthalene	7.613	128	297804	16.3376	ug/mL	96
30) 4-Chloroaniline	7.661	127	255078	33.4904	ug/mL	90
31) Hexachlorobutadiene	7.757	225	140010	34.0633	ug/mL	97
32) Resorcinol	8.104	110	216614	31.4218	ug/mL	84
33) 4-Chloro-3-methylphenol	8.229	107	189513	34.7631	ug/mL	89
34) 2-Methylnaphthalene	8.445	142	238408	17.1729	ug/mL	92
35) 1-Methylnaphthalene	8.570	142	232713	17.4328	ug/mL	93
37) Hexachlorocyclopentadiene	8.647	237	137075	30.6419	ug/mL	97
38) 2,4,6-Trichlorophenol	8.787	196	181914	35.9398	ug/mL	94

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI702.D
Acq On : 7 Sep 2012 4:37 pm
Operator :
Sample : CCV,S20248
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 07 17:08:27 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units		Rel.RT
39) 2,4,5-Trichlorophenol	8.830	196	184736	35.7831	ug/mL		92
40) 2-Fluorobiphenyl	8.892	172	287804	17.3898	ug/mL		99
41) 2-Chloronaphthalene	9.046	162	227378	17.2170	ug/mL		88
42) 2-Nitroaniline	9.166	65	157458	34.6915	ug/mL		94
43) Dimethylphthalate	9.392	163	516107	35.4549	ug/mL		97
44) 2,6-Dinitrotoluene	9.465	165	115112	35.5610	ug/mL		83
45) Acenaphthylene	9.566	152	358217	17.3043	ug/mL		98
46) 3-Nitroaniline	9.681	138	131140	34.7226	ug/mL	#	59
47) Acenaphthene	9.782	154	213761	18.0811	ug/mL		96
48) 2,4-Dinitrophenol	9.796	184	48290	37.5844	ug/mL	#	1
49) 4-Nitrophenol	9.864	109	59324	34.2515	ug/mL	#	71
50) Dibenzofuran	9.994	168	300010	18.3506	ug/mL		83
51) 2,4-Dinitrotoluene	9.965	165	153351	37.2142	ug/mL	#	86
52) 2,3,4,6-Tetrachlorophenol	10.143	232	147732	37.2525	ug/mL		88
53) Diethylphthalate	10.253	149	259543	17.7102	ug/mL		97
54) 4-Chlorophenyl-phenylether	10.407	204	124263	16.6422	ug/mL		84
55) Fluorene	10.417	166	231343	16.4994	ug/mL		88
56) 4-Nitroaniline	10.446	138	116425	34.8091	ug/mL	#	1
57) 2,4,6-Tribromophenol	10.715	330	45226	17.0701	ug/mL	#	81
59) 4,6-Dinitro-2-methylphenol	10.474	198	82688	35.8480	ug/mL		89
60) N-Nitrosodiphenylamine	10.551	169	187382	18.0757	ug/mL		85
61) Azobenzene	10.604	77	230161	17.6421	ug/mL		96
62) 4-Bromophenyl-phenylether	11.018	248	89289	17.1990	ug/mL	#	88
63) Hexachlorobenzene	11.114	284	179747	33.4071	ug/mL		96
64) Pentachlorophenol	11.345	266	127514	35.2230	ug/mL		97
65) Phenanthrene	11.619	178	340457	16.4993	ug/mL		97
66) Anthracene	11.681	178	355761	16.9501	ug/mL		95
67) Carbazole	11.874	167	609382	34.4906	ug/mL		87
68) Di-n-butylphthalate	12.278	149	474374	17.8188	ug/mL		96
69) Fluoranthene	13.095	202	479483	17.2596	ug/mL		96
71) Benzidine	13.244	184	247944	22.9023	ug/mL		88
72) Pyrene	13.384	202	459261	16.7845	ug/mL		94
73) Terphenyl-d14	13.552	244	314372	17.1567	ug/mL		97
74) Butylbenzylphthalate	14.144	149	228463	17.5363	ug/mL		88
75) 3,3'-Dichlorobenzidine	14.918	252	339369	33.9635	ug/mL		97
76) Benzo(a)anthracene	14.966	228	370073	16.4356	ug/mL		99
77) bis(2-Ethylhexyl)phthalate	14.947	149	279566	17.8367	ug/mL		92
78) Chrysene	15.028	228	356303	17.0988	ug/mL		95
80) Di-n-octylphthalate	16.096	149	576114	17.5638	ug/mL		90
81) Benzo(b)fluoranthene	16.962	252	440854	16.4767	ug/mL		95
82) Benzo(k)fluoranthene	17.029	252	395956	16.0855	ug/mL		93
83) Benzo(a)pyrene	17.717	252	399921	17.1088	ug/mL		95
84) Indeno(1,2,3-cd)pyrene	20.828	276	456809	17.3745	ug/mL		87

Quantitation Report (QT Reviewed)

Data Path : G:\msbna06\090712\
Data File : YI702.D
Acq On : 7 Sep 2012 4:37 pm
Operator :
Sample : CCV,S20248
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 07 17:08:27 2012
Quant Method : C:\msdchem\1\METHODS\6PTBNA6.M
Quant Title : MSBNA06 BNA
QLast Update : Fri Sep 07 17:08:17 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc.	Units	Rel.RT
85) Dibenz(a,h)anthracene	20.900	278	372177	17.7583	ug/mL	93
86) Benzo(g,h,i)perylene	21.607	276	392236	17.9465	ug/mL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239403
ANALYTICAL REPORT
Pesticides
Matrix: Water

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
FB.09042012	239403-007
EB.09042012	239403-008

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
PESTICIDES (EPA 8081B)
WATER

Laboratory number:	**239403**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/04/12**
Samples Received:	**09/04/12**

This data package contains sample and QC results for two water samples, requested for the above referenced project on 09/04/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Pesticides (EPA 8081B) Water:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B.

No analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 23403

Chain of Custody # _____

Project No: CA0007611.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: E Manton and D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None
1	EX36B116D.2	04/04/12	1150		X			1					X
2	EX36B116A.2	04/04/12	1155		X			1					X
3	EX36B116B.2	04/04/12	1140		X			1					X
4	EX36B116C.2	04/04/12	1200		X			1					X
5	EX36B015A.2	04/04/12	1250		X			1					X
6	EX36B163A.2	04/04/12	1315		X			2					X
7	FB.090420120	04/04/12	1455	X				9	3		1		5
8	EB.090420120	04/04/12	1505	X				3			1		2
	Temp Blank												

ANALYTICAL REQUEST

Big(2)-Ethylhexyl)phthlate by 8270D	Copper by EPA 6010C	Mercury by EPA 7471B	Alpha-BHC by EPA 8081B	PCBs by 8082	TPHd by 8015	TPHg by 8015	SVOCs by 8270	Pesticides by 8081	Metals by 6010/7174
X									
X									
X									
X									
	X	X							
	X	X	X						
				X	X	X	X	X	X
							X	X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

RECEIVED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 239403 Date Received 9/4/12 Number of coolers 1
Client ARCADIS Project CA000761.0001

Date Opened 9/4/12 By (print) EL (sign) [signature]
Date Logged in ~~EL~~ 9/6/12 By (print) JG (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? (YES) NO N/A
17. Did you document your preservative check? (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239403

Sample	pH: <2	>9	>12	Other
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
-008a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: EL
Date: 9/6/12

Page 1 of 1

Results & QC Summary

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8081B
Matrix:	Water	Sampled:	09/04/12
Units:	ug/L	Received:	09/04/12
Diln Fac:	1.000	Prepared:	09/10/12
Batch#:	190334	Analyzed:	09/11/12

Field ID: FB.09042012 Lab ID: 239403-007
Type: SAMPLE

Analyte	Result	LOQ	DL
alpha-BHC	0.03 U	0.05	0.01
Heptachlor epoxide	0.03 U	0.05	0.01
Dieldrin	0.06 U	0.1	0.02

Surrogate	%REC	Limits
TCMX	80	26-128
Decachlorobiphenyl	86	29-122

Field ID: EB.09042012 Lab ID: 239403-008
Type: SAMPLE

Analyte	Result	LOQ	DL
alpha-BHC	0.03 U	0.05	0.01
Heptachlor epoxide	0.03 U	0.05	0.01
Dieldrin	0.06 U	0.09	0.02

Surrogate	%REC	Limits
TCMX	88	26-128
Decachlorobiphenyl	95	29-122

Type: BLANK Lab ID: QC655486

Analyte	Result	LOQ	DL
alpha-BHC	0.03 U	0.05	0.01
Heptachlor epoxide	0.03 U	0.05	0.01
Dieldrin	0.06 U	0.1	0.02

Surrogate	%REC	Limits
TCMX	77	26-128
Decachlorobiphenyl	91	29-122

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8081B
Matrix:	Water	Batch#:	190334
Units:	ug/L	Prepared:	09/10/12
Diln Fac:	1.000	Analyzed:	09/11/12

Type: BS Lab ID: QC655487

Analyte	Spiked	Result	%REC	Limits
alpha-BHC	0.2000	0.2495	125	45-148
Heptachlor epoxide	0.2000	0.2454	123	57-133
Dieldrin	0.4000	0.5503	138	51-149

Surrogate	%REC	Limits
TCMX	96	26-128
Decachlorobiphenyl	105	29-122

Type: BSD Lab ID: QC655488

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
alpha-BHC	0.2000	0.2064	103	45-148	19	20
Heptachlor epoxide	0.2000	0.2162	108	57-133	13	50
Dieldrin	0.4000	0.4978	124	51-149	10	37

Surrogate	%REC	Limits
TCMX	80	26-128
Decachlorobiphenyl	84	29-122

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PEST Water: EPA 8081B

Inst : GC21
Calnum : 242328737001
Units : pg/uL

Name : gc21_pest_228
Date : 15-AUG-2012 09:17

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	228_006	242328737006	PEST_1/2	15-AUG-2012 09:17	S19412 (2X)
L2	228_007	242328737007	PEST_1	15-AUG-2012 09:38	S19412
L3	228_008	242328737008	PEST_2	15-AUG-2012 10:00	S20311
L4	228_009	242328737009	PEST_3	15-AUG-2012 10:22	S19414
L5	228_010	242328737010	PEST_4	15-AUG-2012 10:43	S19415
L6	228_011	242328737011	PEST_5	15-AUG-2012 11:05	S19416
L7	228_012	242328737012	PEST_6	15-AUG-2012 11:27	S19417
L8	228_013	242328737013	PEST_7	15-AUG-2012 11:49	S19418

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	1910.0	1584.5	1623.6	1592.6	1606.9	1498.6	1734.8	1643.5	AVRG	R		6.06E-4		1649.3	8	0.990	20	
Heptachlor epoxide	A	1418.0	1139.5	1116.0	1080.7	1074.4	939.96	1086.9	1036.2	AVRG	R		9.00E-4		1111.5	12	0.990	20	
Dieldrin	A	1201.5	981.00	981.80	976.45	1003.5	844.84	905.56	764.35	AVRG	R		0.00104		957.38	13	0.990	20	
TCMX	A	1449.0	1136.3	1128.6	1097.0	1088.6	1021.1	1162.5	1084.2	AVRG	R		8.73E-4		1145.9	11	0.990	20	
Decachlorobiphenyl	A	722.50	590.25	624.20	576.90	577.53	444.48	466.10	478.26	AVRG	R		0.00179		560.03	17	0.990	20	
alpha-BHC	B	1502.0	1479.0	3022.4	1740.0	3252.8	3197.6	6710.7		QUAD	A	4732.34	49.3462	130.9982	2986.3	0.998	0.990	20	
Heptachlor epoxide	B	1079.0	1016.0	2188.0	1201.9	1810.9	1643.5	4434.5		QUAD	A	6201.61	-795.05	101.6505	1910.6	0.995	0.990	20	
Dieldrin	B	1150.5	1077.5	2353.9	1266.8	4479.0	4142.7	4985.2	3946.8	QUAD	A	-37329	5821.24	-8.26739	2925.3	0.990	0.990	20	
TCMX	B	855.50	831.00	1770.4	1052.3	2370.9	2564.3	3620.5		QUAD	A	-3774.8	1493.29	21.73896	1866.4	0.998	0.990	20	
Decachlorobiphenyl	B	469.00	454.50	1066.2	525.55	739.65	628.38	1164.5	2203.9	QUAD	A	3899.58	97.3852	10.42620	906.46	0.999	0.990	20	
Average EPA 8081B	A														(n=23)	11			
Average EPA 8081B	B														(n=23)	61			

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
alpha-BHC	A	1.0000	16	2.0000	-4	5.0000	-2	10.000	-3	20.000	-3	25.000	-9	50.000	5	100.00	0
Heptachlor epoxide	A	1.0000	**28**	2.0000	3	5.0000	0	10.000	-3	20.000	-3	25.000	-15	50.000	-2	100.00	-7
Dieldrin	A	2.0000	**25**	4.0000	2	10.000	3	20.000	2	40.000	5	50.000	-12	100.00	-5	200.00	-20
TCMX	A	2.0000	**26**	4.0000	-1	10.000	-2	20.000	-4	40.000	-5	50.000	-11	100.00	1	200.00	-5
Decachlorobiphenyl	A	2.0000	**29**	4.0000	5	10.000	11	20.000	3	40.000	3	50.000	**-21**	100.00	-17	200.00	-15
alpha-BHC	B	1.0000	**-100**	2.0000	**-100**	5.0000	**74**	10.000	-4	20.000	6	25.000	-5	50.000	0		
Heptachlor epoxide	B	1.0000	**-100**	2.0000	**-100**	5.0000	**136**	10.000	**24**	20.000	8	25.000	-9	50.000	0		
Dieldrin	B	2.0000	**244**	4.0000	**81**	10.000	6	20.000	**-45**	40.000	-2	50.000	-10	100.00	9	200.00	-1
TCMX	B	2.0000	**75**	4.0000	12	10.000	**22**	20.000	**-31**	40.000	3	50.000	2	100.00	0		
Decachlorobiphenyl	B	2.0000	**-100**	4.0000	**-100**	10.000	**112**	20.000	5	40.000	13	50.000	-6	100.00	-1	200.00	0

TKB 08/16/12 : Corrected automatically drawn baseline in all levels.

TKB 08/16/12 : ICAL fails PEM (ENDRIN) ON CH.B, ENDRIN COMPOUNDS WILL BE REPORTED FORM CH.A

TKB 08/16/12 : ICAL fails ICV FOR VARIOUS ANALYTES ON CH.B, THESE ANALYTES WILL BE REPORTED FROM CH.A

TKB 08/16/12 : CHANGED FIT TYPES AND DROPPED VARIOUS HIGH/LOW POINTS TO IMPROVE %RSD/R^2

TKB 08/16/12 : METHOXYCHLOR FAILS %RSD ON CH.B - IT WILL BE REPORTED FROM CH.A

TKB 08/16/12 : ADDITIONAL SET OF ICV RAN BECAUSE THE FIRST SET HAD EXPIRED

Analyst: TKB Date: 08/16/12 Reviewer: EAH Date: 08/16/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PEST Water
EPA 8081B

Inst : GC21 Name : gc21_pest_228
Calnum : 242328737001 Cal Date : 15-AUG-2012

ICV 242328737019 (228_019 16-AUG-2012) stds: S20524

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	20.00	19.36	pg/uL	-3	20	
Heptachlor epoxide	A	20.00	19.50	pg/uL	-2	20	
Dieldrin	A	20.00	20.59	pg/uL	3	20	
alpha-BHC	B	20.00	17.17	pg/uL	-14	20	
Heptachlor epoxide	B	20.00	18.82	pg/uL	-6	20	
Dieldrin	B	20.00	11.01	pg/uL	**-45**	20	v- ***
Average EPA 8081B	A	n=21			7		
Average EPA 8081B	B	n=21			18		

Analyst: TKB Date: 08/16/12 Reviewer: EAH Date: 08/16/12

-=low bias v=ICV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Water
EPA 8081B

Inst : GC21 Run Name : PEST_4 IDF : 1.0
Seqnum : 242367635010.1 File : 255_010 Time : 11-SEP-2012 12:06
Cal : 242328737001 Caldate : 15-AUG-2012
Standards: S20650

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1649.3	1692.3	20.00	20.52	pg/uL	3	20	
Heptachlor epoxide	A	1111.5	1163.0	20.00	20.93	pg/uL	5	20	
Dieldrin	A	957.38	1147.5	40.00	47.94	pg/uL	20	20	
TCMX	A	1145.9	1159.0	40.00	40.46	pg/uL	1	20	
Decachlorobiphenyl	A	560.03	484.03	40.00	34.57	pg/uL	-14	20	
alpha-BHC	B	2986.3	1513.7	20.00	13.78	pg/uL	**-31**	20	c- ***
Heptachlor epoxide	B	1910.6	1106.6	20.00	17.03	pg/uL	-15	20	
Dieldrin	B	2925.3	1162.8	40.00	14.71	pg/uL	**-63**	20	c- v- ***
TCMX	B	1866.4	885.05	40.00	20.26	pg/uL	**-49**	20	c-
Decachlorobiphenyl	B	906.46	456.08	40.00	32.71	pg/uL	-18	20	
Average EPA 8081B	A	(n=23)					9		
Average EPA 8081B	B	(n=23)					33		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV v=ICV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Water
EPA 8081B

Inst : GC21 Run Name : PEST_3 IDF : 1.0
Seqnum : 242367635017.1 File : 255_017 Time : 11-SEP-2012 15:15
Cal : 242328737001 Caldate : 15-AUG-2012
Standards: S20649

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1649.3	1386.8	10.00	8.408	pg/uL	-16	20	
Heptachlor epoxide	A	1111.5	978.40	10.00	8.803	pg/uL	-12	20	
Dieldrin	A	957.38	924.00	20.00	19.30	pg/uL	-3	20	
TCMX	A	1145.9	912.45	20.00	15.93	pg/uL	-20	20	
Decachlorobiphenyl	A	560.03	447.25	20.00	15.97	pg/uL	-20	20	
alpha-BHC	B	2986.3	1314.6	10.00	7.828	pg/uL	**-22**	20	c- ***
Heptachlor epoxide	B	1910.6	1051.3	10.00	11.51	pg/uL	15	20	
Dieldrin	B	2925.3	930.95	20.00	9.746	pg/uL	**-51**	20	c- v- ***
TCMX	B	1866.4	720.80	20.00	10.56	pg/uL	**-47**	20	c-
Decachlorobiphenyl	B	906.46	378.65	20.00	14.67	pg/uL	**-27**	20	c-
Average EPA 8081B	A	(n=23)					12		
Average EPA 8081B	B	(n=21)					28		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Endrin aldehyde not quantifiable (B) 4,4'-DDD not quantifiable (B)

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV v=ICV

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 242328737

Instrument : GC21 Begun : 08/15/12 06:57
Method : EPA 8081B SOP Version : pesticides_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	228_001	X	HEX			08/15/12 06:57	1.0		
002	228_002	PEM	PEM			08/15/12 07:18	1.0	1	
003	228_003	CCV	PEST_3			08/15/12 07:40	1.0	2	No Quant ac arsd
004	228_004	PEM	PEM			08/15/12 08:27	1.0	1	
005	228_005	IB	CAL			08/15/12 08:55	1.0		No Quant
006	228_006	ICAL	PEST_1/2			08/15/12 09:17	1.0	3	
007	228_007	ICAL	PEST_1			08/15/12 09:38	1.0	3	
008	228_008	ICAL	PEST_2			08/15/12 10:00	1.0	4	
009	228_009	ICAL	PEST_3			08/15/12 10:22	1.0	2	
010	228_010	ICAL	PEST_4			08/15/12 10:43	1.0	5	
011	228_011	ICAL	PEST_5			08/15/12 11:05	1.0	6	
012	228_012	ICAL	PEST_6			08/15/12 11:27	1.0	7	
013	228_013	ICAL	PEST_7			08/15/12 11:49	1.0	8	
014	228_014	X	HEX			08/15/12 12:11	1.0		
015	228_015	X	PEST_ICV			08/15/12 12:32	1.0	9	
016	228_016	X	ICV			08/15/12 15:04	1.0	9	
018	228_018	X	PEST_ICV			08/16/12 12:59	1.0	10	
019	228_019	ICV	PEST_ICV			08/16/12 13:30	1.0	10	

TKB 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 19.

Standards used: 1=S20501 2=S19414 3=S19412 4=S20311 5=S19415 6=S19416 7=S19417 8=S19418 9=S19196 10=S20524
Flags used: No Quant=Endrin not quantifiable ac=average CCV drift out arsd=average ICAL %RSD out
Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 242367635

Instrument : GC21 Begun : 09/11/12 07:15
Method : EPA 8081B SOP Version : pesticides_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	255_001	X	HEX			09/11/12 07:15	1.0		
002	255_002	PEM	PEM			09/11/12 07:37	1.0	1	
003	255_003	CCV	PEST_3			09/11/12 07:58	1.0	2	No Quant
004	255_004	LCS	QC655372	Soil	190308	09/11/12 09:39	1.0		arsd av >ac <ac
005	255_005	MS	QC655373	Soil	190308	09/11/12 10:01	1.0		arsd av >ac <ac
006	255_006	MSD	QC655374	Soil	190308	09/11/12 10:23	1.0		arsd av >ac <ac
007	255_007	MS	QC655373	Soil	190308	09/11/12 11:01	1.0		arsd av >ac <ac
008	255_008	MSD	QC655374	Soil	190308	09/11/12 11:22	1.0		arsd av >ac <ac
009	255_009	PEM	PEM			09/11/12 11:44	1.0	1	
010	255_010	CCV	PEST_4			09/11/12 12:06	1.0	3	
011	255_011	BLANK	QC655486	Water	190334	09/11/12 12:59	1.0		No Quant
012	255_012	BS	QC655487	Water	190334	09/11/12 13:21	1.0		
013	255_013	BSD	QC655488	Water	190334	09/11/12 13:43	1.0		
014	255_014	SAMPLE	239403-007	Water	190334	09/11/12 14:05	1.0		No Quant
015	255_015	SAMPLE	239403-008	Water	190334	09/11/12 14:26	1.0		
016	255_016	PEM	PEM			09/11/12 14:53	1.0	1	
017	255_017	CCV	PEST_3			09/11/12 15:15	1.0	2	No Quant
018	255_018	BLANK	QC655680	Soil	190378	09/11/12 18:40	1.0		No Quant arsd av <ac >ac
019	255_019	LCS	QC655684	Soil	190378	09/11/12 19:02	1.0		No Quant arsd av <ac >ac
020	255_020	SAMPLE	239496-001	Soil	190378	09/11/12 19:23	1.0		No Quant arsd av <ac >ac
021	255_021	SAMPLE	239496-002	Soil	190378	09/11/12 19:45	1.0		No Quant arsd av <ac >ac
022	255_022	SAMPLE	239496-003	Soil	190378	09/11/12 20:07	5.0		No Quant arsd av <ac >ac
023	255_023	SAMPLE	239496-004	Soil	190378	09/11/12 20:29	1.0		No Quant arsd av <ac >ac
024	255_024	SAMPLE	239496-005	Soil	190378	09/11/12 20:50	1.0		No Quant arsd av <ac >ac
025	255_025	SAMPLE	239496-006	Soil	190378	09/11/12 21:12	1.0		No Quant arsd av <ac >ac
026	255_026	SAMPLE	239496-007	Soil	190378	09/11/12 21:34	1.0		No Quant arsd av <ac >ac
027	255_027	SAMPLE	239496-008	Soil	190378	09/11/12 21:56	1.0		No Quant arsd av <ac >ac
028	255_028	SAMPLE	239496-009	Soil	190378	09/11/12 22:18	5.0		No Quant arsd av <ac >ac
029	255_029	SAMPLE	239496-010	Soil	190378	09/11/12 22:40	1.0		No Quant arsd av <ac >ac
030	255_030	PEM	PEM			09/11/12 23:02	1.0	1	
031	255_031	CCV	PEST_4			09/11/12 23:24	1.0	3	arsd av ac
032	255_032	X	PEM			09/11/12 23:45	1.0	1	
033	255_033	X	XCCV			09/12/12 00:07	1.0	3	

TKB 09/12/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

Standards used: 1=S20501 2=S20649 3=S20650

Flags used: <=opening >=closing No Quant=Endosulfan II not quantifiable ac=average CCV drift out arsd=average ICAL %RSD out av=average ICV drift out

SAMPLE PREPARATION SUMMARY

Batch # : 190334 Analysis : 608-PEST
Started By : TFB Prep Date : 10-SEP-2012 12:25 Finished By : CGL
Method : 3520C SOP Version : 8081_3520_rv17 Units : mL
Spike #1 ID : S20518 Spike #2 ID : S20150

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239403-007		Water	1040	10	1	0.009615	5	.4				8081	
239403-008		Water	1060	10	1	0.009434	5	.4				8081	
239499-001		Water	960	10	1	0.01042	7	.4				608-PEST	Prepped 11-SEP-2012 11:35
239499-002		Water	900	10	1	0.01111	7	.4				608-PEST	Prepped 11-SEP-2012 11:35; mss
QC655486	BLANK	Water	1000	10	1	0.01		.4				8081	
QC655487	BS	Water	1000	10	1	0.01		.4	.2			8081	
QC655488	BSD	Water	1000	10	1	0.01		.4	.2			8081	
QC655733	MS	Water	1000	10	1	0.01	7	.4	.2			608-PEST	Prepped 11-SEP-2012 11:35
QC655734	MSD	Water	1040	10	1	0.009615	7	.4	.2			608-PEST	Prepped 11-SEP-2012 11:35

PRW 09/11/12 : All volumes verified. Batch reviewed for 239403

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/12/12

Pesticides (8081 & 608) Water Prep Log — Curtis & Tompkins, Ltd.

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Extraction Method: ☒ EPA 3520c cont. L/L ☐ _____

Cleanup Method (if needed): ☐ EPA 3620b Florisil ☐ _____

LIMS Batch No: 190334

Date Extracted: 9/10/12

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
239403-007	E	1040	☐7 ☒5	☐ 10.0 ☐		
↓ -008	C	1060	☐7 ☒↓	☐ 10.0 ☐		
MB QC655486	MA	1000	☐7 ☒NA	☐ 10.0 ☐		
BS ↓ 7	↓	1000	☐7 ☒↓	☐ 10.0 ☐		
BSD ↓ 8	↓	1000	☐7 ☒↓	☐ 10.0 ☐		
239499-001	J	960	☒7 ☐	☒ 10.0 ☐		★ added 9/11/12 @ 1135
↓ -002	AD	900	☒7 ☐	☒ 10.0 ☐		↓
MS QC655733	W	1000	☒7 ☐	☒ 10.0 ☐		
MSD ↓ 4	Y	1040	☒7 ☐	☒ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		
			☐7 ☐	☐ 10.0 ☐		TKB 9/11/12

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.4 mL of surrogate solution was added to all samples	S20518A	TFB 9/10/12
0.2 mL of matrix spiking solution was added to all spikes	S20150A	↓
☒ EPA 3520c: Samples continuously extracted with about 450 mL of CH_2Cl_2	EM52160	
Extraction Start Time:	1225 / ★1135	↓
Extraction End Time:	0700 / ★0630	9/11/12
☐ EPA 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	
Extracts filtered through baked, CH_2Cl_2-rinsed granular Na_2SO_4	EM30122150	
Exchanged 2x with Hexane	JTBLOK EL7	
Concentrated to final volumes as noted above at temperature (degrees C)	100	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil	NA	
Extracts relinquished to the Pesticide Group	Y	↓

9/10/12
Extraction Chemist **Date**

Contined from Page ____
Continued on Page ____

9/11/12
Reviewed by **Date**

REPORTING SUMMARY FOR 239403 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
239403-007	alpha-BHC	GC21	A	09/11/12 14:05
239403-007	Heptachlor epoxide	GC21	A	09/11/12 14:05
239403-007	Dieldrin	GC21	A	09/11/12 14:05
239403-007	TCMX	GC21	A	09/11/12 14:05
239403-007	Decachlorobiphenyl	GC21	A	09/11/12 14:05
239403-008	alpha-BHC	GC21	A	09/11/12 14:26
239403-008	Heptachlor epoxide	GC21	A	09/11/12 14:26
239403-008	Dieldrin	GC21	A	09/11/12 14:26
239403-008	TCMX	GC21	A	09/11/12 14:26
239403-008	Decachlorobiphenyl	GC21	A	09/11/12 14:26
QC655486	alpha-BHC	GC21	A	09/11/12 12:59
QC655486	Heptachlor epoxide	GC21	A	09/11/12 12:59
QC655486	Dieldrin	GC21	A	09/11/12 12:59
QC655486	TCMX	GC21	A	09/11/12 12:59
QC655486	Decachlorobiphenyl	GC21	A	09/11/12 12:59
QC655487	alpha-BHC	GC21	A	09/11/12 13:21
QC655487	Heptachlor epoxide	GC21	A	09/11/12 13:21
QC655487	Dieldrin	GC21	A	09/11/12 13:21
QC655487	TCMX	GC21	A	09/11/12 13:21
QC655487	Decachlorobiphenyl	GC21	A	09/11/12 13:21
QC655488	alpha-BHC	GC21	A	09/11/12 13:43
QC655488	Heptachlor epoxide	GC21	A	09/11/12 13:43
QC655488	Dieldrin	GC21	A	09/11/12 13:43
QC655488	TCMX	GC21	A	09/11/12 13:43
QC655488	Decachlorobiphenyl	GC21	A	09/11/12 13:43

Case Narrative Addendum: Manual Integrations for 239403 PEST (Water)

For SAMPLE 239403-007 (GC21 255_014):
Corrected automatically drawn baseline.

For SAMPLE 239403-008 (GC21 255_015):
Corrected automatically drawn baseline.

For CCV PEST_3 (GC21 255_017):
Corrected automatically drawn baseline.

For CCV PEST_4 (GC21 255_010):
Corrected automatically drawn baseline.

For BLANK QC655486 (GC21 255_011):
Corrected automatically drawn baseline.

For BSD QC655488 (GC21 255_013):
Corrected automatically drawn baseline.

For Calibration GC21 (242328737001):
Corrected automatically drawn baseline in all levels.

For ICV PEST_ICV (GC21 228_019):
Corrected automatically drawn baseline.

Sample Raw Data

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8081B

Inst	: GC21	Lab ID	: 239403-007	Client ID	: FB.09042012
Seqnum	: 242367635014	Matrix	: Water	Acct	: ARCSF (JG)
File	: 255_014	Batch	: 190334	Time	: 11-SEP-2012 14:05
Cal	: 242328737001	Caldate	: 15-AUG-2012		
IDF	: 1.0	Raw Units	: pg/uL	Units	: ug/L

1040.00 mL --> 10.0 ml = 0.009615 ml/ml PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Blank	Flags
alpha-BHC	A	0.1043	ND			0.05		u
Heptachlor epoxide	A	0.3563	ND			0.05		u
Dieldrin	A	0.5755	ND	0.06 J	167%	0.1		u

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	32.03	0.3846	0.3080	80	26-128	u
Decachlorobiphenyl	A	34.47	0.3846	0.3315	86	29-122	u

TKB 09/11/12 : Corrected automatically drawn baseline.

Heptachlor epoxide not quantifiable (B) alpha-BHC not quantifiable (B)

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-014**
Sample Name: **239403-007,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:05:00 PM
Analysis Date: 9/11/2012 3:43:10 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.627	5.620	36701	32.028
alpha-BHC	6.267	6.253	172	0.104
gamma-BHC	6.720	6.713	432	0.291
beta-BHC	6.987	6.960	651	1.144
delta-BHC	7.307	7.300	884	0.697
Heptachlor	7.533	7.533	85	0.069
Aldrin	7.993	7.987	201	0.156
Isodrin	8.420	8.420	309	0.314
Heptachlor epoxide	8.540	8.533	396	0.356
gamma-Chlordane	8.873	8.867	432	0.403
alpha-Chlordane	8.973	8.967	282	0.277
Endosulfan I	9.033	9.027	310	0.329
4,4'-DDE		9.173		0.000 BDL
Dieldrin	9.360	9.353	551	0.576
Endrin	9.627	9.620	447	0.689
4,4'-DDD	9.793	9.773	404	0.597
Endosulfan II	9.860	9.860	836	1.093
Endrin aldehyde	10.007	10.000	1328	2.349
4,4'-DDT	10.127	10.113	639	0.954
Endosulfan sulfate	10.260	10.253	1311	2.183
Methoxychlor	10.613	10.600	971	3.742
Endrin ketone	10.773	10.767	946	1.369
Decachlorobiphenyl	12.533	12.527	19305	34.472

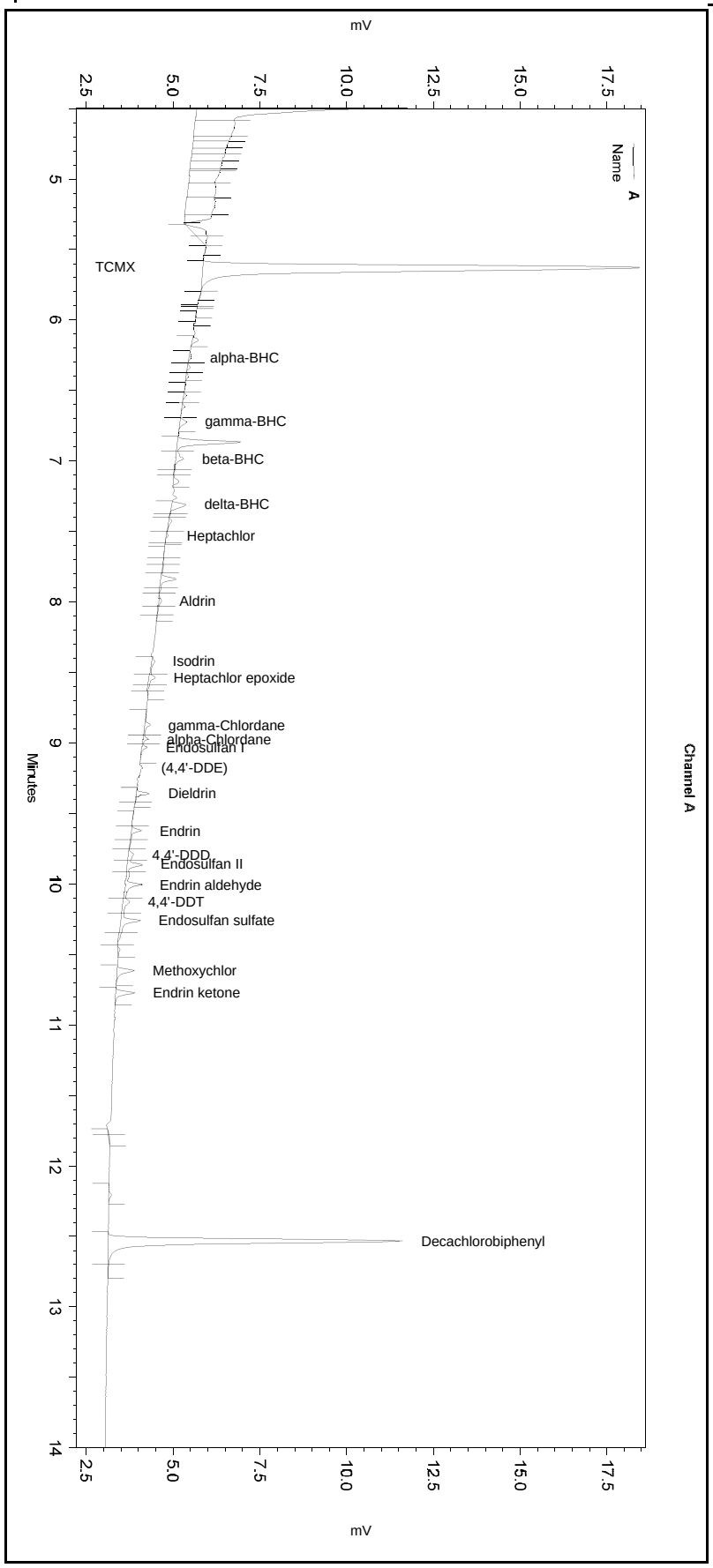
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.707	25448	15.893
alpha-BHC	5.413	5.420	154	0.000
gamma-BHC	5.813	5.840	240	0.000
beta-BHC	5.907	5.927	2295	3.320
delta-BHC	6.267	6.273	41	0.000
Heptachlor		6.360		0.000 BDL
Aldrin	6.713	6.740	79	0.000
Isodrin	7.193	7.193	6	0.000
Heptachlor epoxide	7.393	7.380	56	0.000
gamma-Chlordane	7.580	7.587	62	0.000
alpha-Chlordane	7.733	7.747	251	0.000
Endosulfan I	7.793	7.820	126	0.000
4,4'-DDE		7.907		0.000 BDL
Dieldrin	8.107	8.127	34	6.478
Endrin	8.480	8.467	842	0.000
4,4'-DDD	8.547	8.547	582	0.000
Endosulfan II	8.667	8.693	278	0.000
4,4'-DDT	8.893	8.893	13	0.000
Endrin aldehyde		9.047		0.000 BDL
Endosulfan sulfate		9.333		0.000 BDL
Methoxychlor		9.567		0.000 BDL
Endrin ketone		9.873		0.000 BDL
Decachlorobiphenyl	10.967	10.967	14371	27.363

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-014**
Sample Name: **239403-007,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:05:00 PM
Analysis Date: 9/11/2012 3:43:10 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

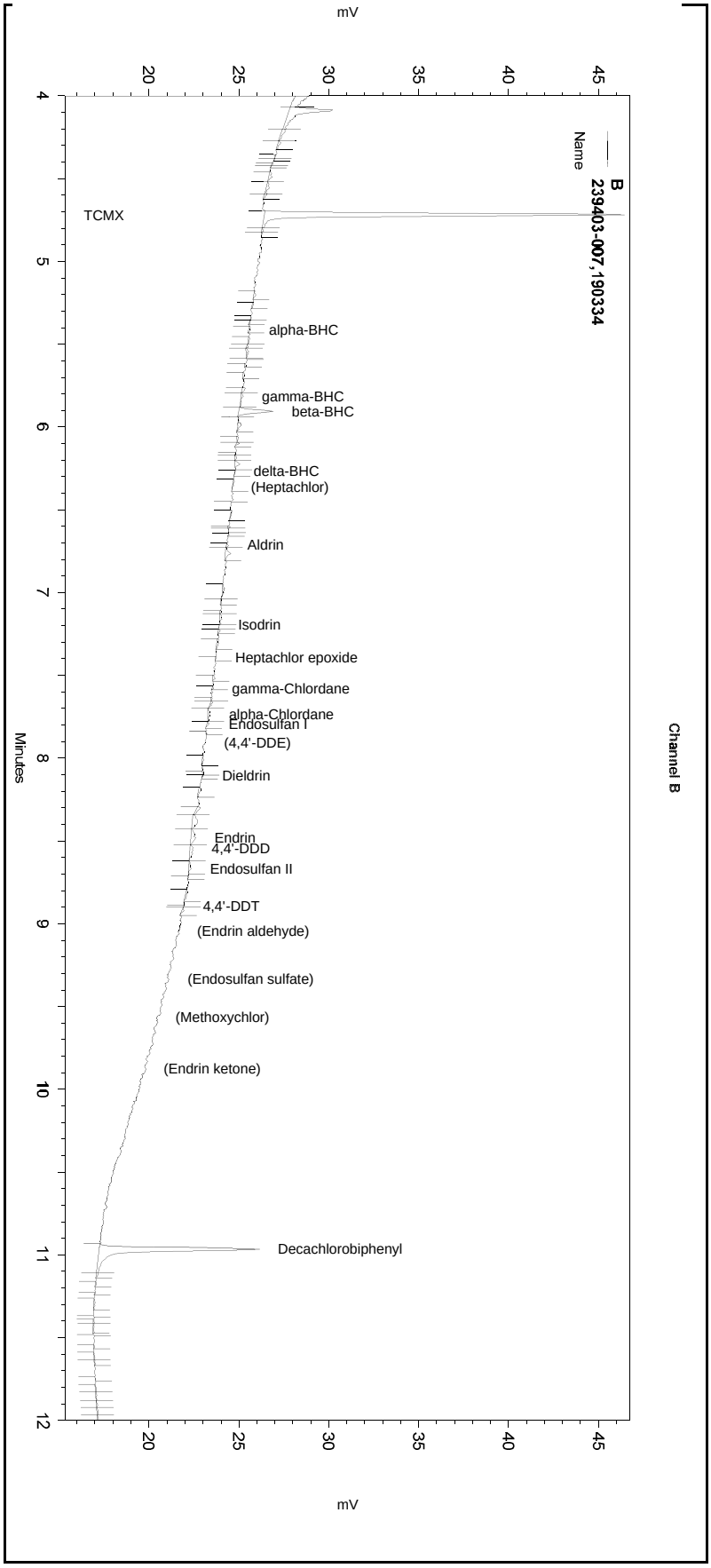
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	5.507	6.548	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-014**
Sample Name: **239403-007,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:05:00 PM
Analysis Date: 9/11/2012 3:43:10 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	5.184	10.255	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-014**
Sample Name: **239403-007,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:05:00 PM
Analysis Date: 9/11/2012 2:23:10 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.627	5.620	41753	36.437
alpha-BHC	6.267	6.253	172	0.104
gamma-BHC	6.720	6.713	432	0.291
beta-BHC	6.987	6.960	651	1.144
delta-BHC	7.307	7.300	884	0.697
Heptachlor	7.533	7.533	85	0.069
Aldrin	7.993	7.987	201	0.156
Isodrin	8.420	8.420	309	0.314
Heptachlor epoxide	8.540	8.533	396	0.356
gamma-Chlordane	8.873	8.867	432	0.403
alpha-Chlordane	8.973	8.967	282	0.277
Endosulfan I	9.033	9.027	310	0.329
4,4'-DDE		9.173		0.000 BDL
Dieldrin	9.360	9.353	551	0.576
Endrin	9.627	9.620	447	0.689
4,4'-DDD	9.793	9.773	404	0.597
Endosulfan II	9.860	9.860	836	1.093
Endrin aldehyde	10.007	10.000	1328	2.349
4,4'-DDT	10.127	10.113	639	0.954
Endosulfan sulfate	10.260	10.253	1311	2.183
Methoxychlor	10.613	10.600	971	3.742
Endrin ketone	10.773	10.767	946	1.369
Decachlorobiphenyl	12.533	12.527	19305	34.472

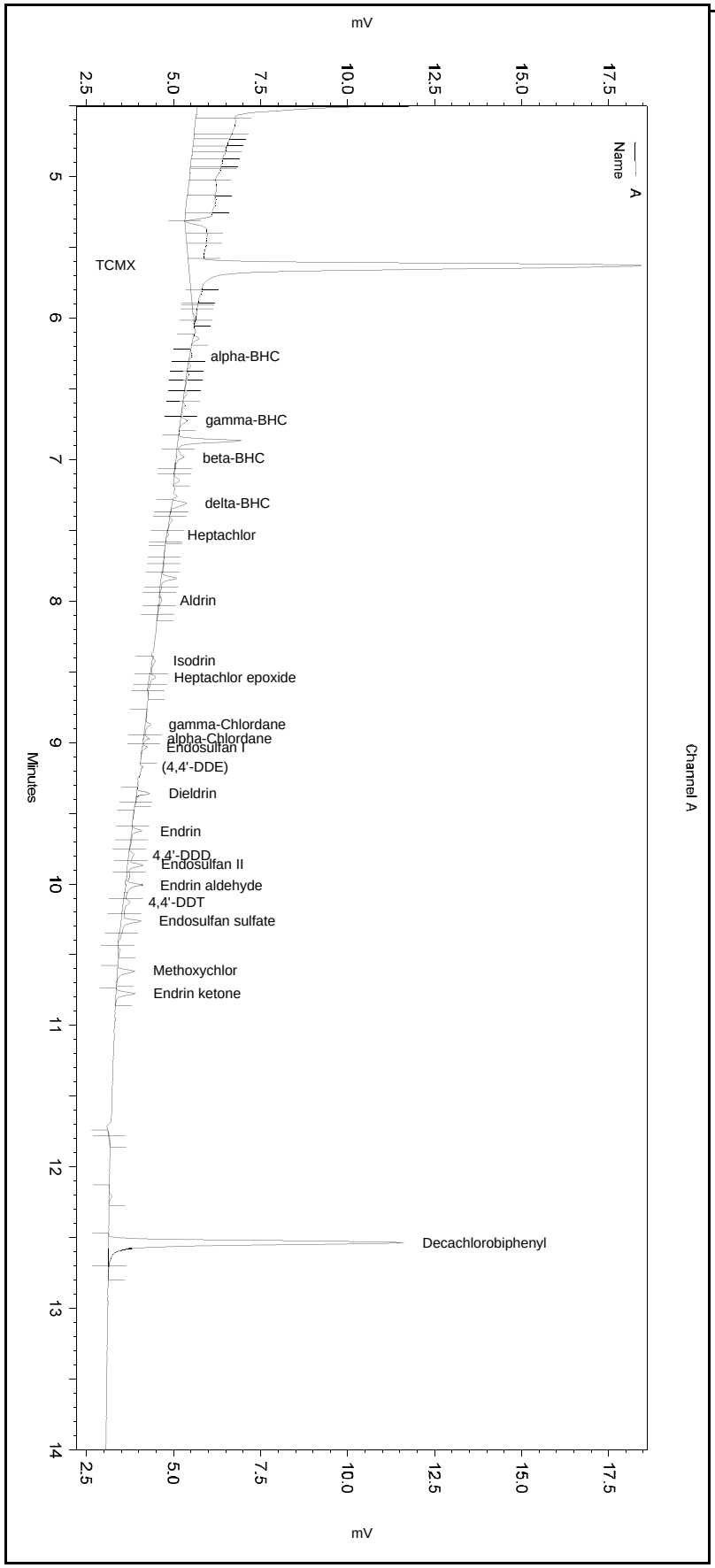
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.707	25448	15.893
alpha-BHC	5.413	5.420	165	0.000
gamma-BHC	5.813	5.840	345	0.000
beta-BHC	5.907	5.927	2368	3.520
delta-BHC	6.267	6.273	276	0.000
Heptachlor		6.360		0.000 BDL
Aldrin	6.713	6.740	118	0.000
Isodrin	7.193	7.193	70	0.000
Heptachlor epoxide	7.393	7.380	56	0.000
gamma-Chlordane	7.580	7.587	208	0.000
alpha-Chlordane	7.733	7.747	472	0.000
Endosulfan I	7.793	7.820	236	0.000
4,4'-DDE		7.907		0.000 BDL
Dieldrin	8.107	8.127	460	6.553
Endrin	8.480	8.467	1151	0.000
4,4'-DDD	8.547	8.547	1152	0.000
Endosulfan II	8.667	8.693	1013	0.000
4,4'-DDT	8.893	8.893	129	0.000
Endrin aldehyde		9.047		0.000 BDL
Endosulfan sulfate		9.333		0.000 BDL
Methoxychlor		9.567		0.000 BDL
Endrin ketone		9.873		0.000 BDL
Decachlorobiphenyl	10.967	10.967	14371	27.363

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-014**
Sample Name: **239403-007,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:05:00 PM
Analysis Date: 9/11/2012 2:23:10 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

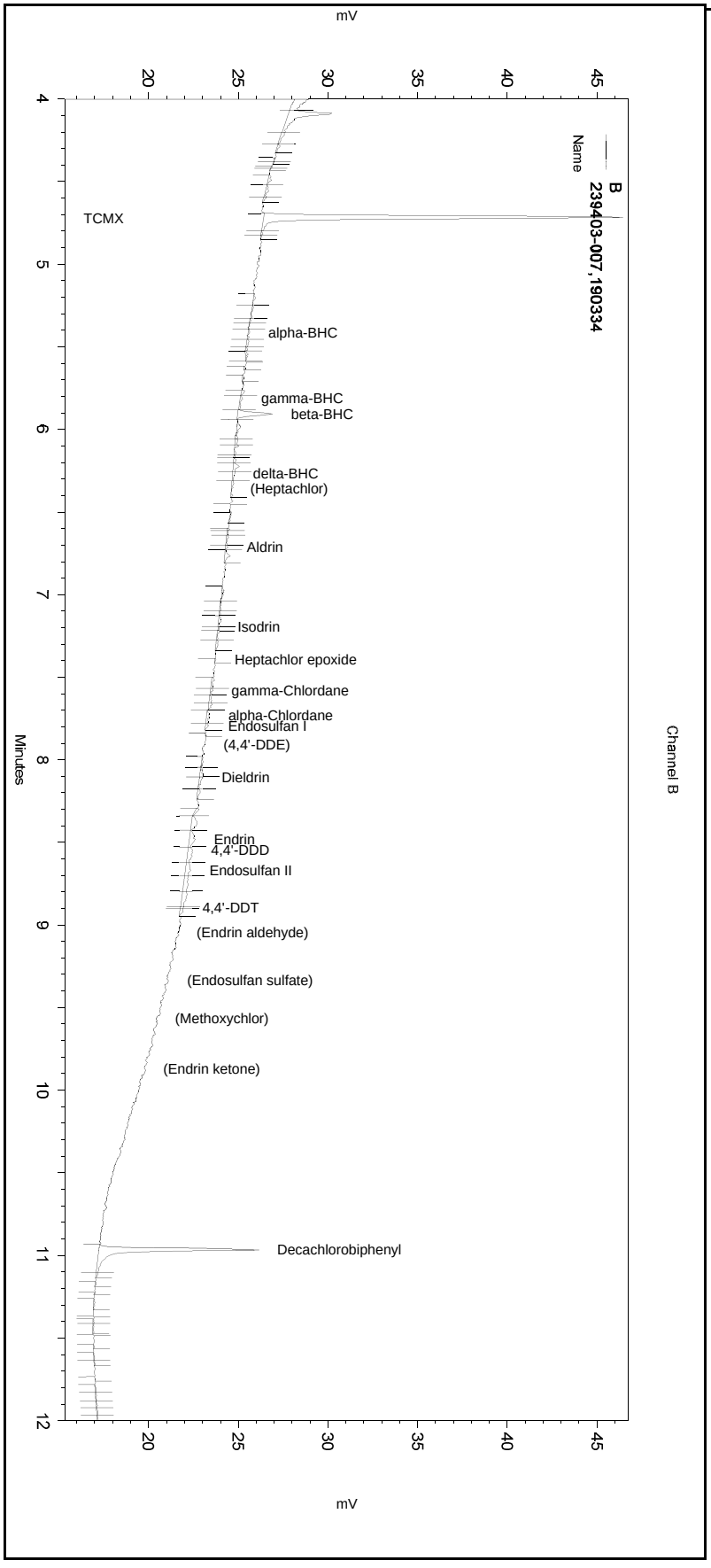
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-014_EE1E.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-014**
Sample Name: **239403-007,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:05:00 PM
Analysis Date: 9/11/2012 2:23:10 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-014_EE1E.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8081B

Inst	: GC21	Lab ID	: 239403-008	Client ID	: EB.09042012
Seqnum	: 242367635015	Matrix	: Water	Acct	: ARCSF (JG)
File	: 255_015	Batch	: 190334	Time	: 11-SEP-2012 14:26
Cal	: 242328737001	Caldate	: 15-AUG-2012		
IDF	: 1.0	Raw Units	: pg/uL	Units	: ug/L

1060.00 mL --> 10.0 ml = 0.009434 ml/ml PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Blank	Flags
alpha-BHC	A	0.01273	ND	ND		0.05		u
Heptachlor epoxide	A	0	ND	ND		0.05		u
Dieldrin	A	0	ND	0.06 J		0.09		u

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	35.22	0.3774	0.3323	88	26-128	u
Decachlorobiphenyl	A	38.16	0.3774	0.3600	95	29-122	u

TKB 09/11/12 : Corrected automatically drawn baseline.

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-015**
Sample Name: **239403-008,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:26:55 PM
Analysis Date: 9/11/2012 3:43:14 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.627	5.620	40362	35.223
alpha-BHC	6.260	6.253	21	0.013
gamma-BHC	6.727	6.713	209	0.141
beta-BHC	6.953	6.960	16	0.028
delta-BHC		7.300		0.000 BDL
Heptachlor	7.513	7.533	52	0.042
Aldrin	8.000	7.987	5	0.004
Isodrin		8.420		0.000 BDL
Heptachlor epoxide		8.533		0.000 BDL
gamma-Chlordane		8.867		0.000 BDL
alpha-Chlordane		8.967		0.000 BDL
Endosulfan I		9.027		0.000 BDL
4,4'-DDE		9.173		0.000 BDL
Dieldrin		9.353		0.000 BDL
Endrin		9.620		0.000 BDL
4,4'-DDD		9.773		0.000 BDL
Endosulfan II		9.860		0.000 BDL
Endrin aldehyde	10.007	10.000	31	0.055
4,4'-DDT		10.113		0.000 BDL
Endosulfan sulfate		10.253		0.000 BDL
Methoxychlor		10.600		0.000 BDL
Endrin ketone	10.740	10.767	57	0.082
Decachlorobiphenyl	12.533	12.527	21372	38.162

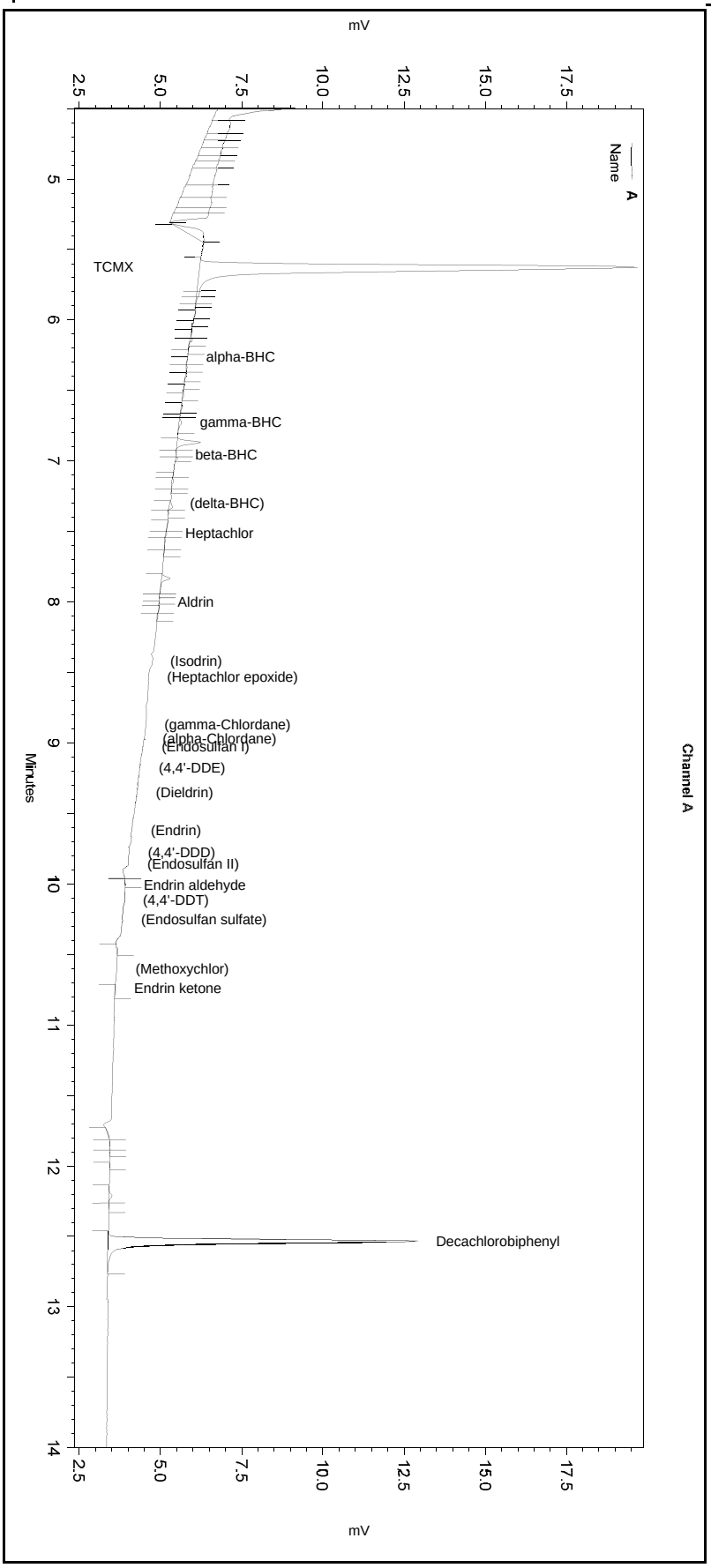
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	26084	16.183
alpha-BHC		5.420		0.000 BDL
gamma-BHC		5.840		0.000 BDL
beta-BHC	5.907	5.927	1216	0.000
delta-BHC	6.280	6.273	123	0.000
Heptachlor	6.373	6.360	236	0.000
Aldrin	6.760	6.740	329	0.000
Isodrin	7.167	7.193	198	0.000
Heptachlor epoxide		7.380		0.000 BDL
gamma-Chlordane		7.587		0.000 BDL
alpha-Chlordane	7.740	7.747	91	0.000
Endosulfan I		7.820		0.000 BDL
4,4'-DDE	7.900	7.907	201	3.598
Dieldrin	8.100	8.127	212	6.509
Endrin	8.473	8.467	788	0.000
4,4'-DDD	8.553	8.547	571	0.000
Endosulfan II		8.693		0.000 BDL
4,4'-DDT	8.907	8.893	49	0.000
Endrin aldehyde		9.047		0.000 BDL
Endosulfan sulfate		9.333		0.000 BDL
Methoxychlor		9.567		0.000 BDL
Endrin ketone		9.873		0.000 BDL
Decachlorobiphenyl	10.967	10.967	15505	29.018

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-015**
Sample Name: **239403-008,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:26:55 PM
Analysis Date: 9/11/2012 3:43:14 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

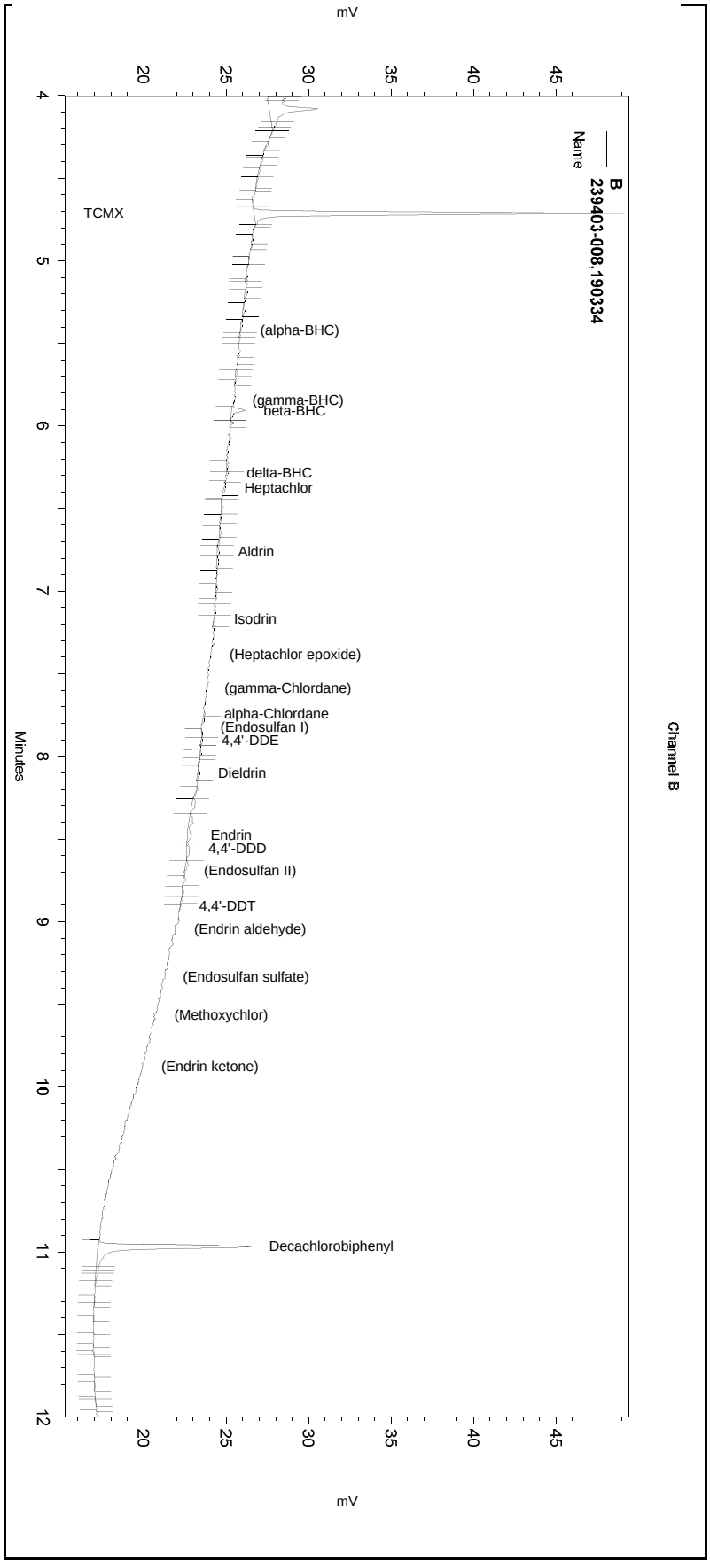
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	5.977	12.021	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-015**
Sample Name: **239403-008,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:26:55 PM
Analysis Date: 9/11/2012 3:43:14 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	4.272	10.522	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-015**
Sample Name: **239403-008,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:26:55 PM
Analysis Date: 9/11/2012 2:45:10 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.627	5.620	40499	35.342
alpha-BHC	6.260	6.253	43	0.026
gamma-BHC	6.727	6.713	228	0.154
beta-BHC	6.953	6.960	97	0.171
delta-BHC		7.300		0.000 BDL
Heptachlor	7.513	7.533	78	0.063
Aldrin	8.000	7.987	33	0.026
Isodrin		8.420		0.000 BDL
Heptachlor epoxide		8.533		0.000 BDL
gamma-Chlordane		8.867		0.000 BDL
alpha-Chlordane		8.967		0.000 BDL
Endosulfan I		9.027		0.000 BDL
4,4'-DDE		9.173		0.000 BDL
Dieldrin		9.353		0.000 BDL
Endrin		9.620		0.000 BDL
4,4'-DDD		9.773		0.000 BDL
Endosulfan II		9.860		0.000 BDL
Endrin aldehyde	10.007	10.000	51	0.090
4,4'-DDT		10.113		0.000 BDL
Endosulfan sulfate		10.253		0.000 BDL
Methoxychlor		10.600		0.000 BDL
Endrin ketone	10.740	10.767	57	0.082
Decachlorobiphenyl	12.533	12.527	21372	38.162

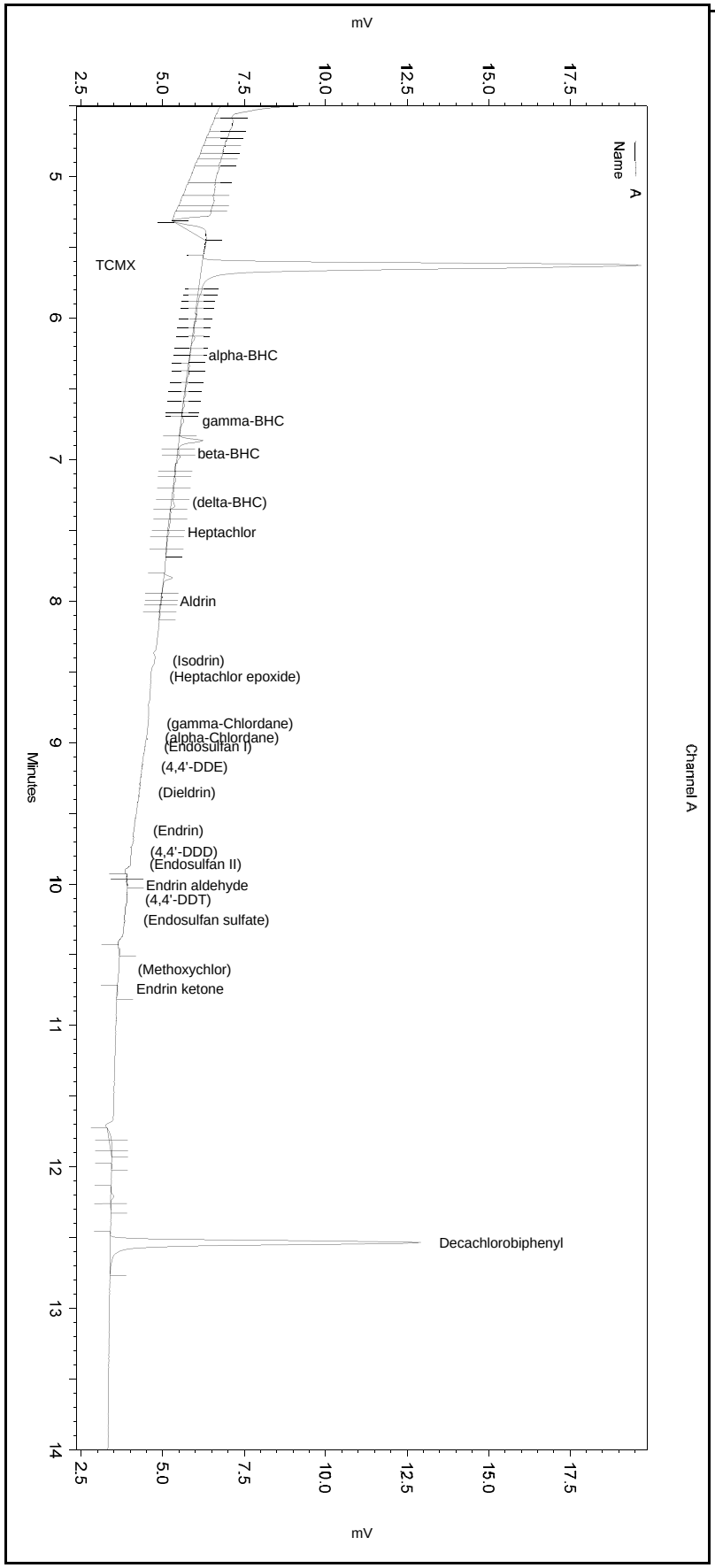
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	30007	17.938
alpha-BHC		5.420		0.000 BDL
gamma-BHC		5.840		0.000 BDL
beta-BHC	5.907	5.927	1216	0.000
delta-BHC	6.280	6.273	441	0.000
Heptachlor	6.373	6.360	445	0.000
Aldrin	6.760	6.740	387	0.000
Isodrin	7.167	7.193	379	0.000
Heptachlor epoxide		7.380		0.000 BDL
gamma-Chlordane		7.587		0.000 BDL
alpha-Chlordane	7.740	7.747	127	0.000
Endosulfan I		7.820		0.000 BDL
4,4'-DDE	7.900	7.907	653	3.775
Dieldrin	8.100	8.127	1160	6.675
Endrin	8.473	8.467	934	0.000
4,4'-DDD	8.553	8.547	1218	0.000
Endosulfan II		8.693		0.000 BDL
4,4'-DDT	8.907	8.893	173	0.000
Endrin aldehyde		9.047		0.000 BDL
Endosulfan sulfate		9.333		0.000 BDL
Methoxychlor		9.567		0.000 BDL
Endrin ketone		9.873		0.000 BDL
Decachlorobiphenyl	10.967	10.967	15505	29.018

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-015**
Sample Name: **239403-008,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:26:55 PM
Analysis Date: 9/11/2012 2:45:10 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

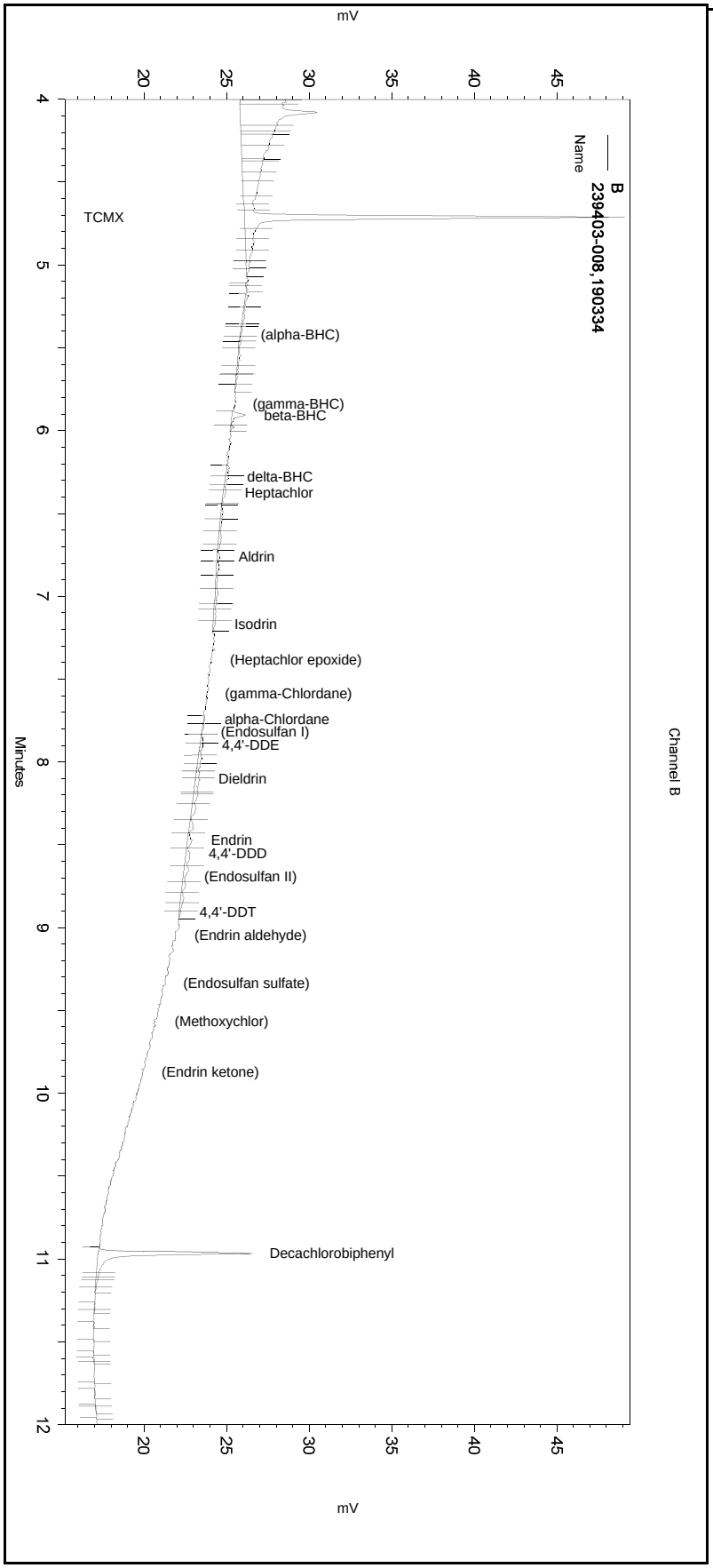
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-015_EE1F.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-015**
Sample Name: **239403-008,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 2:26:55 PM
Analysis Date: 9/11/2012 2:45:10 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-015_EE1F.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

QC Raw Data

CURTIS & TOMPKINS BLANK USER REPORT FOR 239403 PEST Water
EPA 8081B

Inst : GC21 Lab ID : QC655486
Seqnum : 242367635011.1 Matrix : Water
File : 255_011 Batch : 190334 Time : 11-SEP-2012 12:59
Cal : 242328737001 Caldate : 15-AUG-2012
IDF : 1.0 Raw Units : pg/uL Units : ug/L

1000.00 mL --> 10.0 ml = 0.01 ml/ml PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Flags
alpha-BHC	A	0.1025	ND			0.05	u
Heptachlor epoxide	A	0.1476	ND			0.05	u
Dieldrin	A	0.5661	ND	ND		0.1	u

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	30.80	0.4000	0.3080	77	26-128	u
Decachlorobiphenyl	A	36.31	0.4000	0.3631	91	29-122	u

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Heptachlor epoxide not quantifiable (B) alpha-BHC not quantifiable (B)

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-011**
Sample Name: **mb,qc655486,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:59:38 PM
Analysis Date: 9/11/2012 3:44:20 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.620	35299	30.805
alpha-BHC	6.267	6.253	169	0.102
gamma-BHC	6.733	6.713	498	0.336
beta-BHC		6.960		0.000 BDL
delta-BHC	7.313	7.300	692	0.546
Heptachlor	7.547	7.533	63	0.051
Aldrin	8.000	7.987	181	0.140
Isodrin	8.433	8.420	66	0.067
Heptachlor epoxide	8.547	8.533	164	0.148
gamma-Chlordane	8.880	8.867	193	0.180
alpha-Chlordane	8.980	8.967	187	0.184
Endosulfan I	9.040	9.027	208	0.221
4,4'-DDE	9.180	9.173	283	0.297
Dieldrin	9.367	9.353	542	0.566
Endrin	9.633	9.620	488	0.752
4,4'-DDD	9.787	9.773	612	0.905
Endosulfan II	9.867	9.860	819	1.071
Endrin aldehyde	10.007	10.000	947	1.675
4,4'-DDT	10.127	10.113	602	0.899
Endosulfan sulfate	10.267	10.253	1039	1.730
Methoxychlor	10.613	10.600	1457	5.615
Endrin ketone	10.780	10.767	1075	1.556
Decachlorobiphenyl	12.540	12.527	20335	36.311

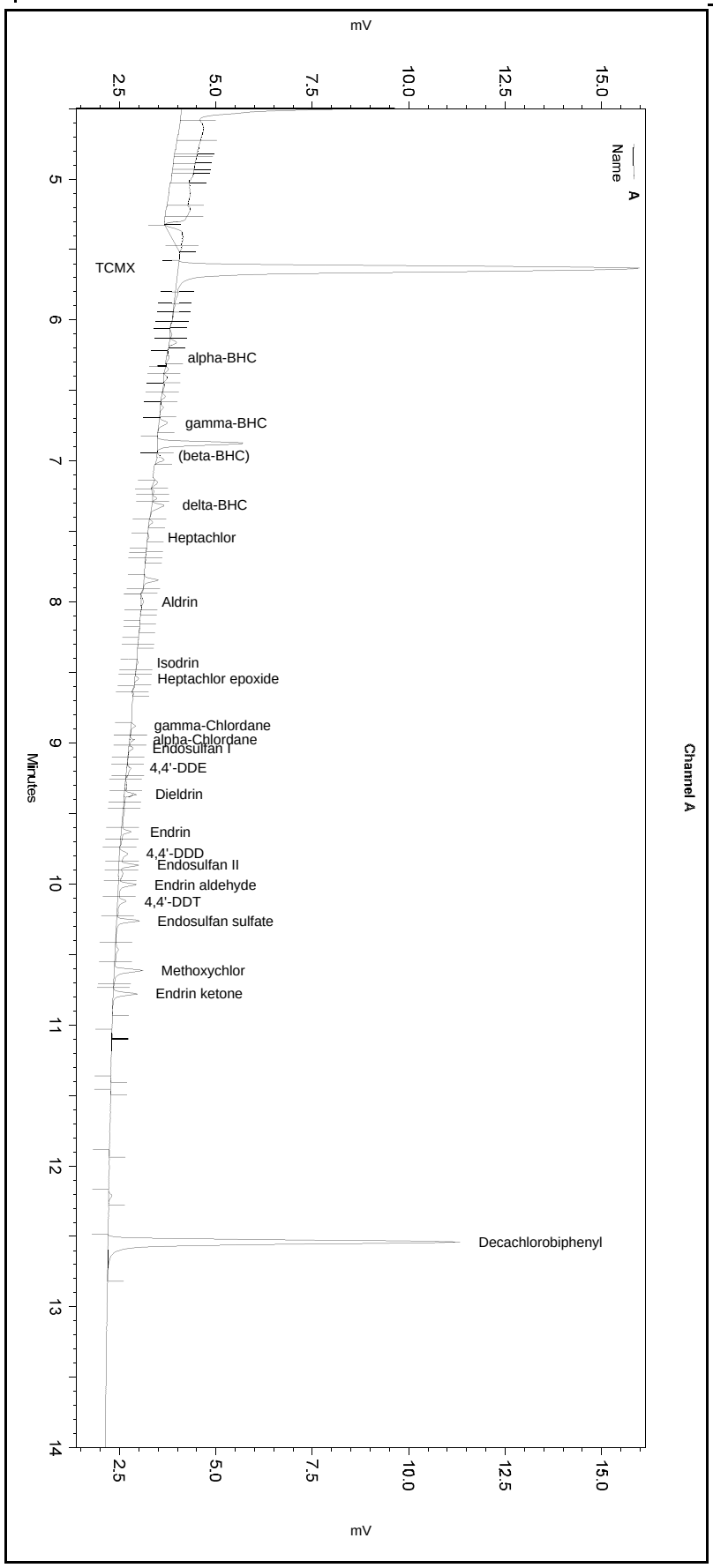
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	28320	17.191
alpha-BHC	5.440	5.420	81	0.000
gamma-BHC	5.813	5.840	277	0.000
beta-BHC	5.907	5.927	2763	4.540
delta-BHC	6.273	6.273	136	0.000
Heptachlor		6.360		0.000 BDL
Aldrin	6.760	6.740	580	0.000
Isodrin	7.213	7.193	329	0.000
Heptachlor epoxide	7.360	7.380	99	0.000
gamma-Chlordane	7.580	7.587	171	0.000
alpha-Chlordane	7.760	7.747	88	0.000
Endosulfan I	7.827	7.820	110	0.000
4,4'-DDE		7.907		0.000 BDL
Dieldrin		8.127		0.000 BDL
Endrin	8.467	8.467	464	0.000
4,4'-DDD	8.540	8.547	122	0.000
Endosulfan II		8.693		0.000 BDL
4,4'-DDT	8.913	8.893	186	0.000
Endrin aldehyde	9.060	9.047	106	0.000
Endosulfan sulfate		9.333		0.000 BDL
Methoxychlor		9.567		0.000 BDL
Endrin ketone		9.873		0.000 BDL
Decachlorobiphenyl	10.973	10.967	17426	31.650

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-011**
Sample Name: **mb,qc655486,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:59:38 PM
Analysis Date: 9/11/2012 3:44:20 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

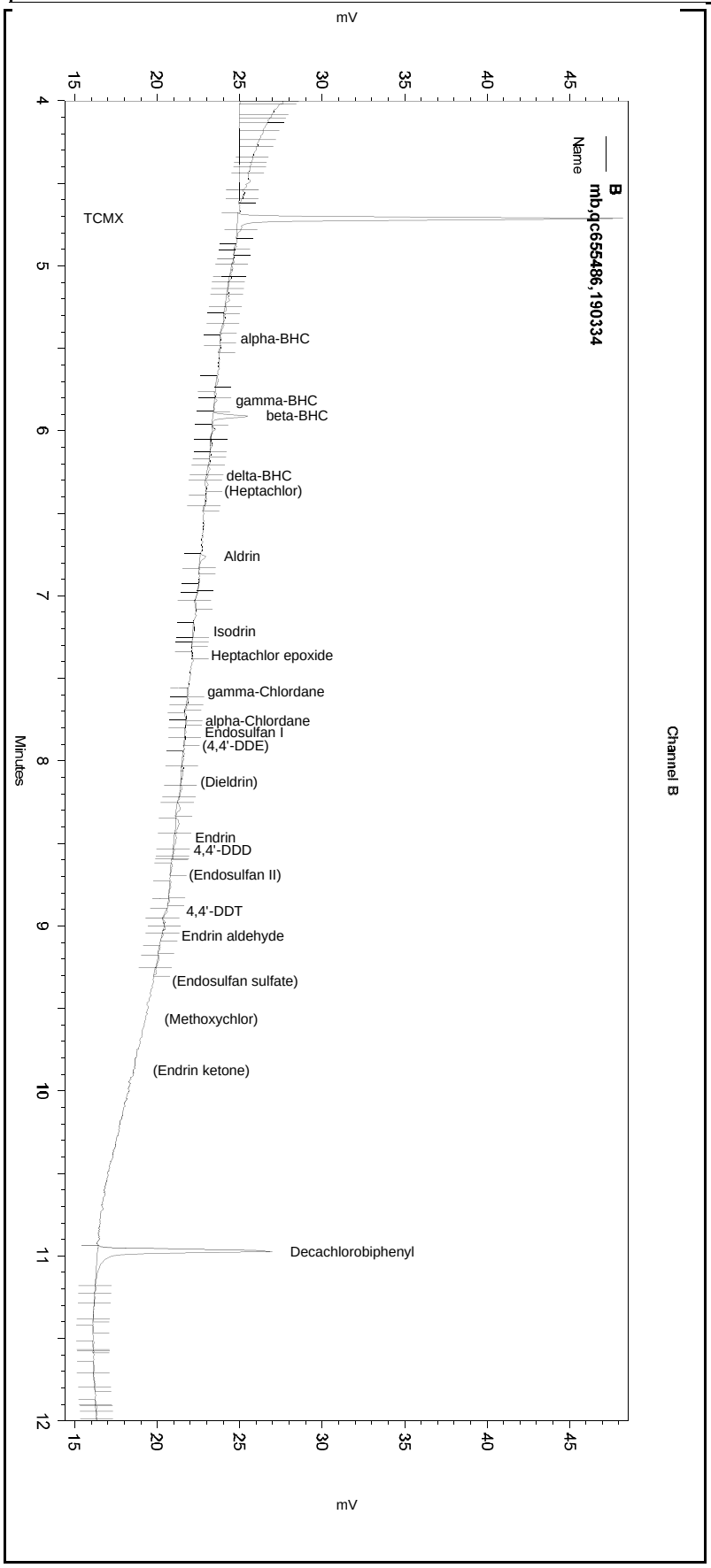
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	6.039	8.706	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-011**
Sample Name: **mb,qc655486,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:59:38 PM
Analysis Date: 9/11/2012 3:44:20 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	4.957	10.59	0
Yes	Reset Baseline	9.35	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-011**
Sample Name: **mb,qc655486,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:59:38 PM
Analysis Date: 9/11/2012 1:17:48 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.620	35386	30.880
alpha-BHC	6.267	6.253	328	0.199
gamma-BHC	6.733	6.713	514	0.347
beta-BHC		6.960		0.000 BDL
delta-BHC	7.313	7.300	1016	0.801
Heptachlor	7.547	7.533	125	0.102
Aldrin	8.000	7.987	314	0.243
Isodrin	8.433	8.420	92	0.093
Heptachlor epoxide	8.547	8.533	291	0.262
gamma-Chlordane	8.880	8.867	193	0.180
alpha-Chlordane	8.980	8.967	187	0.184
Endosulfan I	9.040	9.027	208	0.221
4,4'-DDE	9.180	9.173	283	0.297
Dieldrin	9.367	9.353	542	0.566
Endrin	9.633	9.620	488	0.752
4,4'-DDD	9.787	9.773	612	0.905
Endosulfan II	9.867	9.860	819	1.071
Endrin aldehyde	10.007	10.000	947	1.675
4,4'-DDT	10.127	10.113	602	0.899
Endosulfan sulfate	10.267	10.253	1039	1.730
Methoxychlor	10.613	10.600	1457	5.615
Endrin ketone	10.780	10.767	1075	1.556
Decachlorobiphenyl	12.540	12.527	20335	36.311

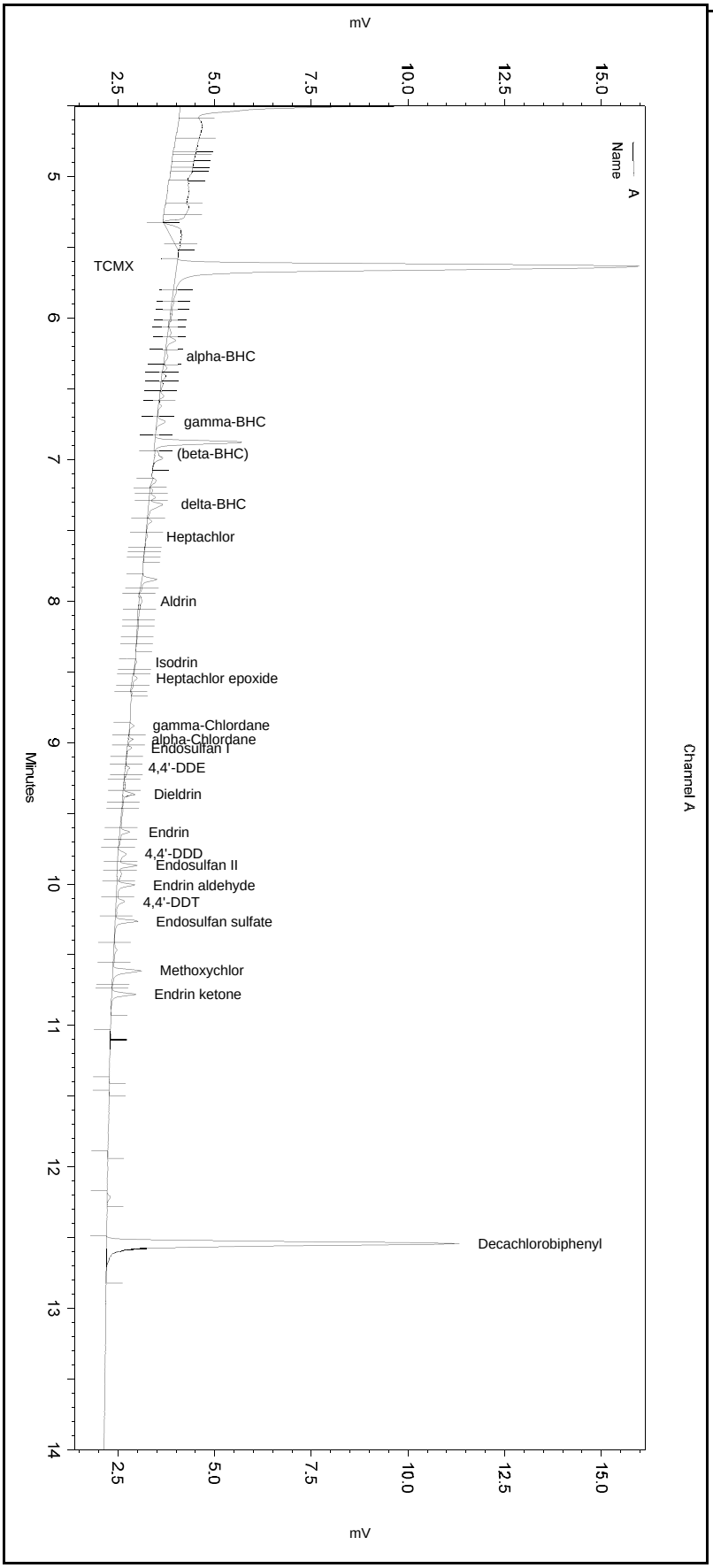
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	28320	17.191
alpha-BHC	5.440	5.420	268	0.000
gamma-BHC	5.813	5.840	569	0.000
beta-BHC	5.907	5.927	3040	5.205
delta-BHC	6.273	6.273	183	0.000
Heptachlor		6.360		0.000 BDL
Aldrin	6.760	6.740	674	0.000
Isodrin	7.213	7.193	378	0.000
Heptachlor epoxide	7.360	7.380	99	0.000
gamma-Chlordane	7.580	7.587	266	0.000
alpha-Chlordane	7.760	7.747	150	0.000
Endosulfan I	7.827	7.820	110	0.000
4,4'-DDE		7.907		0.000 BDL
Dieldrin		8.127		0.000 BDL
Endrin	8.467	8.467	2967	0.000
4,4'-DDD	8.540	8.547	1343	0.000
Endosulfan II		8.693		0.000 BDL
4,4'-DDT	8.913	8.893	2649	0.000
Endrin aldehyde	9.060	9.047	3303	0.000
Endosulfan sulfate	9.340	9.333	3618	0.000
Methoxychlor	9.567	9.567	1037	1.068
Endrin ketone		9.873		0.000 BDL
Decachlorobiphenyl	10.973	10.967	17426	31.650

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-011**
Sample Name: **mb,qc655486,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:59:38 PM
Analysis Date: 9/11/2012 1:17:48 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

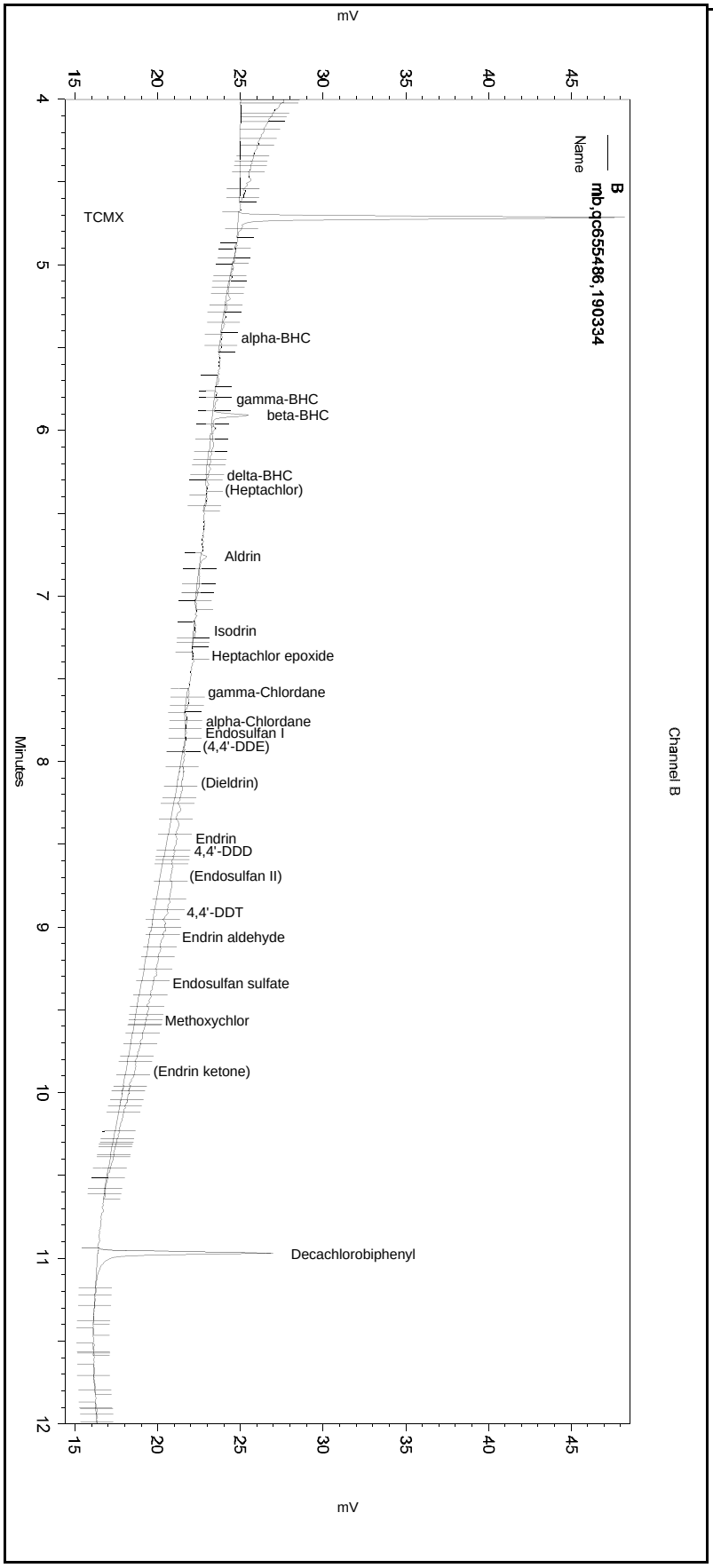
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-011_EE1B.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-011**
Sample Name: **mb,qc655486,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:59:38 PM
Analysis Date: 9/11/2012 1:17:48 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-011_EE1B.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 PEST Water
EPA 8081B

Type : BS
Inst : GC21
Seqnum : 242367635012.1
File : 255_012
IDF : 1.0
Lab ID : QC655487
Matrix : Water
Batch : 190334
Time : 11-SEP-2012 13:21
Cal : 242328737001
Units : ug/L

Type : BSD
Inst : GC21
Seqnum : 242367635013.1
File : 255_013
IDF : 1.0
Lab ID : QC655488
Matrix : Water
Batch : 190334
Time : 11-SEP-2012 13:43
Cal : 242328737001

BS: 1000.00 mL --> 10.0 ml = 0.01 ml/ml PDF
BSD: 1000.00 mL --> 10.0 ml = 0.01 ml/ml PDF

Analyte	Spiked	BS Raw	BS Result	Ch	%Rec	BSD Raw	BSD Result	Ch	%Rec	Limits	RPD	Lim	Flags
alpha-BHC	0.2000	24.95	0.2495	A	125	20.64	0.2064	A	103	45-148	19	20	u
Heptachlor epoxide	0.2000	24.54	0.2454	A	123	21.62	0.2162	A	108	57-133	13	50	u
Dieldrin	0.4000	55.03	0.5503	A	138	49.78	0.4978	A	124	51-149	10	37	u
TCMX	0.4000	38.41	0.3841	A	96	32.02	0.3202	A	80	26-128			u
Decachlorobiphenyl	0.4000	41.93	0.4193	A	105	33.64	0.3364	A	84	29-122			u

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-012**
Sample Name: **bs,qc655487,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:21:31 PM
Analysis Date: 9/11/2012 3:43:00 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.600	5.620	44015	38.411
alpha-BHC	6.240	6.253	41147	24.948
gamma-BHC	6.700	6.713	35924	24.222
beta-BHC	6.953	6.960	13395	23.546
delta-BHC	7.293	7.300	32505	25.626
Heptachlor	7.527	7.533	27799	22.581
Aldrin	7.987	7.987	31478	24.394
Isodrin	8.420	8.420	23132	23.496
Heptachlor epoxide	8.533	8.533	27273	24.538
gamma-Chlordane	8.867	8.867	26292	24.529
alpha-Chlordane	8.967	8.967	24865	24.418
Endosulfan I	9.027	9.027	23830	25.313
4,4'-DDE	9.173	9.173	46437	48.769
Dieldrin	9.360	9.353	52682	55.028
Endrin	9.620	9.620	35507	54.695
4,4'-DDD	9.780	9.773	30403	44.950
Endosulfan II	9.860	9.860	36481	47.685
Endrin aldehyde	10.000	10.000	29103	51.469
4,4'-DDT	10.120	10.113	29237	43.643
Endosulfan sulfate	10.253	10.253	29847	49.702
Methoxychlor	10.607	10.600	61328	236.344
Endrin ketone	10.773	10.767	36290	52.521
Decachlorobiphenyl	12.533	12.527	23483	41.932

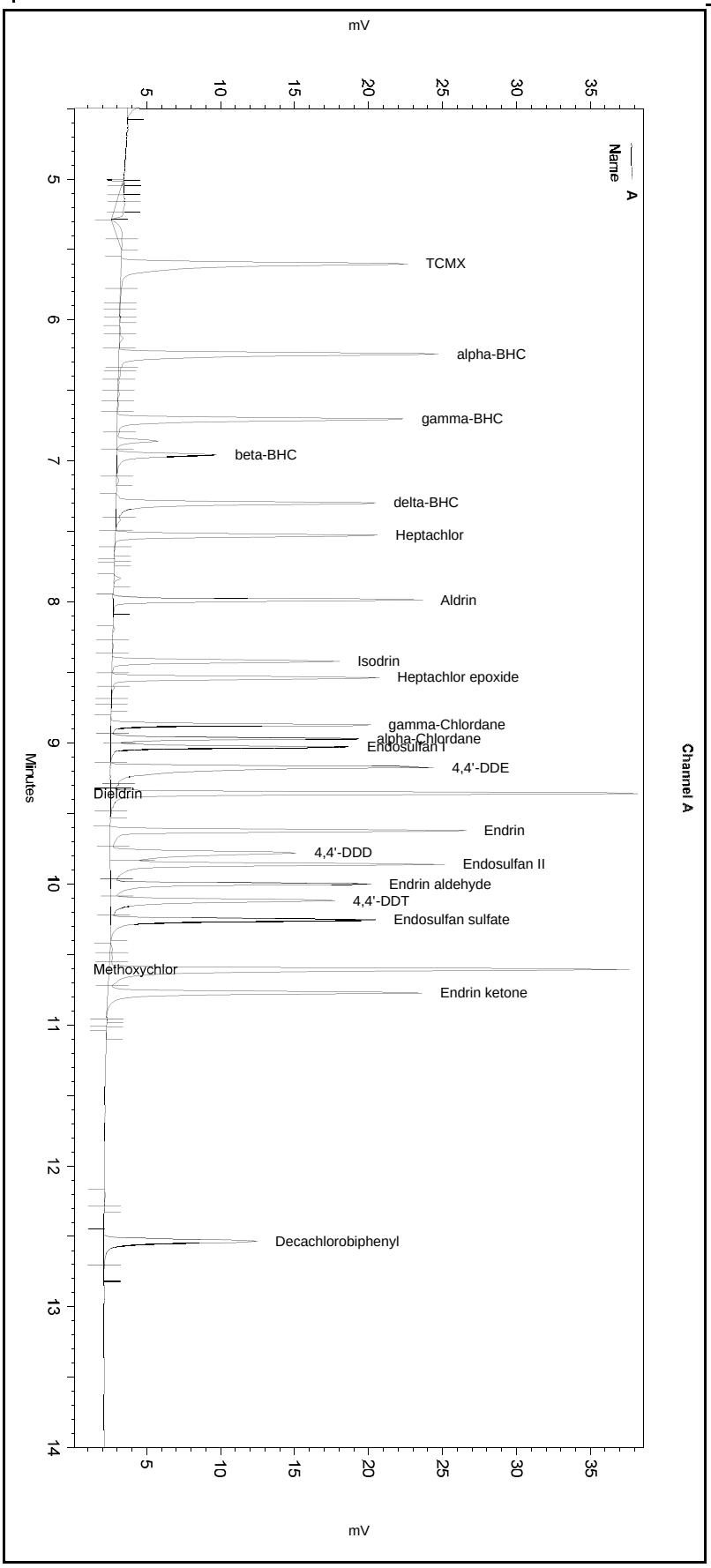
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	28192	17.133
alpha-BHC	5.420	5.420	30348	13.797
gamma-BHC	5.840	5.840	24658	14.273
beta-BHC	5.927	5.927	10597	17.115
delta-BHC	6.273	6.273	19263	13.907
Heptachlor	6.360	6.360	21935	15.996
Aldrin	6.747	6.740	24560	16.608
Isodrin	7.193	7.193	17202	15.788
Heptachlor epoxide	7.380	7.380	20169	16.268
gamma-Chlordane	7.593	7.587	19073	16.028
alpha-Chlordane	7.753	7.747	18150	16.272
Endosulfan I	7.827	7.820	17859	17.338
4,4'-DDE	7.913	7.907	30880	14.412
Dieldrin	8.127	8.127	49662	15.275
Endrin	8.467	8.467	23628	23.822
4,4'-DDD	8.547	8.547	23072	26.065
Endosulfan II	8.700	8.693	30547	25.111
4,4'-DDT	8.893	8.893	23098	19.035
Endrin aldehyde	9.053	9.047	27164	32.557
Endosulfan sulfate	9.333	9.333	25617	32.475
Methoxychlor	9.573	9.567	56706	58.400
Endrin ketone	9.873	9.873	43914	15.404
Decachlorobiphenyl	10.967	10.967	15368	28.823

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-012**
Sample Name: **bs,qc655487,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:21:31 PM
Analysis Date: 9/11/2012 3:43:00 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

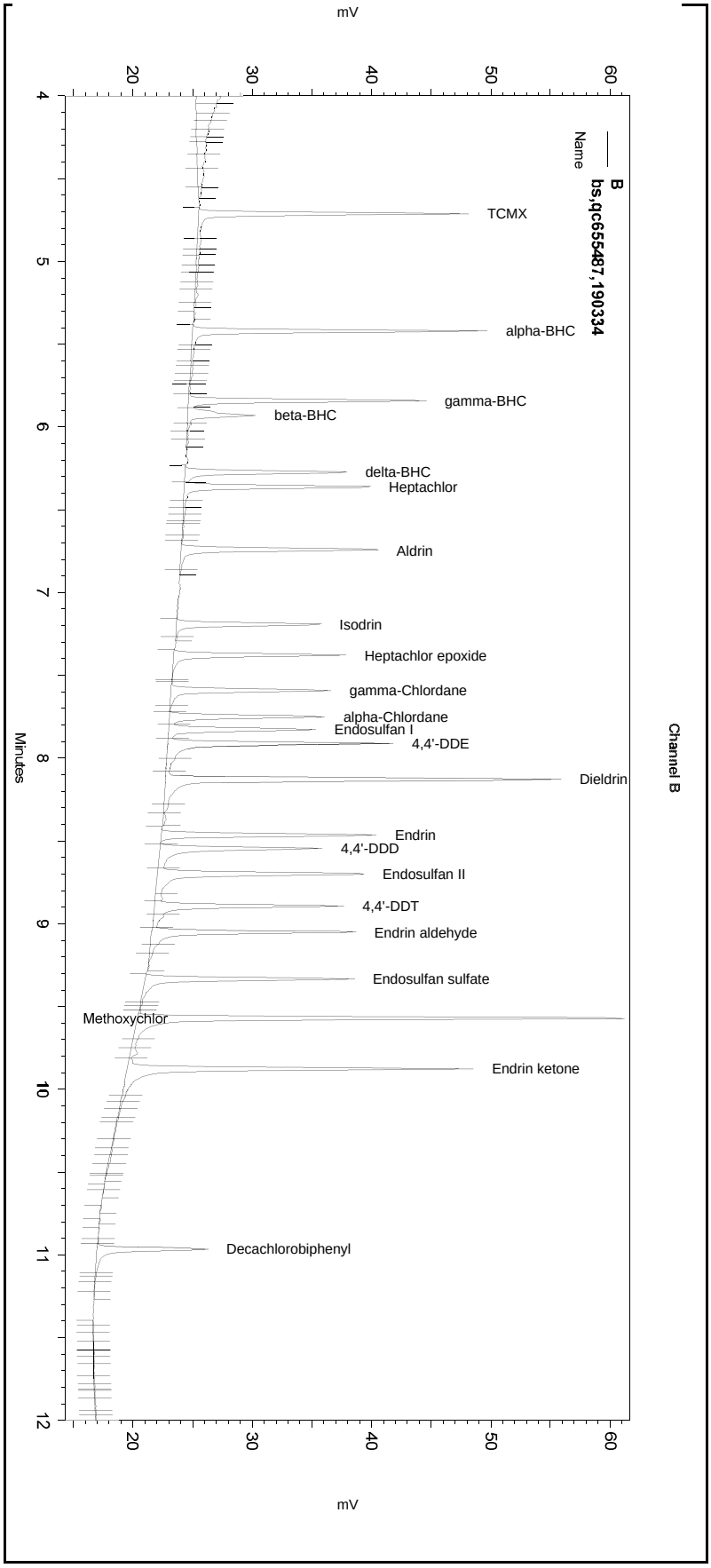
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.507	0	0
Yes	Reset Baseline	7.484	0	0
Yes	Reset Baseline	8.086	0	0
Yes	Split Peak	9.285	0	0
Yes	Reset Baseline	10.402	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-012**
Sample Name: **bs,qc655487,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:21:31 PM
Analysis Date: 9/11/2012 3:43:00 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.622	0	0
Yes	Reset Baseline	5.348	0	0
Yes	Manual Baseline	8.411	9.288	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-012**
Sample Name: **bs,qc655487,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:21:31 PM
Analysis Date: 9/11/2012 1:39:42 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.600	5.620	52809	46.085
alpha-BHC	6.240	6.253	43731	26.515
gamma-BHC	6.700	6.713	37099	25.014
beta-BHC	6.953	6.960	13953	24.527
delta-BHC	7.293	7.300	32725	25.799
Heptachlor	7.527	7.533	28191	22.899
Aldrin	7.987	7.987	31728	24.587
Isodrin	8.420	8.420	23132	23.496
Heptachlor epoxide	8.533	8.533	27273	24.538
gamma-Chlordane	8.867	8.867	26292	24.529
alpha-Chlordane	8.967	8.967	24865	24.418
Endosulfan I	9.027	9.027	23830	25.313
4,4'-DDE	9.173	9.173	47387	49.767
Dieldrin	9.360	9.353	52682	55.028
Endrin	9.620	9.620	35688	54.974
4,4'-DDD	9.780	9.773	30735	45.441
Endosulfan II	9.860	9.860	37186	48.606
Endrin aldehyde	10.000	10.000	29993	53.043
4,4'-DDT	10.120	10.113	30512	45.547
Endosulfan sulfate	10.253	10.253	32221	53.655
Methoxychlor	10.607	10.600	62773	241.913
Endrin ketone	10.773	10.767	37330	54.026
Decachlorobiphenyl	12.533	12.527	23483	41.932

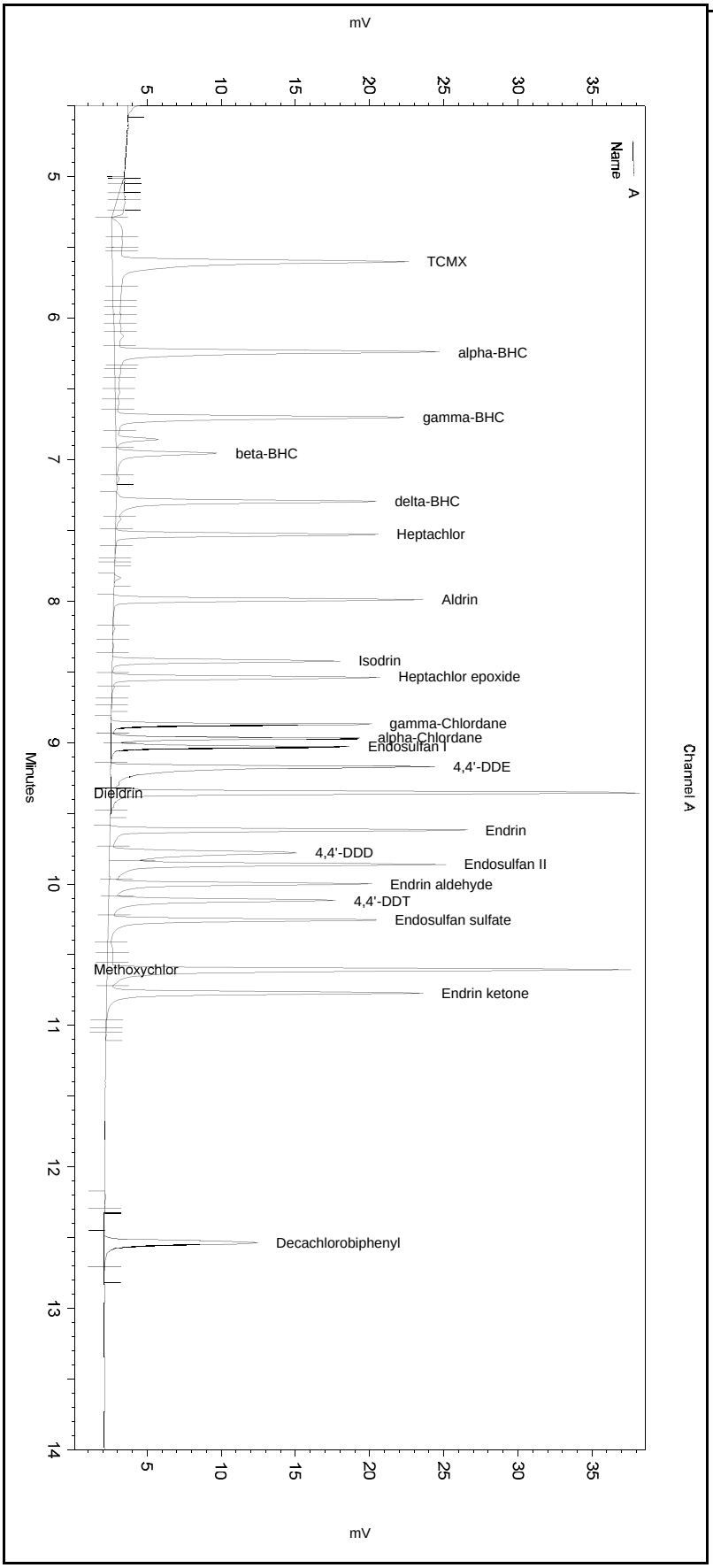
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	39734	22.055
alpha-BHC	5.420	5.420	34358	14.851
gamma-BHC	5.840	5.840	25601	14.575
beta-BHC	5.927	5.927	11356	18.002
delta-BHC	6.273	6.273	19263	13.907
Heptachlor	6.360	6.360	21935	15.996
Aldrin	6.747	6.740	24560	16.608
Isodrin	7.193	7.193	17202	15.788
Heptachlor epoxide	7.380	7.380	20169	16.268
gamma-Chlordane	7.593	7.587	19073	16.028
alpha-Chlordane	7.753	7.747	18150	16.272
Endosulfan I	7.827	7.820	17859	17.338
4,4'-DDE	7.913	7.907	30880	14.412
Dieldrin	8.127	8.127	49662	15.275
Endrin	8.467	8.467	23522	23.756
4,4'-DDD	8.547	8.547	21856	25.389
Endosulfan II	8.700	8.693	27344	23.577
4,4'-DDT	8.893	8.893	21029	17.860
Endrin aldehyde	9.053	9.047	25718	31.844
Endosulfan sulfate	9.333	9.333	25617	32.475
Methoxychlor	9.573	9.567	56706	58.400
Endrin ketone	9.873	9.873	43914	15.404
Decachlorobiphenyl	10.967	10.967	15368	28.823

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-012**
Sample Name: **bs,qc655487,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:21:31 PM
Analysis Date: 9/11/2012 1:39:42 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

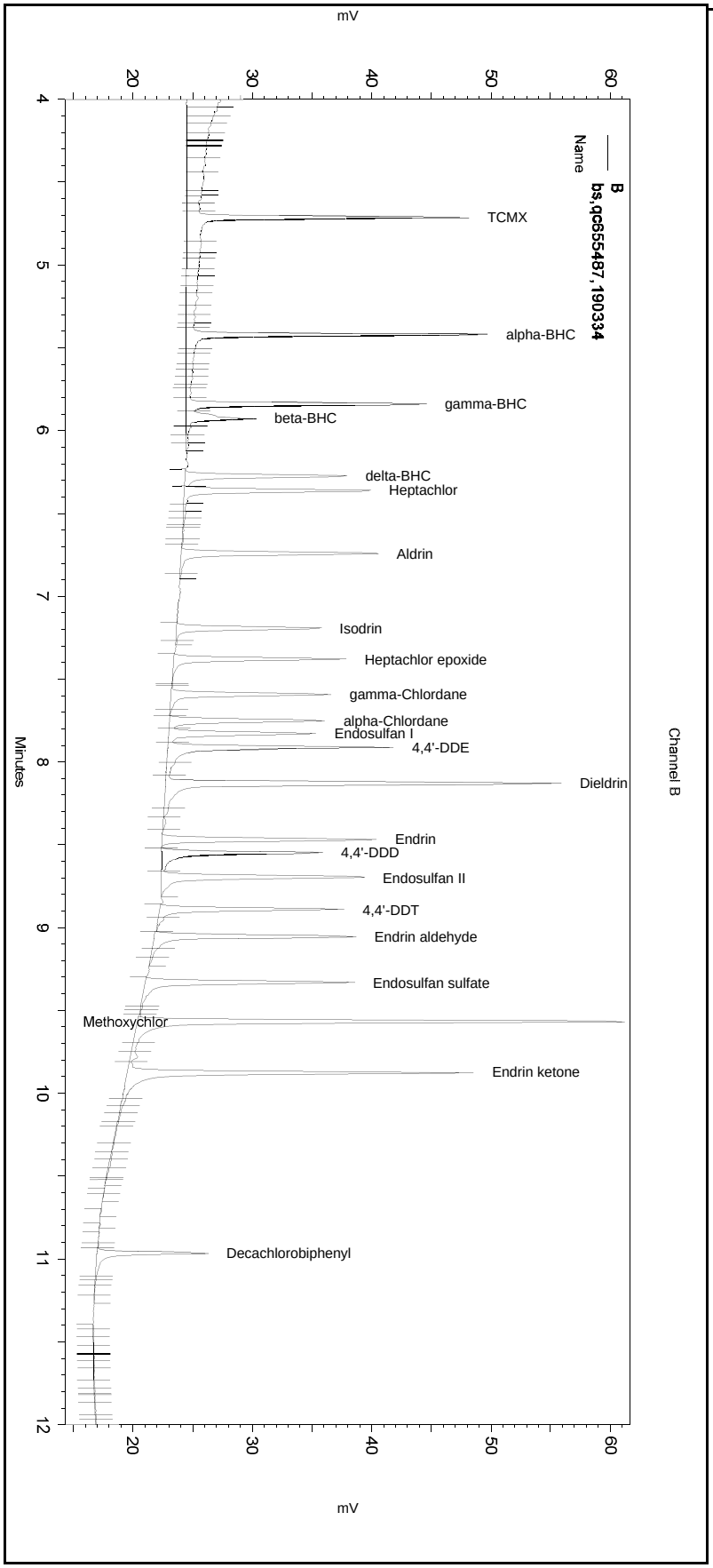
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-012_EE1C.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-012**
Sample Name: **bs,qc655487,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:21:31 PM
Analysis Date: 9/11/2012 1:39:42 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-012_EE1C.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-013**
Sample Name: **bsd,qc655488,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:43:18 PM
Analysis Date: 9/11/2012 3:43:06 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.620	36693	32.021
alpha-BHC	6.267	6.253	34043	20.641
gamma-BHC	6.720	6.713	30472	20.546
beta-BHC	6.967	6.960	12030	21.147
delta-BHC	7.307	7.300	28601	22.548
Heptachlor	7.540	7.533	23716	19.264
Aldrin	8.000	7.987	27894	21.616
Isodrin	8.427	8.420	20346	20.666
Heptachlor epoxide	8.540	8.533	24025	21.616
gamma-Chlordane	8.873	8.867	23417	21.847
alpha-Chlordane	8.973	8.967	22155	21.757
Endosulfan I	9.033	9.027	21220	22.540
4,4'-DDE	9.180	9.173	41798	43.897
Dieldrin	9.360	9.353	47655	49.777
Endrin	9.627	9.620	30712	47.309
4,4'-DDD	9.787	9.773	29331	43.365
Endosulfan II	9.867	9.860	34576	45.195
Endrin aldehyde	10.007	10.000	28015	49.545
4,4'-DDT	10.127	10.113	27364	40.847
Endosulfan sulfate	10.260	10.253	29470	49.074
Methoxychlor	10.613	10.600	55318	213.183
Endrin ketone	10.773	10.767	33629	48.670
Decachlorobiphenyl	12.540	12.527	18838	33.638

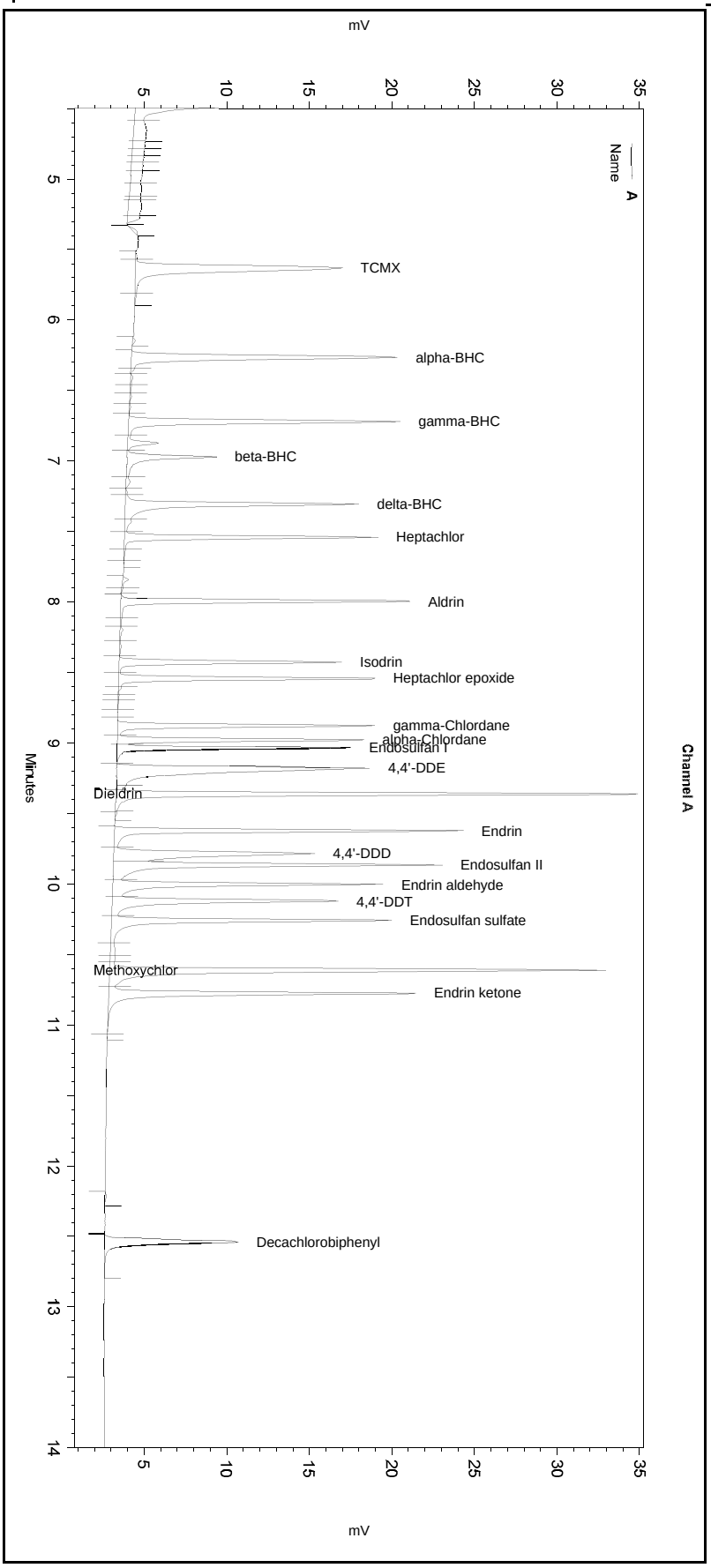
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.707	28859	17.431
alpha-BHC	5.427	5.420	32501	14.372
gamma-BHC	5.847	5.840	25807	14.639
beta-BHC	5.933	5.927	11093	17.698
delta-BHC	6.280	6.273	20434	14.353
Heptachlor	6.367	6.360	23644	16.512
Aldrin	6.747	6.740	25511	16.894
Isodrin	7.200	7.193	19056	16.698
Heptachlor epoxide	7.387	7.380	21536	16.801
gamma-Chlordane	7.593	7.587	19683	16.287
alpha-Chlordane	7.753	7.747	19575	16.874
Endosulfan I	7.833	7.820	19451	18.018
4,4'-DDE	7.913	7.907	33475	15.236
Dieldrin	8.133	8.127	55053	16.245
Endrin	8.473	8.467	25192	24.780
4,4'-DDD	8.553	8.547	23413	26.250
Endosulfan II	8.700	8.693	29906	24.812
4,4'-DDT	8.900	8.893	22791	18.864
Endrin aldehyde	9.053	9.047	28848	33.359
Endosulfan sulfate	9.340	9.333	27565	33.482
Methoxychlor	9.573	9.567	66734	68.727
Endrin ketone	9.880	9.873	49510	16.485
Decachlorobiphenyl	10.973	10.967	16605	30.549

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-013**
Sample Name: **bsd,qc655488,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:43:18 PM
Analysis Date: 9/11/2012 3:43:06 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

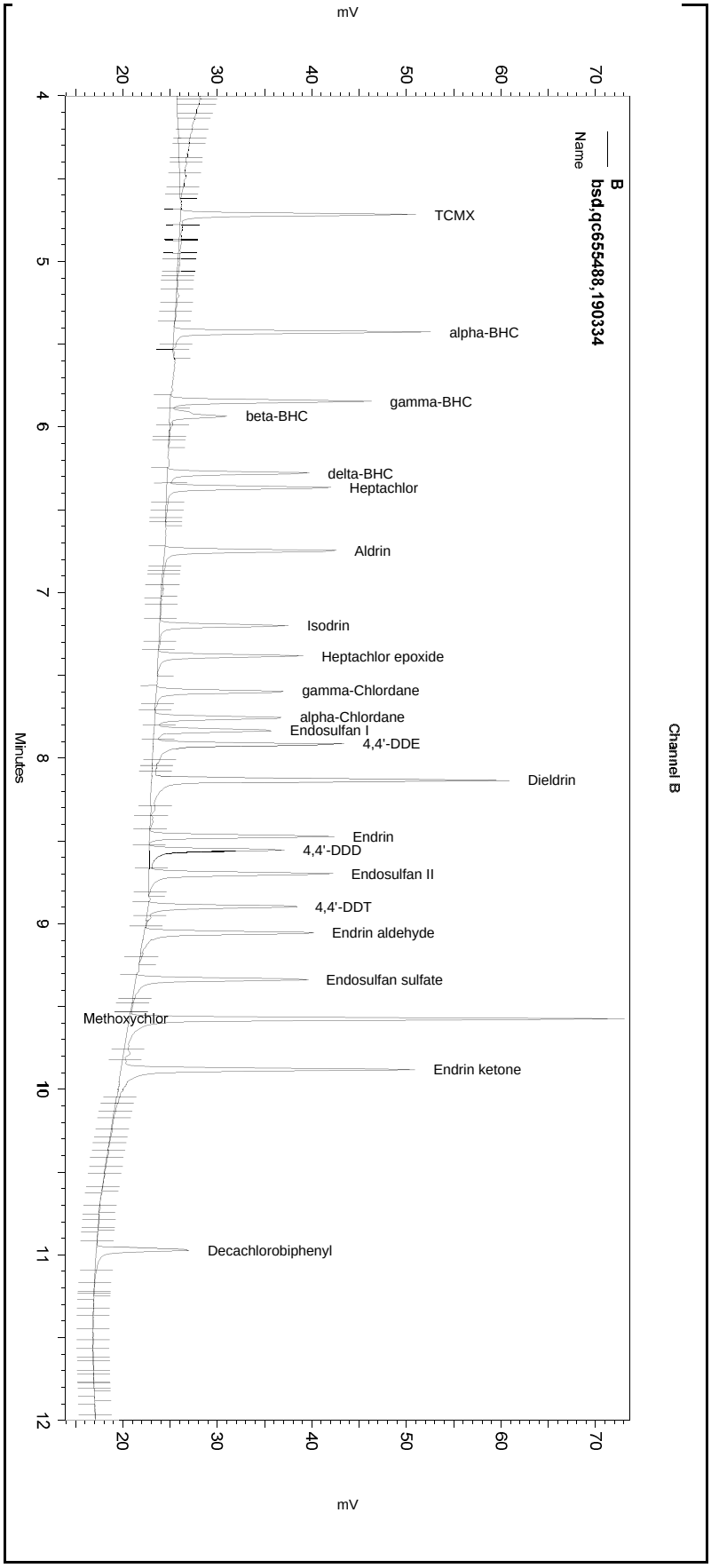
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.9	0	0
Yes	Manual Baseline	9.142	9.556	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-013**
Sample Name: **bsd,qc655488,190334**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:43:18 PM
Analysis Date: 9/11/2012 3:43:06 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.656	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-013**
Sample Name: **bsd,qc655488,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:43:18 PM
Analysis Date: 9/11/2012 2:01:28 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.620	37317	32.566
alpha-BHC	6.267	6.253	34364	20.835
gamma-BHC	6.720	6.713	30584	20.621
beta-BHC	6.967	6.960	12082	21.238
delta-BHC	7.307	7.300	28601	22.548
Heptachlor	7.540	7.533	23716	19.264
Aldrin	8.000	7.987	27894	21.616
Isodrin	8.427	8.420	20346	20.666
Heptachlor epoxide	8.540	8.533	24025	21.616
gamma-Chlordane	8.873	8.867	23417	21.847
alpha-Chlordane	8.973	8.967	22155	21.757
Endosulfan I	9.033	9.027	21220	22.540
4,4'-DDE	9.180	9.173	38946	40.902
Dieldrin	9.360	9.353	45433	47.456
Endrin	9.627	9.620	30712	47.309
4,4'-DDD	9.787	9.773	29331	43.365
Endosulfan II	9.867	9.860	34576	45.195
Endrin aldehyde	10.007	10.000	28015	49.545
4,4'-DDT	10.127	10.113	27364	40.847
Endosulfan sulfate	10.260	10.253	29470	49.074
Methoxychlor	10.613	10.600	55318	213.183
Endrin ketone	10.773	10.767	33629	48.670
Decachlorobiphenyl	12.540	12.527	18838	33.638

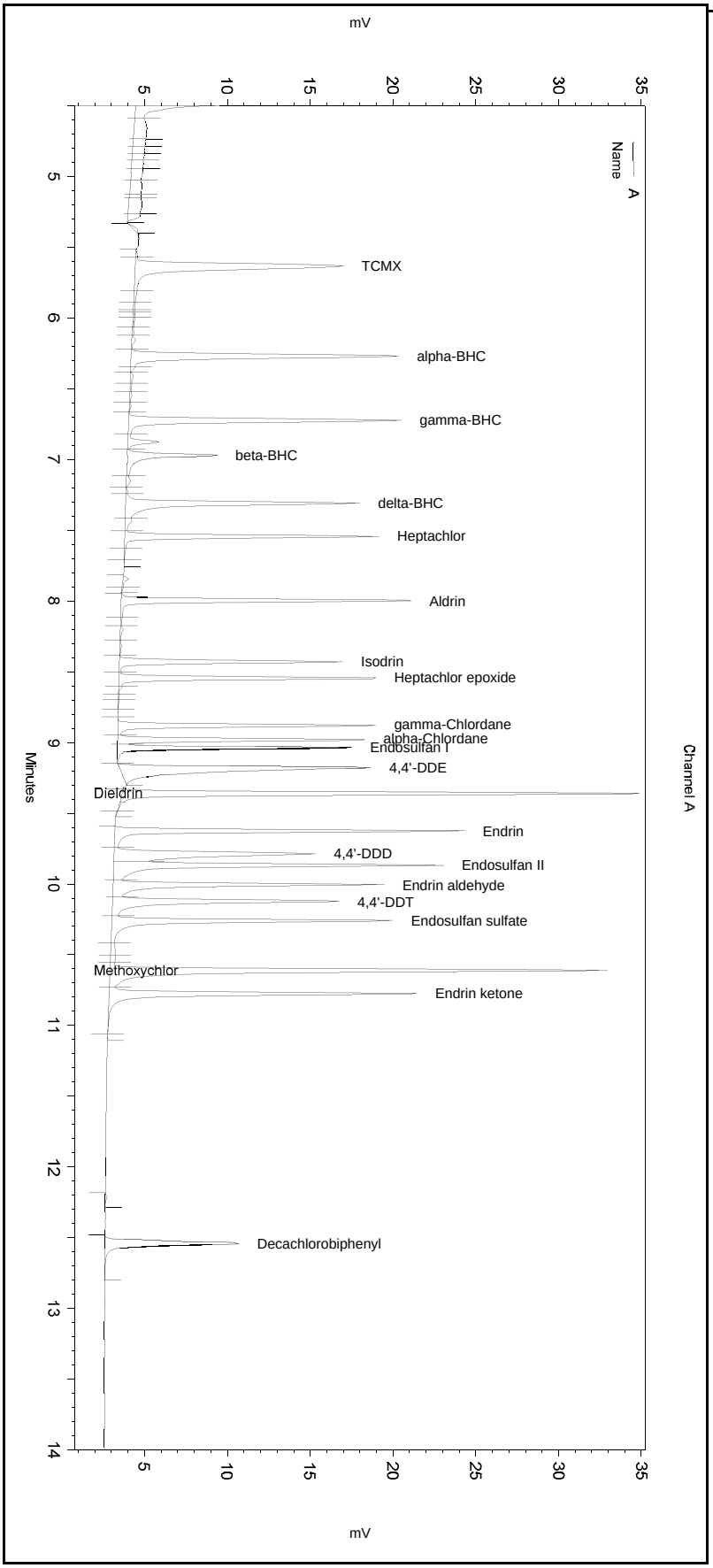
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.707	34189	19.747
alpha-BHC	5.427	5.420	33533	14.640
gamma-BHC	5.847	5.840	25807	14.639
beta-BHC	5.933	5.927	11093	17.698
delta-BHC	6.280	6.273	20434	14.353
Heptachlor	6.367	6.360	23644	16.512
Aldrin	6.747	6.740	25511	16.894
Isodrin	7.200	7.193	19056	16.698
Heptachlor epoxide	7.387	7.380	21536	16.801
gamma-Chlordane	7.593	7.587	19683	16.287
alpha-Chlordane	7.753	7.747	19575	16.874
Endosulfan I	7.833	7.820	19451	18.018
4,4'-DDE	7.913	7.907	33475	15.236
Dieldrin	8.133	8.127	55053	16.245
Endrin	8.473	8.467	25192	24.780
4,4'-DDD	8.553	8.547	23413	26.250
Endosulfan II	8.700	8.693	29906	24.812
4,4'-DDT	8.900	8.893	22791	18.864
Endrin aldehyde	9.053	9.047	28848	33.359
Endosulfan sulfate	9.340	9.333	27565	33.482
Methoxychlor	9.573	9.567	66734	68.727
Endrin ketone	9.880	9.873	49510	16.485
Decachlorobiphenyl	10.973	10.967	16605	30.549

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-013**
Sample Name: **bsd,qc655488,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:43:18 PM
Analysis Date: 9/11/2012 2:01:28 PM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

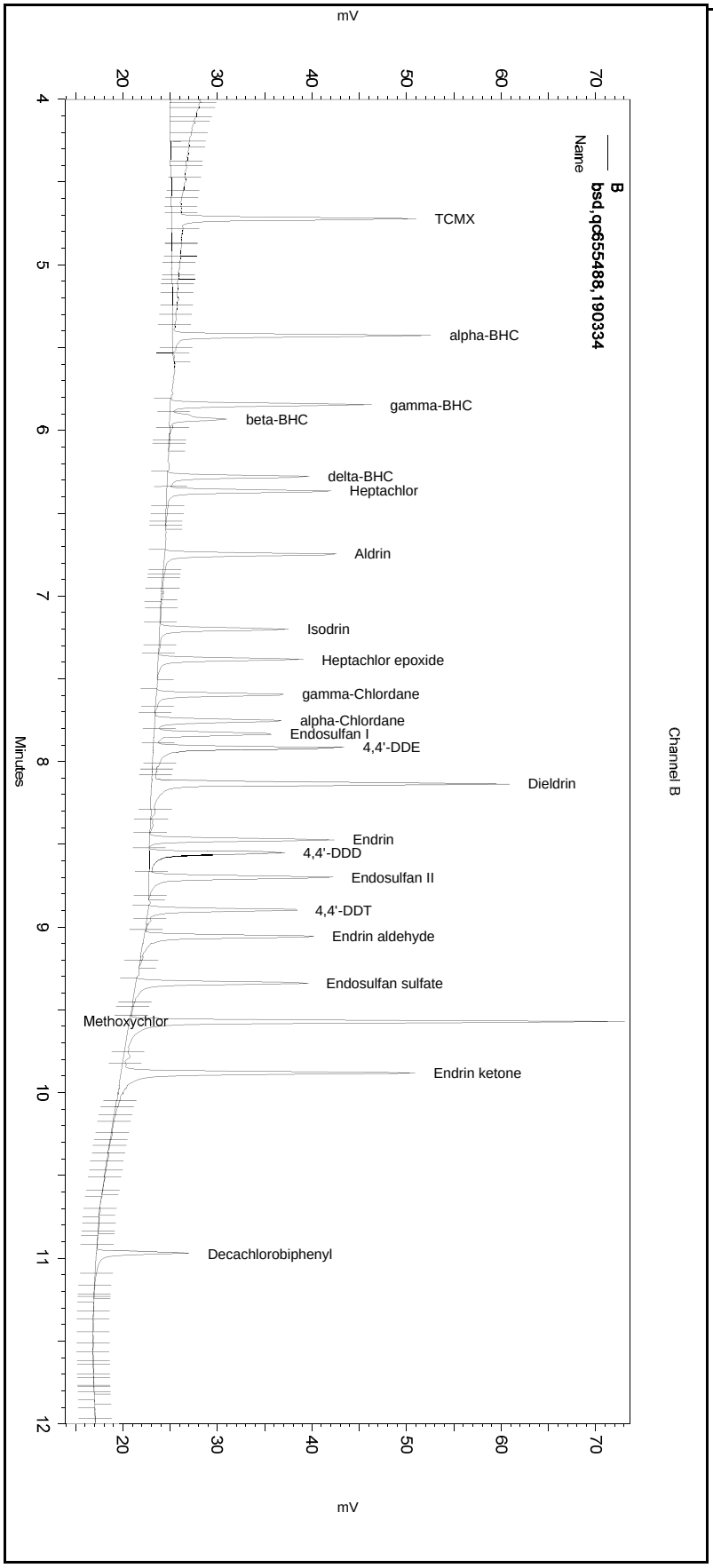
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-013_EE1D.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-013**
Sample Name: **bsd,qc655488,190334**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 1:43:18 PM
Analysis Date: 9/11/2012 2:01:28 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-013_EE1D.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Initial Calibration Raw Data

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PEST Water: EPA 8081B

Inst : GC21
Calnum : 242328737001
Units : pg/uL

Name : gc21_pest_228
Date : 15-AUG-2012 09:17

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	228_006	242328737006	PEST_1/2	15-AUG-2012 09:17	S19412 (2X)
L2	228_007	242328737007	PEST_1	15-AUG-2012 09:38	S19412
L3	228_008	242328737008	PEST_2	15-AUG-2012 10:00	S20311
L4	228_009	242328737009	PEST_3	15-AUG-2012 10:22	S19414
L5	228_010	242328737010	PEST_4	15-AUG-2012 10:43	S19415
L6	228_011	242328737011	PEST_5	15-AUG-2012 11:05	S19416
L7	228_012	242328737012	PEST_6	15-AUG-2012 11:27	S19417
L8	228_013	242328737013	PEST_7	15-AUG-2012 11:49	S19418

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	1910.0	1584.5	1623.6	1592.6	1606.9	1498.6	1734.8	1643.5	AVRG	R		6.06E-4		1649.3	8	0.990	20	
Heptachlor epoxide	A	1418.0	1139.5	1116.0	1080.7	1074.4	939.96	1086.9	1036.2	AVRG	R		9.00E-4		1111.5	12	0.990	20	
Dieldrin	A	1201.5	981.00	981.80	976.45	1003.5	844.84	905.56	764.35	AVRG	R		0.00104		957.38	13	0.990	20	
TCMX	A	1449.0	1136.3	1128.6	1097.0	1088.6	1021.1	1162.5	1084.2	AVRG	R		8.73E-4		1145.9	11	0.990	20	
Decachlorobiphenyl	A	722.50	590.25	624.20	576.90	577.53	444.48	466.10	478.26	AVRG	R		0.00179		560.03	17	0.990	20	
alpha-BHC	B	1502.0	1479.0	3022.4	1740.0	3252.8	3197.6	6710.7		QUAD	A	4732.34	49.3462	130.9982	2986.3	0.998	0.990	20	
Heptachlor epoxide	B	1079.0	1016.0	2188.0	1201.9	1810.9	1643.5	4434.5		QUAD	A	6201.61	-795.05	101.6505	1910.6	0.995	0.990	20	
Dieldrin	B	1150.5	1077.5	2353.9	1266.8	4479.0	4142.7	4985.2	3946.8	QUAD	A	-37329	5821.24	-8.26739	2925.3	0.990	0.990	20	
TCMX	B	855.50	831.00	1770.4	1052.3	2370.9	2564.3	3620.5		QUAD	A	-3774.8	1493.29	21.73896	1866.4	0.998	0.990	20	
Decachlorobiphenyl	B	469.00	454.50	1066.2	525.55	739.65	628.38	1164.5	2203.9	QUAD	A	3899.58	97.3852	10.42620	906.46	0.999	0.990	20	
Average EPA 8081B	A														(n=23)	11			
Average EPA 8081B	B														(n=23)	61			

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
alpha-BHC	A	1.0000	16	2.0000	-4	5.0000	-2	10.000	-3	20.000	-3	25.000	-9	50.000	5	100.00	0
Heptachlor epoxide	A	1.0000	**28**	2.0000	3	5.0000	0	10.000	-3	20.000	-3	25.000	-15	50.000	-2	100.00	-7
Dieldrin	A	2.0000	**25**	4.0000	2	10.000	3	20.000	2	40.000	5	50.000	-12	100.00	-5	200.00	-20
TCMX	A	2.0000	**26**	4.0000	-1	10.000	-2	20.000	-4	40.000	-5	50.000	-11	100.00	1	200.00	-5
Decachlorobiphenyl	A	2.0000	**29**	4.0000	5	10.000	11	20.000	3	40.000	3	50.000	**-21**	100.00	-17	200.00	-15
alpha-BHC	B	1.0000	**-100**	2.0000	**-100**	5.0000	**74**	10.000	-4	20.000	6	25.000	-5	50.000	0		
Heptachlor epoxide	B	1.0000	**-100**	2.0000	**-100**	5.0000	**136**	10.000	**24**	20.000	8	25.000	-9	50.000	0		
Dieldrin	B	2.0000	**244**	4.0000	**81**	10.000	6	20.000	**-45**	40.000	-2	50.000	-10	100.00	9	200.00	-1
TCMX	B	2.0000	**75**	4.0000	12	10.000	**22**	20.000	**-31**	40.000	3	50.000	2	100.00	0		
Decachlorobiphenyl	B	2.0000	**-100**	4.0000	**-100**	10.000	**112**	20.000	5	40.000	13	50.000	-6	100.00	-1	200.00	0

TKB 08/16/12 : Corrected automatically drawn baseline in all levels.

TKB 08/16/12 : ICAL fails PEM (ENDRIN) ON CH.B, ENDRIN COMPOUNDS WILL BE REPORTED FORM CH.A

TKB 08/16/12 : ICAL fails ICV FOR VARIOUS ANALYTES ON CH.B, THESE ANALYTES WILL BE REPORTED FROM CH.A

TKB 08/16/12 : CHANGED FIT TYPES AND DROPPED VARIOUS HIGH/LOW POINTS TO IMPROVE %RSD/R^2

TKB 08/16/12 : METHOXYCHLOR FAILS %RSD ON CH.B - IT WILL BE REPORTED FROM CH.A

TKB 08/16/12 : ADDITIONAL SET OF ICV RAN BECAUSE THE FIRST SET HAD EXPIRED

Analyst: TKB Date: 08/16/12 Reviewer: EAH Date: 08/16/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PEST Water
EPA 8081B

Inst : GC21 Name : gc21_pest_228
Calnum : 242328737001 Cal Date : 15-AUG-2012

ICV 242328737019 (228_019 16-AUG-2012) stds: S20524

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	20.00	19.36	pg/uL	-3	20	
Heptachlor epoxide	A	20.00	19.50	pg/uL	-2	20	
Dieldrin	A	20.00	20.59	pg/uL	3	20	
alpha-BHC	B	20.00	17.17	pg/uL	-14	20	
Heptachlor epoxide	B	20.00	18.82	pg/uL	-6	20	
Dieldrin	B	20.00	11.01	pg/uL	**-45**	20	v- ***
Average EPA 8081B	A	n=21			7		
Average EPA 8081B	B	n=21			18		

Analyst: TKB Date: 08/16/12 Reviewer: EAH Date: 08/16/12

-=low bias v=ICV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/16/2012 2:23:39 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.640	2898	2.000 CAL
alpha-BHC	6.267	6.270	1910	1.000 CAL
gamma-BHC	6.727	6.733	1745	1.000 CAL
beta-BHC	6.973	6.980	690	1.000 CAL
delta-BHC	7.313	7.320	1465	1.000 CAL
Heptachlor	7.553	7.560	1456	1.000 CAL
Aldrin	8.007	8.013	1544	1.000 CAL
Isodrin	8.440	8.447	1197	1.000 CAL
Heptachlor epoxide	8.553	8.560	1418	1.000 CAL
gamma-Chlordane	8.887	8.893	1273	1.000 CAL
alpha-Chlordane	8.987	8.993	1241	1.000 CAL
Endosulfan I	9.047	9.053	1130	1.000 CAL
4,4'-DDE	9.187	9.193	2292	2.000 CAL
Dieldrin	9.373	9.380	2403	2.000 CAL
Endrin	9.640	9.647	1527	2.000 CAL
4,4'-DDD	9.787	9.787	1634	2.000 CAL
Endosulfan II	9.880	9.880	1899	2.000 CAL
Endrin aldehyde	10.020	10.027	1288	2.000 CAL
4,4'-DDT	10.133	10.133	1434	2.000 CAL
Endosulfan sulfate	10.273	10.280	1350	2.000 CAL
Methoxychlor	10.620	10.620	3362	10.000 CAL
Endrin ketone	10.787	10.793	1690	2.000 CAL
Decachlorobiphenyl	12.560	12.567	1445	2.000 CAL

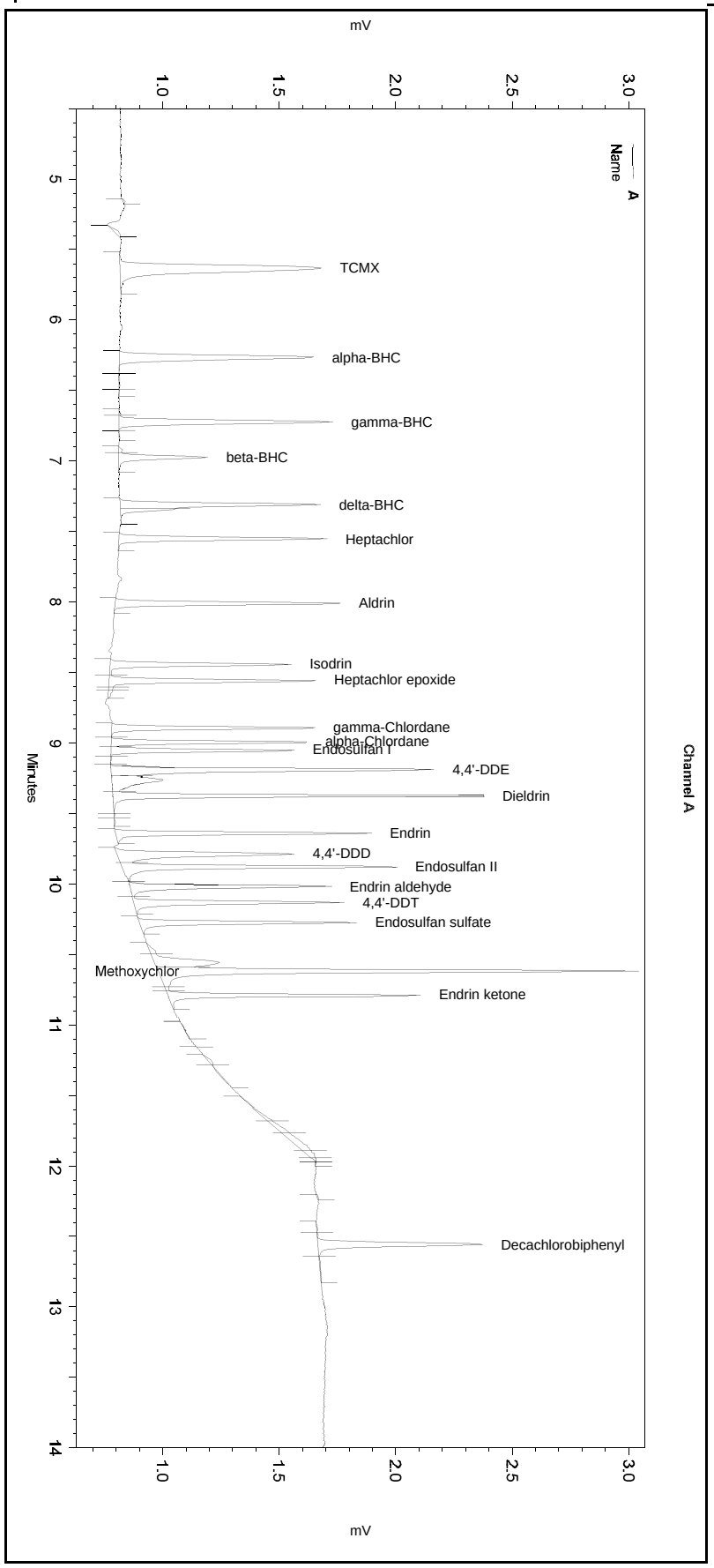
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	1711	2.000 CAL
alpha-BHC	5.433	5.433	1502	1.000 CAL
gamma-BHC	5.853	5.853	1532	1.000 CAL
beta-BHC	5.940	5.940	573	1.000 CAL
delta-BHC	6.287	6.287	1285	1.000 CAL
Heptachlor	6.373	6.373	1214	1.000 CAL
Aldrin	6.753	6.753	1318	1.000 CAL
Isodrin	7.207	7.207	740	1.000 CAL
Heptachlor epoxide	7.393	7.393	1079	1.000 CAL
gamma-Chlordane	7.607	7.607	1288	1.000 CAL
alpha-Chlordane	7.767	7.767	1183	1.000 CAL
Endosulfan I	7.840	7.840	932	1.000 CAL
4,4'-DDE	7.927	7.920	1826	2.000 CAL
Dieldrin	8.140	8.140	2301	2.000 CAL
Endrin	8.480	8.480	2002	2.000 CAL
4,4'-DDD	8.560	8.560	1708	2.000 CAL
Endosulfan II	8.713	8.707	1483	2.000 CAL
4,4'-DDT	8.907	8.900	1727	2.000 CAL
Endrin aldehyde	9.067	9.060	1471	2.000 CAL
Endosulfan sulfate	9.347	9.347	1479	2.000 CAL
Methoxychlor	9.580	9.580	3490	10.000 CAL
Endrin ketone	9.887	9.880	7612	2.000 CAL
Decachlorobiphenyl	10.980	10.973	938	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/16/2012 2:23:39 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

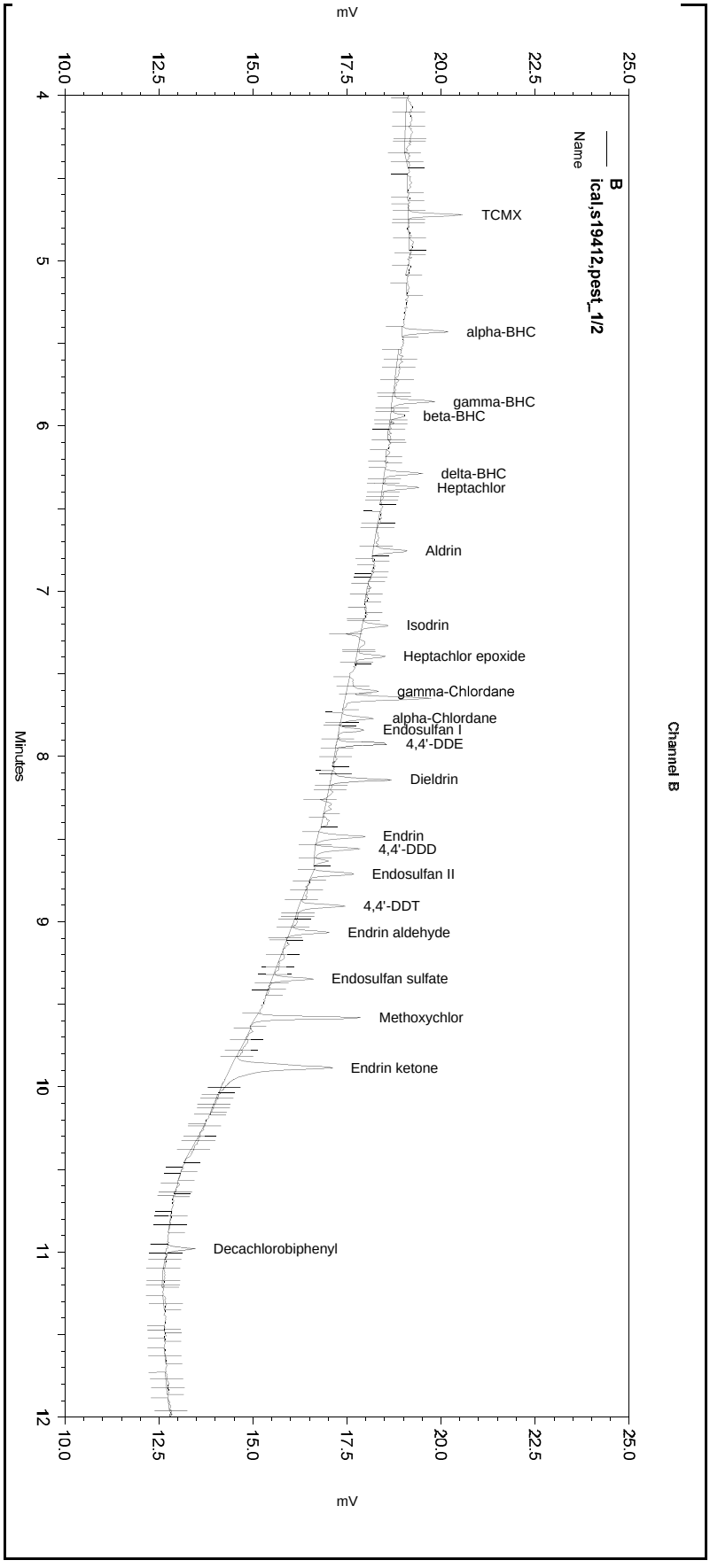
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.68	0	0
Yes	Split Peak	7.34	0	0
Yes	Split Peak	8.601	0	0
Yes	Reset Baseline	8.68	0	0
Yes	Reset Baseline	8.742	0	0
Yes	Split Peak	9.094	0	0
Yes	Split Peak	10.753	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/16/2012 2:23:39 PM
Sample Amount: 1



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	4.694	0	0
Yes	Split Peak	4.747	0	0
Yes	Split Peak	5.821	0	0
Yes	Split Peak	5.915	0	0
Yes	Split Peak	5.961	0	0
Yes	Split Peak	6.317	0	0
Yes	Split Peak	6.401	0	0
Yes	Manual Baseline	7.166	7.441	0
Yes	Split Peak	7.182	0	0
Yes	Split Peak	7.365	0	0
Yes	Split Peak	7.424	0	0
Yes	Reset Baseline	7.448	0	0
Yes	Split Peak	7.794	0	0
Yes	Split Peak	7.954	0	0
Yes	Manual Baseline	8.087	8.429	0
Yes	Split Peak	8.109	0	0
Yes	Split Peak	8.171	0	0
Yes	Reset Baseline	8.346	0	0
Yes	Reset Baseline	8.672	0	0
Yes	Split Peak	8.946	0	0
Yes	Split Peak	9.034	0	0
Yes	Split Peak	9.1	0	0
Yes	Split Peak	9.321	0	0
Yes	Split Peak	9.376	0	0
Yes	Reset Baseline	9.468	0	0
Yes	Split Peak	11.008	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/15/2012 1:21:30 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.640	2898	1.750
alpha-BHC	6.267	6.270	1910	0.783
gamma-BHC	6.727	6.733	1756	0.798
beta-BHC	6.973	6.980	690	0.783
delta-BHC	7.313	7.320	1772	0.891
Heptachlor	7.553	7.560	1456	0.744
Aldrin	8.007	8.013	1544	0.784
Isodrin	8.440	8.447	1211	0.790
Heptachlor epoxide	8.553	8.560	1479	0.828
gamma-Chlordane	8.887	8.893	1459	0.886
alpha-Chlordane	8.987	8.993	1291	0.820
Endosulfan I	9.047	9.053	1187	0.796
4,4'-DDE	9.187	9.193	2303	1.530
Dieldrin	9.373	9.380	2408	1.570
Endrin	9.640	9.647	1527	1.421
4,4'-DDD	9.787	9.787	1634	1.496
Endosulfan II	9.880	9.880	1899	1.564
Endrin aldehyde	10.020	10.027	1288	1.375
4,4'-DDT	10.133	10.133	1434	1.264
Endosulfan sulfate	10.273	10.280	1350	1.297
Methoxychlor	10.620	10.620	3362	7.129
Endrin ketone	10.787	10.793	1712	1.585
Decachlorobiphenyl	12.560	12.567	1445	1.627

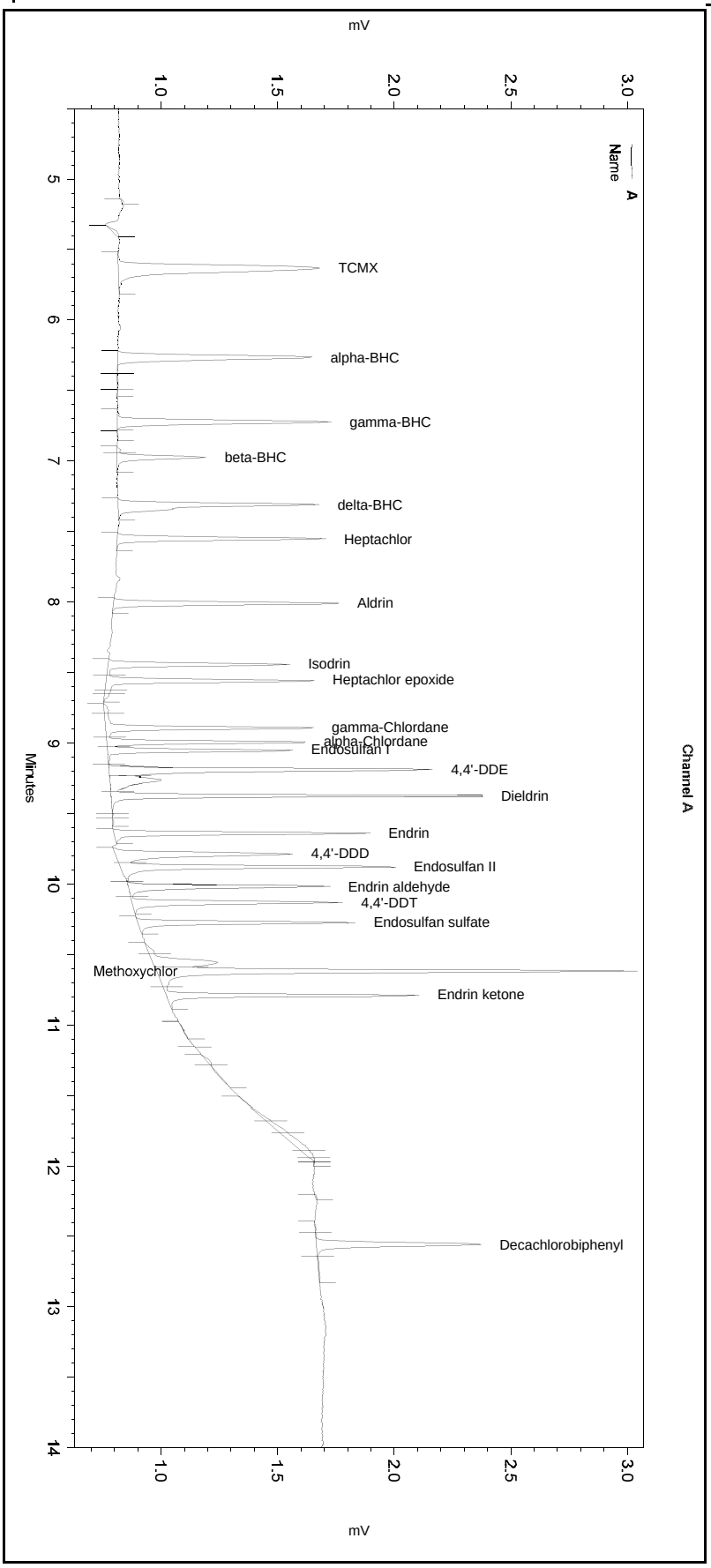
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	1773	4.279
alpha-BHC	5.433	5.433	1502	0.000
gamma-BHC	5.853	5.853	1588	0.000
beta-BHC	5.940	5.940	715	1.700
delta-BHC	6.287	6.287	1344	0.307
Heptachlor	6.373	6.373	1289	0.312
Aldrin	6.753	6.753	1318	0.045
Isodrin	7.207	7.207	1855	0.000
Heptachlor epoxide	7.393	7.393	2891	2.145
gamma-Chlordane	7.607	7.607	1795	1.177
alpha-Chlordane	7.767	7.767	1723	1.105
Endosulfan I	7.840	7.840	1289	0.855
4,4'-DDE	7.927	7.920	2218	0.000
Dieldrin	8.140	8.140	2871	0.000
Endrin	8.480	8.480	3389	0.243
4,4'-DDD	8.560	8.560	3425	0.000
Endosulfan II	8.713	8.707	3425	3.386
4,4'-DDT	8.907	8.900	4451	5.829
Endrin aldehyde	9.067	9.060	4948	6.447
Endosulfan sulfate	9.347	9.347	4996	5.315
Methoxychlor	9.580	9.580	5243	19.991
Endrin ketone	9.887	9.880	8737	0.000
Decachlorobiphenyl	10.980	10.973	972	1.544

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/15/2012 1:21:30 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

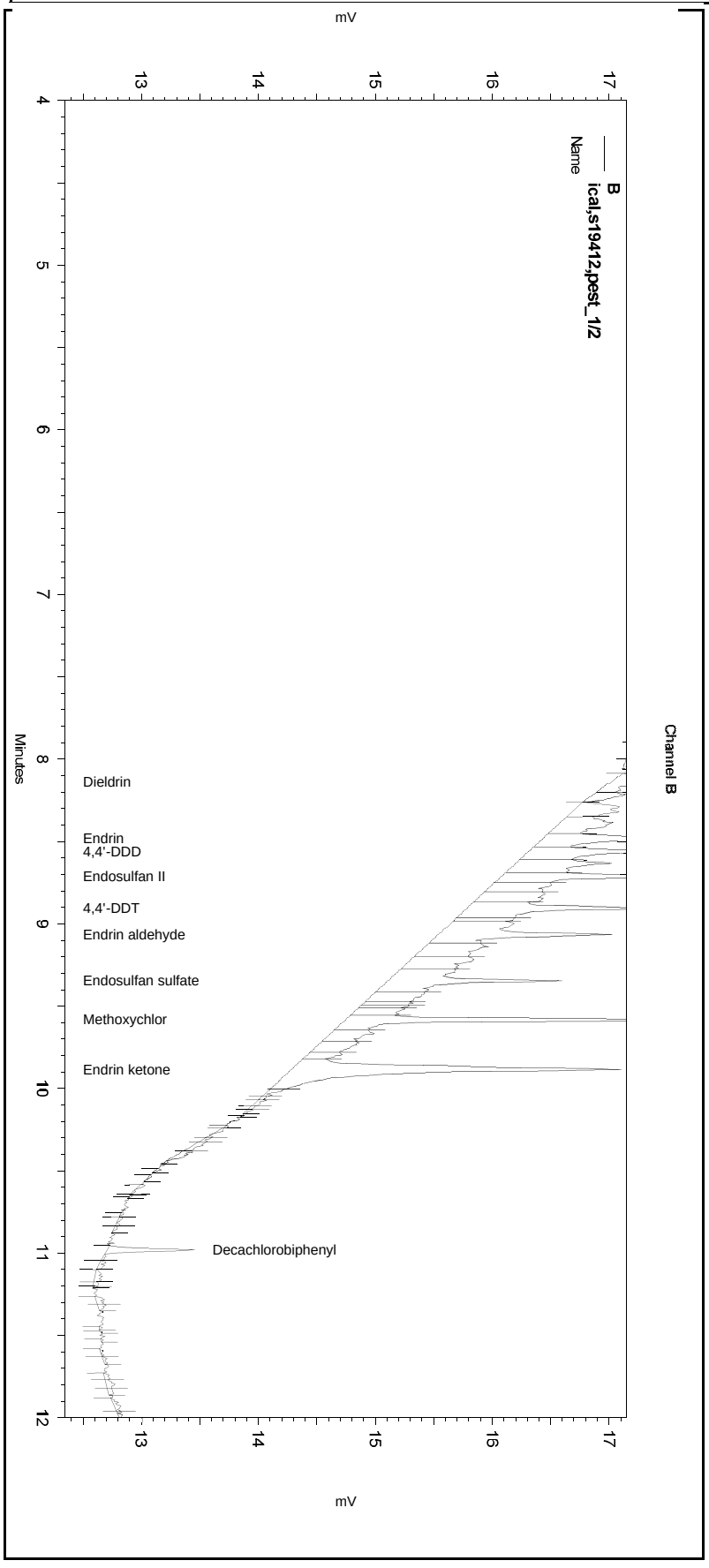
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/15/2012 1:21:30 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/16/2012 2:23:46 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	4545	4.000 CAL
alpha-BHC	6.273	6.270	3169	2.000 CAL
gamma-BHC	6.733	6.733	2877	2.000 CAL
beta-BHC	6.980	6.980	1122	2.000 CAL
delta-BHC	7.313	7.320	2387	2.000 CAL
Heptachlor	7.553	7.560	2384	2.000 CAL
Aldrin	8.013	8.013	2513	2.000 CAL
Isodrin	8.440	8.447	1916	2.000 CAL
Heptachlor epoxide	8.560	8.560	2279	2.000 CAL
gamma-Chlordane	8.893	8.893	2132	2.000 CAL
alpha-Chlordane	8.993	8.993	2042	2.000 CAL
Endosulfan I	9.047	9.053	1895	2.000 CAL
4,4'-DDE	9.193	9.193	3861	4.000 CAL
Dieldrin	9.380	9.380	3924	4.000 CAL
Endrin	9.640	9.647	2579	4.000 CAL
4,4'-DDD	9.787	9.787	2727	4.000 CAL
Endosulfan II	9.880	9.880	3147	4.000 CAL
Endrin aldehyde	10.020	10.027	2242	4.000 CAL
4,4'-DDT	10.133	10.133	2490	4.000 CAL
Endosulfan sulfate	10.273	10.280	2245	4.000 CAL
Methoxychlor	10.620	10.620	5425	20.000 CAL
Endrin ketone	10.787	10.793	2772	4.000 CAL
Decachlorobiphenyl	12.560	12.567	2361	4.000 CAL

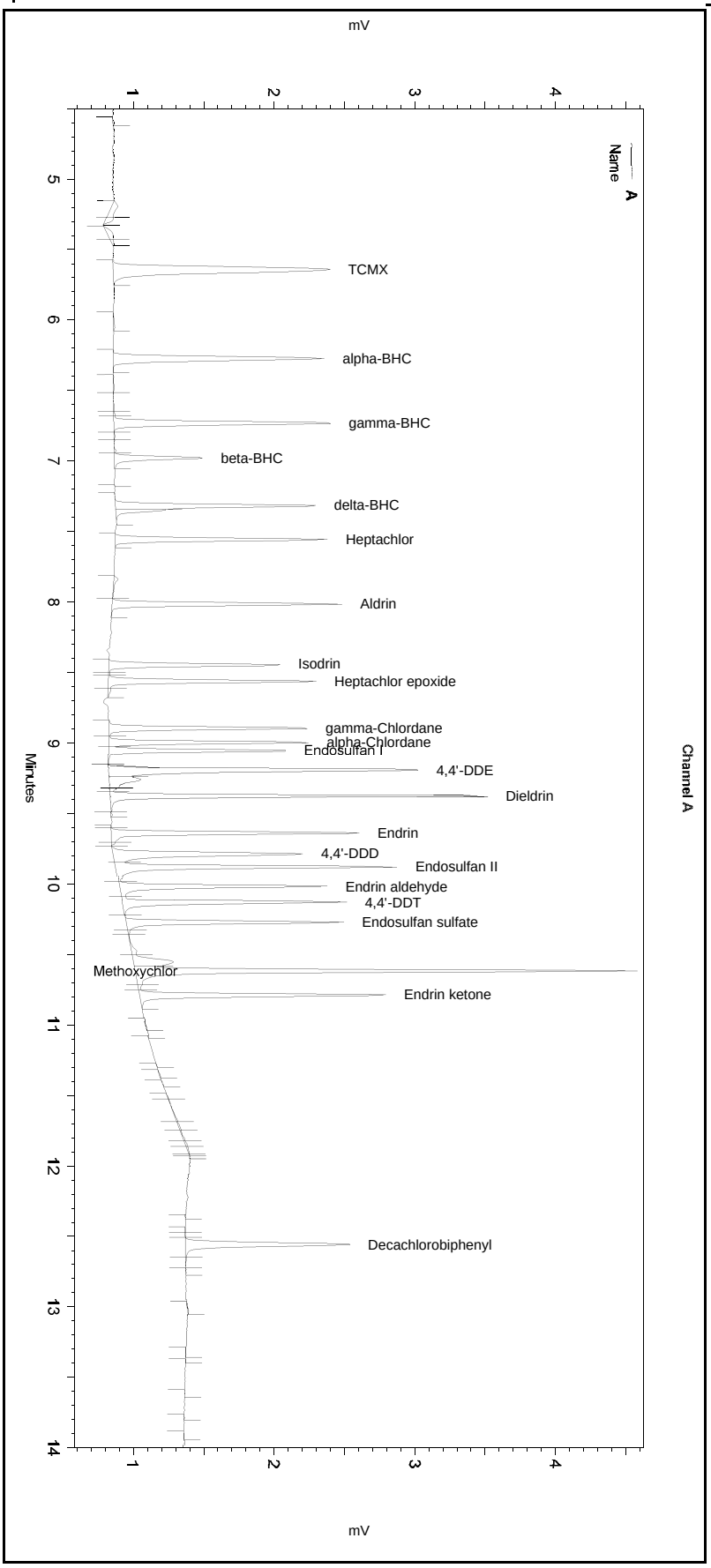
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	3324	4.000 CAL
alpha-BHC	5.433	5.433	2958	2.000 CAL
gamma-BHC	5.853	5.853	3001	2.000 CAL
beta-BHC	5.940	5.940	1150	2.000 CAL
delta-BHC	6.287	6.287	2838	2.000 CAL
Heptachlor	6.373	6.373	2536	2.000 CAL
Aldrin	6.760	6.753	2562	2.000 CAL
Isodrin	7.207	7.207	1995	2.000 CAL
Heptachlor epoxide	7.393	7.393	2032	2.000 CAL
gamma-Chlordane	7.607	7.607	2433	2.000 CAL
alpha-Chlordane	7.767	7.767	2468	2.000 CAL
Endosulfan I	7.840	7.840	2085	2.000 CAL
4,4'-DDE	7.927	7.920	3917	4.000 CAL
Dieldrin	8.140	8.140	4310	4.000 CAL
Endrin	8.487	8.480	3512	4.000 CAL
4,4'-DDD	8.560	8.560	3418	4.000 CAL
Endosulfan II	8.713	8.707	3617	4.000 CAL
4,4'-DDT	8.907	8.900	3244	4.000 CAL
Endrin aldehyde	9.067	9.060	2732	4.000 CAL
Endosulfan sulfate	9.347	9.347	2987	4.000 CAL
Methoxychlor	9.580	9.580	7026	20.000 CAL
Endrin ketone	9.887	9.880	11585	4.000 CAL
Decachlorobiphenyl	10.980	10.973	1818	4.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/16/2012 2:23:46 PM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

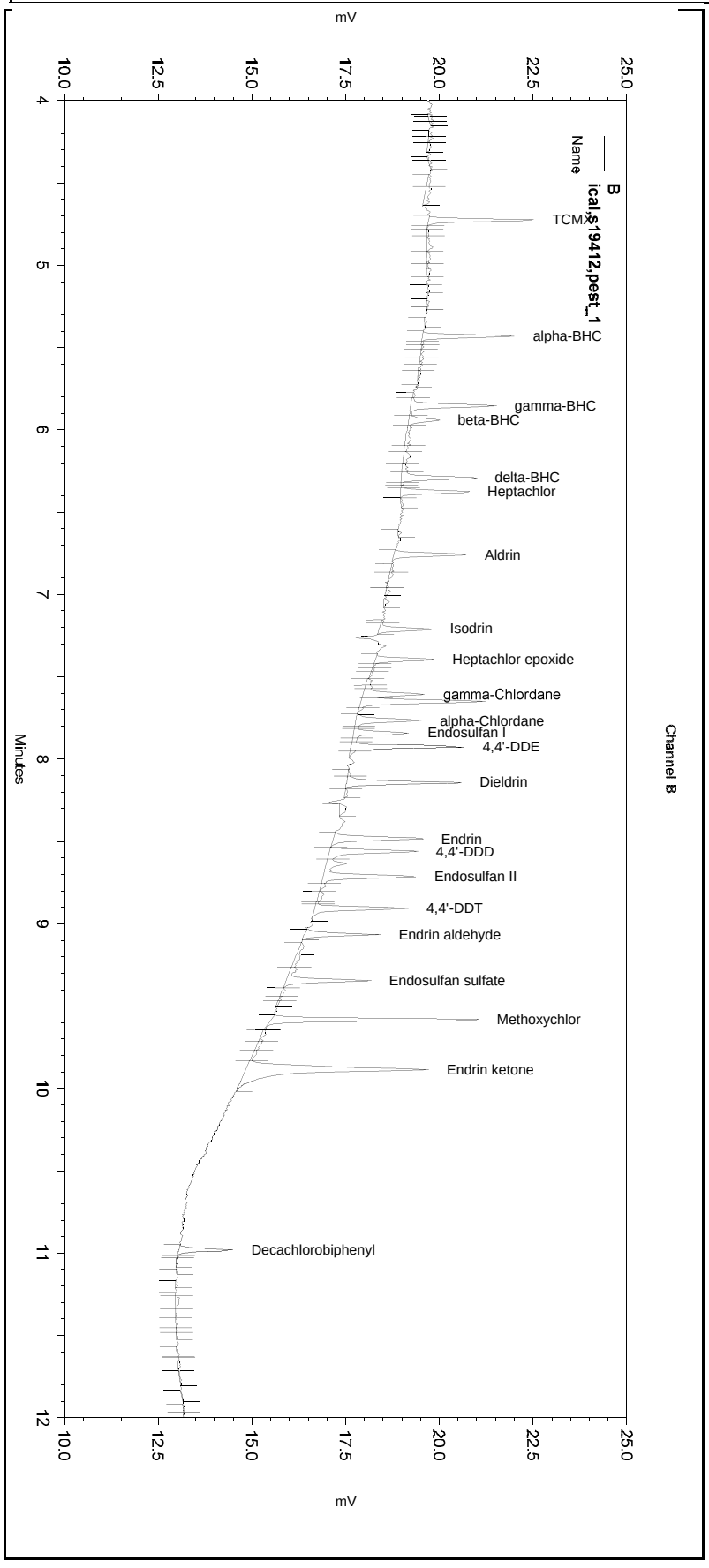
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.678	0	0
Yes	Split Peak	7.341	0	0
Yes	Reset Baseline	7.614	0	0
Yes	Split Peak	8.515	0	0
Yes	Reset Baseline	8.675	0	0
Yes	Reset Baseline	8.743	0	0
Yes	Split Peak	9.346	0	0
Yes	Split Peak	9.61	0	0
Yes	Split Peak	9.706	0	0
Yes	Split Peak	10.327	0	0
Yes	Split Peak	10.751	0	0
Yes	Split Peak	12.505	0	0
Yes	Split Peak	12.65	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/16/2012 2:23:46 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.686	0	0
Yes	Split Peak	4.756	0	0
Yes	Split Peak	5.46	0	0
Yes	Split Peak	5.887	0	0
Yes	Split Peak	6.314	0	0
Yes	Split Peak	6.355	0	0
Yes	Reset Baseline	7.243	0	0
Yes	Reset Baseline	7.31	0	0
Yes	Split Peak	7.42	0	0
Yes	Split Peak	7.573	0	0
Yes	Split Peak	7.685	0	0
Yes	Split Peak	7.8	0	0
Yes	Split Peak	7.873	0	0
Yes	Split Peak	7.954	0	0
Yes	Reset Baseline	7.994	0	0
Yes	Split Peak	8.099	0	0
Yes	Reset Baseline	8.242	0	0
Yes	Reset Baseline	8.373	0	0
Yes	Split Peak	8.88	0	0
Yes	Split Peak	8.953	0	0
Yes	Reset Baseline	8.985	0	0
Yes	Split Peak	9.321	0	0
Yes	Split Peak	9.388	0	0
Yes	Reset Baseline	10.021	0	0
Yes	Split Peak	11.014	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/15/2012 1:21:34 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	4545	2.744
alpha-BHC	6.273	6.270	3169	1.300
gamma-BHC	6.733	6.733	2890	1.314
beta-BHC	6.980	6.980	1122	1.274
delta-BHC	7.313	7.320	2873	1.444
Heptachlor	7.553	7.560	2403	1.228
Aldrin	8.013	8.013	2513	1.277
Isodrin	8.440	8.447	1939	1.265
Heptachlor epoxide	8.560	8.560	2382	1.333
gamma-Chlordane	8.893	8.893	2378	1.444
alpha-Chlordane	8.993	8.993	2120	1.346
Endosulfan I	9.047	9.053	1967	1.318
4,4'-DDE	9.193	9.193	3876	2.576
Dieldrin	9.380	9.380	3990	2.602
Endrin	9.640	9.647	2607	2.426
4,4'-DDD	9.787	9.787	2727	2.496
Endosulfan II	9.880	9.880	3147	2.592
Endrin aldehyde	10.020	10.027	2242	2.393
4,4'-DDT	10.133	10.133	2490	2.195
Endosulfan sulfate	10.273	10.280	2268	2.179
Methoxychlor	10.620	10.620	5425	11.504
Endrin ketone	10.787	10.793	2821	2.612
Decachlorobiphenyl	12.560	12.567	2382	2.682

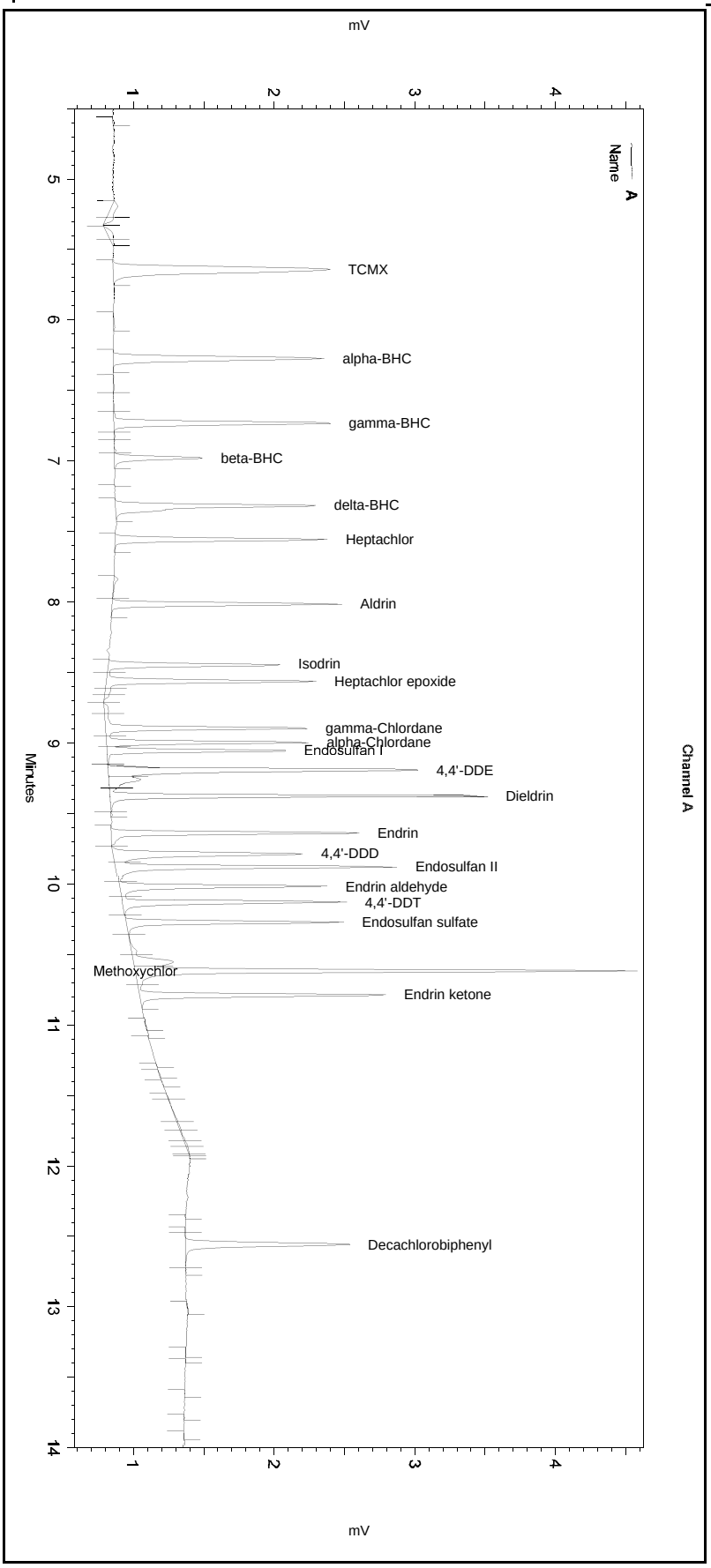
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	4092	5.478
alpha-BHC	5.433	5.433	3036	0.000
gamma-BHC	5.853	5.853	3072	1.105
beta-BHC	5.940	5.940	1150	2.243
delta-BHC	6.287	6.287	2907	1.726
Heptachlor	6.373	6.373	2619	1.472
Aldrin	6.760	6.753	2562	1.171
Isodrin	7.207	7.207	3545	0.000
Heptachlor epoxide	7.393	7.393	5878	3.775
gamma-Chlordane	7.607	7.607	5139	3.370
alpha-Chlordane	7.767	7.767	5243	3.363
Endosulfan I	7.840	7.840	4733	3.141
4,4'-DDE	7.927	7.920	7244	9.198
Dieldrin	8.140	8.140	9252	9.755
Endrin	8.487	8.480	6809	7.719
4,4'-DDD	8.560	8.560	5850	6.580
Endosulfan II	8.713	8.707	5896	5.751
4,4'-DDT	8.907	8.900	7814	8.998
Endrin aldehyde	9.067	9.060	4575	5.572
Endosulfan sulfate	9.347	9.347	4552	4.475
Methoxychlor	9.580	9.580	7026	22.238
Endrin ketone	9.887	9.880	12407	0.000
Decachlorobiphenyl	10.980	10.973	1942	3.085

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/15/2012 1:21:34 PM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

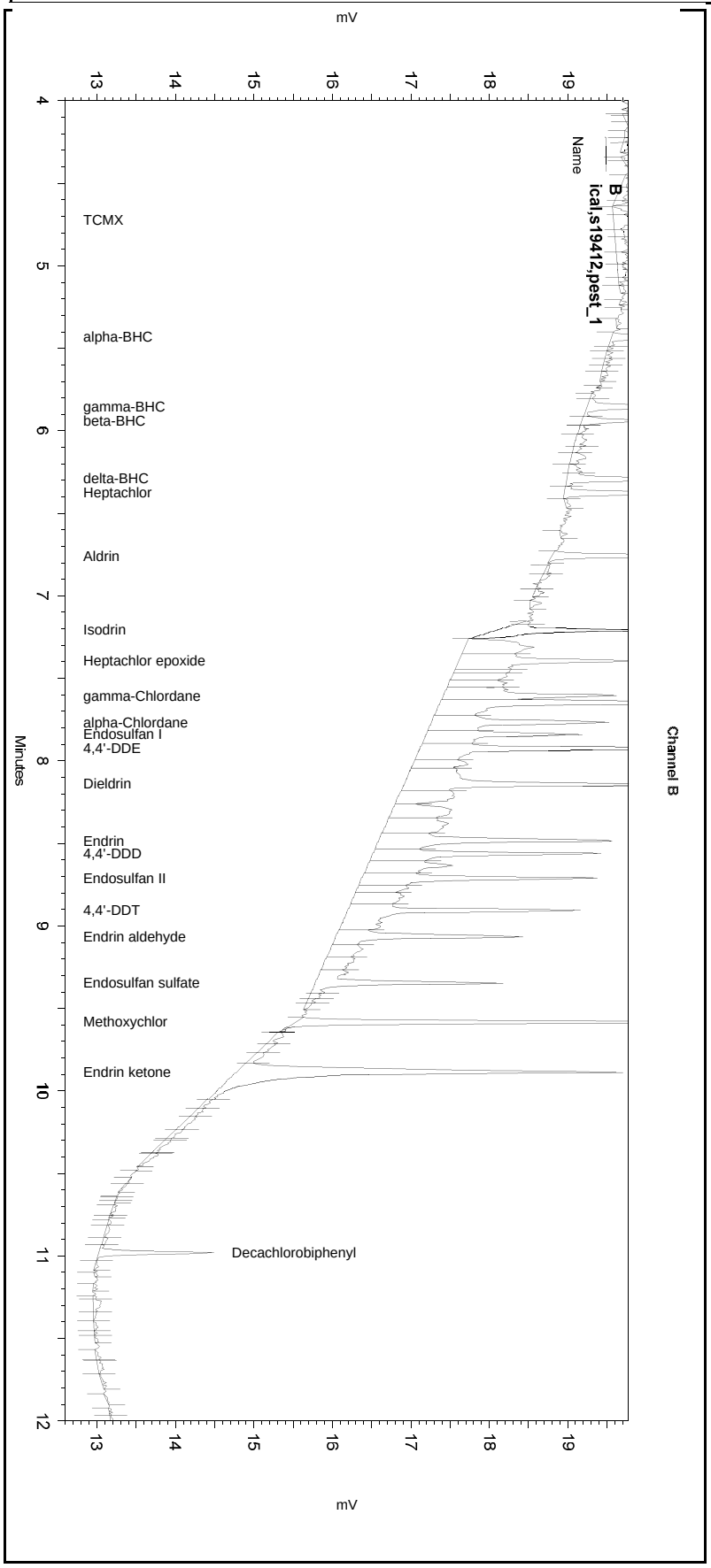
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/15/2012 1:21:34 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/16/2012 2:23:53 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	11286	10.000 CAL
alpha-BHC	6.273	6.270	8118	5.000 CAL
gamma-BHC	6.727	6.733	7355	5.000 CAL
beta-BHC	6.973	6.980	2851	5.000 CAL
delta-BHC	7.313	7.320	6365	5.000 CAL
Heptachlor	7.553	7.560	5949	5.000 CAL
Aldrin	8.007	8.013	6479	5.000 CAL
Isodrin	8.440	8.447	4998	5.000 CAL
Heptachlor epoxide	8.553	8.560	5580	5.000 CAL
gamma-Chlordane	8.887	8.893	5536	5.000 CAL
alpha-Chlordane	8.987	8.993	5230	5.000 CAL
Endosulfan I	9.047	9.053	4777	5.000 CAL
4,4'-DDE	9.187	9.193	9957	10.000 CAL
Dieldrin	9.373	9.380	9818	10.000 CAL
Endrin	9.640	9.647	6402	10.000 CAL
4,4'-DDD	9.787	9.787	6984	10.000 CAL
Endosulfan II	9.873	9.880	8078	10.000 CAL
Endrin aldehyde	10.020	10.027	6026	10.000 CAL
4,4'-DDT	10.133	10.133	6754	10.000 CAL
Endosulfan sulfate	10.273	10.280	6337	10.000 CAL
Methoxychlor	10.620	10.620	13506	50.000 CAL
Endrin ketone	10.787	10.793	7431	10.000 CAL
Decachlorobiphenyl	12.553	12.567	6242	10.000 CAL

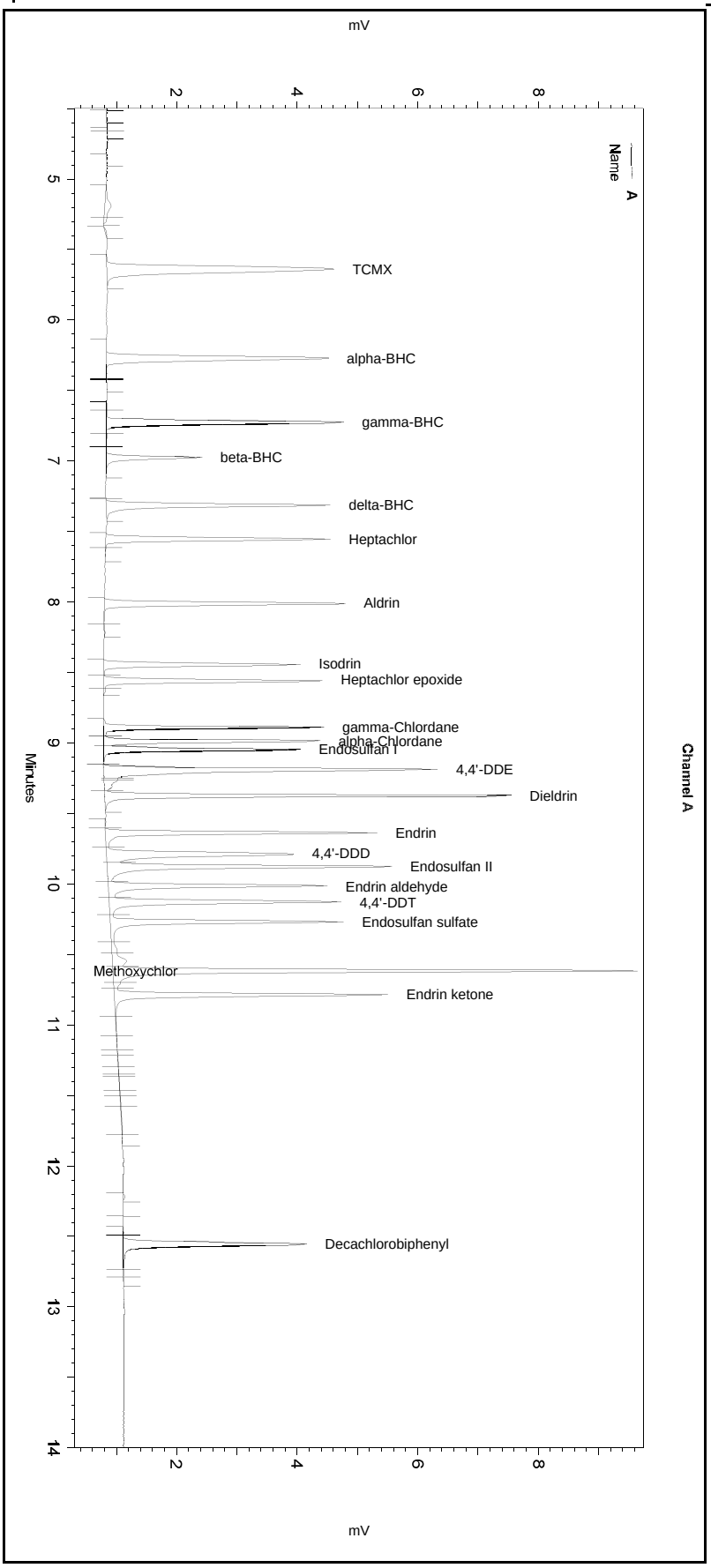
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.720	17704	10.000 CAL
alpha-BHC	5.427	5.433	15112	5.000 CAL
gamma-BHC	5.847	5.853	13722	5.000 CAL
beta-BHC	5.933	5.940	4895	5.000 CAL
delta-BHC	6.287	6.287	12966	5.000 CAL
Heptachlor	6.373	6.373	12183	5.000 CAL
Aldrin	6.753	6.753	12462	5.000 CAL
Isodrin	7.207	7.207	9798	5.000 CAL
Heptachlor epoxide	7.393	7.393	10940	5.000 CAL
gamma-Chlordane	7.607	7.607	11249	5.000 CAL
alpha-Chlordane	7.767	7.767	10815	5.000 CAL
Endosulfan I	7.840	7.840	9813	5.000 CAL
4,4'-DDE	7.920	7.920	21267	10.000 CAL
Dieldrin	8.140	8.140	23539	10.000 CAL
Endrin	8.480	8.480	17921	10.000 CAL
4,4'-DDD	8.560	8.560	17421	10.000 CAL
Endosulfan II	8.713	8.707	19584	10.000 CAL
4,4'-DDT	8.907	8.900	18398	10.000 CAL
Endrin aldehyde	9.067	9.060	14665	10.000 CAL
Endosulfan sulfate	9.347	9.347	15050	10.000 CAL
Methoxychlor	9.580	9.580	58884	50.000 CAL
Endrin ketone	9.887	9.880	25485	10.000 CAL
Decachlorobiphenyl	10.980	10.973	10662	10.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/16/2012 2:23:53 PM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

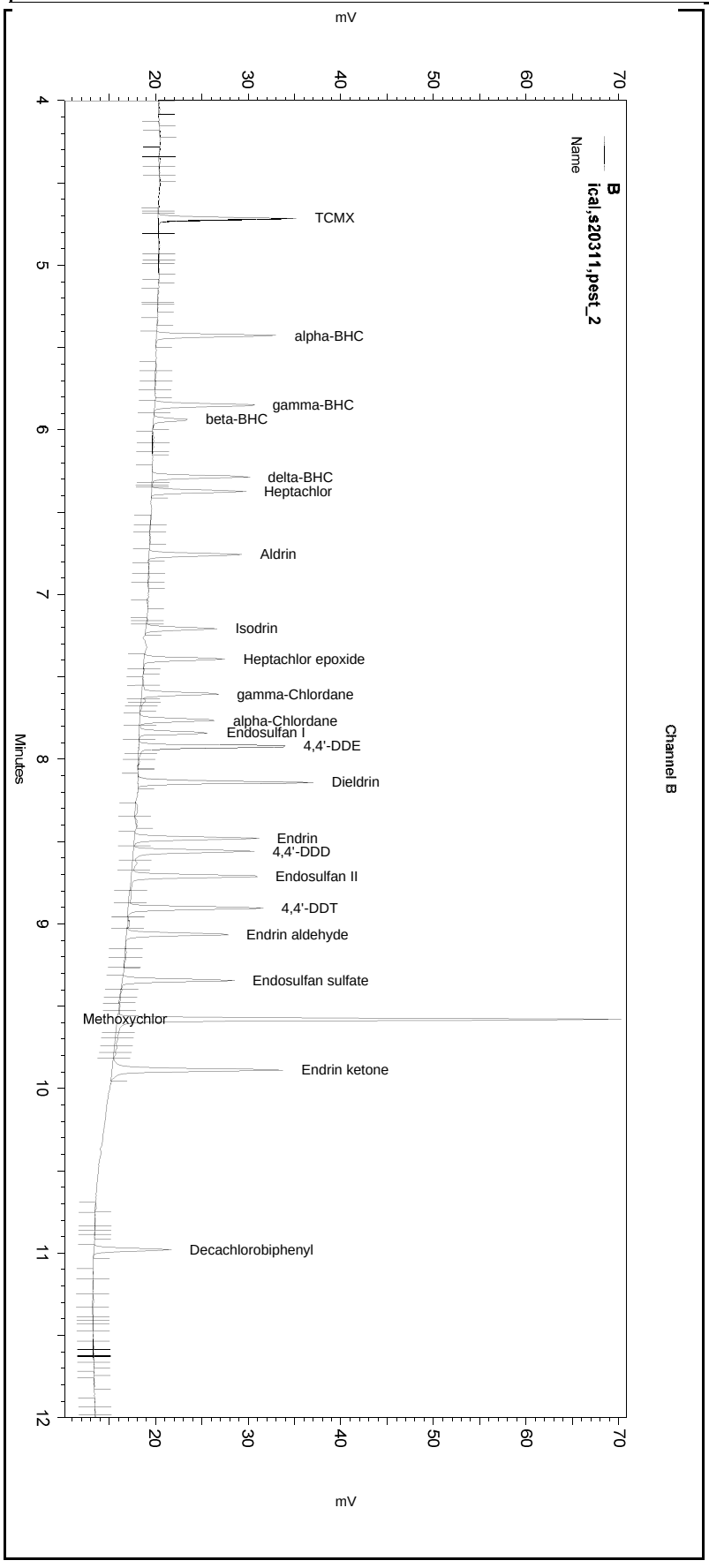
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.611	0	0
Yes	Split Peak	9.254	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/16/2012 2:23:53 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	4.684	0	0
Yes	Reset Baseline	5.814	0	0
Yes	Split Peak	6.317	0	0
Yes	Split Peak	6.346	0	0
Yes	Reset Baseline	6.416	0	0
Yes	Reset Baseline	6.711	0	0
Yes	Split Peak	7.177	0	0
Yes	Reset Baseline	7.248	0	0
Yes	Reset Baseline	7.312	0	0
Yes	Split Peak	7.634	0	0
Yes	Split Peak	7.97	0	0
Yes	Reset Baseline	8.08	0	0
Yes	Reset Baseline	8.187	0	0
Yes	Reset Baseline	8.417	0	0
Yes	Reset Baseline	9.961	0	0
Yes	Reset Baseline	10.942	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/15/2012 1:21:39 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	11286	6.813
alpha-BHC	6.273	6.270	8118	3.329
gamma-BHC	6.727	6.733	7355	3.343
beta-BHC	6.973	6.980	2851	3.237
delta-BHC	7.313	7.320	6365	3.199
Heptachlor	7.553	7.560	5977	3.055
Aldrin	8.007	8.013	6479	3.292
Isodrin	8.440	8.447	4998	3.261
Heptachlor epoxide	8.553	8.560	5580	3.124
gamma-Chlordane	8.887	8.893	5536	3.362
alpha-Chlordane	8.987	8.993	5230	3.321
Endosulfan I	9.047	9.053	4777	3.202
4,4'-DDE	9.187	9.193	10136	6.736
Dieldrin	9.373	9.380	9818	6.402
Endrin	9.640	9.647	6402	5.957
4,4'-DDD	9.787	9.787	6984	6.393
Endosulfan II	9.873	9.880	8078	6.655
Endrin aldehyde	10.020	10.027	6026	6.433
4,4'-DDT	10.133	10.133	6754	5.954
Endosulfan sulfate	10.273	10.280	6337	6.089
Methoxychlor	10.620	10.620	13506	28.639
Endrin ketone	10.787	10.793	7431	6.881
Decachlorobiphenyl	12.553	12.567	6242	7.027

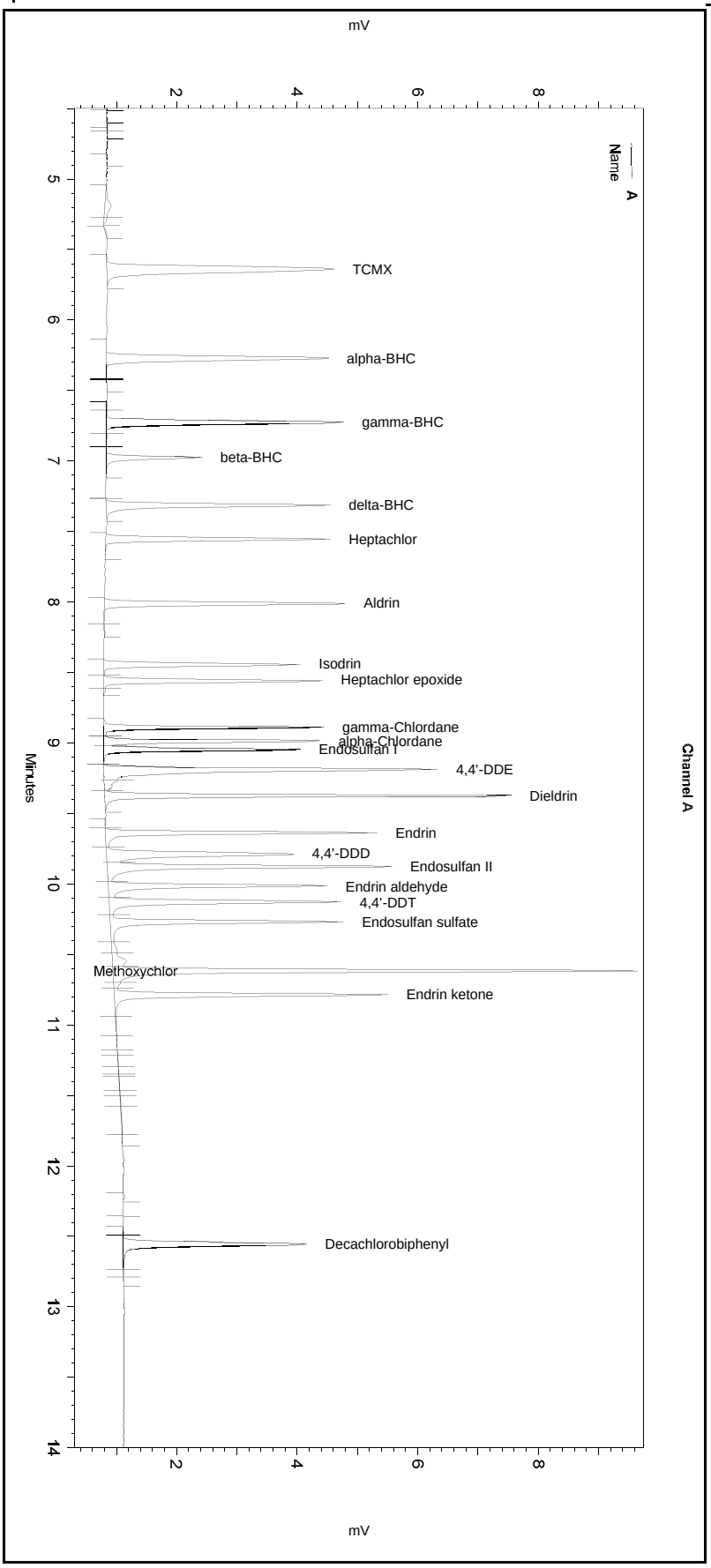
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.720	17750	12.067
alpha-BHC	5.427	5.433	15112	8.878
gamma-BHC	5.847	5.853	14156	8.631
beta-BHC	5.933	5.940	5050	7.110
delta-BHC	6.287	6.287	13165	8.228
Heptachlor	6.373	6.373	12531	7.618
Aldrin	6.753	6.753	12913	7.863
Isodrin	7.207	7.207	10465	11.254
Heptachlor epoxide	7.393	7.393	12460	7.367
gamma-Chlordane	7.607	7.607	12903	8.461
alpha-Chlordane	7.767	7.767	11664	7.481
Endosulfan I	7.840	7.840	10951	7.268
4,4'-DDE	7.920	7.920	23433	19.810
Dieldrin	8.140	8.140	26522	18.741
Endrin	8.480	8.480	19543	20.395
4,4'-DDD	8.560	8.560	18865	20.210
Endosulfan II	8.713	8.707	21194	15.993
4,4'-DDT	8.907	8.900	19130	16.884
Endrin aldehyde	9.067	9.060	15215	18.797
Endosulfan sulfate	9.347	9.347	15050	17.437
Methoxychlor	9.580	9.580	59253	76.242
Endrin ketone	9.887	9.880	27258	17.894
Decachlorobiphenyl	10.980	10.973	11001	17.477

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/15/2012 1:21:39 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

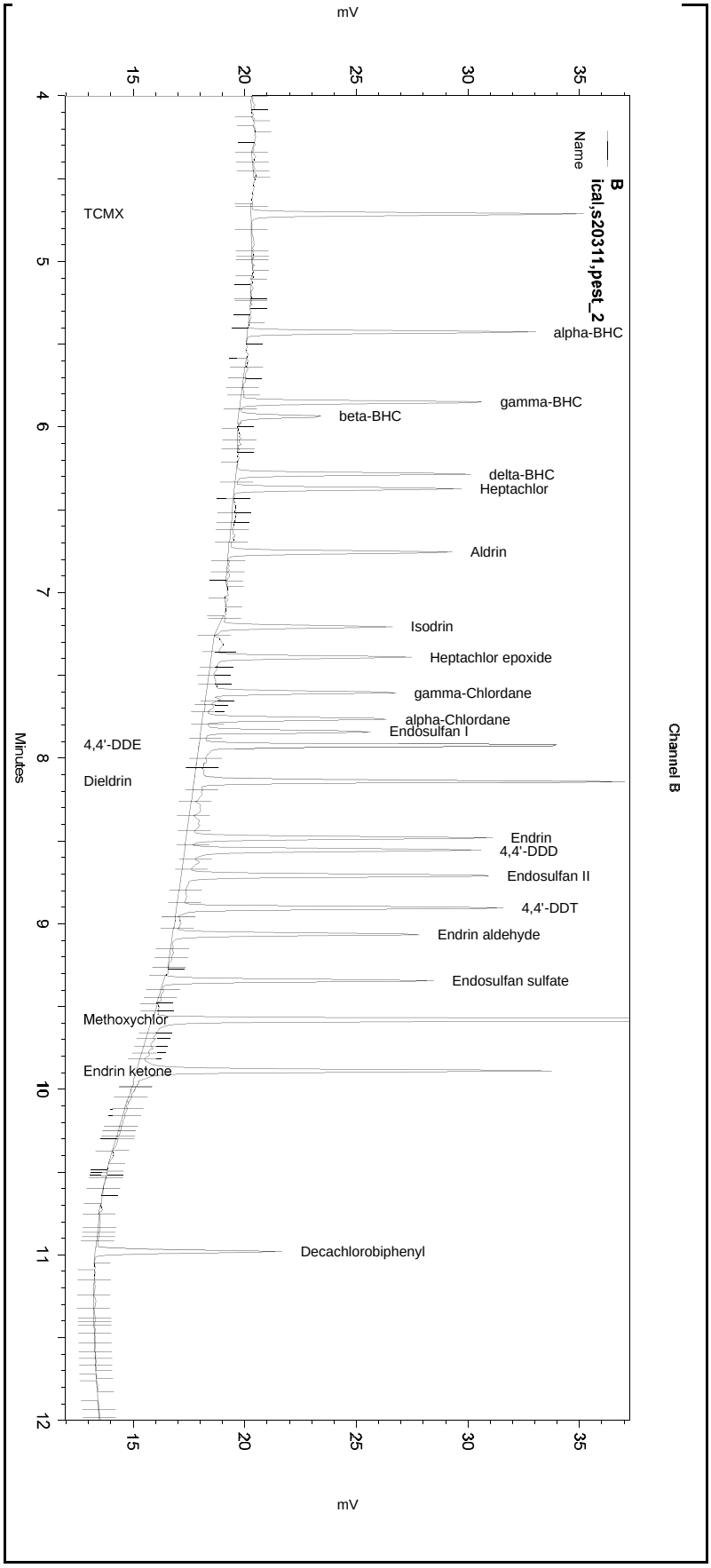
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/15/2012 1:21:39 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/16/2012 2:23:59 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	21939	20.000 CAL
alpha-BHC	6.267	6.270	15926	10.000 CAL
gamma-BHC	6.727	6.733	14421	10.000 CAL
beta-BHC	6.973	6.980	5524	10.000 CAL
delta-BHC	7.313	7.320	12737	10.000 CAL
Heptachlor	7.553	7.560	11986	10.000 CAL
Aldrin	8.007	8.013	12614	10.000 CAL
Isodrin	8.440	8.447	9577	10.000 CAL
Heptachlor epoxide	8.553	8.560	10807	10.000 CAL
gamma-Chlordane	8.887	8.893	10635	10.000 CAL
alpha-Chlordane	8.987	8.993	9996	10.000 CAL
Endosulfan I	9.047	9.053	9237	10.000 CAL
4,4'-DDE	9.187	9.193	19238	20.000 CAL
Dieldrin	9.373	9.380	19529	20.000 CAL
Endrin	9.640	9.647	12737	20.000 CAL
4,4'-DDD	9.787	9.787	13646	20.000 CAL
Endosulfan II	9.873	9.880	15746	20.000 CAL
Endrin aldehyde	10.013	10.027	11820	20.000 CAL
4,4'-DDT	10.127	10.133	13820	20.000 CAL
Endosulfan sulfate	10.267	10.280	12369	20.000 CAL
Methoxychlor	10.613	10.620	27548	100.000 CAL
Endrin ketone	10.787	10.793	14239	20.000 CAL
Decachlorobiphenyl	12.553	12.567	11538	20.000 CAL

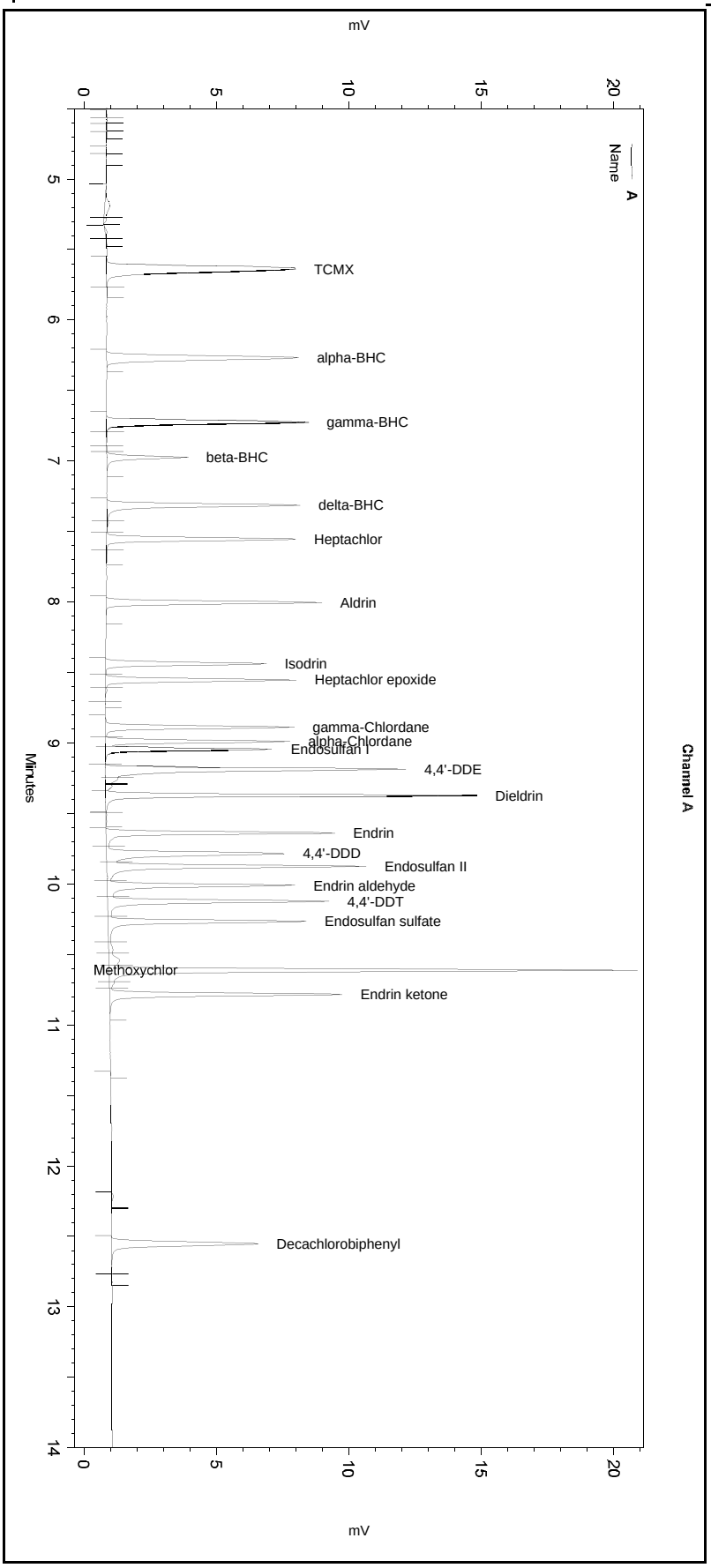
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	21045	20.000 CAL
alpha-BHC	5.433	5.433	17400	10.000 CAL
gamma-BHC	5.853	5.853	16100	10.000 CAL
beta-BHC	5.940	5.940	5339	10.000 CAL
delta-BHC	6.287	6.287	14528	10.000 CAL
Heptachlor	6.373	6.373	13949	10.000 CAL
Aldrin	6.753	6.753	14660	10.000 CAL
Isodrin	7.207	7.207	11253	10.000 CAL
Heptachlor epoxide	7.393	7.393	12019	10.000 CAL
gamma-Chlordane	7.600	7.607	12314	10.000 CAL
alpha-Chlordane	7.760	7.767	11773	10.000 CAL
Endosulfan I	7.840	7.840	10316	10.000 CAL
4,4'-DDE	7.920	7.920	23437	20.000 CAL
Dieldrin	8.140	8.140	25335	20.000 CAL
Endrin	8.480	8.480	17913	20.000 CAL
4,4'-DDD	8.560	8.560	17530	20.000 CAL
Endosulfan II	8.707	8.707	19198	20.000 CAL
4,4'-DDT	8.900	8.900	18914	20.000 CAL
Endrin aldehyde	9.060	9.060	14770	20.000 CAL
Endosulfan sulfate	9.340	9.347	14896	20.000 CAL
Methoxychlor	9.580	9.580	57003	100.000 CAL
Endrin ketone	9.880	9.880	28182	20.000 CAL
Decachlorobiphenyl	10.980	10.973	10511	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/16/2012 2:23:59 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

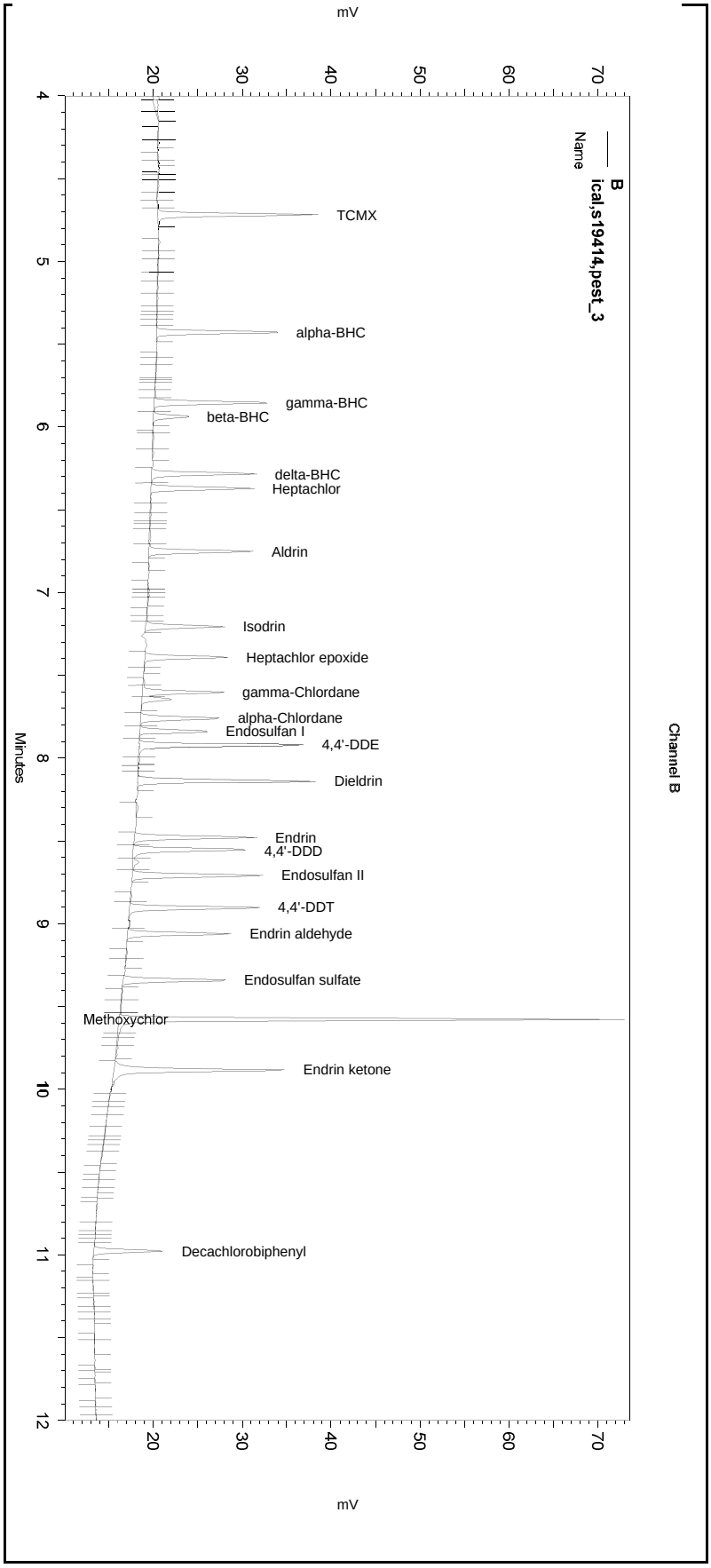
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.935	0	0
Yes	Manual Baseline	9.144	9.592	0
Yes	Manual Peak	9.487	9.601	0
Yes	Split Peak	9.491	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/16/2012 2:23:59 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.799	0	0
Yes	Reset Baseline	5.484	0	0
Yes	Reset Baseline	7.238	0	0
Yes	Reset Baseline	7.283	0	0
Yes	Reset Baseline	8.191	0	0
Yes	Reset Baseline	8.387	0	0
Yes	Reset Baseline	8.756	0	0
Yes	Reset Baseline	9.285	0	0
Yes	Reset Baseline	9.816	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/15/2012 1:21:43 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	21939	13.245
alpha-BHC	6.267	6.270	15926	6.531
gamma-BHC	6.727	6.733	14421	6.555
beta-BHC	6.973	6.980	5546	6.296
delta-BHC	7.313	7.320	12737	6.402
Heptachlor	7.553	7.560	11986	6.127
Aldrin	8.007	8.013	12614	6.409
Isodrin	8.440	8.447	9577	6.248
Heptachlor epoxide	8.553	8.560	10807	6.050
gamma-Chlordane	8.887	8.893	10635	6.458
alpha-Chlordane	8.987	8.993	9996	6.347
Endosulfan I	9.047	9.053	9237	6.191
4,4'-DDE	9.187	9.193	18804	12.496
Dieldrin	9.373	9.380	19051	12.423
Endrin	9.640	9.647	12737	11.851
4,4'-DDD	9.787	9.787	13646	12.490
Endosulfan II	9.873	9.880	15746	12.971
Endrin aldehyde	10.013	10.027	11820	12.619
4,4'-DDT	10.127	10.133	13820	12.183
Endosulfan sulfate	10.267	10.280	12369	11.886
Methoxychlor	10.613	10.620	27548	58.416
Endrin ketone	10.787	10.793	14239	13.184
Decachlorobiphenyl	12.553	12.567	11538	12.989

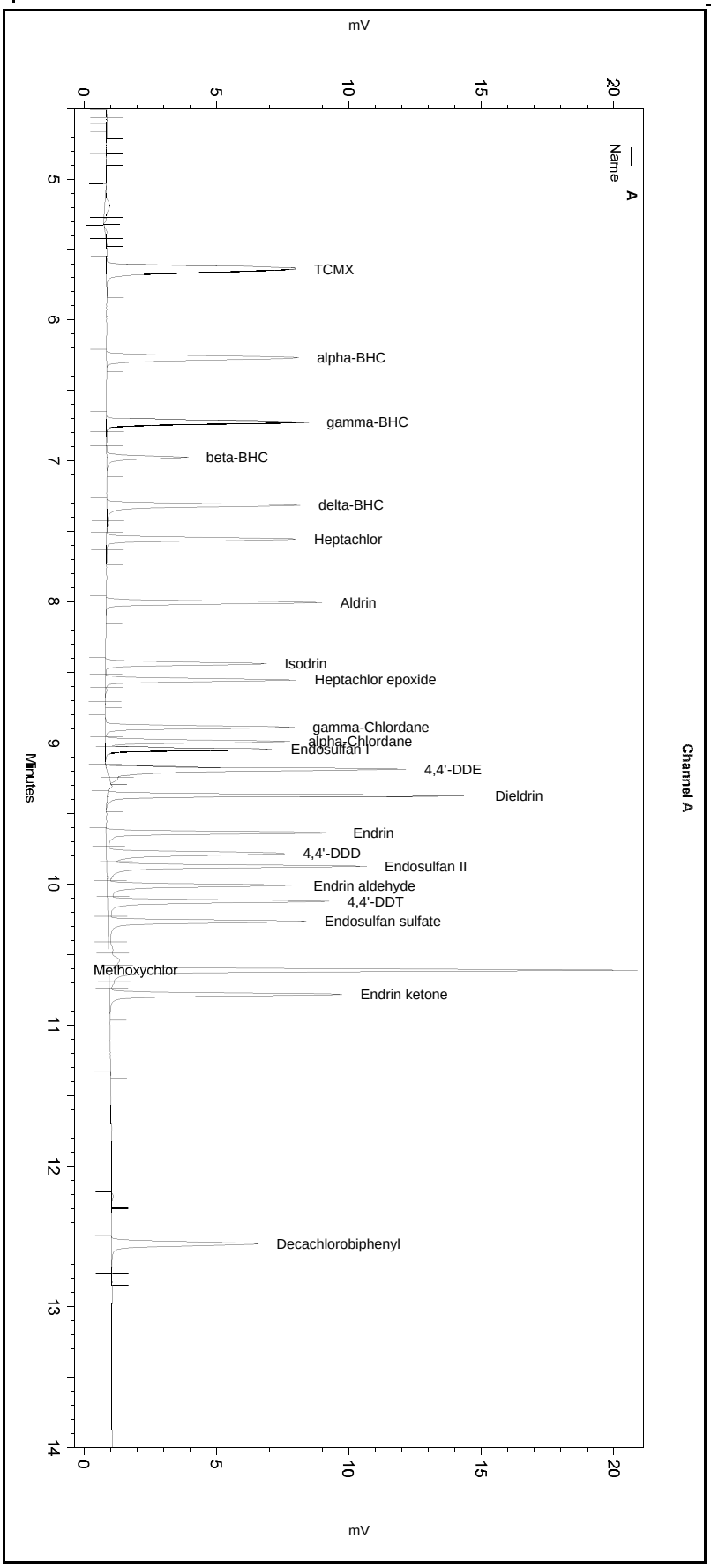
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	21872	13.921
alpha-BHC	5.433	5.433	19158	10.225
gamma-BHC	5.853	5.853	16516	9.651
beta-BHC	5.940	5.940	5477	7.643
delta-BHC	6.287	6.287	14528	8.906
Heptachlor	6.373	6.373	13949	8.309
Aldrin	6.753	6.753	14660	8.747
Isodrin	7.207	7.207	12119	12.366
Heptachlor epoxide	7.393	7.393	15438	8.992
gamma-Chlordane	7.600	7.607	14552	9.542
alpha-Chlordane	7.760	7.767	14678	9.414
Endosulfan I	7.840	7.840	13167	8.739
4,4'-DDE	7.920	7.920	28199	21.749
Dieldrin	8.140	8.140	31133	20.333
Endrin	8.480	8.480	22368	22.407
4,4'-DDD	8.560	8.560	22073	22.318
Endosulfan II	8.707	8.707	26059	18.490
4,4'-DDT	8.900	8.900	29197	22.232
Endrin aldehyde	9.060	9.060	21438	23.405
Endosulfan sulfate	9.340	9.347	22343	23.292
Methoxychlor	9.580	9.580	63040	79.552
Endrin ketone	9.880	9.880	36661	21.688
Decachlorobiphenyl	10.980	10.973	10511	16.699

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/15/2012 1:21:43 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

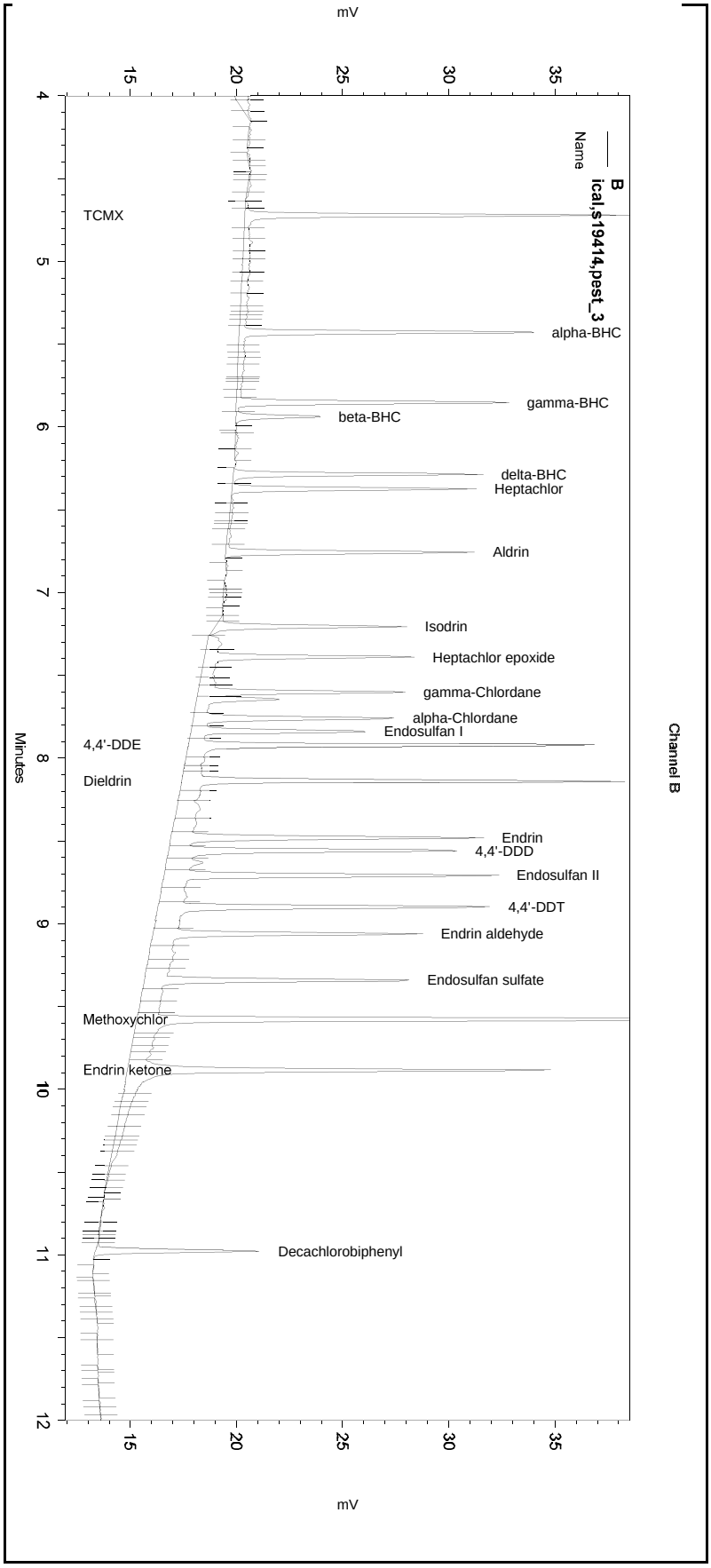
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/15/2012 1:21:43 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/16/2012 2:24:06 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	43543	40.000 CAL
alpha-BHC	6.273	6.270	32138	20.000 CAL
gamma-BHC	6.733	6.733	28995	20.000 CAL
beta-BHC	6.980	6.980	11073	20.000 CAL
delta-BHC	7.320	7.320	25561	20.000 CAL
Heptachlor	7.553	7.560	24154	20.000 CAL
Aldrin	8.013	8.013	25595	20.000 CAL
Isodrin	8.447	8.447	19133	20.000 CAL
Heptachlor epoxide	8.560	8.560	21487	20.000 CAL
gamma-Chlordane	8.893	8.893	21229	20.000 CAL
alpha-Chlordane	8.993	8.993	19860	20.000 CAL
Endosulfan I	9.053	9.053	18573	20.000 CAL
4,4'-DDE	9.193	9.193	40345	40.000 CAL
Dieldrin	9.380	9.380	40140	40.000 CAL
Endrin	9.640	9.647	26194	40.000 CAL
4,4'-DDD	9.787	9.787	27906	40.000 CAL
Endosulfan II	9.880	9.880	32026	40.000 CAL
Endrin aldehyde	10.020	10.027	23982	40.000 CAL
4,4'-DDT	10.133	10.133	29415	40.000 CAL
Endosulfan sulfate	10.273	10.280	25402	40.000 CAL
Methoxychlor	10.620	10.620	58206	200.000 CAL
Endrin ketone	10.787	10.793	29611	40.000 CAL
Decachlorobiphenyl	12.553	12.567	23101	40.000 CAL

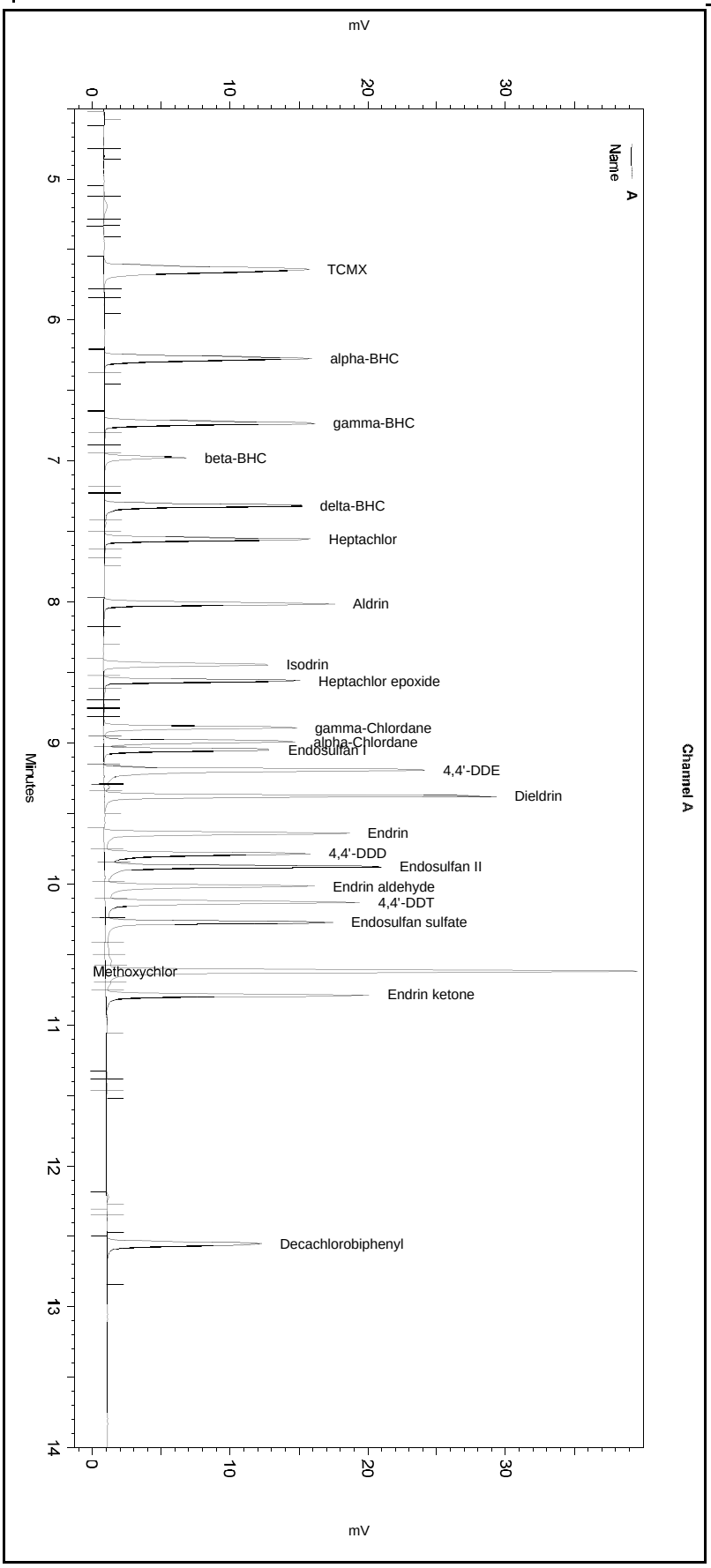
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.727	4.720	94837	40.000 CAL
alpha-BHC	5.433	5.433	65055	20.000 CAL
gamma-BHC	5.853	5.853	53223	20.000 CAL
beta-BHC	5.940	5.940	14885	20.000 CAL
delta-BHC	6.293	6.287	46085	20.000 CAL
Heptachlor	6.380	6.373	44615	20.000 CAL
Aldrin	6.760	6.753	44204	20.000 CAL
Isodrin	7.213	7.207	31400	20.000 CAL
Heptachlor epoxide	7.393	7.393	36218	20.000 CAL
gamma-Chlordane	7.607	7.607	34355	20.000 CAL
alpha-Chlordane	7.767	7.767	33501	20.000 CAL
Endosulfan I	7.840	7.840	29714	20.000 CAL
4,4'-DDE	7.927	7.920	145597	40.000 CAL
Dieldrin	8.147	8.140	179159	40.000 CAL
Endrin	8.487	8.480	69742	40.000 CAL
4,4'-DDD	8.560	8.560	69281	40.000 CAL
Endosulfan II	8.713	8.707	83907	40.000 CAL
4,4'-DDT	8.907	8.900	90608	40.000 CAL
Endrin aldehyde	9.067	9.060	53408	40.000 CAL
Endosulfan sulfate	9.347	9.347	51943	40.000 CAL
Methoxychlor	9.587	9.580	363585	200.000 CAL
Endrin ketone	9.887	9.880	168733	40.000 CAL
Decachlorobiphenyl	10.980	10.973	29586	40.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/16/2012 2:24:06 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

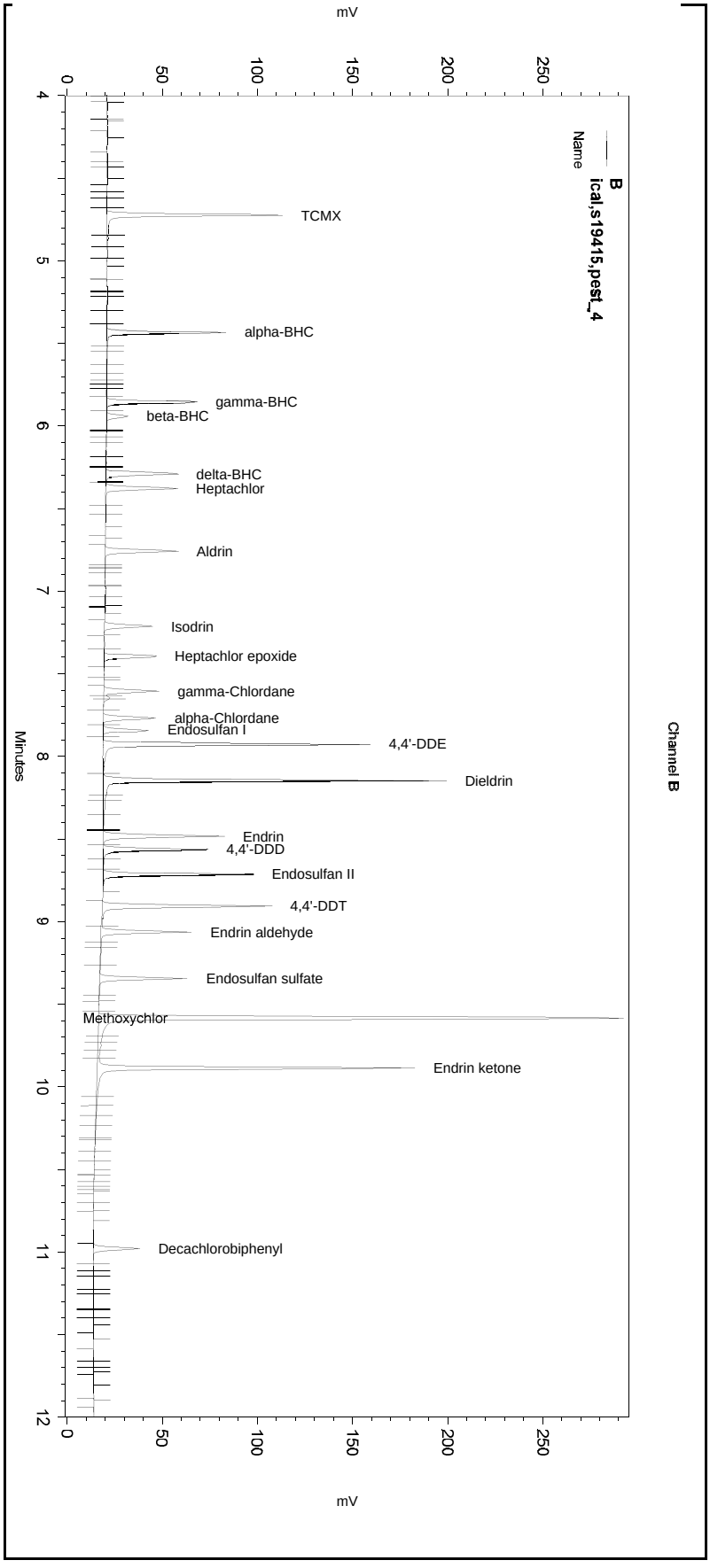
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/16/2012 2:24:06 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.633	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/15/2012 1:21:47 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	43543	26.287
alpha-BHC	6.273	6.270	32138	13.179
gamma-BHC	6.733	6.733	28995	13.179
beta-BHC	6.980	6.980	11073	12.571
delta-BHC	7.320	7.320	25561	12.848
Heptachlor	7.553	7.560	24154	12.347
Aldrin	8.013	8.013	25595	13.004
Isodrin	8.447	8.447	19133	12.482
Heptachlor epoxide	8.560	8.560	21487	12.028
gamma-Chlordane	8.893	8.893	21229	12.891
alpha-Chlordane	8.993	8.993	19860	12.610
Endosulfan I	9.053	9.053	18573	12.449
4,4'-DDE	9.193	9.193	40345	26.811
Dieldrin	9.380	9.380	40140	26.175
Endrin	9.640	9.647	26194	24.373
4,4'-DDD	9.787	9.787	27906	25.543
Endosulfan II	9.880	9.880	32026	26.383
Endrin aldehyde	10.020	10.027	23982	25.602
4,4'-DDT	10.133	10.133	29415	25.931
Endosulfan sulfate	10.273	10.280	25402	24.410
Methoxychlor	10.620	10.620	58206	123.426
Endrin ketone	10.787	10.793	29611	27.418
Decachlorobiphenyl	12.553	12.567	23101	26.007

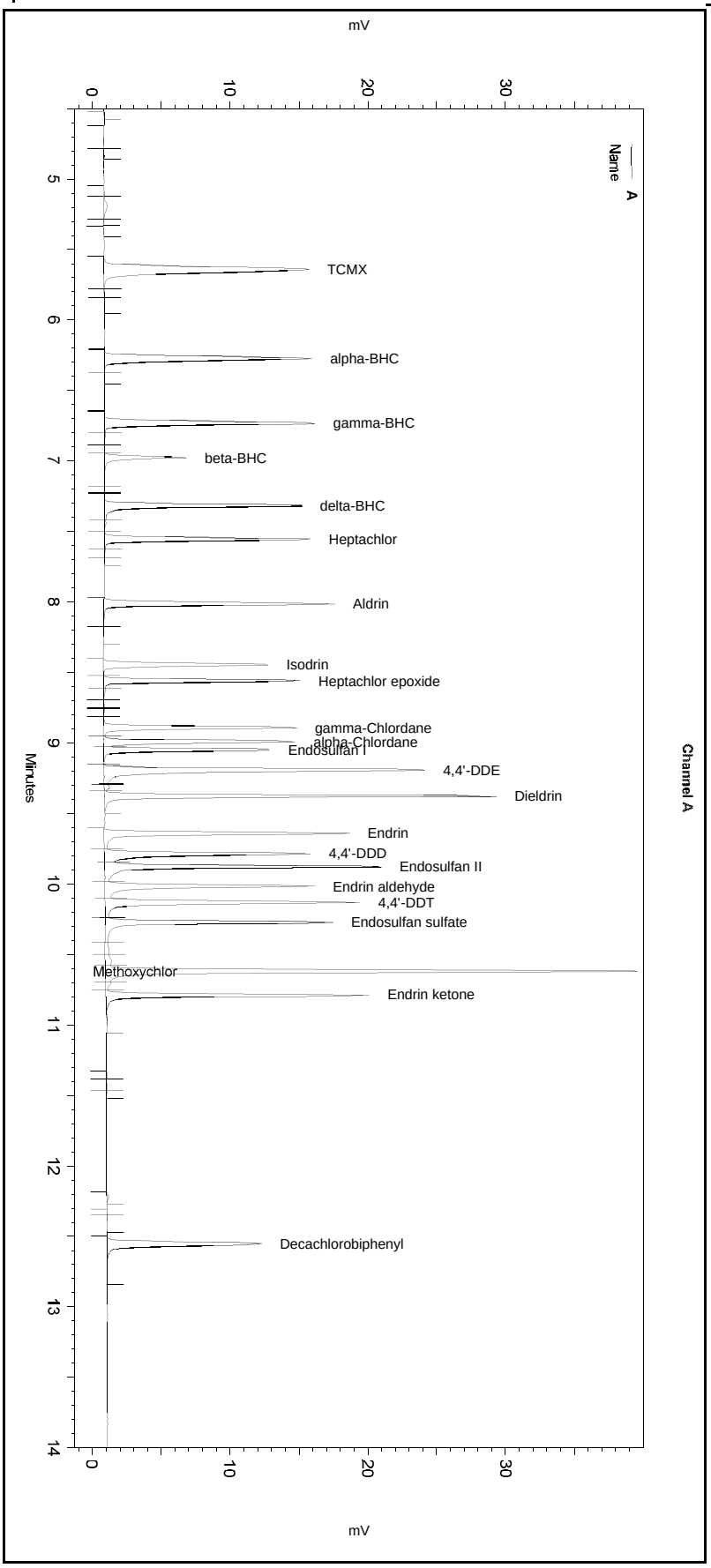
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.727	4.720	94837	40.633
alpha-BHC	5.433	5.433	65055	19.841
gamma-BHC	5.853	5.853	53223	20.265
beta-BHC	5.940	5.940	14885	19.385
delta-BHC	6.293	6.287	46085	20.407
Heptachlor	6.380	6.373	44615	19.279
Aldrin	6.760	6.753	44204	19.873
Isodrin	7.213	7.207	31400	21.045
Heptachlor epoxide	7.393	7.393	36218	20.331
gamma-Chlordane	7.607	7.607	37402	24.526
alpha-Chlordane	7.767	7.767	33501	21.486
Endosulfan I	7.840	7.840	29714	19.720
4,4'-DDE	7.927	7.920	145597	47.679
Dieldrin	8.147	8.140	179159	47.165
Endrin	8.487	8.480	69742	45.212
4,4'-DDD	8.560	8.560	69281	42.599
Endosulfan II	8.713	8.707	83907	39.309
4,4'-DDT	8.907	8.900	90608	44.134
Endrin aldehyde	9.067	9.060	53408	39.513
Endosulfan sulfate	9.347	9.347	51943	40.025
Methoxychlor	9.587	9.580	363585	256.373
Endrin ketone	9.887	9.880	168733	48.460
Decachlorobiphenyl	10.980	10.973	29586	47.003

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/15/2012 1:21:47 PM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

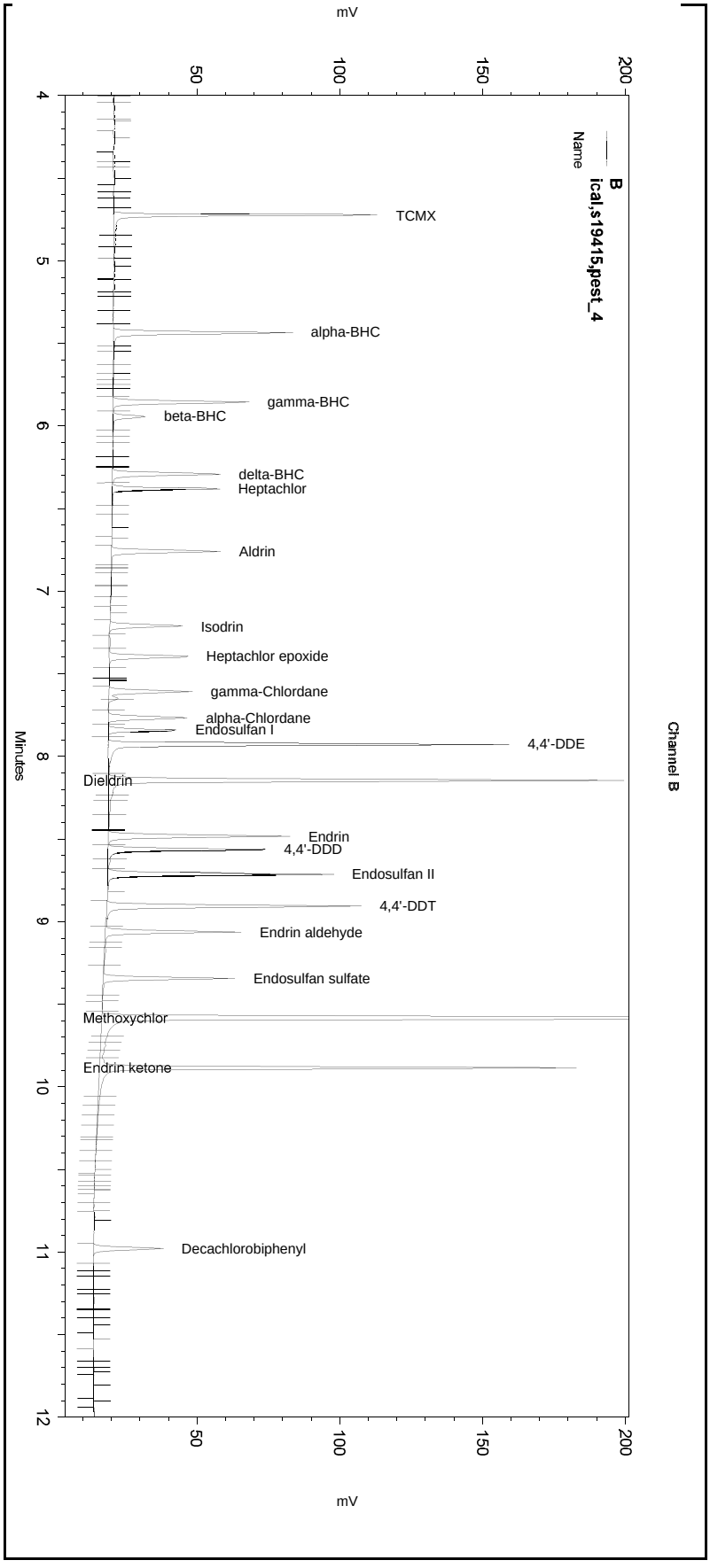
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/15/2012 1:21:47 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/16/2012 2:24:13 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	51057	50.000 CAL
alpha-BHC	6.260	6.270	37465	25.000 CAL
gamma-BHC	6.720	6.733	33184	25.000 CAL
beta-BHC	6.973	6.980	12222	25.000 CAL
delta-BHC	7.313	7.320	27455	25.000 CAL
Heptachlor	7.553	7.560	27859	25.000 CAL
Aldrin	8.007	8.013	28989	25.000 CAL
Isodrin	8.440	8.447	21603	25.000 CAL
Heptachlor epoxide	8.553	8.560	23499	25.000 CAL
gamma-Chlordane	8.887	8.893	22906	25.000 CAL
alpha-Chlordane	8.993	8.993	21457	25.000 CAL
Endosulfan I	9.047	9.053	19701	25.000 CAL
4,4'-DDE	9.187	9.193	41445	50.000 CAL
Dieldrin	9.380	9.380	42242	50.000 CAL
Endrin	9.640	9.647	28782	50.000 CAL
4,4'-DDD	9.787	9.787	26713	50.000 CAL
Endosulfan II	9.880	9.880	30935	50.000 CAL
Endrin aldehyde	10.020	10.027	22076	50.000 CAL
4,4'-DDT	10.133	10.133	28511	50.000 CAL
Endosulfan sulfate	10.273	10.280	24846	50.000 CAL
Methoxychlor	10.620	10.620	55236	250.000 CAL
Endrin ketone	10.787	10.793	27455	50.000 CAL
Decachlorobiphenyl	12.560	12.567	22224	50.000 CAL

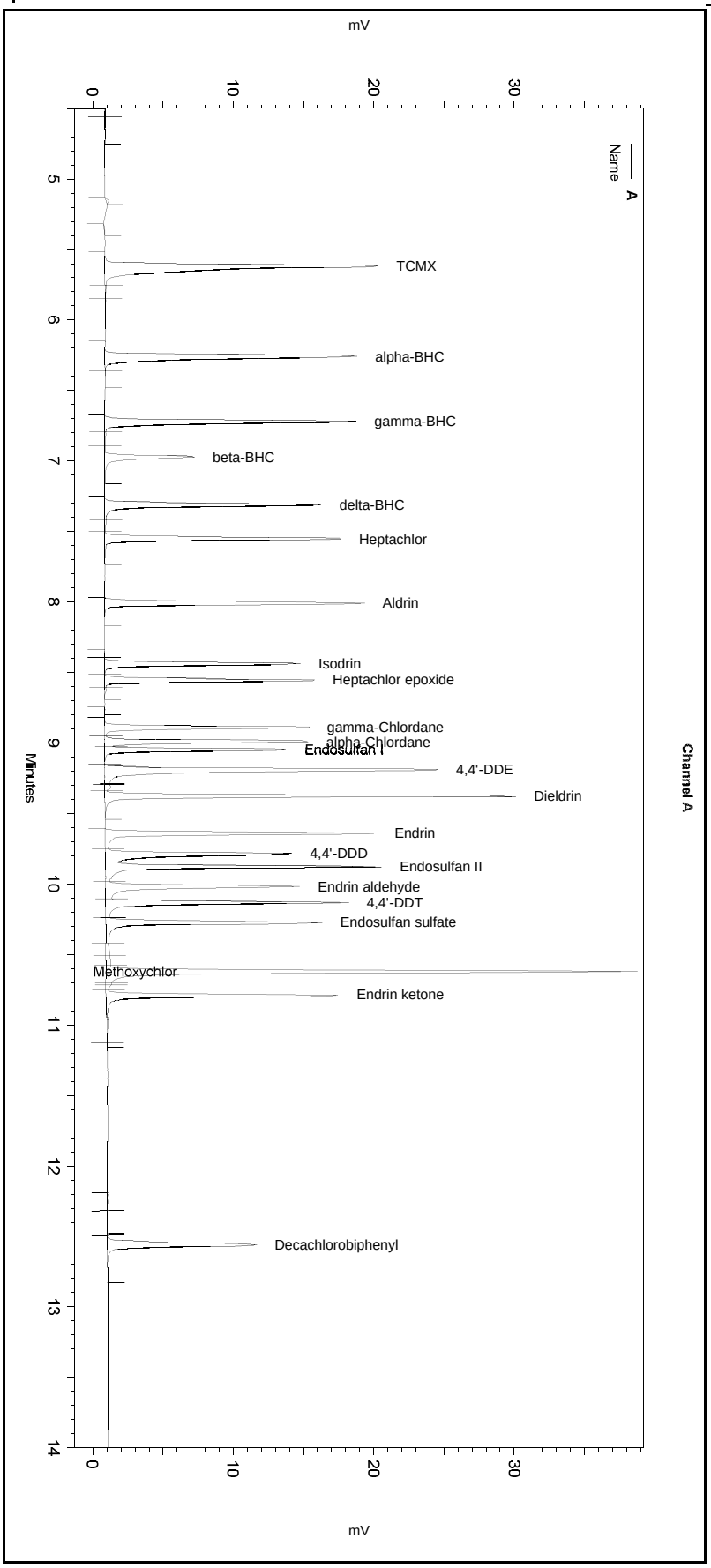
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	128215	50.000 CAL
alpha-BHC	5.433	5.433	79940	25.000 CAL
gamma-BHC	5.853	5.853	62869	25.000 CAL
beta-BHC	5.940	5.940	16239	25.000 CAL
delta-BHC	6.287	6.287	52536	25.000 CAL
Heptachlor	6.373	6.373	50843	25.000 CAL
Aldrin	6.760	6.753	49964	25.000 CAL
Isodrin	7.213	7.207	34272	25.000 CAL
Heptachlor epoxide	7.393	7.393	41088	25.000 CAL
gamma-Chlordane	7.607	7.607	39566	25.000 CAL
alpha-Chlordane	7.767	7.767	36589	25.000 CAL
Endosulfan I	7.840	7.840	31908	25.000 CAL
4,4'-DDE	7.927	7.920	173934	50.000 CAL
Dieldrin	8.147	8.140	207133	50.000 CAL
Endrin	8.487	8.480	79388	50.000 CAL
4,4'-DDD	8.560	8.560	81452	50.000 CAL
Endosulfan II	8.713	8.707	103377	50.000 CAL
4,4'-DDT	8.907	8.900	110072	50.000 CAL
Endrin aldehyde	9.067	9.060	63705	50.000 CAL
Endosulfan sulfate	9.347	9.347	56976	50.000 CAL
Methoxychlor	9.587	9.580	379128	250.000 CAL
Endrin ketone	9.893	9.880	190002	50.000 CAL
Decachlorobiphenyl	10.980	10.973	31419	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/16/2012 2:24:13 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

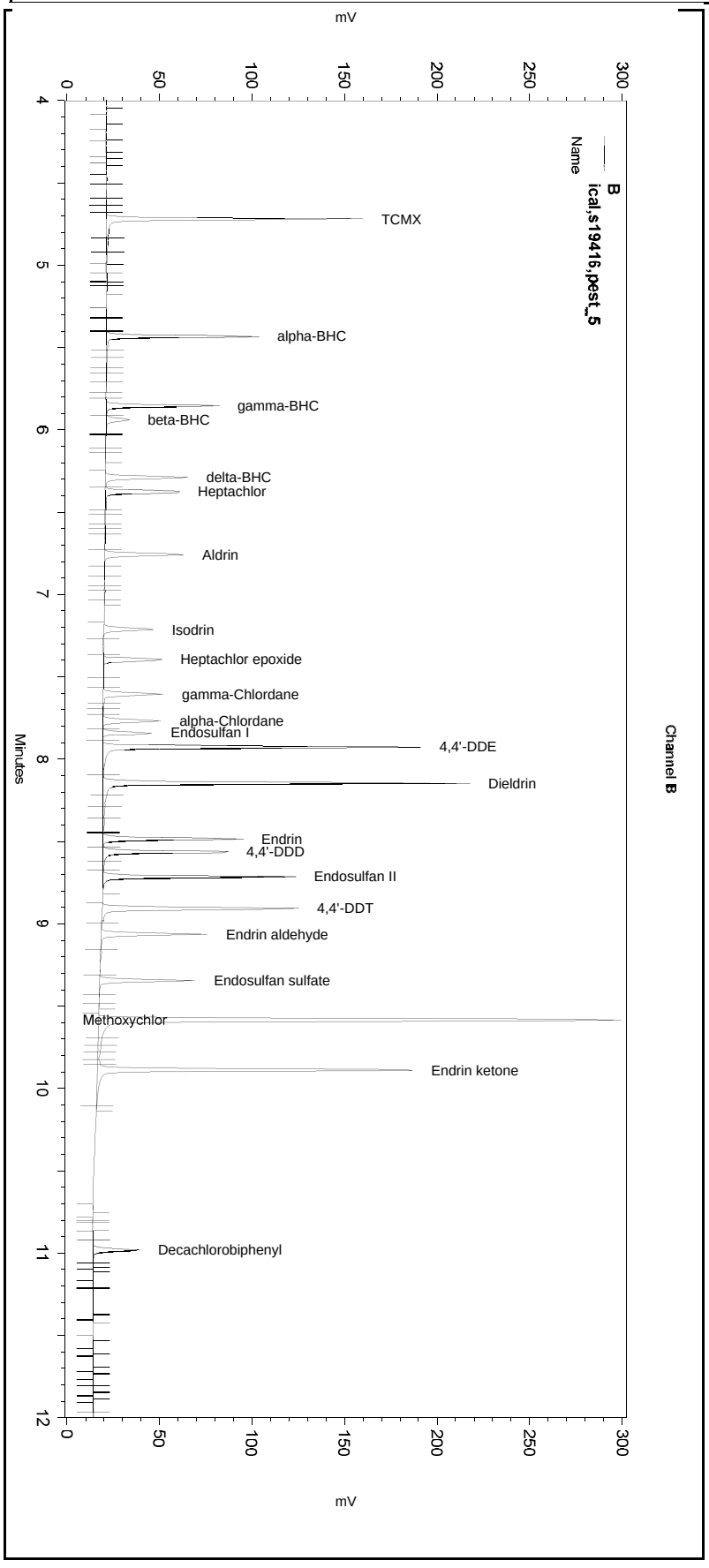
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	9.293	0	0
Yes	Split Peak	10.7	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/16/2012 2:24:13 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.085	0	0
Yes	Split Peak	9.851	0	0
Yes	Reset Baseline	10.142	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/15/2012 1:21:51 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	51057	30.824
alpha-BHC	6.260	6.270	37465	15.364
gamma-BHC	6.720	6.733	33184	15.083
beta-BHC	6.973	6.980	12222	13.876
delta-BHC	7.313	7.320	27455	13.800
Heptachlor	7.553	7.560	27859	14.241
Aldrin	8.007	8.013	28989	14.728
Isodrin	8.440	8.447	21603	14.093
Heptachlor epoxide	8.553	8.560	23499	13.155
gamma-Chlordane	8.887	8.893	22906	13.909
alpha-Chlordane	8.993	8.993	21457	13.624
Endosulfan I	9.047	9.053	19701	13.205
4,4'-DDE	9.187	9.193	42337	28.135
Dieldrin	9.380	9.380	42242	27.546
Endrin	9.640	9.647	28782	26.781
4,4'-DDD	9.787	9.787	26713	24.451
Endosulfan II	9.880	9.880	30935	25.484
Endrin aldehyde	10.020	10.027	22076	23.568
4,4'-DDT	10.133	10.133	28511	25.134
Endosulfan sulfate	10.273	10.280	24846	23.876
Methoxychlor	10.620	10.620	55564	117.823
Endrin ketone	10.787	10.793	27455	25.421
Decachlorobiphenyl	12.560	12.567	22224	25.020

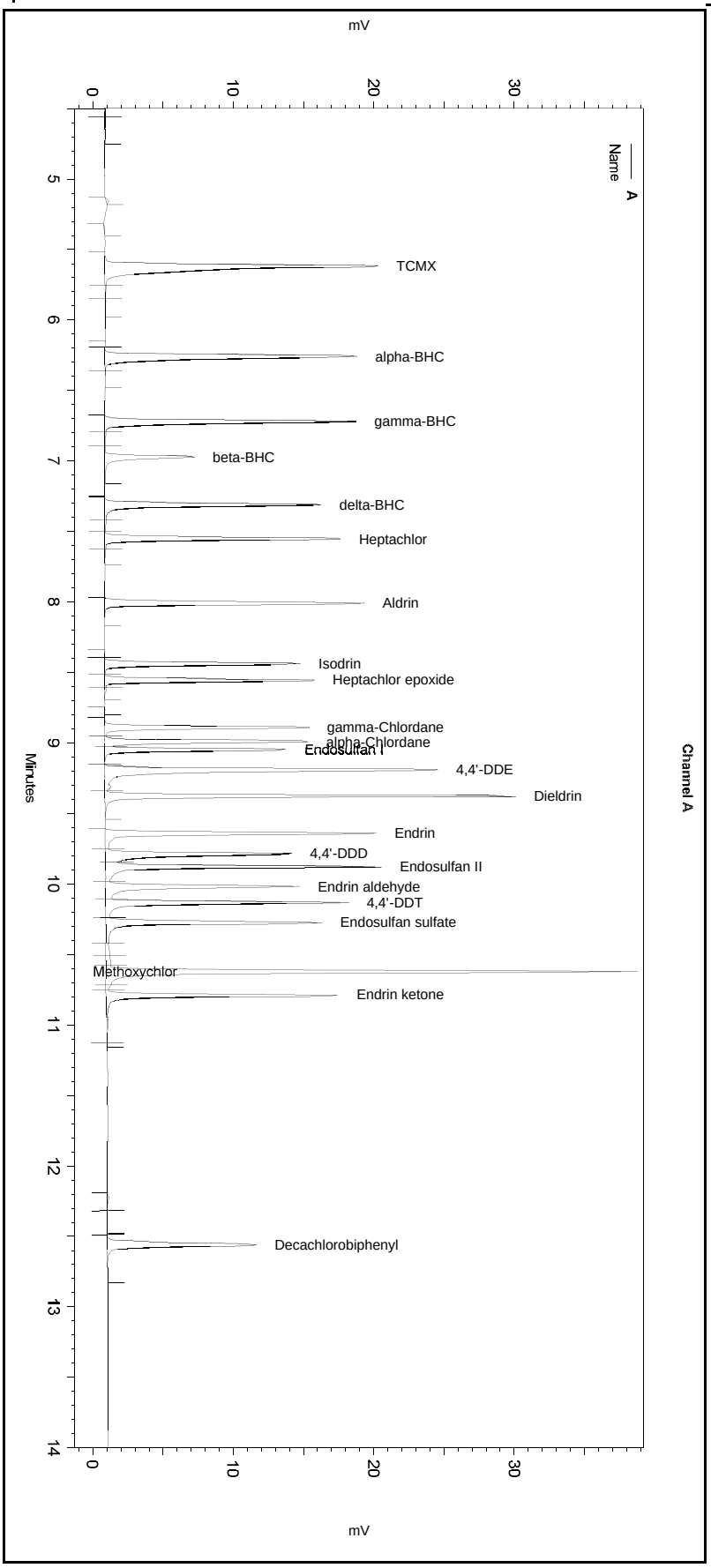
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	128215	50.501
alpha-BHC	5.433	5.433	79940	22.068
gamma-BHC	5.853	5.853	62869	22.315
beta-BHC	5.940	5.940	16239	21.075
delta-BHC	6.287	6.287	52666	22.262
Heptachlor	6.373	6.373	51464	21.172
Aldrin	6.760	6.753	51347	21.971
Isodrin	7.213	7.207	35985	22.579
Heptachlor epoxide	7.393	7.393	41088	22.988
gamma-Chlordane	7.607	7.607	39566	25.945
alpha-Chlordane	7.767	7.767	36589	23.467
Endosulfan I	7.840	7.840	31908	21.176
4,4'-DDE	7.927	7.920	173934	51.868
Dieldrin	8.147	8.140	207133	50.535
Endrin	8.487	8.480	79388	48.668
4,4'-DDD	8.560	8.560	81452	46.408
Endosulfan II	8.713	8.707	103377	44.560
4,4'-DDT	8.907	8.900	110151	49.385
Endrin aldehyde	9.067	9.060	64032	43.594
Endosulfan sulfate	9.347	9.347	57561	42.561
Methoxychlor	9.587	9.580	380785	263.955
Endrin ketone	9.893	9.880	197868	52.397
Decachlorobiphenyl	10.980	10.973	31419	49.915

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/15/2012 1:21:51 PM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

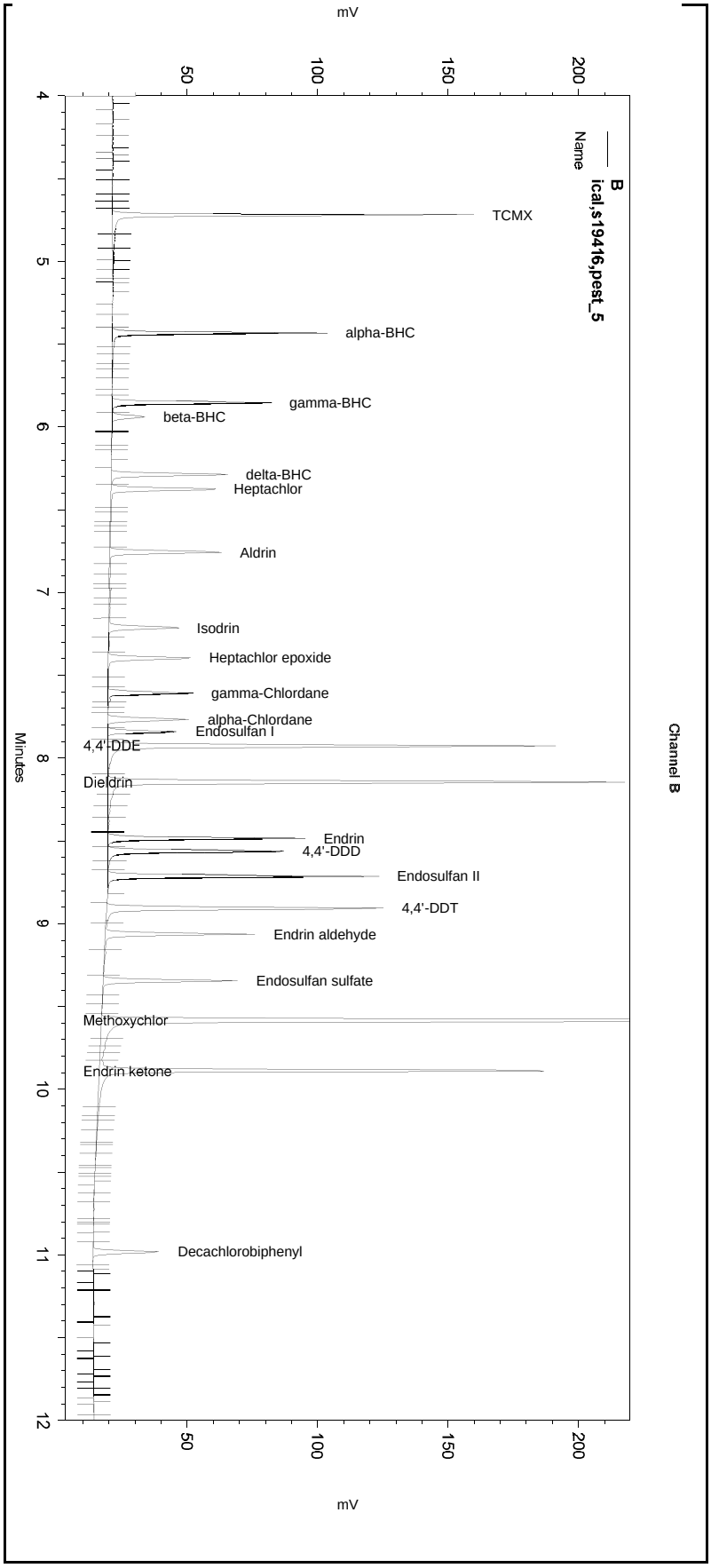
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/15/2012 1:21:51 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/16/2012 2:24:20 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	116251	100.000 CAL
alpha-BHC	6.260	6.270	86740	50.000 CAL
gamma-BHC	6.720	6.733	76931	50.000 CAL
beta-BHC	6.973	6.980	27433	50.000 CAL
delta-BHC	7.313	7.320	65138	50.000 CAL
Heptachlor	7.553	7.560	64231	50.000 CAL
Aldrin	8.007	8.013	65699	50.000 CAL
Isodrin	8.440	8.447	49273	50.000 CAL
Heptachlor epoxide	8.560	8.560	54346	50.000 CAL
gamma-Chlordane	8.893	8.893	53173	50.000 CAL
alpha-Chlordane	8.993	8.993	50104	50.000 CAL
Endosulfan I	9.047	9.053	46513	50.000 CAL
4,4'-DDE	9.193	9.193	92161	100.000 CAL
Dieldrin	9.380	9.380	90556	100.000 CAL
Endrin	9.640	9.647	66504	100.000 CAL
4,4'-DDD	9.787	9.787	65236	100.000 CAL
Endosulfan II	9.880	9.880	70830	100.000 CAL
Endrin aldehyde	10.020	10.027	53478	100.000 CAL
4,4'-DDT	10.133	10.133	68948	100.000 CAL
Endosulfan sulfate	10.273	10.280	58314	100.000 CAL
Methoxychlor	10.620	10.620	111397	500.000 CAL
Endrin ketone	10.787	10.793	63748	100.000 CAL
Decachlorobiphenyl	12.560	12.567	46610	100.000 CAL

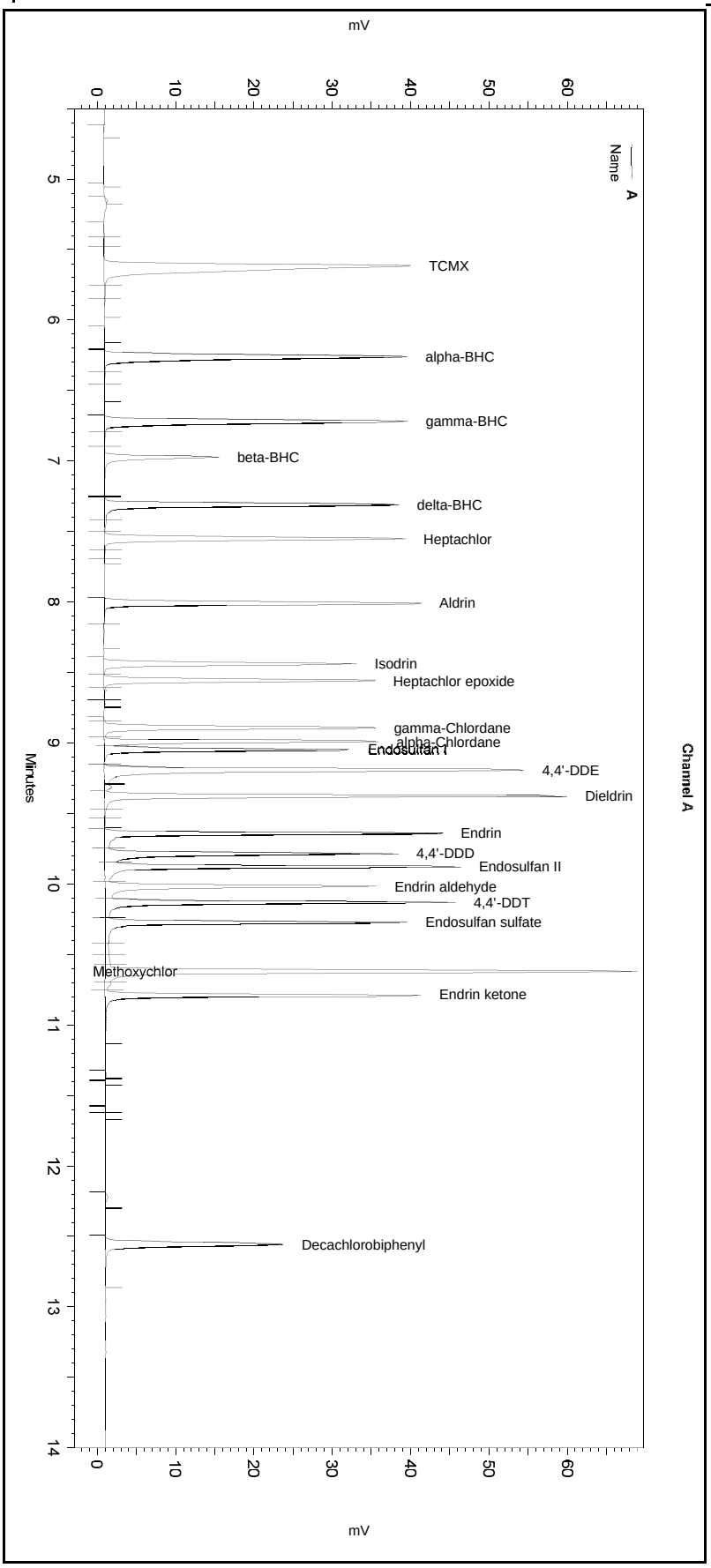
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.727	4.720	362047	100.000 CAL
alpha-BHC	5.433	5.433	335534	50.000 CAL
gamma-BHC	5.860	5.853	298499	50.000 CAL
beta-BHC	5.940	5.940	57241	50.000 CAL
delta-BHC	6.293	6.287	271864	50.000 CAL
Heptachlor	6.380	6.373	308440	50.000 CAL
Aldrin	6.760	6.753	290326	50.000 CAL
Isodrin	7.213	7.207	173474	50.000 CAL
Heptachlor epoxide	7.400	7.393	221727	50.000 CAL
gamma-Chlordane	7.607	7.607	210539	50.000 CAL
alpha-Chlordane	7.773	7.767	209681	50.000 CAL
Endosulfan I	7.847	7.840	193111	50.000 CAL
4,4'-DDE	7.927	7.920	493629	100.000 CAL
Dieldrin	8.147	8.140	498518	100.000 CAL
Endrin	8.487	8.480	367699	100.000 CAL
4,4'-DDD	8.567	8.560	442852	100.000 CAL
Endosulfan II	8.713	8.707	470778	100.000 CAL
4,4'-DDT	8.907	8.900	445212	100.000 CAL
Endrin aldehyde	9.067	9.060	385440	100.000 CAL
Endosulfan sulfate	9.353	9.347	355843	100.000 CAL
Methoxychlor	9.587	9.580	590978	500.000 CAL
Endrin ketone	9.887	9.880	436524	100.000 CAL
Decachlorobiphenyl	10.987	10.973	116446	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/16/2012 2:24:20 PM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

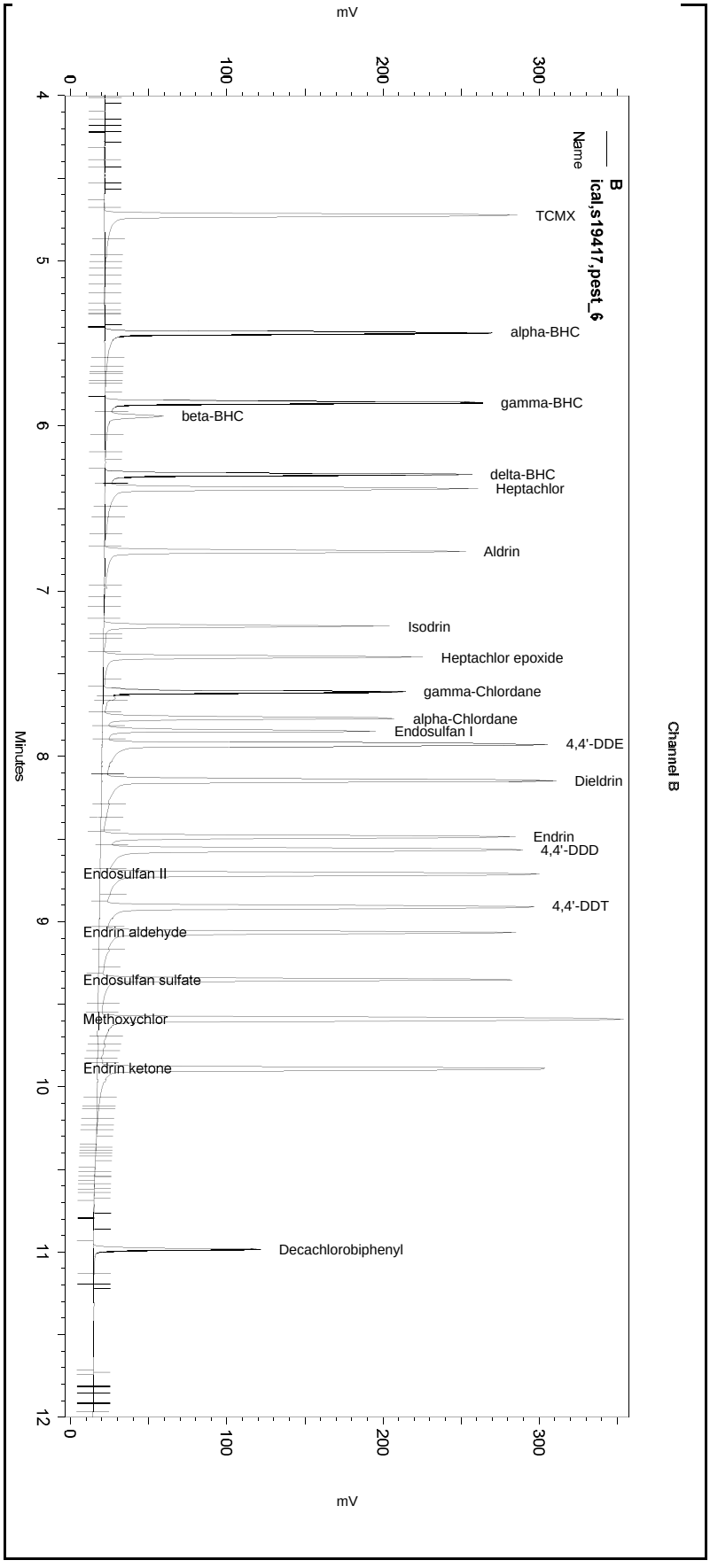
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	8.813	9.602	0
Yes	Split Peak	8.85	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/16/2012 2:24:20 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	7.167	10.299	0
Yes	Split Peak	7.26	0	0
Yes	Split Peak	7.632	0	0
Yes	Split Peak	9.855	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/15/2012 1:21:55 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	116251	70.182
alpha-BHC	6.260	6.270	86740	35.570
gamma-BHC	6.720	6.733	76931	34.967
beta-BHC	6.973	6.980	27433	31.145
delta-BHC	7.313	7.320	65138	32.740
Heptachlor	7.553	7.560	64231	32.834
Aldrin	8.007	8.013	65699	33.379
Isodrin	8.440	8.447	49273	32.145
Heptachlor epoxide	8.560	8.560	54346	30.423
gamma-Chlordane	8.893	8.893	53250	32.334
alpha-Chlordane	8.993	8.993	49998	31.746
Endosulfan I	9.047	9.053	46178	30.952
4,4'-DDE	9.193	9.193	89866	59.719
Dieldrin	9.380	9.380	88976	58.021
Endrin	9.640	9.647	66504	61.880
4,4'-DDD	9.787	9.787	65236	59.711
Endosulfan II	9.880	9.880	70830	58.349
Endrin aldehyde	10.020	10.027	53478	57.091
4,4'-DDT	10.133	10.133	68948	60.782
Endosulfan sulfate	10.273	10.280	58314	56.036
Methoxychlor	10.620	10.620	111397	236.217
Endrin ketone	10.787	10.793	63748	59.026
Decachlorobiphenyl	12.560	12.567	46610	52.473

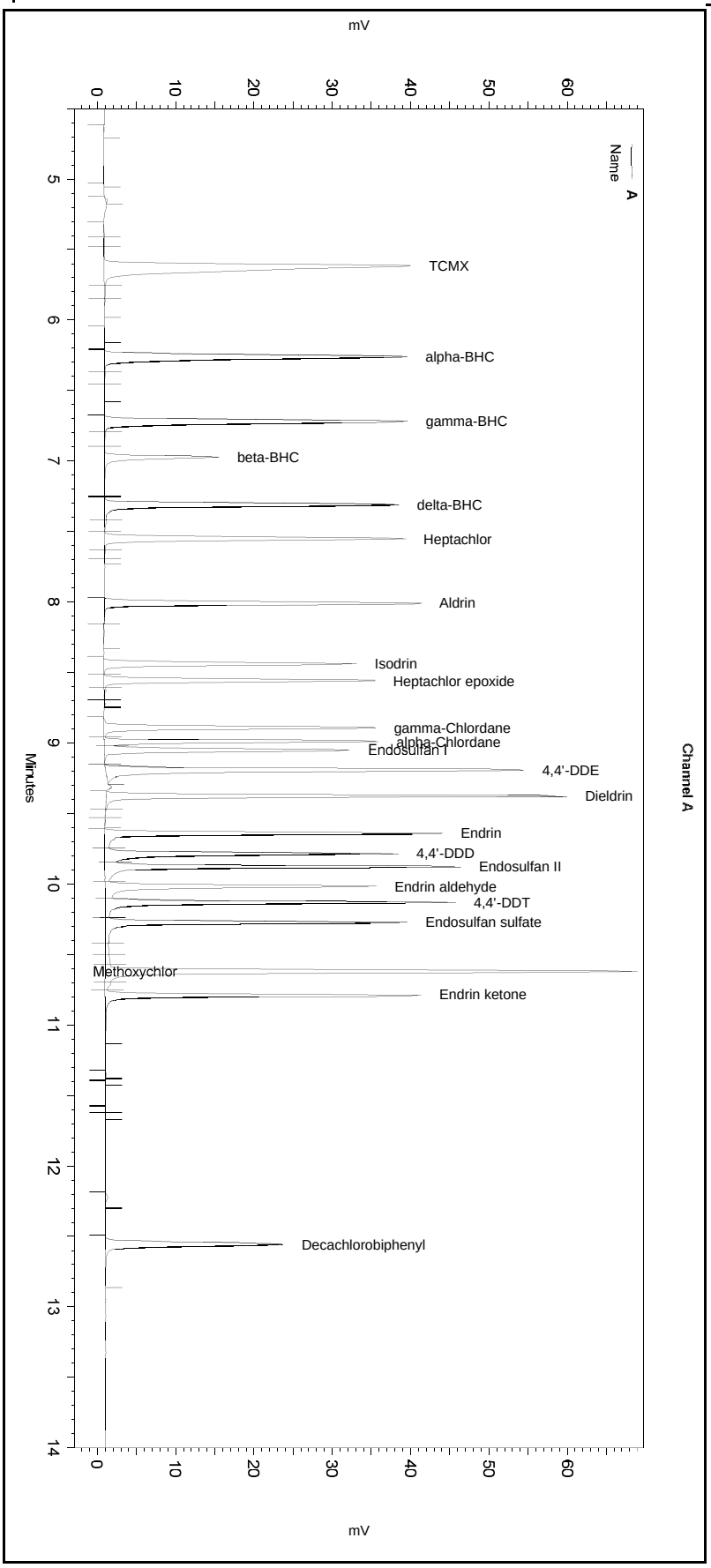
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.727	4.720	362047	102.625
alpha-BHC	5.433	5.433	335534	45.626
gamma-BHC	5.860	5.853	298499	52.306
beta-BHC	5.940	5.940	57241	72.250
delta-BHC	6.293	6.287	271864	59.425
Heptachlor	6.380	6.373	308440	61.748
Aldrin	6.760	6.753	290326	62.899
Isodrin	7.213	7.207	174457	49.576
Heptachlor epoxide	7.400	7.393	211859	116.172
gamma-Chlordane	7.607	7.607	215781	141.494
alpha-Chlordane	7.773	7.767	203394	130.450
Endosulfan I	7.847	7.840	186343	123.670
4,4'-DDE	7.927	7.920	473231	83.598
Dieldrin	8.147	8.140	478649	75.432
Endrin	8.487	8.480	354846	109.421
4,4'-DDD	8.567	8.560	407969	106.010
Endosulfan II	8.713	8.707	418648	98.694
4,4'-DDT	8.907	8.900	399672	100.751
Endrin aldehyde	9.067	9.060	352246	105.807
Endosulfan sulfate	9.353	9.347	328183	112.189
Methoxychlor	9.587	9.580	574267	340.485
Endrin ketone	9.887	9.880	428425	76.322
Decachlorobiphenyl	10.987	10.973	116446	184.995

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/15/2012 1:21:55 PM
Sample Amount: 1



---< General Method Parameters >---

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

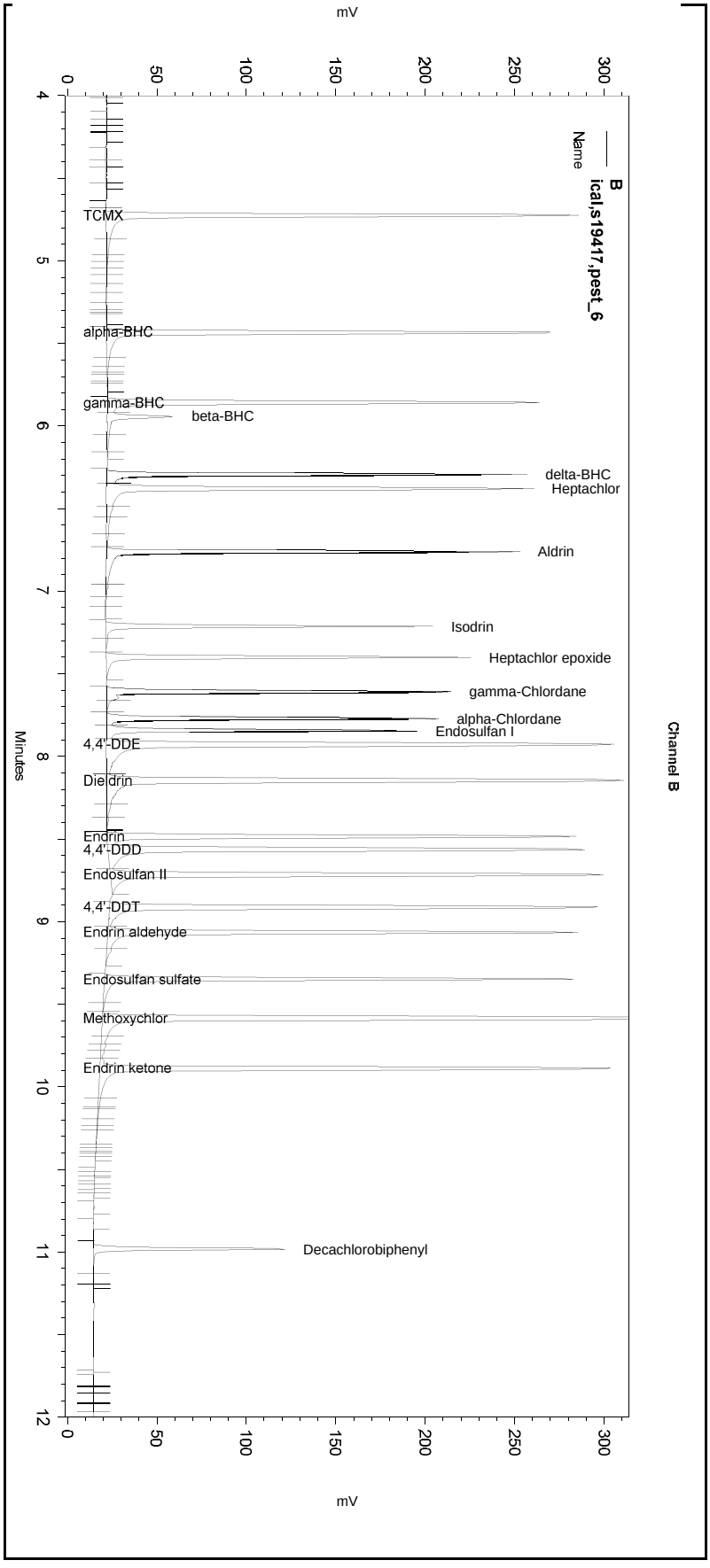
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/15/2012 1:21:55 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/16/2012 2:24:26 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	216839	200.000 CAL
alpha-BHC	6.253	6.270	164346	100.000 CAL
gamma-BHC	6.720	6.733	145267	100.000 CAL
beta-BHC	6.967	6.980	58626	100.000 CAL
delta-BHC	7.307	7.320	126343	100.000 CAL
Heptachlor	7.547	7.560	120576	100.000 CAL
Aldrin	8.007	8.013	121232	100.000 CAL
Isodrin	8.440	8.447	95747	100.000 CAL
Heptachlor epoxide	8.553	8.560	103621	100.000 CAL
gamma-Chlordane	8.887	8.893	102412	100.000 CAL
alpha-Chlordane	8.987	8.993	98536	100.000 CAL
Endosulfan I	9.047	9.053	92781	100.000 CAL
4,4'-DDE	9.187	9.193	157892	200.000 CAL
Dieldrin	9.373	9.380	152870	200.000 CAL
Endrin	9.640	9.647	122520	200.000 CAL
4,4'-DDD	9.780	9.787	129445	200.000 CAL
Endosulfan II	9.873	9.880	132277	200.000 CAL
Endrin aldehyde	10.020	10.027	109918	200.000 CAL
4,4'-DDT	10.127	10.133	131658	200.000 CAL
Endosulfan sulfate	10.273	10.280	120126	200.000 CAL
Methoxychlor	10.613	10.620	188073	1000.000 CAL
Endrin ketone	10.787	10.793	121558	200.000 CAL
Decachlorobiphenyl	12.553	12.567	95651	200.000 CAL

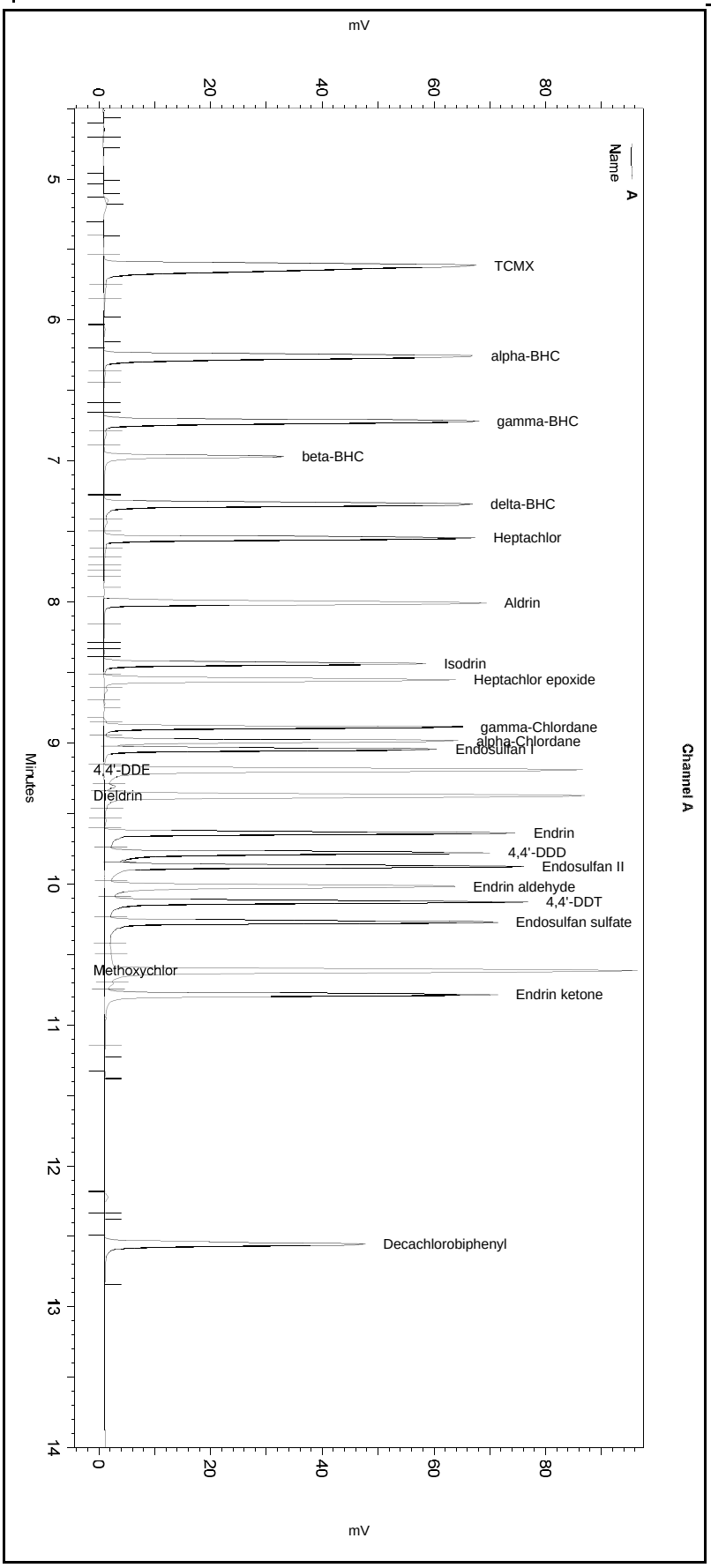
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	546935	200.000 CAL
alpha-BHC	5.433	5.433	535439	100.000 CAL
gamma-BHC	5.853	5.853	494709	100.000 CAL
beta-BHC	5.940	5.940	281158	100.000 CAL
delta-BHC	6.287	6.287	490254	100.000 CAL
Heptachlor	6.380	6.373	582139	100.000 CAL
Aldrin	6.760	6.753	524287	100.000 CAL
Isodrin	7.213	7.207	432666	100.000 CAL
Heptachlor epoxide	7.393	7.393	494391	100.000 CAL
gamma-Chlordane	7.607	7.607	506648	100.000 CAL
alpha-Chlordane	7.767	7.767	472709	100.000 CAL
Endosulfan I	7.840	7.840	511594	100.000 CAL
4,4'-DDE	7.927	7.920	846633	200.000 CAL
Dieldrin	8.140	8.140	789356	200.000 CAL
Endrin	8.487	8.480	611701	200.000 CAL
4,4'-DDD	8.560	8.560	752095	200.000 CAL
Endosulfan II	8.713	8.707	771921	200.000 CAL
4,4'-DDT	8.907	8.900	719890	200.000 CAL
Endrin aldehyde	9.067	9.060	671797	200.000 CAL
Endosulfan sulfate	9.347	9.347	631106	200.000 CAL
Methoxychlor	9.580	9.580	803577	1000.000 CAL
Endrin ketone	9.887	9.880	660915	200.000 CAL
Decachlorobiphenyl	10.980	10.973	440782	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/16/2012 2:24:26 PM
Sample Amount: 1



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No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

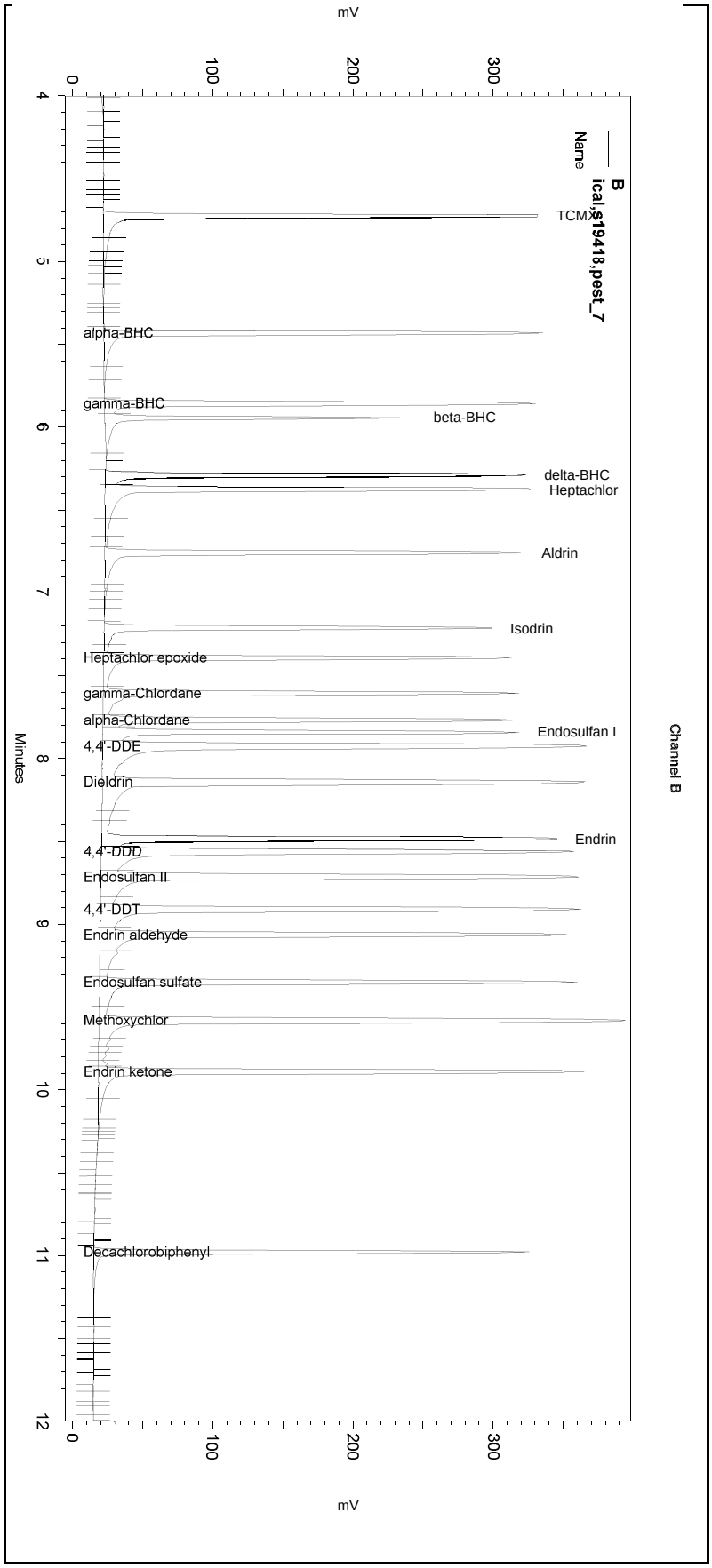
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	8.847	0	0
Yes	Split Peak	10.745	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/16/2012 2:24:26 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	7.167	10.295	0
Yes	Split Peak	9.852	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/15/2012 1:21:59 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	216839	130.908
alpha-BHC	6.253	6.270	164346	67.395
gamma-BHC	6.720	6.733	145267	66.027
beta-BHC	6.967	6.980	58626	66.558
delta-BHC	7.307	7.320	126343	63.504
Heptachlor	7.547	7.560	120576	61.637
Aldrin	8.007	8.013	121232	61.593
Isodrin	8.440	8.447	95747	62.463
Heptachlor epoxide	8.553	8.560	103621	58.007
gamma-Chlordane	8.887	8.893	102860	62.459
alpha-Chlordane	8.987	8.993	98536	62.566
Endosulfan I	9.047	9.053	92781	62.188
4,4'-DDE	9.187	9.193	157892	104.925
Dieldrin	9.373	9.380	152870	99.687
Endrin	9.640	9.647	122520	114.001
4,4'-DDD	9.780	9.787	129445	118.482
Endosulfan II	9.873	9.880	132277	108.969
Endrin aldehyde	10.020	10.027	109918	117.345
4,4'-DDT	10.127	10.133	131658	116.065
Endosulfan sulfate	10.273	10.280	120126	115.434
Methoxychlor	10.613	10.620	188073	398.809
Endrin ketone	10.787	10.793	125217	115.942
Decachlorobiphenyl	12.553	12.567	95651	107.683

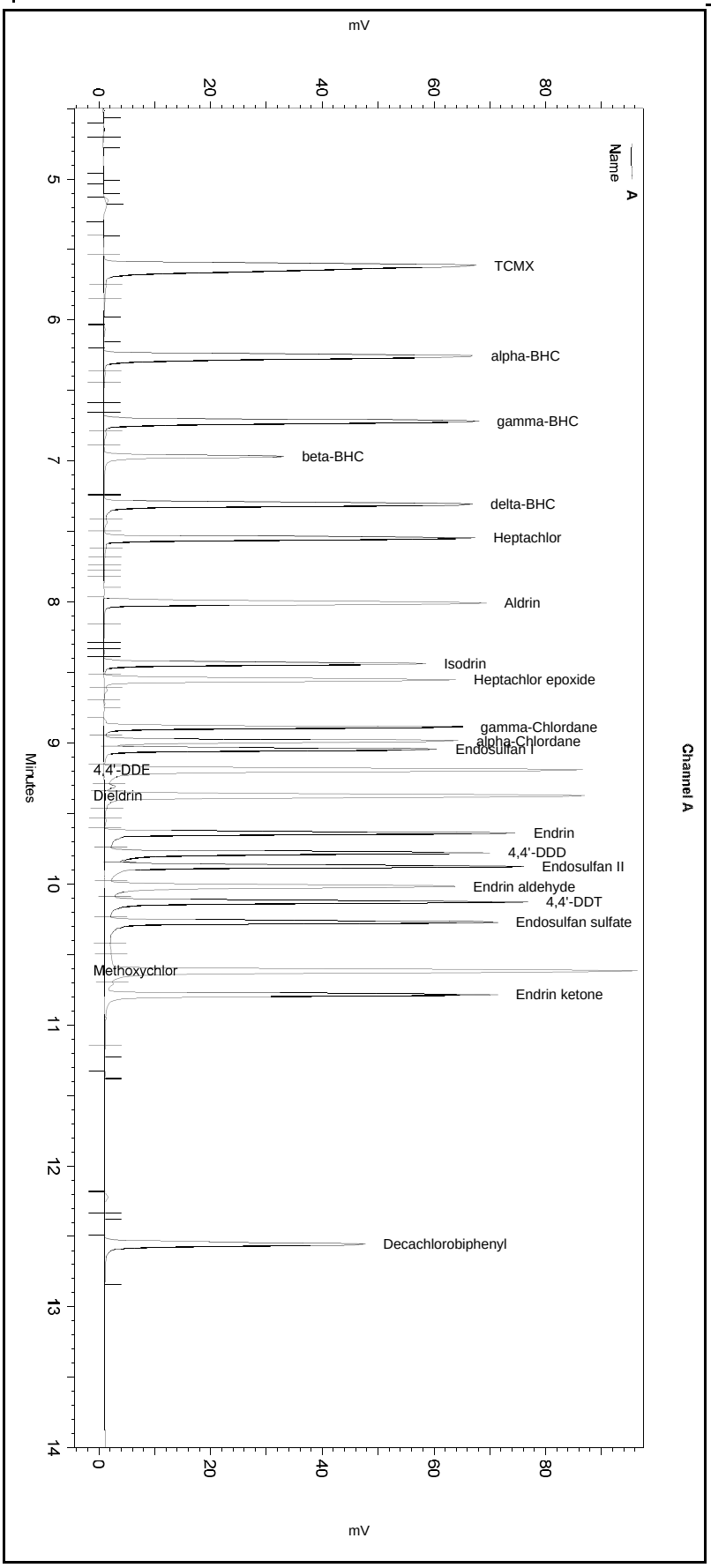
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	546935	133.619
alpha-BHC	5.433	5.433	535439	57.670
gamma-BHC	5.853	5.853	494709	68.170
beta-BHC	5.940	5.940	281158	351.720
delta-BHC	6.287	6.287	490254	82.369
Heptachlor	6.380	6.373	582139	87.615
Aldrin	6.760	6.753	524287	87.415
Isodrin	7.213	7.207	431240	77.364
Heptachlor epoxide	7.393	7.393	484157	264.756
gamma-Chlordane	7.607	7.607	492839	323.169
alpha-Chlordane	7.767	7.767	465062	298.276
Endosulfan I	7.840	7.840	501318	332.710
4,4'-DDE	7.927	7.920	815624	108.679
Dieldrin	8.140	8.140	751566	93.761
Endrin	8.487	8.480	589844	142.591
4,4'-DDD	8.560	8.560	692033	138.333
Endosulfan II	8.713	8.707	676894	128.044
4,4'-DDT	8.907	8.900	642467	129.809
Endrin aldehyde	9.067	9.060	612177	140.069
Endosulfan sulfate	9.347	9.347	581419	151.671
Methoxychlor	9.580	9.580	774570	407.877
Endrin ketone	9.887	9.880	646450	93.205
Decachlorobiphenyl	10.980	10.973	440782	700.260

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/15/2012 1:21:59 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

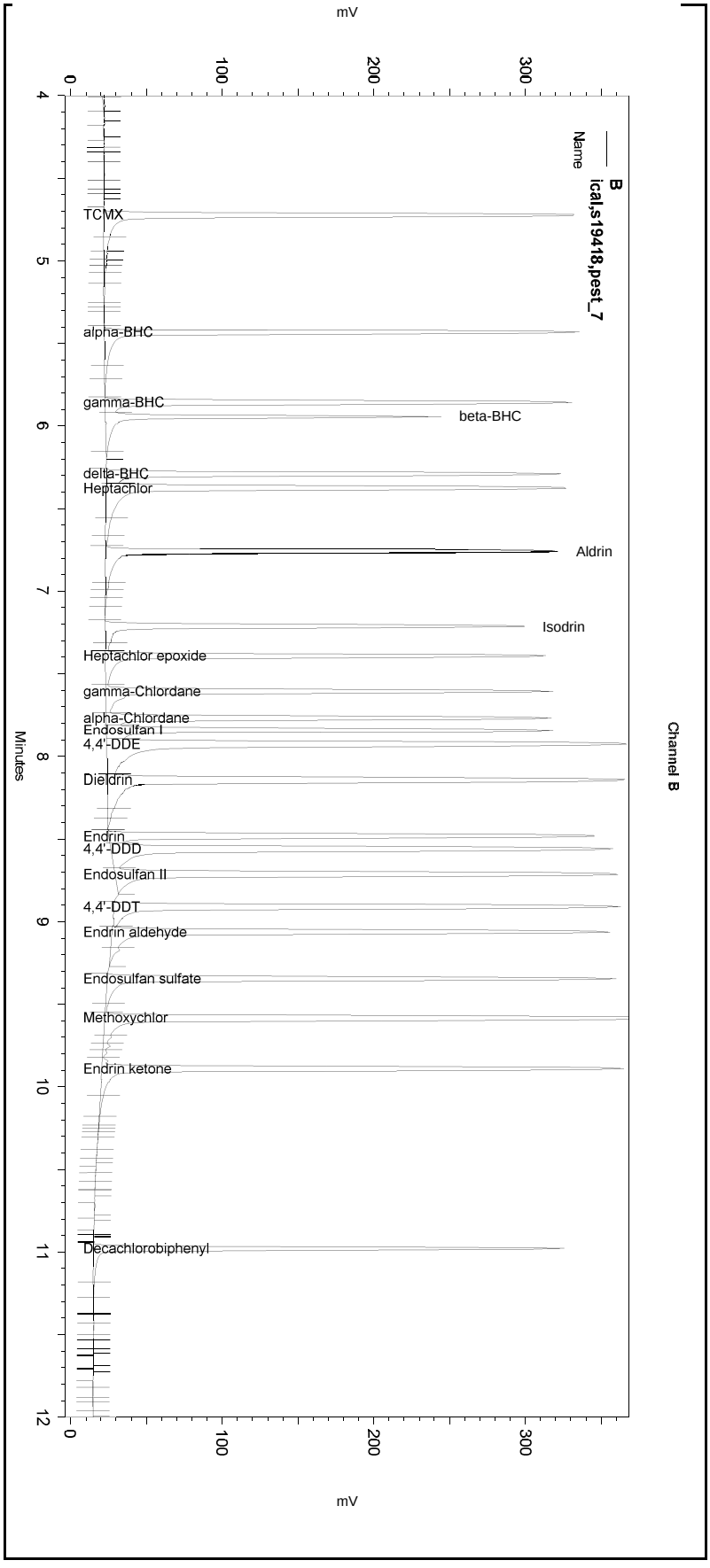
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/15/2012 1:21:59 PM
Sample Amount: 1



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No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:36:25 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.640	24817	21.657
alpha-BHC	6.267	6.270	31928	19.358
gamma-BHC	6.727	6.733	28284	19.071
beta-BHC	6.973	6.980	11298	19.860
delta-BHC	7.313	7.320	27008	21.292
Heptachlor	7.553	7.560	24502	19.902
Aldrin	8.013	8.013	25303	19.608
Isodrin	8.440	8.447	20006	20.321
Heptachlor epoxide	8.560	8.560	21676	19.502
gamma-Chlordane	8.887	8.893	20909	19.507
alpha-Chlordane	8.987	8.993	19887	19.530
Endosulfan I	9.047	9.053	18579	19.735
4,4'-DDE	9.187	9.193	19999	21.003
Dieldrin	9.373	9.380	19714	20.592
Endrin	9.640	9.647	12532	19.304
4,4'-DDD	9.780	9.787	13977	20.665
Endosulfan II	9.873	9.880	17431	22.784
Endrin aldehyde	10.020	10.027	14536	25.707
4,4'-DDT	10.127	10.133	14609	21.807
Endosulfan sulfate	10.273	10.280	14691	24.464
Methoxychlor	10.613	10.620	53484	206.115
Endrin ketone	10.787	10.793	17013	24.622
Decachlorobiphenyl	12.553	12.567	13492	24.092

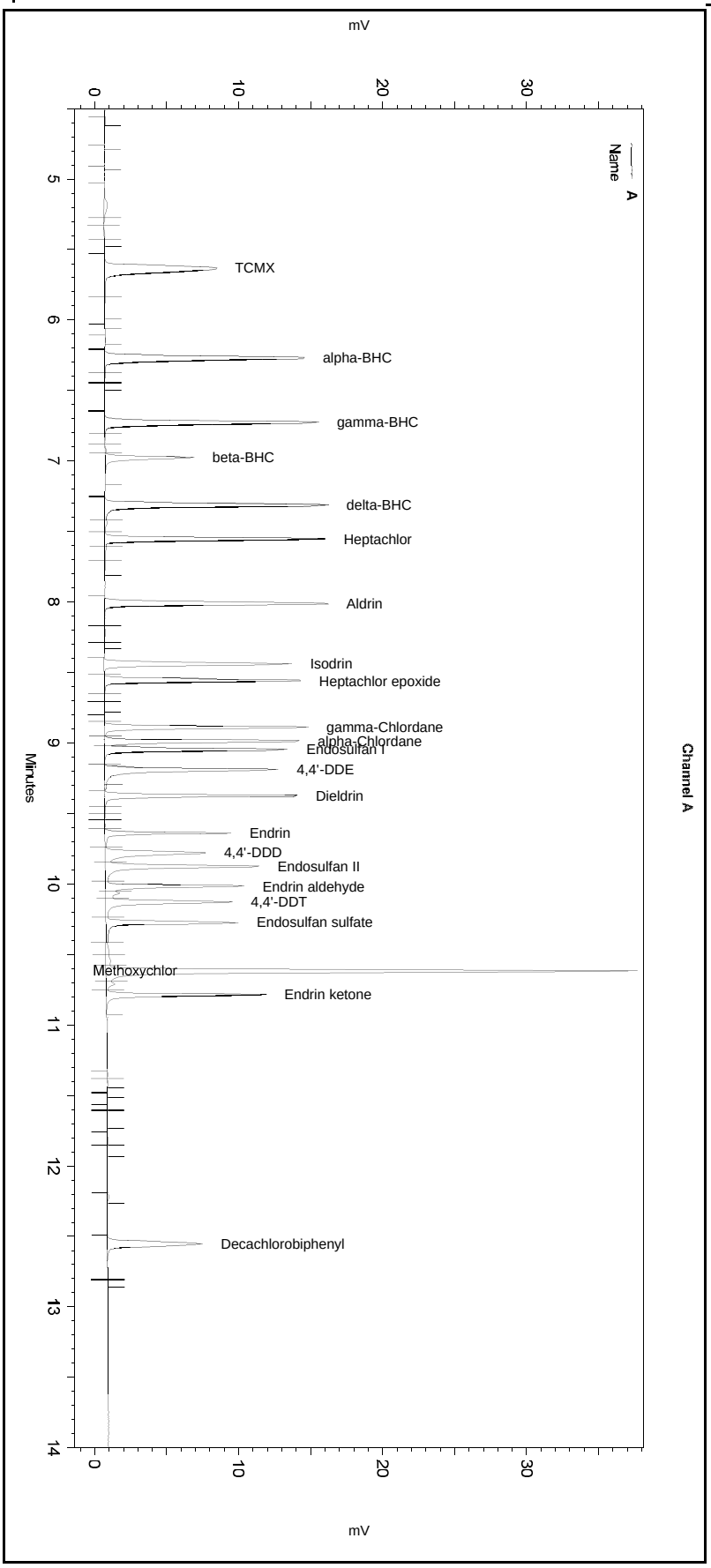
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.720	12712	9.677
alpha-BHC	5.427	5.433	44190	17.168
gamma-BHC	5.847	5.853	36196	17.562
beta-BHC	5.933	5.940	12139	18.884
delta-BHC	6.287	6.287	33685	18.513
Heptachlor	6.373	6.373	32007	18.754
Aldrin	6.753	6.753	33143	18.986
Isodrin	7.207	7.207	15159	14.706
Heptachlor epoxide	7.393	7.393	27256	18.824
gamma-Chlordane	7.600	7.607	27235	19.132
alpha-Chlordane	7.760	7.767	25964	19.273
Endosulfan I	7.840	7.840	23214	19.497
4,4'-DDE	7.920	7.920	24553	12.352
Dieldrin	8.140	8.140	25776	11.013
Endrin	8.480	8.480	16264	18.544
4,4'-DDD	8.560	8.560	17698	22.841
Endosulfan II	8.707	8.707	21125	20.207
4,4'-DDT	8.900	8.900	18378	16.248
Endrin aldehyde	9.060	9.060	18120	27.603
Endosulfan sulfate	9.347	9.347	17143	27.386
Methoxychlor	9.580	9.580	116351	119.826
Endrin ketone	9.887	9.880	22143	11.242
Decachlorobiphenyl	10.980	10.973	6909	12.949

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:36:25 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

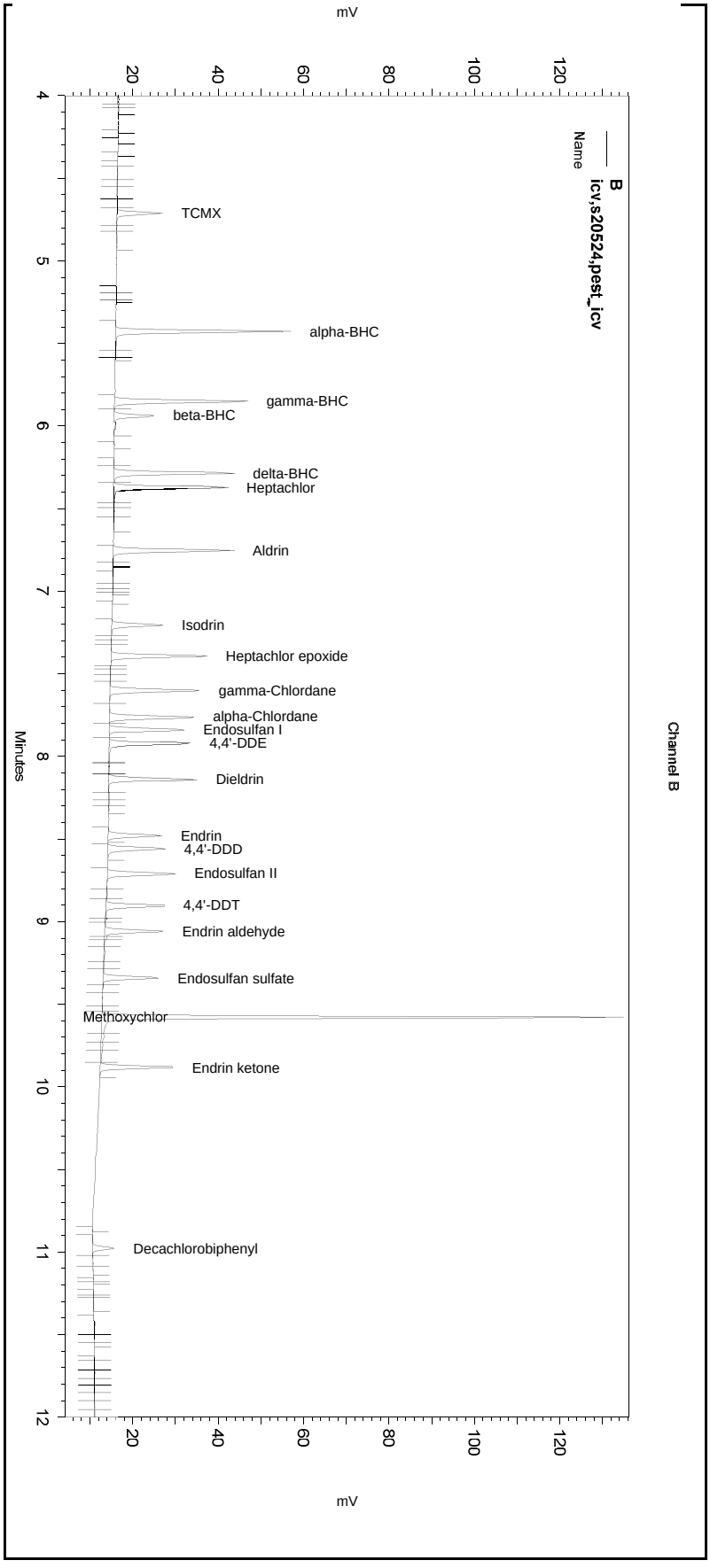
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	8.801	9.546	0
Yes	Split Peak	8.847	0	0
Yes	Split Peak	10.053	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:36:25 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.372	0	0
Yes	Reset Baseline	8.637	0	0
Yes	Split Peak	9.09	0	0
Yes	Reset Baseline	9.954	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:06:37 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.640	24817	21.657
alpha-BHC	6.267	6.270	31928	19.358
gamma-BHC	6.727	6.733	28284	19.071
beta-BHC	6.973	6.980	11298	19.860
delta-BHC	7.313	7.320	27008	21.292
Heptachlor	7.553	7.560	24502	19.902
Aldrin	8.013	8.013	25303	19.608
Isodrin	8.440	8.447	20006	20.321
Heptachlor epoxide	8.560	8.560	21676	19.502
gamma-Chlordane	8.887	8.893	20931	19.528
alpha-Chlordane	8.987	8.993	19855	19.498
Endosulfan I	9.047	9.053	18482	19.632
4,4'-DDE	9.187	9.193	19353	20.325
Dieldrin	9.373	9.380	19472	20.339
Endrin	9.640	9.647	12532	19.304
4,4'-DDD	9.780	9.787	13977	20.665
Endosulfan II	9.873	9.880	17431	22.784
Endrin aldehyde	10.020	10.027	16511	29.200
4,4'-DDT	10.127	10.133	14609	21.807
Endosulfan sulfate	10.273	10.280	14691	24.464
Methoxychlor	10.613	10.620	53484	206.115
Endrin ketone	10.787	10.793	17013	24.622
Decachlorobiphenyl	12.553	12.567	13492	24.092

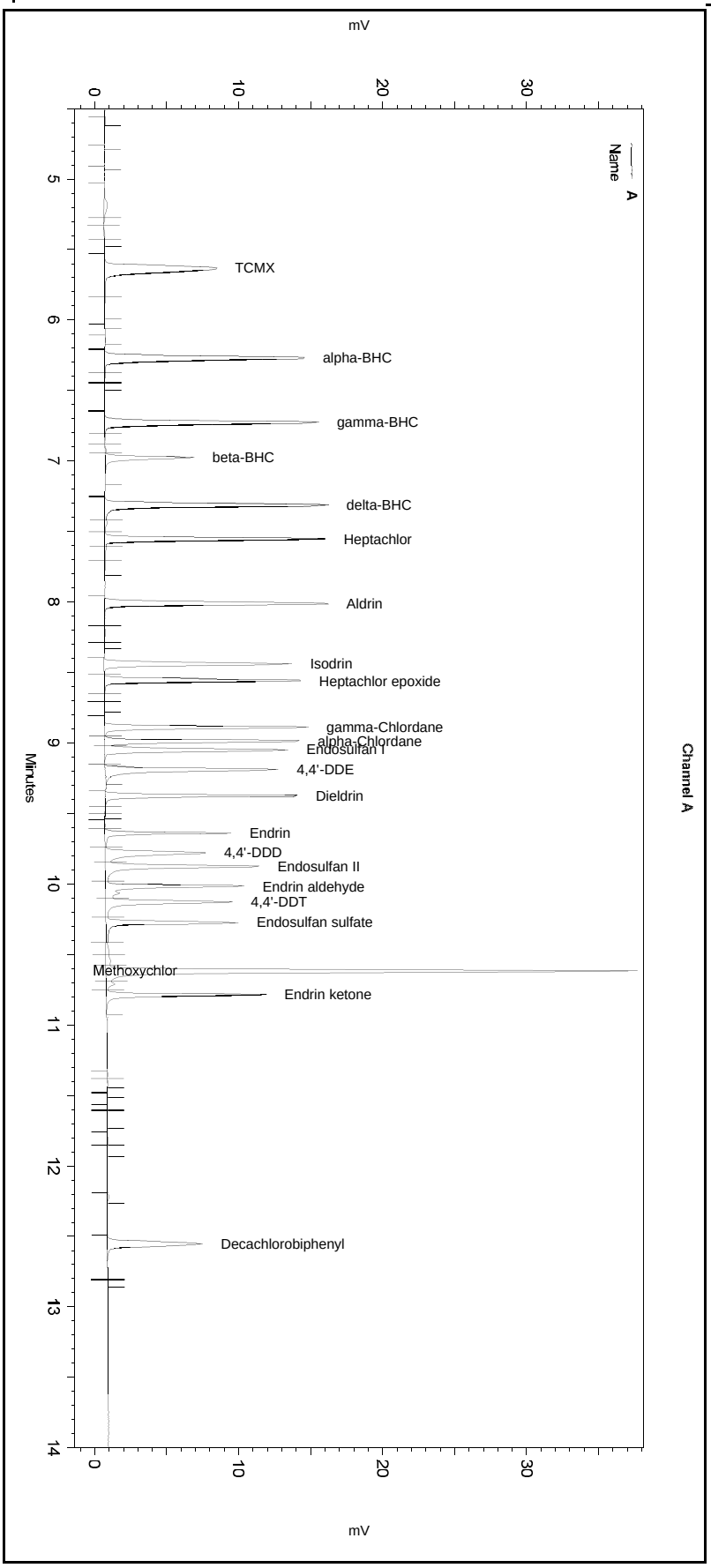
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.720	12712	9.677
alpha-BHC	5.427	5.433	44190	17.168
gamma-BHC	5.847	5.853	36196	17.562
beta-BHC	5.933	5.940	12139	18.884
delta-BHC	6.287	6.287	33685	18.513
Heptachlor	6.373	6.373	32007	18.754
Aldrin	6.753	6.753	33143	18.986
Isodrin	7.207	7.207	15213	14.736
Heptachlor epoxide	7.393	7.393	27719	18.976
gamma-Chlordane	7.600	7.607	28521	19.565
alpha-Chlordane	7.760	7.767	27611	19.830
Endosulfan I	7.840	7.840	24741	20.056
4,4'-DDE	7.920	7.920	27963	13.472
Dieldrin	8.140	8.140	29176	11.616
Endrin	8.480	8.480	21135	22.198
4,4'-DDD	8.560	8.560	24563	26.861
Endosulfan II	8.707	8.707	27011	23.410
4,4'-DDT	8.900	8.900	23451	19.229
Endrin aldehyde	9.060	9.060	23360	30.626
Endosulfan sulfate	9.347	9.347	21281	30.042
Methoxychlor	9.580	9.580	121618	125.251
Endrin ketone	9.887	9.880	26143	12.002
Decachlorobiphenyl	10.980	10.973	6909	12.697

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:06:37 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

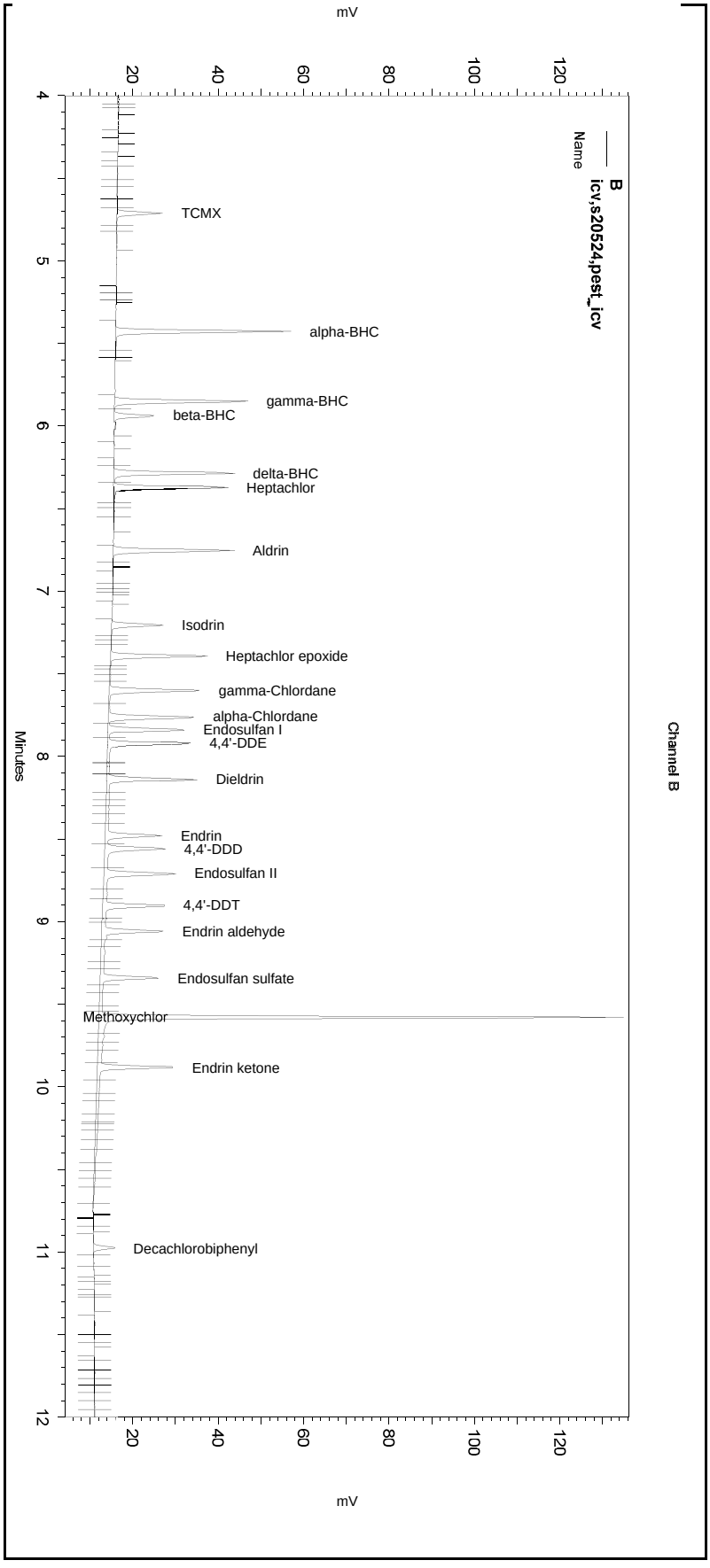
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:06:37 PM
Sample Amount: 1



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No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Continuing Calibration Verification Raw Data

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Water
EPA 8081B

Inst : GC21 Run Name : PEST_4 IDF : 1.0
Seqnum : 242367635010.1 File : 255_010 Time : 11-SEP-2012 12:06
Cal : 242328737001 Caldate : 15-AUG-2012
Standards: S20650

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1649.3	1692.3	20.00	20.52	pg/uL	3	20	
Heptachlor epoxide	A	1111.5	1163.0	20.00	20.93	pg/uL	5	20	
Dieldrin	A	957.38	1147.5	40.00	47.94	pg/uL	20	20	
TCMX	A	1145.9	1159.0	40.00	40.46	pg/uL	1	20	
Decachlorobiphenyl	A	560.03	484.03	40.00	34.57	pg/uL	-14	20	
alpha-BHC	B	2986.3	1513.7	20.00	13.78	pg/uL	**-31**	20	c- ***
Heptachlor epoxide	B	1910.6	1106.6	20.00	17.03	pg/uL	-15	20	
Dieldrin	B	2925.3	1162.8	40.00	14.71	pg/uL	**-63**	20	c- v- ***
TCMX	B	1866.4	885.05	40.00	20.26	pg/uL	**-49**	20	c-
Decachlorobiphenyl	B	906.46	456.08	40.00	32.71	pg/uL	-18	20	
Average EPA 8081B	A	(n=23)					9		
Average EPA 8081B	B	(n=23)					33		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV v=ICV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:28:34 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.620	5.620	46359	40.456
alpha-BHC	6.253	6.253	33845	20.521
gamma-BHC	6.713	6.713	30333	20.452
beta-BHC	6.960	6.960	11629	20.442
delta-BHC	7.300	7.300	27532	21.705
Heptachlor	7.533	7.533	24136	19.605
Aldrin	7.993	7.987	27478	21.294
Isodrin	8.420	8.420	20730	21.056
Heptachlor epoxide	8.540	8.533	23260	20.928
gamma-Chlordane	8.873	8.867	22672	21.152
alpha-Chlordane	8.973	8.967	21485	21.099
Endosulfan I	9.027	9.027	20836	22.133
4,4'-DDE	9.173	9.173	42381	44.509
Dieldrin	9.360	9.353	45900	47.944
Endrin	9.620	9.620	30380	46.798
4,4'-DDD	9.773	9.773	30716	45.413
Endosulfan II	9.860	9.860	35427	46.307
Endrin aldehyde	10.000	10.000	25174	44.521
4,4'-DDT	10.113	10.113	27841	41.559
Endosulfan sulfate	10.253	10.253	27816	46.320
Methoxychlor	10.600	10.600	54796	211.171
Endrin ketone	10.767	10.767	30991	44.852
Decachlorobiphenyl	12.527	12.527	19361	34.572

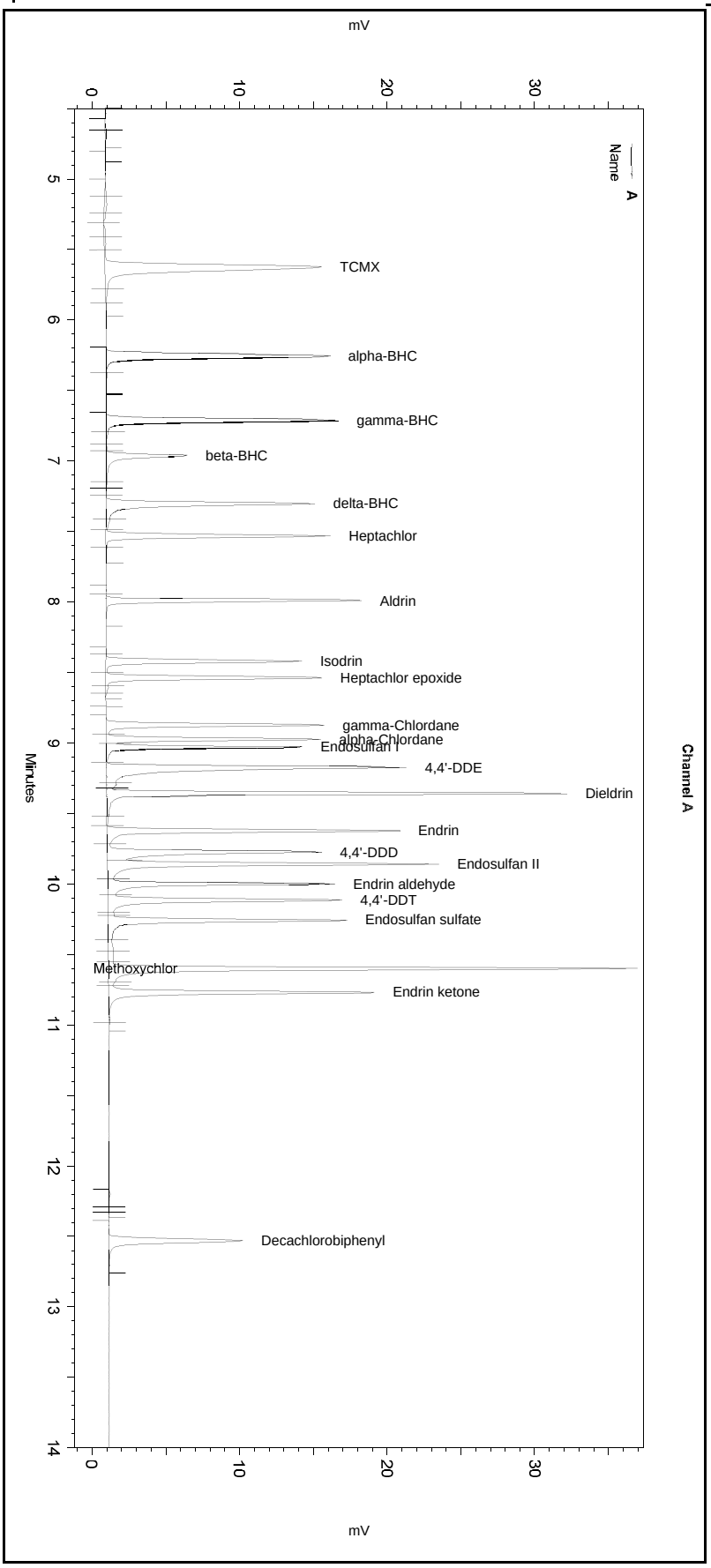
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	35402	20.260
alpha-BHC	5.420	5.420	30273	13.776
gamma-BHC	5.840	5.840	25648	14.589
beta-BHC	5.927	5.927	8062	13.886
delta-BHC	6.273	6.273	20499	14.378
Heptachlor	6.360	6.360	22166	16.067
Aldrin	6.740	6.740	24596	16.619
Isodrin	7.193	7.193	18341	16.355
Heptachlor epoxide	7.380	7.380	22131	17.026
gamma-Chlordane	7.593	7.587	20328	16.555
alpha-Chlordane	7.753	7.747	18513	16.428
Endosulfan I	7.827	7.820	17410	17.140
4,4'-DDE	7.913	7.907	31231	14.524
Dieldrin	8.127	8.127	46512	14.710
Endrin	8.467	8.467	24119	24.128
4,4'-DDD	8.547	8.547	23189	26.129
Endosulfan II	8.693	8.693	36093	27.539
4,4'-DDT	8.893	8.893	24423	19.754
Endrin aldehyde	9.053	9.047	27477	32.709
Endosulfan sulfate	9.333	9.333	25572	32.451
Methoxychlor	9.567	9.567	62865	64.743
Endrin ketone	9.873	9.873	51517	16.874
Decachlorobiphenyl	10.967	10.967	18243	32.713

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:28:34 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

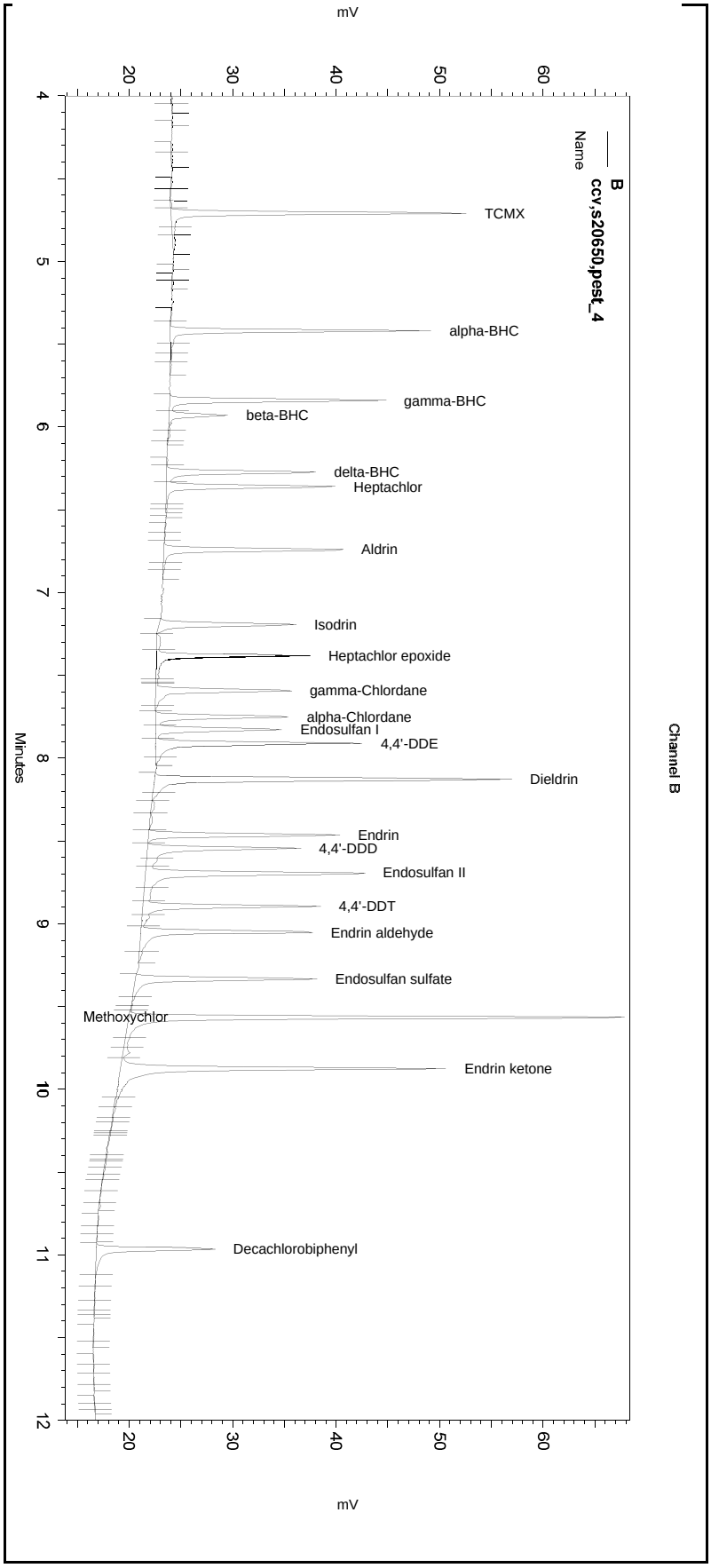
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	9.277	0	0
Yes	Split Peak	10.219	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:28:34 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	8.778	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:25:34 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.620	5.620	46359	40.456
alpha-BHC	6.253	6.253	33845	20.521
gamma-BHC	6.713	6.713	30333	20.452
beta-BHC	6.960	6.960	11629	20.442
delta-BHC	7.300	7.300	27532	21.705
Heptachlor	7.533	7.533	24136	19.605
Aldrin	7.993	7.987	27478	21.294
Isodrin	8.420	8.420	20730	21.056
Heptachlor epoxide	8.540	8.533	23260	20.928
gamma-Chlordane	8.873	8.867	22672	21.152
alpha-Chlordane	8.973	8.967	21485	21.099
Endosulfan I	9.027	9.027	20836	22.133
4,4'-DDE	9.173	9.173	43773	45.971
Dieldrin	9.360	9.353	45900	47.944
Endrin	9.620	9.620	30380	46.798
4,4'-DDD	9.773	9.773	30716	45.413
Endosulfan II	9.860	9.860	35427	46.307
Endrin aldehyde	10.000	10.000	25174	44.521
4,4'-DDT	10.113	10.113	27841	41.559
Endosulfan sulfate	10.253	10.253	28298	47.123
Methoxychlor	10.600	10.600	54796	211.171
Endrin ketone	10.767	10.767	30991	44.852
Decachlorobiphenyl	12.527	12.527	19361	34.572

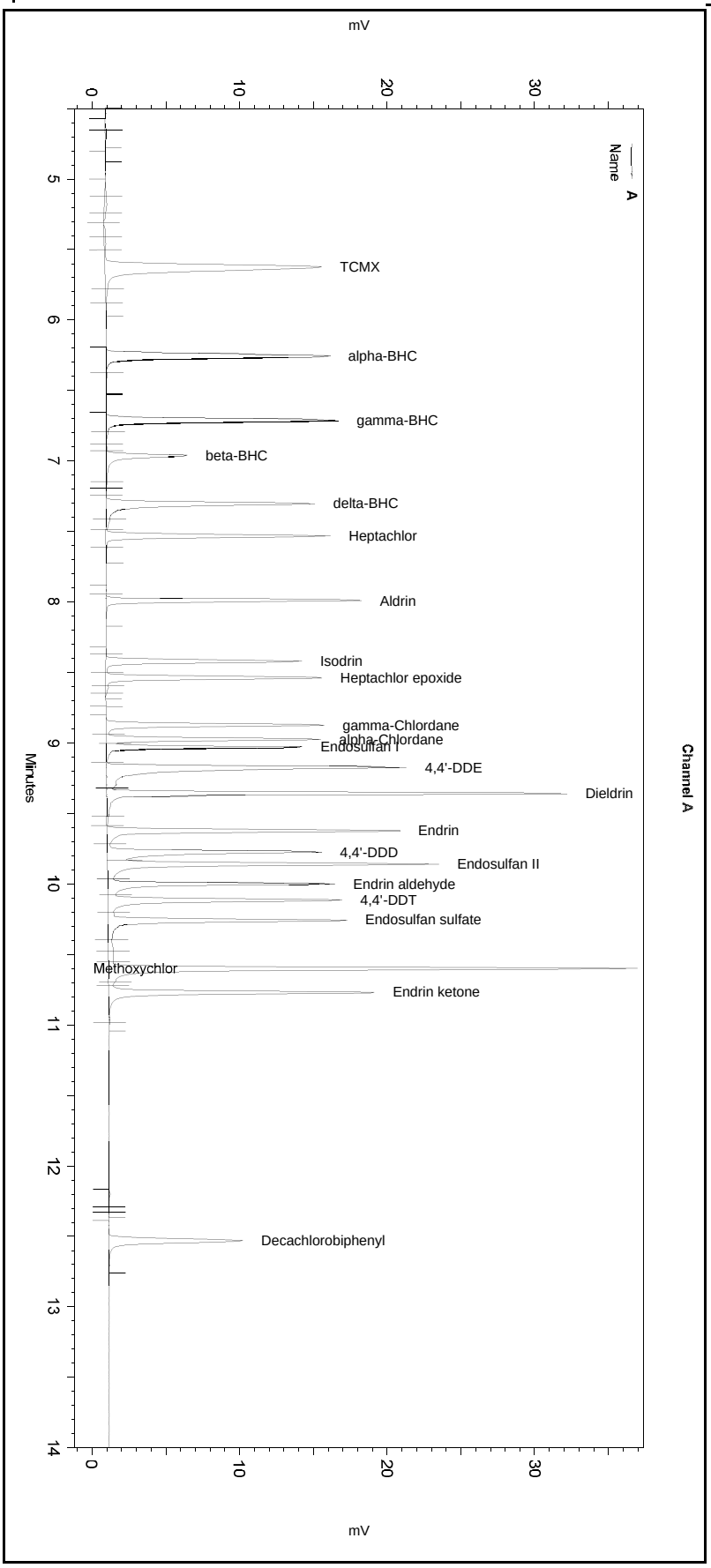
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	35402	20.260
alpha-BHC	5.420	5.420	30273	13.776
gamma-BHC	5.840	5.840	25648	14.589
beta-BHC	5.927	5.927	8062	13.886
delta-BHC	6.273	6.273	20499	14.378
Heptachlor	6.360	6.360	22166	16.067
Aldrin	6.740	6.740	24596	16.619
Isodrin	7.193	7.193	18341	16.355
Heptachlor epoxide	7.380	7.380	22131	17.026
gamma-Chlordane	7.593	7.587	20328	16.555
alpha-Chlordane	7.753	7.747	18513	16.428
Endosulfan I	7.827	7.820	17410	17.140
4,4'-DDE	7.913	7.907	31231	14.524
Dieldrin	8.127	8.127	46512	14.710
Endrin	8.467	8.467	24119	24.128
4,4'-DDD	8.547	8.547	23189	26.129
Endosulfan II	8.693	8.693	39203	28.800
4,4'-DDT	8.893	8.893	24423	19.754
Endrin aldehyde	9.053	9.047	27477	32.709
Endosulfan sulfate	9.333	9.333	25572	32.451
Methoxychlor	9.567	9.567	62865	64.743
Endrin ketone	9.873	9.873	51517	16.874
Decachlorobiphenyl	10.967	10.967	18243	32.713

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:25:34 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

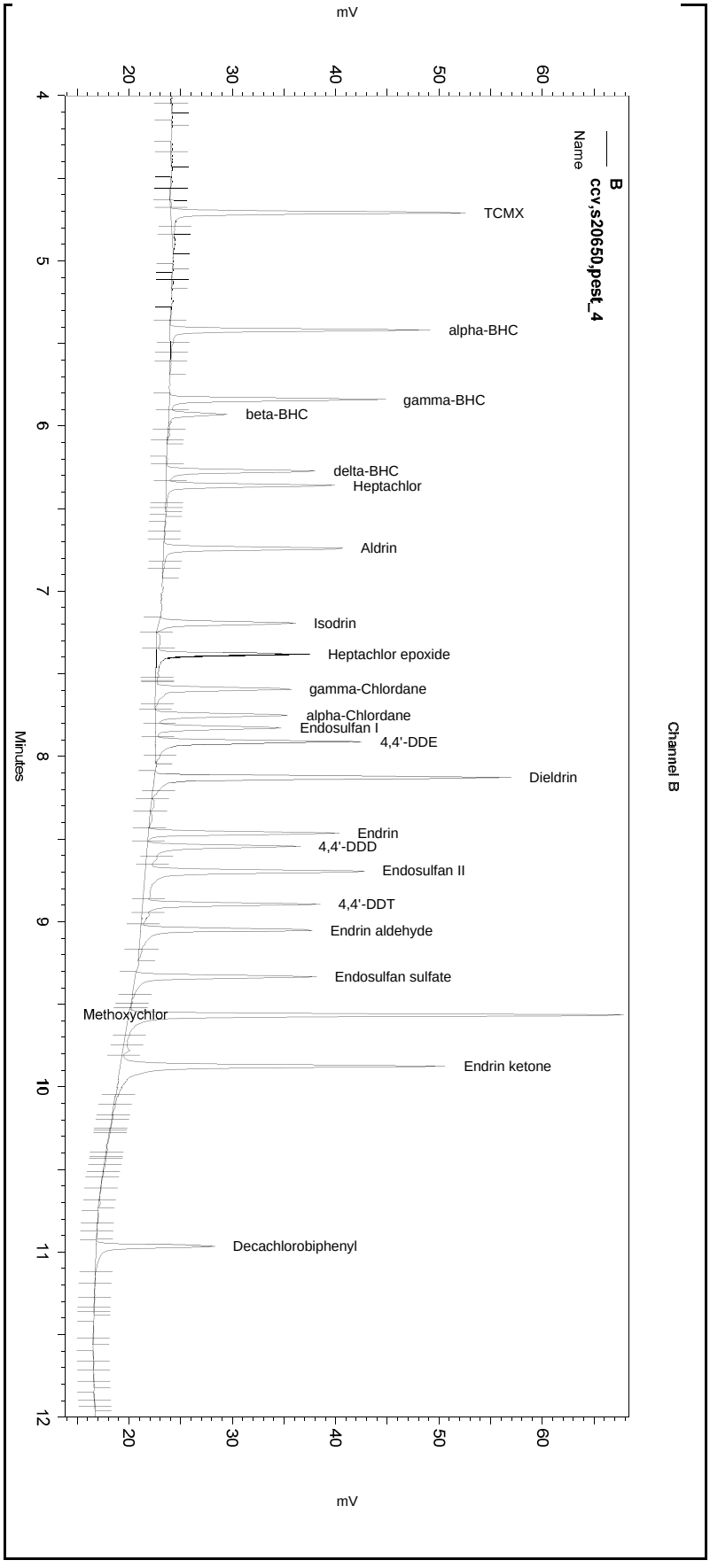
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:25:34 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Water
EPA 8081B

Inst : GC21 Run Name : PEST_3 IDF : 1.0
Seqnum : 242367635017.1 File : 255_017 Time : 11-SEP-2012 15:15
Cal : 242328737001 Caldate : 15-AUG-2012
Standards: S20649

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1649.3	1386.8	10.00	8.408	pg/uL	-16	20	
Heptachlor epoxide	A	1111.5	978.40	10.00	8.803	pg/uL	-12	20	
Dieldrin	A	957.38	924.00	20.00	19.30	pg/uL	-3	20	
TCMX	A	1145.9	912.45	20.00	15.93	pg/uL	-20	20	
Decachlorobiphenyl	A	560.03	447.25	20.00	15.97	pg/uL	-20	20	
alpha-BHC	B	2986.3	1314.6	10.00	7.828	pg/uL	**-22**	20	c- ***
Heptachlor epoxide	B	1910.6	1051.3	10.00	11.51	pg/uL	15	20	
Dieldrin	B	2925.3	930.95	20.00	9.746	pg/uL	**-51**	20	c- v- ***
TCMX	B	1866.4	720.80	20.00	10.56	pg/uL	**-47**	20	c-
Decachlorobiphenyl	B	906.46	378.65	20.00	14.67	pg/uL	**-27**	20	c-
Average EPA 8081B	A	(n=23)					12		
Average EPA 8081B	B	(n=21)					28		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Endrin aldehyde not quantifiable (B) 4,4'-DDD not quantifiable (B)

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV v=ICV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-017**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 3:15:03 PM
Analysis Date: 9/11/2012 3:39:03 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.627	5.620	18249	15.925
alpha-BHC	6.260	6.253	13868	8.408
gamma-BHC	6.720	6.713	12482	8.416
beta-BHC	6.967	6.960	4412	7.756
delta-BHC	7.307	7.300	10615	8.368
Heptachlor	7.540	7.533	9607	7.804
Aldrin	7.993	7.987	11386	8.824
Isodrin	8.427	8.420	8574	8.709
Heptachlor epoxide	8.547	8.533	9784	8.803
gamma-Chlordane	8.873	8.867	9474	8.839
alpha-Chlordane	8.973	8.967	9014	8.852
Endosulfan I	9.033	9.027	8719	9.262
4,4'-DDE	9.180	9.173	16629	17.464
Dieldrin	9.360	9.353	18480	19.303
Endrin	9.627	9.620	12909	19.885
4,4'-DDD	9.793	9.773	11531	17.048
Endosulfan II	9.867	9.860	15886	20.765
Endrin aldehyde	10.007	10.000	10755	19.021
4,4'-DDT	10.127	10.113	11862	17.707
Endosulfan sulfate	10.260	10.253	11600	19.317
Methoxychlor	10.613	10.600	22598	87.087
Endrin ketone	10.780	10.767	13323	19.282
Decachlorobiphenyl	12.540	12.527	8945	15.972

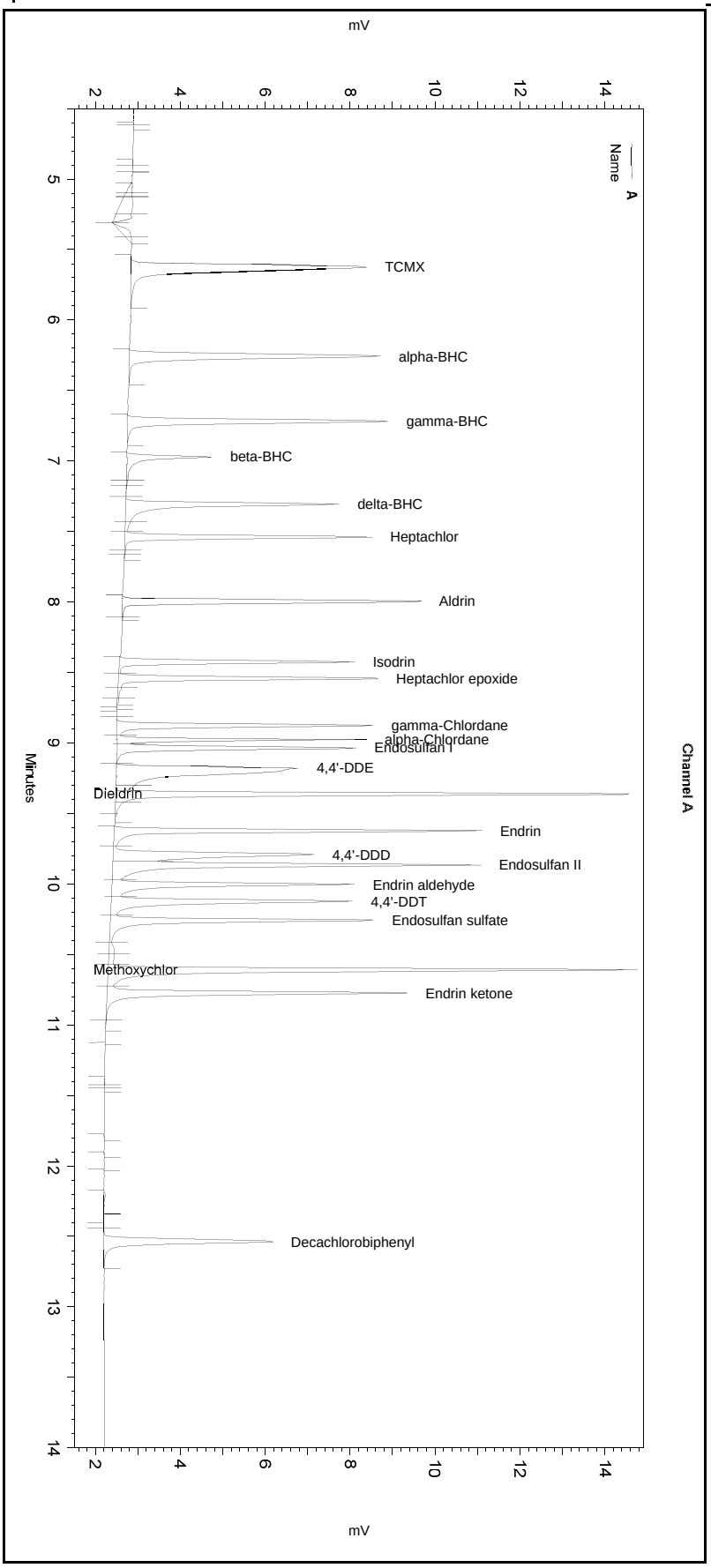
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	14416	10.559
alpha-BHC	5.427	5.420	13146	7.828
gamma-BHC	5.847	5.840	11126	8.541
beta-BHC	5.933	5.927	3925	7.124
delta-BHC	6.280	6.273	8725	8.345
Heptachlor	6.367	6.360	9919	11.210
Aldrin	6.747	6.740	10851	11.179
Isodrin	7.200	7.193	8742	10.372
Heptachlor epoxide	7.387	7.380	10513	11.507
gamma-Chlordane	7.600	7.587	8973	10.374
alpha-Chlordane	7.760	7.747	8240	10.597
Endosulfan I	7.833	7.820	7851	11.594
4,4'-DDE	7.920	7.907	13104	8.419
Dieldrin	8.133	8.127	18619	9.746
Endrin	8.473	8.467	10460	12.528
4,4'-DDD	8.553	8.547	9016	14.862
Endosulfan II	8.700	8.693	13578	14.878
4,4'-DDT	8.900	8.893	9324	9.177
Endrin aldehyde	9.060	9.047	10404	21.698
Endosulfan sulfate	9.340	9.333	11456	22.798
Methoxychlor	9.573	9.567	20550	21.164
Endrin ketone	9.880	9.873	23315	11.464
Decachlorobiphenyl	10.973	10.967	7573	14.672

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-017**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 3:15:03 PM
Analysis Date: 9/11/2012 3:39:03 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

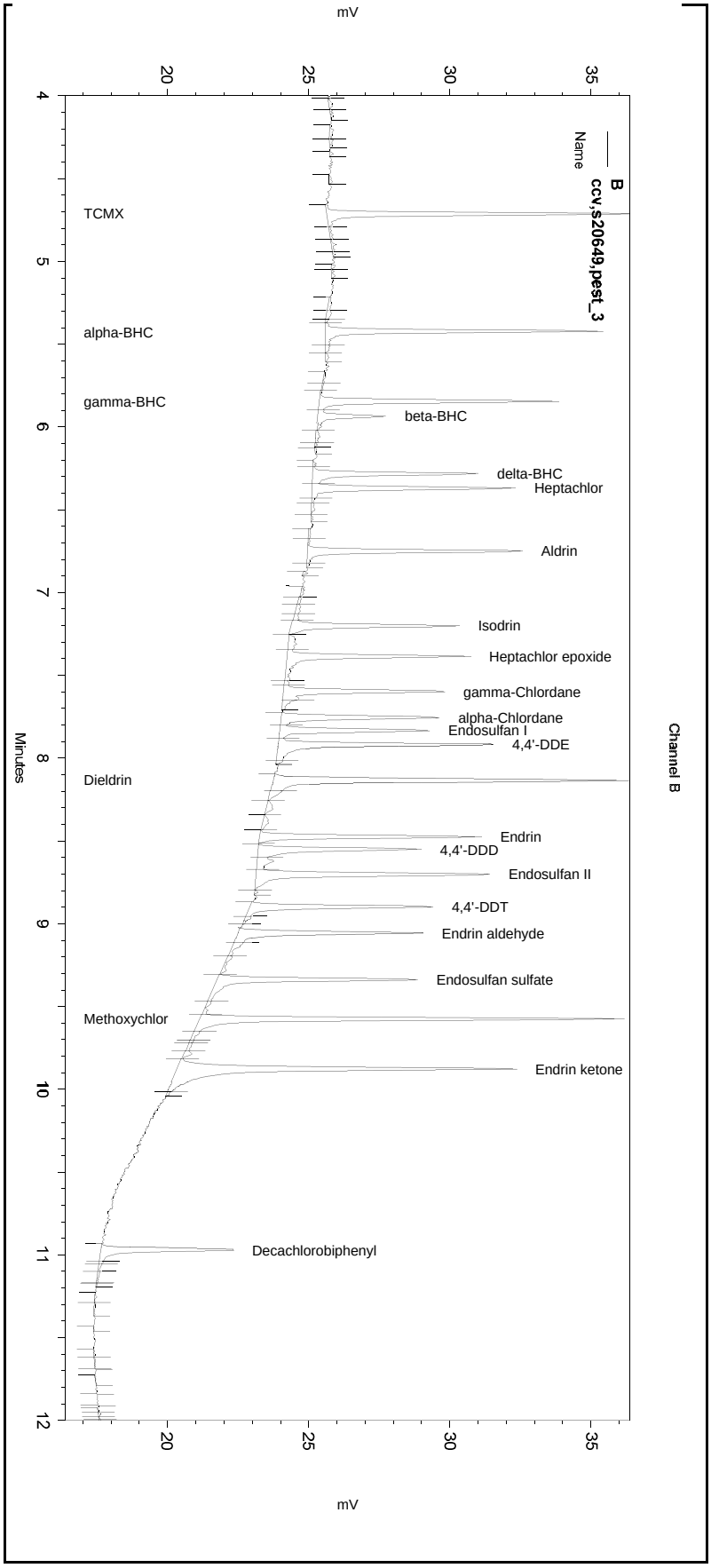
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Peak	5.519	5.918	0
Yes	Manual Baseline	9.142	9.565	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-017**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 3:15:03 PM
Analysis Date: 9/11/2012 3:39:03 PM
Sample Amount: 1



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	10.047	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-017**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 3:15:03 PM
Analysis Date: 9/11/2012 3:33:18 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.627	5.620	18158	15.846
alpha-BHC	6.260	6.253	13868	8.408
gamma-BHC	6.720	6.713	12482	8.416
beta-BHC	6.967	6.960	4412	7.756
delta-BHC	7.307	7.300	10615	8.368
Heptachlor	7.540	7.533	9607	7.804
Aldrin	7.993	7.987	11386	8.824
Isodrin	8.427	8.420	8574	8.709
Heptachlor epoxide	8.547	8.533	9784	8.803
gamma-Chlordane	8.873	8.867	9474	8.839
alpha-Chlordane	8.973	8.967	9014	8.852
Endosulfan I	9.033	9.027	8719	9.262
4,4'-DDE	9.180	9.173	14561	15.292
Dieldrin	9.360	9.353	16483	17.217
Endrin	9.627	9.620	12909	19.885
4,4'-DDD	9.793	9.773	11531	17.048
Endosulfan II	9.867	9.860	15886	20.765
Endrin aldehyde	10.007	10.000	10755	19.021
4,4'-DDT	10.127	10.113	11862	17.707
Endosulfan sulfate	10.260	10.253	11600	19.317
Methoxychlor	10.613	10.600	22598	87.087
Endrin ketone	10.780	10.767	13323	19.282
Decachlorobiphenyl	12.540	12.527	8945	15.972

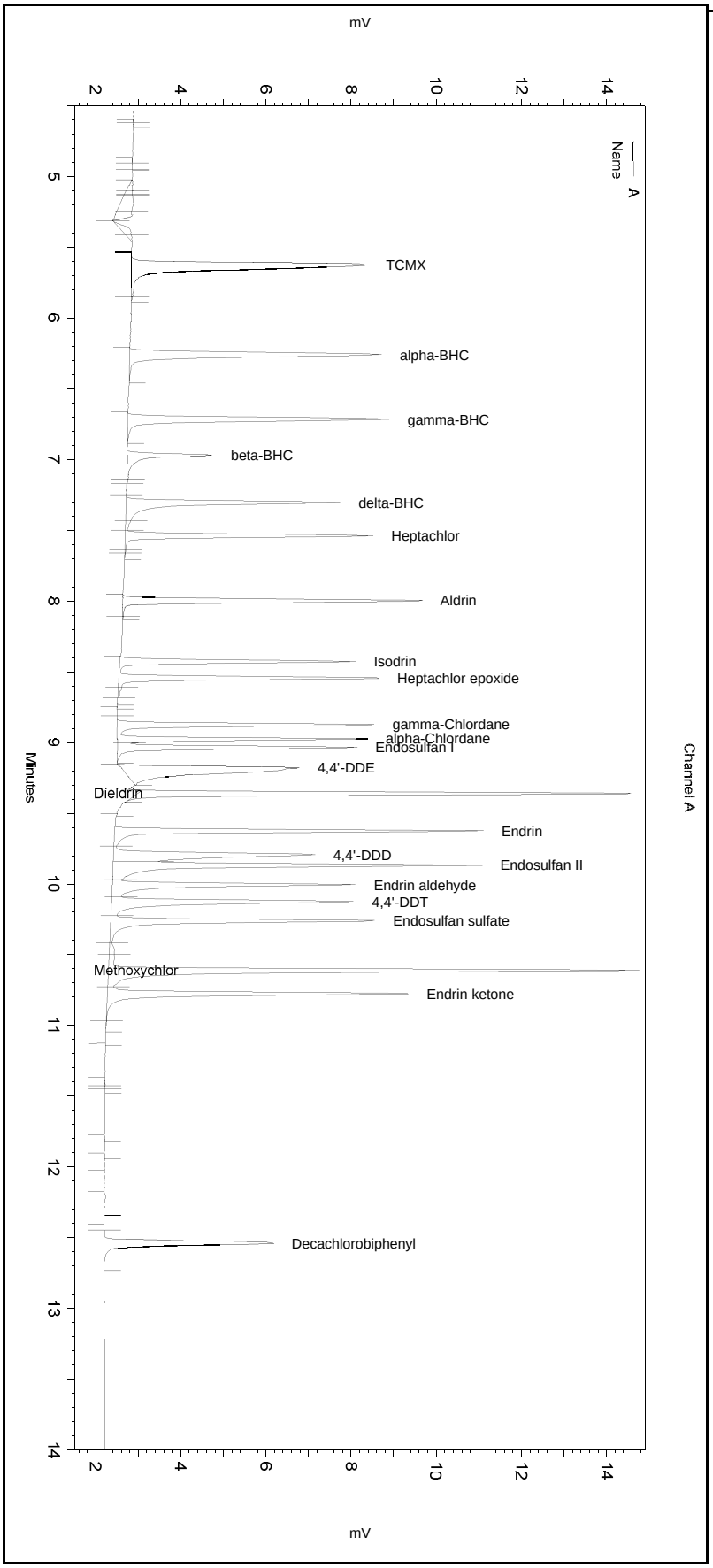
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	14416	10.559
alpha-BHC	5.427	5.420	13146	7.828
gamma-BHC	5.847	5.840	11126	8.541
beta-BHC	5.933	5.927	3925	7.124
delta-BHC	6.280	6.273	8725	8.345
Heptachlor	6.367	6.360	9919	11.210
Aldrin	6.747	6.740	10851	11.179
Isodrin	7.200	7.193	8742	10.372
Heptachlor epoxide	7.387	7.380	10513	11.507
gamma-Chlordane	7.600	7.587	8973	10.374
alpha-Chlordane	7.760	7.747	8240	10.597
Endosulfan I	7.833	7.820	7851	11.594
4,4'-DDE	7.920	7.907	13104	8.419
Dieldrin	8.133	8.127	18619	9.746
Endrin	8.473	8.467	10460	12.528
4,4'-DDD	8.553	8.547	9016	14.862
Endosulfan II	8.700	8.693	13578	14.878
4,4'-DDT	8.900	8.893	9364	9.217
Endrin aldehyde	9.060	9.047	10631	21.917
Endosulfan sulfate	9.340	9.333	12337	23.619
Methoxychlor	9.573	9.567	21378	22.017
Endrin ketone	9.880	9.873	25463	11.873
Decachlorobiphenyl	10.973	10.967	7573	14.672

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-017**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 3:15:03 PM
Analysis Date: 9/11/2012 3:33:18 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

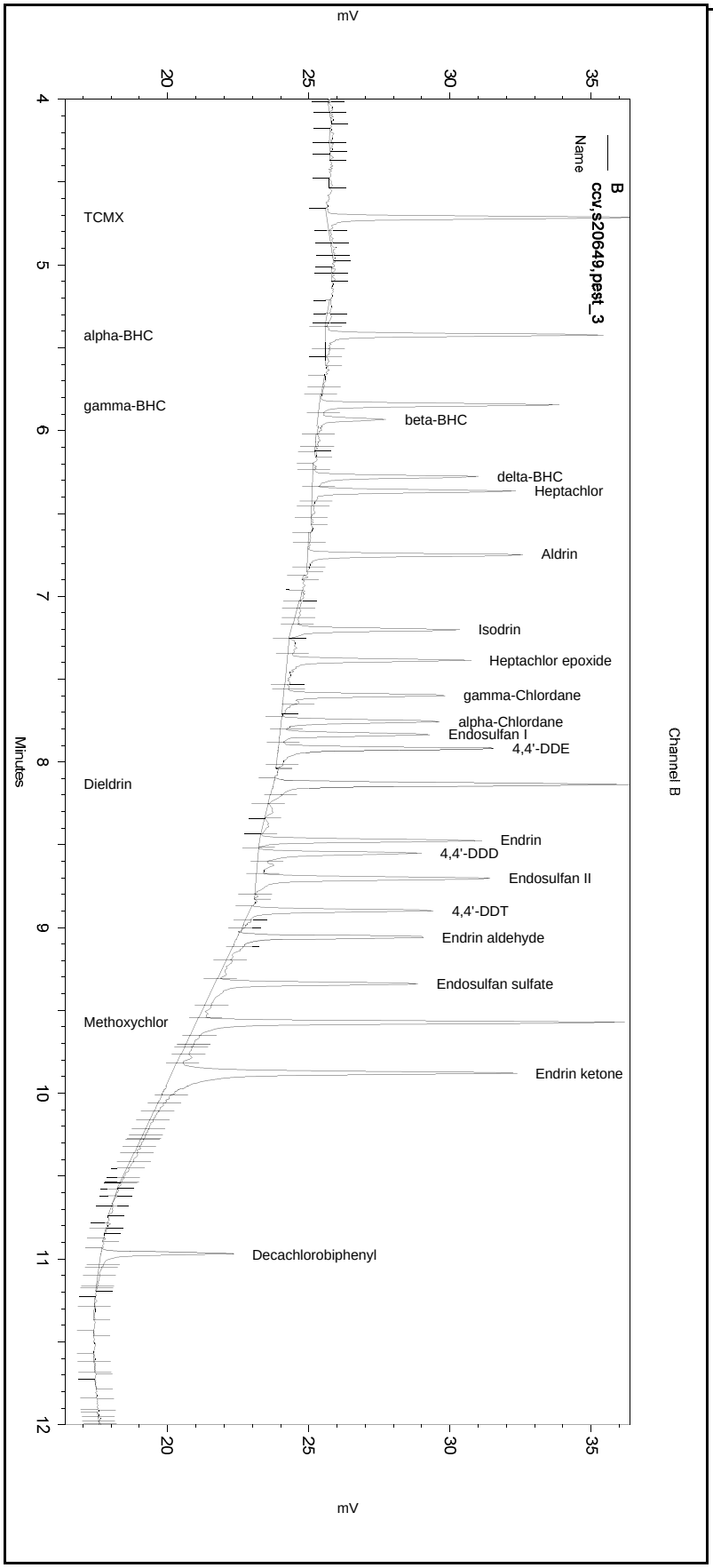
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-017_EE21.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-017**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 3:15:03 PM
Analysis Date: 9/11/2012 3:33:18 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-017_EE21.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239403
ANALYTICAL REPORT
Pesticides
Matrix: Soil

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
EX36B163A.2	239403-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
PESTICIDES (EPA 8081B)
SOIL

Laboratory number:	**239403**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/04/12**
Samples Received:	**09/04/12**

This data package contains sample and QC results for one soil sample, requested for the above referenced project on 09/04/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Pesticides (EPA 8081B) Soil:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B.

All samples underwent florisil cleanup using EPA Method 3620C.

EX36B163A.2 (lab # 239403-006) was diluted due to the color of the sample extract.

No other analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 23403

Chain of Custody # _____

Project No: CA0007611.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: E Manton and D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None
1	EX36B116D.2	04/04/12	1150		X			1					X
2	EX36B116A.2	04/04/12	1155		X			1					X
3	EX36B116B.2	04/04/12	1140		X			1					X
4	EX36B116C.2	04/04/12	1200		X			1					X
5	EX36B015A.2	04/04/12	1250		X			1					X
6	EX36B163A.2	04/04/12	1315		X			2					X
7	FB.0904 2012	04/04/12	1455	X				9	3		1		5
8	EB.09 04 2012	04/04/12	1505	X				3			1		2
	Temp Blank												

ANALYTICAL REQUEST

Lab No.	Bis(2-Ethylhexyl)phthalate by 8270D	Copper by EPA 6010C	Mercury by EPA 7471B	Alpha-BHC by EPA 8081B	PCBs by 8082	TPHd by 8015	TPHg by 8015	SVOCs by 8270	Pesticides by 8081	Metals by 6010/7174
1	X									
2	X									
3	X									
4	X									
5		X	X							
6		X	X	X						
7					X	X	X	X	X	X
8								X	X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

RECEIVED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239403 Date Received 9/4/12 Number of coolers 1
Client ARCADIS Project CA000761.0001

Date Opened 9/4/12 By (print) EL (sign) [signature]
Date Logged in ~~EL~~ 9/6/12 By (print) ~~EL~~ JG (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? (YES) NO N/A
17. Did you document your preservative check? (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239403

Sample	pH: <2	>9	>12	Other
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
-008a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: EL
Date: 9/6/12

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Results & QC Summary

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8081B
Field ID:	EX36B163A.2	Sampled:	09/04/12
Matrix:	Soil	Received:	09/04/12
Units:	ug/Kg	Prepared:	09/09/12
Basis:	dry	Analyzed:	09/10/12
Batch#:	190308		

Type: SAMPLE
Lab ID: 239403-006
Moisture: 13%
Diln Fac: 3.000

Analyte	Result	LOQ	DL
alpha-BHC	1.9 U	5.9	0.92

Surrogate	%REC	Limits
TCMX	98	46-120
Decachlorobiphenyl	92	38-125

Type: BLANK
Lab ID: QC655371
Diln Fac: 1.000

Analyte	Result	LOQ	DL
alpha-BHC	0.55 U	1.7	0.26

Surrogate	%REC	Limits
TCMX	79	46-120
Decachlorobiphenyl	111	38-125

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8081B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC655372	Batch#:	190308
Matrix:	Soil	Prepared:	09/09/12
Units:	ug/Kg	Analyzed:	09/11/12

Analyte	Spiked	Result	%REC	Limits
alpha-BHC	13.21	9.708	73	51-120

Surrogate	%REC	Limits
TCMX	71	46-120
Decachlorobiphenyl	81	38-125

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3550B
Project#:	CA000761.0001	Analysis:	EPA 8081B
Field ID:	ZZZZZZZZZZ	Batch#:	190308
MSS Lab ID:	239356-011	Sampled:	08/29/12
Matrix:	Soil	Received:	09/04/12
Units:	ug/Kg	Prepared:	09/09/12
Basis:	dry	Analyzed:	09/11/12
Diln Fac:	1.000		

Type: MS Moisture: 18%
Lab ID: QC655373

Analyte	MSS Result	Spiked	Result	%REC	Limits
alpha-BHC	<0.3227	16.11	11.64	72	47-128

Surrogate	%REC	Limits
TCMX	78	46-120
Decachlorobiphenyl	77	38-125

Type: MSD Moisture: 18%
Lab ID: QC655374

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
alpha-BHC	16.10	11.74	73	47-128	1	42

Surrogate	%REC	Limits
TCMX	78	46-120
Decachlorobiphenyl	75	38-125

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PEST Soil: EPA 8081B

Inst : GC21
Calnum : 242328737001
Units : pg/uL

Name : gc21_pest_228
Date : 15-AUG-2012 09:17

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	228_006	242328737006	PEST_1/2	15-AUG-2012 09:17	S19412 (2X)
L2	228_007	242328737007	PEST_1	15-AUG-2012 09:38	S19412
L3	228_008	242328737008	PEST_2	15-AUG-2012 10:00	S20311
L4	228_009	242328737009	PEST_3	15-AUG-2012 10:22	S19414
L5	228_010	242328737010	PEST_4	15-AUG-2012 10:43	S19415
L6	228_011	242328737011	PEST_5	15-AUG-2012 11:05	S19416
L7	228_012	242328737012	PEST_6	15-AUG-2012 11:27	S19417
L8	228_013	242328737013	PEST_7	15-AUG-2012 11:49	S19418

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	1910.0	1584.5	1623.6	1592.6	1606.9	1498.6	1734.8	1643.5	AVRG	R		6.06E-4		1649.3	8	0.990	20	
TCMX	A	1449.0	1136.3	1128.6	1097.0	1088.6	1021.1	1162.5	1084.2	AVRG	R		8.73E-4		1145.9	11	0.990	20	
Decachlorobiphenyl	A	722.50	590.25	624.20	576.90	577.53	444.48	466.10	478.26	AVRG	R		0.00179		560.03	17	0.990	20	
alpha-BHC	B	1502.0	1479.0	3022.4	1740.0	3252.8	3197.6	6710.7		QUAD	A	4732.34	49.3462	130.9982	2986.3	0.998	0.990	20	
TCMX	B	855.50	831.00	1770.4	1052.3	2370.9	2564.3	3620.5		QUAD	A	-3774.8	1493.29	21.73896	1866.4	0.998	0.990	20	
Decachlorobiphenyl	B	469.00	454.50	1066.2	525.55	739.65	628.38	1164.5	2203.9	QUAD	A	3899.58	97.3852	10.42620	906.46	0.999	0.990	20	
Average EPA 8081B	A														(n=23)	11			
Average EPA 8081B	B														(n=23)	61			

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
alpha-BHC	A	1.0000	16	2.0000	-4	5.0000	-2	10.000	-3	20.000	-3	25.000	-9	50.000	5	100.00	0
TCMX	A	2.0000	**26**	4.0000	-1	10.000	-2	20.000	-4	40.000	-5	50.000	-11	100.00	1	200.00	-5
Decachlorobiphenyl	A	2.0000	**29**	4.0000	5	10.000	11	20.000	3	40.000	3	50.000	**-21**	100.00	-17	200.00	-15
alpha-BHC	B	1.0000	**-100**	2.0000	**-100**	5.0000	**74**	10.000	-4	20.000	6	25.000	-5	50.000	0		
TCMX	B	2.0000	**75**	4.0000	12	10.000	**22**	20.000	**-31**	40.000	3	50.000	2	100.00	0		
Decachlorobiphenyl	B	2.0000	**-100**	4.0000	**-100**	10.000	**112**	20.000	5	40.000	13	50.000	-6	100.00	-1	200.00	0

TKB 08/16/12 : Corrected automatically drawn baseline in all levels.

TKB 08/16/12 : ICAL fails PEM (ENDRIN) ON CH.B, ENDRIN COMPOUNDS WILL BE REPORTED FORM CH.A

TKB 08/16/12 : ICAL fails ICV FOR VARIOUS ANALYTES ON CH.B, THESE ANALYTES WILL BE REPORTED FROM CH.A

TKB 08/16/12 : CHANGED FIT TYPES AND DROPPED VARIOUS HIGH/LOW POINTS TO IMPROVE %RSD/R^2

TKB 08/16/12 : METHOXYCHLOR FAILS %RSD ON CH.B - IT WILL BE REPORTED FROM CH.A

TKB 08/16/12 : ADDITIONAL SET OF ICV RAN BECAUSE THE FIRST SET HAD EXPIRED

Analyst: TKB Date: 08/16/12 Reviewer: EAH Date: 08/16/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PEST Soil
EPA 8081B

Inst : GC21 Name : gc21_pest_228
Calnum : 242328737001 Cal Date : 15-AUG-2012

ICV 242328737019 (228_019 16-AUG-2012) stds: S20524

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	20.00	19.36	pg/uL	-3	20	
alpha-BHC	B	20.00	17.17	pg/uL	-14	20	
Average EPA 8081B	A	n=21			7		
Average EPA 8081B	B	n=21			18		

Analyst: TKB Date: 08/16/12 Reviewer: EAH Date: 08/16/12

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PEST Soil: EPA 8081B

Inst : GC23
Calnum : 802339015004
Units : pg/uL

Name : gc23_pest_235
Date : 22-AUG-2012 18:30

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	235_019	802339015019	PEST_1/2	22-AUG-2012 18:30	S19412 (2X)
L2	235_020	802339015020	PEST_1	22-AUG-2012 18:52	S19412
L3	235_021	802339015021	PEST_2	22-AUG-2012 19:14	S20311
L4	235_022	802339015022	PEST_3	22-AUG-2012 19:36	S19414
L5	235_024	802339015024	PEST_4	23-AUG-2012 06:17	S19415
L6	235_025	802339015025	PEST_5	23-AUG-2012 06:39	S19416
L7	235_026	802339015026	PEST_6	23-AUG-2012 07:01	S19417

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	14018	12551	13472	13611	11703	12170	14112	AVRG	R		7.64E-5		13091	7	0.990	20	
TCMX	A	8642.5	7911.8	9392.5	8036.8	6703.5	7126.8	7726.6	AVRG	R		1.26E-4		7934.4	11	0.990	20	
Decachlorobiphenyl	A	10582	9566.8	9185.4	8956.8	6487.4	5880.6	5083.4	QUAD	A	19628.0	6835.43	-19.8300	7963.2	0.991	0.990	20	
alpha-BHC	B	36716	31715	33981	32303	26988	27932	23744	AVRG	R		3.28E-5		30483	15	0.990	20	
TCMX	B	20592	18220	17929	17717	15446	15586	13422	AVRG	R		5.89E-5		16987	14	0.990	20	
Decachlorobiphenyl	B		17047	17331	16169	11352	11631		AVRG	R		6.80E-5		14706	20	0.990	20	
Average EPA 8081B	A													(n=23)	12			
Average EPA 8081B	B													(n=23)	20			

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
alpha-BHC	A	1.0000	7	2.0000	-4	5.0000	3	10.000	4	20.000	-11	25.000	-7	50.000	8
TCMX	A	2.0000	9	4.0000	0	10.000	18	20.000	1	40.000	-16	50.000	-10	100.00	-3
Decachlorobiphenyl	A	2.0000	**-89**	4.0000	**-31**	10.000	9	20.000	**26**	40.000	-1	50.000	-7	100.00	1
alpha-BHC	B	1.0000	20	2.0000	4	5.0000	11	10.000	6	20.000	-11	25.000	-8	50.000	**-22**
TCMX	B	2.0000	**21**	4.0000	7	10.000	6	20.000	4	40.000	-9	50.000	-8	100.00	**-21**
Decachlorobiphenyl	B			4.0000	16	10.000	18	20.000	10	40.000	**-23**	50.000	**-21**		

TKB 08/23/12 : Corrected automatically drawn baseline in all levels.

TKB 08/23/12 : DROPPED VARIOUS LOW (BELOW RL) AND HIGH POINTS (INCLUDING L7) AND CHANGED FIT TYPES TO IMPROVE %RSD/R^2.

TKB 08/23/12 : %RSD FAILS ON CH.B FOR ENDOSULFAN II, ENDRIN KETONE AND METHOXYCHLOR. THEY WILL BE REPORTED FROM CH.A

Analyst: TKB Date: 08/23/12 Reviewer: EAH Date: 08/23/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PEST Soil
EPA 8081B

Inst : GC23 Name : gc23_pest_235
Calnum : 802339015004 Cal Date : 22-AUG-2012

ICV 802339015029 (235_029 23-AUG-2012) stds: S20524

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	20.00	18.62	pg/uL	-7	20	
alpha-BHC	B	20.00	18.53	pg/uL	-7	20	
Average EPA 8081B	A	n=21			8		
Average EPA 8081B	B	n=21			8		

Analyst: TKB Date: 08/23/12 Reviewer: EAH Date: 08/23/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Soil
EPA 8081B

Inst : GC21 Run Name : PEST_3 IDF : 1.0
Seqnum : 242367635003.1 File : 255_003 Time : 11-SEP-2012 07:58
Cal : 242328737001 Caldate : 15-AUG-2012
Standards: S20649

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1649.3	1777.8	10.00	10.78	pg/uL	8	20	
TCMX	A	1145.9	1214.0	20.00	21.19	pg/uL	6	20	
Decachlorobiphenyl	A	560.03	561.05	20.00	20.04	pg/uL	0	20	
alpha-BHC	B	2986.3	1160.4	10.00	7.057	pg/uL	**-29**	20	c- ***
TCMX	B	1866.4	660.10	20.00	9.933	pg/uL	**-50**	20	c-
Decachlorobiphenyl	B	906.46	390.05	20.00	15.23	pg/uL	**-24**	20	c-
Average EPA 8081B	A	(n=23)					13		
Average EPA 8081B	B	(n=20)					29		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Heptachlor not quantifiable (B) Endosulfan sulfate not quantifiable (B)
4,4'-DDD not quantifiable (B)

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Soil
EPA 8081B

Inst : GC21 Run Name : PEST_4 IDF : 1.0
Seqnum : 242367635010.1 File : 255_010 Time : 11-SEP-2012 12:06
Cal : 242328737001 Caldate : 15-AUG-2012
Standards: S20650

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1649.3	1692.3	20.00	20.52	pg/uL	3	20	
TCMX	A	1145.9	1159.0	40.00	40.46	pg/uL	1	20	
Decachlorobiphenyl	A	560.03	484.03	40.00	34.57	pg/uL	-14	20	
alpha-BHC	B	2986.3	1513.7	20.00	13.78	pg/uL	**-31**	20	c- ***
TCMX	B	1866.4	885.05	40.00	20.26	pg/uL	**-49**	20	c-
Decachlorobiphenyl	B	906.46	456.08	40.00	32.71	pg/uL	-18	20	
Average EPA 8081B	A	(n=23)					9		
Average EPA 8081B	B	(n=23)					33		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Soil
EPA 8081B

Inst : GC23 Run Name : PEST_3 IDF : 1.0
Seqnum : 802366168015.1 File : 254_015 Time : 10-SEP-2012 12:47
Cal : 802339015004 Caldate : 22-AUG-2012
Standards: S20649

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	13091	15640	10.00	11.95	pg/uL	19	20	
TCMX	A	7934.4	7507.0	20.00	18.92	pg/uL	-5	20	
Decachlorobiphenyl	A	7963.2	8554.7	20.00	23.80	pg/uL	19	20	
alpha-BHC	B	30483	43419	10.00	14.24	pg/uL	**42**	20	c+ ***
TCMX	B	16987	24209	20.00	28.50	pg/uL	**43**	20	c+
Decachlorobiphenyl	B	14706	18980	20.00	25.81	pg/uL	**29**	20	c+
Average EPA 8081B	A	(n=23)					15		
Average EPA 8081B	B	(n=23)					41		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Soil
EPA 8081B

Inst : GC23 Run Name : PEST_4 IDF : 1.0
Seqnum : 802366168025.1 File : 254_025 Time : 10-SEP-2012 17:19
Cal : 802339015004 Caldate : 22-AUG-2012
Standards: S20650

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	13091	15488	20.00	23.66	pg/uL	18	20	
TCMX	A	7934.4	6979.0	40.00	35.18	pg/uL	-12	20	
Decachlorobiphenyl	A	7963.2	7976.3	40.00	51.50	pg/uL	**29**	20	c+
alpha-BHC	B	30483	39489	20.00	25.91	pg/uL	**30**	20	c+ ***
TCMX	B	16987	22425	40.00	52.80	pg/uL	**32**	20	c+
Decachlorobiphenyl	B	14706	16005	40.00	43.53	pg/uL	9	20	
Average EPA 8081B	A	(n=23)					18		
Average EPA 8081B	B	(n=23)					26		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 242328737

Instrument : GC21 Begun : 08/15/12 06:57
Method : EPA 8081B SOP Version : pesticides_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	228_001	X	HEX			08/15/12 06:57	1.0		
002	228_002	PEM	PEM			08/15/12 07:18	1.0	1	
003	228_003	CCV	PEST_3			08/15/12 07:40	1.0	2	No Quant ac arsd
004	228_004	PEM	PEM			08/15/12 08:27	1.0	1	
005	228_005	IB	CAL			08/15/12 08:55	1.0		No Quant
006	228_006	ICAL	PEST_1/2			08/15/12 09:17	1.0	3	
007	228_007	ICAL	PEST_1			08/15/12 09:38	1.0	3	
008	228_008	ICAL	PEST_2			08/15/12 10:00	1.0	4	
009	228_009	ICAL	PEST_3			08/15/12 10:22	1.0	2	
010	228_010	ICAL	PEST_4			08/15/12 10:43	1.0	5	
011	228_011	ICAL	PEST_5			08/15/12 11:05	1.0	6	
012	228_012	ICAL	PEST_6			08/15/12 11:27	1.0	7	
013	228_013	ICAL	PEST_7			08/15/12 11:49	1.0	8	
014	228_014	X	HEX			08/15/12 12:11	1.0		
015	228_015	X	PEST_ICV			08/15/12 12:32	1.0	9	
016	228_016	X	ICV			08/15/12 15:04	1.0	9	
018	228_018	X	PEST_ICV			08/16/12 12:59	1.0	10	
019	228_019	ICV	PEST_ICV			08/16/12 13:30	1.0	10	

TKB 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 19.

Standards used: 1=S20501 2=S19414 3=S19412 4=S20311 5=S19415 6=S19416 7=S19417 8=S19418 9=S19196 10=S20524
Flags used: No Quant=Endrin not quantifiable ac=average CCV drift out arsd=average ICAL %RSD out
Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 242367635

Instrument : GC21 Begun : 09/11/12 07:15
Method : EPA 8081B SOP Version : pesticides_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	255_001	X	HEX			09/11/12 07:15	1.0		
002	255_002	PEM	PEM			09/11/12 07:37	1.0	1	
003	255_003	CCV	PEST_3			09/11/12 07:58	1.0	2	No Quant
004	255_004	LCS	QC655372	Soil	190308	09/11/12 09:39	1.0		
005	255_005	MS	QC655373	Soil	190308	09/11/12 10:01	1.0		
006	255_006	MSD	QC655374	Soil	190308	09/11/12 10:23	1.0		
007	255_007	MS	QC655373	Soil	190308	09/11/12 11:01	1.0		
008	255_008	MSD	QC655374	Soil	190308	09/11/12 11:22	1.0		
009	255_009	PEM	PEM			09/11/12 11:44	1.0	1	
010	255_010	CCV	PEST_4			09/11/12 12:06	1.0	3	
011	255_011	BLANK	QC655486	Water	190334	09/11/12 12:59	1.0		No Quant arsd av >ac <ac
012	255_012	BS	QC655487	Water	190334	09/11/12 13:21	1.0		arsd av >ac <ac
013	255_013	BSD	QC655488	Water	190334	09/11/12 13:43	1.0		arsd av >ac <ac
014	255_014	SAMPLE	239403-007	Water	190334	09/11/12 14:05	1.0		No Quant
015	255_015	SAMPLE	239403-008	Water	190334	09/11/12 14:26	1.0		
016	255_016	PEM	PEM			09/11/12 14:53	1.0	1	
017	255_017	CCV	PEST_3			09/11/12 15:15	1.0	2	No Quant
018	255_018	BLANK	QC655680	Soil	190378	09/11/12 18:40	1.0		No Quant arsd av <ac >ac
019	255_019	LCS	QC655684	Soil	190378	09/11/12 19:02	1.0		No Quant arsd av <ac >ac
020	255_020	SAMPLE	239496-001	Soil	190378	09/11/12 19:23	1.0		No Quant arsd av <ac >ac
021	255_021	SAMPLE	239496-002	Soil	190378	09/11/12 19:45	1.0		No Quant arsd av <ac >ac
022	255_022	SAMPLE	239496-003	Soil	190378	09/11/12 20:07	5.0		No Quant arsd av <ac >ac
023	255_023	SAMPLE	239496-004	Soil	190378	09/11/12 20:29	1.0		No Quant arsd av <ac >ac
024	255_024	SAMPLE	239496-005	Soil	190378	09/11/12 20:50	1.0		No Quant arsd av <ac >ac
025	255_025	SAMPLE	239496-006	Soil	190378	09/11/12 21:12	1.0		No Quant arsd av <ac >ac
026	255_026	SAMPLE	239496-007	Soil	190378	09/11/12 21:34	1.0		No Quant arsd av <ac >ac
027	255_027	SAMPLE	239496-008	Soil	190378	09/11/12 21:56	1.0		No Quant arsd av <ac >ac
028	255_028	SAMPLE	239496-009	Soil	190378	09/11/12 22:18	5.0		No Quant arsd av <ac >ac
029	255_029	SAMPLE	239496-010	Soil	190378	09/11/12 22:40	1.0		No Quant arsd av <ac >ac
030	255_030	PEM	PEM			09/11/12 23:02	1.0	1	
031	255_031	CCV	PEST_4			09/11/12 23:24	1.0	3	arsd av ac
032	255_032	X	PEM			09/11/12 23:45	1.0	1	
033	255_033	X	XCCV			09/12/12 00:07	1.0	3	

TKB 09/12/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

Standards used: 1=S20501 2=S20649 3=S20650

Flags used: <=opening >=closing No Quant=Endosulfan II not quantifiable ac=average CCV drift out arsd=average ICAL %RSD out av=average ICV drift out

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 802339015

Instrument : GC23 Begun : 08/22/12 10:15
Method : EPA 8081B SOP Version : pesticides_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	235_001	X	HEX			08/22/12 10:15	1.0		
002	235_002	PEM	PEM			08/22/12 10:37	1.0	1	
003	235_003	IB	CAL			08/22/12 10:59	1.0		
004	235_004	ICAL	PEST_1/2			08/22/12 11:21	1.0	2	
005	235_005	ICAL	PEST_1			08/22/12 11:43	1.0	2	
006	235_006	ICAL	PEST_2			08/22/12 12:05	1.0	3	
007	235_007	ICAL	PEST_3			08/22/12 12:28	1.0	4	
008	235_008	ICAL	PEST_4			08/22/12 12:50	1.0	5	
009	235_009	ICAL	PEST_5			08/22/12 13:12	1.0	6	
010	235_010	ICAL	PEST_6			08/22/12 13:34	1.0	7	
011	235_011	ICAL	PEST_7			08/22/12 13:56	1.0	8	
012	235_012	X	HEX			08/22/12 14:18	1.0		
013	235_013	X	PEST_ICV			08/22/12 14:40	1.0	9	
014	235_014	ICV	CCV/ICV			08/22/12 15:38	1.0	9	
015	235_015	X	HEX			08/22/12 17:02	1.0		
016	235_016	X	HEX			08/22/12 17:24	1.0		
017	235_017	PEM	PEM			08/22/12 17:46	1.0	1	
018	235_018	IB	CAL			08/22/12 18:08	1.0		No Quant
019	235_019	ICAL	PEST_1/2			08/22/12 18:30	1.0	2	
020	235_020	ICAL	PEST_1			08/22/12 18:52	1.0	2	
021	235_021	ICAL	PEST_2			08/22/12 19:14	1.0	3	
022	235_022	ICAL	PEST_3			08/22/12 19:36	1.0	4	
024	235_024	ICAL	PEST_4			08/23/12 06:17	1.0	5	
025	235_025	ICAL	PEST_5			08/23/12 06:39	1.0	6	
026	235_026	ICAL	PEST_6			08/23/12 07:01	1.0	7	
027	235_027	ICAL	PEST_7			08/23/12 07:23	1.0	8	
028	235_028	X	HEX			08/23/12 08:13	1.0		
029	235_029	ICV	PEST_ICV			08/23/12 08:35	1.0	9	
030	235_030	ICAL	CHLOR_500			08/23/12 09:03	1.0	10	
031	235_031	ICAL	TOX_500			08/23/12 09:25	1.0	11	
032	235_032	X	HEX			08/23/12 10:02	1.0		
033	235_033	PEM	PEM			08/23/12 10:24	1.0	1	
034	235_034	CCV	PEST_4			08/23/12 10:46	1.0	5	
035	235_035	SAMPLE	238986-005	Soil	189618	08/23/12 11:14	5.0		>ac
036	235_036	SAMPLE	238986-006	Soil	189618	08/23/12 11:36	5.0		>ac
037	235_037	PEM	PEM			08/23/12 12:09	1.0	1	
038	235_038	CCV	PEST_3			08/23/12 12:36	1.0	4	ac
039	235_039	SAMPLE	238707-001	Soil	189429	08/23/12 13:07	1.0		<ac
040	235_040	SAMPLE	238707-002	Soil	189429	08/23/12 13:29	1.0		<ac
041	235_041	SAMPLE	238707-003	Soil	189429	08/23/12 13:51	1.0		<ac
042	235_042	SAMPLE	238707-004	Soil	189429	08/23/12 14:13	1.0		<ac
043	235_043	SAMPLE	238707-005	Soil	189429	08/23/12 14:35	1.0		<ac
044	235_044	SAMPLE	238707-006	Soil	189429	08/23/12 14:57	1.0		<ac
045	235_045	MS	QC652780	Soil	189705	08/23/12 15:47	1.0		<ac
046	235_046	MSD	QC652781	Soil	189705	08/23/12 16:09	1.0		<ac
047	235_047	BLANK	QC652968	Water	189750	08/23/12 16:58	1.0		<ac
048	235_048	BS	QC652969	Water	189750	08/23/12 17:20	1.0		<ac
049	235_049	BSD	QC652970	Water	189750	08/23/12 17:42	1.0		<ac
051	235_051	X	HEX			08/24/12 07:36	1.0		
052	235_052	PEM	PEM			08/24/12 07:58	1.0	1	
053	235_053	CCV	PEST_4			08/24/12 08:20	1.0	5	
054	235_054	BLANK	QC653152	Soil	189790	08/24/12 10:06	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 802339015

Instrument : GC23 Begun : 08/22/12 10:15
Method : EPA 8081B SOP Version : pesticides_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
055	235_055	LCS	QC653156	Soil	189790	08/24/12 10:29	1.0		
056	235_056	SAMPLE	239099-003	Soil	189790	08/24/12 10:51	1.0		
057	235_057	SAMPLE	239099-004	Soil	189790	08/24/12 11:13	1.0		
058	235_058	MSS	239099-001	Soil	189790	08/24/12 11:35	1.0		
059	235_059	SAMPLE	239099-002	Soil	189790	08/24/12 11:57	1.0		
061	235_061	X	HEX			08/24/12 12:27	1.0		
062	235_062	X	HEX			08/24/12 12:49	1.0		
063	235_063	PEM	PEM			08/24/12 13:11	1.0	1	
064	235_064	CCV	PEST_3			08/24/12 13:33	1.0	4	
065	235_065	X	HEX			08/24/12 15:37	1.0		
066	235_066	SAMPLE	239058-002	Soil	189790	08/24/12 15:59	1.0		
071	235_071	X	HEX			08/24/12 17:03	1.0		
072	235_072	SAMPLE	239058-004	Soil	189790	08/24/12 17:25	1.0		
073	235_073	SAMPLE	239058-005	Soil	189790	08/24/12 17:47	1.0		
074	235_074	MSS	239058-006	Soil	189790	08/24/12 18:09	1.0		
075	235_075	SAMPLE	239058-009	Soil	189790	08/24/12 18:31	1.0		
076	235_076	SAMPLE	239058-011	Soil	189790	08/24/12 18:53	1.0		
077	235_077	SAMPLE	239058-012	Soil	189790	08/24/12 19:15	1.0		
078	235_078	SAMPLE	239058-001	Soil	189790	08/24/12 19:37	10.0		
079	235_079	SAMPLE	239058-003	Soil	189790	08/24/12 19:59	2.0		
080	235_080	SAMPLE	239058-008	Soil	189790	08/24/12 20:21	3.0		
081	235_081	PEM	PEM			08/24/12 20:44	1.0	1	
082	235_082	CCV	PEST_4			08/24/12 21:06	1.0	5	
083	235_083	X	CCV			08/24/12 21:28	1.0	5	
084	235_084	X	PEM			08/24/12 21:50	1.0	1	
085	235_085	SAMPLE	239058-010	Soil	189790	08/24/12 22:12	5.0		
086	235_086	SAMPLE	239058-007	Soil	189790	08/24/12 22:34	100.0		
087	235_087	SAMPLE	238963-006	Water	189645	08/24/12 22:56	1.0		

TKB 08/23/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 42.

KMH 08/24/12 : autosampler errors, didn't aquire run 50, 60 & 67-70

KMH 08/24/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 43 through 64.

TKB 08/28/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 65 through 87.

Standards used: 1=S20501 2=S19412 3=S20311 4=S19414 5=S19415 6=S19416 7=S19417 8=S19418 9=S20524 10=S20181 11=S19613
Flags used: <=opening >=closing No Quant=Endrin ketone not quantifiable ac=average CCV drift out

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 802366168

Instrument : GC23 Begun : 09/10/12 06:48
Method : EPA 8081B SOP Version : pesticides_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	254_001	X	HEX			09/10/12 06:48	1.0		
002	254_002	PEM	PEM			09/10/12 07:10	1.0	1	
003	254_003	CCV	PEST_4			09/10/12 07:32	1.0	2	
004	254_004	SAMPLE	239356-015	Soil	190263	09/10/12 08:45	1.0		
005	254_005	SAMPLE	239356-016	Soil	190263	09/10/12 09:07	1.0		
006	254_006	SAMPLE	239356-017	Soil	190263	09/10/12 09:29	1.0		
007	254_007	SAMPLE	239357-002	Soil	190263	09/10/12 09:51	3.0		3:DDE44=240
008	254_008	SAMPLE	239357-003	Soil	190263	09/10/12 10:13	1.0		
009	254_009	SAMPLE	239357-004	Soil	190263	09/10/12 10:35	1.0		
010	254_010	SAMPLE	239357-008	Soil	190263	09/10/12 10:57	1.0		
011	254_011	SAMPLE	239357-011	Soil	190263	09/10/12 11:19	1.0		
012	254_012	SAMPLE	239357-012	Soil	190263	09/10/12 11:41	1.0		
013	254_013	MSS	239357-013	Soil	190263	09/10/12 12:03	10.0		1:DDT44=340
014	254_014	PEM	PEM			09/10/12 12:25	1.0	1	
015	254_015	CCV	PEST_3			09/10/12 12:47	1.0	3	
016	254_016	BLANK	QC655371	Soil	190308	09/10/12 14:01	1.0		
017	254_017	LCS	QC655372	Soil	190308	09/10/12 14:23	1.0		
018	254_018	MSS	239356-011	Soil	190308	09/10/12 14:45	1.0		
019	254_019	SAMPLE	239403-006	Soil	190308	09/10/12 15:07	3.0		
020	254_020	SAMPLE	239446-002	Soil	190308	09/10/12 15:29	1.0		>ac <ac
021	254_021	SAMPLE	239448-002	Soil	190308	09/10/12 15:51	1.0		>ac <ac
022	254_022	MS	QC655373	Soil	190308	09/10/12 16:13	1.0		
023	254_023	MSD	QC655374	Soil	190308	09/10/12 16:35	1.0		
024	254_024	PEM	PEM			09/10/12 16:57	1.0	1	
025	254_025	CCV	PEST_4			09/10/12 17:19	1.0	2	1:DDD44=53
026	254_026	SAMPLE	239220-004	Soil	190153	09/10/12 17:41	1.0		
027	254_027	SAMPLE	239220-006	Soil	190263	09/10/12 18:03	1.0		
028	254_028	SAMPLE	239221-003	Soil	190153	09/10/12 18:25	1.0		1:DDE44=190
029	254_029	SAMPLE	239222-001	Soil	190153	09/10/12 18:47	1.0		
030	254_030	SAMPLE	239222-002	Soil	190153	09/10/12 19:09	1.0		
031	254_031	SAMPLE	239222-003	Soil	190153	09/10/12 19:31	1.0		1:DDE44=180
032	254_032	SAMPLE	239222-004	Soil	190153	09/10/12 19:52	1.0		
033	254_033	SAMPLE	239222-009	Soil	190153	09/10/12 20:14	1.0		
034	254_034	MSS	239357-013	Soil	190263	09/10/12 20:37	50.0		
035	254_035	SAMPLE	239356-012	Soil	190308	09/10/12 20:58	3.0		3:DDD44=430
036	254_036	SAMPLE	239356-013	Soil	190308	09/10/12 21:21	3.0		No Quant , 2:DDE44=230
037	254_037	SAMPLE	239356-014	Soil	190308	09/10/12 21:43	1.0		
038	254_038	PEM	PEM			09/10/12 22:05	1.0	1	
039	254_039	CCV	PEST_3			09/10/12 22:27	1.0	3	ac

TKB 09/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Standards used: 1=S20501 2=S20650 3=S20649

Flags used: <=opening >=closing No Quant=Decachlorobiphenyl not quantifiable ac=average CCV drift out

SAMPLE PREPARATION SUMMARY

Batch # : 190308 Analysis : PCB
Started By : JPE Prep Date : 09-SEP-2012 18:00 Finished By : JPE
Method : 3550B SOP Version : PCB_3550_rv8 Units : g
Spike #1 ID : S20518 Spike #2 ID : S20528 Spike #3 ID : S20514

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239296-005		Soil	29.73	20	1	0.6727		.8				PCB	
239356-001		Soil	30.38	20	1	0.6583		.8				8081, PCB	
239356-002		Soil	30.25	20	1	0.6612		.8				8081, PCB	
239356-003		Soil	30.03	20	1	0.666		.8				8081, PCB	
239356-004		Soil	30.23	20	1	0.6616		.8				8081, PCB	
239356-005		Soil	30.27	20	1	0.6607		.8				8081, PCB	
239356-006		Soil	30.23	20	1	0.6616		.8				8081, PCB	
239356-007		Soil	30.32	20	1	0.6596		.8				8081, PCB	
239356-008		Soil	30.32	20	1	0.6596		.8				8081, PCB	
239356-009		Soil	30.05	20	1	0.6656		.8				8081, PCB	
239356-010		Soil	30.44	20	1	0.657		.8				8081, PCB	
239356-011		Soil	30.11	20	1	0.6642		.8				8081, PCB	MSS
239356-012		Soil	30.01	20	1	0.6664		.8				8081, PCB	
239356-013		Soil	30.17	20	1	0.6629		.8				8081, PCB	
239356-014		Soil	30.05	20	1	0.6656		.8				8081, PCB	
239403-006		Soil	29.7	20	1	0.6734		.8				8081	
239437-001		Soil	30.13	20	1	0.6638		.8				PCB	
239437-002		Soil	30.22	20	1	0.6618		.8				PCB	
239446-002		Soil	30.13	20	1	0.6638		.8				8081, PCB	
239448-002		Soil	30.35	20	1	0.659		.8				8081, PCB	
QC655371	BLANK	Soil	30.35	20	1	0.659		.8				8081	
QC655372	LCS	Soil	30.28	20	1	0.6605		.8	.4			8081	
QC655373	MS	Soil	30.28	20	1	0.6605		.8	.4			8081	
QC655374	MSD	Soil	30.29	20	1	0.6603		.8	.4			8081	
QC655375	LCS	Soil	30.2	20	1	0.6623		.8		1		PCB	
QC655376	MS	Soil	30.04	20	1	0.6658		.8		1		PCB	
QC655377	MSD	Soil	30.08	20	1	0.6649		.8		1		PCB	

EAH 09/11/12 : Reviewed for pest and verified paperwork for pCB.

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/12/12

8081 Soil Prep Log

Curtis & Tompkins, Ltd.

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Extraction Method:
☒ EPA 3550b Sonication
o _____

Cleanup Method:
x EPA 3620b Florisil

LIMS Batch No: 190308
Date Extracted: 9/9/2012

	Sample #	Container ID	Sample Wt (g)	Final Vol (mL)	Comments
	239359-001	A/B	30.38	☒ 20.0 ☐	
	-002		30.25	☒ 20.0 ☐	
	-003		30.03	☒ 20.0 ☐	
	-004		30.23	☒ 20.0 ☐	
5	-005		30.27	☒ 20.0 ☐	
	-006		30.23	☒ 20.0 ☐	
	-007		30.37	☒ 20.0 ☐	
	-008		30.32	☒ 20.0 ☐	
	-009		30.05	☒ 20.0 ☐	
10	-010	↓	30.44	☒ 20.0 ☐	
	-011	A/B/C	30.11	☒ 20.0 ☐	MSS
	-012	A/B	30.01	☒ 20.0 ☐	
	-013	↓	30.17	☒ 20.0 ☐	
	-014	↓	30.05	☒ 20.0 ☐	
15	239403-006	A	29.70	☒ 20.0 ☐	
	239446-002	↓	30.13	☒ 20.0 ☐	
	239448-002	↓	30.35	☒ 20.0 ☐	
	MB 660371		30.35	☒ 20.0 ☐	
	LCS 72		30.28	☒ 20.0 ☐	
20	MS 73		30.28	☒ 20.0 ☐	
	MSD 74		30.29	☒ 20.0 ☐	
				☐ 20.0 ☐	
				☐ 20.0 ☐	
				☐ 20.0 ☐	
				☐ 20.0 ☐	PAL 9/10/12

	Mfg & Lot # / LIMS # / Time	Initials / Date
Solvent-rinsed granular Na_2SO_4 weighed out for QC samples	EM VB15H	SPE 9/9/12
dried with CH_2Cl_2-rinsed ☒ granular Na_2SO_4 ☐ powder	↓	↓
0.8 mL of surrogate solution was added to all samples	S20518B	
0.4 mL of spike solution was added to all spikes	S20528B	
1:1 CH_2Cl_2 (lot# EM52160):Acetone(lot# EM52039) was added to all	✓	
Solvent added at (time)	1600	
☒ sonicated 3 times w/ ≥100mL ☐ soxhlet extractors on at:	✓	
soxhlets off at:	NA	
Extracts filtered through baked, CH_2Cl_2-rinsed powdered Na_2SO_4	EM 30411C07V	
Exchanged 2x with Hexane	JTB108E17	
Concentrated to final volume at temperature (degrees C)	100	
xFlorisil Cleanup Performed	✓	
Extracts relinquished to Pesticide Group	✓	

9/9/12
Extraction Chemist / Date

Continued from page ____
Continued on page ____

PAL 9/10/12
Reviewed by / Date

Curtis & Tompkins, Ltd. **Florisil Cleanup** **EPA 3620B**

Prep Chemist: JPE
Cleanup Date: 9/9/2012

Benchbook # **BK 3338**
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Sample #	Extraction Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
239356-001	190308	☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-002		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-003		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-004		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-005		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-006		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-007		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-008		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-009		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-010		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-011		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-012		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-013		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
-014		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
239403-006		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
239446-002		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
239448-002		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
MB QC655371		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
LCS 72		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
MS 73		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
MSD 74		☒ 1.0 ☐ ____	☒ 1.0 ☐ ____	
		☐ 1.0 ☐ ____	☐ 1.0 ☐ ____	
		☐ 1.0 ☐ ____	☐ 1.0 ☐ ____	
		☐ 1.0 ☐ ____	☐ 1.0 ☐ ____	
		☐ 1.0 ☐ ____	☐ 1.0 ☐ ____	
		☐ 1.0 ☐ ____	☐ 1.0 ☐ ____	
		☐ 1.0 ☐ ____	☐ 1.0 ☐ ____	
		☐ 1.0 ☐ ____	☐ 1.0 ☐ ____	
		☐ 1.0 ☐ ____	☐ 1.0 ☐ ____	
		☐ 1.0 ☐ ____	☐ 1.0 ☐ ____	JML 9/10/12

	Mfg & Lot # / Time / Program	Initials / Date
☒ Extracts were cleaned up using Florisil cartridges	SP 3556401	JPE 9/9/12
Florisil cartridges/ columns rinsed 3x with Hexane	J7B L08E17	
Extracts were eluted with 9.0 mL ~~9:1~~ 8:2 Hexane/Acetone — Hexane	↓	
Acetone	EM52034	
Concentrated to volumes as noted above	✓	

JPE 9/9/12
Extraction Chemist / Date

Continued from page 1
Continued on page ____

JML 9/10/12
Reviewed by / Date

PCB (8082) Soil Prep Log

LIMS Batch No: 190308
LIMS Analysis PCB (P|P)
Date Extracted: 9/9/2012

☒ EPA 3550b Sonication
☐ Other _____

Curtis & Tompkins, Ltd.
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BK3344

	Sample #	Container ID	Sample Wt (g)	Final Vol (mL)	Comments
	739796-005	L	29.73	□ 25.0 ☒ 20.0	
	739356-001	A|B	30.39	□ 25.0 ☒ 20.0	
	002	↓	30.25	□ 25.0 ☒ 20.0	
	003		30.03	□ 25.0 ☒ 20.0	
5	004		30.23	□ 25.0 ☒ 20.0	
	005		30.27	□ 25.0 ☒ 20.0	
	006		30.23	□ 25.0 ☒ 20.0	
	007		30.32	□ 25.0 ☒ 20.0	
	008		30.32	□ 25.0 ☒ 20.0	
10	009		30.05	□ 25.0 ☒ 20.0	
	010	↓	30.44	□ 25.0 ☒ 20.0	
	011	A|B|C	30.11	□ 25.0 ☒ 20.0	MS5
	012	A|B	30.01	□ 25.0 ☒ 20.0	
	013	↓	30.17	□ 25.0 ☒ 20.0	
15	014	↓	30.05	□ 25.0 ☒ 20.0	
	739437-001	A	30.13	□ 25.0 ☒ 20.0	
	↓ 007	↓	30.22	□ 25.0 ☒ 20.0	
	739446-002		30.13	□ 25.0 ☒ 20.0	
	739448-002	↓	30.35	□ 25.0 ☒ 20.0	
20	MB QC655371		30.35	□ 25.0 ☒ 20.0	
	LCS 75		30.20	□ 25.0 ☒ 20.0	
	MS 76		30.04	□ 25.0 ☒ 20.0	
	MSD ↓ 77		30.08	□ 25.0 ☒ 20.0	
				□ 25.0 □	
				□ 25.0 □	PML 9/

	Mfg & Lot # / LIMS # / Time	Initials / Date
Solvent-rinsed granular Na_2SO_4 weighed out for QC samples	EM VB151H	JPE 9/9/12
dried with CH_2Cl_2-rinsed ☒ granular Na_2SO_4 ☐ powder	↓	
0.8 mL of surrogate solution was added to all samples	50 JPE 9/9/12 S205188	
1.0 mL of matrix spiking solution was added to all spikes	S205141	
1:1 CH_2Cl_2 (lot# EM S7160):Acetone(lot# EM S2035) was added to all	✓	
Solvent added at (time)	1800	
☒ sonicated 3 times w/ ≥100mL ☐ soxhlet extractors on at:	✓	
Soxhlets off at:	N/A	
Extracts filtered through baked, CH_2Cl_2-rinsed powdered Na_2SO_4	EM 30411024	
Solvent exchanged with Hexane, Lot#	J7B108E17	
Concentrated to final volume at temperature (degrees C)	100	
EPA 3665A Clean-up: vortexed w/ H_2SO_4 Lot#	FS120430	
Centrifuged for 1 min; 5mL transferred to labelled vial	✓	
Relinquished to PCB group		

9/9/12
Extraction Chemist / Date

Continued from page _____
Continued on page _____

PML 9/10/12
Reviewed by / Date

REPORTING SUMMARY FOR 239403 PEST Soil

Sample ID	Analyte	Inst ID	Ch	Date & Time
239403-006	alpha-BHC	GC23	A	09/10/12 15:07
239403-006	TCMX	GC23	A	09/10/12 15:07
239403-006	Decachlorobiphenyl	GC23	A	09/10/12 15:07
QC655371	alpha-BHC	GC23	A	09/10/12 14:01
QC655371	TCMX	GC23	A	09/10/12 14:01
QC655371	Decachlorobiphenyl	GC23	A	09/10/12 14:01
QC655372	alpha-BHC	GC21	A	09/11/12 09:39
QC655372	TCMX	GC21	A	09/11/12 09:39
QC655372	Decachlorobiphenyl	GC21	A	09/11/12 09:39
QC655373	alpha-BHC	GC21	A	09/11/12 11:01
QC655373	TCMX	GC21	A	09/11/12 11:01
QC655373	Decachlorobiphenyl	GC21	A	09/11/12 11:01
QC655374	alpha-BHC	GC21	A	09/11/12 11:22
QC655374	TCMX	GC21	A	09/11/12 11:22
QC655374	Decachlorobiphenyl	GC21	A	09/11/12 11:22

Dilutions for 239403 PEST Soil
Curtis & Tompkins Laboratories

Type	Sample ID	IDFs
SAMPLE	239403-006	3X

Case Narrative Addendum: Manual Integrations for 239403 PEST (Soil)

For SAMPLE 239403-006 (GC23_254_019):
Corrected automatically drawn baseline.

For CCV PEST_3 (GC21_255_003):
Corrected automatically drawn baseline.

For CCV PEST_3 (GC23_254_015):
Corrected automatically drawn baseline.

For CCV PEST_4 (GC21_255_010):
Corrected automatically drawn baseline.

For CCV PEST_4 (GC23_254_025):
Corrected automatically drawn baseline.

For BLANK QC655371 (GC23_254_016):
Corrected automatically drawn baseline.

For LCS QC655372 (GC21_255_004):
Corrected automatically drawn baseline.

For MSD QC655374 (GC21_255_008):
Corrected automatically drawn baseline.

For Calibration GC21 (242328737001):
Corrected automatically drawn baseline in all levels.

For ICV PEST_ICV (GC21_228_019):
Corrected automatically drawn baseline.

For Calibration GC23 (802339015004):
Corrected automatically drawn baseline in all levels.

For ICV PEST_ICV (GC23_235_029):
Corrected automatically drawn baseline.

Sample Raw Data

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8081B

Inst	: GC23	Lab ID	: 239403-006	Client ID	: EX36B163A.2
Seqnum	: 802366168019	Matrix	: Soil	Acct	: ARCSF (JG)
File	: 254_019	Batch	: 190308	Time	: 10-SEP-2012 15:07
Cal	: 802339015004	Caldate	: 22-AUG-2012		
IDF	: 3.0	Raw Units	: pg/uL	Units	: ug/Kg

29.70 g --> 20.0 ml = 0.6734 ml/g PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Blank	Flags
alpha-BHC	A	0.002063	ND	ND	124%	5.2		u

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	13.08	26.94	26.42	98	46-120	u
Decachlorobiphenyl	A	12.27	26.94	24.78	92	38-125	>c+ u

09/10/12 : Was diluted due to the color of the sample extract.

TKB 09/11/12 : Corrected automatically drawn baseline.

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias >=closing c=CCV u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-019**
Sample Name: **239403-006,190308,3x//c**
Instrument: GC23 (Offline) Vial: 19 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 3:07:49 PM
Analysis Date: 9/11/2012 9:24:05 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.487	5.479	103763	13.078
alpha-BHC	6.127	6.110	27	0.002
gamma-BHC		6.570		0.000 BDL
beta-BHC		6.820		0.000 BDL
delta-BHC	7.143	7.157	685	0.062
Heptachlor	7.413	7.397	474	0.043
Aldrin	7.833	7.853	510	0.045
Isodrin	8.300	8.287	387	0.042
Heptachlor epoxide	8.413	8.403	8022	0.778
gamma-Chlordane		8.740		0.000 BDL
alpha-Chlordane	8.853	8.843	173	0.017
Endosulfan I		8.903		0.000 BDL
4,4'-DDE	9.053	9.050	1000	0.119
Dieldrin		9.233		0.000 BDL
Endrin	9.507	9.503	2487	0.377
4,4'-DDD	9.643	9.647	1629	0.277
Endosulfan II		9.740		0.000 BDL
Endrin aldehyde	9.897	9.883	2914	0.438
4,4'-DDT	10.010	10.003	2136	0.370
Endosulfan sulfate	10.143	10.140	4666	0.727
Methoxychlor	10.510	10.497	598	0.228
Endrin ketone	10.637	10.650	6631	0.903
Decachlorobiphenyl	12.397	12.397	100495	12.267

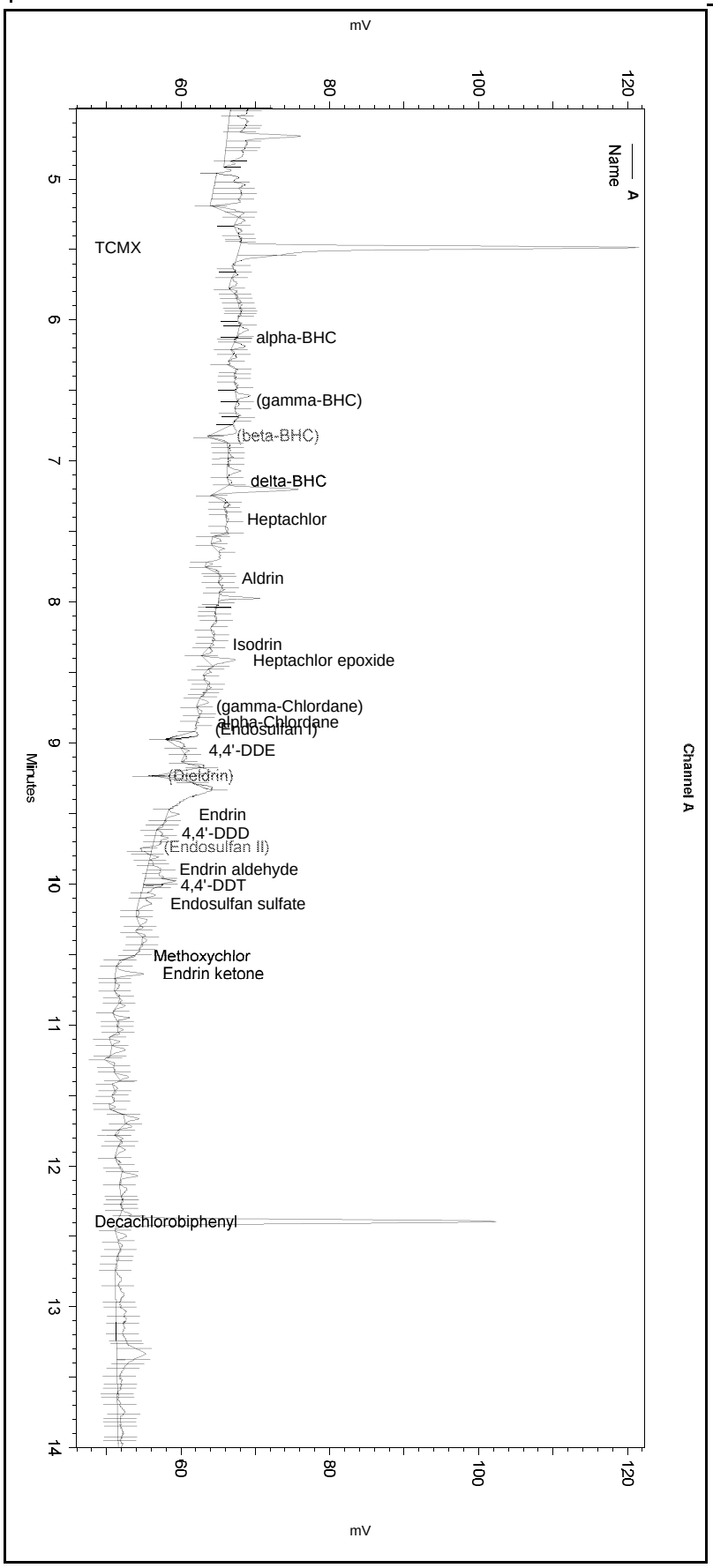
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.227	4.215	270925	15.948
alpha-BHC	4.963	4.953	267	0.009
gamma-BHC	5.370	5.380	8236	0.288
beta-BHC		5.477		0.000 BDL
delta-BHC	5.820	5.827	653	0.025
Heptachlor	5.927	5.907	1058	0.037
Aldrin		6.283		0.000 BDL
Isodrin	6.750	6.737	2731	0.116
Heptachlor epoxide	6.930	6.930	2015	0.077
gamma-Chlordane	7.127	7.143	970	0.000
alpha-Chlordane		7.303		0.000 BDL
Endosulfan I	7.373	7.373	3312	0.142
4,4'-DDE	7.480	7.477	997	0.045
Dieldrin	7.680	7.677	5343	0.000
Endrin	8.003	8.013	1787	0.090
4,4'-DDD		8.113		0.000 BDL
Endosulfan II	8.253	8.247	1989	0.097
4,4'-DDT	8.457	8.457	406	0.021
Endrin aldehyde	8.597	8.610	338	0.019
Endosulfan sulfate		8.910		0.000 BDL
Methoxychlor	9.187	9.177	1466	0.193
Endrin ketone		9.463		0.000 BDL
Decachlorobiphenyl	10.567	10.563	222361	15.120

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-019**
Sample Name: **239403-006,190308,3x//c**
Instrument: GC23 (Offline) Vial: 19 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 3:07:49 PM
Analysis Date: 9/11/2012 9:24:05 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

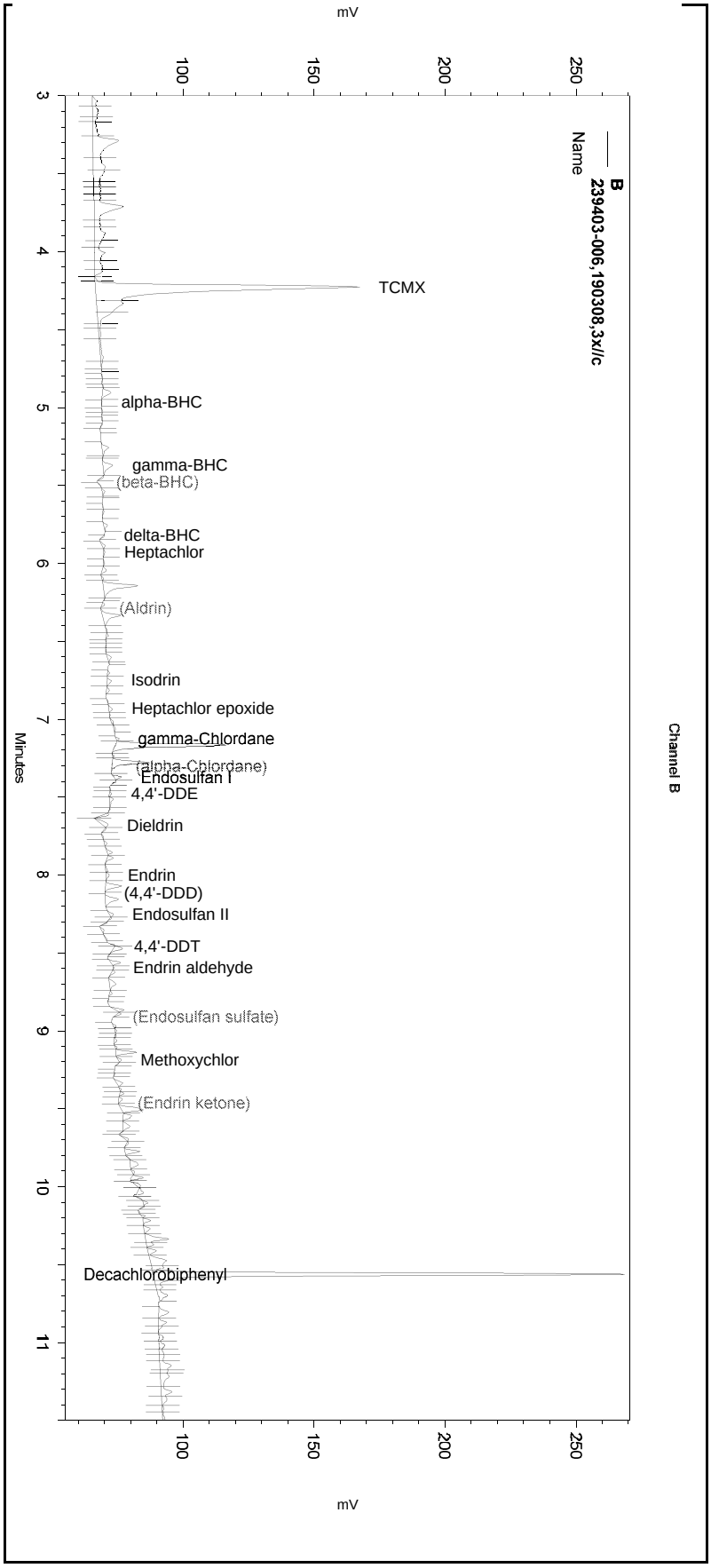
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\254-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	5.279	12.673	0
Yes	Manual Baseline	5.444	5.615	0
Yes	Manual Baseline	9.621	10.19	0
Yes	Manual Baseline	12.312	12.456	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-019**
Sample Name: **239403-006,190308,3x//c**
Instrument: GC23 (Offline) Vial: 19 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 3:07:49 PM
Analysis Date: 9/11/2012 9:24:05 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\254-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	4.773	10.186	0
Yes	Reset Baseline	10.734	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-019**
Sample Name: **239403-006,190308,3x//c**
Instrument: GC23 Vial: 19 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 3:07:49 PM
Analysis Date: 9/10/2012 3:26:17 PM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.487	5.477	121007	15.251
alpha-BHC	6.127	6.110	1165	0.089
gamma-BHC		6.570		0.000 BDL
beta-BHC		6.820		0.000 BDL
delta-BHC	7.143	7.157	9147	0.826
Heptachlor	7.413	7.397	7730	0.709
Aldrin	7.833	7.853	5136	0.457
Isodrin	8.300	8.287	2994	0.322
Heptachlor epoxide	8.413	8.403	12498	1.213
gamma-Chlordane		8.740		0.000 BDL
alpha-Chlordane	8.853	8.843	288	0.028
Endosulfan I		8.903		0.000 BDL
4,4'-DDE	9.053	9.050	8551	1.015
Dieldrin		9.233		0.000 BDL
Endrin	9.507	9.503	3840	0.582
4,4'-DDD	9.643	9.647	3056	0.520
Endosulfan II		9.740		0.000 BDL
Endrin aldehyde	9.897	9.883	591	0.089
4,4'-DDT	10.010	10.003	1637	0.283
Endosulfan sulfate	10.143	10.140	3295	0.513
Methoxychlor	10.510	10.497	2671	1.018
Endrin ketone	10.637	10.650	6755	0.920
Decachlorobiphenyl	12.397	12.397	105322	13.029

GC23

PEST - ECD Instrument Results

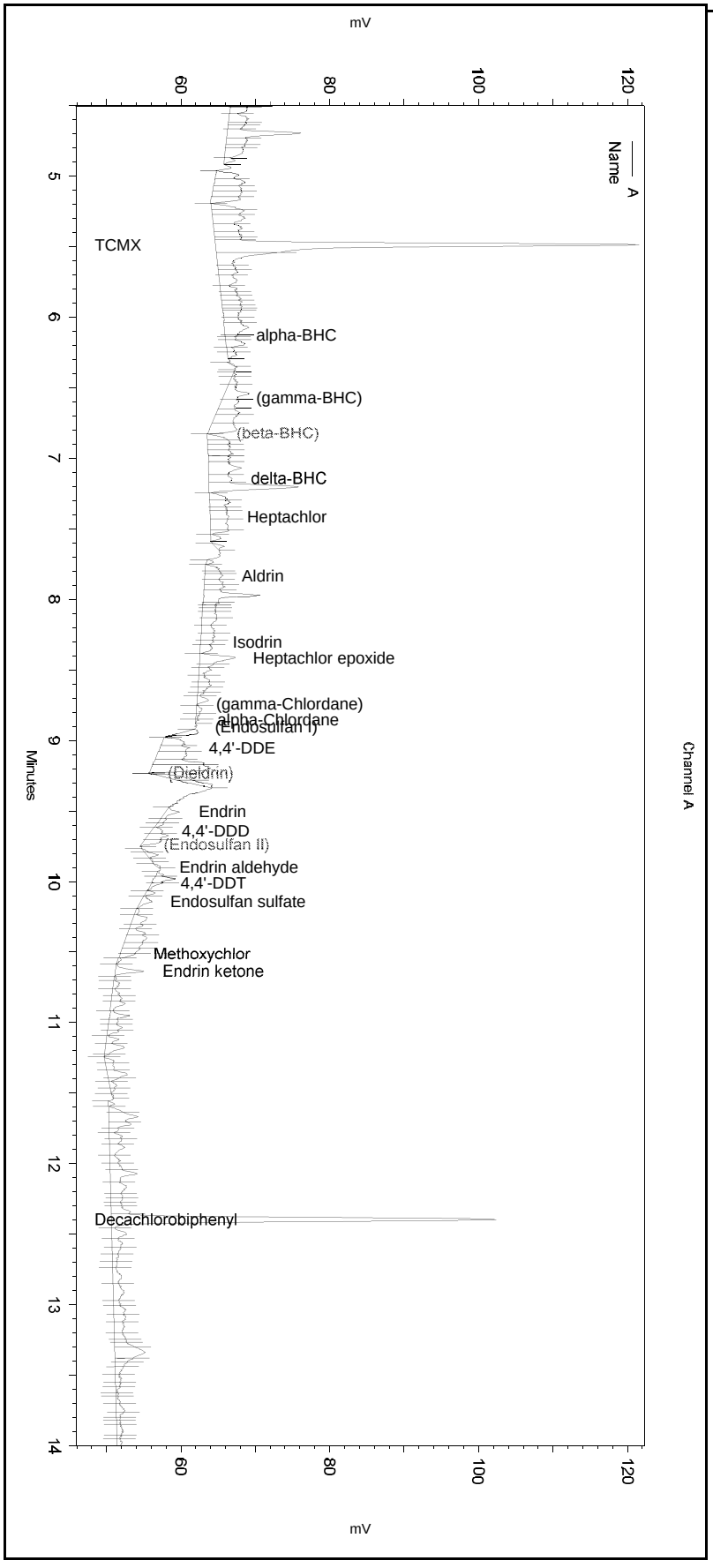
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.227	4.215	273783	16.117
alpha-BHC	4.963	4.953	6591	0.216
gamma-BHC	5.370	5.380	24186	0.846
beta-BHC		5.477		0.000 BDL
delta-BHC	5.820	5.827	653	0.025
Heptachlor	5.927	5.907	6669	0.232
Aldrin		6.283		0.000 BDL
Isodrin	6.750	6.737	3658	0.156
Heptachlor epoxide	6.930	6.930	8284	0.317
gamma-Chlordane	7.127	7.143	19340	0.000
alpha-Chlordane		7.303		0.000 BDL
Endosulfan I	7.373	7.373	19191	0.825
4,4'-DDE	7.480	7.477	13479	0.606
Dieldrin	7.680	7.677	13196	0.000
Endrin	8.003	8.013	12948	0.650
4,4'-DDD		8.113		0.000 BDL
Endosulfan II	8.253	8.247	15497	0.757
4,4'-DDT	8.457	8.457	8427	0.434
Endrin aldehyde	8.597	8.610	6128	0.353
Endosulfan sulfate		8.910		0.000 BDL
Methoxychlor	9.187	9.177	6581	0.865
Endrin ketone		9.463		0.000 BDL
Decachlorobiphenyl	10.567	10.563	244580	16.631

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-019**
Sample Name: **239403-006,190308,3x//c**
Instrument: GC23 Vial: 19 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 3:07:49 PM
Analysis Date: 9/10/2012 3:26:17 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

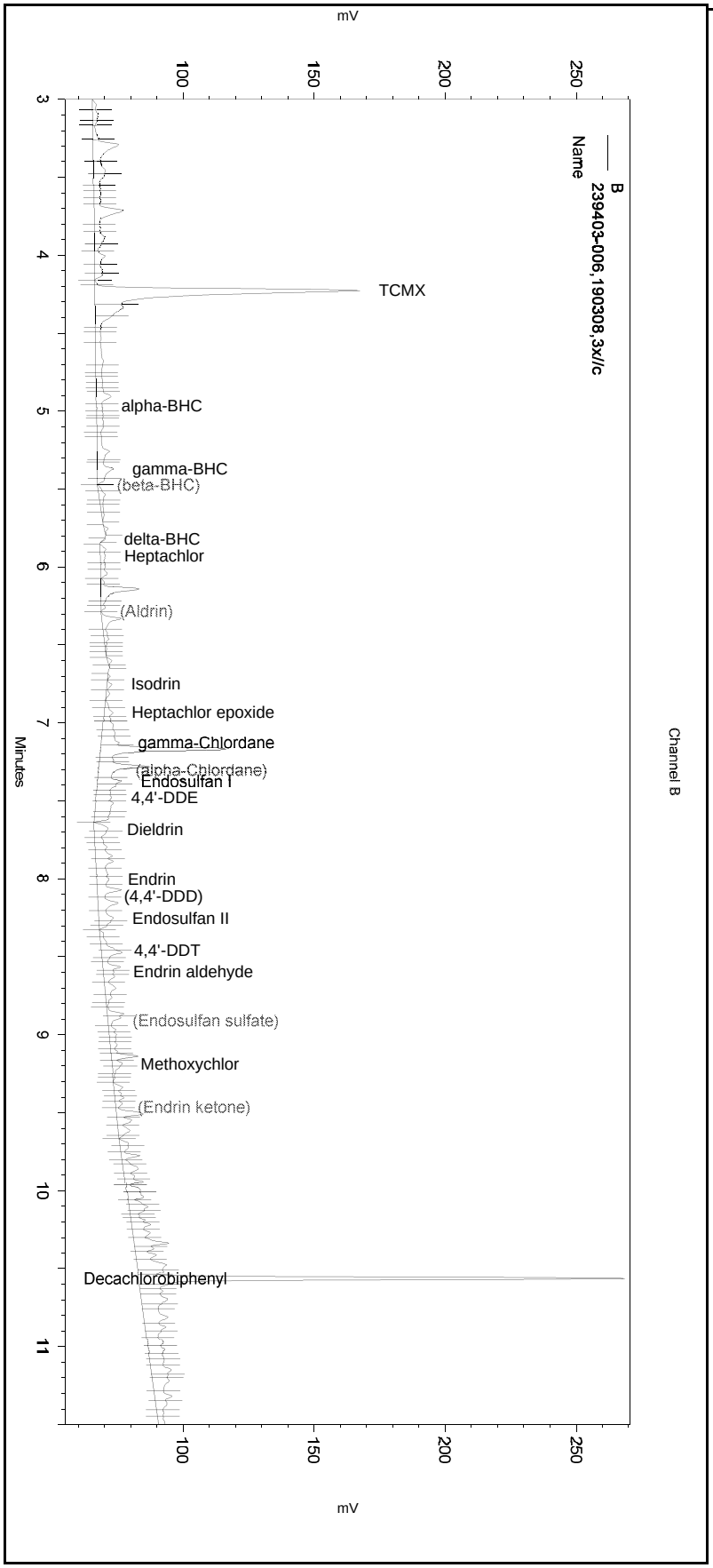
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\254-019_0FF2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-019**
Sample Name: **239403-006,190308,3x//c**
Instrument: GC23 Vial: 19 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 3:07:49 PM
Analysis Date: 9/10/2012 3:26:17 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\254-019_0FF2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

QC Raw Data

CURTIS & TOMPKINS BLANK USER REPORT FOR 239403 PEST Soil
EPA 8081B

Inst : GC23 Lab ID : QC655371
Seqnum : 802366168016.1 Matrix : Soil
File : 254_016 Batch : 190308 Time : 10-SEP-2012 14:01
Cal : 802339015004 Caldate : 22-AUG-2012
IDF : 1.0 Raw Units : pg/uL Units : ug/Kg

30.35 g --> 20.0 ml = 0.659 ml/g PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Flags
alpha-BHC	A	0	ND	ND		1.7	u

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	31.71	26.36	20.90	79	46-120	u
Decachlorobiphenyl	A	44.42	26.36	29.27	111	38-125	>c+ u

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

TKB 09/11/12 : REPORTING DIELDRIN FROM CH. B FOR BETTER CCV RECOVERY [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias >=closing c=CCV u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-016**
Sample Name: **mb,qc655371,190308**
Instrument: GC23 (Offline) Vial: 16 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 2:01:57 PM
Analysis Date: 9/11/2012 9:23:48 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.503	5.479	251585	31.708
alpha-BHC		6.110		0.000 BDL
gamma-BHC	6.550	6.570	2114	0.173
beta-BHC	6.820	6.820	1073	0.213
delta-BHC	7.147	7.157	175	0.016
Heptachlor	7.417	7.397	1916	0.176
Aldrin	7.853	7.853	322	0.029
Isodrin	8.270	8.287	166	0.018
Heptachlor epoxide	8.393	8.403	993	0.096
gamma-Chlordane	8.753	8.740	536	0.050
alpha-Chlordane	8.847	8.843	92	0.009
Endosulfan I	8.913	8.903	568	0.062
4,4'-DDE	9.073	9.050	821	0.097
Dieldrin	9.220	9.233	414	0.045
Endrin	9.517	9.503	1150	0.174
4,4'-DDD		9.647		0.000 BDL
Endosulfan II		9.740		0.000 BDL
Endrin aldehyde	9.877	9.883	127	0.019
4,4'-DDT	9.993	10.003	537	0.093
Endosulfan sulfate	10.130	10.140	280	0.044
Methoxychlor	10.510	10.497	2604	0.992
Endrin ketone	10.663	10.650	692	0.094
Decachlorobiphenyl	12.417	12.397	284130	44.420

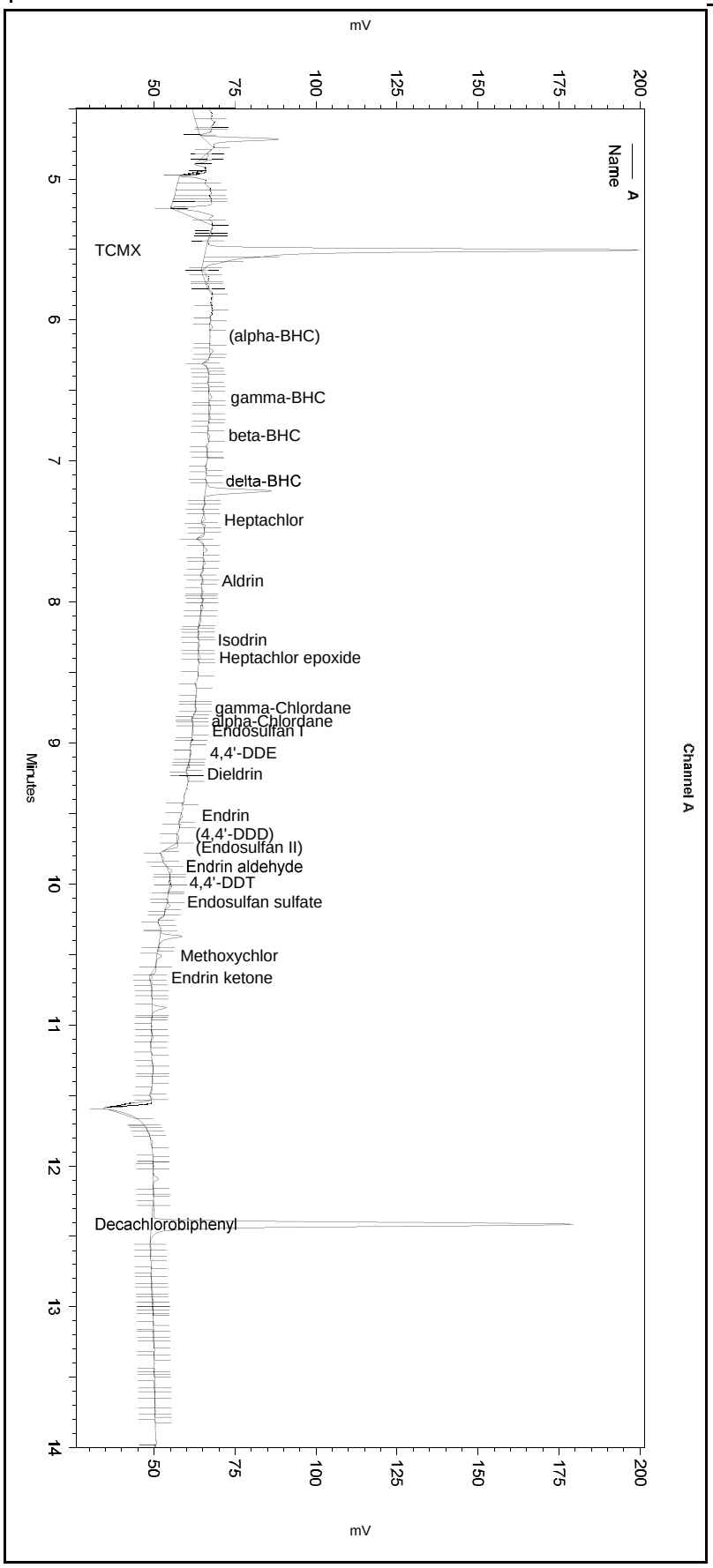
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.227	4.215	555486	32.700
alpha-BHC		4.953		0.000 BDL
gamma-BHC		5.380		0.000 BDL
beta-BHC		5.477		0.000 BDL
delta-BHC	5.833	5.827	1346	0.051
Heptachlor		5.907		0.000 BDL
Aldrin	6.277	6.283	215	0.008
Isodrin		6.737		0.000 BDL
Heptachlor epoxide		6.930		0.000 BDL
gamma-Chlordane	7.127	7.143	320	0.000
alpha-Chlordane	7.317	7.303	3235	0.134
Endosulfan I		7.373		0.000 BDL
4,4'-DDE	7.477	7.477	156	0.007
Dieldrin	7.687	7.677	901	0.000
Endrin		8.013		0.000 BDL
4,4'-DDD	8.127	8.113	111	0.006
Endosulfan II	8.240	8.247	240	0.012
4,4'-DDT		8.457		0.000 BDL
Endrin aldehyde	8.607	8.610	1505	0.087
Endosulfan sulfate		8.910		0.000 BDL
Methoxychlor	9.190	9.177	2008	0.264
Endrin ketone		9.463		0.000 BDL
Decachlorobiphenyl	10.573	10.563	553624	37.646

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-016**
Sample Name: **mb,qc655371,190308**
Instrument: GC23 (Offline) Vial: 16 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 2:01:57 PM
Analysis Date: 9/11/2012 9:23:48 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

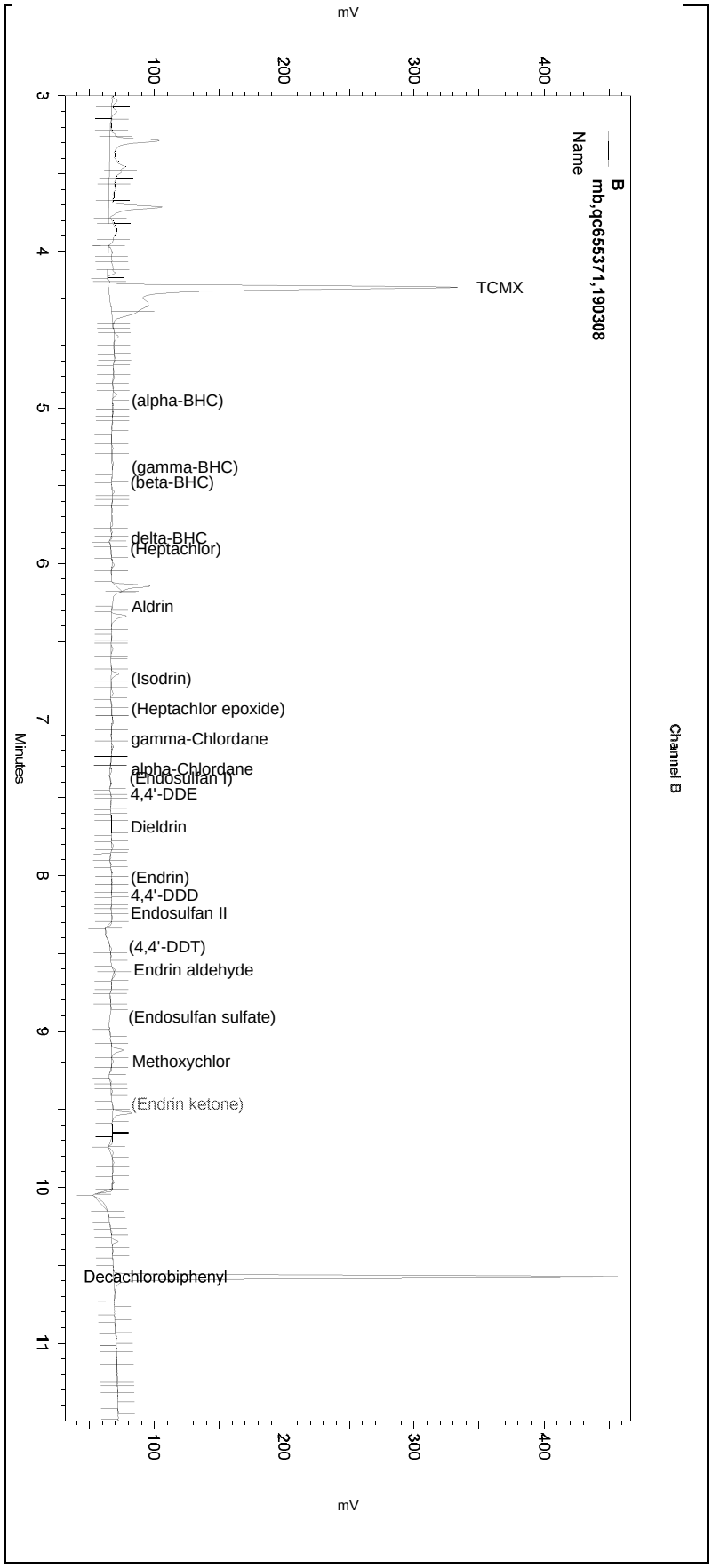
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\254-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	5.946	12.079	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-016**
Sample Name: **mb,qc655371,190308**
Instrument: GC23 (Offline) Vial: 16 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 2:01:57 PM
Analysis Date: 9/11/2012 9:23:48 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\254-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	4.588	10.962	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-016**
Sample Name: **mb,qc655371,190308**
Instrument: GC23 Vial: 16 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 2:01:57 PM
Analysis Date: 9/10/2012 2:20:23 PM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX		5.477		0.000 BDL
alpha-BHC		6.110		0.000 BDL
gamma-BHC	6.550	6.570	3520	0.288
beta-BHC	6.820	6.820	1073	0.213
delta-BHC	7.147	7.157	768	0.069
Heptachlor	7.417	7.397	5164	0.474
Aldrin	7.853	7.853	4573	0.407
Isodrin	8.270	8.287	166	0.018
Heptachlor epoxide	8.393	8.403	1118	0.108
gamma-Chlordane	8.753	8.740	2066	0.193
alpha-Chlordane	8.847	8.843	514	0.050
Endosulfan I	8.913	8.903	3775	0.411
4,4'-DDE	9.073	9.050	3343	0.397
Dieldrin	9.220	9.233	502	0.055
Endrin	9.517	9.503	1714	0.260
4,4'-DDD		9.647		0.000 BDL
Endosulfan II		9.740		0.000 BDL
Endrin aldehyde	9.877	9.883	4470	0.672
4,4'-DDT	9.993	10.003	15576	2.696
Endosulfan sulfate	10.130	10.140	8877	1.383
Methoxychlor	10.510	10.497	38662	14.734
Endrin ketone	10.663	10.650	13425	1.829
Decachlorobiphenyl	12.417	12.397	284130	44.420

GC23

PEST - ECD Instrument Results

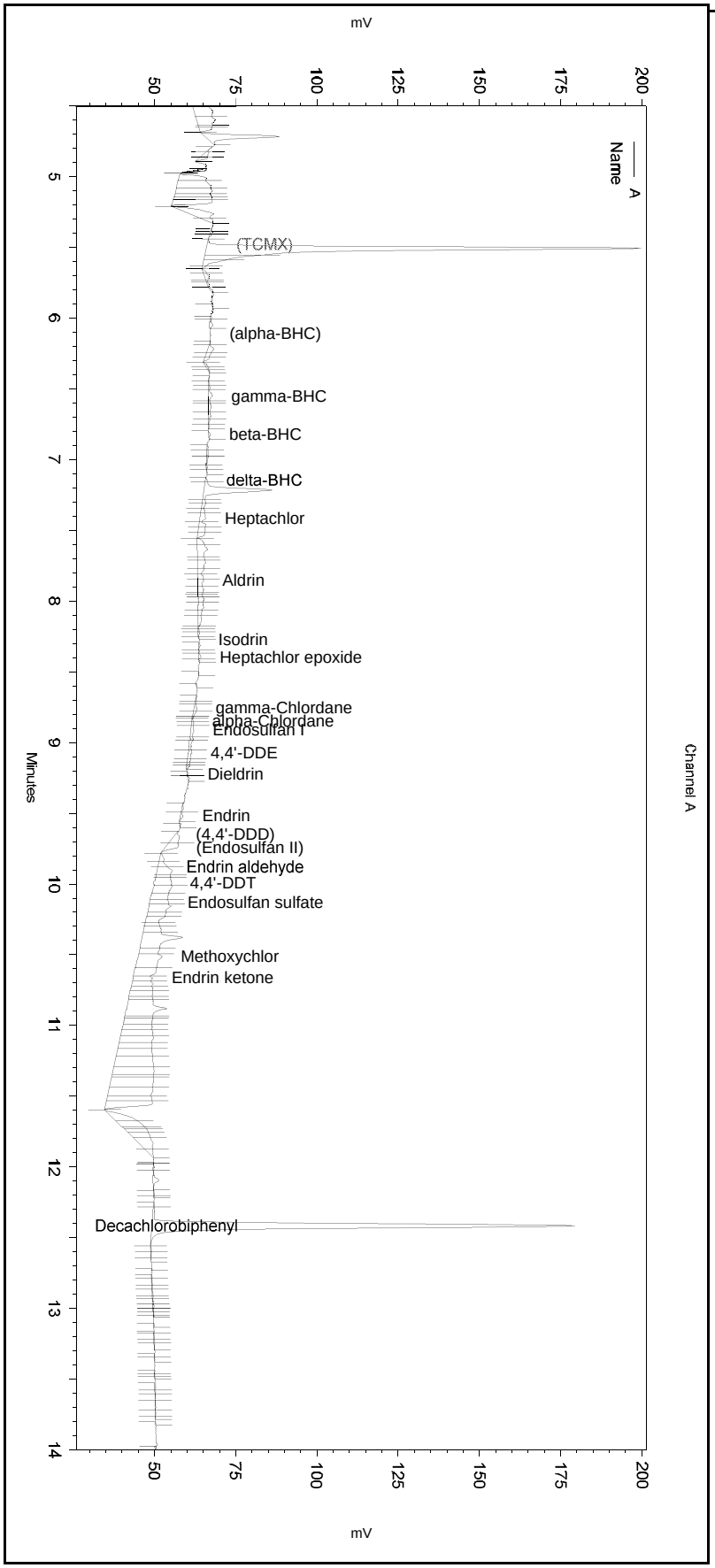
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.227	4.215	560632	33.003
alpha-BHC		4.953		0.000 BDL
gamma-BHC		5.380		0.000 BDL
beta-BHC		5.477		0.000 BDL
delta-BHC	5.833	5.827	3161	0.120
Heptachlor		5.907		0.000 BDL
Aldrin	6.277	6.283	1240	0.046
Isodrin		6.737		0.000 BDL
Heptachlor epoxide		6.930		0.000 BDL
gamma-Chlordane	7.127	7.143	3016	0.000
alpha-Chlordane	7.317	7.303	7252	0.300
Endosulfan I		7.373		0.000 BDL
4,4'-DDE	7.477	7.477	3843	0.173
Dieldrin	7.687	7.677	18868	0.000
Endrin		8.013		0.000 BDL
4,4'-DDD	8.127	8.113	7919	0.444
Endosulfan II	8.240	8.247	8993	0.439
4,4'-DDT		8.457		0.000 BDL
Endrin aldehyde	8.607	8.610	15717	0.906
Endosulfan sulfate		8.910		0.000 BDL
Methoxychlor	9.190	9.177	9434	1.240
Endrin ketone		9.463		0.000 BDL
Decachlorobiphenyl	10.573	10.563	558575	37.983

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-016**
Sample Name: **mb,qc655371,190308**
Instrument: GC23 Vial: 16 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 2:01:57 PM
Analysis Date: 9/10/2012 2:20:23 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\254-016_0FEF.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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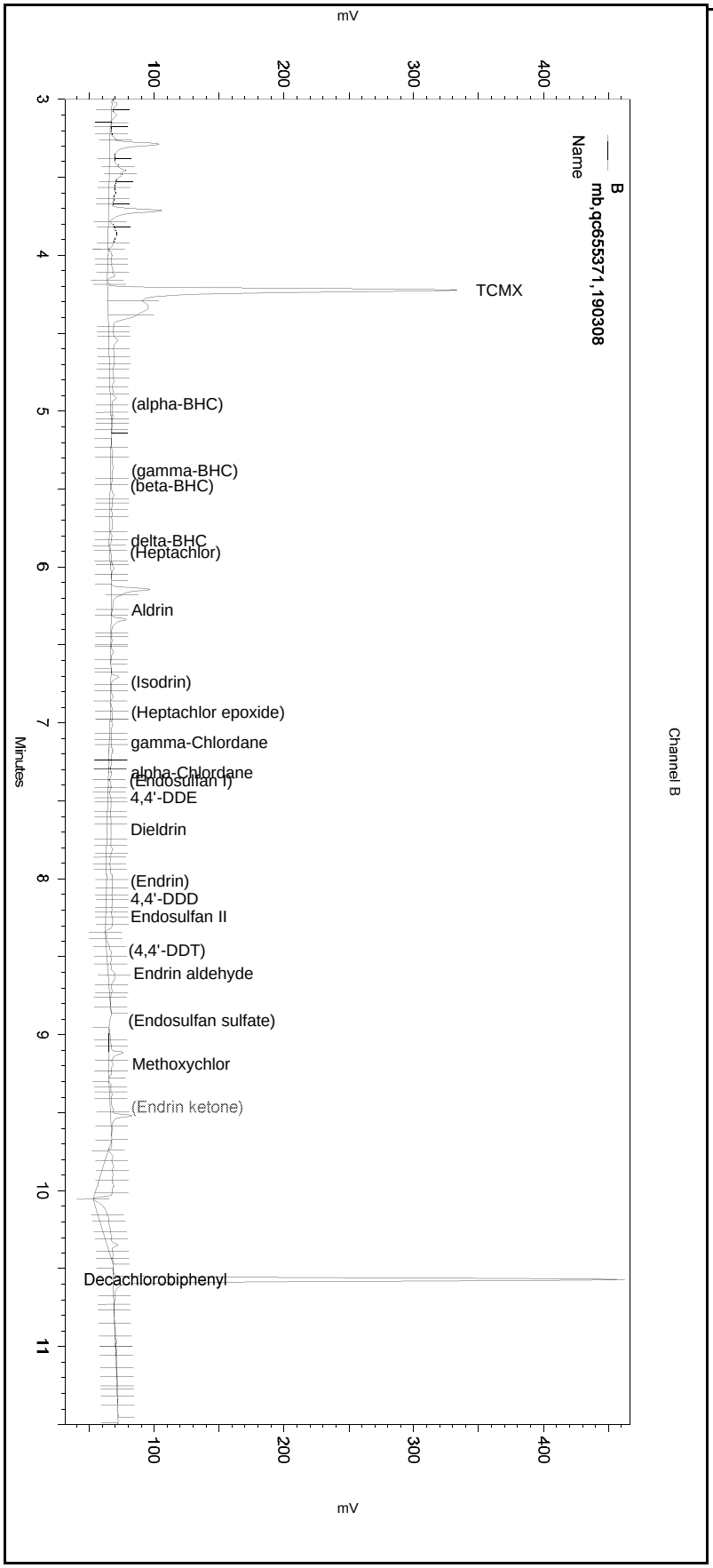
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-016**
Sample Name: **mb,qc655371,190308**
Instrument: GC23 Vial: 16 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 2:01:57 PM
Analysis Date: 9/10/2012 2:20:23 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\254-016_0FEF.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 PEST Soil
EPA 8081B

Type : LCS
Inst : GC21
Seqnum : 242367635004.1
File : 255_004
IDF : 1.0
Lab ID : QC655372
Matrix : Soil
Batch : 190308
Time : 11-SEP-2012 09:39
Cal : 242328737001
Units : ug/Kg

LCS: 30.28 g --> 20.0 ml = 0.6605 ml/g PDF

Analyte	Spiked	Raw	LCS	Ch	%Rec	Limits	Flags
alpha-BHC	13.21	14.70	9.708	A	73	51-120	u
TCMX	26.42	28.43	18.78	A	71	46-120	u
Decachlorobiphenyl	26.42	32.56	21.51	A	81	38-125	u

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

TKB 09/11/12 [Dieldrin A]: Recovery well within limits despite instrument bias [general version]

TKB 09/11/12 [Endrin A]: Recovery well within limits despite instrument bias [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-004**
Sample Name: **lcs,qc655372,190308**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 9:39:42 AM
Analysis Date: 9/11/2012 12:35:51 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.620	32573	28.426
alpha-BHC	6.267	6.253	24241	14.698
gamma-BHC	6.727	6.713	20817	14.036
beta-BHC	6.980	6.960	8979	15.784
delta-BHC	7.313	7.300	23128	18.233
Heptachlor	7.547	7.533	17030	13.833
Aldrin	8.007	7.987	19506	15.116
Isodrin	8.433	8.420	14266	14.491
Heptachlor epoxide	8.553	8.533	16503	14.848
gamma-Chlordane	8.887	8.867	16951	15.814
alpha-Chlordane	8.987	8.967	16390	16.096
Endosulfan I	9.047	9.027	14906	15.834
4,4'-DDE	9.187	9.173	31034	32.593
Dieldrin	9.373	9.353	32539	33.988
Endrin	9.633	9.620	22704	34.973
4,4'-DDD	9.787	9.773	23268	34.401
Endosulfan II	9.873	9.860	28121	36.757
Endrin aldehyde	10.013	10.000	15394	27.225
4,4'-DDT	10.127	10.113	22918	34.211
Endosulfan sulfate	10.267	10.253	22791	37.952
Methoxychlor	10.613	10.600	47465	182.919
Endrin ketone	10.780	10.767	25391	36.747
Decachlorobiphenyl	12.540	12.527	18234	32.559

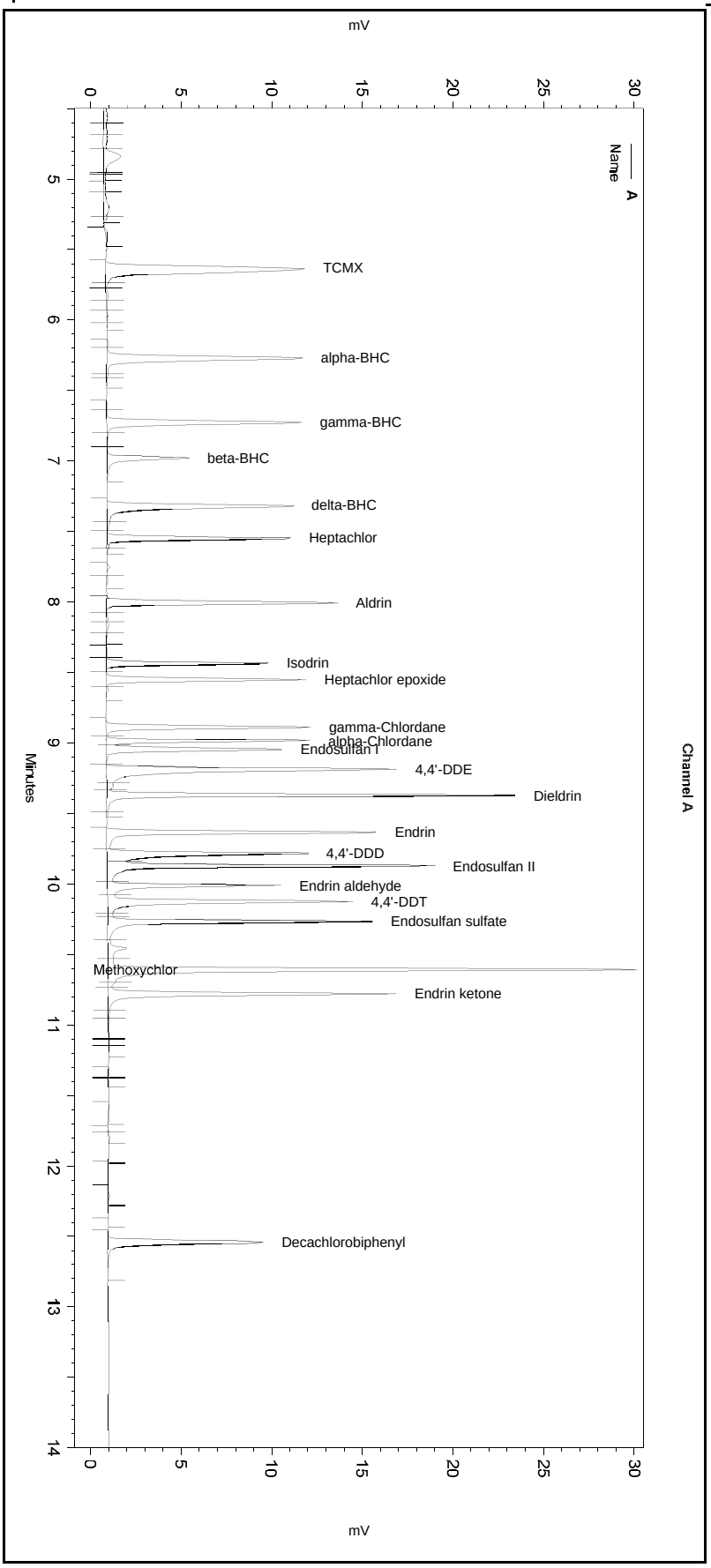
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.707	19685	13.181
alpha-BHC	5.427	5.420	15544	8.898
gamma-BHC	5.847	5.840	13097	9.653
beta-BHC	5.933	5.927	5079	9.293
delta-BHC	6.287	6.273	11572	10.301
Heptachlor	6.373	6.360	11864	12.213
Aldrin	6.753	6.740	13556	12.557
Isodrin	7.207	7.193	9901	11.318
Heptachlor epoxide	7.393	7.380	10906	11.758
gamma-Chlordane	7.600	7.587	11525	12.177
alpha-Chlordane	7.760	7.747	11445	12.870
Endosulfan I	7.833	7.820	11047	13.850
4,4'-DDE	7.920	7.907	20748	11.076
Dieldrin	8.140	8.127	26582	11.156
Endrin	8.480	8.467	15045	17.488
4,4'-DDD	8.560	8.547	15213	21.078
Endosulfan II	8.707	8.693	23205	21.404
4,4'-DDT	8.900	8.893	15068	14.016
Endrin aldehyde	9.060	9.047	13952	24.732
Endosulfan sulfate	9.340	9.333	15996	26.570
Methoxychlor	9.580	9.567	30867	31.789
Endrin ketone	9.880	9.873	25888	11.953
Decachlorobiphenyl	10.973	10.967	12973	25.197

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-004**
Sample Name: **lcs,qc655372,190308**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 9:39:42 AM
Analysis Date: 9/11/2012 12:35:51 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

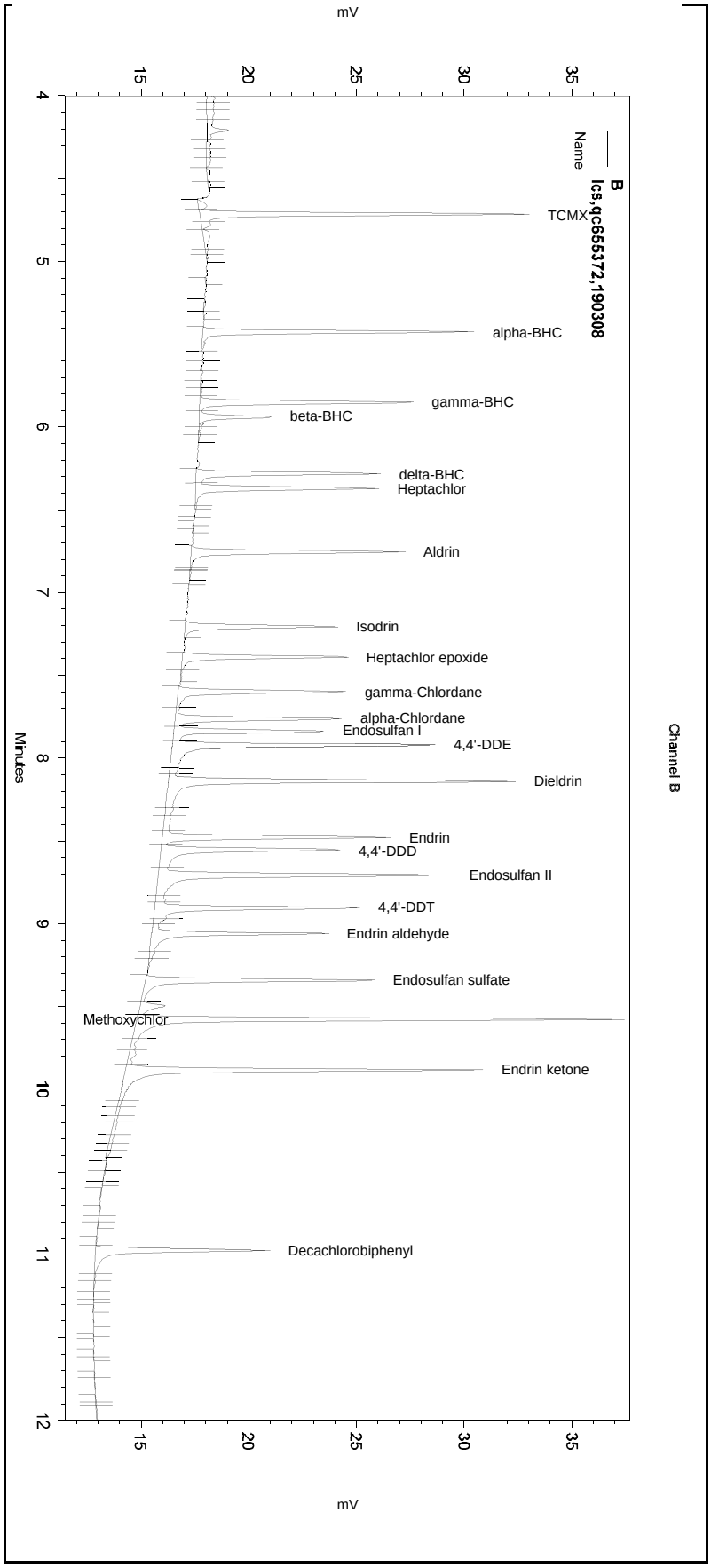
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	9.28	0	0
Yes	Split Peak	10.235	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-004**
Sample Name: **lcs,qc655372,190308**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 9:39:42 AM
Analysis Date: 9/11/2012 12:35:51 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	9.281	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-004**
Sample Name: **lcs,qc655372,190308**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 9:39:42 AM
Analysis Date: 9/11/2012 9:57:57 AM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.620	32573	28.426
alpha-BHC	6.267	6.253	24241	14.698
gamma-BHC	6.727	6.713	20817	14.036
beta-BHC	6.980	6.960	8979	15.784
delta-BHC	7.313	7.300	23128	18.233
Heptachlor	7.547	7.533	17030	13.833
Aldrin	8.007	7.987	19506	15.116
Isodrin	8.433	8.420	14266	14.491
Heptachlor epoxide	8.553	8.533	16503	14.848
gamma-Chlordane	8.887	8.867	16951	15.814
alpha-Chlordane	8.987	8.967	16390	16.096
Endosulfan I	9.047	9.027	14906	15.834
4,4'-DDE	9.187	9.173	32069	33.680
Dieldrin	9.373	9.353	32539	33.988
Endrin	9.633	9.620	22704	34.973
4,4'-DDD	9.787	9.773	23268	34.401
Endosulfan II	9.873	9.860	28121	36.757
Endrin aldehyde	10.013	10.000	15394	27.225
4,4'-DDT	10.127	10.113	22918	34.211
Endosulfan sulfate	10.267	10.253	23304	38.807
Methoxychlor	10.613	10.600	47465	182.919
Endrin ketone	10.780	10.767	25391	36.747
Decachlorobiphenyl	12.540	12.527	18234	32.559

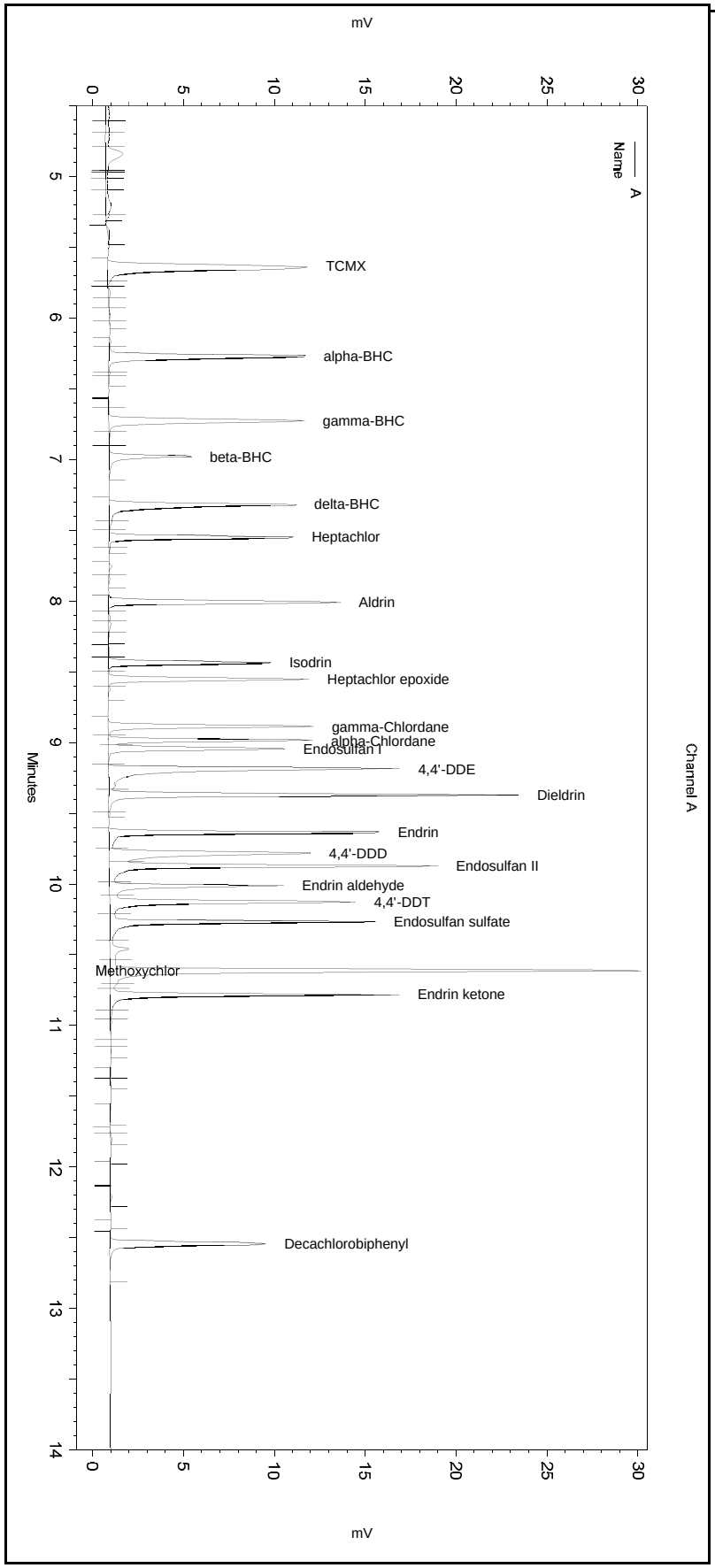
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.707	19685	13.181
alpha-BHC	5.427	5.420	15544	8.898
gamma-BHC	5.847	5.840	13097	9.653
beta-BHC	5.933	5.927	5079	9.293
delta-BHC	6.287	6.273	11572	10.301
Heptachlor	6.373	6.360	11864	12.213
Aldrin	6.753	6.740	13556	12.557
Isodrin	7.207	7.193	9901	11.318
Heptachlor epoxide	7.393	7.380	10906	11.758
gamma-Chlordane	7.600	7.587	11690	12.280
alpha-Chlordane	7.760	7.747	11874	13.129
Endosulfan I	7.833	7.820	11553	14.156
4,4'-DDE	7.920	7.907	22158	11.553
Dieldrin	8.140	8.127	29270	11.633
Endrin	8.480	8.467	16685	18.893
4,4'-DDD	8.560	8.547	18190	23.166
Endosulfan II	8.707	8.693	27103	23.456
4,4'-DDT	8.900	8.893	17855	15.913
Endrin aldehyde	9.060	9.047	19170	28.252
Endosulfan sulfate	9.340	9.333	21193	29.989
Methoxychlor	9.580	9.567	34531	35.562
Endrin ketone	9.880	9.873	28783	12.505
Decachlorobiphenyl	10.973	10.967	12973	25.197

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-004**
Sample Name: **lcs,qc655372,190308**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 9:39:42 AM
Analysis Date: 9/11/2012 9:57:57 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

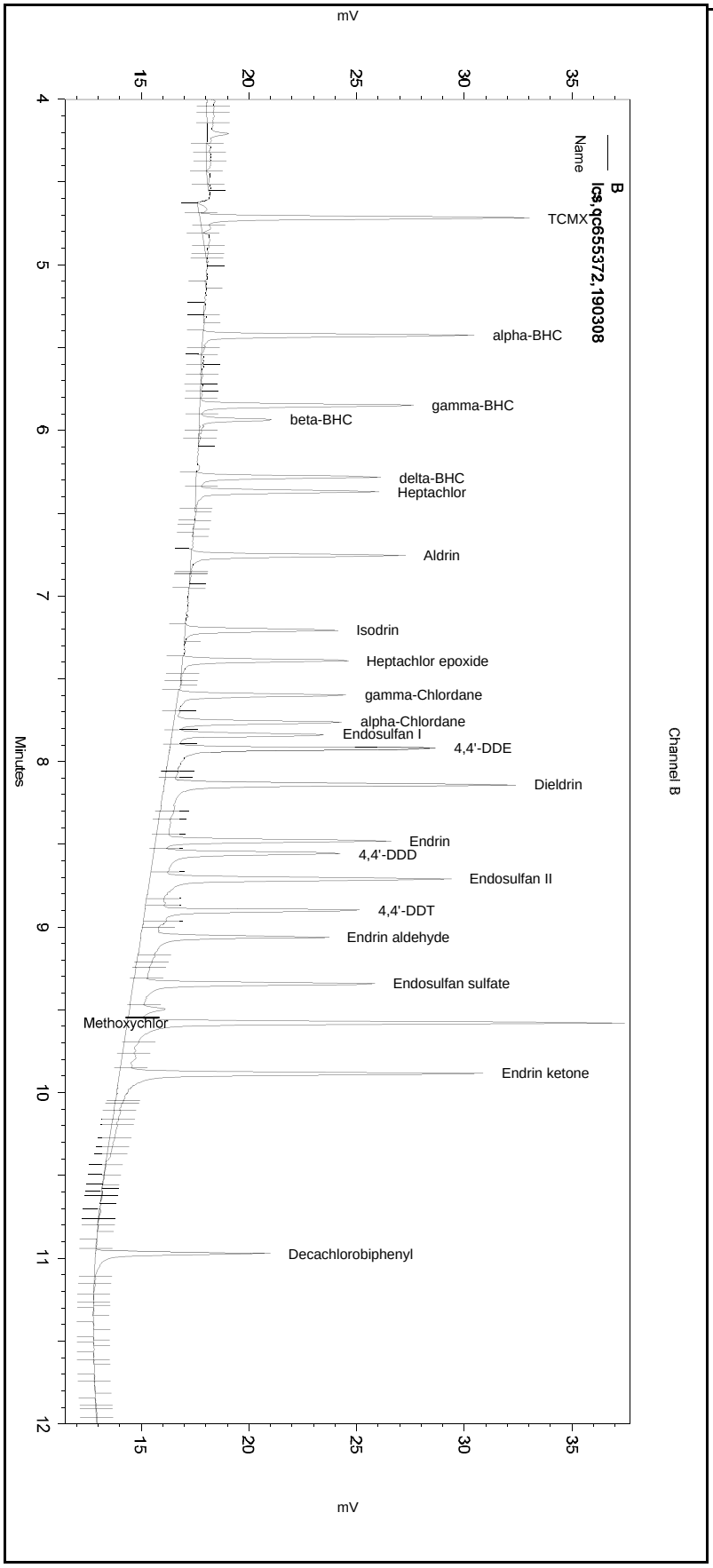
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-004_EE14.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-004**
Sample Name: **lcs,qc655372,190308**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 9:39:42 AM
Analysis Date: 9/11/2012 9:57:57 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-004_EE14.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 PEST Soil
EPA 8081B

Type : MSS	Type : MS	Type : MSD
Inst : GC23	Inst : GC21	Inst : GC21
Seqnum : 802366168018	Seqnum : 242367635007.1	Seqnum : 242367635008.1
File : 254_018	File : 255_007	File : 255_008
IDF : 1.0	IDF : 1.0	IDF : 1.0
Lab ID : 239356-011	Lab ID : QC655373	Lab ID : QC655374
Matrix : Soil	Matrix : Soil	Matrix : Soil
Batch : 190308	Batch : 190308	Batch : 190308
Time : 10-SEP-2012 14:45	Time : 11-SEP-2012 11:01	Time : 11-SEP-2012 11:22
Cal : 802339015004	Cal : 242328737001	Cal : 242328737001
Units : ug/Kg		

MSS: 30.11 g --> 20.0 ml = 0.6642 ml/g PDF
MS: 30.28 g --> 20.0 ml = 0.6605 ml/g PDF
MSD: 30.29 g --> 20.0 ml = 0.6603 ml/g PDF

Analyte	MSS	Ch	Spiked	MS Raw	MS Result	Ch	%Rec	Spiked	MSD Raw	MSD Result	Ch	%Rec	Limits	RPD	Lim	Flags
alpha-BHC	ND	A	13.21	14.45	9.544	A	72	13.21	14.58	9.630	A	73	47-128	1	42	u
TCMX			26.42	31.01	20.48	A	78	26.41	31.23	20.62	A	78	46-120			u
Decachlorobiphenyl			26.42	30.83	20.36	A	77	26.41	30.05	19.84	A	75	38-125			u

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

TKB 09/11/12 [Dieldrin A]: Recovery well within limits despite instrument bias [general version]

TKB 09/11/12 [Endrin A]: Recovery well within limits despite instrument bias [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-007**
Sample Name: **ms,qc655373,190308**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:01:05 AM
Analysis Date: 9/11/2012 12:36:04 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.620	35538	31.013
alpha-BHC	6.267	6.253	23833	14.450
gamma-BHC	6.720	6.713	24957	16.827
beta-BHC	6.973	6.960	11508	20.229
delta-BHC	7.307	7.300	28487	22.458
Heptachlor	7.540	7.533	21434	17.410
Aldrin	8.000	7.987	23541	18.243
Isodrin	8.427	8.420	18494	18.785
Heptachlor epoxide	8.547	8.533	20768	18.685
gamma-Chlordane	8.880	8.867	18859	17.594
alpha-Chlordane	8.980	8.967	19948	19.590
Endosulfan I	9.040	9.027	18866	20.040
4,4'-DDE	9.180	9.173	39797	41.796
Dieldrin	9.367	9.353	39156	40.899
Endrin	9.633	9.620	28656	44.142
4,4'-DDD	9.767	9.773	29141	43.085
Endosulfan II	9.867	9.860	25367	33.157
Endrin aldehyde	10.007	10.000	18111	32.030
4,4'-DDT	10.120	10.113	29308	43.749
Endosulfan sulfate	10.260	10.253	24606	40.975
Methoxychlor	10.600	10.600	53510	206.215
Endrin ketone	10.773	10.767	26131	37.818
Decachlorobiphenyl	12.533	12.527	17263	30.825

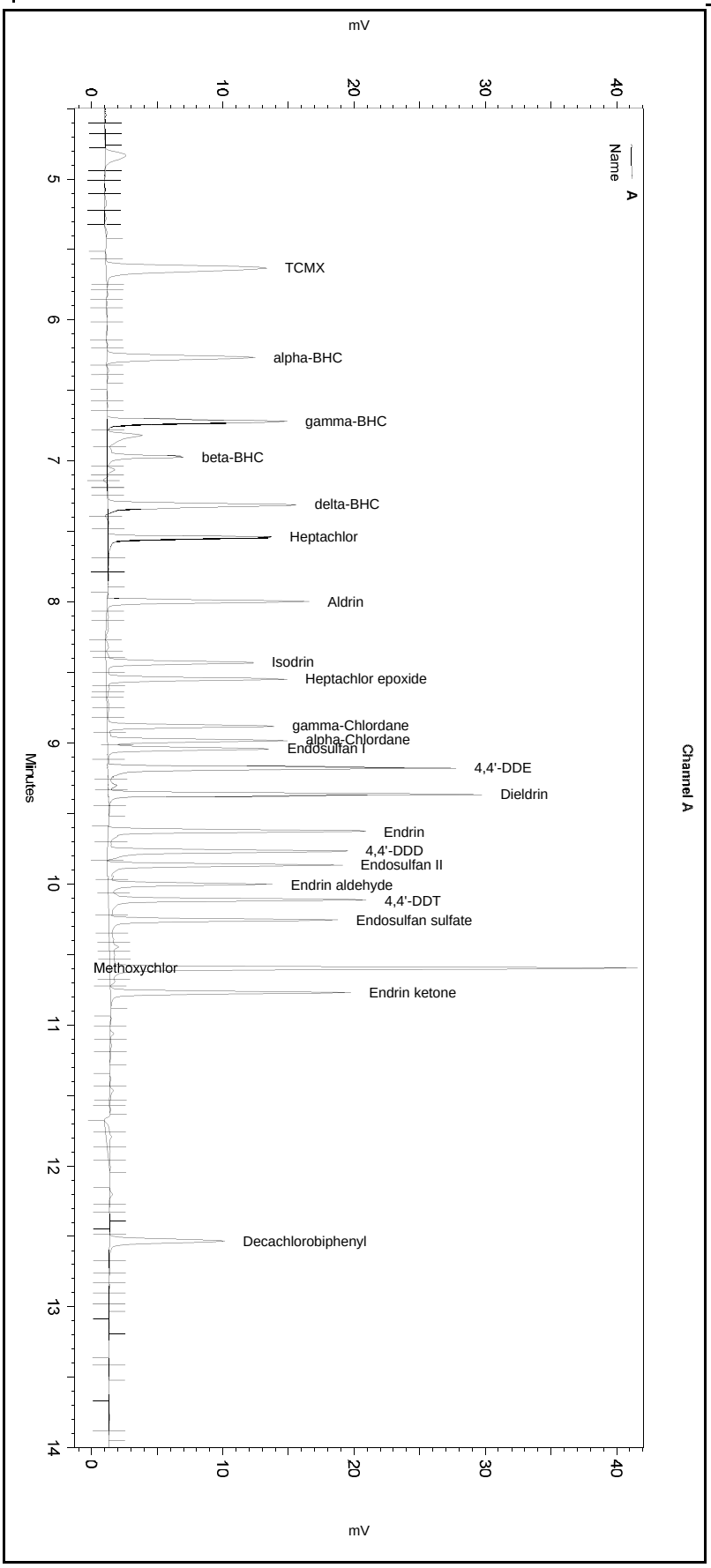
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	28026	17.059
alpha-BHC	5.427	5.420	23925	11.917
gamma-BHC	5.847	5.840	22206	13.452
beta-BHC	5.933	5.927	8444	14.404
delta-BHC	6.280	6.273	19695	14.074
Heptachlor	6.367	6.360	20036	15.392
Aldrin	6.747	6.740	21491	15.631
Isodrin	7.200	7.193	15910	15.115
Heptachlor epoxide	7.387	7.380	18019	15.380
gamma-Chlordane	7.593	7.587	17381	15.279
alpha-Chlordane	7.753	7.747	16503	15.535
Endosulfan I	7.827	7.820	15936	16.463
4,4'-DDE	7.913	7.907	30958	14.437
Dieldrin	8.133	8.127	40193	13.579
Endrin	8.473	8.467	24407	24.305
4,4'-DDD	8.553	8.547	23785	26.450
Endosulfan II	8.700	8.693	30929	25.286
4,4'-DDT	8.893	8.893	23996	19.525
Endrin aldehyde	9.053	9.047	19229	28.287
Endosulfan sulfate	9.340	9.333	23688	31.428
Methoxychlor	9.573	9.567	66825	68.821
Endrin ketone	9.880	9.873	41194	14.881
Decachlorobiphenyl	10.967	10.967	18005	32.407

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-007**
Sample Name: **ms,qc655373,190308**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:01:05 AM
Analysis Date: 9/11/2012 12:36:04 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

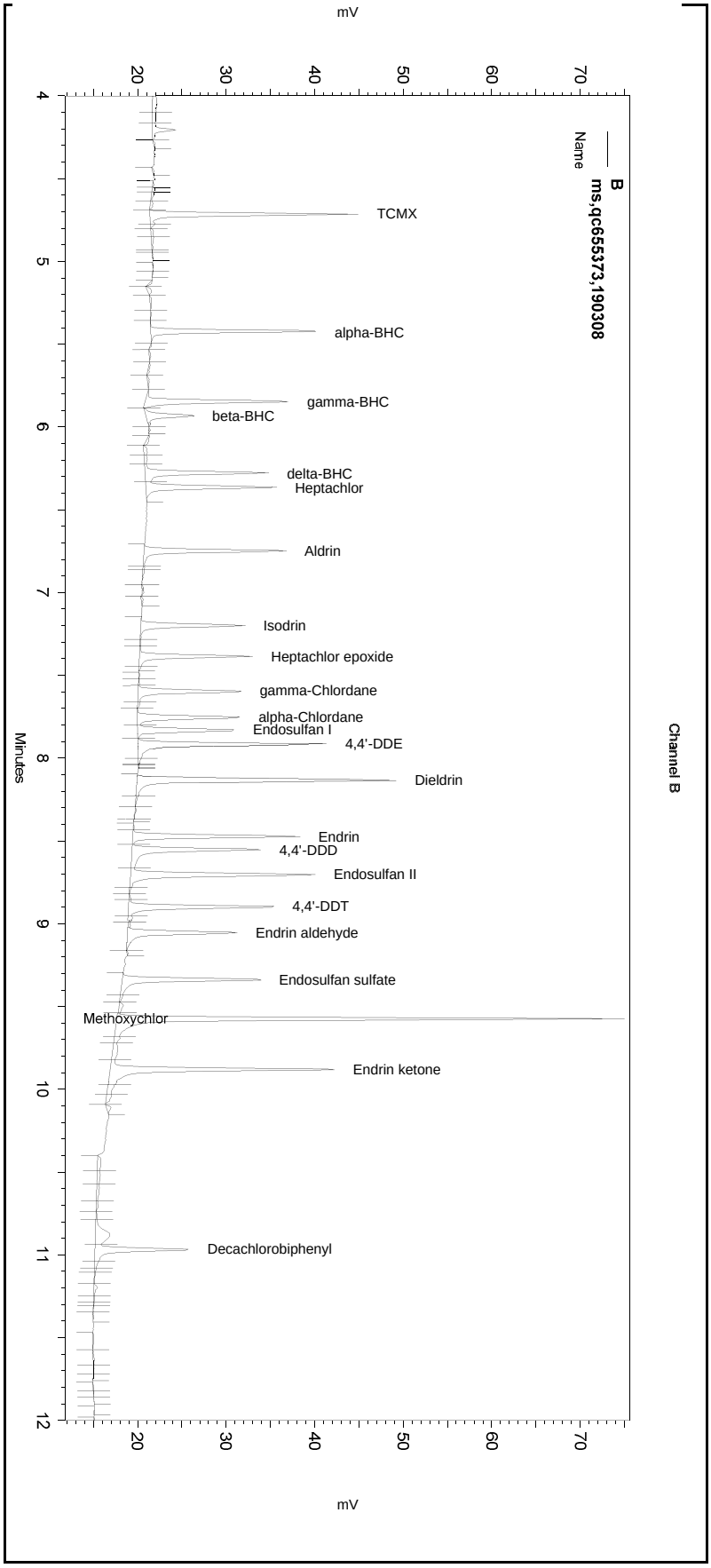
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	5.83	6.586	0
Yes	Manual Baseline	6.637	7.892	0
Yes	Reset Baseline	9.523	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-007**
Sample Name: **ms,qc655373,190308**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:01:05 AM
Analysis Date: 9/11/2012 12:36:04 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	5.019	6.068	0
Yes	Reset Baseline	9.192	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-007**
Sample Name: **ms,qc655373,190308**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:01:05 AM
Analysis Date: 9/11/2012 11:19:20 AM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.620	36436	31.797
alpha-BHC	6.267	6.253	25262	15.317
gamma-BHC	6.720	6.713	27126	18.290
beta-BHC	6.973	6.960	13930	24.487
delta-BHC	7.307	7.300	30657	24.169
Heptachlor	7.540	7.533	23006	18.687
Aldrin	8.000	7.987	23541	18.243
Isodrin	8.427	8.420	18612	18.905
Heptachlor epoxide	8.547	8.533	20928	18.829
gamma-Chlordane	8.880	8.867	19251	17.960
alpha-Chlordane	8.980	8.967	20318	19.953
Endosulfan I	9.040	9.027	19385	20.591
4,4'-DDE	9.180	9.173	40624	42.664
Dieldrin	9.367	9.353	39936	41.714
Endrin	9.633	9.620	29205	44.988
4,4'-DDD	9.767	9.773	29353	43.398
Endosulfan II	9.867	9.860	25367	33.157
Endrin aldehyde	10.007	10.000	18111	32.030
4,4'-DDT	10.120	10.113	29308	43.749
Endosulfan sulfate	10.260	10.253	24606	40.975
Methoxychlor	10.600	10.600	53510	206.215
Endrin ketone	10.773	10.767	26131	37.818
Decachlorobiphenyl	12.533	12.527	17263	30.825

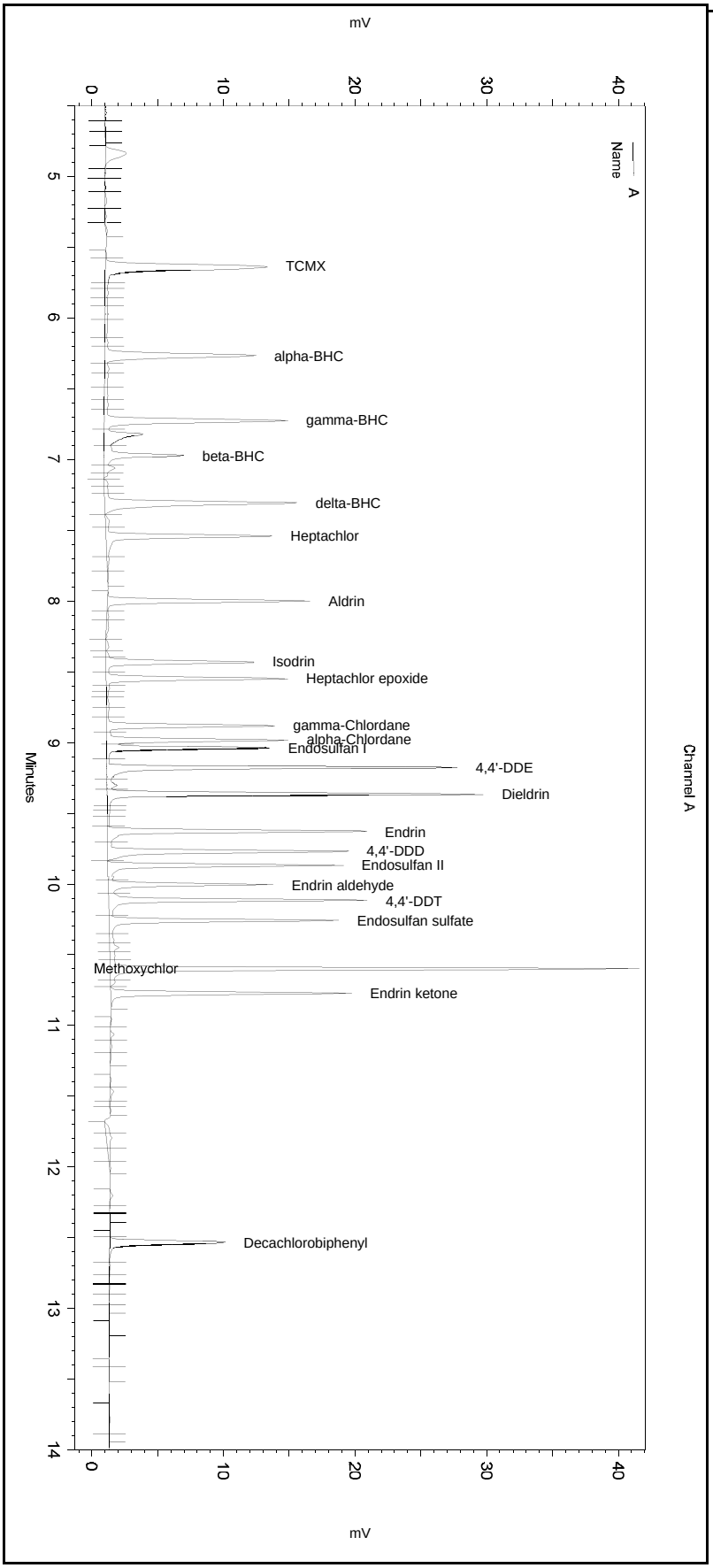
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	28507	17.274
alpha-BHC	5.427	5.420	29572	13.583
gamma-BHC	5.847	5.840	24075	14.083
beta-BHC	5.933	5.927	10467	16.960
delta-BHC	6.280	6.273	19695	14.074
Heptachlor	6.367	6.360	20036	15.392
Aldrin	6.747	6.740	21491	15.631
Isodrin	7.200	7.193	15910	15.115
Heptachlor epoxide	7.387	7.380	18019	15.380
gamma-Chlordane	7.593	7.587	17381	15.279
alpha-Chlordane	7.753	7.747	16503	15.535
Endosulfan I	7.827	7.820	15936	16.463
4,4'-DDE	7.913	7.907	30958	14.437
Dieldrin	8.133	8.127	40258	13.591
Endrin	8.473	8.467	24946	24.632
4,4'-DDD	8.553	8.547	25413	27.299
Endosulfan II	8.700	8.693	33070	26.247
4,4'-DDT	8.893	8.893	26464	20.820
Endrin aldehyde	9.053	9.047	25042	31.503
Endosulfan sulfate	9.340	9.333	27435	33.416
Methoxychlor	9.573	9.567	69561	71.639
Endrin ketone	9.880	9.873	42350	15.103
Decachlorobiphenyl	10.967	10.967	18005	32.407

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-007**
Sample Name: **ms,qc655373,190308**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:01:05 AM
Analysis Date: 9/11/2012 11:19:20 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

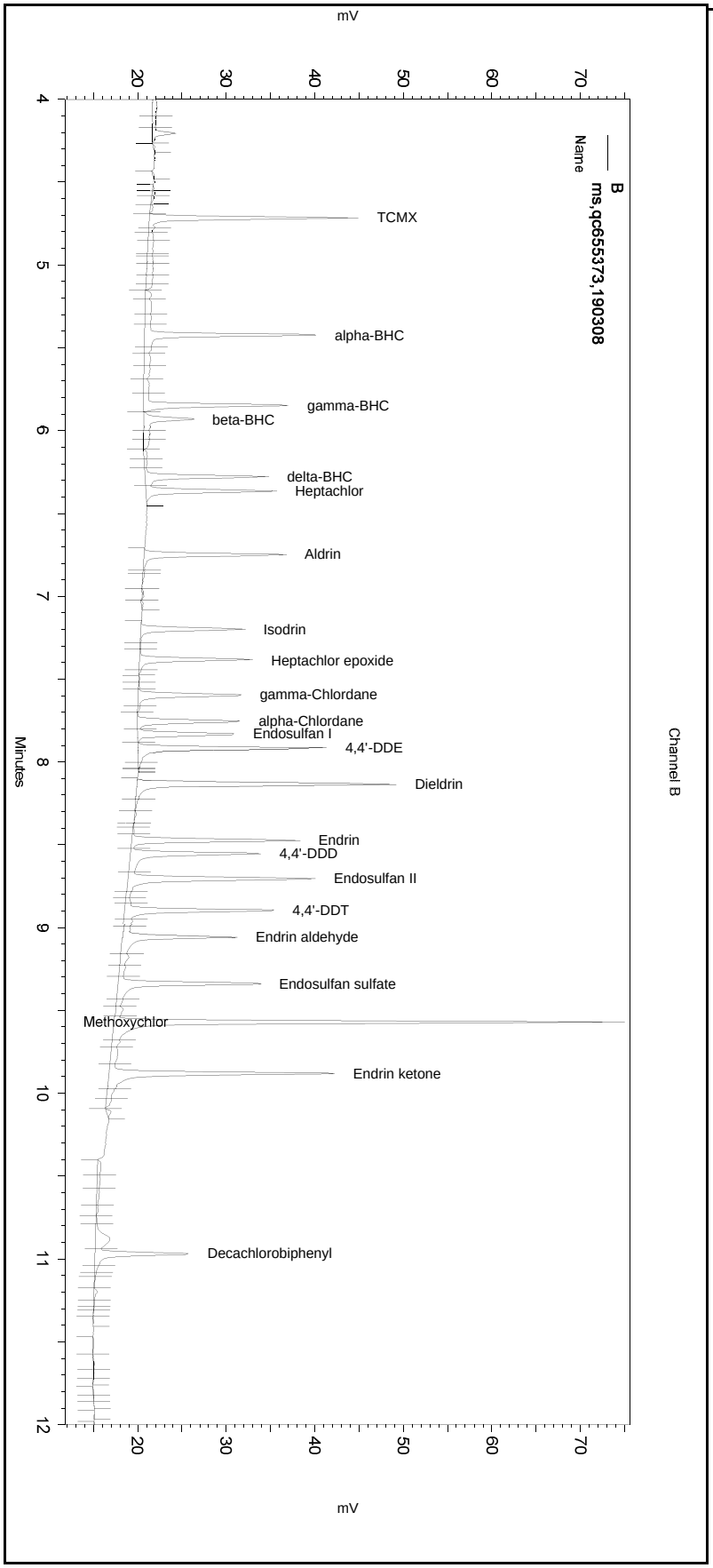
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-007_EE17.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-007**
Sample Name: **ms,qc655373,190308**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:01:05 AM
Analysis Date: 9/11/2012 11:19:20 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-007_EE17.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-008**
Sample Name: **msd,qc655374,190308**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:22:52 AM
Analysis Date: 9/11/2012 12:36:08 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.627	5.620	35787	31.230
alpha-BHC	6.260	6.253	24054	14.584
gamma-BHC	6.720	6.713	25299	17.058
beta-BHC	6.967	6.960	12018	21.126
delta-BHC	7.307	7.300	29307	23.104
Heptachlor	7.540	7.533	22539	18.308
Aldrin	7.993	7.987	24112	18.685
Isodrin	8.427	8.420	18272	18.560
Heptachlor epoxide	8.540	8.533	20614	18.547
gamma-Chlordane	8.873	8.867	19032	17.756
alpha-Chlordane	8.973	8.967	20418	20.051
Endosulfan I	9.033	9.027	19434	20.643
4,4'-DDE	9.173	9.173	40473	42.506
Dieldrin	9.367	9.353	40161	41.949
Endrin	9.627	9.620	28235	43.493
4,4'-DDD	9.767	9.773	29032	42.923
Endosulfan II	9.867	9.860	25159	32.886
Endrin aldehyde	10.007	10.000	18519	32.751
4,4'-DDT	10.113	10.113	28838	43.048
Endosulfan sulfate	10.260	10.253	25017	41.659
Methoxychlor	10.600	10.600	54255	209.086
Endrin ketone	10.773	10.767	27050	39.148
Decachlorobiphenyl	12.533	12.527	16829	30.050

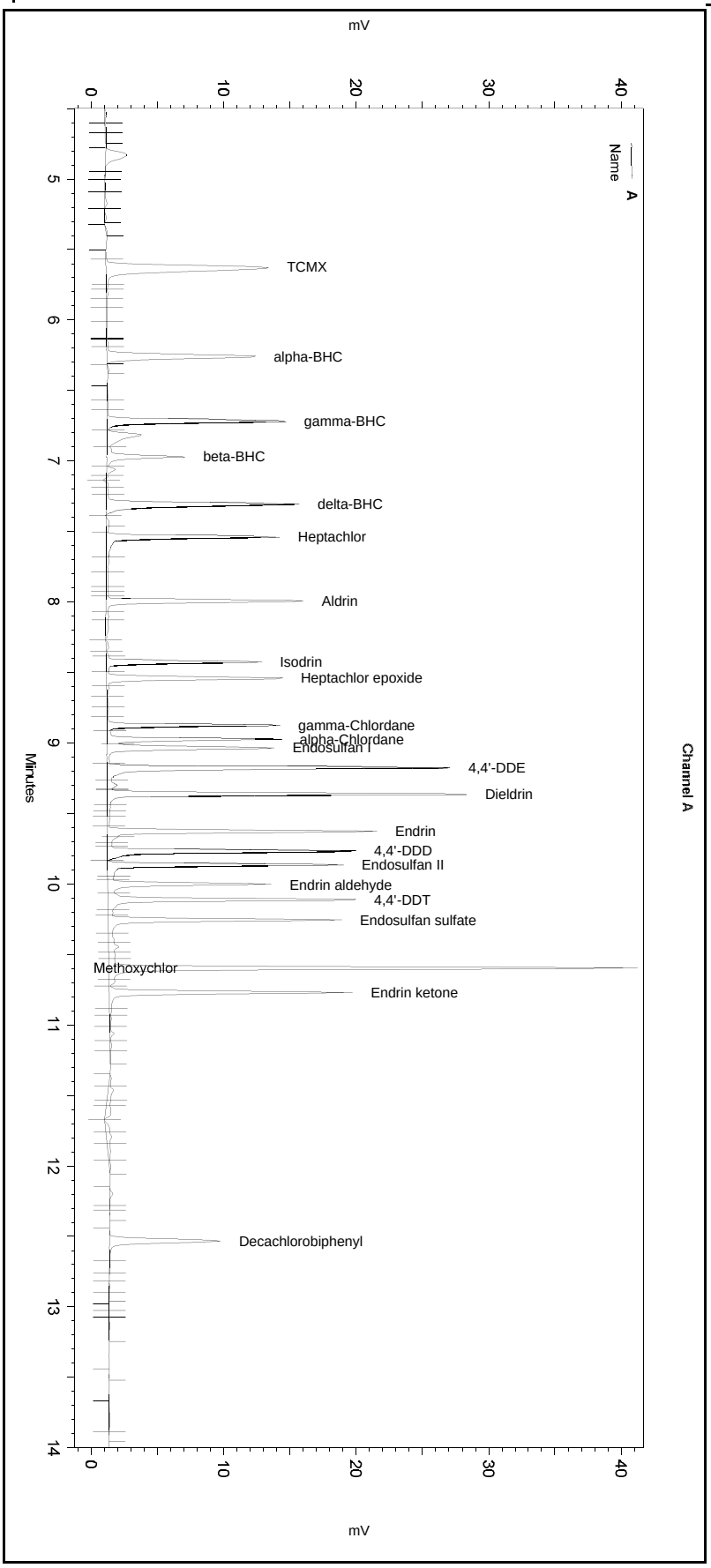
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	26636	16.434
alpha-BHC	5.427	5.420	23264	11.707
gamma-BHC	5.847	5.840	21634	13.251
beta-BHC	5.933	5.927	7864	13.613
delta-BHC	6.280	6.273	18580	13.638
Heptachlor	6.367	6.360	19771	15.304
Aldrin	6.747	6.740	21444	15.616
Isodrin	7.200	7.193	16815	15.590
Heptachlor epoxide	7.387	7.380	18629	15.639
gamma-Chlordane	7.593	7.587	18523	15.790
alpha-Chlordane	7.753	7.747	17854	16.143
Endosulfan I	7.827	7.820	17443	17.154
4,4'-DDE	7.913	7.907	33207	15.152
Dieldrin	8.133	8.127	44163	14.289
Endrin	8.473	8.467	25740	25.106
4,4'-DDD	8.553	8.547	26135	27.664
Endosulfan II	8.700	8.693	33619	26.487
4,4'-DDT	8.893	8.893	24720	19.913
Endrin aldehyde	9.053	9.047	19820	28.641
Endosulfan sulfate	9.340	9.333	22938	31.006
Methoxychlor	9.573	9.567	66591	68.580
Endrin ketone	9.880	9.873	38534	14.370
Decachlorobiphenyl	10.967	10.967	18381	32.890

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-008**
Sample Name: **msd,qc655374,190308**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:22:52 AM
Analysis Date: 9/11/2012 12:36:08 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

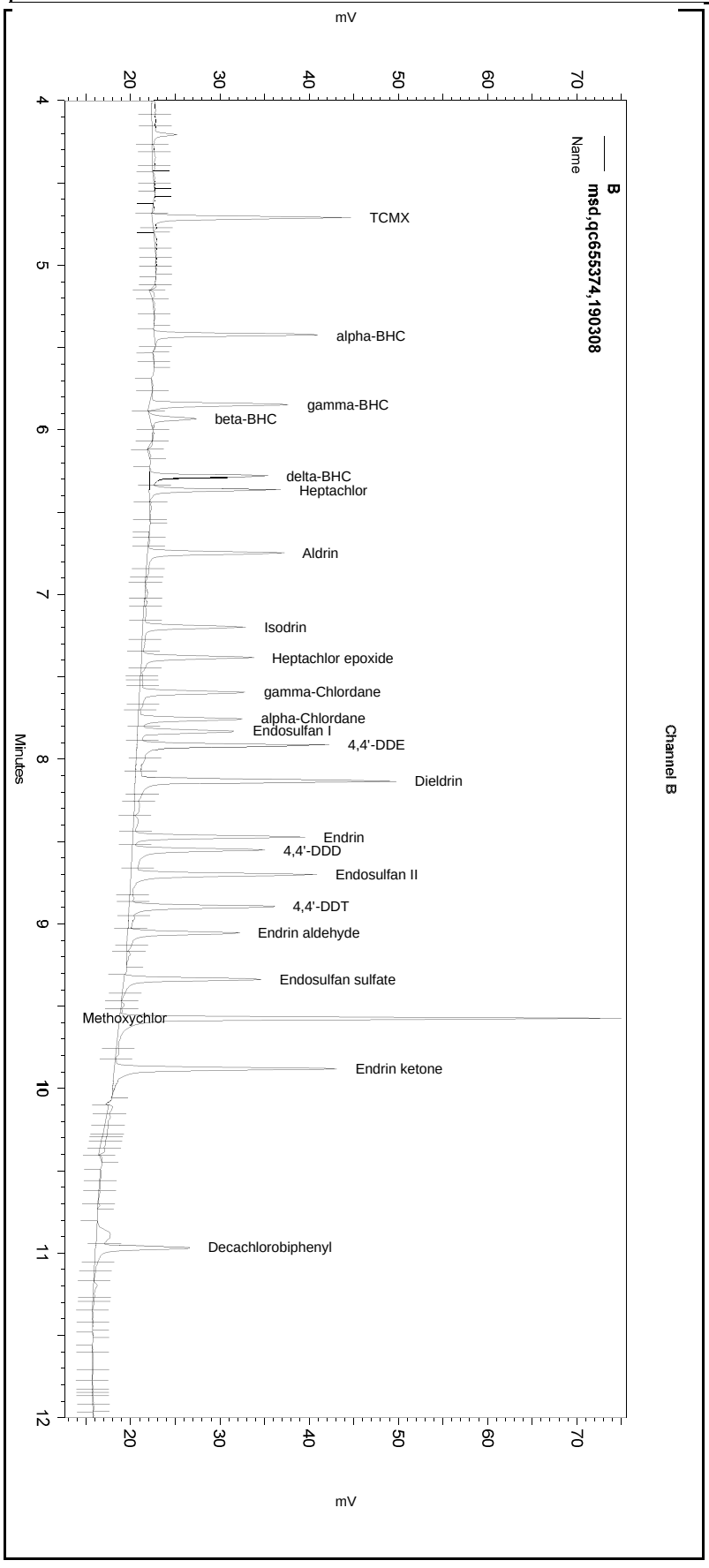
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	6.464	8.269	0
Yes	Split Peak	9.664	0	0
Yes	Split Peak	9.735	0	0
Yes	Split Peak	9.971	0	0
Yes	Split Peak	10.19	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-008**
Sample Name: **msd,qc655374,190308**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:22:52 AM
Analysis Date: 9/11/2012 12:36:08 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	4.848	6.061	0
Yes	Reset Baseline	10.069	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-008**
Sample Name: **msd,qc655374,190308**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:22:52 AM
Analysis Date: 9/11/2012 11:41:06 AM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.627	5.620	35787	31.230
alpha-BHC	6.260	6.253	24054	14.584
gamma-BHC	6.720	6.713	26125	17.615
beta-BHC	6.967	6.960	13563	23.842
delta-BHC	7.307	7.300	30418	23.980
Heptachlor	7.540	7.533	21133	17.166
Aldrin	7.993	7.987	23525	18.231
Isodrin	8.427	8.420	18272	18.560
Heptachlor epoxide	8.540	8.533	20614	18.547
gamma-Chlordane	8.873	8.867	19032	17.756
alpha-Chlordane	8.973	8.967	20418	20.051
Endosulfan I	9.033	9.027	19434	20.643
4,4'-DDE	9.173	9.173	40473	42.506
Dieldrin	9.367	9.353	40161	41.949
Endrin	9.627	9.620	29466	45.390
4,4'-DDD	9.767	9.773	29594	43.754
Endosulfan II	9.867	9.860	25159	32.886
Endrin aldehyde	10.007	10.000	19201	33.957
4,4'-DDT	10.113	10.113	29663	44.279
Endosulfan sulfate	10.260	10.253	25017	41.659
Methoxychlor	10.600	10.600	54255	209.086
Endrin ketone	10.773	10.767	27050	39.148
Decachlorobiphenyl	12.533	12.527	16829	30.050

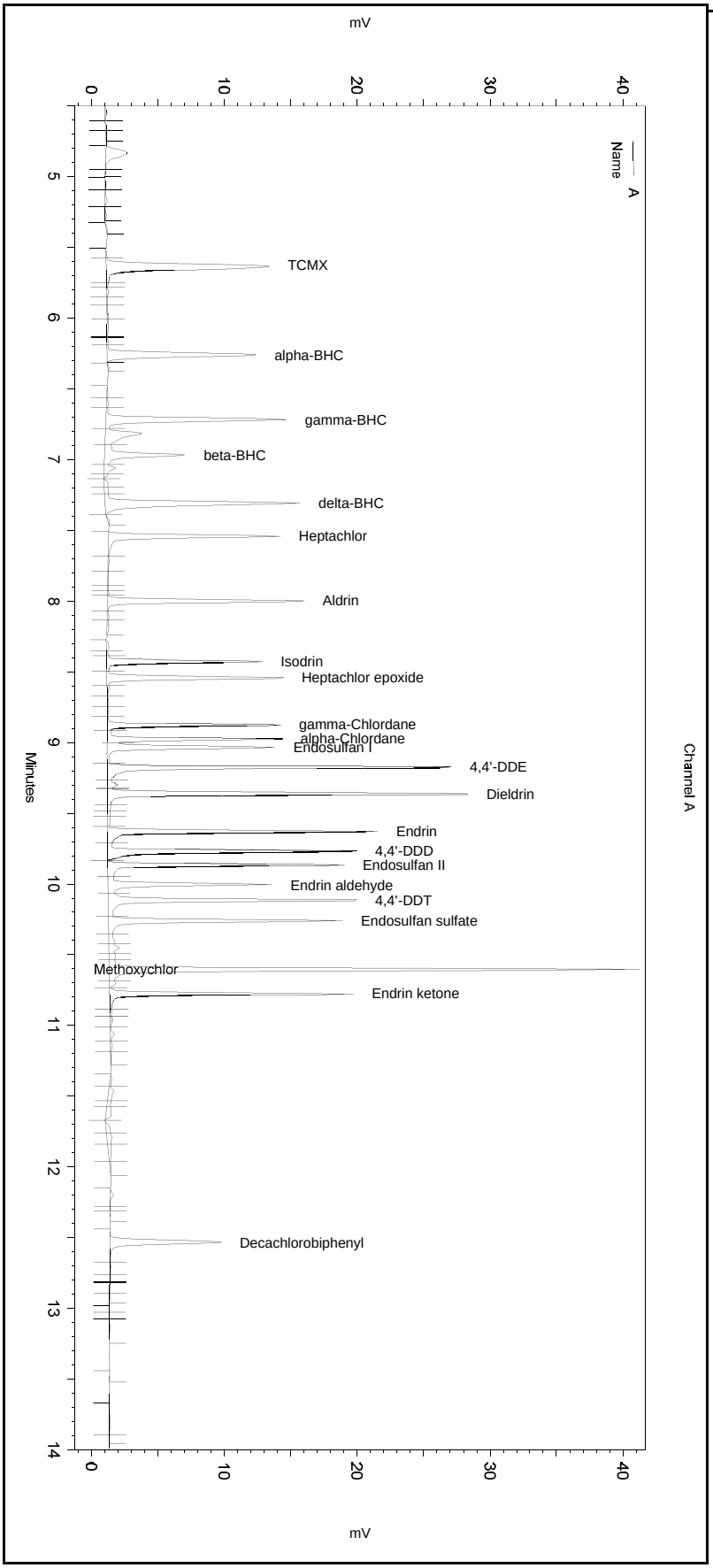
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	27158	16.669
alpha-BHC	5.427	5.420	25159	12.300
gamma-BHC	5.847	5.840	22679	13.615
beta-BHC	5.933	5.927	9700	16.024
delta-BHC	6.280	6.273	18580	13.638
Heptachlor	6.367	6.360	19771	15.304
Aldrin	6.747	6.740	21444	15.616
Isodrin	7.200	7.193	16815	15.590
Heptachlor epoxide	7.387	7.380	18629	15.639
gamma-Chlordane	7.593	7.587	18523	15.790
alpha-Chlordane	7.753	7.747	17854	16.143
Endosulfan I	7.827	7.820	17443	17.154
4,4'-DDE	7.913	7.907	33207	15.152
Dieldrin	8.133	8.127	44163	14.289
Endrin	8.473	8.467	25740	25.106
4,4'-DDD	8.553	8.547	26135	27.664
Endosulfan II	8.700	8.693	33619	26.487
4,4'-DDT	8.893	8.893	24720	19.913
Endrin aldehyde	9.053	9.047	19820	28.641
Endosulfan sulfate	9.340	9.333	23025	31.056
Methoxychlor	9.573	9.567	69103	71.167
Endrin ketone	9.880	9.873	44267	15.472
Decachlorobiphenyl	10.967	10.967	18381	32.890

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-008**
Sample Name: **msd,qc655374,190308**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:22:52 AM
Analysis Date: 9/11/2012 11:41:06 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

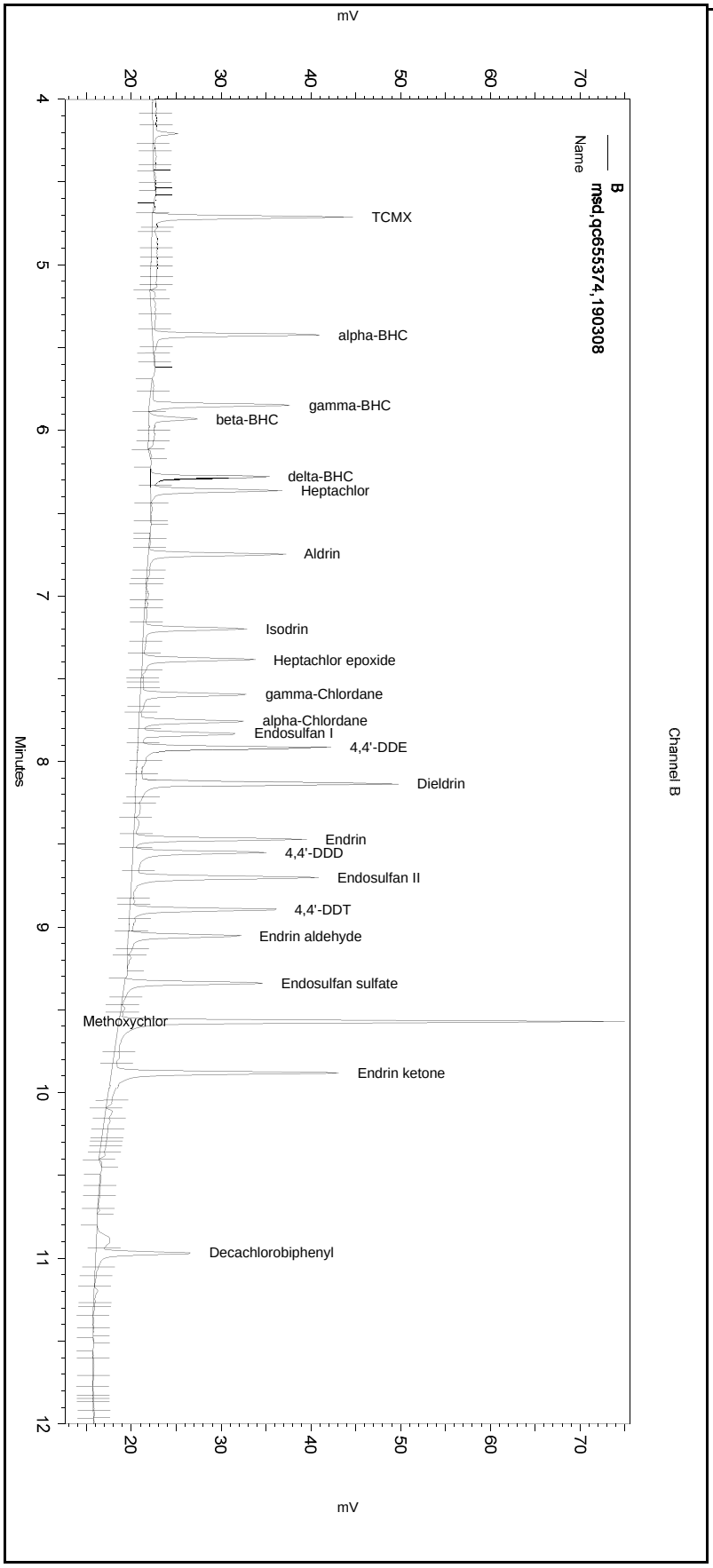
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-008_EE18.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-008**
Sample Name: **msd,qc655374,190308**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 11:22:52 AM
Analysis Date: 9/11/2012 11:41:06 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
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Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-008_EE18.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Initial Calibration Raw Data

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PEST Soil: EPA 8081B

Inst : GC21
Calnum : 242328737001
Units : pg/uL

Name : gc21_pest_228
Date : 15-AUG-2012 09:17

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	228_006	242328737006	PEST_1/2	15-AUG-2012 09:17	S19412 (2X)
L2	228_007	242328737007	PEST_1	15-AUG-2012 09:38	S19412
L3	228_008	242328737008	PEST_2	15-AUG-2012 10:00	S20311
L4	228_009	242328737009	PEST_3	15-AUG-2012 10:22	S19414
L5	228_010	242328737010	PEST_4	15-AUG-2012 10:43	S19415
L6	228_011	242328737011	PEST_5	15-AUG-2012 11:05	S19416
L7	228_012	242328737012	PEST_6	15-AUG-2012 11:27	S19417
L8	228_013	242328737013	PEST_7	15-AUG-2012 11:49	S19418

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	1910.0	1584.5	1623.6	1592.6	1606.9	1498.6	1734.8	1643.5	AVRG	R		6.06E-4		1649.3	8	0.990	20	
TCMX	A	1449.0	1136.3	1128.6	1097.0	1088.6	1021.1	1162.5	1084.2	AVRG	R		8.73E-4		1145.9	11	0.990	20	
Decachlorobiphenyl	A	722.50	590.25	624.20	576.90	577.53	444.48	466.10	478.26	AVRG	R		0.00179		560.03	17	0.990	20	
alpha-BHC	B	1502.0	1479.0	3022.4	1740.0	3252.8	3197.6	6710.7		QUAD	A	4732.34	49.3462	130.9982	2986.3	0.998	0.990	20	
TCMX	B	855.50	831.00	1770.4	1052.3	2370.9	2564.3	3620.5		QUAD	A	-3774.8	1493.29	21.73896	1866.4	0.998	0.990	20	
Decachlorobiphenyl	B	469.00	454.50	1066.2	525.55	739.65	628.38	1164.5	2203.9	QUAD	A	3899.58	97.3852	10.42620	906.46	0.999	0.990	20	
Average EPA 8081B	A														(n=23)	11			
Average EPA 8081B	B														(n=23)	61			

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
alpha-BHC	A	1.0000	16	2.0000	-4	5.0000	-2	10.000	-3	20.000	-3	25.000	-9	50.000	5	100.00	0
TCMX	A	2.0000	**26**	4.0000	-1	10.000	-2	20.000	-4	40.000	-5	50.000	-11	100.00	1	200.00	-5
Decachlorobiphenyl	A	2.0000	**29**	4.0000	5	10.000	11	20.000	3	40.000	3	50.000	**-21**	100.00	-17	200.00	-15
alpha-BHC	B	1.0000	**-100**	2.0000	**-100**	5.0000	**74**	10.000	-4	20.000	6	25.000	-5	50.000	0		
TCMX	B	2.0000	**75**	4.0000	12	10.000	**22**	20.000	**-31**	40.000	3	50.000	2	100.00	0		
Decachlorobiphenyl	B	2.0000	**-100**	4.0000	**-100**	10.000	**112**	20.000	5	40.000	13	50.000	-6	100.00	-1	200.00	0

TKB 08/16/12 : Corrected automatically drawn baseline in all levels.

TKB 08/16/12 : ICAL fails PEM (ENDRIN) ON CH.B, ENDRIN COMPOUNDS WILL BE REPORTED FORM CH.A

TKB 08/16/12 : ICAL fails ICV FOR VARIOUS ANALYTES ON CH.B, THESE ANALYTES WILL BE REPORTED FROM CH.A

TKB 08/16/12 : CHANGED FIT TYPES AND DROPPED VARIOUS HIGH/LOW POINTS TO IMPROVE %RSD/R^2

TKB 08/16/12 : METHOXYCHLOR FAILS %RSD ON CH.B - IT WILL BE REPORTED FROM CH.A

TKB 08/16/12 : ADDITIONAL SET OF ICV RAN BECAUSE THE FIRST SET HAD EXPIRED

Analyst: TKB Date: 08/16/12 Reviewer: EAH Date: 08/16/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PEST Soil
EPA 8081B

Inst : GC21 Name : gc21_pest_228
Calnum : 242328737001 Cal Date : 15-AUG-2012

ICV 242328737019 (228_019 16-AUG-2012) stds: S20524

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	20.00	19.36	pg/uL	-3	20	
alpha-BHC	B	20.00	17.17	pg/uL	-14	20	
Average EPA 8081B	A	n=21			7		
Average EPA 8081B	B	n=21			18		

Analyst: TKB Date: 08/16/12 Reviewer: EAH Date: 08/16/12

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/16/2012 2:23:39 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.640	2898	2.000 CAL
alpha-BHC	6.267	6.270	1910	1.000 CAL
gamma-BHC	6.727	6.733	1745	1.000 CAL
beta-BHC	6.973	6.980	690	1.000 CAL
delta-BHC	7.313	7.320	1465	1.000 CAL
Heptachlor	7.553	7.560	1456	1.000 CAL
Aldrin	8.007	8.013	1544	1.000 CAL
Isodrin	8.440	8.447	1197	1.000 CAL
Heptachlor epoxide	8.553	8.560	1418	1.000 CAL
gamma-Chlordane	8.887	8.893	1273	1.000 CAL
alpha-Chlordane	8.987	8.993	1241	1.000 CAL
Endosulfan I	9.047	9.053	1130	1.000 CAL
4,4'-DDE	9.187	9.193	2292	2.000 CAL
Dieldrin	9.373	9.380	2403	2.000 CAL
Endrin	9.640	9.647	1527	2.000 CAL
4,4'-DDD	9.787	9.787	1634	2.000 CAL
Endosulfan II	9.880	9.880	1899	2.000 CAL
Endrin aldehyde	10.020	10.027	1288	2.000 CAL
4,4'-DDT	10.133	10.133	1434	2.000 CAL
Endosulfan sulfate	10.273	10.280	1350	2.000 CAL
Methoxychlor	10.620	10.620	3362	10.000 CAL
Endrin ketone	10.787	10.793	1690	2.000 CAL
Decachlorobiphenyl	12.560	12.567	1445	2.000 CAL

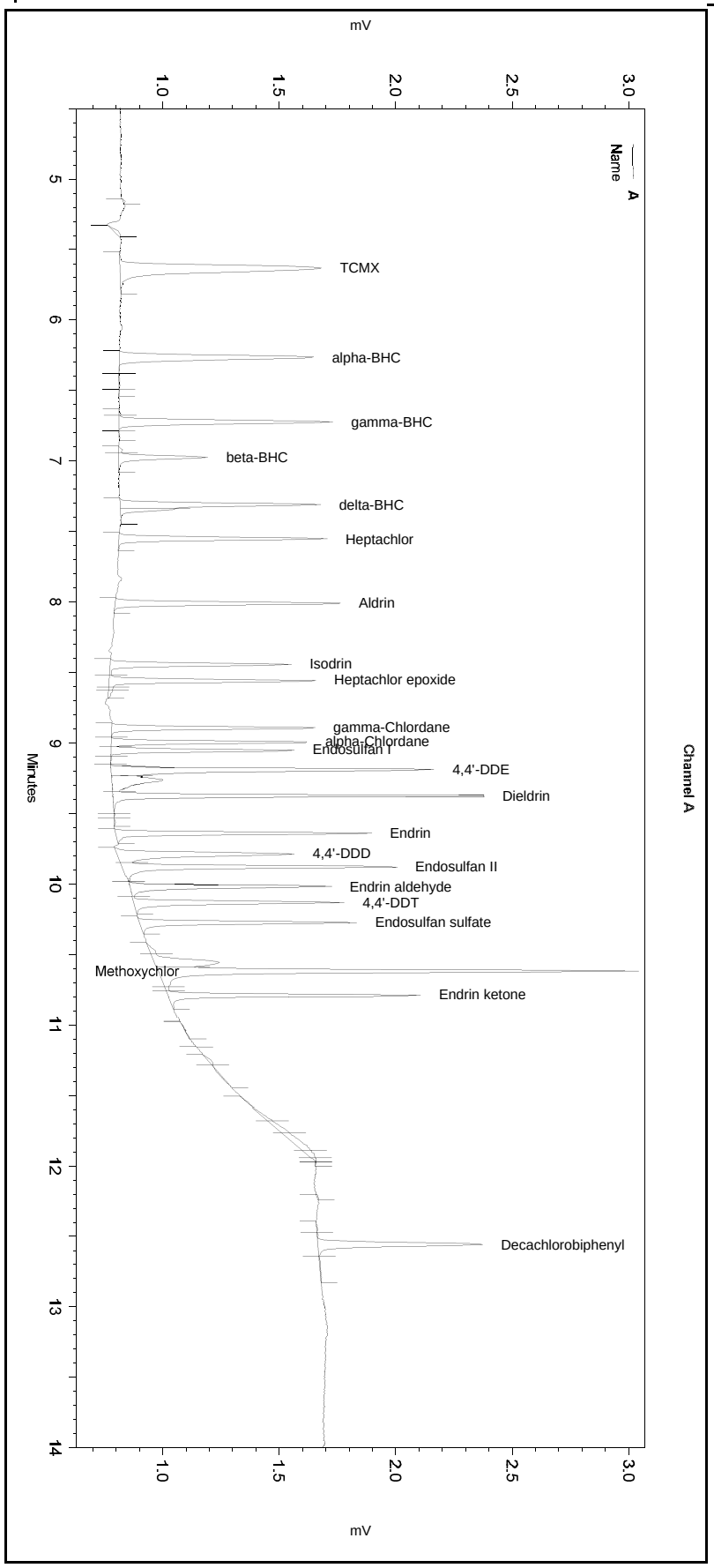
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	1711	2.000 CAL
alpha-BHC	5.433	5.433	1502	1.000 CAL
gamma-BHC	5.853	5.853	1532	1.000 CAL
beta-BHC	5.940	5.940	573	1.000 CAL
delta-BHC	6.287	6.287	1285	1.000 CAL
Heptachlor	6.373	6.373	1214	1.000 CAL
Aldrin	6.753	6.753	1318	1.000 CAL
Isodrin	7.207	7.207	740	1.000 CAL
Heptachlor epoxide	7.393	7.393	1079	1.000 CAL
gamma-Chlordane	7.607	7.607	1288	1.000 CAL
alpha-Chlordane	7.767	7.767	1183	1.000 CAL
Endosulfan I	7.840	7.840	932	1.000 CAL
4,4'-DDE	7.927	7.920	1826	2.000 CAL
Dieldrin	8.140	8.140	2301	2.000 CAL
Endrin	8.480	8.480	2002	2.000 CAL
4,4'-DDD	8.560	8.560	1708	2.000 CAL
Endosulfan II	8.713	8.707	1483	2.000 CAL
4,4'-DDT	8.907	8.900	1727	2.000 CAL
Endrin aldehyde	9.067	9.060	1471	2.000 CAL
Endosulfan sulfate	9.347	9.347	1479	2.000 CAL
Methoxychlor	9.580	9.580	3490	10.000 CAL
Endrin ketone	9.887	9.880	7612	2.000 CAL
Decachlorobiphenyl	10.980	10.973	938	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/16/2012 2:23:39 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

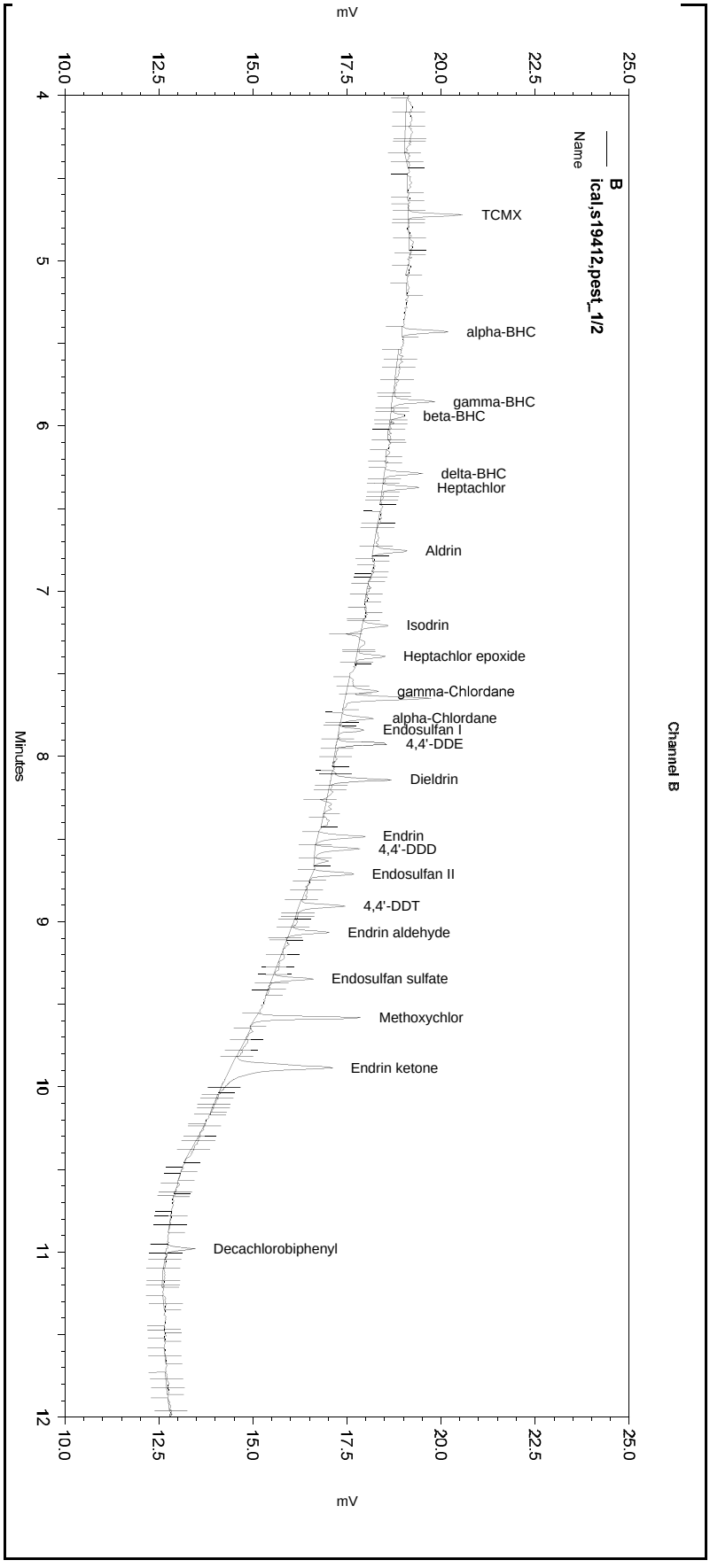
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.68	0	0
Yes	Split Peak	7.34	0	0
Yes	Split Peak	8.601	0	0
Yes	Reset Baseline	8.68	0	0
Yes	Reset Baseline	8.742	0	0
Yes	Split Peak	9.094	0	0
Yes	Split Peak	10.753	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/16/2012 2:23:39 PM
Sample Amount: 1



---< General Method Parameters >----------

No items selected for this section

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No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	4.694	0	0
Yes	Split Peak	4.747	0	0
Yes	Split Peak	5.821	0	0
Yes	Split Peak	5.915	0	0
Yes	Split Peak	5.961	0	0
Yes	Split Peak	6.317	0	0
Yes	Split Peak	6.401	0	0
Yes	Manual Baseline	7.166	7.441	0
Yes	Split Peak	7.182	0	0
Yes	Split Peak	7.365	0	0
Yes	Split Peak	7.424	0	0
Yes	Reset Baseline	7.448	0	0
Yes	Split Peak	7.794	0	0
Yes	Split Peak	7.954	0	0
Yes	Manual Baseline	8.087	8.429	0
Yes	Split Peak	8.109	0	0
Yes	Split Peak	8.171	0	0
Yes	Reset Baseline	8.346	0	0
Yes	Reset Baseline	8.672	0	0
Yes	Split Peak	8.946	0	0
Yes	Split Peak	9.034	0	0
Yes	Split Peak	9.1	0	0
Yes	Split Peak	9.321	0	0
Yes	Split Peak	9.376	0	0
Yes	Reset Baseline	9.468	0	0
Yes	Split Peak	11.008	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/15/2012 1:21:30 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.640	2898	1.750
alpha-BHC	6.267	6.270	1910	0.783
gamma-BHC	6.727	6.733	1756	0.798
beta-BHC	6.973	6.980	690	0.783
delta-BHC	7.313	7.320	1772	0.891
Heptachlor	7.553	7.560	1456	0.744
Aldrin	8.007	8.013	1544	0.784
Isodrin	8.440	8.447	1211	0.790
Heptachlor epoxide	8.553	8.560	1479	0.828
gamma-Chlordane	8.887	8.893	1459	0.886
alpha-Chlordane	8.987	8.993	1291	0.820
Endosulfan I	9.047	9.053	1187	0.796
4,4'-DDE	9.187	9.193	2303	1.530
Dieldrin	9.373	9.380	2408	1.570
Endrin	9.640	9.647	1527	1.421
4,4'-DDD	9.787	9.787	1634	1.496
Endosulfan II	9.880	9.880	1899	1.564
Endrin aldehyde	10.020	10.027	1288	1.375
4,4'-DDT	10.133	10.133	1434	1.264
Endosulfan sulfate	10.273	10.280	1350	1.297
Methoxychlor	10.620	10.620	3362	7.129
Endrin ketone	10.787	10.793	1712	1.585
Decachlorobiphenyl	12.560	12.567	1445	1.627

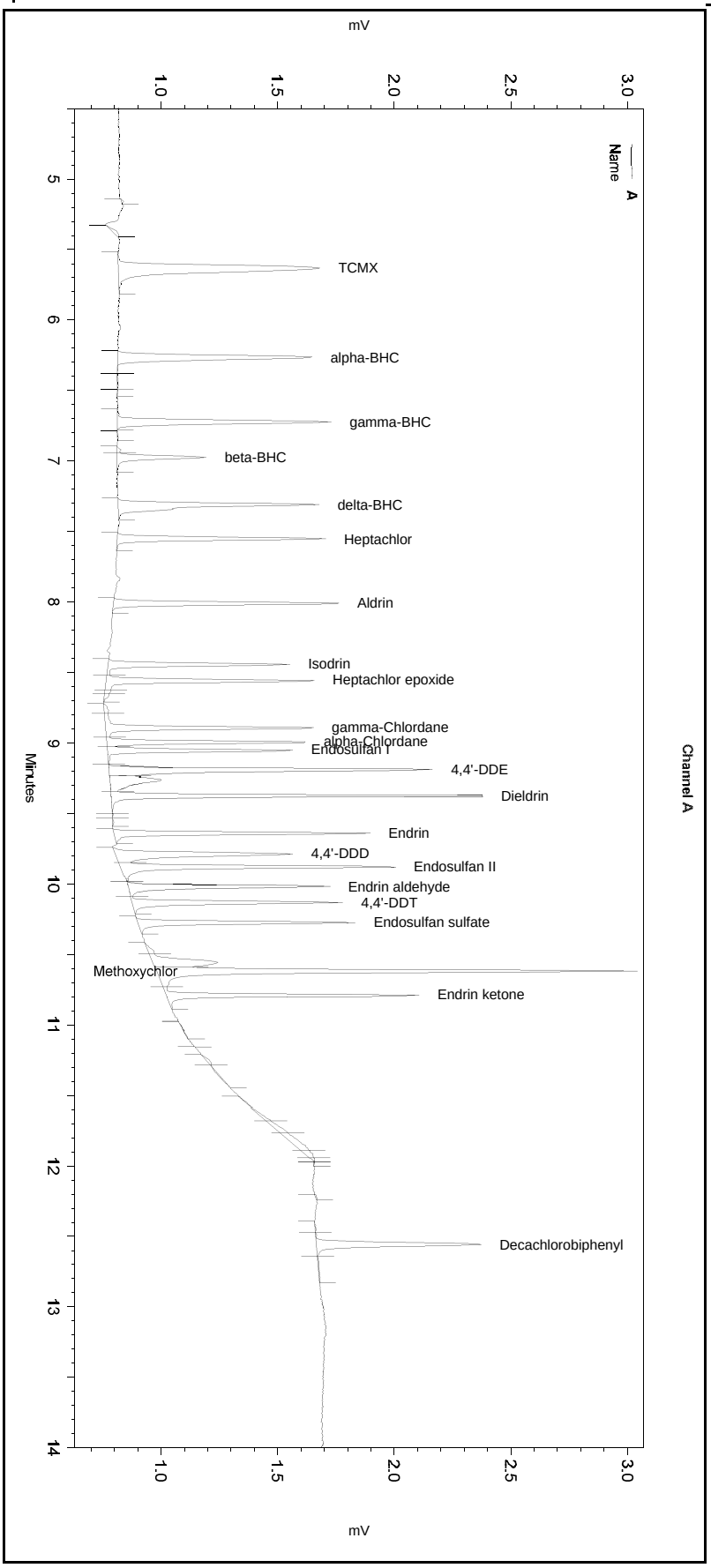
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	1773	4.279
alpha-BHC	5.433	5.433	1502	0.000
gamma-BHC	5.853	5.853	1588	0.000
beta-BHC	5.940	5.940	715	1.700
delta-BHC	6.287	6.287	1344	0.307
Heptachlor	6.373	6.373	1289	0.312
Aldrin	6.753	6.753	1318	0.045
Isodrin	7.207	7.207	1855	0.000
Heptachlor epoxide	7.393	7.393	2891	2.145
gamma-Chlordane	7.607	7.607	1795	1.177
alpha-Chlordane	7.767	7.767	1723	1.105
Endosulfan I	7.840	7.840	1289	0.855
4,4'-DDE	7.927	7.920	2218	0.000
Dieldrin	8.140	8.140	2871	0.000
Endrin	8.480	8.480	3389	0.243
4,4'-DDD	8.560	8.560	3425	0.000
Endosulfan II	8.713	8.707	3425	3.386
4,4'-DDT	8.907	8.900	4451	5.829
Endrin aldehyde	9.067	9.060	4948	6.447
Endosulfan sulfate	9.347	9.347	4996	5.315
Methoxychlor	9.580	9.580	5243	19.991
Endrin ketone	9.887	9.880	8737	0.000
Decachlorobiphenyl	10.980	10.973	972	1.544

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/15/2012 1:21:30 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes
==========

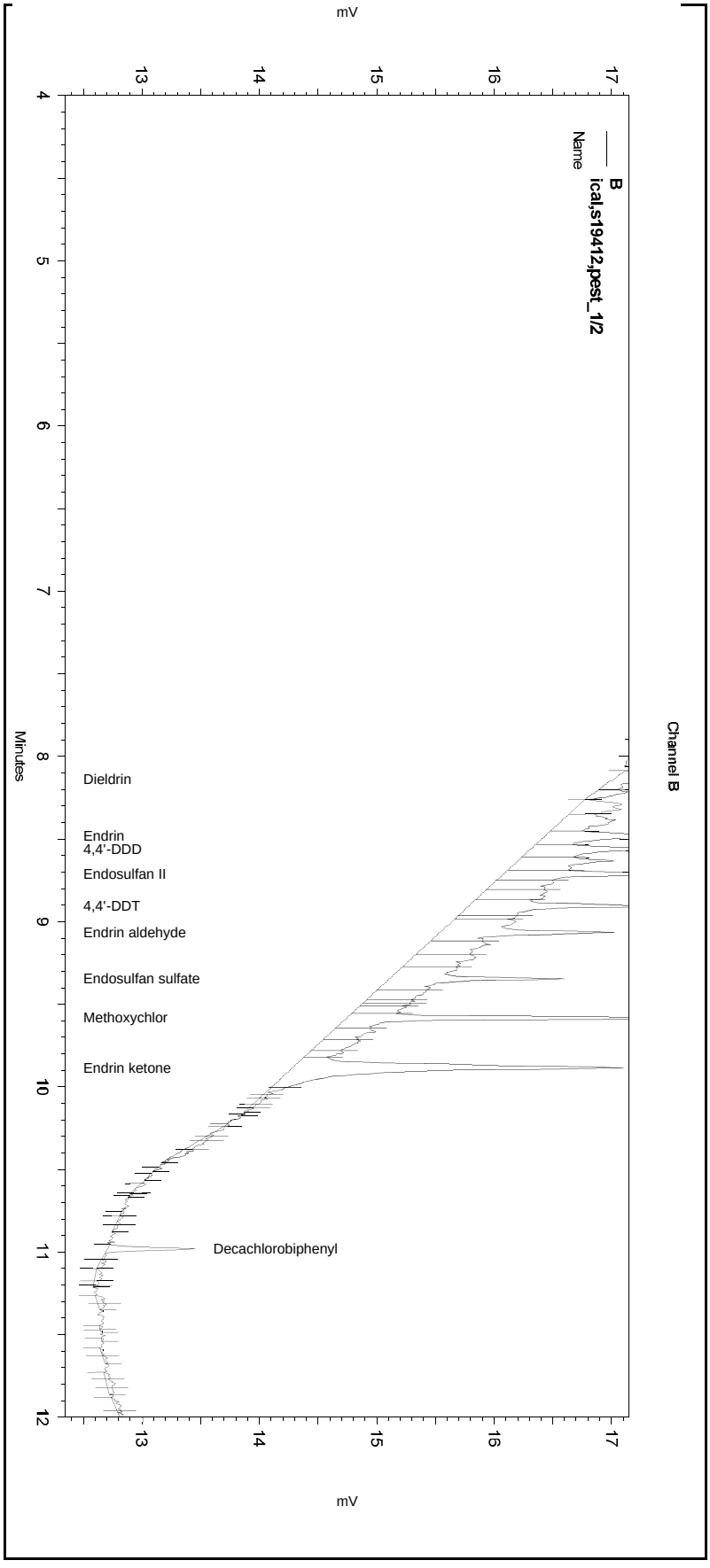
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006**
Sample Name: **ical,s19412,pest_1/2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:17:05 AM
Analysis Date: 8/15/2012 1:21:30 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/16/2012 2:23:46 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	4545	4.000 CAL
alpha-BHC	6.273	6.270	3169	2.000 CAL
gamma-BHC	6.733	6.733	2877	2.000 CAL
beta-BHC	6.980	6.980	1122	2.000 CAL
delta-BHC	7.313	7.320	2387	2.000 CAL
Heptachlor	7.553	7.560	2384	2.000 CAL
Aldrin	8.013	8.013	2513	2.000 CAL
Isodrin	8.440	8.447	1916	2.000 CAL
Heptachlor epoxide	8.560	8.560	2279	2.000 CAL
gamma-Chlordane	8.893	8.893	2132	2.000 CAL
alpha-Chlordane	8.993	8.993	2042	2.000 CAL
Endosulfan I	9.047	9.053	1895	2.000 CAL
4,4'-DDE	9.193	9.193	3861	4.000 CAL
Dieldrin	9.380	9.380	3924	4.000 CAL
Endrin	9.640	9.647	2579	4.000 CAL
4,4'-DDD	9.787	9.787	2727	4.000 CAL
Endosulfan II	9.880	9.880	3147	4.000 CAL
Endrin aldehyde	10.020	10.027	2242	4.000 CAL
4,4'-DDT	10.133	10.133	2490	4.000 CAL
Endosulfan sulfate	10.273	10.280	2245	4.000 CAL
Methoxychlor	10.620	10.620	5425	20.000 CAL
Endrin ketone	10.787	10.793	2772	4.000 CAL
Decachlorobiphenyl	12.560	12.567	2361	4.000 CAL

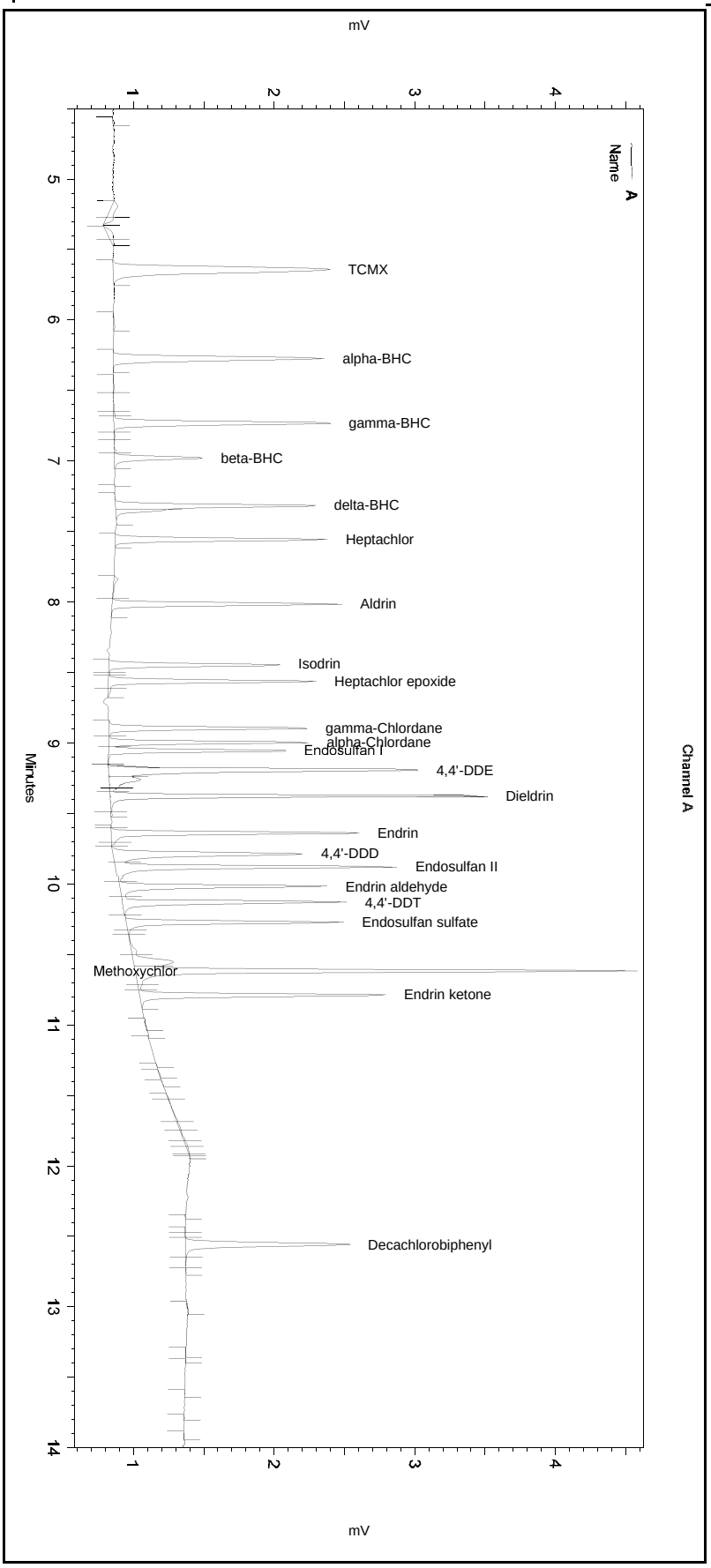
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	3324	4.000 CAL
alpha-BHC	5.433	5.433	2958	2.000 CAL
gamma-BHC	5.853	5.853	3001	2.000 CAL
beta-BHC	5.940	5.940	1150	2.000 CAL
delta-BHC	6.287	6.287	2838	2.000 CAL
Heptachlor	6.373	6.373	2536	2.000 CAL
Aldrin	6.760	6.753	2562	2.000 CAL
Isodrin	7.207	7.207	1995	2.000 CAL
Heptachlor epoxide	7.393	7.393	2032	2.000 CAL
gamma-Chlordane	7.607	7.607	2433	2.000 CAL
alpha-Chlordane	7.767	7.767	2468	2.000 CAL
Endosulfan I	7.840	7.840	2085	2.000 CAL
4,4'-DDE	7.927	7.920	3917	4.000 CAL
Dieldrin	8.140	8.140	4310	4.000 CAL
Endrin	8.487	8.480	3512	4.000 CAL
4,4'-DDD	8.560	8.560	3418	4.000 CAL
Endosulfan II	8.713	8.707	3617	4.000 CAL
4,4'-DDT	8.907	8.900	3244	4.000 CAL
Endrin aldehyde	9.067	9.060	2732	4.000 CAL
Endosulfan sulfate	9.347	9.347	2987	4.000 CAL
Methoxychlor	9.580	9.580	7026	20.000 CAL
Endrin ketone	9.887	9.880	11585	4.000 CAL
Decachlorobiphenyl	10.980	10.973	1818	4.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/16/2012 2:23:46 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

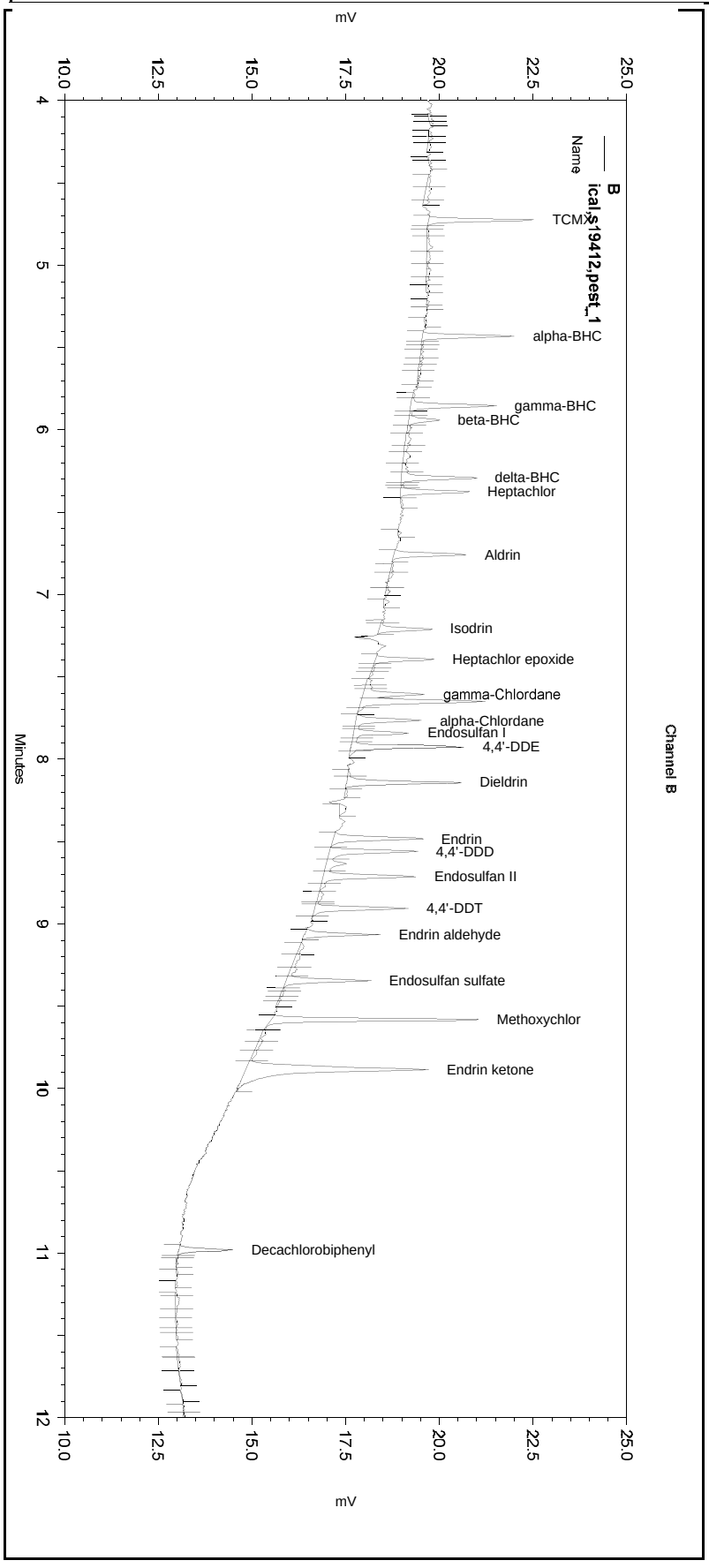
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.678	0	0
Yes	Split Peak	7.341	0	0
Yes	Reset Baseline	7.614	0	0
Yes	Split Peak	8.515	0	0
Yes	Reset Baseline	8.675	0	0
Yes	Reset Baseline	8.743	0	0
Yes	Split Peak	9.346	0	0
Yes	Split Peak	9.61	0	0
Yes	Split Peak	9.706	0	0
Yes	Split Peak	10.327	0	0
Yes	Split Peak	10.751	0	0
Yes	Split Peak	12.505	0	0
Yes	Split Peak	12.65	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/16/2012 2:23:46 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.686	0	0
Yes	Split Peak	4.756	0	0
Yes	Split Peak	5.46	0	0
Yes	Split Peak	5.887	0	0
Yes	Split Peak	6.314	0	0
Yes	Split Peak	6.355	0	0
Yes	Reset Baseline	7.243	0	0
Yes	Reset Baseline	7.31	0	0
Yes	Split Peak	7.42	0	0
Yes	Split Peak	7.573	0	0
Yes	Split Peak	7.685	0	0
Yes	Split Peak	7.8	0	0
Yes	Split Peak	7.873	0	0
Yes	Split Peak	7.954	0	0
Yes	Reset Baseline	7.994	0	0
Yes	Split Peak	8.099	0	0
Yes	Reset Baseline	8.242	0	0
Yes	Reset Baseline	8.373	0	0
Yes	Split Peak	8.88	0	0
Yes	Split Peak	8.953	0	0
Yes	Reset Baseline	8.985	0	0
Yes	Split Peak	9.321	0	0
Yes	Split Peak	9.388	0	0
Yes	Reset Baseline	10.021	0	0
Yes	Split Peak	11.014	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/15/2012 1:21:34 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	4545	2.744
alpha-BHC	6.273	6.270	3169	1.300
gamma-BHC	6.733	6.733	2890	1.314
beta-BHC	6.980	6.980	1122	1.274
delta-BHC	7.313	7.320	2873	1.444
Heptachlor	7.553	7.560	2403	1.228
Aldrin	8.013	8.013	2513	1.277
Isodrin	8.440	8.447	1939	1.265
Heptachlor epoxide	8.560	8.560	2382	1.333
gamma-Chlordane	8.893	8.893	2378	1.444
alpha-Chlordane	8.993	8.993	2120	1.346
Endosulfan I	9.047	9.053	1967	1.318
4,4'-DDE	9.193	9.193	3876	2.576
Dieldrin	9.380	9.380	3990	2.602
Endrin	9.640	9.647	2607	2.426
4,4'-DDD	9.787	9.787	2727	2.496
Endosulfan II	9.880	9.880	3147	2.592
Endrin aldehyde	10.020	10.027	2242	2.393
4,4'-DDT	10.133	10.133	2490	2.195
Endosulfan sulfate	10.273	10.280	2268	2.179
Methoxychlor	10.620	10.620	5425	11.504
Endrin ketone	10.787	10.793	2821	2.612
Decachlorobiphenyl	12.560	12.567	2382	2.682

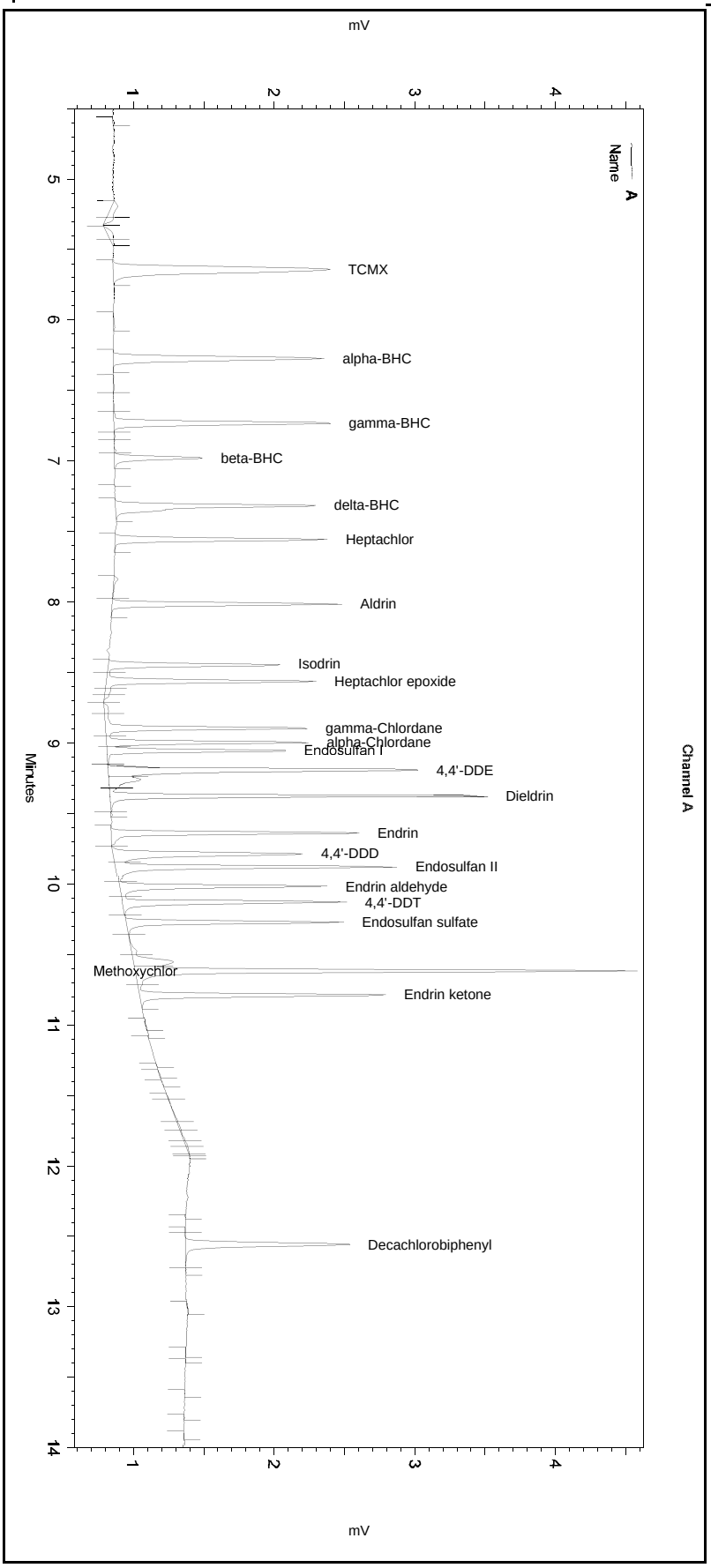
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	4092	5.478
alpha-BHC	5.433	5.433	3036	0.000
gamma-BHC	5.853	5.853	3072	1.105
beta-BHC	5.940	5.940	1150	2.243
delta-BHC	6.287	6.287	2907	1.726
Heptachlor	6.373	6.373	2619	1.472
Aldrin	6.760	6.753	2562	1.171
Isodrin	7.207	7.207	3545	0.000
Heptachlor epoxide	7.393	7.393	5878	3.775
gamma-Chlordane	7.607	7.607	5139	3.370
alpha-Chlordane	7.767	7.767	5243	3.363
Endosulfan I	7.840	7.840	4733	3.141
4,4'-DDE	7.927	7.920	7244	9.198
Dieldrin	8.140	8.140	9252	9.755
Endrin	8.487	8.480	6809	7.719
4,4'-DDD	8.560	8.560	5850	6.580
Endosulfan II	8.713	8.707	5896	5.751
4,4'-DDT	8.907	8.900	7814	8.998
Endrin aldehyde	9.067	9.060	4575	5.572
Endosulfan sulfate	9.347	9.347	4552	4.475
Methoxychlor	9.580	9.580	7026	22.238
Endrin ketone	9.887	9.880	12407	0.000
Decachlorobiphenyl	10.980	10.973	1942	3.085

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/15/2012 1:21:34 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

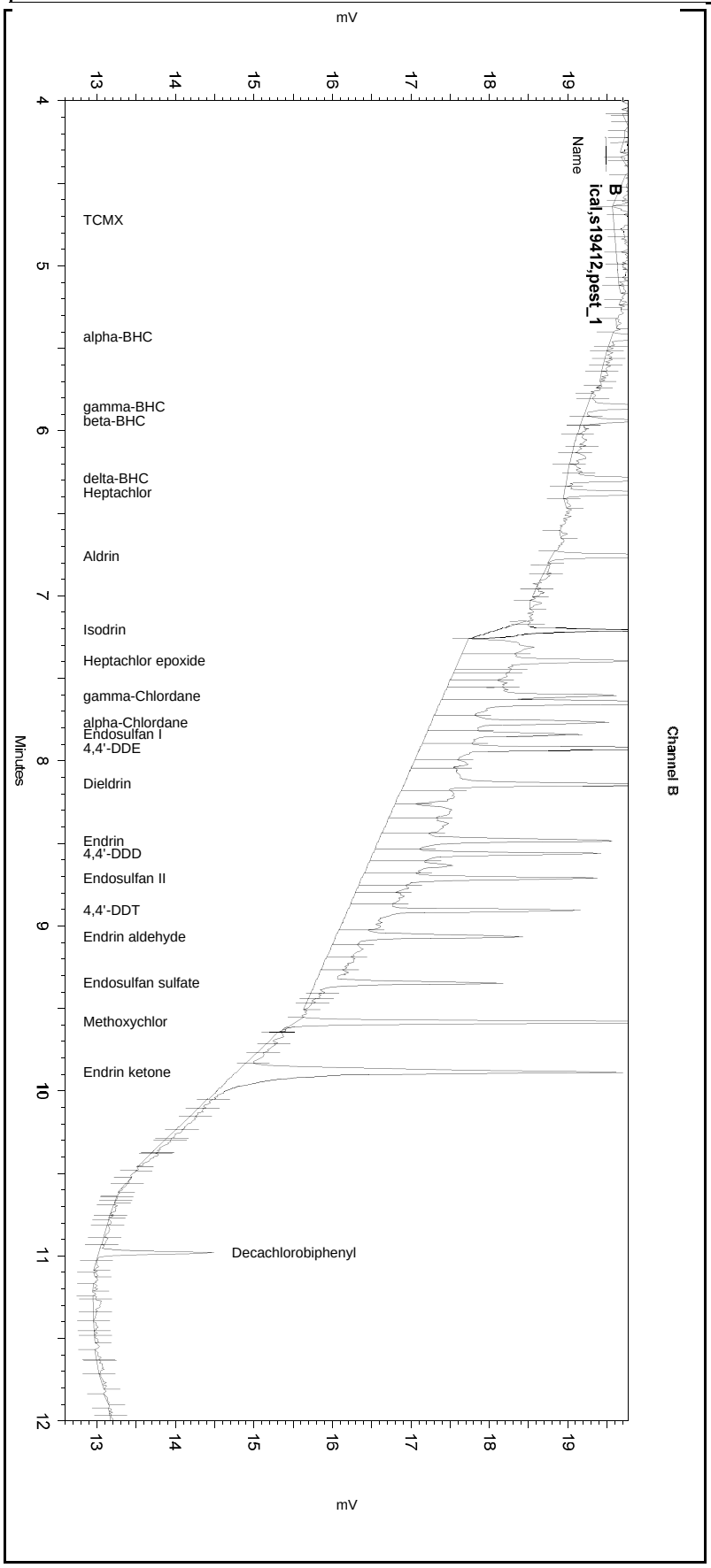
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007**
Sample Name: **ical,s19412,pest_1**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 9:38:56 AM
Analysis Date: 8/15/2012 1:21:34 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/16/2012 2:23:53 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	11286	10.000 CAL
alpha-BHC	6.273	6.270	8118	5.000 CAL
gamma-BHC	6.727	6.733	7355	5.000 CAL
beta-BHC	6.973	6.980	2851	5.000 CAL
delta-BHC	7.313	7.320	6365	5.000 CAL
Heptachlor	7.553	7.560	5949	5.000 CAL
Aldrin	8.007	8.013	6479	5.000 CAL
Isodrin	8.440	8.447	4998	5.000 CAL
Heptachlor epoxide	8.553	8.560	5580	5.000 CAL
gamma-Chlordane	8.887	8.893	5536	5.000 CAL
alpha-Chlordane	8.987	8.993	5230	5.000 CAL
Endosulfan I	9.047	9.053	4777	5.000 CAL
4,4'-DDE	9.187	9.193	9957	10.000 CAL
Dieldrin	9.373	9.380	9818	10.000 CAL
Endrin	9.640	9.647	6402	10.000 CAL
4,4'-DDD	9.787	9.787	6984	10.000 CAL
Endosulfan II	9.873	9.880	8078	10.000 CAL
Endrin aldehyde	10.020	10.027	6026	10.000 CAL
4,4'-DDT	10.133	10.133	6754	10.000 CAL
Endosulfan sulfate	10.273	10.280	6337	10.000 CAL
Methoxychlor	10.620	10.620	13506	50.000 CAL
Endrin ketone	10.787	10.793	7431	10.000 CAL
Decachlorobiphenyl	12.553	12.567	6242	10.000 CAL

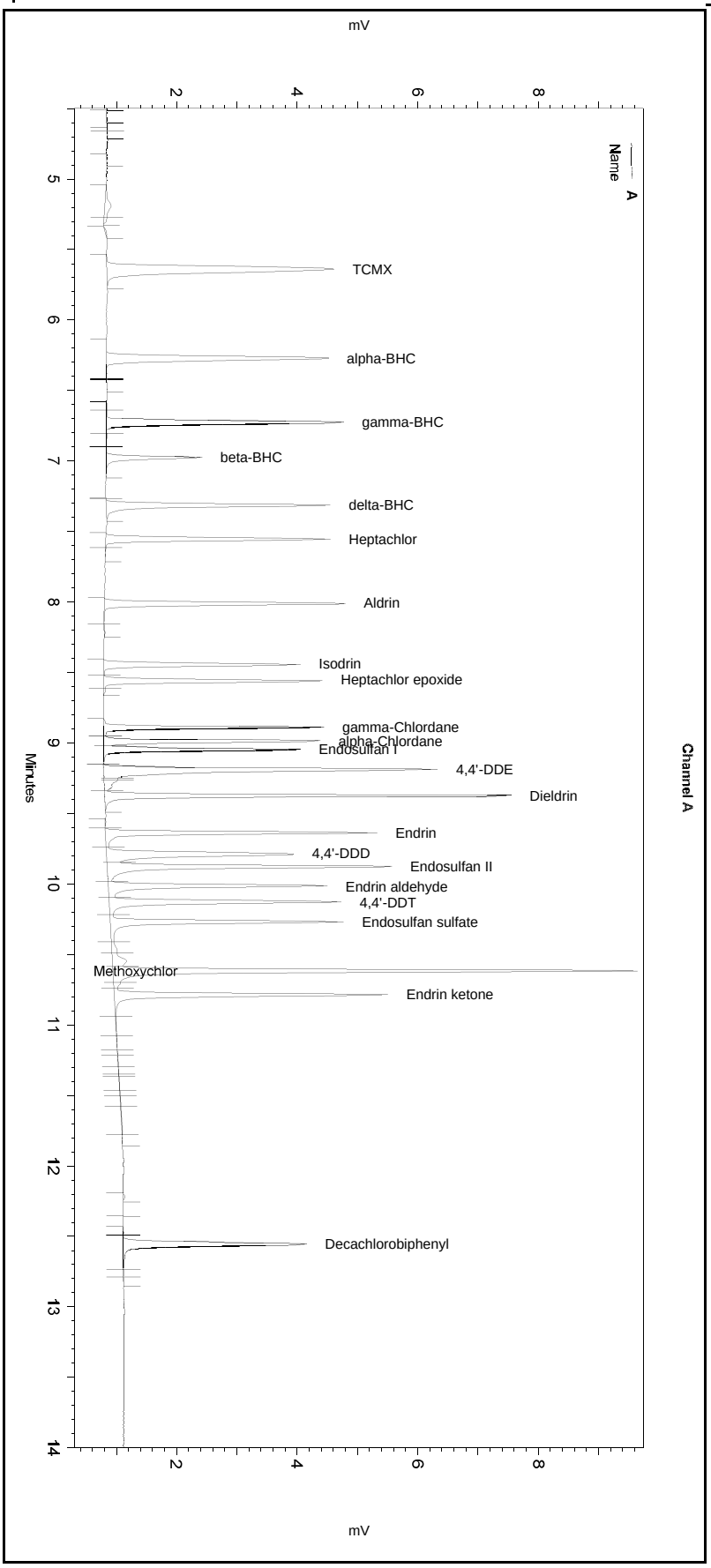
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.720	17704	10.000 CAL
alpha-BHC	5.427	5.433	15112	5.000 CAL
gamma-BHC	5.847	5.853	13722	5.000 CAL
beta-BHC	5.933	5.940	4895	5.000 CAL
delta-BHC	6.287	6.287	12966	5.000 CAL
Heptachlor	6.373	6.373	12183	5.000 CAL
Aldrin	6.753	6.753	12462	5.000 CAL
Isodrin	7.207	7.207	9798	5.000 CAL
Heptachlor epoxide	7.393	7.393	10940	5.000 CAL
gamma-Chlordane	7.607	7.607	11249	5.000 CAL
alpha-Chlordane	7.767	7.767	10815	5.000 CAL
Endosulfan I	7.840	7.840	9813	5.000 CAL
4,4'-DDE	7.920	7.920	21267	10.000 CAL
Dieldrin	8.140	8.140	23539	10.000 CAL
Endrin	8.480	8.480	17921	10.000 CAL
4,4'-DDD	8.560	8.560	17421	10.000 CAL
Endosulfan II	8.713	8.707	19584	10.000 CAL
4,4'-DDT	8.907	8.900	18398	10.000 CAL
Endrin aldehyde	9.067	9.060	14665	10.000 CAL
Endosulfan sulfate	9.347	9.347	15050	10.000 CAL
Methoxychlor	9.580	9.580	58884	50.000 CAL
Endrin ketone	9.887	9.880	25485	10.000 CAL
Decachlorobiphenyl	10.980	10.973	10662	10.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/16/2012 2:23:53 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

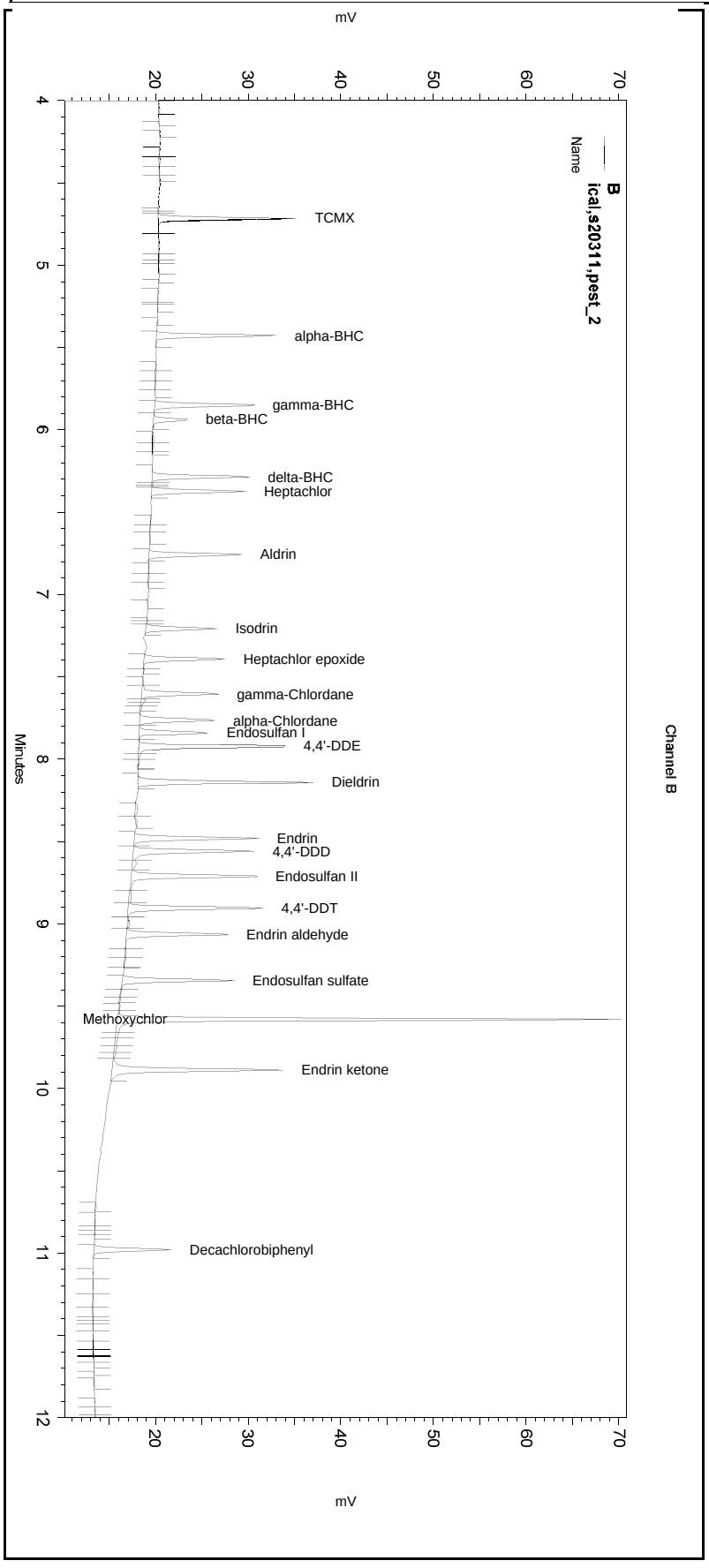
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.611	0	0
Yes	Split Peak	9.254	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/16/2012 2:23:53 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	4.684	0	0
Yes	Reset Baseline	5.814	0	0
Yes	Split Peak	6.317	0	0
Yes	Split Peak	6.346	0	0
Yes	Reset Baseline	6.416	0	0
Yes	Reset Baseline	6.711	0	0
Yes	Split Peak	7.177	0	0
Yes	Reset Baseline	7.248	0	0
Yes	Reset Baseline	7.312	0	0
Yes	Split Peak	7.634	0	0
Yes	Split Peak	7.97	0	0
Yes	Reset Baseline	8.08	0	0
Yes	Reset Baseline	8.187	0	0
Yes	Reset Baseline	8.417	0	0
Yes	Reset Baseline	9.961	0	0
Yes	Reset Baseline	10.942	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/15/2012 1:21:39 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	11286	6.813
alpha-BHC	6.273	6.270	8118	3.329
gamma-BHC	6.727	6.733	7355	3.343
beta-BHC	6.973	6.980	2851	3.237
delta-BHC	7.313	7.320	6365	3.199
Heptachlor	7.553	7.560	5977	3.055
Aldrin	8.007	8.013	6479	3.292
Isodrin	8.440	8.447	4998	3.261
Heptachlor epoxide	8.553	8.560	5580	3.124
gamma-Chlordane	8.887	8.893	5536	3.362
alpha-Chlordane	8.987	8.993	5230	3.321
Endosulfan I	9.047	9.053	4777	3.202
4,4'-DDE	9.187	9.193	10136	6.736
Dieldrin	9.373	9.380	9818	6.402
Endrin	9.640	9.647	6402	5.957
4,4'-DDD	9.787	9.787	6984	6.393
Endosulfan II	9.873	9.880	8078	6.655
Endrin aldehyde	10.020	10.027	6026	6.433
4,4'-DDT	10.133	10.133	6754	5.954
Endosulfan sulfate	10.273	10.280	6337	6.089
Methoxychlor	10.620	10.620	13506	28.639
Endrin ketone	10.787	10.793	7431	6.881
Decachlorobiphenyl	12.553	12.567	6242	7.027

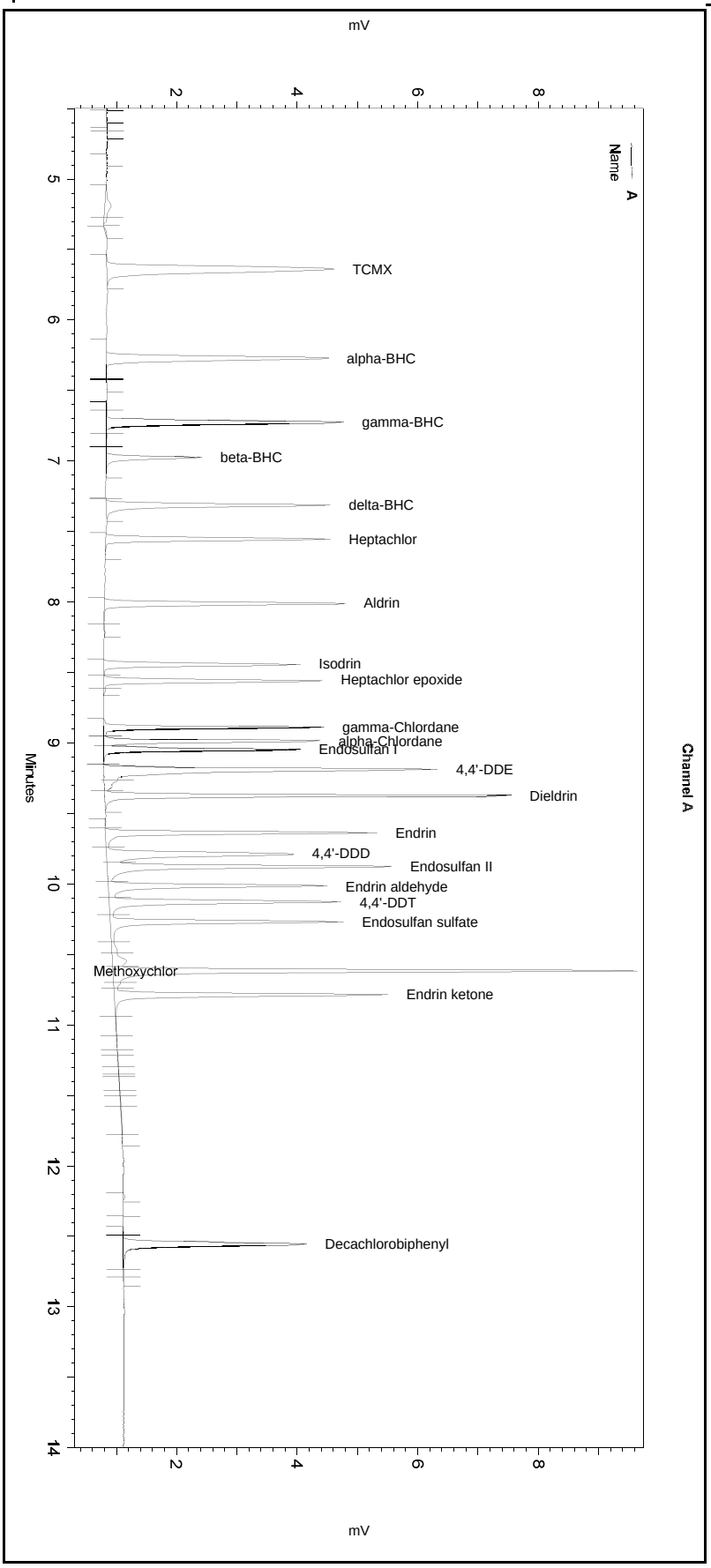
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.720	17750	12.067
alpha-BHC	5.427	5.433	15112	8.878
gamma-BHC	5.847	5.853	14156	8.631
beta-BHC	5.933	5.940	5050	7.110
delta-BHC	6.287	6.287	13165	8.228
Heptachlor	6.373	6.373	12531	7.618
Aldrin	6.753	6.753	12913	7.863
Isodrin	7.207	7.207	10465	11.254
Heptachlor epoxide	7.393	7.393	12460	7.367
gamma-Chlordane	7.607	7.607	12903	8.461
alpha-Chlordane	7.767	7.767	11664	7.481
Endosulfan I	7.840	7.840	10951	7.268
4,4'-DDE	7.920	7.920	23433	19.810
Dieldrin	8.140	8.140	26522	18.741
Endrin	8.480	8.480	19543	20.395
4,4'-DDD	8.560	8.560	18865	20.210
Endosulfan II	8.713	8.707	21194	15.993
4,4'-DDT	8.907	8.900	19130	16.884
Endrin aldehyde	9.067	9.060	15215	18.797
Endosulfan sulfate	9.347	9.347	15050	17.437
Methoxychlor	9.580	9.580	59253	76.242
Endrin ketone	9.887	9.880	27258	17.894
Decachlorobiphenyl	10.980	10.973	11001	17.477

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/15/2012 1:21:39 PM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes
==========

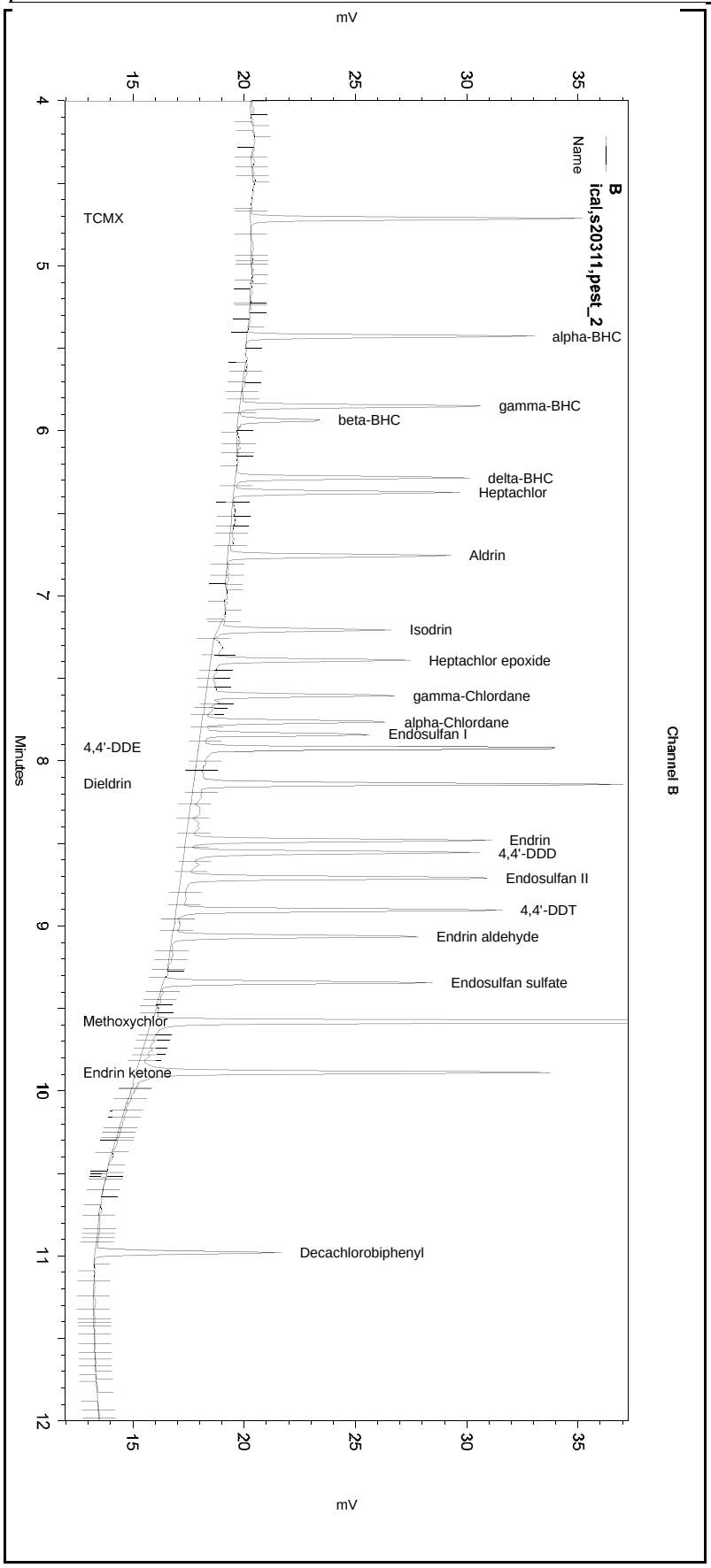
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008**
Sample Name: **ical,s20311,pest_2**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:00:32 AM
Analysis Date: 8/15/2012 1:21:39 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/16/2012 2:23:59 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	21939	20.000 CAL
alpha-BHC	6.267	6.270	15926	10.000 CAL
gamma-BHC	6.727	6.733	14421	10.000 CAL
beta-BHC	6.973	6.980	5524	10.000 CAL
delta-BHC	7.313	7.320	12737	10.000 CAL
Heptachlor	7.553	7.560	11986	10.000 CAL
Aldrin	8.007	8.013	12614	10.000 CAL
Isodrin	8.440	8.447	9577	10.000 CAL
Heptachlor epoxide	8.553	8.560	10807	10.000 CAL
gamma-Chlordane	8.887	8.893	10635	10.000 CAL
alpha-Chlordane	8.987	8.993	9996	10.000 CAL
Endosulfan I	9.047	9.053	9237	10.000 CAL
4,4'-DDE	9.187	9.193	19238	20.000 CAL
Dieldrin	9.373	9.380	19529	20.000 CAL
Endrin	9.640	9.647	12737	20.000 CAL
4,4'-DDD	9.787	9.787	13646	20.000 CAL
Endosulfan II	9.873	9.880	15746	20.000 CAL
Endrin aldehyde	10.013	10.027	11820	20.000 CAL
4,4'-DDT	10.127	10.133	13820	20.000 CAL
Endosulfan sulfate	10.267	10.280	12369	20.000 CAL
Methoxychlor	10.613	10.620	27548	100.000 CAL
Endrin ketone	10.787	10.793	14239	20.000 CAL
Decachlorobiphenyl	12.553	12.567	11538	20.000 CAL

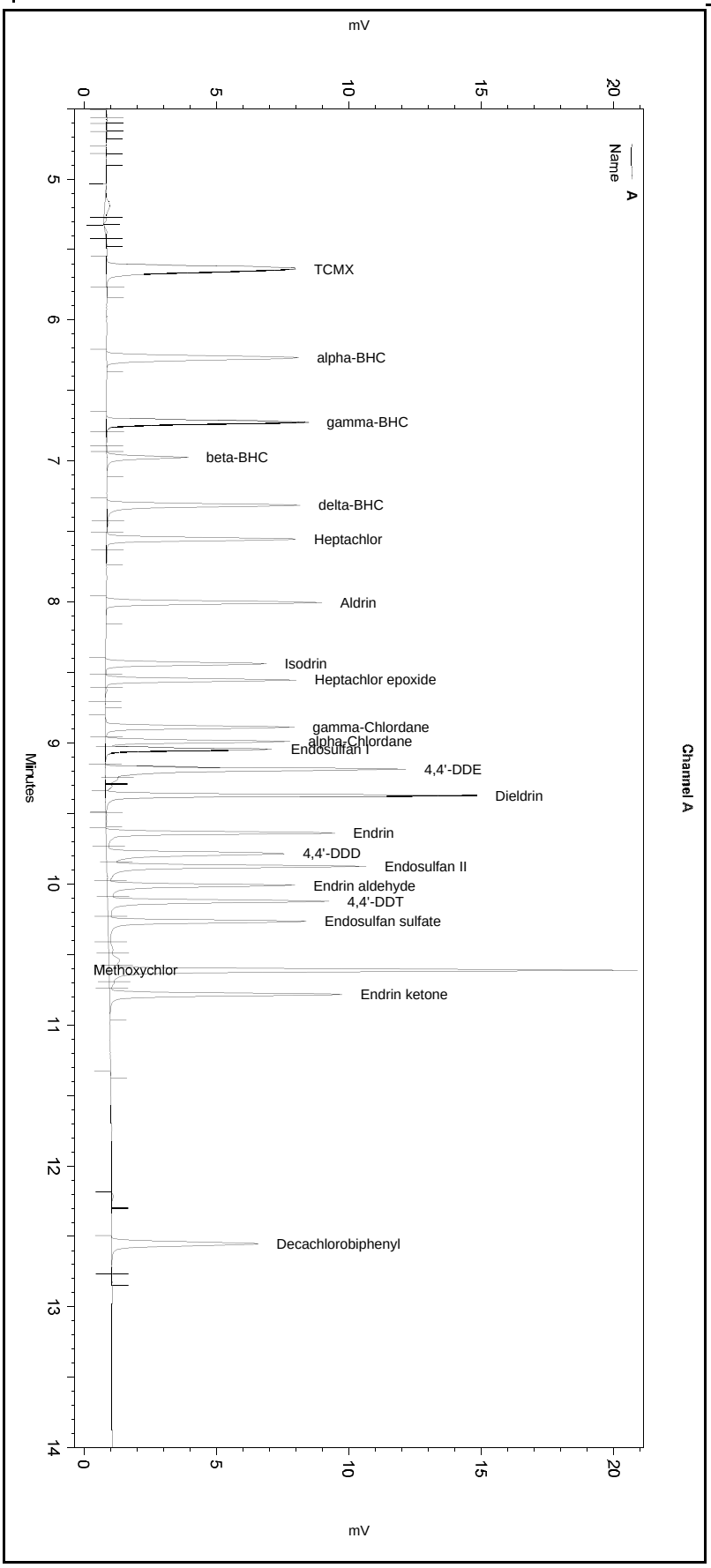
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	21045	20.000 CAL
alpha-BHC	5.433	5.433	17400	10.000 CAL
gamma-BHC	5.853	5.853	16100	10.000 CAL
beta-BHC	5.940	5.940	5339	10.000 CAL
delta-BHC	6.287	6.287	14528	10.000 CAL
Heptachlor	6.373	6.373	13949	10.000 CAL
Aldrin	6.753	6.753	14660	10.000 CAL
Isodrin	7.207	7.207	11253	10.000 CAL
Heptachlor epoxide	7.393	7.393	12019	10.000 CAL
gamma-Chlordane	7.600	7.607	12314	10.000 CAL
alpha-Chlordane	7.760	7.767	11773	10.000 CAL
Endosulfan I	7.840	7.840	10316	10.000 CAL
4,4'-DDE	7.920	7.920	23437	20.000 CAL
Dieldrin	8.140	8.140	25335	20.000 CAL
Endrin	8.480	8.480	17913	20.000 CAL
4,4'-DDD	8.560	8.560	17530	20.000 CAL
Endosulfan II	8.707	8.707	19198	20.000 CAL
4,4'-DDT	8.900	8.900	18914	20.000 CAL
Endrin aldehyde	9.060	9.060	14770	20.000 CAL
Endosulfan sulfate	9.340	9.347	14896	20.000 CAL
Methoxychlor	9.580	9.580	57003	100.000 CAL
Endrin ketone	9.880	9.880	28182	20.000 CAL
Decachlorobiphenyl	10.980	10.973	10511	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/16/2012 2:23:59 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

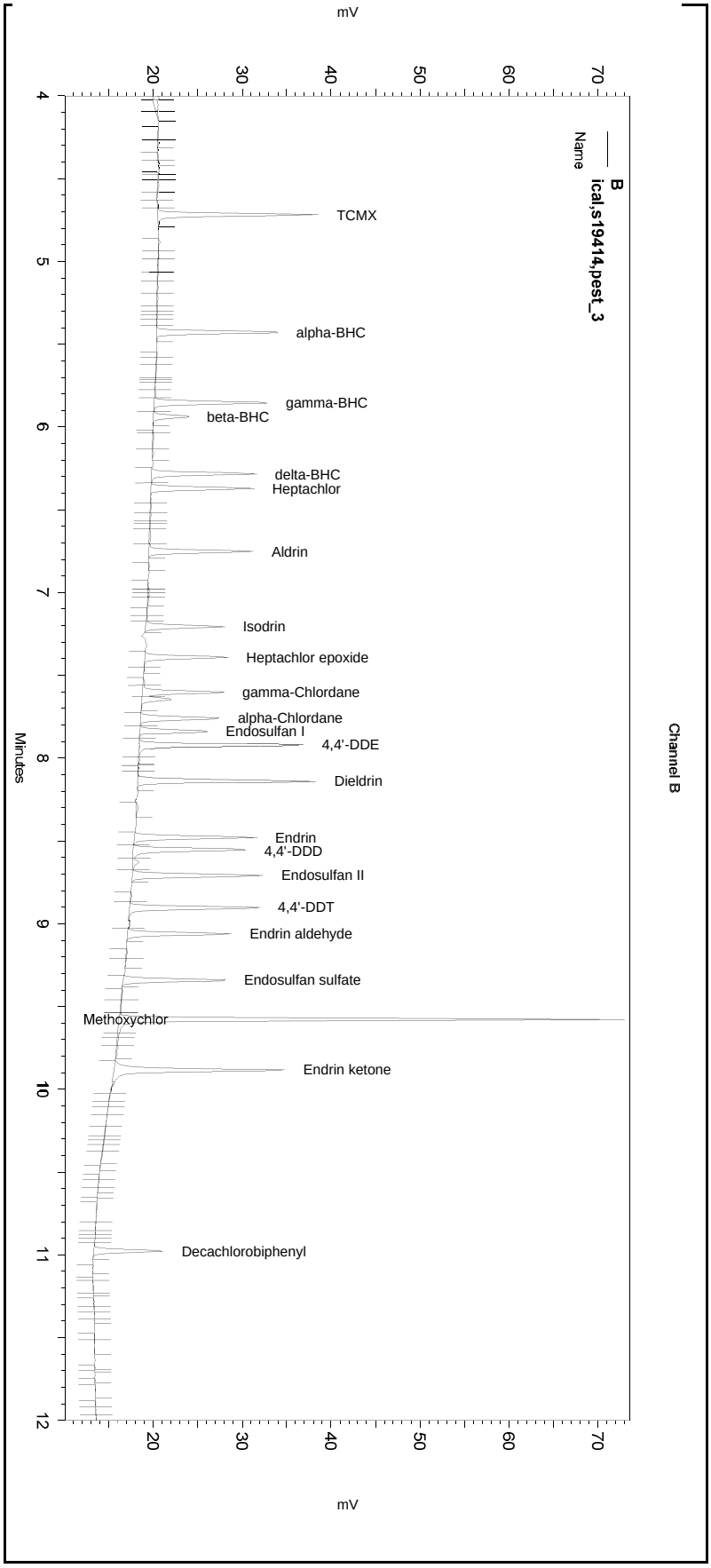
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.935	0	0
Yes	Manual Baseline	9.144	9.592	0
Yes	Manual Peak	9.487	9.601	0
Yes	Split Peak	9.491	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/16/2012 2:23:59 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.799	0	0
Yes	Reset Baseline	5.484	0	0
Yes	Reset Baseline	7.238	0	0
Yes	Reset Baseline	7.283	0	0
Yes	Reset Baseline	8.191	0	0
Yes	Reset Baseline	8.387	0	0
Yes	Reset Baseline	8.756	0	0
Yes	Reset Baseline	9.285	0	0
Yes	Reset Baseline	9.816	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/15/2012 1:21:43 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	21939	13.245
alpha-BHC	6.267	6.270	15926	6.531
gamma-BHC	6.727	6.733	14421	6.555
beta-BHC	6.973	6.980	5546	6.296
delta-BHC	7.313	7.320	12737	6.402
Heptachlor	7.553	7.560	11986	6.127
Aldrin	8.007	8.013	12614	6.409
Isodrin	8.440	8.447	9577	6.248
Heptachlor epoxide	8.553	8.560	10807	6.050
gamma-Chlordane	8.887	8.893	10635	6.458
alpha-Chlordane	8.987	8.993	9996	6.347
Endosulfan I	9.047	9.053	9237	6.191
4,4'-DDE	9.187	9.193	18804	12.496
Dieldrin	9.373	9.380	19051	12.423
Endrin	9.640	9.647	12737	11.851
4,4'-DDD	9.787	9.787	13646	12.490
Endosulfan II	9.873	9.880	15746	12.971
Endrin aldehyde	10.013	10.027	11820	12.619
4,4'-DDT	10.127	10.133	13820	12.183
Endosulfan sulfate	10.267	10.280	12369	11.886
Methoxychlor	10.613	10.620	27548	58.416
Endrin ketone	10.787	10.793	14239	13.184
Decachlorobiphenyl	12.553	12.567	11538	12.989

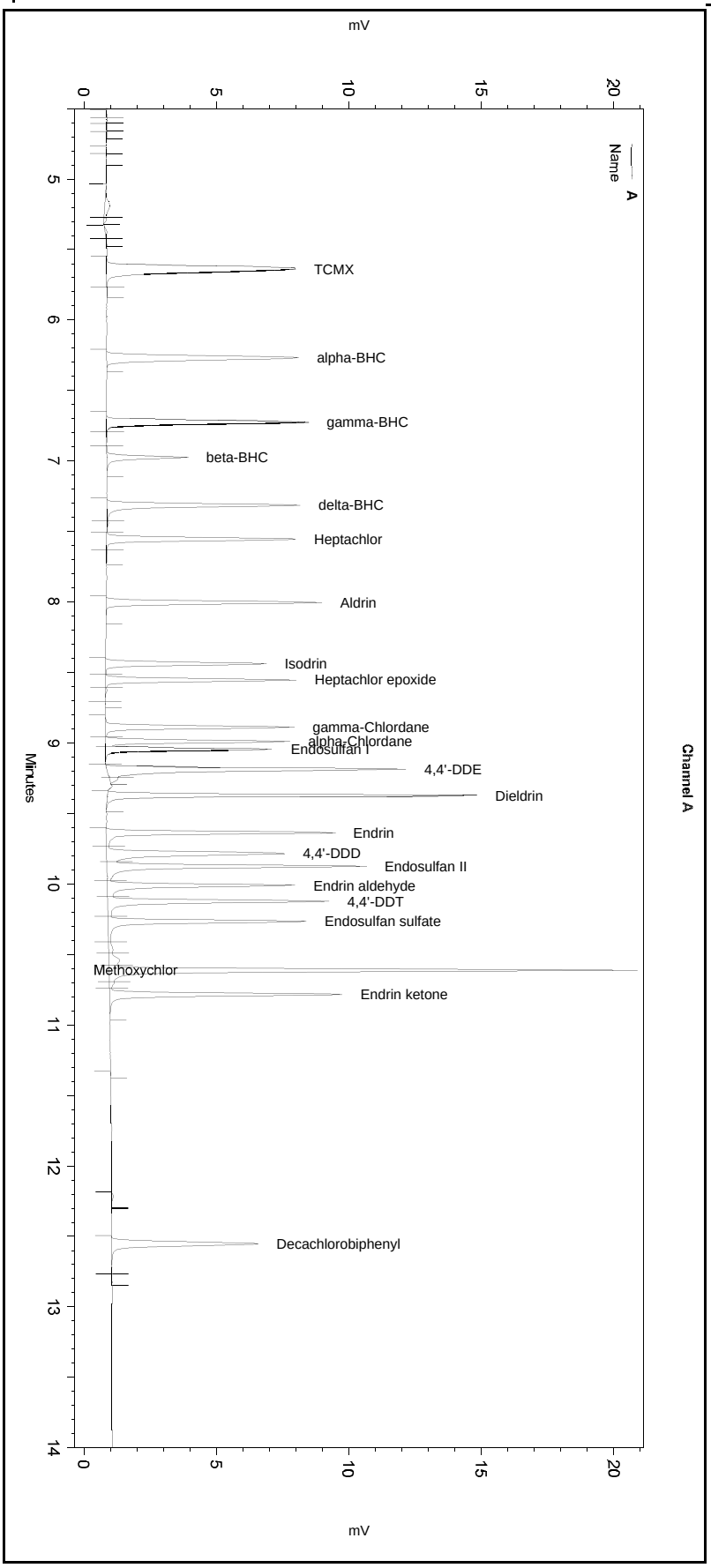
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	21872	13.921
alpha-BHC	5.433	5.433	19158	10.225
gamma-BHC	5.853	5.853	16516	9.651
beta-BHC	5.940	5.940	5477	7.643
delta-BHC	6.287	6.287	14528	8.906
Heptachlor	6.373	6.373	13949	8.309
Aldrin	6.753	6.753	14660	8.747
Isodrin	7.207	7.207	12119	12.366
Heptachlor epoxide	7.393	7.393	15438	8.992
gamma-Chlordane	7.600	7.607	14552	9.542
alpha-Chlordane	7.760	7.767	14678	9.414
Endosulfan I	7.840	7.840	13167	8.739
4,4'-DDE	7.920	7.920	28199	21.749
Dieldrin	8.140	8.140	31133	20.333
Endrin	8.480	8.480	22368	22.407
4,4'-DDD	8.560	8.560	22073	22.318
Endosulfan II	8.707	8.707	26059	18.490
4,4'-DDT	8.900	8.900	29197	22.232
Endrin aldehyde	9.060	9.060	21438	23.405
Endosulfan sulfate	9.340	9.347	22343	23.292
Methoxychlor	9.580	9.580	63040	79.552
Endrin ketone	9.880	9.880	36661	21.688
Decachlorobiphenyl	10.980	10.973	10511	16.699

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/15/2012 1:21:43 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

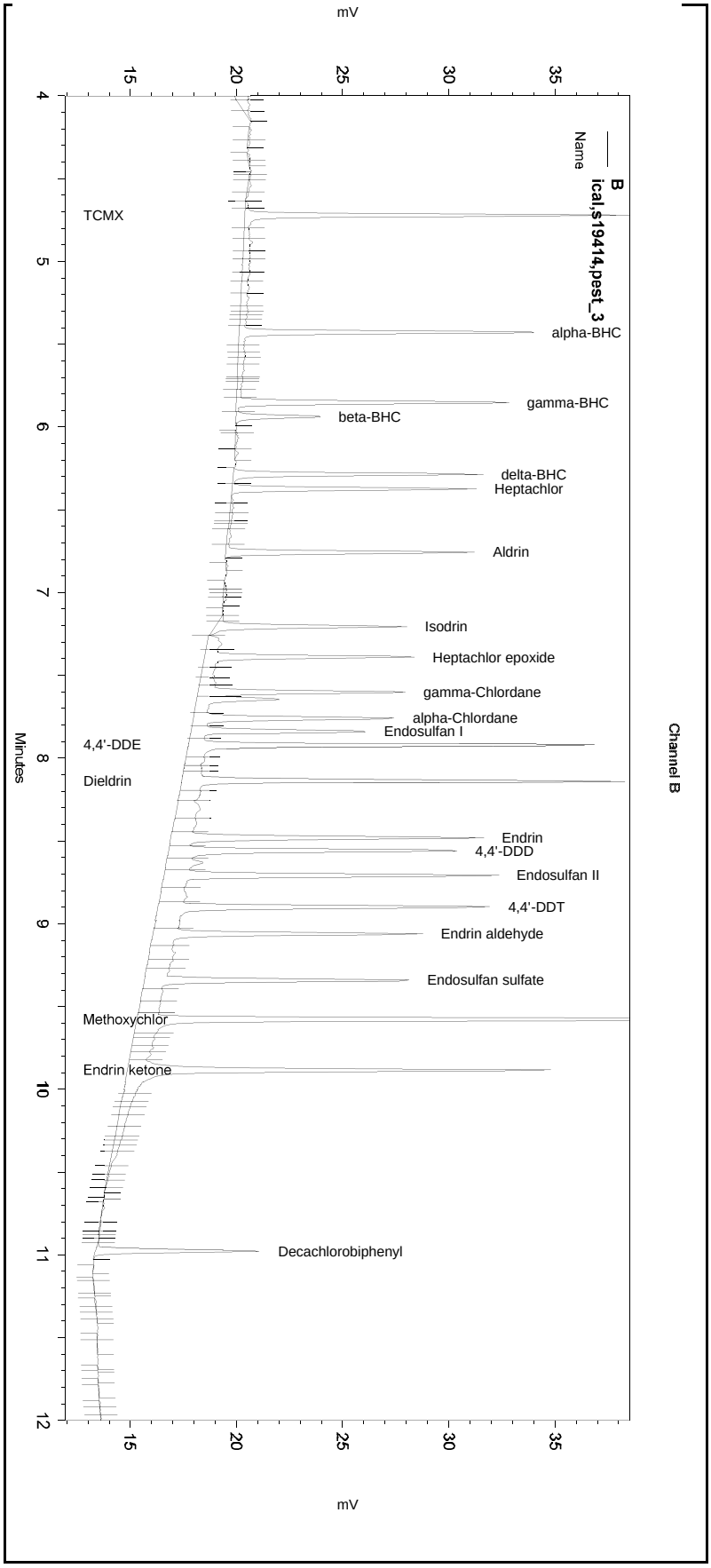
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009**
Sample Name: **ical,s19414,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:22:11 AM
Analysis Date: 8/15/2012 1:21:43 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/16/2012 2:24:06 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	43543	40.000 CAL
alpha-BHC	6.273	6.270	32138	20.000 CAL
gamma-BHC	6.733	6.733	28995	20.000 CAL
beta-BHC	6.980	6.980	11073	20.000 CAL
delta-BHC	7.320	7.320	25561	20.000 CAL
Heptachlor	7.553	7.560	24154	20.000 CAL
Aldrin	8.013	8.013	25595	20.000 CAL
Isodrin	8.447	8.447	19133	20.000 CAL
Heptachlor epoxide	8.560	8.560	21487	20.000 CAL
gamma-Chlordane	8.893	8.893	21229	20.000 CAL
alpha-Chlordane	8.993	8.993	19860	20.000 CAL
Endosulfan I	9.053	9.053	18573	20.000 CAL
4,4'-DDE	9.193	9.193	40345	40.000 CAL
Dieldrin	9.380	9.380	40140	40.000 CAL
Endrin	9.640	9.647	26194	40.000 CAL
4,4'-DDD	9.787	9.787	27906	40.000 CAL
Endosulfan II	9.880	9.880	32026	40.000 CAL
Endrin aldehyde	10.020	10.027	23982	40.000 CAL
4,4'-DDT	10.133	10.133	29415	40.000 CAL
Endosulfan sulfate	10.273	10.280	25402	40.000 CAL
Methoxychlor	10.620	10.620	58206	200.000 CAL
Endrin ketone	10.787	10.793	29611	40.000 CAL
Decachlorobiphenyl	12.553	12.567	23101	40.000 CAL

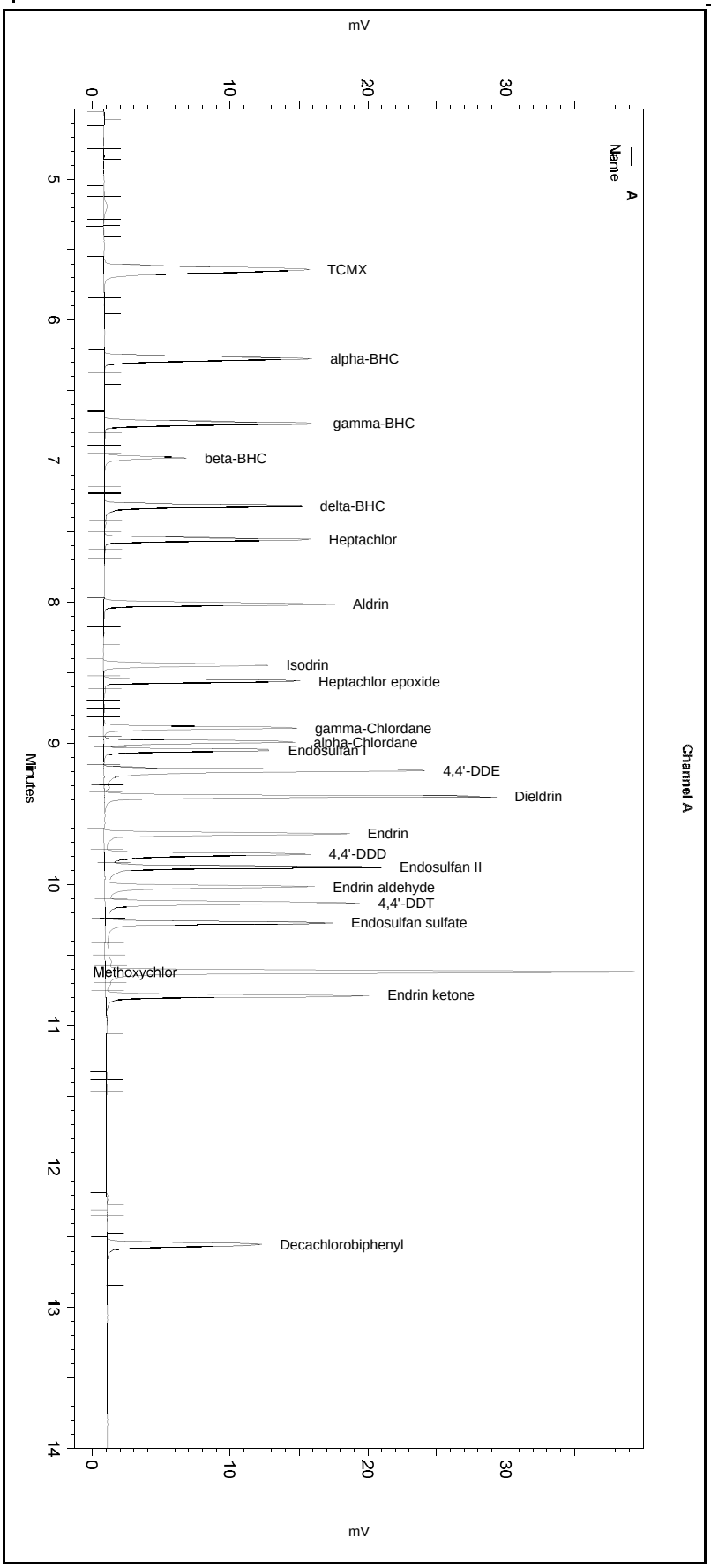
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.727	4.720	94837	40.000 CAL
alpha-BHC	5.433	5.433	65055	20.000 CAL
gamma-BHC	5.853	5.853	53223	20.000 CAL
beta-BHC	5.940	5.940	14885	20.000 CAL
delta-BHC	6.293	6.287	46085	20.000 CAL
Heptachlor	6.380	6.373	44615	20.000 CAL
Aldrin	6.760	6.753	44204	20.000 CAL
Isodrin	7.213	7.207	31400	20.000 CAL
Heptachlor epoxide	7.393	7.393	36218	20.000 CAL
gamma-Chlordane	7.607	7.607	34355	20.000 CAL
alpha-Chlordane	7.767	7.767	33501	20.000 CAL
Endosulfan I	7.840	7.840	29714	20.000 CAL
4,4'-DDE	7.927	7.920	145597	40.000 CAL
Dieldrin	8.147	8.140	179159	40.000 CAL
Endrin	8.487	8.480	69742	40.000 CAL
4,4'-DDD	8.560	8.560	69281	40.000 CAL
Endosulfan II	8.713	8.707	83907	40.000 CAL
4,4'-DDT	8.907	8.900	90608	40.000 CAL
Endrin aldehyde	9.067	9.060	53408	40.000 CAL
Endosulfan sulfate	9.347	9.347	51943	40.000 CAL
Methoxychlor	9.587	9.580	363585	200.000 CAL
Endrin ketone	9.887	9.880	168733	40.000 CAL
Decachlorobiphenyl	10.980	10.973	29586	40.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/16/2012 2:24:06 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

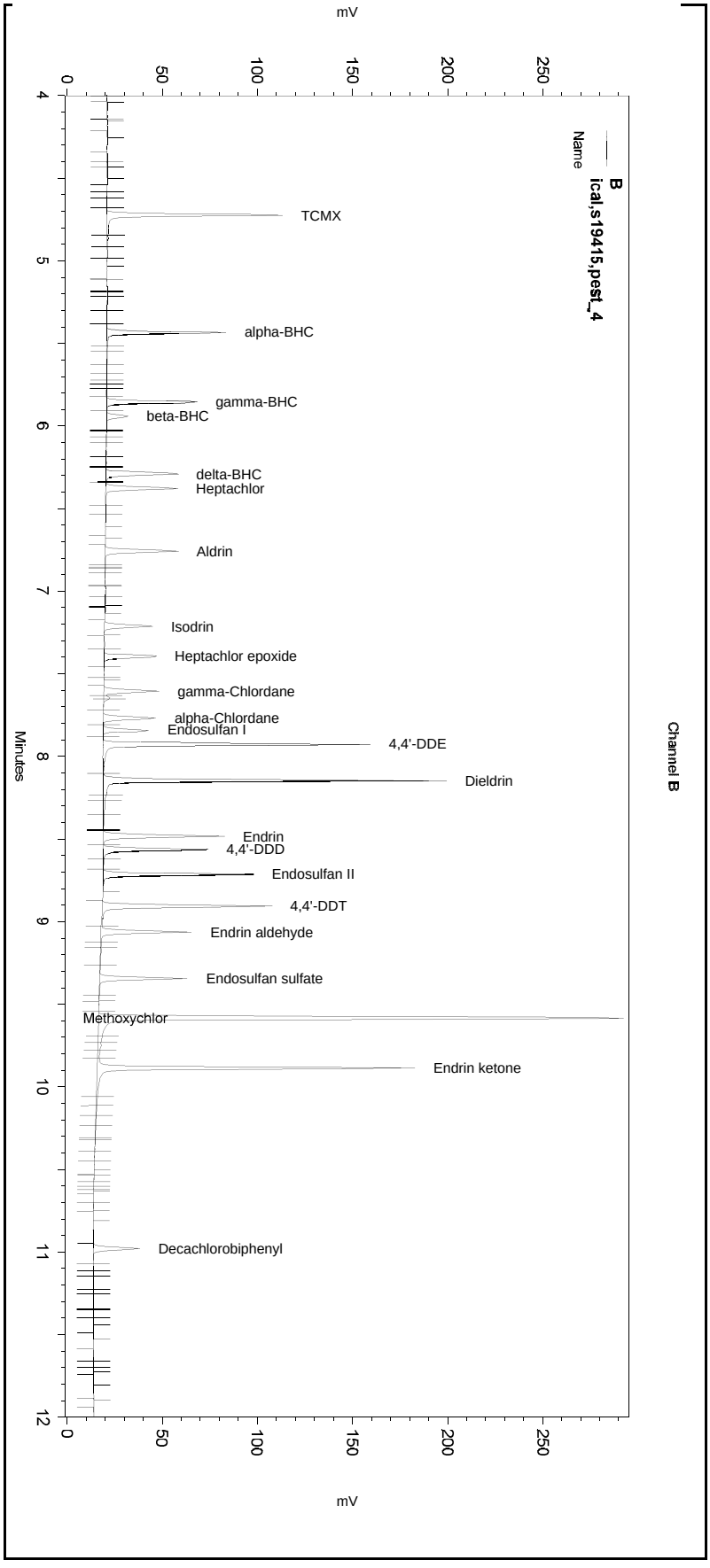
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/16/2012 2:24:06 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.633	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/15/2012 1:21:47 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.640	5.640	43543	26.287
alpha-BHC	6.273	6.270	32138	13.179
gamma-BHC	6.733	6.733	28995	13.179
beta-BHC	6.980	6.980	11073	12.571
delta-BHC	7.320	7.320	25561	12.848
Heptachlor	7.553	7.560	24154	12.347
Aldrin	8.013	8.013	25595	13.004
Isodrin	8.447	8.447	19133	12.482
Heptachlor epoxide	8.560	8.560	21487	12.028
gamma-Chlordane	8.893	8.893	21229	12.891
alpha-Chlordane	8.993	8.993	19860	12.610
Endosulfan I	9.053	9.053	18573	12.449
4,4'-DDE	9.193	9.193	40345	26.811
Dieldrin	9.380	9.380	40140	26.175
Endrin	9.640	9.647	26194	24.373
4,4'-DDD	9.787	9.787	27906	25.543
Endosulfan II	9.880	9.880	32026	26.383
Endrin aldehyde	10.020	10.027	23982	25.602
4,4'-DDT	10.133	10.133	29415	25.931
Endosulfan sulfate	10.273	10.280	25402	24.410
Methoxychlor	10.620	10.620	58206	123.426
Endrin ketone	10.787	10.793	29611	27.418
Decachlorobiphenyl	12.553	12.567	23101	26.007

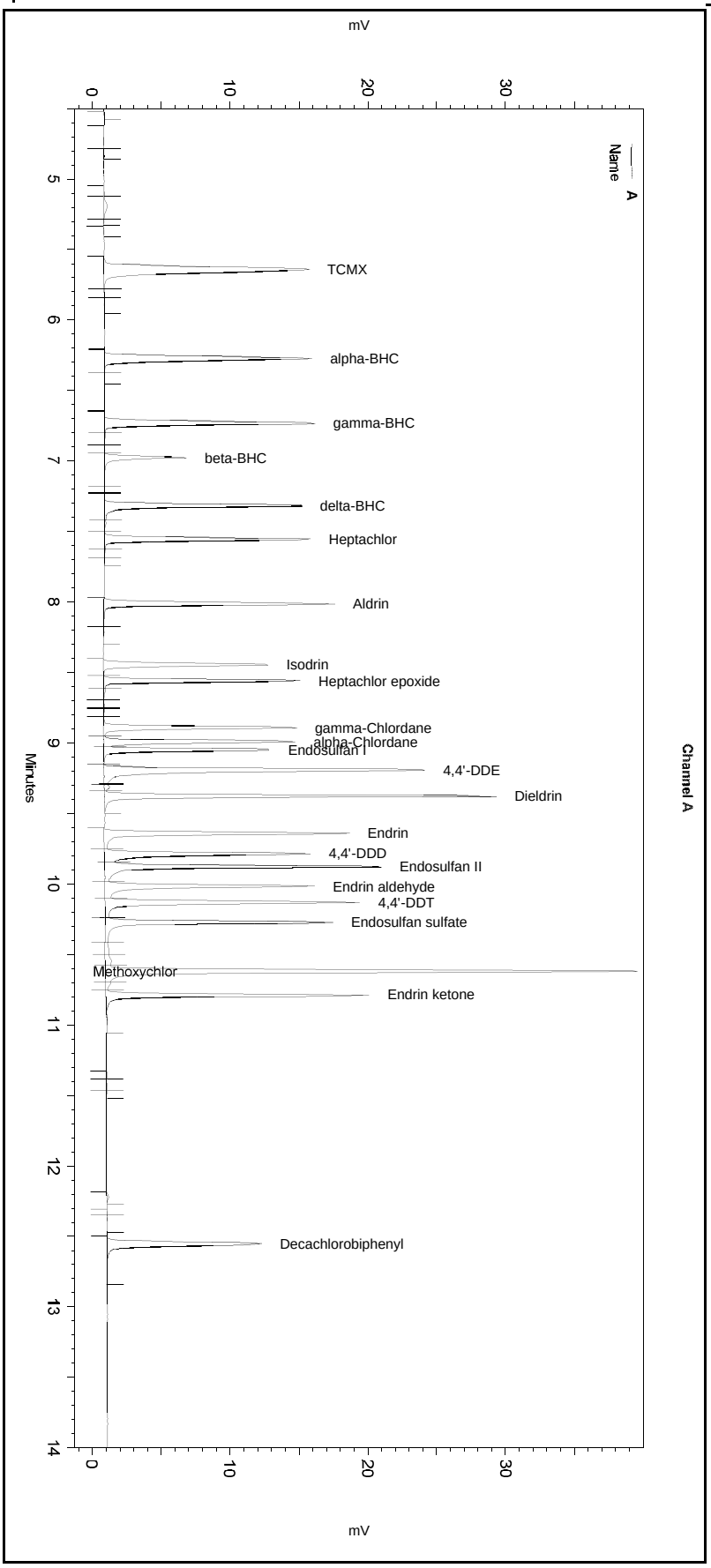
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.727	4.720	94837	40.633
alpha-BHC	5.433	5.433	65055	19.841
gamma-BHC	5.853	5.853	53223	20.265
beta-BHC	5.940	5.940	14885	19.385
delta-BHC	6.293	6.287	46085	20.407
Heptachlor	6.380	6.373	44615	19.279
Aldrin	6.760	6.753	44204	19.873
Isodrin	7.213	7.207	31400	21.045
Heptachlor epoxide	7.393	7.393	36218	20.331
gamma-Chlordane	7.607	7.607	37402	24.526
alpha-Chlordane	7.767	7.767	33501	21.486
Endosulfan I	7.840	7.840	29714	19.720
4,4'-DDE	7.927	7.920	145597	47.679
Dieldrin	8.147	8.140	179159	47.165
Endrin	8.487	8.480	69742	45.212
4,4'-DDD	8.560	8.560	69281	42.599
Endosulfan II	8.713	8.707	83907	39.309
4,4'-DDT	8.907	8.900	90608	44.134
Endrin aldehyde	9.067	9.060	53408	39.513
Endosulfan sulfate	9.347	9.347	51943	40.025
Methoxychlor	9.587	9.580	363585	256.373
Endrin ketone	9.887	9.880	168733	48.460
Decachlorobiphenyl	10.980	10.973	29586	47.003

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/15/2012 1:21:47 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

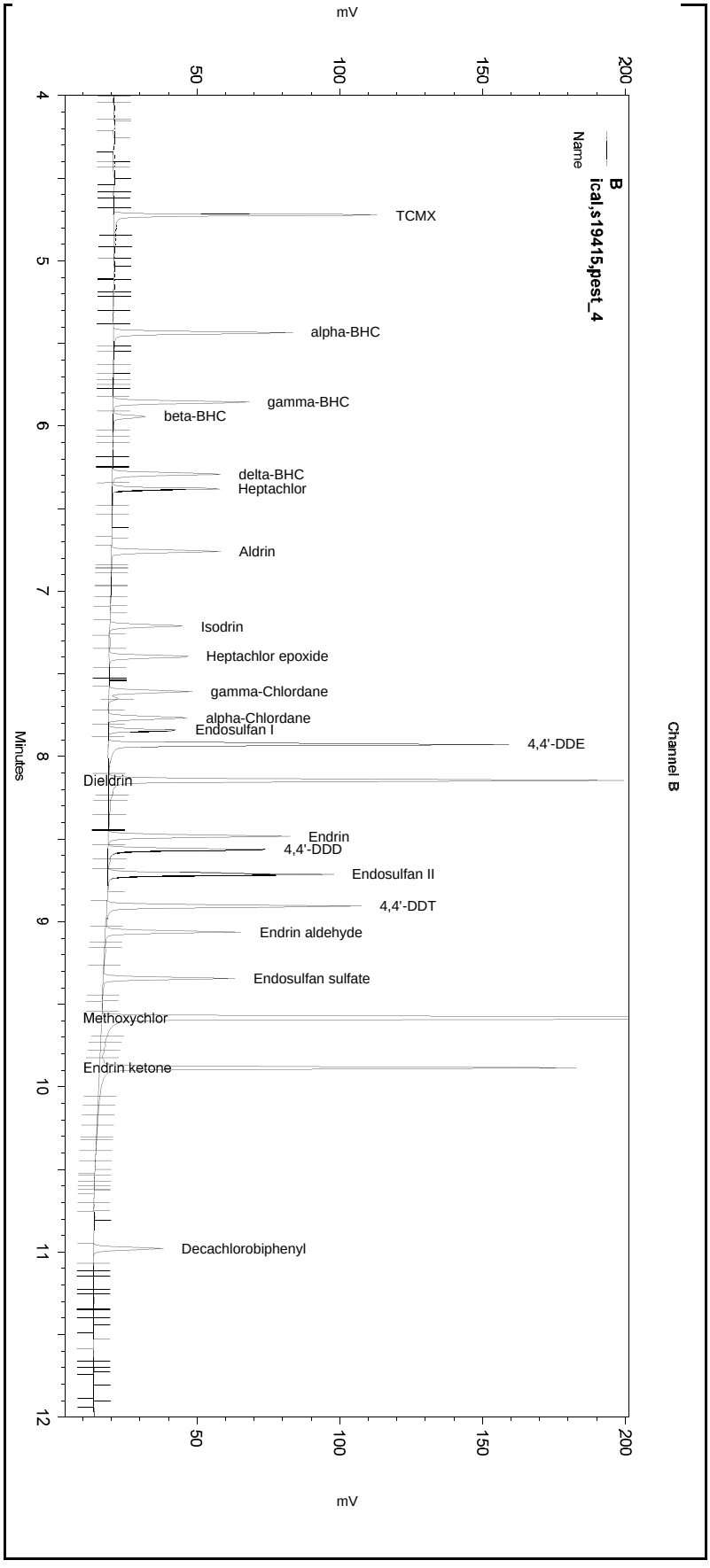
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010**
Sample Name: **ical,s19415,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 10:43:52 AM
Analysis Date: 8/15/2012 1:21:47 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/16/2012 2:24:13 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	51057	50.000 CAL
alpha-BHC	6.260	6.270	37465	25.000 CAL
gamma-BHC	6.720	6.733	33184	25.000 CAL
beta-BHC	6.973	6.980	12222	25.000 CAL
delta-BHC	7.313	7.320	27455	25.000 CAL
Heptachlor	7.553	7.560	27859	25.000 CAL
Aldrin	8.007	8.013	28989	25.000 CAL
Isodrin	8.440	8.447	21603	25.000 CAL
Heptachlor epoxide	8.553	8.560	23499	25.000 CAL
gamma-Chlordane	8.887	8.893	22906	25.000 CAL
alpha-Chlordane	8.993	8.993	21457	25.000 CAL
Endosulfan I	9.047	9.053	19701	25.000 CAL
4,4'-DDE	9.187	9.193	41445	50.000 CAL
Dieldrin	9.380	9.380	42242	50.000 CAL
Endrin	9.640	9.647	28782	50.000 CAL
4,4'-DDD	9.787	9.787	26713	50.000 CAL
Endosulfan II	9.880	9.880	30935	50.000 CAL
Endrin aldehyde	10.020	10.027	22076	50.000 CAL
4,4'-DDT	10.133	10.133	28511	50.000 CAL
Endosulfan sulfate	10.273	10.280	24846	50.000 CAL
Methoxychlor	10.620	10.620	55236	250.000 CAL
Endrin ketone	10.787	10.793	27455	50.000 CAL
Decachlorobiphenyl	12.560	12.567	22224	50.000 CAL

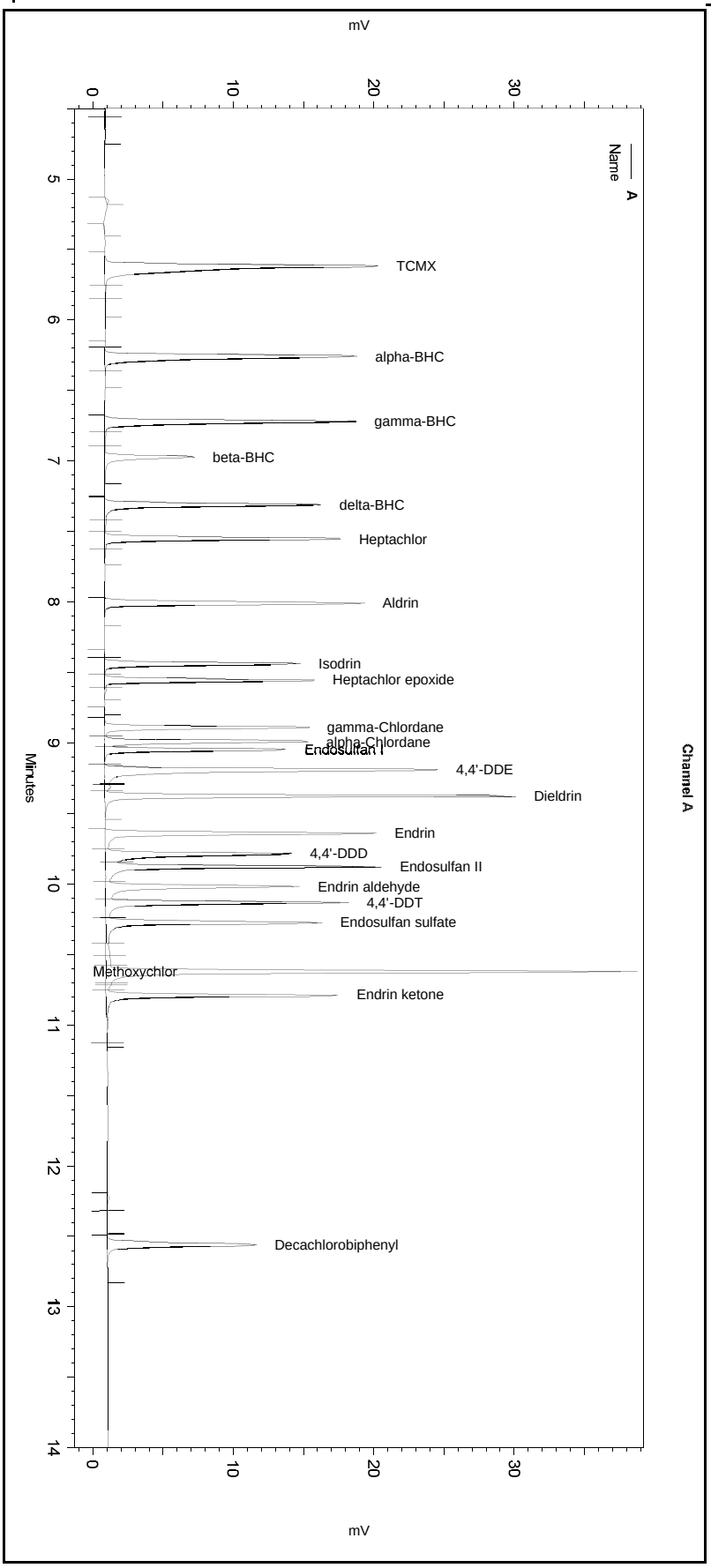
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	128215	50.000 CAL
alpha-BHC	5.433	5.433	79940	25.000 CAL
gamma-BHC	5.853	5.853	62869	25.000 CAL
beta-BHC	5.940	5.940	16239	25.000 CAL
delta-BHC	6.287	6.287	52536	25.000 CAL
Heptachlor	6.373	6.373	50843	25.000 CAL
Aldrin	6.760	6.753	49964	25.000 CAL
Isodrin	7.213	7.207	34272	25.000 CAL
Heptachlor epoxide	7.393	7.393	41088	25.000 CAL
gamma-Chlordane	7.607	7.607	39566	25.000 CAL
alpha-Chlordane	7.767	7.767	36589	25.000 CAL
Endosulfan I	7.840	7.840	31908	25.000 CAL
4,4'-DDE	7.927	7.920	173934	50.000 CAL
Dieldrin	8.147	8.140	207133	50.000 CAL
Endrin	8.487	8.480	79388	50.000 CAL
4,4'-DDD	8.560	8.560	81452	50.000 CAL
Endosulfan II	8.713	8.707	103377	50.000 CAL
4,4'-DDT	8.907	8.900	110072	50.000 CAL
Endrin aldehyde	9.067	9.060	63705	50.000 CAL
Endosulfan sulfate	9.347	9.347	56976	50.000 CAL
Methoxychlor	9.587	9.580	379128	250.000 CAL
Endrin ketone	9.893	9.880	190002	50.000 CAL
Decachlorobiphenyl	10.980	10.973	31419	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/16/2012 2:24:13 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

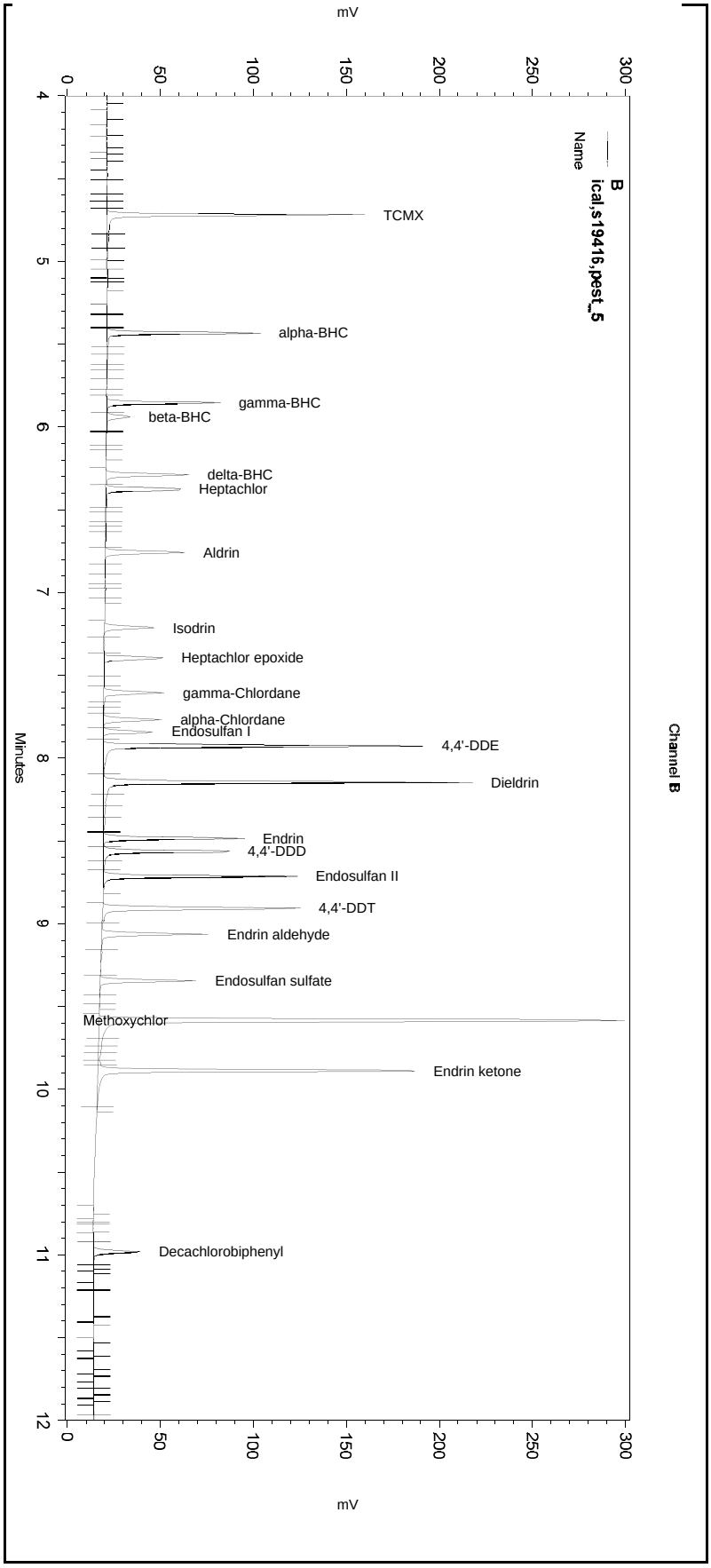
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	9.293	0	0
Yes	Split Peak	10.7	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/16/2012 2:24:13 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.085	0	0
Yes	Split Peak	9.851	0	0
Yes	Reset Baseline	10.142	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/15/2012 1:21:51 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	51057	30.824
alpha-BHC	6.260	6.270	37465	15.364
gamma-BHC	6.720	6.733	33184	15.083
beta-BHC	6.973	6.980	12222	13.876
delta-BHC	7.313	7.320	27455	13.800
Heptachlor	7.553	7.560	27859	14.241
Aldrin	8.007	8.013	28989	14.728
Isodrin	8.440	8.447	21603	14.093
Heptachlor epoxide	8.553	8.560	23499	13.155
gamma-Chlordane	8.887	8.893	22906	13.909
alpha-Chlordane	8.993	8.993	21457	13.624
Endosulfan I	9.047	9.053	19701	13.205
4,4'-DDE	9.187	9.193	42337	28.135
Dieldrin	9.380	9.380	42242	27.546
Endrin	9.640	9.647	28782	26.781
4,4'-DDD	9.787	9.787	26713	24.451
Endosulfan II	9.880	9.880	30935	25.484
Endrin aldehyde	10.020	10.027	22076	23.568
4,4'-DDT	10.133	10.133	28511	25.134
Endosulfan sulfate	10.273	10.280	24846	23.876
Methoxychlor	10.620	10.620	55564	117.823
Endrin ketone	10.787	10.793	27455	25.421
Decachlorobiphenyl	12.560	12.567	22224	25.020

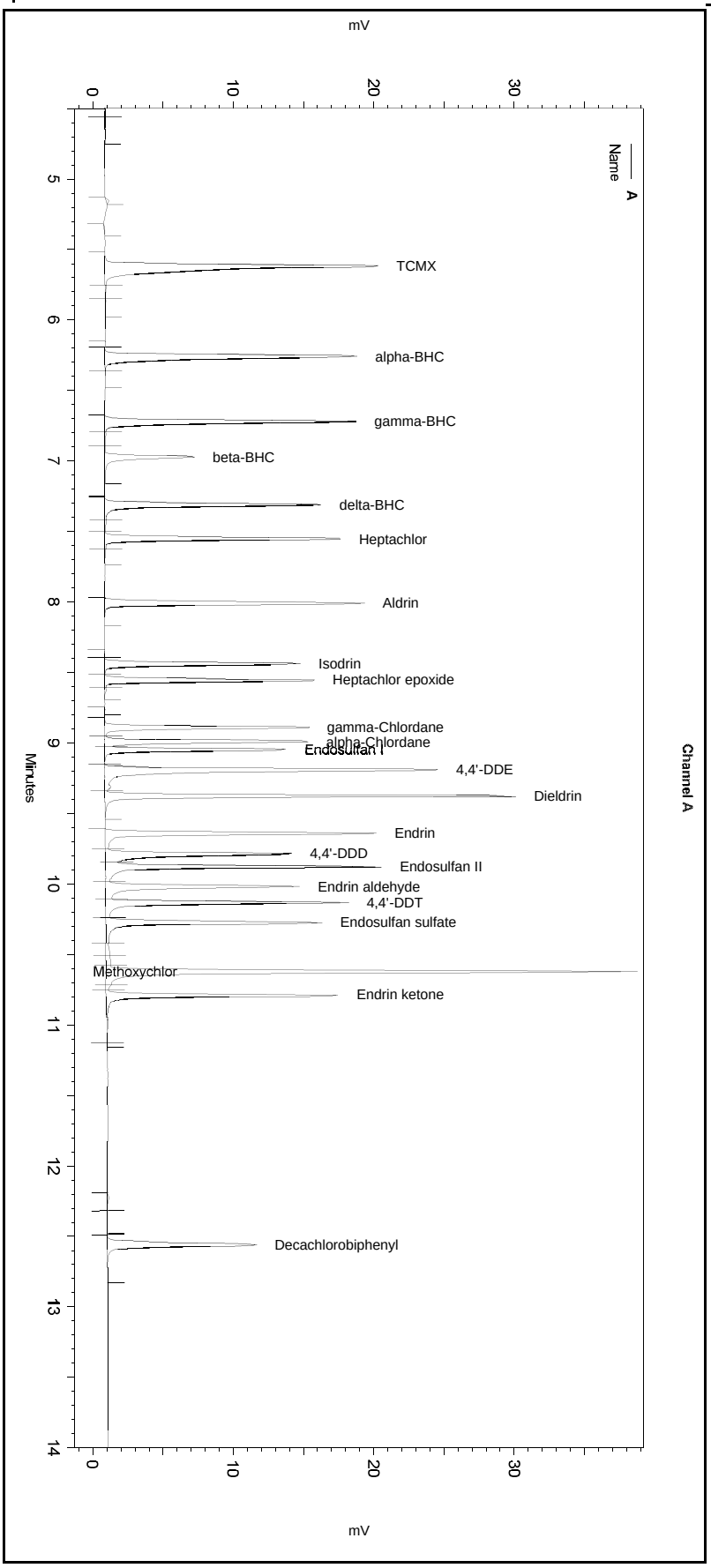
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	128215	50.501
alpha-BHC	5.433	5.433	79940	22.068
gamma-BHC	5.853	5.853	62869	22.315
beta-BHC	5.940	5.940	16239	21.075
delta-BHC	6.287	6.287	52666	22.262
Heptachlor	6.373	6.373	51464	21.172
Aldrin	6.760	6.753	51347	21.971
Isodrin	7.213	7.207	35985	22.579
Heptachlor epoxide	7.393	7.393	41088	22.988
gamma-Chlordane	7.607	7.607	39566	25.945
alpha-Chlordane	7.767	7.767	36589	23.467
Endosulfan I	7.840	7.840	31908	21.176
4,4'-DDE	7.927	7.920	173934	51.868
Dieldrin	8.147	8.140	207133	50.535
Endrin	8.487	8.480	79388	48.668
4,4'-DDD	8.560	8.560	81452	46.408
Endosulfan II	8.713	8.707	103377	44.560
4,4'-DDT	8.907	8.900	110151	49.385
Endrin aldehyde	9.067	9.060	64032	43.594
Endosulfan sulfate	9.347	9.347	57561	42.561
Methoxychlor	9.587	9.580	380785	263.955
Endrin ketone	9.893	9.880	197868	52.397
Decachlorobiphenyl	10.980	10.973	31419	49.915

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/15/2012 1:21:51 PM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes
==========

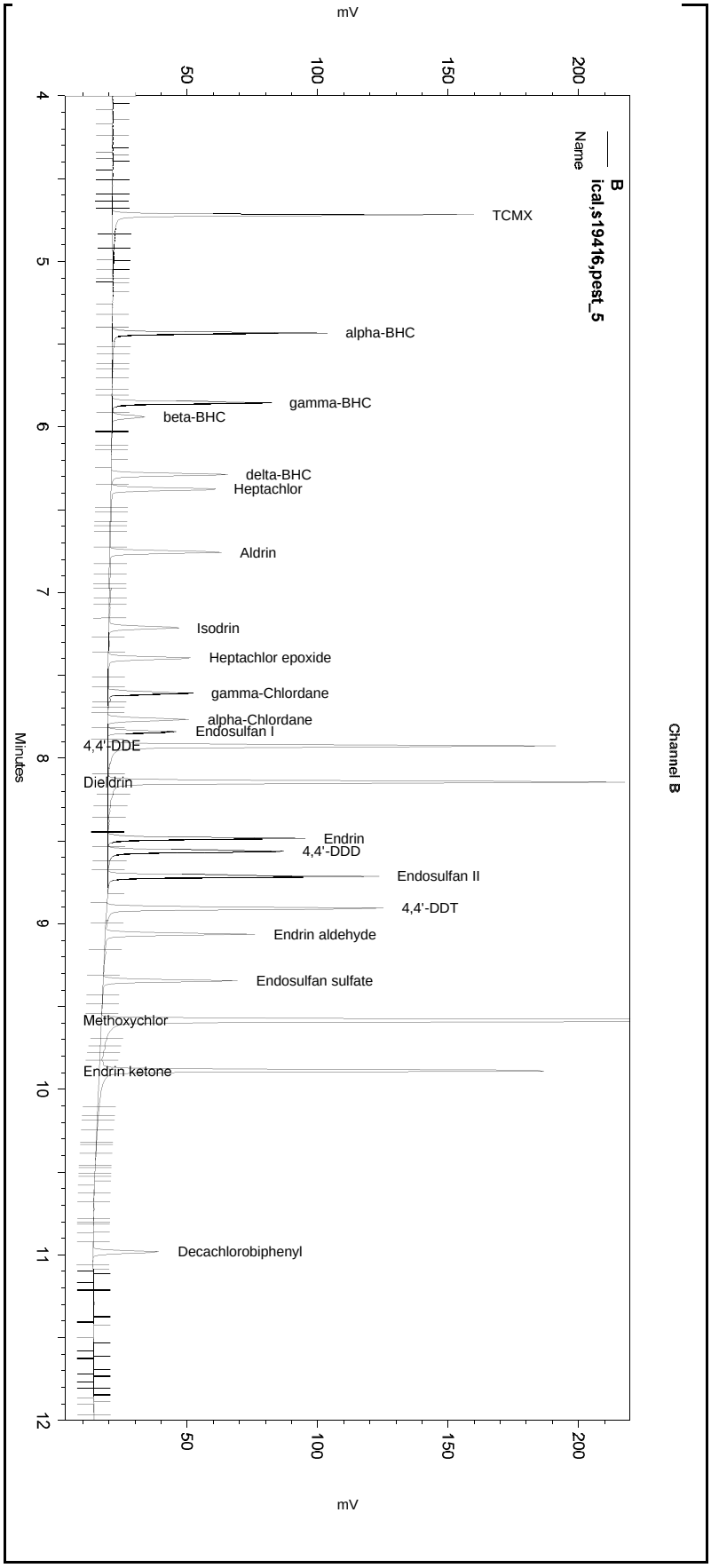
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011**
Sample Name: **ical,s19416,pest_5**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:05:44 AM
Analysis Date: 8/15/2012 1:21:51 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/16/2012 2:24:20 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	116251	100.000 CAL
alpha-BHC	6.260	6.270	86740	50.000 CAL
gamma-BHC	6.720	6.733	76931	50.000 CAL
beta-BHC	6.973	6.980	27433	50.000 CAL
delta-BHC	7.313	7.320	65138	50.000 CAL
Heptachlor	7.553	7.560	64231	50.000 CAL
Aldrin	8.007	8.013	65699	50.000 CAL
Isodrin	8.440	8.447	49273	50.000 CAL
Heptachlor epoxide	8.560	8.560	54346	50.000 CAL
gamma-Chlordane	8.893	8.893	53173	50.000 CAL
alpha-Chlordane	8.993	8.993	50104	50.000 CAL
Endosulfan I	9.047	9.053	46513	50.000 CAL
4,4'-DDE	9.193	9.193	92161	100.000 CAL
Dieldrin	9.380	9.380	90556	100.000 CAL
Endrin	9.640	9.647	66504	100.000 CAL
4,4'-DDD	9.787	9.787	65236	100.000 CAL
Endosulfan II	9.880	9.880	70830	100.000 CAL
Endrin aldehyde	10.020	10.027	53478	100.000 CAL
4,4'-DDT	10.133	10.133	68948	100.000 CAL
Endosulfan sulfate	10.273	10.280	58314	100.000 CAL
Methoxychlor	10.620	10.620	111397	500.000 CAL
Endrin ketone	10.787	10.793	63748	100.000 CAL
Decachlorobiphenyl	12.560	12.567	46610	100.000 CAL

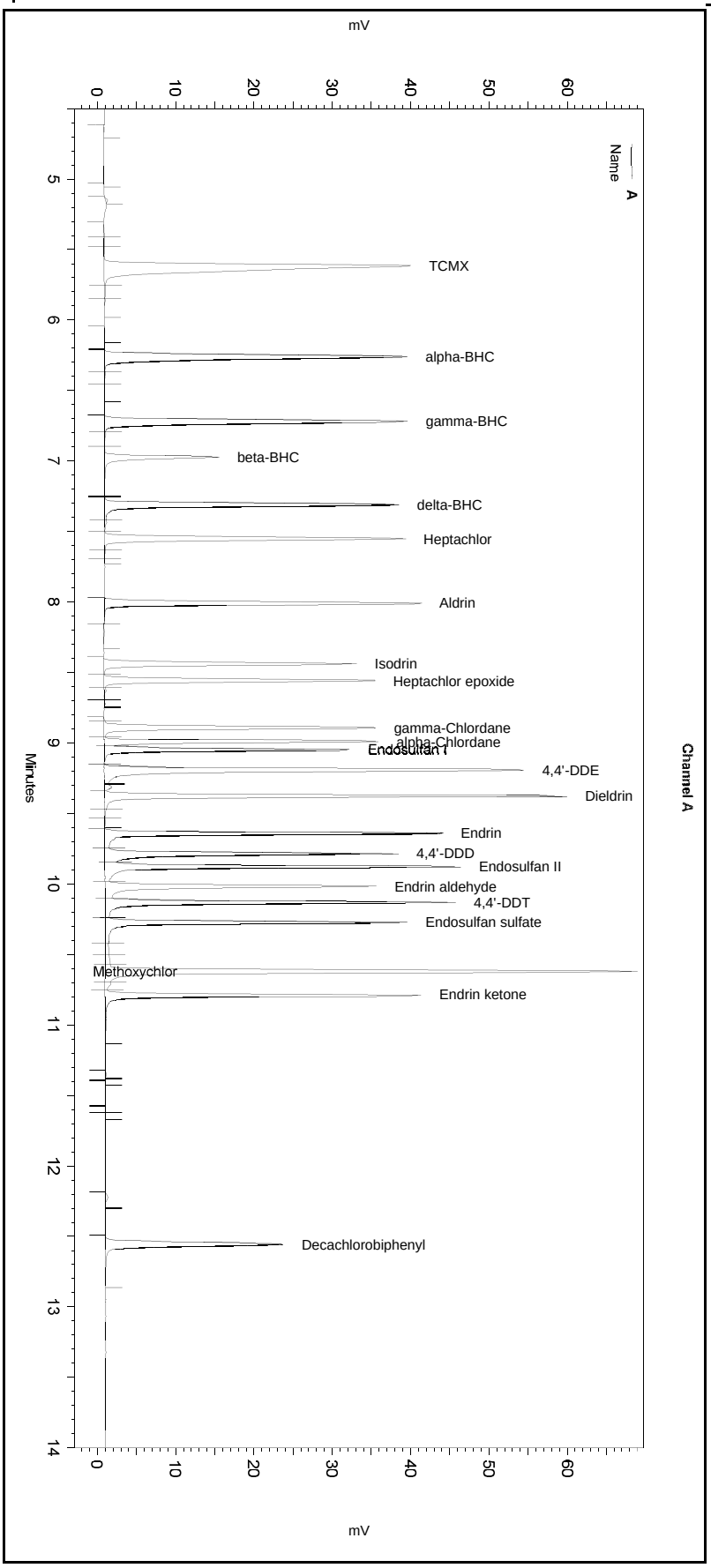
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.727	4.720	362047	100.000 CAL
alpha-BHC	5.433	5.433	335534	50.000 CAL
gamma-BHC	5.860	5.853	298499	50.000 CAL
beta-BHC	5.940	5.940	57241	50.000 CAL
delta-BHC	6.293	6.287	271864	50.000 CAL
Heptachlor	6.380	6.373	308440	50.000 CAL
Aldrin	6.760	6.753	290326	50.000 CAL
Isodrin	7.213	7.207	173474	50.000 CAL
Heptachlor epoxide	7.400	7.393	221727	50.000 CAL
gamma-Chlordane	7.607	7.607	210539	50.000 CAL
alpha-Chlordane	7.773	7.767	209681	50.000 CAL
Endosulfan I	7.847	7.840	193111	50.000 CAL
4,4'-DDE	7.927	7.920	493629	100.000 CAL
Dieldrin	8.147	8.140	498518	100.000 CAL
Endrin	8.487	8.480	367699	100.000 CAL
4,4'-DDD	8.567	8.560	442852	100.000 CAL
Endosulfan II	8.713	8.707	470778	100.000 CAL
4,4'-DDT	8.907	8.900	445212	100.000 CAL
Endrin aldehyde	9.067	9.060	385440	100.000 CAL
Endosulfan sulfate	9.353	9.347	355843	100.000 CAL
Methoxychlor	9.587	9.580	590978	500.000 CAL
Endrin ketone	9.887	9.880	436524	100.000 CAL
Decachlorobiphenyl	10.987	10.973	116446	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/16/2012 2:24:20 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

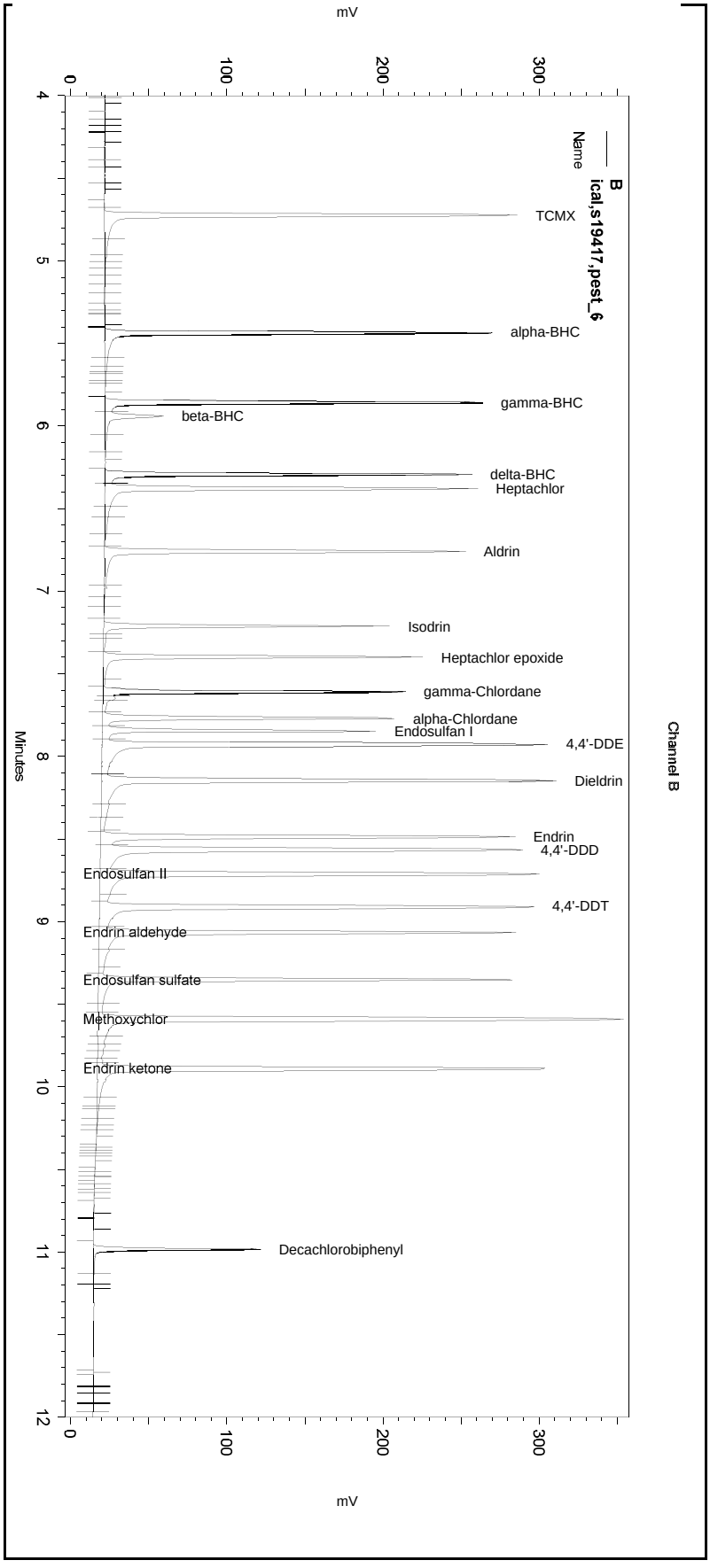
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	8.813	9.602	0
Yes	Split Peak	8.85	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/16/2012 2:24:20 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	7.167	10.299	0
Yes	Split Peak	7.26	0	0
Yes	Split Peak	7.632	0	0
Yes	Split Peak	9.855	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/15/2012 1:21:55 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	116251	70.182
alpha-BHC	6.260	6.270	86740	35.570
gamma-BHC	6.720	6.733	76931	34.967
beta-BHC	6.973	6.980	27433	31.145
delta-BHC	7.313	7.320	65138	32.740
Heptachlor	7.553	7.560	64231	32.834
Aldrin	8.007	8.013	65699	33.379
Isodrin	8.440	8.447	49273	32.145
Heptachlor epoxide	8.560	8.560	54346	30.423
gamma-Chlordane	8.893	8.893	53250	32.334
alpha-Chlordane	8.993	8.993	49998	31.746
Endosulfan I	9.047	9.053	46178	30.952
4,4'-DDE	9.193	9.193	89866	59.719
Dieldrin	9.380	9.380	88976	58.021
Endrin	9.640	9.647	66504	61.880
4,4'-DDD	9.787	9.787	65236	59.711
Endosulfan II	9.880	9.880	70830	58.349
Endrin aldehyde	10.020	10.027	53478	57.091
4,4'-DDT	10.133	10.133	68948	60.782
Endosulfan sulfate	10.273	10.280	58314	56.036
Methoxychlor	10.620	10.620	111397	236.217
Endrin ketone	10.787	10.793	63748	59.026
Decachlorobiphenyl	12.560	12.567	46610	52.473

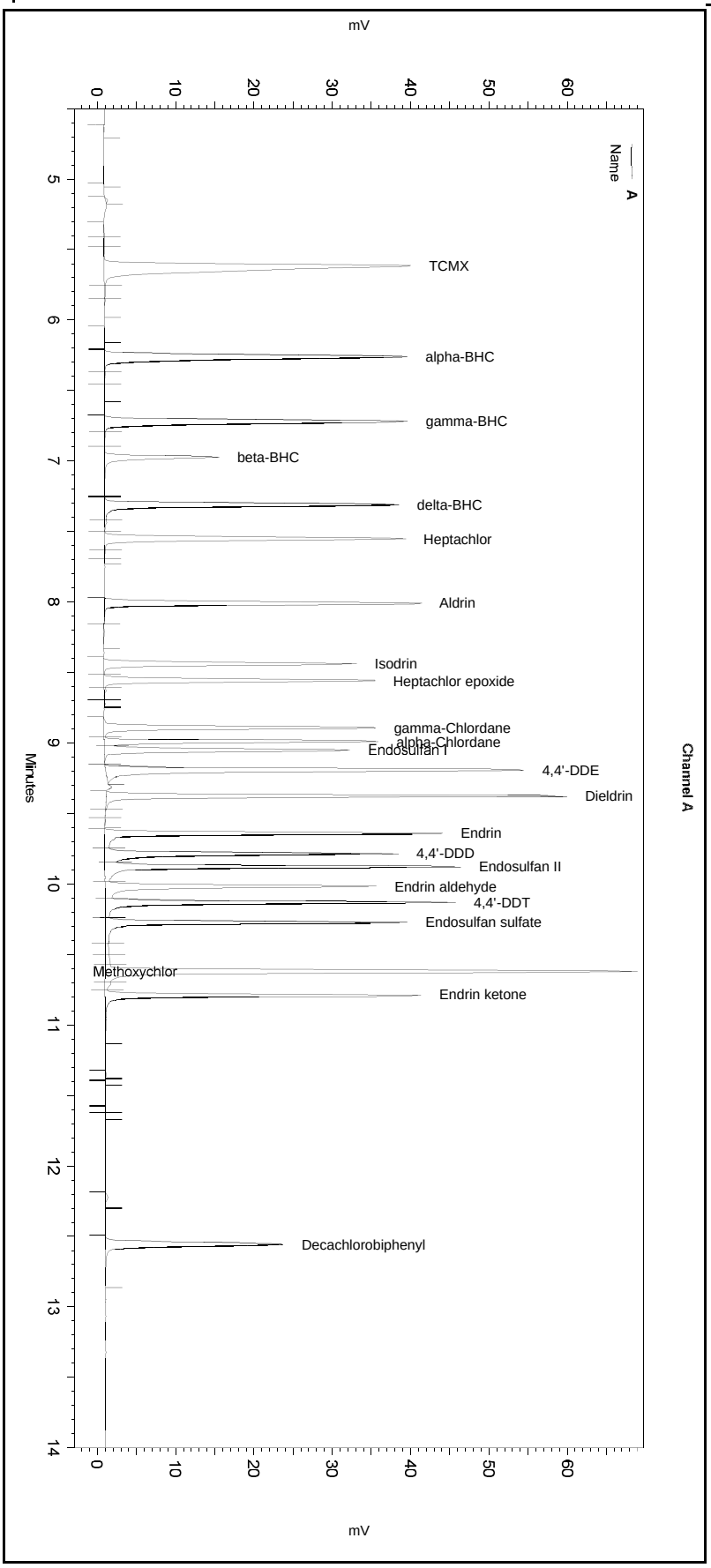
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.727	4.720	362047	102.625
alpha-BHC	5.433	5.433	335534	45.626
gamma-BHC	5.860	5.853	298499	52.306
beta-BHC	5.940	5.940	57241	72.250
delta-BHC	6.293	6.287	271864	59.425
Heptachlor	6.380	6.373	308440	61.748
Aldrin	6.760	6.753	290326	62.899
Isodrin	7.213	7.207	174457	49.576
Heptachlor epoxide	7.400	7.393	211859	116.172
gamma-Chlordane	7.607	7.607	215781	141.494
alpha-Chlordane	7.773	7.767	203394	130.450
Endosulfan I	7.847	7.840	186343	123.670
4,4'-DDE	7.927	7.920	473231	83.598
Dieldrin	8.147	8.140	478649	75.432
Endrin	8.487	8.480	354846	109.421
4,4'-DDD	8.567	8.560	407969	106.010
Endosulfan II	8.713	8.707	418648	98.694
4,4'-DDT	8.907	8.900	399672	100.751
Endrin aldehyde	9.067	9.060	352246	105.807
Endosulfan sulfate	9.353	9.347	328183	112.189
Methoxychlor	9.587	9.580	574267	340.485
Endrin ketone	9.887	9.880	428425	76.322
Decachlorobiphenyl	10.987	10.973	116446	184.995

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/15/2012 1:21:55 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

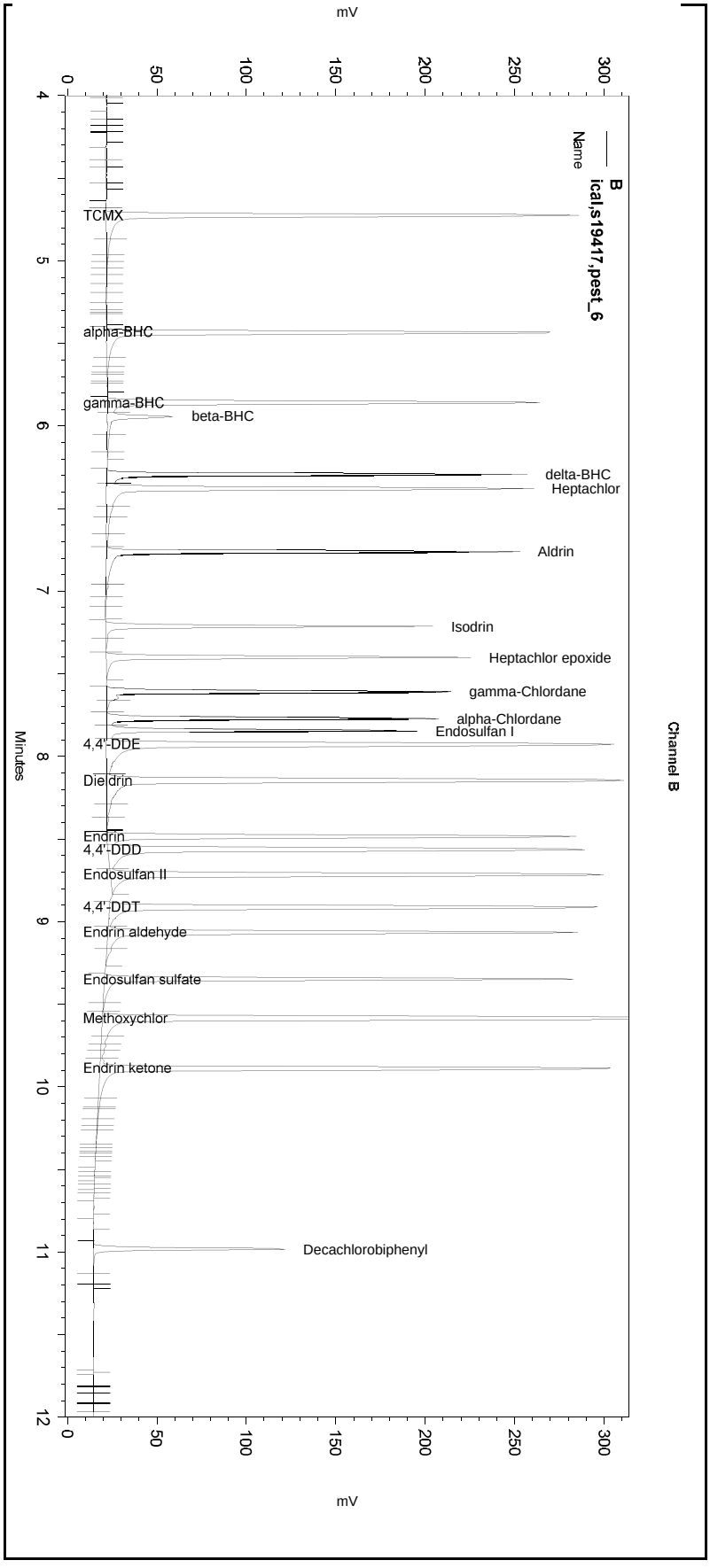
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012**
Sample Name: **ical,s19417,pest_6**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:27:35 AM
Analysis Date: 8/15/2012 1:21:55 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/16/2012 2:24:26 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	216839	200.000 CAL
alpha-BHC	6.253	6.270	164346	100.000 CAL
gamma-BHC	6.720	6.733	145267	100.000 CAL
beta-BHC	6.967	6.980	58626	100.000 CAL
delta-BHC	7.307	7.320	126343	100.000 CAL
Heptachlor	7.547	7.560	120576	100.000 CAL
Aldrin	8.007	8.013	121232	100.000 CAL
Isodrin	8.440	8.447	95747	100.000 CAL
Heptachlor epoxide	8.553	8.560	103621	100.000 CAL
gamma-Chlordane	8.887	8.893	102412	100.000 CAL
alpha-Chlordane	8.987	8.993	98536	100.000 CAL
Endosulfan I	9.047	9.053	92781	100.000 CAL
4,4'-DDE	9.187	9.193	157892	200.000 CAL
Dieldrin	9.373	9.380	152870	200.000 CAL
Endrin	9.640	9.647	122520	200.000 CAL
4,4'-DDD	9.780	9.787	129445	200.000 CAL
Endosulfan II	9.873	9.880	132277	200.000 CAL
Endrin aldehyde	10.020	10.027	109918	200.000 CAL
4,4'-DDT	10.127	10.133	131658	200.000 CAL
Endosulfan sulfate	10.273	10.280	120126	200.000 CAL
Methoxychlor	10.613	10.620	188073	1000.000 CAL
Endrin ketone	10.787	10.793	121558	200.000 CAL
Decachlorobiphenyl	12.553	12.567	95651	200.000 CAL

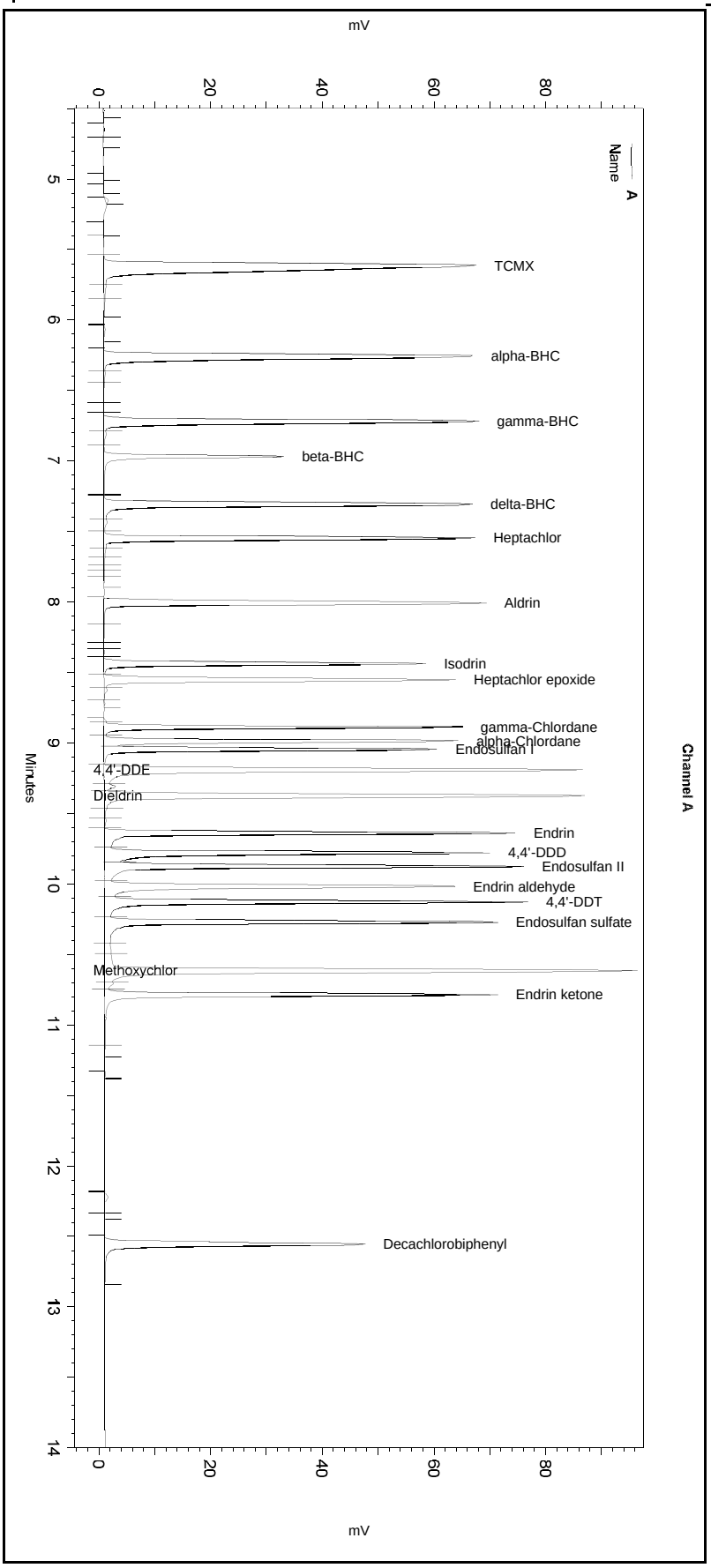
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	546935	200.000 CAL
alpha-BHC	5.433	5.433	535439	100.000 CAL
gamma-BHC	5.853	5.853	494709	100.000 CAL
beta-BHC	5.940	5.940	281158	100.000 CAL
delta-BHC	6.287	6.287	490254	100.000 CAL
Heptachlor	6.380	6.373	582139	100.000 CAL
Aldrin	6.760	6.753	524287	100.000 CAL
Isodrin	7.213	7.207	432666	100.000 CAL
Heptachlor epoxide	7.393	7.393	494391	100.000 CAL
gamma-Chlordane	7.607	7.607	506648	100.000 CAL
alpha-Chlordane	7.767	7.767	472709	100.000 CAL
Endosulfan I	7.840	7.840	511594	100.000 CAL
4,4'-DDE	7.927	7.920	846633	200.000 CAL
Dieldrin	8.140	8.140	789356	200.000 CAL
Endrin	8.487	8.480	611701	200.000 CAL
4,4'-DDD	8.560	8.560	752095	200.000 CAL
Endosulfan II	8.713	8.707	771921	200.000 CAL
4,4'-DDT	8.907	8.900	719890	200.000 CAL
Endrin aldehyde	9.067	9.060	671797	200.000 CAL
Endosulfan sulfate	9.347	9.347	631106	200.000 CAL
Methoxychlor	9.580	9.580	803577	1000.000 CAL
Endrin ketone	9.887	9.880	660915	200.000 CAL
Decachlorobiphenyl	10.980	10.973	440782	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/16/2012 2:24:26 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

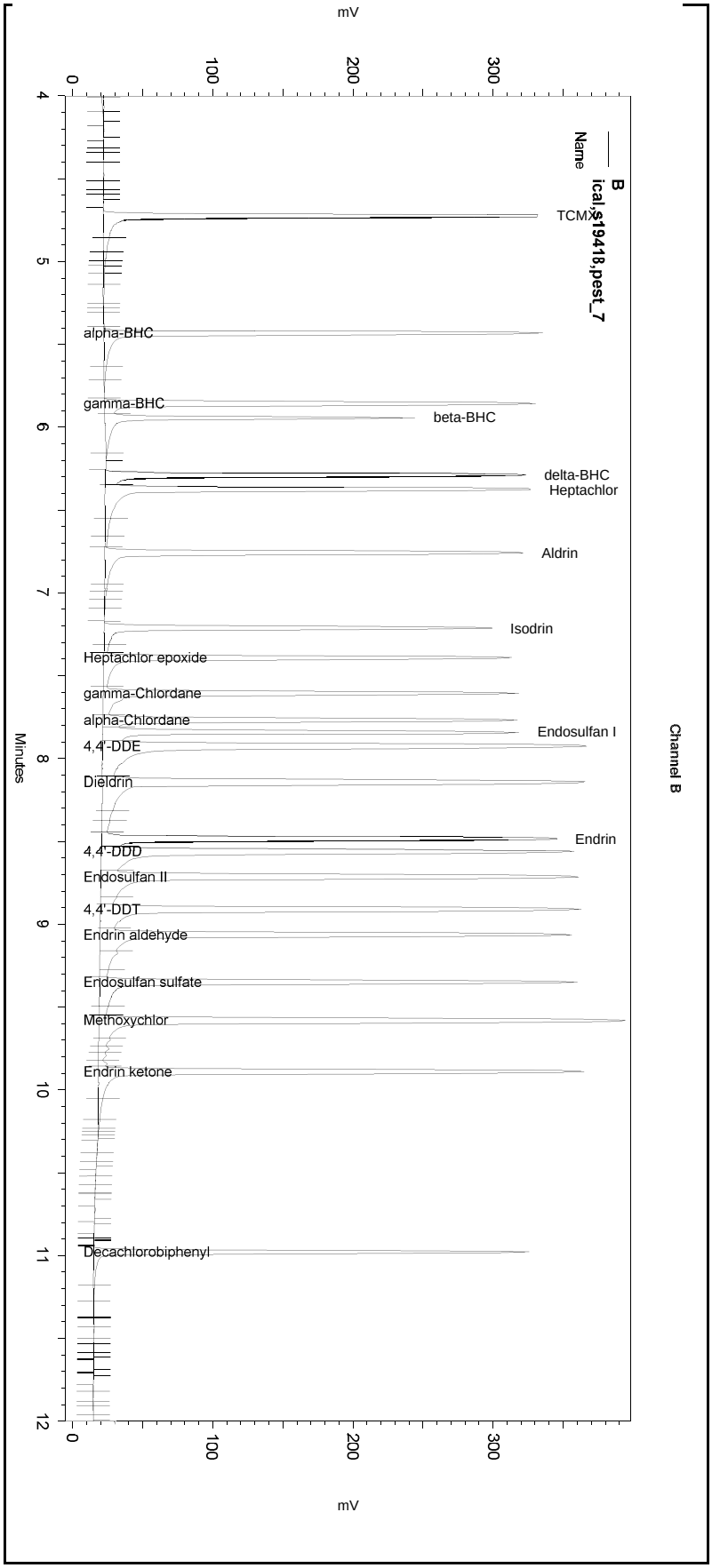
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	8.847	0	0
Yes	Split Peak	10.745	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/16/2012 2:24:26 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	7.167	10.295	0
Yes	Split Peak	9.852	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/15/2012 1:21:59 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.613	5.640	216839	130.908
alpha-BHC	6.253	6.270	164346	67.395
gamma-BHC	6.720	6.733	145267	66.027
beta-BHC	6.967	6.980	58626	66.558
delta-BHC	7.307	7.320	126343	63.504
Heptachlor	7.547	7.560	120576	61.637
Aldrin	8.007	8.013	121232	61.593
Isodrin	8.440	8.447	95747	62.463
Heptachlor epoxide	8.553	8.560	103621	58.007
gamma-Chlordane	8.887	8.893	102860	62.459
alpha-Chlordane	8.987	8.993	98536	62.566
Endosulfan I	9.047	9.053	92781	62.188
4,4'-DDE	9.187	9.193	157892	104.925
Dieldrin	9.373	9.380	152870	99.687
Endrin	9.640	9.647	122520	114.001
4,4'-DDD	9.780	9.787	129445	118.482
Endosulfan II	9.873	9.880	132277	108.969
Endrin aldehyde	10.020	10.027	109918	117.345
4,4'-DDT	10.127	10.133	131658	116.065
Endosulfan sulfate	10.273	10.280	120126	115.434
Methoxychlor	10.613	10.620	188073	398.809
Endrin ketone	10.787	10.793	125217	115.942
Decachlorobiphenyl	12.553	12.567	95651	107.683

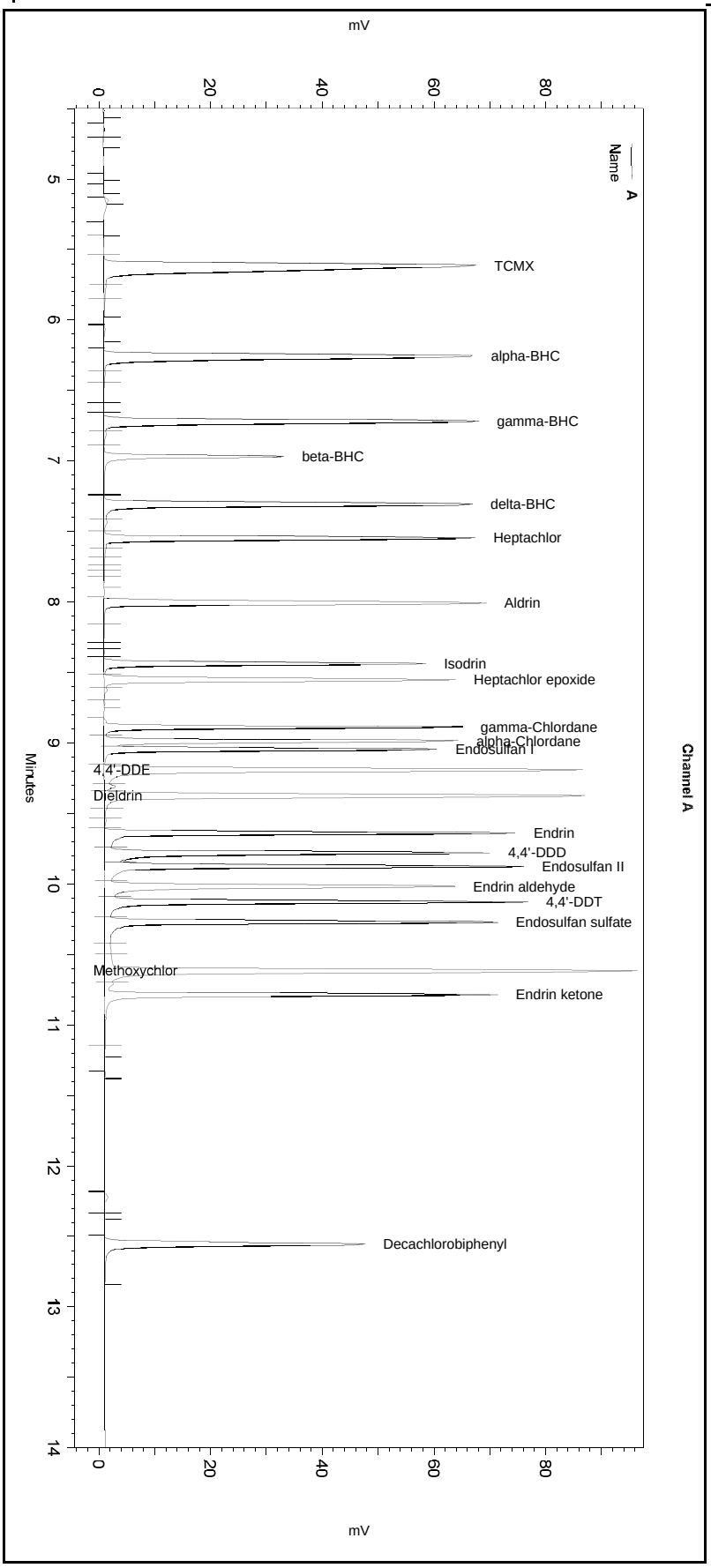
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.720	4.720	546935	133.619
alpha-BHC	5.433	5.433	535439	57.670
gamma-BHC	5.853	5.853	494709	68.170
beta-BHC	5.940	5.940	281158	351.720
delta-BHC	6.287	6.287	490254	82.369
Heptachlor	6.380	6.373	582139	87.615
Aldrin	6.760	6.753	524287	87.415
Isodrin	7.213	7.207	431240	77.364
Heptachlor epoxide	7.393	7.393	484157	264.756
gamma-Chlordane	7.607	7.607	492839	323.169
alpha-Chlordane	7.767	7.767	465062	298.276
Endosulfan I	7.840	7.840	501318	332.710
4,4'-DDE	7.927	7.920	815624	108.679
Dieldrin	8.140	8.140	751566	93.761
Endrin	8.487	8.480	589844	142.591
4,4'-DDD	8.560	8.560	692033	138.333
Endosulfan II	8.713	8.707	676894	128.044
4,4'-DDT	8.907	8.900	642467	129.809
Endrin aldehyde	9.067	9.060	612177	140.069
Endosulfan sulfate	9.347	9.347	581419	151.671
Methoxychlor	9.580	9.580	774570	407.877
Endrin ketone	9.887	9.880	646450	93.205
Decachlorobiphenyl	10.980	10.973	440782	700.260

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/15/2012 1:21:59 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

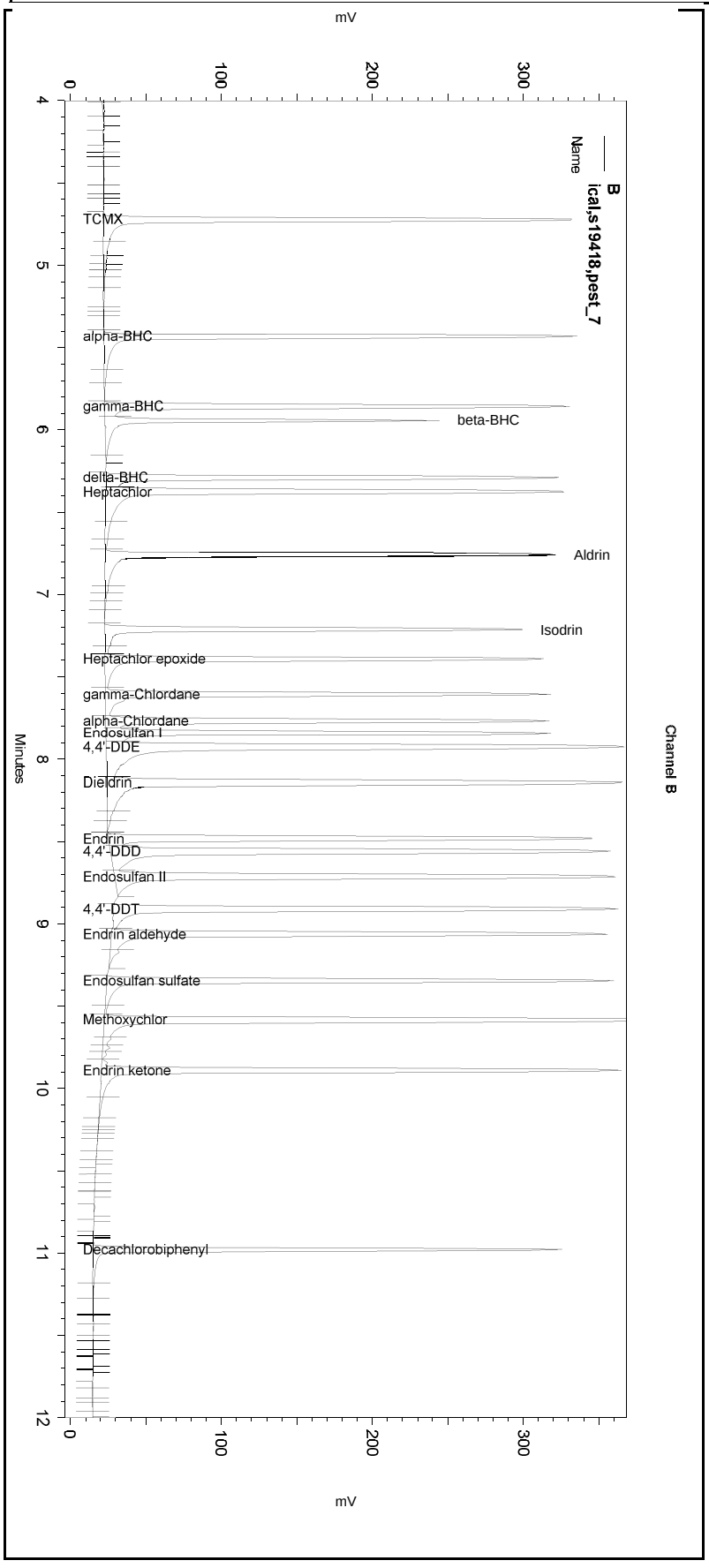
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013**
Sample Name: **ical,s19418,pest_7**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/15/2012 11:49:14 AM
Analysis Date: 8/15/2012 1:21:59 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:36:25 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.640	24817	21.657
alpha-BHC	6.267	6.270	31928	19.358
gamma-BHC	6.727	6.733	28284	19.071
beta-BHC	6.973	6.980	11298	19.860
delta-BHC	7.313	7.320	27008	21.292
Heptachlor	7.553	7.560	24502	19.902
Aldrin	8.013	8.013	25303	19.608
Isodrin	8.440	8.447	20006	20.321
Heptachlor epoxide	8.560	8.560	21676	19.502
gamma-Chlordane	8.887	8.893	20909	19.507
alpha-Chlordane	8.987	8.993	19887	19.530
Endosulfan I	9.047	9.053	18579	19.735
4,4'-DDE	9.187	9.193	19999	21.003
Dieldrin	9.373	9.380	19714	20.592
Endrin	9.640	9.647	12532	19.304
4,4'-DDD	9.780	9.787	13977	20.665
Endosulfan II	9.873	9.880	17431	22.784
Endrin aldehyde	10.020	10.027	14536	25.707
4,4'-DDT	10.127	10.133	14609	21.807
Endosulfan sulfate	10.273	10.280	14691	24.464
Methoxychlor	10.613	10.620	53484	206.115
Endrin ketone	10.787	10.793	17013	24.622
Decachlorobiphenyl	12.553	12.567	13492	24.092

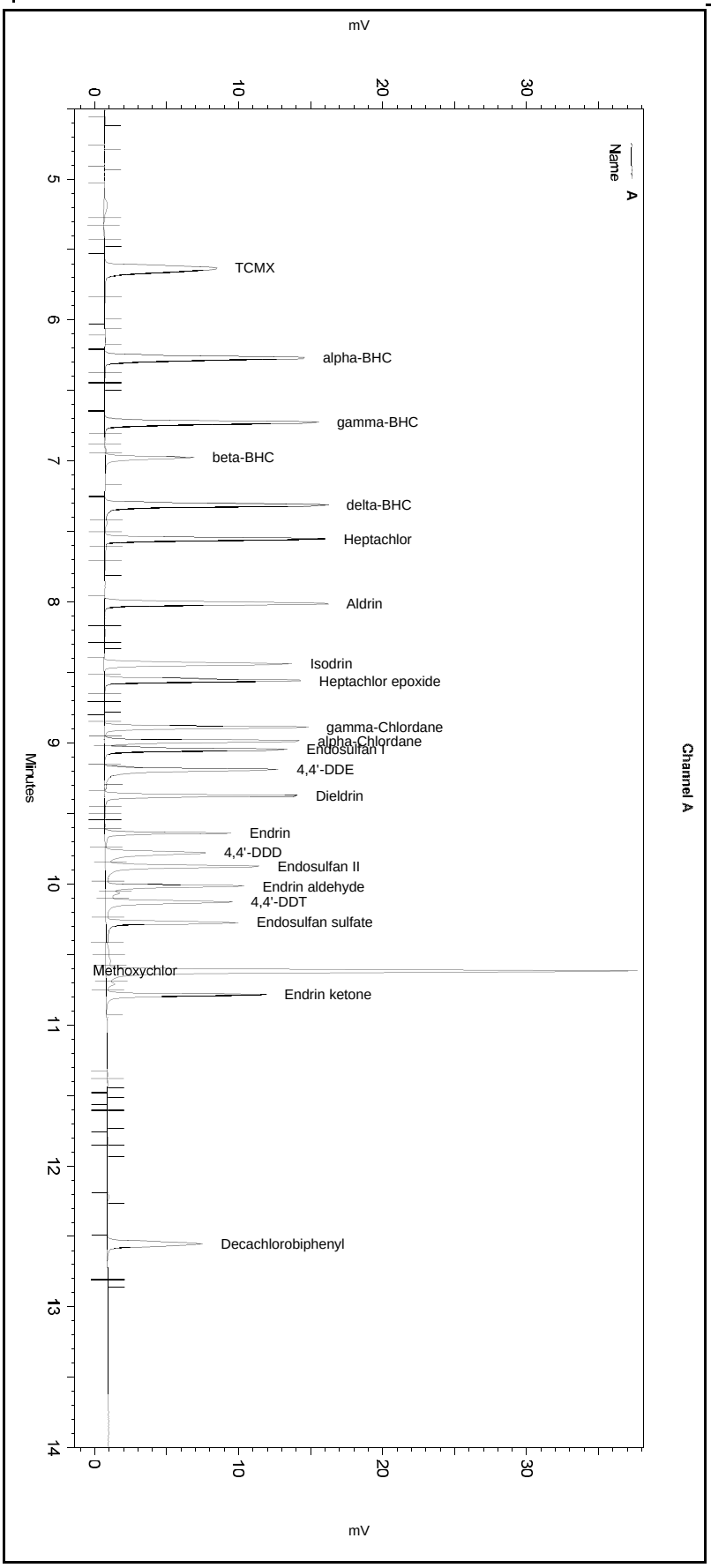
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.720	12712	9.677
alpha-BHC	5.427	5.433	44190	17.168
gamma-BHC	5.847	5.853	36196	17.562
beta-BHC	5.933	5.940	12139	18.884
delta-BHC	6.287	6.287	33685	18.513
Heptachlor	6.373	6.373	32007	18.754
Aldrin	6.753	6.753	33143	18.986
Isodrin	7.207	7.207	15159	14.706
Heptachlor epoxide	7.393	7.393	27256	18.824
gamma-Chlordane	7.600	7.607	27235	19.132
alpha-Chlordane	7.760	7.767	25964	19.273
Endosulfan I	7.840	7.840	23214	19.497
4,4'-DDE	7.920	7.920	24553	12.352
Dieldrin	8.140	8.140	25776	11.013
Endrin	8.480	8.480	16264	18.544
4,4'-DDD	8.560	8.560	17698	22.841
Endosulfan II	8.707	8.707	21125	20.207
4,4'-DDT	8.900	8.900	18378	16.248
Endrin aldehyde	9.060	9.060	18120	27.603
Endosulfan sulfate	9.347	9.347	17143	27.386
Methoxychlor	9.580	9.580	116351	119.826
Endrin ketone	9.887	9.880	22143	11.242
Decachlorobiphenyl	10.980	10.973	6909	12.949

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:36:25 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

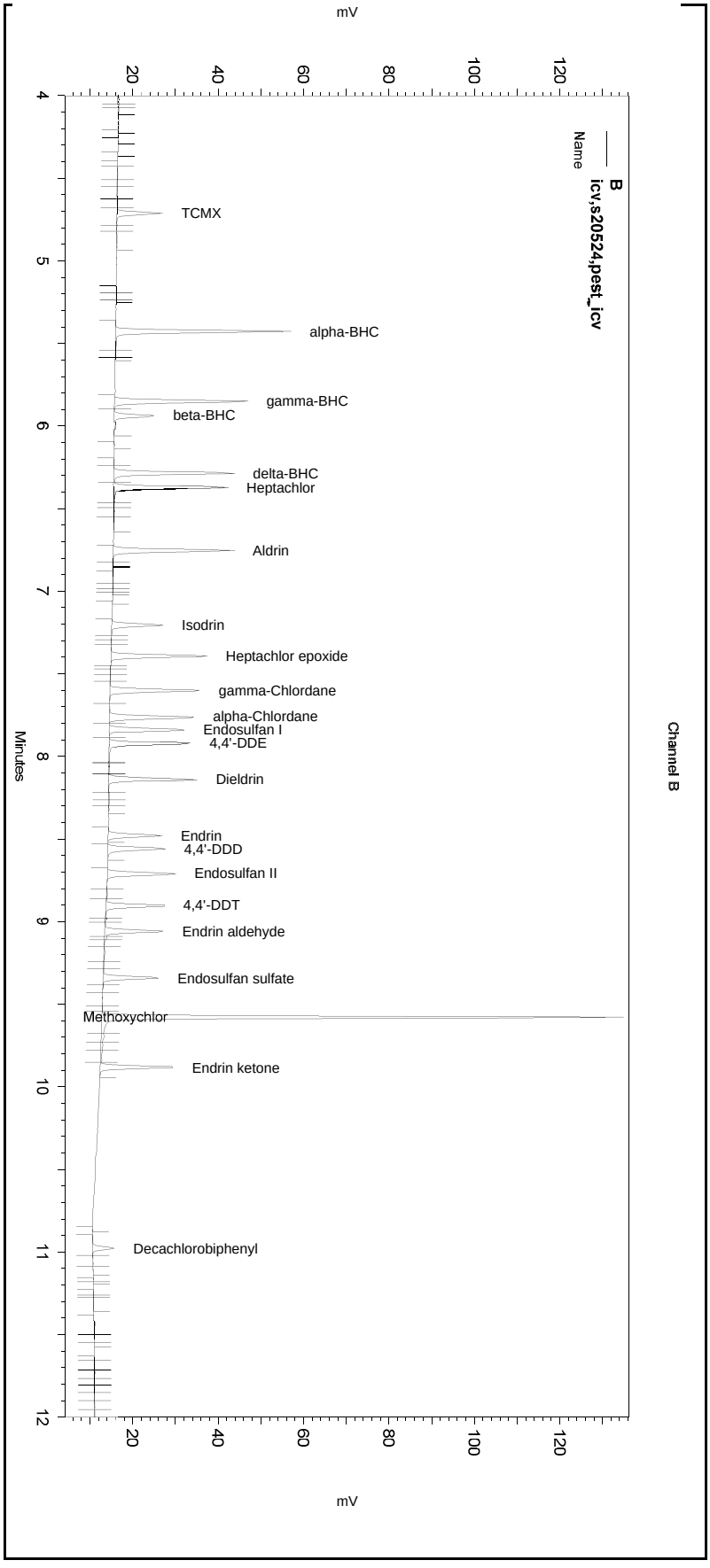
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	8.801	9.546	0
Yes	Split Peak	8.847	0	0
Yes	Split Peak	10.053	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:36:25 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.372	0	0
Yes	Reset Baseline	8.637	0	0
Yes	Split Peak	9.09	0	0
Yes	Reset Baseline	9.954	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:06:37 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.633	5.640	24817	21.657
alpha-BHC	6.267	6.270	31928	19.358
gamma-BHC	6.727	6.733	28284	19.071
beta-BHC	6.973	6.980	11298	19.860
delta-BHC	7.313	7.320	27008	21.292
Heptachlor	7.553	7.560	24502	19.902
Aldrin	8.013	8.013	25303	19.608
Isodrin	8.440	8.447	20006	20.321
Heptachlor epoxide	8.560	8.560	21676	19.502
gamma-Chlordane	8.887	8.893	20931	19.528
alpha-Chlordane	8.987	8.993	19855	19.498
Endosulfan I	9.047	9.053	18482	19.632
4,4'-DDE	9.187	9.193	19353	20.325
Dieldrin	9.373	9.380	19472	20.339
Endrin	9.640	9.647	12532	19.304
4,4'-DDD	9.780	9.787	13977	20.665
Endosulfan II	9.873	9.880	17431	22.784
Endrin aldehyde	10.020	10.027	16511	29.200
4,4'-DDT	10.127	10.133	14609	21.807
Endosulfan sulfate	10.273	10.280	14691	24.464
Methoxychlor	10.613	10.620	53484	206.115
Endrin ketone	10.787	10.793	17013	24.622
Decachlorobiphenyl	12.553	12.567	13492	24.092

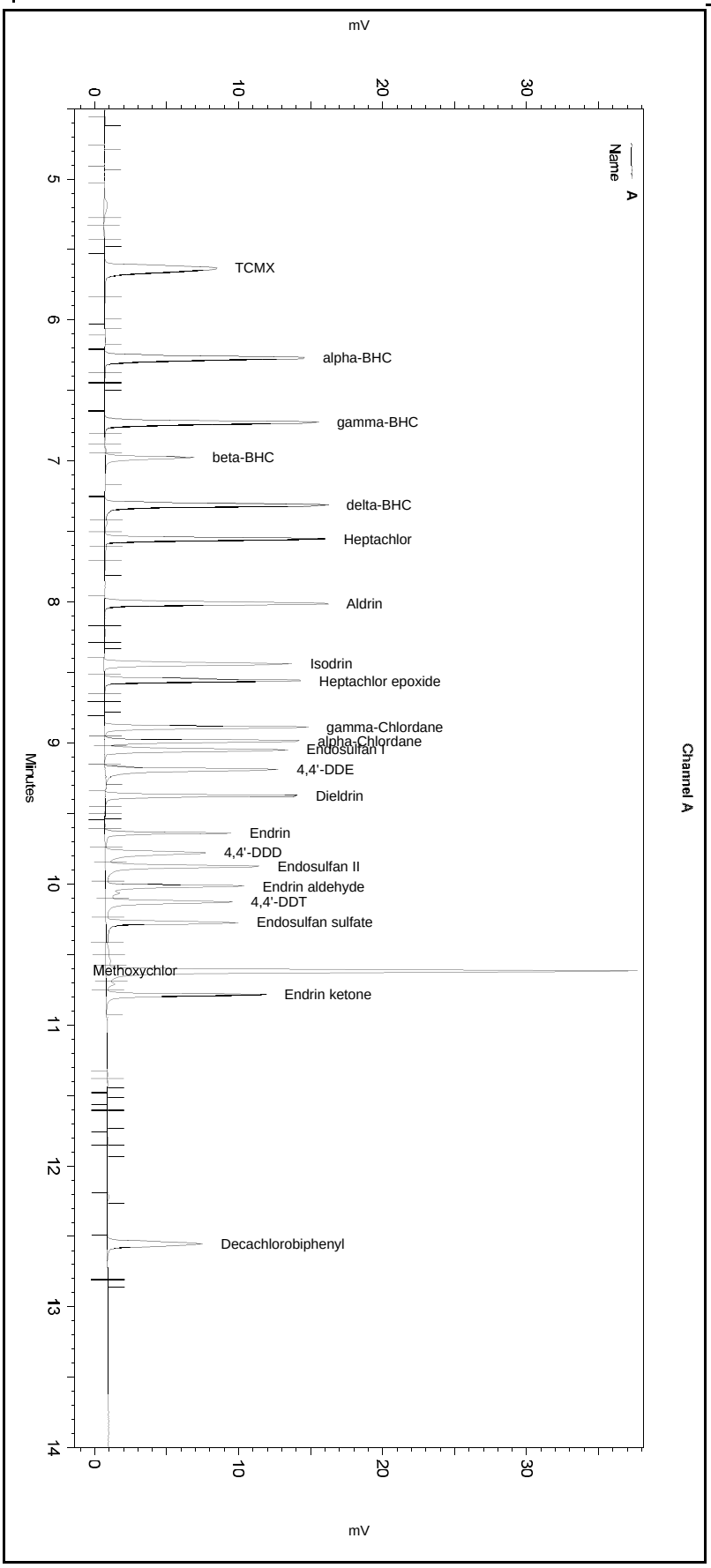
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.720	12712	9.677
alpha-BHC	5.427	5.433	44190	17.168
gamma-BHC	5.847	5.853	36196	17.562
beta-BHC	5.933	5.940	12139	18.884
delta-BHC	6.287	6.287	33685	18.513
Heptachlor	6.373	6.373	32007	18.754
Aldrin	6.753	6.753	33143	18.986
Isodrin	7.207	7.207	15213	14.736
Heptachlor epoxide	7.393	7.393	27719	18.976
gamma-Chlordane	7.600	7.607	28521	19.565
alpha-Chlordane	7.760	7.767	27611	19.830
Endosulfan I	7.840	7.840	24741	20.056
4,4'-DDE	7.920	7.920	27963	13.472
Dieldrin	8.140	8.140	29176	11.616
Endrin	8.480	8.480	21135	22.198
4,4'-DDD	8.560	8.560	24563	26.861
Endosulfan II	8.707	8.707	27011	23.410
4,4'-DDT	8.900	8.900	23451	19.229
Endrin aldehyde	9.060	9.060	23360	30.626
Endosulfan sulfate	9.347	9.347	21281	30.042
Methoxychlor	9.580	9.580	121618	125.251
Endrin ketone	9.887	9.880	26143	12.002
Decachlorobiphenyl	10.980	10.973	6909	12.697

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:06:37 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

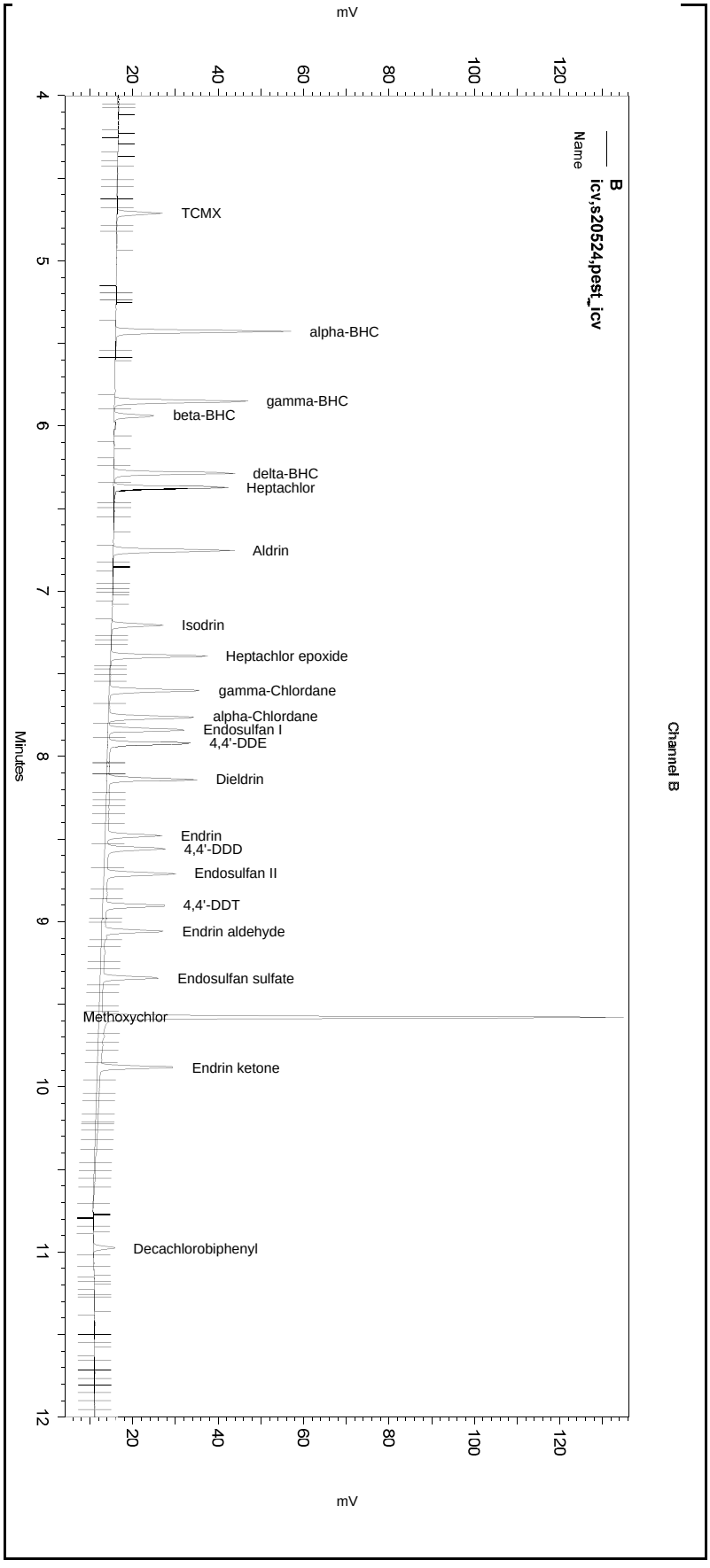
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\228.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-228.met

Software Version 3.1.7
Run Date: 8/16/2012 1:30:14 PM
Analysis Date: 8/16/2012 2:06:37 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\228-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PEST Soil: EPA 8081B

Inst : GC23
Calnum : 802339015004
Units : pg/uL

Name : gc23_pest_235
Date : 22-AUG-2012 18:30

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	235_019	802339015019	PEST_1/2	22-AUG-2012 18:30	S19412 (2X)
L2	235_020	802339015020	PEST_1	22-AUG-2012 18:52	S19412
L3	235_021	802339015021	PEST_2	22-AUG-2012 19:14	S20311
L4	235_022	802339015022	PEST_3	22-AUG-2012 19:36	S19414
L5	235_024	802339015024	PEST_4	23-AUG-2012 06:17	S19415
L6	235_025	802339015025	PEST_5	23-AUG-2012 06:39	S19416
L7	235_026	802339015026	PEST_6	23-AUG-2012 07:01	S19417

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	14018	12551	13472	13611	11703	12170	14112	AVRG	R		7.64E-5		13091	7	0.990	20	
TCMX	A	8642.5	7911.8	9392.5	8036.8	6703.5	7126.8	7726.6	AVRG	R		1.26E-4		7934.4	11	0.990	20	
Decachlorobiphenyl	A	10582	9566.8	9185.4	8956.8	6487.4	5880.6	5083.4	QUAD	A	19628.0	6835.43	-19.8300	7963.2	0.991	0.990	20	
alpha-BHC	B	36716	31715	33981	32303	26988	27932	23744	AVRG	R		3.28E-5		30483	15	0.990	20	
TCMX	B	20592	18220	17929	17717	15446	15586	13422	AVRG	R		5.89E-5		16987	14	0.990	20	
Decachlorobiphenyl	B		17047	17331	16169	11352	11631		AVRG	R		6.80E-5		14706	20	0.990	20	
Average EPA 8081B	A													(n=23)	12			
Average EPA 8081B	B													(n=23)	20			

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
alpha-BHC	A	1.0000	7	2.0000	-4	5.0000	3	10.000	4	20.000	-11	25.000	-7	50.000	8
TCMX	A	2.0000	9	4.0000	0	10.000	18	20.000	1	40.000	-16	50.000	-10	100.00	-3
Decachlorobiphenyl	A	2.0000	**-89**	4.0000	**-31**	10.000	9	20.000	**26**	40.000	-1	50.000	-7	100.00	1
alpha-BHC	B	1.0000	20	2.0000	4	5.0000	11	10.000	6	20.000	-11	25.000	-8	50.000	**-22**
TCMX	B	2.0000	**21**	4.0000	7	10.000	6	20.000	4	40.000	-9	50.000	-8	100.00	**-21**
Decachlorobiphenyl	B			4.0000	16	10.000	18	20.000	10	40.000	**-23**	50.000	**-21**		

TKB 08/23/12 : Corrected automatically drawn baseline in all levels.

TKB 08/23/12 : DROPPED VARIOUS LOW (BELOW RL) AND HIGH POINTS (INCLUDING L7) AND CHANGED FIT TYPES TO IMPROVE %RSD/R^2.

TKB 08/23/12 : %RSD FAILS ON CH.B FOR ENDOSULFAN II, ENDRIN KETONE AND METHOXYCHLOR. THEY WILL BE REPORTED FROM CH.A

Analyst: TKB Date: 08/23/12 Reviewer: EAH Date: 08/23/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PEST Soil
EPA 8081B

Inst : GC23 Name : gc23_pest_235
Calnum : 802339015004 Cal Date : 22-AUG-2012

ICV 802339015029 (235_029 23-AUG-2012) stds: S20524

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	20.00	18.62	pg/uL	-7	20	
alpha-BHC	B	20.00	18.53	pg/uL	-7	20	
Average EPA 8081B	A	n=21			8		
Average EPA 8081B	B	n=21			8		

Analyst: TKB Date: 08/23/12 Reviewer: EAH Date: 08/23/12

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-019**
Sample Name: **ical,s19412,pest_1/2,2x**
Instrument: GC23 (Offline) Vial: 19 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:30:36 PM
Analysis Date: 8/23/2012 9:33:53 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.493	5.493	17285	2.000 CAL
alpha-BHC	6.123	6.117	14018	1.000 CAL
gamma-BHC	6.580	6.583	12710	1.000 CAL
beta-BHC	6.830	6.830	6726	1.000 CAL
delta-BHC	7.167	7.167	11179	1.000 CAL
Heptachlor	7.410	7.403	13012	1.000 CAL
Aldrin	7.867	7.870	12765	1.000 CAL
Isodrin	8.297	8.299	10870	1.000 CAL
Heptachlor epoxide	8.417	8.417	12815	1.000 CAL
gamma-Chlordane	8.750	8.750	13099	1.000 CAL
alpha-Chlordane	8.857	8.857	13260	1.000 CAL
Endosulfan I	8.913	8.913	11370	1.000 CAL
4,4'-DDE	9.060	9.060	16901	2.000 CAL
Dieldrin	9.243	9.247	19955	2.000 CAL
Endrin	9.513	9.513	14717	2.000 CAL
4,4'-DDD	9.657	9.657	10861	2.000 CAL
Endosulfan II	9.750	9.750	18824	2.000 CAL
Endrin aldehyde	9.893	9.893	15277	2.000 CAL
4,4'-DDT	10.010	10.009	10423	2.000 CAL
Endosulfan sulfate	10.150	10.140	15087	2.000 CAL
Methoxychlor	10.507	10.499	24050	10.000 CAL
Endrin ketone	10.660	10.658	15204	2.000 CAL
Decachlorobiphenyl	12.417	12.409	21164	2.000 CAL

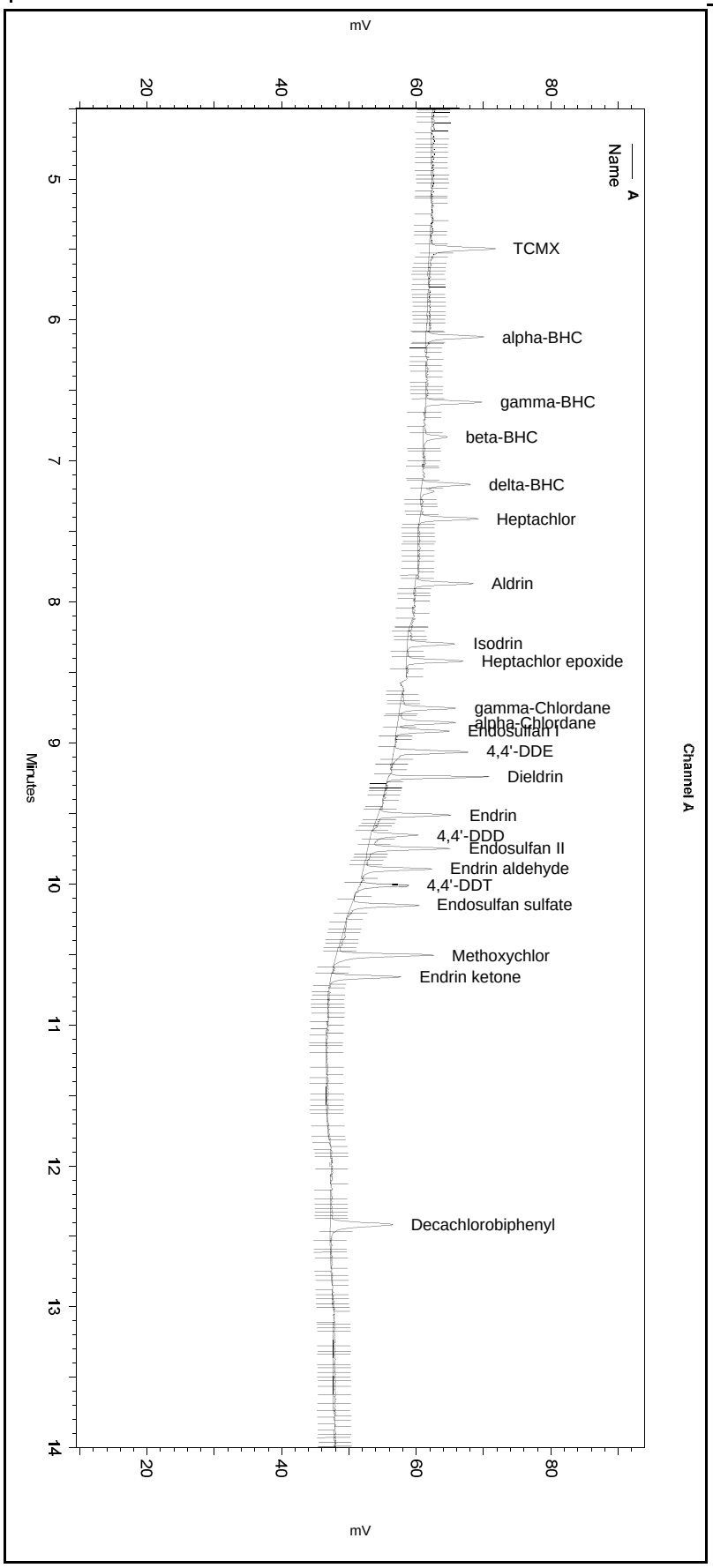
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.230	4.230	41184	2.000 CAL
alpha-BHC	4.970	4.967	36716	1.000 CAL
gamma-BHC	5.400	5.393	34248	1.000 CAL
beta-BHC	5.493	5.487	12356	1.000 CAL
delta-BHC	5.840	5.837	31251	1.000 CAL
Heptachlor	5.920	5.917	33793	1.000 CAL
Aldrin	6.300	6.293	33081	1.000 CAL
Isodrin	6.753	6.747	30528	1.000 CAL
Heptachlor epoxide	6.943	6.937	33670	1.000 CAL
gamma-Chlordane	7.170	7.150	194066	1.000 CAL
alpha-Chlordane	7.317	7.310	29247	1.000 CAL
Endosulfan I	7.387	7.380	27346	1.000 CAL
4,4'-DDE	7.490	7.483	53813	2.000 CAL
Dieldrin	7.690	7.683	61876	2.000 CAL
Endrin	8.030	8.023	54011	2.000 CAL
4,4'-DDD	8.127	8.120	40148	2.000 CAL
Endosulfan II	8.260	8.253	56939	2.000 CAL
4,4'-DDT	8.470	8.463	47124	2.000 CAL
Endrin aldehyde	8.623	8.617	43138	2.000 CAL
Endosulfan sulfate	8.923	8.917	44945	2.000 CAL
Methoxychlor	9.187	9.180	110475	10.000 CAL
Endrin ketone	9.473	9.467	168169	2.000 CAL
Decachlorobiphenyl	10.573	10.567	38788	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-019**
Sample Name: **ical,s19412,pest_1/2,2x**
Instrument: GC23 (Offline) Vial: 19 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:30:36 PM
Analysis Date: 8/23/2012 9:33:53 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

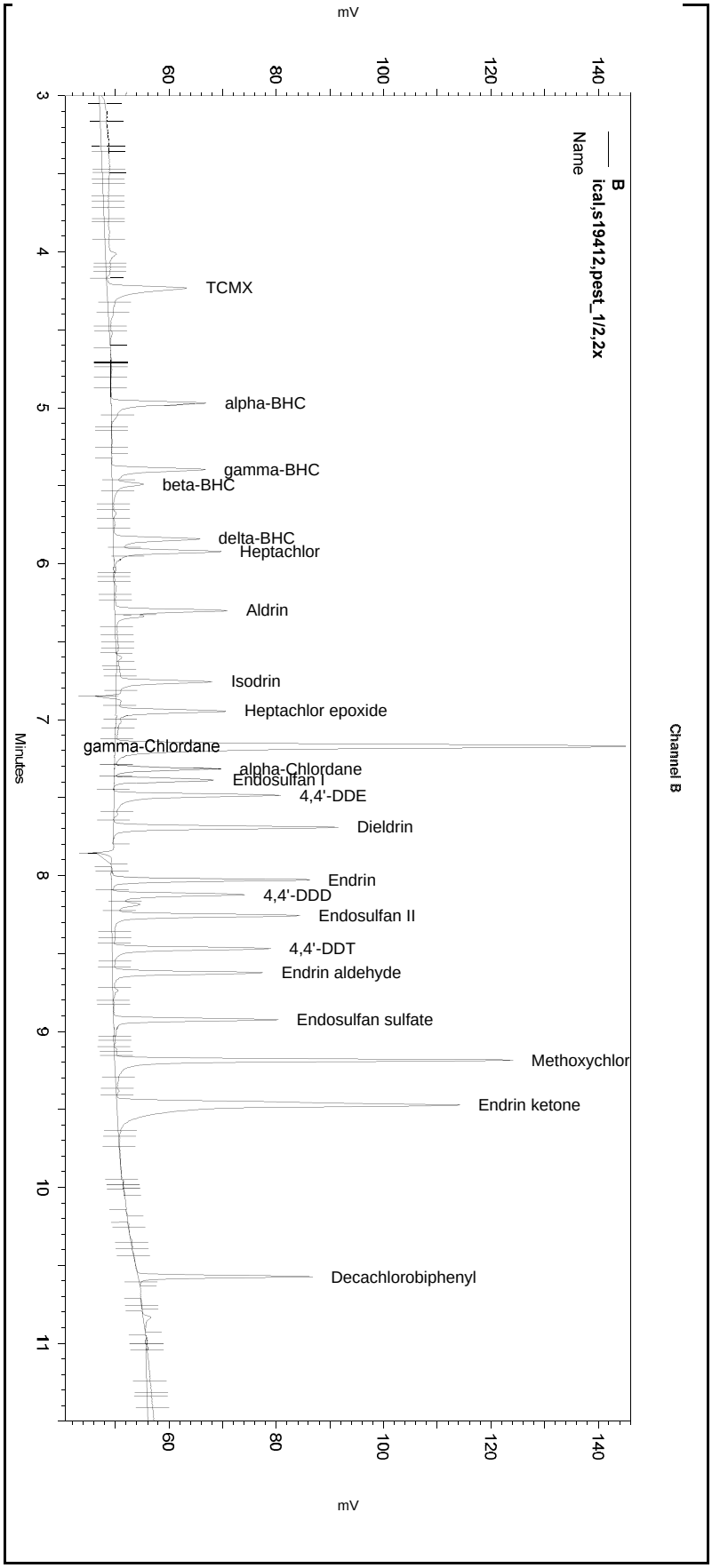
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.46	0	0
Yes	Split Peak	5.523	0	0
Yes	Split Peak	6.089	0	0
Yes	Split Peak	6.161	0	0
Yes	Split Peak	6.557	0	0
Yes	Split Peak	6.801	0	0
Yes	Split Peak	7.136	0	0
Yes	Split Peak	7.453	0	0
Yes	Split Peak	8.382	0	0
Yes	Reset Baseline	8.538	0	0
Yes	Reset Baseline	8.625	0	0
Yes	Split Peak	8.721	0	0
Yes	Split Peak	8.792	0	0
Yes	Split Peak	9.113	0	0
Yes	Split Peak	9.546	0	0
Yes	Split Peak	9.686	0	0
Yes	Split Peak	9.792	0	0
Yes	Split Peak	10.478	0	0
Yes	Split Peak	12.464	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-019**
Sample Name: **ical,s19412,pest_1/2,2x**
Instrument: GC23 (Offline) Vial: 19 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:30:36 PM
Analysis Date: 8/23/2012 9:33:53 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.532	0	0
Yes	Split Peak	5.951	0	0
Yes	Manual Baseline	6.568	7.815	0
Yes	Split Peak	6.717	0	0
Yes	Move BL Stop	7.813	7.794	0
Yes	Reset Baseline	7.815	0	0
Yes	Reset Baseline	7.938	0	0
Yes	Split Peak	10.608	0	0
Yes	Reset Baseline	10.652	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-019**
Sample Name: **ical,s19412,pest_1/2,2x**
Instrument: GC23 Vial: 19 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:30:36 PM
Analysis Date: 8/22/2012 6:49:03 PM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.493	5.493	19405	2.469
alpha-BHC	6.123	6.117	14324	1.076
gamma-BHC	6.580	6.583	13322	1.058
beta-BHC	6.830	6.830	7513	1.605
delta-BHC	7.167	7.167	11257	0.977
Heptachlor	7.410	7.403	13148	1.181
Aldrin	7.867	7.870	12765	1.145
Isodrin	8.297	8.299	12036	1.323
Heptachlor epoxide	8.417	8.417	16789	1.662
gamma-Chlordane	8.750	8.750	15996	1.577
alpha-Chlordane	8.857	8.857	13977	1.405
Endosulfan I	8.913	8.913	11555	1.264
4,4'-DDE	9.060	9.060	17763	2.170
Dieldrin	9.243	9.247	19955	2.106
Endrin	9.513	9.513	15360	2.256
4,4'-DDD	9.657	9.657	12906	2.297
Endosulfan II	9.750	9.750	19331	2.345
Endrin aldehyde	9.893	9.893	15277	2.226
4,4'-DDT	10.010	10.009	10423	2.057
Endosulfan sulfate	10.150	10.140	15087	2.397
Methoxychlor	10.507	10.499	24731	11.522
Endrin ketone	10.660	10.658	15204	2.322
Decachlorobiphenyl	12.417	12.409	22420	2.984

GC23

PEST - ECD Instrument Results

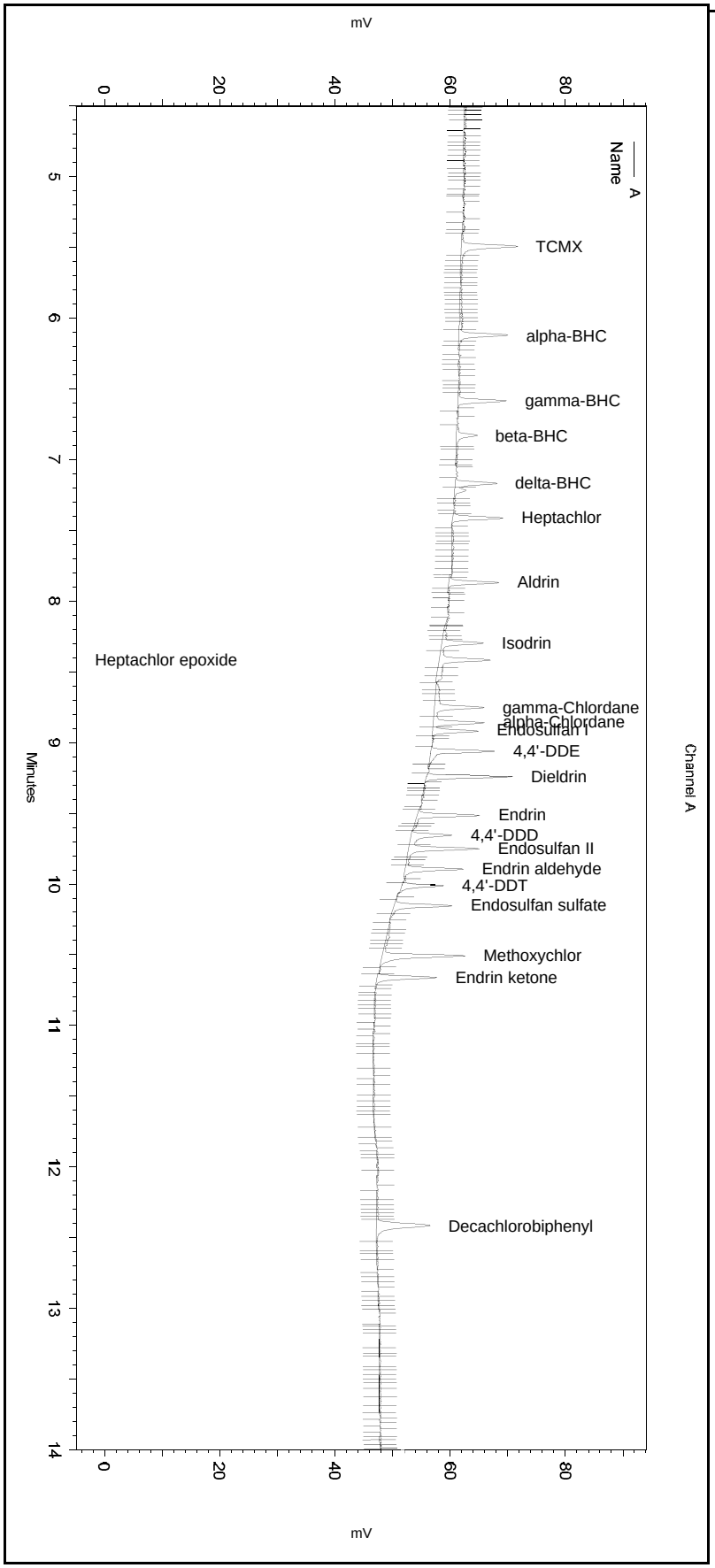
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.230	4.230	41184	2.514
alpha-BHC	4.970	4.967	36716	1.225
gamma-BHC	5.400	5.393	34248	1.198
beta-BHC	5.493	5.487	14916	1.248
delta-BHC	5.840	5.837	31251	1.212
Heptachlor	5.920	5.917	38033	1.350
Aldrin	6.300	6.293	33081	1.212
Isodrin	6.753	6.747	44642	1.978
Heptachlor epoxide	6.943	6.937	53819	2.149
gamma-Chlordane	7.170	7.150	230719	8.942
alpha-Chlordane	7.317	7.310	45931	1.940
Endosulfan I	7.387	7.380	47724	2.028
4,4'-DDE	7.490	7.483	85295	4.295
Dieldrin	7.690	7.683	93759	3.780
Endrin	8.030	8.023	76140	3.601
4,4'-DDD	8.127	8.120	52031	2.933
Endosulfan II	8.260	8.253	75786	3.496
4,4'-DDT	8.470	8.463	60685	3.316
Endrin aldehyde	8.623	8.617	55614	3.513
Endosulfan sulfate	8.923	8.917	58064	3.313
Methoxychlor	9.187	9.180	115683	10.887
Endrin ketone	9.473	9.467	172166	8.780
Decachlorobiphenyl	10.573	10.567	41603	2.827

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-019**
Sample Name: **ical,s19412,pest_1/2,2x**
Instrument: GC23 Vial: 19 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:30:36 PM
Analysis Date: 8/22/2012 6:49:03 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

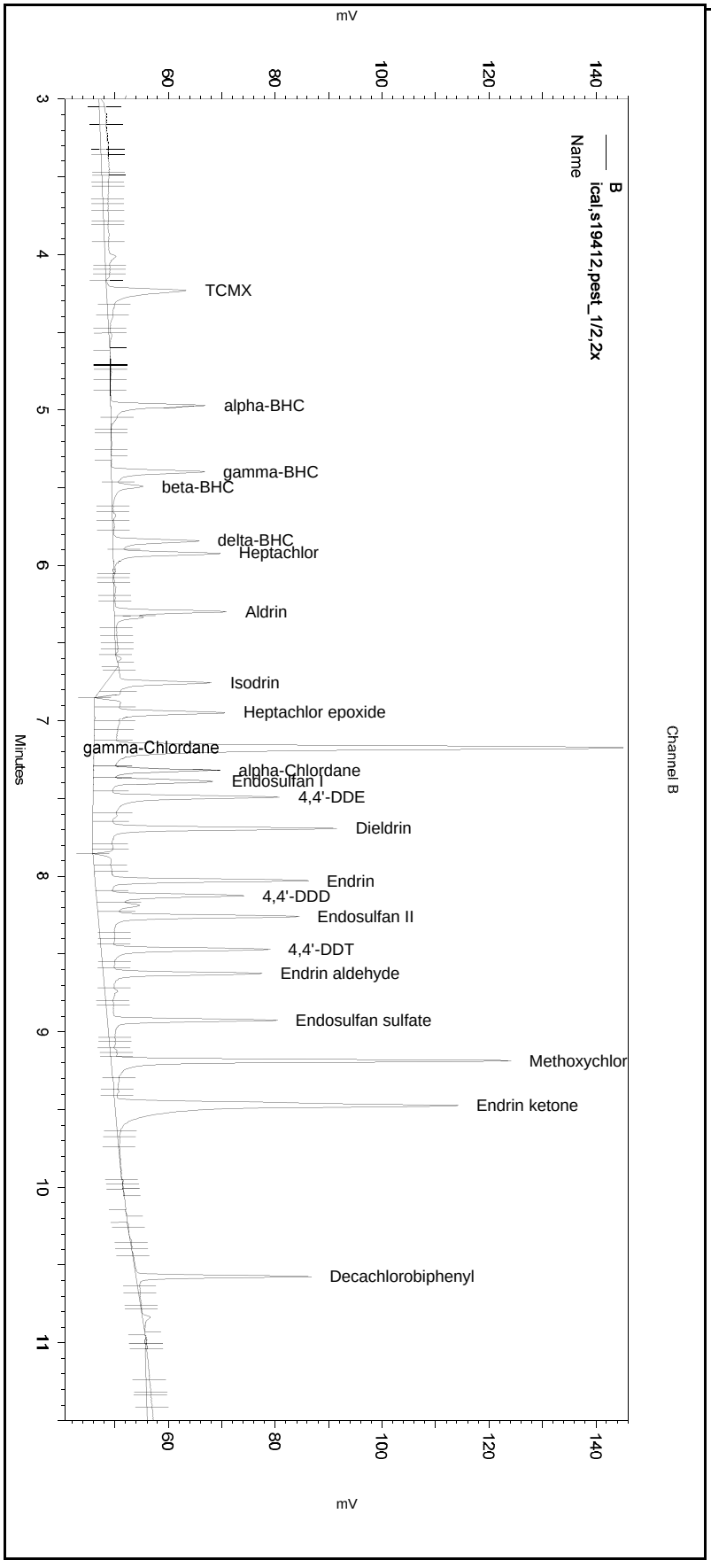
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-019_EB65.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-019**
Sample Name: **ical,s19412,pest_1/2,2x**
Instrument: GC23 Vial: 19 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:30:36 PM
Analysis Date: 8/22/2012 6:49:03 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-019_EB65.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-020**
Sample Name: **ical,s19412,pest_1**
Instrument: GC23 (Offline) Vial: 20 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:52:32 PM
Analysis Date: 8/23/2012 9:34:00 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.487	5.493	31647	4.000 CAL
alpha-BHC	6.120	6.117	25101	2.000 CAL
gamma-BHC	6.577	6.583	24528	2.000 CAL
beta-BHC	6.823	6.830	11488	2.000 CAL
delta-BHC	7.163	7.167	22051	2.000 CAL
Heptachlor	7.407	7.403	23999	2.000 CAL
Aldrin	7.863	7.870	22312	2.000 CAL
Isodrin	8.293	8.299	21162	2.000 CAL
Heptachlor epoxide	8.410	8.417	22857	2.000 CAL
gamma-Chlordane	8.747	8.750	24552	2.000 CAL
alpha-Chlordane	8.850	8.857	23440	2.000 CAL
Endosulfan I	8.910	8.913	20824	2.000 CAL
4,4'-DDE	9.057	9.060	36764	4.000 CAL
Dieldrin	9.240	9.247	38138	4.000 CAL
Endrin	9.507	9.513	26689	4.000 CAL
4,4'-DDD	9.653	9.657	24959	4.000 CAL
Endosulfan II	9.747	9.750	34896	4.000 CAL
Endrin aldehyde	9.890	9.893	30663	4.000 CAL
4,4'-DDT	10.007	10.009	23693	4.000 CAL
Endosulfan sulfate	10.147	10.140	28493	4.000 CAL
Methoxychlor	10.500	10.499	49305	20.000 CAL
Endrin ketone	10.657	10.658	30258	4.000 CAL
Decachlorobiphenyl	12.410	12.409	38267	4.000 CAL

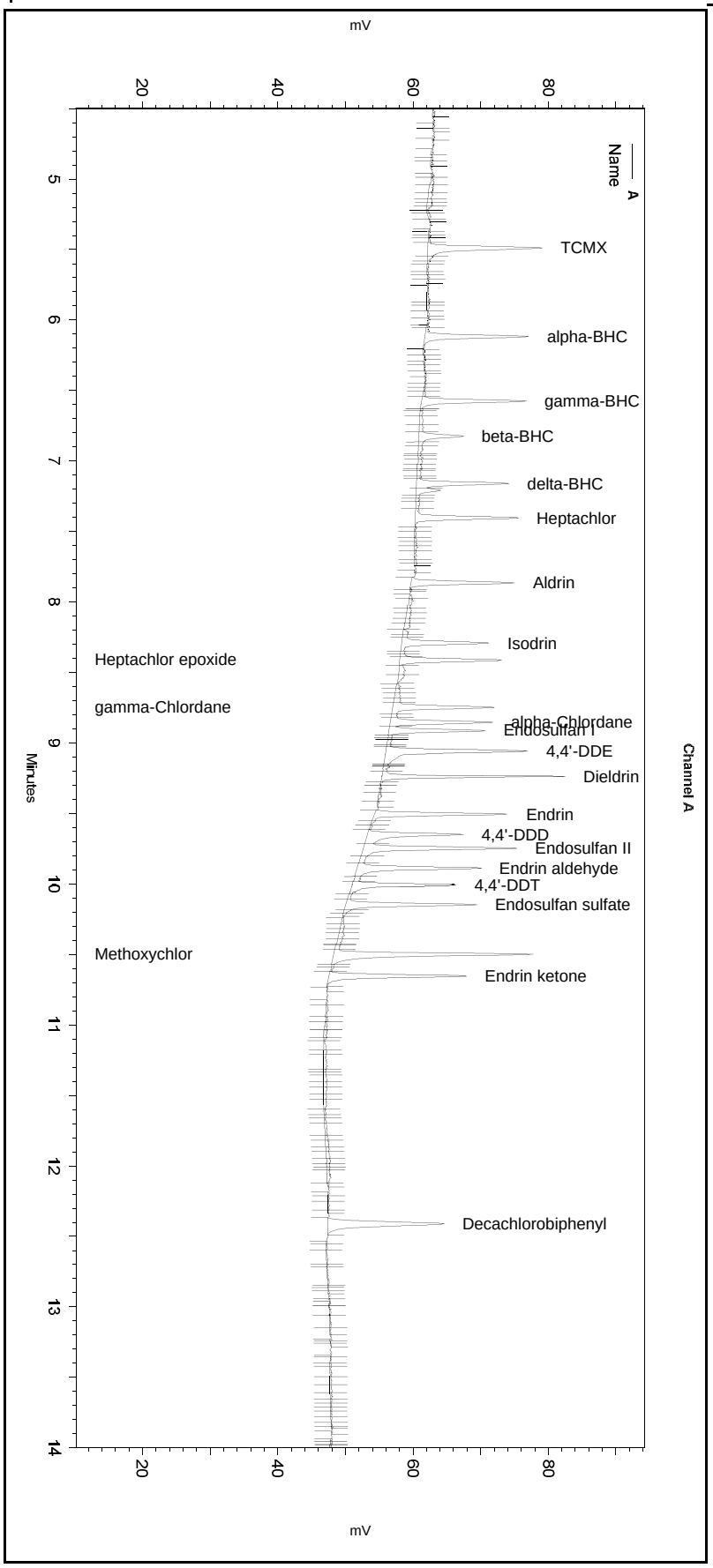
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.230	4.230	72879	4.000 CAL
alpha-BHC	4.967	4.967	63429	2.000 CAL
gamma-BHC	5.393	5.393	59185	2.000 CAL
beta-BHC	5.487	5.487	20833	2.000 CAL
delta-BHC	5.837	5.837	53778	2.000 CAL
Heptachlor	5.917	5.917	60738	2.000 CAL
Aldrin	6.297	6.293	55642	2.000 CAL
Isodrin	6.750	6.747	48177	2.000 CAL
Heptachlor epoxide	6.940	6.937	54057	2.000 CAL
gamma-Chlordane	7.160	7.150	127222	2.000 CAL
alpha-Chlordane	7.313	7.310	50758	2.000 CAL
Endosulfan I	7.383	7.380	48413	2.000 CAL
4,4'-DDE	7.483	7.483	90931	4.000 CAL
Dieldrin	7.687	7.683	107731	4.000 CAL
Endrin	8.023	8.023	90938	4.000 CAL
4,4'-DDD	8.120	8.120	70220	4.000 CAL
Endosulfan II	8.253	8.253	92951	4.000 CAL
4,4'-DDT	8.467	8.463	78315	4.000 CAL
Endrin aldehyde	8.620	8.617	71476	4.000 CAL
Endosulfan sulfate	8.920	8.917	74998	4.000 CAL
Methoxychlor	9.183	9.180	184360	20.000 CAL
Endrin ketone	9.470	9.467	147428	4.000 CAL
Decachlorobiphenyl	10.567	10.567	68187	4.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-020**
Sample Name: **ical,s19412,pest_1**
Instrument: GC23 (Offline) Vial: 20 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:52:32 PM
Analysis Date: 8/23/2012 9:34:00 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

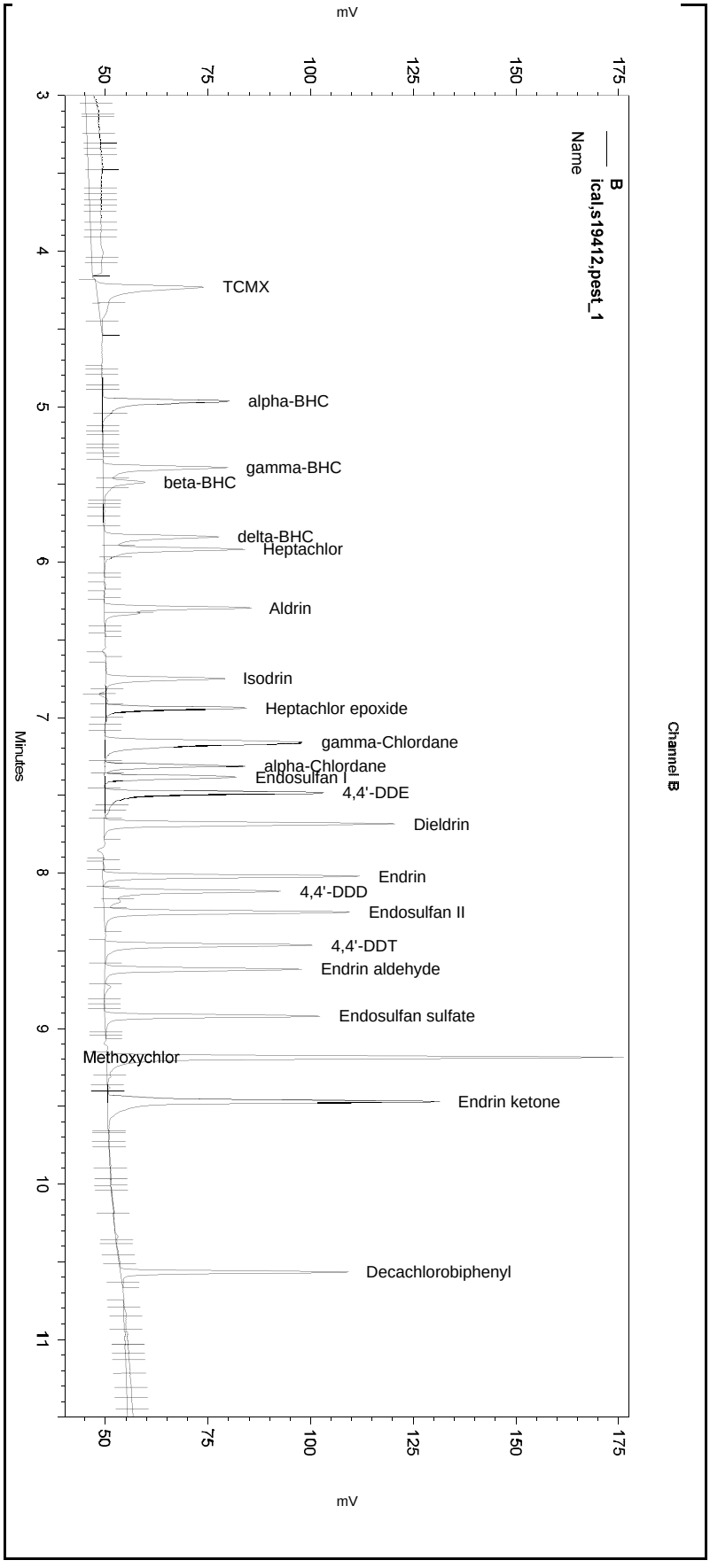
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	8.254	0	0
Yes	Split Peak	8.383	0	0
Yes	Reset Baseline	8.576	0	0
Yes	Split Peak	8.816	0	0
Yes	Split Peak	8.943	0	0
Yes	Split Peak	9.026	0	0
Yes	Split Peak	9.155	0	0
Yes	Split Peak	9.276	0	0
Yes	Split Peak	9.799	0	0
Yes	Split Peak	9.95	0	0
Yes	Split Peak	10.181	0	0
Yes	Split Peak	10.466	0	0
Yes	Split Peak	10.573	0	0
Yes	Reset Baseline	12.5	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-020**
Sample Name: **ical,s19412,pest_1**
Instrument: GC23 (Offline) Vial: 20 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:52:32 PM
Analysis Date: 8/23/2012 9:34:00 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.176	0	0
Yes	Reset Baseline	4.546	0	0
Yes	Split Peak	5.525	0	0
Yes	Split Peak	5.964	0	0
Yes	Reset Baseline	6.52	0	0
Yes	Manual Baseline	6.642	7.808	0
Yes	Move BL Stop	7.807	7.779	0
Yes	Reset Baseline	7.808	0	0
Yes	Reset Baseline	7.891	0	0
Yes	Reset Baseline	9.122	0	0
Yes	Reset Baseline	10.672	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-020**
Sample Name: **ical,s19412,pest_1**
Instrument: GC23 Vial: 20 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:52:32 PM
Analysis Date: 8/22/2012 7:10:59 PM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.487	5.493	31647	4.027
alpha-BHC	6.120	6.117	25101	1.886
gamma-BHC	6.577	6.583	24528	1.948
beta-BHC	6.823	6.830	11488	2.455
delta-BHC	7.163	7.167	22051	1.914
Heptachlor	7.407	7.403	23999	2.156
Aldrin	7.863	7.870	22312	2.002
Isodrin	8.293	8.299	22260	2.448
Heptachlor epoxide	8.410	8.417	24274	2.403
gamma-Chlordane	8.747	8.750	25486	2.512
alpha-Chlordane	8.850	8.857	25443	2.557
Endosulfan I	8.910	8.913	21966	2.403
4,4'-DDE	9.057	9.060	38526	4.707
Dieldrin	9.240	9.247	38532	4.067
Endrin	9.507	9.513	26689	3.919
4,4'-DDD	9.653	9.657	24959	4.443
Endosulfan II	9.747	9.750	37204	4.513
Endrin aldehyde	9.890	9.893	32152	4.685
4,4'-DDT	10.007	10.009	23693	4.675
Endosulfan sulfate	10.147	10.140	29811	4.736
Methoxychlor	10.500	10.499	50930	23.728
Endrin ketone	10.657	10.658	30258	4.621
Decachlorobiphenyl	12.410	12.409	39306	5.232

GC23

PEST - ECD Instrument Results

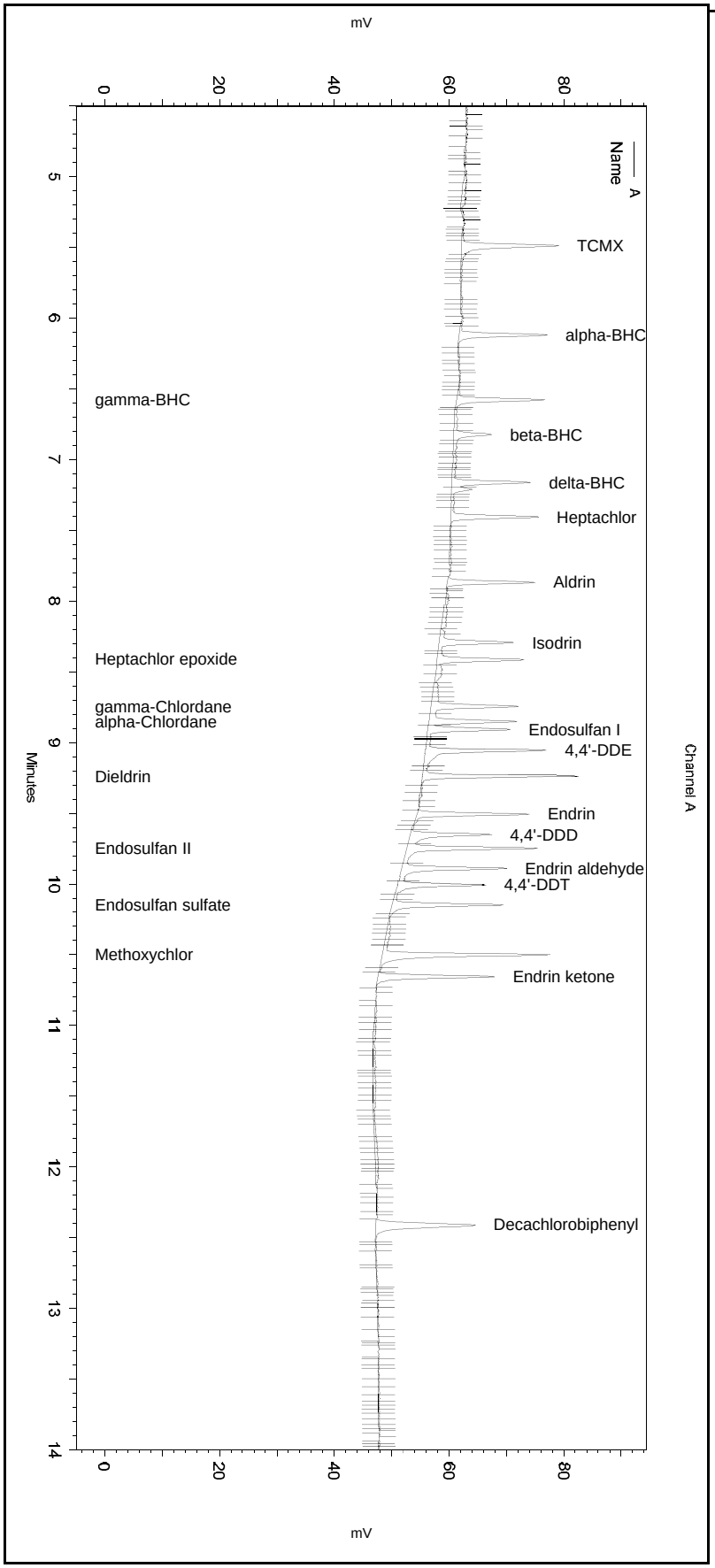
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.230	4.230	80318	4.903
alpha-BHC	4.967	4.967	69056	2.305
gamma-BHC	5.393	5.393	59185	2.071
beta-BHC	5.487	5.487	25388	2.124
delta-BHC	5.837	5.837	53778	2.086
Heptachlor	5.917	5.917	64389	2.285
Aldrin	6.297	6.293	56267	2.062
Isodrin	6.750	6.747	52137	2.310
Heptachlor epoxide	6.940	6.937	62317	2.488
gamma-Chlordane	7.160	7.150	144890	5.616
alpha-Chlordane	7.313	7.310	58255	2.460
Endosulfan I	7.383	7.380	57832	2.458
4,4'-DDE	7.483	7.483	101354	5.103
Dieldrin	7.687	7.683	119871	4.833
Endrin	8.023	8.023	95511	4.517
4,4'-DDD	8.120	8.120	72513	4.087
Endosulfan II	8.253	8.253	94253	4.347
4,4'-DDT	8.467	8.463	78315	4.280
Endrin aldehyde	8.620	8.617	71476	4.515
Endosulfan sulfate	8.920	8.917	74998	4.279
Methoxychlor	9.183	9.180	188763	19.895
Endrin ketone	9.470	9.467	149851	7.642
Decachlorobiphenyl	10.567	10.567	78012	5.301

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-020**
Sample Name: **ical,s19412,pest_1**
Instrument: GC23 Vial: 20 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:52:32 PM
Analysis Date: 8/22/2012 7:10:59 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

Manual Integration Fixes

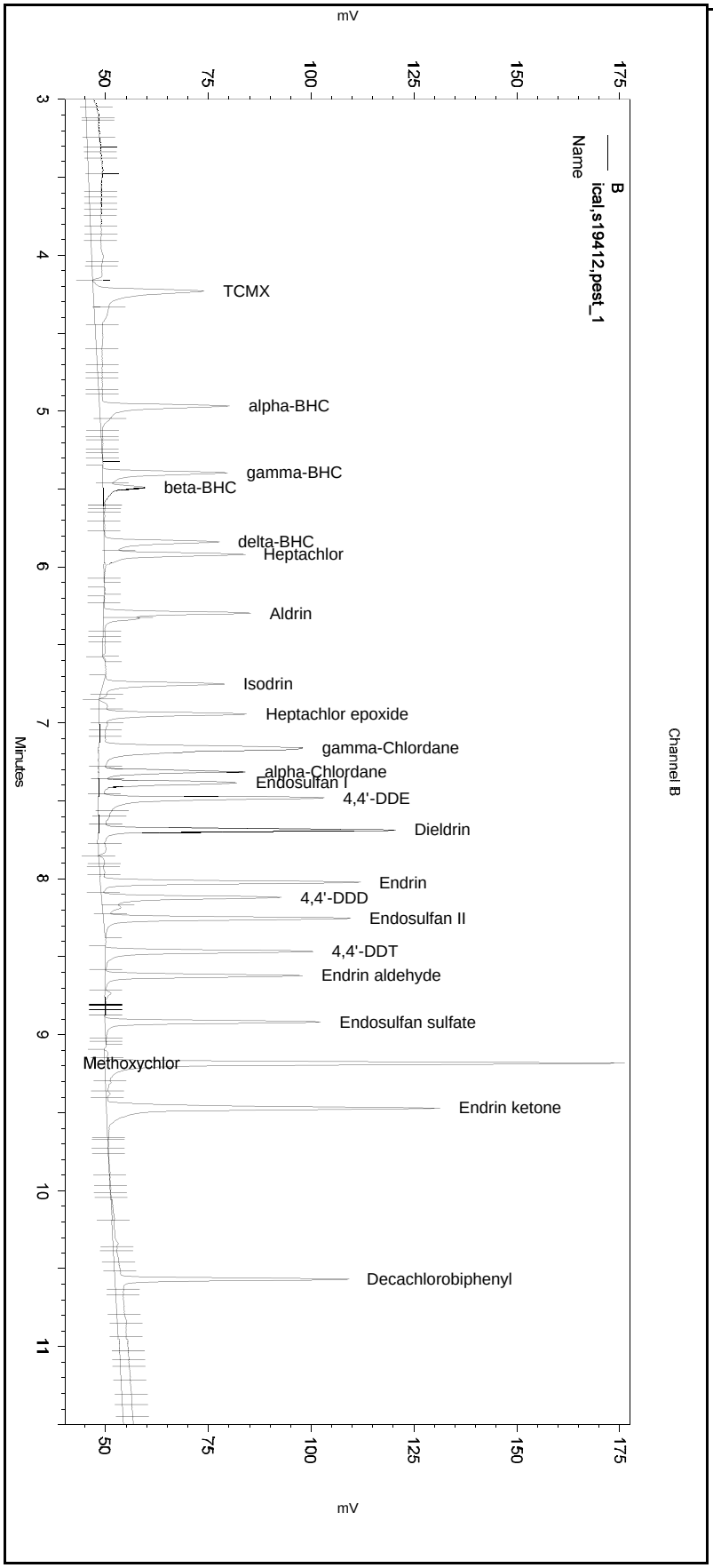
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-020_EB66.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-020**
Sample Name: **ical,s19412,pest_1**
Instrument: GC23 Vial: 20 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 6:52:32 PM
Analysis Date: 8/22/2012 7:10:59 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-020_EB66.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-021**
Sample Name: **ical,s20311,pest_2**
Instrument: GC23 (Offline) Vial: 21 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:14:26 PM
Analysis Date: 8/23/2012 9:34:07 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.490	5.493	93925	10.000 CAL
alpha-BHC	6.123	6.117	67361	5.000 CAL
gamma-BHC	6.580	6.583	63208	5.000 CAL
beta-BHC	6.827	6.830	26748	5.000 CAL
delta-BHC	7.163	7.167	56005	5.000 CAL
Heptachlor	7.410	7.403	58659	5.000 CAL
Aldrin	7.867	7.870	58094	5.000 CAL
Isodrin	8.297	8.299	51058	5.000 CAL
Heptachlor epoxide	8.413	8.417	55206	5.000 CAL
gamma-Chlordane	8.750	8.750	56372	5.000 CAL
alpha-Chlordane	8.857	8.857	55202	5.000 CAL
Endosulfan I	8.913	8.913	49243	5.000 CAL
4,4'-DDE	9.060	9.060	87595	10.000 CAL
Dieldrin	9.243	9.247	94718	10.000 CAL
Endrin	9.510	9.513	69491	10.000 CAL
4,4'-DDD	9.657	9.657	64949	10.000 CAL
Endosulfan II	9.750	9.750	80172	10.000 CAL
Endrin aldehyde	9.890	9.893	75579	10.000 CAL
4,4'-DDT	10.010	10.009	57649	10.000 CAL
Endosulfan sulfate	10.150	10.140	67515	10.000 CAL
Methoxychlor	10.503	10.499	127472	50.000 CAL
Endrin ketone	10.660	10.658	72182	10.000 CAL
Decachlorobiphenyl	12.413	12.409	91854	10.000 CAL

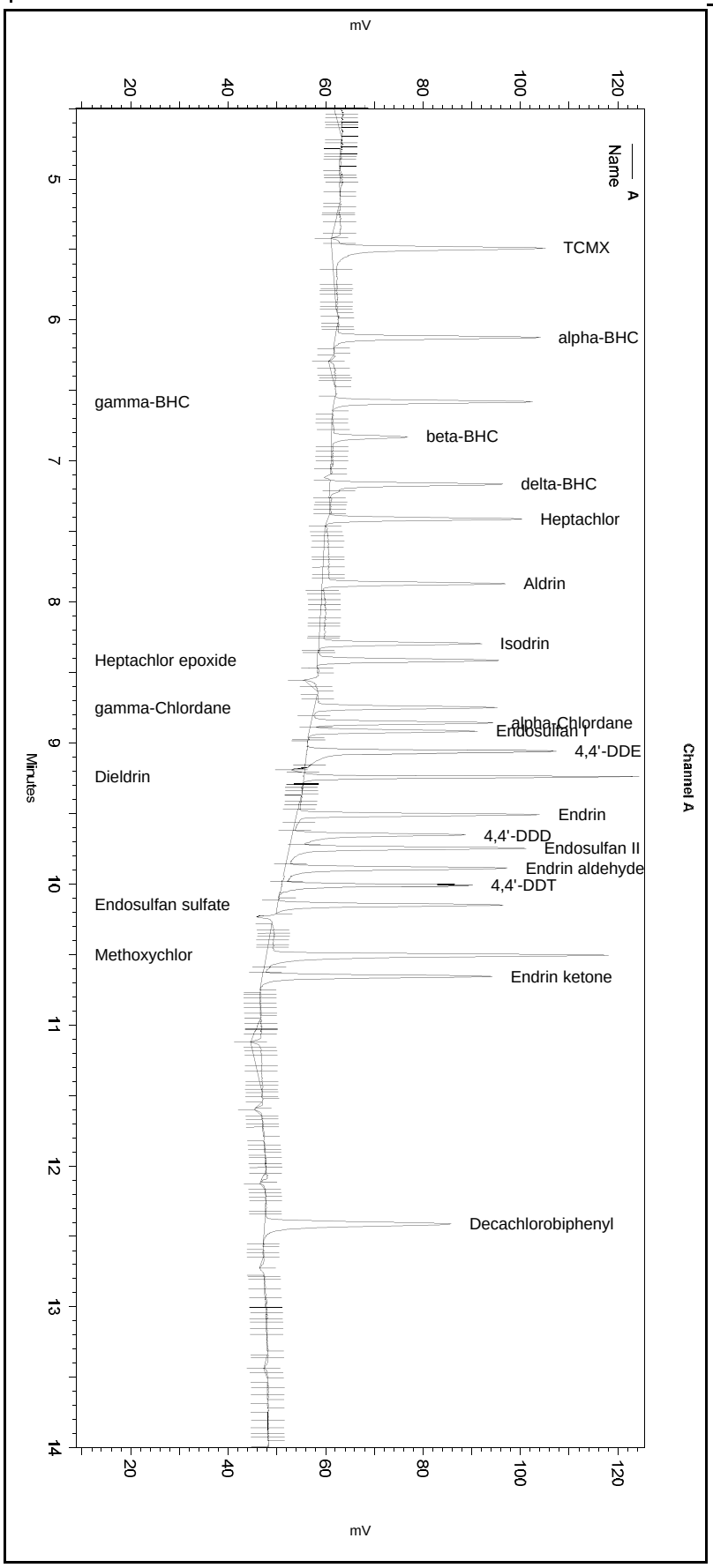
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.233	4.230	179294	10.000 CAL
alpha-BHC	4.970	4.967	169903	5.000 CAL
gamma-BHC	5.397	5.393	156421	5.000 CAL
beta-BHC	5.490	5.487	56330	5.000 CAL
delta-BHC	5.840	5.837	138403	5.000 CAL
Heptachlor	5.920	5.917	161990	5.000 CAL
Aldrin	6.300	6.293	153114	5.000 CAL
Isodrin	6.753	6.747	130133	5.000 CAL
Heptachlor epoxide	6.943	6.937	144150	5.000 CAL
gamma-Chlordane	7.157	7.150	167635	5.000 CAL
alpha-Chlordane	7.317	7.310	134866	5.000 CAL
Endosulfan I	7.387	7.380	132381	5.000 CAL
4,4'-DDE	7.487	7.483	242138	10.000 CAL
Dieldrin	7.690	7.683	290178	10.000 CAL
Endrin	8.027	8.023	232789	10.000 CAL
4,4'-DDD	8.123	8.120	193050	10.000 CAL
Endosulfan II	8.257	8.253	244314	10.000 CAL
4,4'-DDT	8.470	8.463	204487	10.000 CAL
Endrin aldehyde	8.623	8.617	191547	10.000 CAL
Endosulfan sulfate	8.923	8.917	195548	10.000 CAL
Methoxychlor	9.187	9.180	449999	50.000 CAL
Endrin ketone	9.473	9.467	286820	10.000 CAL
Decachlorobiphenyl	10.570	10.567	173312	10.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-021**
Sample Name: **ical,s20311,pest_2**
Instrument: GC23 (Offline) Vial: 21 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:14:26 PM
Analysis Date: 8/23/2012 9:34:07 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

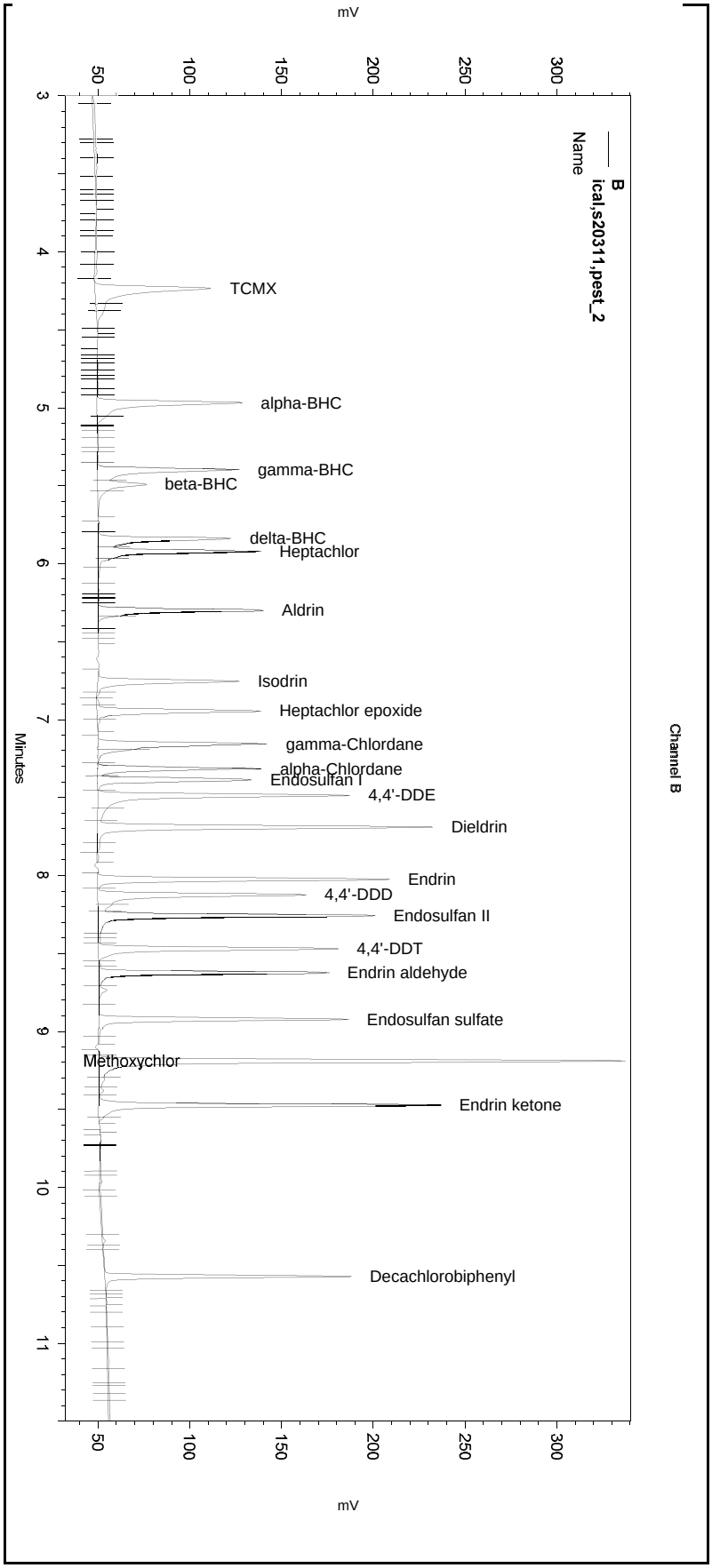
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-021

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.237	0	0
Yes	Reset Baseline	7.098	0	0
Yes	Reset Baseline	7.129	0	0
Yes	Reset Baseline	8.521	0	0
Yes	Reset Baseline	8.981	0	0
Yes	Manual Baseline	8.99	9.359	0
Yes	Split Peak	9.208	0	0
Yes	Reset Baseline	10.206	0	0
Yes	Reset Baseline	10.265	0	0
Yes	Valley to Valley	11.469	12.75	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-021**
Sample Name: **ical,s20311,pest_2**
Instrument: GC23 (Offline) Vial: 21 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:14:26 PM
Analysis Date: 8/23/2012 9:34:07 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-021

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.533	0	0
Yes	Reset Baseline	6.567	0	0
Yes	Split Peak	7.566	0	0
Yes	Reset Baseline	7.917	0	0
Yes	Reset Baseline	7.966	0	0
Yes	Reset Baseline	9.08	0	0
Yes	Reset Baseline	9.115	0	0
Yes	Reset Baseline	9.604	0	0
Yes	Reset Baseline	10.707	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-021**
Sample Name: **ical,s20311,pest_2**
Instrument: GC23 Vial: 21 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:14:26 PM
Analysis Date: 8/22/2012 7:32:54 PM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.490	5.493	93925	11.950
alpha-BHC	6.123	6.117	69596	5.229
gamma-BHC	6.580	6.583	63208	5.020
beta-BHC	6.827	6.830	29994	6.409
delta-BHC	7.163	7.167	60490	5.249
Heptachlor	7.410	7.403	58659	5.269
Aldrin	7.867	7.870	63745	5.718
Isodrin	8.297	8.299	62610	6.884
Heptachlor epoxide	8.413	8.417	70256	6.955
gamma-Chlordane	8.750	8.750	58497	5.766
alpha-Chlordane	8.857	8.857	58375	5.867
Endosulfan I	8.913	8.913	53855	5.892
4,4'-DDE	9.060	9.060	106418	13.001
Dieldrin	9.243	9.247	104866	11.067
Endrin	9.510	9.513	72954	10.713
4,4'-DDD	9.657	9.657	72414	12.891
Endosulfan II	9.750	9.750	95272	11.557
Endrin aldehyde	9.890	9.893	93084	13.564
4,4'-DDT	10.010	10.009	80483	15.882
Endosulfan sulfate	10.150	10.140	86614	13.761
Methoxychlor	10.503	10.499	141245	65.805
Endrin ketone	10.660	10.658	76240	11.642
Decachlorobiphenyl	12.413	12.409	108481	14.439

GC23

PEST - ECD Instrument Results

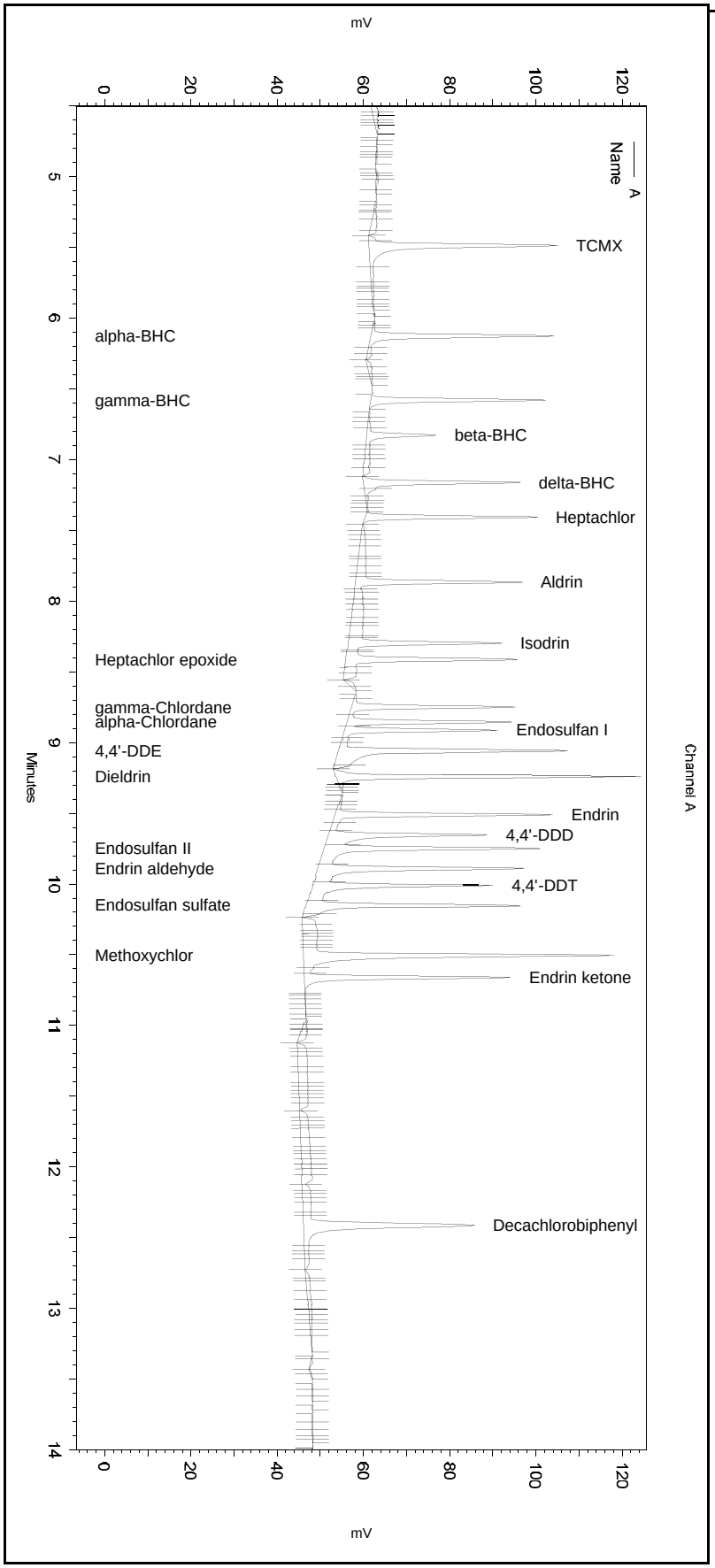
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.233	4.230	179294	10.946
alpha-BHC	4.970	4.967	169903	5.671
gamma-BHC	5.397	5.393	156421	5.472
beta-BHC	5.490	5.487	67707	5.664
delta-BHC	5.840	5.837	138798	5.383
Heptachlor	5.920	5.917	162729	5.776
Aldrin	6.300	6.293	155976	5.716
Isodrin	6.753	6.747	130133	5.765
Heptachlor epoxide	6.943	6.937	144150	5.755
gamma-Chlordane	7.157	7.150	167930	6.509
alpha-Chlordane	7.317	7.310	136150	5.750
Endosulfan I	7.387	7.380	134504	5.716
4,4'-DDE	7.487	7.483	264243	13.305
Dieldrin	7.690	7.683	296428	11.951
Endrin	8.027	8.023	242629	11.475
4,4'-DDD	8.123	8.120	202835	11.433
Endosulfan II	8.257	8.253	258530	11.924
4,4'-DDT	8.470	8.463	215349	11.768
Endrin aldehyde	8.623	8.617	203579	12.860
Endosulfan sulfate	8.923	8.917	214846	12.257
Methoxychlor	9.187	9.180	458854	56.612
Endrin ketone	9.473	9.467	291232	14.851
Decachlorobiphenyl	10.570	10.567	194533	13.218

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-021**
Sample Name: **ical,s20311,pest_2**
Instrument: GC23 Vial: 21 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:14:26 PM
Analysis Date: 8/22/2012 7:32:54 PM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

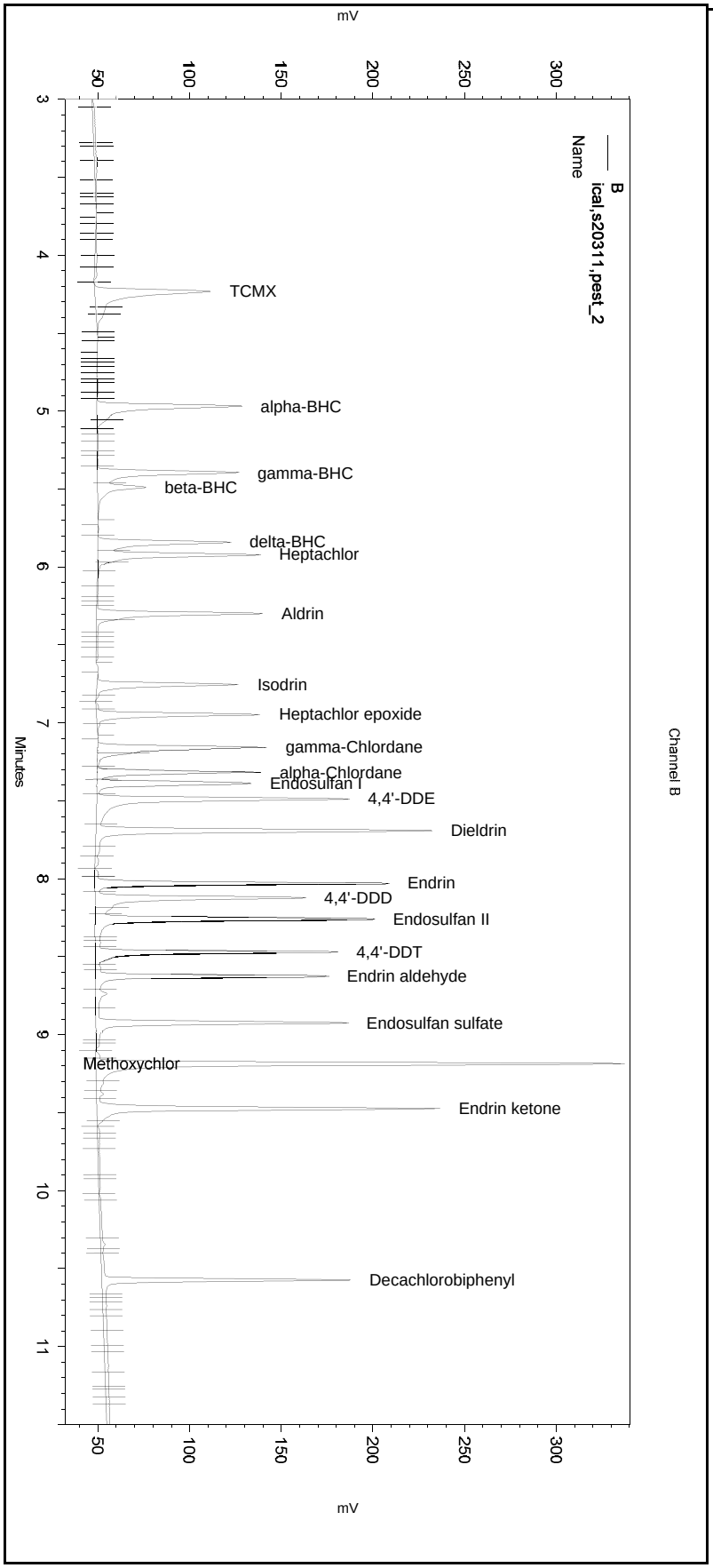
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-021_EB67.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-021**
Sample Name: **ical,s20311,pest_2**
Instrument: GC23 Vial: 21 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:14:26 PM
Analysis Date: 8/22/2012 7:32:54 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-021_EB67.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-022**
Sample Name: **ical,s19414,pest_3**
Instrument: GC23 (Offline) Vial: 22 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:36:26 PM
Analysis Date: 8/23/2012 9:34:15 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.493	5.493	160735	20.000 CAL
alpha-BHC	6.127	6.117	136106	10.000 CAL
gamma-BHC	6.583	6.583	128606	10.000 CAL
beta-BHC	6.830	6.830	48803	10.000 CAL
delta-BHC	7.167	7.167	120454	10.000 CAL
Heptachlor	7.410	7.403	116460	10.000 CAL
Aldrin	7.870	7.870	121434	10.000 CAL
Isodrin	8.300	8.299	97837	10.000 CAL
Heptachlor epoxide	8.417	8.417	106415	10.000 CAL
gamma-Chlordane	8.753	8.750	111575	10.000 CAL
alpha-Chlordane	8.857	8.857	105859	10.000 CAL
Endosulfan I	8.917	8.913	95995	10.000 CAL
4,4'-DDE	9.060	9.060	175614	20.000 CAL
Dieldrin	9.247	9.247	195601	20.000 CAL
Endrin	9.513	9.513	137154	20.000 CAL
4,4'-DDD	9.657	9.657	128565	20.000 CAL
Endosulfan II	9.750	9.750	179598	20.000 CAL
Endrin aldehyde	9.893	9.893	142500	20.000 CAL
4,4'-DDT	10.010	10.009	127149	20.000 CAL
Endosulfan sulfate	10.150	10.140	139586	20.000 CAL
Methoxychlor	10.503	10.499	285415	100.000 CAL
Endrin ketone	10.660	10.658	165725	20.000 CAL
Decachlorobiphenyl	12.413	12.409	179136	20.000 CAL

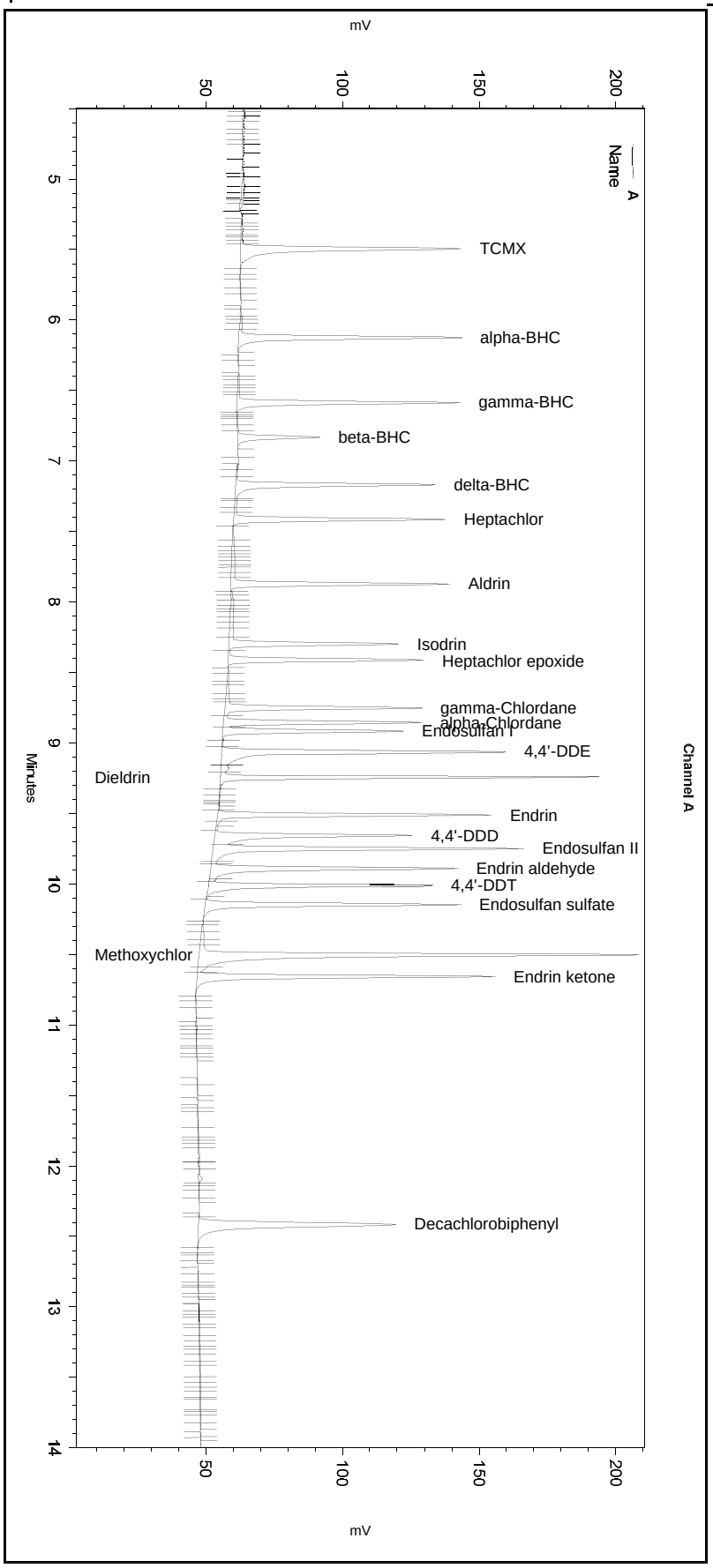
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.237	4.230	354346	20.000 CAL
alpha-BHC	4.973	4.967	323029	10.000 CAL
gamma-BHC	5.400	5.393	308377	10.000 CAL
beta-BHC	5.493	5.487	118022	10.000 CAL
delta-BHC	5.843	5.837	284657	10.000 CAL
Heptachlor	5.923	5.917	315253	10.000 CAL
Aldrin	6.303	6.293	300282	10.000 CAL
Isodrin	6.753	6.747	249184	10.000 CAL
Heptachlor epoxide	6.947	6.937	288562	10.000 CAL
gamma-Chlordane	7.157	7.150	306986	10.000 CAL
alpha-Chlordane	7.320	7.310	267042	10.000 CAL
Endosulfan I	7.390	7.380	259063	10.000 CAL
4,4'-DDE	7.490	7.483	457612	20.000 CAL
Dieldrin	7.690	7.683	528793	20.000 CAL
Endrin	8.030	8.023	437224	20.000 CAL
4,4'-DDD	8.127	8.120	376402	20.000 CAL
Endosulfan II	8.260	8.253	461602	20.000 CAL
4,4'-DDT	8.470	8.463	416855	20.000 CAL
Endrin aldehyde	8.627	8.617	361173	20.000 CAL
Endosulfan sulfate	8.927	8.917	368219	20.000 CAL
Methoxychlor	9.187	9.180	734019	100.000 CAL
Endrin ketone	9.477	9.467	490876	20.000 CAL
Decachlorobiphenyl	10.573	10.567	323377	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-022**
Sample Name: **ical,s19414,pest_3**
Instrument: GC23 (Offline) Vial: 22 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:36:26 PM
Analysis Date: 8/23/2012 9:34:15 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

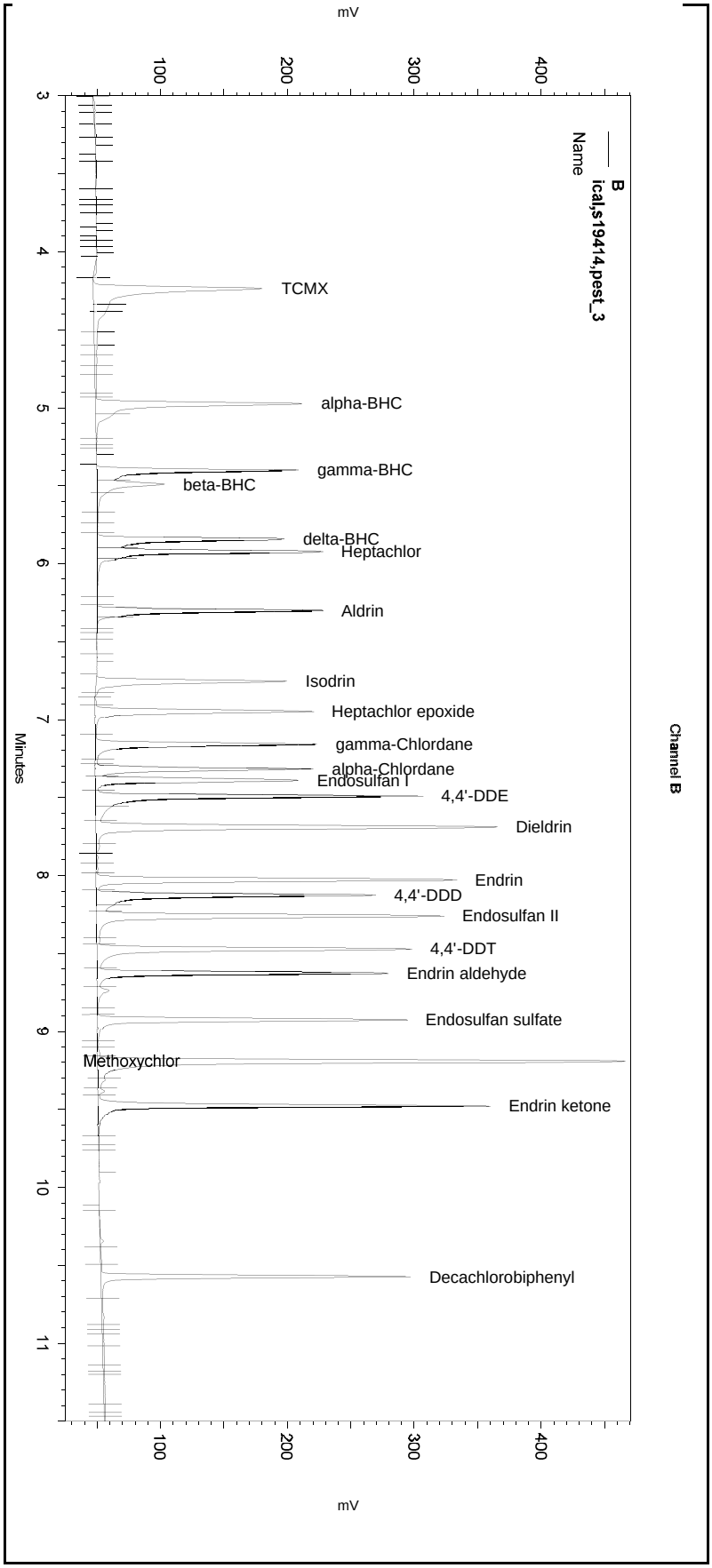
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-022

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.47	0	0
Yes	Manual Baseline	9.435	10.267	0
Yes	Reset Baseline	12.294	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-022**
Sample Name: **ical,s19414,pest_3**
Instrument: GC23 (Offline) Vial: 22 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:36:26 PM
Analysis Date: 8/23/2012 9:34:15 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-022

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.342	0	0
Yes	Split Peak	7.558	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-022**
Sample Name: **ical,s19414,pest_3**
Instrument: GC23 Vial: 22 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:36:26 PM
Analysis Date: 8/22/2012 7:54:52 PM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.493	5.493	160735	20.451
alpha-BHC	6.127	6.117	136106	10.227
gamma-BHC	6.583	6.583	128606	10.214
beta-BHC	6.830	6.830	48803	10.428
delta-BHC	7.167	7.167	120454	10.453
Heptachlor	7.410	7.403	116460	10.462
Aldrin	7.870	7.870	123545	11.083
Isodrin	8.300	8.299	101842	11.198
Heptachlor epoxide	8.417	8.417	112390	11.126
gamma-Chlordane	8.753	8.750	114662	11.303
alpha-Chlordane	8.857	8.857	107716	10.827
Endosulfan I	8.917	8.913	97706	10.689
4,4'-DDE	9.060	9.060	177072	21.633
Dieldrin	9.247	9.247	196334	20.721
Endrin	9.513	9.513	136363	20.024
4,4'-DDD	9.657	9.657	123517	21.988
Endosulfan II	9.750	9.750	169699	20.586
Endrin aldehyde	9.893	9.893	129899	18.929
4,4'-DDT	10.010	10.009	119908	23.661
Endosulfan sulfate	10.150	10.140	138836	22.057
Methoxychlor	10.503	10.499	285415	132.973
Endrin ketone	10.660	10.658	165725	25.307
Decachlorobiphenyl	12.413	12.409	183820	24.467

GC23

PEST - ECD Instrument Results

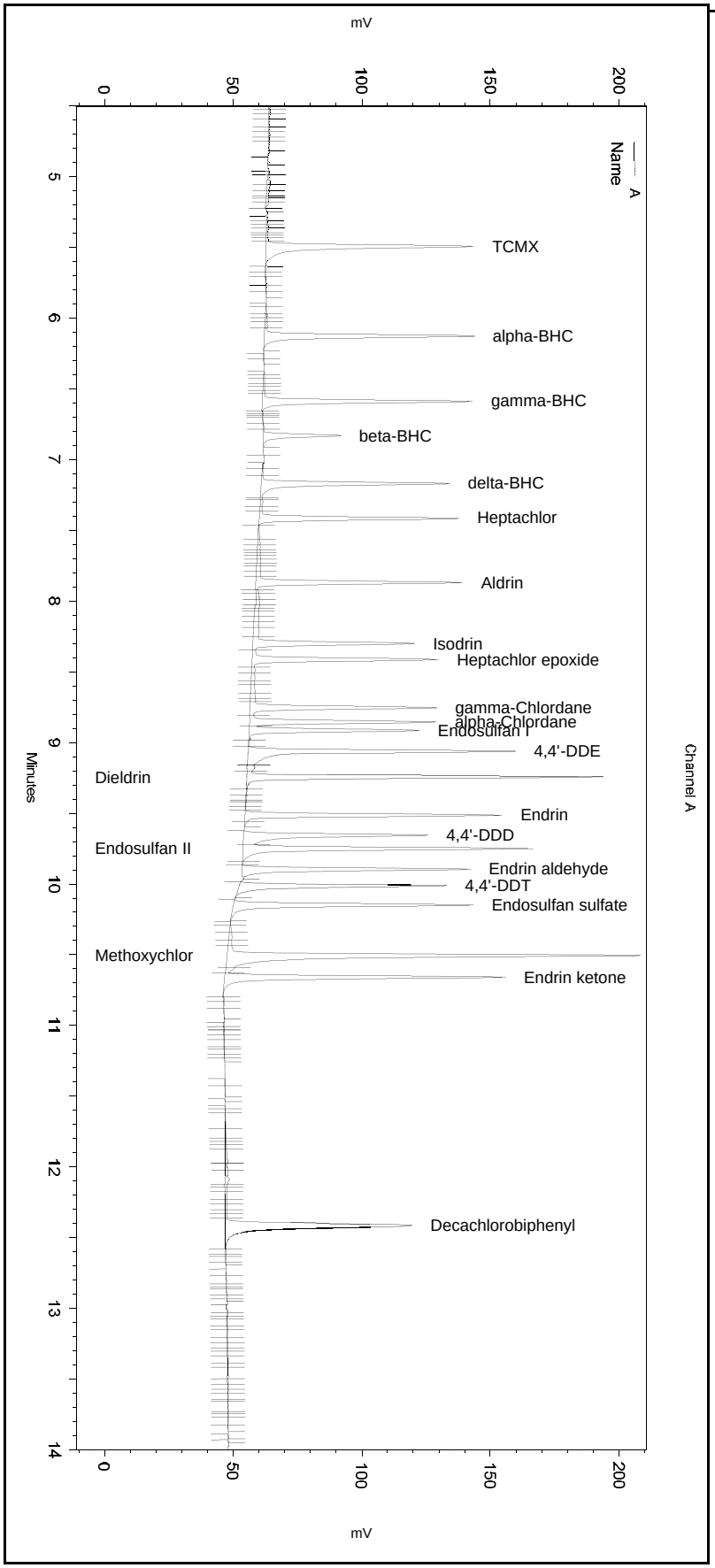
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.237	4.230	354346	21.632
alpha-BHC	4.973	4.967	323029	10.781
gamma-BHC	5.400	5.393	308377	10.789
beta-BHC	5.493	5.487	118022	9.873
delta-BHC	5.843	5.837	284657	11.040
Heptachlor	5.923	5.917	315253	11.190
Aldrin	6.303	6.293	312186	11.440
Isodrin	6.753	6.747	249184	11.039
Heptachlor epoxide	6.947	6.937	288562	11.521
gamma-Chlordane	7.157	7.150	306986	11.898
alpha-Chlordane	7.320	7.310	267042	11.278
Endosulfan I	7.390	7.380	259063	11.010
4,4'-DDE	7.490	7.483	498607	25.106
Dieldrin	7.690	7.683	528793	21.319
Endrin	8.030	8.023	437224	20.678
4,4'-DDD	8.127	8.120	376402	21.216
Endosulfan II	8.260	8.253	461602	21.291
4,4'-DDT	8.470	8.463	416855	22.780
Endrin aldehyde	8.627	8.617	361173	22.816
Endosulfan sulfate	8.927	8.917	368219	21.007
Methoxychlor	9.187	9.180	734019	102.560
Endrin ketone	9.477	9.467	490876	25.032
Decachlorobiphenyl	10.573	10.567	323377	21.972

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-022**
Sample Name: **ical,s19414,pest_3**
Instrument: GC23 Vial: 22 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:36:26 PM
Analysis Date: 8/22/2012 7:54:52 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

Manual Integration Fixes

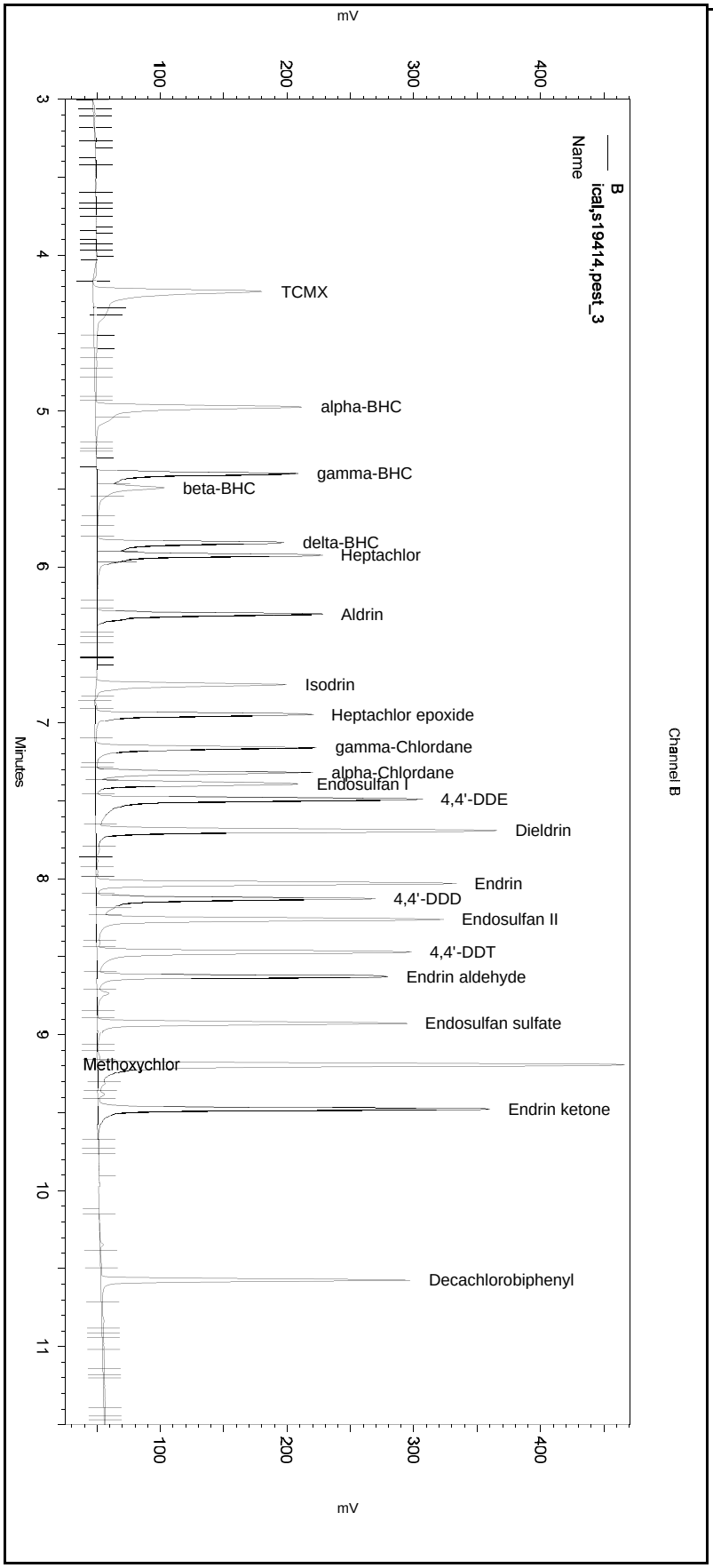
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-022_EB68.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-022**
Sample Name: **ical,s19414,pest_3**
Instrument: GC23 Vial: 22 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/22/2012 7:36:26 PM
Analysis Date: 8/22/2012 7:54:52 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-022_EB68.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-024**
Sample Name: **ical,s19415,pest_4**
Instrument: GC23 (Offline) Vial: 23 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:17:39 AM
Analysis Date: 8/23/2012 9:37:35 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.510	5.493	268140	40.000 CAL
alpha-BHC	6.140	6.117	234051	20.000 CAL
gamma-BHC	6.600	6.583	219247	20.000 CAL
beta-BHC	6.843	6.830	84966	20.000 CAL
delta-BHC	7.183	7.167	204222	20.000 CAL
Heptachlor	7.427	7.403	195675	20.000 CAL
Aldrin	7.883	7.870	192921	20.000 CAL
Isodrin	8.313	8.299	154448	20.000 CAL
Heptachlor epoxide	8.430	8.417	170942	20.000 CAL
gamma-Chlordane	8.763	8.750	178853	20.000 CAL
alpha-Chlordane	8.870	8.857	166056	20.000 CAL
Endosulfan I	8.927	8.913	150525	20.000 CAL
4,4'-DDE	9.073	9.060	309878	40.000 CAL
Dieldrin	9.257	9.247	320121	40.000 CAL
Endrin	9.523	9.513	241215	40.000 CAL
4,4'-DDD	9.667	9.657	230358	40.000 CAL
Endosulfan II	9.760	9.750	268105	40.000 CAL
Endrin aldehyde	9.903	9.893	213329	40.000 CAL
4,4'-DDT	10.023	10.009	233776	40.000 CAL
Endosulfan sulfate	10.160	10.140	223230	40.000 CAL
Methoxychlor	10.513	10.499	590497	200.000 CAL
Endrin ketone	10.670	10.658	271004	40.000 CAL
Decachlorobiphenyl	12.427	12.409	259495	40.000 CAL

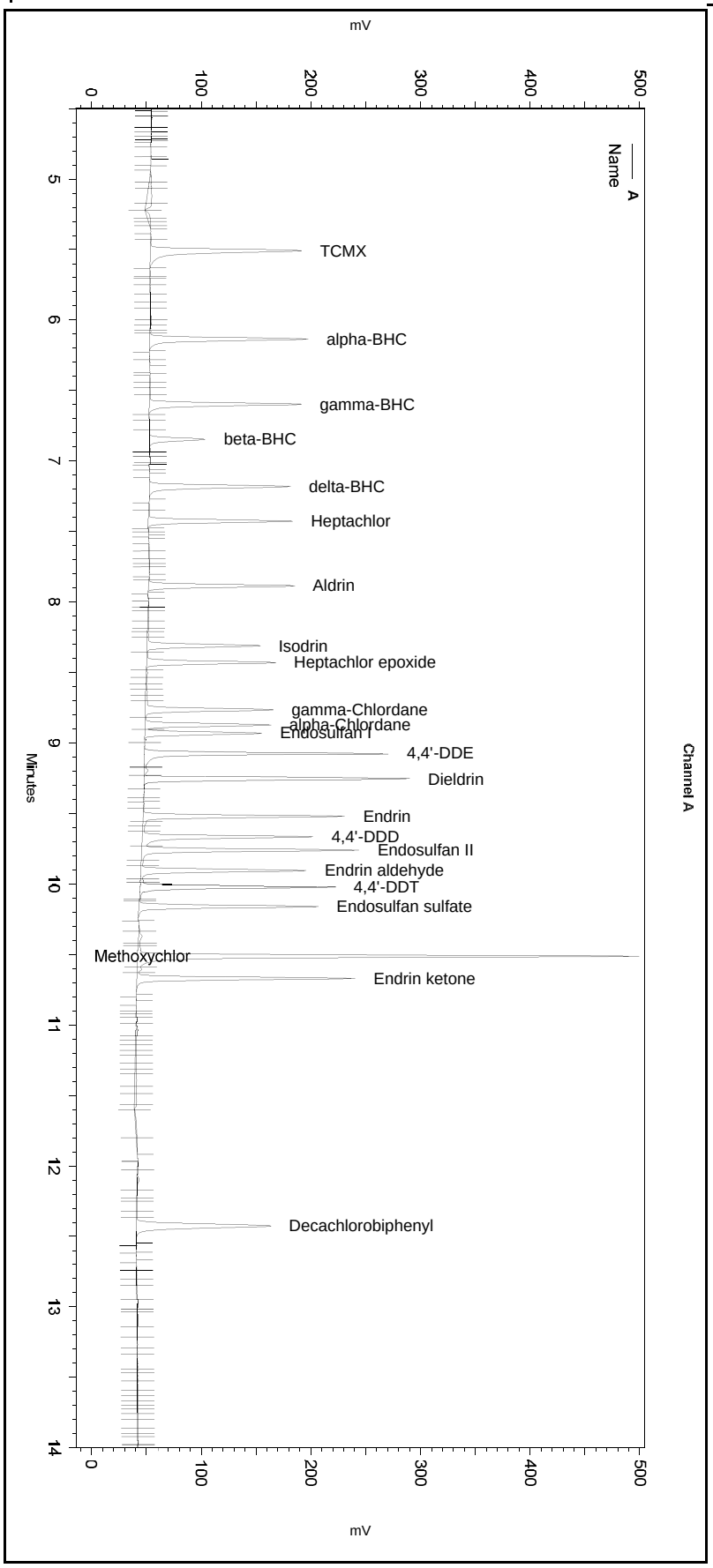
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.237	4.230	617825	40.000 CAL
alpha-BHC	4.973	4.967	539753	20.000 CAL
gamma-BHC	5.403	5.393	509807	20.000 CAL
beta-BHC	5.497	5.487	213854	20.000 CAL
delta-BHC	5.847	5.837	478382	20.000 CAL
Heptachlor	5.927	5.917	513848	20.000 CAL
Aldrin	6.307	6.293	490245	20.000 CAL
Isodrin	6.757	6.747	412385	20.000 CAL
Heptachlor epoxide	6.950	6.937	459755	20.000 CAL
gamma-Chlordane	7.160	7.150	478385	20.000 CAL
alpha-Chlordane	7.320	7.310	433445	20.000 CAL
Endosulfan I	7.390	7.380	413199	20.000 CAL
4,4'-DDE	7.493	7.483	743136	40.000 CAL
Dieldrin	7.693	7.683	745685	40.000 CAL
Endrin	8.033	8.023	650039	40.000 CAL
4,4'-DDD	8.130	8.120	603904	40.000 CAL
Endosulfan II	8.263	8.253	609454	40.000 CAL
4,4'-DDT	8.473	8.463	640893	40.000 CAL
Endrin aldehyde	8.627	8.617	539567	40.000 CAL
Endosulfan sulfate	8.927	8.917	565585	40.000 CAL
Methoxychlor	9.190	9.180	918564	200.000 CAL
Endrin ketone	9.477	9.467	571356	40.000 CAL
Decachlorobiphenyl	10.573	10.567	454083	40.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-024**
Sample Name: **ical,s19415,pest_4**
Instrument: GC23 (Offline) Vial: 23 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:17:39 AM
Analysis Date: 8/23/2012 9:37:35 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

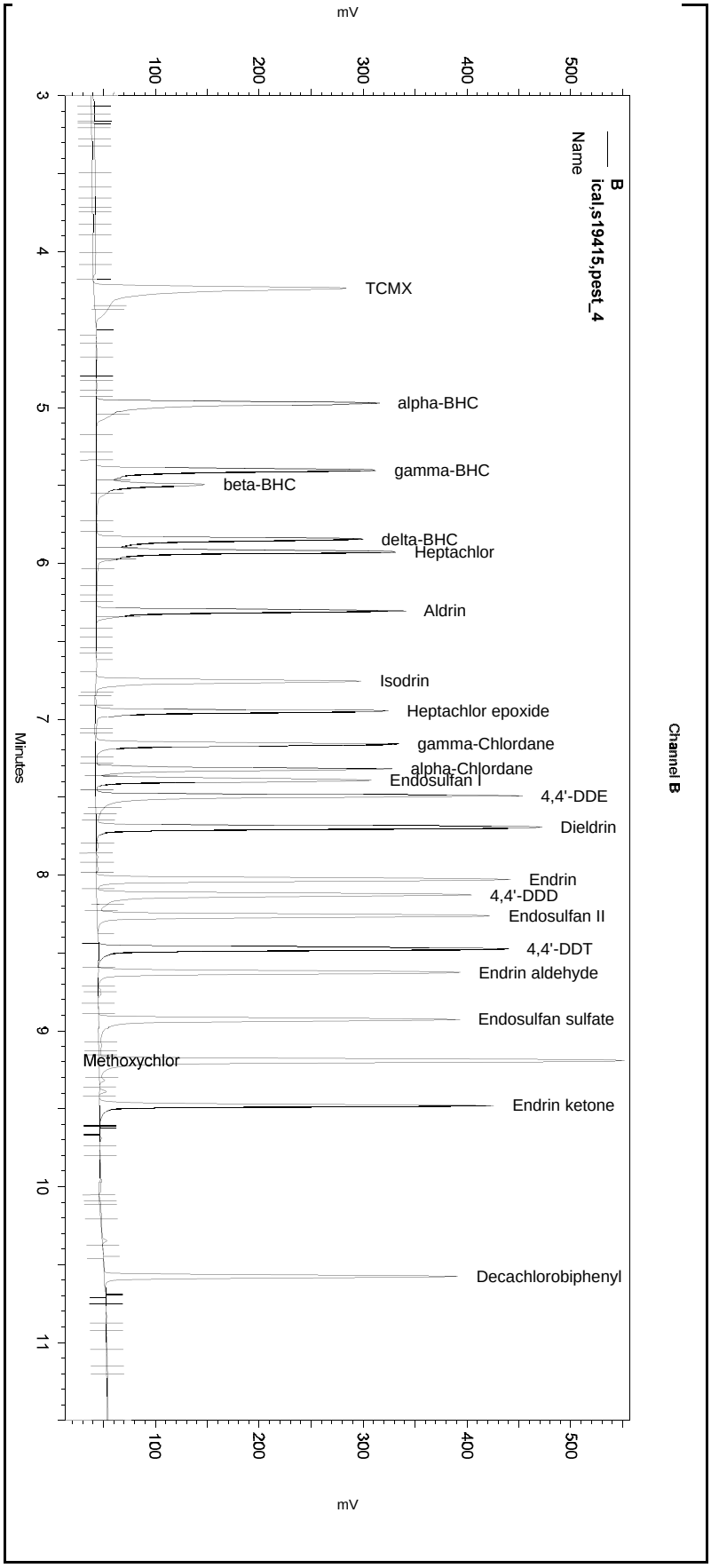
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	9.416	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-024**
Sample Name: **ical,s19415,pest_4**
Instrument: GC23 (Offline) Vial: 23 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:17:39 AM
Analysis Date: 8/23/2012 9:37:35 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.505	0	0
Yes	Split Peak	6.339	0	0
Yes	Reset Baseline	8.407	0	0
Yes	Reset Baseline	9.356	0	0
Yes	Reset Baseline	9.624	0	0
Yes	Reset Baseline	10.455	0	0
Yes	Reset Baseline	10.693	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-024**
Sample Name: **ical,s19415,pest_4**
Instrument: GC23 Vial: 23 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:17:39 AM
Analysis Date: 8/23/2012 6:36:05 AM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.510	5.493	268140	34.116
alpha-BHC	6.140	6.117	234051	17.587
gamma-BHC	6.600	6.583	219247	17.414
beta-BHC	6.843	6.830	84966	18.155
delta-BHC	7.183	7.167	204222	17.723
Heptachlor	7.427	7.403	195675	17.578
Aldrin	7.883	7.870	192921	17.306
Isodrin	8.313	8.299	155909	17.143
Heptachlor epoxide	8.430	8.417	173187	17.144
gamma-Chlordane	8.763	8.750	183637	18.102
alpha-Chlordane	8.870	8.857	170180	17.105
Endosulfan I	8.927	8.913	156252	17.094
4,4'-DDE	9.073	9.060	321614	39.292
Dieldrin	9.257	9.247	328991	34.721
Endrin	9.523	9.513	249272	36.604
4,4'-DDD	9.667	9.657	237306	42.244
Endosulfan II	9.760	9.750	273819	33.217
Endrin aldehyde	9.903	9.893	217034	31.627
4,4'-DDT	10.023	10.009	236631	46.694
Endosulfan sulfate	10.160	10.140	224309	35.637
Methoxychlor	10.513	10.499	590497	275.108
Endrin ketone	10.670	10.658	271004	41.384
Decachlorobiphenyl	12.427	12.409	259495	34.540

GC23

PEST - ECD Instrument Results

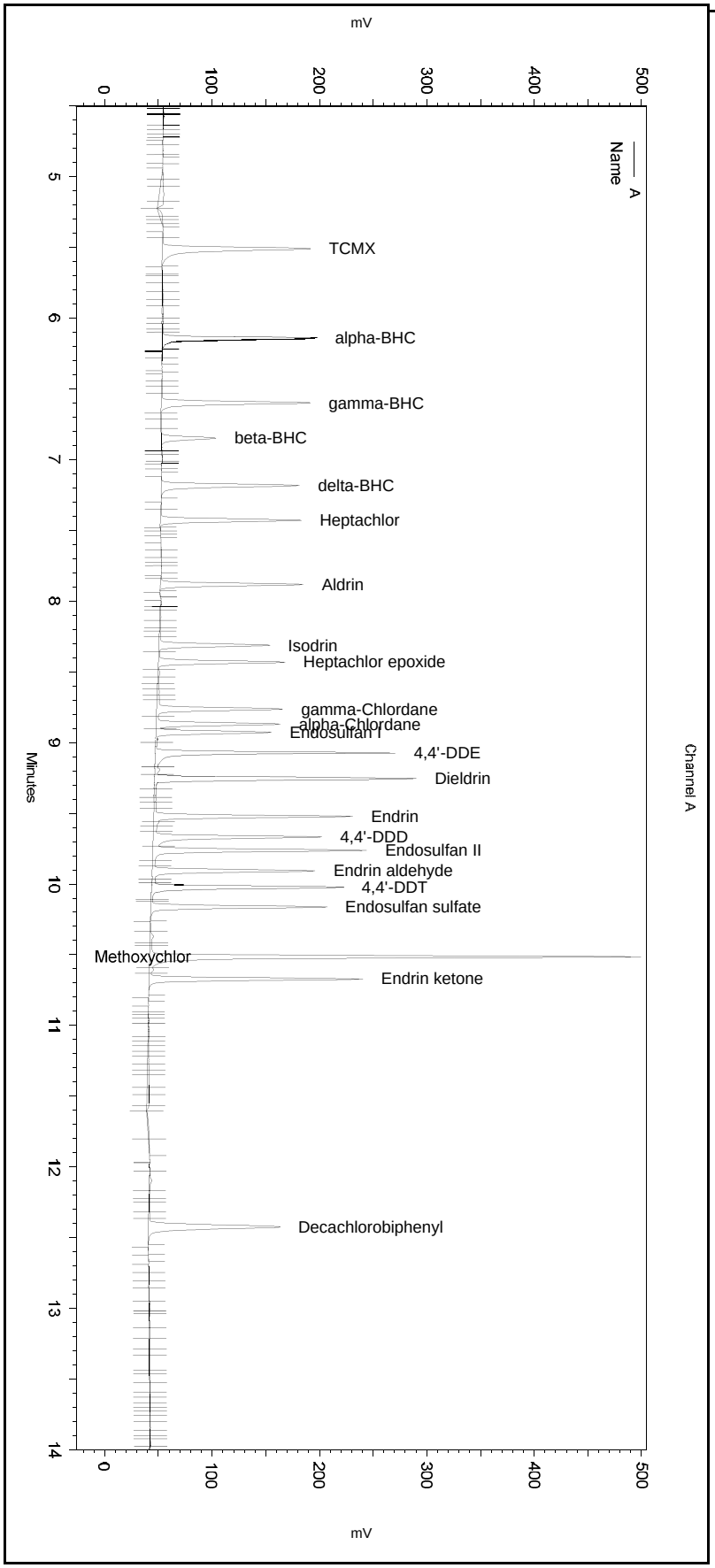
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.237	4.230	630690	38.502
alpha-BHC	4.973	4.967	554079	18.493
gamma-BHC	5.403	5.393	521285	18.237
beta-BHC	5.497	5.487	220546	18.449
delta-BHC	5.847	5.837	484072	18.775
Heptachlor	5.927	5.917	517401	18.365
Aldrin	6.307	6.293	516593	18.931
Isodrin	6.757	6.747	412385	18.270
Heptachlor epoxide	6.950	6.937	459755	18.356
gamma-Chlordane	7.160	7.150	478385	18.542
alpha-Chlordane	7.320	7.310	433445	18.306
Endosulfan I	7.390	7.380	413199	17.561
4,4'-DDE	7.493	7.483	743136	37.419
Dieldrin	7.693	7.683	745685	30.064
Endrin	8.033	8.023	653199	30.892
4,4'-DDD	8.130	8.120	608599	34.304
Endosulfan II	8.263	8.253	620562	28.622
4,4'-DDT	8.473	8.463	652859	35.677
Endrin aldehyde	8.627	8.617	546837	34.544
Endosulfan sulfate	8.927	8.917	576840	32.908
Methoxychlor	9.190	9.180	932206	146.602
Endrin ketone	9.477	9.467	587228	29.946
Decachlorobiphenyl	10.573	10.567	500555	34.010

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-024**
Sample Name: **ical,s19415,pest_4**
Instrument: GC23 Vial: 23 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:17:39 AM
Analysis Date: 8/23/2012 6:36:05 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

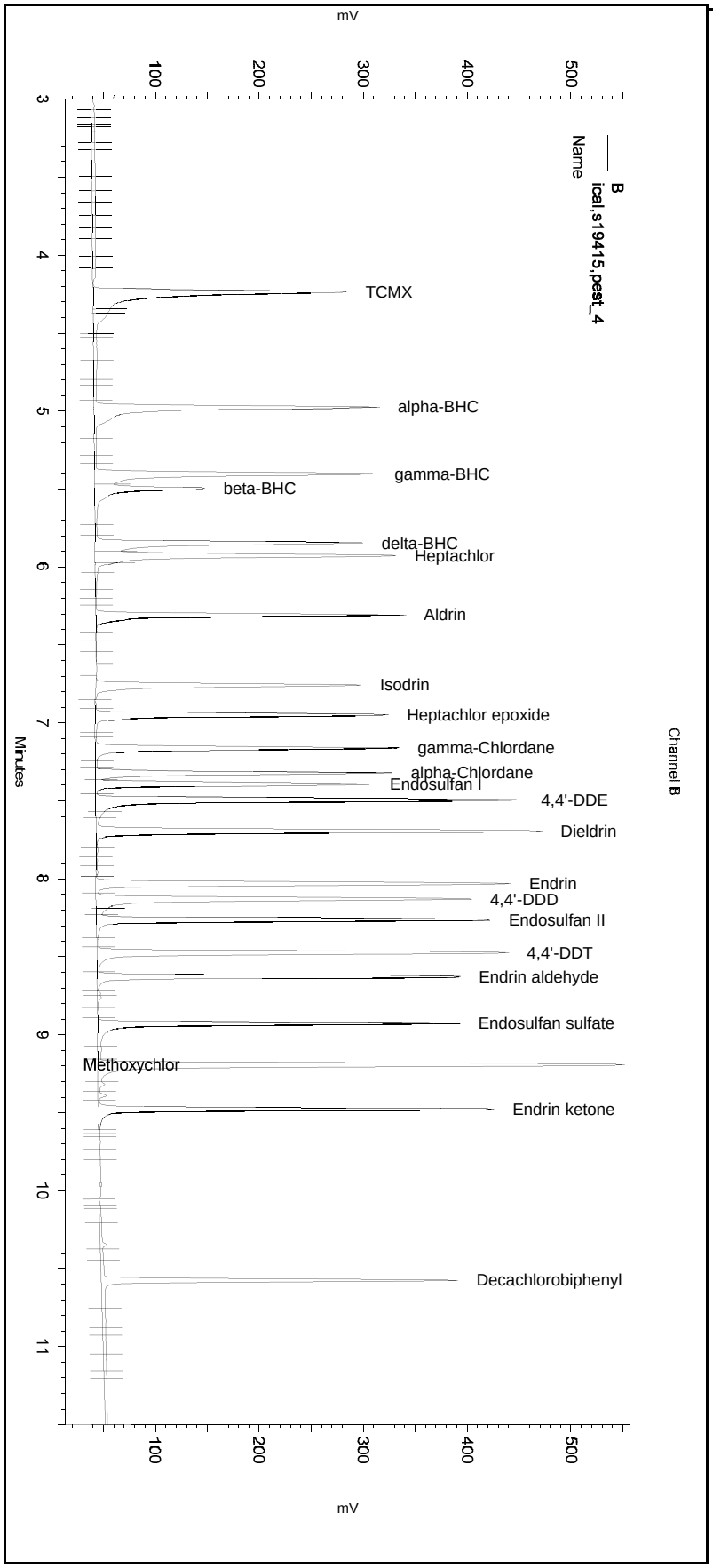
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-024_EB6A.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-024**
Sample Name: **ical,s19415,pest_4**
Instrument: GC23 Vial: 23 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:17:39 AM
Analysis Date: 8/23/2012 6:36:05 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-024_EB6A.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-025**
Sample Name: **ical,s19416,pest_5**
Instrument: GC23 (Offline) Vial: 24 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:39:34 AM
Analysis Date: 8/23/2012 8:56:07 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.490	5.493	356341	50.000 CAL
alpha-BHC	6.120	6.117	304255	25.000 CAL
gamma-BHC	6.580	6.583	281588	25.000 CAL
beta-BHC	6.827	6.830	104990	25.000 CAL
delta-BHC	7.163	7.167	260298	25.000 CAL
Heptachlor	7.407	7.403	240776	25.000 CAL
Aldrin	7.867	7.870	253597	25.000 CAL
Isodrin	8.297	8.299	195414	25.000 CAL
Heptachlor epoxide	8.413	8.417	213237	25.000 CAL
gamma-Chlordane	8.747	8.750	219333	25.000 CAL
alpha-Chlordane	8.853	8.857	206999	25.000 CAL
Endosulfan I	8.910	8.913	189047	25.000 CAL
4,4'-DDE	9.057	9.060	360834	50.000 CAL
Dieldrin	9.240	9.247	415656	50.000 CAL
Endrin	9.510	9.513	279401	50.000 CAL
4,4'-DDD	9.653	9.657	253206	50.000 CAL
Endosulfan II	9.747	9.750	345746	50.000 CAL
Endrin aldehyde	9.890	9.893	267832	50.000 CAL
4,4'-DDT	10.010	10.009	256348	50.000 CAL
Endosulfan sulfate	10.147	10.140	259354	50.000 CAL
Methoxychlor	10.500	10.499	578641	250.000 CAL
Endrin ketone	10.657	10.658	315913	50.000 CAL
Decachlorobiphenyl	12.410	12.409	294031	50.000 CAL

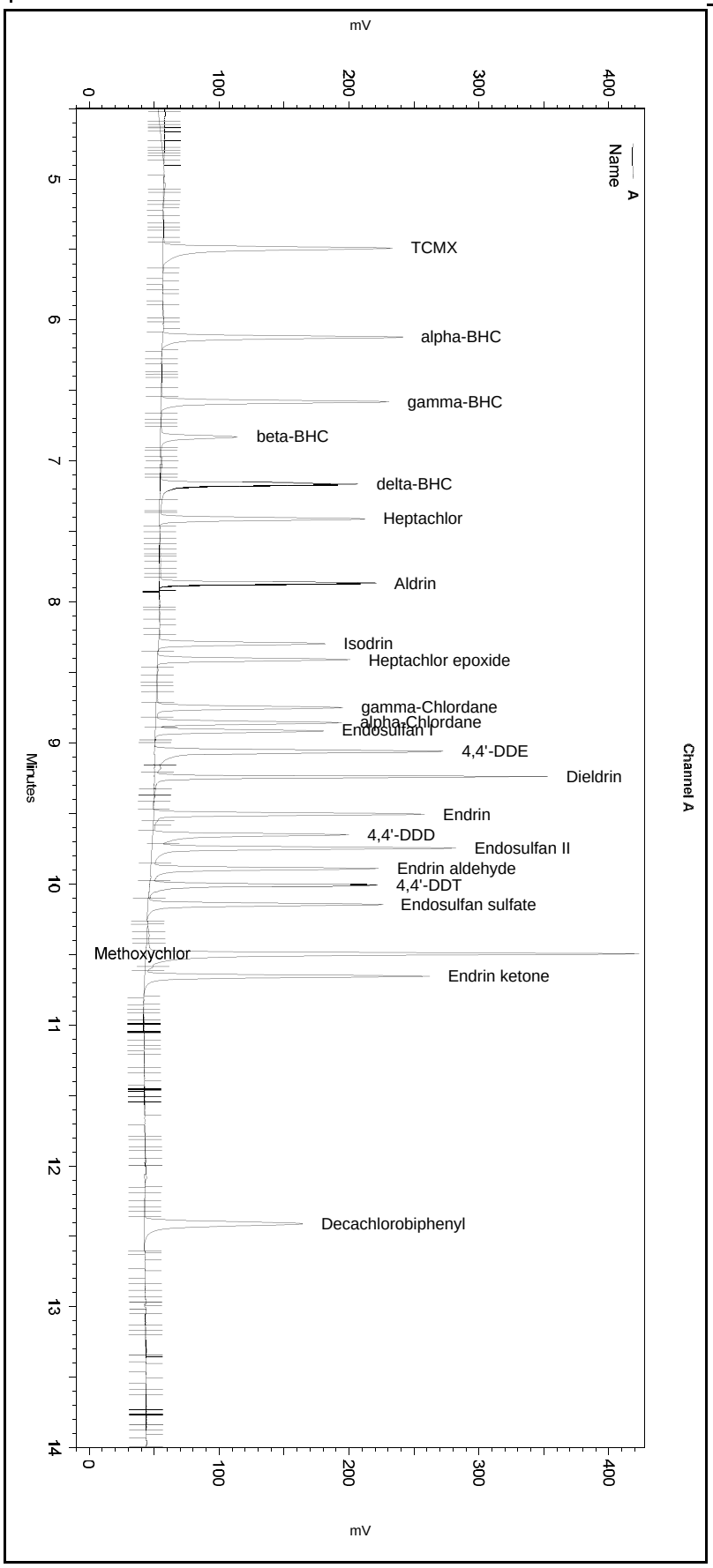
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.233	4.230	779308	50.000 CAL
alpha-BHC	4.967	4.967	698300	25.000 CAL
gamma-BHC	5.397	5.393	685017	25.000 CAL
beta-BHC	5.490	5.487	284198	25.000 CAL
delta-BHC	5.840	5.837	632463	25.000 CAL
Heptachlor	5.920	5.917	667650	25.000 CAL
Aldrin	6.297	6.293	634197	25.000 CAL
Isodrin	6.750	6.747	545091	25.000 CAL
Heptachlor epoxide	6.940	6.937	596189	25.000 CAL
gamma-Chlordane	7.153	7.150	610547	25.000 CAL
alpha-Chlordane	7.313	7.310	562760	25.000 CAL
Endosulfan I	7.383	7.380	546132	25.000 CAL
4,4'-DDE	7.487	7.483	911698	50.000 CAL
Dieldrin	7.687	7.683	905282	50.000 CAL
Endrin	8.027	8.023	771776	50.000 CAL
4,4'-DDD	8.120	8.120	807923	50.000 CAL
Endosulfan II	8.257	8.253	820012	50.000 CAL
4,4'-DDT	8.467	8.463	807031	50.000 CAL
Endrin aldehyde	8.620	8.617	699874	50.000 CAL
Endosulfan sulfate	8.920	8.917	716406	50.000 CAL
Methoxychlor	9.183	9.180	1116386	250.000 CAL
Endrin ketone	9.470	9.467	742525	50.000 CAL
Decachlorobiphenyl	10.570	10.567	581550	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-025**
Sample Name: **ical,s19416,pest_5**
Instrument: GC23 (Offline) Vial: 24 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:39:34 AM
Analysis Date: 8/23/2012 8:56:07 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

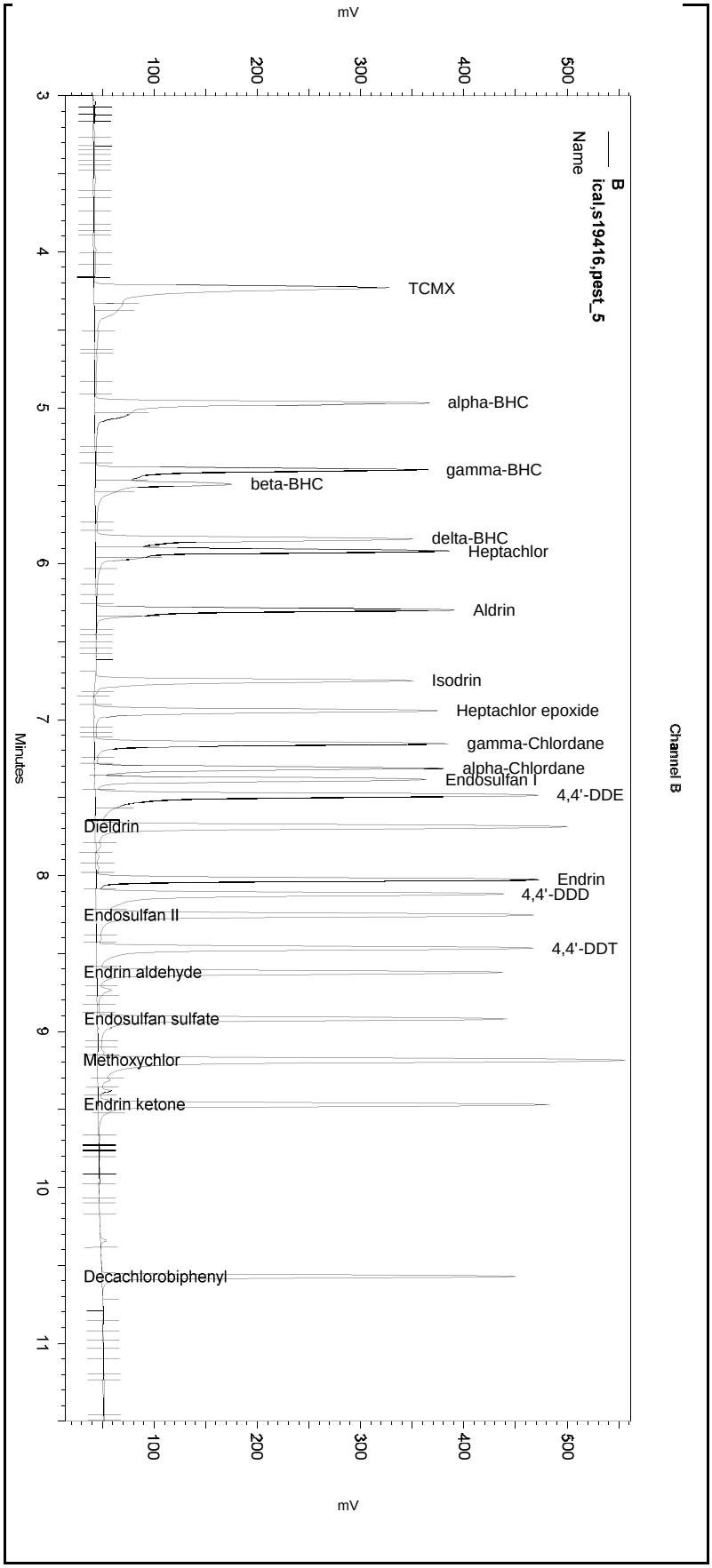
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-025

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	9.473	10.284	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-025**
Sample Name: **ical,s19416,pest_5**
Instrument: GC23 (Offline) Vial: 24 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:39:34 AM
Analysis Date: 8/23/2012 8:56:07 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-025

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	10.721	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-025**
Sample Name: **ical,s19416,pest_5**
Instrument: GC23 Vial: 24 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:39:34 AM
Analysis Date: 8/23/2012 6:57:56 AM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.490	5.493	356341	45.338
alpha-BHC	6.120	6.117	304255	22.862
gamma-BHC	6.580	6.583	281588	22.365
beta-BHC	6.827	6.830	104990	22.433
delta-BHC	7.163	7.167	260298	22.589
Heptachlor	7.407	7.403	240776	21.629
Aldrin	7.867	7.870	253597	22.750
Isodrin	8.297	8.299	195414	21.487
Heptachlor epoxide	8.413	8.417	213237	21.109
gamma-Chlordane	8.747	8.750	219333	21.621
alpha-Chlordane	8.853	8.857	206999	20.806
Endosulfan I	8.910	8.913	189047	20.682
4,4'-DDE	9.057	9.060	360834	44.084
Dieldrin	9.240	9.247	415656	43.868
Endrin	9.510	9.513	277547	40.756
4,4'-DDD	9.653	9.657	247080	43.983
Endosulfan II	9.747	9.750	338879	41.110
Endrin aldehyde	9.890	9.893	263440	38.389
4,4'-DDT	10.010	10.009	253619	50.046
Endosulfan sulfate	10.147	10.140	258488	41.067
Methoxychlor	10.500	10.499	578641	269.584
Endrin ketone	10.657	10.658	315913	48.242
Decachlorobiphenyl	12.410	12.409	294031	39.136

GC23

PEST - ECD Instrument Results

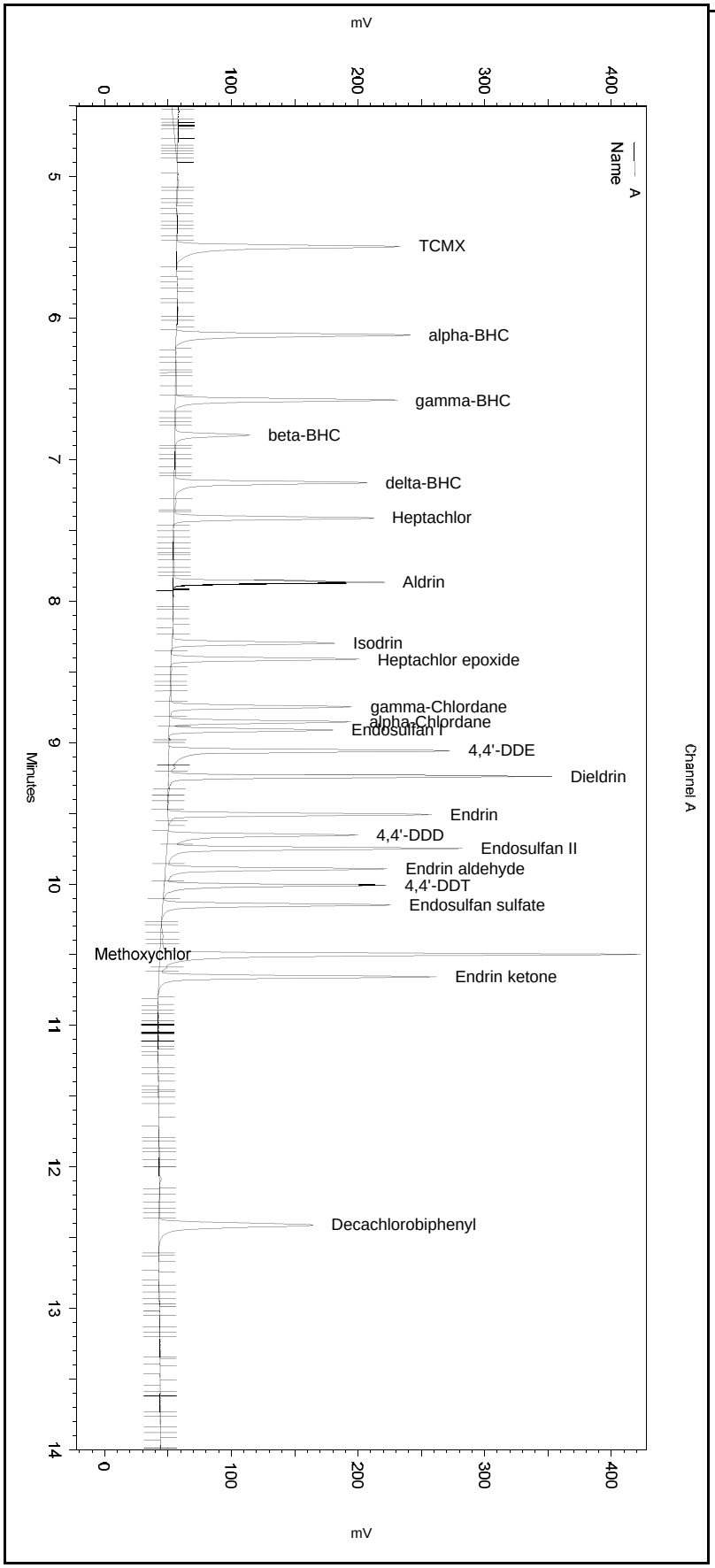
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.233	4.230	779308	47.575
alpha-BHC	4.967	4.967	698300	23.306
gamma-BHC	5.397	5.393	685017	23.966
beta-BHC	5.490	5.487	284198	23.774
delta-BHC	5.840	5.837	632463	24.530
Heptachlor	5.920	5.917	667650	23.698
Aldrin	6.297	6.293	634197	23.241
Isodrin	6.750	6.747	545091	24.149
Heptachlor epoxide	6.940	6.937	596189	23.803
gamma-Chlordane	7.153	7.150	610547	23.664
alpha-Chlordane	7.313	7.310	562760	23.767
Endosulfan I	7.383	7.380	546132	23.211
4,4'-DDE	7.487	7.483	911698	45.907
Dieldrin	7.687	7.683	905282	36.498
Endrin	8.027	8.023	771776	36.500
4,4'-DDD	8.120	8.120	807923	45.539
Endosulfan II	8.257	8.253	820012	37.822
4,4'-DDT	8.467	8.463	807031	44.102
Endrin aldehyde	8.620	8.617	699874	44.212
Endosulfan sulfate	8.920	8.917	716406	40.870
Methoxychlor	9.183	9.180	1116386	217.458
Endrin ketone	9.470	9.467	742525	37.865
Decachlorobiphenyl	10.570	10.567	613438	41.680

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-025**
Sample Name: **ical,s19416,pest_5**
Instrument: GC23 Vial: 24 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:39:34 AM
Analysis Date: 8/23/2012 6:57:56 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

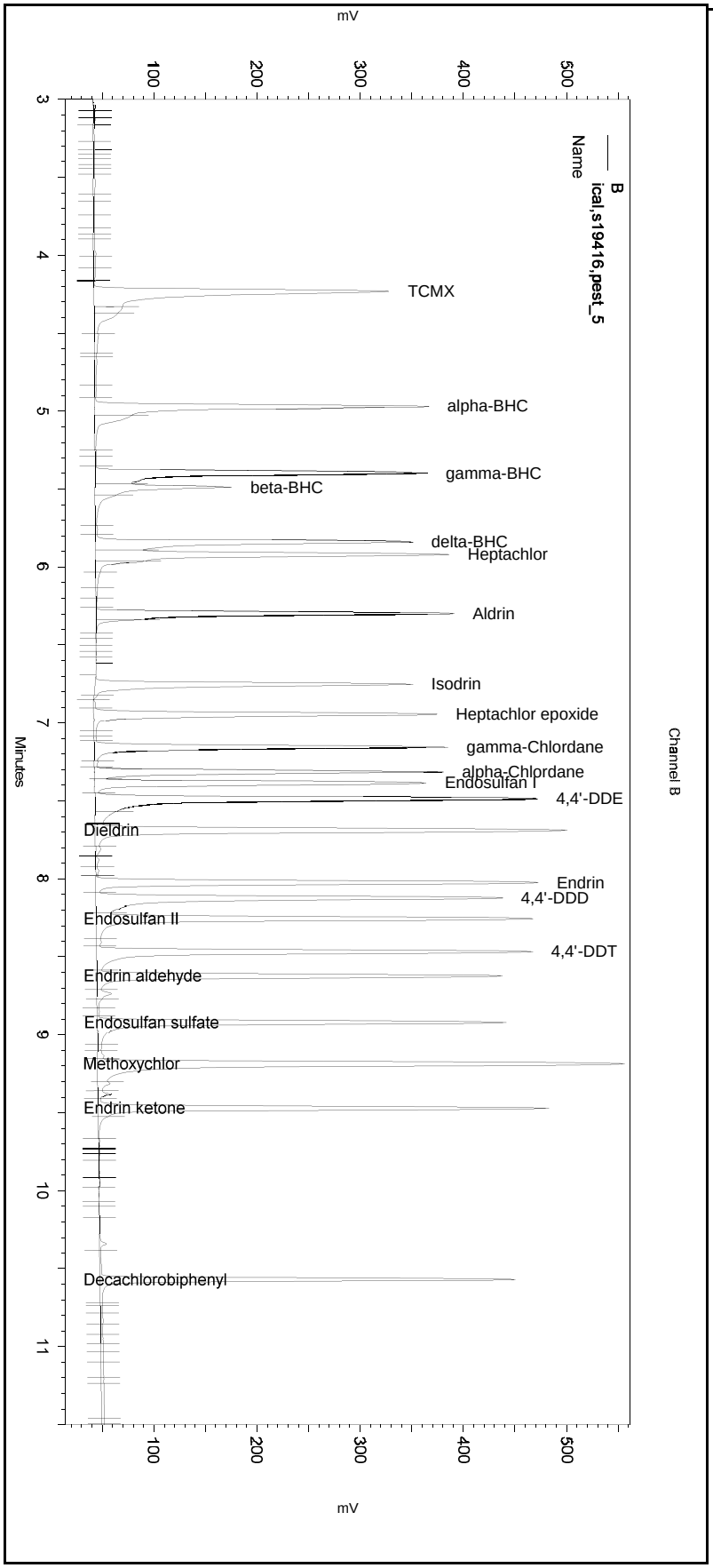
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-025_EB6B.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-025**
Sample Name: **ical,s19416,pest_5**
Instrument: GC23 Vial: 24 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 6:39:34 AM
Analysis Date: 8/23/2012 6:57:56 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-025_EB6B.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-026**
Sample Name: **ical,s19417,pest_6**
Instrument: GC23 (Offline) Vial: 25 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 7:01:35 AM
Analysis Date: 8/23/2012 9:31:55 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.487	5.493	772664	100.000 CAL
alpha-BHC	6.117	6.117	705604	50.000 CAL
gamma-BHC	6.577	6.583	640164	50.000 CAL
beta-BHC	6.820	6.830	201760	50.000 CAL
delta-BHC	7.160	7.167	573627	50.000 CAL
Heptachlor	7.403	7.403	530234	50.000 CAL
Aldrin	7.860	7.870	557402	50.000 CAL
Isodrin	8.290	8.299	404681	50.000 CAL
Heptachlor epoxide	8.410	8.417	457426	50.000 CAL
gamma-Chlordane	8.743	8.750	470150	50.000 CAL
alpha-Chlordane	8.850	8.857	442871	50.000 CAL
Endosulfan I	8.907	8.913	402344	50.000 CAL
4,4'-DDE	9.053	9.060	881362	100.000 CAL
Dieldrin	9.237	9.247	1094833	100.000 CAL
Endrin	9.507	9.513	670653	100.000 CAL
4,4'-DDD	9.650	9.657	572555	100.000 CAL
Endosulfan II	9.743	9.750	831238	100.000 CAL
Endrin aldehyde	9.887	9.893	586072	100.000 CAL
4,4'-DDT	10.003	10.009	620682	100.000 CAL
Endosulfan sulfate	10.143	10.140	575803	100.000 CAL
Methoxychlor	10.497	10.499	1413513	500.000 CAL
Endrin ketone	10.653	10.658	761833	100.000 CAL
Decachlorobiphenyl	12.403	12.409	508341	100.000 CAL

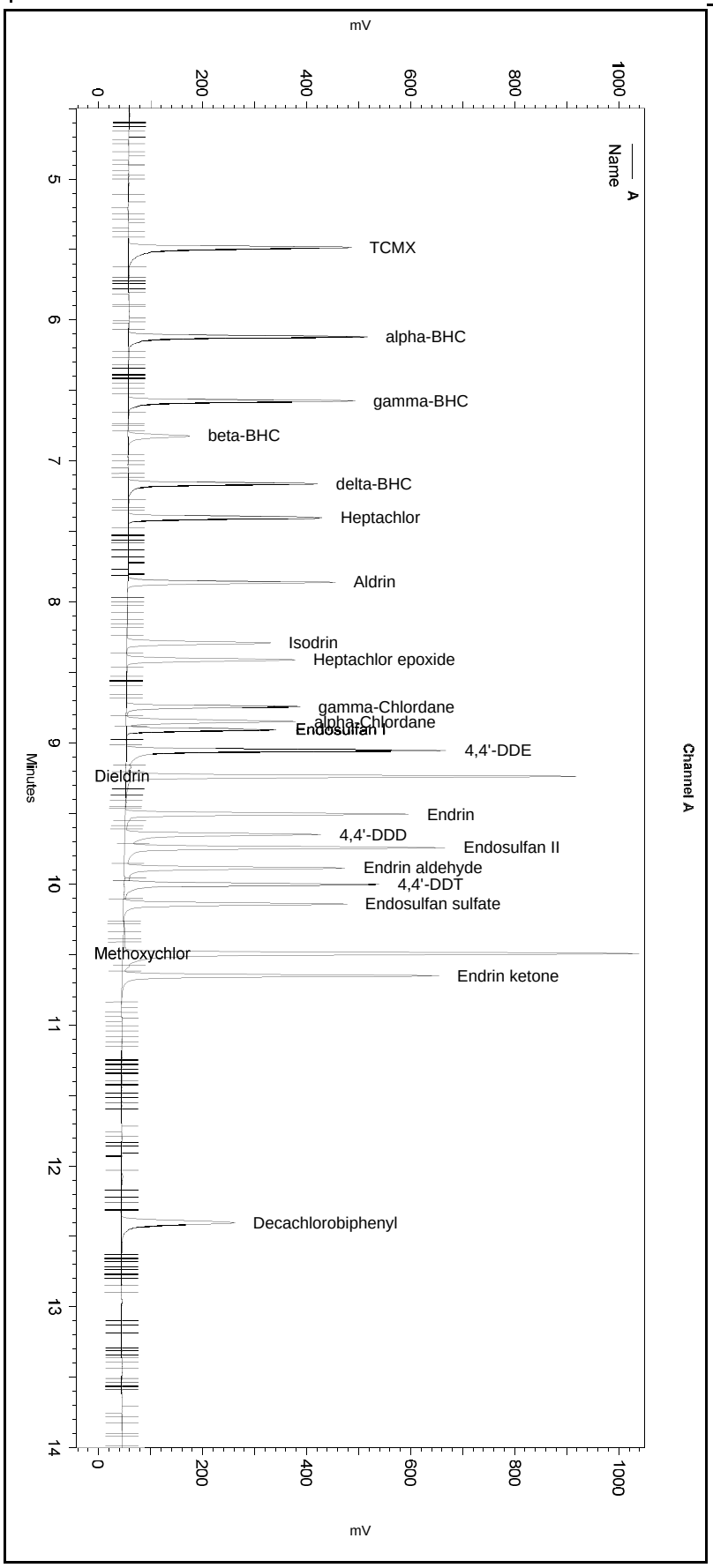
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.227	4.230	1342223	100.000 CAL
alpha-BHC	4.963	4.967	1187221	50.000 CAL
gamma-BHC	5.393	5.393	1067632	50.000 CAL
beta-BHC	5.487	5.487	527084	50.000 CAL
delta-BHC	5.833	5.837	1008783	50.000 CAL
Heptachlor	5.913	5.917	1041014	50.000 CAL
Aldrin	6.293	6.293	956459	50.000 CAL
Isodrin	6.747	6.747	834045	50.000 CAL
Heptachlor epoxide	6.937	6.937	881719	50.000 CAL
gamma-Chlordane	7.150	7.150	972546	50.000 CAL
alpha-Chlordane	7.310	7.310	835054	50.000 CAL
Endosulfan I	7.380	7.380	817645	50.000 CAL
4,4'-DDE	7.483	7.483	1293646	100.000 CAL
Dieldrin	7.683	7.683	1191148	100.000 CAL
Endrin	8.020	8.023	1045361	100.000 CAL
4,4'-DDD	8.117	8.120	1179850	100.000 CAL
Endosulfan II	8.250	8.253	1131445	100.000 CAL
4,4'-DDT	8.463	8.463	1152658	100.000 CAL
Endrin aldehyde	8.617	8.617	980707	100.000 CAL
Endosulfan sulfate	8.917	8.917	1018467	100.000 CAL
Methoxychlor	9.180	9.180	1444766	500.000 CAL
Endrin ketone	9.467	9.467	984232	100.000 CAL
Decachlorobiphenyl	10.563	10.567	830111	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-026**
Sample Name: **ical,s19417,pest_6**
Instrument: GC23 (Offline) Vial: 25 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 7:01:35 AM
Analysis Date: 8/23/2012 9:31:55 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

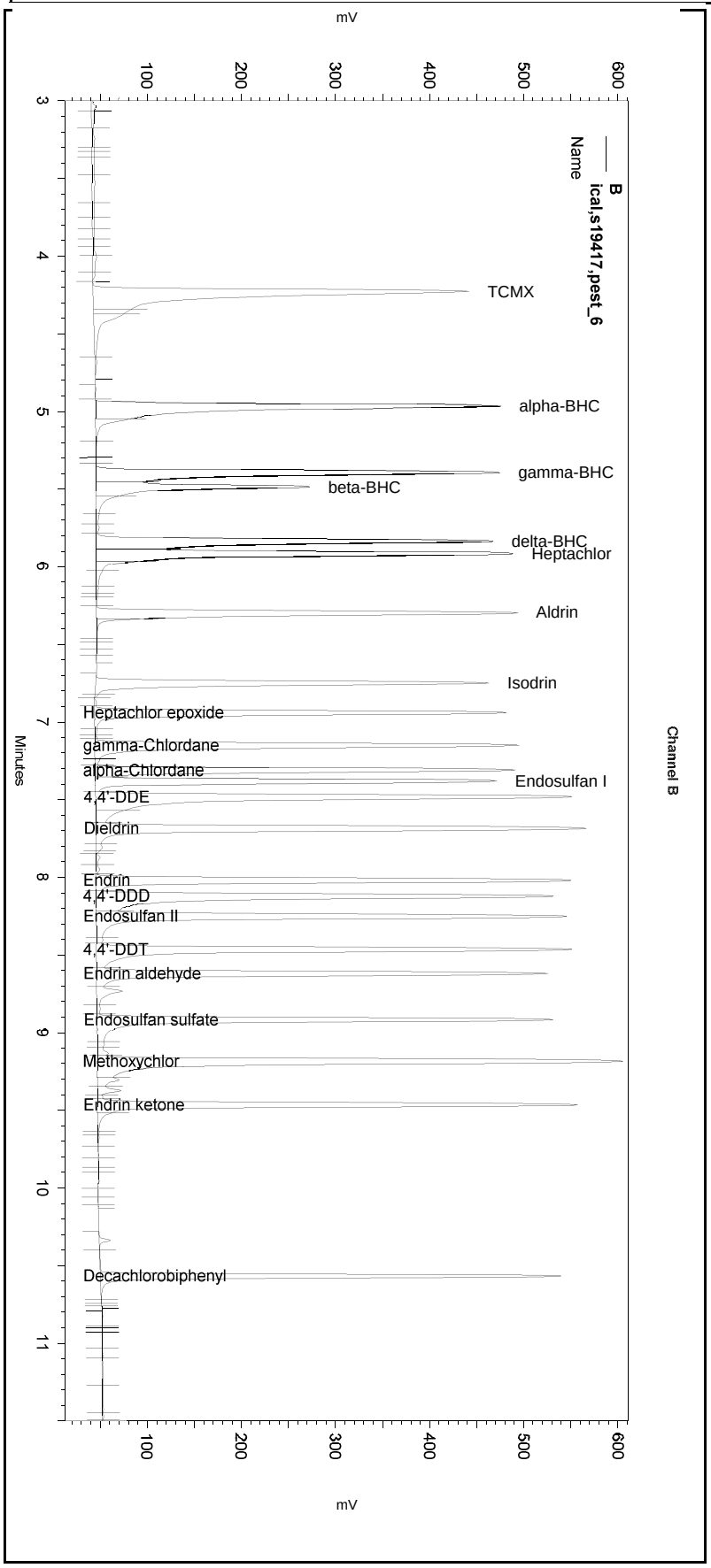
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-026

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.721	0	0
Yes	Manual Baseline	9.468	10.876	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-026**
Sample Name: **ical,s19417,pest_6**
Instrument: GC23 (Offline) Vial: 25 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 7:01:35 AM
Analysis Date: 8/23/2012 9:31:55 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-026

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.545	0	0
Yes	Split Peak	5.967	0	0
Yes	Split Peak	6.335	0	0
Yes	Split Peak	7.569	0	0
Yes	Reset Baseline	10.772	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-026**
Sample Name: **ical,s19417,pest_6**
Instrument: GC23 Vial: 25 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 7:01:35 AM
Analysis Date: 8/23/2012 7:20:02 AM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.487	5.493	772664	98.307
alpha-BHC	6.117	6.117	705604	53.019
gamma-BHC	6.577	6.583	640164	50.845
beta-BHC	6.820	6.830	201760	43.110
delta-BHC	7.160	7.167	575609	49.952
Heptachlor	7.403	7.403	534053	47.975
Aldrin	7.860	7.870	567295	50.891
Isodrin	8.290	8.299	407686	44.827
Heptachlor epoxide	8.410	8.417	458871	45.425
gamma-Chlordane	8.743	8.750	470150	46.345
alpha-Chlordane	8.850	8.857	442871	44.514
Endosulfan I	8.907	8.913	402344	44.016
4,4'-DDE	9.053	9.060	881362	107.677
Dieldrin	9.237	9.247	1094833	115.546
Endrin	9.507	9.513	666917	97.933
4,4'-DDD	9.650	9.657	550872	98.062
Endosulfan II	9.743	9.750	783532	95.051
Endrin aldehyde	9.887	9.893	535910	78.094
4,4'-DDT	10.003	10.009	580052	114.461
Endosulfan sulfate	10.143	10.140	558679	88.760
Methoxychlor	10.497	10.499	1411741	657.719
Endrin ketone	10.653	10.658	761695	116.315
Decachlorobiphenyl	12.403	12.409	508341	67.662

GC23

PEST - ECD Instrument Results

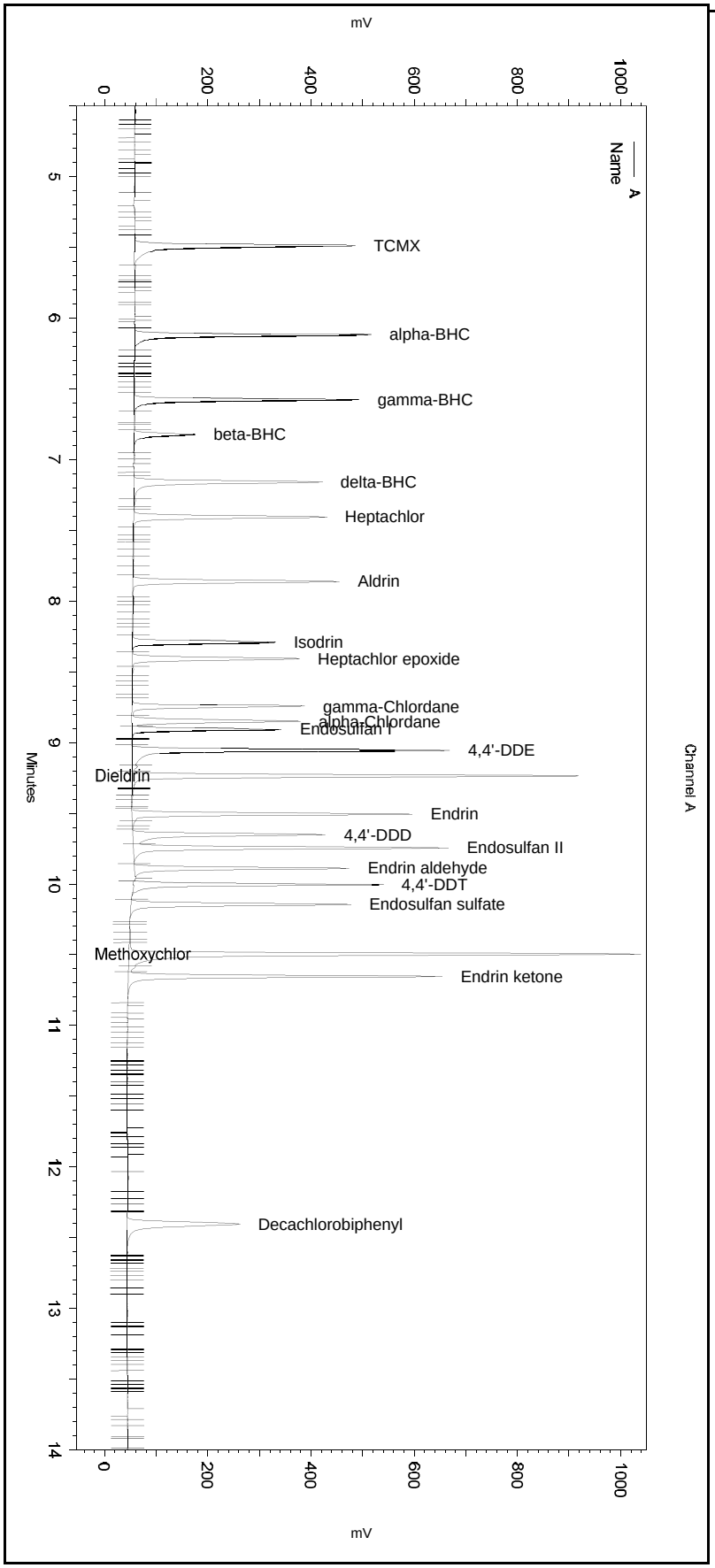
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.227	4.230	1342223	81.940
alpha-BHC	4.963	4.967	1187221	39.624
gamma-BHC	5.393	5.393	1067632	37.352
beta-BHC	5.487	5.487	583963	48.850
delta-BHC	5.833	5.837	1008783	39.125
Heptachlor	5.913	5.917	1096492	38.919
Aldrin	6.293	6.293	994335	36.438
Isodrin	6.747	6.747	834045	36.950
Heptachlor epoxide	6.937	6.937	881719	35.203
gamma-Chlordane	7.150	7.150	972546	37.695
alpha-Chlordane	7.310	7.310	835054	35.267
Endosulfan I	7.380	7.380	817645	34.750
4,4'-DDE	7.483	7.483	1369273	68.947
Dieldrin	7.683	7.683	1191148	48.024
Endrin	8.020	8.023	1045361	49.439
4,4'-DDD	8.117	8.120	1179850	66.503
Endosulfan II	8.250	8.253	1131445	52.186
4,4'-DDT	8.463	8.463	1152658	62.990
Endrin aldehyde	8.617	8.617	980707	61.953
Endosulfan sulfate	8.917	8.917	1018467	58.103
Methoxychlor	9.180	9.180	1444766	0.000
Endrin ketone	9.467	9.467	984232	50.191
Decachlorobiphenyl	10.563	10.567	862354	58.593

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-026**
Sample Name: **ical,s19417,pest_6**
Instrument: GC23 Vial: 25 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 7:01:35 AM
Analysis Date: 8/23/2012 7:20:02 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

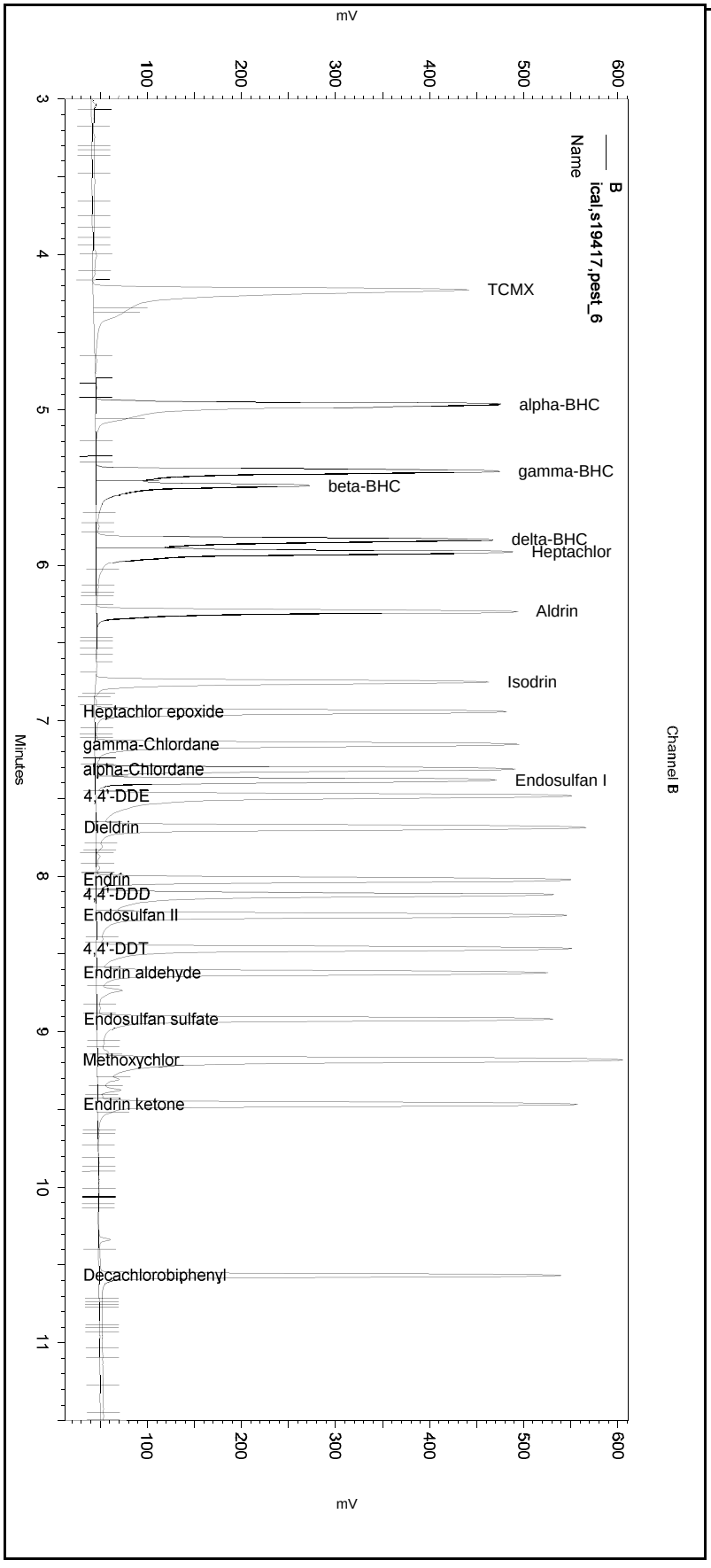
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-026_EB6C.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-026**
Sample Name: **ical,s19417,pest_6**
Instrument: GC23 Vial: 25 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 7:01:35 AM
Analysis Date: 8/23/2012 7:20:02 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-026_EB6C.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-029**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC23 (Offline) Vial: 29 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 8:35:25 AM
Analysis Date: 8/23/2012 10:10:50 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.483	5.493	148379	18.701
alpha-BHC	6.117	6.117	243796	18.623
gamma-BHC	6.577	6.583	222478	18.213
beta-BHC	6.823	6.830	89629	17.833
delta-BHC	7.160	7.167	209742	18.933
Heptachlor	7.403	7.403	200163	18.364
Aldrin	7.860	7.870	201274	17.920
Isodrin	8.290	8.299	167420	18.008
Heptachlor epoxide	8.410	8.417	178703	17.337
gamma-Chlordane	8.743	8.750	187840	17.549
alpha-Chlordane	8.850	8.857	177620	17.257
Endosulfan I	8.907	8.913	164582	17.899
4,4'-DDE	9.053	9.060	161719	19.200
Dieldrin	9.237	9.247	173584	18.909
Endrin	9.507	9.513	124771	18.920
4,4'-DDD	9.650	9.657	115349	19.626
Endosulfan II	9.743	9.750	159642	19.584
Endrin aldehyde	9.887	9.893	123287	18.544
4,4'-DDT	10.003	10.009	112932	19.550
Endosulfan sulfate	10.143	10.140	117899	18.371
Methoxychlor	10.497	10.499	470022	179.125
Endrin ketone	10.653	10.658	142123	19.362
Decachlorobiphenyl	12.403	12.409	146669	19.713

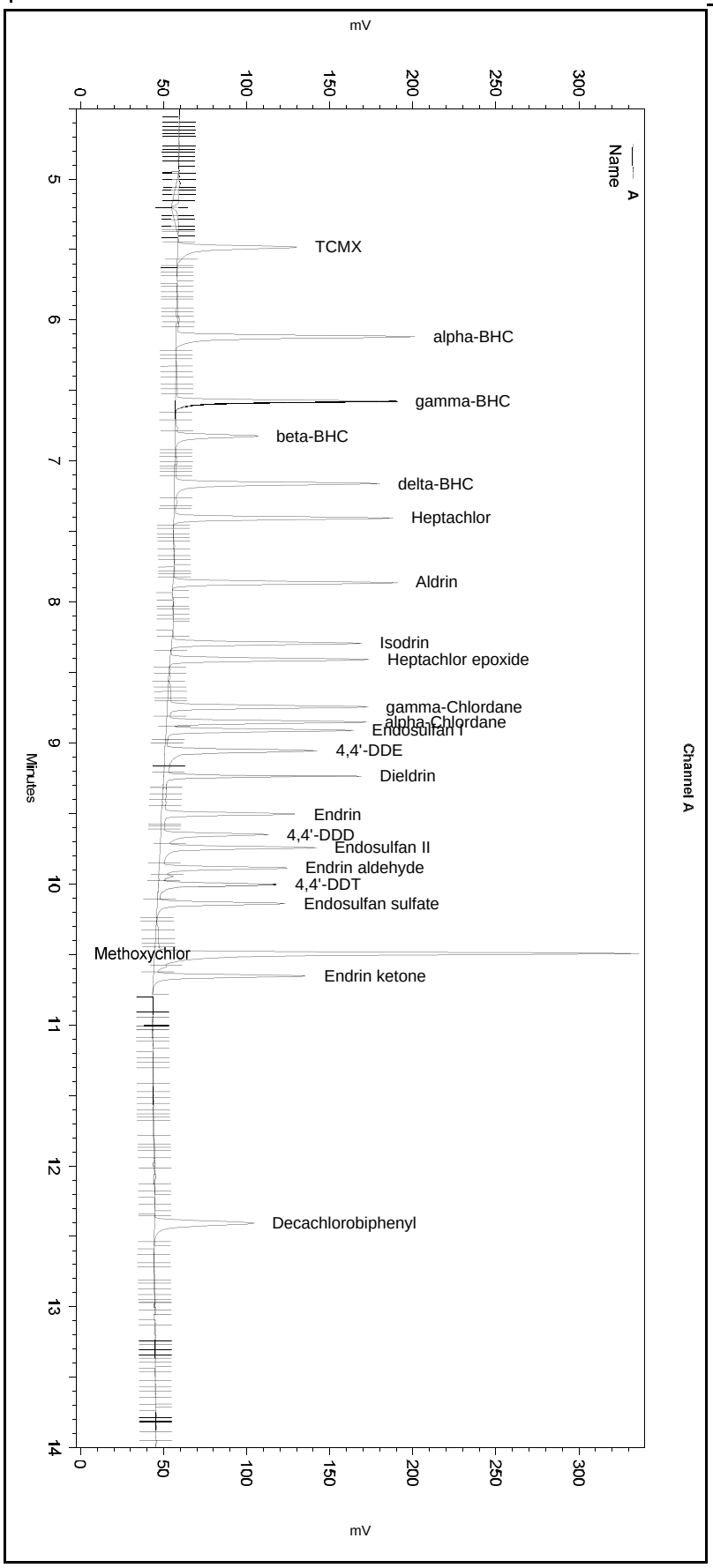
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.227	4.230	362476	21.338
alpha-BHC	4.963	4.967	564894	18.532
gamma-BHC	5.393	5.393	506506	17.709
beta-BHC	5.487	5.487	216020	19.277
delta-BHC	5.837	5.837	465161	17.727
Heptachlor	5.913	5.917	542241	18.855
Aldrin	6.293	6.293	479962	17.631
Isodrin	6.747	6.747	432294	18.377
Heptachlor epoxide	6.937	6.937	450305	17.238
gamma-Chlordane	7.150	7.150	560048	23.207
alpha-Chlordane	7.310	7.310	436245	18.049
Endosulfan I	7.380	7.380	425169	18.282
4,4'-DDE	7.480	7.483	444090	19.952
Dieldrin	7.683	7.683	472064	20.557
Endrin	8.020	8.023	371887	18.676
4,4'-DDD	8.117	8.120	344957	19.342
Endosulfan II	8.250	8.253	404989	19.778
4,4'-DDT	8.463	8.463	381422	19.628
Endrin aldehyde	8.617	8.617	324380	18.689
Endosulfan sulfate	8.917	8.917	339141	18.901
Methoxychlor	9.180	9.180	981494	128.963
Endrin ketone	9.467	9.467	477748	20.037
Decachlorobiphenyl	10.563	10.567	298059	20.268

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-029**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC23 (Offline) Vial: 29 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 8:35:25 AM
Analysis Date: 8/23/2012 10:10:50 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

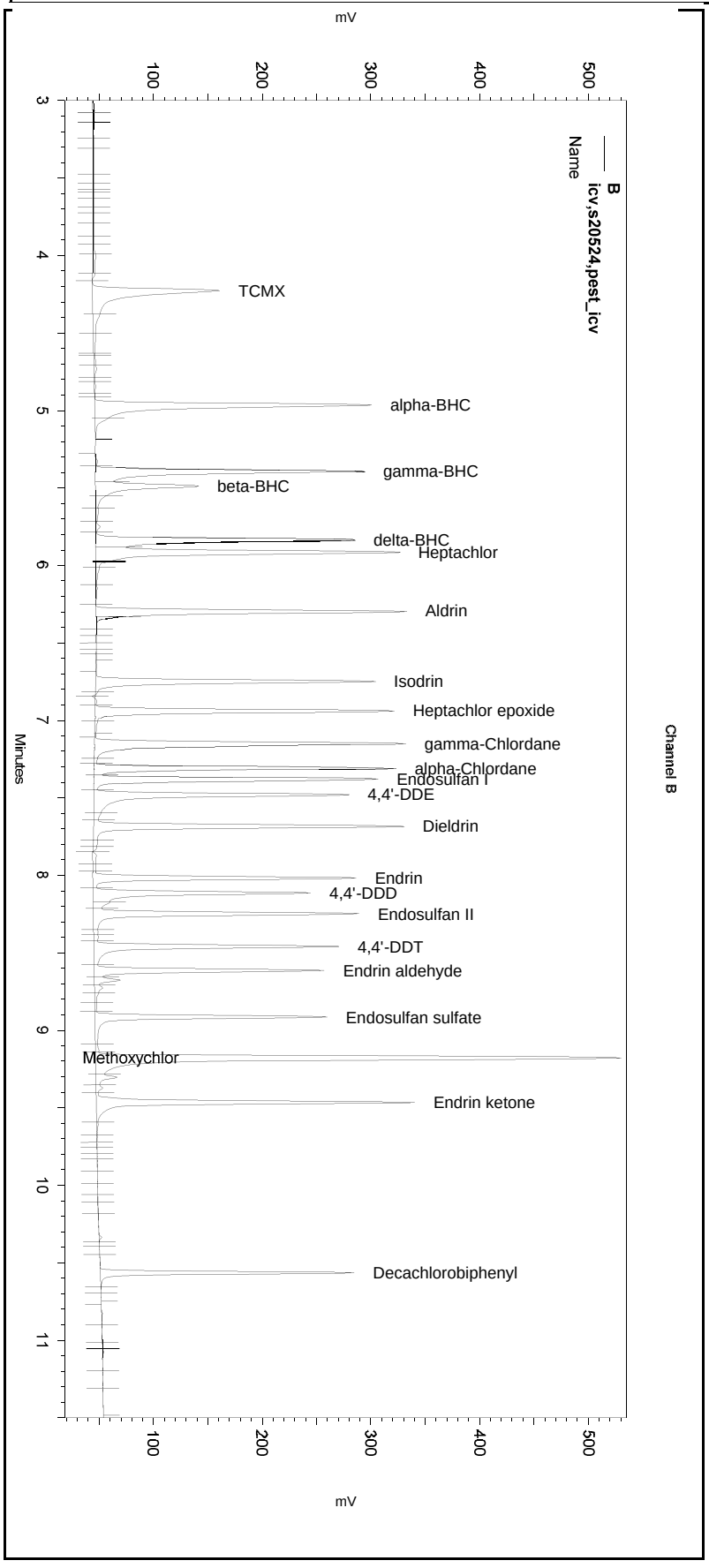
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-029

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.401	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-029**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC23 (Offline) Vial: 29 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 8:35:25 AM
Analysis Date: 8/23/2012 10:10:50 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\235-029

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.972	0	0
Yes	Split Peak	6.328	0	0
Yes	Manual Baseline	6.499	7.849	0
Yes	Reset Baseline	10.746	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-029**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC23 Vial: 29 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 8:35:25 AM
Analysis Date: 8/23/2012 8:53:51 AM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.483	5.493	160875	20.468
alpha-BHC	6.117	6.117	243796	18.319
gamma-BHC	6.577	6.583	222478	17.670
beta-BHC	6.823	6.830	89629	19.151
delta-BHC	7.160	7.167	209742	18.202
Heptachlor	7.403	7.403	200163	17.981
Aldrin	7.860	7.870	201274	18.056
Isodrin	8.290	8.299	167420	18.409
Heptachlor epoxide	8.410	8.417	178703	17.690
gamma-Chlordane	8.743	8.750	187840	18.516
alpha-Chlordane	8.850	8.857	177620	17.853
Endosulfan I	8.907	8.913	164582	18.005
4,4'-DDE	9.053	9.060	161719	19.757
Dieldrin	9.237	9.247	173584	18.320
Endrin	9.507	9.513	124771	18.322
4,4'-DDD	9.650	9.657	115349	20.534
Endosulfan II	9.743	9.750	159642	19.366
Endrin aldehyde	9.887	9.893	123287	17.966
4,4'-DDT	10.003	10.009	112932	22.285
Endosulfan sulfate	10.143	10.140	117899	18.731
Methoxychlor	10.497	10.499	470022	218.980
Endrin ketone	10.653	10.658	142123	21.703
Decachlorobiphenyl	12.403	12.409	146669	19.522

GC23

PEST - ECD Instrument Results

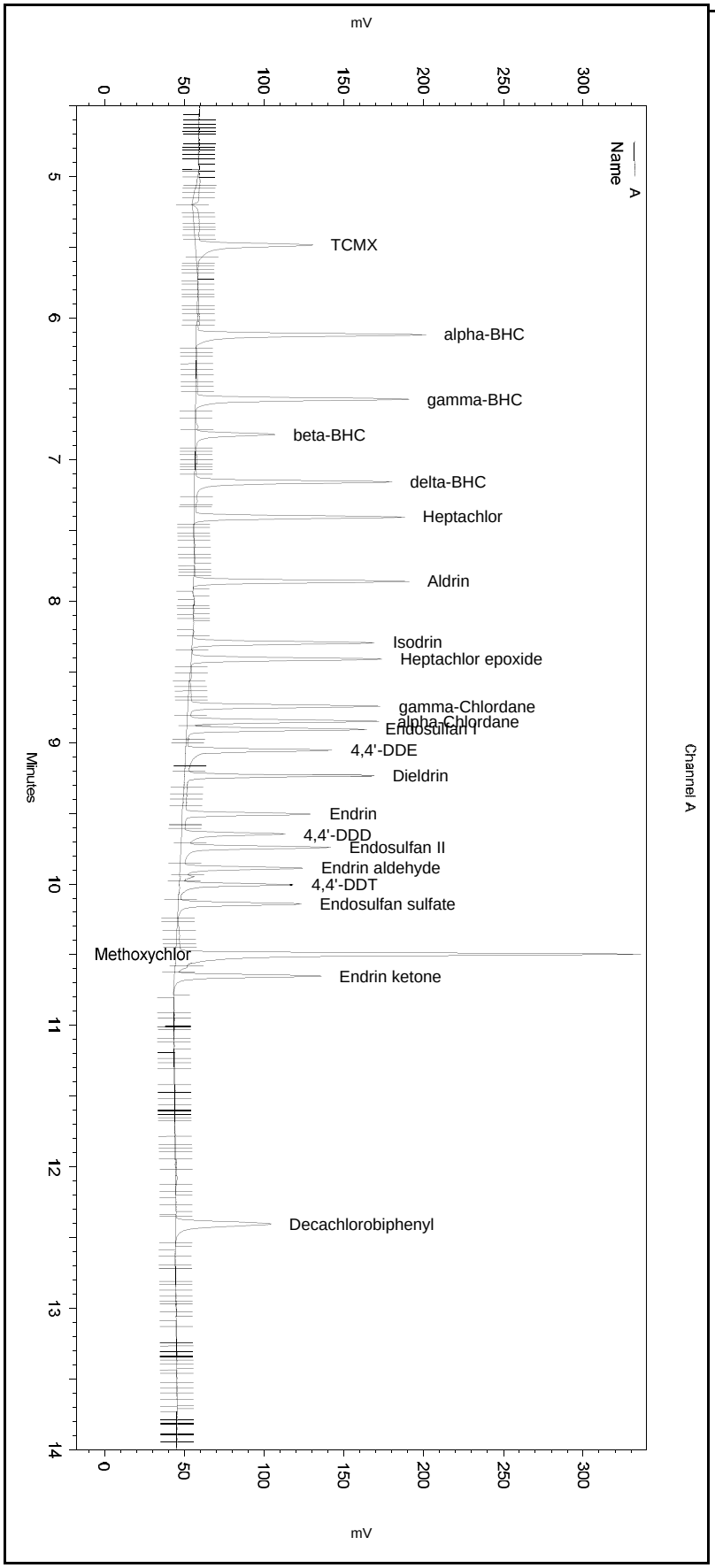
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.227	4.230	362476	22.128
alpha-BHC	4.963	4.967	564894	18.853
gamma-BHC	5.393	5.393	506506	17.720
beta-BHC	5.487	5.487	216020	18.071
delta-BHC	5.837	5.837	465161	18.041
Heptachlor	5.913	5.917	556384	19.749
Aldrin	6.293	6.293	505140	18.511
Isodrin	6.747	6.747	437094	19.364
Heptachlor epoxide	6.937	6.937	454557	18.149
gamma-Chlordane	7.150	7.150	549467	21.297
alpha-Chlordane	7.310	7.310	431585	18.227
Endosulfan I	7.380	7.380	420338	17.864
4,4'-DDE	7.480	7.483	438903	22.100
Dieldrin	7.683	7.683	470532	18.971
Endrin	8.020	8.023	371887	17.588
4,4'-DDD	8.117	8.120	344957	19.444
Endosulfan II	8.250	8.253	404989	18.679
4,4'-DDT	8.463	8.463	381422	20.844
Endrin aldehyde	8.617	8.617	324380	20.492
Endosulfan sulfate	8.917	8.917	339141	19.348
Methoxychlor	9.180	9.180	981494	160.520
Endrin ketone	9.467	9.467	477748	24.363
Decachlorobiphenyl	10.563	10.567	305391	20.750

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-029**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC23 Vial: 29 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 8:35:25 AM
Analysis Date: 8/23/2012 8:53:51 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

Manual Integration Fixes

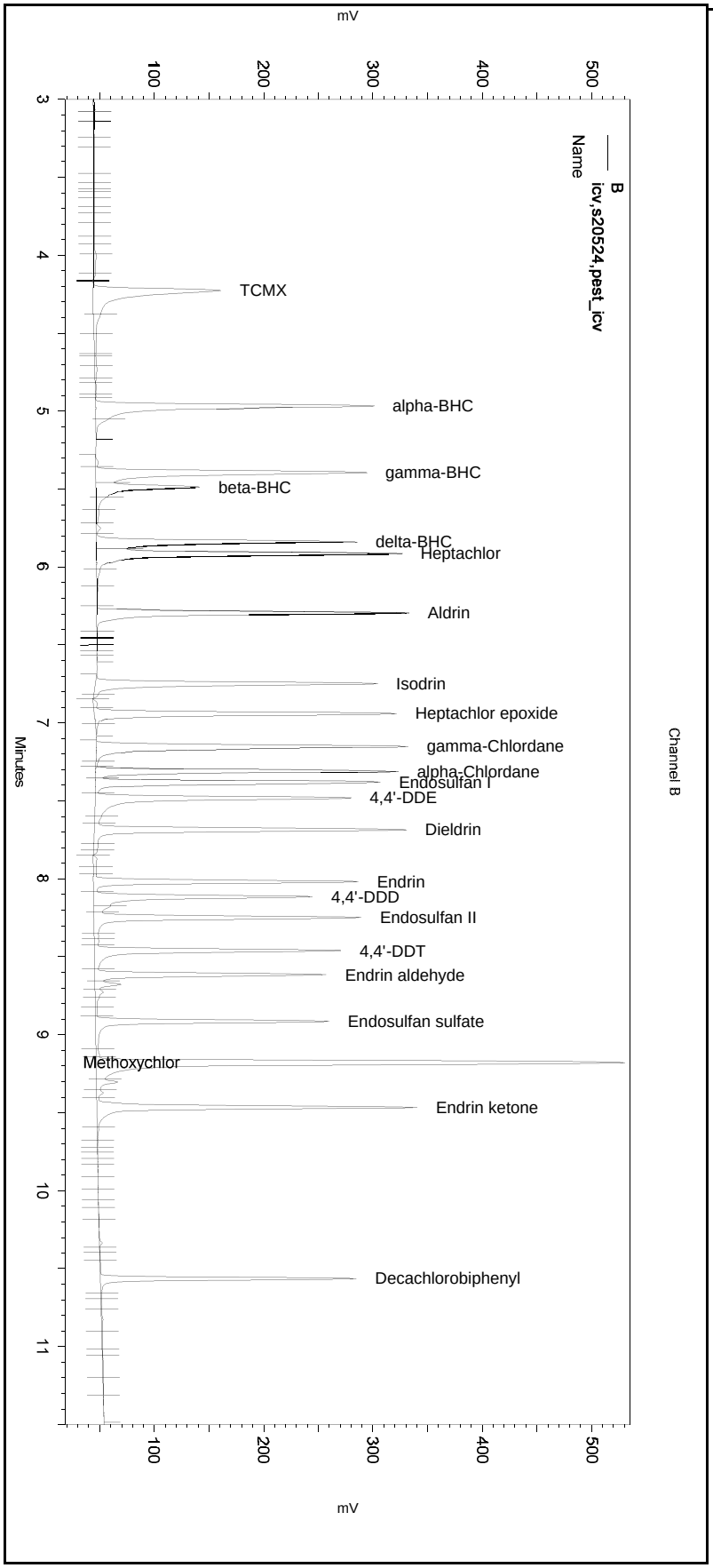
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-029_EB6F.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\235.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\235-029**
Sample Name: **icv,s20524,pest_icv**
Instrument: GC23 Vial: 29 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-235.met

Software Version 3.1.7
Run Date: 8/23/2012 8:35:25 AM
Analysis Date: 8/23/2012 8:53:51 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\235-029_EB6F.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Continuing Calibration Verification Raw Data

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Soil
EPA 8081B

Inst : GC21 Run Name : PEST_3 IDF : 1.0
Seqnum : 242367635003.1 File : 255_003 Time : 11-SEP-2012 07:58
Cal : 242328737001 Caldate : 15-AUG-2012
Standards: S20649

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1649.3	1777.8	10.00	10.78	pg/uL	8	20	
TCMX	A	1145.9	1214.0	20.00	21.19	pg/uL	6	20	
Decachlorobiphenyl	A	560.03	561.05	20.00	20.04	pg/uL	0	20	
alpha-BHC	B	2986.3	1160.4	10.00	7.057	pg/uL	**-29**	20	c- ***
TCMX	B	1866.4	660.10	20.00	9.933	pg/uL	**-50**	20	c-
Decachlorobiphenyl	B	906.46	390.05	20.00	15.23	pg/uL	**-24**	20	c-
Average EPA 8081B	A	(n=23)					13		
Average EPA 8081B	B	(n=20)					29		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Heptachlor not quantifiable (B) Endosulfan sulfate not quantifiable (B)
4,4'-DDD not quantifiable (B)

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-003**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 7:58:58 AM
Analysis Date: 9/11/2012 9:24:39 AM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.627	5.620	24279	21.188
alpha-BHC	6.260	6.253	17778	10.779
gamma-BHC	6.720	6.713	16036	10.812
beta-BHC	6.967	6.960	6052	10.638
delta-BHC	7.307	7.300	14356	11.318
Heptachlor	7.540	7.533	12547	10.192
Aldrin	7.993	7.987	14496	11.234
Isodrin	8.427	8.420	10883	11.054
Heptachlor epoxide	8.540	8.533	12283	11.051
gamma-Chlordane	8.873	8.867	12069	11.260
alpha-Chlordane	8.980	8.967	11499	11.292
Endosulfan I	9.033	9.027	10949	11.630
4,4'-DDE	9.180	9.173	21772	22.865
Dieldrin	9.367	9.353	23442	24.486
Endrin	9.627	9.620	15296	23.562
4,4'-DDD	9.787	9.773	15206	22.482
Endosulfan II	9.867	9.860	19297	25.223
Endrin aldehyde	10.007	10.000	13566	23.992
4,4'-DDT	10.127	10.113	14187	21.178
Endosulfan sulfate	10.260	10.253	15177	25.273
Methoxychlor	10.613	10.600	27133	104.564
Endrin ketone	10.773	10.767	16850	24.386
Decachlorobiphenyl	12.533	12.527	11221	20.037

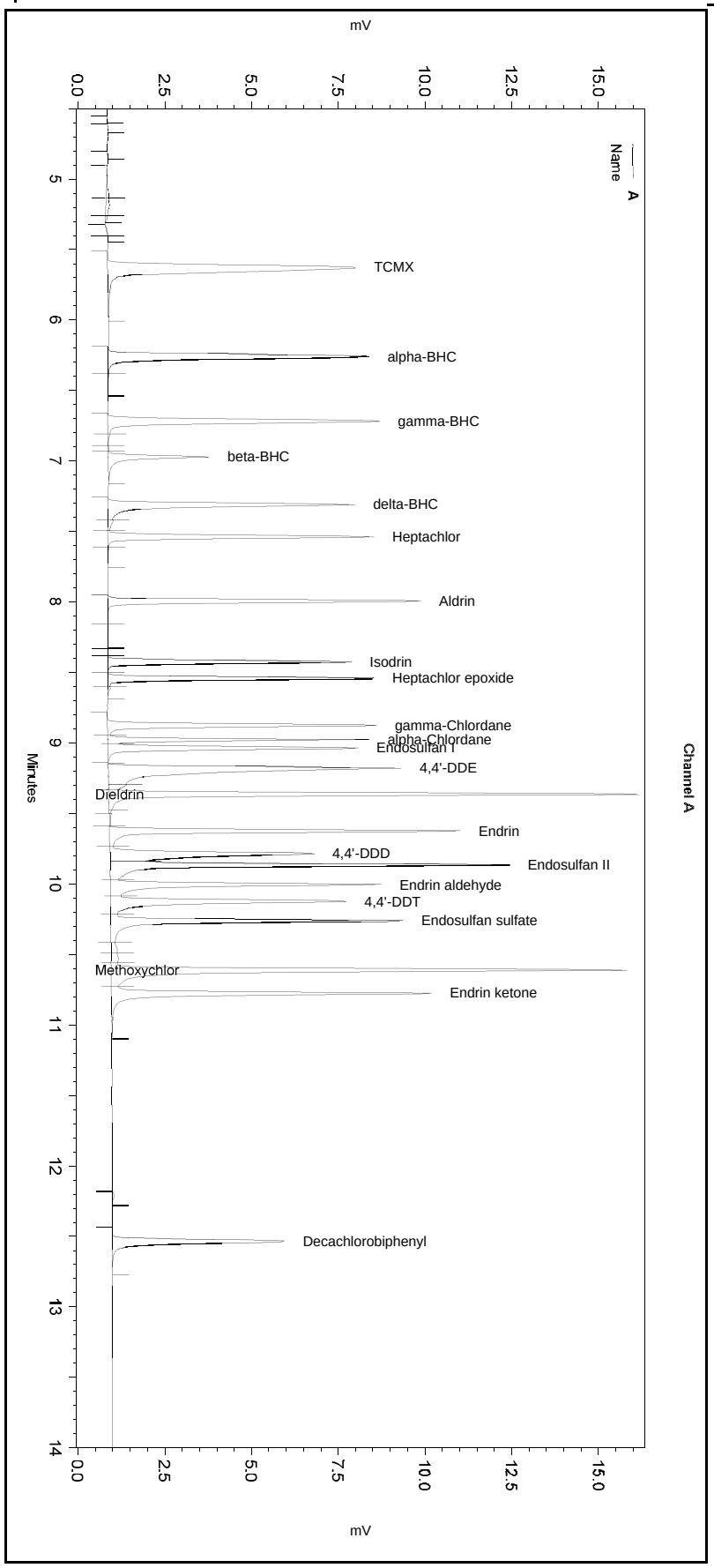
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	13202	9.933
alpha-BHC	5.427	5.420	11604	7.057
gamma-BHC	5.847	5.840	10001	7.810
beta-BHC	5.933	5.927	3492	6.220
delta-BHC	6.280	6.273	8656	8.288
Heptachlor	6.367	6.360	8530	10.374
Aldrin	6.747	6.740	10205	10.804
Isodrin	7.200	7.193	7770	9.479
Heptachlor epoxide	7.387	7.380	8385	9.975
gamma-Chlordane	7.600	7.587	7553	9.106
alpha-Chlordane	7.760	7.747	7955	10.351
Endosulfan I	7.833	7.820	7685	11.455
4,4'-DDE	7.913	7.907	13144	8.433
Dieldrin	8.133	8.127	17569	9.560
Endrin	8.473	8.467	9374	10.917
4,4'-DDD	8.553	8.547	8712	14.396
Endosulfan II	8.700	8.693	15226	16.230
4,4'-DDT	8.900	8.893	9731	9.583
Endrin aldehyde	9.060	9.047	10707	21.990
Endosulfan sulfate	9.340	9.333	10343	21.671
Methoxychlor	9.573	9.567	17480	18.002
Endrin ketone	9.880	9.873	20703	10.969
Decachlorobiphenyl	10.973	10.967	7801	15.230

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-003**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 7:58:58 AM
Analysis Date: 9/11/2012 9:24:39 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

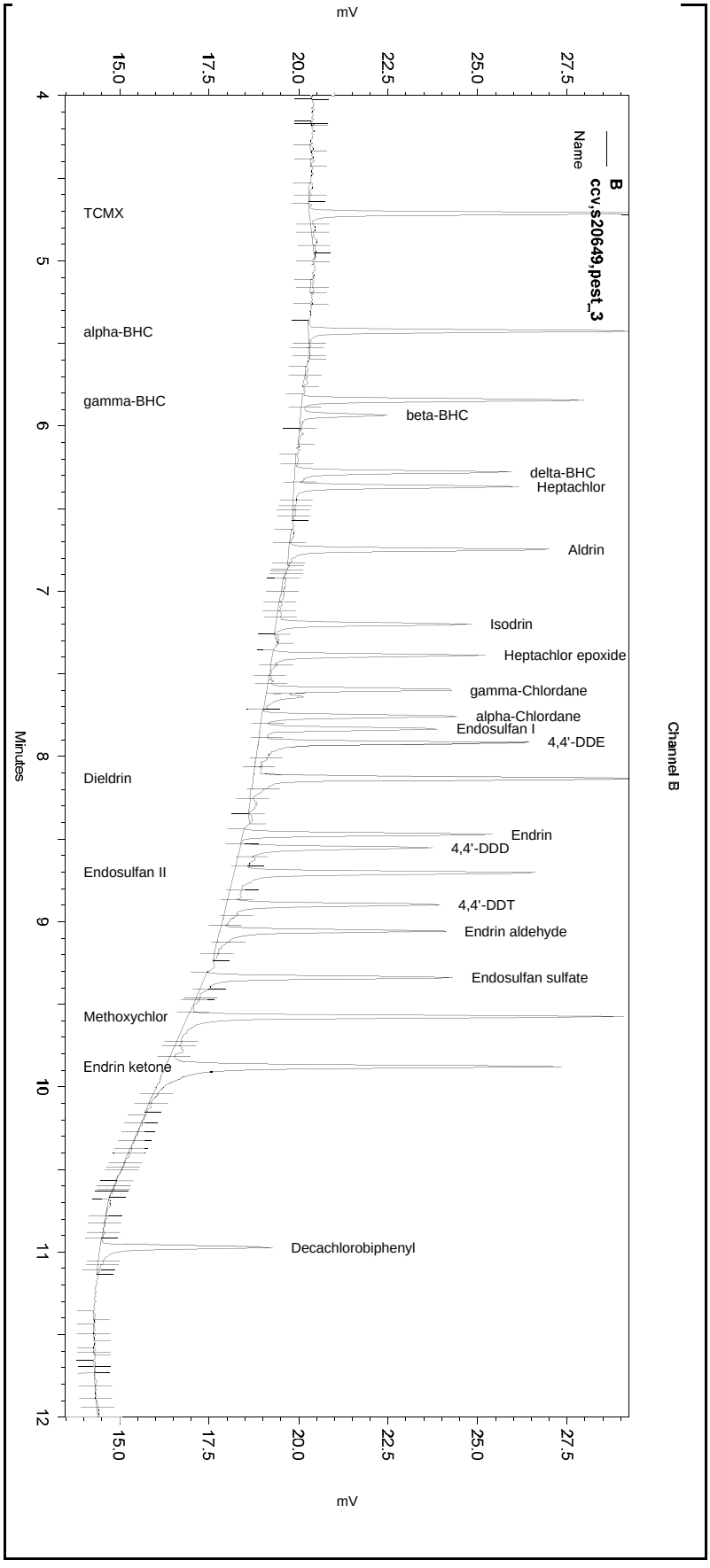
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-003

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	9.134	9.592	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-003**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 7:58:58 AM
Analysis Date: 9/11/2012 9:24:39 AM
Sample Amount: 1



---< General Method Parameters >----------

No items selected for this section

---< B >----------

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-003

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.404	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-003**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 7:58:58 AM
Analysis Date: 9/11/2012 8:17:13 AM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.627	5.620	24279	21.188
alpha-BHC	6.260	6.253	17778	10.779
gamma-BHC	6.720	6.713	16036	10.812
beta-BHC	6.967	6.960	6052	10.638
delta-BHC	7.307	7.300	14356	11.318
Heptachlor	7.540	7.533	12547	10.192
Aldrin	7.993	7.987	14496	11.234
Isodrin	8.427	8.420	10883	11.054
Heptachlor epoxide	8.540	8.533	12283	11.051
gamma-Chlordane	8.873	8.867	12069	11.260
alpha-Chlordane	8.980	8.967	11499	11.292
Endosulfan I	9.033	9.027	10949	11.630
4,4'-DDE	9.180	9.173	19495	20.474
Dieldrin	9.367	9.353	21896	22.871
Endrin	9.627	9.620	15296	23.562
4,4'-DDD	9.787	9.773	15206	22.482
Endosulfan II	9.867	9.860	19297	25.223
Endrin aldehyde	10.007	10.000	13566	23.992
4,4'-DDT	10.127	10.113	14187	21.178
Endosulfan sulfate	10.260	10.253	15177	25.273
Methoxychlor	10.613	10.600	27133	104.564
Endrin ketone	10.773	10.767	16850	24.386
Decachlorobiphenyl	12.533	12.527	11221	20.037

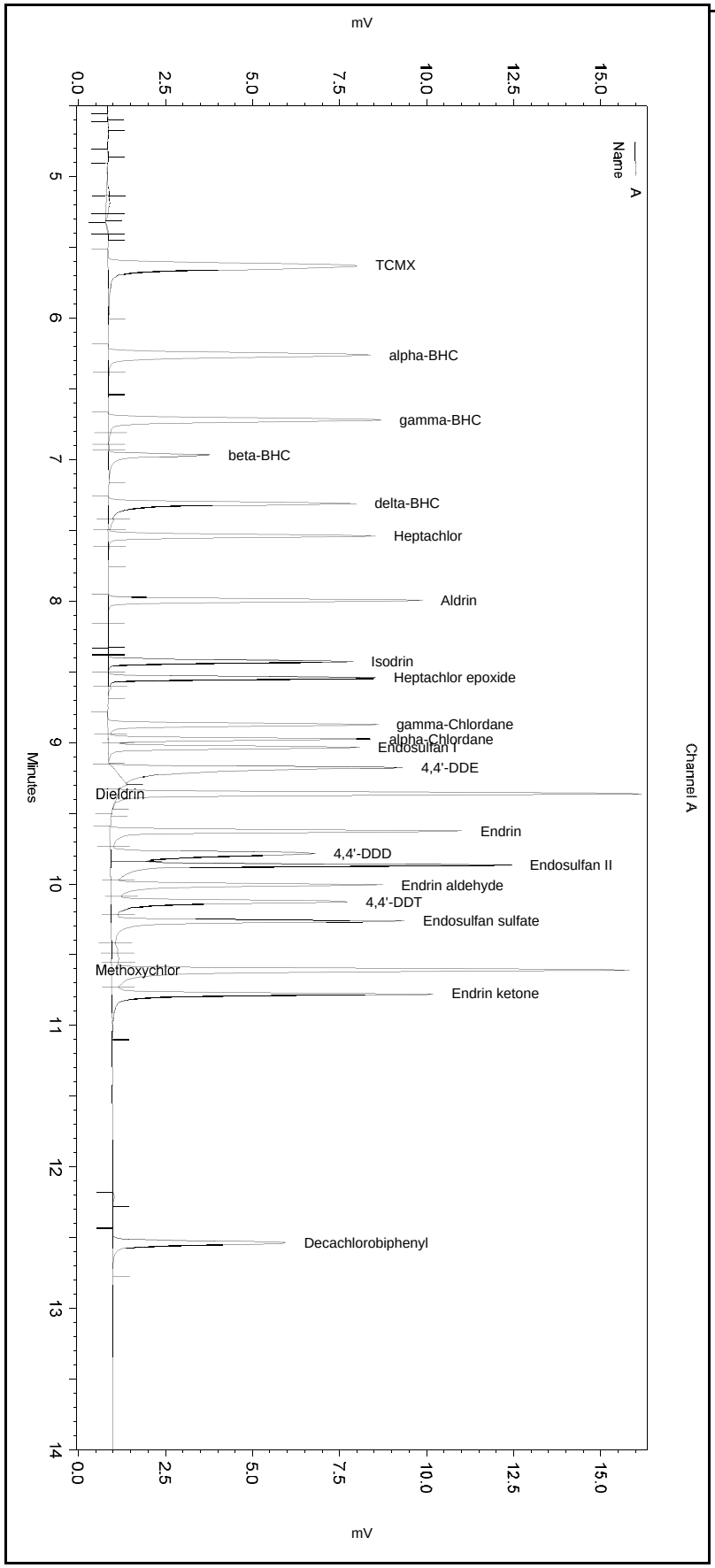
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	13202	9.933
alpha-BHC	5.427	5.420	11604	7.057
gamma-BHC	5.847	5.840	10001	7.810
beta-BHC	5.933	5.927	3492	6.220
delta-BHC	6.280	6.273	8656	8.288
Heptachlor	6.367	6.360	8530	10.374
Aldrin	6.747	6.740	10205	10.804
Isodrin	7.200	7.193	7770	9.479
Heptachlor epoxide	7.387	7.380	8407	9.993
gamma-Chlordane	7.600	7.587	7623	9.175
alpha-Chlordane	7.760	7.747	8160	10.529
Endosulfan I	7.833	7.820	7994	11.712
4,4'-DDE	7.913	7.907	13744	8.647
Dieldrin	8.133	8.127	18580	9.739
Endrin	8.473	8.467	10351	12.379
4,4'-DDD	8.553	8.547	9400	15.408
Endosulfan II	8.700	8.693	16175	16.947
4,4'-DDT	8.900	8.893	10121	9.960
Endrin aldehyde	9.060	9.047	10934	22.204
Endosulfan sulfate	9.340	9.333	10343	21.671
Methoxychlor	9.573	9.567	17480	18.002
Endrin ketone	9.880	9.873	20703	10.969
Decachlorobiphenyl	10.973	10.967	7801	15.230

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-003**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 7:58:58 AM
Analysis Date: 9/11/2012 8:17:13 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes
==========

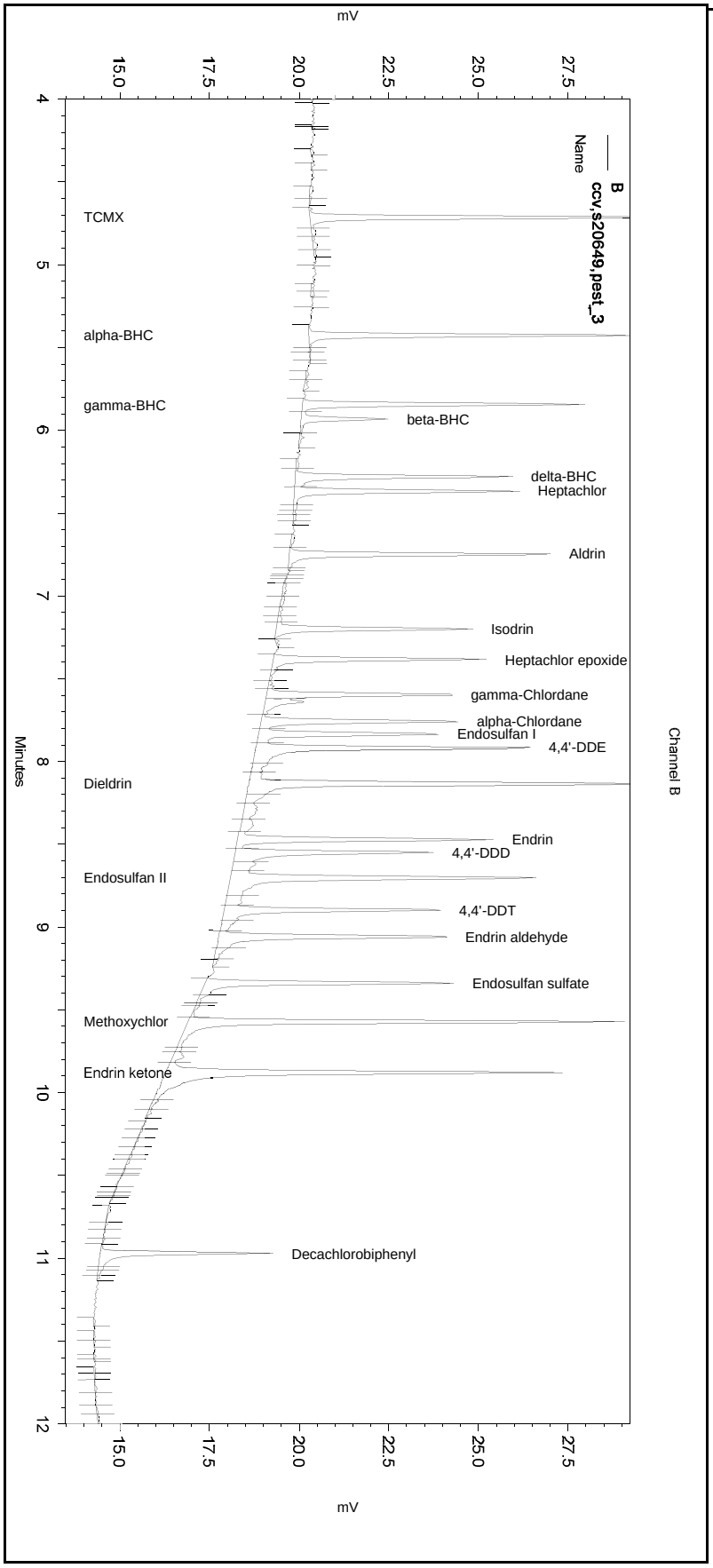
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-003_EE13.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-003**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC21 Vial: N/A Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 7:58:58 AM
Analysis Date: 9/11/2012 8:17:13 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10066\255-003_EE13.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Soil
EPA 8081B

Inst : GC21 Run Name : PEST_4 IDF : 1.0
Seqnum : 242367635010.1 File : 255_010 Time : 11-SEP-2012 12:06
Cal : 242328737001 Caldate : 15-AUG-2012
Standards: S20650

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1649.3	1692.3	20.00	20.52	pg/uL	3	20	
TCMX	A	1145.9	1159.0	40.00	40.46	pg/uL	1	20	
Decachlorobiphenyl	A	560.03	484.03	40.00	34.57	pg/uL	-14	20	
alpha-BHC	B	2986.3	1513.7	20.00	13.78	pg/uL	**-31**	20	c- ***
TCMX	B	1866.4	885.05	40.00	20.26	pg/uL	**-49**	20	c-
Decachlorobiphenyl	B	906.46	456.08	40.00	32.71	pg/uL	-18	20	
Average EPA 8081B	A	(n=23)					9		
Average EPA 8081B	B	(n=23)					33		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:28:34 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.620	5.620	46359	40.456
alpha-BHC	6.253	6.253	33845	20.521
gamma-BHC	6.713	6.713	30333	20.452
beta-BHC	6.960	6.960	11629	20.442
delta-BHC	7.300	7.300	27532	21.705
Heptachlor	7.533	7.533	24136	19.605
Aldrin	7.993	7.987	27478	21.294
Isodrin	8.420	8.420	20730	21.056
Heptachlor epoxide	8.540	8.533	23260	20.928
gamma-Chlordane	8.873	8.867	22672	21.152
alpha-Chlordane	8.973	8.967	21485	21.099
Endosulfan I	9.027	9.027	20836	22.133
4,4'-DDE	9.173	9.173	42381	44.509
Dieldrin	9.360	9.353	45900	47.944
Endrin	9.620	9.620	30380	46.798
4,4'-DDD	9.773	9.773	30716	45.413
Endosulfan II	9.860	9.860	35427	46.307
Endrin aldehyde	10.000	10.000	25174	44.521
4,4'-DDT	10.113	10.113	27841	41.559
Endosulfan sulfate	10.253	10.253	27816	46.320
Methoxychlor	10.600	10.600	54796	211.171
Endrin ketone	10.767	10.767	30991	44.852
Decachlorobiphenyl	12.527	12.527	19361	34.572

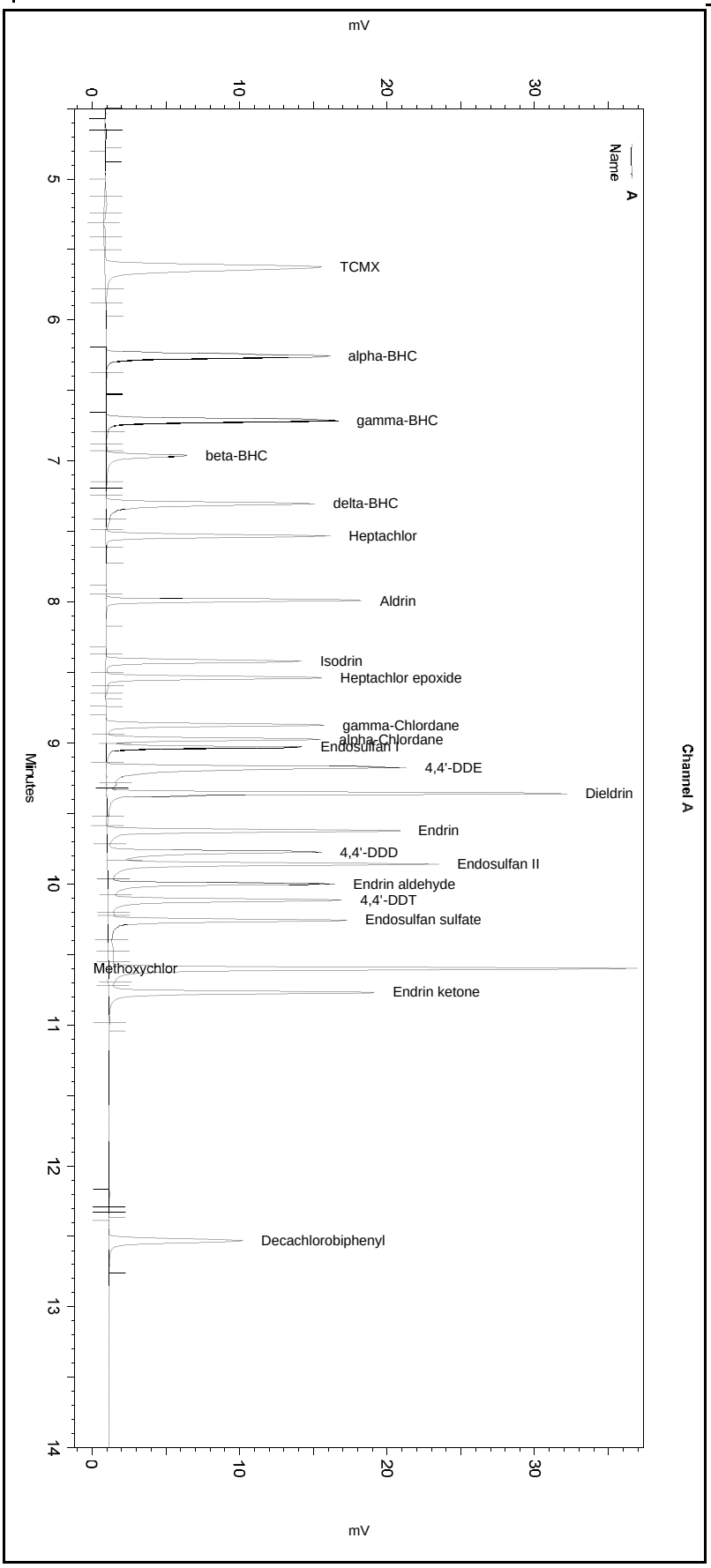
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	35402	20.260
alpha-BHC	5.420	5.420	30273	13.776
gamma-BHC	5.840	5.840	25648	14.589
beta-BHC	5.927	5.927	8062	13.886
delta-BHC	6.273	6.273	20499	14.378
Heptachlor	6.360	6.360	22166	16.067
Aldrin	6.740	6.740	24596	16.619
Isodrin	7.193	7.193	18341	16.355
Heptachlor epoxide	7.380	7.380	22131	17.026
gamma-Chlordane	7.593	7.587	20328	16.555
alpha-Chlordane	7.753	7.747	18513	16.428
Endosulfan I	7.827	7.820	17410	17.140
4,4'-DDE	7.913	7.907	31231	14.524
Dieldrin	8.127	8.127	46512	14.710
Endrin	8.467	8.467	24119	24.128
4,4'-DDD	8.547	8.547	23189	26.129
Endosulfan II	8.693	8.693	36093	27.539
4,4'-DDT	8.893	8.893	24423	19.754
Endrin aldehyde	9.053	9.047	27477	32.709
Endosulfan sulfate	9.333	9.333	25572	32.451
Methoxychlor	9.567	9.567	62865	64.743
Endrin ketone	9.873	9.873	51517	16.874
Decachlorobiphenyl	10.967	10.967	18243	32.713

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:28:34 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

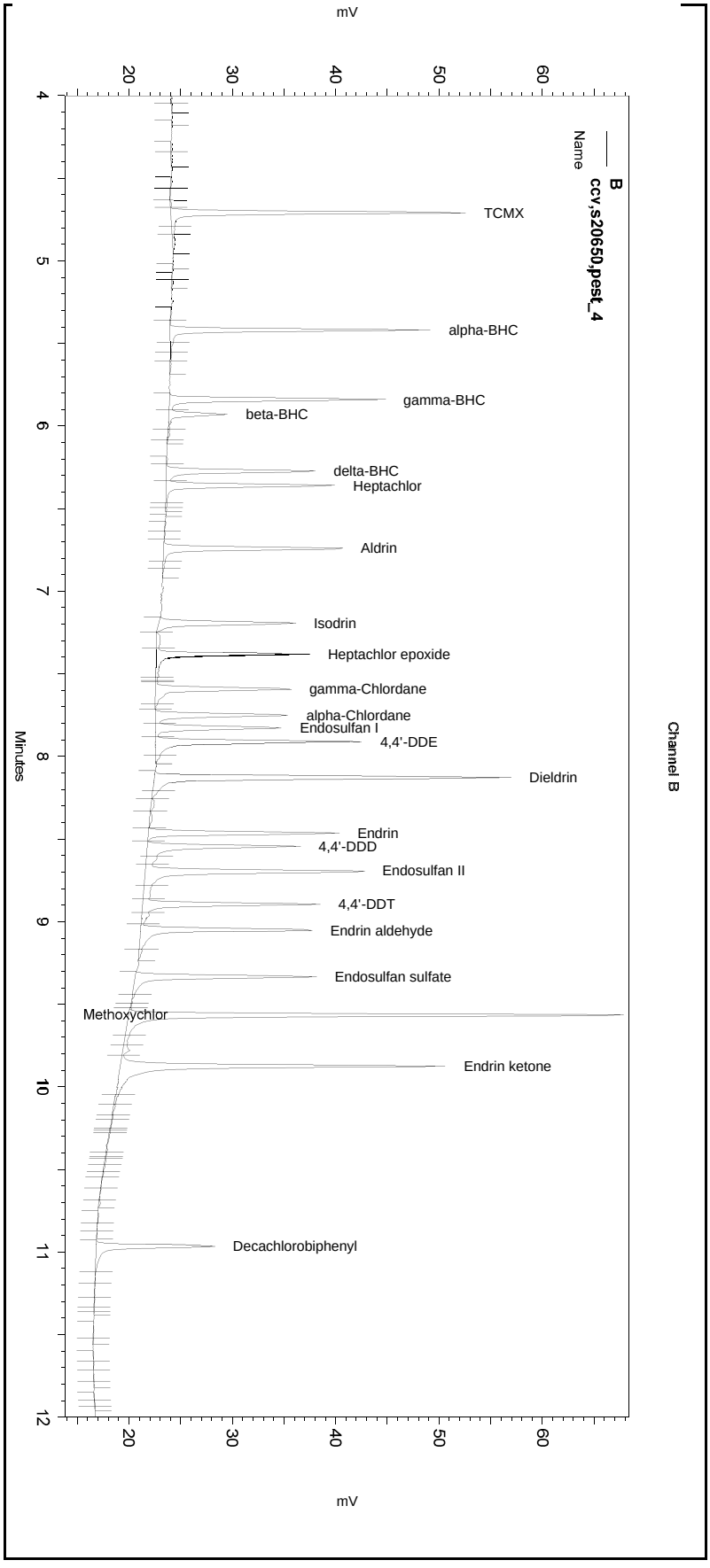
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	9.277	0	0
Yes	Split Peak	10.219	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:28:34 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	8.778	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:25:34 PM
Sample Amount: 1

GC21
PEST - ECD Instrument Results
Channel A: Rtx-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.620	5.620	46359	40.456
alpha-BHC	6.253	6.253	33845	20.521
gamma-BHC	6.713	6.713	30333	20.452
beta-BHC	6.960	6.960	11629	20.442
delta-BHC	7.300	7.300	27532	21.705
Heptachlor	7.533	7.533	24136	19.605
Aldrin	7.993	7.987	27478	21.294
Isodrin	8.420	8.420	20730	21.056
Heptachlor epoxide	8.540	8.533	23260	20.928
gamma-Chlordane	8.873	8.867	22672	21.152
alpha-Chlordane	8.973	8.967	21485	21.099
Endosulfan I	9.027	9.027	20836	22.133
4,4'-DDE	9.173	9.173	43773	45.971
Dieldrin	9.360	9.353	45900	47.944
Endrin	9.620	9.620	30380	46.798
4,4'-DDD	9.773	9.773	30716	45.413
Endosulfan II	9.860	9.860	35427	46.307
Endrin aldehyde	10.000	10.000	25174	44.521
4,4'-DDT	10.113	10.113	27841	41.559
Endosulfan sulfate	10.253	10.253	28298	47.123
Methoxychlor	10.600	10.600	54796	211.171
Endrin ketone	10.767	10.767	30991	44.852
Decachlorobiphenyl	12.527	12.527	19361	34.572

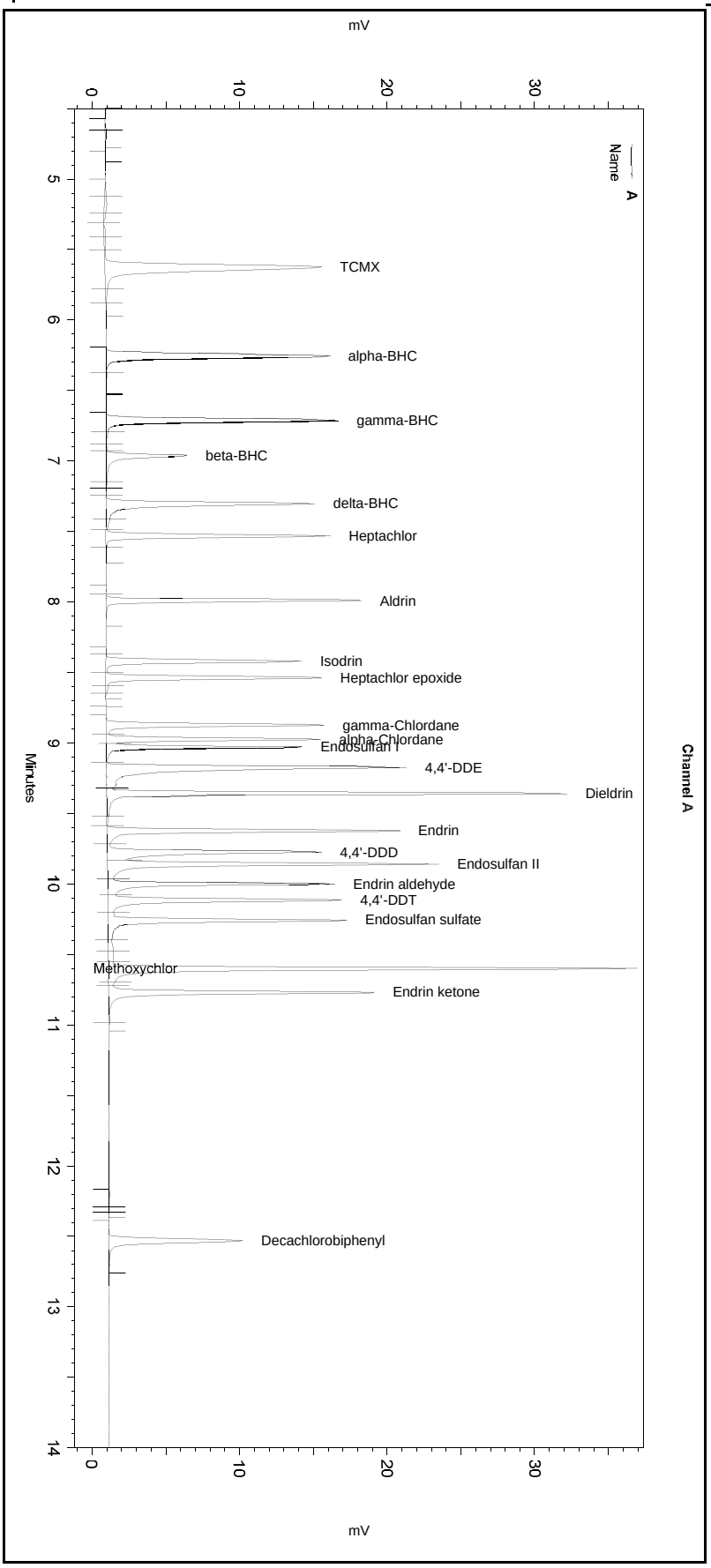
GC21
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.713	4.707	35402	20.260
alpha-BHC	5.420	5.420	30273	13.776
gamma-BHC	5.840	5.840	25648	14.589
beta-BHC	5.927	5.927	8062	13.886
delta-BHC	6.273	6.273	20499	14.378
Heptachlor	6.360	6.360	22166	16.067
Aldrin	6.740	6.740	24596	16.619
Isodrin	7.193	7.193	18341	16.355
Heptachlor epoxide	7.380	7.380	22131	17.026
gamma-Chlordane	7.593	7.587	20328	16.555
alpha-Chlordane	7.753	7.747	18513	16.428
Endosulfan I	7.827	7.820	17410	17.140
4,4'-DDE	7.913	7.907	31231	14.524
Dieldrin	8.127	8.127	46512	14.710
Endrin	8.467	8.467	24119	24.128
4,4'-DDD	8.547	8.547	23189	26.129
Endosulfan II	8.693	8.693	39203	28.800
4,4'-DDT	8.893	8.893	24423	19.754
Endrin aldehyde	9.053	9.047	27477	32.709
Endosulfan sulfate	9.333	9.333	25572	32.451
Methoxychlor	9.567	9.567	62865	64.743
Endrin ketone	9.873	9.873	51517	16.874
Decachlorobiphenyl	10.967	10.967	18243	32.713

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:25:34 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	3	0
Yes	Shoulder Sensitivity	3	24	0

Manual Integration Fixes

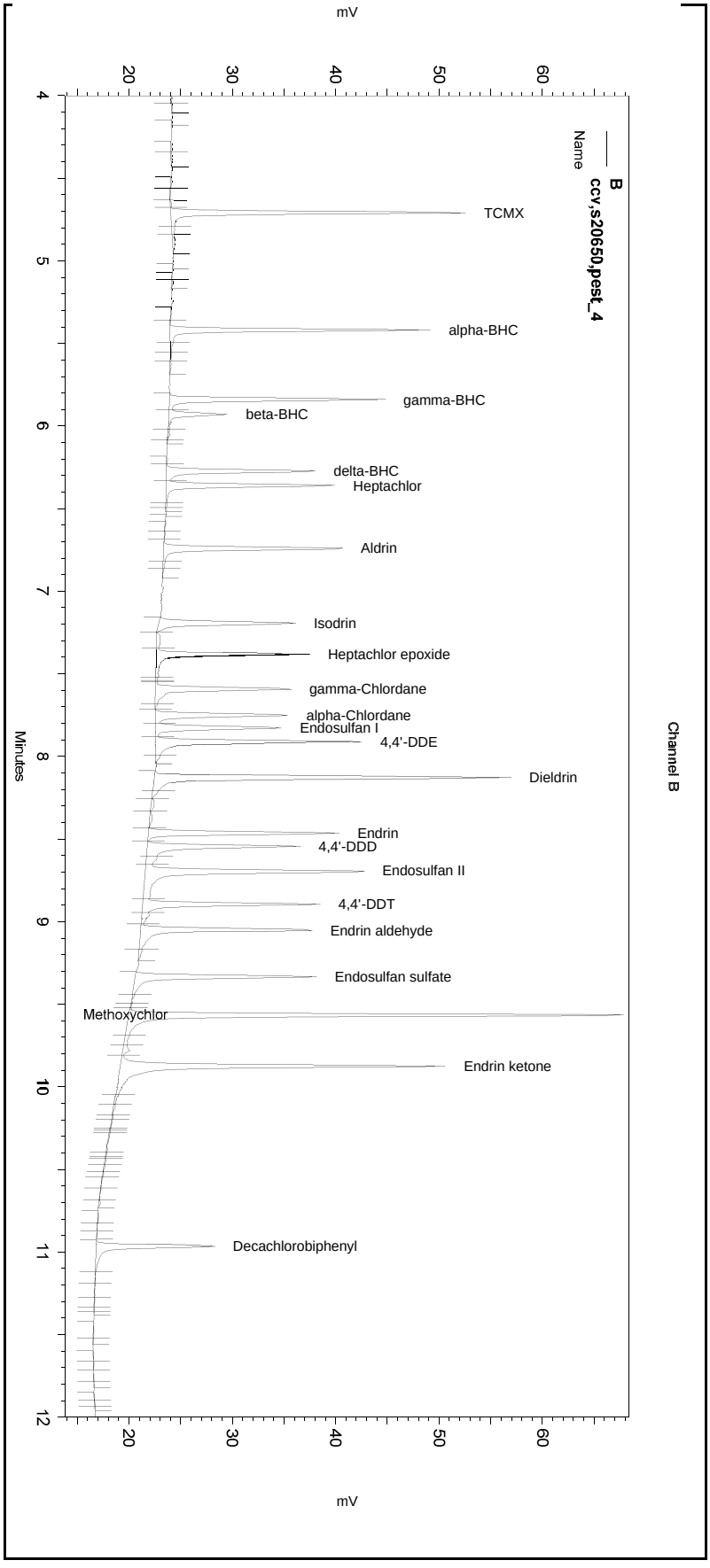
Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC21\Sequence\255.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC21 Vial: N/A Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC21\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/11/2012 12:06:24 PM
Analysis Date: 9/11/2012 12:25:34 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	24	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC21\Data\255-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Soil
EPA 8081B

Inst : GC23 Run Name : PEST_3 IDF : 1.0
Seqnum : 802366168015.1 File : 254_015 Time : 10-SEP-2012 12:47
Cal : 802339015004 Caldate : 22-AUG-2012
Standards: S20649

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	13091	15640	10.00	11.95	pg/uL	19	20	
TCMX	A	7934.4	7507.0	20.00	18.92	pg/uL	-5	20	
Decachlorobiphenyl	A	7963.2	8554.7	20.00	23.80	pg/uL	19	20	
alpha-BHC	B	30483	43419	10.00	14.24	pg/uL	**42**	20	c+ ***
TCMX	B	16987	24209	20.00	28.50	pg/uL	**43**	20	c+
Decachlorobiphenyl	B	14706	18980	20.00	25.81	pg/uL	**29**	20	c+
Average EPA 8081B	A	(n=23)					15		
Average EPA 8081B	B	(n=23)					41		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-015**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC23 (Offline) Vial: 15 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 12:47:40 PM
Analysis Date: 9/11/2012 9:23:41 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.477	5.479	150139	18.923
alpha-BHC	6.113	6.110	156397	11.947
gamma-BHC	6.570	6.570	147560	12.080
beta-BHC	6.820	6.820	56028	11.147
delta-BHC	7.157	7.157	136330	12.306
Heptachlor	7.400	7.397	131505	12.065
Aldrin	7.857	7.853	130819	11.647
Isodrin	8.287	8.287	104356	11.225
Heptachlor epoxide	8.407	8.403	115772	11.232
gamma-Chlordane	8.740	8.740	115632	10.803
alpha-Chlordane	8.847	8.843	112212	10.902
Endosulfan I	8.903	8.903	101593	11.049
4,4'-DDE	9.050	9.050	198358	23.550
Dieldrin	9.233	9.233	212987	23.201
Endrin	9.503	9.503	167373	25.380
4,4'-DDD	9.650	9.647	144686	24.617
Endosulfan II	9.740	9.740	179818	22.059
Endrin aldehyde	9.883	9.883	137456	20.676
4,4'-DDT	10.000	10.003	126878	21.965
Endosulfan sulfate	10.140	10.140	150664	23.477
Methoxychlor	10.497	10.497	305568	116.452
Endrin ketone	10.650	10.650	178264	24.285
Decachlorobiphenyl	12.393	12.397	171094	23.803

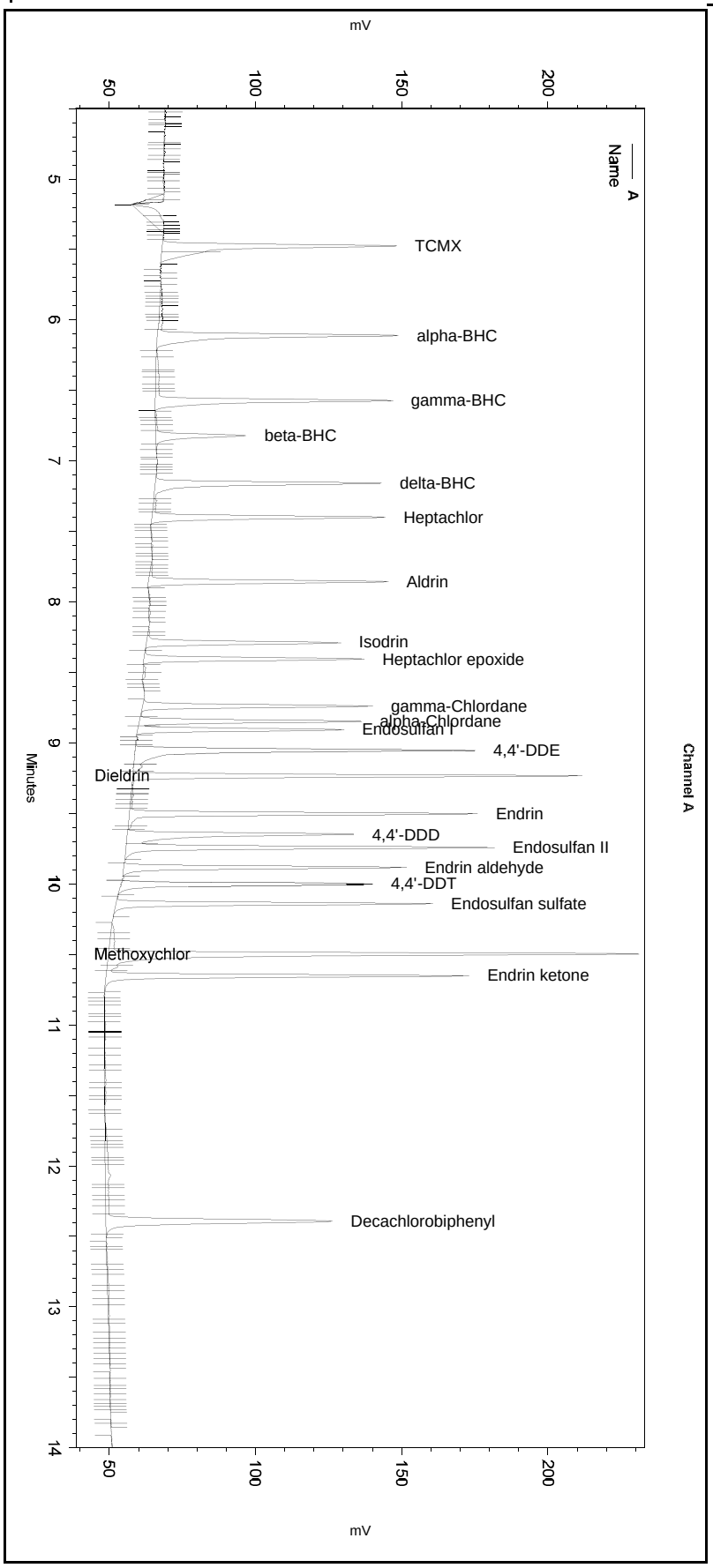
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.220	4.215	484182	28.502
alpha-BHC	4.957	4.953	434192	14.244
gamma-BHC	5.383	5.380	413838	14.469
beta-BHC	5.477	5.477	178560	15.934
delta-BHC	5.830	5.827	379742	14.472
Heptachlor	5.907	5.907	431992	15.022
Aldrin	6.287	6.283	416100	15.285
Isodrin	6.740	6.737	328696	13.973
Heptachlor epoxide	6.930	6.930	370217	14.173
gamma-Chlordane	7.143	7.143	388882	14.434
alpha-Chlordane	7.303	7.303	351978	14.563
Endosulfan I	7.373	7.373	340972	14.662
4,4'-DDE	7.477	7.477	650182	29.212
Dieldrin	7.677	7.677	648326	30.761
Endrin	8.017	8.013	570879	28.670
4,4'-DDD	8.113	8.113	550771	30.881
Endosulfan II	8.247	8.247	570609	27.866
4,4'-DDT	8.457	8.457	478435	24.620
Endrin aldehyde	8.610	8.610	451382	26.007
Endosulfan sulfate	8.910	8.910	470509	26.223
Methoxychlor	9.177	9.177	850164	111.707
Endrin ketone	9.463	9.463	577447	24.218
Decachlorobiphenyl	10.563	10.563	379599	25.813

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-015**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC23 (Offline) Vial: 15 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 12:47:40 PM
Analysis Date: 9/11/2012 9:23:41 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

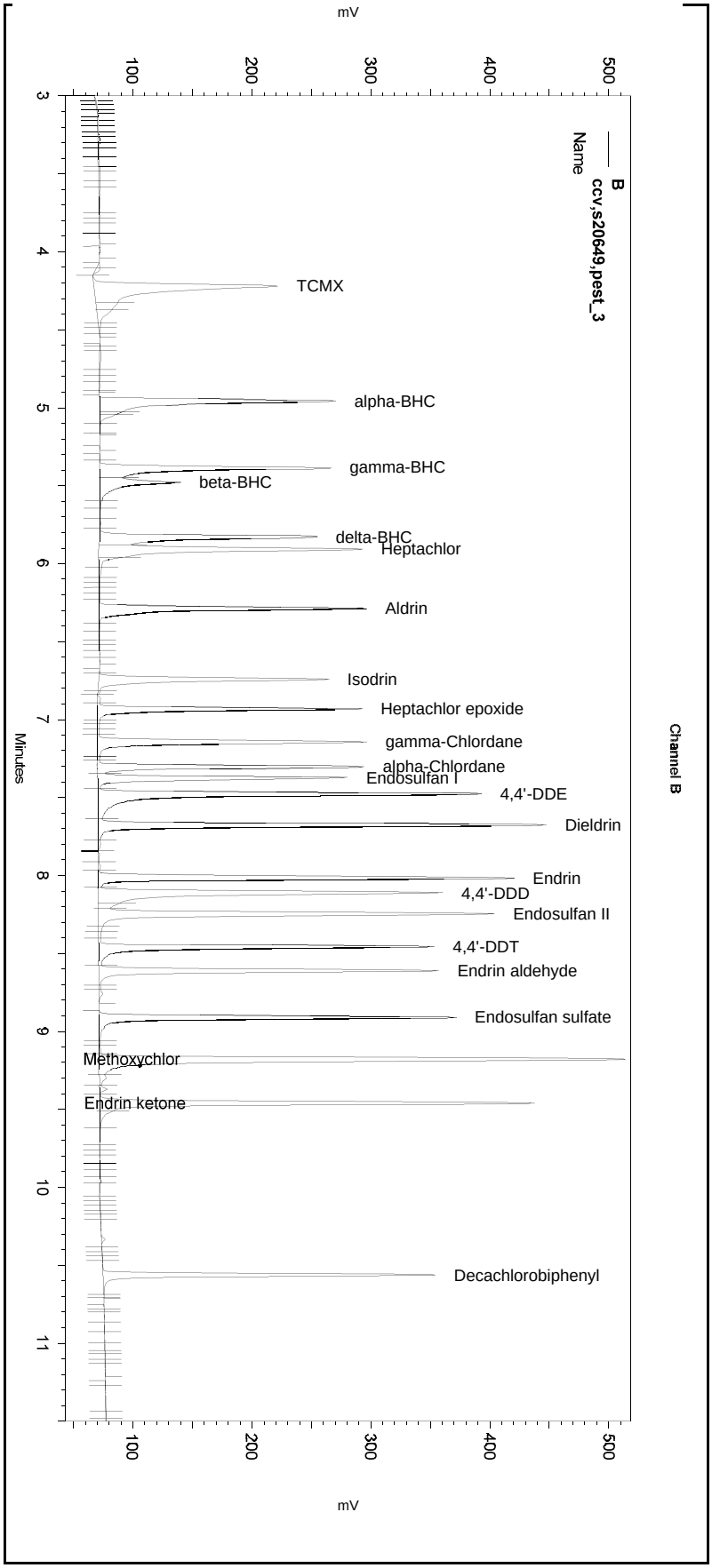
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\254-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.385	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-015**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC23 (Offline) Vial: 15 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 12:47:40 PM
Analysis Date: 9/11/2012 9:23:41 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\254-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.551	0	0
Yes	Reset Baseline	10.731	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-015**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC23 Vial: 15 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 12:47:40 PM
Analysis Date: 9/10/2012 1:06:08 PM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.477	5.477	176030	22.186
alpha-BHC	6.113	6.110	156397	11.947
gamma-BHC	6.570	6.570	147560	12.080
beta-BHC	6.820	6.820	56028	11.147
delta-BHC	7.157	7.157	136330	12.306
Heptachlor	7.400	7.397	131505	12.065
Aldrin	7.857	7.853	130819	11.647
Isodrin	8.287	8.287	104356	11.225
Heptachlor epoxide	8.407	8.403	115772	11.232
gamma-Chlordane	8.740	8.740	115632	10.803
alpha-Chlordane	8.847	8.843	112212	10.902
Endosulfan I	8.903	8.903	101593	11.049
4,4'-DDE	9.050	9.050	198358	23.550
Dieldrin	9.233	9.233	212987	23.201
Endrin	9.503	9.503	167373	25.380
4,4'-DDD	9.650	9.647	144686	24.617
Endosulfan II	9.740	9.740	179818	22.059
Endrin aldehyde	9.883	9.883	137456	20.676
4,4'-DDT	10.000	10.003	126878	21.965
Endosulfan sulfate	10.140	10.140	150664	23.477
Methoxychlor	10.497	10.497	305568	116.452
Endrin ketone	10.650	10.650	178264	24.285
Decachlorobiphenyl	12.393	12.397	171094	23.803

GC23

PEST - ECD Instrument Results

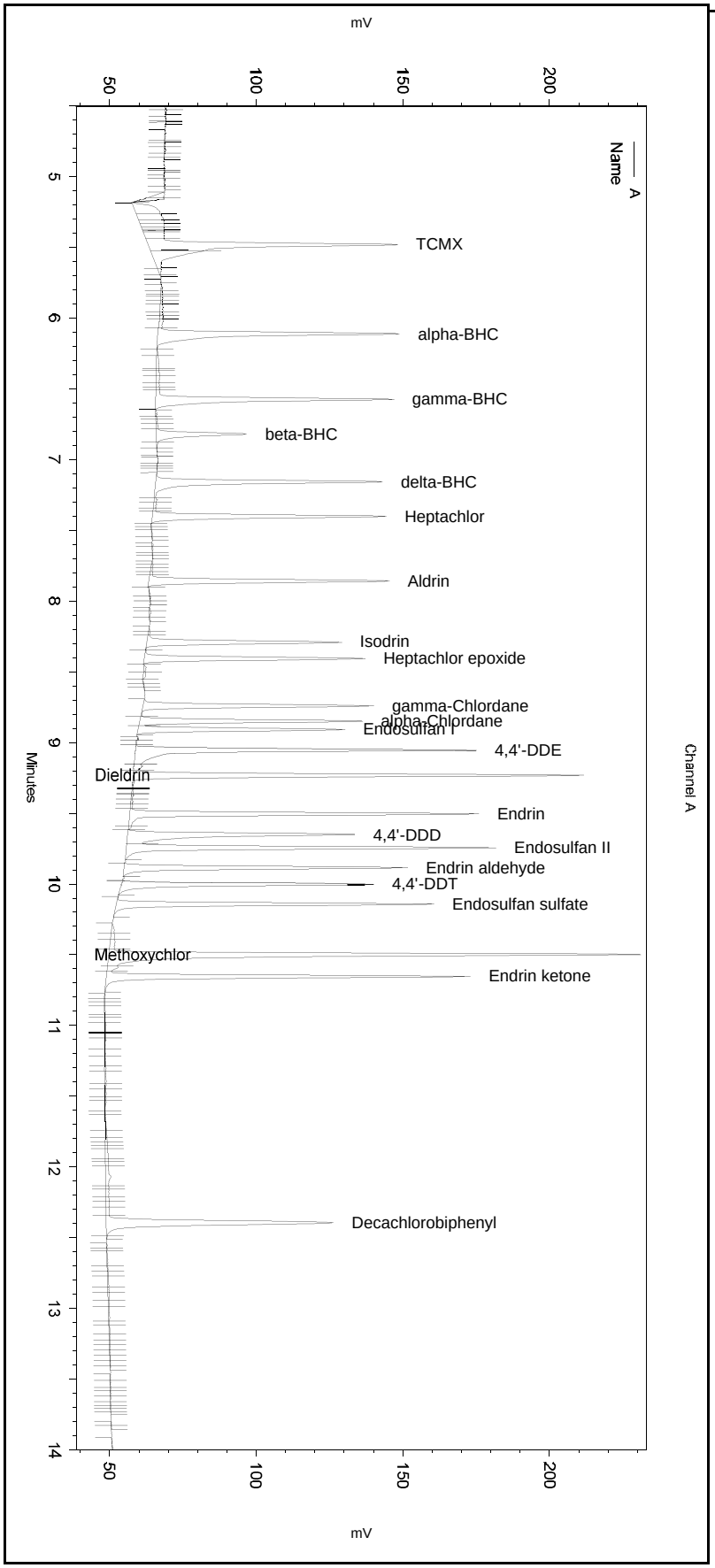
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.220	4.215	493001	29.021
alpha-BHC	4.957	4.953	441116	14.471
gamma-BHC	5.383	5.380	413838	14.469
beta-BHC	5.477	5.477	178560	15.934
delta-BHC	5.830	5.827	379742	14.472
Heptachlor	5.907	5.907	431992	15.022
Aldrin	6.287	6.283	416100	15.285
Isodrin	6.740	6.737	328696	13.973
Heptachlor epoxide	6.930	6.930	370217	14.173
gamma-Chlordane	7.143	7.143	388882	14.434
alpha-Chlordane	7.303	7.303	351978	14.563
Endosulfan I	7.373	7.373	340972	14.662
4,4'-DDE	7.477	7.477	650182	29.212
Dieldrin	7.677	7.677	648326	30.761
Endrin	8.017	8.013	570879	28.670
4,4'-DDD	8.113	8.113	550771	30.881
Endosulfan II	8.247	8.247	570609	27.866
4,4'-DDT	8.457	8.457	478435	24.620
Endrin aldehyde	8.610	8.610	451382	26.007
Endosulfan sulfate	8.910	8.910	470509	26.223
Methoxychlor	9.177	9.177	850164	111.707
Endrin ketone	9.463	9.463	577447	24.218
Decachlorobiphenyl	10.563	10.563	390030	26.522

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-015**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC23 Vial: 15 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 12:47:40 PM
Analysis Date: 9/10/2012 1:06:08 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\254-015_0FEE.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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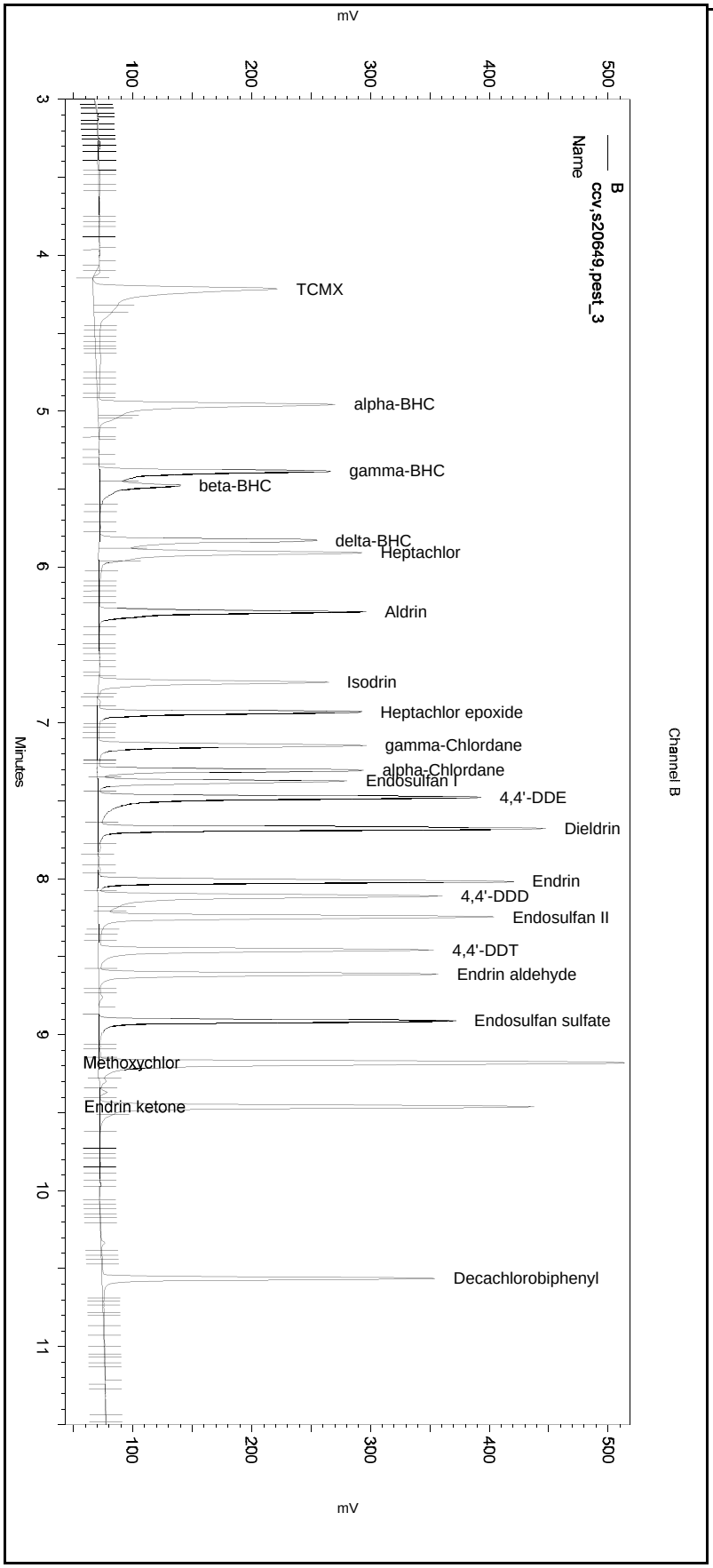
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-015**
Sample Name: **ccv,s20649,pest_3**
Instrument: GC23 Vial: 15 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 12:47:40 PM
Analysis Date: 9/10/2012 1:06:08 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\254-015_0FEE.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PEST Soil
EPA 8081B

Inst : GC23 Run Name : PEST_4 IDF : 1.0
Seqnum : 802366168025.1 File : 254_025 Time : 10-SEP-2012 17:19
Cal : 802339015004 Caldate : 22-AUG-2012
Standards: S20650

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	13091	15488	20.00	23.66	pg/uL	18	20	
TCMX	A	7934.4	6979.0	40.00	35.18	pg/uL	-12	20	
Decachlorobiphenyl	A	7963.2	7976.3	40.00	51.50	pg/uL	**29**	20	c+
alpha-BHC	B	30483	39489	20.00	25.91	pg/uL	**30**	20	c+ ***
TCMX	B	16987	22425	40.00	52.80	pg/uL	**32**	20	c+
Decachlorobiphenyl	B	14706	16005	40.00	43.53	pg/uL	9	20	
Average EPA 8081B	A	(n=23)					18		
Average EPA 8081B	B	(n=23)					26		

TKB 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: TKB Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-025**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC23 (Offline) Vial: 25 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 5:19:45 PM
Analysis Date: 9/11/2012 9:24:41 AM
Sample Amount: 1

GC23
PEST - ECD Instrument Results
Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.483	5.479	279160	35.184
alpha-BHC	6.117	6.110	309763	23.663
gamma-BHC	6.577	6.570	290652	23.795
beta-BHC	6.823	6.820	108275	21.542
delta-BHC	7.163	7.157	281055	25.370
Heptachlor	7.403	7.397	263837	24.206
Aldrin	7.860	7.853	264088	23.513
Isodrin	8.290	8.287	212672	22.875
Heptachlor epoxide	8.410	8.403	231625	22.472
gamma-Chlordane	8.743	8.740	235868	22.036
alpha-Chlordane	8.850	8.843	225739	21.933
Endosulfan I	8.907	8.903	204891	22.283
4,4'-DDE	9.053	9.050	422837	50.202
Dieldrin	9.237	9.233	469790	51.175
Endrin	9.507	9.503	341436	51.775
4,4'-DDD	9.650	9.647	305951	52.055
Endosulfan II	9.743	9.740	363881	44.638
Endrin aldehyde	9.887	9.883	280046	42.123
4,4'-DDT	10.003	10.003	261760	45.315
Endosulfan sulfate	10.143	10.140	312590	48.708
Methoxychlor	10.497	10.497	664416	253.208
Endrin ketone	10.653	10.650	364813	49.699
Decachlorobiphenyl	12.397	12.397	319051	51.498

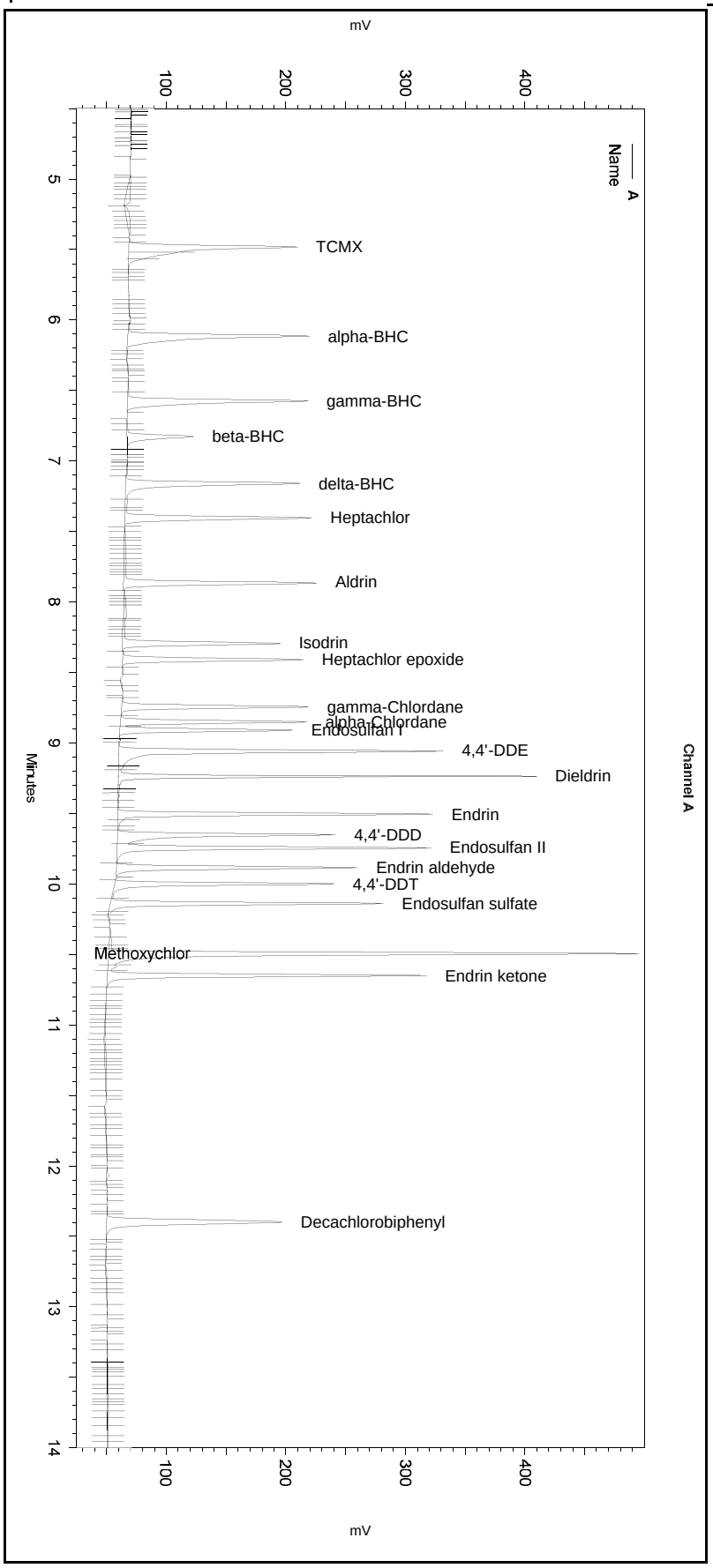
GC23
PEST - ECD Instrument Results
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.223	4.215	897013	52.804
alpha-BHC	4.960	4.953	789782	25.909
gamma-BHC	5.387	5.380	754673	26.386
beta-BHC	5.480	5.477	355897	31.759
delta-BHC	5.830	5.827	694045	26.450
Heptachlor	5.910	5.907	746375	25.954
Aldrin	6.290	6.283	700308	25.725
Isodrin	6.743	6.737	597689	25.408
Heptachlor epoxide	6.933	6.930	649670	24.871
gamma-Chlordane	7.147	7.143	731571	33.076
alpha-Chlordane	7.307	7.303	617516	25.549
Endosulfan I	7.377	7.373	608002	26.144
4,4'-DDE	7.480	7.477	1081683	48.598
Dieldrin	7.680	7.677	990108	57.313
Endrin	8.017	8.013	872841	43.834
4,4'-DDD	8.117	8.113	949182	53.220
Endosulfan II	8.250	8.247	934774	45.650
4,4'-DDT	8.460	8.457	788334	40.568
Endrin aldehyde	8.613	8.610	764117	44.025
Endosulfan sulfate	8.913	8.910	777481	43.332
Methoxychlor	9.180	9.177	1194845	156.996
Endrin ketone	9.467	9.463	874854	36.692
Decachlorobiphenyl	10.563	10.563	640199	43.533

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-025**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC23 (Offline) Vial: 25 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 5:19:45 PM
Analysis Date: 9/11/2012 9:24:41 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

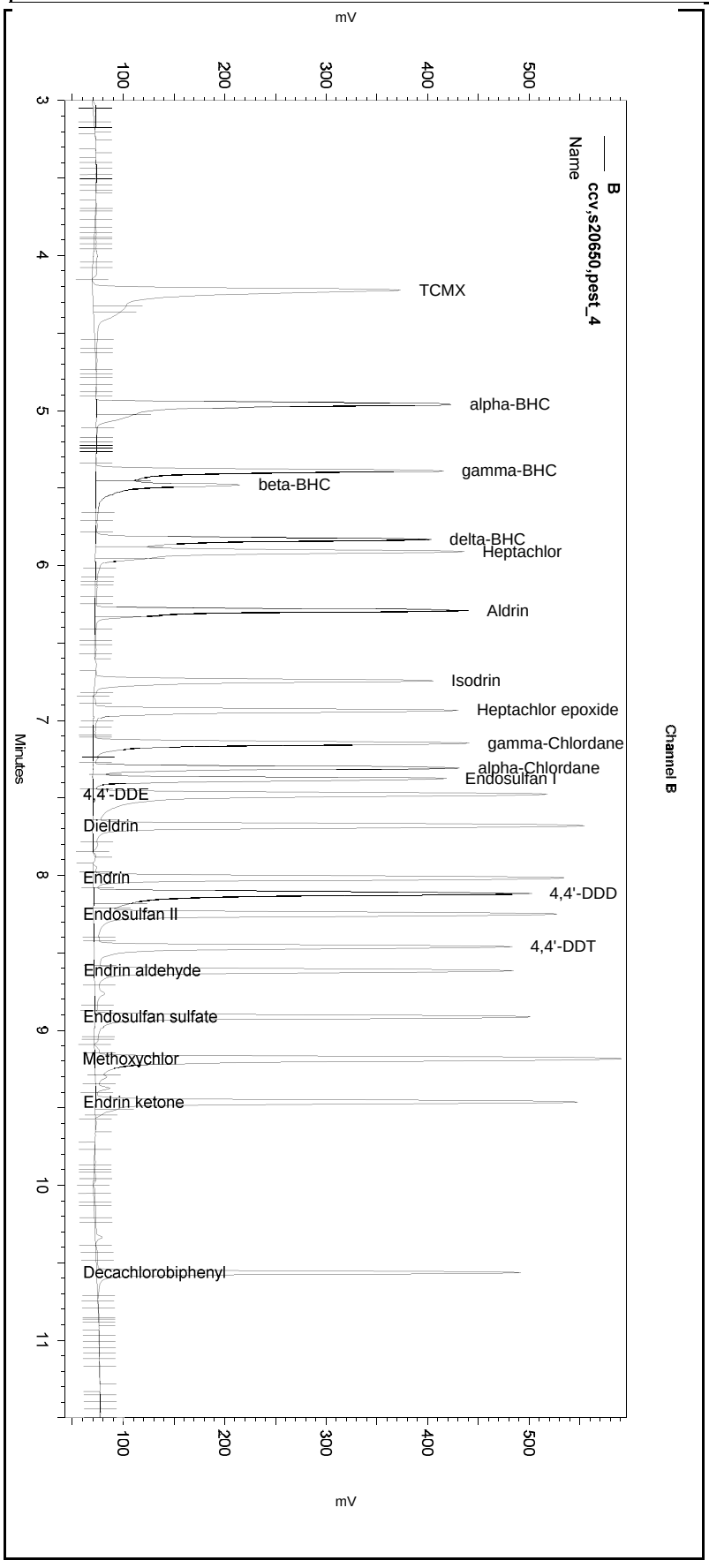
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\254-025

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.401	0	0
Yes	Reset Baseline	8.51	0	0
Yes	Reset Baseline	10.308	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-025**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC23 (Offline) Vial: 25 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 5:19:45 PM
Analysis Date: 9/11/2012 9:24:41 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC23\Data\254-025

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	9.658	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-025**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC23 Vial: 25 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 5:19:45 PM
Analysis Date: 9/10/2012 5:38:11 PM
Sample Amount: 1

GC23

PEST - ECD Instrument Results

Channel A: RTX-440

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	5.483	5.477	290160	36.570
alpha-BHC	6.117	6.110	309763	23.663
gamma-BHC	6.577	6.570	290652	23.795
beta-BHC	6.823	6.820	108275	21.542
delta-BHC	7.163	7.157	281901	25.447
Heptachlor	7.403	7.397	266011	24.406
Aldrin	7.860	7.853	270070	24.046
Isodrin	8.290	8.287	222152	23.895
Heptachlor epoxide	8.410	8.403	242033	23.482
gamma-Chlordane	8.743	8.740	235868	22.036
alpha-Chlordane	8.850	8.843	225739	21.933
Endosulfan I	8.907	8.903	204891	22.283
4,4'-DDE	9.053	9.050	422837	50.202
Dieldrin	9.237	9.233	469790	51.175
Endrin	9.507	9.503	341436	51.775
4,4'-DDD	9.650	9.647	305951	52.055
Endosulfan II	9.743	9.740	363881	44.638
Endrin aldehyde	9.887	9.883	280046	42.123
4,4'-DDT	10.003	10.003	261760	45.315
Endosulfan sulfate	10.143	10.140	312590	48.708
Methoxychlor	10.497	10.497	675668	257.497
Endrin ketone	10.653	10.650	372394	50.732
Decachlorobiphenyl	12.397	12.397	319051	51.498

GC23

PEST - ECD Instrument Results

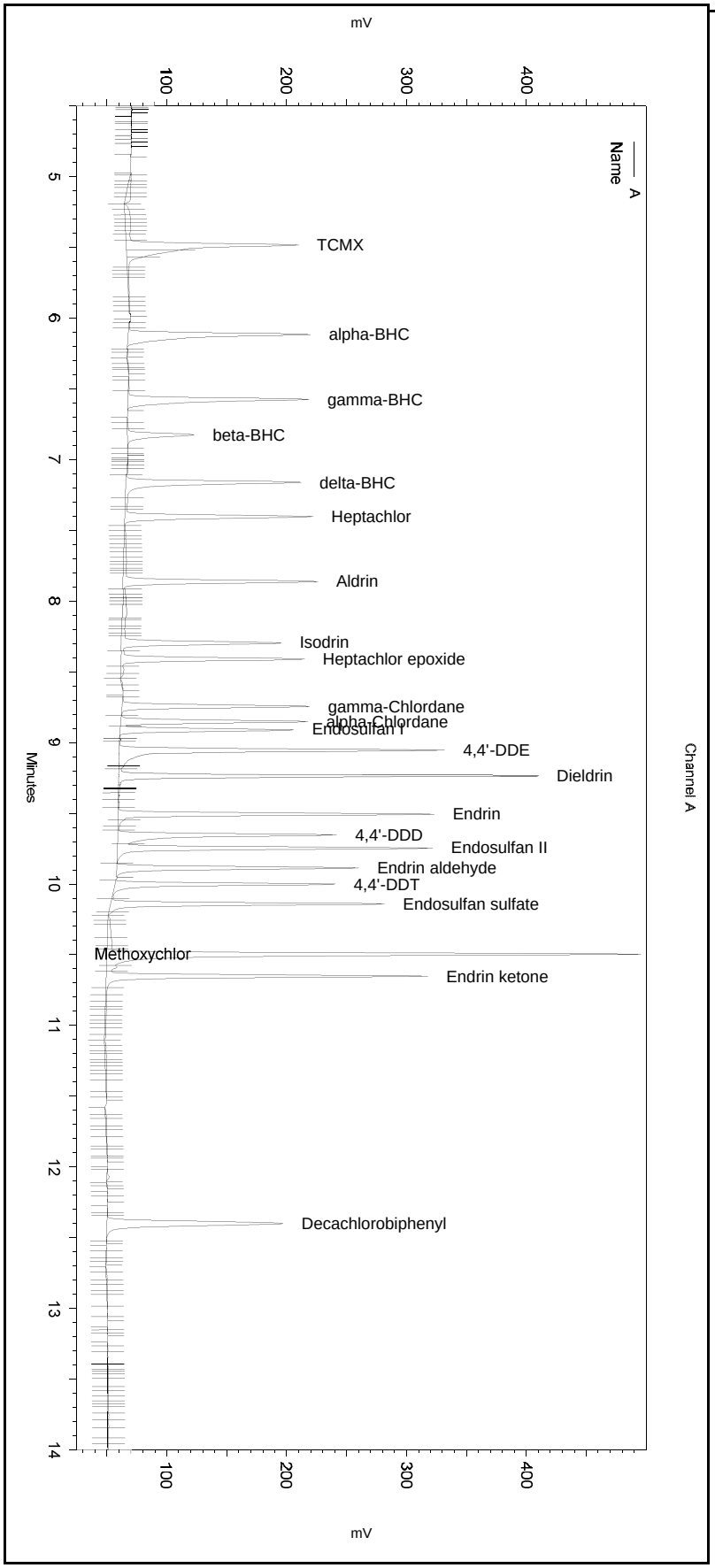
Channel B: CLPII

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.223	4.215	897013	52.804
alpha-BHC	4.960	4.953	789782	25.909
gamma-BHC	5.387	5.380	754673	26.386
beta-BHC	5.480	5.477	355897	31.759
delta-BHC	5.830	5.827	694045	26.450
Heptachlor	5.910	5.907	746375	25.954
Aldrin	6.290	6.283	700308	25.725
Isodrin	6.743	6.737	597689	25.408
Heptachlor epoxide	6.933	6.930	649670	24.871
gamma-Chlordane	7.147	7.143	731571	33.076
alpha-Chlordane	7.307	7.303	617516	25.549
Endosulfan I	7.377	7.373	608002	26.144
4,4'-DDE	7.480	7.477	1081683	48.598
Dieldrin	7.680	7.677	990108	57.313
Endrin	8.017	8.013	873569	43.871
4,4'-DDD	8.117	8.113	950605	53.300
Endosulfan II	8.250	8.247	939366	45.874
4,4'-DDT	8.460	8.457	794263	40.873
Endrin aldehyde	8.613	8.610	770078	44.369
Endosulfan sulfate	8.913	8.910	788722	43.958
Methoxychlor	9.180	9.177	1207482	158.656
Endrin ketone	9.467	9.463	885863	37.153
Decachlorobiphenyl	10.563	10.563	640199	43.533

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-025**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC23 Vial: 25 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 5:19:45 PM
Analysis Date: 9/10/2012 5:38:11 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	4.934	0	0

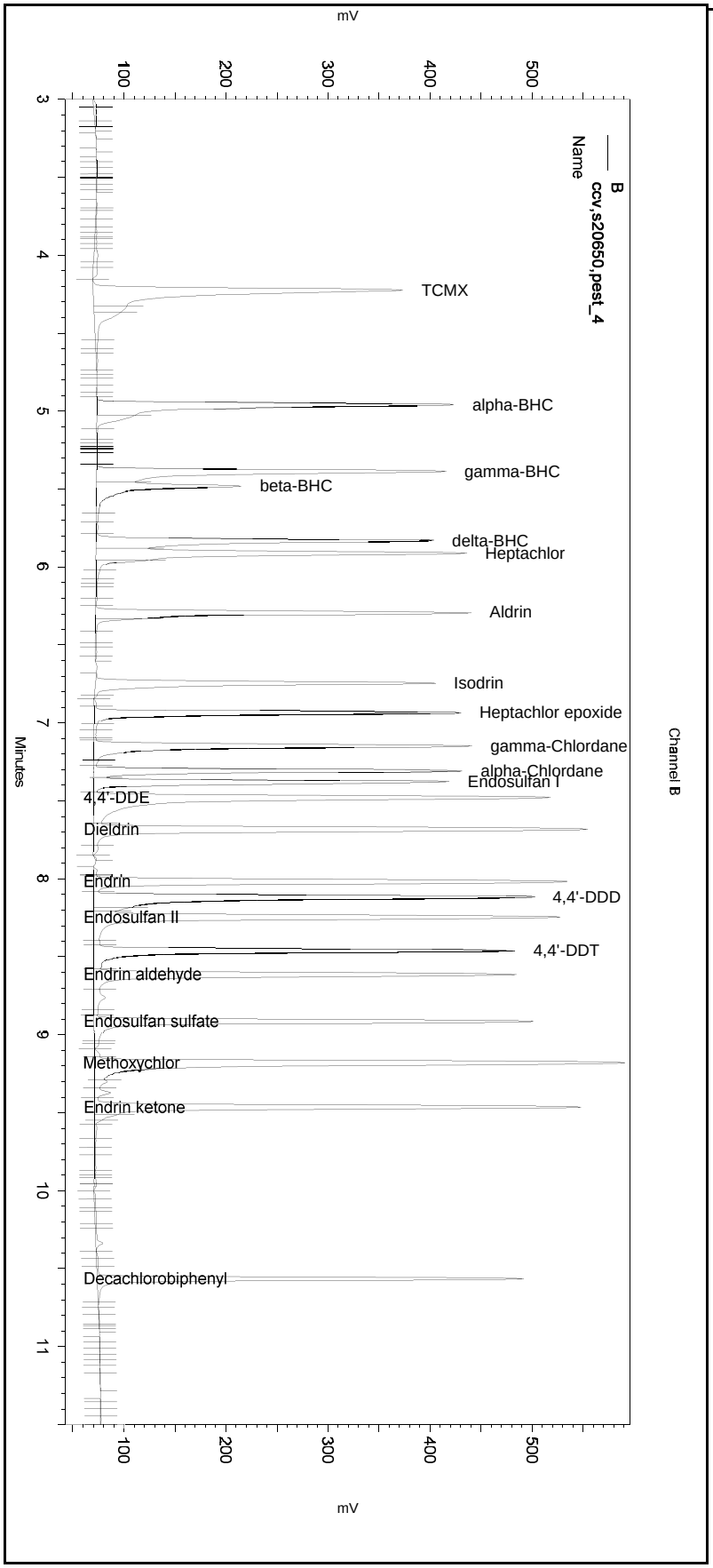
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\254-025_0FF8.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC23\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC23\Data\254-025**
Sample Name: **ccv,s20650,pest_4**
Instrument: GC23 Vial: 25 Operator: lims2k3\pest2
Method Name: \\Lims\gdrive\ezchrom\Projects\GC23\Method\isopest-run-251(RT).met

Software Version 3.1.7
Run Date: 9/10/2012 5:19:45 PM
Analysis Date: 9/10/2012 5:38:11 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	2	14.55	50
Yes	Reset Baseline	6.645	0	0

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10057\254-025_0FF8.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239403
ANALYTICAL REPORT
PCBs

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
FB.09042012	239403-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
PCBS (EPA 8082A)

Laboratory number:	**239403**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/04/12**
Samples Received:	**09/04/12**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 09/04/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

PCBs (EPA 8082A):

All samples underwent sulfuric acid cleanup using EPA Method 3665A.

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B.

No analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 23403

Chain of Custody # _____

Project No: CA0007611.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: E Manton and D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None
1	EX36B116D.2	04/04/12	1150		X			1					X
2	EX36B116A.2	04/04/12	1155		X			1					X
3	EX36B116B.2	04/04/12	1140		X			1					X
4	EX36B116C.2	04/04/12	1200		X			1					X
5	EX36B015A.2	04/04/12	1250		X			1					X
6	EX36B163A.2	04/04/12	1315		X			2					X
7	FB.090420120	04/04/12	1455	X				9	3		1		5
8	EB.090420120	04/04/12	1505	X				3			1		2
	Temp Blank												

ANALYTICAL REQUEST

Big(2)-Ethylhexyl)phthlate by 8270D	Copper by EPA 6010C	Mercury by EPA 7471B	Alpha-BHC by EPA 8081B	PCBs by 8082	TPHg by 8015	TPHd by 8015	SVOCs by 8270	Pesticides by 8081	Metals by 6010/7174
X									
X									
X									
X									
	X	X							
	X	X	X						
				X	X	X	X	X	X
							X	X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

RECEIVED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239403 Date Received 9/4/12 Number of coolers 1
Client ARCADIS Project CA000761.0001

Date Opened 9/4/12 By (print) EL (sign)
Date Logged in ~~EL~~ 9/6/12 By (print) JG (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? (YES) NO N/A
17. Did you document your preservative check? (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239403

Sample	pH: <2	>9	>12	Other
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
-008a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: EL
Date: 9/6/12

Results & QC Summary

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8082A
Field ID:	FB.09042012	Sampled:	09/04/12
Matrix:	Water	Received:	09/04/12
Units:	ug/L	Prepared:	09/06/12
Diln Fac:	1.000	Analyzed:	09/08/12
Batch#:	190234		

Type: SAMPLE Lab ID: 239403-007

Analyte	Result	LOQ	DL
Aroclor-1254	0.19 U	0.47	0.11
Aroclor-1260	0.19 U	0.47	0.093

Surrogate	%REC	Limits
TCMX	85	39-120
Decachlorobiphenyl	82	24-120

Type: BLANK Lab ID: QC655035

Analyte	Result	LOQ	DL
Aroclor-1254	0.20 U	0.50	0.12
Aroclor-1260	0.20 U	0.50	0.10

Surrogate	%REC	Limits
TCMX	81	39-120
Decachlorobiphenyl	92	24-120

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3520C
Project#:	CA000761.0001	Analysis:	EPA 8082A
Matrix:	Water	Batch#:	190234
Units:	ug/L	Prepared:	09/06/12
Diln Fac:	1.000	Analyzed:	09/10/12

Type: BS Lab ID: QC655036

Analyte	Spiked	Result	%REC	Limits
Aroclor-1260	5.000	4.311	86	58-131

Surrogate	%REC	Limits
TCMX	95	39-120
Decachlorobiphenyl	85	24-120

Type: BSD Lab ID: QC655037

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1260	5.000	4.954	99	58-131	14	20

Surrogate	%REC	Limits
TCMX	101	39-120
Decachlorobiphenyl	83	24-120

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PCBS Water: EPA 8082A

Inst : GC06
Calnum : 202360551001
Units : pg/uL

Name : AR1660_250
Date : 06-SEP-2012 16:49

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	250_008	202360551008	PCB10_2	06-SEP-2012 16:49	S19975
L2	250_009	202360551009	PCB25_5	06-SEP-2012 17:53	S19976
L3	250_010	202360551010	PCB100_20	06-SEP-2012 18:21	S19977
L4	250_011	202360551011	PCB250_50	06-SEP-2012 18:49	S19978
L5	250_012	202360551012	PCB500_100	06-SEP-2012 19:16	S19979
L6	250_013	202360551013	PCB750_150	06-SEP-2012 19:44	S19980
L7	250_014	202360551014	PCB1000_200	06-SEP-2012 20:11	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	977.50	867.00	809.57	733.00	642.90	572.49		AVRG	R		0.00130		767.08	19	.99	20	
Aroclor-1260 Peak # 2	A	636.20	645.28	605.17	591.27	519.42	473.96	475.94	AVRG	R		0.00177		563.89	13	.99	20	
Aroclor-1260 Peak # 3	A	618.80	500.24	451.97	419.33	372.34			AVRG	R		0.00212		472.54	20	.99	20	
Aroclor-1260 Peak # 4	A	1017.8	1084.9	1023.1	964.77	859.73	781.83	774.13	AVRG	R		0.00108		929.46	13	.99	20	
Aroclor-1260 Peak # 5	A	396.50	438.52	438.93	410.76	371.41	335.84	345.47	AVRG	R		0.00256		391.06	11	.99	20	
TCMX	A	7935.0	7919.0	7022.0	6505.6	5961.7	5524.8	5380.5	AVRG	R		1.51E-4		6606.9	16	.99	20	
Decachlorobiphenyl	A	9631.0	10236	8546.9	7706.8	6649.9			AVRG	R		1.17E-4		8554.0	17	.99	20	
Aroclor-1260 Peak # 1	B	2729.3	3301.2	2645.9	2303.9	1981.0	1729.9	1695.0	LINR	R	-49.479	6.04E-4		2340.9	0.991	.99	20	
Aroclor-1260 Peak # 2	B	2380.8	2230.8	2241.2	1901.8	1754.7	1545.4	1482.5	AVRG	R		5.17E-4		1933.9	19	.99	20	
Aroclor-1260 Peak # 3	B	2148.9	2011.4	1730.7	1584.4	1364.0	1285.0		AVRG	R		5.93E-4		1687.4	20	.99	20	
Aroclor-1260 Peak # 4	B	4938.5	4697.8	4098.2	3630.0	3080.2	2740.6	2634.3	LINR	R	-49.347	3.86E-4		3688.5	0.991	.99	20	
Aroclor-1260 Peak # 5	B	2595.9	1546.7	1663.5	1747.5	1514.5	1303.6	1337.7	LINR	R	-32.273	7.65E-4		1672.8	0.992	.99	20	
TCMX	B	23332	20443	16814	16552	16902	15096	14060	AVRG	R		5.68E-5		17600	18	.99	20	
Decachlorobiphenyl	B	33114	33066	25782	21904	18200	15398	14918	QUAD	A	85306.8	20048.7	-29.2621	23197	0.996	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**27**	25.000	13	100.00	6	250.00	-4	500.00	-16	750.00	**-25**		
Aroclor-1260 Peak # 2	A	10.000	13	25.000	14	100.00	7	250.00	5	500.00	-8	750.00	-16	1000.0	-16
Aroclor-1260 Peak # 3	A	10.000	**31**	25.000	6	100.00	-4	250.00	-11	500.00	**-21**				
Aroclor-1260 Peak # 4	A	10.000	10	25.000	17	100.00	10	250.00	4	500.00	-8	750.00	-16	1000.0	-17
Aroclor-1260 Peak # 5	A	10.000	1	25.000	12	100.00	12	250.00	5	500.00	-5	750.00	-14	1000.0	-12
TCMX	A	2.0000	20	5.0000	20	20.000	6	50.000	-2	100.00	-10	150.00	-16	200.00	-19
Decachlorobiphenyl	A	2.0000	13	5.0000	20	20.000	0	50.000	-10	100.00	**-22**				
Aroclor-1260 Peak # 1	B	10.000	**-430**	25.000	**-98**	100.00	10	250.00	19	500.00	10	750.00	-2	1000.0	-3
Aroclor-1260 Peak # 2	B	10.000	**23**	25.000	15	100.00	16	250.00	-2	500.00	-9	750.00	-20	1000.0	**-23**
Aroclor-1260 Peak # 3	B	10.000	**27**	25.000	19	100.00	3	250.00	-6	500.00	-19	750.00	**-24**		
Aroclor-1260 Peak # 4	B	10.000	**-403**	25.000	**-116**	100.00	9	250.00	**21**	500.00	9	750.00	-1	1000.0	-3
Aroclor-1260 Peak # 5	B	10.000	**-224**	25.000	**-111**	100.00	-5	250.00	**21**	500.00	9	750.00	-5	1000.0	-1
TCMX	B	2.0000	**33**	5.0000	16	20.000	-4	50.000	-6	100.00	-4	150.00	-14	200.00	-20
Decachlorobiphenyl	B	2.0000	**-148**	5.0000	-20	20.000	11	50.000	9	100.00	2	150.00	-7	200.00	4

PML 09/07/12 : Corrected automatically drawn baseline in all levels.

PML 09/07/12 : dropped various points and changed fit types for various peaks for better r^2 %RSD recovery

PML 09/07/12 : RTs updated in the integrated version of ICAL

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PCBS Water
EPA 8082A

Inst : GC06 Name : AR1660_250
Calnum : 202360551001 Cal Date : 06-SEP-2012

ICV 202360551016 (250_016 06-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	241.7	pg/uL	-3	20	
Aroclor-1260	B	250.0	261.4	pg/uL	5	20	

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PCBS Water: EPA 8082A

Inst : GC16
Calnum : 232358946001
Units : pg/ul

Name : AR1660_249A
Date : 05-SEP-2012 18:41

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	249_011	232358946011	PCB10_2	05-SEP-2012 18:41	S19975
L2	249_012	232358946012	PCB25_5	05-SEP-2012 19:09	S19976
L3	249_013	232358946013	PCB100_20	05-SEP-2012 19:37	S19977
L4	249_014	232358946014	PCB250_50	05-SEP-2012 20:05	S19978
L5	249_015	232358946015	PCB500_100	05-SEP-2012 20:33	S19979
L6	249_016	232358946016	PCB750_150	05-SEP-2012 21:00	S19980
L7	249_017	232358946017	PCB1000_200	05-SEP-2012 21:28	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	2903.7	2645.1	2043.0	1737.6	1402.8	1280.3	1106.0	QUAD	A	26125.9	1714.03	-0.63519	1874.1	0.999	.99	20	
Aroclor-1260 Peak # 2	A	2014.6	2233.6	1766.6	1721.8	1453.3	1305.8		AVRG	R		5.72E-4		1749.3	20	.99	20	
Aroclor-1260 Peak # 3	A	1771.7	1496.8	1264.0	1095.8	936.53	843.23		LINR	R	-38.896	0.00120		1234.7	0.990	.99	20	
Aroclor-1260 Peak # 4	A	3727.3	3500.8	2817.0	2358.5	1983.1			LINR	R	-28.596	5.17E-4		2877.3	0.990	.99	20	
Aroclor-1260 Peak # 5	A	1374.7	1851.5	1420.5	1250.3	1105.9			AVRG	R		7.14E-4		1400.6	20	.99	20	
TCMX	A	25623	23507	19325	16224	13450	12341		LINR	R	-8.5129	8.29E-5		18411	0.990	.99	20	
Decachlorobiphenyl	A	19026	17296	15334	12347	10199	8511.2	7607.0	QUAD	A	39971.0	12237.7	-24.6931	12903	0.998	.99	20	
Aroclor-1260 Peak # 1	B	737.60	685.28	610.78	566.71	523.53	511.21	462.17	AVRG	R		0.00171		585.32	17	.99	20	
Aroclor-1260 Peak # 2	B	482.10	512.84	461.15	427.77	386.81	373.66	335.02	AVRG	R		0.00235		425.62	15	.99	20	
Aroclor-1260 Peak # 3	B	452.10	448.84	396.59	370.66	342.93	328.44	298.96	AVRG	R		0.00265		376.93	16	.99	20	
Aroclor-1260 Peak # 4	B	1098.3	1073.3	903.13	850.18	809.19	768.62	711.59	AVRG	R		0.00113		887.76	17	.99	20	
Aroclor-1260 Peak # 5	B	468.10	474.00	402.01	386.37	373.42	351.19	330.73	AVRG	R		0.00251		397.97	14	.99	20	
TCMX	B	7732.0	7094.6	6965.0	6979.1	6744.6	7130.1	6405.6	AVRG	R		1.43E-4		7007.3	6	.99	20	
Decachlorobiphenyl	B	11072	10605	8542.8	7613.2	7438.3			AVRG	R		1.10E-4		9054.2	19	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**-83**	25.000	-6	100.00	8	250.00	6	500.00	-4	750.00	1	1000.0	0
Aroclor-1260 Peak # 2	A	10.000	15	25.000	**28**	100.00	1	250.00	-2	500.00	-17	750.00	**-25**		
Aroclor-1260 Peak # 3	A	10.000	**-276**	25.000	**-76**	100.00	13	250.00	16	500.00	5	750.00	-4		
Aroclor-1260 Peak # 4	A	10.000	**-193**	25.000	**-33**	100.00	17	250.00	11	500.00	-3				
Aroclor-1260 Peak # 5	A	10.000	-2	25.000	**32**	100.00	1	250.00	-11	500.00	**-21**				
TCMX	A	2.0000	**-313**	5.0000	**-75**	20.000	18	50.000	17	100.00	3	150.00	-3		
Decachlorobiphenyl	A	2.0000	**-108**	5.0000	**-23**	20.000	14	50.000	6	100.00	0	150.00	-6	200.00	5
Aroclor-1260 Peak # 1	B	10.000	**26**	25.000	17	100.00	4	250.00	-3	500.00	-11	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 2	B	10.000	13	25.000	20	100.00	8	250.00	1	500.00	-9	750.00	-12	1000.0	**-21**
Aroclor-1260 Peak # 3	B	10.000	20	25.000	19	100.00	5	250.00	-2	500.00	-9	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 4	B	10.000	**24**	25.000	**21**	100.00	2	250.00	-4	500.00	-9	750.00	-13	1000.0	-20
Aroclor-1260 Peak # 5	B	10.000	18	25.000	19	100.00	1	250.00	-3	500.00	-6	750.00	-12	1000.0	-17
TCMX	B	2.0000	10	5.0000	1	20.000	-1	50.000	0	100.00	-4	150.00	2	200.00	-9
Decachlorobiphenyl	B	2.0000	**22**	5.0000	17	20.000	-6	50.000	-16	100.00	-18				

PML 09/06/12 : Corrected automatically drawn baseline in all levels.

PML 09/06/12 : changed fit types and dropped various points for better r^2 %RSD recovery

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PCBS Water
EPA 8082A

Inst : GC16 Name : AR1660_249A
Calnum : 232358946001 Cal Date : 05-SEP-2012

ICV 232358946019 (249_019 05-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	268.7	pg/ul	7	20	
Aroclor-1260	B	250.0	265.0	pg/ul	6	20	

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PCBS Water: EPA 8082A

Inst : GC22
Calnum : 252360400001
Units : pg/uL

Name : AR1660_250
Date : 06-SEP-2012 16:48
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	250_014	252360400014	PCB10_2	06-SEP-2012 16:48	S19975
L2	250_015	252360400015	PCB25_5	06-SEP-2012 17:53	S19976
L3	250_016	252360400016	PCB100_20	06-SEP-2012 18:20	S19977
L4	250_017	252360400017	PCB250_50	06-SEP-2012 18:46	S19978
L5	250_018	252360400018	PCB500_100	06-SEP-2012 19:12	S19979
L6	250_019	252360400019	PCB750_150	06-SEP-2012 19:38	S19980
L7	250_020	252360400020	PCB1000_200	06-SEP-2012 20:05	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	151.40	134.80	124.30	122.69	92.478	107.45	114.27	AVRG		0.00826		121.06	16	.99	20	
Aroclor-1260 Peak # 2	A	111.90	103.04	94.520	94.380	69.118	78.705	84.031	AVRG		0.01101		90.813	16	.99	20	
Aroclor-1260 Peak # 3	A	93.000	82.960	75.600	74.020	53.782	60.959	64.024	AVRG		0.01388		72.049	19	.99	20	
Aroclor-1260 Peak # 4	A	204.50	188.08	182.61	190.02	141.79	180.17	199.01	AVRG		0.00544		183.74	11	.99	20	
Aroclor-1260 Peak # 5	A	99.200	85.520	83.070	81.892	58.002	67.717	72.273	AVRG		0.01278		78.239	17	.99	20	
TCMX	A	1412.5	1470.4	1308.5	1350.6	1164.4	1291.3	1284.1	AVRG		7.54E-4		1326.0	7	.99	20	
Decachlorobiphenyl	A	1356.5	1230.6	1214.6	1260.7	936.36	1268.6	1408.8	AVRG		8.07E-4		1239.5	12	.99	20	
Aroclor-1260 Peak # 1	B	719.70	813.96	846.53	1168.3	1739.6	1236.6	1103.0	AVRG		9.18E-4		1089.7	**32**	.99	20	rsd ***
Aroclor-1260 Peak # 2	B	620.90	638.52	691.37	796.50	1697.3	1203.3	1192.2	AVRG		0.00102		977.16	**41**	.99	20	rsd ***
Aroclor-1260 Peak # 3	B	535.00	559.36	521.42	562.50	1281.3	904.19	934.48	AVRG		0.00132		756.89	**39**	.99	20	rsd ***
Aroclor-1260 Peak # 4	B	1156.4	1486.0	1580.9	2281.1	2764.7	1902.6	1503.0	AVRG		5.52E-4		1810.7	**30**	.99	20	rsd ***
Aroclor-1260 Peak # 5	B	494.30	536.00	484.59	467.08	1216.7	834.70	974.18	AVRG		0.00140		715.36	**41**	.99	20	rsd ***
TCMX	B	1311.5	6299.6	18129	21391	18864			LINR	1.25420	5.09E-5		13199	0.993	.99	20	
Decachlorobiphenyl	B	7605.5	9273.8	12559	16473	14363			LINR	0.77699	6.73E-5		12055	0.992	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**25**	25.000	11	100.00	3	250.00	1	500.00	**-24**	750.00	-11	1000.0	-6
Aroclor-1260 Peak # 2	A	10.000	**23**	25.000	13	100.00	4	250.00	4	500.00	**-24**	750.00	-13	1000.0	-7
Aroclor-1260 Peak # 3	A	10.000	**29**	25.000	15	100.00	5	250.00	3	500.00	**-25**	750.00	-15	1000.0	-11
Aroclor-1260 Peak # 4	A	10.000	11	25.000	2	100.00	-1	250.00	3	500.00	**-23**	750.00	-2	1000.0	8
Aroclor-1260 Peak # 5	A	10.000	**27**	25.000	9	100.00	6	250.00	5	500.00	**-26**	750.00	-13	1000.0	-8
TCMX	A	2.0000	7	5.0000	11	20.000	-1	50.000	2	100.00	-12	150.00	-3	200.00	-3
Decachlorobiphenyl	A	2.0000	9	5.0000	-1	20.000	-2	50.000	2	100.00	**-24**	150.00	2	200.00	14
Aroclor-1260 Peak # 1	B	10.000	**-34**	25.000	**-25**	100.00	**-22**	250.00	7	500.00	**60**	750.00	13	1000.0	1
Aroclor-1260 Peak # 2	B	10.000	**-36**	25.000	**-35**	100.00	**-29**	250.00	-18	500.00	**74**	750.00	**23**	1000.0	**22**
Aroclor-1260 Peak # 3	B	10.000	**-29**	25.000	**-26**	100.00	**-31**	250.00	**-26**	500.00	**69**	750.00	19	1000.0	**23**
Aroclor-1260 Peak # 4	B	10.000	**-36**	25.000	-18	100.00	-13	250.00	**26**	500.00	**53**	750.00	5	1000.0	-17
Aroclor-1260 Peak # 5	B	10.000	**-31**	25.000	**-25**	100.00	**-32**	250.00	**-35**	500.00	**70**	750.00	17	1000.0	**36**
TCMX	B	2.0000	**-31**	5.0000	**-43**	20.000	-1	50.000	11	100.00	-3				
Decachlorobiphenyl	B	2.0000	-10	5.0000	**-22**	20.000	-12	50.000	12	100.00	-3				

PML 09/07/12 : Corrected automatically drawn baseline in all levels.

PML 09/07/12 : ICAL fails for AR1016 and AR1260 on Ch. B; will only use said channel for confirm and report only from Ch. A

PML 09/07/12 : changed fit types and dropped various peaks for TCMX and DCB on Ch. B for better recovery

PML 09/07/12 : RTs updated in the integrated version of ICAL and integrated version of ICV

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression

252360400001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PCBS Water
EPA 8082A

Inst : GC22 Name : AR1660_250
Calnum : 252360400001 Cal Date : 06-SEP-2012

ICV 252360400023 (250_023 06-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	223.0	pg/uL	-11	20	
Aroclor-1260	B	250.0	246.6	pg/uL	-1	20	

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC06 Run Name : PCB100_20 IDF : 1.0
Seqnum : 202366165024.1 File : 254_024 Time : 10-SEP-2012 21:27
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	123.5	pg/uL	**23**	20	c+ ***
TCMX	A	6606.9	7827.3	20.00	23.69	pg/uL	18	20	
Decachlorobiphenyl	A	8554.0	8552.0	20.00	20.00	pg/uL	0	20	
Aroclor-1260	B			100.0	143.2	pg/uL	**43**	20	c+ ***
TCMX	B	17600	23007	20.00	26.14	pg/uL	**31**	20	c+
Decachlorobiphenyl	B	23197	28582	20.00	25.18	pg/uL	**26**	20	c+

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC06 Run Name : PCB250_50 IDF : 1.0
Seqnum : 202366165040.1 File : 254_040 Time : 11-SEP-2012 04:48
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	275.9	pg/uL	10	20	
TCMX	A	6606.9	6823.8	50.00	51.64	pg/uL	3	20	
Decachlorobiphenyl	A	8554.0	7425.1	50.00	43.40	pg/uL	-13	20	
Aroclor-1260	B			250.0	304.5	pg/uL	**22**	20	c+ ***
TCMX	B	17600	16760	50.00	47.61	pg/uL	-5	20	
Decachlorobiphenyl	B	23197	22226	50.00	55.70	pg/uL	11	20	

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC16 Run Name : PCB250_50 IDF : 1.0
Seqnum : 232366165009.2 File : 254_009 Time : 10-SEP-2012 16:22
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	355.1	pg/ul	**42**	20	c+ ***
TCMX	A	18411	31025	50.00	120.0	pg/ul	**140**	20	c+
Decachlorobiphenyl	A	12903	12067	50.00	51.36	pg/ul	3	20	
Aroclor-1260	B			250.0	231.7	pg/ul	-7	20	
TCMX	B	7007.3	7673.7	50.00	54.75	pg/ul	10	20	
Decachlorobiphenyl	B	9054.2	5534.6	50.00	30.56	pg/ul	**-39**	20	c-

WSR 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC16 Run Name : PCB100_20 IDF : 1.0
Seqnum : 232366165014.1 File : 254_014 Time : 10-SEP-2012 19:52
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	158.4	pg/ul	**58**	20	c+ ***
TCMX	A	18411	40195	20.00	58.10	pg/ul	**191**	20	c+
Decachlorobiphenyl	A	12903	12762	20.00	18.26	pg/ul	-9	20	
Aroclor-1260	B			100.0	90.33	pg/ul	-10	20	
TCMX	B	7007.3	7041.9	20.00	20.10	pg/ul	0	20	
Decachlorobiphenyl	B	9054.2	5009.2	20.00	11.06	pg/ul	**-45**	20	c-

WSR 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC22 Run Name : PCB100_20 IDF : 1.0
Seqnum : 252360400074.2 File : 250_074 Time : 08-SEP-2012 00:42
Cal : 252360400001 Caldate : 06-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	82.71	pg/uL	-17	20	
TCMX	A	1326.0	1171.4	20.00	17.67	pg/uL	-12	20	
Decachlorobiphenyl	A	1239.5	949.45	20.00	15.32	pg/uL	**-23**	20	c-
Aroclor-1260	B			100.0	63.84	pg/uL	**-36**	20	c- rsd ***
TCMX	B	13199	14393	20.00	15.91	pg/uL	-20	20	
Decachlorobiphenyl	B	12055	11471	20.00	16.21	pg/uL	-19	20	

TKB 09/09/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC22 Run Name : PCB250_50 IDF : 1.0
Seqnum : 252360400089.2 File : 250_089 Time : 08-SEP-2012 07:17
Cal : 252360400001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	222.4	pg/uL	-11	20	
TCMX	A	1326.0	1281.9	50.00	48.34	pg/uL	-3	20	
Decachlorobiphenyl	A	1239.5	1085.6	50.00	43.79	pg/uL	-12	20	
Aroclor-1260	B			250.0	278.1	pg/uL	11	20	rsd ***
TCMX	B	13199	23077	50.00	60.01	pg/uL	20	20	
Decachlorobiphenyl	B	12055	17829	50.00	60.76	pg/uL	**22**	20	c+

TKB 09/09/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202360551

Instrument : GC06
Method : EPA 8082A

Begun : 09/06/12 09:11
SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	250_001	X	PRIMER			09/06/12 09:11	1.0		
002	250_002	X	HEX			09/06/12 09:39	1.0		
003	250_003	CCV	TEST			09/06/12 10:06	1.0	1	
004	250_004	X	HEX			09/06/12 10:34	1.0		
005	250_005	X	PRIMER			09/06/12 14:04	1.0		
006	250_006	X	HEX			09/06/12 14:31	1.0		
007	250_007	IB	CAL			09/06/12 14:59	1.0		
008	250_008	ICAL	PCB10_2			09/06/12 16:49	1.0	2	
009	250_009	ICAL	PCB25_5			09/06/12 17:53	1.0	3	
010	250_010	ICAL	PCB100_20			09/06/12 18:21	1.0	1	
011	250_011	ICAL	PCB250_50			09/06/12 18:49	1.0	4	
012	250_012	ICAL	PCB500_100			09/06/12 19:16	1.0	5	
013	250_013	ICAL	PCB750_150			09/06/12 19:44	1.0	6	
014	250_014	ICAL	PCB1000_200			09/06/12 20:11	1.0	7	
015	250_015	X	HEX			09/06/12 20:39	1.0		
016	250_016	ICV	ULTRA_1660			09/06/12 21:06	1.0	8	
017	250_017	X	ICV			09/06/12 21:34	1.0	8	
018	250_018	IB	CAL			09/06/12 22:02	1.0		
019	250_019	ICAL	AR2154_10			09/06/12 22:29	1.0	9	
020	250_020	ICAL	AR2154_100			09/06/12 22:57	1.0	10	
021	250_021	ICAL	AR2154_250			09/06/12 23:24	1.0	11	
022	250_022	ICAL	AR2154_500			09/06/12 23:52	1.0	12	
023	250_023	ICAL	AR2154_1000			09/07/12 00:19	1.0	13	
024	250_024	X	HEX			09/07/12 00:47	1.0		
025	250_025	CCV	PCB250_50			09/07/12 01:14	1.0	4	
026	250_026	CCV	AR1254			09/07/12 01:42	1.0	11	
027	250_027	CCV	PCB250_50			09/07/12 02:09	1.0	4	
028	250_028	X	XCCV			09/07/12 02:37	1.0	11	
029	250_029	BLANK	QC654597	Water	190132	09/07/12 03:04	1.0		
030	250_030	BS	QC654598	Water	190132	09/07/12 03:32	1.0		
031	250_031	BSD	QC654599	Water	190132	09/07/12 03:59	1.0		
032	250_032	SAMPLE	239237-001	Water	190132	09/07/12 04:27	1.0		
033	250_033	SAMPLE	239333-001	Water	190132	09/07/12 04:54	1.0		
034	250_034	SAMPLE	239334-001	Water	190132	09/07/12 05:22	20.0		
035	250_035	SAMPLE	239335-001	Water	190132	09/07/12 05:50	1.0		
036	250_036	SAMPLE	239362-001	Water	190132	09/07/12 06:17	1.0		
037	250_037	MSS	239378-001	Soil	190194	09/07/12 06:45	1.0		
038	250_038	SAMPLE	239397-001	Soil	190194	09/07/12 07:12	1.0		
039	250_039	SAMPLE	239397-002	Soil	190194	09/07/12 07:40	1.0		
040	250_040	MS	QC654880	Soil	190194	09/07/12 08:07	1.0		
041	250_041	MSD	QC654881	Soil	190194	09/07/12 08:35	1.0		
042	250_042	X	PCB100_20			09/07/12 09:02	1.0	1	
043	250_043	CCV	AR1254			09/07/12 09:30	1.0	11	
044	250_044	CCV	PCB100_20			09/07/12 09:58	1.0	1	
045	250_045	CCV	AR1268			09/07/12 11:26	1.0	14	
046	250_046	SAMPLE	239265-013	Soil	190127	09/07/12 11:54	1.0		
047	250_047	SAMPLE	239265-014	Soil	190127	09/07/12 12:21	1.0		
048	250_048	CCV	PCB250_50			09/07/12 12:56	1.0	4	
049	250_049	CCV	AR1268			09/07/12 13:24	1.0	14	
050	250_050	SAMPLE	239260-021	Soil	190022	09/07/12 16:03	3.0		
051	250_051	SAMPLE	239260-022	Soil	190022	09/07/12 16:31	1.0		
052	250_052	SAMPLE	239260-023	Soil	190022	09/07/12 16:58	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202360551

Instrument : GC06 Begun : 09/06/12 09:11
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	250_053	CCV	PCB500_100			09/07/12 19:06	1.0	5	
054	250_054	CCV	AR1254			09/07/12 20:38	1.0	11	
055	250_055	CCV	AR1268			09/07/12 21:06	1.0	14	
056	250_056	IB	ICAL			09/07/12 21:33	1.0		
057	250_057	ICAL	AR1248_10			09/07/12 22:01	1.0	15	
058	250_058	ICAL	AR1248_100			09/07/12 22:28	1.0	16	
059	250_059	ICAL	AR1248_250			09/07/12 22:56	1.0	17	
060	250_060	ICAL	AR1248_500			09/07/12 23:23	1.0	18	
061	250_061	ICAL	AR1248_1000			09/07/12 23:51	1.0	19	
062	250_062	X	HEX			09/08/12 00:18	1.0		
063	250_063	CCV	PCB100_20			09/08/12 00:46	1.0	1	
064	250_064	CCV	AR1254			09/08/12 01:13	1.0	11	
065	250_065	CCV	AR1268			09/08/12 01:41	1.0	14	
066	250_066	CCV	AR1248_250			09/08/12 02:08	1.0	17	
067	250_067	SAMPLE	239260-015	Soil	190051	09/08/12 02:36	1.0		4:PCB1248#5=1400
068	250_068	SAMPLE	239260-016	Soil	190051	09/08/12 03:04	1.0		
069	250_069	SAMPLE	239260-017	Soil	190051	09/08/12 03:31	1.0		4:PCB1248#5=1300
070	250_070	SAMPLE	239211-003	Soil	189927	09/08/12 03:59	100.0		
071	250_071	SAMPLE	239211-004	Soil	189927	09/08/12 04:26	100.0		
072	250_072	SAMPLE	239211-005	Soil	189927	09/08/12 04:54	100.0		
073	250_073	SAMPLE	239211-006	Soil	189927	09/08/12 05:21	100.0		
074	250_074	SAMPLE	239211-007	Soil	189927	09/08/12 05:49	10.0		
075	250_075	SAMPLE	239211-008	Soil	189927	09/08/12 06:16	100.0		
076	250_076	SAMPLE	239211-009	Soil	189927	09/08/12 06:44	50.0		
077	250_077	CCV	PCB250_50			09/08/12 07:12	1.0	4	
078	250_078	CCV	AR1254			09/08/12 07:39	1.0	11	
079	250_079	CCV	AR1268			09/08/12 08:07	1.0	14	
080	250_080	CCV	AR1248_250			09/08/12 08:34	1.0	17	
081	250_081	BLANK	QC655166	Soil	190263	09/08/12 09:02	1.0		
082	250_082	LCS	QC655167	Soil	190263	09/08/12 09:30	1.0		
083	250_083	SAMPLE	239220-006	Soil	190263	09/08/12 09:57	1.0		
084	250_084	SAMPLE	239452-001	Soil	190263	09/08/12 10:25	1.0		
085	250_085	SAMPLE	239361-001	Soil	190186	09/08/12 10:52	5.0		
086	250_086	SAMPLE	239361-002	Soil	190186	09/08/12 11:20	2.0		
087	250_087	SAMPLE	239211-010	Soil	189927	09/08/12 11:47	50.0		
088	250_088	SAMPLE	239211-011	Soil	189927	09/08/12 12:15	100.0		
089	250_089	SAMPLE	239211-012	Soil	189927	09/08/12 12:43	100.0		
090	250_090	SAMPLE	239211-013	Soil	189927	09/08/12 13:10	100.0		
091	250_091	SAMPLE	239211-014	Soil	189927	09/08/12 13:38	100.0		
092	250_092	CCV	PCB500_100			09/08/12 14:05	1.0	5	
093	250_093	CCV	AR1254			09/08/12 14:33	1.0	11	
094	250_094	CCV	AR1268			09/08/12 15:00	1.0	14	

PML 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 044.

PML 09/07/12 : run_042 CCV processed and worked up; x'd out due to passes DOD/QSMV4 limits only

WSR 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 45 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202360551

Instrument : GC06 Begun : 09/06/12 09:11
Method : EPA 8082A SOP Version : pcb_rv.7

PML 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 050 through 094.

Standards used: 1=S19977 2=S19975 3=S19976 4=S19978 5=S19979 6=S19980 7=S19981 8=S20431 9=S20598 10=S20599 11=S20600 12=S20601 13=S20602 14=S19990 15=S20293 16=S20294 17=S20295 18=S20296 19=S20297

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 202366165

Instrument : GC06 Begun : 09/10/12 06:45
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	254_001	X	HEX			09/10/12 06:45	1.0		
002	254_002	X	PCB100_20			09/10/12 07:12	1.0	1	
003	254_003	CCV	PCB100_20			09/10/12 08:22	1.0	1	
004	254_004	CCV	AR1254			09/10/12 09:06	1.0	2	
005	254_005	CCV	AR1268			09/10/12 09:33	1.0	3	
008	254_008	X	HEX			09/10/12 11:00	1.0		
009	254_009	SAMPLE	239304-011	Soil	190127	09/10/12 11:28	100.0		6:PCB1260#1=3700
010	254_010	SAMPLE	239304-012	Soil	190127	09/10/12 11:55	100.0		5:PCB1260#1=1300
011	254_011	SAMPLE	239304-011	Soil	190127	09/10/12 12:30	500.0		
012	254_012	SAMPLE	239304-012	Soil	190127	09/10/12 12:57	200.0		6:PCB1260#1=2100
013	254_013	SAMPLE	239304-012	Soil	190127	09/10/12 13:50	500.0		
014	254_014	SAMPLE	239304-009	Soil	190127	09/10/12 14:17	1.0		8:PCB1260#5=42000
015	254_015	SAMPLE	239304-009	Soil	190127	09/10/12 14:47	100.0		1:PCB1260#1=1200
016	254_016	SAMPLE	239260-028	Soil	190065	09/10/12 15:14	100.0		
017	254_017	CCV	PCB250_50			09/10/12 15:42	1.0	4	
018	254_018	CCV	AR1268			09/10/12 16:22	1.0	3	
019	254_019	CCV	AR1254			09/10/12 17:04	1.0	2	
020	254_020	BLANK	QC655500	Oil	190337	09/10/12 18:27	1.0		
021	254_021	BS	QC655501	Oil	190337	09/10/12 18:54	1.0		
022	254_022	BSD	QC655502	Oil	190337	09/10/12 19:22	1.0		
023	254_023	SAMPLE	239483-001	Oil	190337	09/10/12 19:50	1.0		
024	254_024	CCV	PCB100_20			09/10/12 21:27	1.0	1	
025	254_025	CCV	AR1254			09/10/12 21:55	1.0	2	
026	254_026	BS	QC655036	Water	190234	09/10/12 22:22	1.0		
027	254_027	BSD	QC655037	Water	190234	09/10/12 22:50	1.0		
028	254_028	BLANK	QC655478	Soil	190332	09/10/12 23:17	1.0		
029	254_029	LCS	QC655479	Soil	190332	09/10/12 23:45	1.0		
030	254_030	SAMPLE	239404-010	Soil	190332	09/11/12 00:13	10.0		
031	254_031	SAMPLE	239404-012	Soil	190332	09/11/12 00:40	1.0		
032	254_032	SAMPLE	239404-013	Soil	190332	09/11/12 01:08	1.0		
033	254_033	SAMPLE	239404-014	Soil	190332	09/11/12 01:35	5.0		
034	254_034	SAMPLE	239410-001	Soil	190332	09/11/12 02:03	5.0		
035	254_035	SAMPLE	239410-003	Soil	190332	09/11/12 02:30	5.0		
036	254_036	SAMPLE	239455-001	Soil	190332	09/11/12 02:58	1.0		11:PCB1260#1=2300
037	254_037	SAMPLE	239455-002	Soil	190332	09/11/12 03:25	1.0		11:PCB1260#1=2300
038	254_038	SAMPLE	239455-003	Soil	190332	09/11/12 03:53	1.0		11:PCB1260#1=2000
039	254_039	SAMPLE	239455-004	Soil	190332	09/11/12 04:20	1.0		
040	254_040	CCV	PCB250_50			09/11/12 04:48	1.0	4	
041	254_041	CCV	AR1254			09/11/12 05:16	1.0	2	

PML 09/10/12 : run_006 and run_007 did not/cannot send to LIMS due to range

WSR 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 18.

KMH 09/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 19 through 41.

Standards used: 1=S19977 2=S20600 3=S19990 4=S19978

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232358946

Instrument : GC16
Method : EPA 8082A
Begun : 09/05/12 06:26
SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	249_001	X	HEX			09/05/12 06:26	1.0		
002	249_002	CCV	PCB250_50			09/05/12 06:54	1.0	1	
003	249_003	CCV	PCB100_20			09/05/12 12:45	1.0	2	
005	249_005	CCV	PCB250_50			09/05/12 14:32	1.0	1	
006	249_006	CCV	PCB250_50			09/05/12 15:19	1.0	1	
007	249_007	IB	CAL			09/05/12 16:49	1.0		
008	249_008	X	PRIME			09/05/12 17:17	1.0		
009	249_009	X	HEX			09/05/12 17:45	1.0		
010	249_010	IB	CAL			09/05/12 18:13	1.0		
011	249_011	ICAL	PCB10_2			09/05/12 18:41	1.0	3	
012	249_012	ICAL	PCB25_5			09/05/12 19:09	1.0	4	
013	249_013	ICAL	PCB100_20			09/05/12 19:37	1.0	2	
014	249_014	ICAL	PCB250_50			09/05/12 20:05	1.0	1	
015	249_015	ICAL	PCB500_100			09/05/12 20:33	1.0	5	
016	249_016	ICAL	PCB750_150			09/05/12 21:00	1.0	6	
017	249_017	ICAL	PCB1000_200			09/05/12 21:28	1.0	7	
018	249_018	X	HEX			09/05/12 21:56	1.0		
019	249_019	ICV	ULTRA_1660			09/05/12 22:24	1.0	8	
020	249_020	X	ICV			09/05/12 22:52	1.0	8	
021	249_021	X	HEX			09/05/12 23:20	1.0		
022	249_022	CCV	PCB250_50			09/05/12 23:47	1.0	1	
023	249_023	CCV	AR1268			09/06/12 00:15	1.0	9	
024	249_024	BLANK	QC654831	Soil	190186	09/06/12 00:43	1.0		
025	249_025	LCS	QC654832	Soil	190186	09/06/12 01:11	1.0		
026	249_026	SAMPLE	239361-001	Soil	190186	09/06/12 01:39	1.0		6:PCB1260#1=3400
027	249_027	LCS	QC654358	Soil	190065	09/06/12 02:07	1.0		
028	249_028	SAMPLE	239261-012	Soil	189968	09/06/12 02:35	1.0		
029	249_029	SAMPLE	239261-019	Soil	190061	09/06/12 03:03	1.0		
030	249_030	SAMPLE	239261-029	Soil	190061	09/06/12 03:31	1.0		
031	249_031	SAMPLE	239263-002	Soil	190061	09/06/12 03:59	1.0		
032	249_032	CCV	PCB100_20			09/06/12 04:27	1.0	2	
033	249_033	CCV	AR1268			09/06/12 04:55	1.0	9	
034	249_034	SAMPLE	239361-002	Soil	190186	09/06/12 05:23	1.0		
035	249_035	SAMPLE	239364-001	Soil	190186	09/06/12 05:51	1.0		2:PCB1016#4=17000
036	249_036	SAMPLE	239364-002	Soil	190186	09/06/12 06:19	1.0		
037	249_037	SAMPLE	239364-003	Soil	190186	09/06/12 06:47	1.0		2:PCB1016#4=1400
038	249_038	SAMPLE	239364-004	Soil	190186	09/06/12 07:15	1.0		6:PCB1260#1=7900
039	249_039	SAMPLE	239364-005	Soil	190186	09/06/12 07:43	1.0		7:PCB1260#1=15000
040	249_040	SAMPLE	239364-006	Soil	190186	09/06/12 08:11	1.0		
041	249_041	MSS	239364-007	Soil	190186	09/06/12 08:39	1.0		6:PCB1260#1=5500
042	249_042	MS	QC654833	Soil	190186	09/06/12 09:07	1.0		2:PCB1260#1=1400
043	249_043	MSD	QC654834	Soil	190186	09/06/12 09:35	1.0		2:PCB1260#1=1900
044	249_044	CCV	PCB250_50			09/06/12 10:03	1.0	1	
045	249_045	CCV	AR1268			09/06/12 10:31	1.0	9	
046	249_046	CCV	AR1254			09/06/12 10:59	1.0	10	
047	249_047	SAMPLE	239364-002	Soil	190186	09/06/12 11:27	1.0		
048	249_048	SAMPLE	239364-006	Soil	190186	09/06/12 11:55	1.0		
049	249_049	SAMPLE	239364-001	Soil	190186	09/06/12 12:23	50.0		10:PCB1016#4=3300
050	249_050	SAMPLE	239364-003	Soil	190186	09/06/12 12:51	5.0		
051	249_051	SAMPLE	239364-004	Soil	190186	09/06/12 13:19	25.0		
052	249_052	SAMPLE	239364-005	Soil	190186	09/06/12 13:47	50.0		
053	249_053	MSS	239364-007	Soil	190186	09/06/12 14:15	5.0		9:PCB1254#5=1600

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232358946

Instrument : GC16 Begun : 09/05/12 06:26
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
054	249_054	SAMPLE	239364-001	Soil	190186	09/06/12 14:56	500.0		
055	249_055	MSS	239364-007	Soil	190186	09/06/12 15:28	50.0		
056	249_056	CCV	PCB100_20			09/06/12 16:07	1.0	2	
057	249_057	CCV	AR1254			09/06/12 16:35	1.0	10	
058	249_058	BLANK	QC654875	Soil	190194	09/06/12 18:07	1.0		
059	249_059	LCS	QC654879	Soil	190194	09/06/12 18:35	1.0		
060	249_060	MSS	239378-001	Soil	190194	09/06/12 19:03	1.0		
061	249_061	BLANK	QC654284	Soil	190051	09/06/12 20:04	1.0		
062	249_062	LCS	QC654285	Soil	190051	09/06/12 20:32	1.0		
063	249_063	MSS	239260-001	Soil	190051	09/06/12 21:00	50.0		
064	249_064	SAMPLE	239260-002	Soil	190051	09/06/12 21:28	50.0		
065	249_065	SAMPLE	239260-003	Soil	190051	09/06/12 21:56	50.0		
066	249_066	SAMPLE	239260-004	Soil	190051	09/06/12 22:24	50.0		
067	249_067	SAMPLE	239260-005	Soil	190051	09/06/12 22:52	50.0		
068	249_068	SAMPLE	239260-006	Soil	190051	09/06/12 23:20	100.0		
069	249_069	SAMPLE	239260-007	Soil	190051	09/06/12 23:48	50.0		
070	249_070	SAMPLE	239260-008	Soil	190051	09/07/12 00:16	50.0		
071	249_071	SAMPLE	239260-009	Soil	190051	09/07/12 00:44	50.0		
072	249_072	CCV	PCB250_50			09/07/12 01:12	1.0	1	
073	249_073	CCV	AR1268			09/07/12 01:40	1.0	9	
074	249_074	SAMPLE	239260-010	Soil	190051	09/07/12 02:08	50.0		
075	249_075	SAMPLE	239260-011	Soil	190051	09/07/12 02:36	50.0		
076	249_076	SAMPLE	239260-012	Soil	190051	09/07/12 03:05	50.0		
077	249_077	SAMPLE	239260-013	Soil	190051	09/07/12 03:33	50.0		
078	249_078	SAMPLE	239260-014	Soil	190051	09/07/12 04:01	50.0		
079	249_079	SAMPLE	239260-015	Soil	190051	09/07/12 04:29	50.0		
080	249_080	SAMPLE	239260-016	Soil	190051	09/07/12 04:57	50.0		
081	249_081	SAMPLE	239260-017	Soil	190051	09/07/12 05:25	50.0		
082	249_082	SAMPLE	239260-018	Soil	190051	09/07/12 05:53	50.0		
083	249_083	SAMPLE	239260-019	Soil	190051	09/07/12 06:21	50.0		
084	249_084	CCV	PCB100_20			09/07/12 06:49	1.0	2	
085	249_085	CCV	AR1268			09/07/12 07:18	1.0	9	
086	249_086	CCV	AR1254			09/07/12 07:59	1.0	10	
087	249_087	BLANK	QC654578	Soil	190127	09/07/12 11:26	1.0		
088	249_088	LCS	QC654579	Soil	190127	09/07/12 11:54	1.0		
089	249_089	MSS	239265-004	Soil	190065	09/07/12 12:26	1.0		
090	249_090	SAMPLE	239265-011	Soil	190127	09/07/12 12:58	200.0		
091	249_091	CCV	PCB250_50			09/07/12 13:51	1.0	1	
092	249_092	CCV	AR1268			09/07/12 14:18	1.0	9	
093	249_093	SAMPLE	239260-024	Soil	190022	09/07/12 15:59	1.0		
094	249_094	SAMPLE	239260-025	Soil	190022	09/07/12 16:27	1.0		
095	249_095	SAMPLE	239260-026	Soil	190022	09/07/12 16:55	1.0		
096	249_096	SAMPLE	239304-013	Soil	190127	09/07/12 17:29	3.0		4:PCB1260#1=1500
097	249_097	SAMPLE	239304-014	Soil	190127	09/07/12 17:56	3.0		4:PCB1260#5=2300
098	249_098	SAMPLE	239304-015	Soil	190127	09/07/12 18:24	3.0		4:PCB1260#1=2800
099	249_099	SAMPLE	239304-004	Soil	190127	09/07/12 19:58	1.0		
100	249_100	SAMPLE	239304-005	Soil	190127	09/07/12 20:26	50.0		
101	249_101	SAMPLE	239304-007	Soil	190127	09/07/12 20:54	1.0		
102	249_102	SAMPLE	239304-008	Soil	190127	09/07/12 21:22	1.0		
103	249_103	CCV	PCB100_20			09/07/12 21:50	1.0	2	
104	249_104	CCV	AR1268			09/07/12 22:18	1.0	9	
105	249_105	SAMPLE	239304-009	Soil	190127	09/07/12 22:46	50.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232358946

Instrument : GC16 Begun : 09/05/12 06:26
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
106	249_106	SAMPLE	239304-010	Soil	190127	09/07/12 23:14	1.0		4:PCB1260#5=50000
109	249_109	SAMPLE	239304-013	Soil	190127	09/08/12 00:38	50.0		
110	249_110	SAMPLE	239304-014	Soil	190127	09/08/12 01:07	50.0		
111	249_111	SAMPLE	239304-015	Soil	190127	09/08/12 01:35	100.0		
112	249_112	SAMPLE	239304-016	Soil	190127	09/08/12 02:03	1.0		4:PCB1260#5=26000
113	249_113	SAMPLE	239304-017	Soil	190096	09/08/12 02:31	1.0		4:PCB1260#5=22000
114	249_114	SAMPLE	239304-018	Soil	190096	09/08/12 02:59	1.0		
115	249_115	CCV	PCB250_50			09/08/12 03:27	1.0	1	
116	249_116	CCV	AR1268			09/08/12 03:55	1.0	9	
117	249_117	SAMPLE	239304-019	Soil	190096	09/08/12 04:23	1.0		
118	249_118	SAMPLE	239304-020	Soil	190096	09/08/12 04:52	1.0		
119	249_119	SAMPLE	239304-021	Soil	190096	09/08/12 05:20	1.0		4:PCB1260#5=1700
120	249_120	SAMPLE	239304-022	Soil	190096	09/08/12 05:48	1.0		4:PCB1260#5=1500
121	249_121	MS	QC654359	Soil	190065	09/08/12 06:16	1.0		
122	249_122	MSD	QC654360	Soil	190065	09/08/12 06:44	1.0		
123	249_123	MS	QC653943	Soil	189968	09/08/12 07:12	1.0		
124	249_124	MSD	QC653944	Soil	189968	09/08/12 07:40	1.0		
125	249_125	MS	QC654334	Soil	190061	09/08/12 08:08	1.0		
126	249_126	MSD	QC654335	Soil	190061	09/08/12 08:36	1.0		
127	249_127	CCV	PCB100_20			09/08/12 09:04	1.0	2	
128	249_128	CCV	AR1268			09/08/12 09:32	1.0	9	

PML 09/06/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 046.

WSR 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 47 through 92.

WSR 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 93 through 128.

Standards used: 1=S19978 2=S19977 3=S19975 4=S19976 5=S19979 6=S19980 7=S19981 8=S20431 9=S19990 10=S20600

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 232366165

Instrument : GC16 Begun : 09/10/12 06:45
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	254_001	X	HEX			09/10/12 06:45	1.0		
002	254_002	X	PCB100_20			09/10/12 07:13	1.0	1	
003	254_003	CCV	PCB100_20			09/10/12 08:22	1.0	1	
004	254_004	CCV	AR1254			09/10/12 09:07	1.0	2	
005	254_005	CCV	AR1268			09/10/12 09:35	1.0	3	
006	254_006	SAMPLE	239304-011	Soil	190127	09/10/12 12:39	1000		
007	254_007	SAMPLE	239260-027	Soil	190065	09/10/12 15:03	100.0		
008	254_008	SAMPLE	239260-024	Soil	190022	09/10/12 15:36	1.0		
009	254_009	CCV	PCB250_50			09/10/12 16:22	1.0	4	
010	254_010	CCV	AR1268			09/10/12 16:50	1.0	3	
011	254_011	CCV	AR1254			09/10/12 17:25	1.0	2	
012	254_012	BS	QC655036	Water	190234	09/10/12 18:25	1.0		
013	254_013	BSD	QC655037	Water	190234	09/10/12 18:53	1.0		
014	254_014	CCV	PCB100_20			09/10/12 19:52	1.0	1	
015	254_015	CCV	AR1254			09/10/12 21:22	1.0	2	1:PCB1016#4=900
016	254_016	BLANK	QC655349	Miscell.	190303	09/10/12 21:50	1.0		
017	254_017	BS	QC655350	Miscell.	190303	09/10/12 22:18	1.0		
018	254_018	BSD	QC655351	Miscell.	190303	09/10/12 22:46	1.0		
019	254_019	SAMPLE	239441-001	Miscell.	190303	09/10/12 23:14	20.0		
020	254_020	SAMPLE	239441-002	Miscell.	190303	09/10/12 23:42	20.0		
021	254_021	CCV	PCB250_50			09/11/12 00:11	1.0	4	
022	254_022	CCV	AR1254			09/11/12 00:39	1.0	2	

WSR 09/10/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 10.

WSR 09/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 11 through 22.

Standards used: 1=S19977 2=S20600 3=S19990 4=S19978

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 252360400

Instrument : GC22
Method : EPA 8082A
Begun : 09/06/12 06:40
SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	250_001	X	HEX			09/06/12 06:40	1.0		
002	250_002	CCV	PCB250_50			09/06/12 07:06	1.0	1	No Quant
004	250_004	CCV	TEST			09/06/12 10:06	1.0	2	
005	250_005	CCV	TEST			09/06/12 10:56	1.0	2	
006	250_006	CCV	TEST			09/06/12 11:23	1.0	2	
007	250_007	X	HEX			09/06/12 11:49	1.0		
008	250_008	X	HEX			09/06/12 12:15	1.0		
009	250_009	CCV	PCB250_50			09/06/12 12:41	1.0	1	
010	250_010	CCV	PCB250_50			09/06/12 13:32	1.0	1	
011	250_011	X	PRIMER			09/06/12 14:13	1.0		
012	250_012	X	HEX			09/06/12 14:56	1.0		
013	250_013	IB	CAL			09/06/12 15:22	1.0		No Quant
014	250_014	ICAL	PCB10_2			09/06/12 16:48	1.0	3	
015	250_015	ICAL	PCB25_5			09/06/12 17:53	1.0	4	
016	250_016	ICAL	PCB100_20			09/06/12 18:20	1.0	2	
017	250_017	ICAL	PCB250_50			09/06/12 18:46	1.0	1	
018	250_018	ICAL	PCB500_100			09/06/12 19:12	1.0	5	
019	250_019	ICAL	PCB750_150			09/06/12 19:38	1.0	6	
020	250_020	ICAL	PCB1000_200			09/06/12 20:05	1.0	7	
021	250_021	X	HEX			09/06/12 20:31	1.0		
022	250_022	X	ULTRA_1660			09/06/12 20:57	1.0	8	
023	250_023	ICV	ICV			09/06/12 21:24	1.0	8	
024	250_024	X	HEX			09/06/12 21:50	1.0		
025	250_025	ICAL	AR2154_10			09/06/12 22:16	1.0	9	
026	250_026	ICAL	AR2154_100			09/06/12 22:42	1.0	10	
027	250_027	ICAL	AR2154_250			09/06/12 23:09	1.0	11	
028	250_028	ICAL	AR2154_500			09/06/12 23:35	1.0	12	
029	250_029	ICAL	AR2154_1000			09/07/12 00:01	1.0	13	
030	250_030	X	HEX			09/07/12 00:28	1.0		
031	250_031	CCV	PCB250_50			09/07/12 00:54	1.0	1	
032	250_032	CCV	AR1254			09/07/12 01:21	1.0	11	
033	250_033	ICAL	AR1268			09/07/12 01:47	1.0	14	
034	250_034	BLANK	QC654578	Soil	190127	09/07/12 02:13	1.0		
035	250_035	LCS	QC654579	Soil	190127	09/07/12 02:40	1.0		
036	250_036	SAMPLE	239265-011	Soil	190127	09/07/12 03:06	50.0		4:PCB1260#4=2100
037	250_037	SAMPLE	239265-012	Soil	190127	09/07/12 03:32	50.0		
038	250_038	SAMPLE	239265-013	Soil	190127	09/07/12 03:59	50.0		
039	250_039	SAMPLE	239265-014	Soil	190127	09/07/12 04:25	50.0		
040	250_040	SAMPLE	239260-020	Soil	190051	09/07/12 04:51	50.0		
041	250_041	MSS	239265-004	Soil	190065	09/07/12 05:17	1.0		
042	250_042	MS	QC654359	Soil	190065	09/07/12 05:44	1.0		
043	250_043	MSD	QC654360	Soil	190065	09/07/12 06:10	1.0		
044	250_044	MS	QC653943	Soil	189968	09/07/12 06:36	1.0		
045	250_045	MSD	QC653944	Soil	189968	09/07/12 07:03	1.0		
046	250_046	CCV	PCB100_20			09/07/12 07:29	1.0	2	
047	250_047	CCV	AR1254			09/07/12 07:55	1.0	11	
048	250_048	CCV	AR1268			09/07/12 08:22	1.0	14	
049	250_049	X	HEX			09/07/12 11:35	1.0		
051	250_051	X	MISINJECT	Soil	190051	09/07/12 12:41	1.0		
052	250_052	X	HEX			09/07/12 12:59	1.0		
053	250_053	MSS	239260-001	Soil	190051	09/07/12 13:25	1.0		
054	250_054	SAMPLE	239260-002	Soil	190051	09/07/12 13:54	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 252360400

Instrument : GC22 Begun : 09/06/12 06:40
Method : EPA 8082A SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
055	250_055	SAMPLE	239260-003	Soil	190051	09/07/12 14:20	1.0		
056	250_056	MSS	239304-001	Soil	190127	09/07/12 16:23	1.0		
057	250_057	SAMPLE	239304-002	Soil	190127	09/07/12 16:49	1.0		
058	250_058	SAMPLE	239304-003	Soil	190127	09/07/12 17:16	1.0		
059	250_059	SAMPLE	239304-005	Soil	190127	09/07/12 17:42	5.0		6:PCB1260#5=3100
060	250_060	SAMPLE	239304-006	Soil	190127	09/07/12 18:08	5.0		
061	250_061	CCV	PCB250_50			09/07/12 18:34	1.0	1	
062	250_062	CCV	AR1254			09/07/12 19:17	1.0	11	
063	250_063	CCV	AR1268			09/07/12 19:43	1.0	14	
064	250_064	SAMPLE	239260-004	Soil	190051	09/07/12 20:19	1.0		
065	250_065	SAMPLE	239260-005	Soil	190051	09/07/12 20:45	1.0		
066	250_066	SAMPLE	239260-006	Soil	190051	09/07/12 21:11	1.0		
067	250_067	SAMPLE	239260-007	Soil	190051	09/07/12 21:38	1.0		
068	250_068	SAMPLE	239260-008	Soil	190051	09/07/12 22:04	1.0		
069	250_069	SAMPLE	239260-009	Soil	190051	09/07/12 22:30	1.0		
070	250_070	SAMPLE	239260-010	Soil	190051	09/07/12 22:56	1.0		
071	250_071	SAMPLE	239260-011	Soil	190051	09/07/12 23:23	1.0		
072	250_072	SAMPLE	239260-012	Soil	190051	09/07/12 23:49	1.0		
073	250_073	SAMPLE	239260-013	Soil	190051	09/08/12 00:15	1.0		
074	250_074	CCV	PCB100_20			09/08/12 00:42	1.0	2	
075	250_075	CCV	AR1254			09/08/12 01:08	1.0	11	
076	250_076	CCV	AR1268			09/08/12 01:34	1.0	14	
077	250_077	BLANK	QC655035	Water	190234	09/08/12 02:01	1.0		
078	250_078	BS	QC655036	Water	190234	09/08/12 02:27	1.0		
079	250_079	BSD	QC655037	Water	190234	09/08/12 02:53	1.0		
080	250_080	SAMPLE	239260-014	Soil	190051	09/08/12 03:20	1.0		
081	250_081	SAMPLE	239260-018	Soil	190051	09/08/12 03:46	1.0		
082	250_082	SAMPLE	239260-019	Soil	190051	09/08/12 04:12	1.0		
083	250_083	SAMPLE	239260-020	Soil	190051	09/08/12 04:39	1.0		
084	250_084	SAMPLE	239375-001	Water	190234	09/08/12 05:05	1.0		
085	250_085	SAMPLE	239376-001	Water	190234	09/08/12 05:31	1.0		
086	250_086	SAMPLE	239377-001	Water	190234	09/08/12 05:58	1.0		
087	250_087	SAMPLE	239403-007	Water	190234	09/08/12 06:24	1.0		
088	250_088	SAMPLE	239404-015	Water	190234	09/08/12 06:50	1.0		
089	250_089	CCV	PCB250_50			09/08/12 07:17	1.0	1	
090	250_090	CCV	AR1254			09/08/12 07:43	1.0	11	
091	250_091	CCV	AR1268			09/08/12 08:10	1.0	14	

PML 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 048.

WSR 09/11/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 49 through 91.

Standards used: 1=S19978 2=S19977 3=S19975 4=S19976 5=S19979 6=S19980 7=S19981 8=S20431 9=S20598 10=S20599 11=S20600 12=S20601 13=S20602 14=S19990

Flags used: No Quant=Aroclor-1016 Peak # 3 not quantifiable

SAMPLE PREPARATION SUMMARY

Batch # : 190234
Started By : RDG
Method : 3520C
Spike #1 ID : S20518
Prep Date : 06-SEP-2012 16:50
SOP Version : PCB_3520_rv9
Spike #2 ID : S20514
Analysis : PCB
Finished By : ICK
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239375-001		Water	1060	25	1	0.02358	7	1				PCB	
239376-001		Water	1060	25	1	0.02358	7	1				PCB	
239377-001		Water	1060	25	1	0.02358	7	1				PCB	
239403-007		Water	1070	25	1	0.02336	7	1				PCB	Prepped 06-SEP-2012 18:15
239404-015		Water	1070	25	1	0.02336	7	1				PCB	Prepped 06-SEP-2012 18:15
QC655035	BLANK	Water	1000	25	1	0.025		1				PCB	
QC655036	BS	Water	1000	25	1	0.025		1	1			PCB	
QC655037	BSD	Water	1000	25	1	0.025		1	1			PCB	

WSR 09/11/12 : Matrix spikes were not performed for this analysis in batch 190234 because they are not required by the method.

EAH 09/11/12 : Needs to complete the verification of GC22 250.

WSR 09/11/12 : SEQUENCE VERIFIED

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

PCB Water Prep Log

Curtis & Tompkins, Ltd.

LIMS Batch No: 190234
LIMS Analysis: PCB
Date Extracted: 9-6-12

Extraction Method:
☒ EPA 3520c cont. L/L
☐ _____

BK3282
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Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
239375-001	C	1060	☒7 ☐	☒ 25.0 ☐	
239376-001	B	1060	☒7 ☐	☒ 25.0 ☐	
239377-001	B	1060	☒7 ☐	☒ 25.0 ☐	
MB QC655035		1000	☐7 ☐	☒ 25.0 ☐	
BS ↓ 36		1000	☐7 ☐	☒ 25.0 ☐	
BSD ↓ 37		1000	☐7 ☐	☒ 25.0 ☐	
239403-007	H	1070	☒7 ☐	☒ 25.0 ☐	added @ 18:15
239404-015	G	1070	☒7 ☐	☒ 25.0 ☐	↓
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	
			☐7 ☐	☐ 25.0 ☐	

WSR 9/11/12

	Lot# / LIMS # / Time	Date/ Initials
1.0 mL of surrogate solution was added to all samples	S20518B	09/06/12 PDH
1.0 mL of matrix spiking solution was added to all spikes	S20514B	
☒ 3520c: Samples were continuously extracted with about 450 mL CH_2Cl_2	EM52460	
Extraction Start Time:	16:50/18:15	↓
Extraction End Time:	1220	DDC 9/7/12
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	ICF 9/7/12
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EMVB15H	
Solvent exchanged 2x w/ Hexane lot#	JTBL08E17	
Concentrated to final volume at temperature (degrees C)	100	
EPA 3665A Clean-up: Vortexed w/ H_2SO_4 lot #	FS120450	
Centrifuged for 1min; 5mL transferred to labelled vial	✓	
Relinquished to PCB group	✓	↓

Raquel de Cruz 09/06/12
Extraction Chemist **Date**

Contined from Page 1
Continued on Page _____

WSR 9/11/12
Reviewed by **Date**

REPORTING SUMMARY FOR 239403 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
239403-007	Aroclor-1254	GC22	A	09/08/12 06:24
239403-007	Aroclor-1260	GC22	A	09/08/12 06:24
239403-007	TCMX	GC22	A	09/08/12 06:24
239403-007	Decachlorobiphenyl	GC22	A	09/08/12 06:24
QC655035	Aroclor-1254	GC22	A	09/08/12 02:01
QC655035	Aroclor-1260	GC22	A	09/08/12 02:01
QC655035	TCMX	GC22	A	09/08/12 02:01
QC655035	Decachlorobiphenyl	GC22	A	09/08/12 02:01
QC655036	Aroclor-1260	GC16	B	09/10/12 18:25
QC655036	TCMX	GC16	B	09/10/12 18:25
QC655036	Decachlorobiphenyl	GC06	A	09/10/12 22:22
QC655037	Aroclor-1260	GC16	B	09/10/12 18:53
QC655037	TCMX	GC16	B	09/10/12 18:53
QC655037	Decachlorobiphenyl	GC06	A	09/10/12 22:50

Case Narrative Addendum: Manual Integrations for 239403 PCBS (Water)

For CCV PCB100_20 (GC06 254_024):
Corrected automatically drawn baseline.

For CCV PCB100_20 (GC16 254_014):
Corrected automatically drawn baseline.

For CCV PCB100_20 (GC22 250_074):
Corrected automatically drawn baseline.

For CCV PCB250_50 (GC16 254_009):
Corrected automatically drawn baseline.

For CCV PCB250_50 (GC22 250_089):
Corrected automatically drawn baseline.

For CCV PCB250_50 (GC06 254_040):
Corrected automatically drawn baseline.

For BSD QC655037 (GC06 254_027):
Corrected automatically drawn baseline.

For BSD QC655037 (GC16 254_013):
Corrected automatically drawn baseline.

For Calibration GC16 (232358946001):
Corrected automatically drawn baseline in all levels.

For Calibration GC22 (252360400001):
Corrected automatically drawn baseline in all levels.

For ICV (GC22 250_023):
Corrected automatically drawn baseline.

For Calibration GC06 (202360551001):
Corrected automatically drawn baseline in all levels.

For ICV ULTRA_1660 (GC06 250_016):
Corrected automatically drawn baseline.

Sample Raw Data

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 8082A

Inst	: GC22	Lab ID	: 239403-007	Client ID	: FB.09042012
Seqnum	: 252360400087	Matrix	: Water	Acct	: ARCSF (JG)
File	: 250_087	Batch	: 190234	Time	: 08-SEP-2012 06:24
Cal	: 252360400001	Caldate	: 06-SEP-2012		
IDF	: 1.0	Raw Units	: pg/uL	Units	: ug/L

1070.00 mL --> 25.0 ml = 0.02336 ml/ml PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Blank	Flags
Aroclor-1254	A		ND			0.47		u
Aroclor-1260	A	0.7247	ND	0.15 J	160%	0.47		u
Aroclor-1260 Peak # 1	A	0.3056	0.01	0.05	148%			
Aroclor-1260 Peak # 2	A	0.6937	0.02	0.00	198%			
Aroclor-1260 Peak # 3	A	2.401	0.06	0.06	13%			
Aroclor-1260 Peak # 4	A	0.2231	0.01	0.04	151%			
Aroclor-1260 Peak # 5	A	0	ND	0.62				

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	33.92	0.9346	0.7925	85	39-120	u
Decachlorobiphenyl	A	32.69	0.9346	0.7638	82	24-120	<c- u

WSR 09/11/12 [Decachlorobiphenyl A]: Recovery well within limits despite instrument bias

Analyst: PML Date: 09/10/12 Reviewer: EAH Date: 09/11/12

-=low bias <=opening c=CCV u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-087**
Sample Name: **239403-007,190234**
Instrument: GC22 (Offline) Vial: 87 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 6:24:36 AM
Analysis Date: 9/10/2012 1:38:18 PM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.457	4.463	44973	33.917
PCB1016#1		6.613		0.000 BDL
PCB1016#2	7.210	7.227	316	5.365
PCB1016#3		7.523		0.000 BDL
PCB1016#4		7.970		0.000 BDL
PCB1016#5	8.457	8.473	65	2.470
PCB1260#1	11.903	11.907	37	0.306
PCB1260#2	12.527	12.527	63	0.694
PCB1260#3	13.320	13.347	173	2.401
PCB1260#4	14.040	14.053	41	0.223
PCB1260#5		14.680		0.000 BDL
Decachlorobiphenyl	17.147	17.163	40517	32.689

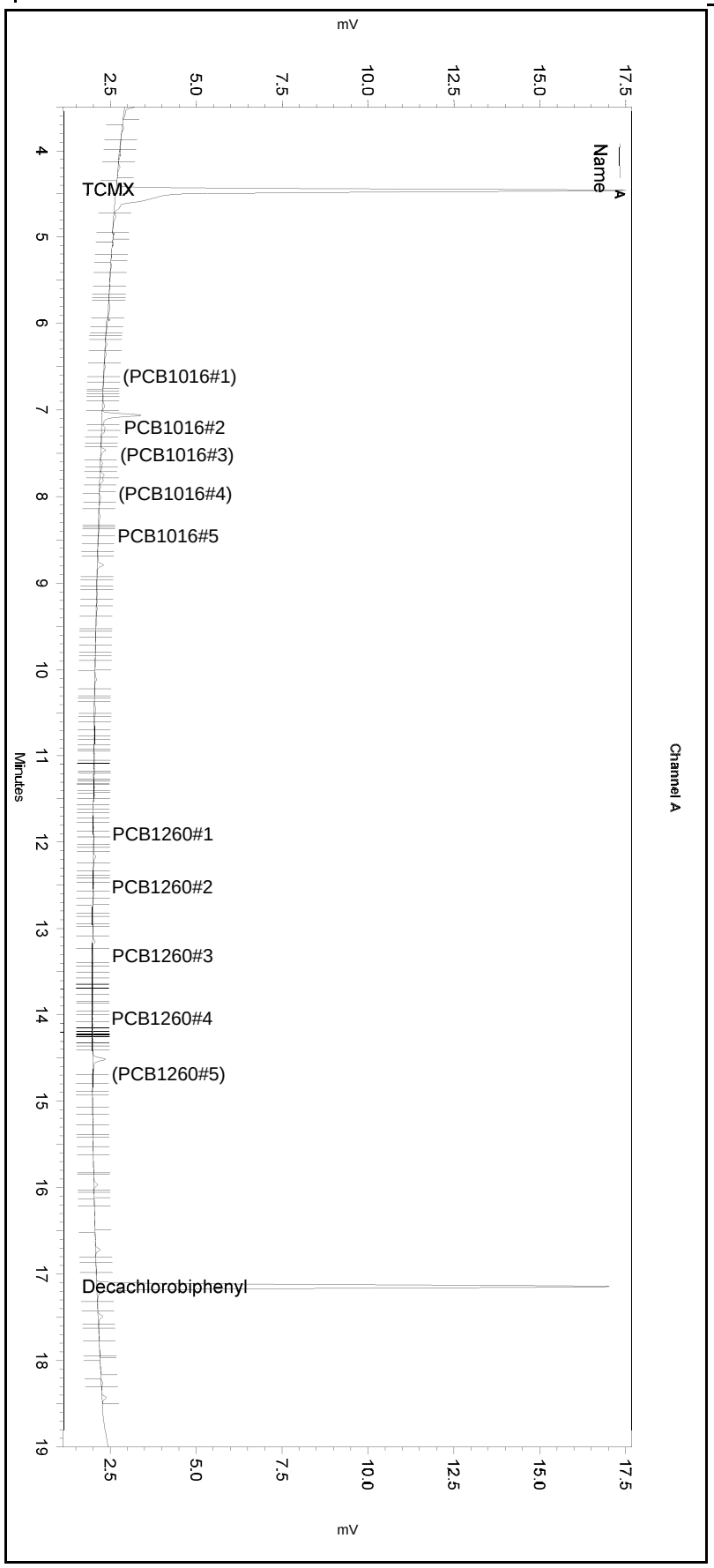
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.493	4.500	306925	16.884
PCB1016#1	6.390	6.410	5256	24.197
PCB1016#2	7.000	6.977	3676	4.211
PCB1016#3	7.210	7.187	1119	3.491
PCB1016#4	7.720	7.720	583	5.429
PCB1016#5	8.163	8.170	696	4.630
PCB1260#1	11.563	11.570	2213	2.031
PCB1260#2	12.183	12.187	4	0.004
PCB1260#3	13.077	13.087	2080	2.748
PCB1260#4	13.713	13.710	2926	1.616
PCB1260#5	14.363	14.360	19061	26.645
Decachlorobiphenyl	17.197	17.210	1057474	71.933

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-087**
Sample Name: **239403-007,190234**
Instrument: GC22 (Offline) Vial: 87 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 6:24:36 AM
Analysis Date: 9/10/2012 1:38:18 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

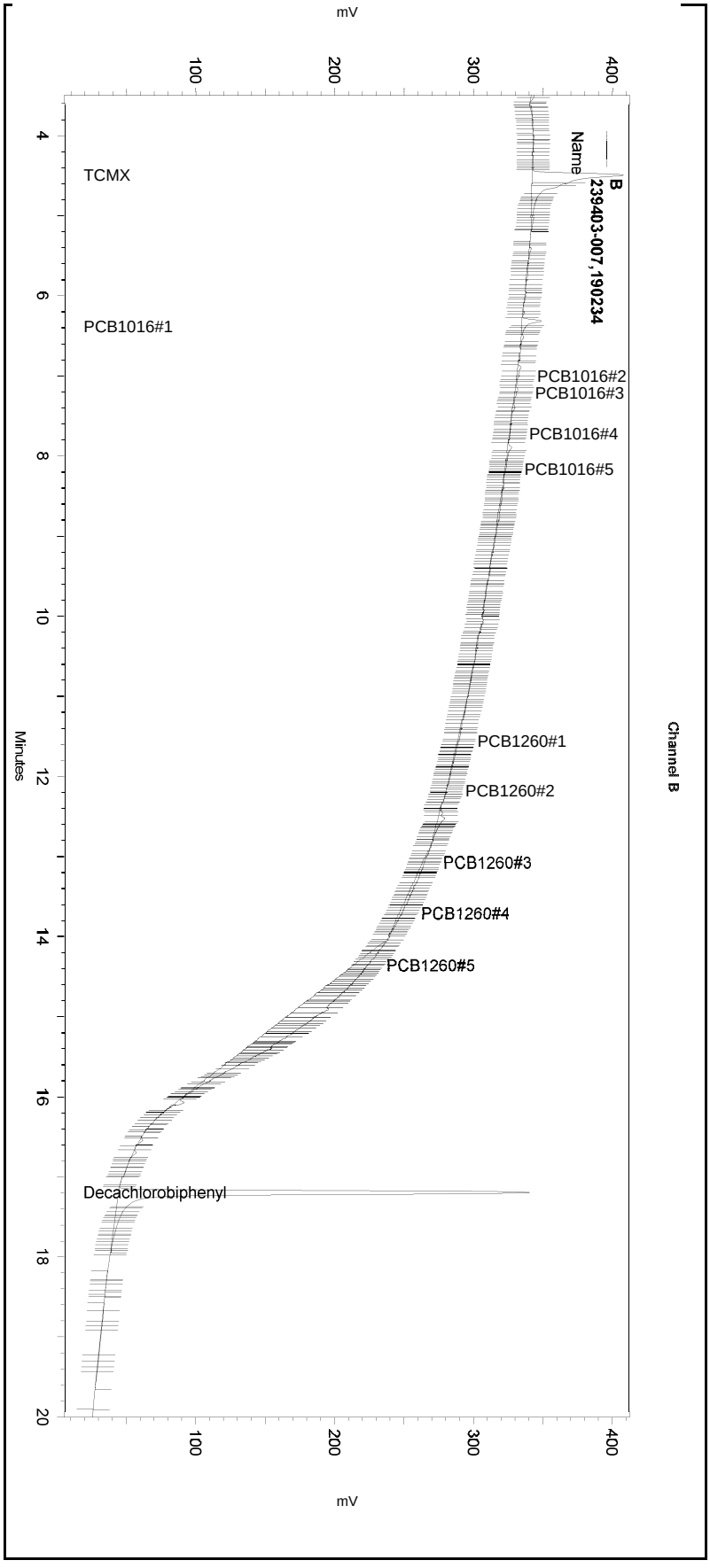
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-087

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-087**
Sample Name: **239403-007,190234**
Instrument: GC22 (Offline) Vial: 87 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 6:24:36 AM
Analysis Date: 9/10/2012 1:38:18 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-087

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

QC Raw Data

CURTIS & TOMPKINS BLANK USER REPORT FOR 239403 PCBS Water
EPA 8082A

Inst : GC22 Lab ID : QC655035
Seqnum : 252360400077.1 Matrix : Water
File : 250_077 Batch : 190234 Time : 08-SEP-2012 02:01
Cal : 252360400001 Caldate : 06-SEP-2012
IDF : 1.0 Raw Units : pg/uL Units : ug/L

1000.00 mL --> 25.0 ml = 0.025 ml/ml PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Flags
Aroclor-1254	A		ND			0.50	u
Aroclor-1260	A	0.9023	ND	ND	30%	0.50	u

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
TCMX	A	32.25	1.000	0.8063	81	39-120	u
Decachlorobiphenyl	A	36.83	1.000	0.9209	92	24-120	<c- u

PML 09/10/12 : opening CCV for AR1260 @ -17, all associated jobs in batch are either QSMV4 or DOD jobs, which passes requirements [general version]

WSR 09/11/12 [Decachlorobiphenyl A]: Recovery well within limits despite instrument bias

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias <=opening c=CCV u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-077**
Sample Name: **mb,QC655035,190234**
Instrument: GC22 (Offline) Vial: 77 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 2:01:13 AM
Analysis Date: 9/10/2012 1:17:49 PM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.453	4.463	42765	32.252
PCB1016#1		6.613		0.000 BDL
PCB1016#2	7.213	7.227	289	4.907
PCB1016#3		7.523		0.000 BDL
PCB1016#4		7.970		0.000 BDL
PCB1016#5	8.490	8.473	14	0.532
PCB1260#1	11.897	11.907	47	0.388
PCB1260#2	12.547	12.527	140	1.542
PCB1260#3	13.327	13.347	116	1.610
PCB1260#4	14.037	14.053	101	0.550
PCB1260#5	14.677	14.680	33	0.422
Decachlorobiphenyl	17.143	17.163	45654	36.834

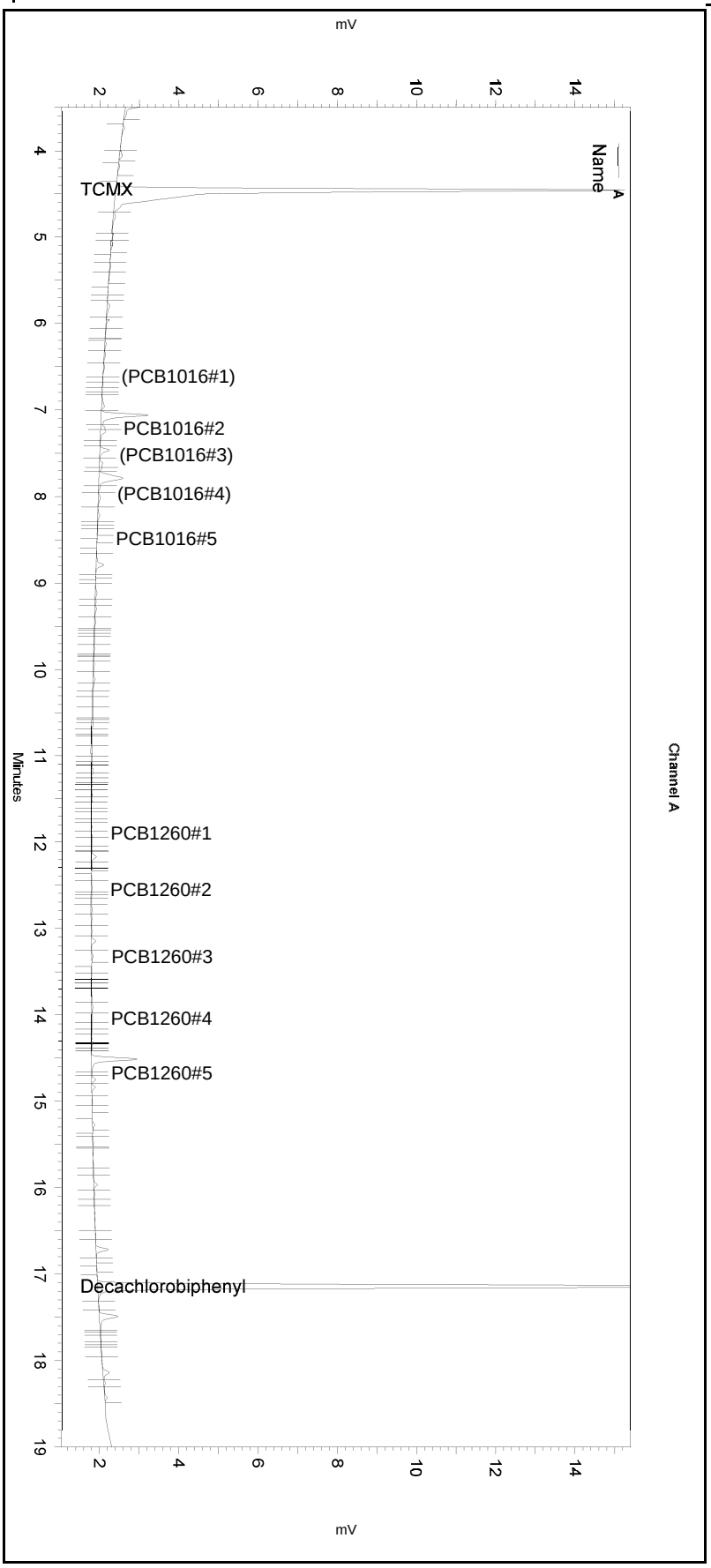
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	557119	29.625
PCB1016#1	6.390	6.410	11661	53.683
PCB1016#2	6.997	6.977	27365	31.350
PCB1016#3	7.170	7.187	98119	306.064
PCB1016#4	7.707	7.720	35311	328.834
PCB1016#5	8.177	8.170	5652	37.598
PCB1260#1	11.563	11.570	320	0.294
PCB1260#2	12.210	12.187	2170	2.221
PCB1260#3	13.083	13.087	484	0.639
PCB1260#4		13.710		0.000 BDL
PCB1260#5	14.383	14.360	131	0.183
Decachlorobiphenyl	17.197	17.210	765332	52.275

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-077**
Sample Name: **mb,QC655035,190234**
Instrument: GC22 (Offline) Vial: 77 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 2:01:13 AM
Analysis Date: 9/10/2012 1:17:49 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

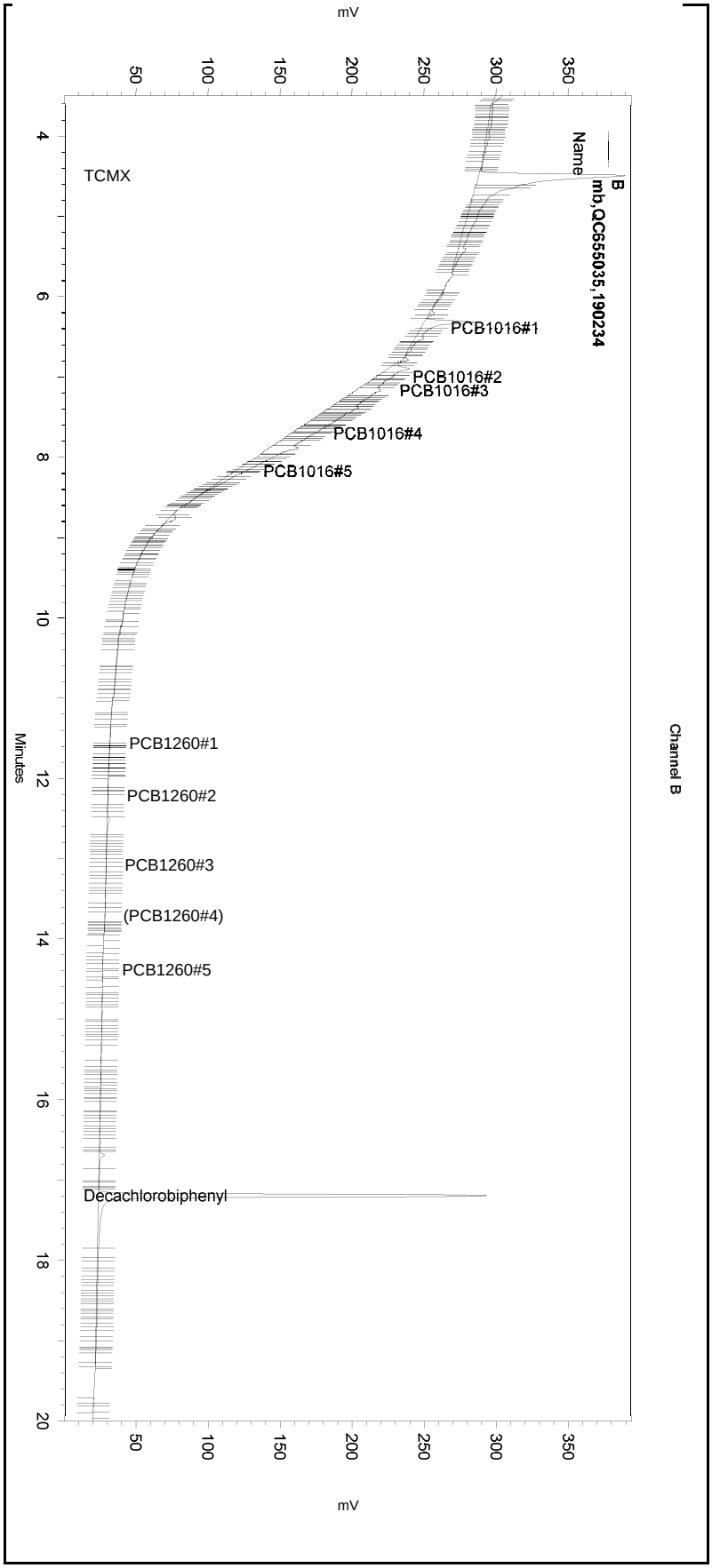
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-077

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-077**
Sample Name: **mb,QC655035,190234**
Instrument: GC22 (Offline) Vial: 77 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 2:01:13 AM
Analysis Date: 9/10/2012 1:17:49 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-077

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 PCBS Water
EPA 8082A

Type : BS
Inst : GC16
Seqnum : 232366165012.2
File : 254_012
IDF : 1.0
Lab ID : QC655036
Matrix : Water
Batch : 190234
Time : 10-SEP-2012 18:25
Cal : 232358946001
Units : ug/L

Type : BSD
Inst : GC16
Seqnum : 232366165013.1
File : 254_013
IDF : 1.0
Lab ID : QC655037
Matrix : Water
Batch : 190234
Time : 10-SEP-2012 18:53
Cal : 232358946001

BS: 1000.00 mL --> 25.0 ml = 0.025 ml/ml PDF
BSD: 1000.00 mL --> 25.0 ml = 0.025 ml/ml PDF

Analyte	Spiked	BS Raw	BS Result	Ch	%Rec	BSD Raw	BSD Result	Ch	%Rec	Limits	RPD	Lim	Flags
Aroclor-1260	5.000	172.4	4.311	B	86	198.2	4.954	B	99	58-131	14	20	u
Aroclor-1260 Peak # 1		207.5	5.186	B		229.4	5.735	B					
Aroclor-1260 Peak # 2		169.3	4.232	B		188.6	4.716	B					
Aroclor-1260 Peak # 3		167.4	4.185	B		189.5	4.738	B					
Aroclor-1260 Peak # 4		156.4	3.911	B		186.4	4.659	B					
Aroclor-1260 Peak # 5		161.6	4.039	B		196.9	4.923	B					
TCMX	1.000	37.93	0.9483	B	95	40.33	1.008	B	101	39-120			u
Decachlorobiphenyl	1.000	24.45	0.6113	B	61	32.91	0.8227	B	82	24-120			<c- >c-

CP 09/11/12 : report DCB from gc06 for passing ccv [general version]

WSR 09/11/12 : Corrected automatically drawn baseline. [general version]

WSR 09/11/12 : CHANNEL B FOR CCV [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias <=opening >=closing c=CCV u=use

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 7:23:25 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.123	4.103	1189342	90.043
PCB1016#1	6.213	6.197	112443	300.539
PCB1016#2	6.830	6.810	410286	391.910
PCB1016#3	7.130	7.110	239647	370.484
PCB1016#4	7.590	7.570	124396	389.145
PCB1016#5	8.097	8.077	193563	353.871
PCB1260#1	11.653	11.640	550989	352.181
PCB1260#2	12.303	12.290	536091	306.461
PCB1260#3	13.160	13.150	280078	297.372
PCB1260#4	13.907	13.897	592602	277.889
PCB1260#5	14.557	14.550	301953	215.591
Decachlorobiphenyl	17.170	17.167	512621	42.219

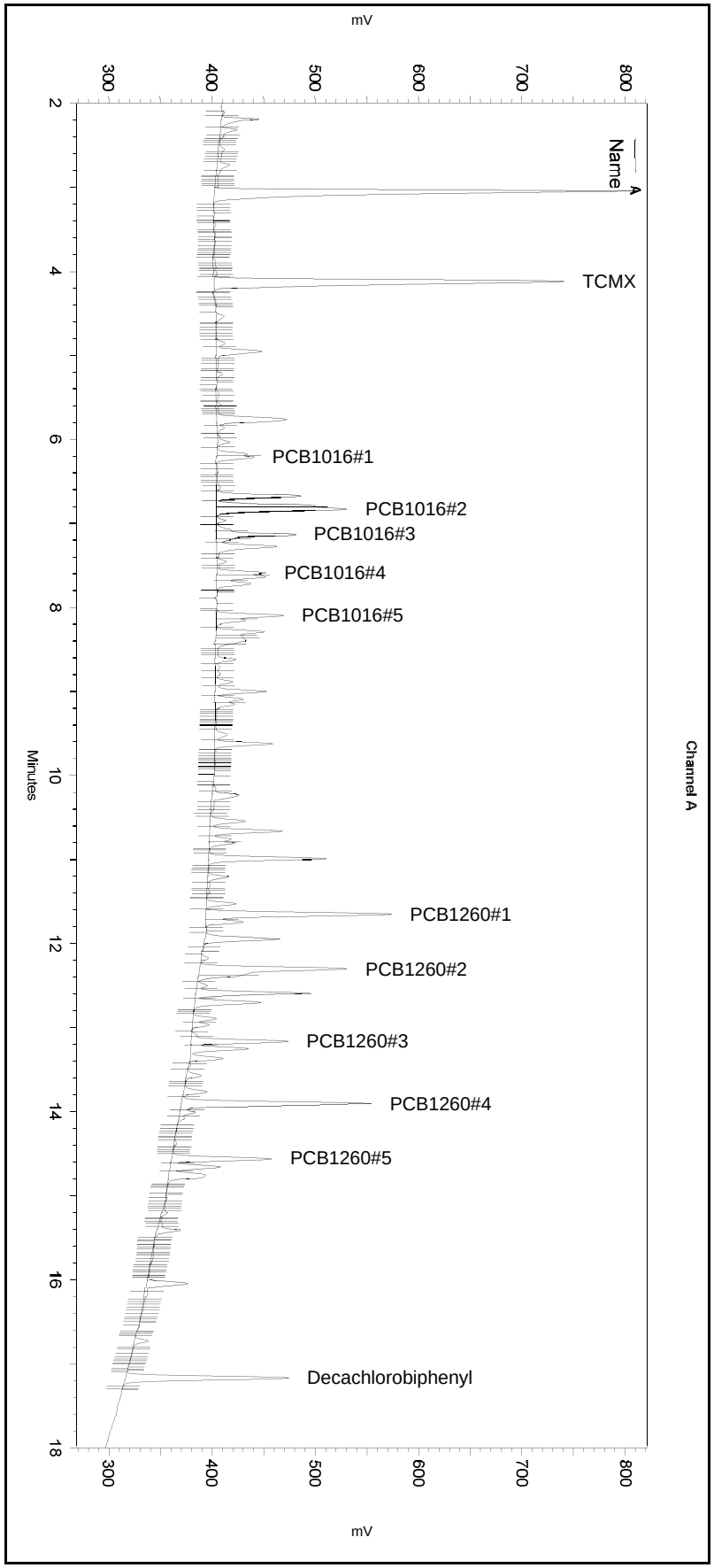
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	265793	37.931
PCB1016#1	5.207	5.207	44145	207.957
PCB1016#2	5.770	5.770	116526	219.657
PCB1016#3	5.987	5.987	55033	224.288
PCB1016#4	6.537	6.537	34491	205.647
PCB1016#5	6.990	6.990	40209	209.399
PCB1260#1	11.153	11.153	121428	207.454
PCB1260#2	11.557	11.560	72055	169.293
PCB1260#3	12.097	12.100	63104	167.415
PCB1260#4	12.753	12.757	138868	156.425
PCB1260#5	13.427	13.430	64303	161.576
Decachlorobiphenyl	16.420	16.423	221397	24.452

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 7:23:25 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

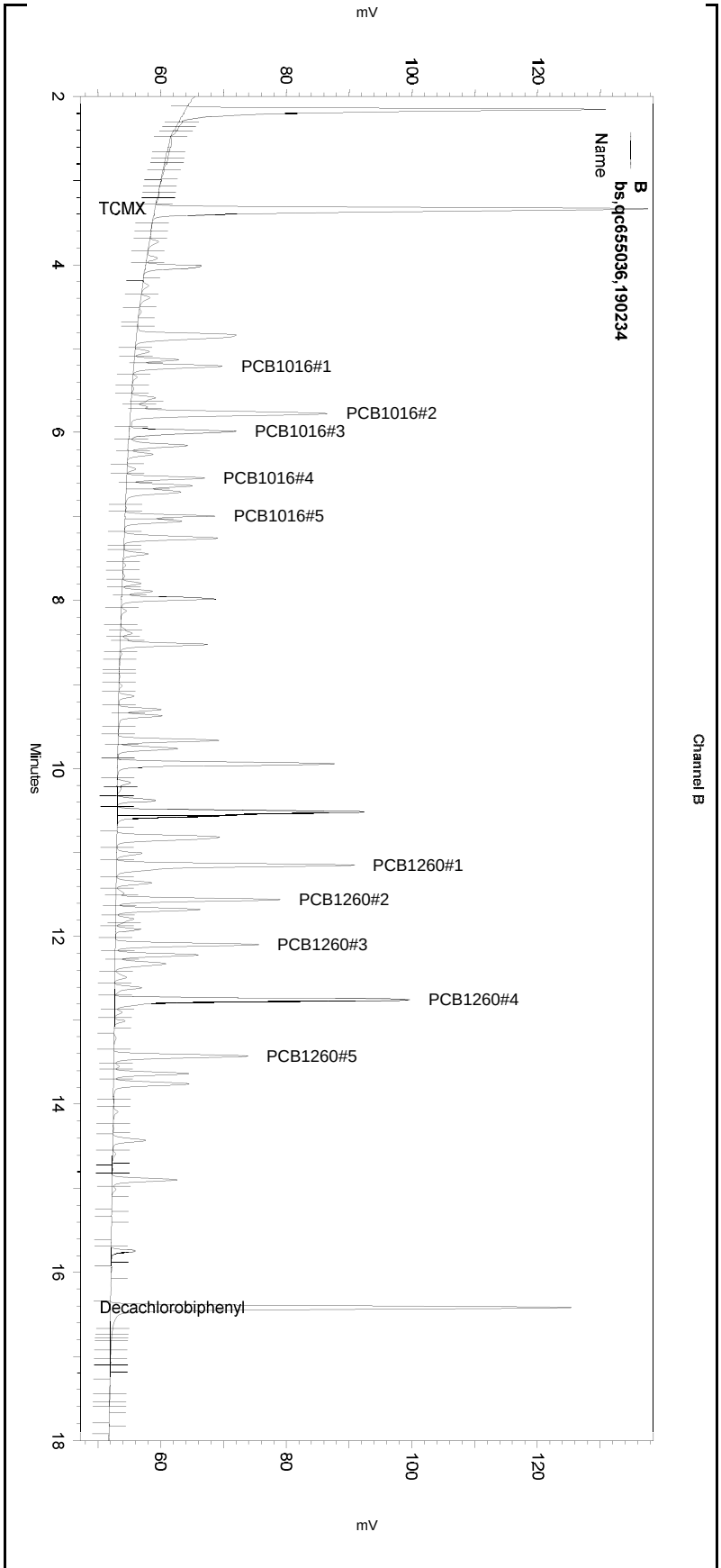
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	4.066	4.248	0
Yes	Reset Baseline	6.083	0	0
Yes	Reset Baseline	7.815	0	0
Yes	Reset Baseline	7.948	0	0
Yes	Manual Peak	13.041	13.435	0
Yes	Split Peak	13.105	0	0
Yes	Split Peak	13.209	0	0
Yes	Reset Baseline	17.313	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 7:23:25 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 6:49:29 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.123	4.103	1205111	91.349
PCB1016#1	6.213	6.197	119824	320.267
PCB1016#2	6.830	6.810	417858	399.143
PCB1016#3	7.130	7.110	247109	382.020
PCB1016#4	7.590	7.570	133285	418.502
PCB1016#5	8.097	8.077	199778	365.233
PCB1260#1	11.653	11.640	550989	352.181
PCB1260#2	12.303	12.290	536091	306.461
PCB1260#3	13.160	13.150	255171	267.468
PCB1260#4	13.907	13.897	592602	277.889
PCB1260#5	14.557	14.550	301953	215.591
Decachlorobiphenyl	17.170	17.167	521546	43.100

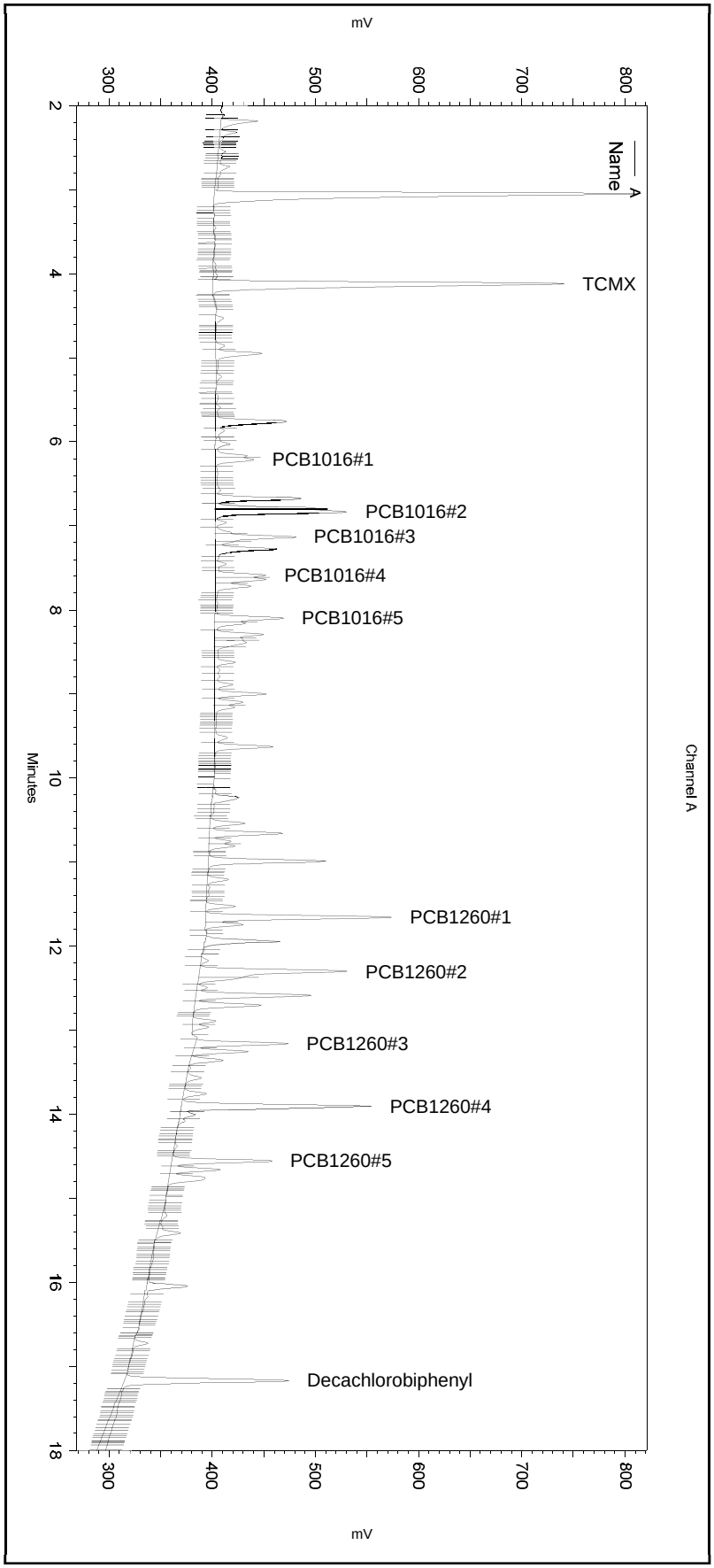
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	265793	37.931
PCB1016#1	5.207	5.207	44145	207.957
PCB1016#2	5.770	5.770	116526	219.657
PCB1016#3	5.987	5.987	55033	224.288
PCB1016#4	6.537	6.537	34491	205.647
PCB1016#5	6.990	6.990	40209	209.399
PCB1260#1	11.153	11.153	121428	207.454
PCB1260#2	11.557	11.560	72055	169.293
PCB1260#3	12.097	12.100	63104	167.415
PCB1260#4	12.753	12.757	138868	156.425
PCB1260#5	13.427	13.430	64303	161.576
Decachlorobiphenyl	16.420	16.423	221397	24.452

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 6:49:29 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes
==========

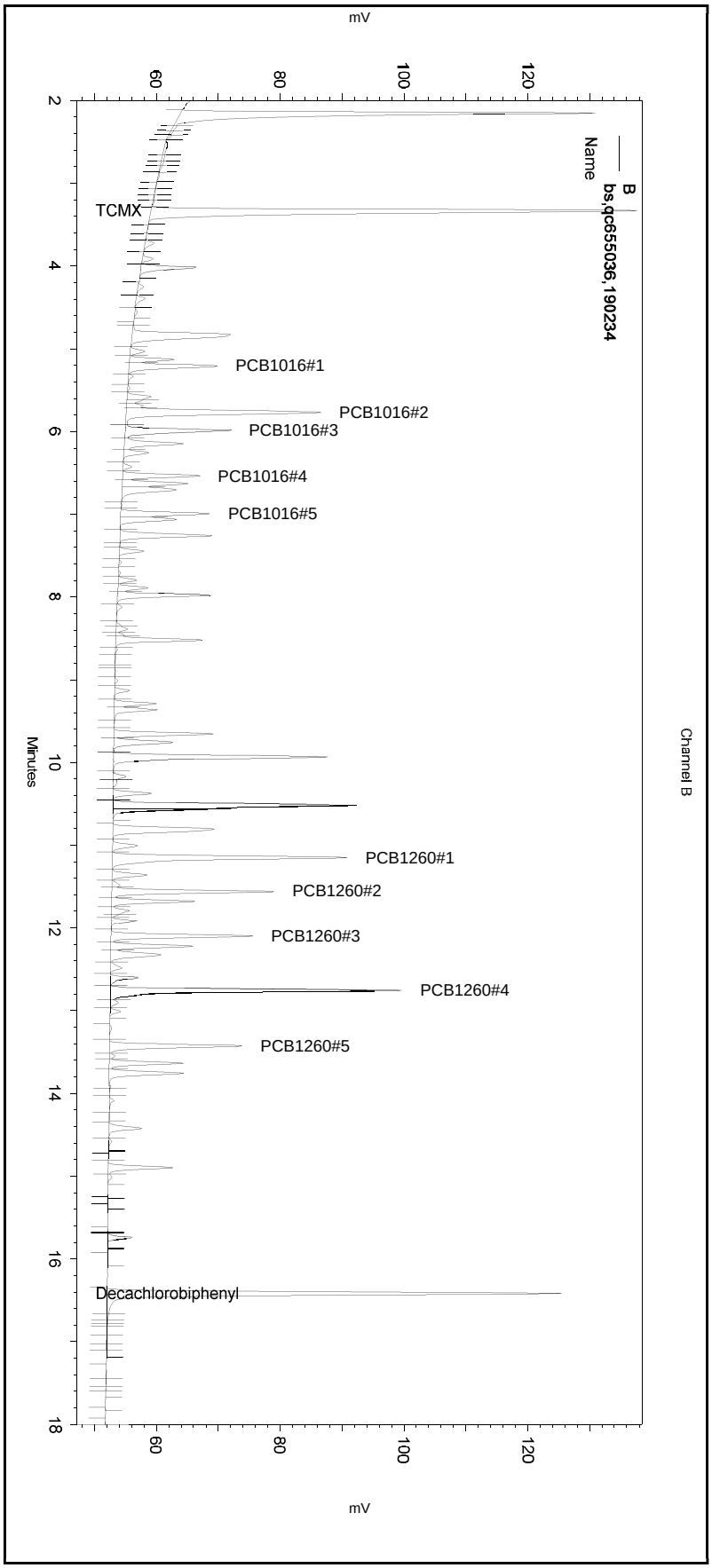
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-012_5DCE.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-012**
Sample Name: **bs,qc655036,190234**
Instrument: GC16 Vial: 12 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:25:32 PM
Analysis Date: 9/10/2012 6:49:29 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-012_5DCE.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 8:24:19 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	671513	47.132
PCB1016#1	6.197	6.197	74295	198.577
PCB1016#2	6.810	6.810	244154	233.219
PCB1016#3	7.113	7.110	155210	239.948
PCB1016#4	7.567	7.570	85653	261.191
PCB1016#5	8.077	8.077	128246	234.459
PCB1260#1	11.640	11.640	417696	251.981
PCB1260#2	12.290	12.290	393428	224.907
PCB1260#3	13.150	13.150	224156	230.231
PCB1260#4	13.893	13.897	507874	234.069
PCB1260#5	14.547	14.550	283856	202.670
Decachlorobiphenyl	17.160	17.167	552413	46.176

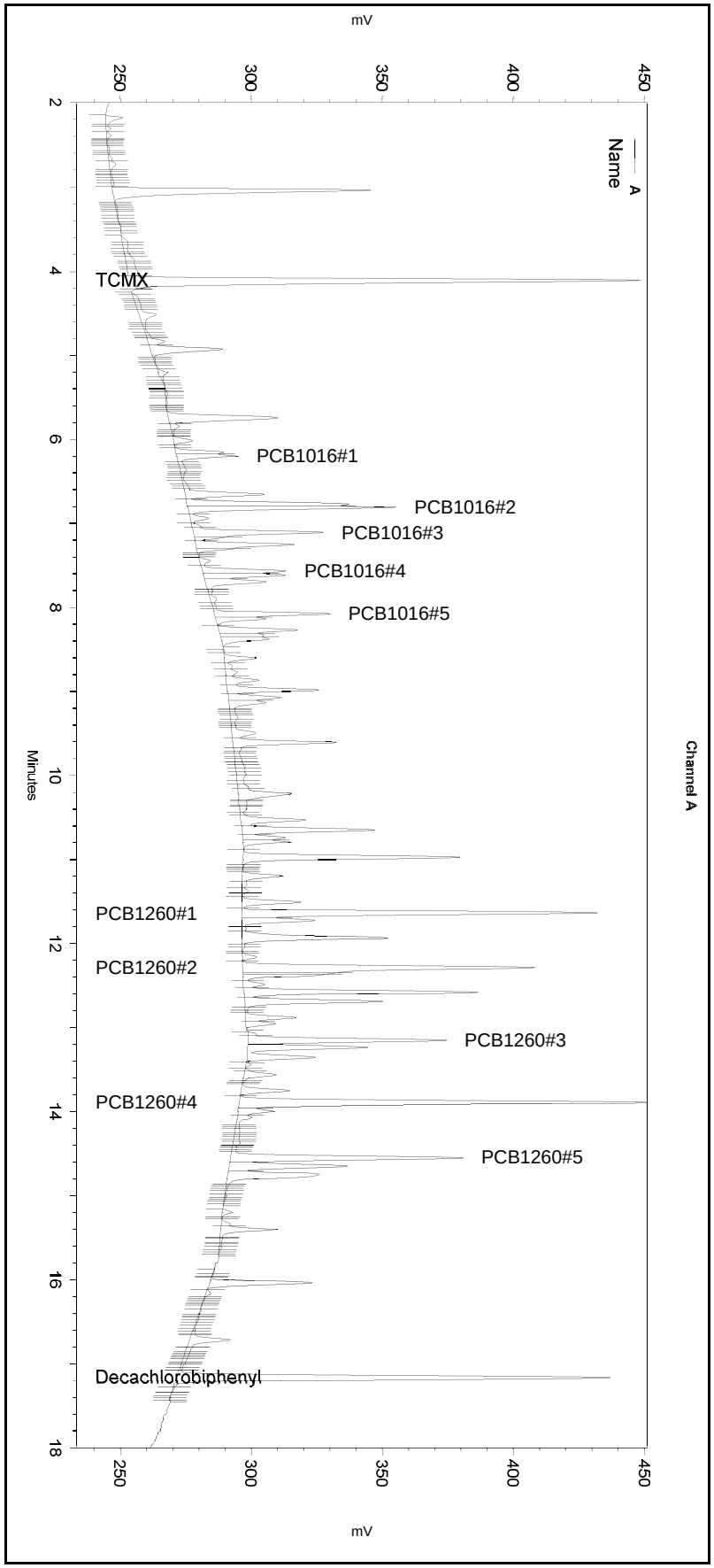
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	282631	40.334
PCB1016#1	5.207	5.207	44494	209.601
PCB1016#2	5.767	5.770	114975	216.734
PCB1016#3	5.983	5.987	52385	213.496
PCB1016#4	6.533	6.537	34862	207.859
PCB1016#5	6.987	6.990	40519	211.014
PCB1260#1	11.150	11.153	134280	229.411
PCB1260#2	11.553	11.560	80293	188.649
PCB1260#3	12.093	12.100	71442	189.536
PCB1260#4	12.750	12.757	165459	186.378
PCB1260#5	13.423	13.430	78364	196.907
Decachlorobiphenyl	16.417	16.423	297962	32.909

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 8:24:19 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

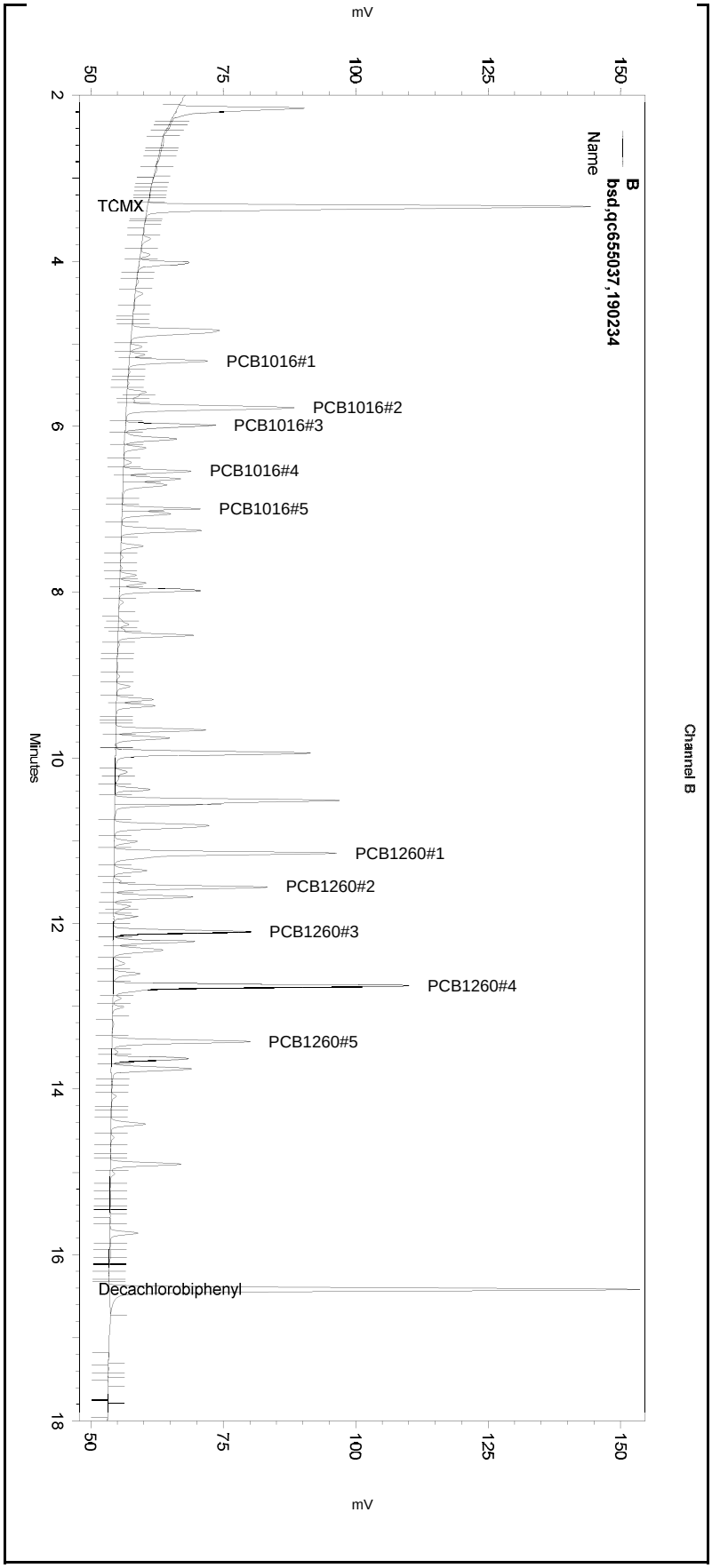
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	4.039	4.225	0
Yes	Reset Baseline	8.465	0	0
Yes	Reset Baseline	10.876	0	0
Yes	Manual Peak	13.05	13.424	0
Yes	Split Peak	13.093	0	0
Yes	Split Peak	13.199	0	0
Yes	Reset Baseline	17.461	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 8:24:19 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	16.724	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 7:17:18 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	695045	49.082
PCB1016#1	6.197	6.197	84554	225.997
PCB1016#2	6.810	6.810	266546	254.608
PCB1016#3	7.113	7.110	183395	283.521
PCB1016#4	7.567	7.570	116307	362.430
PCB1016#5	8.077	8.077	180506	330.000
PCB1260#1	11.640	11.640	446604	272.919
PCB1260#2	12.290	12.290	406370	232.305
PCB1260#3	13.150	13.150	209180	212.250
PCB1260#4	13.893	13.897	507874	234.069
PCB1260#5	14.547	14.550	283856	202.670
Decachlorobiphenyl	17.160	17.167	692921	60.819

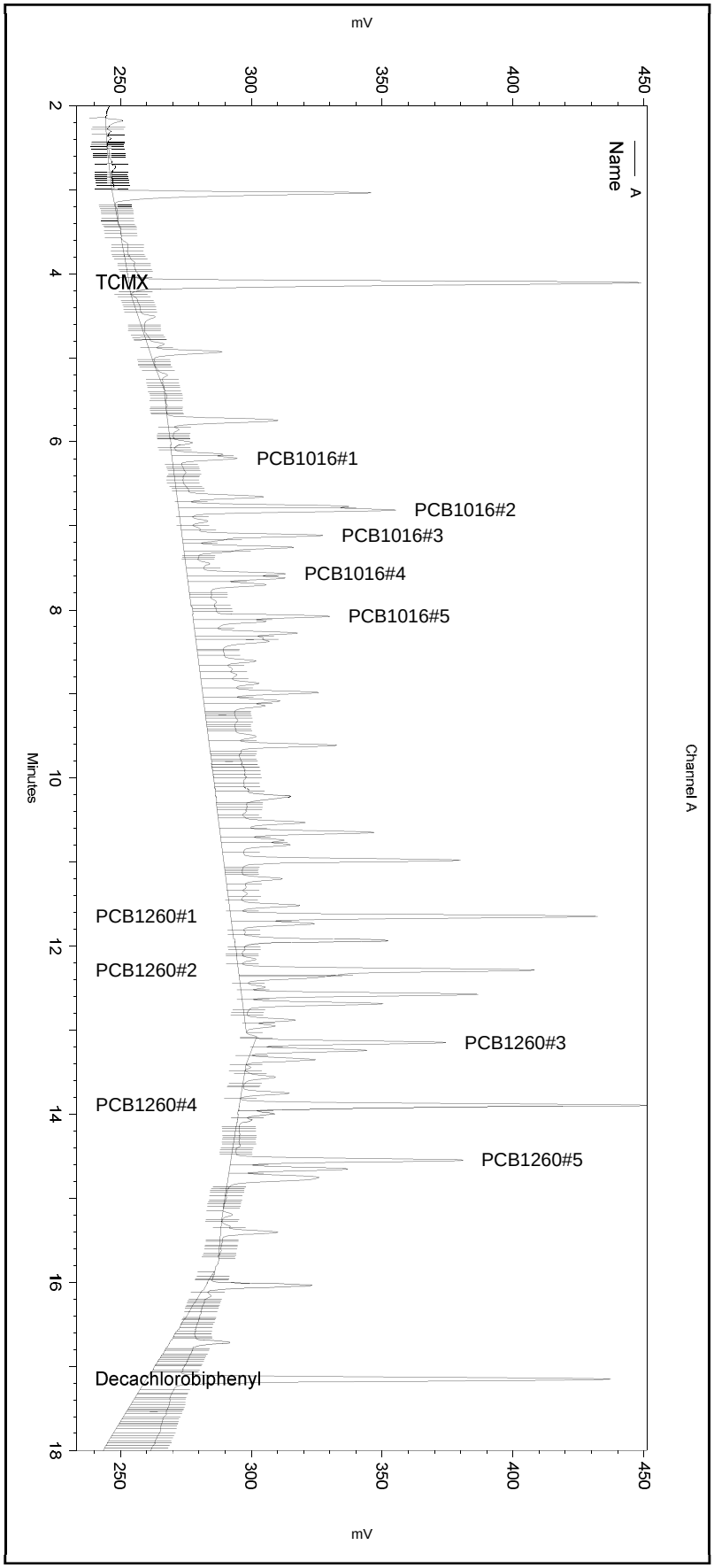
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	282631	40.334
PCB1016#1	5.207	5.207	44494	209.601
PCB1016#2	5.767	5.770	114975	216.734
PCB1016#3	5.983	5.987	52385	213.496
PCB1016#4	6.533	6.537	34862	207.859
PCB1016#5	6.987	6.990	40519	211.014
PCB1260#1	11.150	11.153	134280	229.411
PCB1260#2	11.553	11.560	80293	188.649
PCB1260#3	12.093	12.100	71442	189.536
PCB1260#4	12.750	12.757	165459	186.378
PCB1260#5	13.423	13.430	78364	196.907
Decachlorobiphenyl	16.417	16.423	299149	33.040

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 7:17:18 PM
Sample Amount: 1



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No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes
==========

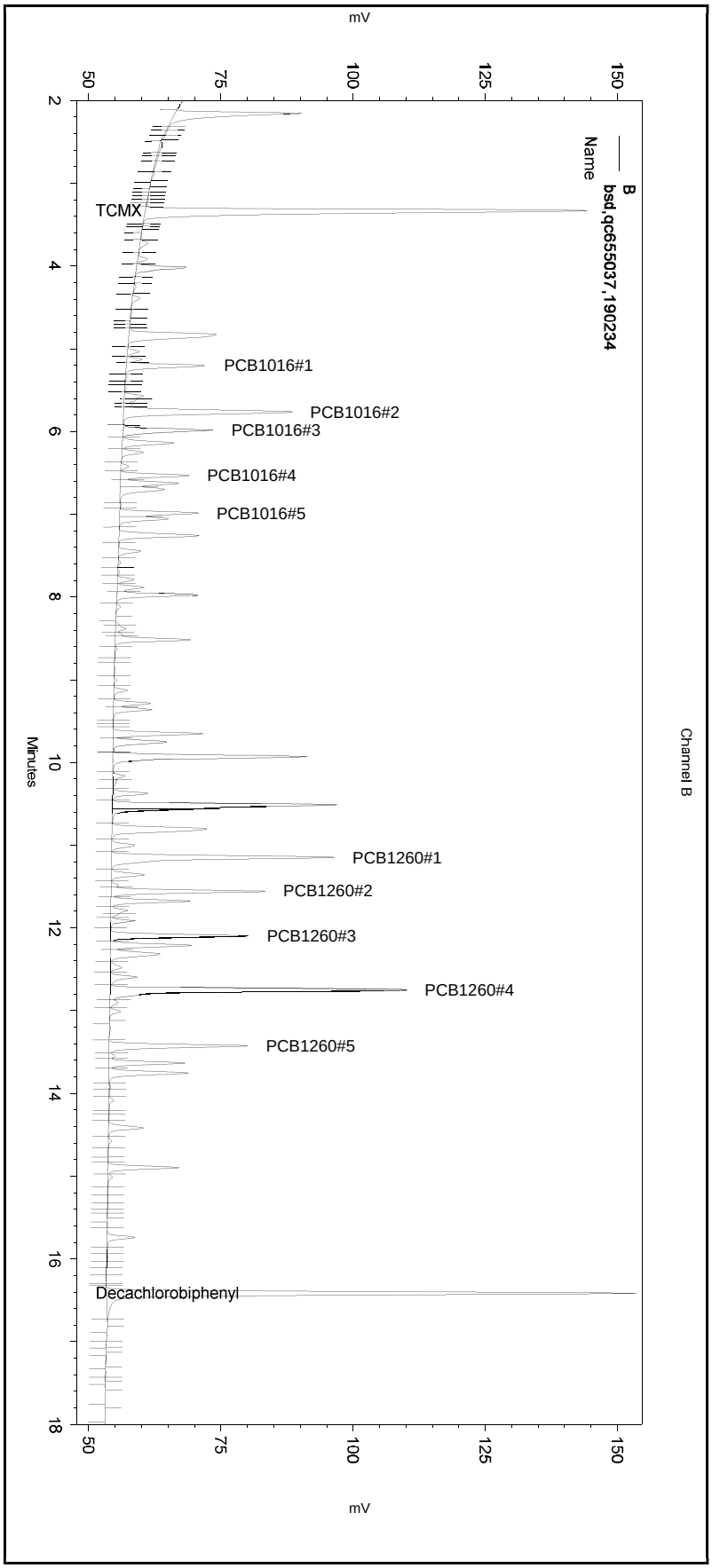
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-013_5DCF.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-013**
Sample Name: **bsd,qc655037,190234**
Instrument: GC16 Vial: 13 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 6:53:21 PM
Analysis Date: 9/10/2012 7:17:18 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-013_5DCF.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 PCBS Water
EPA 8082A

Type	: BS	Type	: BSD
Inst	: GC06	Inst	: GC06
Seqnum	: 202366165026.1	Seqnum	: 202366165027.1
File	: 254_026	File	: 254_027
IDF	: 1.0	IDF	: 1.0
Lab ID	: QC655036	Lab ID	: QC655037
Matrix	: Water	Matrix	: Water
Batch	: 190234	Batch	: 190234
Time	: 10-SEP-2012 22:22	Time	: 10-SEP-2012 22:50
Cal	: 202360551001	Cal	: 202360551001
Units	: ug/L		

BS: 1000.00 mL --> 25.0 ml = 0.025 ml/ml PDF
BSD: 1000.00 mL --> 25.0 ml = 0.025 ml/ml PDF

Analyte	Spiked	BS Raw	BS Result	Ch	%Rec	BSD Raw	BSD Result	Ch	%Rec	Limits	RPD	Lim	Flags
Aroclor-1260	5.000	193.5	4.837	A	97	194.3	4.856	A	97	58-131	0	20	<c+ **b***
Aroclor-1260 Peak # 1		200.7	5.018	A		203.0	5.074	A					
Aroclor-1260 Peak # 2		218.9	5.472	A		223.9	5.598	A					
Aroclor-1260 Peak # 3		161.0	4.024	A		162.1	4.053	A					
Aroclor-1260 Peak # 4		186.3	4.659	A		186.2	4.656	A					
Aroclor-1260 Peak # 5		200.6	5.015	A		196.0	4.901	A					
TCMX	1.000	35.02	0.8755	A	88	35.73	0.8933	A	89	39-120			<c+
Decachlorobiphenyl	1.000	33.82	0.8454	A	85	33.37	0.8342	A	83	24-120			u

WSR 09/11/12 : Corrected automatically drawn baseline. [general version]

WSR 09/11/12 : REPORTING DCB ONLY

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias <=opening b=noncompliant c=CCV u=use

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/10/2012 10:46:43 PM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.770	4.763	231366	35.019
PCB1016#1	6.997	7.004	28317	206.950
PCB1016#2	7.630	7.638	91242	212.126
PCB1016#3	7.943	7.951	57022	247.379
PCB1016#4	8.413	8.410	29962	244.426
PCB1016#5	8.940	8.937	44247	227.678
PCB1260#1	12.550	12.550	153958	200.708
PCB1260#2	13.210	13.210	123434	218.897
PCB1260#3	14.073	14.077	76058	160.957
PCB1260#4	14.817	14.820	173200	186.344
PCB1260#5	15.480	15.483	78442	200.588
Decachlorobiphenyl	18.100	18.103	289268	33.817

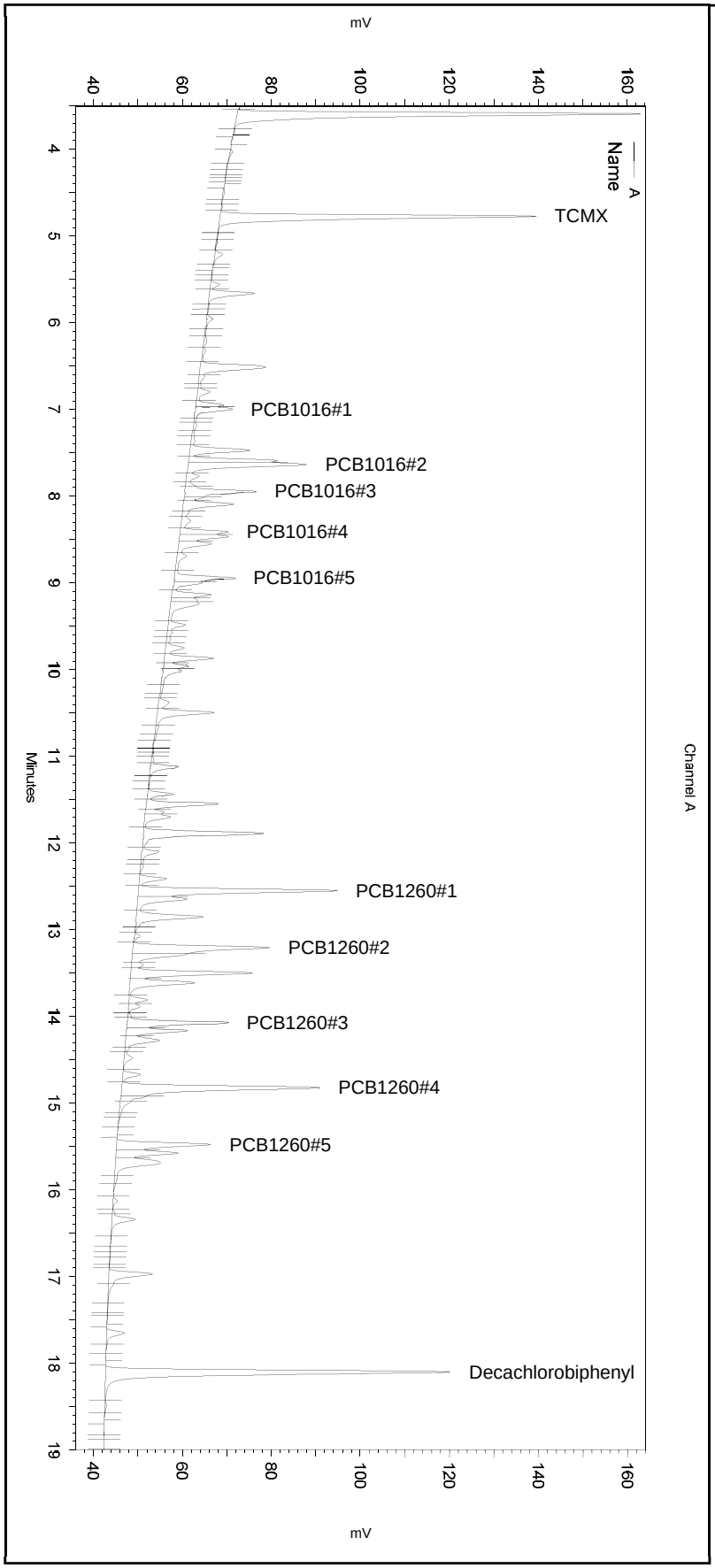
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.973	3.970	708868	40.277
PCB1016#1	5.987	5.983	102775	194.257
PCB1016#2	6.583	6.580	389588	215.310
PCB1016#3	6.807	6.803	160610	208.101
PCB1016#4	7.377	7.377	89617	218.513
PCB1016#5	7.847	7.847	107304	195.859
PCB1260#1	12.083	12.087	525809	268.284
PCB1260#2	12.490	12.497	378090	195.508
PCB1260#3	13.037	13.043	320792	190.111
PCB1260#4	13.693	13.700	720353	228.972
PCB1260#5	14.373	14.380	357582	241.224
Decachlorobiphenyl	17.383	17.390	885202	42.539

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/10/2012 10:46:43 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

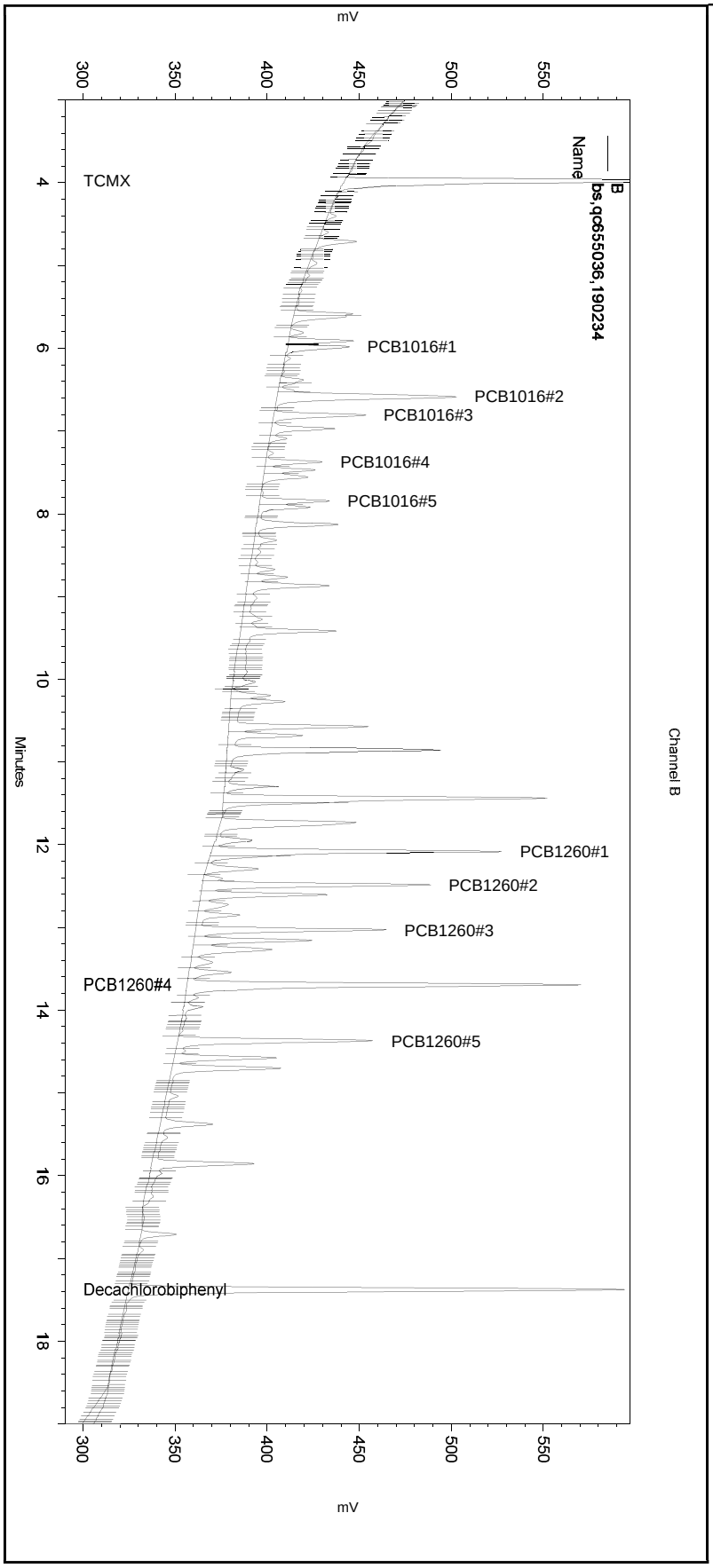
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10091\254-026_2450.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/10/2012 10:46:43 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10091\254-026_2450.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/11/2012 10:36:37 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.770	4.775	231366	35.019
PCB1016#1	6.997	7.002	28317	206.950
PCB1016#2	7.630	7.637	91242	212.126
PCB1016#3	7.943	7.950	57022	247.379
PCB1016#4	8.413	8.420	29962	244.426
PCB1016#5	8.940	8.947	44247	227.678
PCB1260#1	12.550	12.555	153958	200.708
PCB1260#2	13.210	13.214	123434	218.897
PCB1260#3	14.073	14.077	76058	160.957
PCB1260#4	14.817	14.820	173200	186.344
PCB1260#5	15.480	15.482	78442	200.588
Decachlorobiphenyl	18.100	18.102	289268	33.817

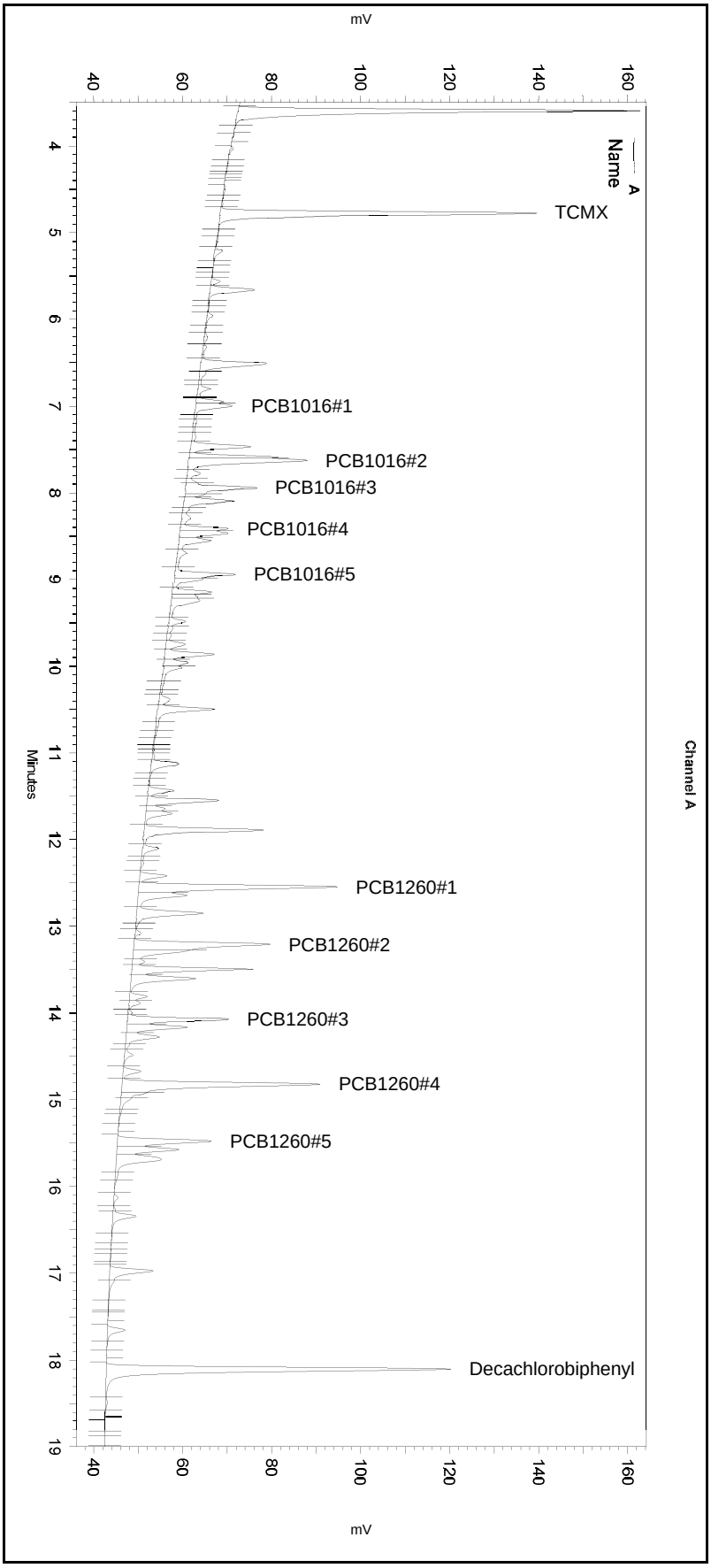
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.973	3.962	708868	40.277
PCB1016#1	5.987	5.979	102775	194.257
PCB1016#2	6.583	6.574	389588	215.310
PCB1016#3	6.807	6.799	160610	208.101
PCB1016#4	7.377	7.369	89617	218.513
PCB1016#5	7.847	7.839	107304	195.859
PCB1260#1	12.083	12.078	525809	268.284
PCB1260#2	12.490	12.475	378090	195.508
PCB1260#3	13.037	13.032	320792	190.111
PCB1260#4	13.693	13.688	720353	228.972
PCB1260#5	14.373	14.370	357582	241.224
Decachlorobiphenyl	17.383	17.378	885202	42.539

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/11/2012 10:36:37 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

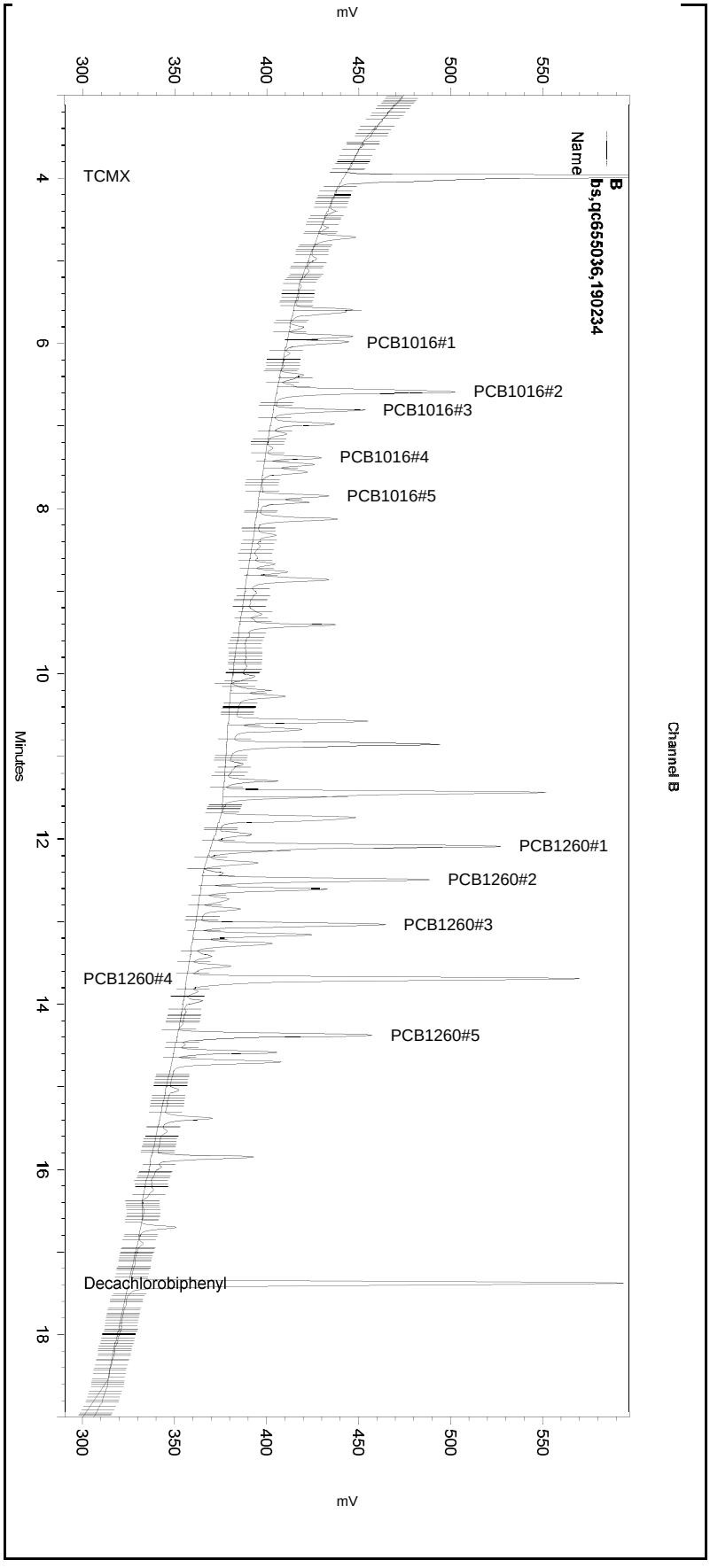
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **bs,qc655036,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 26 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:22:46 PM
Analysis Date: 9/11/2012 10:36:37 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-026

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 (Offline) Vial: 27 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 12:50:27 PM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.783	4.775	236078	35.732
PCB1016#1	7.007	7.002	25016	182.825
PCB1016#2	7.643	7.637	88164	204.970
PCB1016#3	7.957	7.950	51026	221.366
PCB1016#4	8.427	8.420	28123	227.338
PCB1016#5	8.953	8.947	42020	216.219
PCB1260#1	12.563	12.555	155690	202.965
PCB1260#2	13.220	13.214	126267	223.921
PCB1260#3	14.087	14.077	76606	162.117
PCB1260#4	14.830	14.820	173110	186.247
PCB1260#5	15.493	15.482	76662	196.036
Decachlorobiphenyl	18.113	18.102	285441	33.369

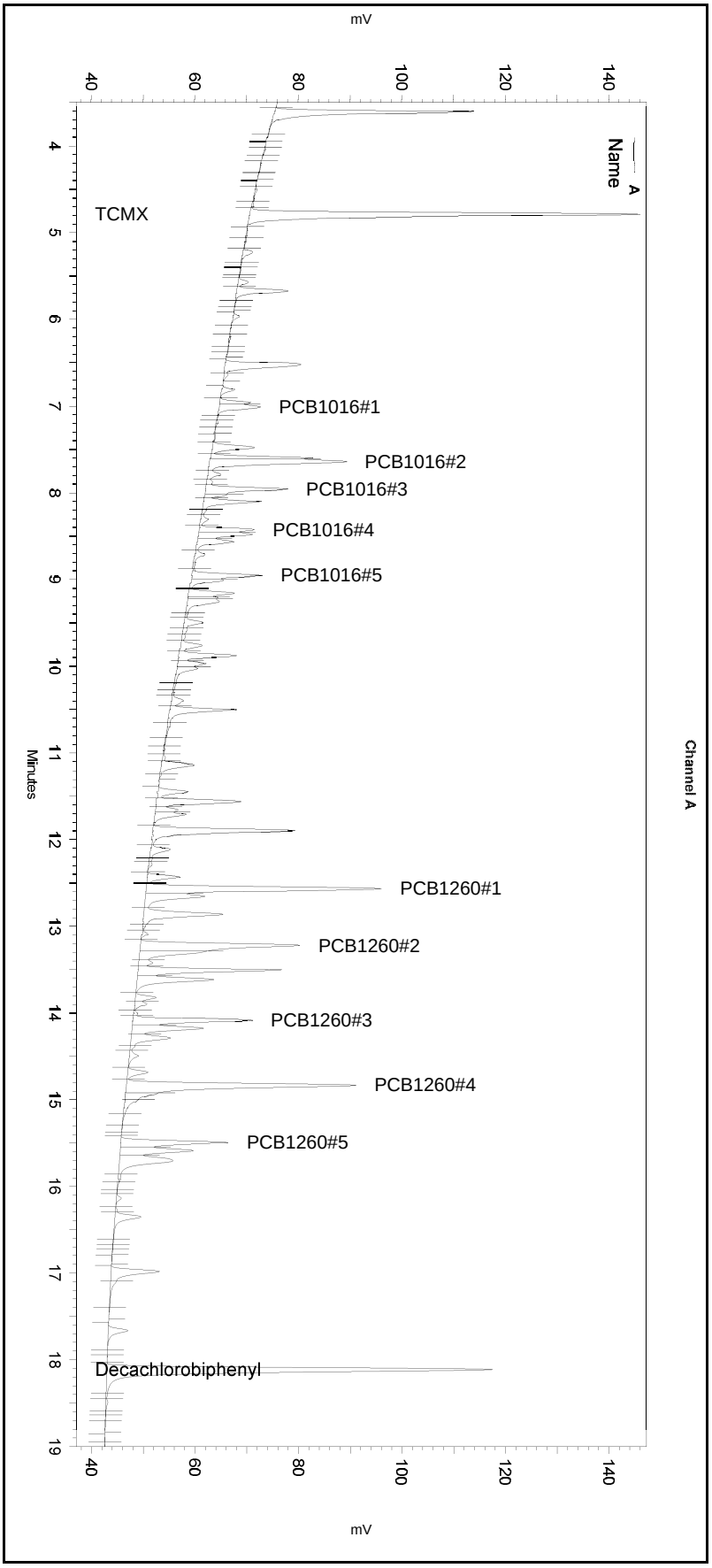
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.987	3.962	708670	40.266
PCB1016#1	6.000	5.979	96701	180.835
PCB1016#2	6.597	6.574	352005	194.539
PCB1016#3	6.820	6.799	144597	187.353
PCB1016#4	7.387	7.369	87141	211.645
PCB1016#5	7.860	7.839	102196	186.536
PCB1260#1	12.093	12.078	567877	293.708
PCB1260#2	12.503	12.475	400568	207.131
PCB1260#3	13.047	13.032	343335	203.471
PCB1260#4	13.703	13.688	752222	241.285
PCB1260#5	14.387	14.370	385127	262.292
Decachlorobiphenyl	17.393	17.378	853196	40.721

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 (Offline) Vial: 27 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 12:50:27 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

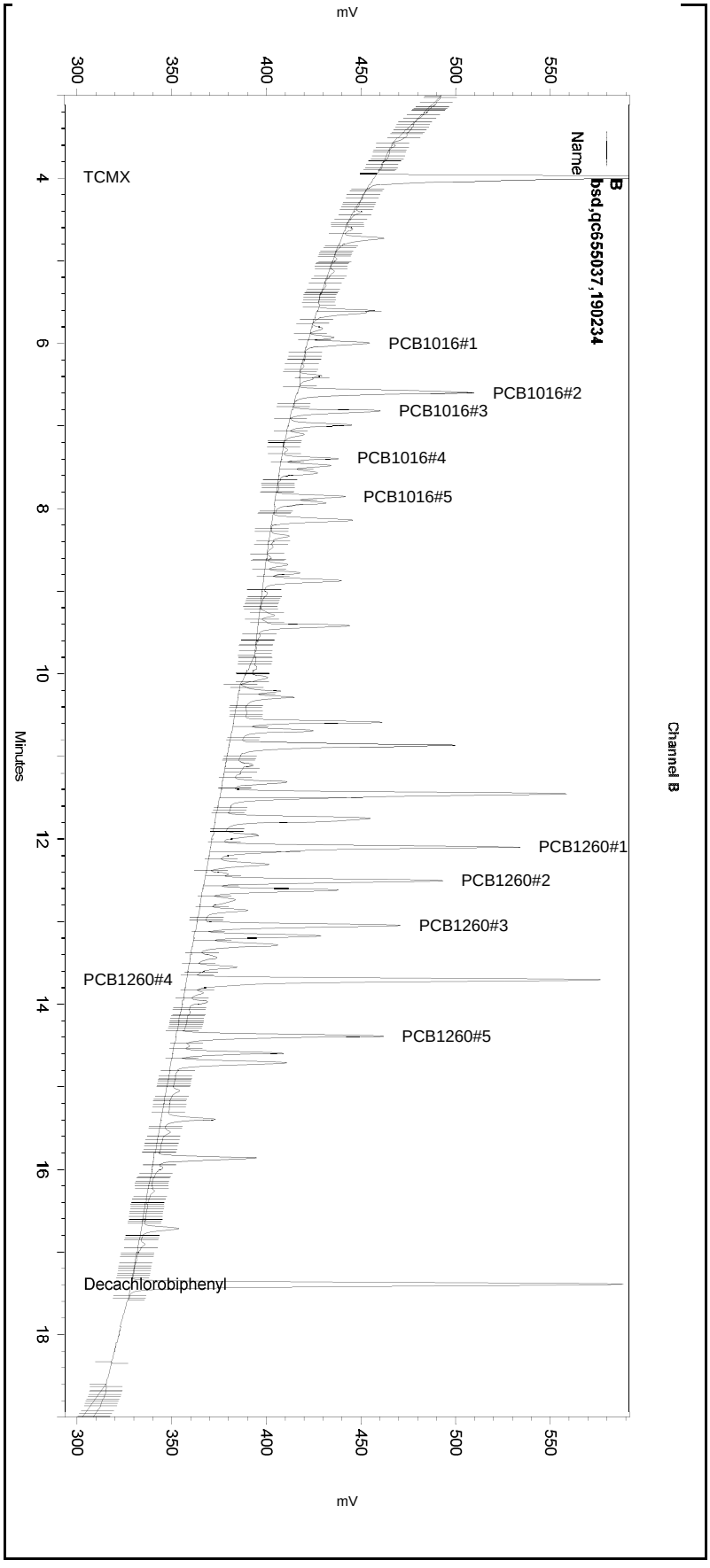
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 (Offline) Vial: 27 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 12:50:27 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	17.588	0	0

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 27 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 10:36:44 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.783	4.775	236078	35.732
PCB1016#1	7.007	7.002	25016	182.825
PCB1016#2	7.643	7.637	88164	204.970
PCB1016#3	7.957	7.950	51026	221.366
PCB1016#4	8.427	8.420	28123	227.338
PCB1016#5	8.953	8.947	42020	216.219
PCB1260#1	12.563	12.555	155690	202.965
PCB1260#2	13.220	13.214	126267	223.921
PCB1260#3	14.087	14.077	76606	162.117
PCB1260#4	14.830	14.820	173110	186.247
PCB1260#5	15.493	15.482	76662	196.036
Decachlorobiphenyl	18.113	18.102	285441	33.369

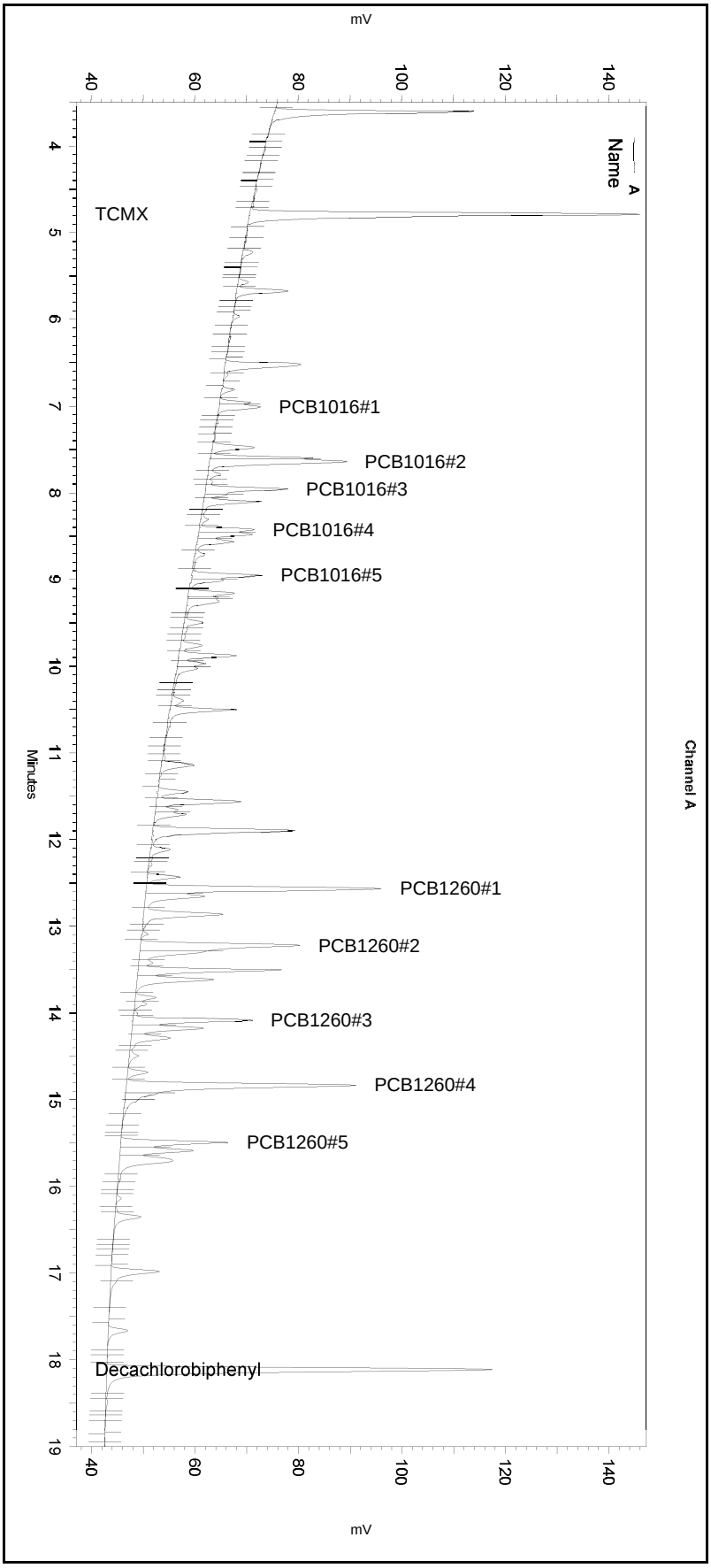
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.987	3.962	708670	40.266
PCB1016#1	6.000	5.979	96701	180.835
PCB1016#2	6.597	6.574	352005	194.539
PCB1016#3	6.820	6.799	144597	187.353
PCB1016#4	7.387	7.369	87141	211.645
PCB1016#5	7.860	7.839	102196	186.536
PCB1260#1	12.093	12.078	573000	296.804
PCB1260#2	12.503	12.475	406779	210.343
PCB1260#3	13.047	13.032	352442	208.868
PCB1260#4	13.703	13.688	766595	246.838
PCB1260#5	14.387	14.370	399061	272.949
Decachlorobiphenyl	17.393	17.378	887568	42.673

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 27 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 10:36:44 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

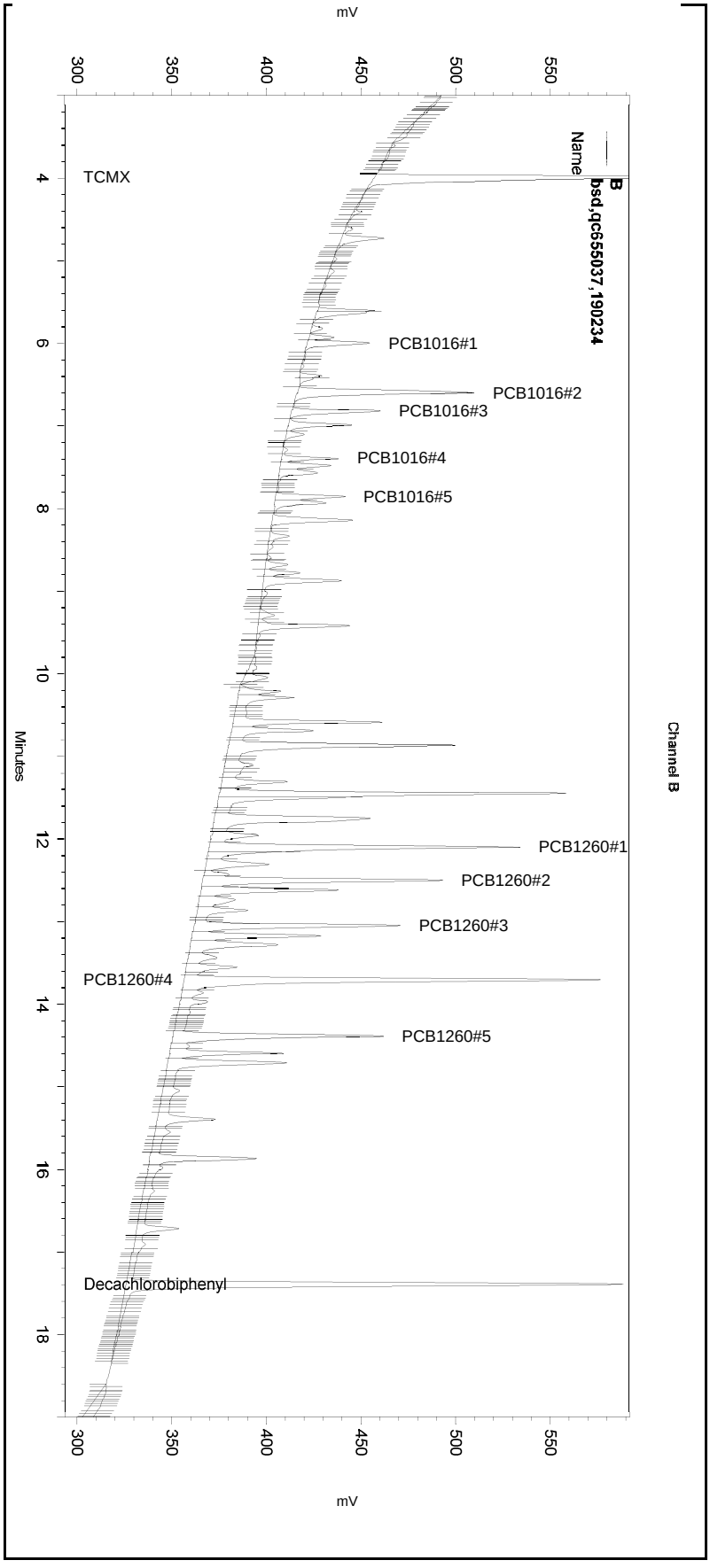
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **bsd,qc655037,190234**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 27 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 10:50:22 PM
Analysis Date: 9/11/2012 10:36:44 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-027

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Initial Calibration Raw Data

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PCBS Water: EPA 8082A

Inst : GC06
Calnum : 202360551001
Units : pg/uL

Name : AR1660_250
Date : 06-SEP-2012 16:49

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	250_008	202360551008	PCB10_2	06-SEP-2012 16:49	S19975
L2	250_009	202360551009	PCB25_5	06-SEP-2012 17:53	S19976
L3	250_010	202360551010	PCB100_20	06-SEP-2012 18:21	S19977
L4	250_011	202360551011	PCB250_50	06-SEP-2012 18:49	S19978
L5	250_012	202360551012	PCB500_100	06-SEP-2012 19:16	S19979
L6	250_013	202360551013	PCB750_150	06-SEP-2012 19:44	S19980
L7	250_014	202360551014	PCB1000_200	06-SEP-2012 20:11	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	977.50	867.00	809.57	733.00	642.90	572.49		AVRG	R		0.00130		767.08	19	.99	20	
Aroclor-1260 Peak # 2	A	636.20	645.28	605.17	591.27	519.42	473.96	475.94	AVRG	R		0.00177		563.89	13	.99	20	
Aroclor-1260 Peak # 3	A	618.80	500.24	451.97	419.33	372.34			AVRG	R		0.00212		472.54	20	.99	20	
Aroclor-1260 Peak # 4	A	1017.8	1084.9	1023.1	964.77	859.73	781.83	774.13	AVRG	R		0.00108		929.46	13	.99	20	
Aroclor-1260 Peak # 5	A	396.50	438.52	438.93	410.76	371.41	335.84	345.47	AVRG	R		0.00256		391.06	11	.99	20	
TCMX	A	7935.0	7919.0	7022.0	6505.6	5961.7	5524.8	5380.5	AVRG	R		1.51E-4		6606.9	16	.99	20	
Decachlorobiphenyl	A	9631.0	10236	8546.9	7706.8	6649.9			AVRG	R		1.17E-4		8554.0	17	.99	20	
Aroclor-1260 Peak # 1	B	2729.3	3301.2	2645.9	2303.9	1981.0	1729.9	1695.0	LINR	R	-49.479	6.04E-4		2340.9	0.991	.99	20	
Aroclor-1260 Peak # 2	B	2380.8	2230.8	2241.2	1901.8	1754.7	1545.4	1482.5	AVRG	R		5.17E-4		1933.9	19	.99	20	
Aroclor-1260 Peak # 3	B	2148.9	2011.4	1730.7	1584.4	1364.0	1285.0		AVRG	R		5.93E-4		1687.4	20	.99	20	
Aroclor-1260 Peak # 4	B	4938.5	4697.8	4098.2	3630.0	3080.2	2740.6	2634.3	LINR	R	-49.347	3.86E-4		3688.5	0.991	.99	20	
Aroclor-1260 Peak # 5	B	2595.9	1546.7	1663.5	1747.5	1514.5	1303.6	1337.7	LINR	R	-32.273	7.65E-4		1672.8	0.992	.99	20	
TCMX	B	23332	20443	16814	16552	16902	15096	14060	AVRG	R		5.68E-5		17600	18	.99	20	
Decachlorobiphenyl	B	33114	33066	25782	21904	18200	15398	14918	QUAD	A	85306.8	20048.7	-29.2621	23197	0.996	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**27**	25.000	13	100.00	6	250.00	-4	500.00	-16	750.00	**-25**		
Aroclor-1260 Peak # 2	A	10.000	13	25.000	14	100.00	7	250.00	5	500.00	-8	750.00	-16	1000.0	-16
Aroclor-1260 Peak # 3	A	10.000	**31**	25.000	6	100.00	-4	250.00	-11	500.00	**-21**				
Aroclor-1260 Peak # 4	A	10.000	10	25.000	17	100.00	10	250.00	4	500.00	-8	750.00	-16	1000.0	-17
Aroclor-1260 Peak # 5	A	10.000	1	25.000	12	100.00	12	250.00	5	500.00	-5	750.00	-14	1000.0	-12
TCMX	A	2.0000	20	5.0000	20	20.000	6	50.000	-2	100.00	-10	150.00	-16	200.00	-19
Decachlorobiphenyl	A	2.0000	13	5.0000	20	20.000	0	50.000	-10	100.00	**-22**				
Aroclor-1260 Peak # 1	B	10.000	**-430**	25.000	**-98**	100.00	10	250.00	19	500.00	10	750.00	-2	1000.0	-3
Aroclor-1260 Peak # 2	B	10.000	**23**	25.000	15	100.00	16	250.00	-2	500.00	-9	750.00	-20	1000.0	**-23**
Aroclor-1260 Peak # 3	B	10.000	**27**	25.000	19	100.00	3	250.00	-6	500.00	-19	750.00	**-24**		
Aroclor-1260 Peak # 4	B	10.000	**-403**	25.000	**-116**	100.00	9	250.00	**21**	500.00	9	750.00	-1	1000.0	-3
Aroclor-1260 Peak # 5	B	10.000	**-224**	25.000	**-111**	100.00	-5	250.00	**21**	500.00	9	750.00	-5	1000.0	-1
TCMX	B	2.0000	**33**	5.0000	16	20.000	-4	50.000	-6	100.00	-4	150.00	-14	200.00	-20
Decachlorobiphenyl	B	2.0000	**-148**	5.0000	-20	20.000	11	50.000	9	100.00	2	150.00	-7	200.00	4

PML 09/07/12 : Corrected automatically drawn baseline in all levels.

PML 09/07/12 : dropped various points and changed fit types for various peaks for better r^2 %RSD recovery

PML 09/07/12 : RTs updated in the integrated version of ICAL

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PCBS Water
EPA 8082A

Inst : GC06 Name : AR1660_250
Calnum : 202360551001 Cal Date : 06-SEP-2012

ICV 202360551016 (250_016 06-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	241.7	pg/uL	-3	20	
Aroclor-1260	B	250.0	261.4	pg/uL	5	20	

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:40:22 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.777	4.763	15870	2.000 CAL
PCB1016#1	7.003	7.004	1656	10.000 CAL
PCB1016#2	7.640	7.638	5307	10.000 CAL
PCB1016#3	7.953	7.951	2195	10.000 CAL
PCB1016#4	8.423	8.410	2172	10.000 CAL
PCB1016#5	8.950	8.937	2049	10.000 CAL
PCB1260#1	12.560	12.550	9775	10.000 CAL
PCB1260#2	13.220	13.210	6362	10.000 CAL
PCB1260#3	14.083	14.077	6188	10.000 CAL
PCB1260#4	14.827	14.820	10178	10.000 CAL
PCB1260#5	15.487	15.483	3965	10.000 CAL
Decachlorobiphenyl	18.110	18.103	19262	2.000 CAL

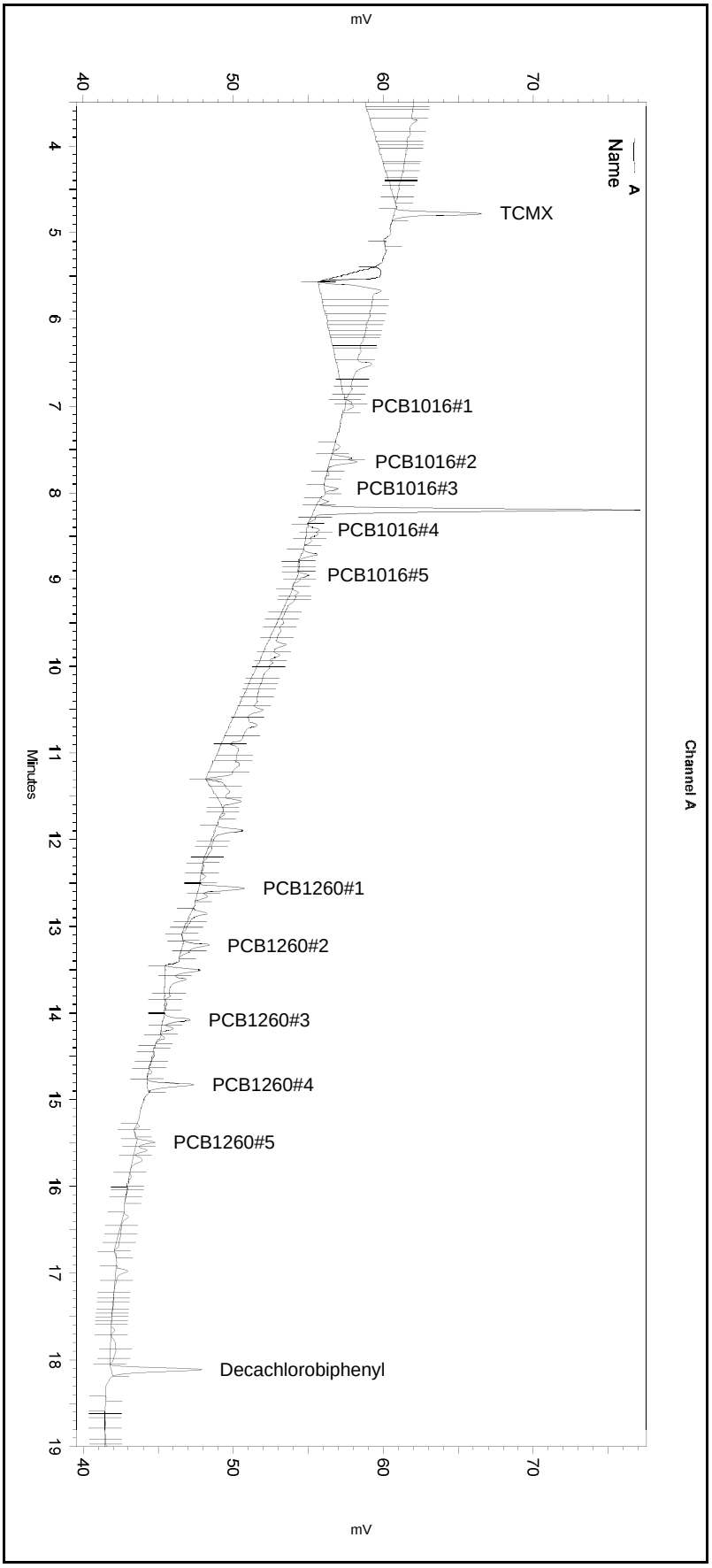
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.953	3.970	46663	2.000 CAL
PCB1016#1	5.970	5.983	5599	10.000 CAL
PCB1016#2	6.563	6.580	19739	10.000 CAL
PCB1016#3	6.790	6.803	9951	10.000 CAL
PCB1016#4	7.363	7.377	7511	10.000 CAL
PCB1016#5	7.833	7.847	6922	10.000 CAL
PCB1260#1	12.080	12.087	27293	10.000 CAL
PCB1260#2	12.487	12.497	23808	10.000 CAL
PCB1260#3	13.033	13.043	21489	10.000 CAL
PCB1260#4	13.693	13.700	49385	10.000 CAL
PCB1260#5	14.373	14.380	25959	10.000 CAL
Decachlorobiphenyl	17.387	17.390	66227	2.000 CAL

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:40:22 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

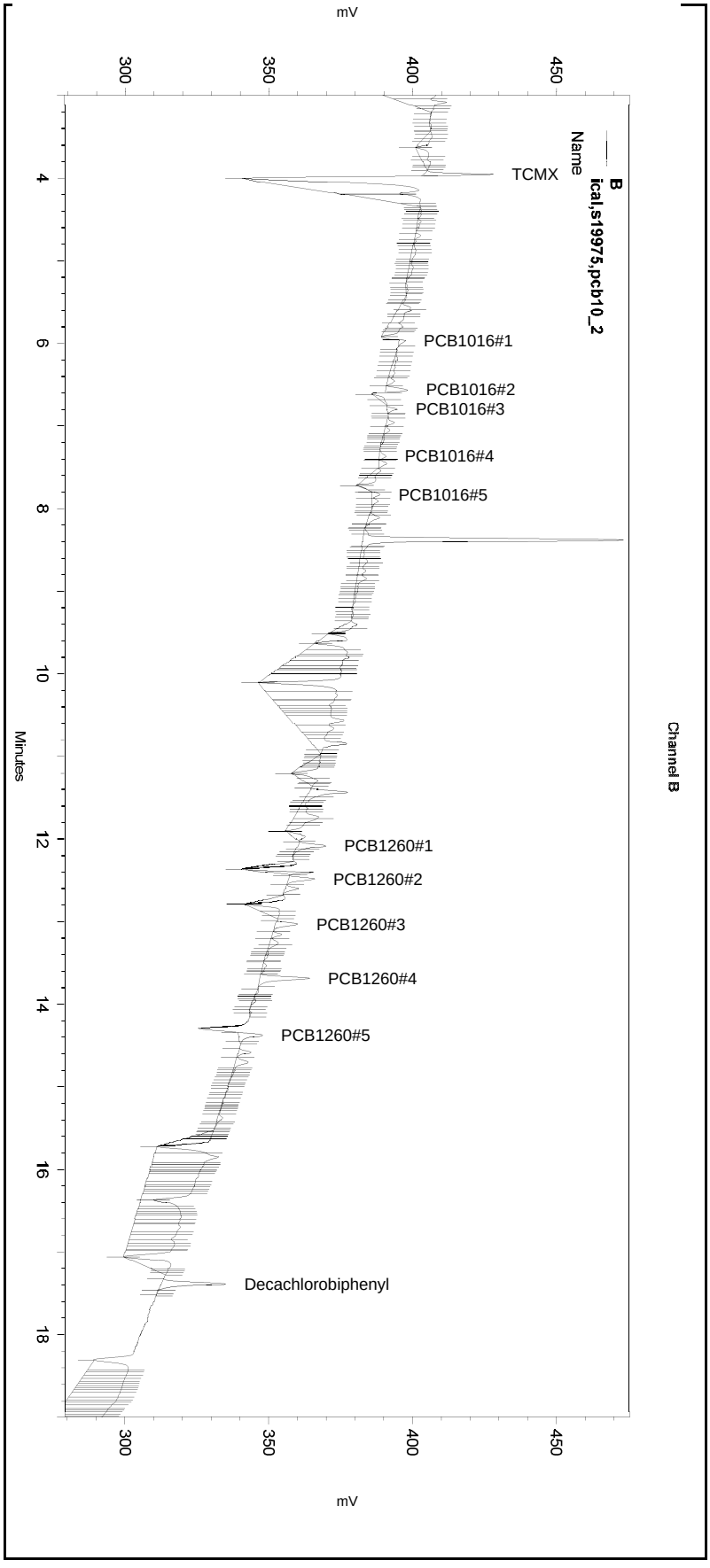
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.867	0	0
Yes	Reset Baseline	5.186	0	0
Yes	Reset Baseline	6.916	0	0
Yes	Reset Baseline	7.07	0	0
Yes	Reset Baseline	7.853	0	0
Yes	Reset Baseline	8.008	0	0
Yes	Reset Baseline	8.609	0	0
Yes	Reset Baseline	8.905	0	0
Yes	Reset Baseline	9.098	0	0
Yes	Reset Baseline	12.489	0	0
Yes	Reset Baseline	12.722	0	0
Yes	Reset Baseline	13.165	0	0
Yes	Reset Baseline	13.384	0	0
Yes	Reset Baseline	13.962	0	0
Yes	Reset Baseline	14.243	0	0
Yes	Reset Baseline	14.909	0	0
Yes	Reset Baseline	15.436	0	0
Yes	Reset Baseline	18.184	0	0

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:40:22 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.904	0	0
Yes	Move BL Stop	4	3.972	0
Yes	Move BL Start	5.92	5.953	0
Yes	Reset Baseline	6.03	0	0
Yes	Reset Baseline	6.591	0	0
Yes	Reset Baseline	6.746	0	0
Yes	Reset Baseline	7.418	0	0
Yes	Reset Baseline	7.788	0	0
Yes	Reset Baseline	7.976	0	0
Yes	Reset Baseline	12.033	0	0
Yes	Split Peak	12.119	0	0
Yes	Reset Baseline	12.26	0	0
Yes	Reset Baseline	12.437	0	0
Yes	Reset Baseline	12.675	0	0
Yes	Reset Baseline	12.974	0	0
Yes	Reset Baseline	13.786	0	0
Yes	Reset Baseline	14.16	0	0
Yes	Reset Baseline	14.341	0	0
Yes	Reset Baseline	14.473	0	0
Yes	Reset Baseline	17.273	0	0
Yes	Reset Baseline	17.548	0	0

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:08:07 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.777	4.763	20301	2.000 CAL
PCB1016#1	7.003	6.990	27824	10.000 CAL
PCB1016#2	7.640	7.627	33882	10.000 CAL
PCB1016#3	7.953	7.940	37352	10.000 CAL
PCB1016#4	8.423	8.410	17751	10.000 CAL
PCB1016#5	8.950	8.937	18533	10.000 CAL
PCB1260#1		12.530		0.000 BDL
PCB1260#2	13.220	13.210	11480	10.000 CAL
PCB1260#3	14.083	14.077	10620	10.000 CAL
PCB1260#4	14.827	14.820	13726	10.000 CAL
PCB1260#5	15.487	15.483	5885	10.000 CAL
Decachlorobiphenyl	18.110	18.103	22262	2.000 CAL

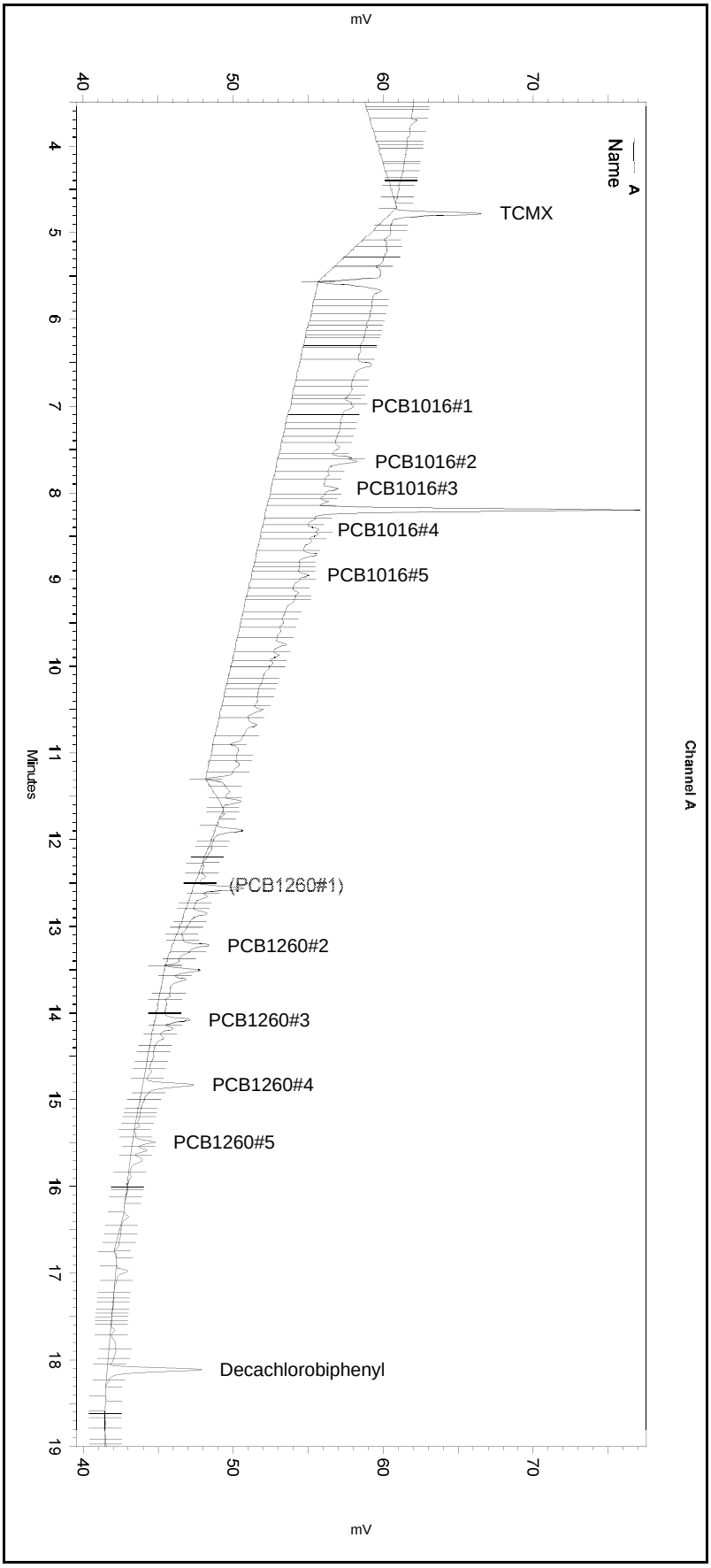
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.953	3.970	331451	2.000 CAL
PCB1016#1	5.970	5.983	38614	10.000 CAL
PCB1016#2	6.563	6.580	43604	10.000 CAL
PCB1016#3	6.790	6.803	18453	10.000 CAL
PCB1016#4	7.363	7.377	15266	10.000 CAL
PCB1016#5	7.833	7.847	28121	10.000 CAL
PCB1260#1	12.080	12.087	132212	10.000 CAL
PCB1260#2	12.487	12.497	135326	10.000 CAL
PCB1260#3	13.033	13.043	161807	10.000 CAL
PCB1260#4	13.693	13.700	217595	10.000 CAL
PCB1260#5	14.373	14.380	104386	10.000 CAL
Decachlorobiphenyl	17.387	17.390	273733	2.000 CAL

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:08:07 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

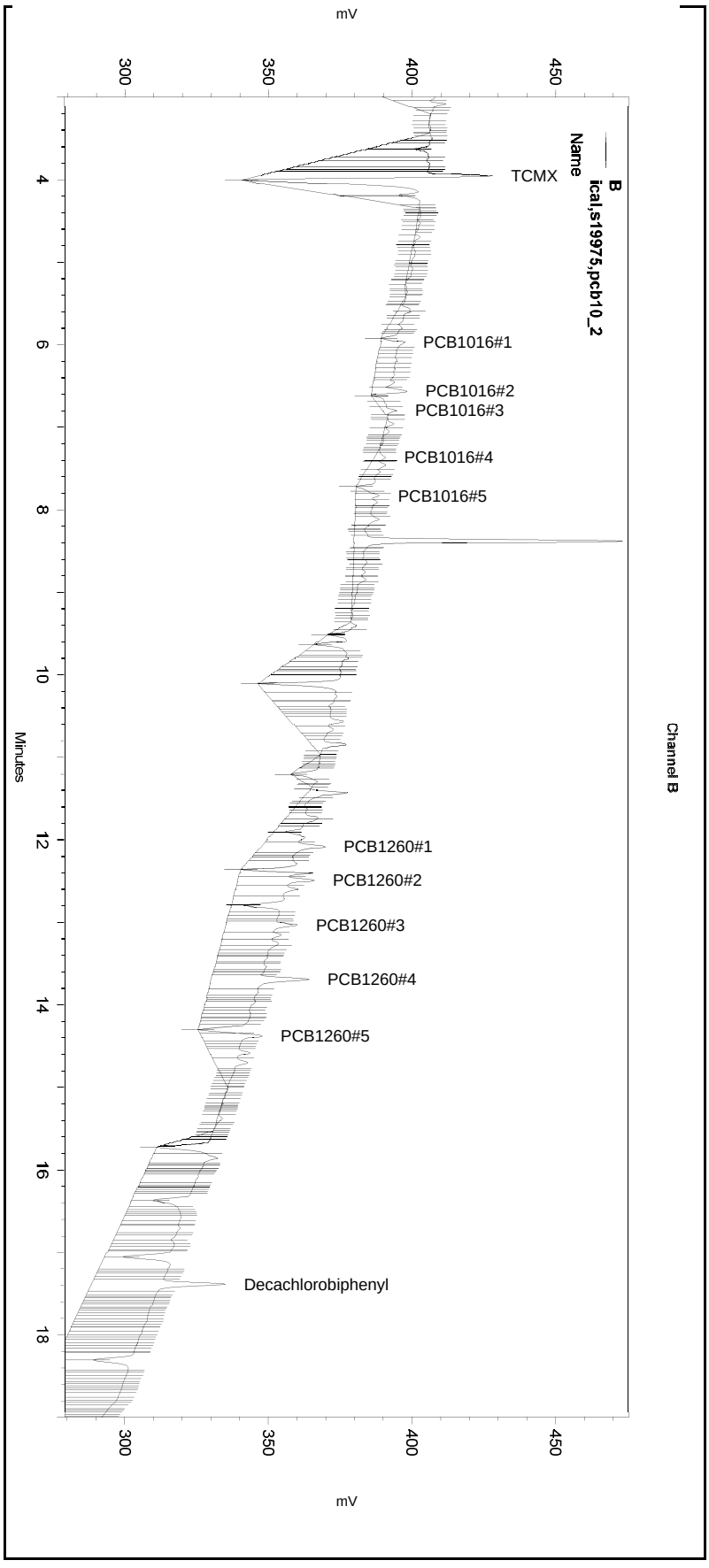
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19975,pcb10_2**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 8 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:49:09 PM
Analysis Date: 9/7/2012 8:08:07 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:40:27 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.787	4.763	39595	5.000 CAL
PCB1016#1	7.017	7.004	3772	25.000 CAL
PCB1016#2	7.650	7.638	12921	25.000 CAL
PCB1016#3	7.963	7.951	6905	25.000 CAL
PCB1016#4	8.433	8.410	4228	25.000 CAL
PCB1016#5	8.960	8.937	5829	25.000 CAL
PCB1260#1	12.570	12.550	21675	25.000 CAL
PCB1260#2	13.230	13.210	16132	25.000 CAL
PCB1260#3	14.093	14.077	12506	25.000 CAL
PCB1260#4	14.837	14.820	27123	25.000 CAL
PCB1260#5	15.500	15.483	10963	25.000 CAL
Decachlorobiphenyl	18.123	18.103	51178	5.000 CAL

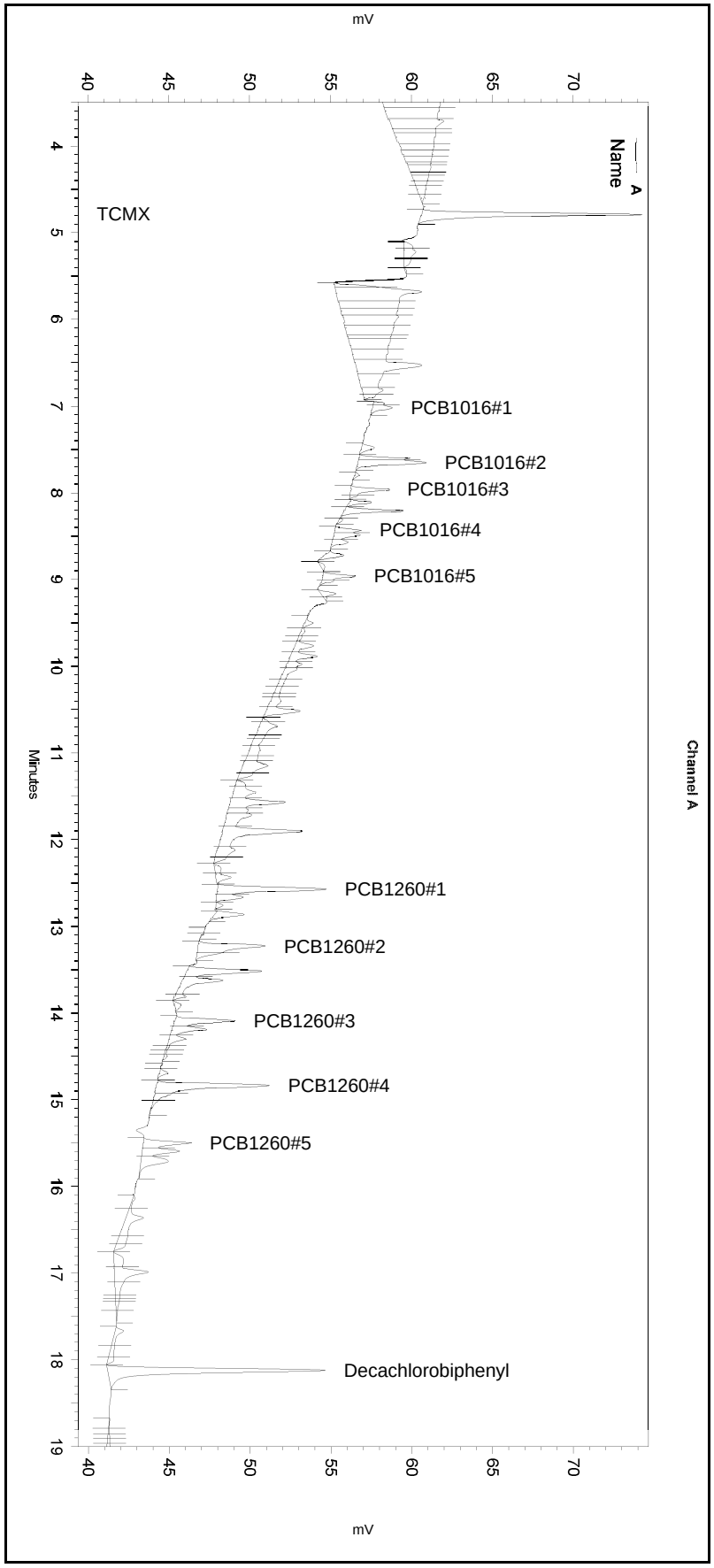
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.970	102216	5.000 CAL
PCB1016#1	5.990	5.983	9272	25.000 CAL
PCB1016#2	6.577	6.580	56063	25.000 CAL
PCB1016#3	6.800	6.803	21302	25.000 CAL
PCB1016#4	7.373	7.377	13052	25.000 CAL
PCB1016#5	7.843	7.847	17168	25.000 CAL
PCB1260#1	12.090	12.087	82531	25.000 CAL
PCB1260#2	12.497	12.497	55771	25.000 CAL
PCB1260#3	13.043	13.043	50285	25.000 CAL
PCB1260#4	13.703	13.700	117444	25.000 CAL
PCB1260#5	14.387	14.380	38667	25.000 CAL
Decachlorobiphenyl	17.397	17.390	165331	5.000 CAL

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:40:27 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

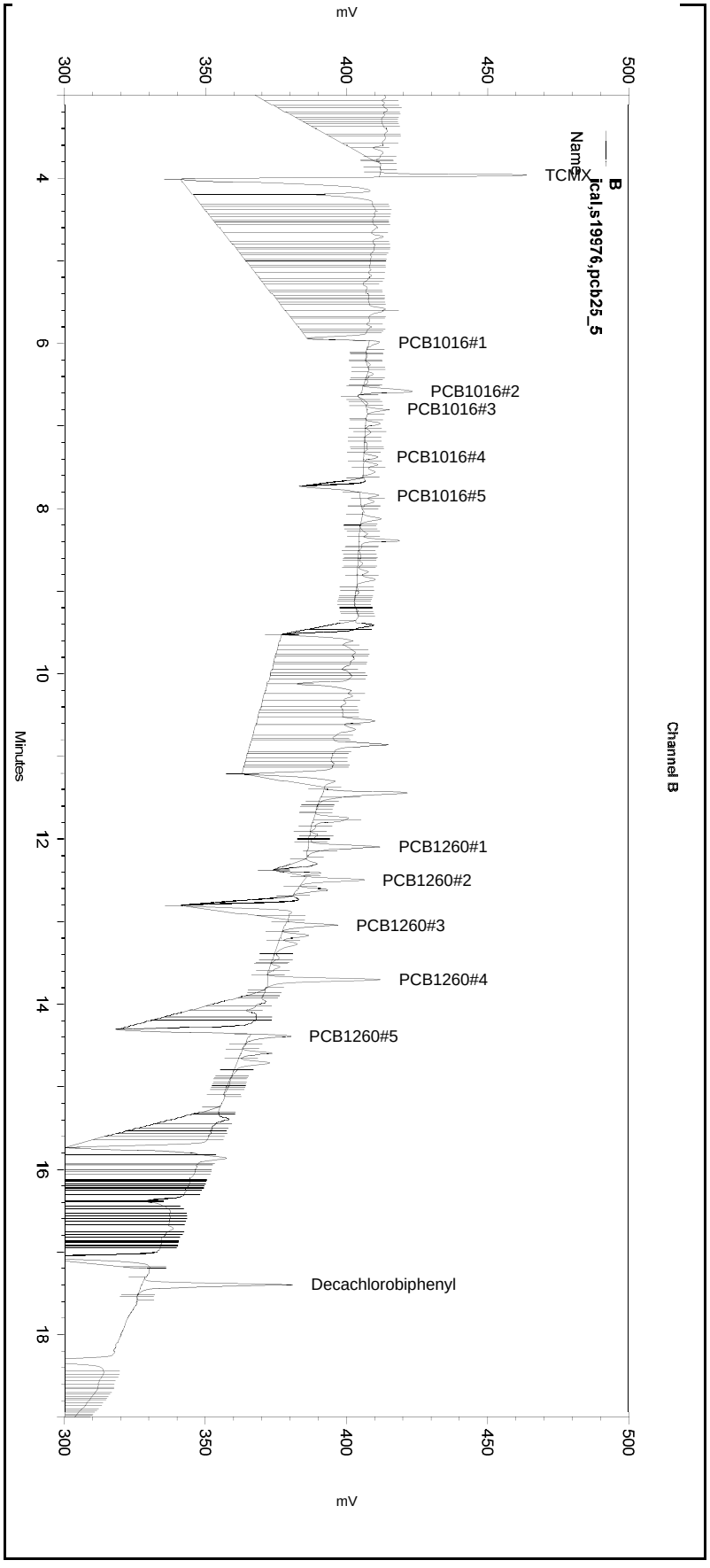
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.895	0	0
Yes	Reset Baseline	6.921	0	0
Yes	Reset Baseline	6.94	0	0
Yes	Reset Baseline	7.118	0	0
Yes	Reset Baseline	7.739	0	0
Yes	Reset Baseline	8.071	0	0
Yes	Reset Baseline	8.648	0	0
Yes	Reset Baseline	8.906	0	0
Yes	Reset Baseline	9.062	0	0
Yes	Reset Baseline	12.509	0	0
Yes	Reset Baseline	12.815	0	0
Yes	Reset Baseline	13.156	0	0
Yes	Reset Baseline	13.397	0	0
Yes	Reset Baseline	14.018	0	0
Yes	Reset Baseline	15.208	0	0
Yes	Reset Baseline	15.424	0	0
Yes	Reset Baseline	15.907	0	0
Yes	Reset Baseline	18.347	0	0

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:40:27 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.906	0	0
Yes	Reset Baseline	3.918	0	0
Yes	Move BL Stop	4.01	3.987	0
Yes	Move BL Start	5.933	5.972	0
Yes	Reset Baseline	6.072	0	0
Yes	Reset Baseline	6.62	0	0
Yes	Reset Baseline	6.746	0	0
Yes	Reset Baseline	6.857	0	0
Yes	Reset Baseline	7.619	0	0
Yes	Reset Baseline	7.804	0	0
Yes	Reset Baseline	8.015	0	0
Yes	Reset Baseline	12.217	0	0
Yes	Reset Baseline	12.456	0	0
Yes	Reset Baseline	12.683	0	0
Yes	Reset Baseline	12.694	0	0
Yes	Reset Baseline	12.975	0	0
Yes	Reset Baseline	13.793	0	0
Yes	Move BL Start	14.313	14.362	0
Yes	Reset Baseline	14.539	0	0
Yes	Reset Baseline	17.577	0	0

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:08:12 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.787	4.763	42143	5.000 CAL
PCB1016#1	6.967	6.990	11253	25.000 CAL
PCB1016#2	7.607	7.627	16378	25.000 CAL
PCB1016#3	7.963	7.940	24358	25.000 CAL
PCB1016#4	8.433	8.410	8733	25.000 CAL
PCB1016#5	8.960	8.937	7767	25.000 CAL
PCB1260#1		12.530		0.000 BDL
PCB1260#2	13.230	13.210	21006	25.000 CAL
PCB1260#3	14.093	14.077	17267	25.000 CAL
PCB1260#4	14.837	14.820	31800	25.000 CAL
PCB1260#5	15.500	15.483	15485	25.000 CAL
Decachlorobiphenyl	18.123	18.103	54704	5.000 CAL

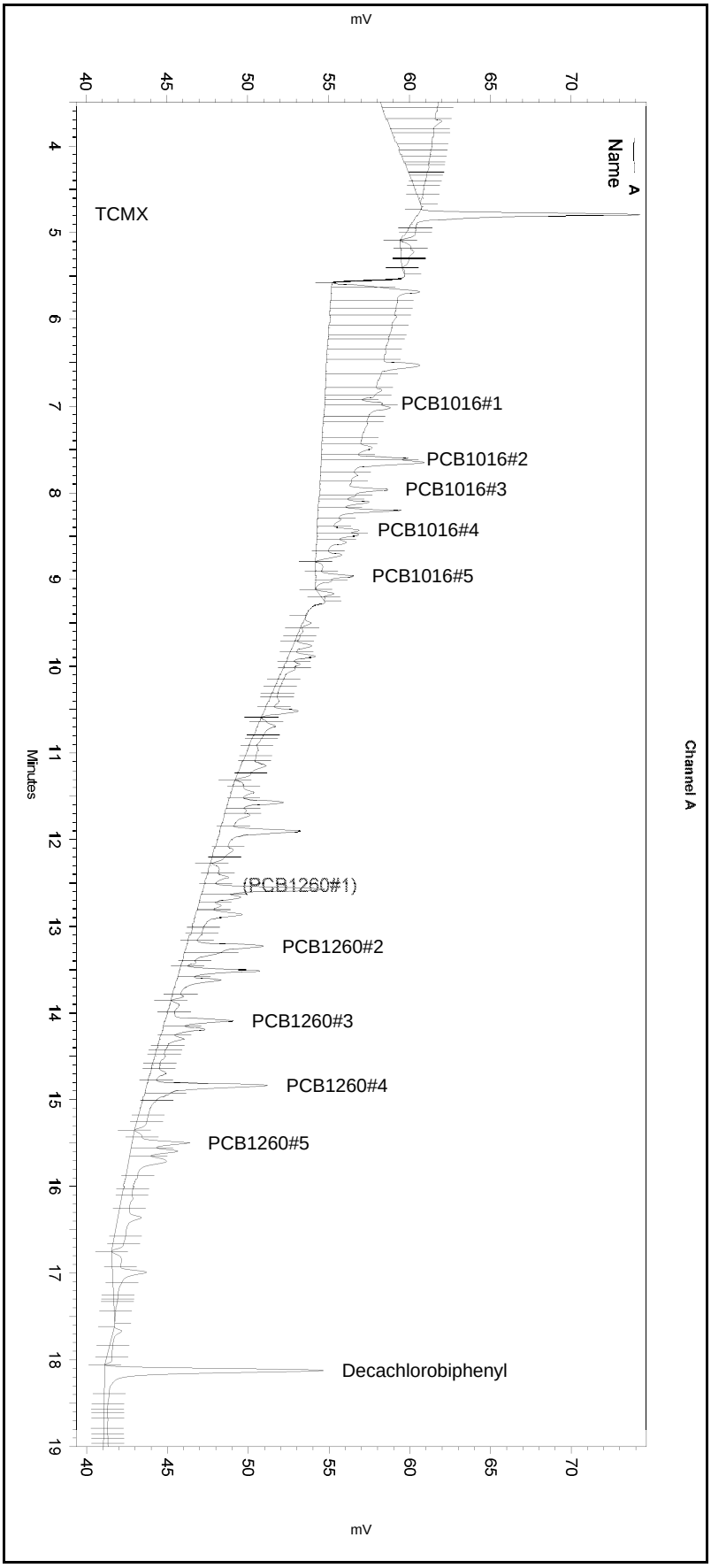
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.970	299430	5.000 CAL
PCB1016#1	5.990	5.983	127203	25.000 CAL
PCB1016#2	6.577	6.580	70837	25.000 CAL
PCB1016#3	6.800	6.803	79155	25.000 CAL
PCB1016#4	7.373	7.377	112142	25.000 CAL
PCB1016#5	7.843	7.847	102914	25.000 CAL
PCB1260#1	12.090	12.087	187843	25.000 CAL
PCB1260#2	12.497	12.497	279229	25.000 CAL
PCB1260#3	13.043	13.043	376067	25.000 CAL
PCB1260#4	13.703	13.700	520050	25.000 CAL
PCB1260#5	14.387	14.380	395564	25.000 CAL
Decachlorobiphenyl	17.397	17.390	214959	5.000 CAL

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:08:12 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

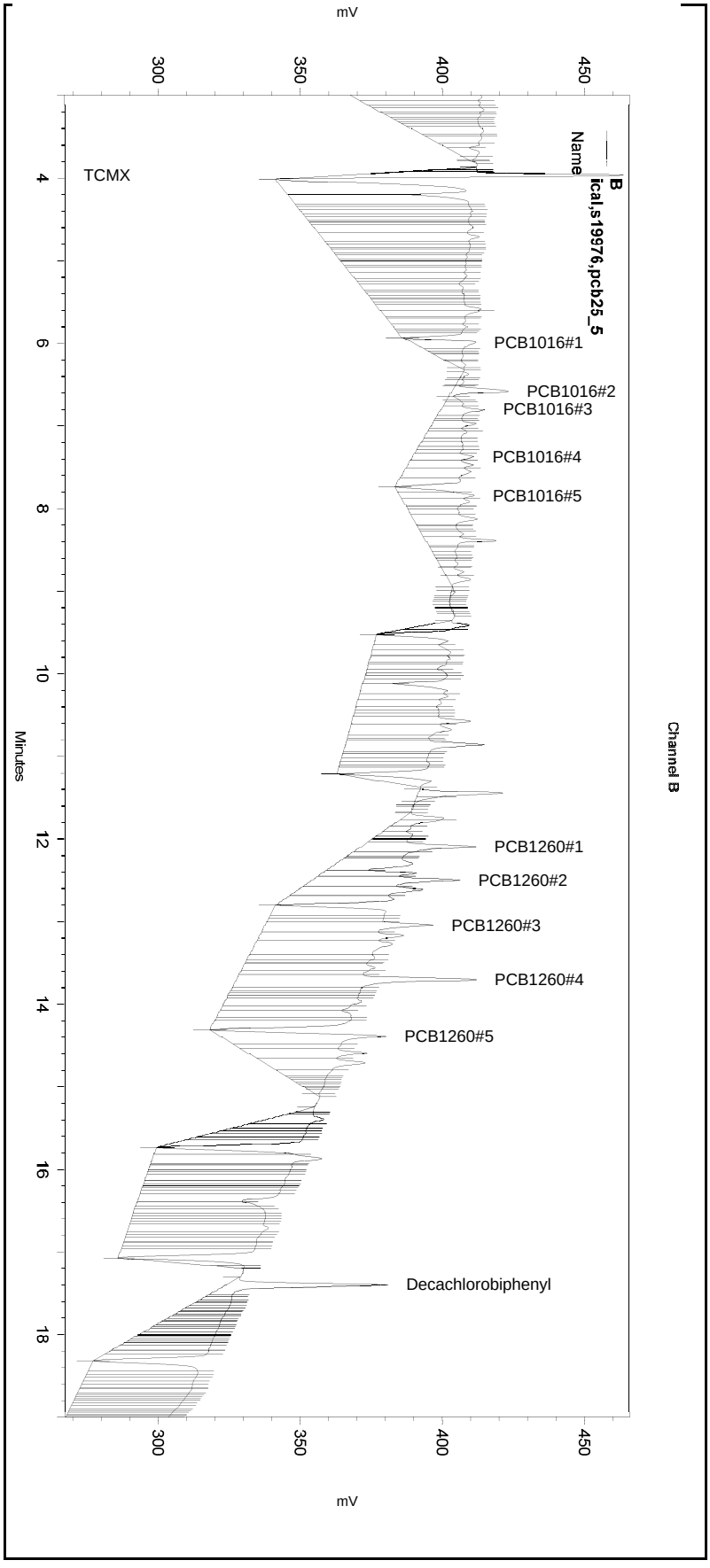
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19976,pcb25_5**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 9 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:53 PM
Analysis Date: 9/7/2012 8:08:12 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:40:33 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	140440	20.000 CAL
PCB1016#1	6.990	7.004	14405	100.000 CAL
PCB1016#2	7.627	7.638	45883	100.000 CAL
PCB1016#3	7.940	7.951	24460	100.000 CAL
PCB1016#4	8.410	8.410	14798	100.000 CAL
PCB1016#5	8.937	8.937	21394	100.000 CAL
PCB1260#1	12.550	12.550	80957	100.000 CAL
PCB1260#2	13.210	13.210	60517	100.000 CAL
PCB1260#3	14.077	14.077	45197	100.000 CAL
PCB1260#4	14.820	14.820	102306	100.000 CAL
PCB1260#5	15.480	15.483	43893	100.000 CAL
Decachlorobiphenyl	18.103	18.103	170938	20.000 CAL

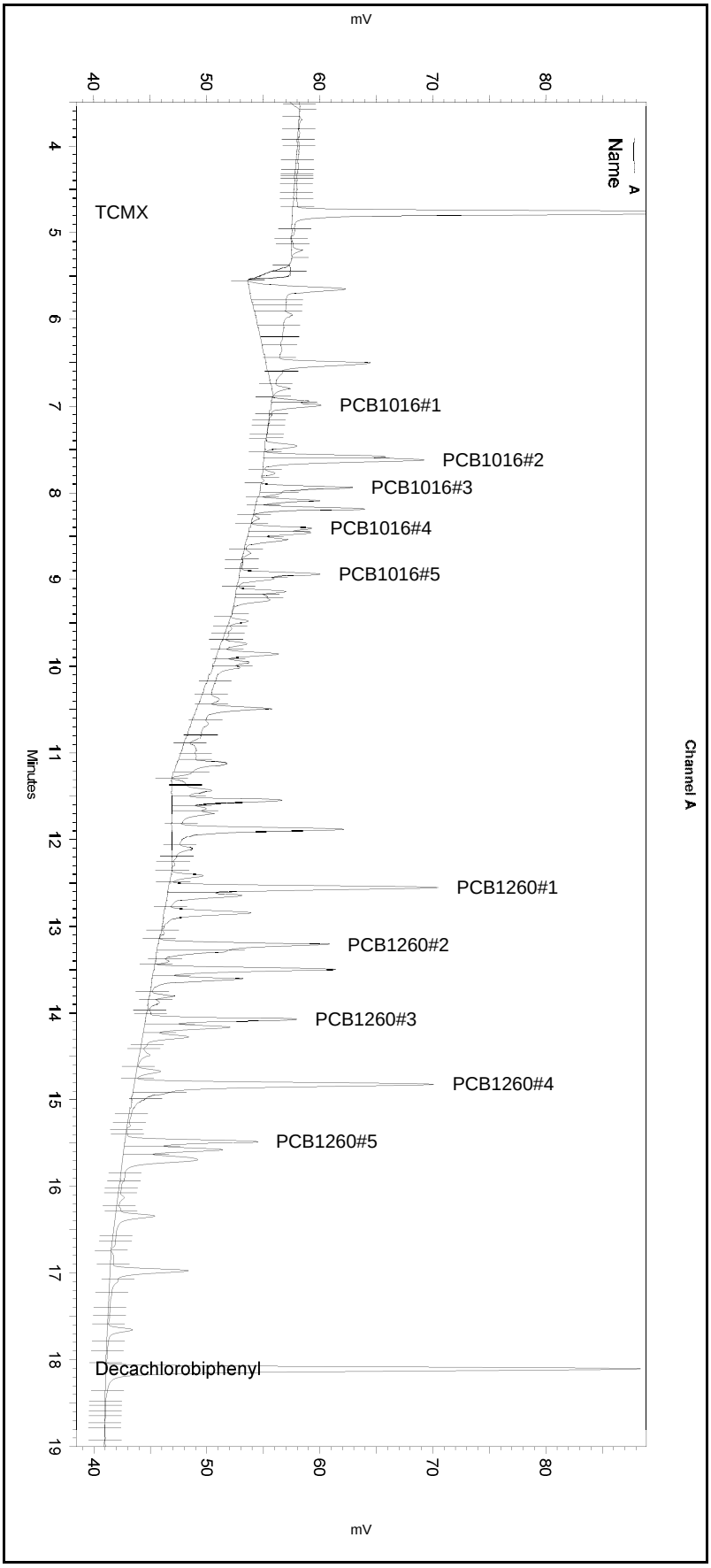
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	336272	20.000 CAL
PCB1016#1	5.983	5.983	74765	100.000 CAL
PCB1016#2	6.580	6.580	203994	100.000 CAL
PCB1016#3	6.800	6.803	80681	100.000 CAL
PCB1016#4	7.373	7.377	44204	100.000 CAL
PCB1016#5	7.843	7.847	57333	100.000 CAL
PCB1260#1	12.087	12.087	264593	100.000 CAL
PCB1260#2	12.493	12.497	224117	100.000 CAL
PCB1260#3	13.040	13.043	173068	100.000 CAL
PCB1260#4	13.697	13.700	409823	100.000 CAL
PCB1260#5	14.380	14.380	166353	100.000 CAL
Decachlorobiphenyl	17.390	17.390	515630	20.000 CAL

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:40:33 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

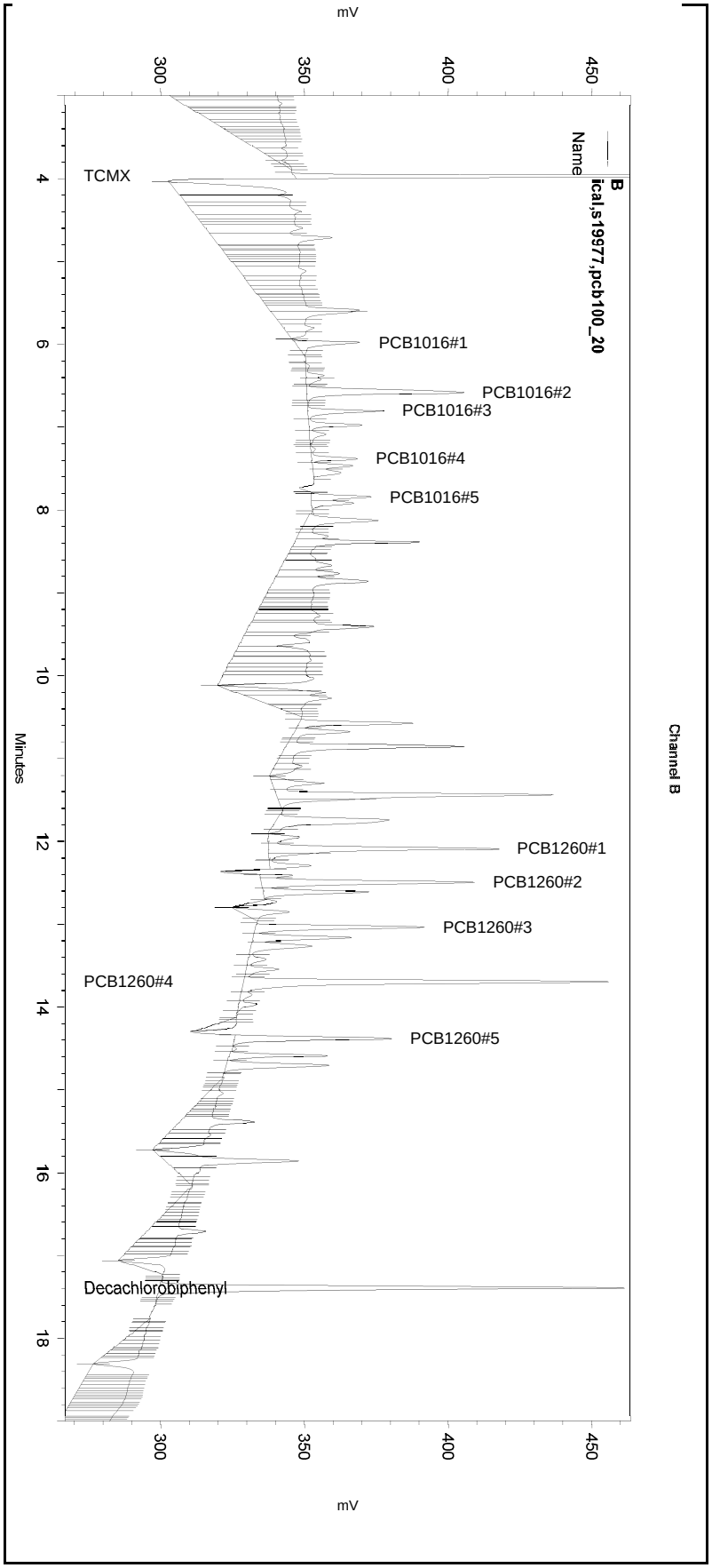
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.276	0	0
Yes	Reset Baseline	6.874	0	0
Yes	Reset Baseline	7.846	0	0
Yes	Reset Baseline	12.344	0	0

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:40:33 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.893	0	0
Yes	Move BL Stop	4.023	4.001	0
Yes	Reset Baseline	5.929	0	0
Yes	Reset Baseline	6.163	0	0
Yes	Reset Baseline	7.647	0	0
Yes	Reset Baseline	7.791	0	0
Yes	Reset Baseline	8.003	0	0
Yes	Reset Baseline	12.333	0	0
Yes	Reset Baseline	12.39	0	0
Yes	Reset Baseline	12.697	0	0
Yes	Reset Baseline	12.957	0	0
Yes	Reset Baseline	14.093	0	0
Yes	Reset Baseline	14.337	0	0
Yes	Reset Baseline	14.835	0	0
Yes	Reset Baseline	17.227	0	0
Yes	Reset Baseline	17.606	0	0

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:08:18 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	175447	20.000 CAL
PCB1016#1	6.990	6.990	33903	100.000 CAL
PCB1016#2	7.627	7.627	62706	100.000 CAL
PCB1016#3	7.940	7.940	37117	100.000 CAL
PCB1016#4	8.410	8.410	20995	100.000 CAL
PCB1016#5	8.937	8.937	24267	100.000 CAL
PCB1260#1	12.550	12.530	88729	100.000 CAL
PCB1260#2	13.210	13.210	66527	100.000 CAL
PCB1260#3	14.077	14.077	48421	100.000 CAL
PCB1260#4	14.820	14.820	104070	100.000 CAL
PCB1260#5	15.480	15.483	43893	100.000 CAL
Decachlorobiphenyl	18.103	18.103	170938	20.000 CAL

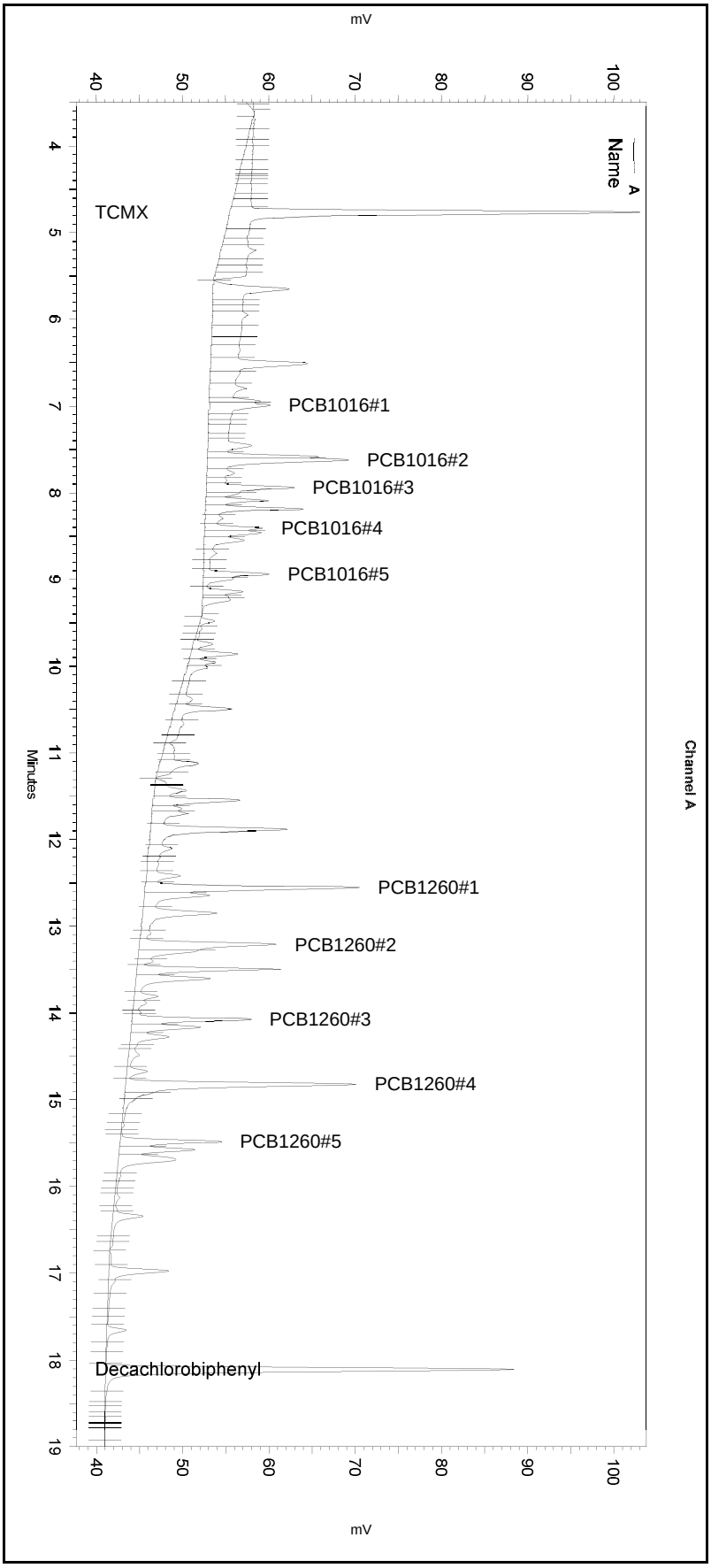
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	731652	20.000 CAL
PCB1016#1	5.983	5.983	557592	100.000 CAL
PCB1016#2	6.580	6.580	760646	100.000 CAL
PCB1016#3	6.800	6.803	604729	100.000 CAL
PCB1016#4	7.373	7.377	431950	100.000 CAL
PCB1016#5	7.843	7.847	335764	100.000 CAL
PCB1260#1	12.087	12.087	324866	100.000 CAL
PCB1260#2	12.493	12.497	334746	100.000 CAL
PCB1260#3	13.040	13.043	312711	100.000 CAL
PCB1260#4	13.697	13.700	604107	100.000 CAL
PCB1260#5	14.380	14.380	334172	100.000 CAL
Decachlorobiphenyl	17.390	17.390	733493	20.000 CAL

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:08:18 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

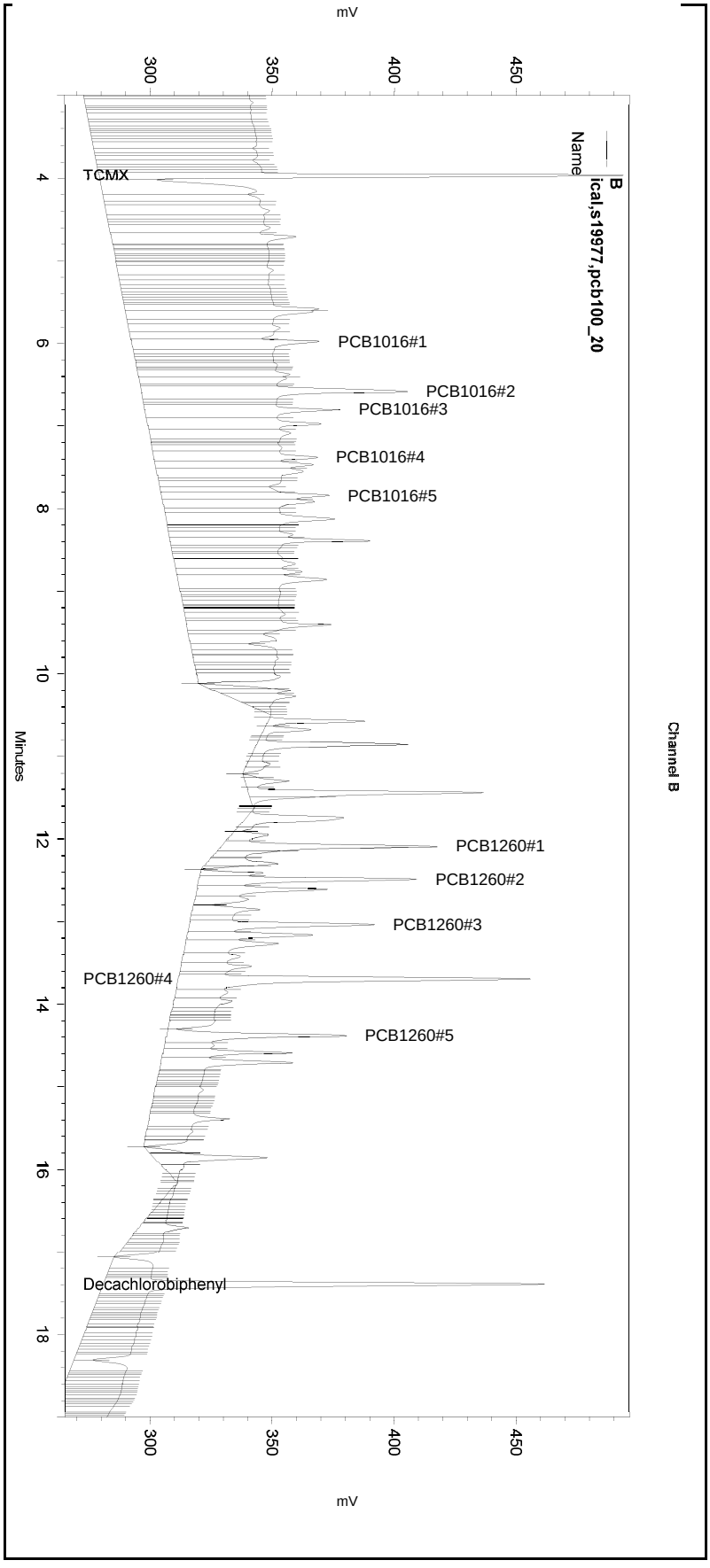
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 10 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:21:33 PM
Analysis Date: 9/7/2012 8:08:18 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:47:45 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	325280	50.000 CAL
PCB1016#1	6.990	7.004	32977	250.000 CAL
PCB1016#2	7.627	7.638	109472	250.000 CAL
PCB1016#3	7.940	7.951	62920	250.000 CAL
PCB1016#4	8.410	8.410	36376	250.000 CAL
PCB1016#5	8.937	8.937	51336	250.000 CAL
PCB1260#1	12.550	12.550	183250	250.000 CAL
PCB1260#2	13.210	13.210	147817	250.000 CAL
PCB1260#3	14.077	14.077	104832	250.000 CAL
PCB1260#4	14.820	14.820	241192	250.000 CAL
PCB1260#5	15.483	15.483	102689	250.000 CAL
Decachlorobiphenyl	18.103	18.103	385340	50.000 CAL

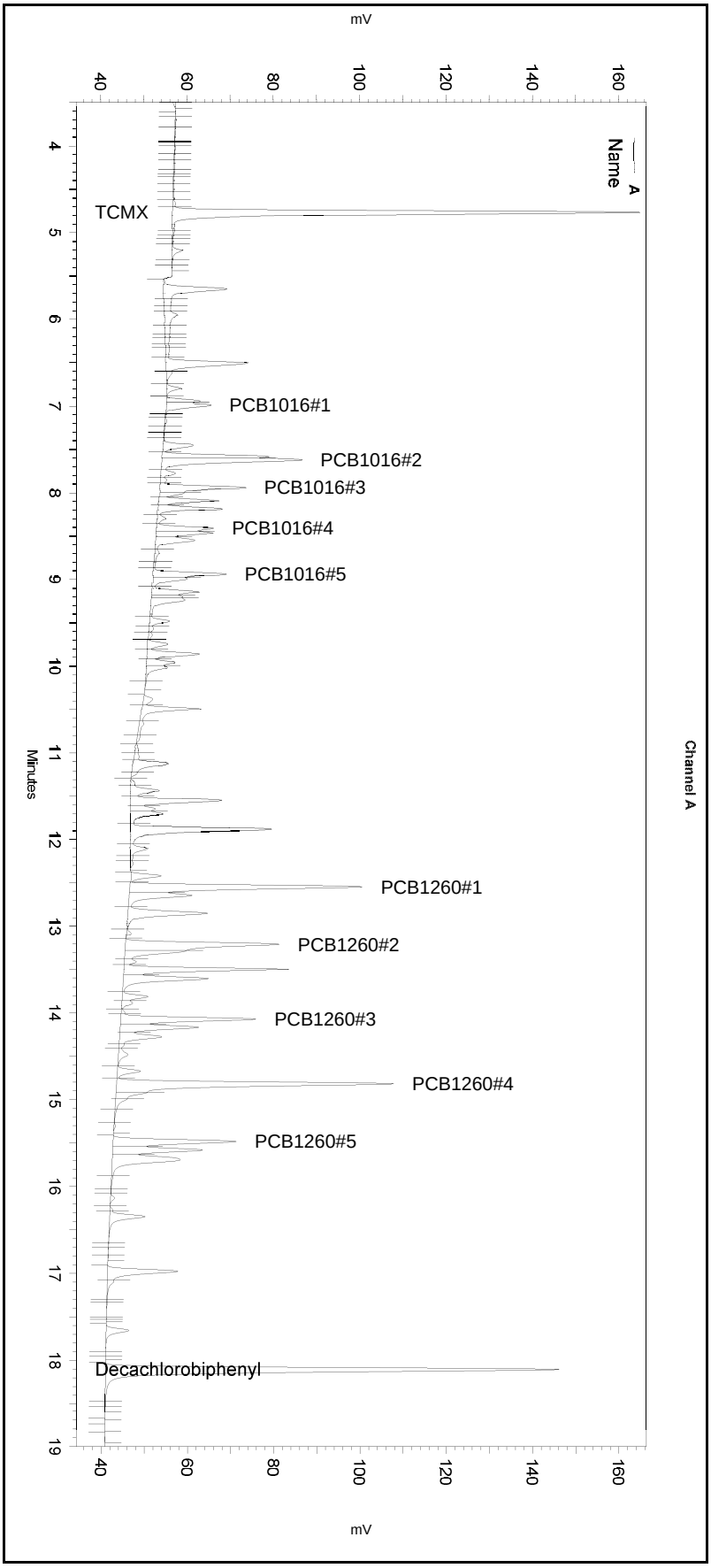
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	827591	50.000 CAL
PCB1016#1	5.983	5.983	137565	250.000 CAL
PCB1016#2	6.580	6.580	473753	250.000 CAL
PCB1016#3	6.803	6.803	196752	250.000 CAL
PCB1016#4	7.377	7.377	114094	250.000 CAL
PCB1016#5	7.847	7.847	134490	250.000 CAL
PCB1260#1	12.087	12.087	575982	250.000 CAL
PCB1260#2	12.497	12.497	475460	250.000 CAL
PCB1260#3	13.043	13.043	396095	250.000 CAL
PCB1260#4	13.700	13.700	907509	250.000 CAL
PCB1260#5	14.380	14.380	436868	250.000 CAL
Decachlorobiphenyl	17.390	17.390	1095183	50.000 CAL

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:47:45 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

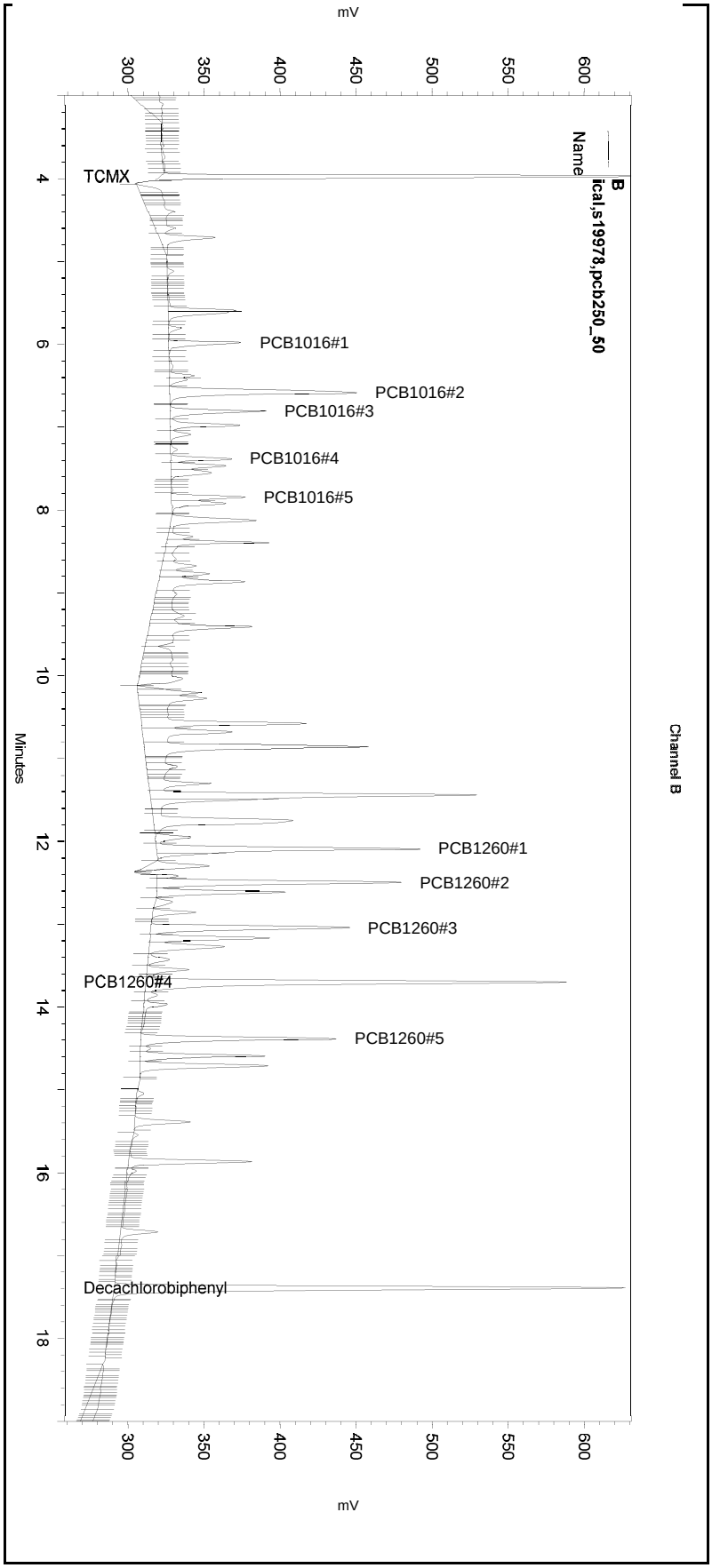
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.873	0	0
Yes	Reset Baseline	12.362	0	0

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:47:45 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.92	0	0
Yes	Reset Baseline	4.023	0	0
Yes	Reset Baseline	8.05	0	0
Yes	Reset Baseline	12.23	0	0
Yes	Manual Baseline	12.395	12.685	0
Yes	Reset Baseline	12.438	0	0

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:08:25 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.763	4.763	325280	50.000 CAL
PCB1016#1	6.990	6.990	48771	250.000 CAL
PCB1016#2	7.627	7.627	121864	250.000 CAL
PCB1016#3	7.940	7.940	72006	250.000 CAL
PCB1016#4	8.410	8.410	42092	250.000 CAL
PCB1016#5	8.937	8.937	56600	250.000 CAL
PCB1260#1	12.550	12.530	191375	250.000 CAL
PCB1260#2	13.210	13.210	153439	250.000 CAL
PCB1260#3	14.077	14.077	107747	250.000 CAL
PCB1260#4	14.820	14.820	242864	250.000 CAL
PCB1260#5	15.483	15.483	102689	250.000 CAL
Decachlorobiphenyl	18.103	18.103	385340	50.000 CAL

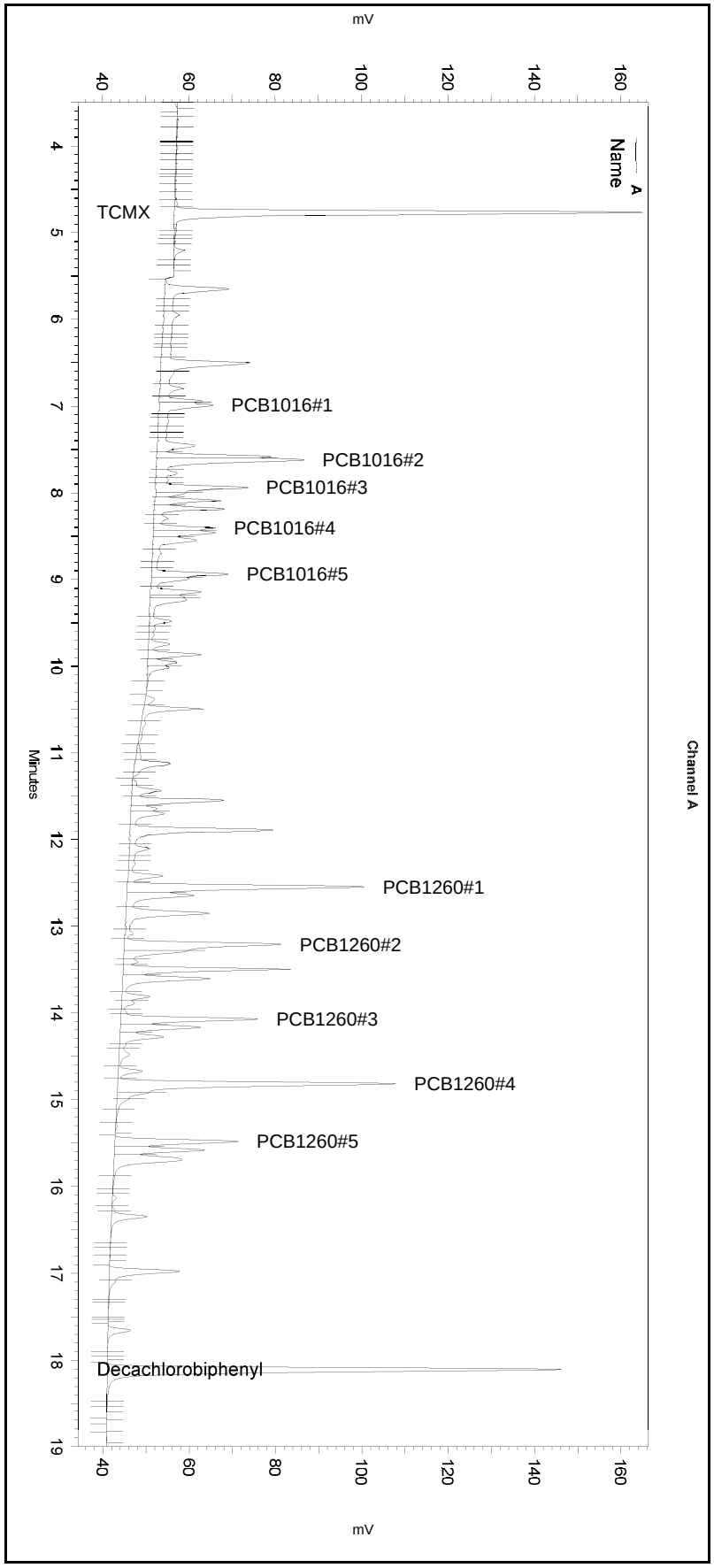
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	922308	50.000 CAL
PCB1016#1	5.983	5.983	182309	250.000 CAL
PCB1016#2	6.580	6.580	573838	250.000 CAL
PCB1016#3	6.803	6.803	287939	250.000 CAL
PCB1016#4	7.377	7.377	193495	250.000 CAL
PCB1016#5	7.847	7.847	221298	250.000 CAL
PCB1260#1	12.087	12.087	680465	250.000 CAL
PCB1260#2	12.497	12.497	579033	250.000 CAL
PCB1260#3	13.043	13.043	484635	250.000 CAL
PCB1260#4	13.700	13.700	964210	250.000 CAL
PCB1260#5	14.380	14.380	449722	250.000 CAL
Decachlorobiphenyl	17.390	17.390	1095183	50.000 CAL

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:08:25 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

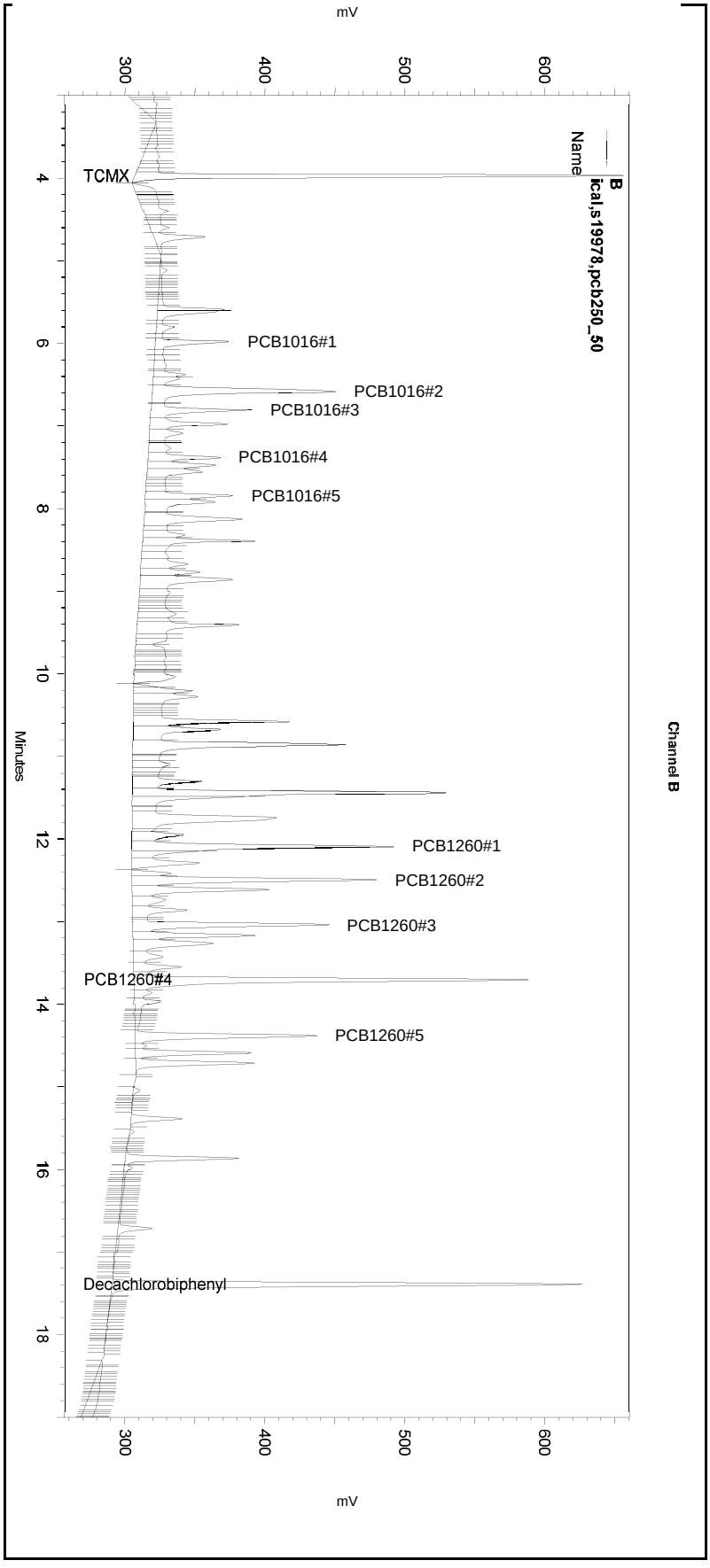
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:49:03 PM
Analysis Date: 9/7/2012 8:08:25 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:43:10 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	596169	100.000 CAL
PCB1016#1	6.997	7.004	66250	500.000 CAL
PCB1016#2	7.630	7.638	192643	500.000 CAL
PCB1016#3	7.947	7.951	111882	500.000 CAL
PCB1016#4	8.417	8.410	60139	500.000 CAL
PCB1016#5	8.943	8.937	87966	500.000 CAL
PCB1260#1	12.553	12.550	321448	500.000 CAL
PCB1260#2	13.213	13.210	259709	500.000 CAL
PCB1260#3	14.080	14.077	186170	500.000 CAL
PCB1260#4	14.823	14.820	429866	500.000 CAL
PCB1260#5	15.487	15.483	185707	500.000 CAL
Decachlorobiphenyl	18.107	18.103	664993	100.000 CAL

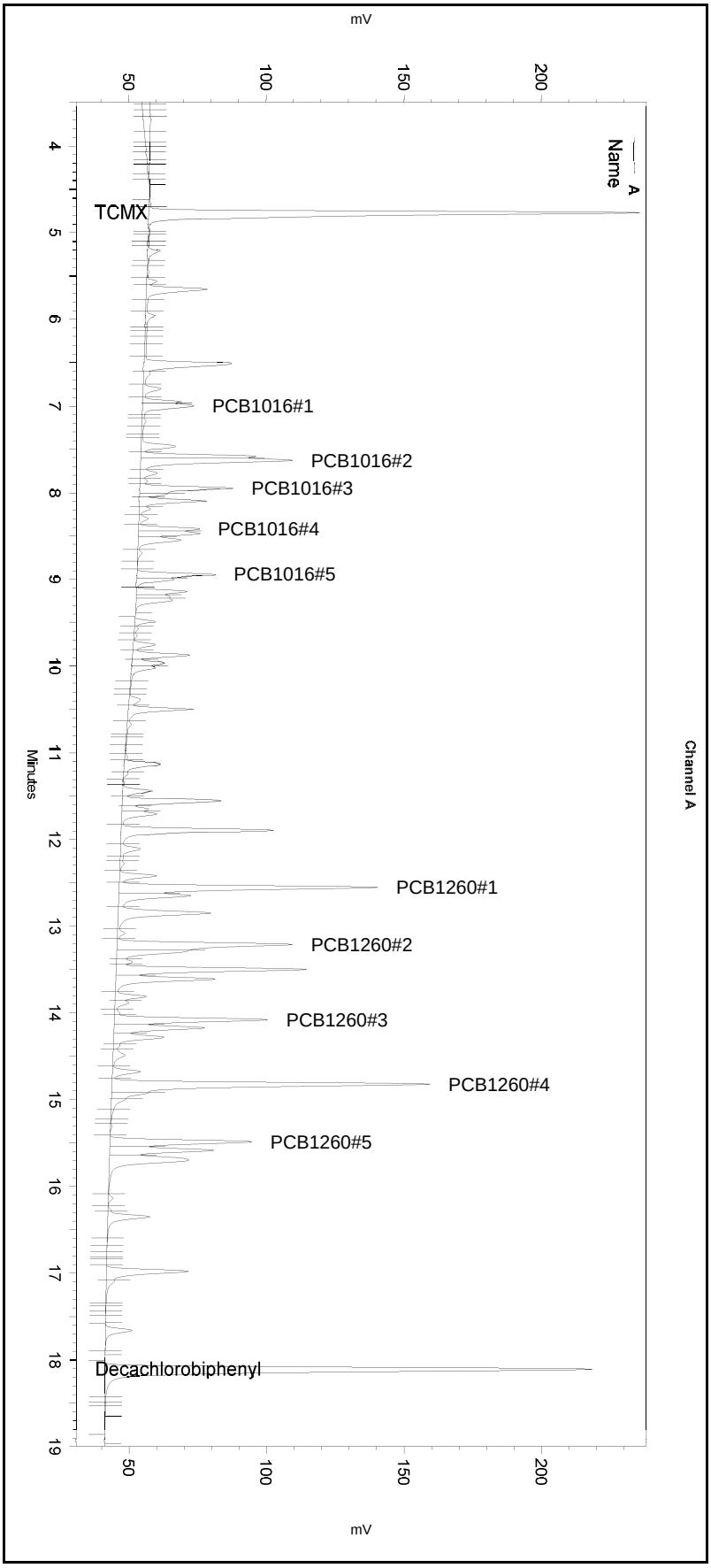
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.973	3.970	1690248	100.000 CAL
PCB1016#1	5.993	5.983	263242	500.000 CAL
PCB1016#2	6.587	6.580	832006	500.000 CAL
PCB1016#3	6.810	6.803	356144	500.000 CAL
PCB1016#4	7.383	7.377	205998	500.000 CAL
PCB1016#5	7.853	7.847	237285	500.000 CAL
PCB1260#1	12.090	12.087	990522	500.000 CAL
PCB1260#2	12.500	12.497	877326	500.000 CAL
PCB1260#3	13.047	13.043	681996	500.000 CAL
PCB1260#4	13.703	13.700	1540112	500.000 CAL
PCB1260#5	14.383	14.380	757230	500.000 CAL
Decachlorobiphenyl	17.393	17.390	1819990	100.000 CAL

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:43:10 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

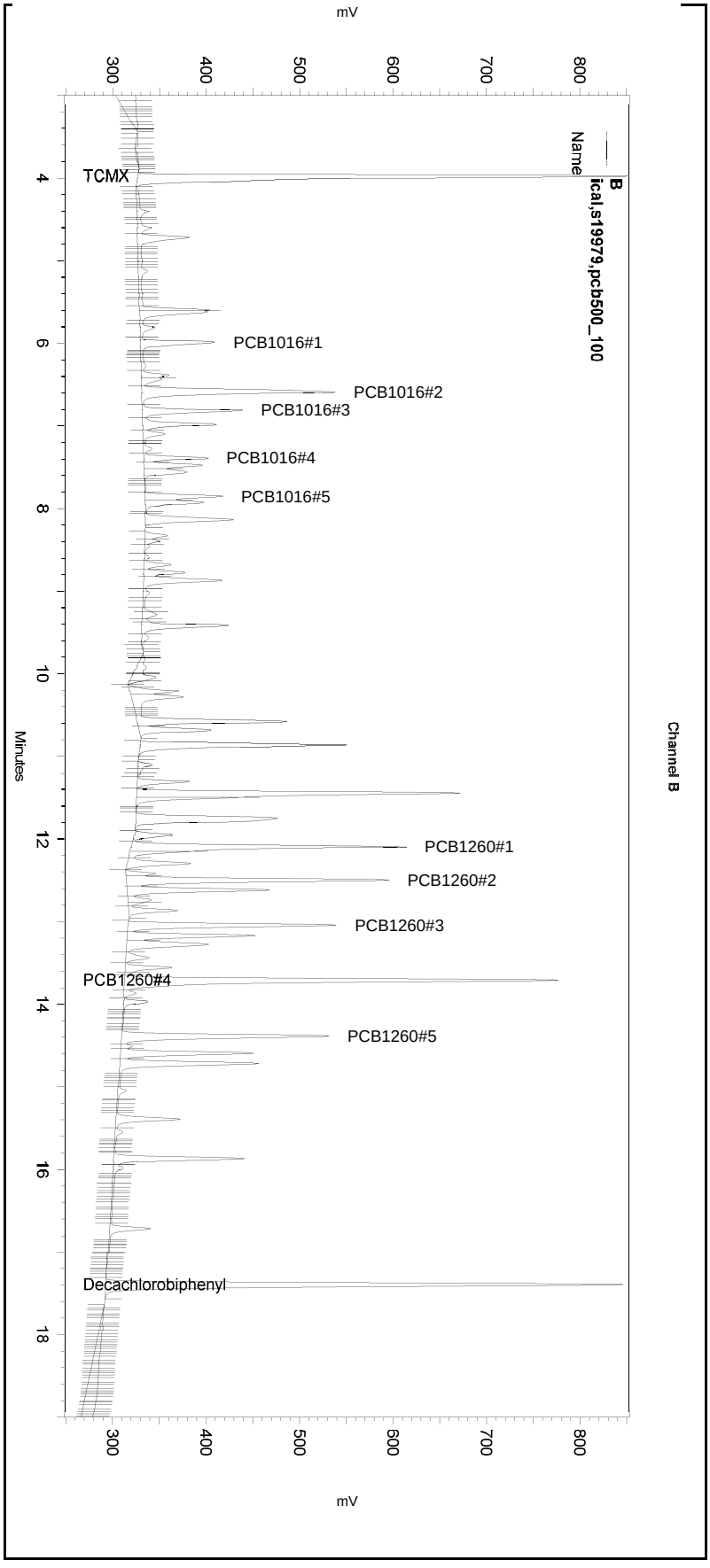
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.482	0	0
Yes	Reset Baseline	9.388	0	0

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:43:10 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.884	0	0
Yes	Reset Baseline	8.235	0	0
Yes	Reset Baseline	12.955	0	0
Yes	Reset Baseline	17.569	0	0

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:08:30 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	682805	100.000 CAL
PCB1016#1	6.997	6.990	104536	500.000 CAL
PCB1016#2	7.630	7.627	227290	500.000 CAL
PCB1016#3	7.947	7.940	139983	500.000 CAL
PCB1016#4	8.417	8.410	80815	500.000 CAL
PCB1016#5	8.943	8.937	114959	500.000 CAL
PCB1260#1	12.553	12.530	328279	500.000 CAL
PCB1260#2	13.213	13.210	265518	500.000 CAL
PCB1260#3	14.080	14.077	189374	500.000 CAL
PCB1260#4	14.823	14.820	432144	500.000 CAL
PCB1260#5	15.487	15.483	186280	500.000 CAL
Decachlorobiphenyl	18.107	18.103	664993	100.000 CAL

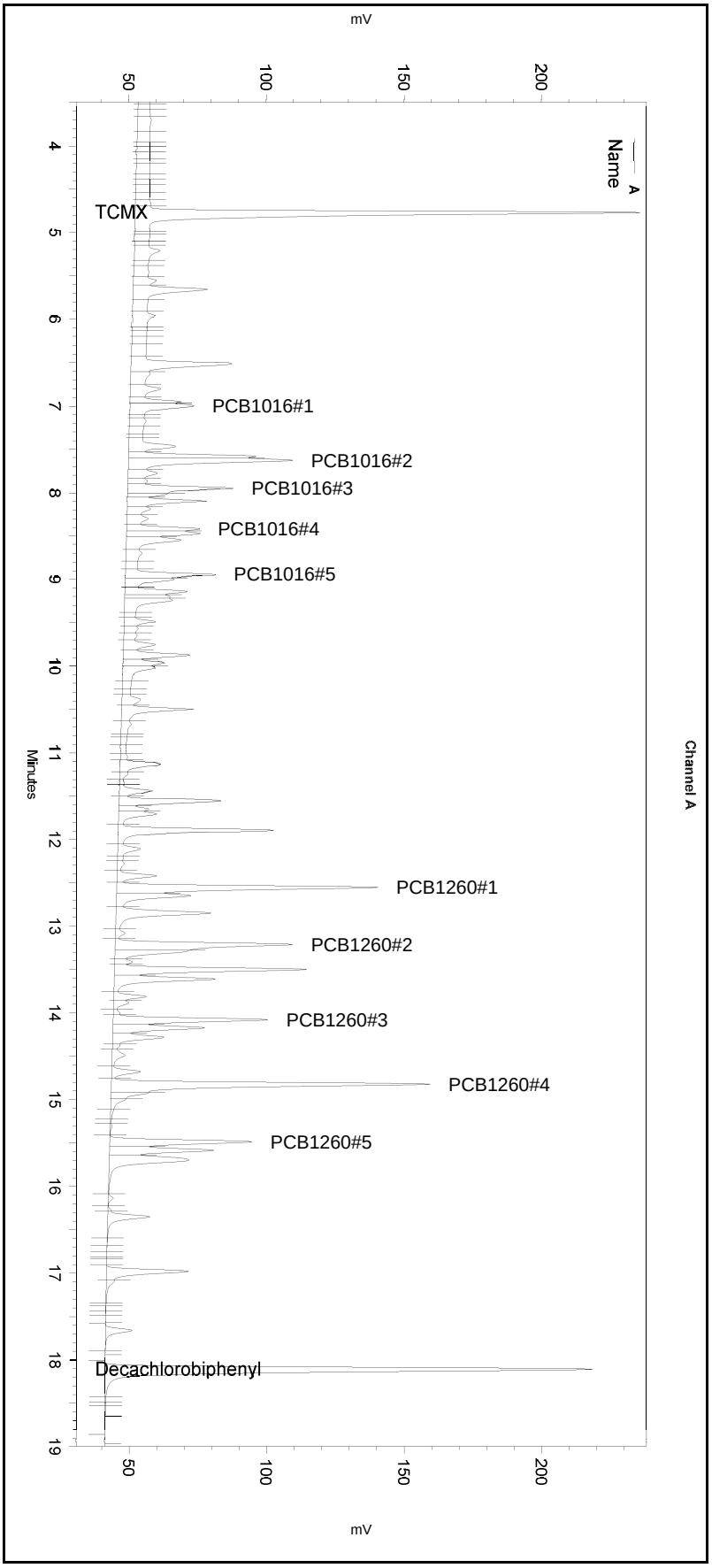
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.973	3.970	1716249	100.000 CAL
PCB1016#1	5.993	5.983	297728	500.000 CAL
PCB1016#2	6.587	6.580	888220	500.000 CAL
PCB1016#3	6.810	6.803	400449	500.000 CAL
PCB1016#4	7.383	7.377	239714	500.000 CAL
PCB1016#5	7.853	7.847	272915	500.000 CAL
PCB1260#1	12.090	12.087	990522	500.000 CAL
PCB1260#2	12.500	12.497	892620	500.000 CAL
PCB1260#3	13.047	13.043	761459	500.000 CAL
PCB1260#4	13.703	13.700	1667648	500.000 CAL
PCB1260#5	14.383	14.380	898685	500.000 CAL
Decachlorobiphenyl	17.393	17.390	2210059	100.000 CAL

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:08:30 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

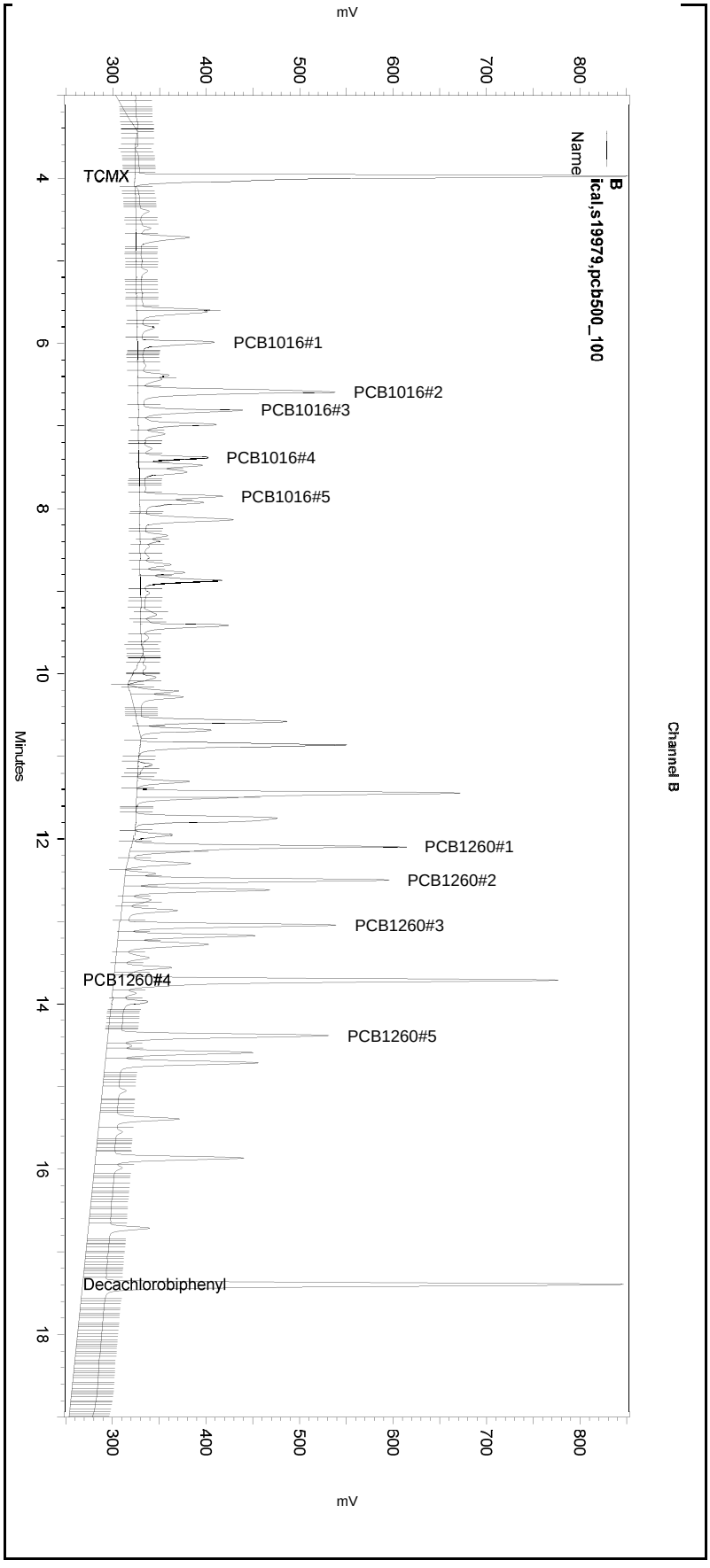
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19979,pcb500_100**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:16:35 PM
Analysis Date: 9/7/2012 8:08:30 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:40:50 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.760	4.763	828717	150.000 CAL
PCB1016#1	6.987	7.004	86438	750.000 CAL
PCB1016#2	7.620	7.638	250253	750.000 CAL
PCB1016#3	7.937	7.951	144418	750.000 CAL
PCB1016#4	8.407	8.410	78627	750.000 CAL
PCB1016#5	8.933	8.937	122058	750.000 CAL
PCB1260#1	12.543	12.550	429369	750.000 CAL
PCB1260#2	13.203	13.210	355470	750.000 CAL
PCB1260#3	14.070	14.077	253746	750.000 CAL
PCB1260#4	14.813	14.820	586370	750.000 CAL
PCB1260#5	15.477	15.483	251877	750.000 CAL
Decachlorobiphenyl	18.097	18.103	852871	150.000 CAL

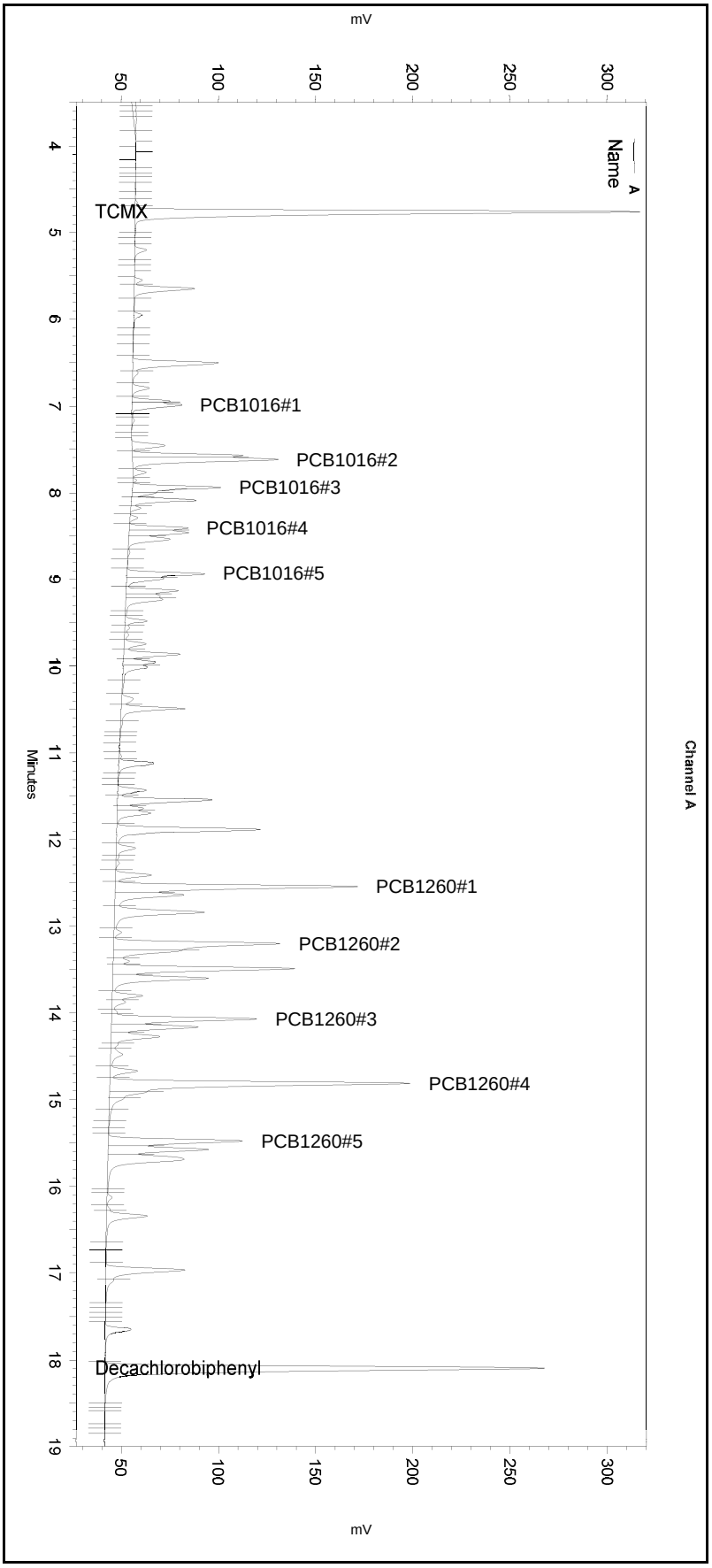
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	2264442	150.000 CAL
PCB1016#1	5.983	5.983	349194	750.000 CAL
PCB1016#2	6.577	6.580	1097380	750.000 CAL
PCB1016#3	6.800	6.803	467186	750.000 CAL
PCB1016#4	7.373	7.377	275695	750.000 CAL
PCB1016#5	7.843	7.847	332655	750.000 CAL
PCB1260#1	12.083	12.087	1297398	750.000 CAL
PCB1260#2	12.490	12.497	1159075	750.000 CAL
PCB1260#3	13.037	13.043	963756	750.000 CAL
PCB1260#4	13.693	13.700	2055476	750.000 CAL
PCB1260#5	14.377	14.380	977736	750.000 CAL
Decachlorobiphenyl	17.383	17.390	2309664	150.000 CAL

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:40:50 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

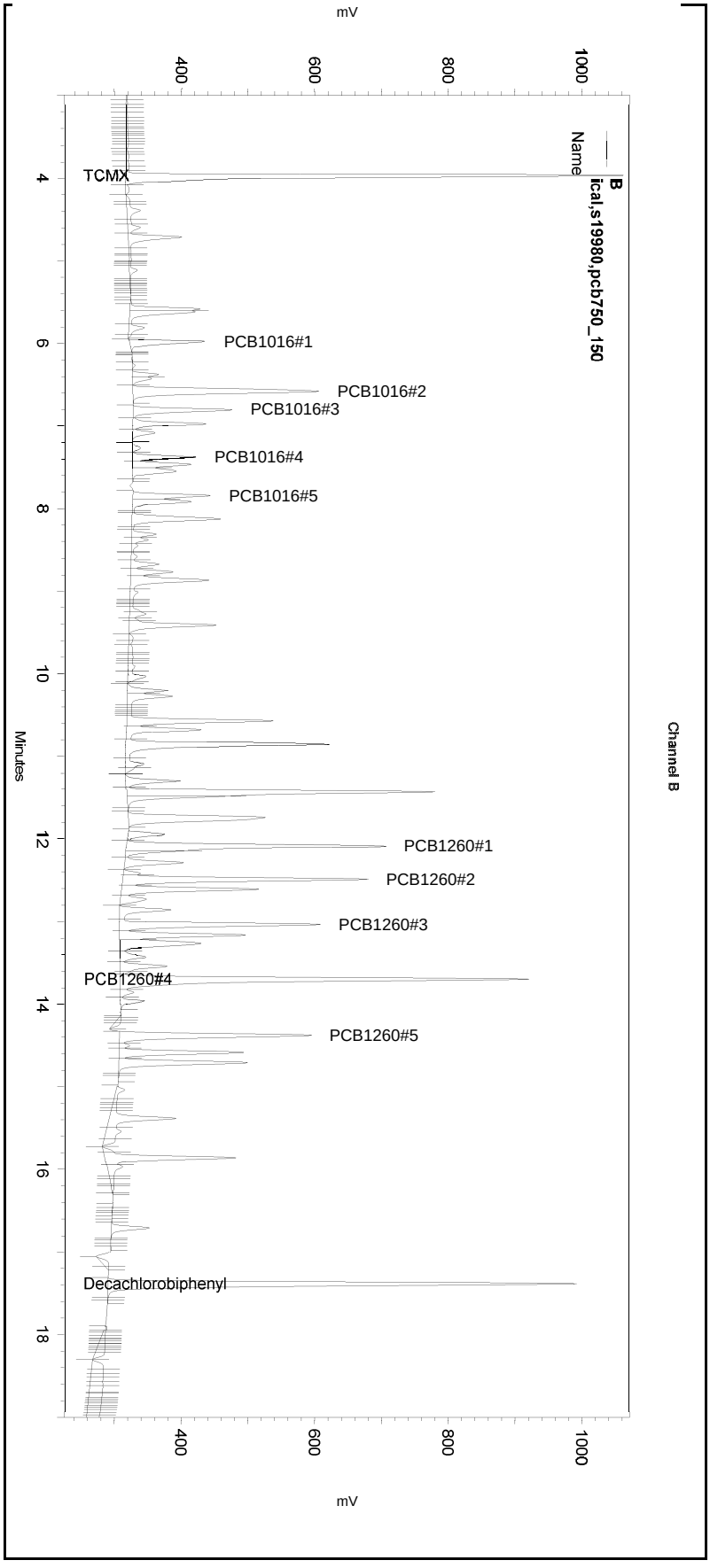
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.818	0	0

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:40:50 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.679	0	0
Yes	Reset Baseline	7.763	0	0
Yes	Reset Baseline	11.857	0	0
Yes	Reset Baseline	14.126	0	0
Yes	Reset Baseline	14.324	0	0
Yes	Reset Baseline	14.932	0	0
Yes	Reset Baseline	17.238	0	0
Yes	Reset Baseline	17.622	0	0

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:09:20 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.760	4.763	828717	150.000 CAL
PCB1016#1	6.987	6.990	93091	750.000 CAL
PCB1016#2	7.620	7.627	266914	750.000 CAL
PCB1016#3	7.937	7.940	161046	750.000 CAL
PCB1016#4	8.407	8.410	86147	750.000 CAL
PCB1016#5	8.933	8.937	128700	750.000 CAL
PCB1260#1	12.543	12.530	429369	750.000 CAL
PCB1260#2	13.203	13.210	355470	750.000 CAL
PCB1260#3	14.070	14.077	253746	750.000 CAL
PCB1260#4	14.813	14.820	586370	750.000 CAL
PCB1260#5	15.477	15.483	251877	750.000 CAL
Decachlorobiphenyl	18.097	18.103	852871	150.000 CAL

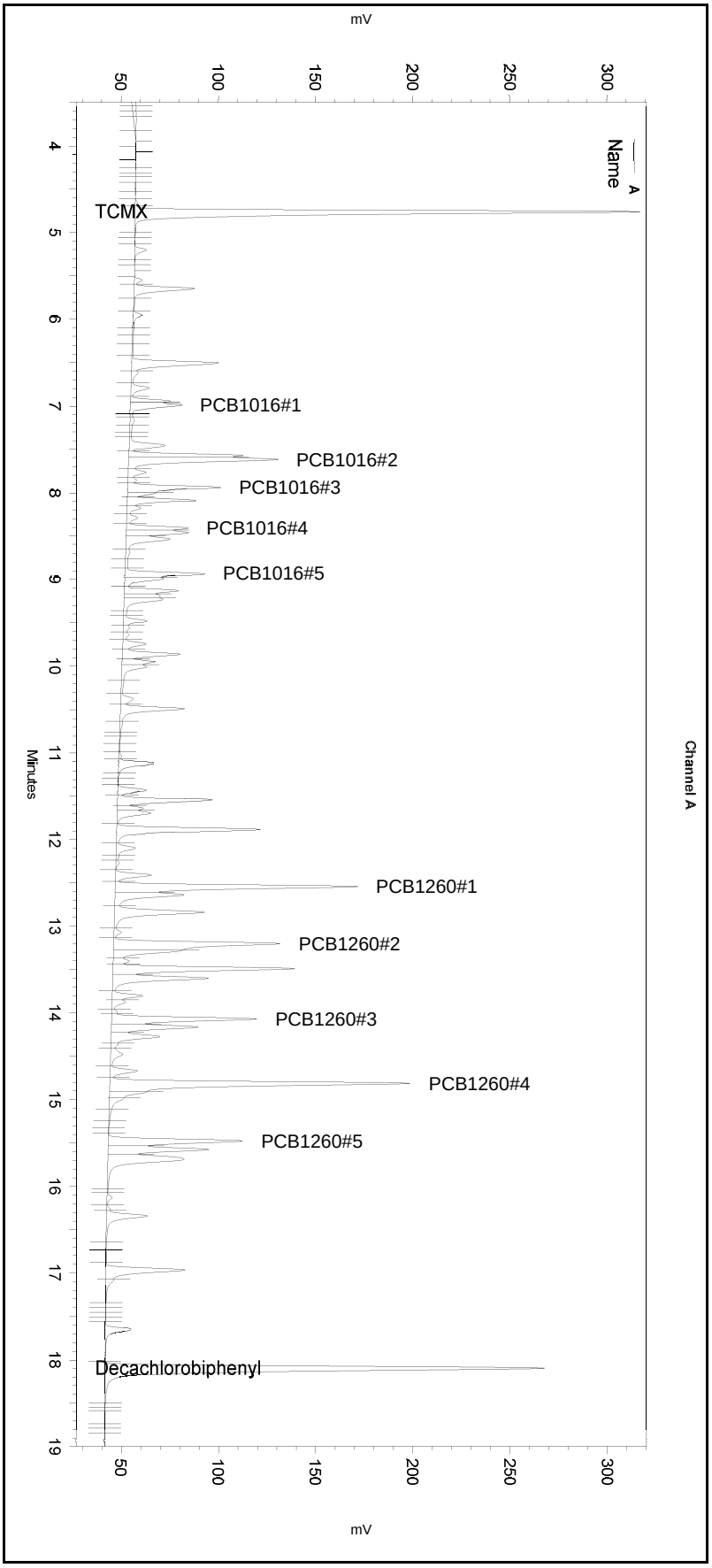
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.967	3.970	2264442	150.000 CAL
PCB1016#1	5.983	5.983	349194	750.000 CAL
PCB1016#2	6.577	6.580	1097380	750.000 CAL
PCB1016#3	6.800	6.803	469770	750.000 CAL
PCB1016#4	7.373	7.377	293111	750.000 CAL
PCB1016#5	7.843	7.847	364274	750.000 CAL
PCB1260#1	12.083	12.087	1428553	750.000 CAL
PCB1260#2	12.490	12.497	1258462	750.000 CAL
PCB1260#3	13.037	13.043	1069785	750.000 CAL
PCB1260#4	13.693	13.700	2228065	750.000 CAL
PCB1260#5	14.377	14.380	1143765	750.000 CAL
Decachlorobiphenyl	17.383	17.390	2607386	150.000 CAL

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:09:20 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

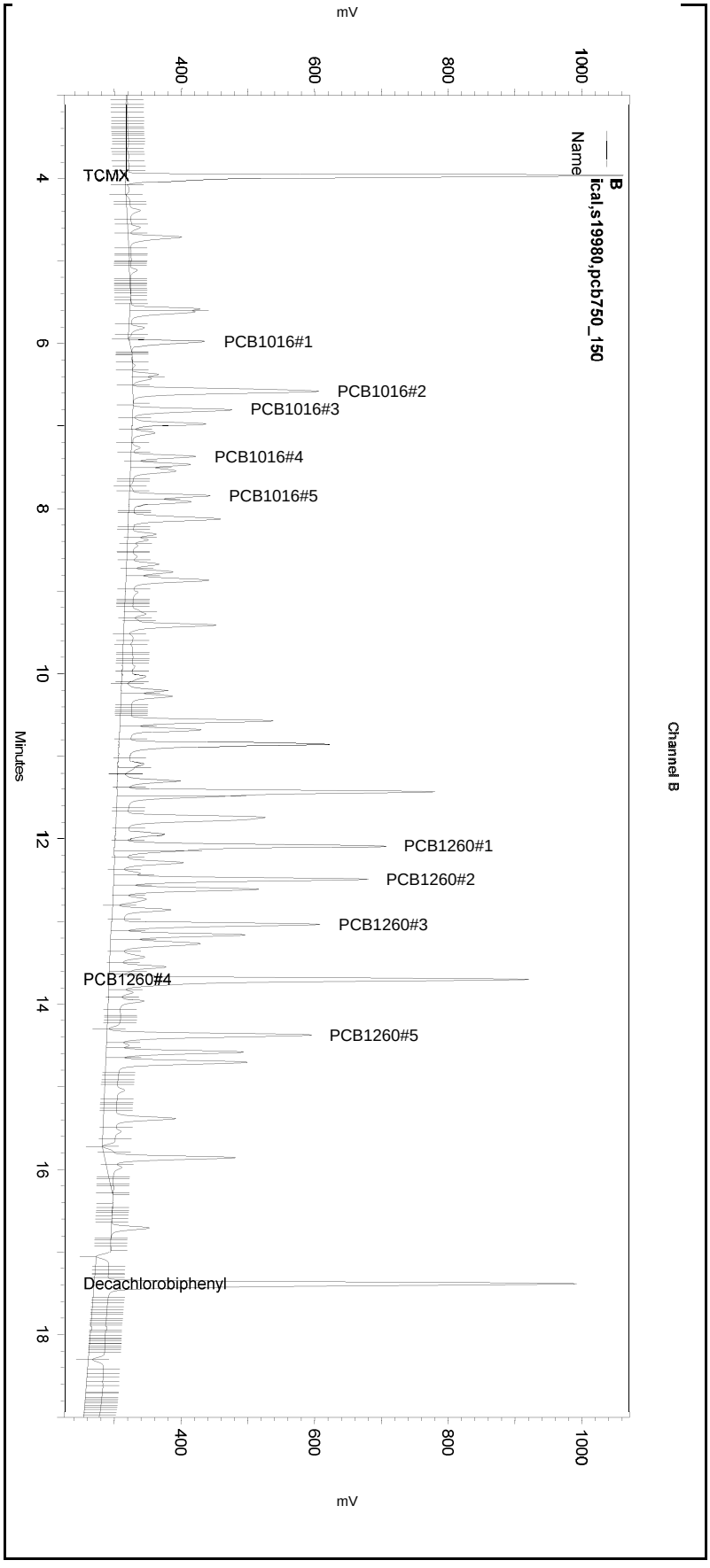
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19980,pcb750_150**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:44:08 PM
Analysis Date: 9/7/2012 8:09:20 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:45:30 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.773	4.763	1076106	200.000 CAL
PCB1016#1	7.003	7.004	117622	1000.000 CAL
PCB1016#2	7.637	7.638	347710	1000.000 CAL
PCB1016#3	7.950	7.951	205234	1000.000 CAL
PCB1016#4	8.420	8.410	112837	1000.000 CAL
PCB1016#5	8.947	8.937	164360	1000.000 CAL
PCB1260#1	12.557	12.550	561628	1000.000 CAL
PCB1260#2	13.217	13.210	475944	1000.000 CAL
PCB1260#3	14.083	14.077	336688	1000.000 CAL
PCB1260#4	14.827	14.820	774134	1000.000 CAL
PCB1260#5	15.490	15.483	345469	1000.000 CAL
Decachlorobiphenyl	18.110	18.103	1120940	200.000 CAL

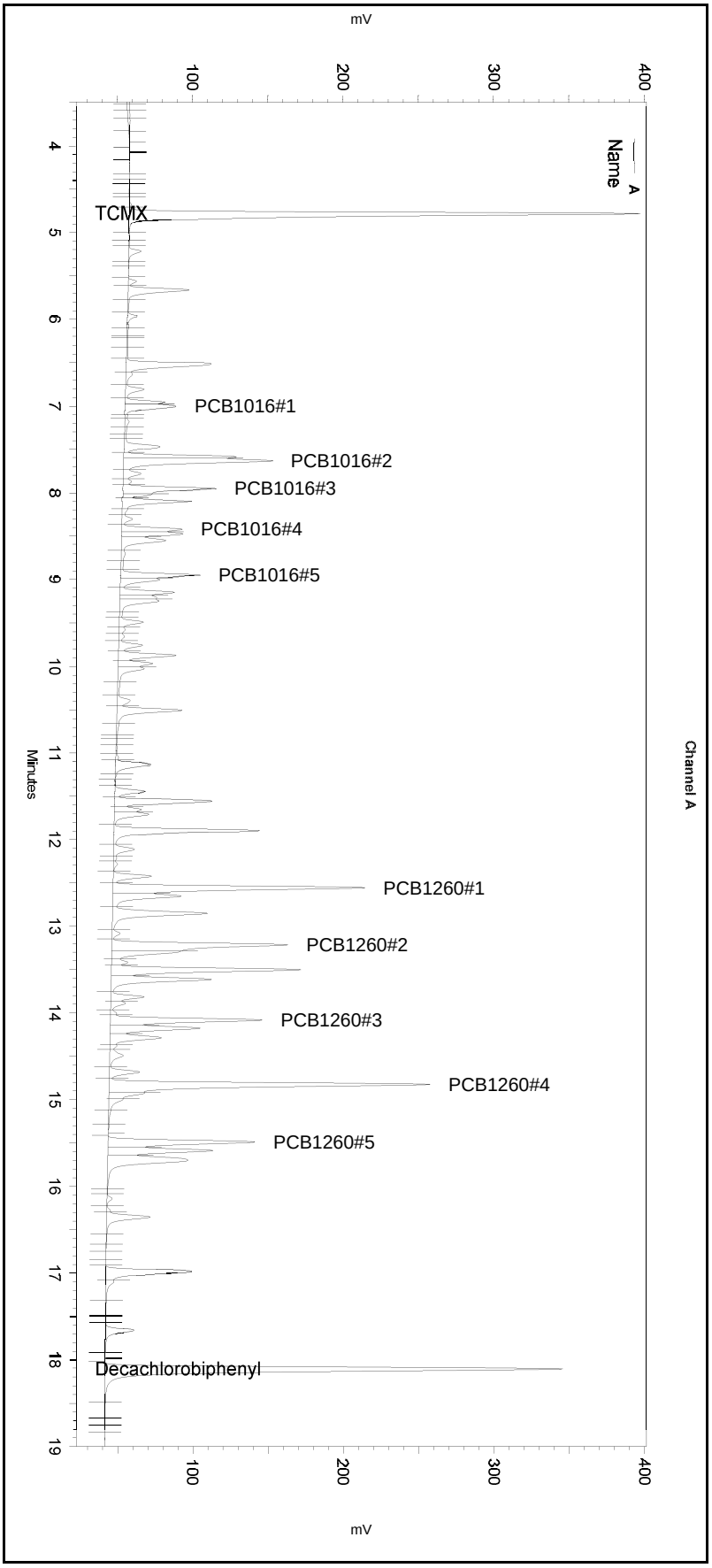
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.980	3.970	2811983	200.000 CAL
PCB1016#1	5.997	5.983	456896	1000.000 CAL
PCB1016#2	6.593	6.580	1387456	1000.000 CAL
PCB1016#3	6.817	6.803	626326	1000.000 CAL
PCB1016#4	7.387	7.377	365293	1000.000 CAL
PCB1016#5	7.857	7.847	426715	1000.000 CAL
PCB1260#1	12.097	12.087	1694979	1000.000 CAL
PCB1260#2	12.503	12.497	1482483	1000.000 CAL
PCB1260#3	13.050	13.043	1204600	1000.000 CAL
PCB1260#4	13.707	13.700	2634276	1000.000 CAL
PCB1260#5	14.387	14.380	1337671	1000.000 CAL
Decachlorobiphenyl	17.397	17.390	2983596	200.000 CAL

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:45:30 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

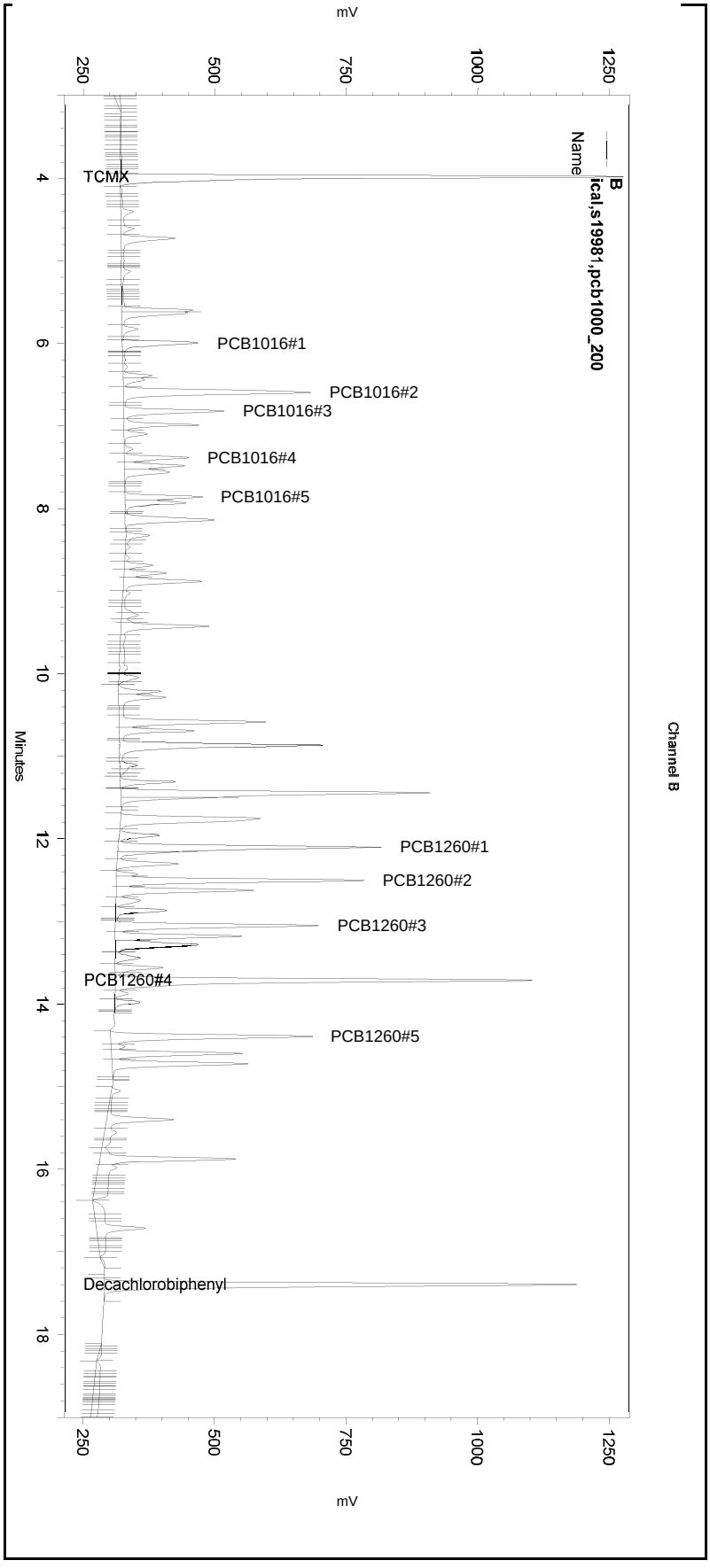
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:45:30 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.283	0	0
Yes	Reset Baseline	11.652	0	0
Yes	Reset Baseline	14.118	0	0
Yes	Reset Baseline	14.92	0	0
Yes	Reset Baseline	17.203	0	0
Yes	Reset Baseline	17.601	0	0

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:09:25 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.773	4.763	1076106	200.000 CAL
PCB1016#1	7.003	6.990	117622	1000.000 CAL
PCB1016#2	7.637	7.627	347710	1000.000 CAL
PCB1016#3	7.950	7.940	205234	1000.000 CAL
PCB1016#4	8.420	8.410	112837	1000.000 CAL
PCB1016#5	8.947	8.937	164360	1000.000 CAL
PCB1260#1	12.557	12.530	561628	1000.000 CAL
PCB1260#2	13.217	13.210	475944	1000.000 CAL
PCB1260#3	14.083	14.077	336688	1000.000 CAL
PCB1260#4	14.827	14.820	774134	1000.000 CAL
PCB1260#5	15.490	15.483	345469	1000.000 CAL
Decachlorobiphenyl	18.110	18.103	1120940	200.000 CAL

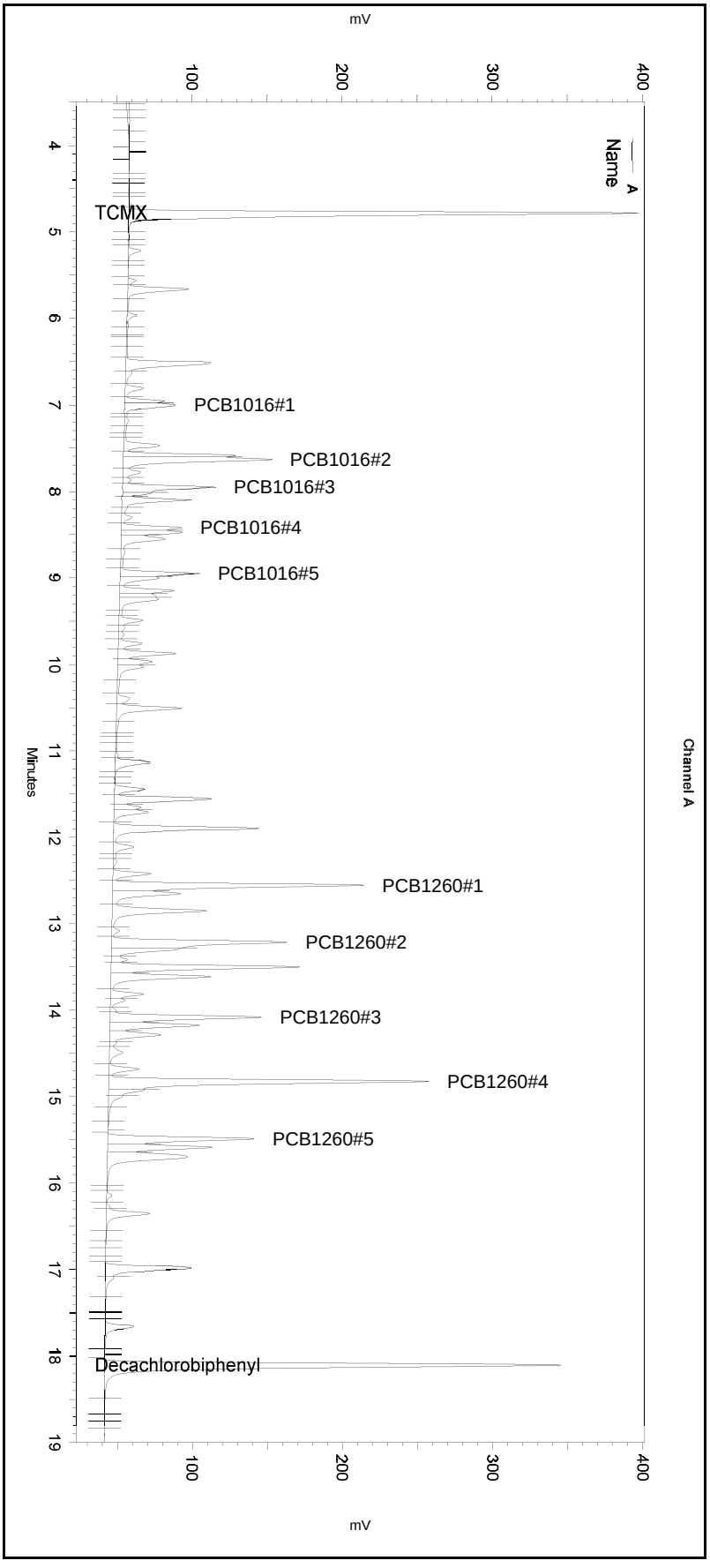
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.980	3.970	2833018	200.000 CAL
PCB1016#1	5.997	5.983	606263	1000.000 CAL
PCB1016#2	6.593	6.580	1620536	1000.000 CAL
PCB1016#3	6.817	6.803	837891	1000.000 CAL
PCB1016#4	7.387	7.377	528850	1000.000 CAL
PCB1016#5	7.857	7.847	599761	1000.000 CAL
PCB1260#1	12.097	12.087	1961204	1000.000 CAL
PCB1260#2	12.503	12.497	1725780	1000.000 CAL
PCB1260#3	13.050	13.043	1510718	1000.000 CAL
PCB1260#4	13.707	13.700	3043493	1000.000 CAL
PCB1260#5	14.387	14.380	1658900	1000.000 CAL
Decachlorobiphenyl	17.397	17.390	3535051	200.000 CAL

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:09:25 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

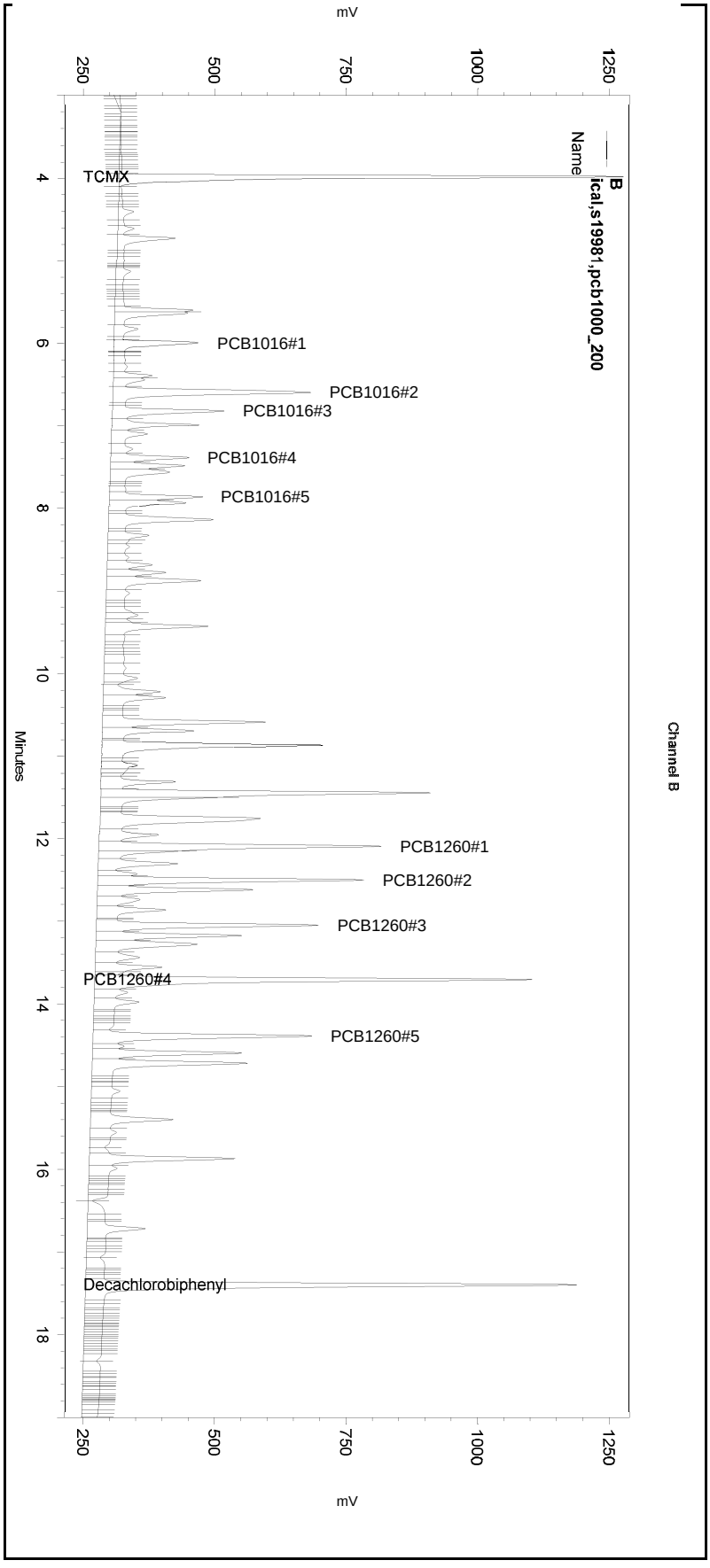
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ical,s19981,pcb1000_200**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:11:43 PM
Analysis Date: 9/7/2012 8:09:25 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:57:30 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	321909	48.723
PCB1016#1	6.990	7.004	34724	253.775
PCB1016#2	7.627	7.638	105533	245.350
PCB1016#3	7.940	7.951	57551	249.673
PCB1016#4	8.410	8.410	32830	271.075
PCB1016#5	8.937	8.937	50032	257.446
PCB1260#1	12.547	12.550	177195	231.000
PCB1260#2	13.207	13.210	137185	243.283
PCB1260#3	14.073	14.077	103349	218.712
PCB1260#4	14.817	14.820	235333	253.192
PCB1260#5	15.480	15.483	102602	262.368
Decachlorobiphenyl	18.100	18.103	323735	37.846

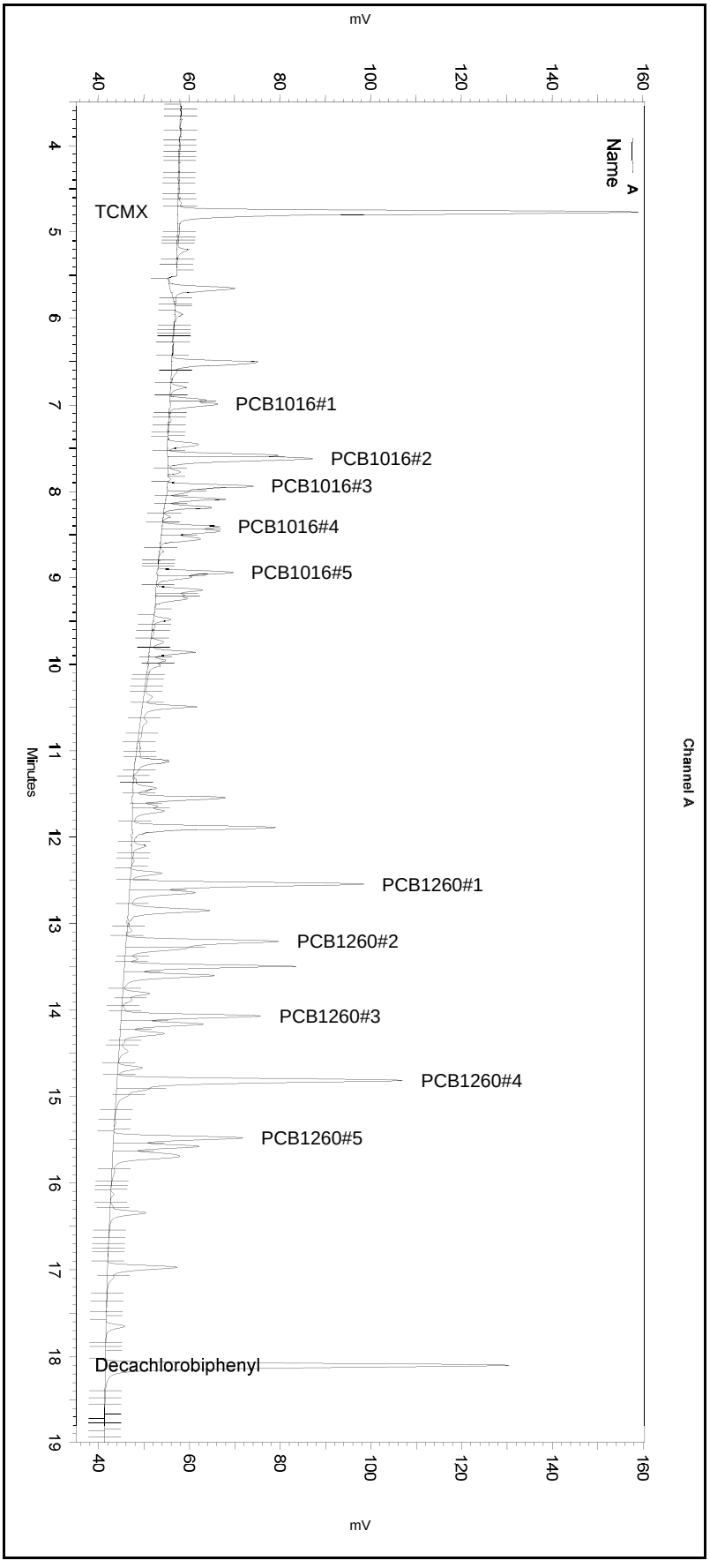
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	780721	44.360
PCB1016#1	5.987	5.983	141329	279.447
PCB1016#2	6.580	6.580	446193	246.593
PCB1016#3	6.803	6.803	186548	241.708
PCB1016#4	7.377	7.377	108180	270.002
PCB1016#5	7.847	7.847	131750	240.480
PCB1260#1	12.083	12.087	518936	264.131
PCB1260#2	12.493	12.497	464575	240.228
PCB1260#3	13.037	13.043	382945	226.945
PCB1260#4	13.697	13.700	868836	286.341
PCB1260#5	14.377	14.380	420559	289.392
Decachlorobiphenyl	17.387	17.390	910785	43.999

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:57:30 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

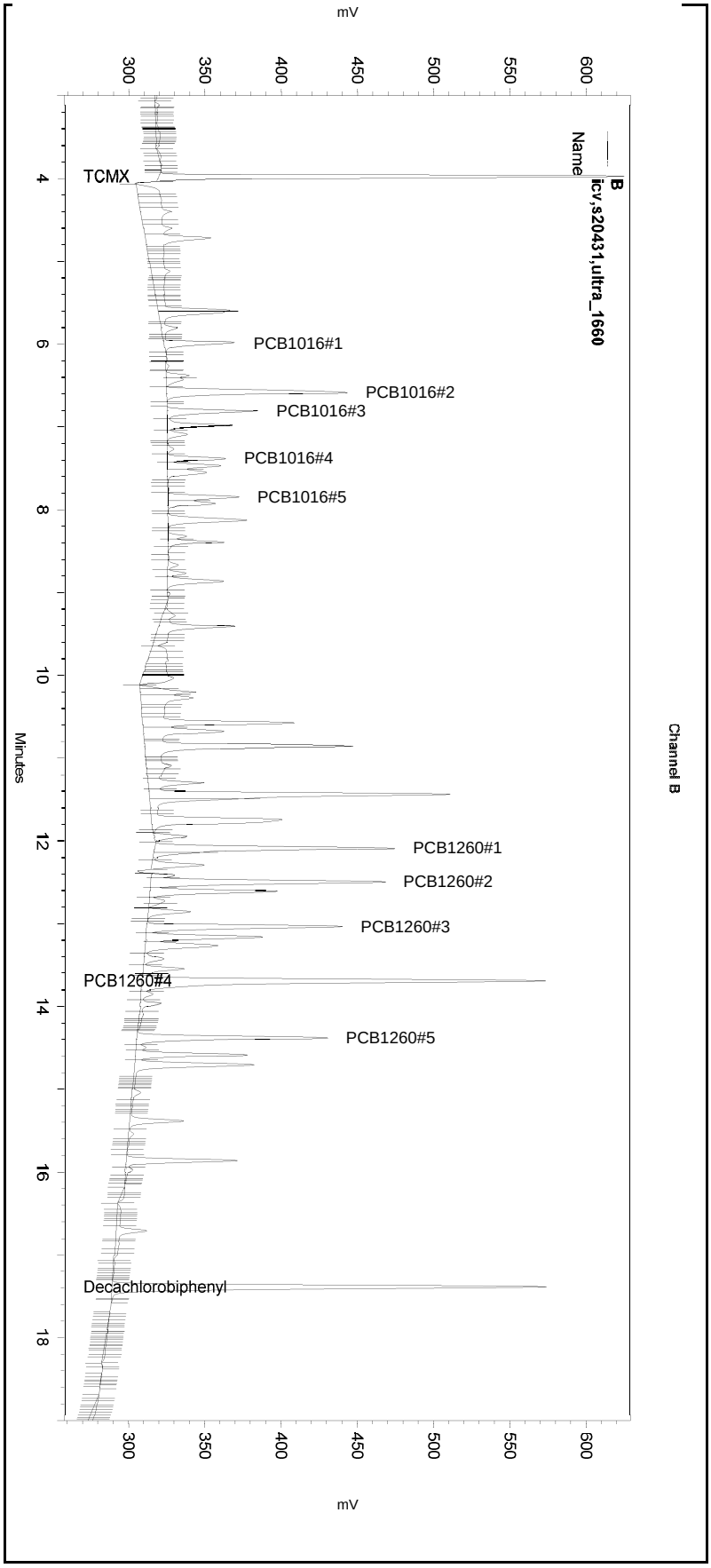
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.829	0	0
Yes	Reset Baseline	9.356	0	0
Yes	Reset Baseline	12.334	0	0

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:57:30 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.029	0	0
Yes	Reset Baseline	12.013	0	0
Yes	Reset Baseline	12.344	0	0
Yes	Reset Baseline	12.387	0	0
Yes	Reset Baseline	17.585	0	0

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:55:28 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.767	4.763	321909	48.723
PCB1016#1	6.990	7.004	40027	292.531
PCB1016#2	7.627	7.638	117185	272.440
PCB1016#3	7.940	7.951	69354	300.878
PCB1016#4	8.410	8.410	39641	334.363
PCB1016#5	8.937	8.937	58949	303.329
PCB1260#1	12.547	12.550	181479	236.585
PCB1260#2	13.207	13.210	140644	249.417
PCB1260#3	14.073	14.077	105130	222.481
PCB1260#4	14.817	14.820	236363	254.301
PCB1260#5	15.480	15.483	102602	262.368
Decachlorobiphenyl	18.100	18.103	323735	37.846

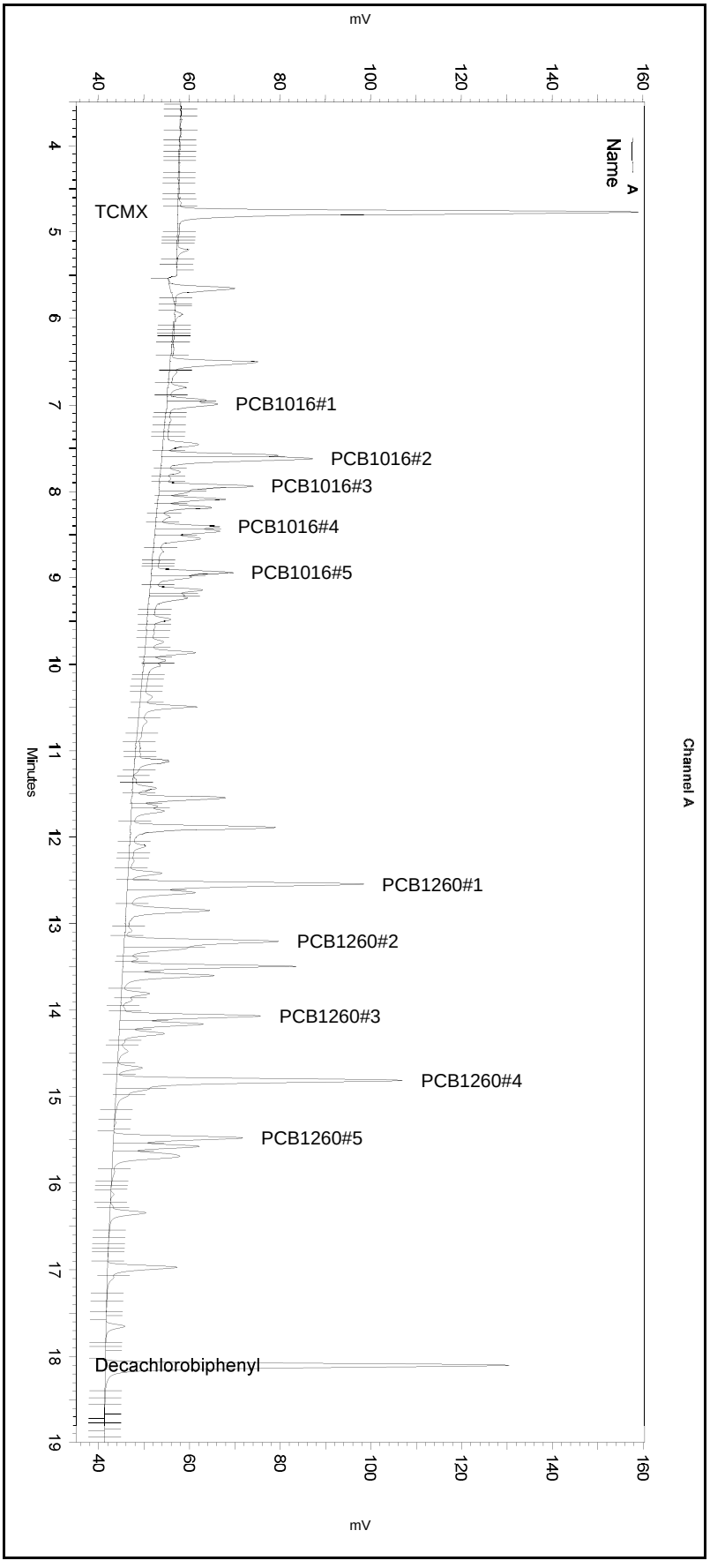
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.970	3.970	830674	47.198
PCB1016#1	5.987	5.983	141456	279.728
PCB1016#2	6.580	6.580	446193	246.593
PCB1016#3	6.803	6.803	186548	241.708
PCB1016#4	7.377	7.377	108180	270.002
PCB1016#5	7.847	7.847	131750	240.480
PCB1260#1	12.083	12.087	618491	324.295
PCB1260#2	12.493	12.497	545583	282.117
PCB1260#3	13.037	13.043	467375	276.980
PCB1260#4	13.697	13.700	952397	318.626
PCB1260#5	14.377	14.380	476273	332.005
Decachlorobiphenyl	17.387	17.390	941202	45.745

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:55:28 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

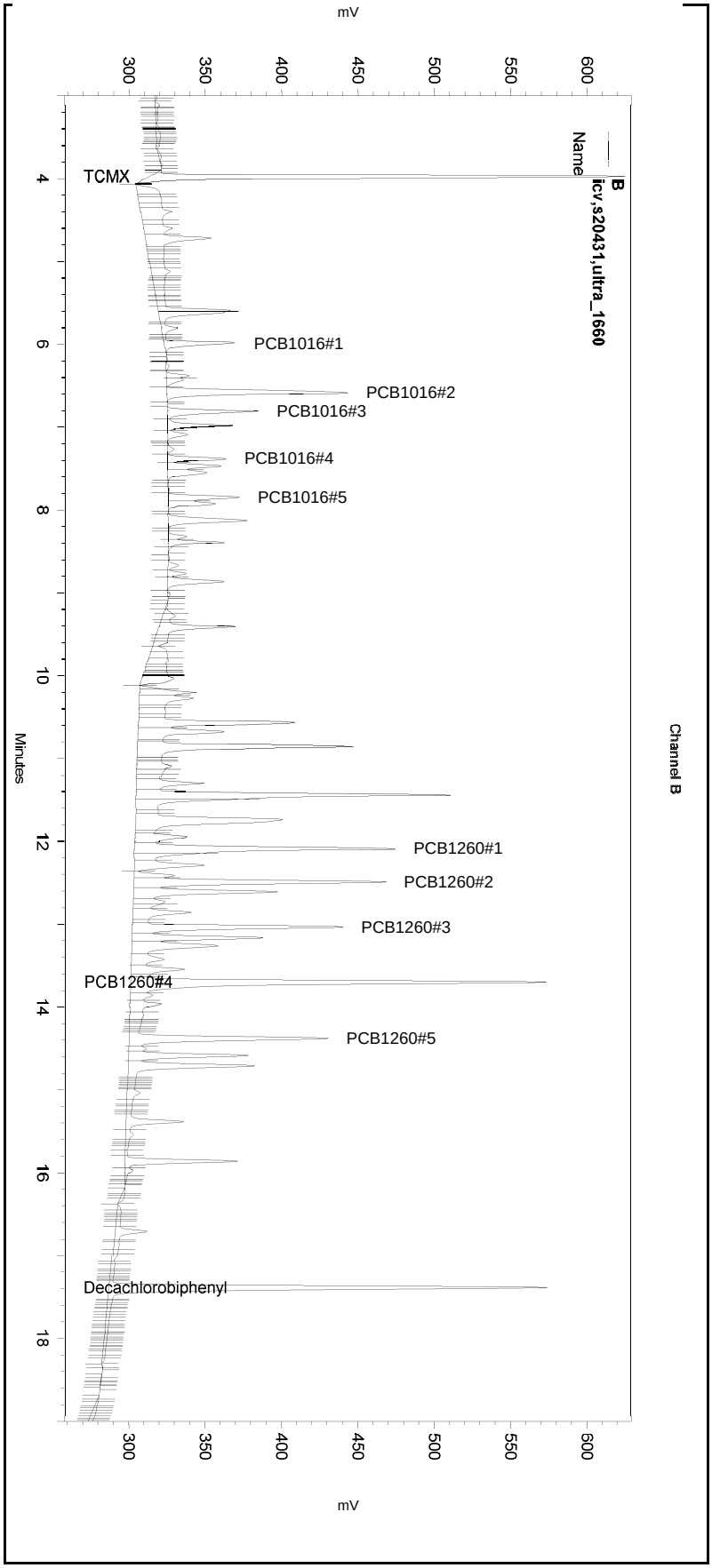
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **icv,s20431,ultra_1660**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\250.seq**
Instrument: GC06 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:06:49 PM
Analysis Date: 9/7/2012 8:55:28 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PCBS Water: EPA 8082A

Inst : GC16
Calnum : 232358946001
Units : pg/ul

Name : AR1660_249A
Date : 05-SEP-2012 18:41

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	249_011	232358946011	PCB10_2	05-SEP-2012 18:41	S19975
L2	249_012	232358946012	PCB25_5	05-SEP-2012 19:09	S19976
L3	249_013	232358946013	PCB100_20	05-SEP-2012 19:37	S19977
L4	249_014	232358946014	PCB250_50	05-SEP-2012 20:05	S19978
L5	249_015	232358946015	PCB500_100	05-SEP-2012 20:33	S19979
L6	249_016	232358946016	PCB750_150	05-SEP-2012 21:00	S19980
L7	249_017	232358946017	PCB1000_200	05-SEP-2012 21:28	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	2903.7	2645.1	2043.0	1737.6	1402.8	1280.3	1106.0	QUAD	A	26125.9	1714.03	-0.63519	1874.1	0.999	.99	20	
Aroclor-1260 Peak # 2	A	2014.6	2233.6	1766.6	1721.8	1453.3	1305.8		AVRG	R		5.72E-4		1749.3	20	.99	20	
Aroclor-1260 Peak # 3	A	1771.7	1496.8	1264.0	1095.8	936.53	843.23		LINR	R	-38.896	0.00120		1234.7	0.990	.99	20	
Aroclor-1260 Peak # 4	A	3727.3	3500.8	2817.0	2358.5	1983.1			LINR	R	-28.596	5.17E-4		2877.3	0.990	.99	20	
Aroclor-1260 Peak # 5	A	1374.7	1851.5	1420.5	1250.3	1105.9			AVRG	R		7.14E-4		1400.6	20	.99	20	
TCMX	A	25623	23507	19325	16224	13450	12341		LINR	R	-8.5129	8.29E-5		18411	0.990	.99	20	
Decachlorobiphenyl	A	19026	17296	15334	12347	10199	8511.2	7607.0	QUAD	A	39971.0	12237.7	-24.6931	12903	0.998	.99	20	
Aroclor-1260 Peak # 1	B	737.60	685.28	610.78	566.71	523.53	511.21	462.17	AVRG	R		0.00171		585.32	17	.99	20	
Aroclor-1260 Peak # 2	B	482.10	512.84	461.15	427.77	386.81	373.66	335.02	AVRG	R		0.00235		425.62	15	.99	20	
Aroclor-1260 Peak # 3	B	452.10	448.84	396.59	370.66	342.93	328.44	298.96	AVRG	R		0.00265		376.93	16	.99	20	
Aroclor-1260 Peak # 4	B	1098.3	1073.3	903.13	850.18	809.19	768.62	711.59	AVRG	R		0.00113		887.76	17	.99	20	
Aroclor-1260 Peak # 5	B	468.10	474.00	402.01	386.37	373.42	351.19	330.73	AVRG	R		0.00251		397.97	14	.99	20	
TCMX	B	7732.0	7094.6	6965.0	6979.1	6744.6	7130.1	6405.6	AVRG	R		1.43E-4		7007.3	6	.99	20	
Decachlorobiphenyl	B	11072	10605	8542.8	7613.2	7438.3			AVRG	R		1.10E-4		9054.2	19	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**-83**	25.000	-6	100.00	8	250.00	6	500.00	-4	750.00	1	1000.0	0
Aroclor-1260 Peak # 2	A	10.000	15	25.000	**28**	100.00	1	250.00	-2	500.00	-17	750.00	**-25**		
Aroclor-1260 Peak # 3	A	10.000	**-276**	25.000	**-76**	100.00	13	250.00	16	500.00	5	750.00	-4		
Aroclor-1260 Peak # 4	A	10.000	**-193**	25.000	**-33**	100.00	17	250.00	11	500.00	-3				
Aroclor-1260 Peak # 5	A	10.000	-2	25.000	**32**	100.00	1	250.00	-11	500.00	**-21**				
TCMX	A	2.0000	**-313**	5.0000	**-75**	20.000	18	50.000	17	100.00	3	150.00	-3		
Decachlorobiphenyl	A	2.0000	**-108**	5.0000	**-23**	20.000	14	50.000	6	100.00	0	150.00	-6	200.00	5
Aroclor-1260 Peak # 1	B	10.000	**26**	25.000	17	100.00	4	250.00	-3	500.00	-11	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 2	B	10.000	13	25.000	20	100.00	8	250.00	1	500.00	-9	750.00	-12	1000.0	**-21**
Aroclor-1260 Peak # 3	B	10.000	20	25.000	19	100.00	5	250.00	-2	500.00	-9	750.00	-13	1000.0	**-21**
Aroclor-1260 Peak # 4	B	10.000	**24**	25.000	**21**	100.00	2	250.00	-4	500.00	-9	750.00	-13	1000.0	-20
Aroclor-1260 Peak # 5	B	10.000	18	25.000	19	100.00	1	250.00	-3	500.00	-6	750.00	-12	1000.0	-17
TCMX	B	2.0000	10	5.0000	1	20.000	-1	50.000	0	100.00	-4	150.00	2	200.00	-9
Decachlorobiphenyl	B	2.0000	**22**	5.0000	17	20.000	-6	50.000	-16	100.00	-18				

PML 09/06/12 : Corrected automatically drawn baseline in all levels.

PML 09/06/12 : changed fit types and dropped various points for better r^2 %RSD recovery

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PCBS Water
EPA 8082A

Inst : GC16 Name : AR1660_249A
Calnum : 232358946001 Cal Date : 05-SEP-2012

ICV 232358946019 (249_019 05-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	268.7	pg/ul	7	20	
Aroclor-1260	B	250.0	265.0	pg/ul	6	20	

Analyst: PML Date: 09/06/12 Reviewer: EAH Date: 09/06/12

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 8:09:38 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	51245	2.000 CAL
PCB1016#1	6.197	6.197	4688	10.000 CAL
PCB1016#2	6.807	6.810	10375	10.000 CAL
PCB1016#3	7.107	7.110	6107	10.000 CAL
PCB1016#4	7.563	7.570	1172	10.000 CAL
PCB1016#5	8.073	8.077	6122	10.000 CAL
PCB1260#1	11.640	11.640	29037	10.000 CAL
PCB1260#2	12.290	12.290	20146	10.000 CAL
PCB1260#3	13.153	13.150	17717	10.000 CAL
PCB1260#4	13.893	13.897	37273	10.000 CAL
PCB1260#5	14.547	14.550	13747	10.000 CAL
Decachlorobiphenyl	17.163	17.167	38051	2.000 CAL

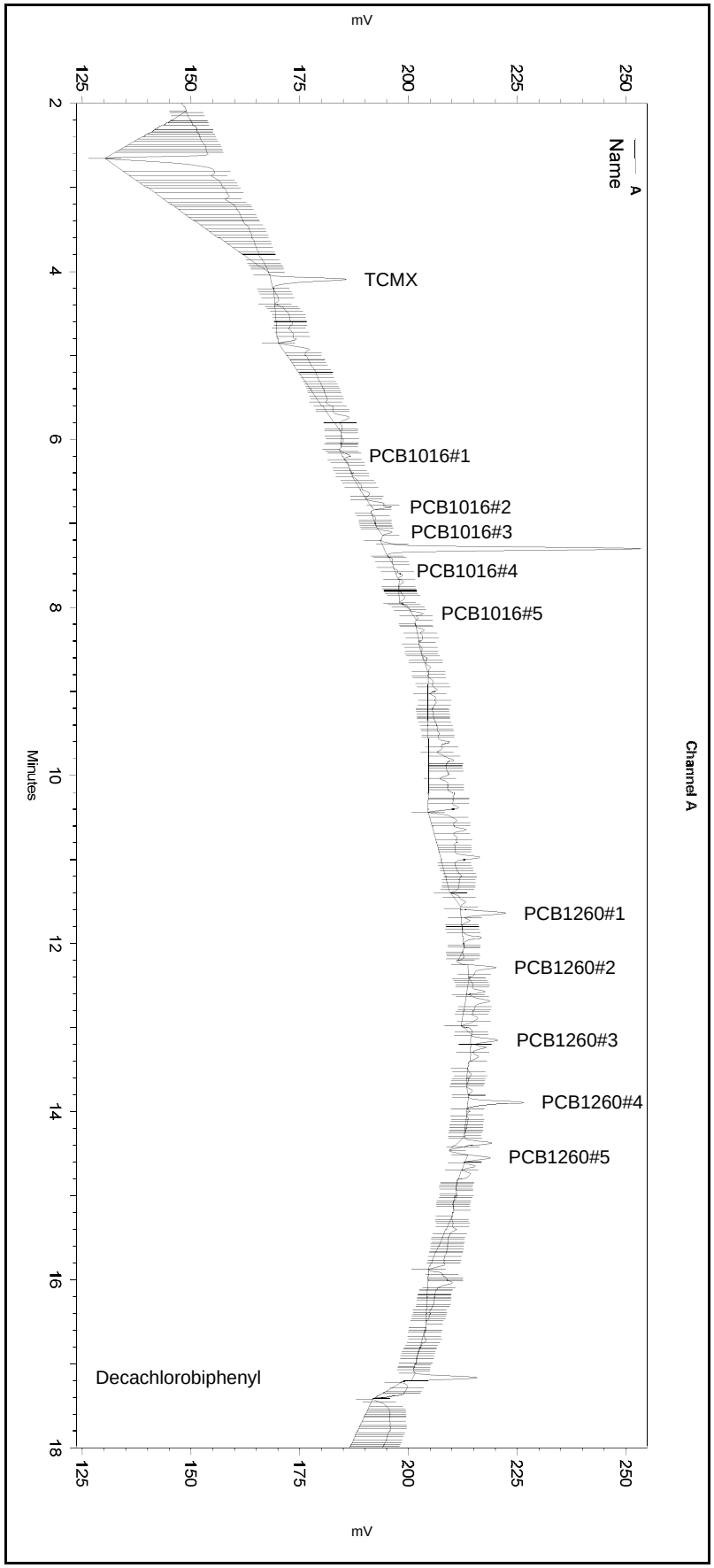
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	15464	2.000 CAL
PCB1016#1	5.203	5.207	2580	10.000 CAL
PCB1016#2	5.767	5.770	6619	10.000 CAL
PCB1016#3	5.983	5.987	2784	10.000 CAL
PCB1016#4	6.533	6.537	2027	10.000 CAL
PCB1016#5	6.987	6.990	2373	10.000 CAL
PCB1260#1	11.153	11.153	7376	10.000 CAL
PCB1260#2	11.557	11.560	4821	10.000 CAL
PCB1260#3	12.100	12.100	4521	10.000 CAL
PCB1260#4	12.757	12.757	10983	10.000 CAL
PCB1260#5	13.430	13.430	4681	10.000 CAL
Decachlorobiphenyl	16.423	16.423	22144	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 8:09:38 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

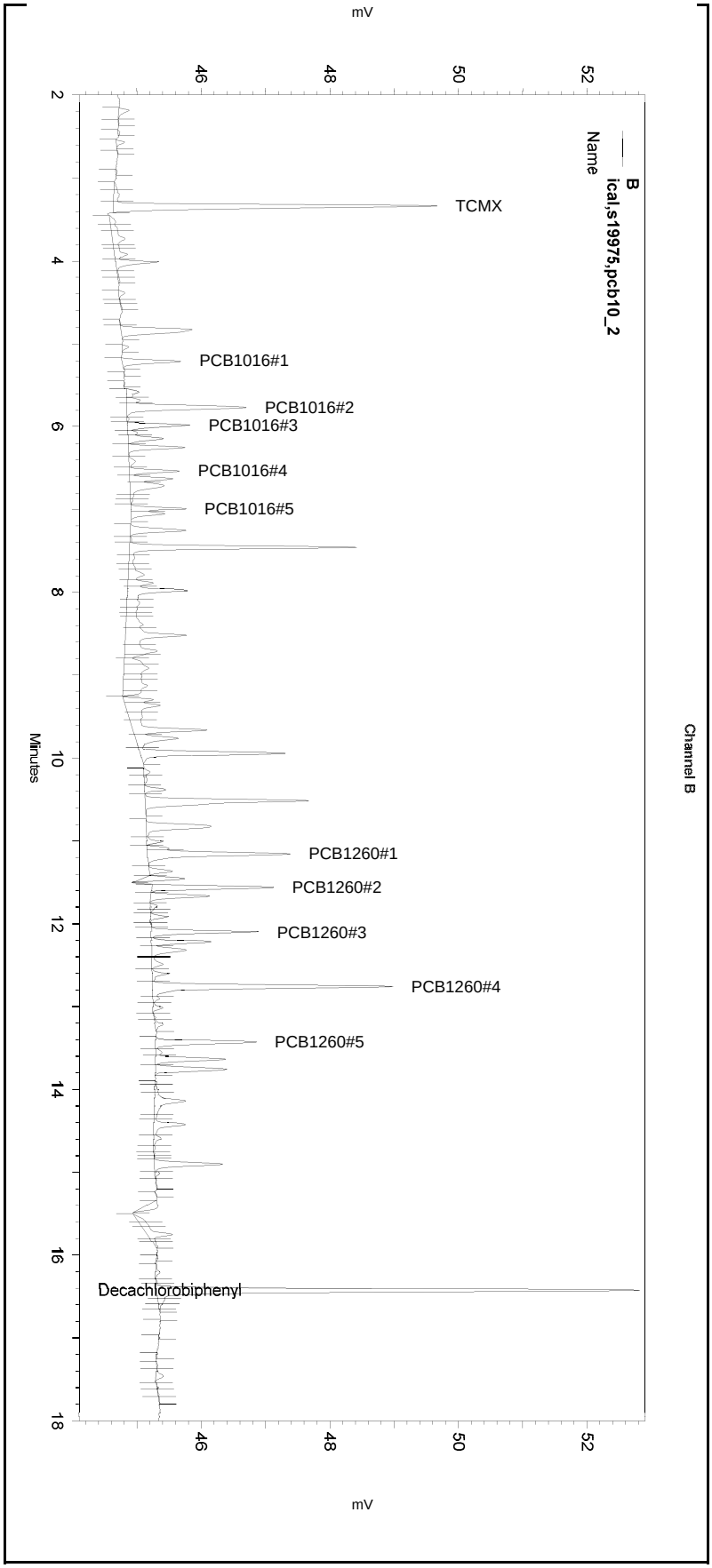
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.029	0	0
Yes	Reset Baseline	4.204	0	0
Yes	Split Peak	6.162	0	0
Yes	Reset Baseline	6.335	0	0
Yes	Reset Baseline	6.717	0	0
Yes	Reset Baseline	6.84	0	0
Yes	Reset Baseline	7.142	0	0
Yes	Reset Baseline	7.187	0	0
Yes	Reset Baseline	7.521	0	0
Yes	Reset Baseline	7.667	0	0
Yes	Reset Baseline	7.749	0	0
Yes	Reset Baseline	8.029	0	0
Yes	Reset Baseline	8.152	0	0
Yes	Reset Baseline	8.193	0	0
Yes	Reset Baseline	11.561	0	0
Yes	Reset Baseline	12.052	0	0
Yes	Reset Baseline	12.251	0	0
Yes	Reset Baseline	12.42	0	0
Yes	Reset Baseline	13.396	0	0
Yes	Reset Baseline	14.511	0	0
Yes	Reset Baseline	17.11	0	0
Yes	Reset Baseline	17.199	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 8:09:38 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.41	0	0
Yes	Manual Baseline	5.546	5.88	0
Yes	Reset Baseline	5.64	0	0
Yes	Reset Baseline	7.147	0	0
Yes	Reset Baseline	11.414	0	0
Yes	Move BL Start	11.503	11.524	0
Yes	Reset Baseline	11.742	0	0
Yes	Reset Baseline	12.033	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 (Offline) Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 7:31:19 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	175877	2.000 CAL
PCB1016#1	6.197	6.197	6680	10.000 CAL
PCB1016#2	6.807	6.810	22434	10.000 CAL
PCB1016#3	7.107	7.110	17654	10.000 CAL
PCB1016#4	7.563	7.570	6620	10.000 CAL
PCB1016#5	8.073	8.077	14368	10.000 CAL
PCB1260#1	11.640	11.640	57541	10.000 CAL
PCB1260#2	12.290	12.290	49117	10.000 CAL
PCB1260#3	13.153	13.150	18253	10.000 CAL
PCB1260#4	13.893	13.897	37273	10.000 CAL
PCB1260#5	14.547	14.550	38949	10.000 CAL
Decachlorobiphenyl	17.163	17.167	78280	2.000 CAL

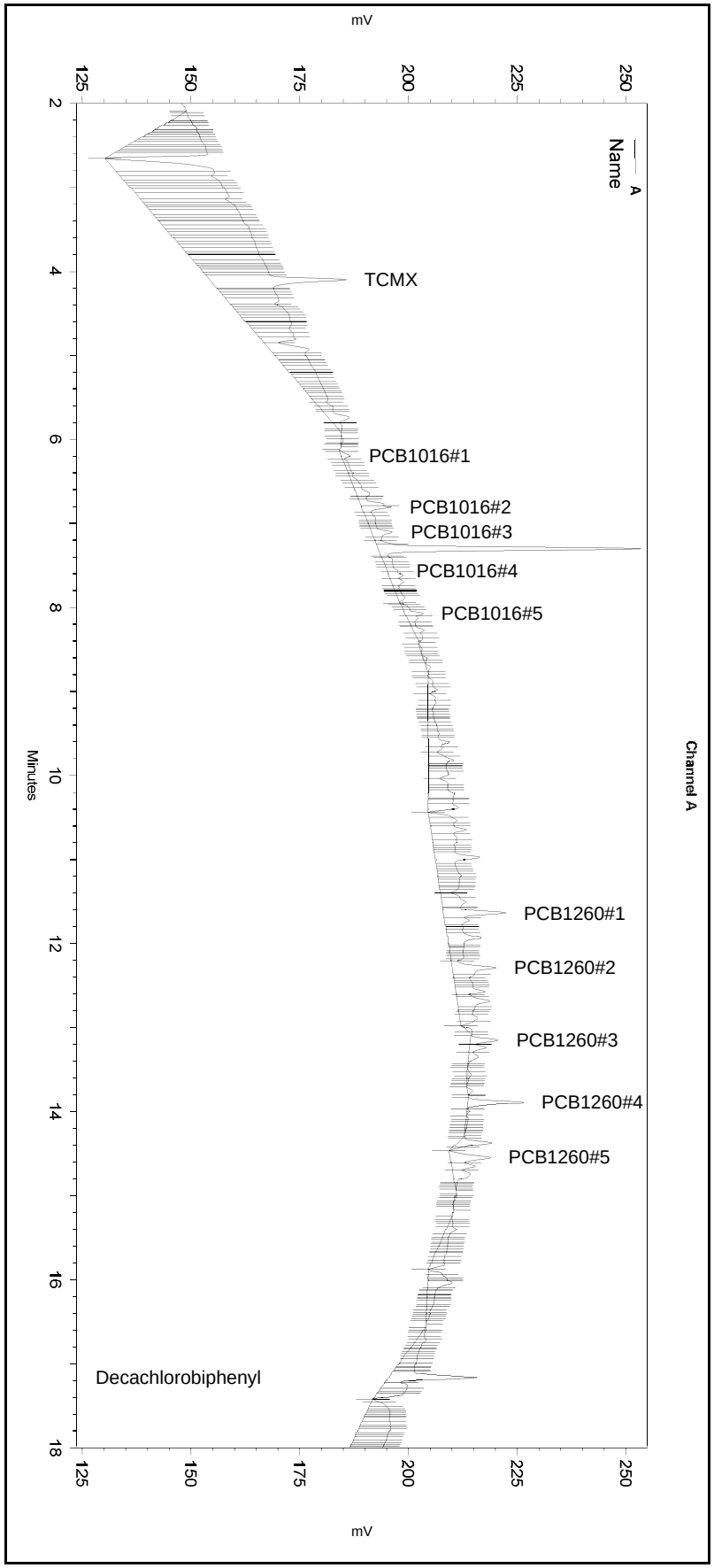
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	16023	2.000 CAL
PCB1016#1	5.203	5.207	2580	10.000 CAL
PCB1016#2	5.767	5.770	7194	10.000 CAL
PCB1016#3	5.983	5.987	3196	10.000 CAL
PCB1016#4	6.533	6.537	2584	10.000 CAL
PCB1016#5	6.987	6.990	3101	10.000 CAL
PCB1260#1	11.153	11.153	9296	10.000 CAL
PCB1260#2	11.557	11.560	6806	10.000 CAL
PCB1260#3	12.100	12.100	5965	10.000 CAL
PCB1260#4	12.757	12.757	11588	10.000 CAL
PCB1260#5	13.430	13.430	4681	10.000 CAL
Decachlorobiphenyl	16.423	16.423	22144	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 (Offline) Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 7:31:19 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

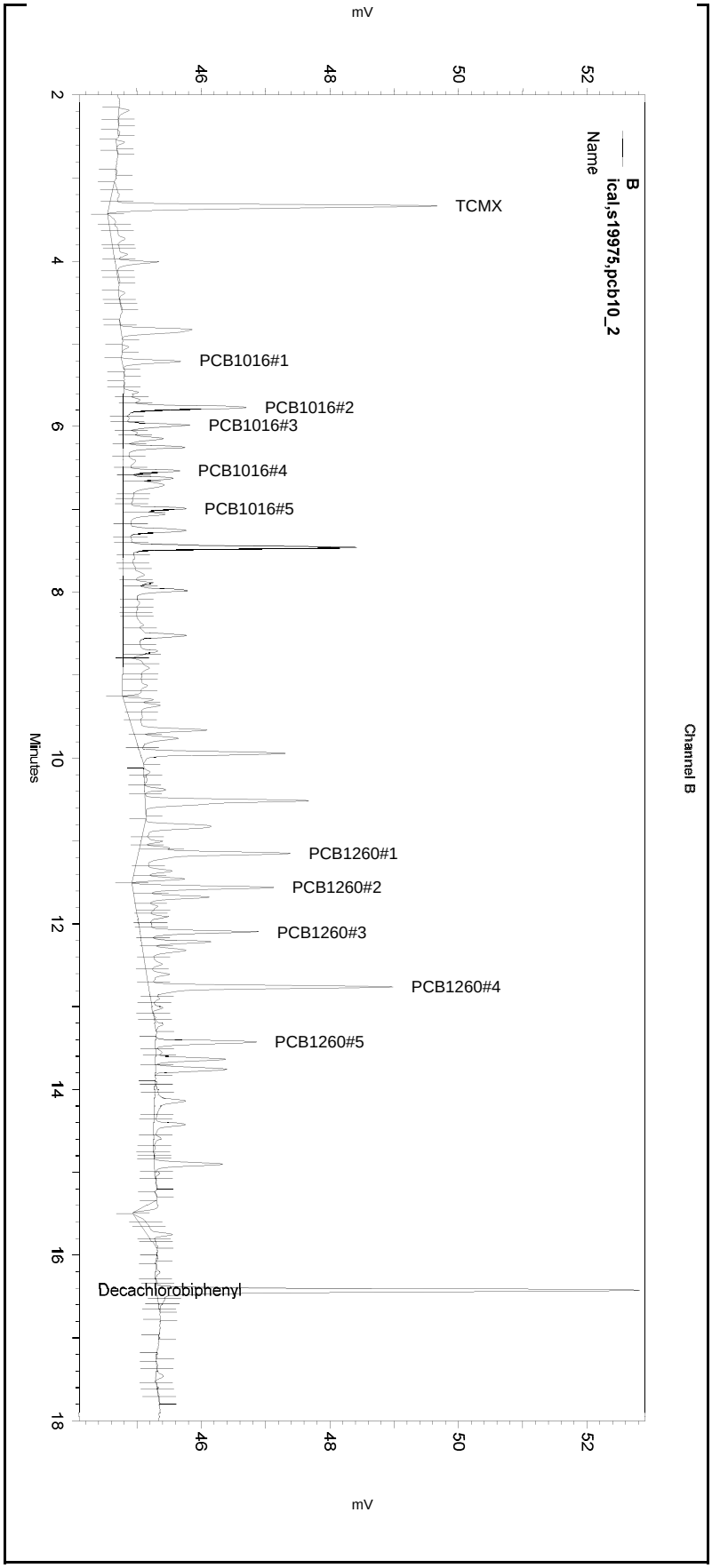
Manual Integration Fixes
==========
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC16 (Offline) Vial: 11 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 6:41:39 PM
Analysis Date: 9/6/2012 7:31:19 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 8:09:44 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	117533	5.000 CAL
PCB1016#1	6.197	6.197	10920	25.000 CAL
PCB1016#2	6.807	6.810	33027	25.000 CAL
PCB1016#3	7.110	7.110	20181	25.000 CAL
PCB1016#4	7.567	7.570	10350	25.000 CAL
PCB1016#5	8.077	8.077	16823	25.000 CAL
PCB1260#1	11.640	11.640	66128	25.000 CAL
PCB1260#2	12.290	12.290	55839	25.000 CAL
PCB1260#3	13.150	13.150	37420	25.000 CAL
PCB1260#4	13.893	13.897	87519	25.000 CAL
PCB1260#5	14.547	14.550	46288	25.000 CAL
Decachlorobiphenyl	17.160	17.167	86480	5.000 CAL

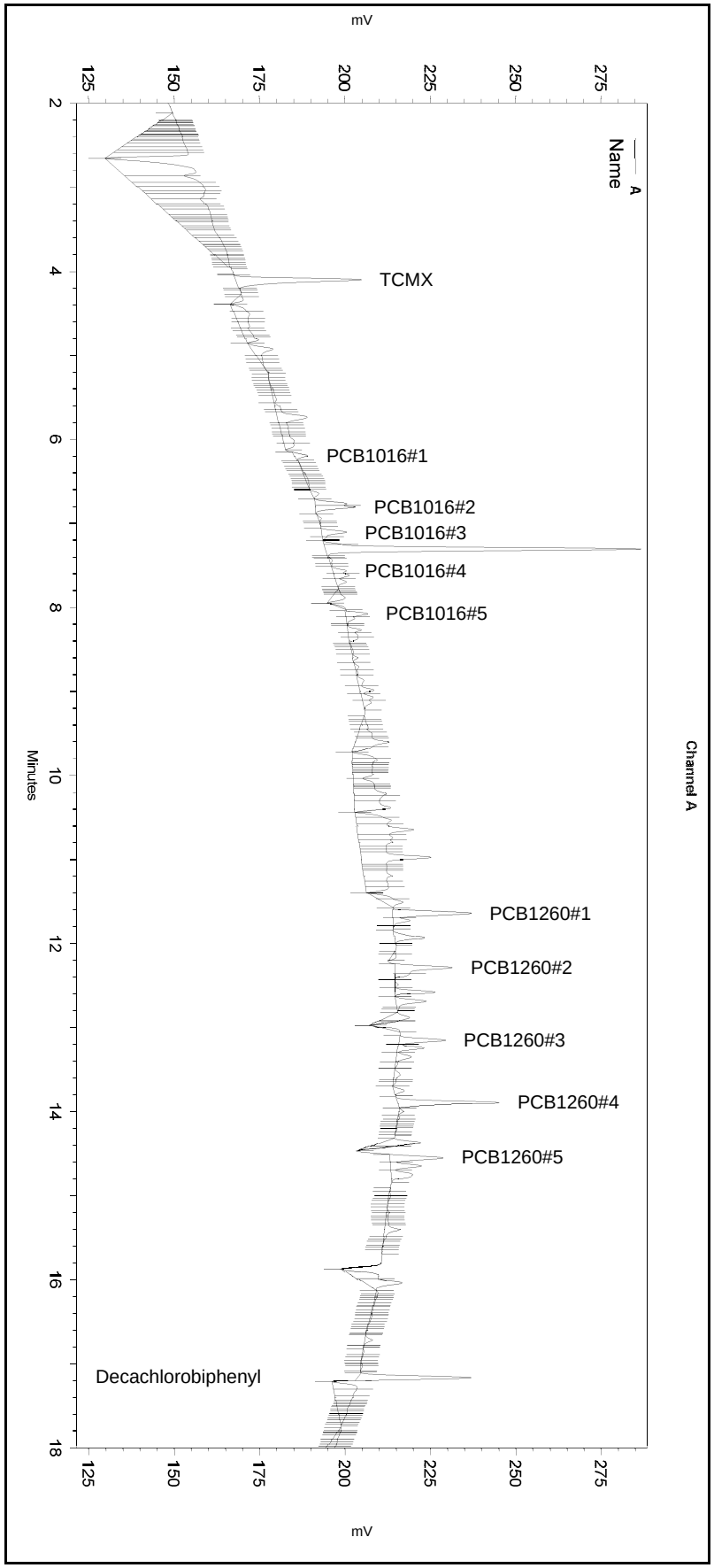
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	35473	5.000 CAL
PCB1016#1	5.203	5.207	5968	25.000 CAL
PCB1016#2	5.767	5.770	15096	25.000 CAL
PCB1016#3	5.983	5.987	7008	25.000 CAL
PCB1016#4	6.533	6.537	4782	25.000 CAL
PCB1016#5	6.987	6.990	5550	25.000 CAL
PCB1260#1	11.153	11.153	17132	25.000 CAL
PCB1260#2	11.560	11.560	12821	25.000 CAL
PCB1260#3	12.100	12.100	11221	25.000 CAL
PCB1260#4	12.757	12.757	26833	25.000 CAL
PCB1260#5	13.430	13.430	11850	25.000 CAL
Decachlorobiphenyl	16.423	16.423	53024	5.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 8:09:44 AM
Sample Amount: 1



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No items selected for this section

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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

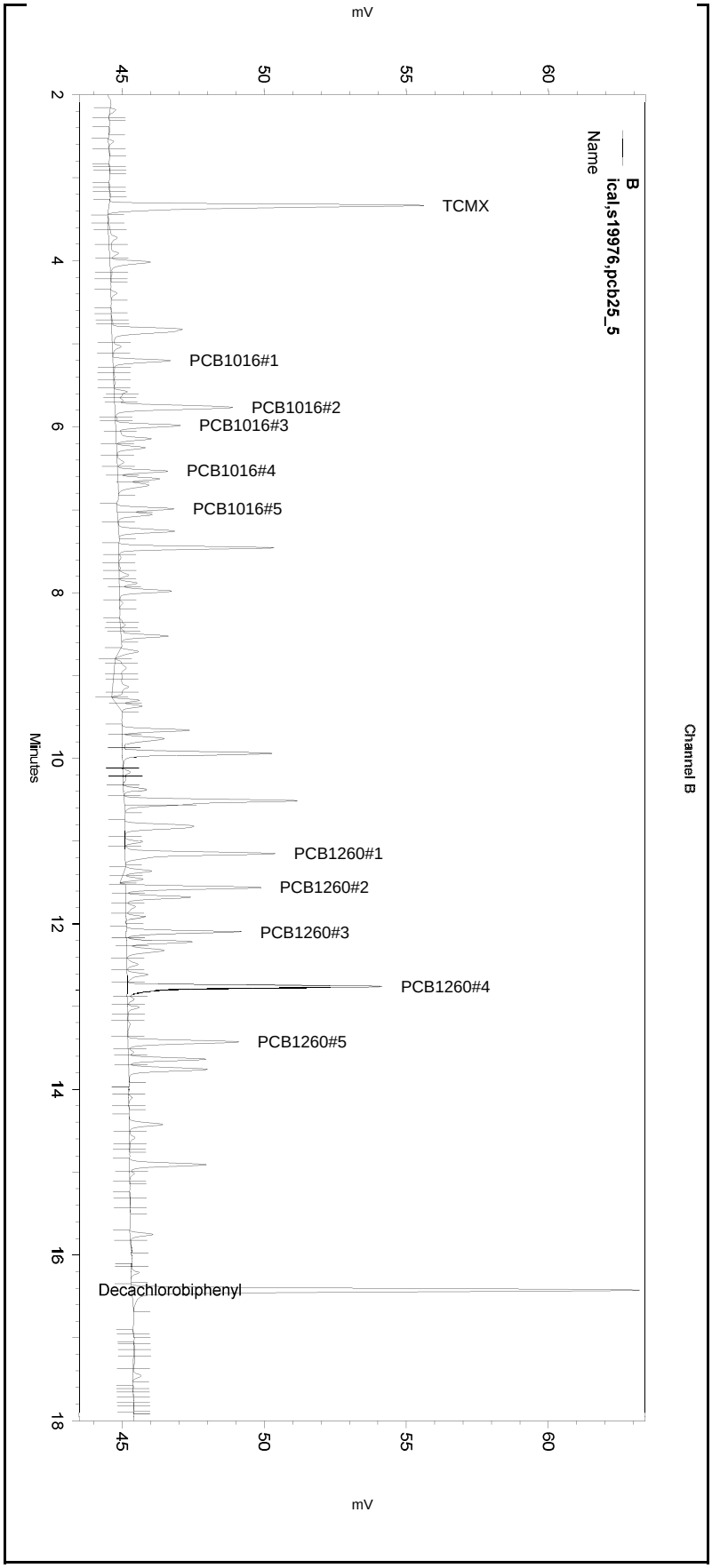
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.024	0	0
Yes	Reset Baseline	6.15	0	0
Yes	Reset Baseline	6.255	0	0
Yes	Reset Baseline	6.709	0	0
Yes	Reset Baseline	7.778	0	0
Yes	Reset Baseline	8.025	0	0
Yes	Reset Baseline	11.569	0	0
Yes	Reset Baseline	12.239	0	0
Yes	Reset Baseline	13.815	0	0
Yes	Move BL Start	14.467	14.508	0
Yes	Reset Baseline	14.843	0	0
Yes	Reset Baseline	16.119	0	0
Yes	Reset Baseline	17.104	0	0
Yes	Move BL Stop	17.213	17.196	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 8:09:44 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.824	0	0
Yes	Reset Baseline	11.295	0	0
Yes	Move BL Start	11.507	11.517	0
Yes	Reset Baseline	12	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 (Offline) Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 7:31:33 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.100	4.103	137337	5.000 CAL
PCB1016#1	6.197	6.197	22611	25.000 CAL
PCB1016#2	6.807	6.810	37981	25.000 CAL
PCB1016#3	7.110	7.110	20657	25.000 CAL
PCB1016#4	7.567	7.570	20762	25.000 CAL
PCB1016#5	8.077	8.077	41551	25.000 CAL
PCB1260#1	11.640	11.640	101401	25.000 CAL
PCB1260#2	12.290	12.290	68518	25.000 CAL
PCB1260#3	13.150	13.150	37420	25.000 CAL
PCB1260#4	13.893	13.897	99188	25.000 CAL
PCB1260#5	14.547	14.550	108952	25.000 CAL
Decachlorobiphenyl	17.160	17.167	126642	5.000 CAL

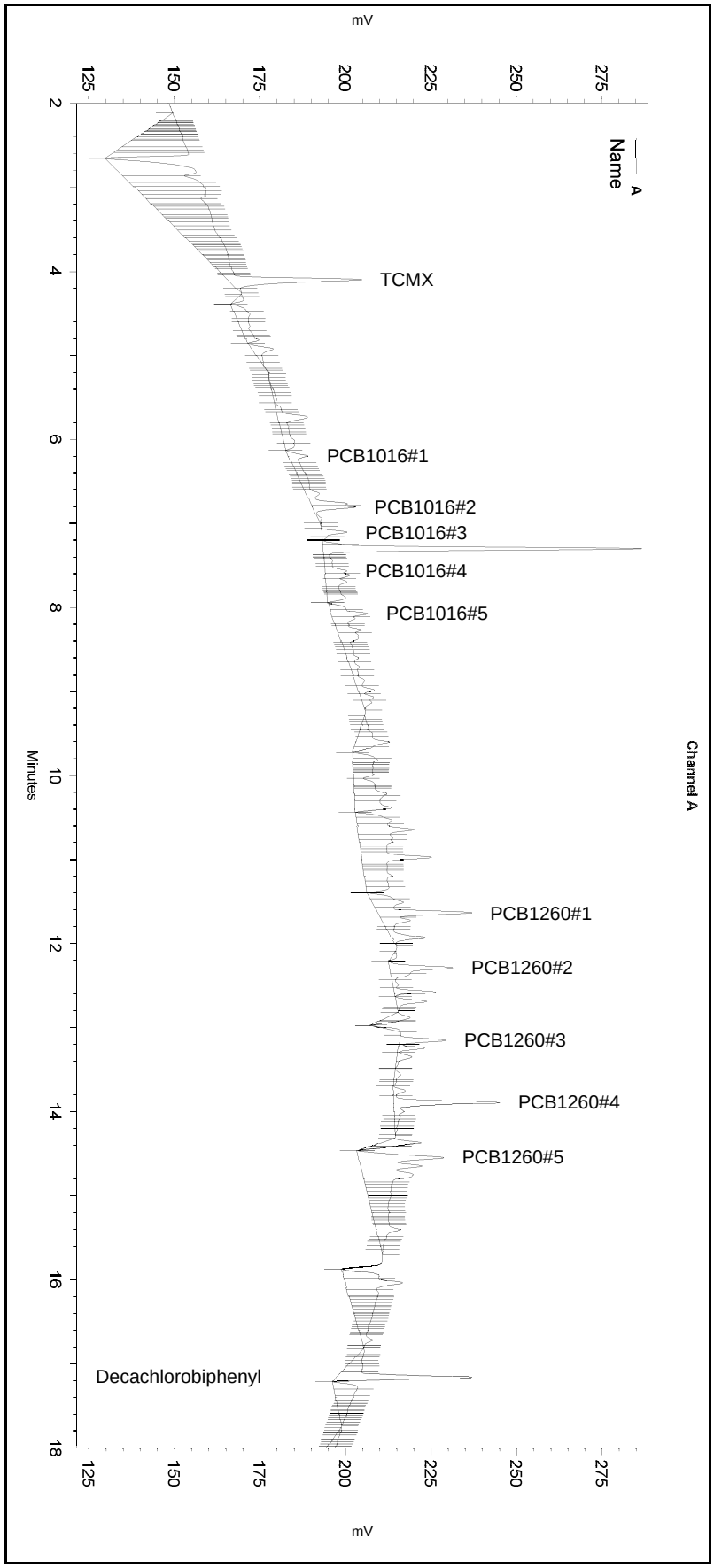
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.333	3.337	35473	5.000 CAL
PCB1016#1	5.203	5.207	6148	25.000 CAL
PCB1016#2	5.767	5.770	15490	25.000 CAL
PCB1016#3	5.983	5.987	7359	25.000 CAL
PCB1016#4	6.533	6.537	5219	25.000 CAL
PCB1016#5	6.987	6.990	5550	25.000 CAL
PCB1260#1	11.153	11.153	18507	25.000 CAL
PCB1260#2	11.560	11.560	14076	25.000 CAL
PCB1260#3	12.100	12.100	12801	25.000 CAL
PCB1260#4	12.757	12.757	27719	25.000 CAL
PCB1260#5	13.430	13.430	12038	25.000 CAL
Decachlorobiphenyl	16.423	16.423	53024	5.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 (Offline) Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 7:31:33 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

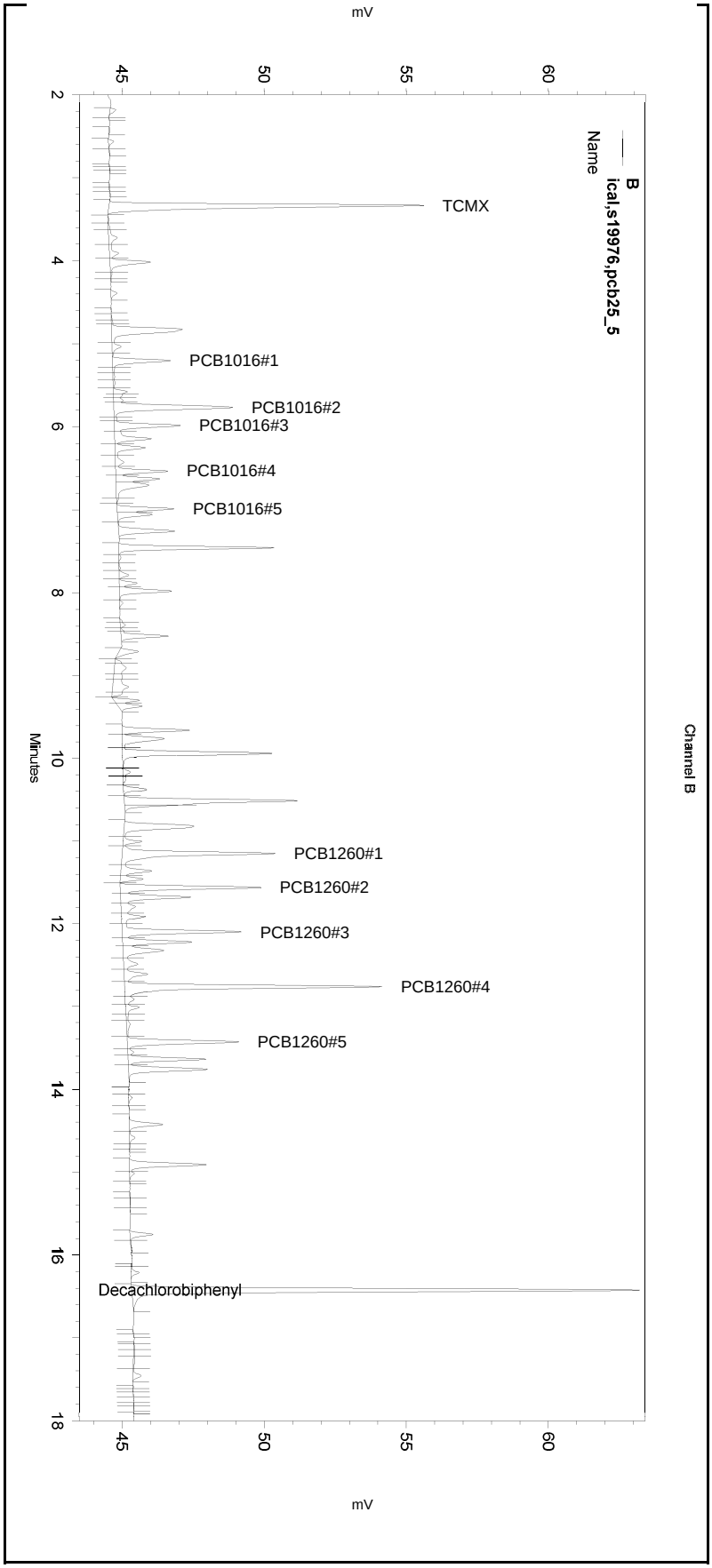
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC16 (Offline) Vial: 12 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:09:32 PM
Analysis Date: 9/6/2012 7:31:33 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:57:29 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	386492	20.000 CAL
PCB1016#1	6.200	6.197	37545	100.000 CAL
PCB1016#2	6.813	6.810	116135	100.000 CAL
PCB1016#3	7.113	7.110	74900	100.000 CAL
PCB1016#4	7.570	7.570	41959	100.000 CAL
PCB1016#5	8.080	8.077	62896	100.000 CAL
PCB1260#1	11.647	11.640	204301	100.000 CAL
PCB1260#2	12.293	12.290	176661	100.000 CAL
PCB1260#3	13.157	13.150	126401	100.000 CAL
PCB1260#4	13.900	13.897	281699	100.000 CAL
PCB1260#5	14.553	14.550	142049	100.000 CAL
Decachlorobiphenyl	17.170	17.167	306679	20.000 CAL

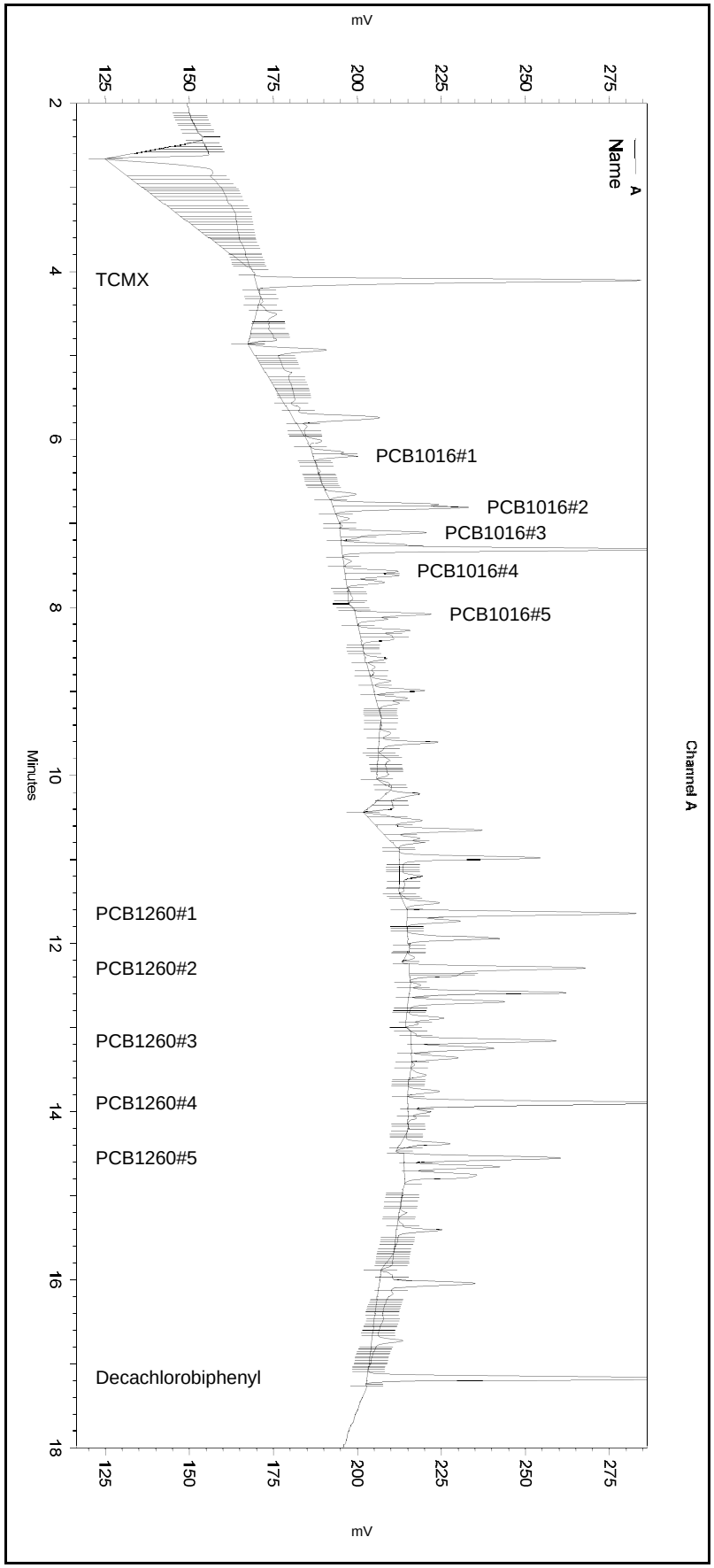
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	139300	20.000 CAL
PCB1016#1	5.210	5.207	22906	100.000 CAL
PCB1016#2	5.773	5.770	55734	100.000 CAL
PCB1016#3	5.990	5.987	26927	100.000 CAL
PCB1016#4	6.540	6.537	18100	100.000 CAL
PCB1016#5	6.993	6.990	19889	100.000 CAL
PCB1260#1	11.160	11.153	61078	100.000 CAL
PCB1260#2	11.563	11.560	46115	100.000 CAL
PCB1260#3	12.107	12.100	39659	100.000 CAL
PCB1260#4	12.763	12.757	90313	100.000 CAL
PCB1260#5	13.437	13.430	40201	100.000 CAL
Decachlorobiphenyl	16.430	16.423	170856	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:57:29 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

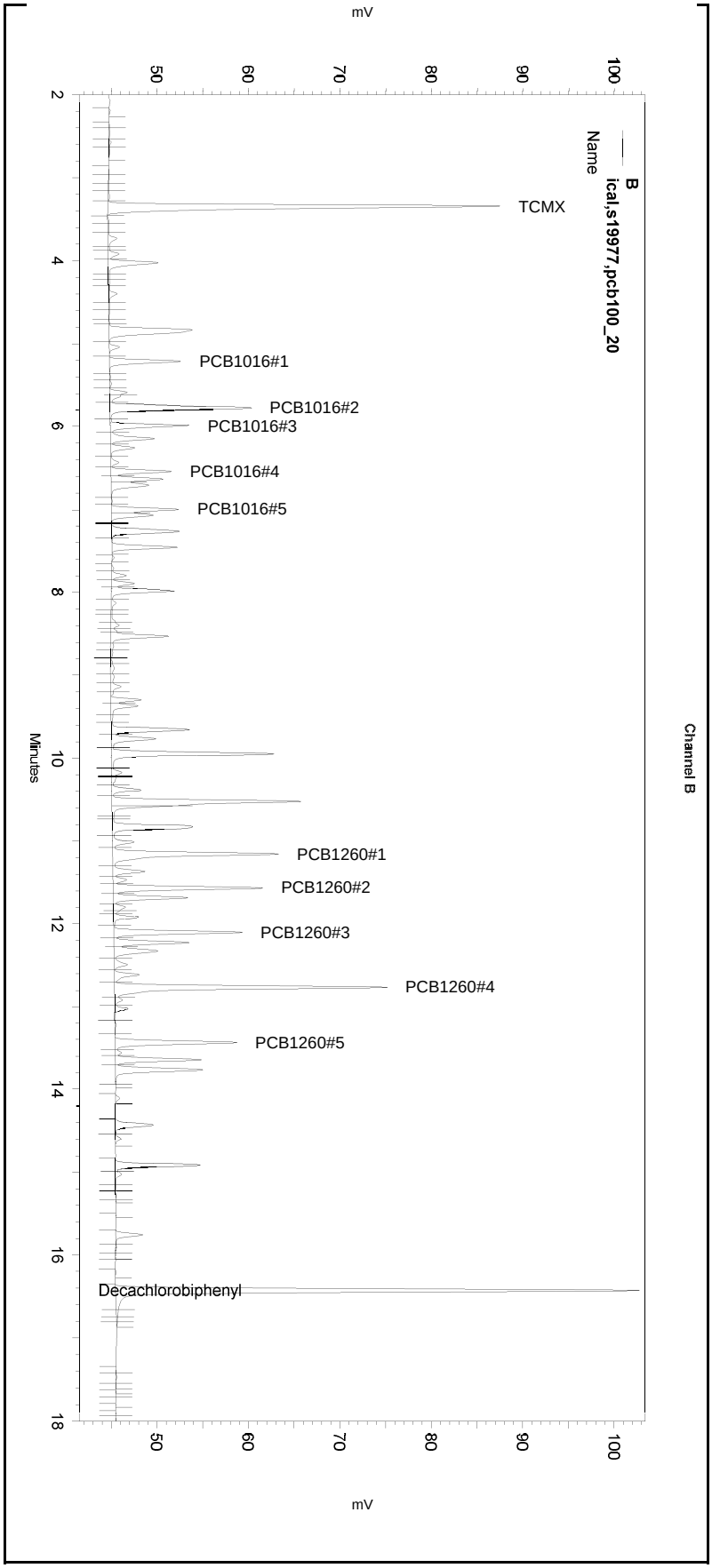
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.002	0	0
Yes	Reset Baseline	4.297	0	0
Yes	Reset Baseline	6.082	0	0
Yes	Reset Baseline	6.713	0	0
Yes	Reset Baseline	7.005	0	0
Yes	Reset Baseline	7.761	0	0
Yes	Reset Baseline	8.025	0	0
Yes	Reset Baseline	11.582	0	0
Yes	Reset Baseline	12.063	0	0
Yes	Move BL Start	12.22	12.243	0
Yes	Reset Baseline	12.458	0	0
Yes	Manual Baseline	13.045	13.419	0
Yes	Split Peak	13.101	0	0
Yes	Reset Baseline	14.497	0	0
Yes	Reset Baseline	14.862	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:57:29 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.545	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 (Offline) Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:31:46 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	684351	20.000 CAL
PCB1016#1	6.200	6.197	116854	100.000 CAL
PCB1016#2	6.813	6.810	198211	100.000 CAL
PCB1016#3	7.113	7.110	147868	100.000 CAL
PCB1016#4	7.570	7.570	78527	100.000 CAL
PCB1016#5	8.080	8.077	81926	100.000 CAL
PCB1260#1	11.647	11.640	218667	100.000 CAL
PCB1260#2	12.293	12.290	191489	100.000 CAL
PCB1260#3	13.157	13.150	118902	100.000 CAL
PCB1260#4	13.900	13.897	281699	100.000 CAL
PCB1260#5	14.553	14.550	159171	100.000 CAL
Decachlorobiphenyl	17.170	17.167	306679	20.000 CAL

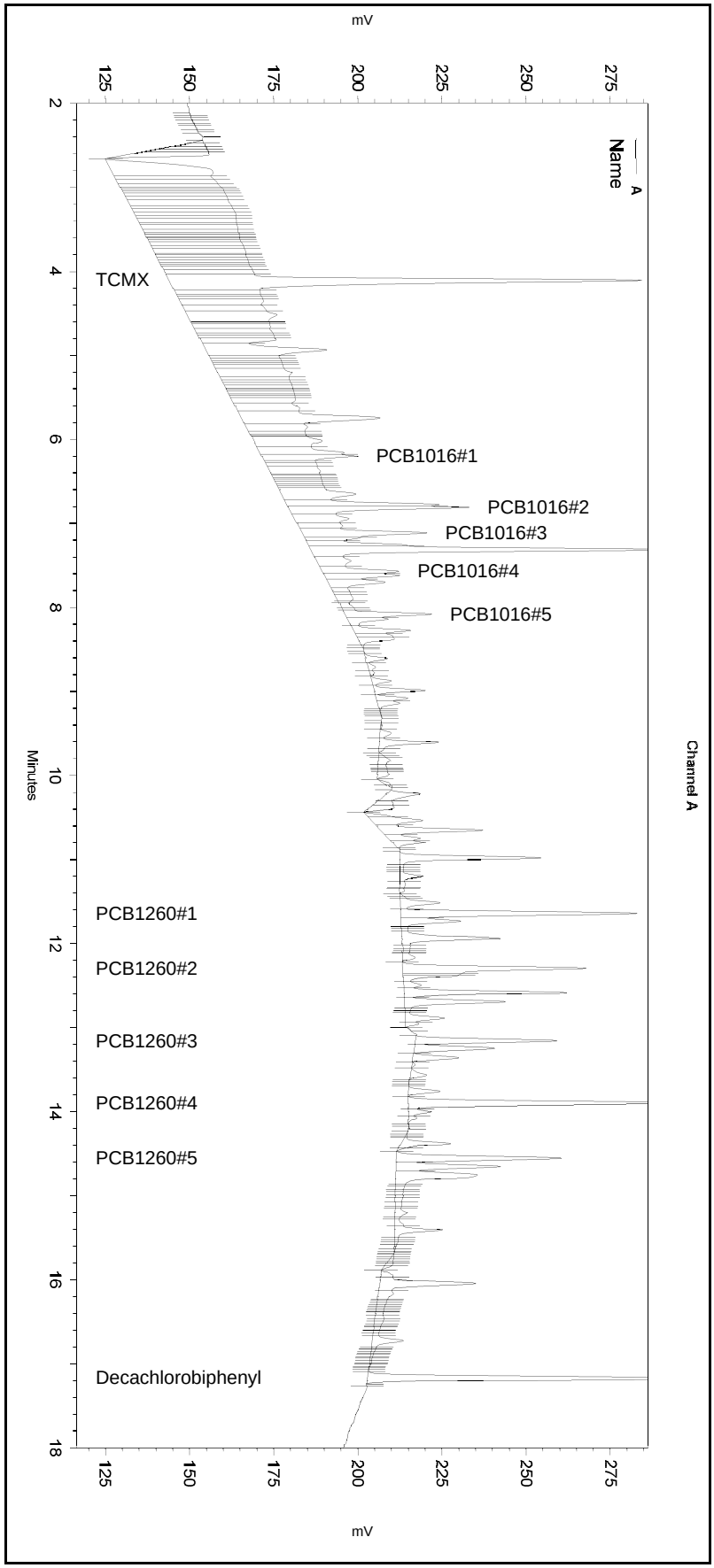
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	139300	20.000 CAL
PCB1016#1	5.210	5.207	24336	100.000 CAL
PCB1016#2	5.773	5.770	57577	100.000 CAL
PCB1016#3	5.990	5.987	28557	100.000 CAL
PCB1016#4	6.540	6.537	19330	100.000 CAL
PCB1016#5	6.993	6.990	21205	100.000 CAL
PCB1260#1	11.160	11.153	61078	100.000 CAL
PCB1260#2	11.563	11.560	46115	100.000 CAL
PCB1260#3	12.107	12.100	39659	100.000 CAL
PCB1260#4	12.763	12.757	90313	100.000 CAL
PCB1260#5	13.437	13.430	40201	100.000 CAL
Decachlorobiphenyl	16.430	16.423	170856	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 (Offline) Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:31:46 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

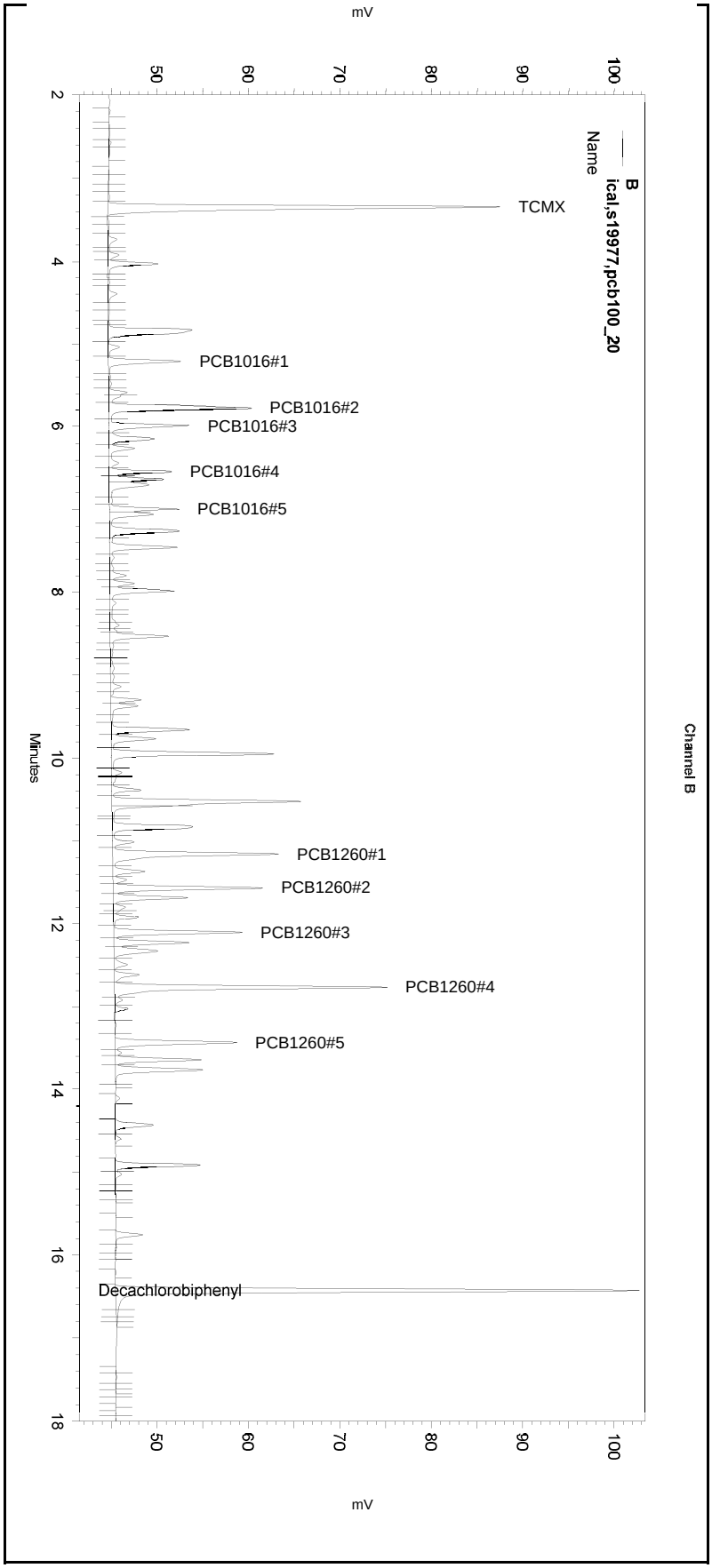
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC16 (Offline) Vial: 13 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 7:37:22 PM
Analysis Date: 9/6/2012 7:31:46 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:57:35 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	811212	50.000 CAL
PCB1016#1	6.197	6.197	92140	250.000 CAL
PCB1016#2	6.810	6.810	268218	250.000 CAL
PCB1016#3	7.110	7.110	184195	250.000 CAL
PCB1016#4	7.570	7.570	94019	250.000 CAL
PCB1016#5	8.077	8.077	145150	250.000 CAL
PCB1260#1	11.640	11.640	434397	250.000 CAL
PCB1260#2	12.290	12.290	430462	250.000 CAL
PCB1260#3	13.150	13.150	273946	250.000 CAL
PCB1260#4	13.897	13.897	589618	250.000 CAL
PCB1260#5	14.550	14.550	312567	250.000 CAL
Decachlorobiphenyl	17.167	17.167	617326	50.000 CAL

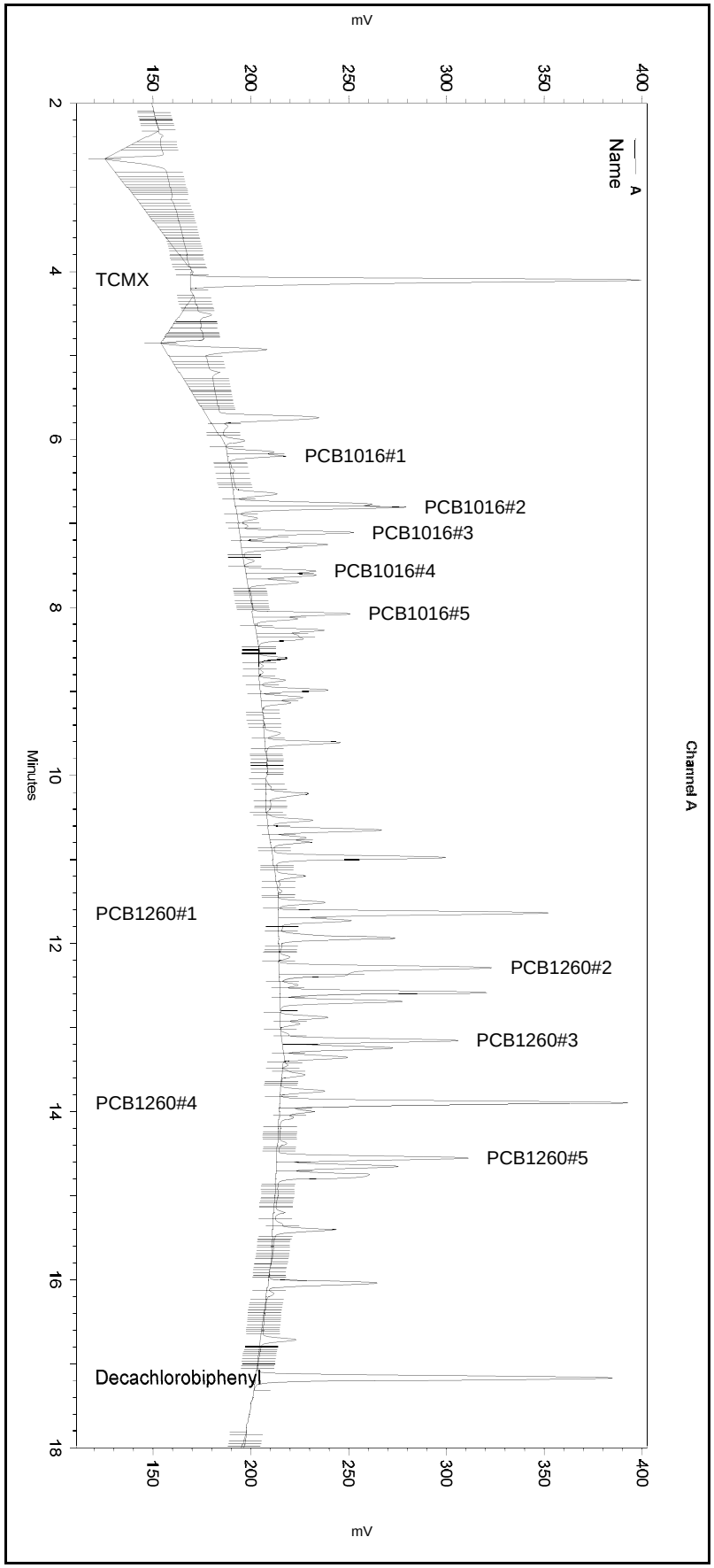
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	348956	50.000 CAL
PCB1016#1	5.207	5.207	53684	250.000 CAL
PCB1016#2	5.770	5.770	129867	250.000 CAL
PCB1016#3	5.987	5.987	62078	250.000 CAL
PCB1016#4	6.537	6.537	42866	250.000 CAL
PCB1016#5	6.990	6.990	48123	250.000 CAL
PCB1260#1	11.153	11.153	141677	250.000 CAL
PCB1260#2	11.560	11.560	106943	250.000 CAL
PCB1260#3	12.100	12.100	92664	250.000 CAL
PCB1260#4	12.757	12.757	212546	250.000 CAL
PCB1260#5	13.430	13.430	96592	250.000 CAL
Decachlorobiphenyl	16.423	16.423	380659	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:57:35 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

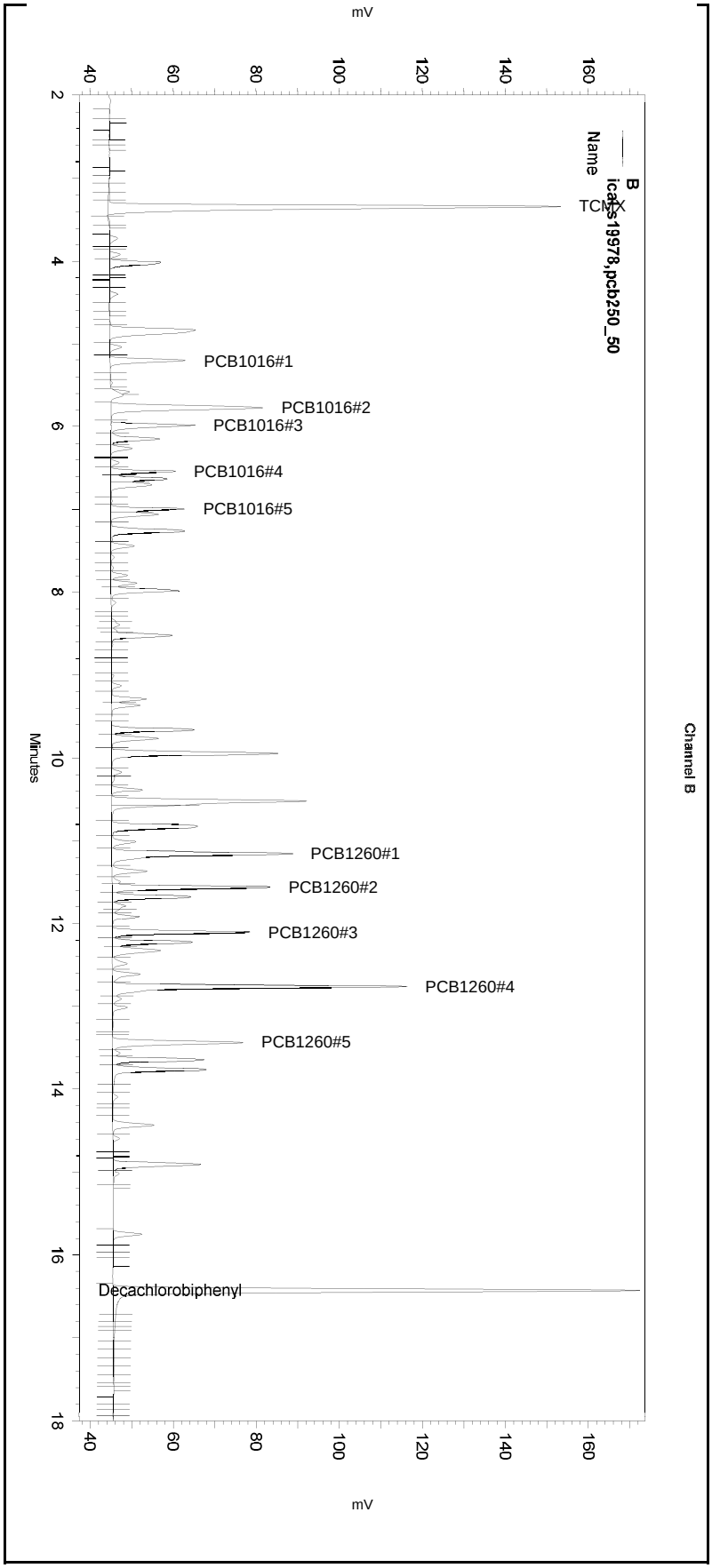
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.976	0	0
Yes	Reset Baseline	4.283	0	0
Yes	Reset Baseline	6.086	0	0
Yes	Reset Baseline	11.42	0	0
Yes	Manual Baseline	13.019	13.428	0
Yes	Split Peak	13.099	0	0
Yes	Reset Baseline	17.316	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:57:35 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 (Offline) Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:32:00 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	1089781	50.000 CAL
PCB1016#1	6.197	6.197	195490	250.000 CAL
PCB1016#2	6.810	6.810	341925	250.000 CAL
PCB1016#3	7.110	7.110	243006	250.000 CAL
PCB1016#4	7.570	7.570	124060	250.000 CAL
PCB1016#5	8.077	8.077	161343	250.000 CAL
PCB1260#1	11.640	11.640	451293	250.000 CAL
PCB1260#2	12.290	12.290	437868	250.000 CAL
PCB1260#3	13.150	13.150	256608	250.000 CAL
PCB1260#4	13.897	13.897	589618	250.000 CAL
PCB1260#5	14.550	14.550	312567	250.000 CAL
Decachlorobiphenyl	17.167	17.167	694583	50.000 CAL

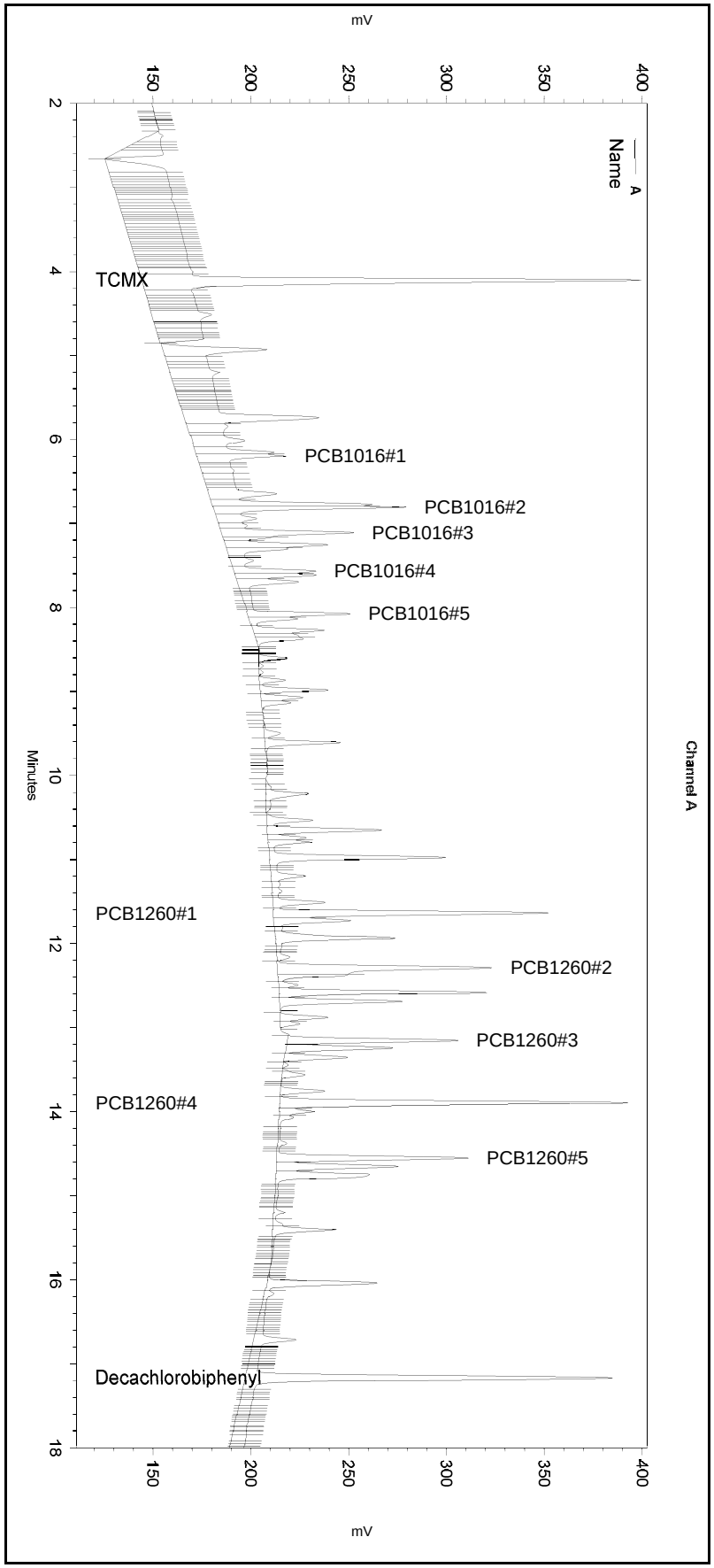
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	348956	50.000 CAL
PCB1016#1	5.207	5.207	53684	250.000 CAL
PCB1016#2	5.770	5.770	129867	250.000 CAL
PCB1016#3	5.987	5.987	62078	250.000 CAL
PCB1016#4	6.537	6.537	42866	250.000 CAL
PCB1016#5	6.990	6.990	48123	250.000 CAL
PCB1260#1	11.153	11.153	141677	250.000 CAL
PCB1260#2	11.560	11.560	106943	250.000 CAL
PCB1260#3	12.100	12.100	92664	250.000 CAL
PCB1260#4	12.757	12.757	212546	250.000 CAL
PCB1260#5	13.430	13.430	96592	250.000 CAL
Decachlorobiphenyl	16.423	16.423	380659	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 (Offline) Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:32:00 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

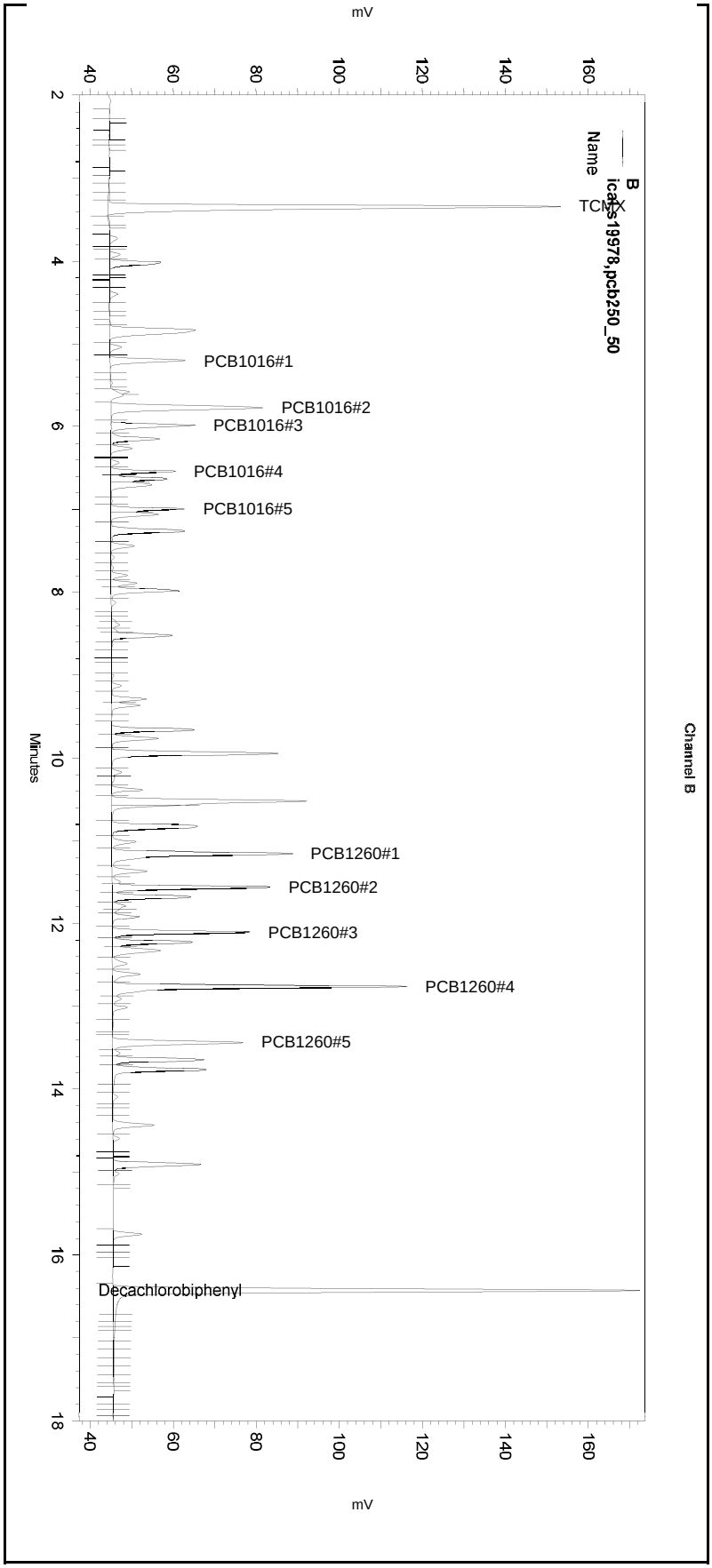
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC16 (Offline) Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:05:13 PM
Analysis Date: 9/6/2012 7:32:00 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:57:40 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.090	4.103	1344954	100.000 CAL
PCB1016#1	6.183	6.197	153076	500.000 CAL
PCB1016#2	6.797	6.810	438830	500.000 CAL
PCB1016#3	7.100	7.110	296694	500.000 CAL
PCB1016#4	7.557	7.570	157076	500.000 CAL
PCB1016#5	8.067	8.077	239254	500.000 CAL
PCB1260#1	11.630	11.640	701410	500.000 CAL
PCB1260#2	12.280	12.290	726674	500.000 CAL
PCB1260#3	13.140	13.150	468263	500.000 CAL
PCB1260#4	13.883	13.897	991537	500.000 CAL
PCB1260#5	14.537	14.550	552960	500.000 CAL
Decachlorobiphenyl	17.157	17.167	1019880	100.000 CAL

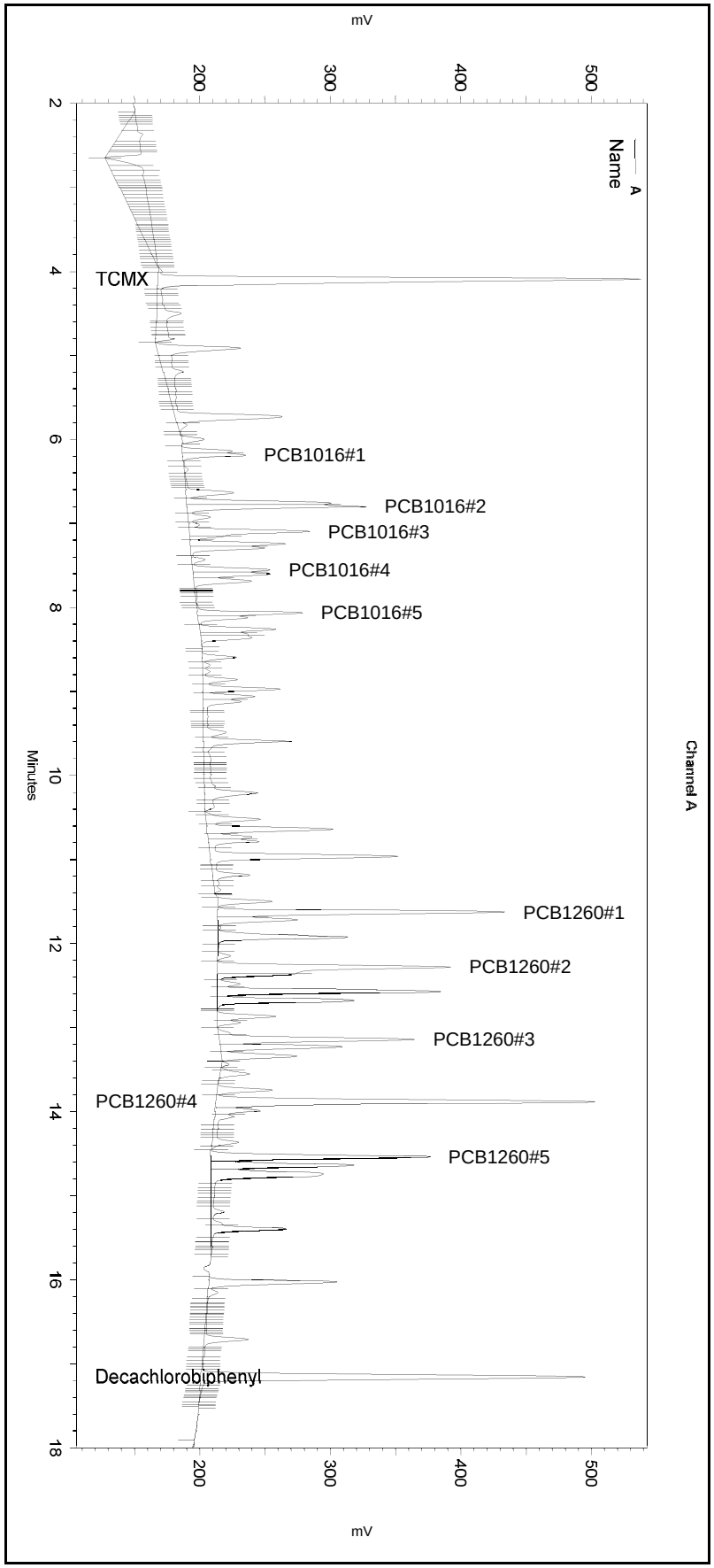
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.323	3.337	674460	100.000 CAL
PCB1016#1	5.193	5.207	94193	500.000 CAL
PCB1016#2	5.757	5.770	232508	500.000 CAL
PCB1016#3	5.973	5.987	110161	500.000 CAL
PCB1016#4	6.527	6.537	73914	500.000 CAL
PCB1016#5	6.980	6.990	85062	500.000 CAL
PCB1260#1	11.143	11.153	261764	500.000 CAL
PCB1260#2	11.550	11.560	193404	500.000 CAL
PCB1260#3	12.090	12.100	171467	500.000 CAL
PCB1260#4	12.747	12.757	404597	500.000 CAL
PCB1260#5	13.420	13.430	186709	500.000 CAL
Decachlorobiphenyl	16.413	16.423	743825	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:57:40 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

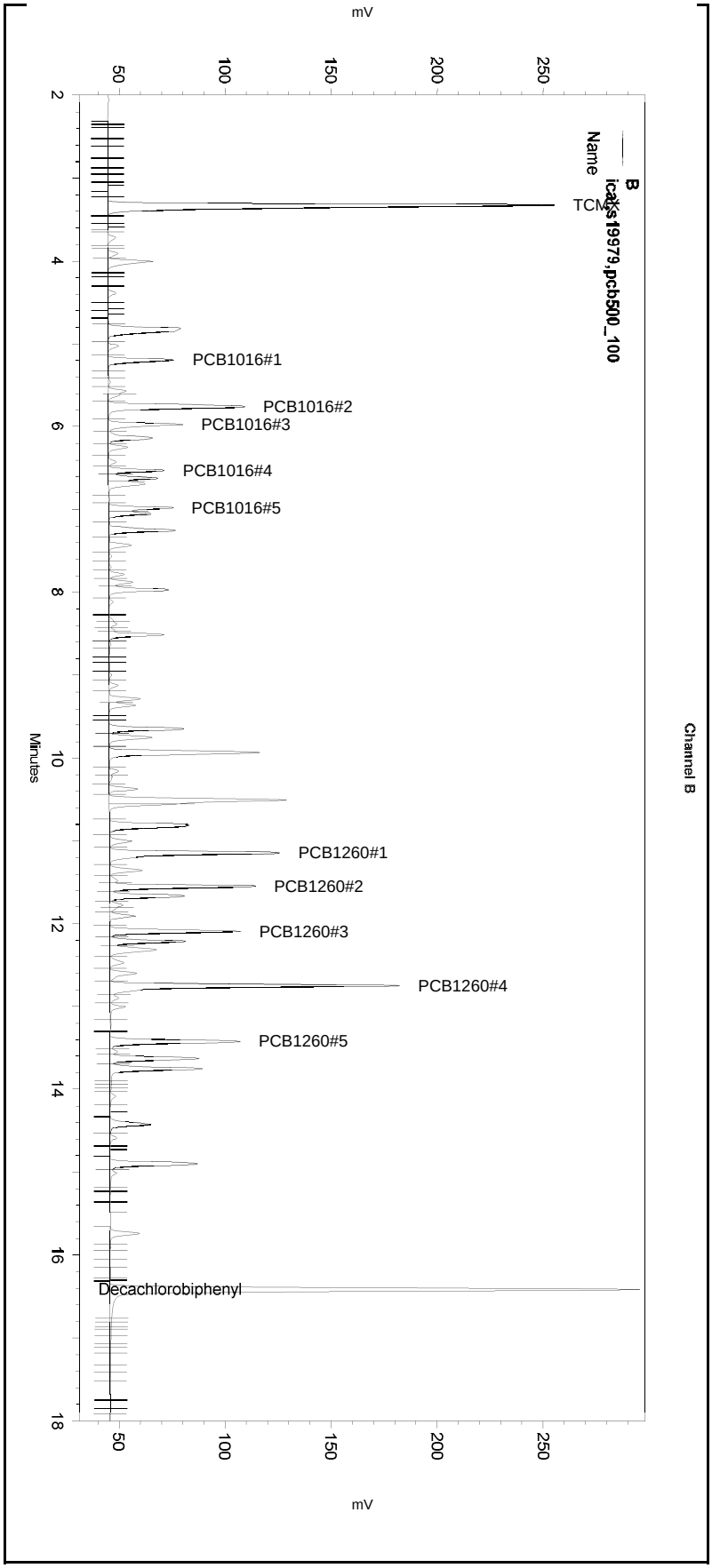
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.955	0	0
Yes	Reset Baseline	6.053	0	0
Yes	Reset Baseline	8.485	0	0
Yes	Reset Baseline	11.447	0	0
Yes	Manual Baseline	13.004	13.404	0
Yes	Reset Baseline	15.72	0	0
Yes	Reset Baseline	15.944	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:57:40 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 (Offline) Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:32:13 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.090	4.103	1675289	100.000 CAL
PCB1016#1	6.183	6.197	339005	500.000 CAL
PCB1016#2	6.797	6.810	632021	500.000 CAL
PCB1016#3	7.100	7.110	468564	500.000 CAL
PCB1016#4	7.557	7.570	290095	500.000 CAL
PCB1016#5	8.067	8.077	403651	500.000 CAL
PCB1260#1	11.630	11.640	786876	500.000 CAL
PCB1260#2	12.280	12.290	782149	500.000 CAL
PCB1260#3	13.140	13.150	393849	500.000 CAL
PCB1260#4	13.883	13.897	991537	500.000 CAL
PCB1260#5	14.537	14.550	555221	500.000 CAL
Decachlorobiphenyl	17.157	17.167	1031486	100.000 CAL

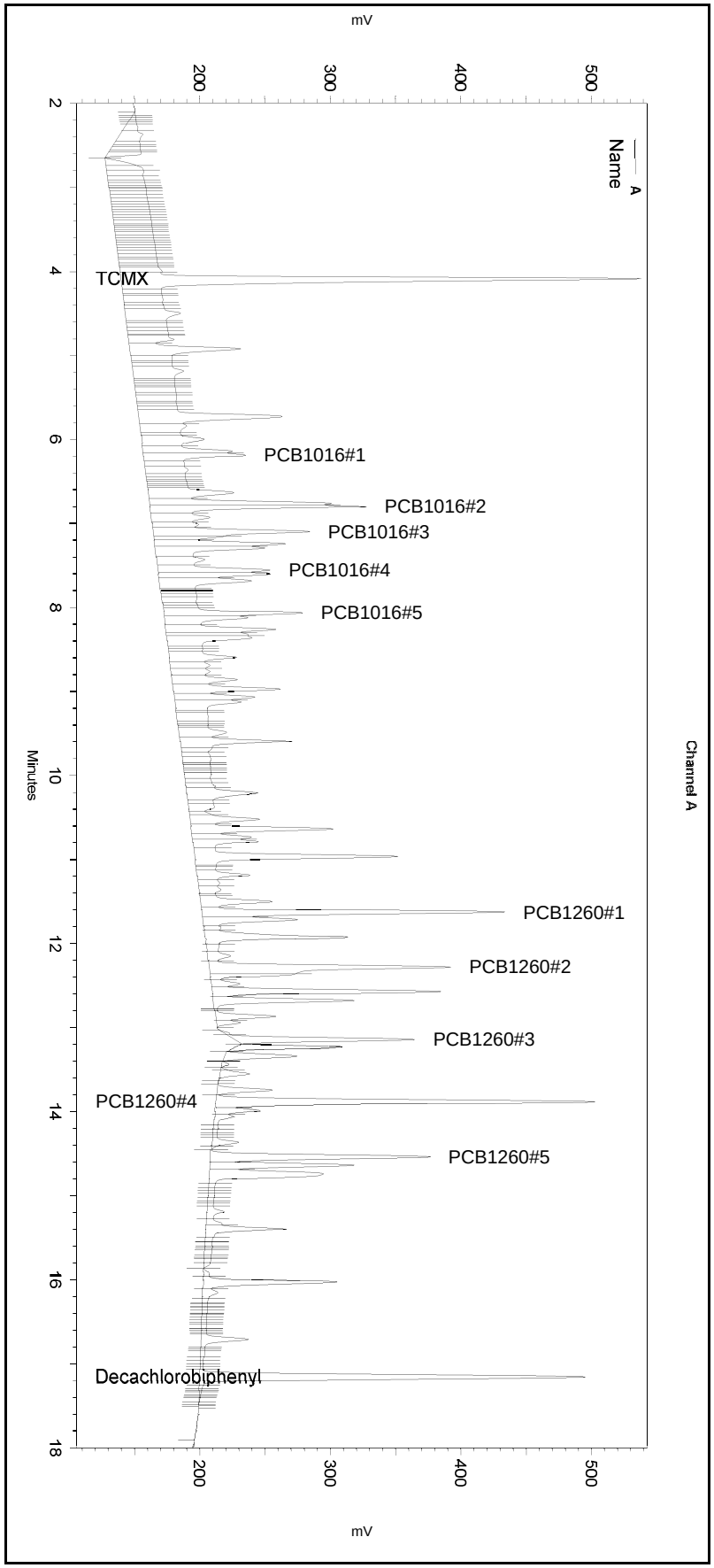
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.323	3.337	674460	100.000 CAL
PCB1016#1	5.193	5.207	94193	500.000 CAL
PCB1016#2	5.757	5.770	232508	500.000 CAL
PCB1016#3	5.973	5.987	110161	500.000 CAL
PCB1016#4	6.527	6.537	73914	500.000 CAL
PCB1016#5	6.980	6.990	85062	500.000 CAL
PCB1260#1	11.143	11.153	261764	500.000 CAL
PCB1260#2	11.550	11.560	193404	500.000 CAL
PCB1260#3	12.090	12.100	171467	500.000 CAL
PCB1260#4	12.747	12.757	404597	500.000 CAL
PCB1260#5	13.420	13.430	186709	500.000 CAL
Decachlorobiphenyl	16.413	16.423	743825	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 (Offline) Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:32:13 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

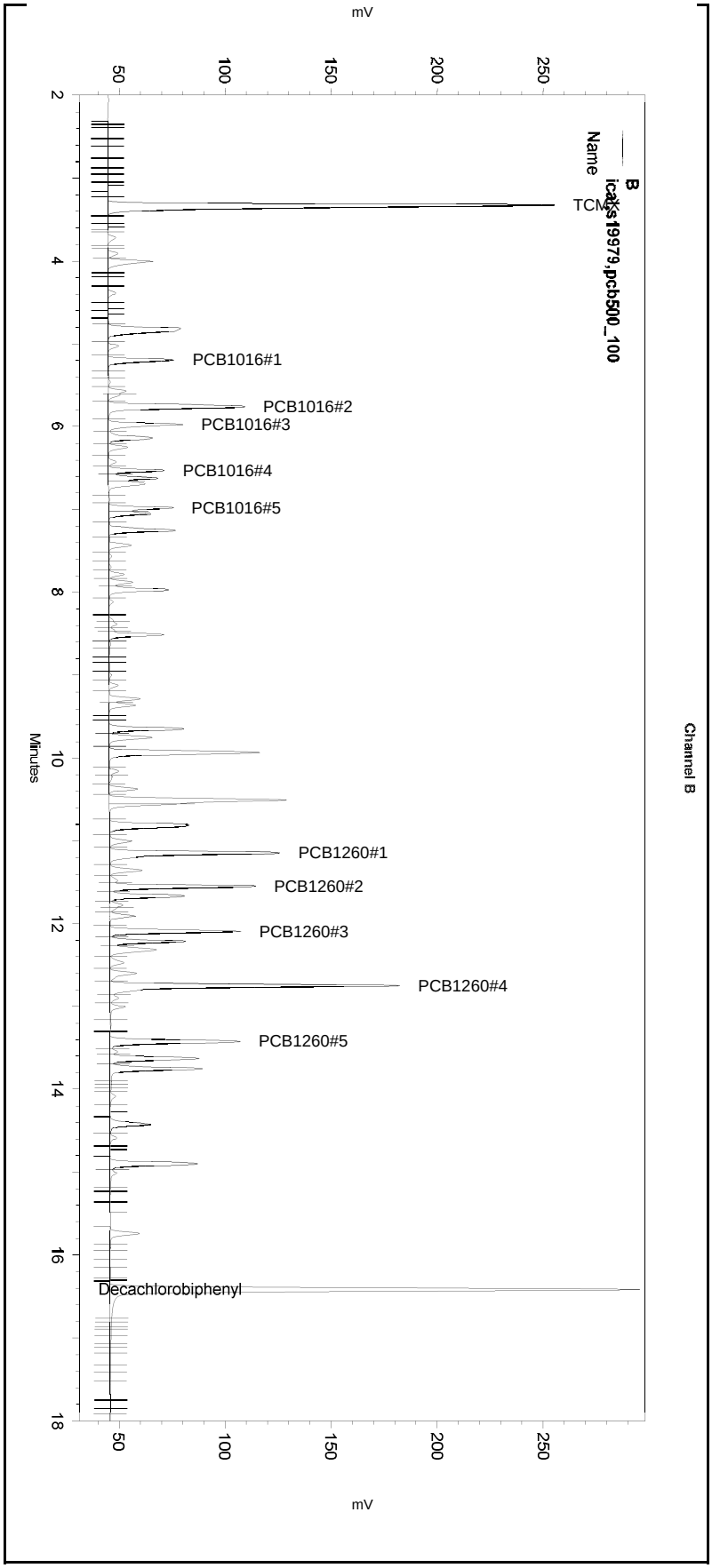
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC16 (Offline) Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 8:33:05 PM
Analysis Date: 9/6/2012 7:32:13 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:57:46 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	1851098	150.000 CAL
PCB1016#1	6.200	6.197	216798	750.000 CAL
PCB1016#2	6.813	6.810	608153	750.000 CAL
PCB1016#3	7.113	7.110	423496	750.000 CAL
PCB1016#4	7.573	7.570	229888	750.000 CAL
PCB1016#5	8.083	8.077	350252	750.000 CAL
PCB1260#1	11.643	11.640	960225	750.000 CAL
PCB1260#2	12.293	12.290	979347	750.000 CAL
PCB1260#3	13.153	13.150	632425	750.000 CAL
PCB1260#4	13.900	13.897	1292836	750.000 CAL
PCB1260#5	14.550	14.550	724082	750.000 CAL
Decachlorobiphenyl	17.167	17.167	1276679	150.000 CAL

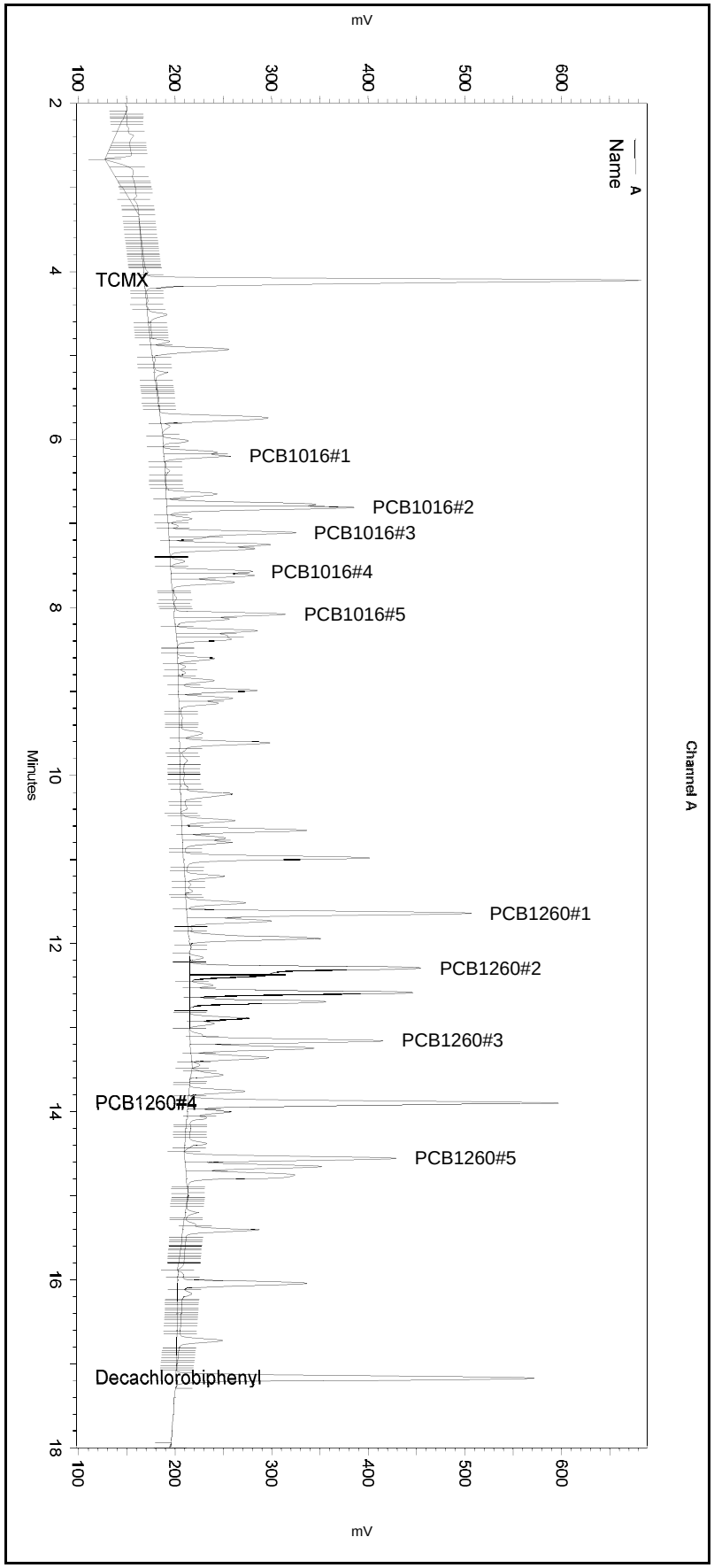
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	1069521	150.000 CAL
PCB1016#1	5.210	5.207	143624	750.000 CAL
PCB1016#2	5.773	5.770	366778	750.000 CAL
PCB1016#3	5.990	5.987	170474	750.000 CAL
PCB1016#4	6.540	6.537	113440	750.000 CAL
PCB1016#5	6.993	6.990	129786	750.000 CAL
PCB1260#1	11.160	11.153	383407	750.000 CAL
PCB1260#2	11.563	11.560	280246	750.000 CAL
PCB1260#3	12.107	12.100	246327	750.000 CAL
PCB1260#4	12.760	12.757	576462	750.000 CAL
PCB1260#5	13.437	13.430	263393	750.000 CAL
Decachlorobiphenyl	16.430	16.423	1006026	150.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:57:46 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

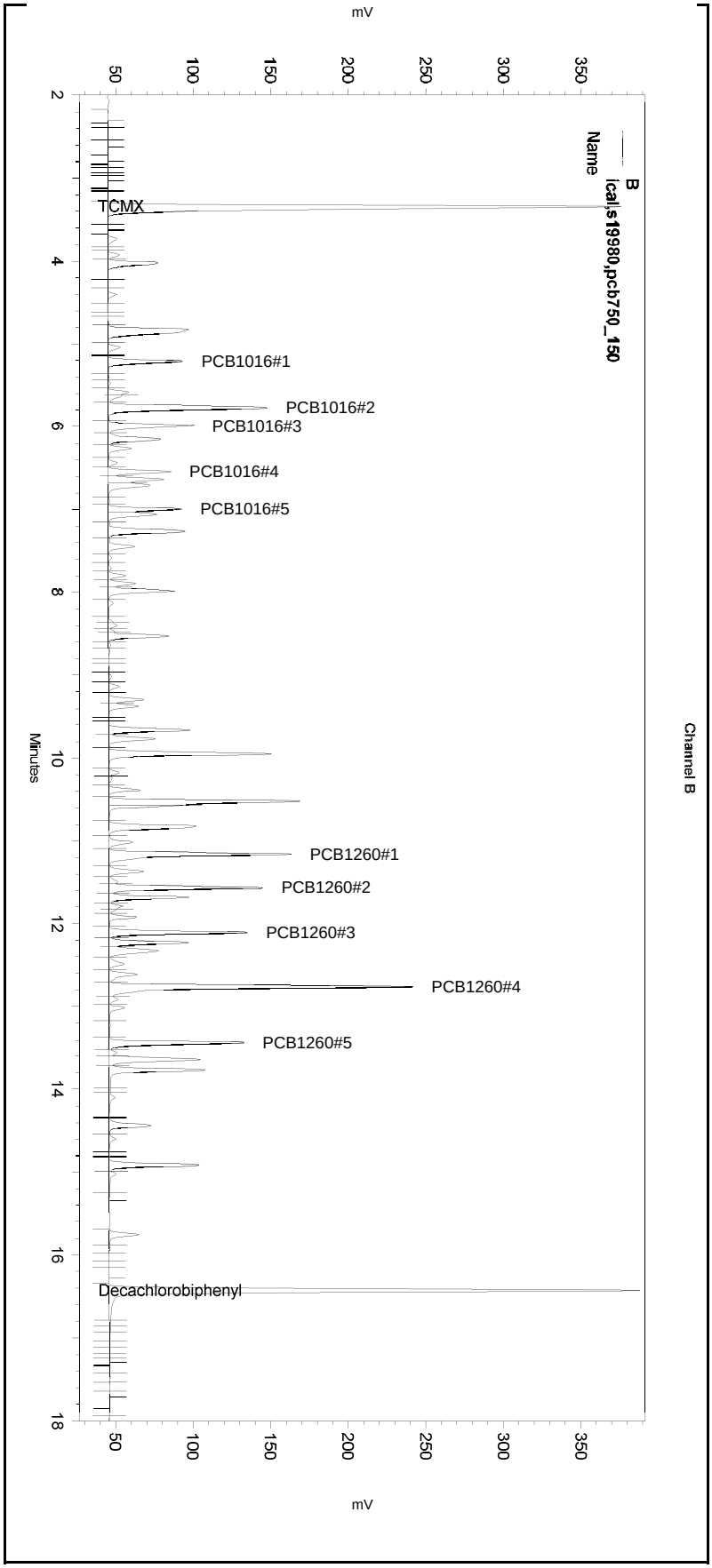
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.958	0	0
Yes	Reset Baseline	8.478	0	0
Yes	Reset Baseline	12.066	0	0
Yes	Manual Baseline	13.006	13.485	0
Yes	Split Peak	13.096	0	0
Yes	Split Peak	13.101	0	0
Yes	Reset Baseline	14.967	0	0
Yes	Reset Baseline	17.299	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:57:46 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 (Offline) Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:32:26 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.107	4.103	1870942	150.000 CAL
PCB1016#1	6.200	6.197	282147	750.000 CAL
PCB1016#2	6.813	6.810	680887	750.000 CAL
PCB1016#3	7.113	7.110	492386	750.000 CAL
PCB1016#4	7.573	7.570	286434	750.000 CAL
PCB1016#5	8.083	8.077	425062	750.000 CAL
PCB1260#1	11.643	11.640	998663	750.000 CAL
PCB1260#2	12.293	12.290	1012980	750.000 CAL
PCB1260#3	13.153	13.150	564621	750.000 CAL
PCB1260#4	13.900	13.897	1293117	750.000 CAL
PCB1260#5	14.550	14.550	733828	750.000 CAL
Decachlorobiphenyl	17.167	17.167	1429447	150.000 CAL

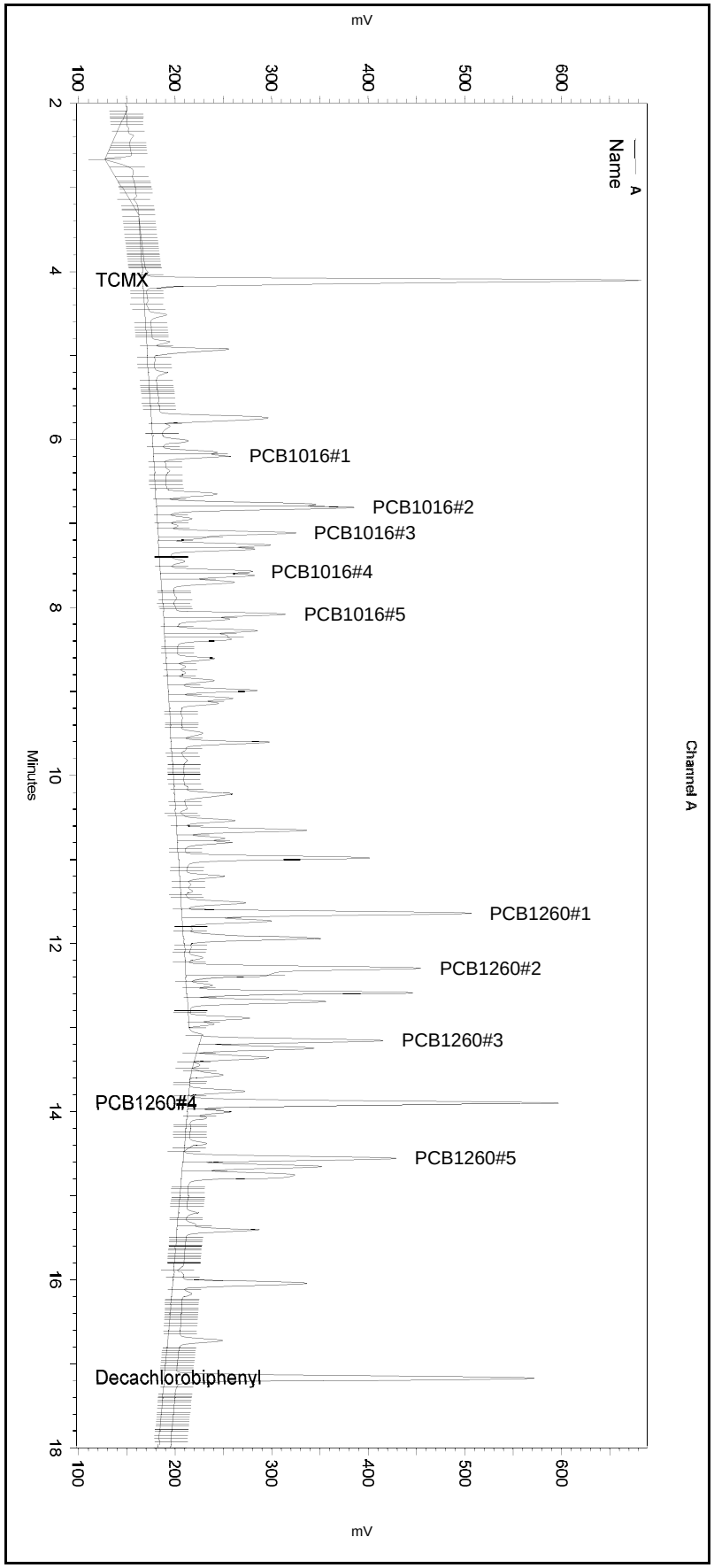
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.340	3.337	1069521	150.000 CAL
PCB1016#1	5.210	5.207	143624	750.000 CAL
PCB1016#2	5.773	5.770	366778	750.000 CAL
PCB1016#3	5.990	5.987	170474	750.000 CAL
PCB1016#4	6.540	6.537	113440	750.000 CAL
PCB1016#5	6.993	6.990	129786	750.000 CAL
PCB1260#1	11.160	11.153	383407	750.000 CAL
PCB1260#2	11.563	11.560	280246	750.000 CAL
PCB1260#3	12.107	12.100	246327	750.000 CAL
PCB1260#4	12.760	12.757	576462	750.000 CAL
PCB1260#5	13.437	13.430	263393	750.000 CAL
Decachlorobiphenyl	16.430	16.423	1006026	150.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 (Offline) Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:32:26 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

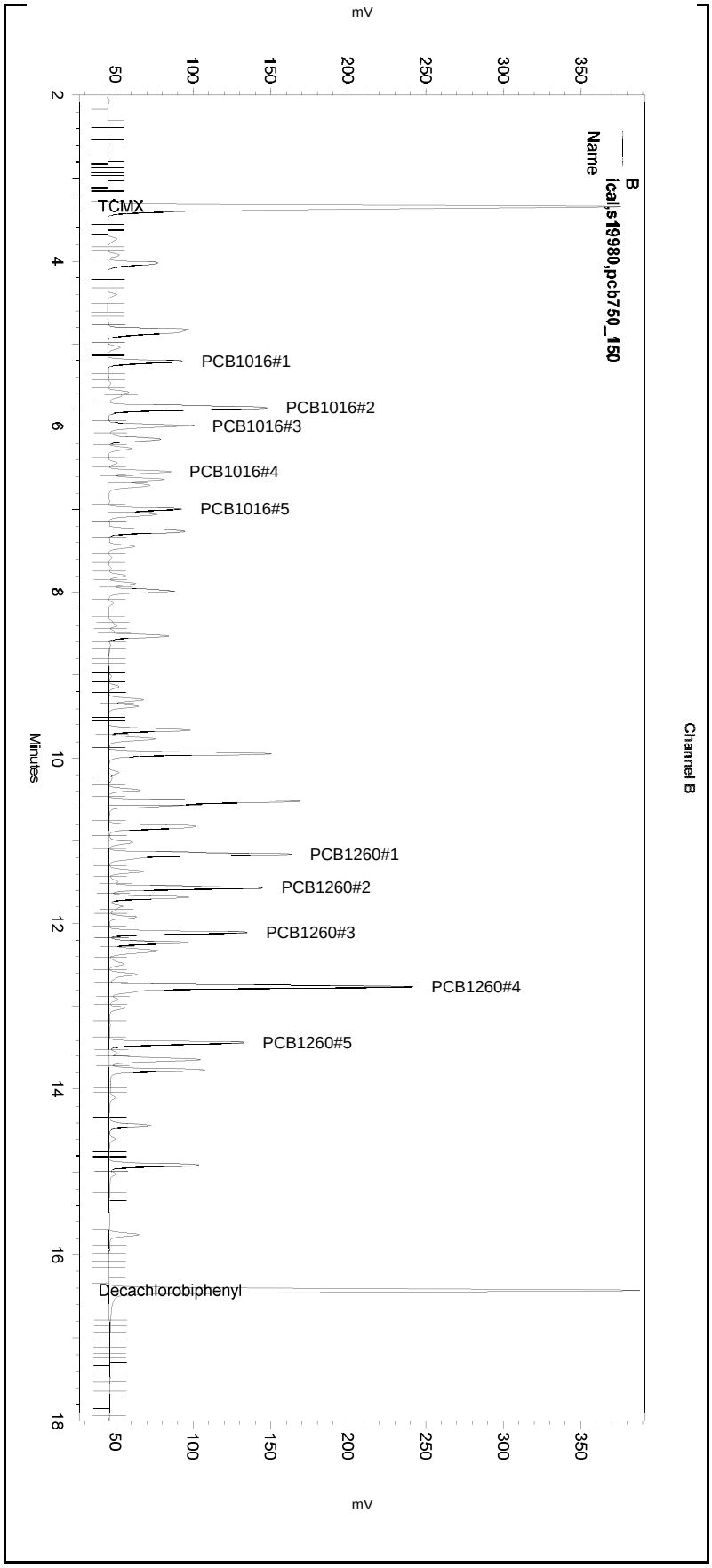
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC16 (Offline) Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:00:55 PM
Analysis Date: 9/6/2012 7:32:26 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:57:52 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.093	4.103	2139909	200.000 CAL
PCB1016#1	6.187	6.197	245258	1000.000 CAL
PCB1016#2	6.800	6.810	689174	1000.000 CAL
PCB1016#3	7.103	7.110	466173	1000.000 CAL
PCB1016#4	7.560	7.570	251333	1000.000 CAL
PCB1016#5	8.070	8.077	388721	1000.000 CAL
PCB1260#1	11.633	11.640	1106040	1000.000 CAL
PCB1260#2	12.280	12.290	1133714	1000.000 CAL
PCB1260#3	13.140	13.150	732069	1000.000 CAL
PCB1260#4	13.887	13.897	1516897	1000.000 CAL
PCB1260#5	14.540	14.550	843436	1000.000 CAL
Decachlorobiphenyl	17.157	17.167	1521403	200.000 CAL

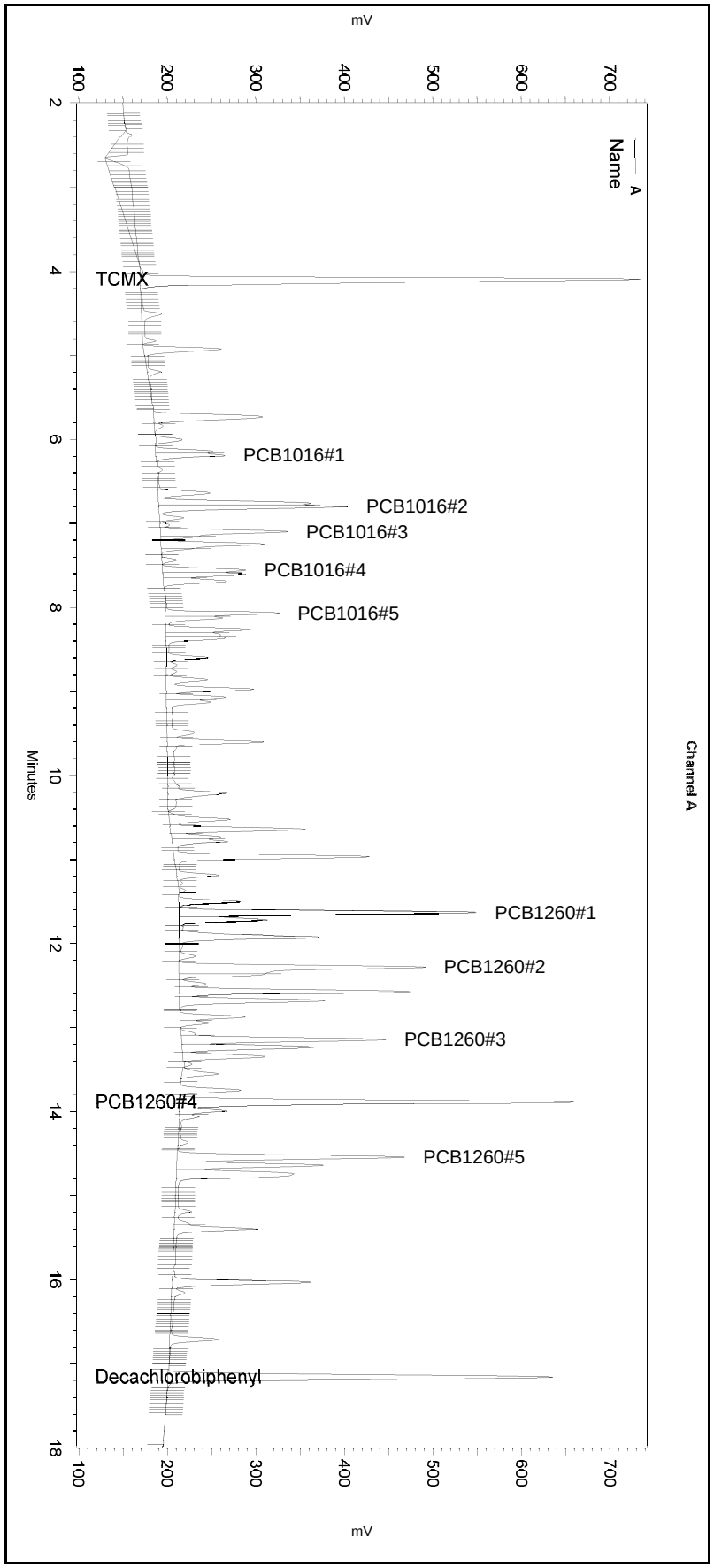
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.327	3.337	1281121	200.000 CAL
PCB1016#1	5.197	5.207	165556	1000.000 CAL
PCB1016#2	5.763	5.770	416829	1000.000 CAL
PCB1016#3	5.977	5.987	193652	1000.000 CAL
PCB1016#4	6.530	6.537	128512	1000.000 CAL
PCB1016#5	6.983	6.990	150292	1000.000 CAL
PCB1260#1	11.147	11.153	462166	1000.000 CAL
PCB1260#2	11.550	11.560	335022	1000.000 CAL
PCB1260#3	12.093	12.100	298965	1000.000 CAL
PCB1260#4	12.750	12.757	711594	1000.000 CAL
PCB1260#5	13.423	13.430	330730	1000.000 CAL
Decachlorobiphenyl	16.417	16.423	1246720	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:57:52 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

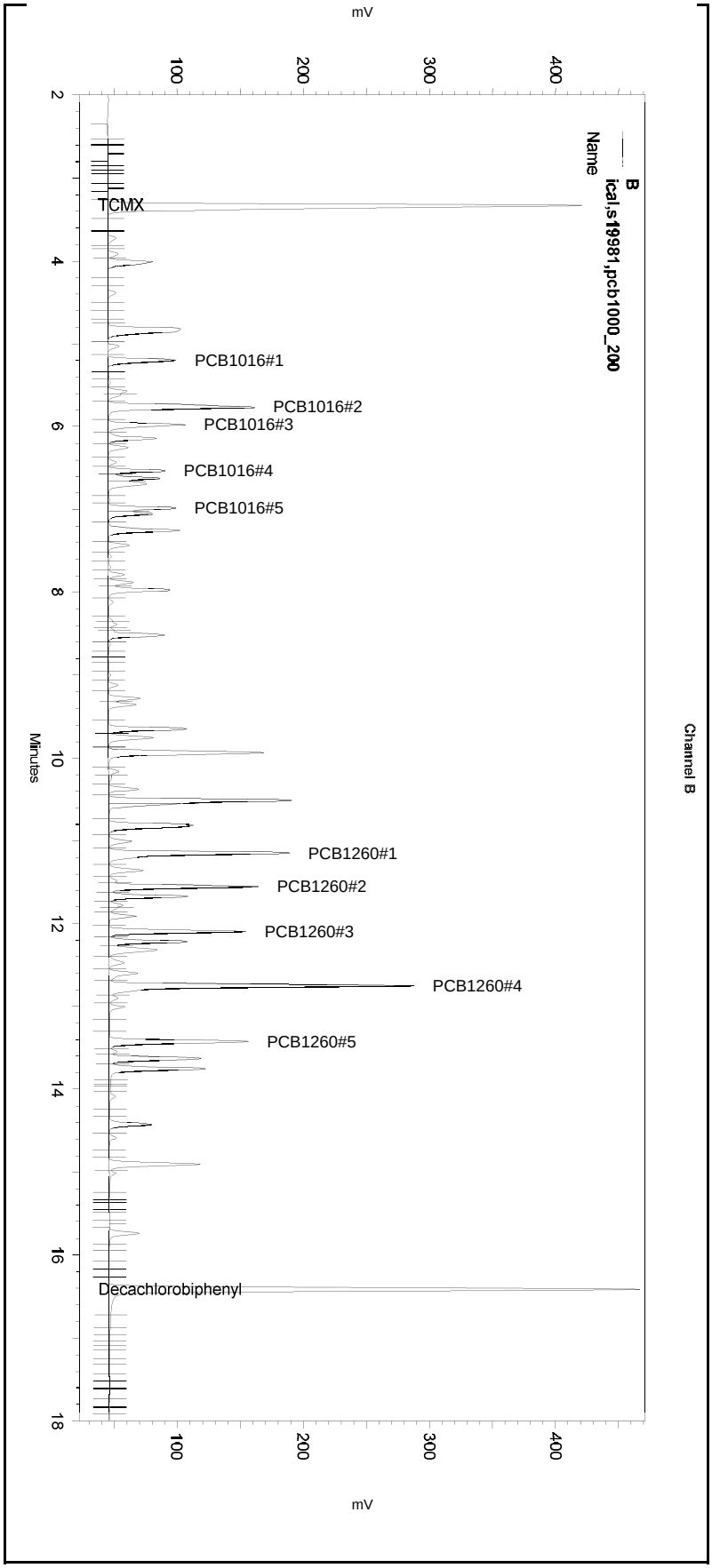
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.93	0	0
Yes	Reset Baseline	5.606	0	0
Yes	Reset Baseline	11.401	0	0
Yes	Manual Baseline	13.005	13.482	0
Yes	Split Peak	13.092	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:57:52 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 (Offline) Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:32:39 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.093	4.103	2421347	200.000 CAL
PCB1016#1	6.187	6.197	319954	1000.000 CAL
PCB1016#2	6.800	6.810	737237	1000.000 CAL
PCB1016#3	7.103	7.110	497422	1000.000 CAL
PCB1016#4	7.560	7.570	260528	1000.000 CAL
PCB1016#5	8.070	8.077	388721	1000.000 CAL
PCB1260#1	11.633	11.640	1147353	1000.000 CAL
PCB1260#2	12.280	12.290	1155812	1000.000 CAL
PCB1260#3	13.140	13.150	658691	1000.000 CAL
PCB1260#4	13.887	13.897	1516897	1000.000 CAL
PCB1260#5	14.540	14.550	843436	1000.000 CAL
Decachlorobiphenyl	17.157	17.167	1521403	200.000 CAL

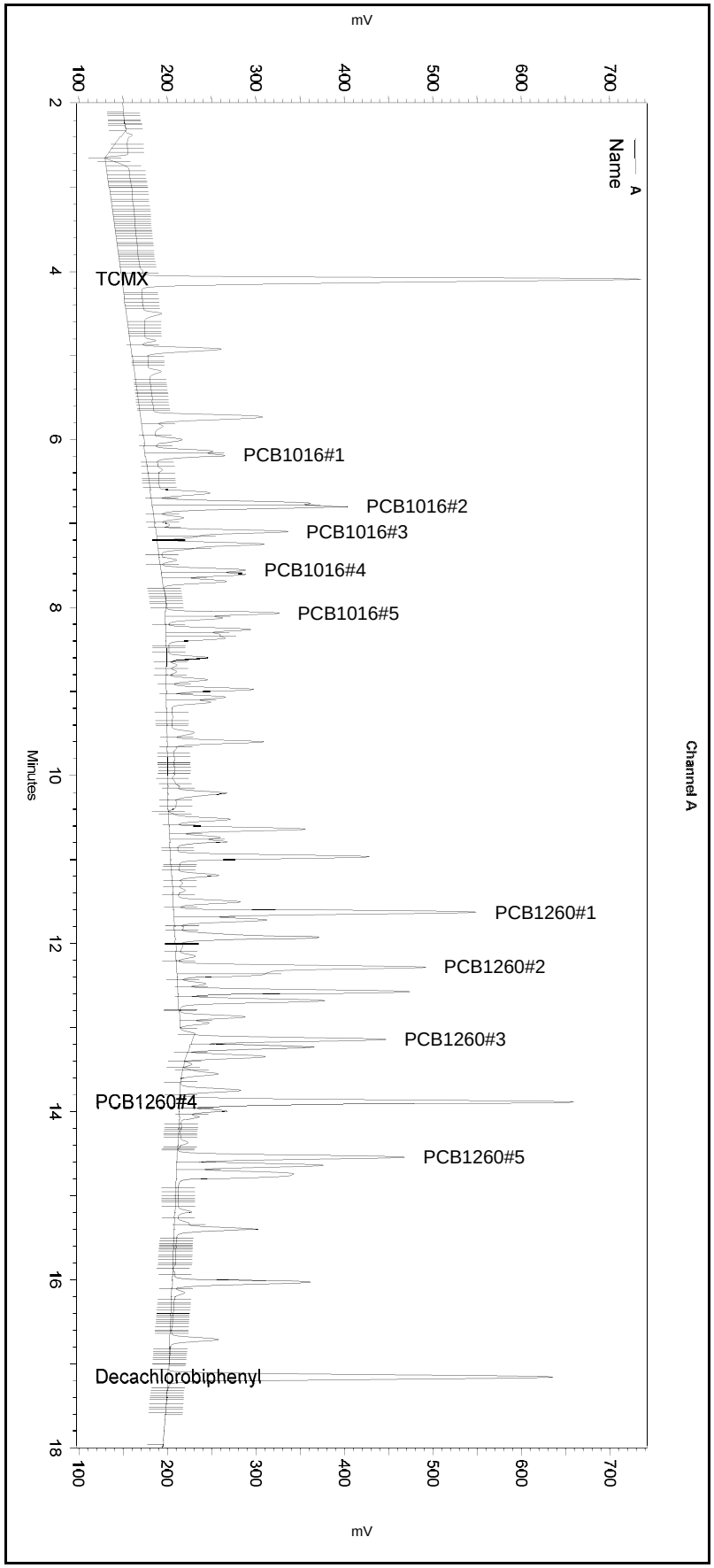
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.327	3.337	1281121	200.000 CAL
PCB1016#1	5.197	5.207	165556	1000.000 CAL
PCB1016#2	5.763	5.770	416829	1000.000 CAL
PCB1016#3	5.977	5.987	193652	1000.000 CAL
PCB1016#4	6.530	6.537	128512	1000.000 CAL
PCB1016#5	6.983	6.990	150292	1000.000 CAL
PCB1260#1	11.147	11.153	462166	1000.000 CAL
PCB1260#2	11.550	11.560	335022	1000.000 CAL
PCB1260#3	12.093	12.100	298965	1000.000 CAL
PCB1260#4	12.750	12.757	711594	1000.000 CAL
PCB1260#5	13.423	13.430	330730	1000.000 CAL
Decachlorobiphenyl	16.417	16.423	1246720	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 (Offline) Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:32:39 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

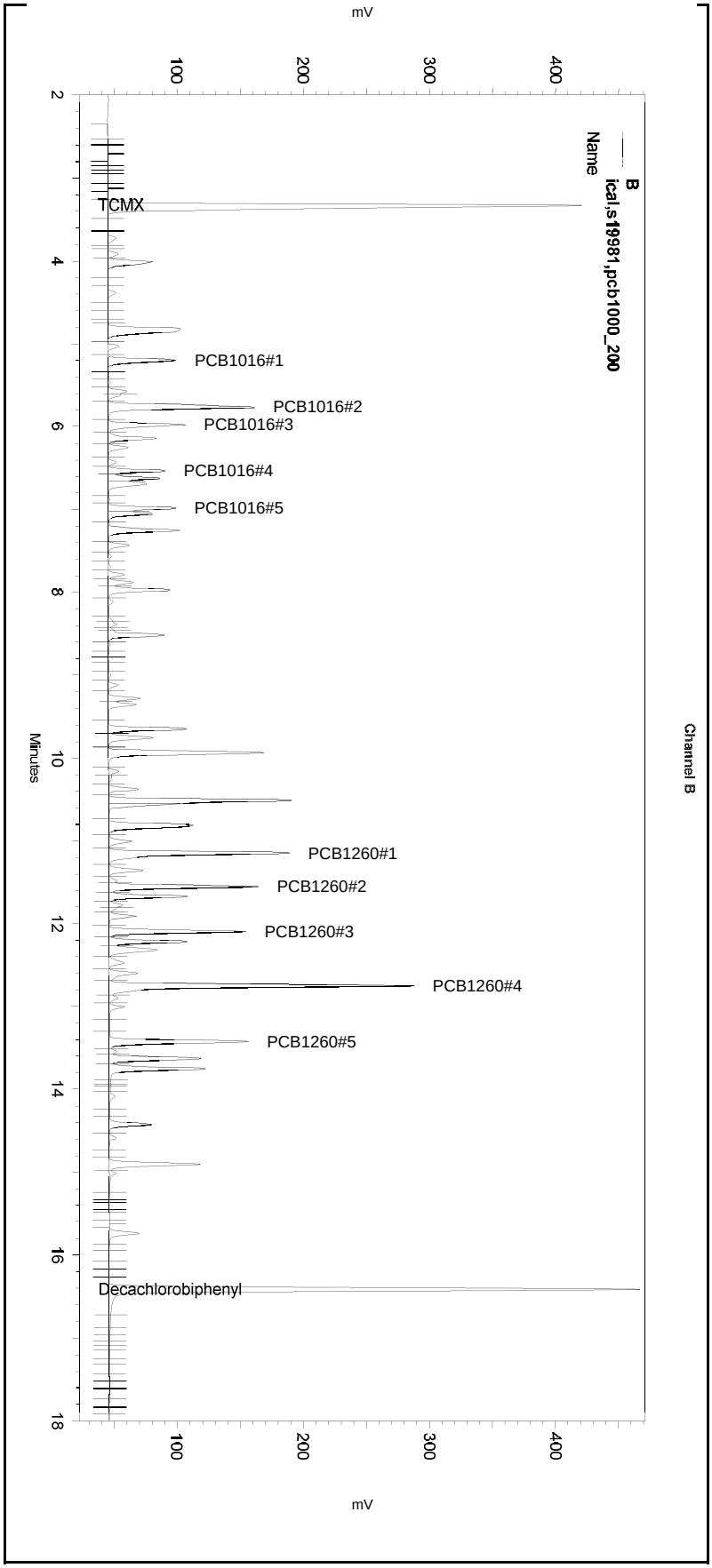
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC16 (Offline) Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 9:28:45 PM
Analysis Date: 9/6/2012 7:32:39 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:14:42 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	768976	55.209
PCB1016#1	6.193	6.197	90700	242.424
PCB1016#2	6.810	6.810	265699	253.799
PCB1016#3	7.110	7.110	180523	279.081
PCB1016#4	7.570	7.570	91018	278.909
PCB1016#5	8.077	8.077	143016	261.461
PCB1260#1	11.640	11.640	435893	265.114
PCB1260#2	12.290	12.290	399646	228.461
PCB1260#3	13.150	13.150	289106	308.211
PCB1260#4	13.897	13.897	631746	298.133
PCB1260#5	14.547	14.550	340983	243.458
Decachlorobiphenyl	17.163	17.167	602039	51.224

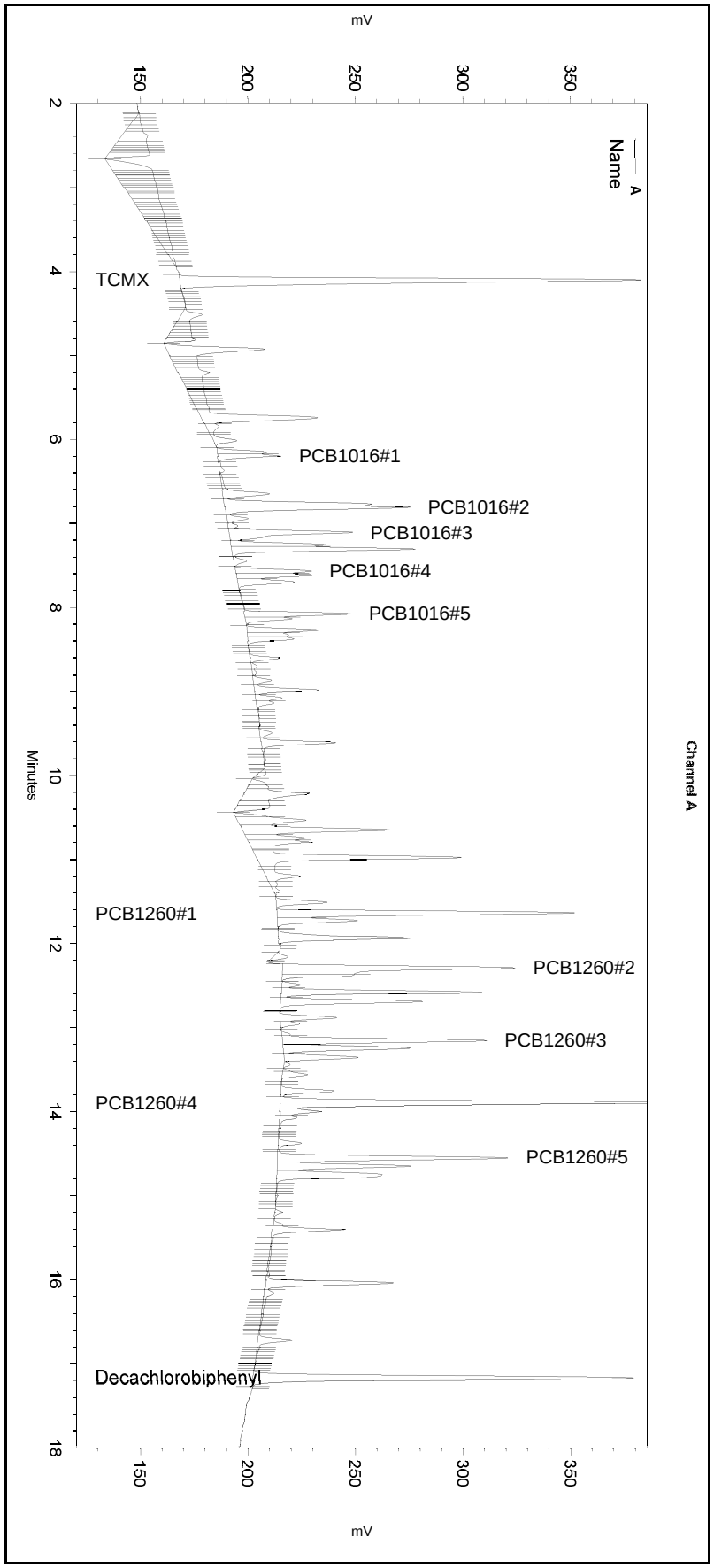
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	334788	47.777
PCB1016#1	5.207	5.207	53599	252.493
PCB1016#2	5.770	5.770	129276	243.692
PCB1016#3	5.987	5.987	61968	252.551
PCB1016#4	6.537	6.537	42719	254.705
PCB1016#5	6.990	6.990	49615	258.383
PCB1260#1	11.157	11.153	146740	250.699
PCB1260#2	11.560	11.560	112803	265.031
PCB1260#3	12.100	12.100	101583	269.500
PCB1260#4	12.757	12.757	234878	264.573
PCB1260#5	13.433	13.430	109422	274.948
Decachlorobiphenyl	16.423	16.423	374794	41.394

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:14:42 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

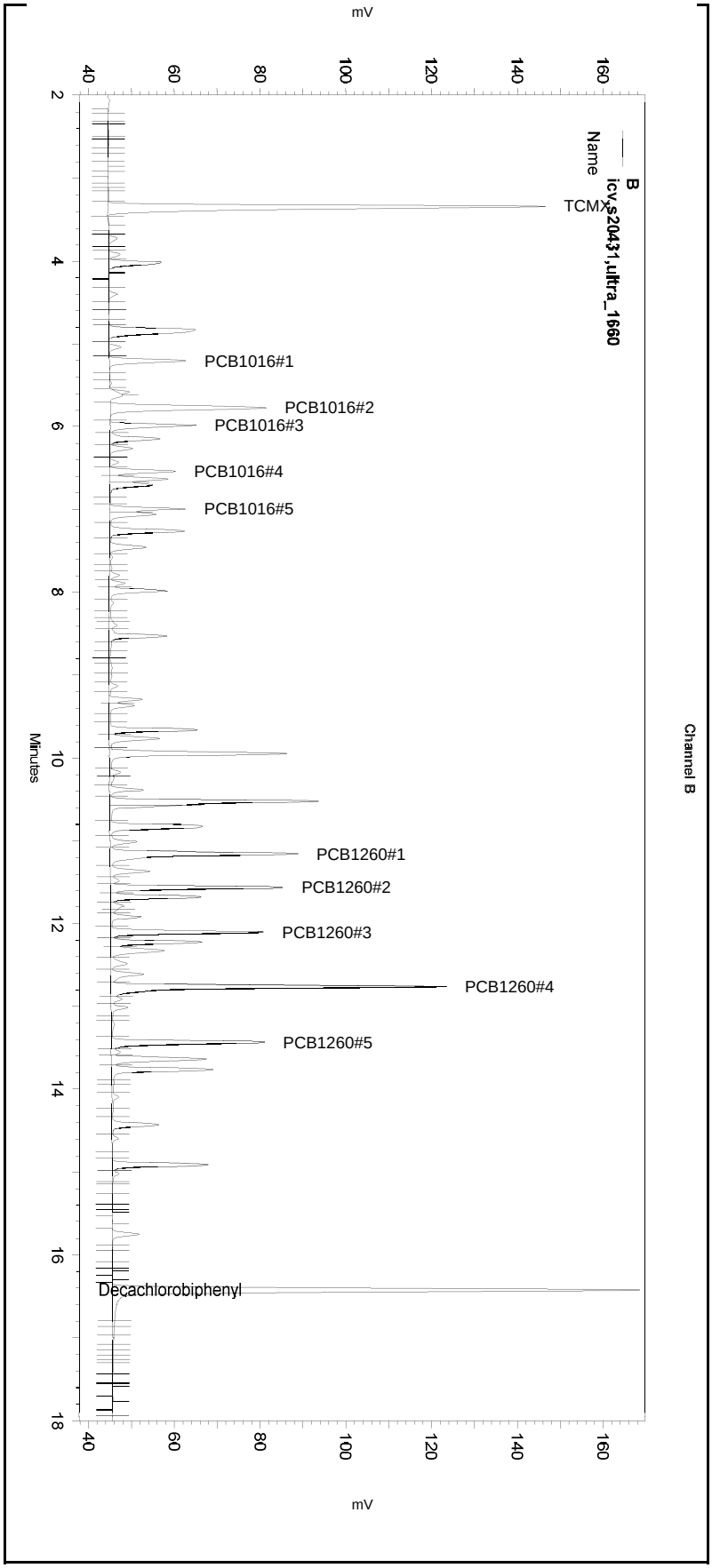
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	3.994	0	0
Yes	Reset Baseline	4.424	0	0
Yes	Reset Baseline	6.089	0	0
Yes	Reset Baseline	8.208	0	0
Yes	Reset Baseline	11.436	0	0
Yes	Reset Baseline	12.062	0	0
Yes	Move BL Start	12.213	12.239	0
Yes	Reset Baseline	12.444	0	0
Yes	Manual Baseline	13.017	13.421	0
Yes	Split Peak	13.098	0	0
Yes	Reset Baseline	17.298	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:14:42 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:02:24 AM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.103	4.103	984503	73.069
PCB1016#1	6.193	6.197	180244	481.758
PCB1016#2	6.810	6.810	339942	324.716
PCB1016#3	7.110	7.110	240826	372.306
PCB1016#4	7.570	7.570	128535	402.814
PCB1016#5	8.077	8.077	182909	334.393
PCB1260#1	11.640	11.640	507707	318.576
PCB1260#2	12.290	12.290	453511	259.254
PCB1260#3	13.150	13.150	270560	270.508
PCB1260#4	13.897	13.897	631746	298.133
PCB1260#5	14.547	14.550	340983	294.206
Decachlorobiphenyl	17.163	17.167	697304	61.260

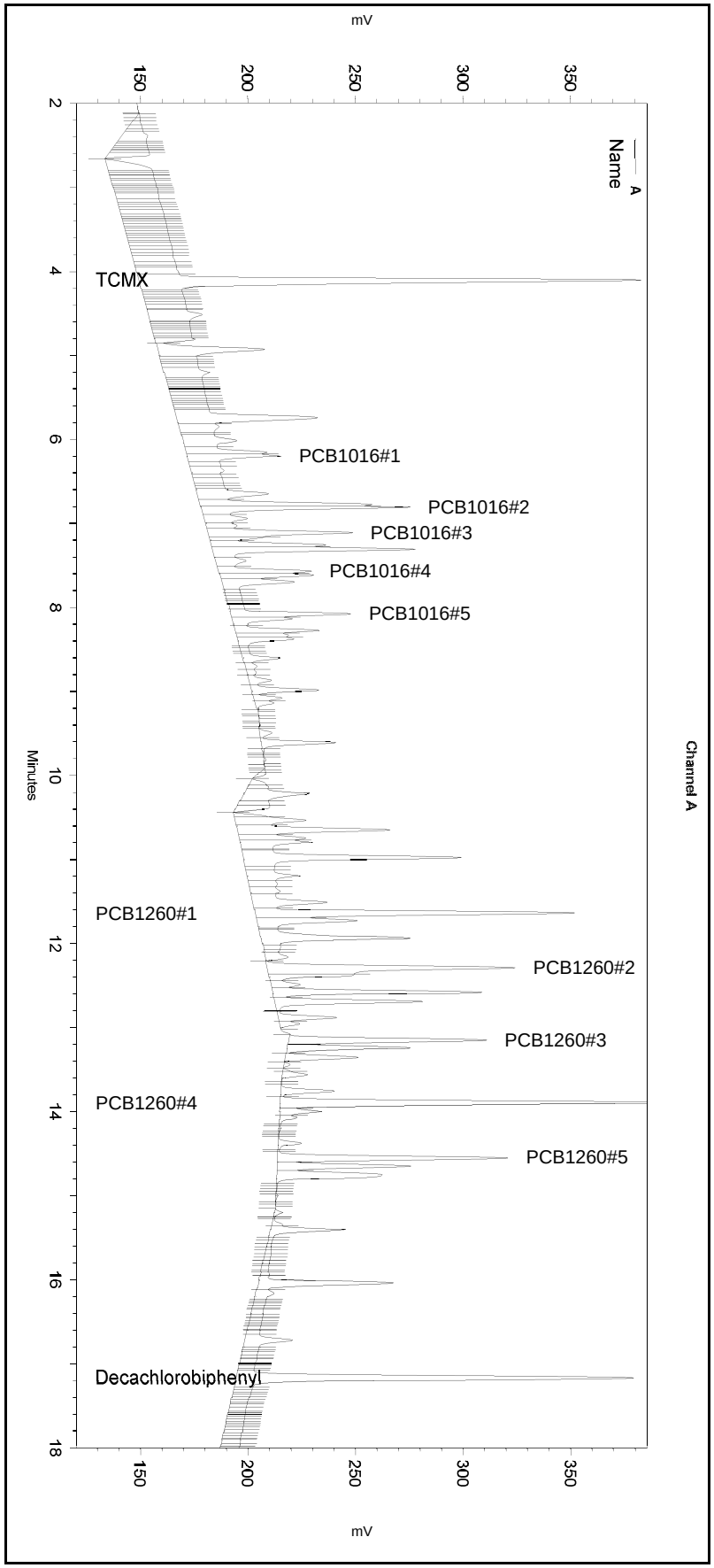
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	334788	47.777
PCB1016#1	5.207	5.207	53599	252.493
PCB1016#2	5.770	5.770	129276	245.990
PCB1016#3	5.987	5.987	61968	252.551
PCB1016#4	6.537	6.537	42719	254.705
PCB1016#5	6.990	6.990	49615	258.383
PCB1260#1	11.157	11.153	146740	250.699
PCB1260#2	11.560	11.560	112803	265.031
PCB1260#3	12.100	12.100	101583	269.500
PCB1260#4	12.757	12.757	234878	264.573
PCB1260#5	13.433	13.430	109422	274.948
Decachlorobiphenyl	16.423	16.423	374794	43.841

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:02:24 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes

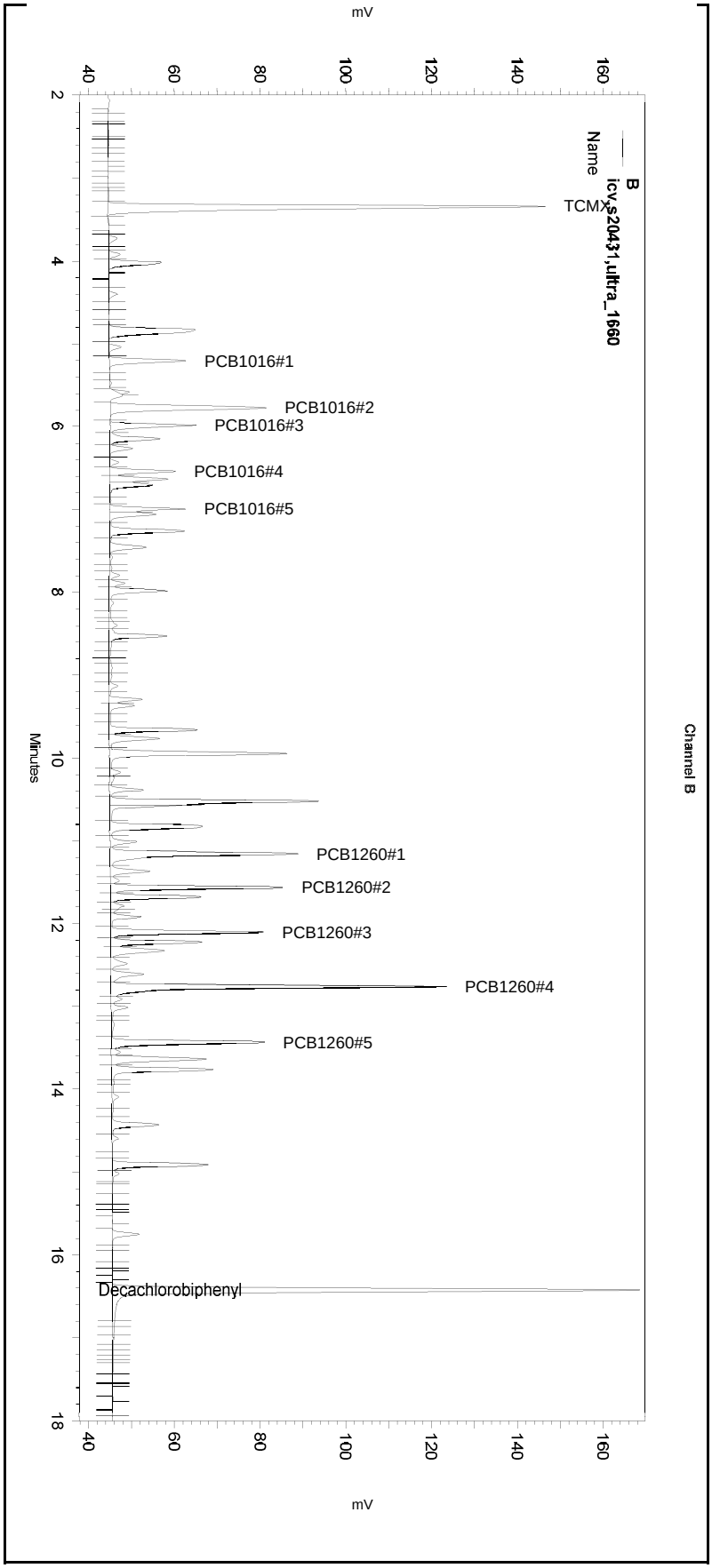
Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\249.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019**
Sample Name: **icv,s20431,ultra_1660**
Instrument: GC16 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/5/2012 10:24:24 PM
Analysis Date: 9/6/2012 8:02:24 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\249-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 PCBS Water: EPA 8082A

Inst : GC22
Calnum : 252360400001
Units : pg/uL

Name : AR1660_250
Date : 06-SEP-2012 16:48
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	250_014	252360400014	PCB10_2	06-SEP-2012 16:48	S19975
L2	250_015	252360400015	PCB25_5	06-SEP-2012 17:53	S19976
L3	250_016	252360400016	PCB100_20	06-SEP-2012 18:20	S19977
L4	250_017	252360400017	PCB250_50	06-SEP-2012 18:46	S19978
L5	250_018	252360400018	PCB500_100	06-SEP-2012 19:12	S19979
L6	250_019	252360400019	PCB750_150	06-SEP-2012 19:38	S19980
L7	250_020	252360400020	PCB1000_200	06-SEP-2012 20:05	S19981

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1260 Peak # 1	A	151.40	134.80	124.30	122.69	92.478	107.45	114.27	AVRG		0.00826		121.06	16	.99	20	
Aroclor-1260 Peak # 2	A	111.90	103.04	94.520	94.380	69.118	78.705	84.031	AVRG		0.01101		90.813	16	.99	20	
Aroclor-1260 Peak # 3	A	93.000	82.960	75.600	74.020	53.782	60.959	64.024	AVRG		0.01388		72.049	19	.99	20	
Aroclor-1260 Peak # 4	A	204.50	188.08	182.61	190.02	141.79	180.17	199.01	AVRG		0.00544		183.74	11	.99	20	
Aroclor-1260 Peak # 5	A	99.200	85.520	83.070	81.892	58.002	67.717	72.273	AVRG		0.01278		78.239	17	.99	20	
TCMX	A	1412.5	1470.4	1308.5	1350.6	1164.4	1291.3	1284.1	AVRG		7.54E-4		1326.0	7	.99	20	
Decachlorobiphenyl	A	1356.5	1230.6	1214.6	1260.7	936.36	1268.6	1408.8	AVRG		8.07E-4		1239.5	12	.99	20	
Aroclor-1260 Peak # 1	B	719.70	813.96	846.53	1168.3	1739.6	1236.6	1103.0	AVRG		9.18E-4		1089.7	**32**	.99	20	rsd ***
Aroclor-1260 Peak # 2	B	620.90	638.52	691.37	796.50	1697.3	1203.3	1192.2	AVRG		0.00102		977.16	**41**	.99	20	rsd ***
Aroclor-1260 Peak # 3	B	535.00	559.36	521.42	562.50	1281.3	904.19	934.48	AVRG		0.00132		756.89	**39**	.99	20	rsd ***
Aroclor-1260 Peak # 4	B	1156.4	1486.0	1580.9	2281.1	2764.7	1902.6	1503.0	AVRG		5.52E-4		1810.7	**30**	.99	20	rsd ***
Aroclor-1260 Peak # 5	B	494.30	536.00	484.59	467.08	1216.7	834.70	974.18	AVRG		0.00140		715.36	**41**	.99	20	rsd ***
TCMX	B	1311.5	6299.6	18129	21391	18864			LINR	1.25420	5.09E-5		13199	0.993	.99	20	
Decachlorobiphenyl	B	7605.5	9273.8	12559	16473	14363			LINR	0.77699	6.73E-5		12055	0.992	.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1260 Peak # 1	A	10.000	**25**	25.000	11	100.00	3	250.00	1	500.00	**-24**	750.00	-11	1000.0	-6
Aroclor-1260 Peak # 2	A	10.000	**23**	25.000	13	100.00	4	250.00	4	500.00	**-24**	750.00	-13	1000.0	-7
Aroclor-1260 Peak # 3	A	10.000	**29**	25.000	15	100.00	5	250.00	3	500.00	**-25**	750.00	-15	1000.0	-11
Aroclor-1260 Peak # 4	A	10.000	11	25.000	2	100.00	-1	250.00	3	500.00	**-23**	750.00	-2	1000.0	8
Aroclor-1260 Peak # 5	A	10.000	**27**	25.000	9	100.00	6	250.00	5	500.00	**-26**	750.00	-13	1000.0	-8
TCMX	A	2.0000	7	5.0000	11	20.000	-1	50.000	2	100.00	-12	150.00	-3	200.00	-3
Decachlorobiphenyl	A	2.0000	9	5.0000	-1	20.000	-2	50.000	2	100.00	**-24**	150.00	2	200.00	14
Aroclor-1260 Peak # 1	B	10.000	**-34**	25.000	**-25**	100.00	**-22**	250.00	7	500.00	**60**	750.00	13	1000.0	1
Aroclor-1260 Peak # 2	B	10.000	**-36**	25.000	**-35**	100.00	**-29**	250.00	-18	500.00	**74**	750.00	**23**	1000.0	**22**
Aroclor-1260 Peak # 3	B	10.000	**-29**	25.000	**-26**	100.00	**-31**	250.00	**-26**	500.00	**69**	750.00	19	1000.0	**23**
Aroclor-1260 Peak # 4	B	10.000	**-36**	25.000	-18	100.00	-13	250.00	**26**	500.00	**53**	750.00	5	1000.0	-17
Aroclor-1260 Peak # 5	B	10.000	**-31**	25.000	**-25**	100.00	**-32**	250.00	**-35**	500.00	**70**	750.00	17	1000.0	**36**
TCMX	B	2.0000	**-31**	5.0000	**-43**	20.000	-1	50.000	11	100.00	-3				
Decachlorobiphenyl	B	2.0000	-10	5.0000	**-22**	20.000	-12	50.000	12	100.00	-3				

PML 09/07/12 : Corrected automatically drawn baseline in all levels.

PML 09/07/12 : ICAL fails for AR1016 and AR1260 on Ch. B; will only use said channel for confirm and report only from Ch. A

PML 09/07/12 : changed fit types and dropped various peaks for TCMX and DCB on Ch. B for better recovery

PML 09/07/12 : RTs updated in the integrated version of ICAL and integrated version of ICV

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression

252360400001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 PCBS Water
EPA 8082A

Inst : GC22 Name : AR1660_250
Calnum : 252360400001 Cal Date : 06-SEP-2012

ICV 252360400023 (250_023 06-SEP-2012) stds: S20431

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1260	A	250.0	223.0	pg/uL	-11	20	
Aroclor-1260	B	250.0	246.6	pg/uL	-1	20	

Analyst: PML Date: 09/07/12 Reviewer: EAH Date: 09/07/12

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 10:15:00 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.483	4.463	2825	2.000 CAL
PCB1016#1	6.633	6.613	230	10.000 CAL
PCB1016#2	7.247	7.227	744	10.000 CAL
PCB1016#3	7.543	7.523	363	10.000 CAL
PCB1016#4	7.990	7.970	203	10.000 CAL
PCB1016#5	8.493	8.473	322	10.000 CAL
PCB1260#1	11.917	11.907	1514	10.000 CAL
PCB1260#2	12.537	12.527	1119	10.000 CAL
PCB1260#3	13.357	13.347	930	10.000 CAL
PCB1260#4	14.060	14.053	2045	10.000 CAL
PCB1260#5	14.687	14.680	992	10.000 CAL
Decachlorobiphenyl	17.167	17.163	2713	2.000 CAL

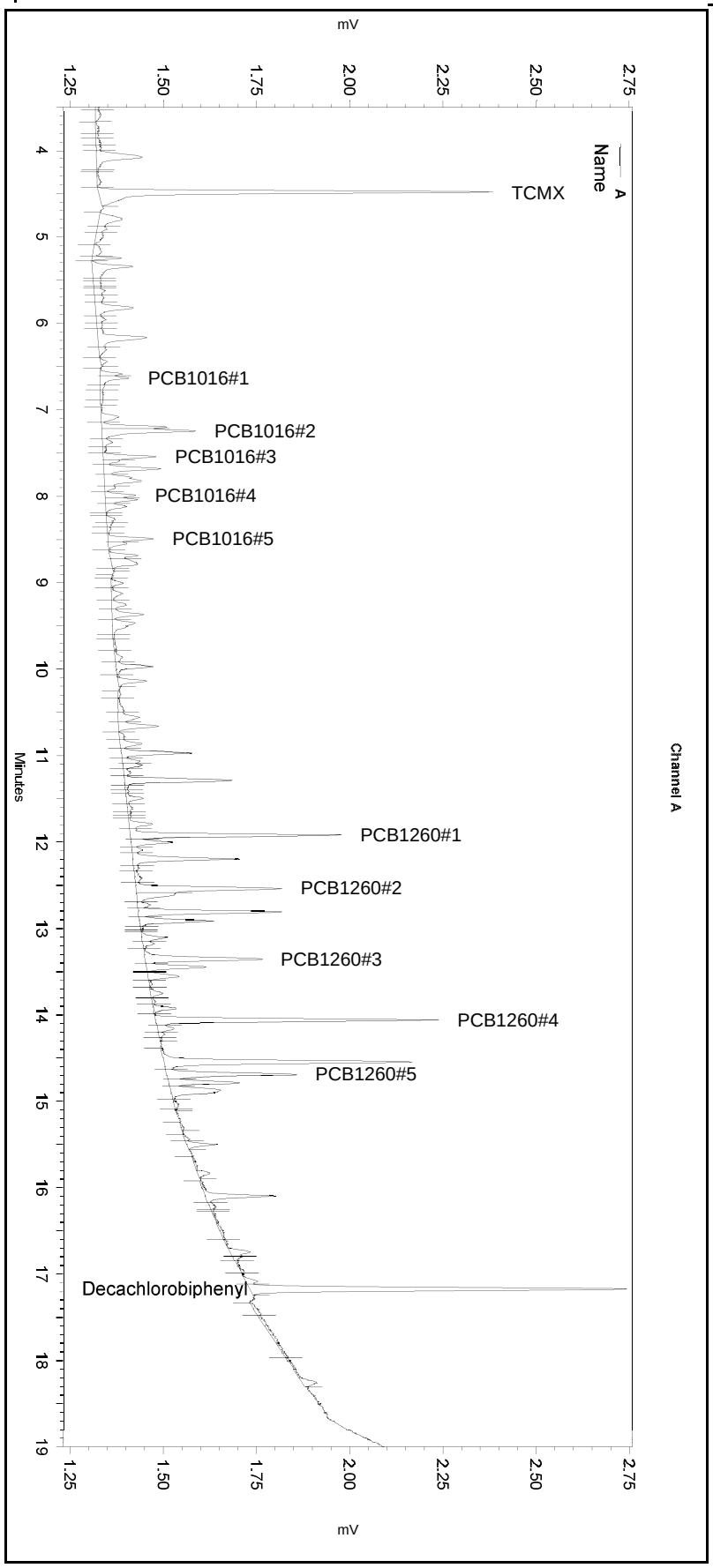
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.483	4.500	2623	2.000 CAL
PCB1016#1	6.400	6.410	1854	10.000 CAL
PCB1016#2	6.973	6.977	4128	10.000 CAL
PCB1016#3	7.180	7.187	2495	10.000 CAL
PCB1016#4	7.717	7.720	1361	10.000 CAL
PCB1016#5	8.167	8.170	1575	10.000 CAL
PCB1260#1	11.563	11.570	7197	10.000 CAL
PCB1260#2	12.183	12.187	6209	10.000 CAL
PCB1260#3	13.083	13.087	5350	10.000 CAL
PCB1260#4	13.703	13.710	11564	10.000 CAL
PCB1260#5	14.353	14.360	4943	10.000 CAL
Decachlorobiphenyl	17.203	17.210	15211	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 10:15:00 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

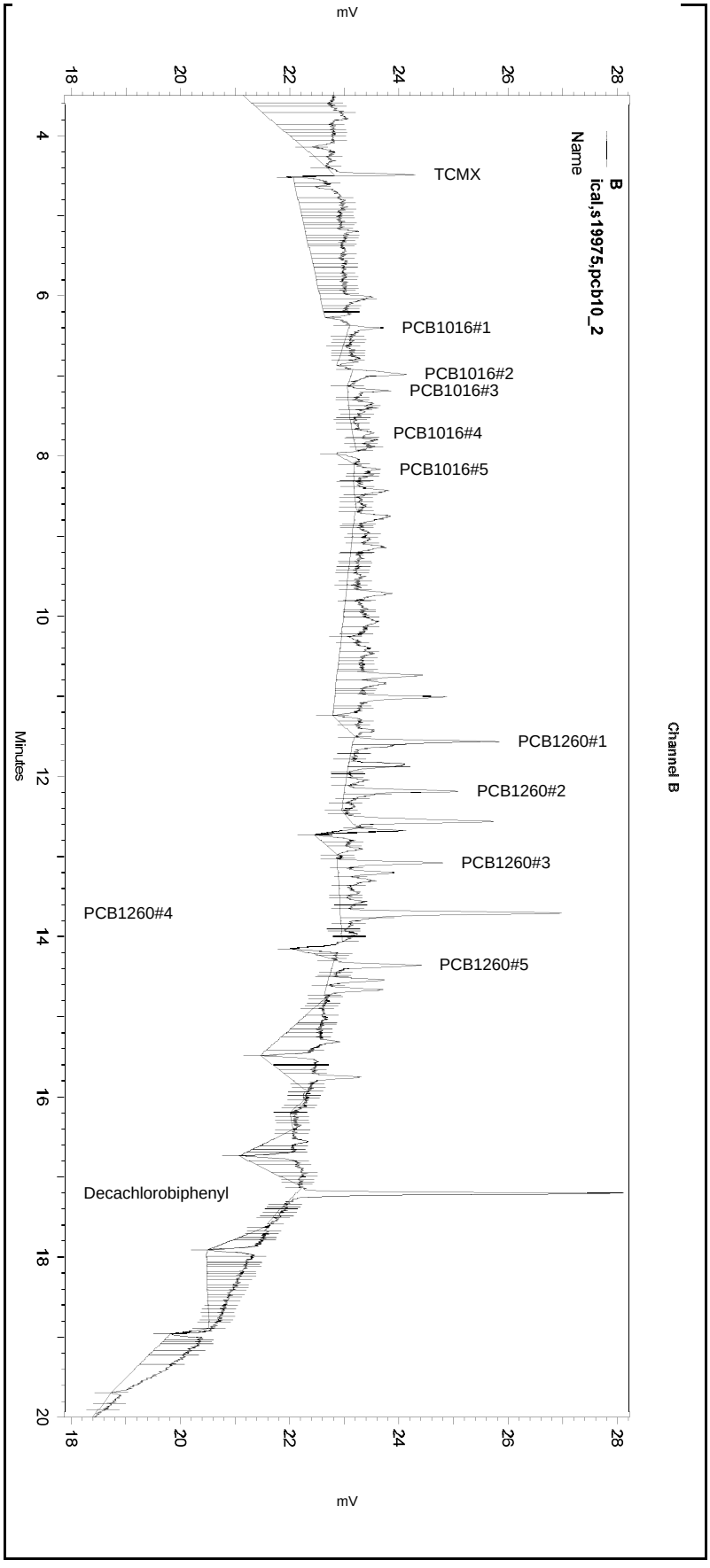
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.675	0	0
Yes	Split Peak	7.576	0	0
Yes	Split Peak	12.579	0	0
Yes	Reset Baseline	17.241	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 10:15:00 AM
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.388	0	0
Yes	Reset Baseline	4.501	0	0
Yes	Reset Baseline	4.503	0	0
Yes	Reset Baseline	6.361	0	0
Yes	Reset Baseline	6.913	0	0
Yes	Reset Baseline	7.932	0	0
Yes	Reset Baseline	8.093	0	0
Yes	Reset Baseline	11.502	0	0
Yes	Split Peak	12.224	0	0
Yes	Reset Baseline	12.638	0	0
Yes	Reset Baseline	13.021	0	0
Yes	Split Peak	13.756	0	0
Yes	Reset Baseline	14.053	0	0
Yes	Reset Baseline	14.284	0	0
Yes	Reset Baseline	14.754	0	0
Yes	Reset Baseline	17.131	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 9:46:11 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.483	4.473	3077	2.000 CAL
PCB1016#1	6.633	6.637	230	10.000 CAL
PCB1016#2	7.247	7.250	744	10.000 CAL
PCB1016#3	7.543	7.545	471	10.000 CAL
PCB1016#4	7.990	7.990	203	10.000 CAL
PCB1016#5	8.493	8.494	322	10.000 CAL
PCB1260#1	11.917	11.907	1514	10.000 CAL
PCB1260#2	12.537	12.530	1519	10.000 CAL
PCB1260#3	13.357	13.350	930	10.000 CAL
PCB1260#4	14.060	14.053	2045	10.000 CAL
PCB1260#5	14.687	14.680	992	10.000 CAL
Decachlorobiphenyl	17.167	17.160	2879	2.000 CAL

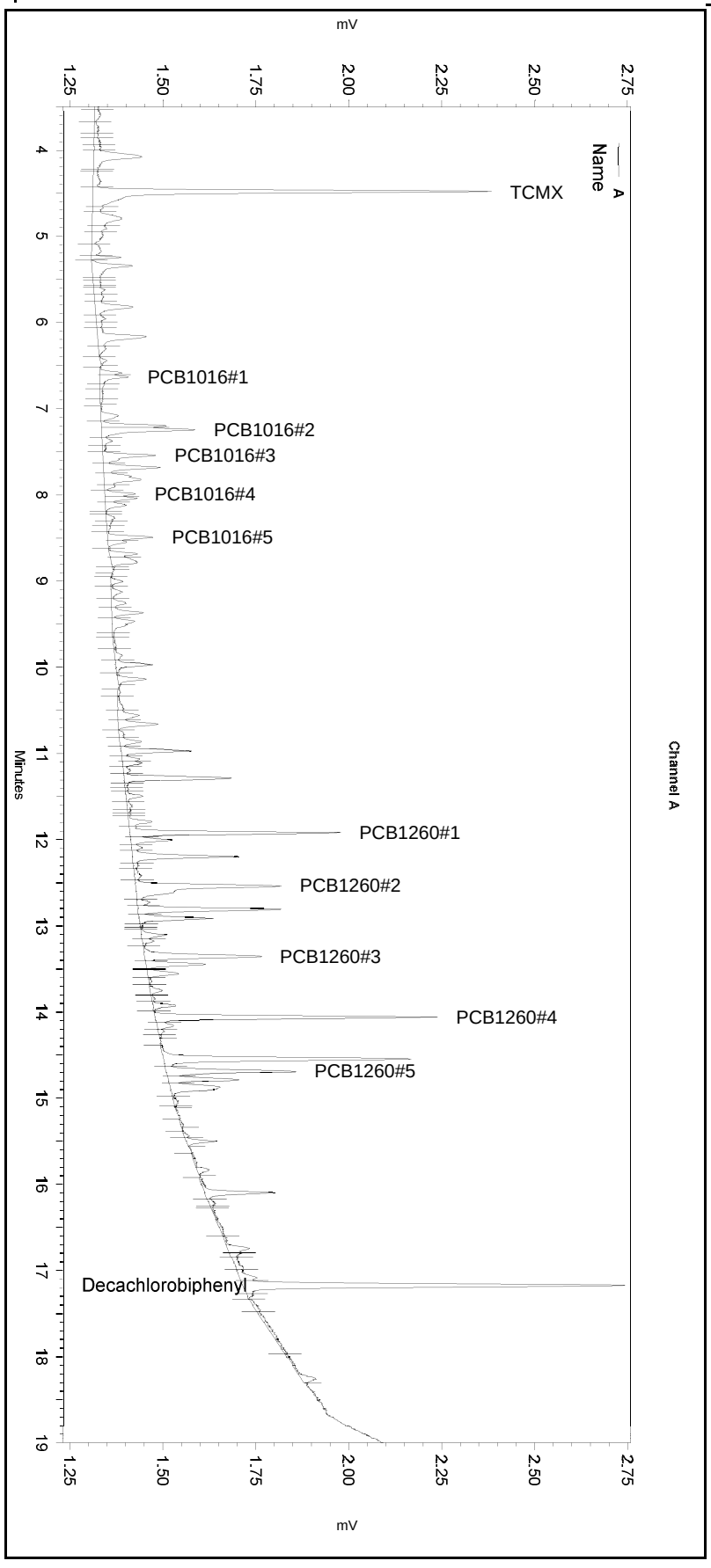
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.483	4.507	18701	2.000 CAL
PCB1016#1	6.400	6.427	16642	10.000 CAL
PCB1016#2	6.973	6.993	16651	10.000 CAL
PCB1016#3	7.180	7.200	8348	10.000 CAL
PCB1016#4	7.717	7.730	3959	10.000 CAL
PCB1016#5	8.167	8.180	3499	10.000 CAL
PCB1260#1	11.563	11.573	11125	10.000 CAL
PCB1260#2	12.183	12.190	14611	10.000 CAL
PCB1260#3	13.083	13.087	11310	10.000 CAL
PCB1260#4	13.703	13.707	24840	10.000 CAL
PCB1260#5	14.353	14.357	15459	10.000 CAL
Decachlorobiphenyl	17.203	17.187	25869	2.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 9:46:11 AM
Sample Amount: 1



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Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes
==========

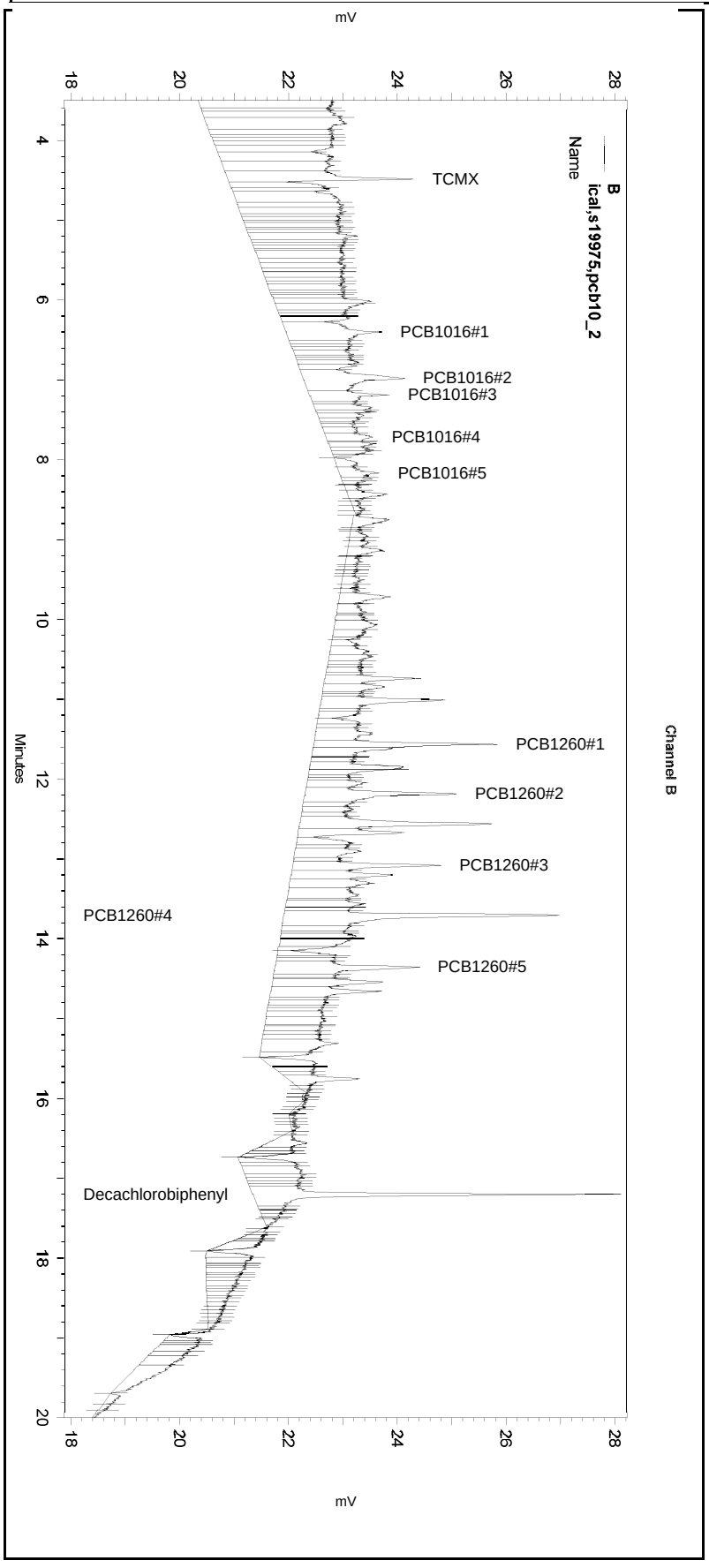
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014**
Sample Name: **ical,s19975,pcb10_2**
Instrument: GC22 Vial: 14 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 4:48:41 PM
Analysis Date: 9/7/2012 9:46:11 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 10:24:53 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.487	4.463	7352	5.000 CAL
PCB1016#1	6.637	6.613	560	25.000 CAL
PCB1016#2	7.243	7.227	1714	25.000 CAL
PCB1016#3	7.543	7.523	923	25.000 CAL
PCB1016#4	7.990	7.970	495	25.000 CAL
PCB1016#5	8.490	8.473	763	25.000 CAL
PCB1260#1	11.917	11.907	3370	25.000 CAL
PCB1260#2	12.540	12.527	2576	25.000 CAL
PCB1260#3	13.357	13.347	2074	25.000 CAL
PCB1260#4	14.060	14.053	4702	25.000 CAL
PCB1260#5	14.687	14.680	2138	25.000 CAL
Decachlorobiphenyl	17.170	17.163	6153	5.000 CAL

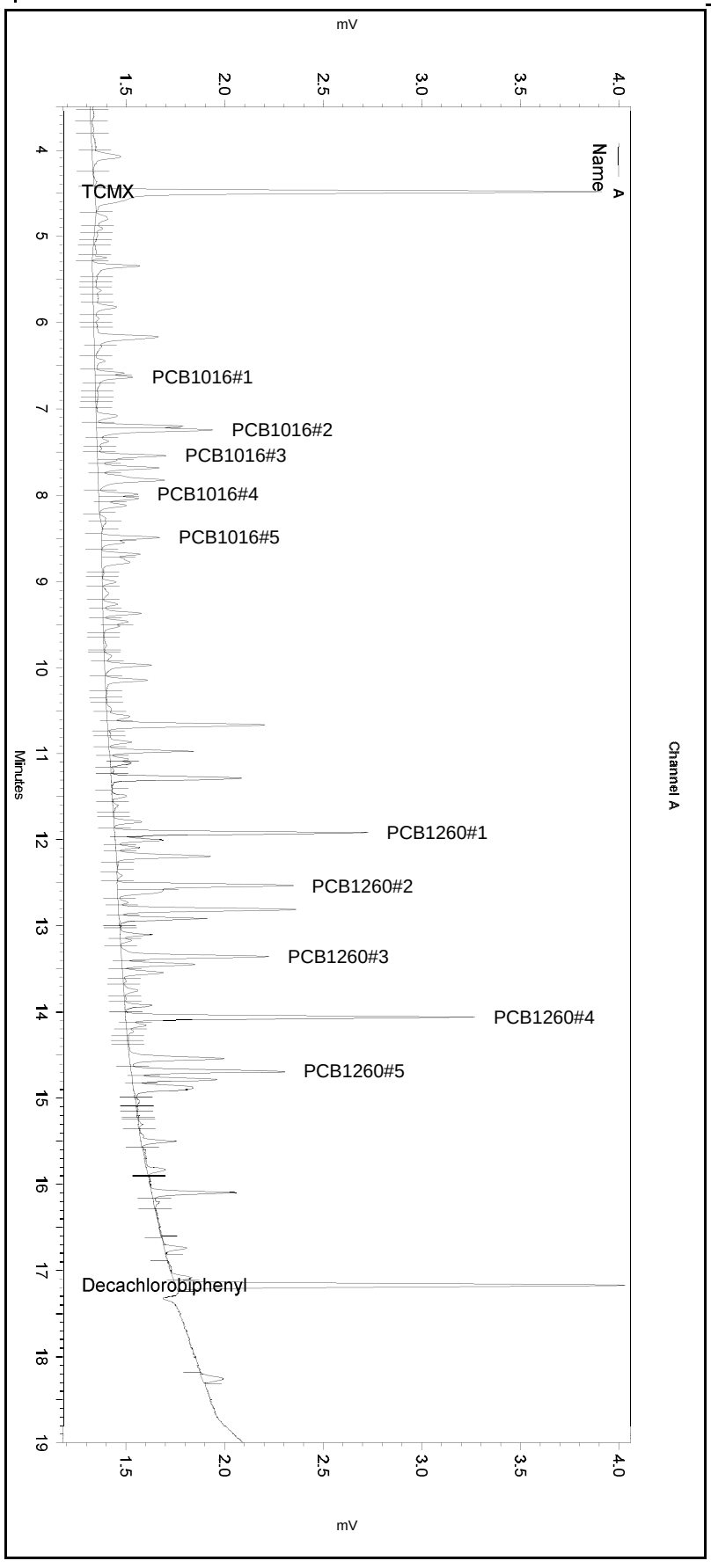
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	31498	5.000 CAL
PCB1016#1	6.403	6.410	6157	25.000 CAL
PCB1016#2	6.970	6.977	13831	25.000 CAL
PCB1016#3	7.183	7.187	6076	25.000 CAL
PCB1016#4	7.717	7.720	2390	25.000 CAL
PCB1016#5	8.163	8.170	3579	25.000 CAL
PCB1260#1	11.560	11.570	20349	25.000 CAL
PCB1260#2	12.177	12.187	15963	25.000 CAL
PCB1260#3	13.083	13.087	13984	25.000 CAL
PCB1260#4	13.703	13.710	37149	25.000 CAL
PCB1260#5	14.357	14.360	13400	25.000 CAL
Decachlorobiphenyl	17.207	17.210	46369	5.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 10:24:53 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

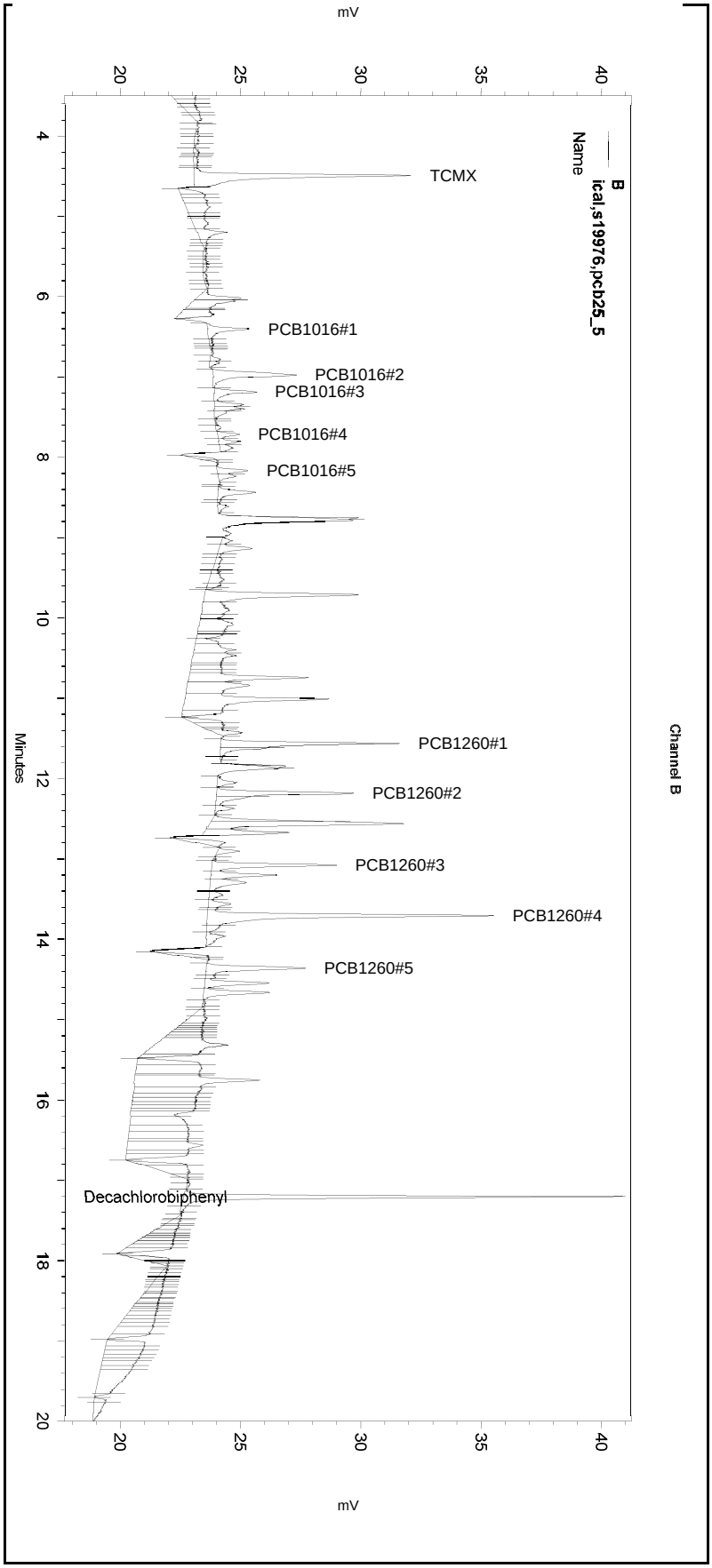
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.718	0	0
Yes	Split Peak	7.582	0	0
Yes	Split Peak	12.583	0	0
Yes	Reset Baseline	17.247	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 10:24:53 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.633	0	0
Yes	Reset Baseline	6.331	0	0
Yes	Disable End Peak Detection	6.843	7.026	0
Yes	Manual Baseline	6.903	7.132	0
Yes	Manual Peak	6.906	7.059	0
Yes	Disable End Peak Detection	6.939	7.022	0
Yes	Reset Baseline	7.073	0	0
Yes	Reset Baseline	7.924	0	0
Yes	Reset Baseline	8.084	0	0
Yes	Reset Baseline	11.476	0	0
Yes	Split Peak	12.221	0	0
Yes	Reset Baseline	12.451	0	0
Yes	Reset Baseline	12.707	0	0
Yes	Reset Baseline	12.856	0	0
Yes	Reset Baseline	14.09	0	0
Yes	Reset Baseline	14.252	0	0
Yes	Reset Baseline	14.836	0	0
Yes	Reset Baseline	17.019	0	0
Yes	Reset Baseline	17.405	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 9:46:16 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.487	4.473	7757	5.000 CAL
PCB1016#1	6.637	6.637	560	25.000 CAL
PCB1016#2	7.243	7.250	1714	25.000 CAL
PCB1016#3	7.543	7.545	1141	25.000 CAL
PCB1016#4	7.990	7.990	495	25.000 CAL
PCB1016#5	8.490	8.494	763	25.000 CAL
PCB1260#1	11.917	11.907	3370	25.000 CAL
PCB1260#2	12.540	12.530	3345	25.000 CAL
PCB1260#3	13.357	13.350	2074	25.000 CAL
PCB1260#4	14.060	14.053	4702	25.000 CAL
PCB1260#5	14.687	14.680	2138	25.000 CAL
Decachlorobiphenyl	17.170	17.160	7066	5.000 CAL

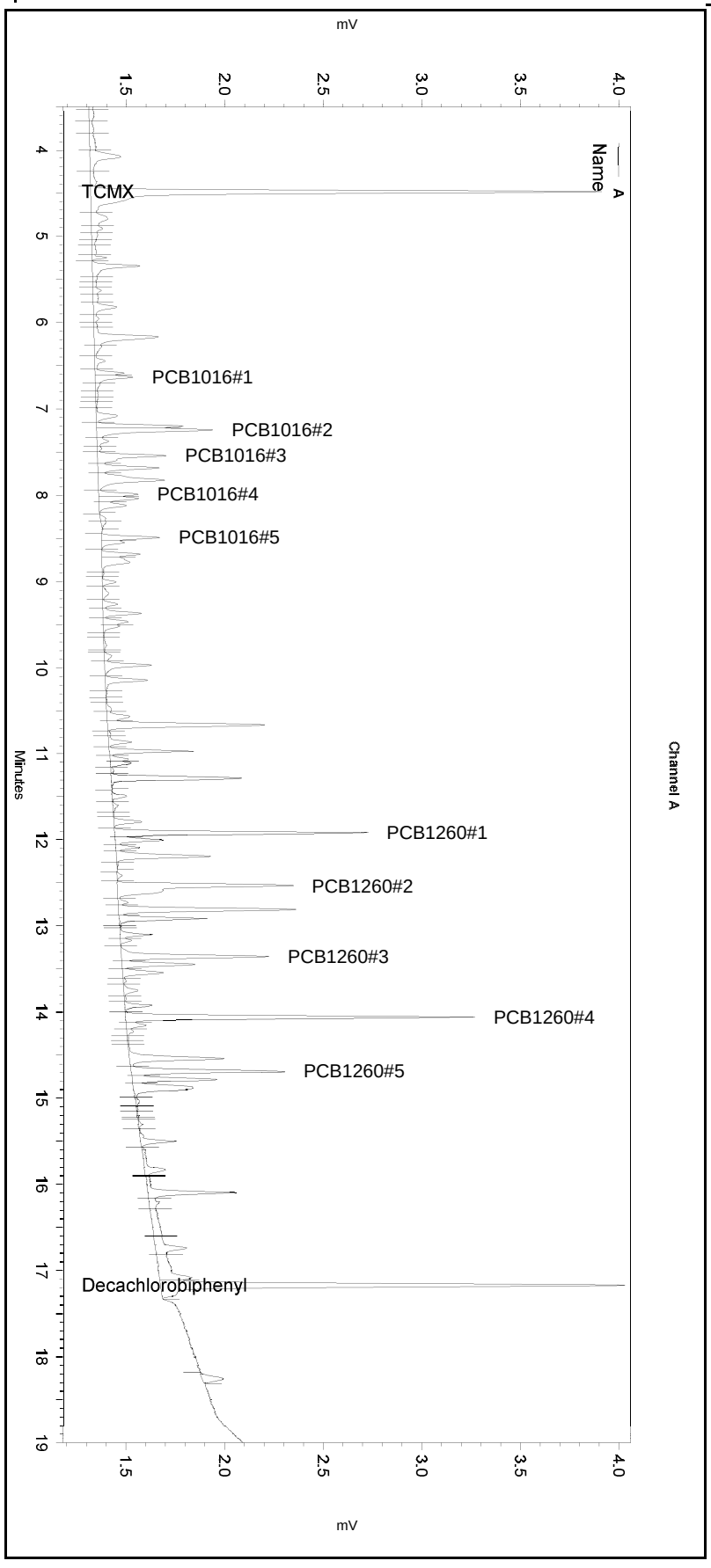
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.507	36842	5.000 CAL
PCB1016#1	6.403	6.427	15644	25.000 CAL
PCB1016#2	6.970	6.993	14587	25.000 CAL
PCB1016#3	7.183	7.200	13224	25.000 CAL
PCB1016#4	7.717	7.730	9186	25.000 CAL
PCB1016#5	8.163	8.180	7817	25.000 CAL
PCB1260#1	11.560	11.573	24911	25.000 CAL
PCB1260#2	12.177	12.190	28264	25.000 CAL
PCB1260#3	13.083	13.087	29436	25.000 CAL
PCB1260#4	13.703	13.707	62825	25.000 CAL
PCB1260#5	14.357	14.357	37672	25.000 CAL
Decachlorobiphenyl	17.207	17.187	78974	5.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 9:46:16 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

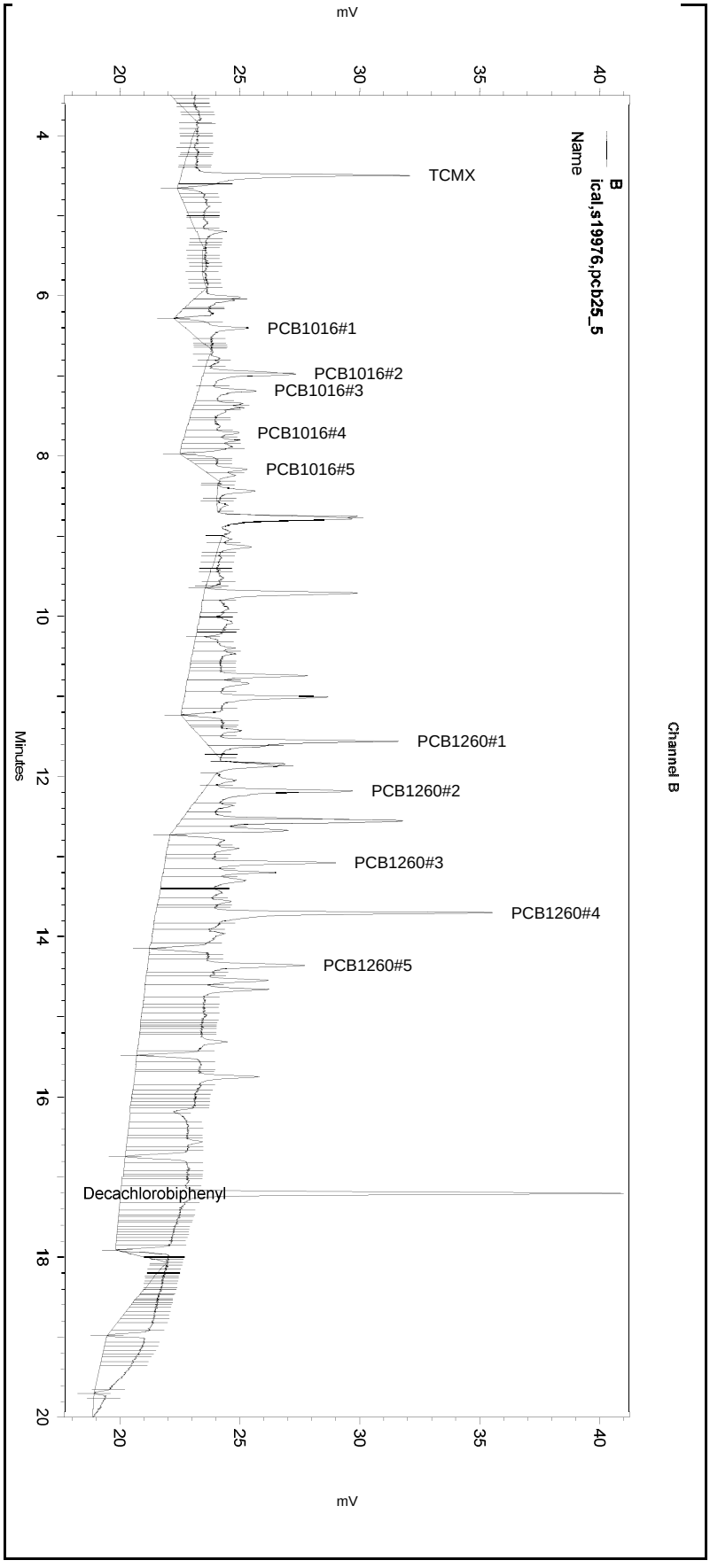
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015**
Sample Name: **ical,s19976,pcb25_5**
Instrument: GC22 Vial: 15 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 5:53:46 PM
Analysis Date: 9/7/2012 9:46:16 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 10:15:09 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.467	4.463	26169	20.000 CAL
PCB1016#1	6.617	6.613	1899	100.000 CAL
PCB1016#2	7.230	7.227	6324	100.000 CAL
PCB1016#3	7.527	7.523	3068	100.000 CAL
PCB1016#4	7.973	7.970	1817	100.000 CAL
PCB1016#5	8.477	8.473	2871	100.000 CAL
PCB1260#1	11.910	11.907	12430	100.000 CAL
PCB1260#2	12.530	12.527	9452	100.000 CAL
PCB1260#3	13.350	13.347	7560	100.000 CAL
PCB1260#4	14.053	14.053	18261	100.000 CAL
PCB1260#5	14.680	14.680	8307	100.000 CAL
Decachlorobiphenyl	17.167	17.163	24292	20.000 CAL

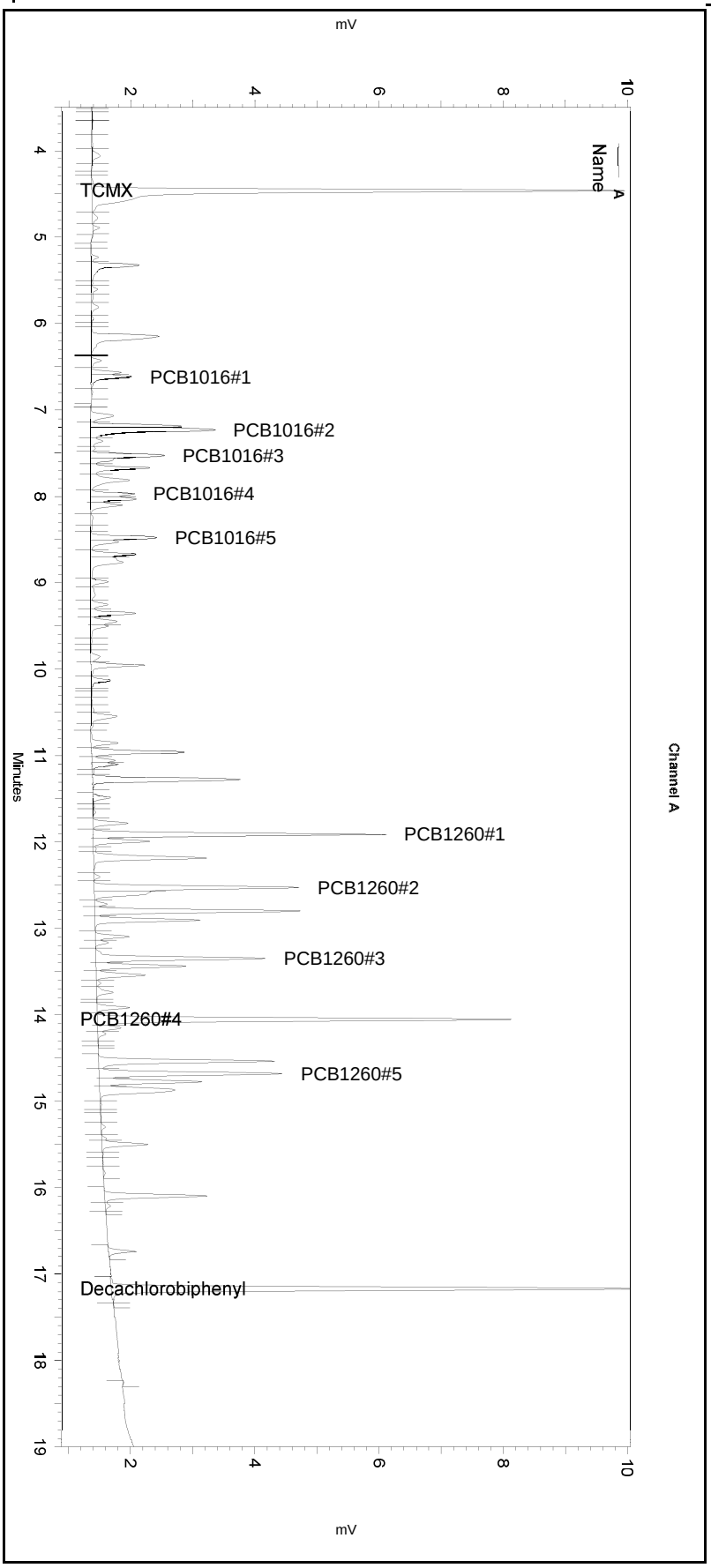
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.500	362584	20.000 CAL
PCB1016#1	6.410	6.410	18775	100.000 CAL
PCB1016#2	6.977	6.977	61324	100.000 CAL
PCB1016#3	7.187	7.187	25112	100.000 CAL
PCB1016#4	7.720	7.720	10201	100.000 CAL
PCB1016#5	8.173	8.170	13639	100.000 CAL
PCB1260#1	11.567	11.570	84653	100.000 CAL
PCB1260#2	12.187	12.187	69137	100.000 CAL
PCB1260#3	13.090	13.087	52142	100.000 CAL
PCB1260#4	13.710	13.710	158088	100.000 CAL
PCB1260#5	14.360	14.360	48459	100.000 CAL
Decachlorobiphenyl	17.213	17.210	251187	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 10:15:09 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

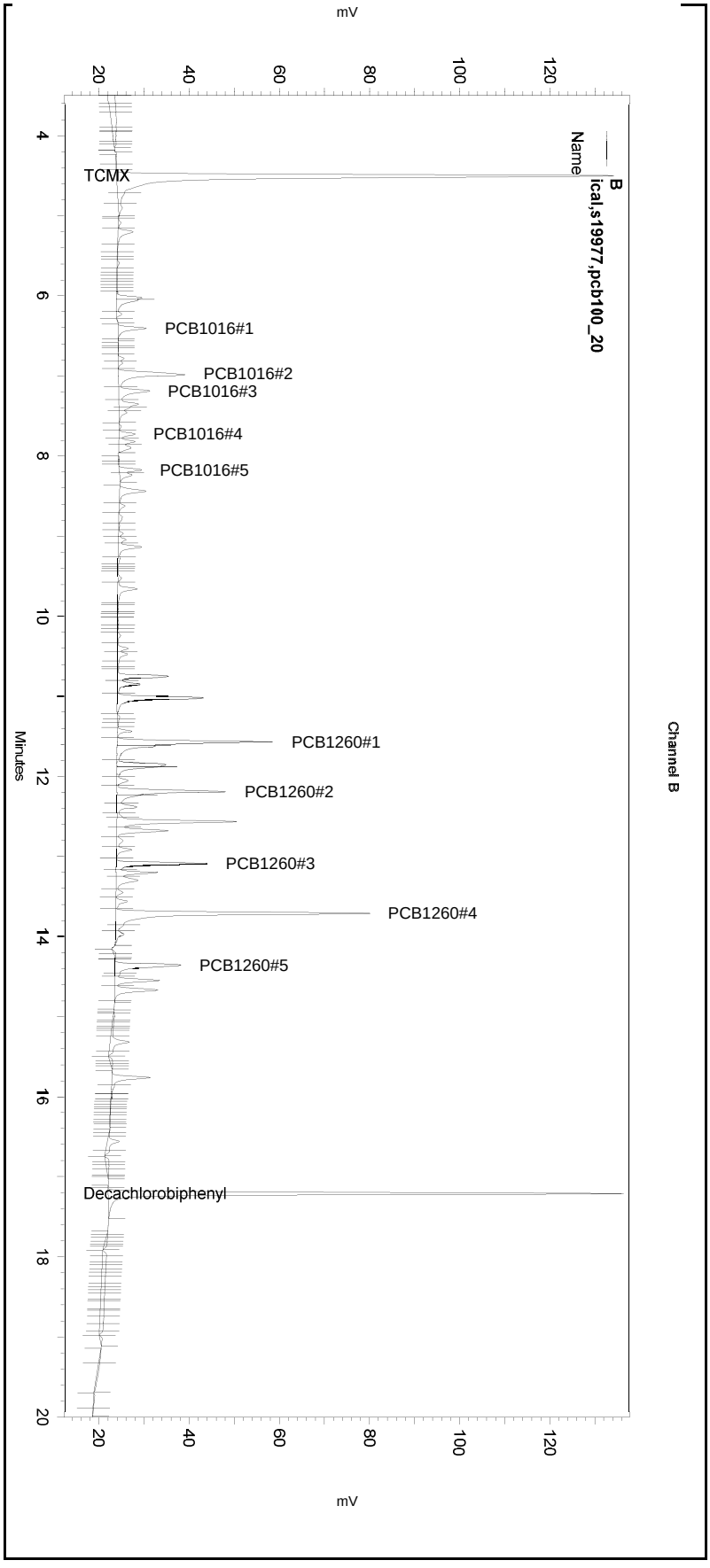
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.561	0	0
Yes	Split Peak	12.572	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 10:15:09 AM
Sample Amount: 1



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No items selected for this section

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Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.355	0	0
Yes	Reset Baseline	7.58	0	0
Yes	Reset Baseline	7.961	0	0
Yes	Reset Baseline	8.332	0	0
Yes	Reset Baseline	14.106	0	0
Yes	Reset Baseline	14.821	0	0
Yes	Reset Baseline	17.066	0	0
Yes	Reset Baseline	17.527	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 9:46:20 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.467	4.473	26169	20.000 CAL
PCB1016#1	6.617	6.637	1899	100.000 CAL
PCB1016#2	7.230	7.250	6324	100.000 CAL
PCB1016#3	7.527	7.545	4059	100.000 CAL
PCB1016#4	7.973	7.990	1817	100.000 CAL
PCB1016#5	8.477	8.494	2871	100.000 CAL
PCB1260#1	11.910	11.907	12430	100.000 CAL
PCB1260#2	12.530	12.530	12487	100.000 CAL
PCB1260#3	13.350	13.350	7560	100.000 CAL
PCB1260#4	14.053	14.053	18261	100.000 CAL
PCB1260#5	14.680	14.680	8307	100.000 CAL
Decachlorobiphenyl	17.167	17.160	24292	20.000 CAL

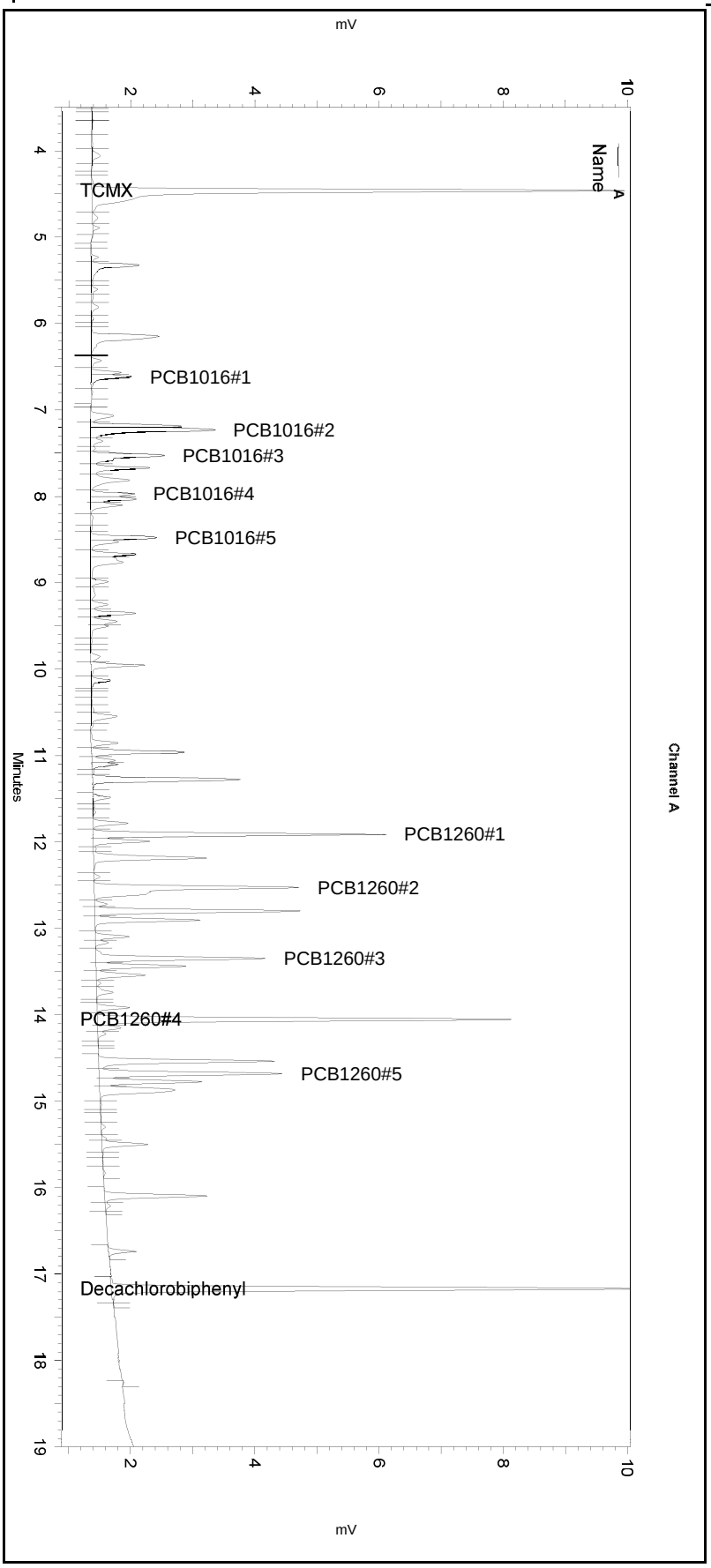
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.507	362584	20.000 CAL
PCB1016#1	6.410	6.427	22635	100.000 CAL
PCB1016#2	6.977	6.993	66809	100.000 CAL
PCB1016#3	7.187	7.200	29179	100.000 CAL
PCB1016#4	7.720	7.730	13145	100.000 CAL
PCB1016#5	8.173	8.180	16636	100.000 CAL
PCB1260#1	11.567	11.573	84951	100.000 CAL
PCB1260#2	12.187	12.190	70902	100.000 CAL
PCB1260#3	13.090	13.087	56348	100.000 CAL
PCB1260#4	13.710	13.707	166426	100.000 CAL
PCB1260#5	14.360	14.357	49427	100.000 CAL
Decachlorobiphenyl	17.213	17.187	283184	20.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 9:46:20 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

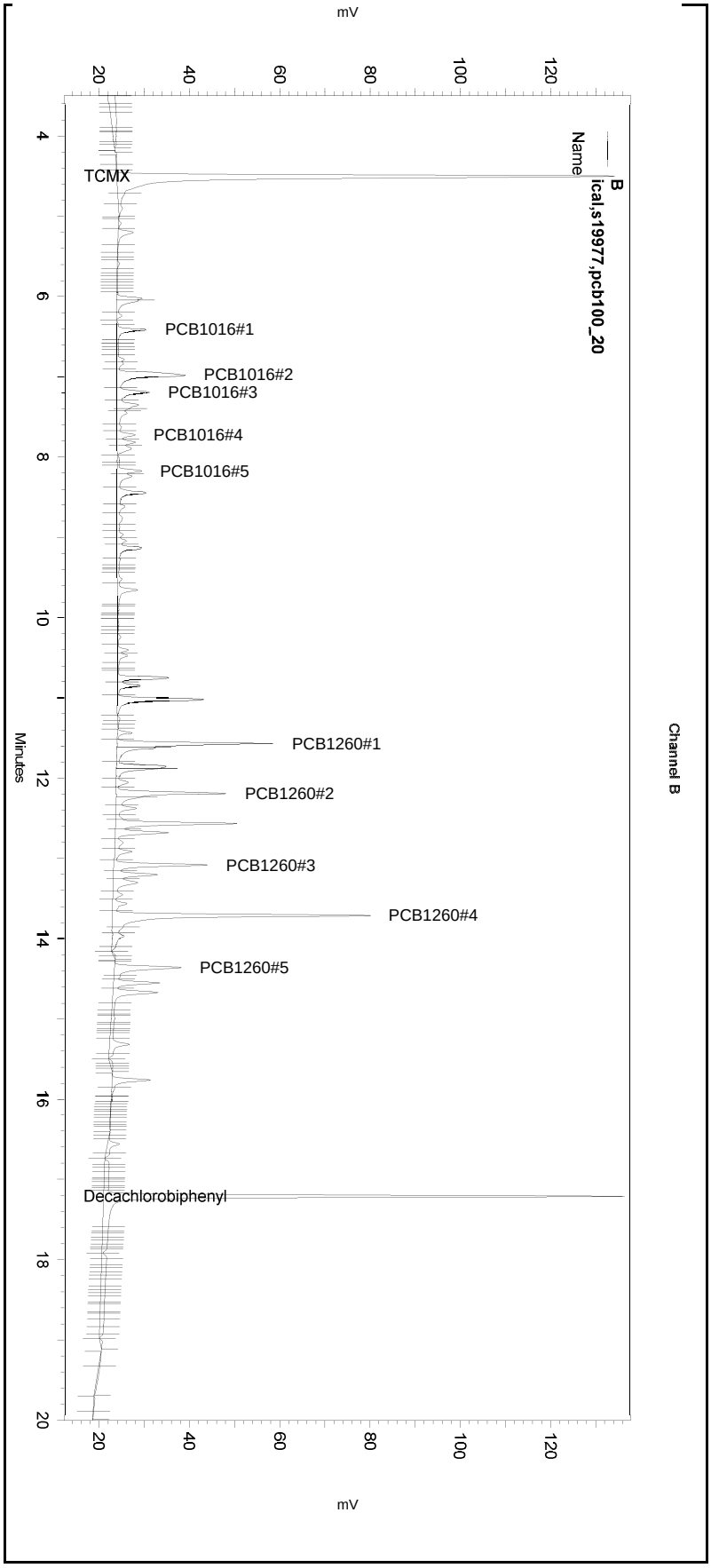
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016**
Sample Name: **ical,s19977,pcb100_20**
Instrument: GC22 Vial: 16 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:20:02 PM
Analysis Date: 9/7/2012 9:46:20 AM
Sample Amount: 1



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Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 10:15:14 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.463	4.463	67528	50.000 CAL
PCB1016#1	6.613	6.613	4680	250.000 CAL
PCB1016#2	7.227	7.227	14669	250.000 CAL
PCB1016#3	7.523	7.523	7591	250.000 CAL
PCB1016#4	7.970	7.970	4309	250.000 CAL
PCB1016#5	8.473	8.473	6822	250.000 CAL
PCB1260#1	11.907	11.907	30673	250.000 CAL
PCB1260#2	12.527	12.527	23595	250.000 CAL
PCB1260#3	13.347	13.347	18505	250.000 CAL
PCB1260#4	14.053	14.053	47505	250.000 CAL
PCB1260#5	14.680	14.680	20473	250.000 CAL
Decachlorobiphenyl	17.163	17.163	63036	50.000 CAL

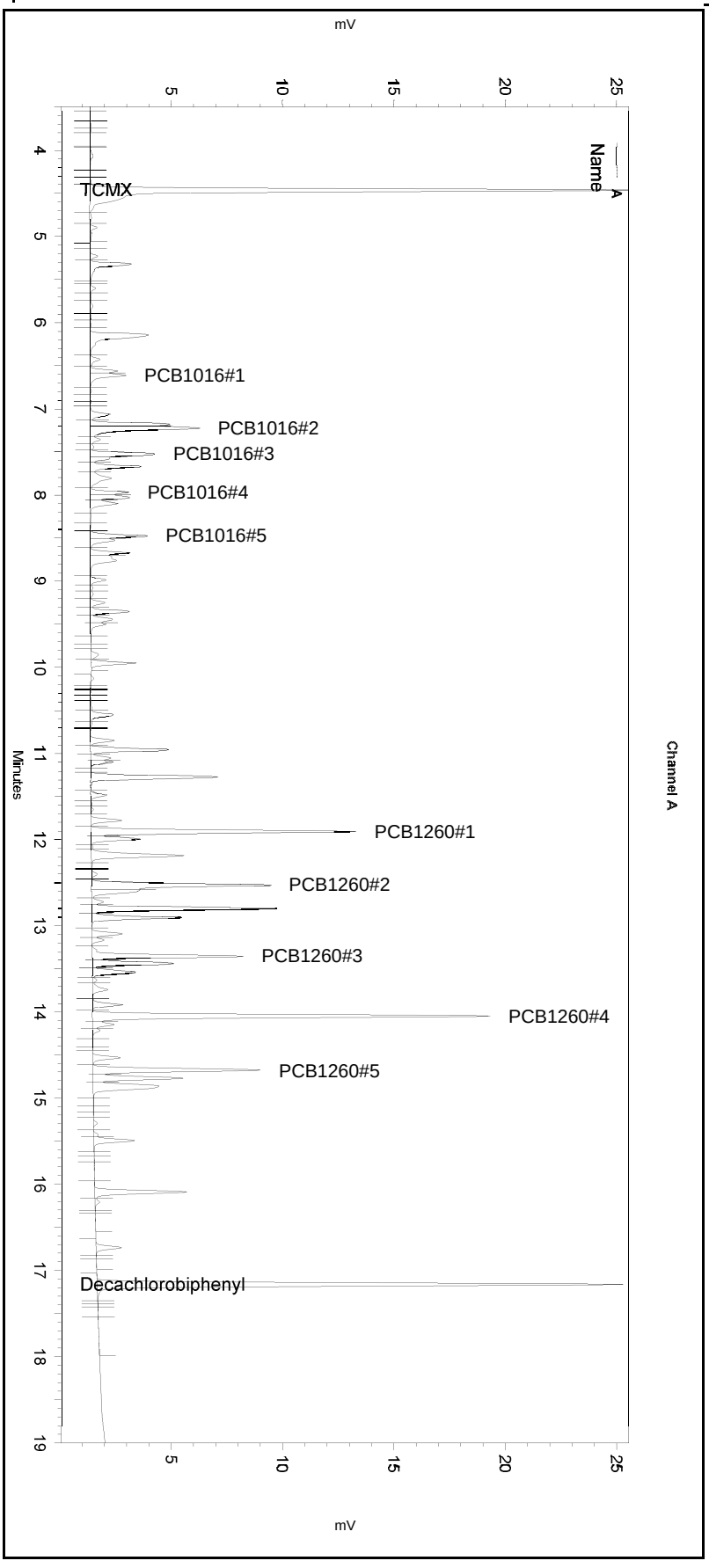
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.500	1069557	50.000 CAL
PCB1016#1	6.410	6.410	45775	250.000 CAL
PCB1016#2	6.977	6.977	162543	250.000 CAL
PCB1016#3	7.187	7.187	49887	250.000 CAL
PCB1016#4	7.720	7.720	22458	250.000 CAL
PCB1016#5	8.170	8.170	30308	250.000 CAL
PCB1260#1	11.570	11.570	292064	250.000 CAL
PCB1260#2	12.187	12.187	199125	250.000 CAL
PCB1260#3	13.087	13.087	140626	250.000 CAL
PCB1260#4	13.710	13.710	570283	250.000 CAL
PCB1260#5	14.360	14.360	116769	250.000 CAL
Decachlorobiphenyl	17.210	17.210	823667	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 10:15:14 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

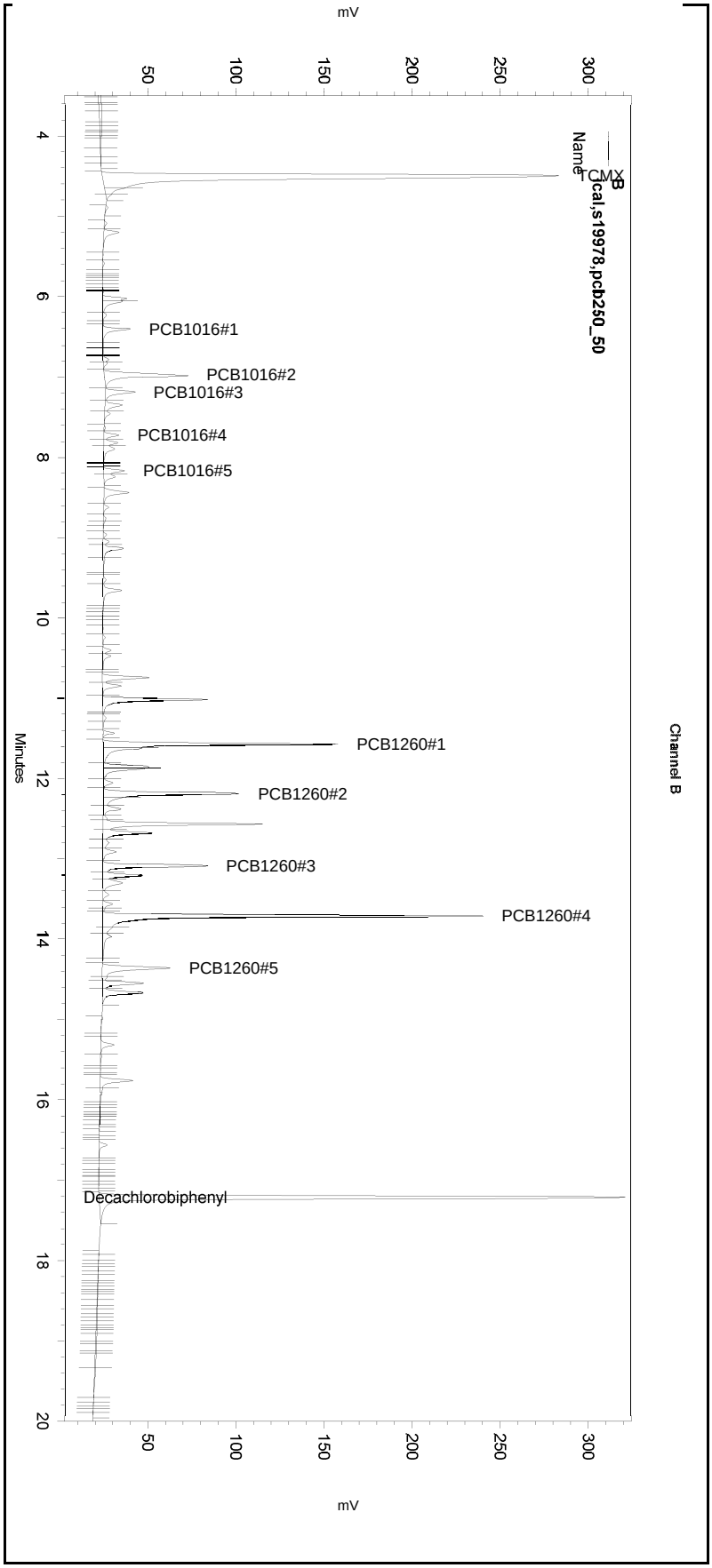
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.56	0	0
Yes	Split Peak	12.574	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 10:15:14 AM
Sample Amount: 1



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Integration Events
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.811	0	0
Yes	Reset Baseline	7.13	0	0
Yes	Reset Baseline	8.351	0	0
Yes	Reset Baseline	11.494	0	0
Yes	Reset Baseline	14.822	0	0
Yes	Reset Baseline	17.541	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 9:46:24 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.463	4.473	67528	50.000 CAL
PCB1016#1	6.613	6.637	4680	250.000 CAL
PCB1016#2	7.227	7.250	14669	250.000 CAL
PCB1016#3	7.523	7.545	9784	250.000 CAL
PCB1016#4	7.970	7.990	4309	250.000 CAL
PCB1016#5	8.473	8.494	6822	250.000 CAL
PCB1260#1	11.907	11.907	30673	250.000 CAL
PCB1260#2	12.527	12.530	30696	250.000 CAL
PCB1260#3	13.347	13.350	18505	250.000 CAL
PCB1260#4	14.053	14.053	47505	250.000 CAL
PCB1260#5	14.680	14.680	20473	250.000 CAL
Decachlorobiphenyl	17.163	17.160	63036	50.000 CAL

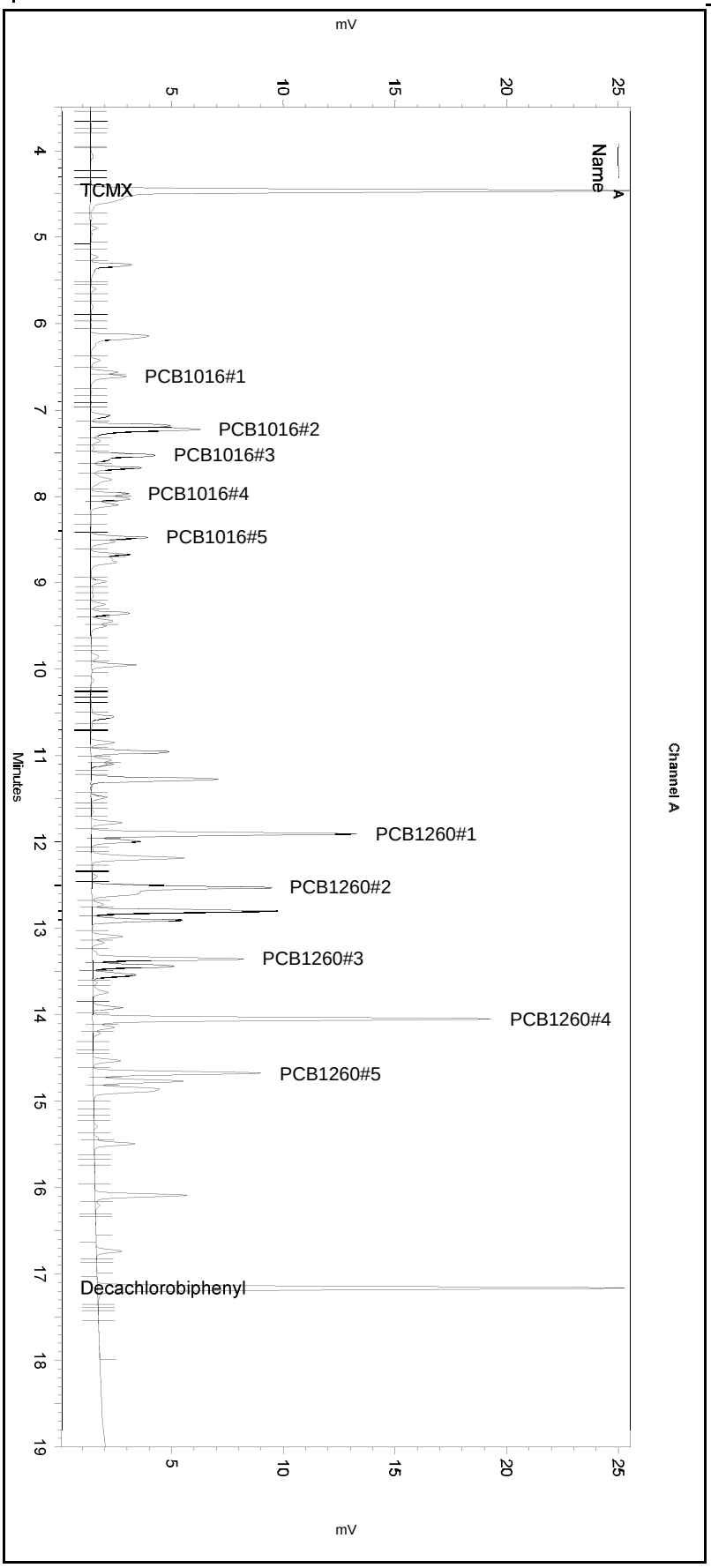
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.507	1117215	50.000 CAL
PCB1016#1	6.410	6.427	75603	250.000 CAL
PCB1016#2	6.977	6.993	202883	250.000 CAL
PCB1016#3	7.187	7.200	78885	250.000 CAL
PCB1016#4	7.720	7.730	35413	250.000 CAL
PCB1016#5	8.170	8.180	39638	250.000 CAL
PCB1260#1	11.570	11.573	297480	250.000 CAL
PCB1260#2	12.187	12.190	205337	250.000 CAL
PCB1260#3	13.087	13.087	148201	250.000 CAL
PCB1260#4	13.710	13.707	581451	250.000 CAL
PCB1260#5	14.360	14.357	126665	250.000 CAL
Decachlorobiphenyl	17.210	17.187	884157	50.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 9:46:24 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

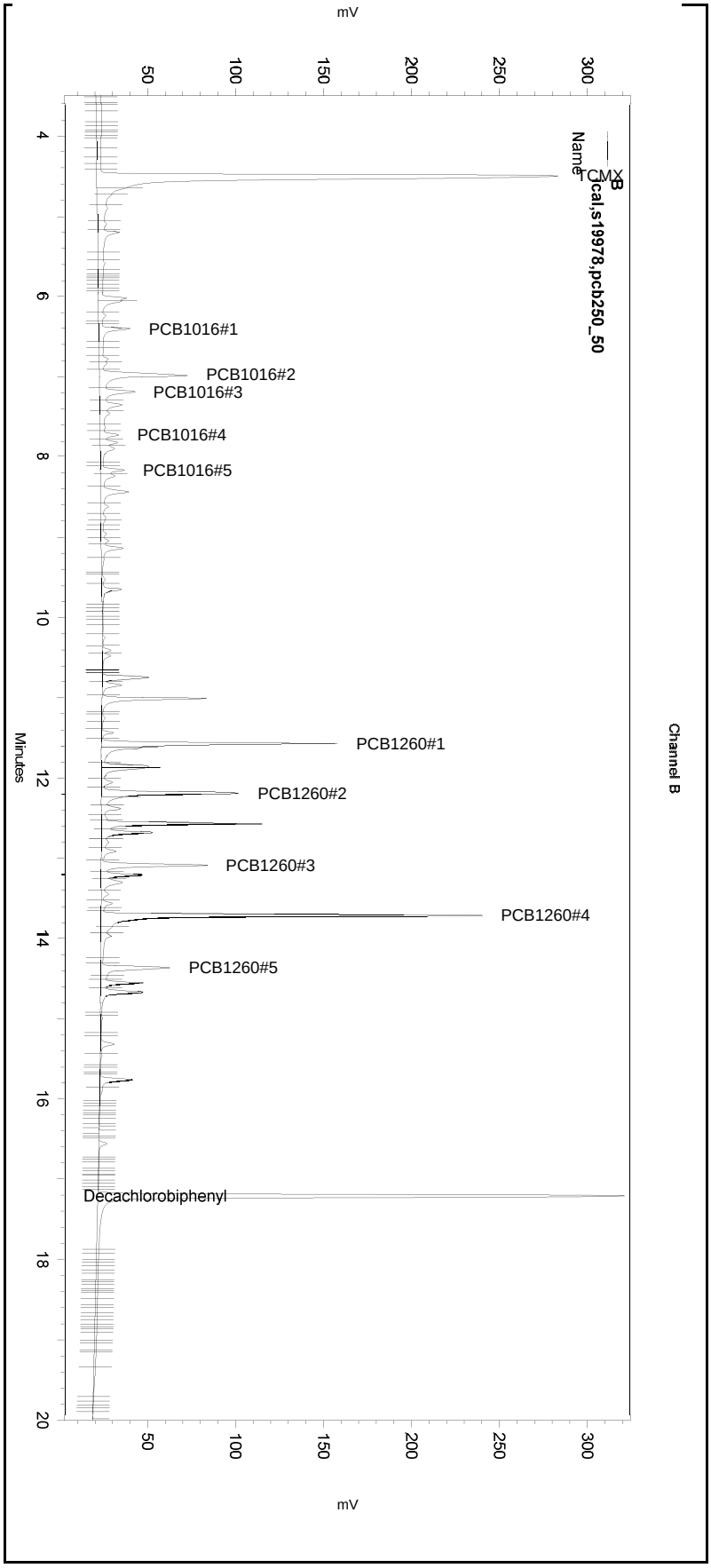
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017**
Sample Name: **ical,s19978,pcb250_50**
Instrument: GC22 Vial: 17 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 6:46:16 PM
Analysis Date: 9/7/2012 9:46:24 AM
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 10:27:54 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.463	4.463	116439	100.000 CAL
PCB1016#1	6.613	6.613	7717	500.000 CAL
PCB1016#2	7.223	7.227	23304	500.000 CAL
PCB1016#3	7.523	7.523	12370	500.000 CAL
PCB1016#4	7.970	7.970	6293	500.000 CAL
PCB1016#5	8.470	8.473	10528	500.000 CAL
PCB1260#1	11.900	11.907	46239	500.000 CAL
PCB1260#2	12.523	12.527	34559	500.000 CAL
PCB1260#3	13.343	13.347	26891	500.000 CAL
PCB1260#4	14.047	14.053	70893	500.000 CAL
PCB1260#5	14.673	14.680	29001	500.000 CAL
Decachlorobiphenyl	17.157	17.163	93636	100.000 CAL

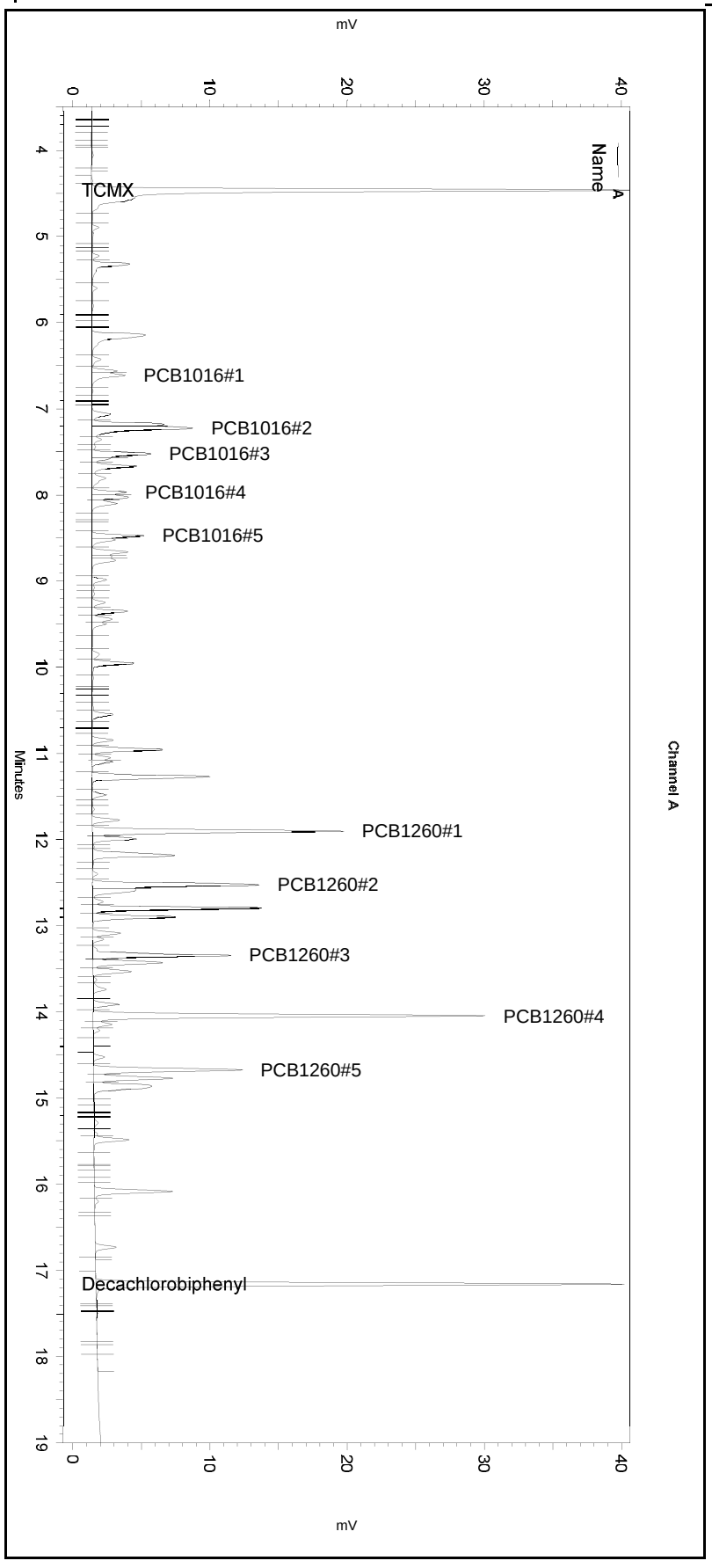
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.500	1886378	100.000 CAL
PCB1016#1	6.407	6.410	118623	500.000 CAL
PCB1016#2	6.977	6.977	717609	500.000 CAL
PCB1016#3	7.183	7.187	204883	500.000 CAL
PCB1016#4	7.717	7.720	54834	500.000 CAL
PCB1016#5	8.167	8.170	84260	500.000 CAL
PCB1260#1	11.567	11.570	869810	500.000 CAL
PCB1260#2	12.183	12.187	848639	500.000 CAL
PCB1260#3	13.083	13.087	640627	500.000 CAL
PCB1260#4	13.707	13.710	1382363	500.000 CAL
PCB1260#5	14.357	14.360	608326	500.000 CAL
Decachlorobiphenyl	17.207	17.210	1436299	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 10:27:54 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

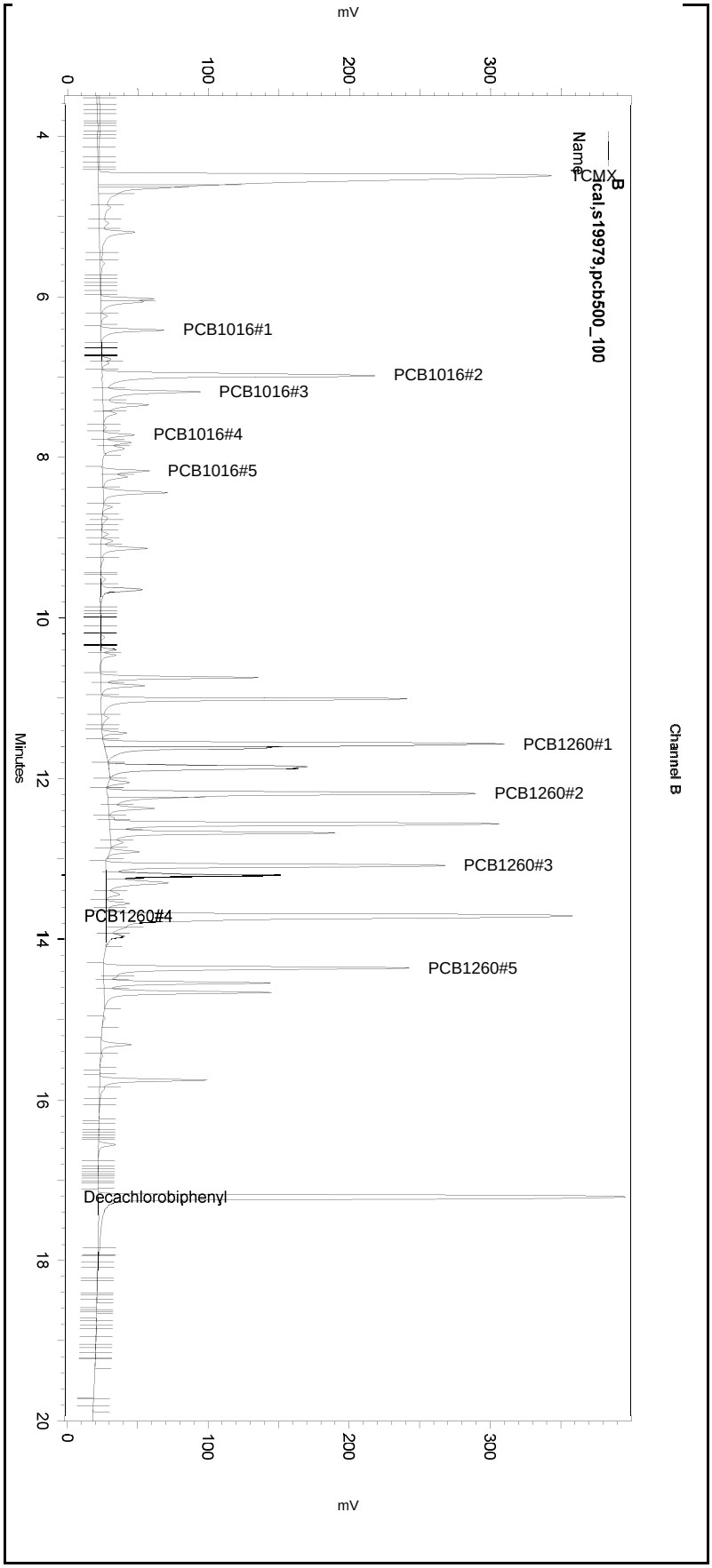
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.571	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 10:27:54 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.335	0	0
Yes	Manual Baseline	6.896	7.582	0
Yes	Reset Baseline	7.42	0	0
Yes	Reset Baseline	7.564	0	0
Yes	Reset Baseline	7.97	0	0
Yes	Reset Baseline	8.367	0	0
Yes	Reset Baseline	8.367	0	0
Yes	Manual Baseline	11.793	11.995	0
Yes	Reset Baseline	12.858	0	0
Yes	Reset Baseline	14.095	0	0
Yes	Reset Baseline	14.869	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 9:46:28 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.463	4.473	116439	100.000 CAL
PCB1016#1	6.613	6.637	7717	500.000 CAL
PCB1016#2	7.223	7.250	23304	500.000 CAL
PCB1016#3	7.523	7.545	14960	500.000 CAL
PCB1016#4	7.970	7.990	6293	500.000 CAL
PCB1016#5	8.470	8.494	10528	500.000 CAL
PCB1260#1	11.900	11.907	46239	500.000 CAL
PCB1260#2	12.523	12.530	34559	500.000 CAL
PCB1260#3	13.343	13.350	26891	500.000 CAL
PCB1260#4	14.047	14.053	70893	500.000 CAL
PCB1260#5	14.673	14.680	29001	500.000 CAL
Decachlorobiphenyl	17.157	17.160	93636	100.000 CAL

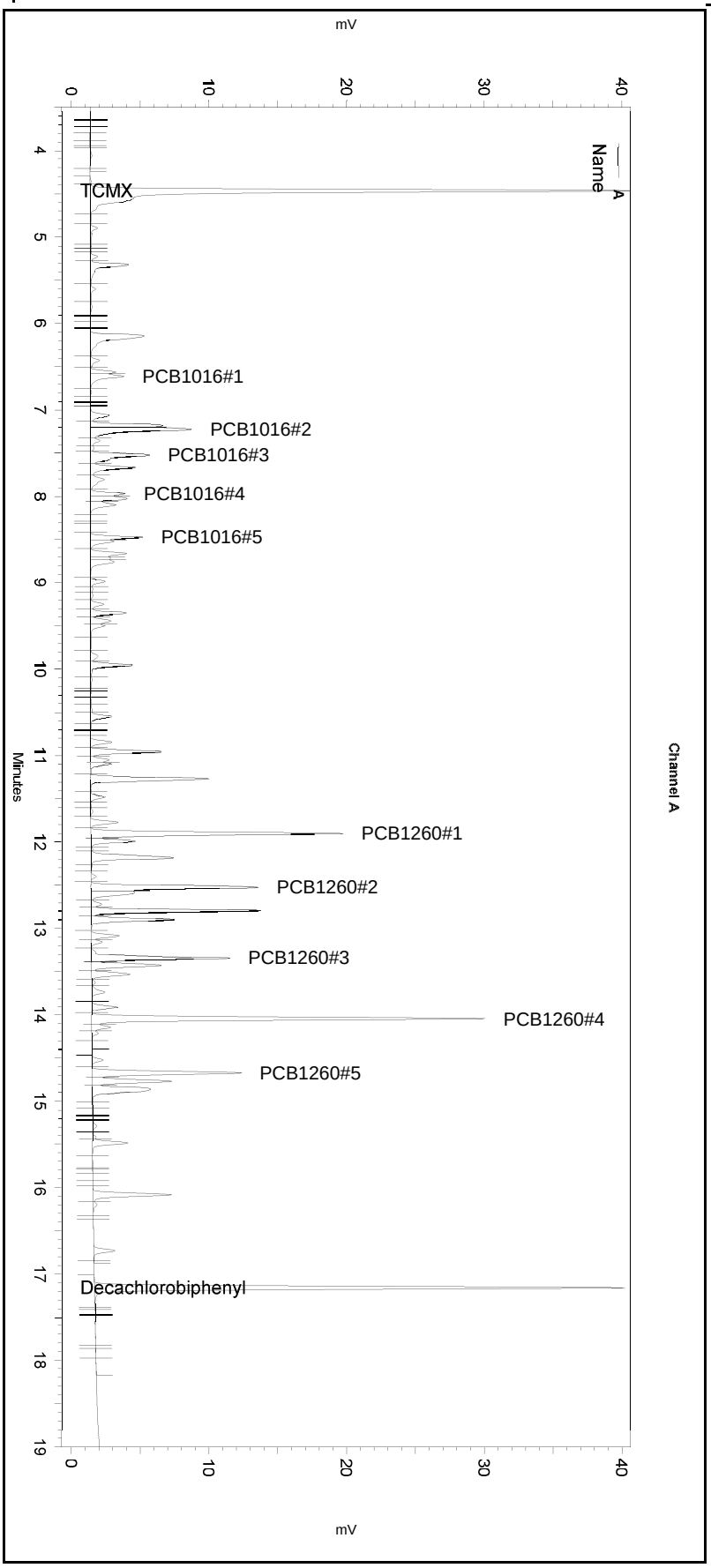
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.500	4.507	1901249	100.000 CAL
PCB1016#1	6.407	6.427	149972	500.000 CAL
PCB1016#2	6.977	6.993	759292	500.000 CAL
PCB1016#3	7.183	7.200	234381	500.000 CAL
PCB1016#4	7.717	7.730	78316	500.000 CAL
PCB1016#5	8.167	8.180	98359	500.000 CAL
PCB1260#1	11.567	11.573	869810	500.000 CAL
PCB1260#2	12.183	12.190	850850	500.000 CAL
PCB1260#3	13.083	13.087	647211	500.000 CAL
PCB1260#4	13.707	13.707	1402489	500.000 CAL
PCB1260#5	14.357	14.357	616684	500.000 CAL
Decachlorobiphenyl	17.207	17.187	1436299	100.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 9:46:28 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

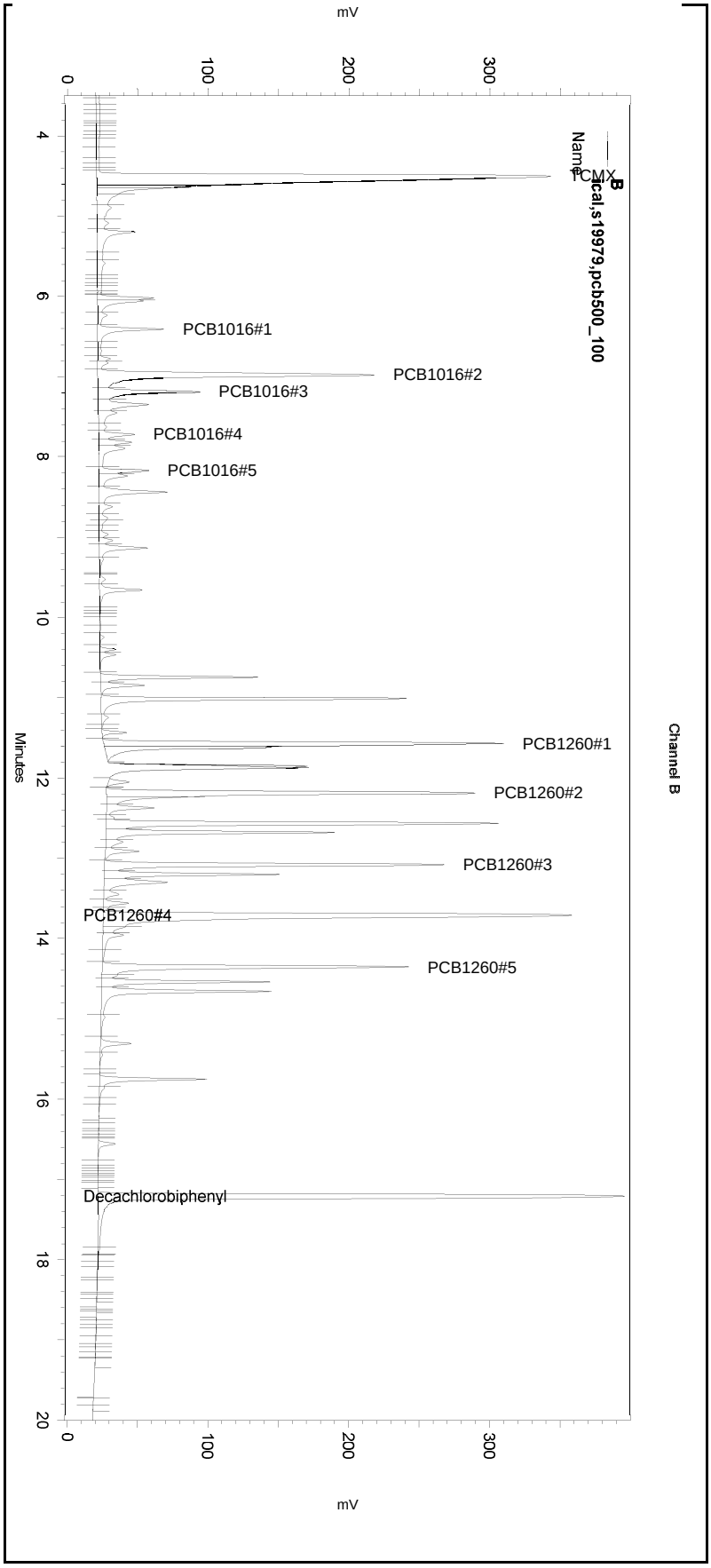
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018**
Sample Name: **ical,s19979,pcb500_100**
Instrument: GC22 Vial: 18 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:12:32 PM
Analysis Date: 9/7/2012 9:46:28 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 10:15:22 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.460	4.463	193693	150.000 CAL
PCB1016#1	6.607	6.613	11925	750.000 CAL
PCB1016#2	7.220	7.227	37514	750.000 CAL
PCB1016#3	7.517	7.523	18510	750.000 CAL
PCB1016#4	7.963	7.970	10369	750.000 CAL
PCB1016#5	8.467	8.473	16580	750.000 CAL
PCB1260#1	11.897	11.907	80589	750.000 CAL
PCB1260#2	12.517	12.527	59029	750.000 CAL
PCB1260#3	13.337	13.347	45719	750.000 CAL
PCB1260#4	14.043	14.053	135124	750.000 CAL
PCB1260#5	14.667	14.680	50788	750.000 CAL
Decachlorobiphenyl	17.150	17.163	190295	150.000 CAL

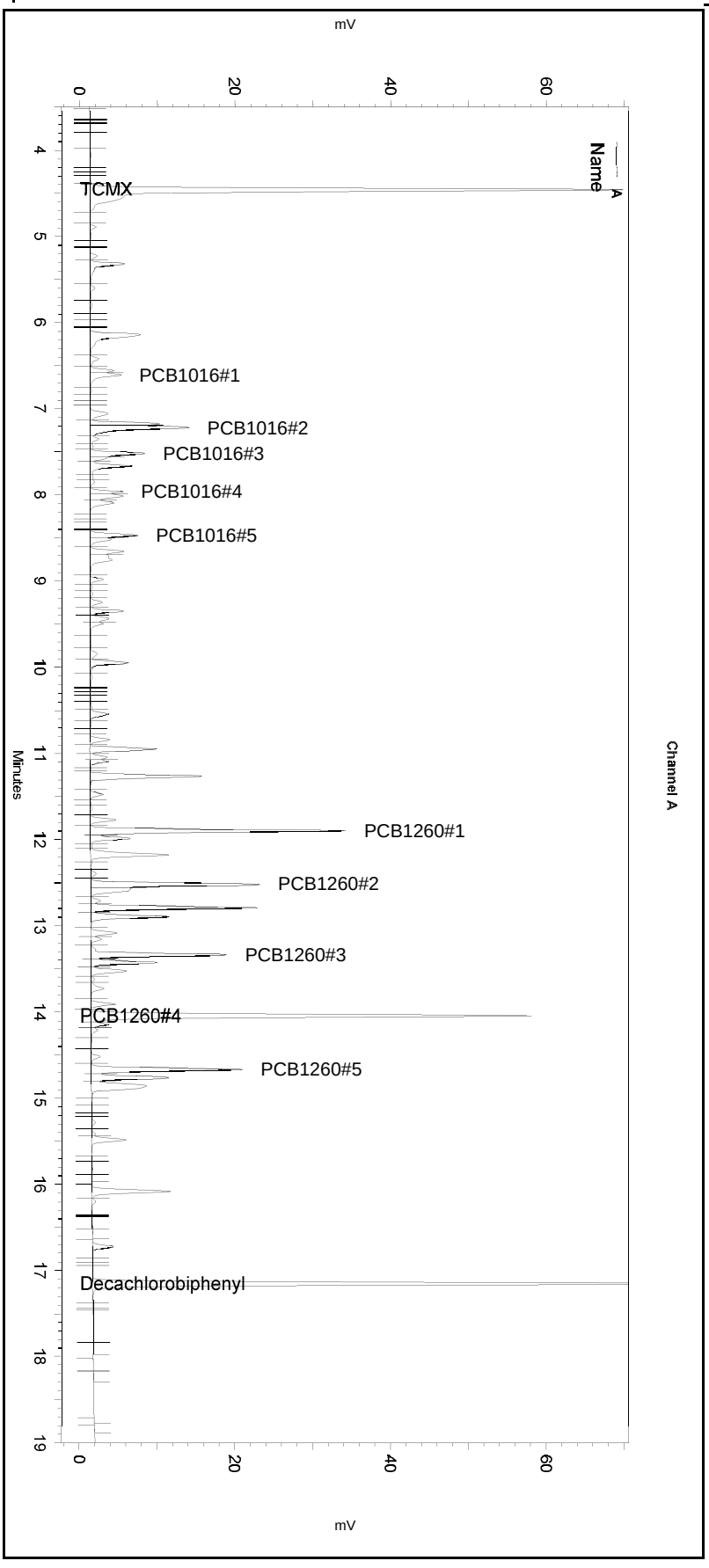
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.493	4.500	2070673	150.000 CAL
PCB1016#1	6.403	6.410	170181	750.000 CAL
PCB1016#2	6.973	6.977	933511	750.000 CAL
PCB1016#3	7.183	7.187	303486	750.000 CAL
PCB1016#4	7.713	7.720	74901	750.000 CAL
PCB1016#5	8.163	8.170	108224	750.000 CAL
PCB1260#1	11.563	11.570	927463	750.000 CAL
PCB1260#2	12.180	12.187	902470	750.000 CAL
PCB1260#3	13.080	13.087	678139	750.000 CAL
PCB1260#4	13.700	13.710	1426923	750.000 CAL
PCB1260#5	14.353	14.360	626028	750.000 CAL
Decachlorobiphenyl	17.200	17.210	1463369	150.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 10:15:22 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

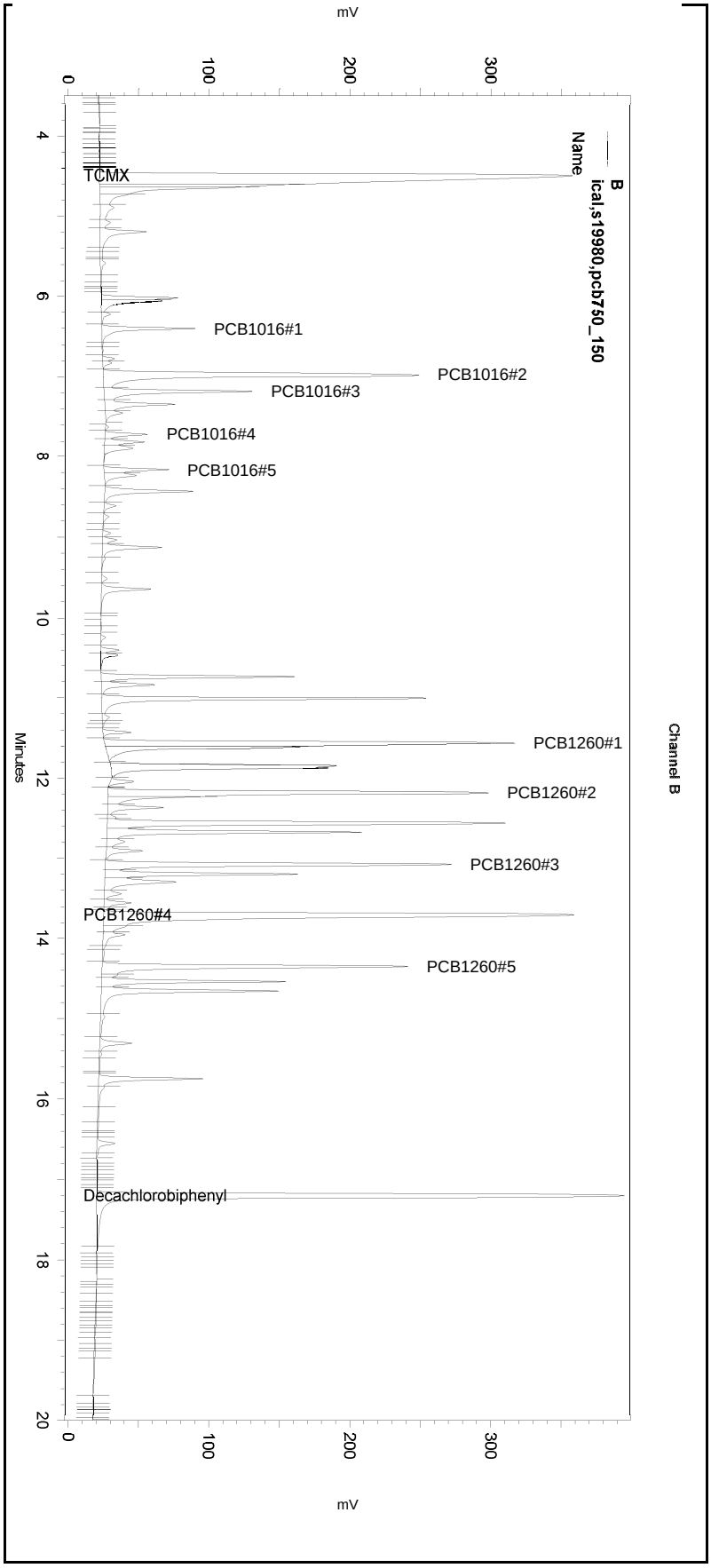
Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.554	0	0
Yes	Split Peak	12.562	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 10:15:22 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.56	0	0
Yes	Reset Baseline	8.358	0	0
Yes	Manual Baseline	11.801	11.992	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 9:46:32 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.460	4.473	193693	150.000 CAL
PCB1016#1		6.637		0.000 BDL
PCB1016#2	7.220	7.250	37514	750.000 CAL
PCB1016#3	7.517	7.545	24037	750.000 CAL
PCB1016#4	7.963	7.990	10369	750.000 CAL
PCB1016#5	8.467	8.494	16580	750.000 CAL
PCB1260#1	11.897	11.907	80589	750.000 CAL
PCB1260#2	12.517	12.530	76053	750.000 CAL
PCB1260#3	13.337	13.350	45719	750.000 CAL
PCB1260#4	14.043	14.053	135124	750.000 CAL
PCB1260#5	14.667	14.680	50788	750.000 CAL
Decachlorobiphenyl	17.150	17.160	190295	150.000 CAL

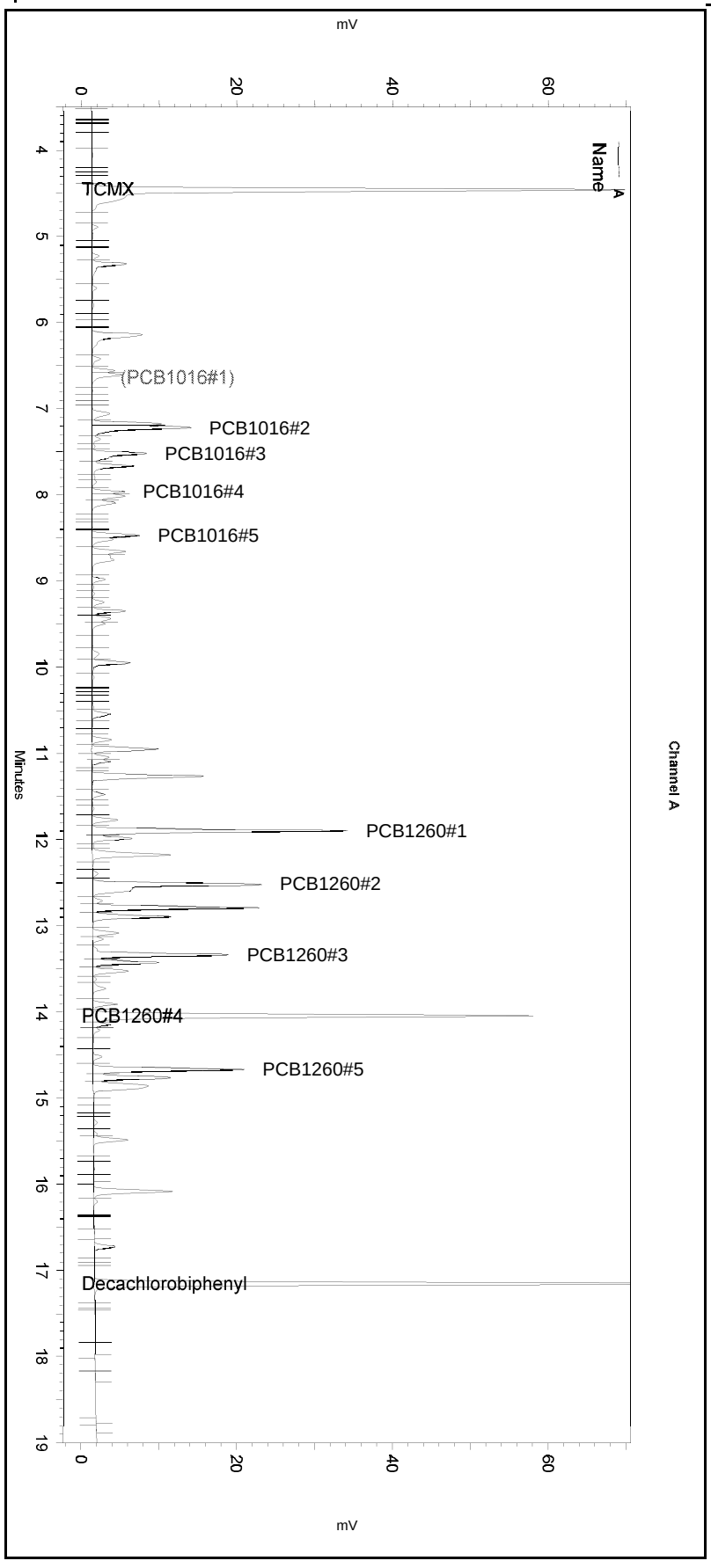
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.493	4.507	2073289	150.000 CAL
PCB1016#1	6.403	6.427	187610	750.000 CAL
PCB1016#2	6.973	6.993	967914	750.000 CAL
PCB1016#3	7.183	7.200	332288	750.000 CAL
PCB1016#4	7.713	7.730	98520	750.000 CAL
PCB1016#5	8.163	8.180	122539	750.000 CAL
PCB1260#1	11.563	11.573	927463	750.000 CAL
PCB1260#2	12.180	12.190	902470	750.000 CAL
PCB1260#3	13.080	13.087	678139	750.000 CAL
PCB1260#4	13.700	13.707	1426923	750.000 CAL
PCB1260#5	14.353	14.357	626028	750.000 CAL
Decachlorobiphenyl	17.200	17.187	1463369	150.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 9:46:32 AM
Sample Amount: 1



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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes
==========

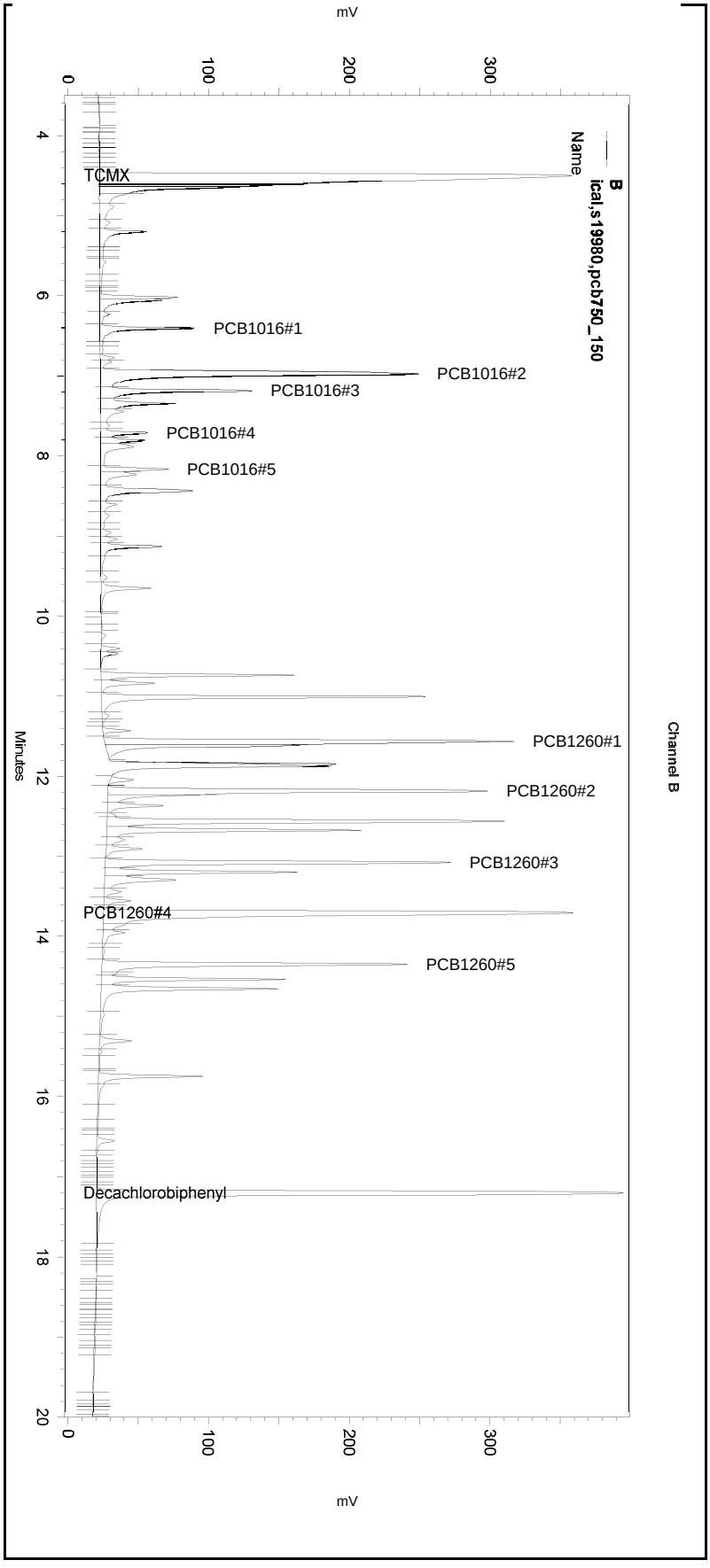
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019**
Sample Name: **ical,s19980,pcb750_150**
Instrument: GC22 Vial: 19 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 7:38:54 PM
Analysis Date: 9/7/2012 9:46:32 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 10:15:26 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.460	4.463	256820	200.000 CAL
PCB1016#1	6.607	6.613	15637	1000.000 CAL
PCB1016#2	7.220	7.227	50772	1000.000 CAL
PCB1016#3	7.517	7.523	24883	1000.000 CAL
PCB1016#4	7.963	7.970	13195	1000.000 CAL
PCB1016#5	8.467	8.473	22366	1000.000 CAL
PCB1260#1	11.893	11.907	114274	1000.000 CAL
PCB1260#2	12.517	12.527	84031	1000.000 CAL
PCB1260#3	13.337	13.347	64024	1000.000 CAL
PCB1260#4	14.043	14.053	199008	1000.000 CAL
PCB1260#5	14.667	14.680	72273	1000.000 CAL
Decachlorobiphenyl	17.150	17.163	281751	200.000 CAL

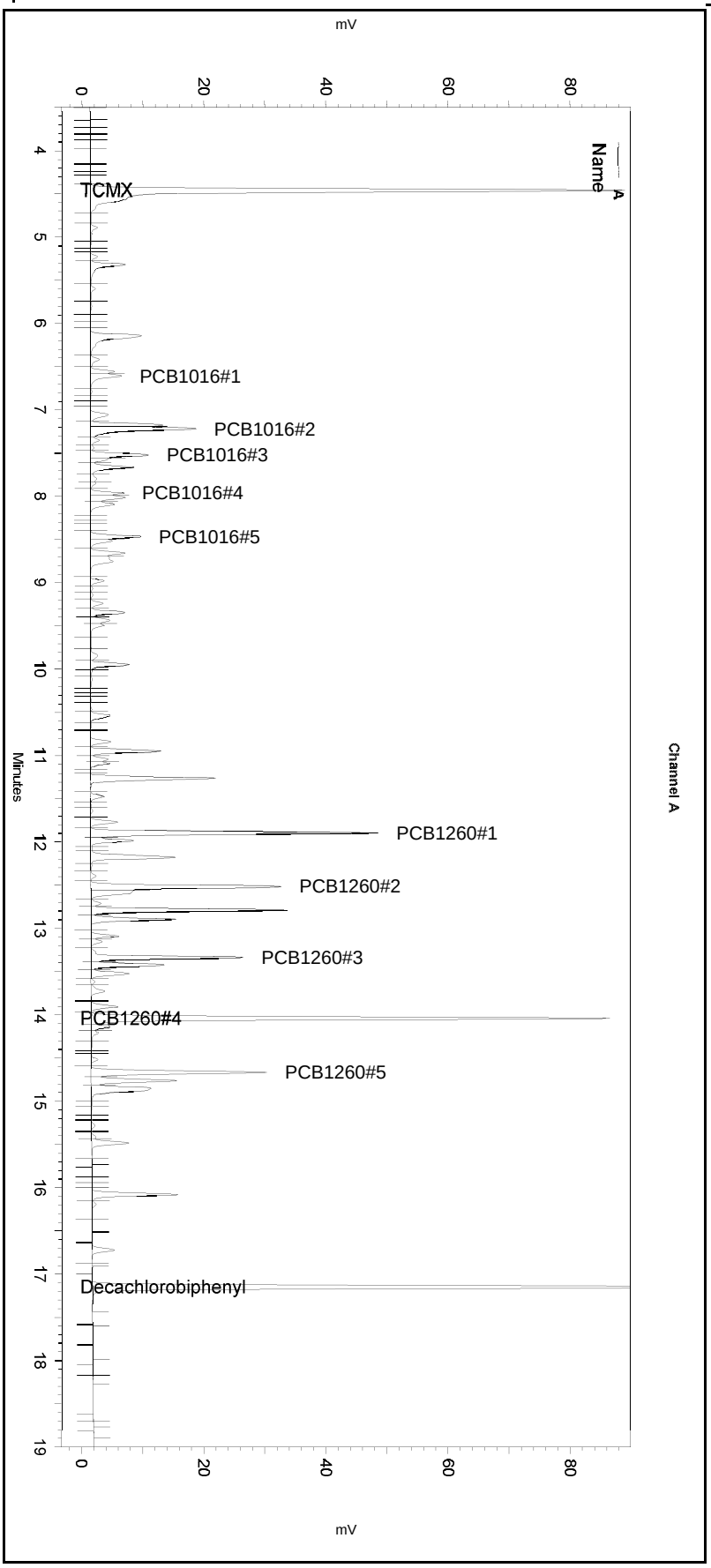
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.497	4.500	2202407	200.000 CAL
PCB1016#1	6.407	6.410	253854	1000.000 CAL
PCB1016#2	6.973	6.977	1200774	1000.000 CAL
PCB1016#3	7.183	7.187	486459	1000.000 CAL
PCB1016#4	7.717	7.720	118599	1000.000 CAL
PCB1016#5	8.167	8.170	181194	1000.000 CAL
PCB1260#1	11.560	11.570	1103013	1000.000 CAL
PCB1260#2	12.180	12.187	1192231	1000.000 CAL
PCB1260#3	13.080	13.087	934481	1000.000 CAL
PCB1260#4	13.700	13.710	1503038	1000.000 CAL
PCB1260#5	14.353	14.360	974180	1000.000 CAL
Decachlorobiphenyl	17.200	17.210	1664463	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 10:15:26 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

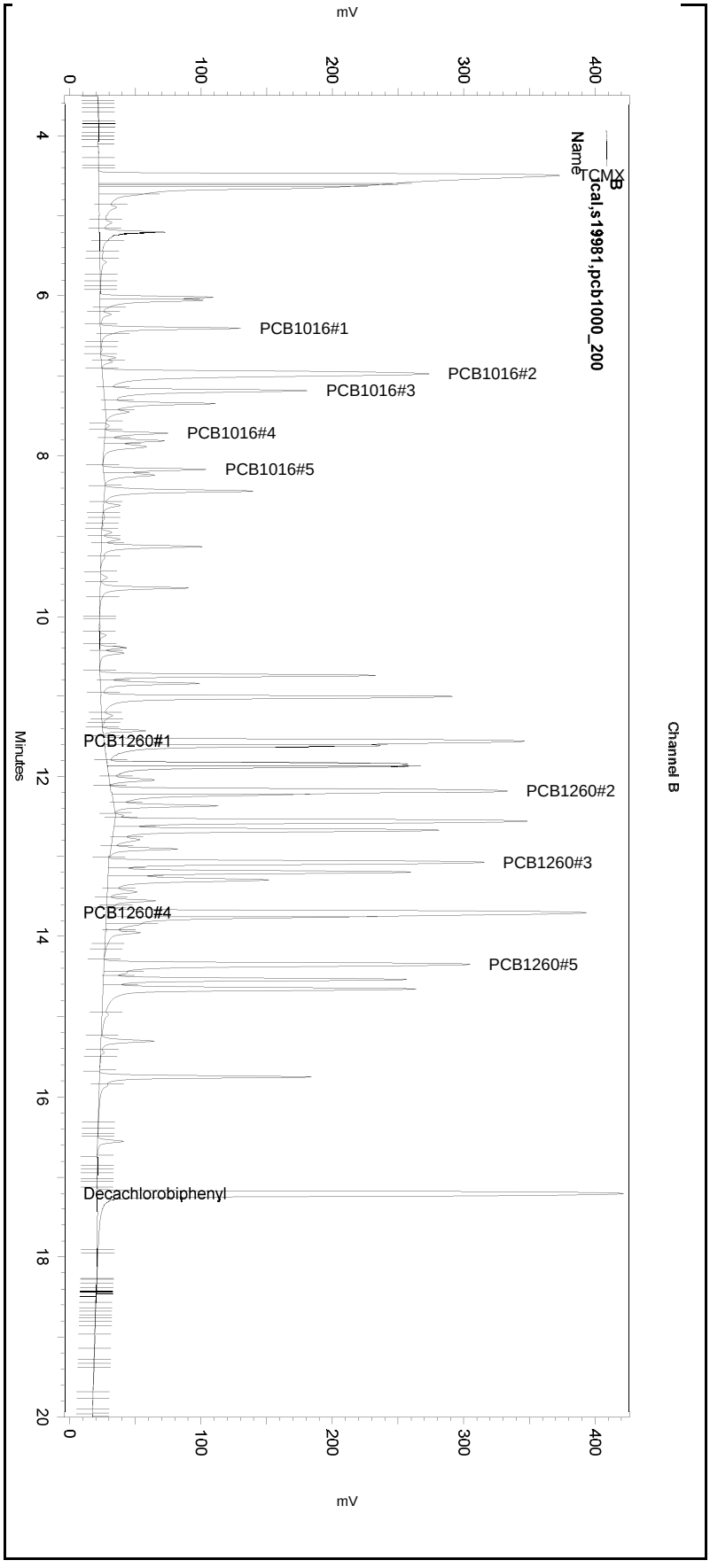
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.554	0	0
Yes	Split Peak	12.564	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 10:15:26 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.559	0	0
Yes	Reset Baseline	8.358	0	0
Yes	Reset Baseline	12.459	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 9:46:36 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.460	4.473	256820	200.000 CAL
PCB1016#1		6.637		0.000 BDL
PCB1016#2	7.220	7.250	50772	1000.000 CAL
PCB1016#3	7.517	7.545	32101	1000.000 CAL
PCB1016#4	8.013	7.990	16384	1000.000 CAL
PCB1016#5	8.467	8.494	22366	1000.000 CAL
PCB1260#1	11.893	11.907	114274	1000.000 CAL
PCB1260#2	12.517	12.530	106315	1000.000 CAL
PCB1260#3	13.337	13.350	64024	1000.000 CAL
PCB1260#4	14.043	14.053	199008	1000.000 CAL
PCB1260#5	14.667	14.680	72273	1000.000 CAL
Decachlorobiphenyl	17.150	17.160	281751	200.000 CAL

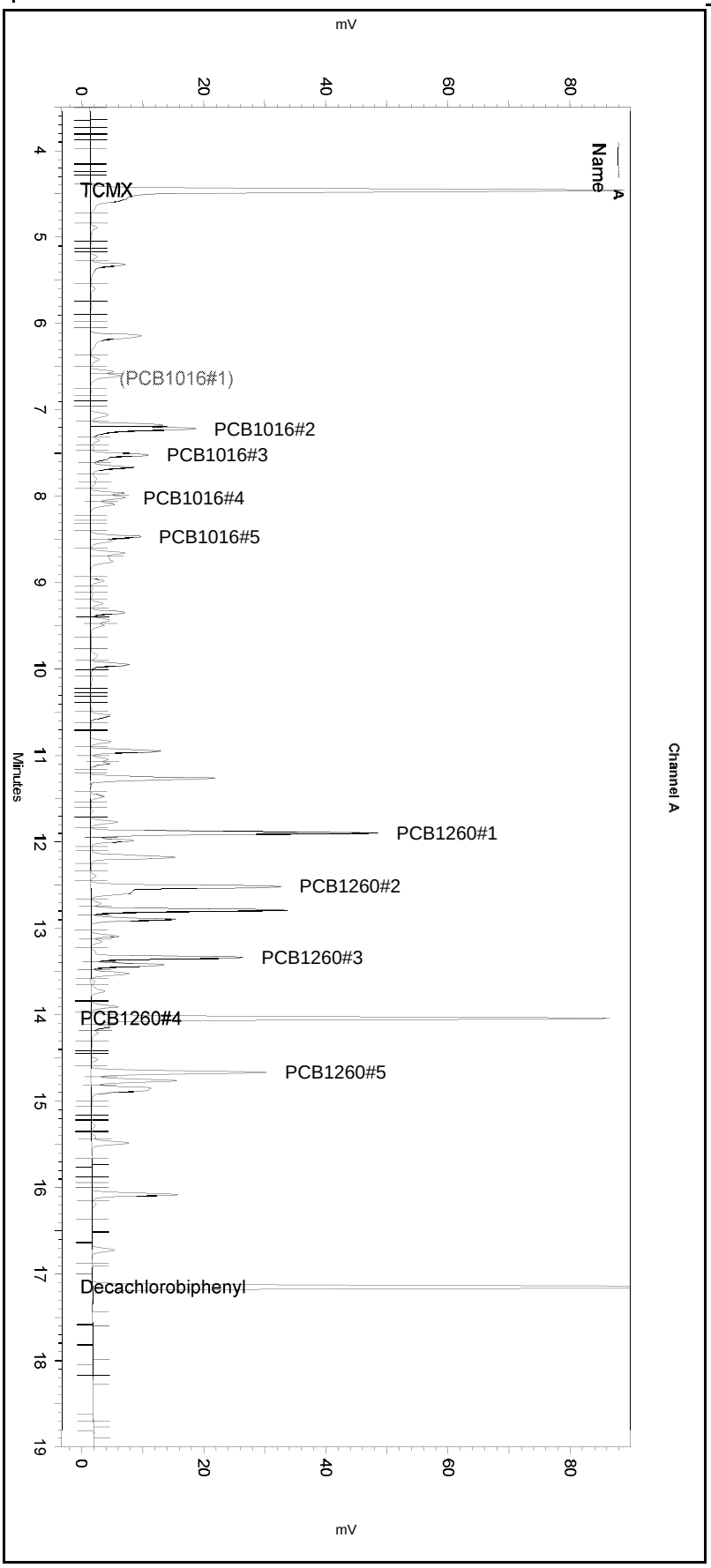
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.497	4.507	2204762	200.000 CAL
PCB1016#1	6.407	6.427	270150	1000.000 CAL
PCB1016#2	6.973	6.993	1257908	1000.000 CAL
PCB1016#3	7.183	7.200	537393	1000.000 CAL
PCB1016#4	7.717	7.730	154942	1000.000 CAL
PCB1016#5	8.167	8.180	206308	1000.000 CAL
PCB1260#1	11.560	11.573	1134918	1000.000 CAL
PCB1260#2	12.180	12.190	1267145	1000.000 CAL
PCB1260#3	13.080	13.087	1009921	1000.000 CAL
PCB1260#4	13.700	13.707	1552893	1000.000 CAL
PCB1260#5	14.353	14.357	1029696	1000.000 CAL
Decachlorobiphenyl	17.200	17.187	1683441	200.000 CAL

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 9:46:36 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

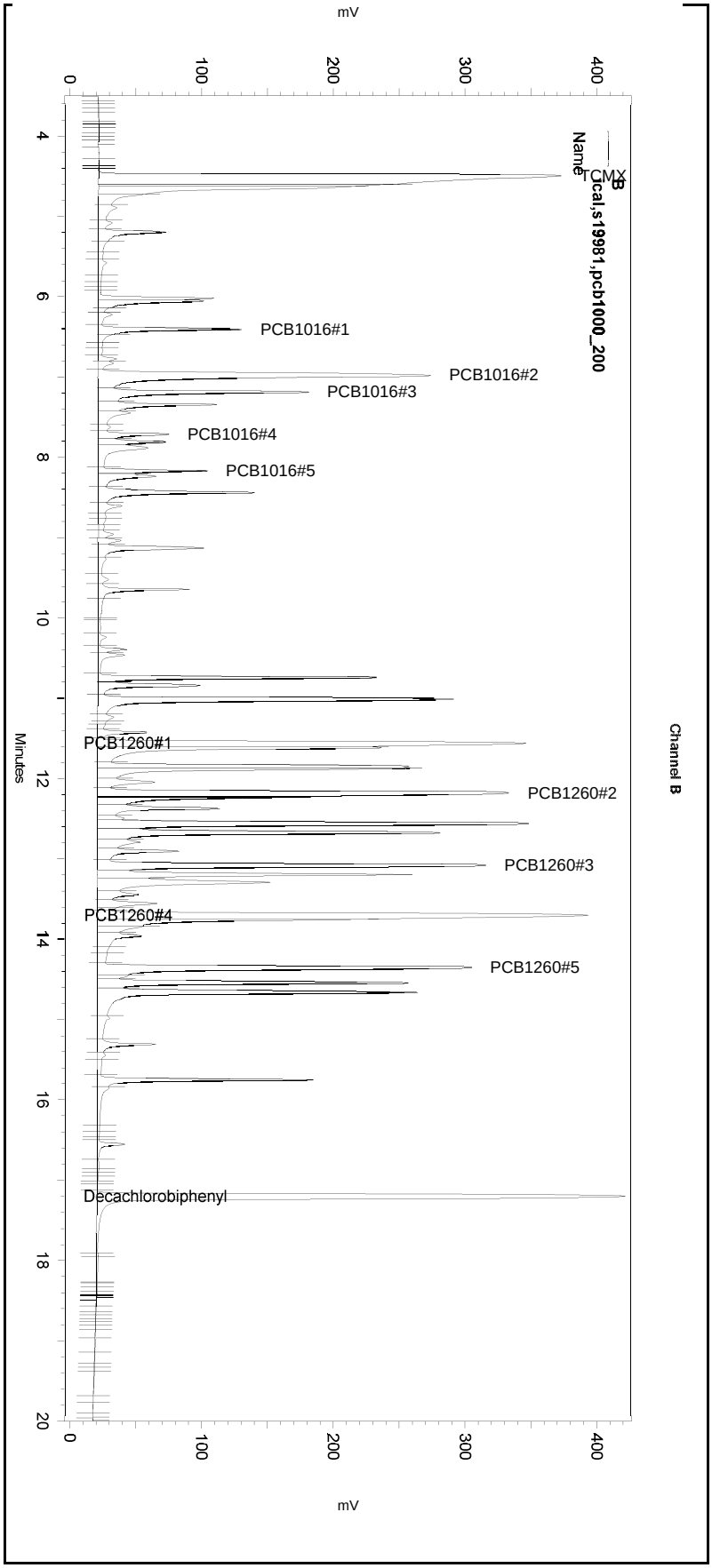
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020**
Sample Name: **ical,s19981,pcb1000_200**
Instrument: GC22 Vial: 20 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 8:05:09 PM
Analysis Date: 9/7/2012 9:46:36 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 10:33:37 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.457	4.463	61754	46.573
PCB1016#1	6.607	6.613	4597	247.377
PCB1016#2	7.217	7.227	13876	235.600
PCB1016#3	7.513	7.523	7477	250.946
PCB1016#4	7.960	7.970	3803	231.261
PCB1016#5	8.463	8.473	6452	245.128
PCB1260#1	11.890	11.907	26082	215.453
PCB1260#2	12.513	12.527	20210	222.544
PCB1260#3	13.330	13.347	16221	225.138
PCB1260#4	14.037	14.053	40765	221.864
PCB1260#5	14.663	14.680	18002	230.089
Decachlorobiphenyl	17.147	17.163	45476	36.690

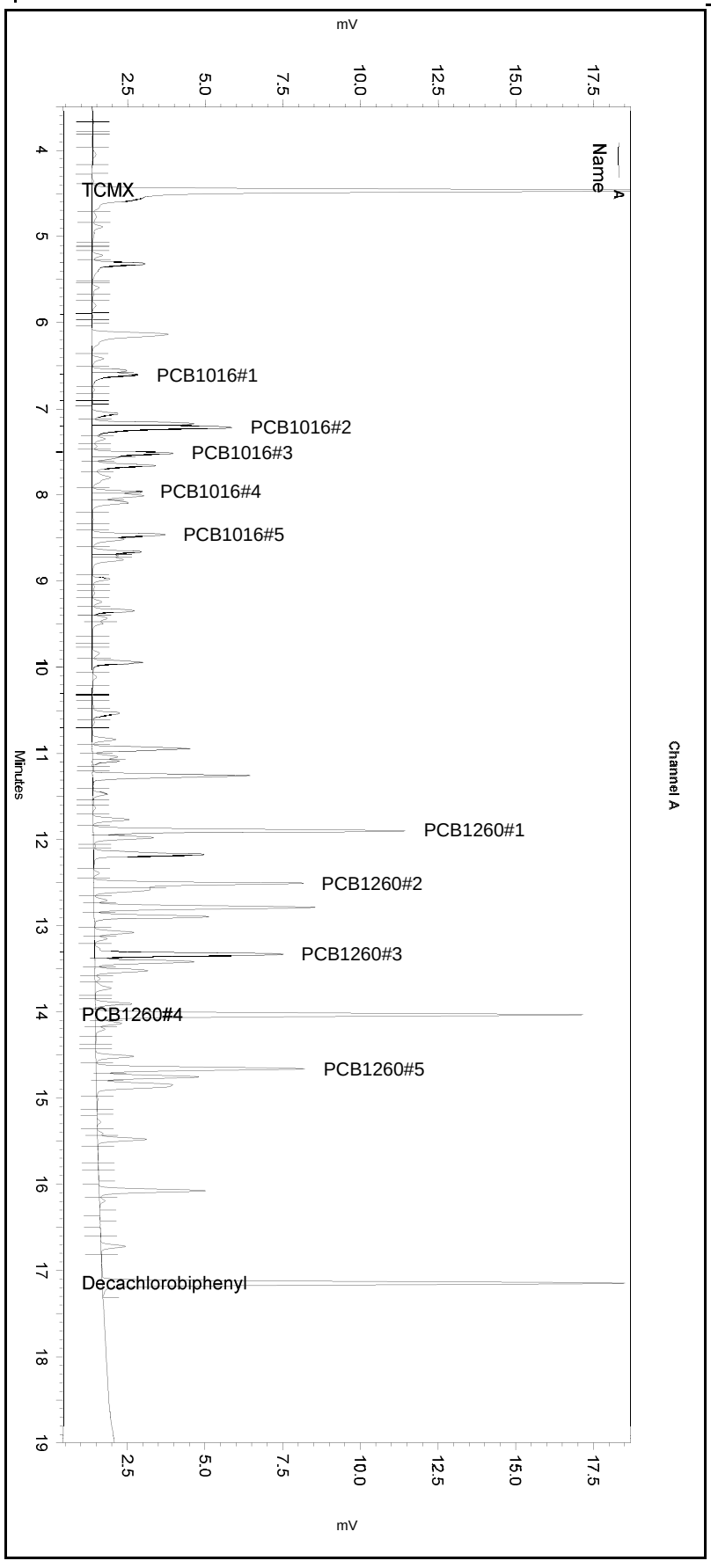
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.493	4.500	923530	48.284
PCB1016#1	6.403	6.410	46848	215.671
PCB1016#2	6.967	6.977	138281	158.420
PCB1016#3	7.180	7.187	62671	195.491
PCB1016#4	7.710	7.720	26617	247.871
PCB1016#5	8.160	8.170	33927	225.687
PCB1260#1	11.557	11.570	292711	268.623
PCB1260#2	12.173	12.187	210810	215.738
PCB1260#3	13.077	13.087	163971	216.639
PCB1260#4	13.697	13.710	608291	335.948
PCB1260#5	14.347	14.360	140330	196.168
Decachlorobiphenyl	17.197	17.210	693190	47.421

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 10:33:37 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

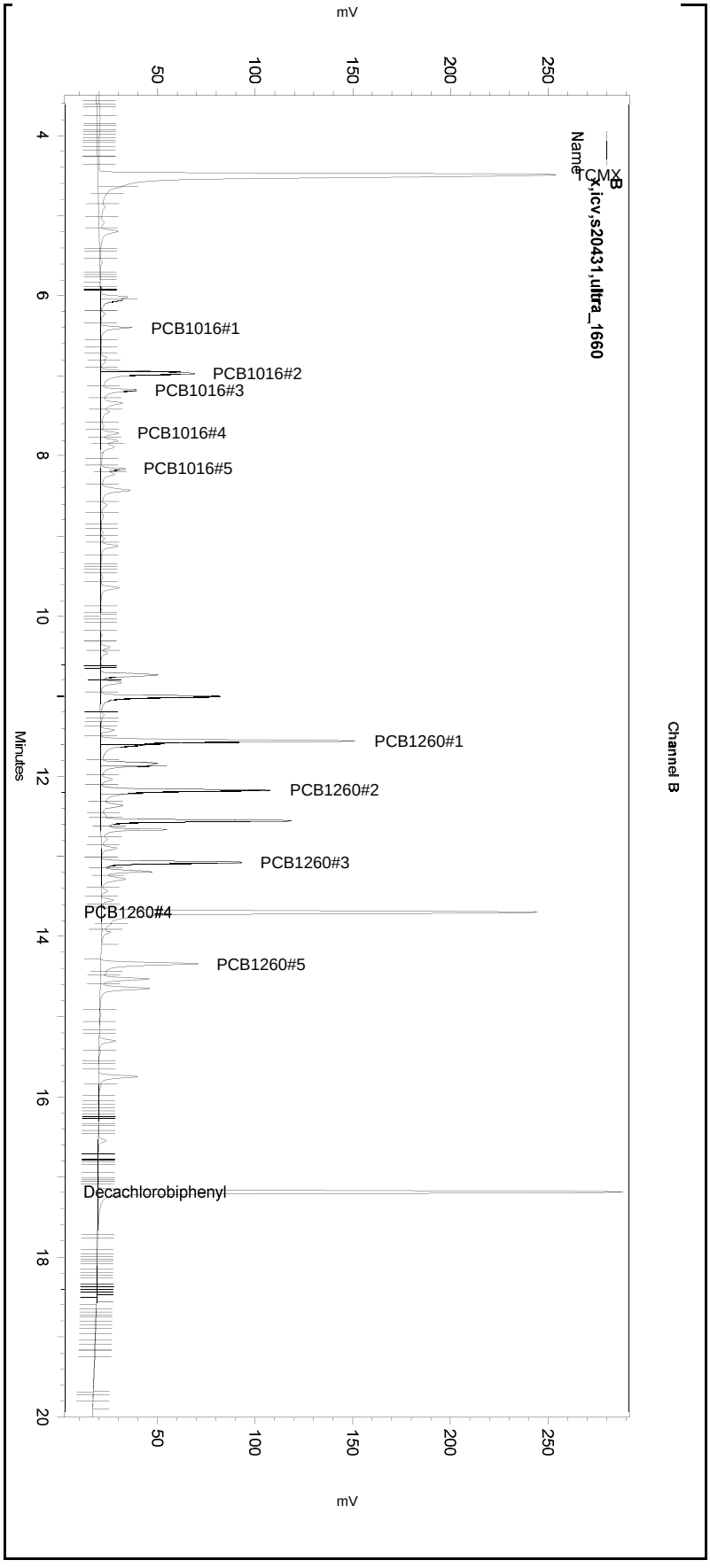
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.559	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 10:33:37 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	5.802	0	0
Yes	Reset Baseline	14.103	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 9:46:47 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.457	4.473	61754	45.557
PCB1016#1		6.637		0.000 BDL
PCB1016#2		7.250		0.000 BDL
PCB1016#3		7.545		0.000 BDL
PCB1016#4	8.010	7.990	4815	284.908
PCB1016#5	8.520	8.494	2751	104.517
PCB1260#1	11.890	11.907	26082	215.453
PCB1260#2	12.513	12.530	20210	174.613
PCB1260#3	13.330	13.350	16221	225.138
PCB1260#4	14.037	14.053	40765	221.864
PCB1260#5	14.663	14.680	18002	230.089
Decachlorobiphenyl	17.147	17.160	45476	35.601

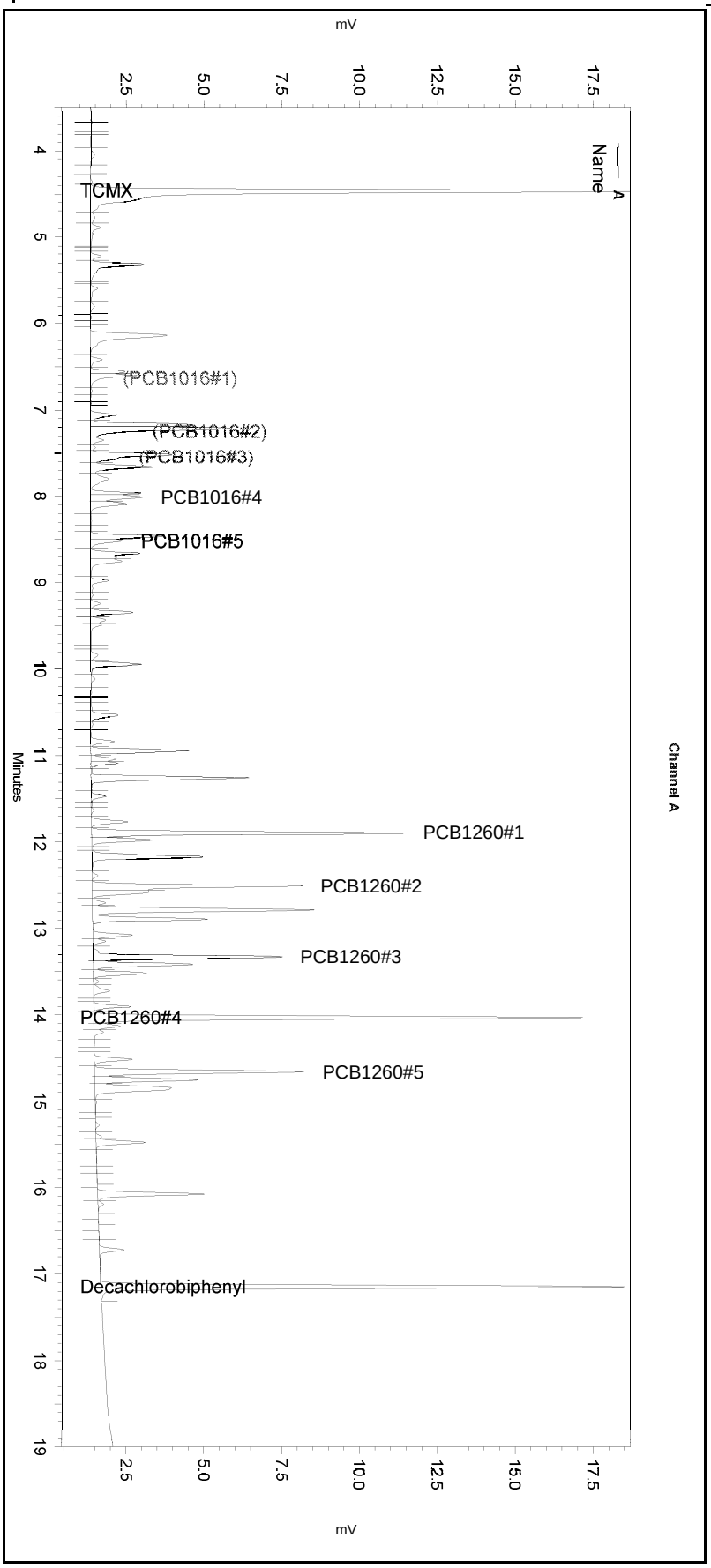
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.493	4.507	939702	43.280
PCB1016#1	6.403	6.427	64997	218.525
PCB1016#2	6.967	6.993	150562	133.126
PCB1016#3	7.180	7.200	72715	205.601
PCB1016#4	7.710	7.730	32080	226.747
PCB1016#5	8.160	8.180	38029	235.200
PCB1260#1	11.557	11.573	295453	189.524
PCB1260#2	12.173	12.190	215962	167.791
PCB1260#3	13.077	13.087	172360	180.185
PCB1260#4	13.697	13.707	624423	221.932
PCB1260#5	14.347	14.357	150758	178.084
Decachlorobiphenyl	17.197	17.187	697694	42.259

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 9:46:47 AM
Sample Amount: 1



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Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes
==========

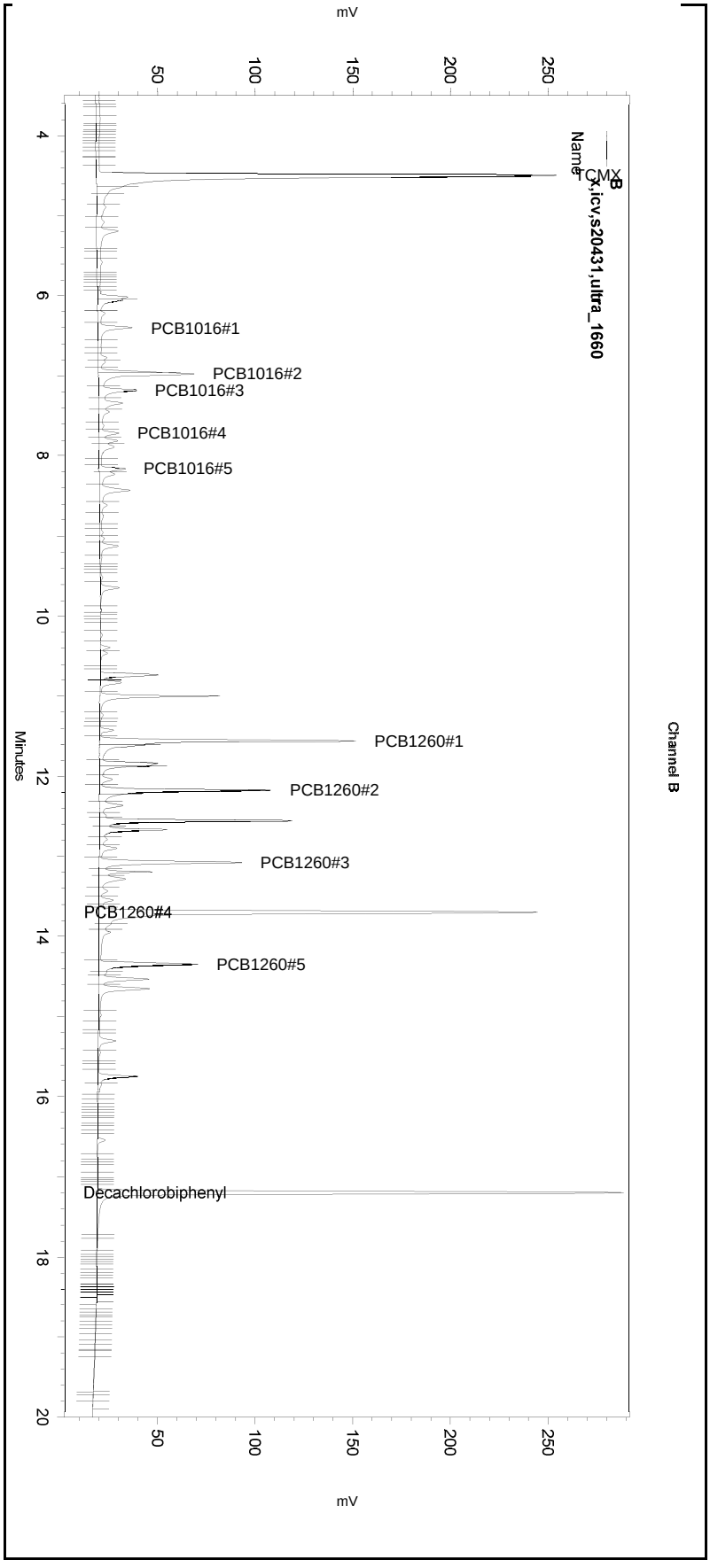
Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023**
Sample Name: **x,icv,s20431,ultra_1660**
Instrument: GC22 Vial: 23 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/6/2012 9:24:03 PM
Analysis Date: 9/7/2012 9:46:47 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Continuing Calibration Verification Raw Data

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC06 Run Name : PCB100_20 IDF : 1.0
Seqnum : 202366165024.1 File : 254_024 Time : 10-SEP-2012 21:27
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	123.5	pg/uL	**23**	20	c+ ***
TCMX	A	6606.9	7827.3	20.00	23.69	pg/uL	18	20	
Decachlorobiphenyl	A	8554.0	8552.0	20.00	20.00	pg/uL	0	20	
Aroclor-1260	B			100.0	143.2	pg/uL	**43**	20	c+ ***
TCMX	B	17600	23007	20.00	26.14	pg/uL	**31**	20	c+
Decachlorobiphenyl	B	23197	28582	20.00	25.18	pg/uL	**26**	20	c+

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:41:04 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.793	4.775	156546	23.694
PCB1016#1	7.020	7.002	16589	121.238
PCB1016#2	7.653	7.637	51610	119.986
PCB1016#3	7.967	7.950	29623	128.513
PCB1016#4	8.437	8.420	17633	129.866
PCB1016#5	8.963	8.947	25319	130.282
PCB1260#1	12.570	12.555	95204	124.113
PCB1260#2	13.227	13.214	73118	129.667
PCB1260#3	14.090	14.077	53051	112.269
PCB1260#4	14.833	14.820	115992	124.795
PCB1260#5	15.493	15.482	49456	126.466
Decachlorobiphenyl	18.113	18.102	171039	19.995

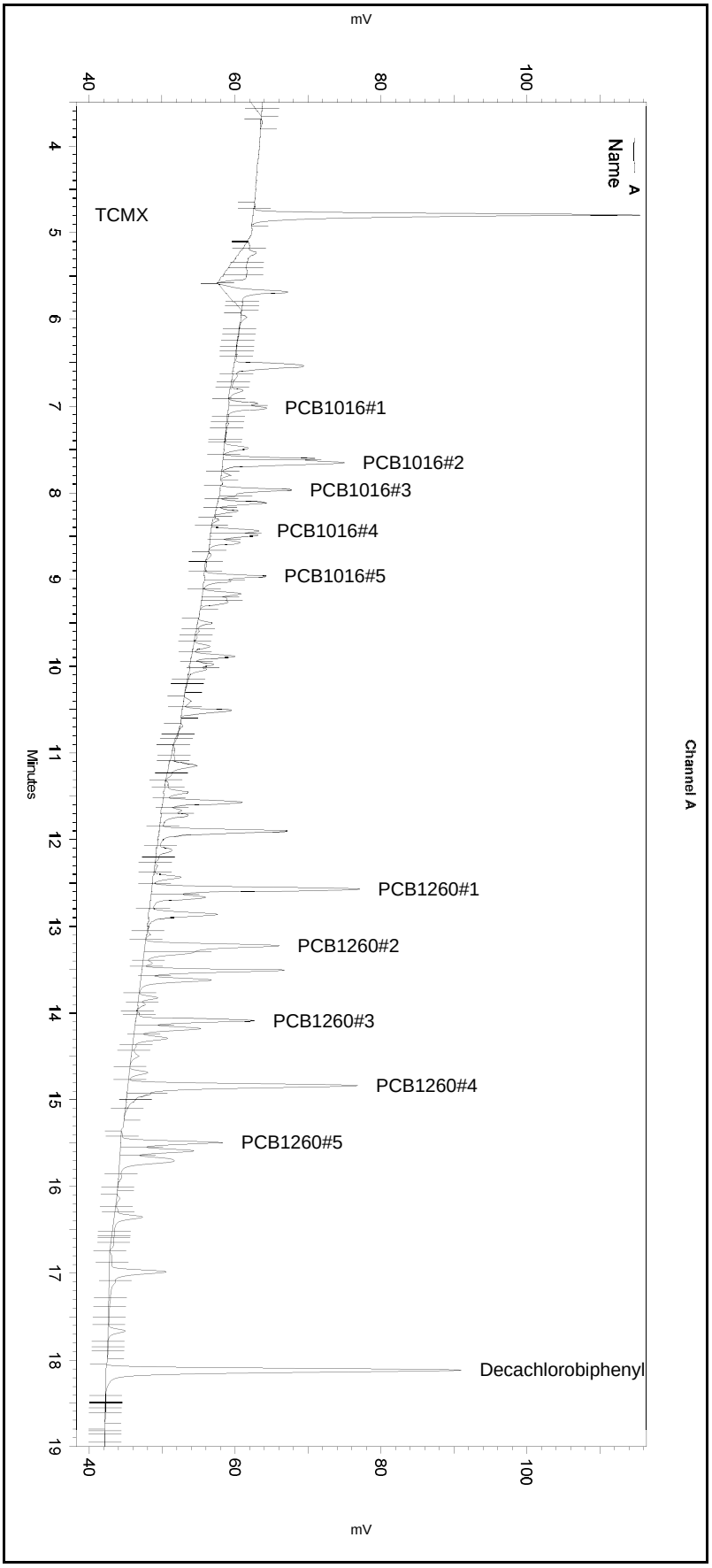
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.962	460137	26.144
PCB1016#1	5.980	5.979	68727	119.023
PCB1016#2	6.577	6.574	250942	138.686
PCB1016#3	6.800	6.799	117555	152.315
PCB1016#4	7.370	7.369	64526	148.917
PCB1016#5	7.840	7.839	77780	141.970
PCB1260#1	12.083	12.078	325200	147.050
PCB1260#2	12.490	12.475	284102	146.907
PCB1260#3	13.037	13.032	223964	132.728
PCB1260#4	13.693	13.688	515570	149.851
PCB1260#5	14.373	14.370	224821	139.682
Decachlorobiphenyl	17.383	17.378	571639	25.183

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:41:04 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

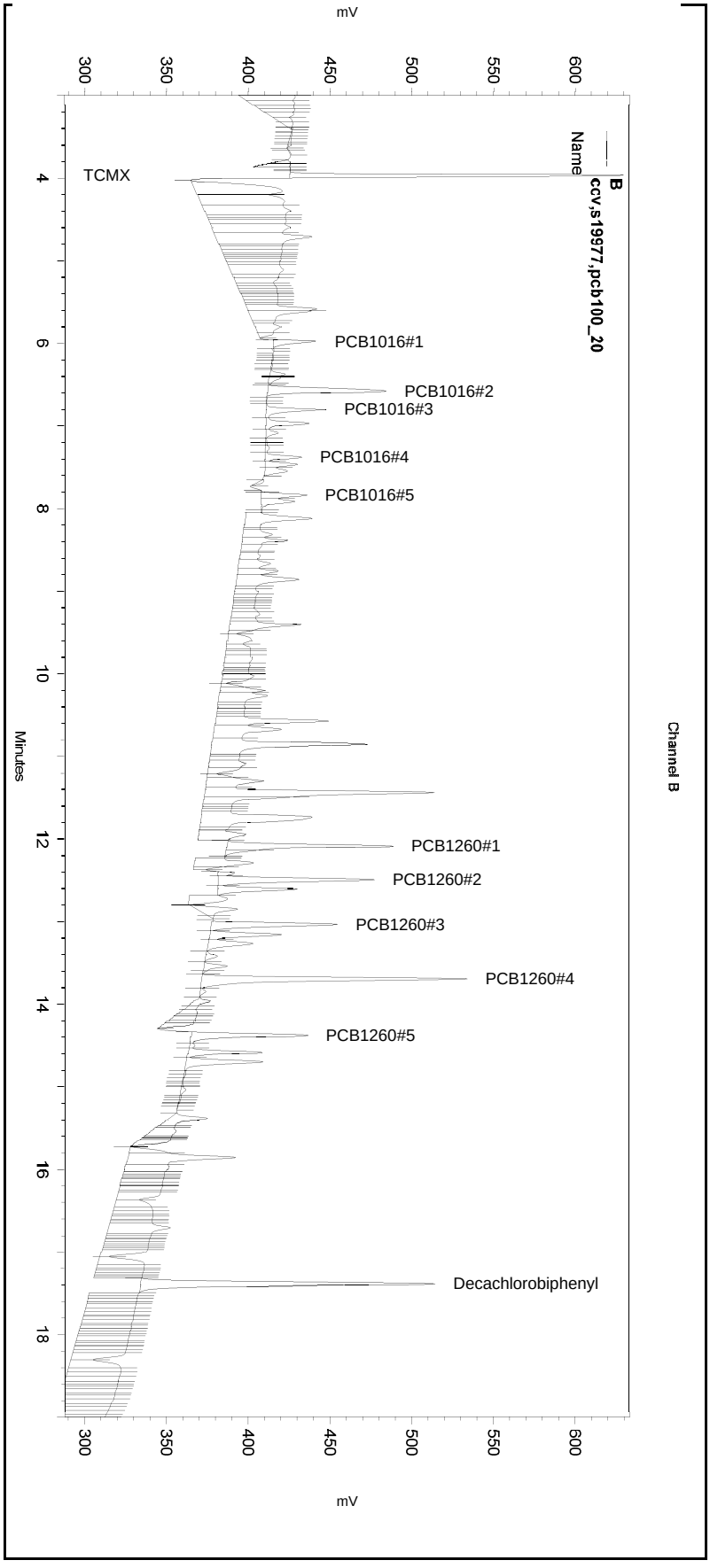
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.922	0	0
Yes	Reset Baseline	8.266	0	0
Yes	Reset Baseline	8.66	0	0
Yes	Reset Baseline	9.344	0	0
Yes	Reset Baseline	15.258	0	0
Yes	Reset Baseline	16.087	0	0

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:41:04 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	3.876	3.972	0
Yes	Backward Horizontal Baseline	5.948	6.057	0
Yes	Reset Baseline	7.615	0	0
Yes	Backward Horizontal Baseline	7.786	8.02	0
Yes	Manual Baseline	12.017	12.222	0
Yes	Backward Horizontal Baseline	12.399	12.674	0
Yes	Reset Baseline	12.961	0	0
Yes	Reset Baseline	13.626	0	0
Yes	Reset Baseline	13.905	0	0
Yes	Move BL Start	14.3	14.336	0
Yes	Manual Baseline	17.315	17.483	0

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:36:24 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.793	4.775	166003	25.126
PCB1016#1	7.020	7.002	16589	121.238
PCB1016#2	7.653	7.637	51610	119.986
PCB1016#3	7.967	7.950	29826	129.394
PCB1016#4	8.437	8.420	17852	131.901
PCB1016#5	8.963	8.947	26021	133.894
PCB1260#1	12.570	12.555	95476	124.467
PCB1260#2	13.227	13.214	73574	130.475
PCB1260#3	14.090	14.077	53647	113.530
PCB1260#4	14.833	14.820	117333	126.237
PCB1260#5	15.493	15.482	50017	127.901
Decachlorobiphenyl	18.113	18.102	171039	19.995

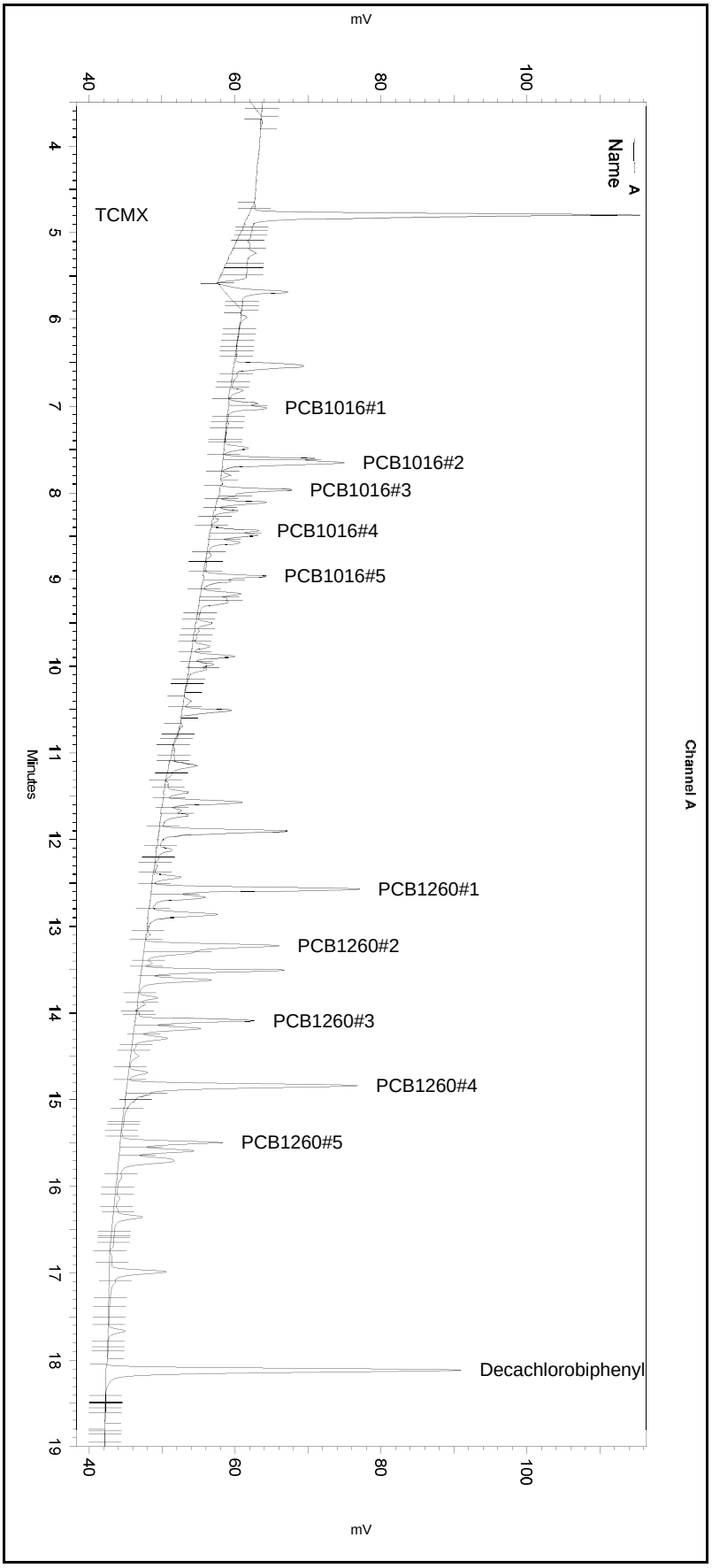
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.963	3.962	722456	41.049
PCB1016#1	5.980	5.979	100565	189.373
PCB1016#2	6.577	6.574	256469	141.740
PCB1016#3	6.800	6.799	137500	178.157
PCB1016#4	7.370	7.369	103534	257.115
PCB1016#5	7.840	7.839	118651	216.571
PCB1260#1	12.083	12.078	493647	248.848
PCB1260#2	12.490	12.475	440619	227.841
PCB1260#3	13.037	13.032	407483	241.487
PCB1260#4	13.693	13.688	750109	240.469
PCB1260#5	14.373	14.370	393829	268.947
Decachlorobiphenyl	17.383	17.378	894477	43.067

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:36:24 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

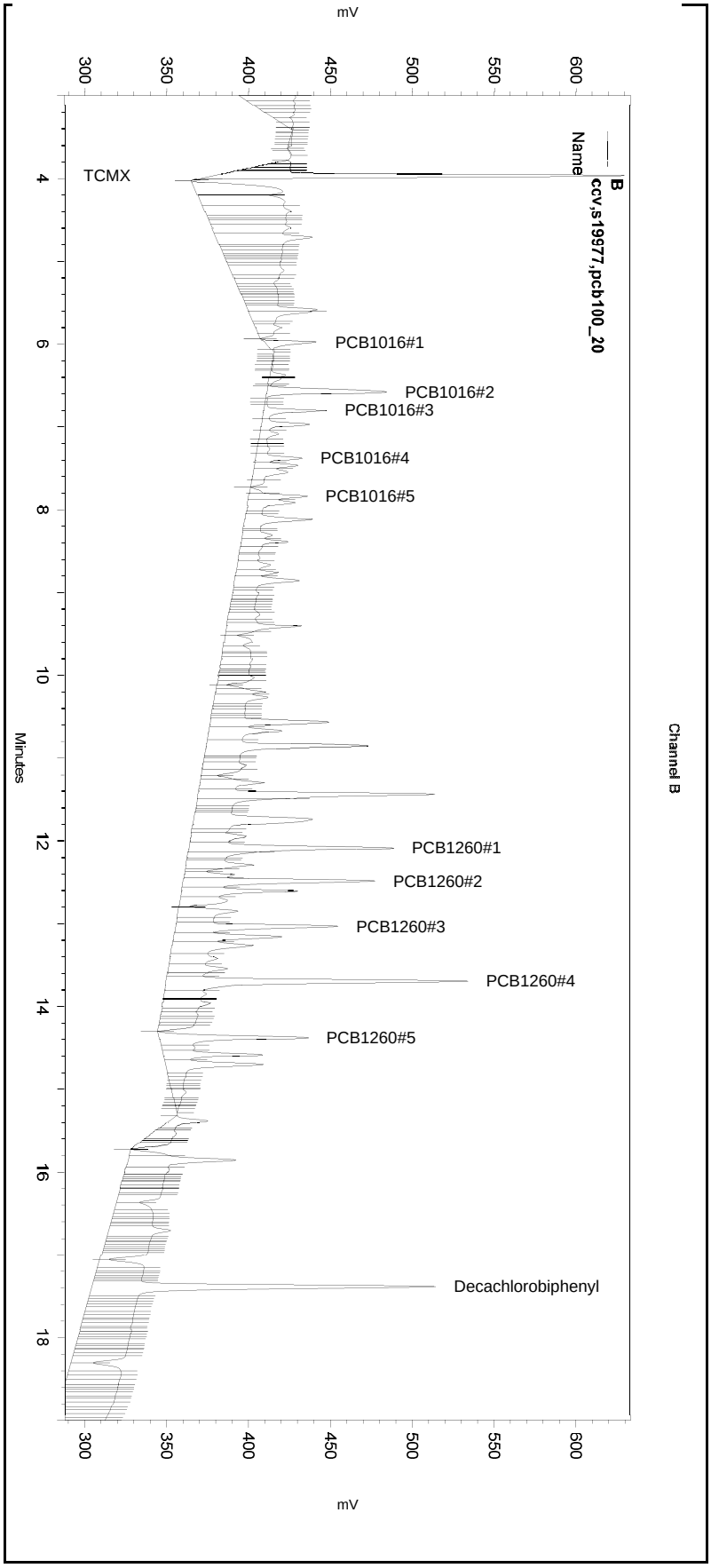
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ccv,s19977,pcb100_20**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 24 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/10/2012 9:27:36 PM
Analysis Date: 9/11/2012 10:36:24 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC06 Run Name : PCB250_50 IDF : 1.0
Seqnum : 202366165040.1 File : 254_040 Time : 11-SEP-2012 04:48
Cal : 202360551001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	275.9	pg/uL	10	20	
TCMX	A	6606.9	6823.8	50.00	51.64	pg/uL	3	20	
Decachlorobiphenyl	A	8554.0	7425.1	50.00	43.40	pg/uL	-13	20	
Aroclor-1260	B			250.0	304.5	pg/uL	**22**	20	c+ ***
TCMX	B	17600	16760	50.00	47.61	pg/uL	-5	20	
Decachlorobiphenyl	B	23197	22226	50.00	55.70	pg/uL	11	20	

KMH 09/11/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:43:16 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.757	4.775	341188	51.641
PCB1016#1	6.983	7.002	35040	256.084
PCB1016#2	7.620	7.637	114692	266.644
PCB1016#3	7.933	7.950	63996	277.634
PCB1016#4	8.403	8.420	36672	306.775
PCB1016#5	8.930	8.947	52202	268.612
PCB1260#1	12.540	12.555	202089	263.454
PCB1260#2	13.200	13.214	162490	288.158
PCB1260#3	14.063	14.077	116254	246.022
PCB1260#4	14.807	14.820	261506	281.352
PCB1260#5	15.470	15.482	117558	300.613
Decachlorobiphenyl	18.090	18.102	371255	43.401

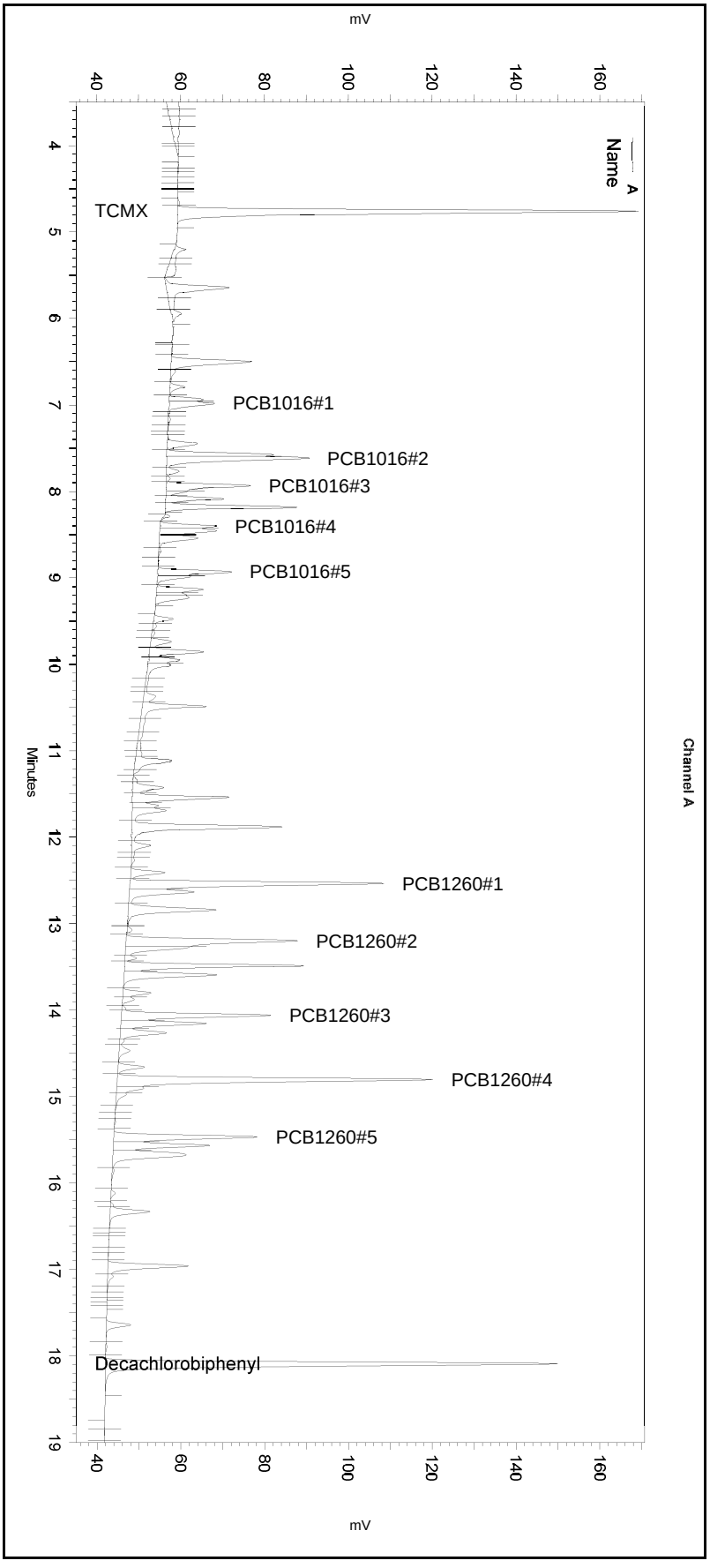
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.960	3.962	837995	47.614
PCB1016#1	5.977	5.979	146826	291.594
PCB1016#2	6.570	6.574	458457	253.371
PCB1016#3	6.797	6.799	215258	278.908
PCB1016#4	7.367	7.369	122196	308.878
PCB1016#5	7.837	7.839	139385	254.416
PCB1260#1	12.073	12.078	618277	324.166
PCB1260#2	12.480	12.475	526372	272.183
PCB1260#3	13.027	13.032	434117	257.271
PCB1260#4	13.683	13.688	990432	333.321
PCB1260#5	14.367	14.370	481217	335.786
Decachlorobiphenyl	17.373	17.378	1111302	55.704

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:43:16 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

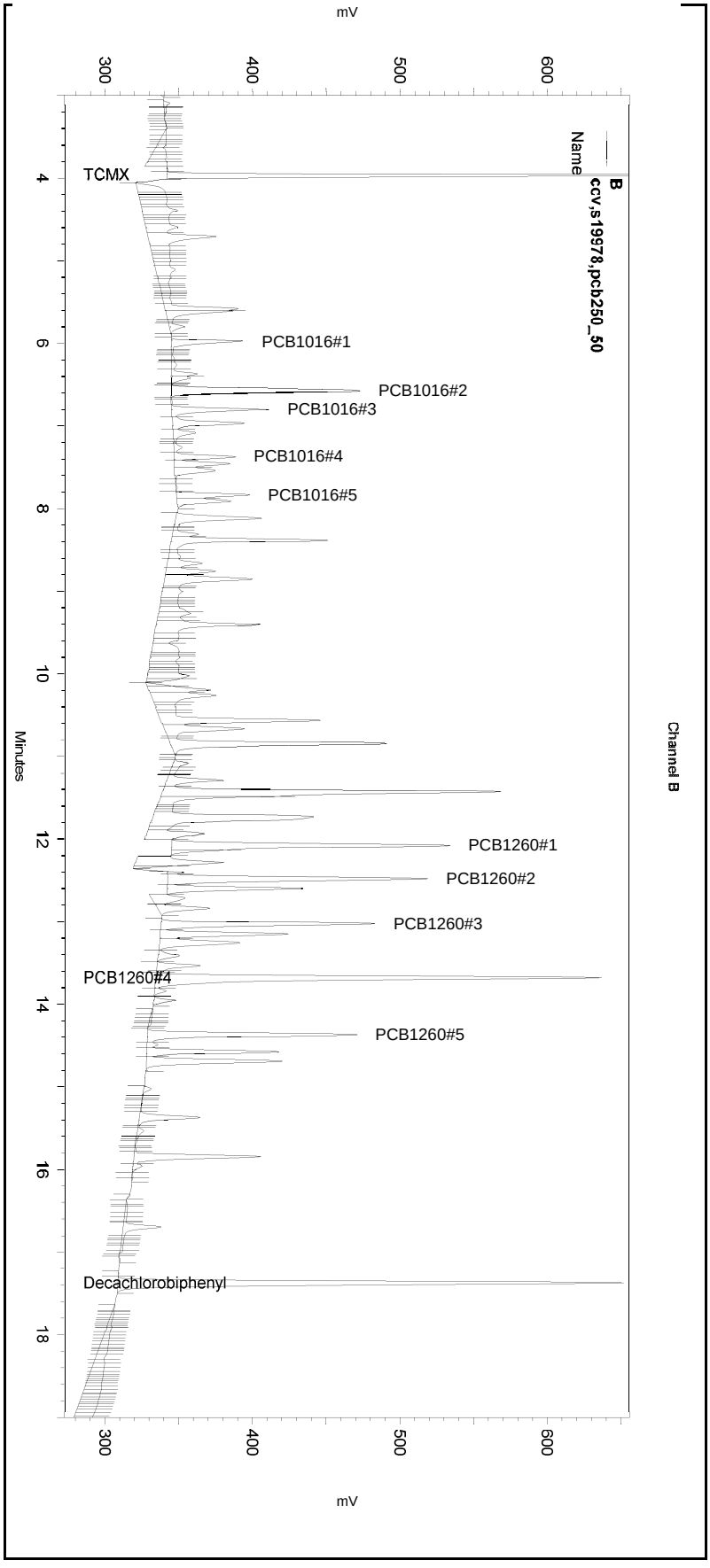
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.944	0	0
Yes	Reset Baseline	8.237	0	0
Yes	Reset Baseline	9.317	0	0
Yes	Reset Baseline	12.341	0	0

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:43:16 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	3.861	3.987	0
Yes	Reset Baseline	5.906	0	0
Yes	Reset Baseline	8.001	0	0
Yes	Horizontal Baseline	12.014	12.172	0
Yes	Backward Horizontal Baseline	12.38	12.671	0
Yes	Reset Baseline	12.923	0	0
Yes	Reset Baseline	14.028	0	0
Yes	Reset Baseline	14.817	0	0
Yes	Reset Baseline	17.501	0	0

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:38:11 AM
Sample Amount: 1

GC06
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.757	4.775	352069	53.288
PCB1016#1	6.983	7.002	39370	287.729
PCB1016#2	7.620	7.637	124412	289.241
PCB1016#3	7.933	7.950	75047	325.576
PCB1016#4	8.403	8.420	42162	357.788
PCB1016#5	8.930	8.947	61640	317.176
PCB1260#1	12.540	12.555	206630	269.373
PCB1260#2	13.200	13.214	166248	294.823
PCB1260#3	14.063	14.077	118139	250.011
PCB1260#4	14.807	14.820	262560	282.486
PCB1260#5	15.470	15.482	117558	300.613
Decachlorobiphenyl	18.090	18.102	371255	43.401

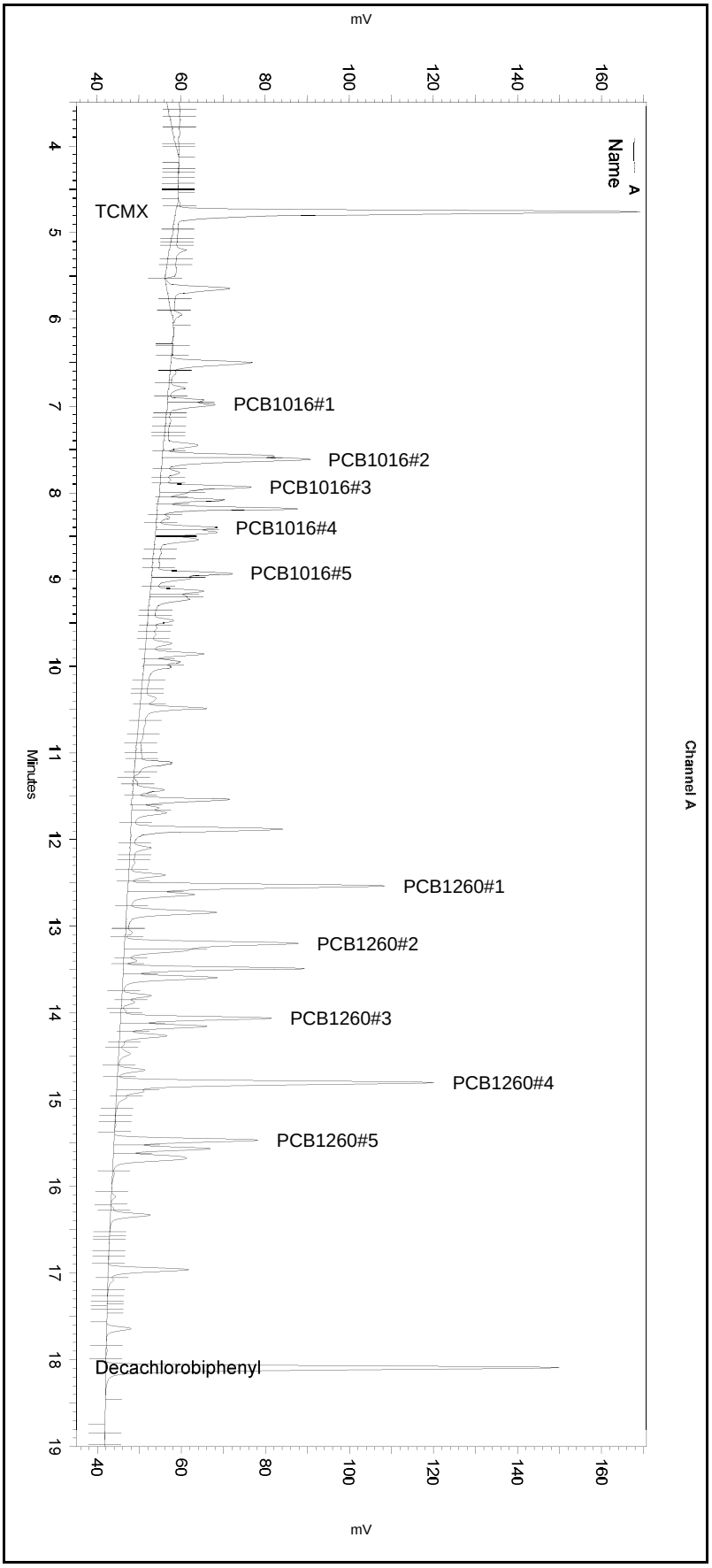
GC06
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.960	3.962	969376	55.079
PCB1016#1	5.977	5.979	357172	756.383
PCB1016#2	6.570	6.574	654760	361.860
PCB1016#3	6.797	6.799	420949	545.419
PCB1016#4	7.367	7.369	268843	715.638
PCB1016#5	7.837	7.839	273516	499.242
PCB1260#1	12.073	12.078	766594	413.799
PCB1260#2	12.480	12.475	692688	358.184
PCB1260#3	13.027	13.032	599589	355.334
PCB1260#4	13.683	13.688	1158026	398.074
PCB1260#5	14.367	14.370	582711	413.414
Decachlorobiphenyl	17.373	17.378	1145195	57.730

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:38:11 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

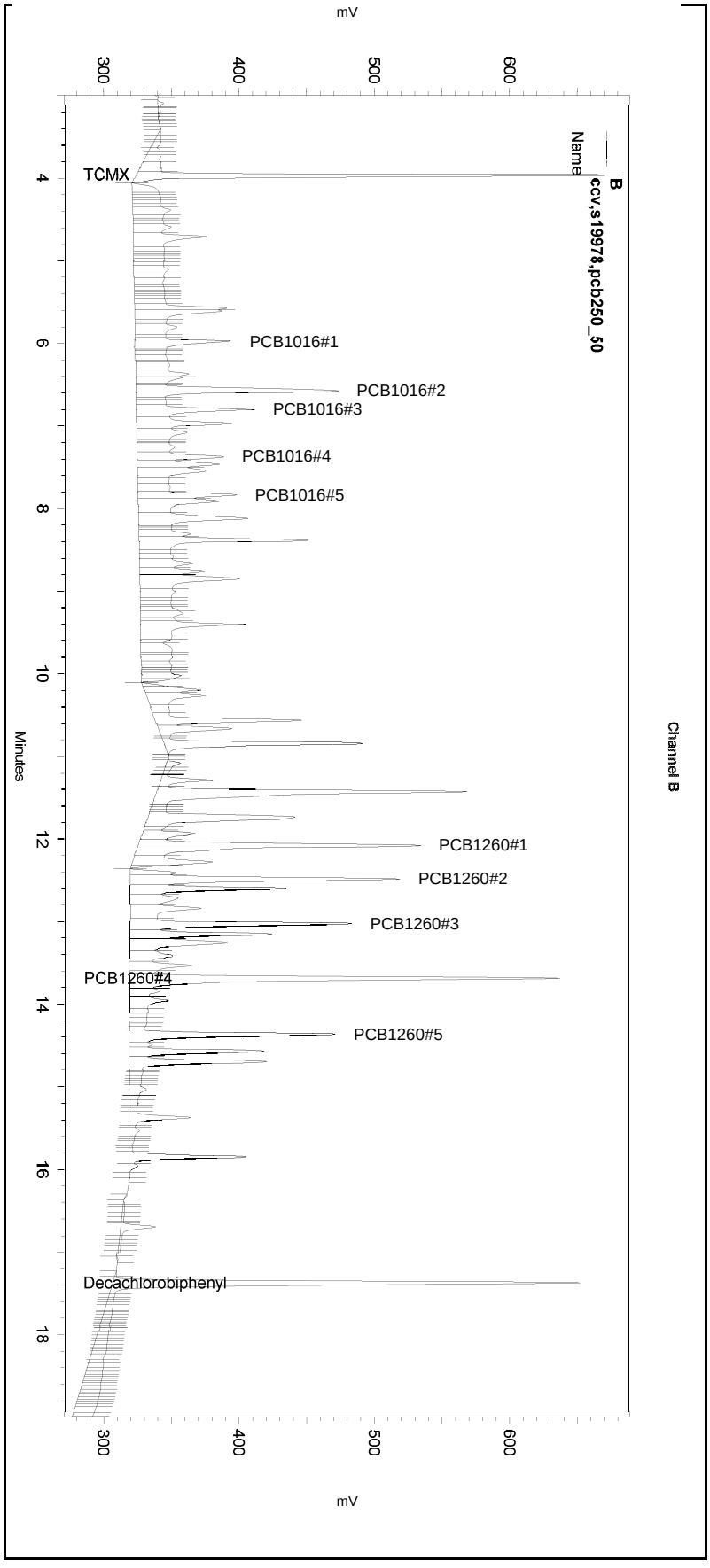
Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sample Name: **ccv,s19978,pcb250_50**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC06\Sequence\254.seq**
Instrument: GC06 Vial: 40 Operator: Pest 3. Analyst (lims2k3\pest3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-254rt.met

Software Version 3.1.7
Run Date: 9/11/2012 4:48:28 AM
Analysis Date: 9/11/2012 10:38:11 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC06\Data\254-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC16 Run Name : PCB250_50 IDF : 1.0
Seqnum : 232366165009.2 File : 254_009 Time : 10-SEP-2012 16:22
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	355.1	pg/ul	**42**	20	c+ ***
TCMX	A	18411	31025	50.00	120.0	pg/ul	**140**	20	c+
Decachlorobiphenyl	A	12903	12067	50.00	51.36	pg/ul	3	20	
Aroclor-1260	B			250.0	231.7	pg/ul	-7	20	
TCMX	B	7007.3	7673.7	50.00	54.75	pg/ul	10	20	
Decachlorobiphenyl	B	9054.2	5534.6	50.00	30.56	pg/ul	**-39**	20	c-

WSR 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias -=low bias c=CCV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:49:26 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.123	4.103	1551252	120.033
PCB1016#1	6.217	6.197	157511	420.997
PCB1016#2	6.790	6.810	260658	248.983
PCB1016#3	7.133	7.110	298062	460.791
PCB1016#4	7.590	7.570	155084	490.496
PCB1016#5	8.100	8.077	236863	433.032
PCB1260#1	11.657	11.640	629439	416.171
PCB1260#2	12.307	12.290	602058	344.172
PCB1260#3	13.163	13.150	370850	406.355
PCB1260#4	13.910	13.897	731333	349.638
PCB1260#5	14.560	14.550	363254	259.360
Decachlorobiphenyl	17.173	17.167	603367	51.360

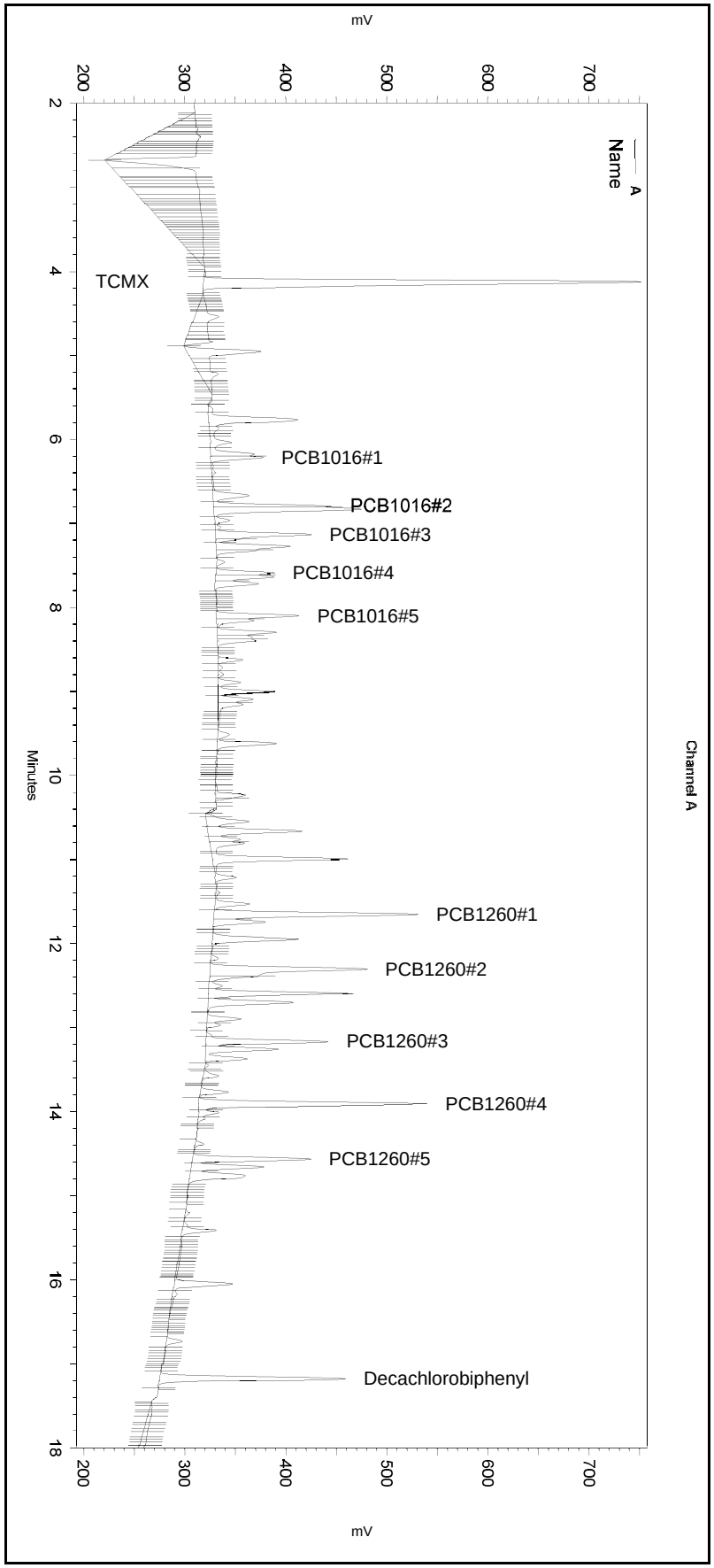
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.343	3.337	383683	54.755
PCB1016#1	5.210	5.207	59052	278.180
PCB1016#2	5.773	5.770	149362	281.555
PCB1016#3	5.990	5.987	70363	286.765
PCB1016#4	6.543	6.537	47275	281.869
PCB1016#5	6.993	6.990	54792	285.344
PCB1260#1	11.157	11.153	143145	244.557
PCB1260#2	11.560	11.560	105966	248.967
PCB1260#3	12.100	12.100	89492	237.422
PCB1260#4	12.757	12.757	193278	217.714
PCB1260#5	13.430	13.430	83456	209.702
Decachlorobiphenyl	16.423	16.423	276728	30.563

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:49:26 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

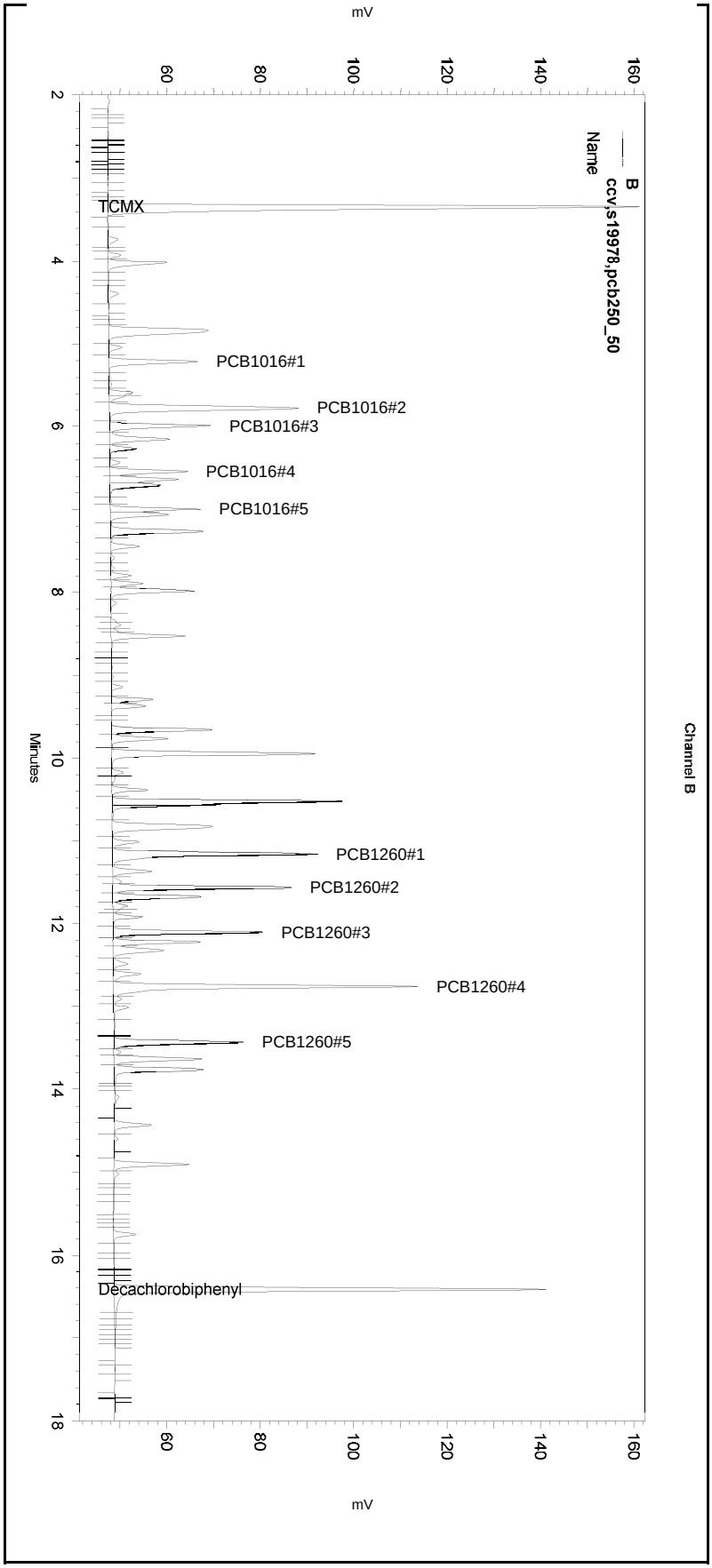
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.268	0	0
Yes	Reset Baseline	11.29	0	0
Yes	Manual Peak	13.03	13.43	0
Yes	Split Peak	13.104	0	0
Yes	Split Peak	13.215	0	0
Yes	Reset Baseline	17.312	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:49:26 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	3.173	3.466	0
Yes	Reset Baseline	4.651	0	0
Yes	Reset Baseline	8.256	0	0
Yes	Reset Baseline	14.256	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:46:18 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.123	4.103	1587384	123.027
PCB1016#1	6.217	6.197	157511	420.997
PCB1016#2	6.790	6.810	260658	248.983
PCB1016#3	7.133	7.110	298062	460.791
PCB1016#4	7.590	7.570	155084	490.496
PCB1016#5	8.100	8.077	236863	433.032
PCB1260#1	11.657	11.640	686890	465.968
PCB1260#2	12.307	12.290	636969	364.129
PCB1260#3	13.163	13.150	338024	366.943
PCB1260#4	13.910	13.897	731333	349.638
PCB1260#5	14.560	14.550	363254	259.360
Decachlorobiphenyl	17.173	17.167	658929	57.174

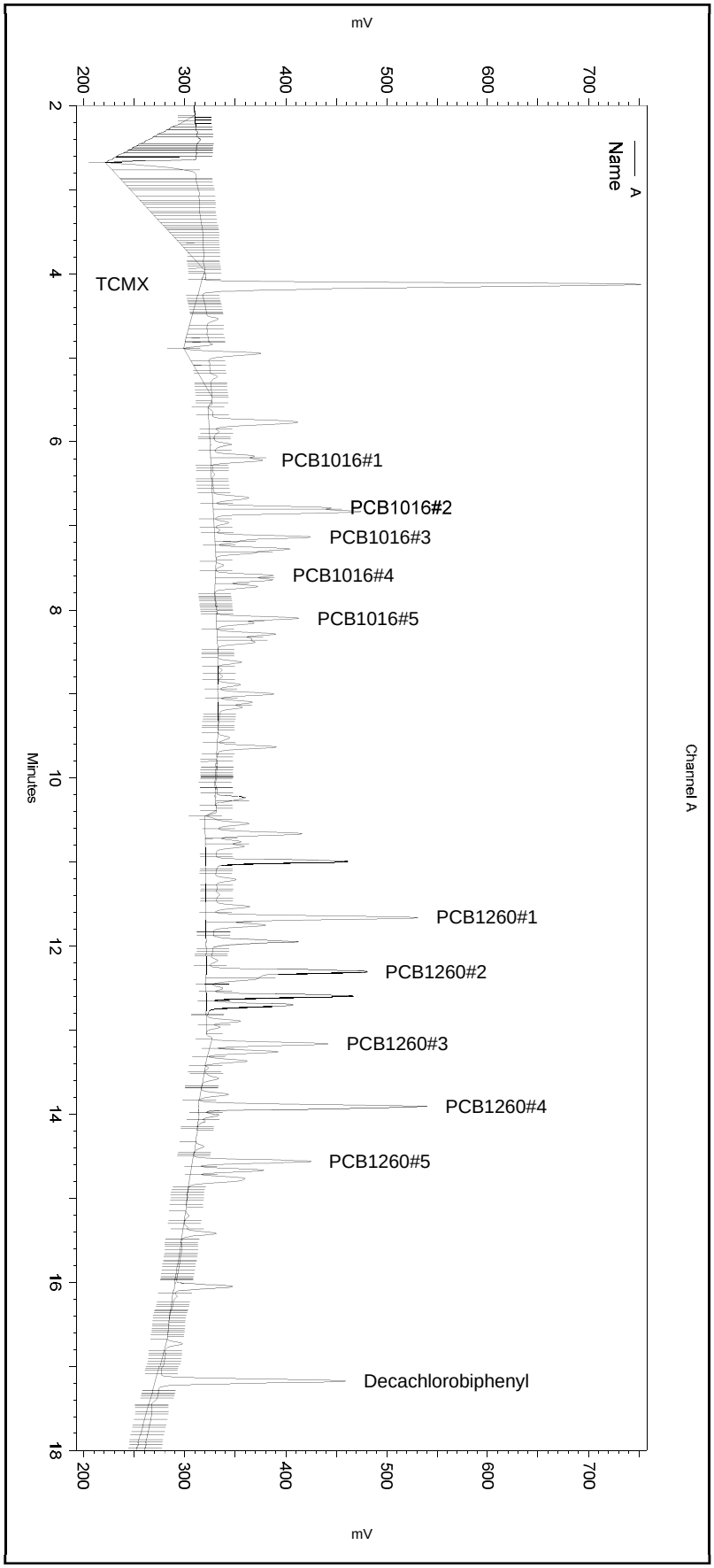
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.343	3.337	384648	54.893
PCB1016#1	5.210	5.207	60301	284.064
PCB1016#2	5.773	5.770	150779	284.226
PCB1016#3	5.990	5.987	71303	290.596
PCB1016#4	6.543	6.537	47985	286.102
PCB1016#5	6.993	6.990	55517	289.120
PCB1260#1	11.157	11.153	144119	246.221
PCB1260#2	11.560	11.560	106563	250.370
PCB1260#3	12.100	12.100	90274	239.497
PCB1260#4	12.757	12.757	194389	218.965
PCB1260#5	13.430	13.430	84534	212.411
Decachlorobiphenyl	16.423	16.423	276728	30.563

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:46:18 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

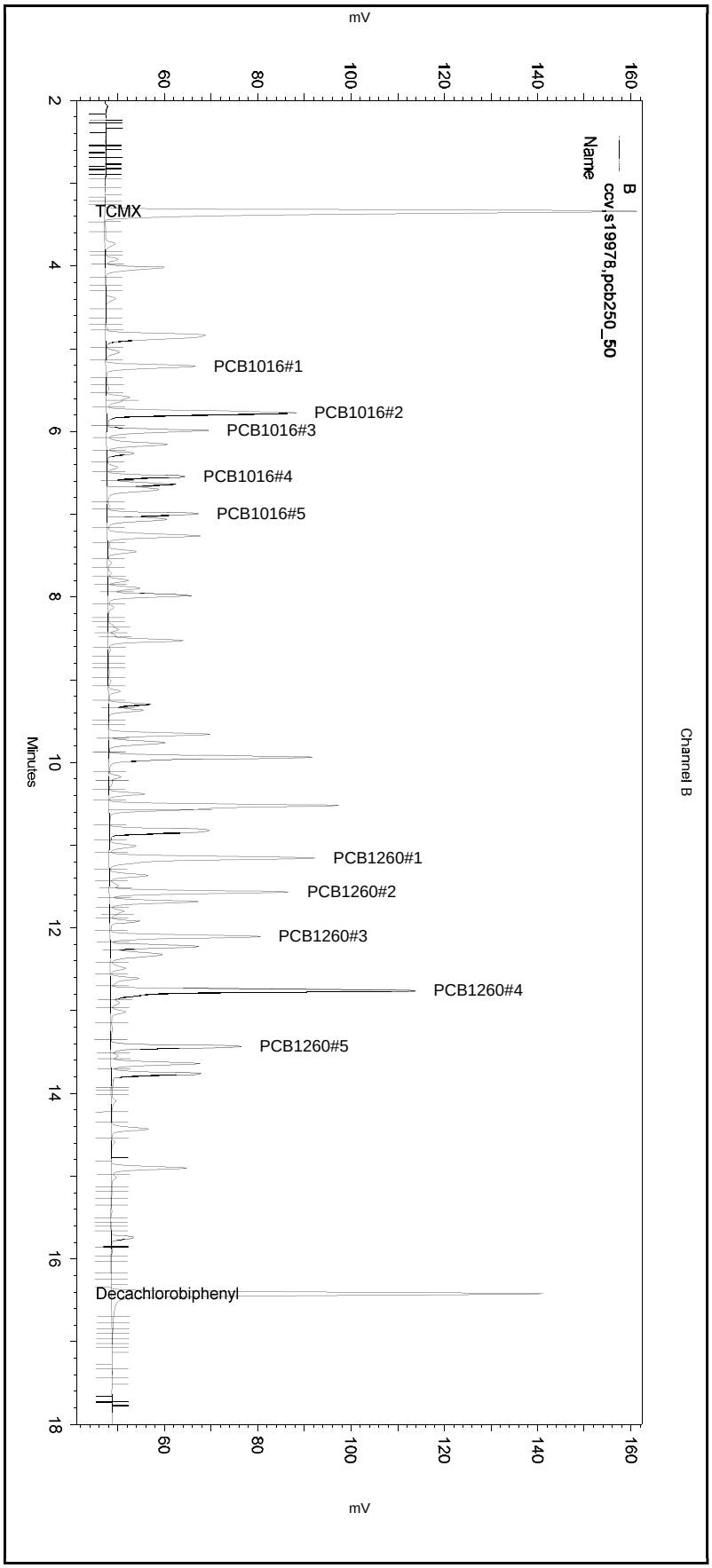
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-009_5DCB.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-009**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC16 Vial: 9 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 4:22:20 PM
Analysis Date: 9/10/2012 4:46:18 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-009_5DCB.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC16 Run Name : PCB100_20 IDF : 1.0
Seqnum : 232366165014.1 File : 254_014 Time : 10-SEP-2012 19:52
Cal : 232358946001 Caldate : 05-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	158.4	pg/ul	**58**	20	c+ ***
TCMX	A	18411	40195	20.00	58.10	pg/ul	**191**	20	c+
Decachlorobiphenyl	A	12903	12762	20.00	18.26	pg/ul	-9	20	
Aroclor-1260	B			100.0	90.33	pg/ul	-10	20	
TCMX	B	7007.3	7041.9	20.00	20.10	pg/ul	0	20	
Decachlorobiphenyl	B	9054.2	5009.2	20.00	11.06	pg/ul	**-45**	20	c-

WSR 09/10/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias -=low bias c=CCV

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:21:12 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.120	4.103	803902	58.103
PCB1016#1	6.217	6.197	70491	188.409
PCB1016#2	6.830	6.810	228767	218.521
PCB1016#3	7.133	7.110	142890	220.902
PCB1016#4	7.590	7.570	72862	218.947
PCB1016#5	8.100	8.077	107968	197.387
PCB1260#1	11.657	11.640	324213	186.849
PCB1260#2	12.303	12.290	283906	162.298
PCB1260#3	13.163	13.150	156660	149.194
PCB1260#4	13.907	13.897	353325	154.138
PCB1260#5	14.557	14.550	195573	139.637
Decachlorobiphenyl	17.170	17.167	255236	18.263

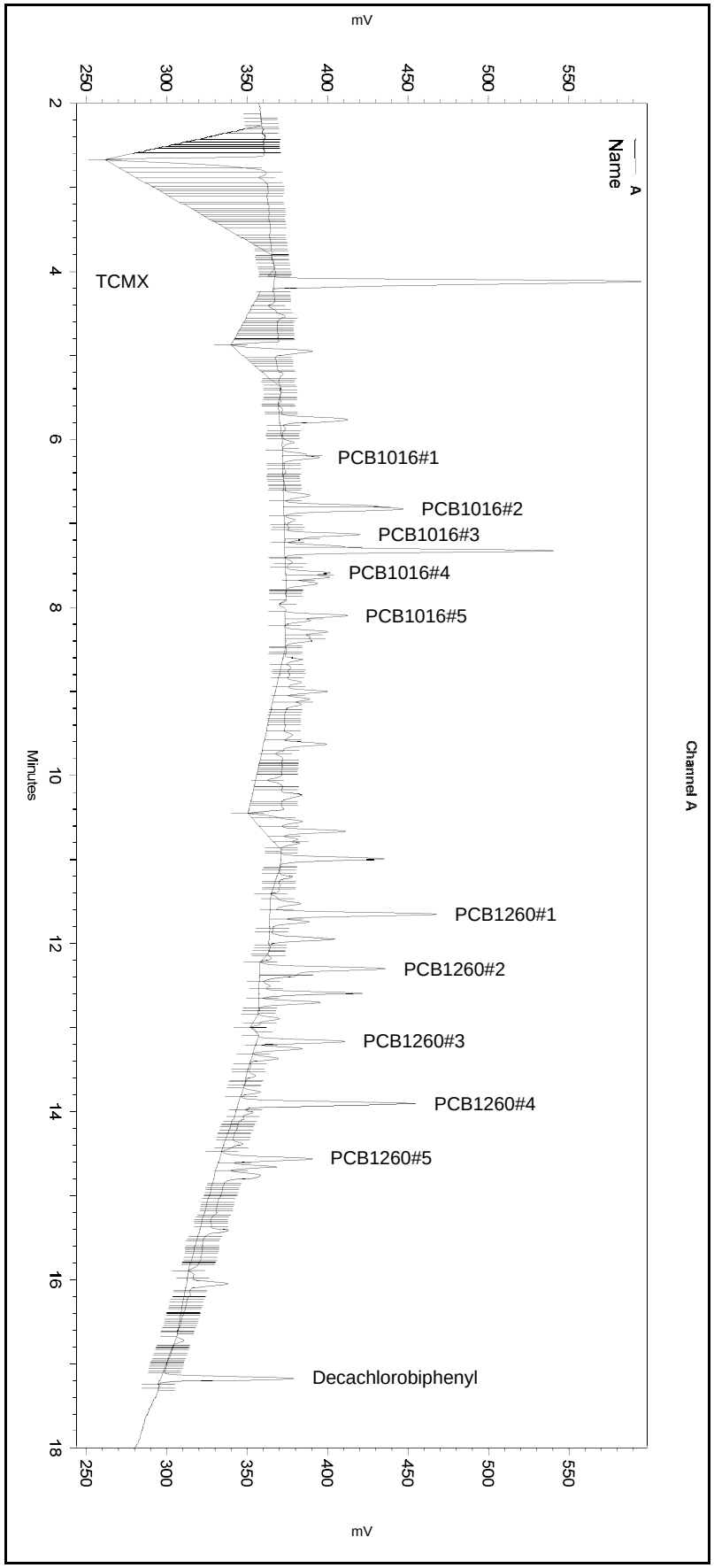
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	140837	20.099
PCB1016#1	5.207	5.207	23496	110.684
PCB1016#2	5.770	5.770	59915	112.943
PCB1016#3	5.987	5.987	28127	114.632
PCB1016#4	6.537	6.537	19125	114.030
PCB1016#5	6.990	6.990	21759	113.316
PCB1260#1	11.153	11.153	57138	97.618
PCB1260#2	11.557	11.560	42501	99.856
PCB1260#3	12.097	12.100	35140	93.226
PCB1260#4	12.753	12.757	74189	83.569
PCB1260#5	13.427	13.430	30794	77.377
Decachlorobiphenyl	16.420	16.423	100184	11.065

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:21:12 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

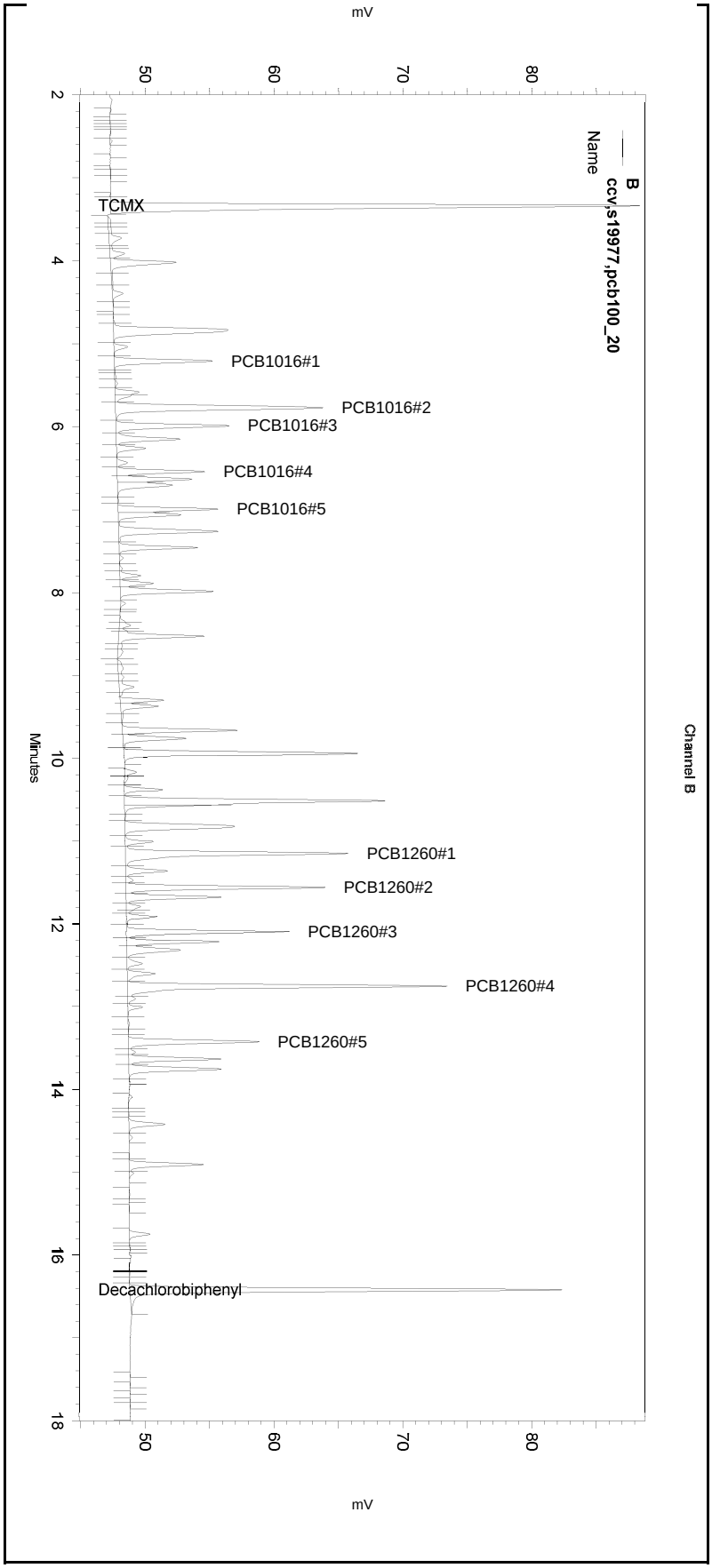
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	4.069	4.24	0
Yes	Reset Baseline	8.031	0	0
Yes	Reset Baseline	8.457	0	0
Yes	Reset Baseline	17.32	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: pest 1. Analyst (lims2k3\pest1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:21:12 PM
Sample Amount: 1



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No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	3.237	3.468	0
Yes	Reset Baseline	8.083	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:16:41 PM
Sample Amount: 1

GC16
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.120	4.103	869161	63.511
PCB1016#1	6.217	6.197	70491	188.409
PCB1016#2	6.830	6.810	228767	218.521
PCB1016#3	7.133	7.110	142890	220.902
PCB1016#4	7.590	7.570	72862	218.947
PCB1016#5	8.100	8.077	137275	250.966
PCB1260#1	11.657	11.640	324213	186.849
PCB1260#2	12.303	12.290	283906	162.298
PCB1260#3	13.163	13.150	156660	149.194
PCB1260#4	13.907	13.897	353325	154.138
PCB1260#5	14.557	14.550	195573	139.637
Decachlorobiphenyl	17.170	17.167	284355	20.847

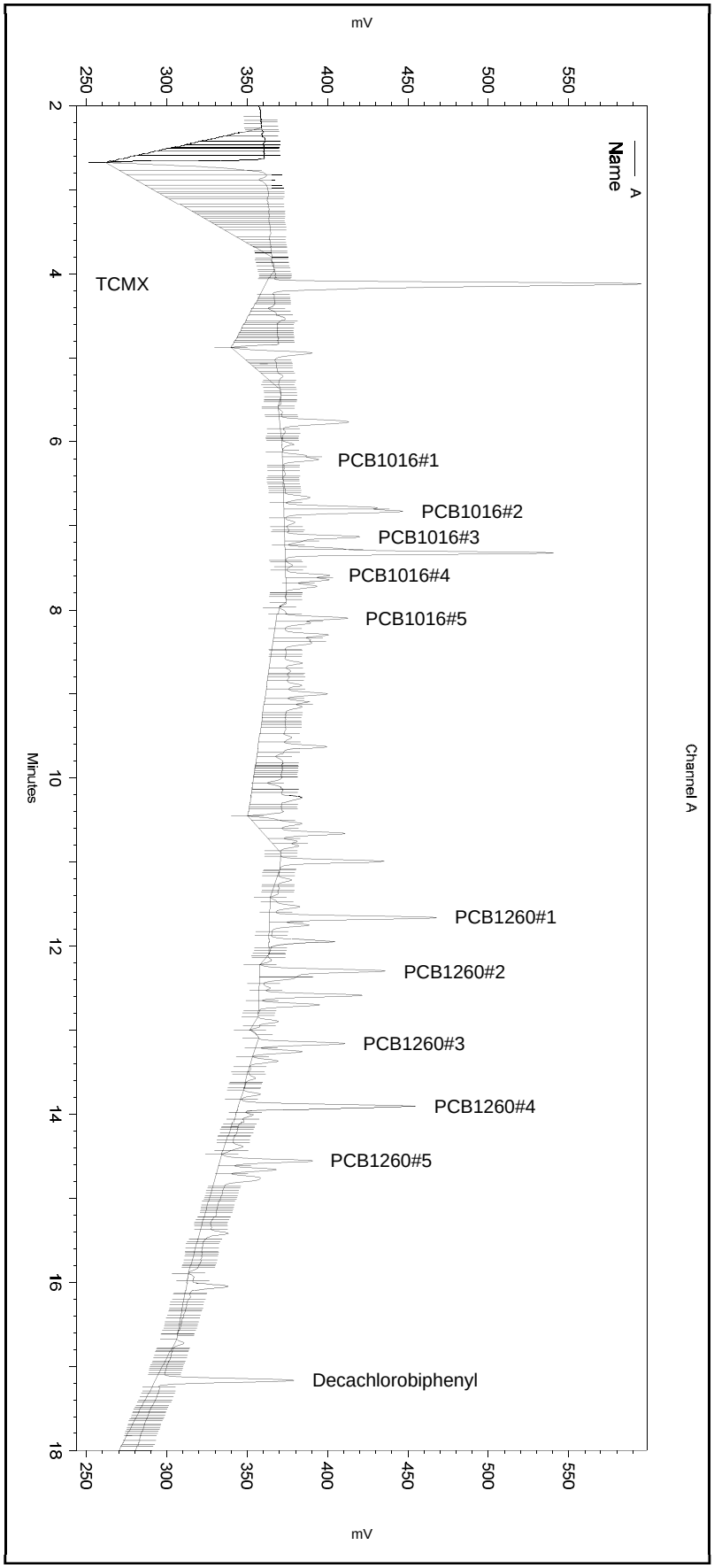
GC16
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	3.337	3.337	142882	20.390
PCB1016#1	5.207	5.207	23904	112.606
PCB1016#2	5.770	5.770	61151	115.273
PCB1016#3	5.987	5.987	29108	118.630
PCB1016#4	6.537	6.537	20103	119.861
PCB1016#5	6.990	6.990	23025	119.909
PCB1260#1	11.153	11.153	57138	97.618
PCB1260#2	11.557	11.560	42501	99.856
PCB1260#3	12.097	12.100	35140	93.226
PCB1260#4	12.753	12.757	74189	83.569
PCB1260#5	13.427	13.430	30794	77.377
Decachlorobiphenyl	16.420	16.423	100184	11.065

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:16:41 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events
==========

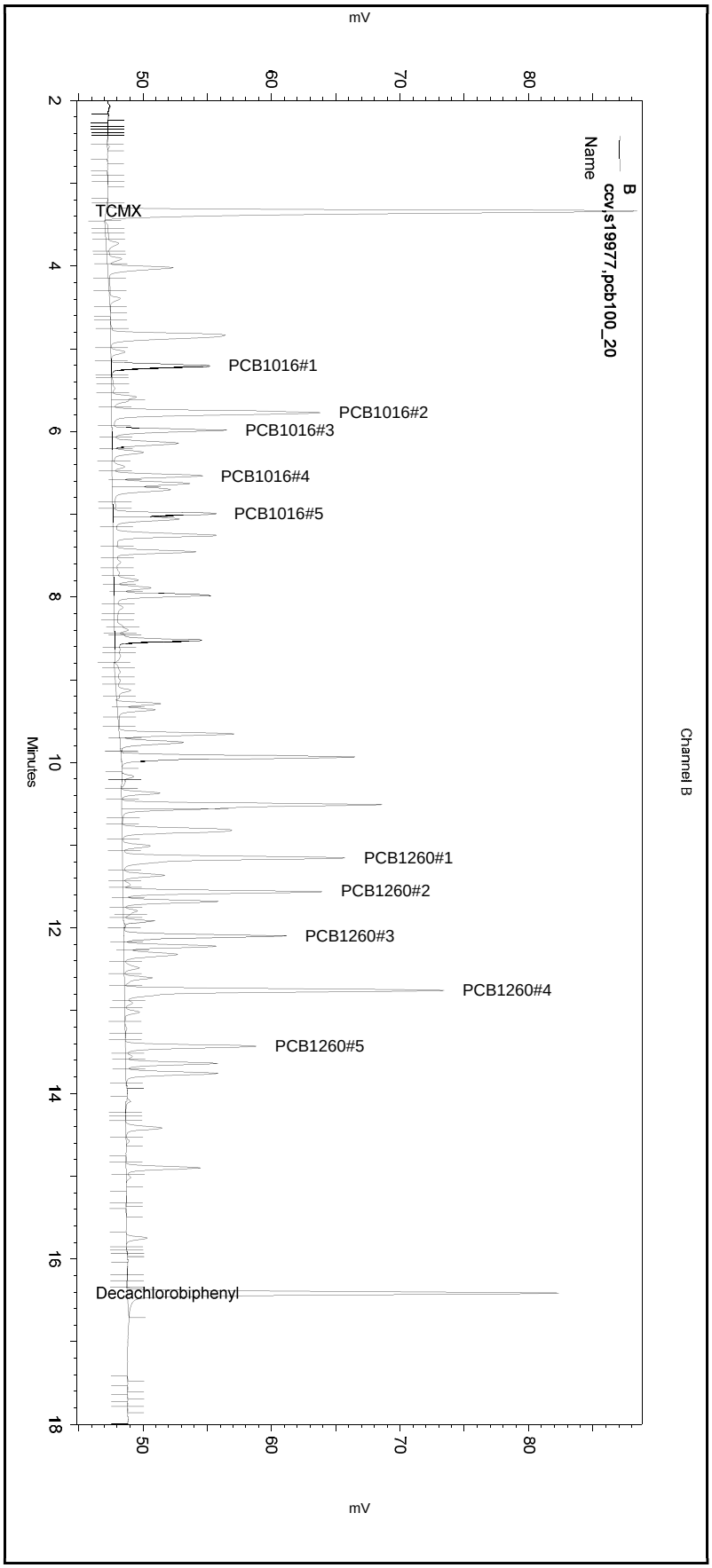
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1
Yes	Reset Baseline	13.085	0	0

Manual Integration Fixes
==========
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-014_5DD0.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC16\Sequence\254.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC16\Data\254-014**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC16 Vial: 14 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC16\Method\PCBs & Congeners\Ar1660\pcb-run-249a.met

Software Version 3.1.7
Run Date: 9/10/2012 7:52:44 PM
Analysis Date: 9/10/2012 8:16:41 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	4	18	1

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10053\254-014_5DD0.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC22 Run Name : PCB100_20 IDF : 1.0
Seqnum : 252360400074.2 File : 250_074 Time : 08-SEP-2012 00:42
Cal : 252360400001 Caldate : 06-SEP-2012
Standards: S19977

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			100.0	82.71	pg/uL	-17	20	
TCMX	A	1326.0	1171.4	20.00	17.67	pg/uL	-12	20	
Decachlorobiphenyl	A	1239.5	949.45	20.00	15.32	pg/uL	**-23**	20	c-
Aroclor-1260	B			100.0	63.84	pg/uL	**-36**	20	c- rsd ***
TCMX	B	13199	14393	20.00	15.91	pg/uL	-20	20	
Decachlorobiphenyl	B	12055	11471	20.00	16.21	pg/uL	-19	20	

TKB 09/09/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

-=low bias c=CCV rsd=ICAL %RSD failure

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 (Offline) Vial: 74 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/9/2012 4:13:23 PM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.453	4.463	23427	17.668
PCB1016#1	6.600	6.613	1748	94.064
PCB1016#2	7.213	7.227	5551	94.250
PCB1016#3	7.513	7.523	2719	91.256
PCB1016#4	7.957	7.970	1364	82.945
PCB1016#5	8.460	8.473	2332	88.599
PCB1260#1	11.887	11.907	10005	82.647
PCB1260#2	12.510	12.527	7868	86.639
PCB1260#3	13.327	13.347	5931	82.319
PCB1260#4	14.033	14.053	14519	79.020
PCB1260#5	14.660	14.680	6489	82.938
Decachlorobiphenyl	17.143	17.163	18989	15.320

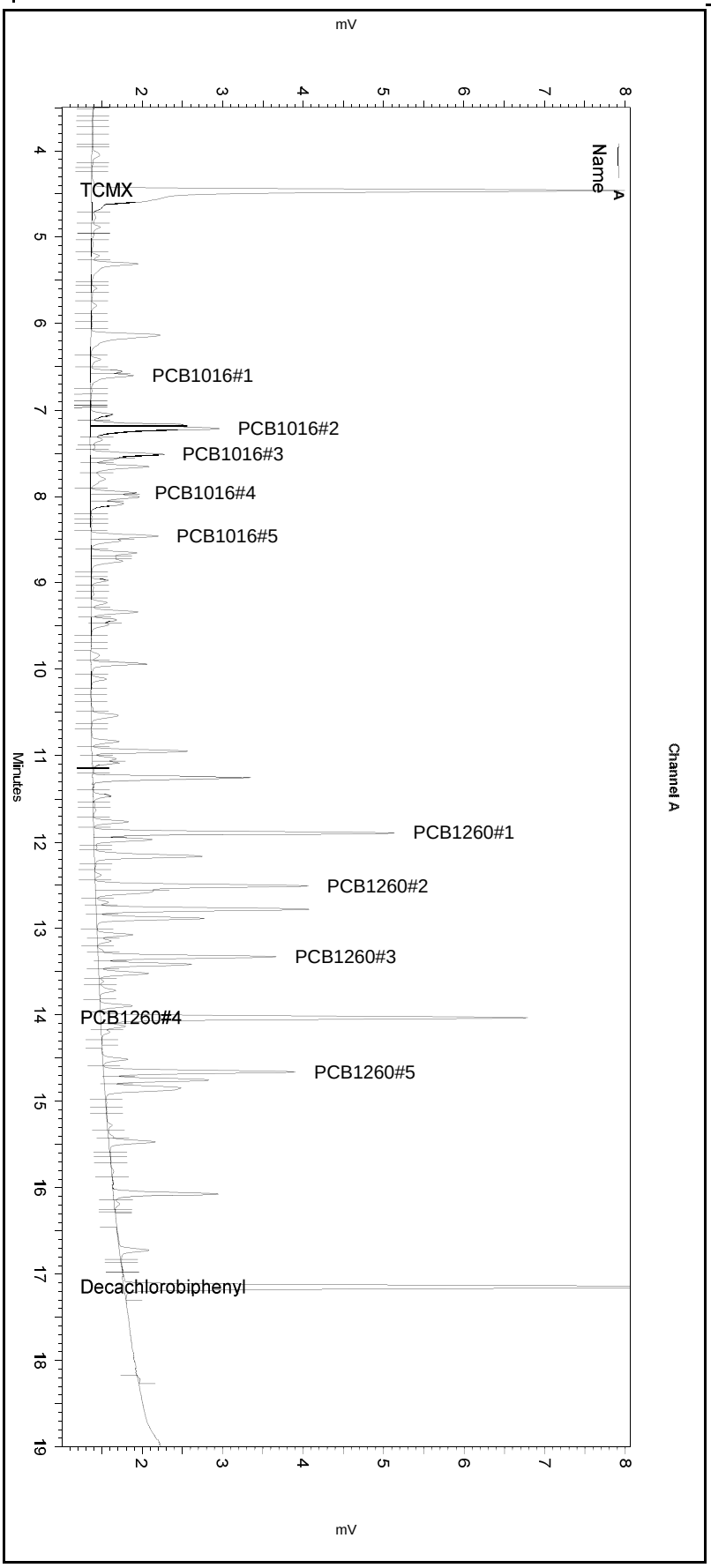
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	287859	15.913
PCB1016#1	6.397	6.410	20102	92.542
PCB1016#2	6.963	6.977	56848	65.127
PCB1016#3	7.173	7.187	23978	74.795
PCB1016#4	7.707	7.720	10507	97.847
PCB1016#5	8.157	8.170	12928	85.999
PCB1260#1	11.553	11.570	68927	63.255
PCB1260#2	12.170	12.187	57973	59.328
PCB1260#3	13.070	13.087	45190	59.705
PCB1260#4	13.693	13.710	135858	75.032
PCB1260#5	14.347	14.360	44256	61.866
Decachlorobiphenyl	17.193	17.210	229424	16.215

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 (Offline) Vial: 74 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/9/2012 4:13:23 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

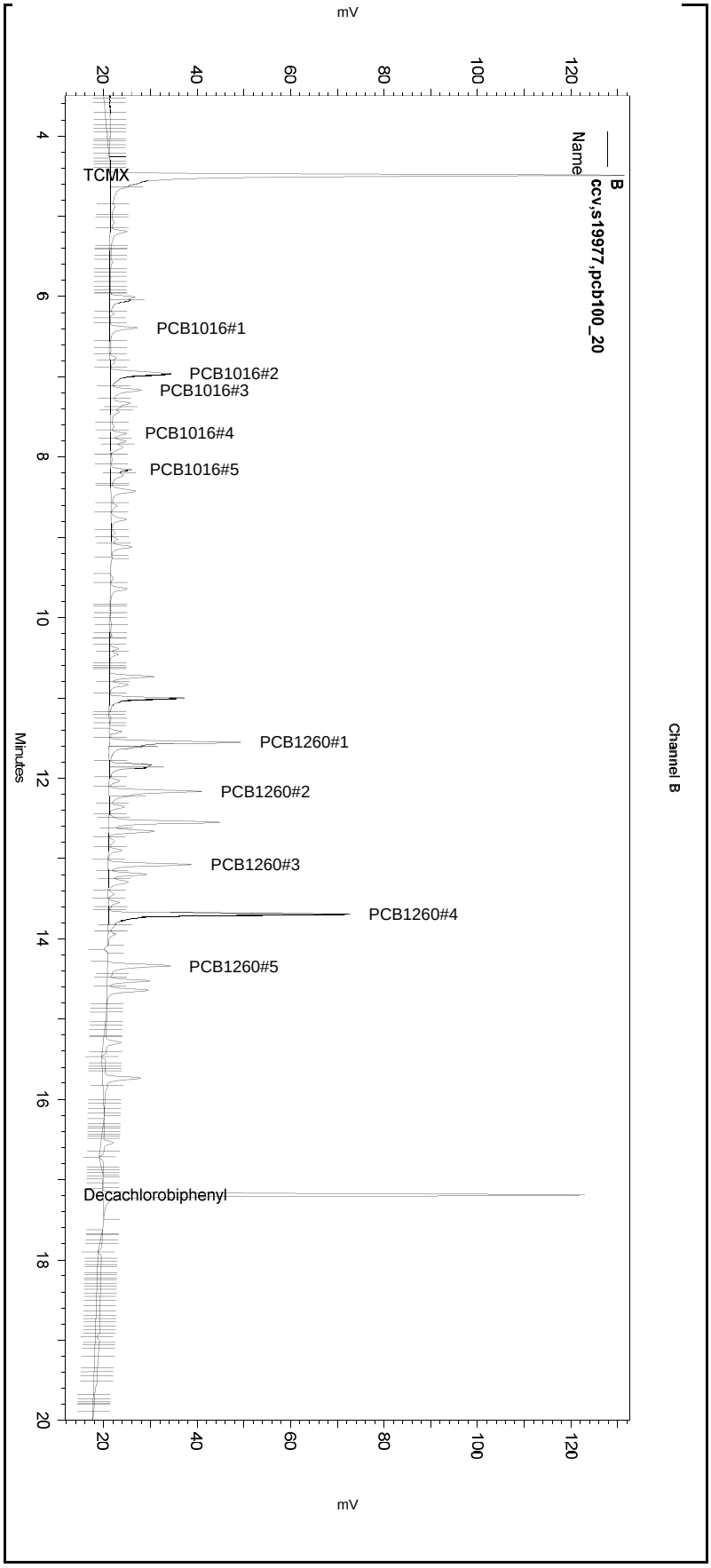
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.558	0	0
Yes	Split Peak	12.559	0	0
Yes	Split Peak	13.272	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 (Offline) Vial: 74 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/9/2012 4:13:23 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.278	0	0
Yes	Reset Baseline	9.263	0	0
Yes	Reset Baseline	11.343	0	0
Yes	Reset Baseline	14.09	0	0
Yes	Reset Baseline	14.203	0	0
Yes	Reset Baseline	16.956	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 Vial: 74 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/8/2012 1:05:54 AM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.453	4.463	23427	17.668
PCB1016#1	6.600	6.613	1748	94.064
PCB1016#2	7.213	7.227	5551	94.250
PCB1016#3	7.513	7.523	3360	112.770
PCB1016#4	7.957	7.970	1364	82.945
PCB1016#5	8.460	8.473	2332	88.599
PCB1260#1	11.887	11.907	10005	82.647
PCB1260#2	12.510	12.527	10041	110.567
PCB1260#3	13.327	13.347	6069	84.234
PCB1260#4	14.033	14.053	14519	79.020
PCB1260#5	14.660	14.680	6489	82.938
Decachlorobiphenyl	17.143	17.163	18989	15.320

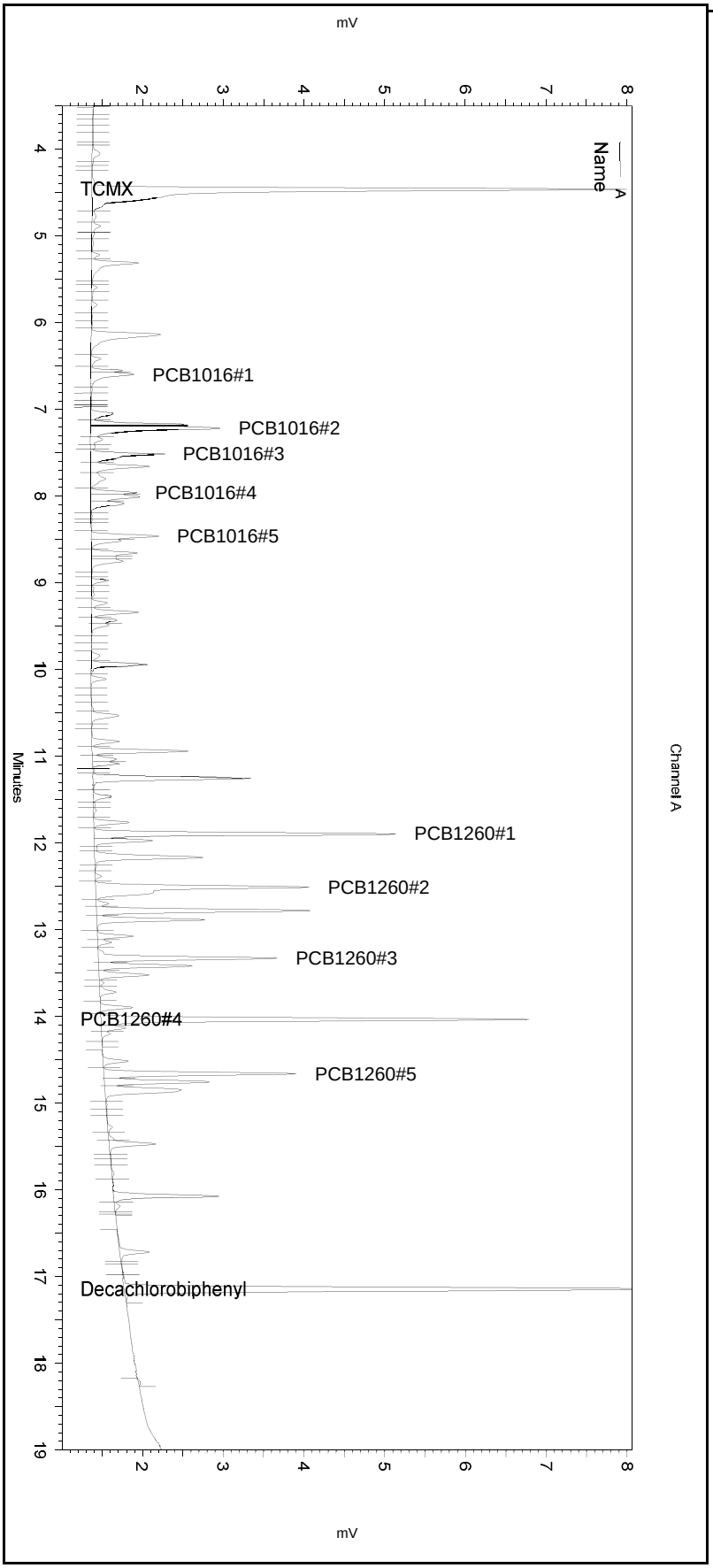
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	321239	17.613
PCB1016#1	6.397	6.410	45766	210.690
PCB1016#2	6.963	6.977	84468	96.770
PCB1016#3	7.173	7.187	42165	131.526
PCB1016#4	7.707	7.720	21573	200.899
PCB1016#5	8.157	8.170	26262	174.698
PCB1260#1	11.553	11.570	76763	70.446
PCB1260#2	12.170	12.187	66757	68.318
PCB1260#3	13.070	13.087	52930	69.931
PCB1260#4	13.693	13.710	144945	80.050
PCB1260#5	14.347	14.360	49396	69.051
Decachlorobiphenyl	17.193	17.210	232297	16.408

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 Vial: 74 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/8/2012 1:05:54 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

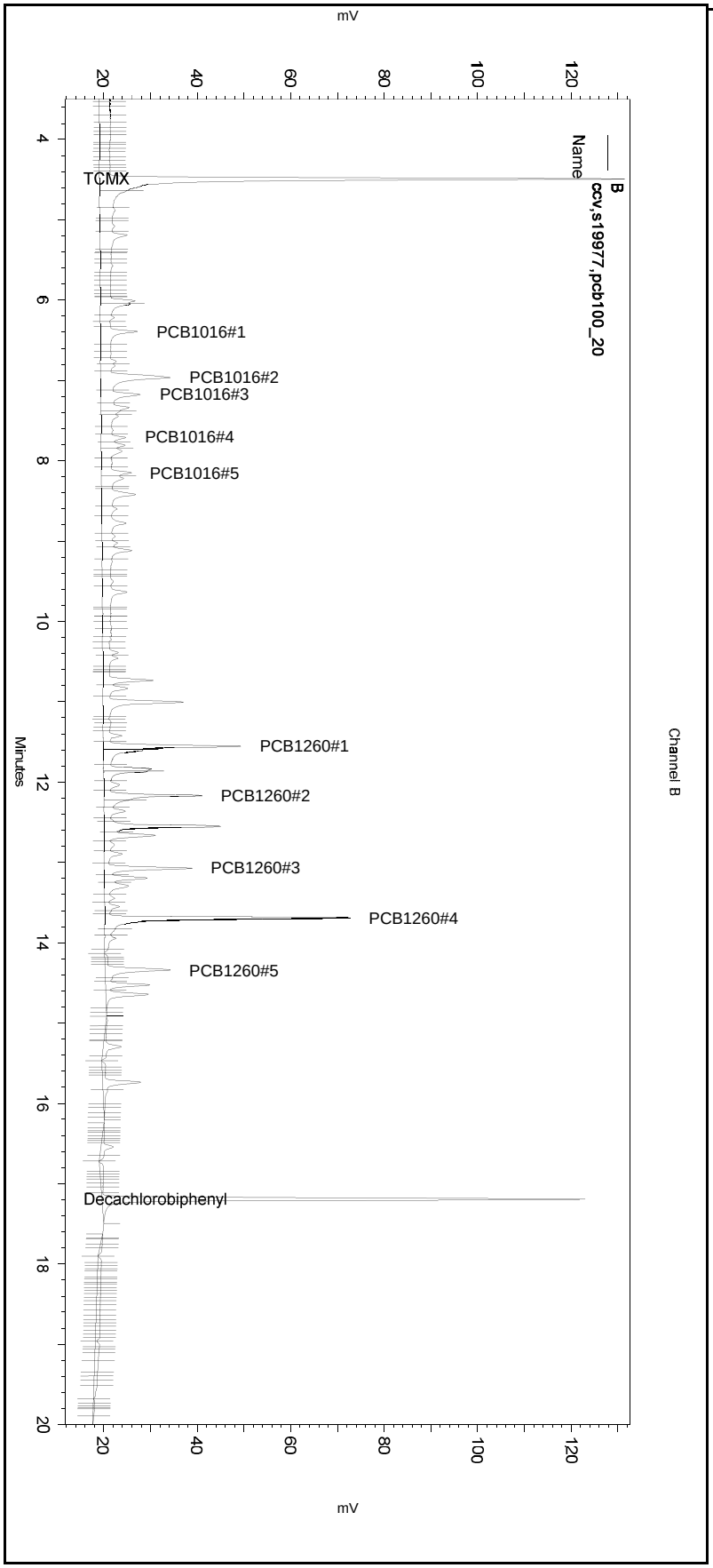
Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10097\250-074_12A3.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-074**
Sample Name: **ccv,s19977,pcb100_20**
Instrument: GC22 Vial: 74 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 12:42:10 AM
Analysis Date: 9/8/2012 1:05:54 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10097\250-074_12A3.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 PCBS Water
EPA 8082A

Inst : GC22 Run Name : PCB250_50 IDF : 1.0
Seqnum : 252360400089.2 File : 250_089 Time : 08-SEP-2012 07:17
Cal : 252360400001 Caldate : 06-SEP-2012
Standards: S19978

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1260	A			250.0	222.4	pg/uL	-11	20	
TCMX	A	1326.0	1281.9	50.00	48.34	pg/uL	-3	20	
Decachlorobiphenyl	A	1239.5	1085.6	50.00	43.79	pg/uL	-12	20	
Aroclor-1260	B			250.0	278.1	pg/uL	11	20	rsd ***
TCMX	B	13199	23077	50.00	60.01	pg/uL	20	20	
Decachlorobiphenyl	B	12055	17829	50.00	60.76	pg/uL	**22**	20	c+

TKB 09/09/12 : Corrected automatically drawn baseline. [general version]

Analyst: WSR Date: 09/11/12 Reviewer: EAH Date: 09/11/12

+=high bias c=CCV rsd=ICAL %RSD failure

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 (Offline) Vial: 89 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/9/2012 4:14:39 PM
Sample Amount: 1

GC22
PCB - ECD Instrument Results
Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.453	4.463	64093	48.337
PCB1016#1	6.600	6.613	4562	245.493
PCB1016#2	7.210	7.227	13896	235.940
PCB1016#3	7.510	7.523	8916	299.242
PCB1016#4	7.957	7.970	3841	233.572
PCB1016#5	8.457	8.473	6186	235.022
PCB1260#1	11.883	11.907	26453	218.518
PCB1260#2	12.507	12.527	20779	228.810
PCB1260#3	13.327	13.347	15657	217.310
PCB1260#4	14.033	14.053	40588	220.901
PCB1260#5	14.657	14.680	17722	226.511
Decachlorobiphenyl	17.140	17.163	54278	43.792

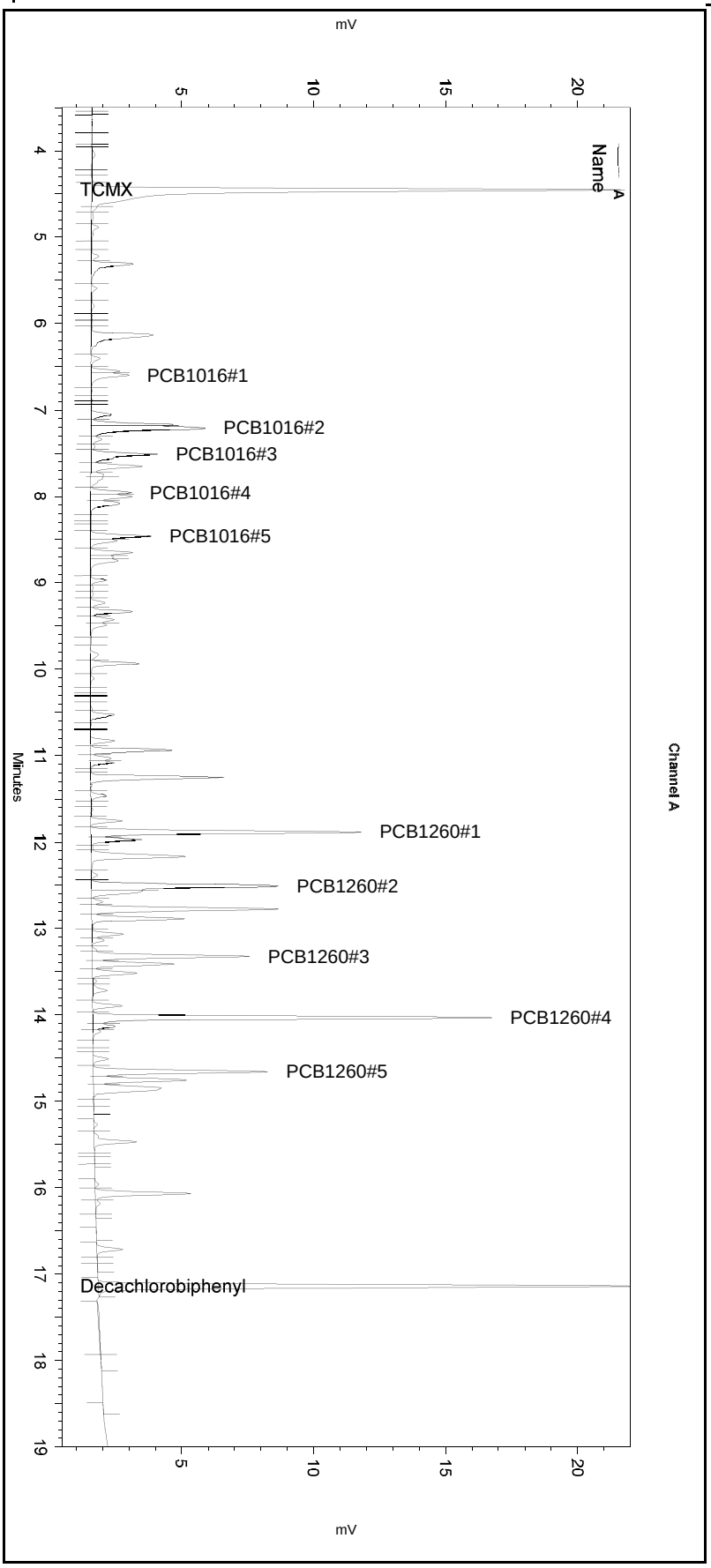
GC22
PCB - ECD Instrument Results
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	1153835	60.012
PCB1016#1	6.393	6.410	56489	260.055
PCB1016#2	6.963	6.977	162130	185.743
PCB1016#3	7.170	7.187	76371	238.225
PCB1016#4	7.703	7.720	28922	269.336
PCB1016#5	8.157	8.170	37292	248.071
PCB1260#1	11.550	11.570	327948	300.961
PCB1260#2	12.167	12.187	249266	255.093
PCB1260#3	13.067	13.087	182370	240.948
PCB1260#4	13.690	13.710	662561	365.920
PCB1260#5	14.340	14.360	162840	227.634
Decachlorobiphenyl	17.193	17.210	891440	60.761

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 (Offline) Vial: 89 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/9/2012 4:14:39 PM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

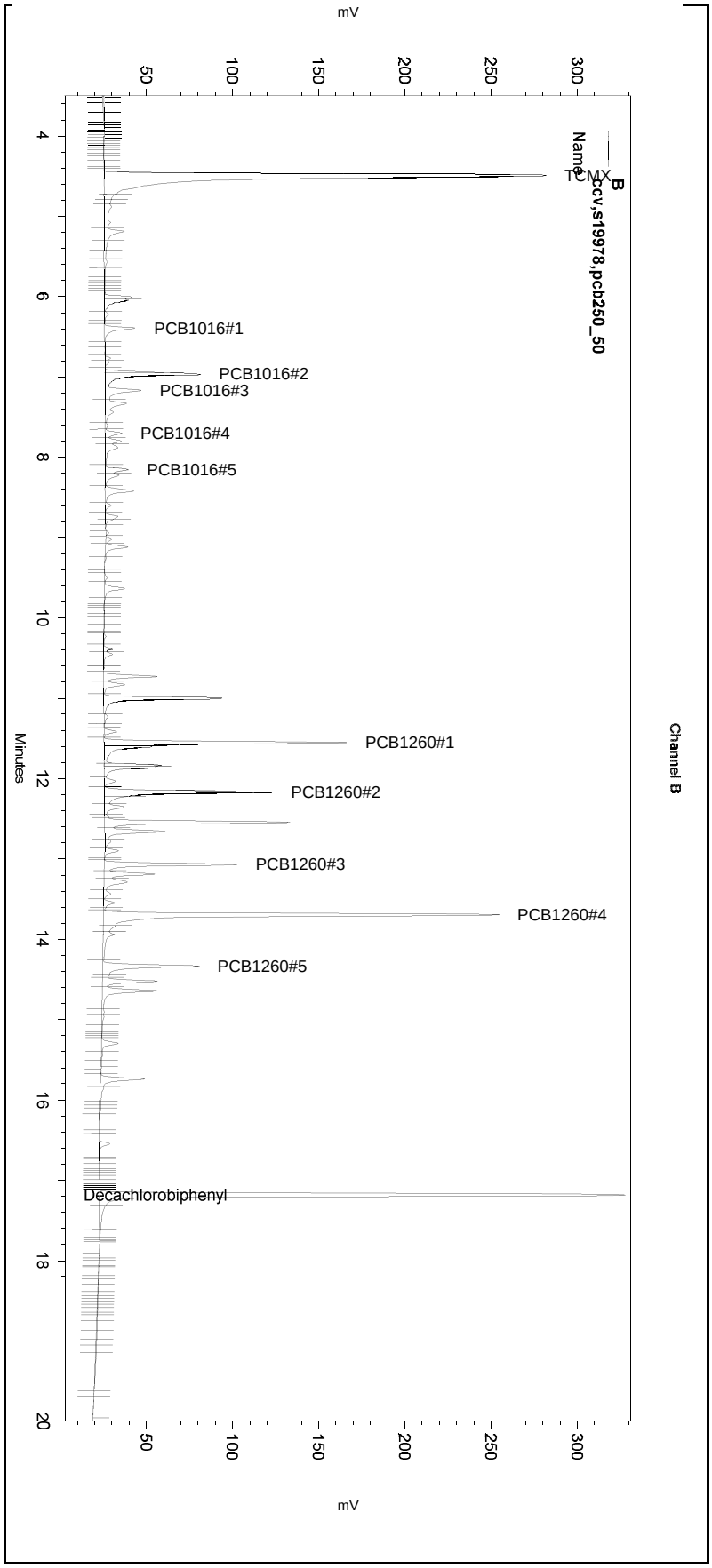
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	4.644	0	0
Yes	Split Peak	12.557	0	0
Yes	Split Peak	13.271	0	0
Yes	Reset Baseline	17.267	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 (Offline) Vial: 89 Operator: Pest 2. Analyst (lims2k3\pest2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/9/2012 4:14:39 PM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: \\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.912	0	0
Yes	Manual Baseline	11.367	13.008	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 Vial: 89 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/8/2012 7:41:02 AM
Sample Amount: 1

GC22

PCB - ECD Instrument Results

Channel A: Stx-CLPesticides

A Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.453	4.463	64694	48.790
PCB1016#1	6.600	6.613	4562	245.493
PCB1016#2	7.210	7.227	13896	235.940
PCB1016#3	7.510	7.523	8916	299.242
PCB1016#4	7.957	7.970	3841	233.572
PCB1016#5	8.457	8.473	6186	235.022
PCB1260#1	11.883	11.907	26453	218.518
PCB1260#2	12.507	12.527	26580	292.688
PCB1260#3	13.327	13.347	16035	222.556
PCB1260#4	14.033	14.053	40588	220.901
PCB1260#5	14.657	14.680	17722	226.511
Decachlorobiphenyl	17.140	17.163	55393	44.692

GC22

PCB - ECD Instrument Results

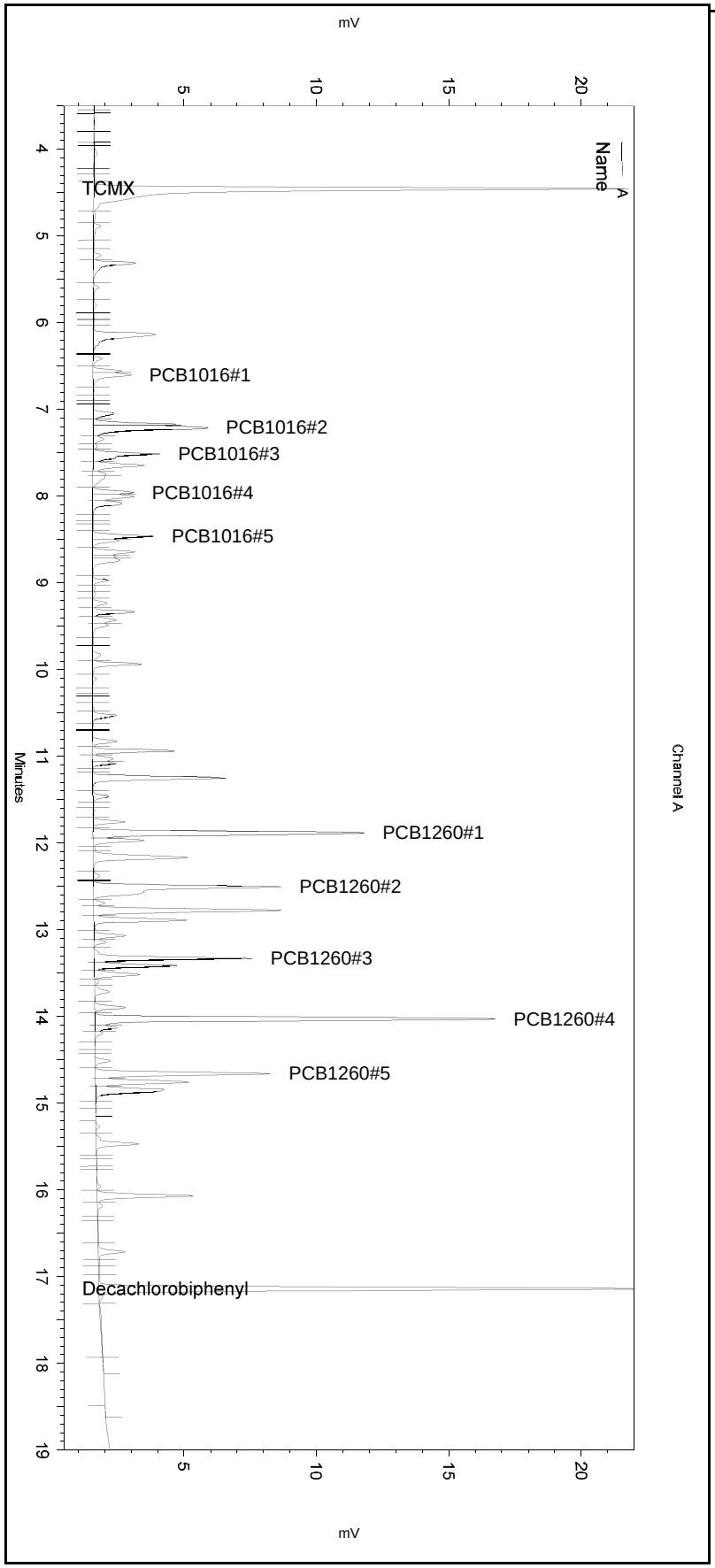
Channel B: Rtx-5

B Results

Name	RT	Exp RT	Area	Conc (ug/L)
TCMX	4.490	4.500	1154955	60.069
PCB1016#1	6.393	6.410	62949	289.794
PCB1016#2	6.963	6.977	168485	193.023
PCB1016#3	7.170	7.187	83101	259.218
PCB1016#4	7.703	7.720	33536	312.304
PCB1016#5	8.157	8.170	42310	281.452
PCB1260#1	11.550	11.570	325633	298.836
PCB1260#2	12.167	12.187	245281	251.015
PCB1260#3	13.067	13.087	182370	240.948
PCB1260#4	13.690	13.710	662561	365.920
PCB1260#5	14.340	14.360	162840	227.634
Decachlorobiphenyl	17.193	17.210	891440	60.761

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 Vial: 89 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/8/2012 7:41:02 AM
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3	20	1000

Manual Integration Fixes

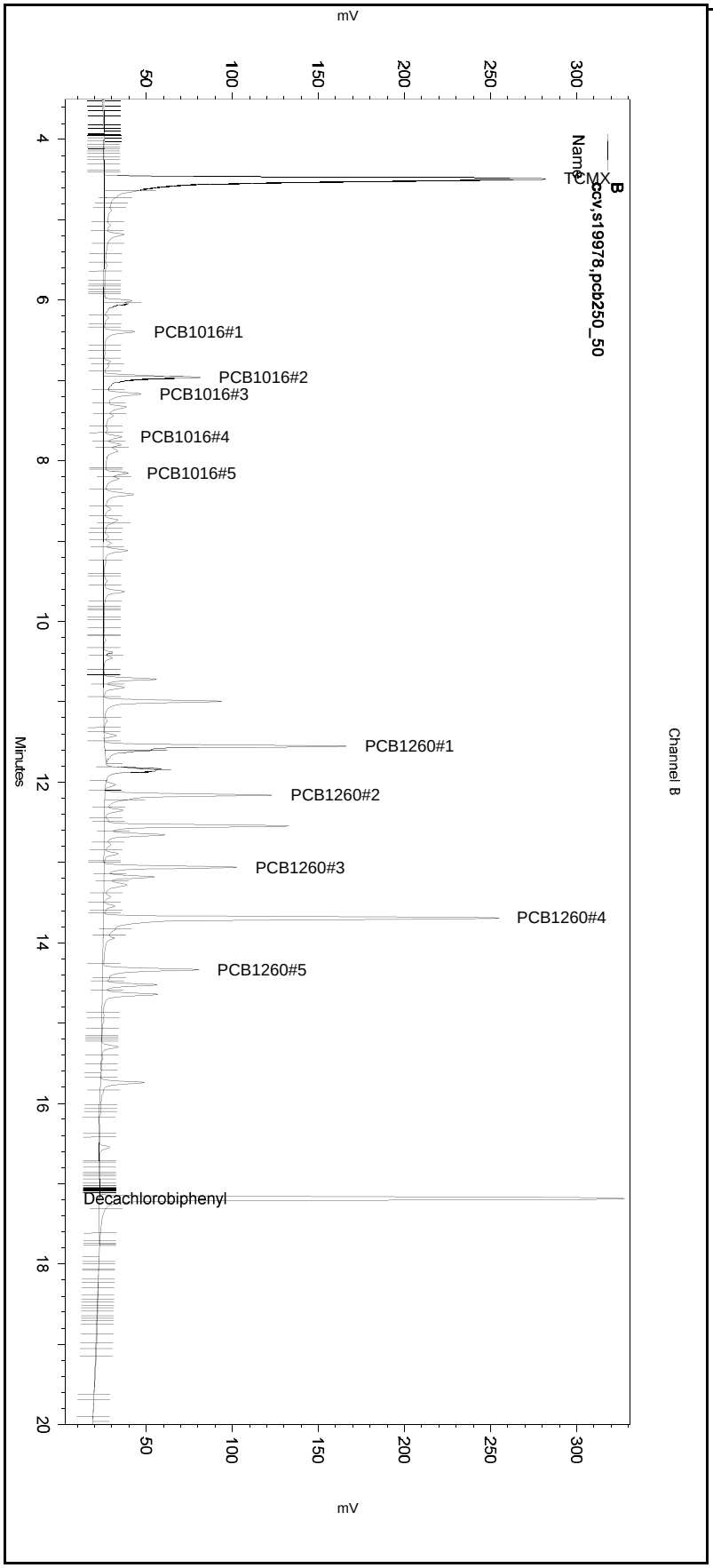
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10097\250-089_12B2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC22\Sequence\250.seq**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC22\Data\250-089**
Sample Name: **ccv,s19978,pcb250_50**
Instrument: GC22 Vial: 89 Operator: lims2k3\pest1
Method Name: \\Lims\gdrive\ezchrom\Projects\GC22\Method\Ar1660\pcb-run-250.met

Software Version 3.1.7
Run Date: 9/8/2012 7:17:19 AM
Analysis Date: 9/8/2012 7:41:02 AM
Sample Amount: 1



---< General Method Parameters >---

No items selected for this section

---< B >---

No items selected for this section

Integration Events
==========

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.5	0
Yes	Shoulder Sensitivity	3.5	20	50

Manual Integration Fixes
==========

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10097\250-089_12B2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239403
ANALYTICAL REPORT
Metals
Matrix: Water

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
FB.09042012	239403-007
EB.09042012	239403-008

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
METALS (EPA 6010C AND EPA 7470A)
WATER

Laboratory number:	**239403**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/04/12**
Samples Received:	**09/04/12**

This data package contains sample and QC results for two water samples, requested for the above referenced project on 09/04/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Metals (EPA 6010C and EPA 7470A) Water:
No analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 23403

Chain of Custody # _____

Project No: CA0007611.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: E Manton and D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None
1	EX36B116D.2	04/04/12	1150		X			1					X
2	EX36B116A.2	04/04/12	1155		X			1					X
3	EX36B116B.2	04/04/12	1140		X			1					X
4	EX36B116C.2	04/04/12	1200		X			1					X
5	EX36B015A.2	04/04/12	1250		X			1					X
6	EX36B163A.2	04/04/12	1315		X			2					X
7	FB.090420120	04/04/12	1455	X				9	3		1		5
8	EB.090420120	04/04/12	1505	X				3			1		2
	Temp Blank												

ANALYTICAL REQUEST

Big(2)-Ethylhexyl)phthlate by 8270D	Copper by EPA 6010C	Mercury by EPA 7471B	Alpha-BHC by EPA 8081B	PCBs by 8082	TPHd by 8015	TPHg by 8015	SVOCs by 8270	Pesticides by 8081	Metals by 6010/7174
X									
X									
X									
X									
	X	X							
	X	X	X						
				X	X	X	X	X	X
							X	X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

RECEIVED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239403 Date Received 9/4/12 Number of coolers 1
Client ARCADIS Project CA000761.0001

Date Opened 9/4/12 By (print) EL (sign) [signature]
Date Logged in ~~EL~~ 9/6/12 By (print) ~~EL~~ JG (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? (YES) NO N/A
17. Did you document your preservative check? (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239403

Sample	pH: <2	>9	>12	Other
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
-008a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: EL
Date: 9/6/12

Page 1 of 1

Results & QC Summary

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	239403	Project#:	CA000761.0001
Client:	Arcadis	Location:	Hunters Point Parcel E
Field ID:	FB.09042012	Diln Fac:	1.000
Lab ID:	239403-007	Sampled:	09/04/12
Matrix:	Water	Received:	09/04/12
Units:	ug/L	Analyzed:	09/07/12

Analyte	Result	LOQ	DL	Batch#	Prepared	Prep	Analysis
Arsenic	5.0 U	5.0	1.5	190250	09/06/12	EPA 3010A	EPA 6010C
Cadmium	1.3 U	5.0	0.38	190250	09/06/12	EPA 3010A	EPA 6010C
Copper	5.0 U	5.0	1.3	190250	09/06/12	EPA 3010A	EPA 6010C
Lead	1.3 U	5.0	1.1	190250	09/06/12	EPA 3010A	EPA 6010C
Manganese	5.0 U	5.0	0.41	190250	09/06/12	EPA 3010A	EPA 6010C
Mercury	0.10 U	0.20	0.020	190269	09/07/12	METHOD	EPA 7470A
Vanadium	1.3 U	5.0	0.46	190250	09/06/12	EPA 3010A	EPA 6010C
Zinc	5.0 U	20	2.3	190250	09/06/12	EPA 3010A	EPA 6010C

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	239403	Project#:	CA000761.0001
Client:	Arcadis	Location:	Hunters Point Parcel E
Field ID:	EB.09042012	Diln Fac:	1.000
Lab ID:	239403-008	Sampled:	09/04/12
Matrix:	Water	Received:	09/04/12
Units:	ug/L	Analyzed:	09/07/12

Analyte	Result	LOQ	DL	Batch#	Prepared	Prep	Analysis
Arsenic	5.0 U	5.0	1.5	190250	09/06/12	EPA 3010A	EPA 6010C
Cadmium	1.3 U	5.0	0.38	190250	09/06/12	EPA 3010A	EPA 6010C
Copper	5.0 U	5.0	1.3	190250	09/06/12	EPA 3010A	EPA 6010C
Lead	1.3 U	5.0	1.1	190250	09/06/12	EPA 3010A	EPA 6010C
Manganese	5.0 U	5.0	0.41	190250	09/06/12	EPA 3010A	EPA 6010C
Mercury	0.10 U	0.20	0.020	190269	09/07/12	METHOD	EPA 7470A
Vanadium	1.3 U	5.0	0.46	190250	09/06/12	EPA 3010A	EPA 6010C
Zinc	5.0 U	20	2.3	190250	09/06/12	EPA 3010A	EPA 6010C

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Batch QC Report

Metals Analytical Report

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3010A
Project#:	CA000761.0001	Analysis:	EPA 6010C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC655108	Batch#:	190250
Matrix:	Water	Prepared:	09/06/12
Units:	ug/L	Analyzed:	09/07/12

Analyte	Result	LOQ	DL
Arsenic	5.0 U	5.0	1.5
Cadmium	1.3 U	5.0	0.38
Copper	5.0 U	5.0	1.3
Lead	1.3 U	5.0	1.1
Manganese	5.0 U	5.0	0.41
Vanadium	1.3 U	5.0	0.46
Zinc	5.0 U	20	2.3

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3010A
Project#:	CA000761.0001	Analysis:	EPA 6010C
Matrix:	Water	Batch#:	190250
Units:	ug/L	Prepared:	09/06/12
Diln Fac:	1.000	Analyzed:	09/07/12

Type: BS Lab ID: QC655109

Analyte	Spiked	Result	%REC	Limits
Arsenic	100.0	89.90	90	79-127
Cadmium	50.00	46.89	94	80-120
Copper	250.0	237.9	95	77-120
Lead	100.0	93.16	93	78-120
Manganese	50.00	48.67	97	80-120
Vanadium	500.0	470.9	94	80-120
Zinc	500.0	470.7	94	80-120

Type: BSD Lab ID: QC655110

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	93.04	93	79-127	3	21
Cadmium	50.00	47.71	95	80-120	2	20
Copper	250.0	241.0	96	77-120	1	20
Lead	100.0	93.74	94	78-120	1	20
Manganese	50.00	49.13	98	80-120	1	20
Vanadium	500.0	477.4	95	80-120	1	20
Zinc	500.0	479.5	96	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3010A
Project#:	CA000761.0001	Analysis:	EPA 6010C
Field ID:	EB.09052012	Batch#:	190250
MSS Lab ID:	239404-015	Sampled:	09/05/12
Matrix:	Water	Received:	09/05/12
Units:	ug/L	Prepared:	09/06/12
Diln Fac:	1.000	Analyzed:	09/07/12

Type: MS Lab ID: QC655111

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	<1.485	100.0	94.19	94	68-135
Cadmium	<0.3835	50.00	48.18	96	76-120
Copper	<1.279	250.0	244.4	98	71-120
Lead	<1.080	100.0	94.03	94	65-120
Manganese	<0.4052	50.00	50.26	101	66-130
Vanadium	<0.4570	500.0	483.3	97	78-120
Zinc	<2.259	500.0	483.1	97	75-124

Type: MSD Lab ID: QC655112

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	92.73	93	68-135	2	32
Cadmium	50.00	48.21	96	76-120	0	20
Copper	250.0	246.8	99	71-120	1	27
Lead	100.0	95.22	95	65-120	1	29
Manganese	50.00	50.34	101	66-130	0	22
Vanadium	500.0	485.6	97	78-120	0	20
Zinc	500.0	484.6	97	75-124	0	27

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3010A
Project#:	CA000761.0001	Analysis:	EPA 6010C
Field ID:	EB.09052012	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	190250
MSS Lab ID:	239404-015	Sampled:	09/05/12
Lab ID:	QC655113	Received:	09/05/12
Matrix:	Water	Analyzed:	09/07/12
Units:	ug/L		

Analyte	MSS Result	MSS LOQ	Result	LOQ	% Diff	Lim
Arsenic	25.00 ND	5.000	25.00 U	25.00	NC	10
Cadmium	6.250 ND	5.000	6.250 U	25.00	NC	10
Copper	25.00 ND	5.000	25.00 U	25.00	NC	10
Lead	6.250 ND	5.000	6.250 U	25.00	NC	10
Manganese	25.00 ND	5.000	25.00 U	25.00	NC	10
Vanadium	6.250 ND	5.000	6.250 U	25.00	NC	10
Zinc	25.00 ND	20.00	25.00 U	100.0	NC	10

U= Not Detected at or above DL
NC= Not Calculated
ND= Not Detected at or above DL
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3010A
Project#:	CA000761.0001	Analysis:	EPA 6010C
Field ID:	EB.09052012	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	190250
MSS Lab ID:	239404-015	Sampled:	09/05/12
Lab ID:	QC655114	Received:	09/05/12
Matrix:	Water	Analyzed:	09/07/12
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	<1.485	100.0	105.4	105	75-125
Cadmium	<0.3835	50.00	55.77	112	75-125
Copper	<1.279	250.0	285.8	114	75-125
Lead	<1.080	100.0	108.8	109	75-125
Manganese	<0.4052	50.00	58.91	118	75-125
Vanadium	<0.4570	500.0	560.6	112	75-125
Zinc	<2.259	500.0	568.3	114	75-125

Batch QC Report

Metals Analytical Report

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	190269
Lab ID:	QC655196	Prepared:	09/07/12
Matrix:	Water	Analyzed:	09/07/12
Units:	ug/L		

Result	LOQ	DL
0.10 U	0.20	0.020

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	LCS	Batch#:	190269
Lab ID:	QC655197	Prepared:	09/07/12
Matrix:	Water	Analyzed:	09/07/12
Units:	ug/L		

Spiked	Result	%REC	Limits
2.500	2.320	93	80-120

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	190269
Field ID:	ZZZZZZZZZZ	Sampled:	09/05/12
MSS Lab ID:	239391-003	Received:	09/05/12
Matrix:	Water	Prepared:	09/07/12
Units:	ug/L	Analyzed:	09/07/12
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC655198	0.08940	2.500	2.204	85	64-124		
MSD	QC655199		2.500	2.145	82	64-124	3	40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	190269
MSS Lab ID:	239391-003	Sampled:	09/05/12
Lab ID:	QC655200	Received:	09/05/12
Matrix:	Water	Analyzed:	09/07/12

MSS Result	MSS LOQ	Result	LOQ	% Diff	Lim
0.08940	0.2000	0.5000 U	1.000	NC	10

U= Not Detected at or above DL
NC= Not Calculated
LOQ= Limit of Quantitation

REPORTING SUMMARY FOR 239403 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AS	CD	CU	PB	MN	HG	V	ZN
239403-007	MET09	09/07/12 14:06	1.0	+	+	+	+	+		+	+
239403-007	MET34	09/07/12 14:18	1.0						+		
239403-008	MET34	09/07/12 14:20	1.0						+		
239403-008	MET09	09/07/12 14:21	1.0	+	+	+	+	+		+	+
QC655108	MET09	09/07/12 13:33	1.0	+	+	+	+	+		+	+
QC655108	MET08	09/09/12 21:22	1.0								
QC655109	MET09	09/07/12 13:37	1.0	+	+	+	+	+		+	+
QC655109	MET08	09/09/12 21:27	1.0								
QC655110	MET09	09/07/12 13:41	1.0	+	+	+	+	+		+	+
QC655110	MET08	09/09/12 21:42	1.0								
QC655111	MET09	09/07/12 13:50	1.0	+	+	+	+	+		+	+
QC655111	MET08	09/09/12 21:51	1.0								
QC655112	MET09	09/07/12 13:54	1.0	+	+	+	+	+		+	+
QC655112	MET08	09/09/12 21:55	1.0								
QC655113	MET09	09/07/12 13:57	5.0	+	+	+	+	+		+	+
QC655113	MET08	09/09/12 21:59	5.0								
QC655114	MET09	09/07/12 14:02	1.0	+	+	+	+	+		+	+
QC655114	MET08	09/09/12 22:04	1.0								
QC655196	MET34	09/07/12 13:56	1.0						+		
QC655197	MET34	09/07/12 13:57	1.0						+		
QC655198	MET34	09/07/12 14:01	1.0						+		
QC655199	MET34	09/07/12 14:03	1.0						+		
QC655200	MET34	09/07/12 14:04	5.0						+		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 92362179

Instrument : MET09 Begun : 09/07/12 12:19
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met09_sn	ICALBLK				09/07/12 12:19	1.0		
002	met09_sn	ICAL	CRI5.1			09/07/12 12:23	1.0	1	
003	met09_sn	ICAL	CS100			09/07/12 12:28	1.0	2	
004	met09_sn	ICAL	CS1K			09/07/12 12:32	1.0	3	
005	met09_sn	ICAL	CS10K			09/07/12 12:36	1.0	4	
006	met09_sn	ICAL	CS100K			09/07/12 12:41	1.0	5	
007	met09_sn	ICV				09/07/12 12:46	1.0	6	
008	met09_sn	ICB				09/07/12 12:51	1.0		
009	met09_sn	ICSA				09/07/12 12:56	1.0	7	10:AL=540000
010	met09_sn	ICSAB				09/07/12 13:14	1.0	8	5:AL=510000
011	met09_sn	XCRI				09/07/12 13:19	1.0	9	
012	met09_sn	CRI				09/07/12 13:23	1.0	9	
013	met09_sn	BLANK	QC655108	Water	190250	09/07/12 13:33	1.0		
014	met09_sn	BS	QC655109	Water	190250	09/07/12 13:37	1.0		
015	met09_sn	BSD	QC655110	Water	190250	09/07/12 13:41	1.0		
016	met09_sn	MSS	239404-015	Water	190250	09/07/12 13:45	1.0		
017	met09_sn	MS	QC655111	Water	190250	09/07/12 13:50	1.0		
018	met09_sn	MSD	QC655112	Water	190250	09/07/12 13:54	1.0		
019	met09_sn	SER	QC655113	Water	190250	09/07/12 13:57	5.0		
020	met09_sn	PDS	QC655114	Water	190250	09/07/12 14:02	1.0	10 11	
021	met09_sn	SAMPLE	239403-007	Water	190250	09/07/12 14:06	1.0		
022	met09_sn	CCV				09/07/12 14:11	1.0	12	
023	met09_sn	CCB				09/07/12 14:16	1.0		
024	met09_sn	SAMPLE	239403-008	Water	190250	09/07/12 14:21	1.0		
025	met09_sn	SAMPLE	239369-001	Water	190250	09/07/12 14:26	1.0		
026	met09_sn	SAMPLE	239374-001	Water	190250	09/07/12 14:30	1.0		
027	met09_sn	SAMPLE	239377-001	Water	190250	09/07/12 14:35	1.0		
028	met09_sn	BLANK	QC654896	Water	190197	09/07/12 14:40	1.0		
029	met09_sn	BS	QC654897	Water	190197	09/07/12 14:45	1.0		
030	met09_sn	BSD	QC654898	Water	190197	09/07/12 14:49	1.0		
031	met09_sn	MSS	239354-001	Water	190197	09/07/12 14:53	1.0		2:NA=400000
032	met09_sn	MS	QC654899	Water	190197	09/07/12 15:00	1.0		1:NA=410000
033	met09_sn	MSD	QC654900	Water	190197	09/07/12 15:05	1.0		1:NA=440000
034	met09_sn	ICSAB				09/07/12 15:11	1.0	8	5:AL=540000
035	met09_sn	CCV				09/07/12 15:16	1.0	12	
036	met09_sn	CCB				09/07/12 15:21	1.0		
037	met09_sn	SER	QC654901	Water	190197	09/07/12 15:26	5.0		
038	met09_sn	PDS	QC654902	Water	190197	09/07/12 15:31	1.0	10 11	1:NA=440000
039	met09_sn	SAMPLE	239343-001	Water	190197	09/07/12 15:37	1.0		1:FE=110000
040	met09_sn	SAMPLE	239343-002	Water	190197	09/07/12 15:42	1.0		
041	met09_sn	SAMPLE	239343-003	Water	190197	09/07/12 15:47	1.0		
042	met09_sn	SAMPLE	239362-001	Water	190197	09/07/12 15:52	1.0		
043	met09_sn	SAMPLE	239354-002	Water	190197	09/07/12 15:56	1.0		3:NA=420000
044	met09_sn	SAMPLE	239354-003	Water	190197	09/07/12 16:03	1.0		2:CA=190000
045	met09_sn	SAMPLE	239354-004	Water	190197	09/07/12 16:10	1.0		1:CA=190000
046	met09_sn	SAMPLE	239354-005	Water	190197	09/07/12 16:15	1.0		2:NA=370000
047	met09_sn	CCV				09/07/12 16:22	1.0	12	
048	met09_sn	CCB				09/07/12 16:27	1.0		
049	met09_sn	SAMPLE	239354-008	Water	190197	09/07/12 16:32	1.0		3:CA=290000
050	met09_sn	SAMPLE	239354-009	Water	190197	09/07/12 16:39	1.0		3:CA=410000
051	met09_sn	SAMPLE	239354-010	Water	190197	09/07/12 16:46	1.0		2:NA=360000
052	met09_sn	SAMPLE	239222-003	Soil	190141	09/07/12 16:52	1.0		5:CA=1300000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 92362179

Instrument : MET09 Begun : 09/07/12 12:19
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met09_sn	SAMPLE	239222-003	Soil	190141	09/07/12 16:56	10.0		2:CA=250000
054	met09_sn	CCV				09/07/12 17:00	1.0	12	
055	met09_sn	CCB				09/07/12 17:05	1.0		
056	met09_sn	ICSAB				09/07/12 17:09	1.0	8	5:AL=510000

NT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

JDB 09/09/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 13 through 56.

Standards used: 1=S20200 2=S20215 3=S20214 4=S20216 5=S20217 6=S20644 7=S20220 8=S20222 9=S20319 10=S19831 11=S19832 12=S20645

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 92362179

Date : 09/07/12 Reference : met09_sn
Sequence : MET09 09/07/12 Analyzed : 09/07/12 12:23

#	Type	Sample ID	Y	A
		ICAL STD	6234829	
		LOWER LIMIT	1870449	
		UPPER LIMIT	7481795	
008	ICB		6155614	
009	ICSA		5242601	
010	ICSAB		5145166	
013	BLANK	QC655108	6064234	
014	BS	QC655109	5895079	
015	BSD	QC655110	5906185	
016	MSS	239404-015	6079371	
017	MS	QC655111	5888577	
018	MSD	QC655112	5856122	
019	SER	QC655113	5970008	
020	PDS	QC655114	5850109	
021	SAMPLE	239403-007	6117394	
022	CCV		5733344	
023	CCB		6156635	
024	SAMPLE	239403-008	6159168	
025	SAMPLE	239369-001	5823322	
026	SAMPLE	239374-001	5848067	
027	SAMPLE	239377-001	6253428	
034	ICSAB		5063588	
035	CCV		5772787	
036	CCB		6214519	
042	SAMPLE	239362-001	6083070	
052	SAMPLE	239222-003	8219329	*
053	SAMPLE	239222-003	6022228	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 METALS Water: EPA 6010C

Inst : MET09
Calnum : 92362179001
Units : ug/L

Reviewer : ---
Date : 07-SEP-2012 12:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met09_sn	92362179002	CRI5.1	07-SEP-2012 12:23	S20200
L2	met09_sn	92362179003	CS100	07-SEP-2012 12:28	S20215
L3	met09_sn	92362179004	CS1K	07-SEP-2012 12:32	S20214
L4	met09_sn	92362179005	CS10K	07-SEP-2012 12:36	S20216
L5	met09_sn	92362179006	CS100K	07-SEP-2012 12:41	S20217

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Arsenic	A	4.9400	9.4610	9.4330	9.7825		LOR0	0.00000	0.10226		8.4041	1.000	0.998	
Cadmium	A	170.80	201.40	202.35	196.68		LOR0	0.00000	0.00508		192.81	1.000	0.998	
Copper	A	220.10	247.95	242.87	243.39		LOR0	0.00000	0.00411		238.58	1.000	0.998	
Lead	A	63.200	63.510	61.747	61.764		LOR0	0.00000	0.01619		62.555	1.000	0.998	
Manganese	A	714.14	846.13	820.66	786.20		LOR0	0.00000	0.00127		791.78	1.000	0.998	
Vanadium	A	233.38	275.29	270.67	275.14		LOR0	0.00000	0.00364		263.62	1.000	0.998	
Zinc	A	80.525	84.027	82.543	83.430		LOR0	0.00000	0.01199		82.631	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Arsenic	A	5.0000	**-49**	100.00	-3	1000.0	-4	10000	0		
Cadmium	A	5.0000	-13	100.00	2	1000.0	3	10000	0		
Copper	A	5.0000	-10	100.00	2	1000.0	0	10000	0		
Lead	A	5.0000	2	100.00	3	1000.0	0	10000	0		
Manganese	A	5.0000	-9	100.00	8	1000.0	4	10000	0		
Vanadium	A	5.0000	-15	100.00	0	1000.0	-2	10000	0		
Zinc	A	20.000	-3	100.00	1	1000.0	-1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

92362179001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 METALS Water
EPA 6010C

Inst : MET09
Calnum : 92362179001 Cal Date : 07-SEP-2012

ICV 92362179007 (07-SEP-2012) stds: S20644

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Arsenic	A	5000	5100	ug/L	2	10	
Cadmium	A	5000	5192	ug/L	4	10	
Copper	A	5000	5052	ug/L	1	10	
Lead	A	5000	5006	ug/L	0	10	
Manganese	A	5000	5119	ug/L	2	10	
Vanadium	A	5000	5100	ug/L	2	10	
Zinc	A	5000	5071	ug/L	1	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179008.1 File : met09_sn Time : 07-SEP-2012 12:51
Cal : 92362179001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.971	ug/L	
Cadmium	A	ND	5.000	0.7671	ug/L	
Copper	A	ND	5.000	2.558	ug/L	
Lead	A	ND	5.000	2.159	ug/L	
Manganese	A	ND	5.000	0.8105	ug/L	
Vanadium	A	ND	5.000	0.9140	ug/L	
Zinc	A	ND	20.00	4.517	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6155614	-1.27

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179009.1 File : met09_sn Time : 07-SEP-2012 12:56
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20220

Analyte	Ch	Quant	IQL	Units	Flags
Arsenic	A	[2.630]	5.000	ug/L	
Cadmium	A	[-1.863]	5.000	ug/L	!a-
Lead	A	[4.696]	5.000	ug/L	!a+
Zinc	A	[5.109]	20.00	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19210	ug/L	96
Copper	A	20000	20740	ug/L	104
Manganese	A	20000	18310	ug/L	92
Nickel	A	20000	17970	ug/L	90
Vanadium	A	20000	20110	ug/L	101
Aluminum	R	500000	537100	ug/L	107
Calcium	R	500000	502600	ug/L	101
Iron	R	200000	204000	ug/L	102
Magnesium	R	500000	509200	ug/L	102
Titanium	R	20000	21220	ug/L	106

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5242601	-15.91

!=warning +=high bias -=low bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179010.1 File : met09_sn Time : 07-SEP-2012 13:14
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	525.6	ug/L	5	20	
Cadmium	A	1000	1010	ug/L	1	20	
Copper	A	500.0	558.6	ug/L	12	20	
Lead	A	1000	930.6	ug/L	-7	20	
Manganese	A	500.0	517.5	ug/L	4	20	
Vanadium	A	500.0	529.4	ug/L	6	20	
Zinc	A	1000	981.3	ug/L	-2	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5145166	-17.48

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179012.1 File : met09_sn Time : 07-SEP-2012 13:23
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20319

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	20.00	17.58	ug/L	-12	30	
Cadmium	A	20.00	20.03	ug/L	0	30	
Copper	A	20.00	20.46	ug/L	2	30	
Lead	A	20.00	20.03	ug/L	0	30	
Manganese	A	20.00	21.40	ug/L	7	30	
Vanadium	A	20.00	19.70	ug/L	-2	30	
Zinc	A	80.00	83.12	ug/L	4	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6025843	-3.35

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179022.1 File : met09_sn Time : 07-SEP-2012 14:11
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	8.4041	10.172	5000	5201	ug/L	4	10	
Cadmium	A	192.81	206.61	5000	5251	ug/L	5	10	
Copper	A	238.58	257.32	5000	5286	ug/L	6	10	
Lead	A	62.555	61.909	5000	5012	ug/L	0	10	
Manganese	A	791.78	823.36	5000	5234	ug/L	5	10	
Vanadium	A	263.62	289.11	5000	5255	ug/L	5	10	
Zinc	A	82.631	86.477	5000	5183	ug/L	4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5733344	-8.04

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179023.1 File : met09_sn Time : 07-SEP-2012 14:16
Cal : 92362179001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.971	ug/L	
Cadmium	A	ND	5.000	0.7671	ug/L	
Copper	A	ND	5.000	2.558	ug/L	
Lead	A	ND	5.000	2.159	ug/L	
Manganese	A	ND	5.000	0.8105	ug/L	
Vanadium	A	ND	5.000	0.9140	ug/L	
Zinc	A	ND	20.00	4.517	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6156635	-1.25

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179034.1 File : met09_sn Time : 07-SEP-2012 15:11
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	532.7	ug/L	7	20	
Cadmium	A	1000	1005	ug/L	1	20	
Copper	A	500.0	558.8	ug/L	12	20	
Lead	A	1000	925.2	ug/L	-7	20	
Manganese	A	500.0	511.8	ug/L	2	20	
Vanadium	A	500.0	528.1	ug/L	6	20	
Zinc	A	1000	991.1	ug/L	-1	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5063588	-18.79

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179035.1 File : met09_sn Time : 07-SEP-2012 15:16
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	8.4041	9.8741	5000	5049	ug/L	1	10	
Cadmium	A	192.81	202.46	5000	5145	ug/L	3	10	
Copper	A	238.58	246.37	5000	5061	ug/L	1	10	
Lead	A	62.555	60.514	5000	4899	ug/L	-2	10	
Manganese	A	791.78	795.82	5000	5059	ug/L	1	10	
Vanadium	A	263.62	280.08	5000	5091	ug/L	2	10	
Zinc	A	82.631	84.447	5000	5061	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5772787	-7.41

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179036.1 File : met09_sn Time : 07-SEP-2012 15:21
Cal : 92362179001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.971	ug/L	
Cadmium	A	ND	5.000	0.7671	ug/L	
Copper	A	ND	5.000	2.558	ug/L	
Lead	A	ND	5.000	2.159	ug/L	
Manganese	A	ND	5.000	0.8105	ug/L	
Vanadium	A	ND	5.000	0.9140	ug/L	
Zinc	A	ND	20.00	4.517	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6214519	-0.33

SAMPLE PREPARATION SUMMARY

Batch # : 190250
Started By : MCB
Method : 3010A
Spike #1 ID : S19831
Prep Date : 06-SEP-2012 19:30
SOP Version : 3010A_icp_rv9
Spike #2 ID : S19832
Analysis : ICAP
Finished By : MCB
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239369-001		Water	50	50	1	1.0						TAL/ICP	
239374-001		Water	50	50	1	1.0						TAL/ICP	
239377-001		Water	50	50	1	1.0						TAL/ICP	
239403-007		Water	50	50	1	1.0						AS, CD, CU, MN, PB, V, ZN	
239403-008		Water	50	50	1	1.0						AS, CD, CU, MN, PB, V, ZN	
239404-015		Water	50	50	1	1.0						AS, CD, CU, MN, PB, V, ZN	
QC655108	BLANK	Water	50	50	1	1.0							
QC655109	BS	Water	50	50	1	1.0		.5	.5				
QC655110	BSD	Water	50	50	1	1.0		.5	.5				
QC655111	MS	Water	50	50	1	1.0		.5	.5				
QC655112	MSD	Water	50	50	1	1.0		.5	.5				
QC655113	SER	Water	50	50	1	1.0							
QC655114	PDS	Water	50	50	1	1.0							

Analyst: JDB Date: 09/09/12 Reviewer: PRW Date: 09/10/12

Water Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 190250
Digested by: MCBIII
Date Digested: 9/6/12

Digestion Method
☒ EPA 3010a for ICP
☐ EPA 200.7
☐ _____

BK 3330
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Continued On: /

Lvl.	Sample #	Container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	ID II	Comments
	BLANK		50	50	N		
	BS						
	BSD						
II	MS-404-015	A				✓	
5	MSD-404-015	↓				✓	
	239404-015	↓				✓	
	239403-007	G				✓	
↓	↓ -008	A				✓	
II	239369-001					✓	
10	239374-001					✓	
↓	239377-001	↓	↓	↓	↓	✓	
15							
20							

MCB III 9/6/12

	Reagent ID or LIMS #	Initials / Date
Digestion Tube Lot #	1143054-262	
.5 mL of spike solution (Std1) was added to all spikes	519831	MCB III 9/6/12
.5 mL of spike solution (Std2) was added to all spikes	519832	
Digestion temperature (90-95 degrees C)	95°C | D-7	
Digestion started at (time)	7:30 AM	
☐ 1:1 HNO3, ☐ concentrated HNO3, added to all samples	0000003390 JTBAKER	
1:1 HCl added to all samples	450038 ↓	
Digestion ended at (time)	11:45 pm	
☐ filtered thru' Whatman # 541	N/A	
Relinquished to ICP group	ICP	↓

Michael C. Brock III 9/6/12
Prep Chemist Signature / Date

Reviewer Signature / Date

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052362260

Instrument : MET34
Method : EPA 7470A

Begun : 09/07/12 13:40
SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	190269	ICALBLK	CAL BLANK			09/07/12 13:40	1.0		
002	190269	ICAL	CAL 1			09/07/12 13:42	1.0	1	
003	190269	ICAL	CAL 2			09/07/12 13:43	1.0	1	
004	190269	ICAL	CAL 3			09/07/12 13:45	1.0	1	
005	190269	ICAL	CAL 4			09/07/12 13:47	1.0	1	
006	190269	ICAL	CAL 5			09/07/12 13:49	1.0	1	
007	190269	ICV				09/07/12 13:52	1.0	2	
008	190269	ICB				09/07/12 13:54	1.0		
009	190269	BLANK	QC655196	Water	190269	09/07/12 13:56	1.0		
010	190269	LCS	QC655197	Water	190269	09/07/12 13:57	1.0		
011	190269	MSS	239391-003	Water	190269	09/07/12 13:59	1.0		
012	190269	MS	QC655198	Water	190269	09/07/12 14:01	1.0		
013	190269	MSD	QC655199	Water	190269	09/07/12 14:03	1.0		
014	190269	SER	QC655200	Water	190269	09/07/12 14:04	5.0		
015	190269	SAMPLE	239391-002	Filtrate	190269	09/07/12 14:06	1.0		
016	190269	SAMPLE	239391-004	Filtrate	190269	09/07/12 14:08	1.0		
017	190269	SAMPLE	239391-005	Water	190269	09/07/12 14:09	1.0		
018	190269	SAMPLE	239267-002	Water	190269	09/07/12 14:11	1.0		
019	190269	CCV				09/07/12 14:13	1.0	3	
020	190269	CCB				09/07/12 14:14	1.0		
021	190269	SAMPLE	239382-001	Water	190269	09/07/12 14:16	1.0		
022	190269	SAMPLE	239403-007	Water	190269	09/07/12 14:18	1.0		
023	190269	SAMPLE	239403-008	Water	190269	09/07/12 14:20	1.0		
024	190269	SAMPLE	239404-015	Water	190269	09/07/12 14:21	1.0		
025	190269	SAMPLE	239426-001	Water	190269	09/07/12 14:23	1.0		
026	190269	SAMPLE	239427-001	Water	190269	09/07/12 14:25	1.0		
027	190269	XSAMPLE	239267-005	Filtrate	190269	09/07/12 14:26	1.0		
028	190269	SAMPLE	239267-005	Filtrate	190269	09/07/12 14:31	1.0		
029	190269	CCV				09/07/12 14:32	1.0	3	
030	190269	CCB				09/07/12 14:34	1.0		
031	190269	BLANK	QC655201	WET Leachate	190270	09/07/12 14:51	1.0		
032	190269	BS	QC655202	WET Leachate	190270	09/07/12 14:53	1.0		
033	190269	BSD	QC655203	WET Leachate	190270	09/07/12 14:55	1.0		
034	190269	MSS	239300-001	WET Leachate	190270	09/07/12 14:56	1.0		
035	190269	MS	QC655204	WET Leachate	190270	09/07/12 14:58	1.0		
036	190269	MSD	QC655205	WET Leachate	190270	09/07/12 15:00	1.0		
037	190269	SAMPLE	239300-002	WET Leachate	190270	09/07/12 15:01	1.0		
038	190269	SAMPLE	239300-003	WET Leachate	190270	09/07/12 15:03	1.0		
039	190269	SAMPLE	239300-004	WET Leachate	190270	09/07/12 15:05	1.0		
040	190269	SAMPLE	239300-005	WET Leachate	190270	09/07/12 15:07	1.0		
041	190269	CCV				09/07/12 15:08	1.0	3	
042	190269	CCB				09/07/12 15:10	1.0		
043	190269	SAMPLE	239300-006	WET Leachate	190270	09/07/12 15:12	1.0		
044	190269	SAMPLE	239300-007	WET Leachate	190270	09/07/12 15:13	1.0		
045	190269	SAMPLE	239300-008	WET Leachate	190270	09/07/12 15:15	1.0		
046	190269	SAMPLE	239300-009	WET Leachate	190270	09/07/12 15:17	1.0		
047	190269	SAMPLE	239300-010	WET Leachate	190270	09/07/12 15:19	1.0		
048	190269	SAMPLE	239300-011	WET Leachate	190270	09/07/12 15:20	1.0		
049	190269	SAMPLE	239296-001	WET Leachate	190270	09/07/12 15:22	1.0		
050	190269	SAMPLE	239296-002	WET Leachate	190270	09/07/12 15:24	1.0		
051	190269	SAMPLE	239296-003	WET Leachate	190270	09/07/12 15:25	1.0		
052	190269	SAMPLE	239296-004	WET Leachate	190270	09/07/12 15:27	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052362260

Instrument : MET34 Begun : 09/07/12 13:40
Method : EPA 7470A SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	190269	CCV				09/07/12 15:29	1.0	3	
054	190269	CCB				09/07/12 15:30	1.0		
055	190269	SAMPLE	239296-005	WET Leachate	190270	09/07/12 15:32	1.0		
056	190269	SAMPLE	239296-006	WET Leachate	190270	09/07/12 15:34	1.0		
057	190269	SAMPLE	239296-007	WET Leachate	190270	09/07/12 15:36	1.0		
058	190269	SAMPLE	239296-008	WET Leachate	190270	09/07/12 15:37	1.0		
059	190269	SAMPLE	239296-009	WET Leachate	190270	09/07/12 15:39	1.0		
060	190269	CCV				09/07/12 15:41	1.0	3	
061	190269	CCB				09/07/12 15:42	1.0		

CRT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 61.

CRT 09/07/12 : On run 27, the sample vial was not on the rack during analysis. The run was aborted and the sample was reran on run 28.

Standards used: 1=S20657 2=S20659 3=S20660

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 METALS Water: EPA 7470A

Inst : MET34
Calnum : 1052362260001
Units : ug/L

Date : 07-SEP-2012 13:40
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	190269	1052362260002	CAL 1	07-SEP-2012 13:42	S20657 (500X)
L2	190269	1052362260003	CAL 2	07-SEP-2012 13:43	S20657 (200X)
L3	190269	1052362260004	CAL 3	07-SEP-2012 13:45	S20657 (50X)
L4	190269	1052362260005	CAL 4	07-SEP-2012 13:47	S20657 (20X)
L5	190269	1052362260006	CAL 5	07-SEP-2012 13:49	S20657 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	6330.0	5370.0	4748.5	4725.2	4769.4	LINR	-0.0467	2.11E-4		5188.6	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.2000	10	0.5000	4	2.0000	-2	5.0000	-1	10.000	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 METALS Water
EPA 7470A

Inst : MET34
Calnum : 1052362260001 Cal Date : 07-SEP-2012 Type : WATER

ICV 1052362260007 (07-SEP-2012) stds: S20659

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	4.616	ug/L	-8	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260008 File : 190269 Time : 07-SEP-2012 13:54
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260019 File : 190269 Time : 07-SEP-2012 14:13
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5188.6	4496.8	5.000	4.705	ug/L	-6	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260020 File : 190269 Time : 07-SEP-2012 14:14
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260029 File : 190269 Time : 07-SEP-2012 14:32
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5188.6	5014.8	5.000	5.252	ug/L	5	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260030 File : 190269 Time : 07-SEP-2012 14:34
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

SAMPLE PREPARATION SUMMARY

Batch # : 190269
Started By : CRT
Method : METHOD
Spike #1 ID : S20657

Prep Date : 07-SEP-2012 09:50

Analysis : HG
Finished By : CRT
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239267-002		Water	50	50	1	1.0						HG-200	
239267-005		Filtrate	50	50	1	1.0						T22/HG	
239382-001		Water	50	50	1	1.0						HG-200	
239391-002		Filtrate	50	50	1	1.0						HG-200	
239391-003		Water	50	50	1	1.0						HG-200	MSS, SER
239391-004		Filtrate	50	50	1	1.0						HG-200	
239391-005		Water	50	50	1	1.0						HG-200	
239403-007		Water	50	50	1	1.0						HG	
239403-008		Water	50	50	1	1.0						HG	
239404-015		Water	50	50	1	1.0						HG	
239426-001		Water	50	50	1	1.0						T22/HG-200	
239427-001		Water	50	50	1	1.0						T22/HG-200	
QC655196	BLANK	Water	50	50	1	1.0							
QC655197	LCS	Water	50	50	1	1.0		1.25					
QC655198	MS	Water	50	50	1	1.0		1.25					
QC655199	MSD	Water	50	50	1	1.0		1.25					
QC655200	SER	Water	50	50	1	1.0							

Analyst: CRT Date: 09/07/12 Reviewer: PRW Date: 09/07/12

Water Digestion for Mercury — Curtis & Tompkins, Ltd.

LIMS Batch #: 190269
Date Digested: 9/7/12

Digestion Method: ☑ EPA 7470A/ EPA 245.1 ☐ _____ — BK3325 Page 59

	Sample #	container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	MB QCC55196		☑ 50 ☐	☑ 50 ☐	N	
	~~BS~~ LCS ↓ 97		☑ 50 ☐	☑ 50 ☐		
	~~RSD~~ ART 9/7		☑ 50 ☐	☑ 50 ☐		
	239391-003	G	☑ 50 ☐	☑ 50 ☐		MSS, SEE
5	MS QC655198		☑ 50 ☐	☑ 50 ☐		
	MSD ↓ 99		☑ 50 ☐	☑ 50 ☐		
	239391-002	G	☑ 50 ☐	☑ 50 ☐		
	↓ -004	B	☑ 50 ☐	☑ 50 ☐		
	↓ -005	G	☑ 50 ☐	☑ 50 ☐		
10	239267-002	A	☑ 50 ☐	☑ 50 ☐		
	239382-001	G	☑ 50 ☐	☑ 50 ☐		
	239403-007	G	☑ 50 ☐	☑ 50 ☐		
	↓ -008	A	☑ 50 ☐	☑ 50 ☐		
	239404-015	A	☑ 50 ☐	☑ 50 ☐		
15	239426-001		☑ 50 ☐	☑ 50 ☐		aliquot: 239238-001
	239427-001		☑ 50 ☐	☑ 50 ☐		↓ 239235-001
	239267-005	A	☑ 50 ☐	☑ 50 ☐	↓	
			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		
20			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		
			☐ 50 ☐	☐ 50 ☐		

CRT 9/7/12

Reagent ID/ LIMS# / Time	Initials / Date
Digestion Tube Lot #	EK120423 — CRT 9/7/12
1.25 mL of spike solution was added to all spikes	S20C57
☑ CAL digested with this batch — ICAL Source LIMS S#	↓ 58
ICV / CCV LIMS S#	↓ 59/60
Digestion Temperature (°C), Block and Probe Location	95°C — A-35
Digestion Started at (time)	9:50
concentrated H_2SO_4	L09049
concentrated HNO_3	L10023
5% $KMnO_4$	9-6
5% $K_2S_2O_8$	8-27
NaCl.hydroxylamine hydrochloride	8-27
Stannous Chloride	9-6
Digestion Completed at (time)	11:50
☐ filtered thru' 0.45 um syringe filter (lot #)	N/A

9/7/12
Prep Chemist / Date

Continued from page ____
Continued on page ____

9-7-12
Reviewed by / Date

Dilutions for 239403 METALS Water
Curtis & Tompkins Laboratories

Type	Sample ID	IDFs
SER	QC655113	5X
SER	QC655200	5X

ICP Raw Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 92362179

Instrument : MET09 Begun : 09/07/12 12:19
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met09_sn	ICALBLK				09/07/12 12:19	1.0		
002	met09_sn	ICAL	CRI5.1			09/07/12 12:23	1.0	1	
003	met09_sn	ICAL	CS100			09/07/12 12:28	1.0	2	
004	met09_sn	ICAL	CS1K			09/07/12 12:32	1.0	3	
005	met09_sn	ICAL	CS10K			09/07/12 12:36	1.0	4	
006	met09_sn	ICAL	CS100K			09/07/12 12:41	1.0	5	
007	met09_sn	ICV				09/07/12 12:46	1.0	6	
008	met09_sn	ICB				09/07/12 12:51	1.0		
009	met09_sn	ICSA				09/07/12 12:56	1.0	7	10:AL=540000
010	met09_sn	ICSAB				09/07/12 13:14	1.0	8	5:AL=510000
011	met09_sn	XCRI				09/07/12 13:19	1.0	9	
012	met09_sn	CRI				09/07/12 13:23	1.0	9	
013	met09_sn	BLANK	QC655108	Water	190250	09/07/12 13:33	1.0		
014	met09_sn	BS	QC655109	Water	190250	09/07/12 13:37	1.0		
015	met09_sn	BSD	QC655110	Water	190250	09/07/12 13:41	1.0		
016	met09_sn	MSS	239404-015	Water	190250	09/07/12 13:45	1.0		
017	met09_sn	MS	QC655111	Water	190250	09/07/12 13:50	1.0		
018	met09_sn	MSD	QC655112	Water	190250	09/07/12 13:54	1.0		
019	met09_sn	SER	QC655113	Water	190250	09/07/12 13:57	5.0		
020	met09_sn	PDS	QC655114	Water	190250	09/07/12 14:02	1.0	10 11	
021	met09_sn	SAMPLE	239403-007	Water	190250	09/07/12 14:06	1.0		
022	met09_sn	CCV				09/07/12 14:11	1.0	12	
023	met09_sn	CCB				09/07/12 14:16	1.0		
024	met09_sn	SAMPLE	239403-008	Water	190250	09/07/12 14:21	1.0		
025	met09_sn	SAMPLE	239369-001	Water	190250	09/07/12 14:26	1.0		
026	met09_sn	SAMPLE	239374-001	Water	190250	09/07/12 14:30	1.0		
027	met09_sn	SAMPLE	239377-001	Water	190250	09/07/12 14:35	1.0		
028	met09_sn	BLANK	QC654896	Water	190197	09/07/12 14:40	1.0		
029	met09_sn	BS	QC654897	Water	190197	09/07/12 14:45	1.0		
030	met09_sn	BSD	QC654898	Water	190197	09/07/12 14:49	1.0		
031	met09_sn	MSS	239354-001	Water	190197	09/07/12 14:53	1.0		2:NA=400000
032	met09_sn	MS	QC654899	Water	190197	09/07/12 15:00	1.0		1:NA=410000
033	met09_sn	MSD	QC654900	Water	190197	09/07/12 15:05	1.0		1:NA=440000
034	met09_sn	ICSAB				09/07/12 15:11	1.0	8	5:AL=540000
035	met09_sn	CCV				09/07/12 15:16	1.0	12	
036	met09_sn	CCB				09/07/12 15:21	1.0		
037	met09_sn	SER	QC654901	Water	190197	09/07/12 15:26	5.0		
038	met09_sn	PDS	QC654902	Water	190197	09/07/12 15:31	1.0	10 11	1:NA=440000
039	met09_sn	SAMPLE	239343-001	Water	190197	09/07/12 15:37	1.0		1:FE=110000
040	met09_sn	SAMPLE	239343-002	Water	190197	09/07/12 15:42	1.0		
041	met09_sn	SAMPLE	239343-003	Water	190197	09/07/12 15:47	1.0		
042	met09_sn	SAMPLE	239362-001	Water	190197	09/07/12 15:52	1.0		
043	met09_sn	SAMPLE	239354-002	Water	190197	09/07/12 15:56	1.0		3:NA=420000
044	met09_sn	SAMPLE	239354-003	Water	190197	09/07/12 16:03	1.0		2:CA=190000
045	met09_sn	SAMPLE	239354-004	Water	190197	09/07/12 16:10	1.0		1:CA=190000
046	met09_sn	SAMPLE	239354-005	Water	190197	09/07/12 16:15	1.0		2:NA=370000
047	met09_sn	CCV				09/07/12 16:22	1.0	12	
048	met09_sn	CCB				09/07/12 16:27	1.0		
049	met09_sn	SAMPLE	239354-008	Water	190197	09/07/12 16:32	1.0		3:CA=290000
050	met09_sn	SAMPLE	239354-009	Water	190197	09/07/12 16:39	1.0		3:CA=410000
051	met09_sn	SAMPLE	239354-010	Water	190197	09/07/12 16:46	1.0		2:NA=360000
052	met09_sn	SAMPLE	239222-003	Soil	190141	09/07/12 16:52	1.0		5:CA=1300000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 92362179

Instrument : MET09 Begun : 09/07/12 12:19
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met09_sn	SAMPLE	239222-003	Soil	190141	09/07/12 16:56	10.0		2:CA=250000
054	met09_sn	CCV				09/07/12 17:00	1.0	12	
055	met09_sn	CCB				09/07/12 17:05	1.0		
056	met09_sn	ICSAB				09/07/12 17:09	1.0	8	5:AL=510000

NT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

JDB 09/09/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 13 through 56.

Standards used: 1=S20200 2=S20215 3=S20214 4=S20216 5=S20217 6=S20644 7=S20220 8=S20222 9=S20319 10=S19831 11=S19832 12=S20645

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst : MET09 Lab ID : 239403-007 Client ID : FB.09042012
Seqnum : 92362179021 Matrix : Water Acct : ARCSF (JG)
File : met09_sn Batch : 190250 Time : 07-SEP-2012 14:06
Cal : 92362179001 Caldate : 07-SEP-2012
IDF : 1.0 Units : ug/L

50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Ch	Result	RL	Blank	Flags
Arsenic	A	ND	5.0		u
Cadmium	A	ND	5.0		!<a- u
Copper	A	ND	5.0		u
Lead	A	ND	**5.0**		!<a+ u **y**
Manganese	A	ND	5.0		u
Vanadium	A	ND	5.0		u
Zinc	A	ND	20		!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	6234829	6117394	-1.88

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

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Sequence No.: 20 **Autosampler Location: 19**
Sample ID: 239403-007,190250,1 **Date Collected: 9/7/2012 2:06:35 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239403-007,190250,1

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: 239403-007,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6117393.8	98.1165	%	0.43092				0.44%
Y	737377.5	103.223	%	0.5983				0.58%
Ag 328.068†	-246.5	-0.530801	ug/L	0.3485439	-0.530801	ug/L	0.3485439	65.66%
Al 308.215 R†	-1.7	-2.50947	ug/L	5.846184	-2.50947	ug/L	5.846184	232.96%
As 188.979†	-17.2	-1.75842	ug/L	0.855931	-1.75842	ug/L	0.855931	48.68%
B 249.677†	-2395.2	-10.9471	ug/L	0.28954	-10.9471	ug/L	0.28954	2.64%
Ba 233.527†	24.1	0.225091	ug/L	0.1510088	0.225091	ug/L	0.1510088	67.09%
Be 313.107†	-1153.2	-0.191028	ug/L	0.0189935	-0.191028	ug/L	0.0189935	9.94%
Ca 315.887 R†	-160.5	-15.4933	ug/L	3.57845	-15.4933	ug/L	3.57845	23.10%
Cd 214.440†	-248.1	-1.26115	ug/L	0.011438	-1.26115	ug/L	0.011438	0.91%
Co 228.616†	-36.2	-0.473033	ug/L	0.0562595	-0.473033	ug/L	0.0562595	11.89%
Cr 267.716†	-71.3	-0.296368	ug/L	0.2834679	-0.296368	ug/L	0.2834679	95.65%
Cu 324.752†	-24.1	-0.0988333	ug/L	0.21905604	-0.0988333	ug/L	0.21905604	221.64%
Fe 238.204 R†	-25.1	-5.31249	ug/L	0.815908	-5.31249	ug/L	0.815908	15.36%
K 766.490 R†	345.6	96.5296	ug/L	57.90271	96.5296	ug/L	57.90271	59.98%
Mg 279.077 R†	-1.2	-0.711826	ug/L	4.7653550	-0.711826	ug/L	4.7653550	669.46%
Mn 257.610†	-725.8	-0.922750	ug/L	0.0072860	-0.922750	ug/L	0.0072860	0.79%
Mo 202.031†	-89.7	-2.27391	ug/L	0.246481	-2.27391	ug/L	0.246481	10.84%
Na 589.592 R†	8614.4	63.8524	ug/L	3.08840	63.8524	ug/L	3.08840	4.84%
Ni 231.604†	-100.2	-0.773571	ug/L	0.1874804	-0.773571	ug/L	0.1874804	24.24%
Pb 220.353†	-62.9	-1.01837	ug/L	0.853988	-1.01837	ug/L	0.853988	83.86%
Sb 206.836†	10.3	0.600651	ug/L	2.0328530	0.600651	ug/L	2.0328530	338.44%
Se 196.026†	-28.4	-2.13688	ug/L	0.970266	-2.13688	ug/L	0.970266	45.41%
Ti 334.940 R†	-42.7	-0.659646	ug/L	0.1676844	-0.659646	ug/L	0.1676844	25.42%
Tl 190.801†	-30.3	-3.23671	ug/L	0.524177	-3.23671	ug/L	0.524177	16.19%
V 292.402†	-171.9	-0.624998	ug/L	0.1889667	-0.624998	ug/L	0.1889667	30.23%
Zn 206.200†	23.5	0.281285	ug/L	0.0440758	0.281285	ug/L	0.0440758	15.67%
Sn 189.927†	-21.9	-1.01805	ug/L	0.110927	-1.01805	ug/L	0.110927	10.90%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst : MET09 Lab ID : 239403-008 Client ID : EB.09042012
Seqnum : 92362179024 Matrix : Water Acct : ARCSF (JG)
File : met09_sn Batch : 190250 Time : 07-SEP-2012 14:21
Cal : 92362179001 Caldate : 07-SEP-2012
IDF : 1.0 Units : ug/L

50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Ch	Result	RL	Blank	Flags
Arsenic	A	ND	5.0		u
Cadmium	A	ND	5.0		!<a- u
Copper	A	ND	5.0		u
Lead	A	ND	**5.0**		!<a+ u **y**
Manganese	A	ND	5.0		u
Vanadium	A	ND	5.0		u
Zinc	A	ND	20		!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	6234829	6159168	-1.21

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

Sequence No.: 23 **Autosampler Location: 20**
Sample ID: 239403-008,190250,1 **Date Collected: 9/7/2012 2:21:15 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239403-008,190250,1

Analyte	Back Pressure	Flow
All	175.0 kPa	0.55 L/min

Mean Data: 239403-008,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6159168.3	98.7865	%	1.03344				1.05%
Y	725142.7	101.510	%	1.0962				1.08%
Ag 328.068†	-286.8	-0.617641	ug/L	0.1997135	-0.617641	ug/L	0.1997135	32.33%
Al 308.215 R†	-0.9	-1.36425	ug/L	3.967069	-1.36425	ug/L	3.967069	290.79%
As 188.979†	-12.6	-1.29232	ug/L	0.513430	-1.29232	ug/L	0.513430	39.73%
B 249.677†	-1611.1	-7.36327	ug/L	0.326638	-7.36327	ug/L	0.326638	4.44%
Ba 233.527†	-26.7	-0.249869	ug/L	0.0599779	-0.249869	ug/L	0.0599779	24.00%
Be 313.107†	-1817.4	-0.301049	ug/L	0.0740105	-0.301049	ug/L	0.0740105	24.58%
Ca 315.887 R†	-196.6	-18.9843	ug/L	1.18868	-18.9843	ug/L	1.18868	6.26%
Cd 214.440†	-163.8	-0.832470	ug/L	0.0655942	-0.832470	ug/L	0.0655942	7.88%
Co 228.616†	-37.2	-0.486889	ug/L	0.1906059	-0.486889	ug/L	0.1906059	39.15%
Cr 267.716†	5.9	0.0244668	ug/L	0.19027542	0.0244668	ug/L	0.19027542	777.69%
Cu 324.752†	-109.4	-0.449389	ug/L	0.2723831	-0.449389	ug/L	0.2723831	60.61%
Fe 238.204 R†	189.1	39.9513	ug/L	0.66646	39.9513	ug/L	0.66646	1.67%
K 766.490 R†	-53.2	-14.8443	ug/L	23.35219	-14.8443	ug/L	23.35219	157.31%
Mg 279.077 R†	14.7	8.39060	ug/L	1.791617	8.39060	ug/L	1.791617	21.35%
Mn 257.610†	221.5	0.281612	ug/L	0.0281793	0.281612	ug/L	0.0281793	10.01%
Mo 202.031†	-89.5	-2.26815	ug/L	0.010098	-2.26815	ug/L	0.010098	0.45%
Na 589.592 R†	3166.2	23.4691	ug/L	4.38021	23.4691	ug/L	4.38021	18.66%
Ni 231.604†	-98.3	-0.759025	ug/L	0.0901102	-0.759025	ug/L	0.0901102	11.87%
Pb 220.353†	-3.3	-0.0530133	ug/L	0.50253862	-0.0530133	ug/L	0.50253862	947.95%
Sb 206.836†	-55.5	-3.24696	ug/L	1.584682	-3.24696	ug/L	1.584682	48.81%
Se 196.026†	-36.0	-2.71094	ug/L	1.597767	-2.71094	ug/L	1.597767	58.94%
Ti 334.940 R†	-34.2	-0.528234	ug/L	0.5414448	-0.528234	ug/L	0.5414448	102.50%
Tl 190.801†	-25.7	-2.74801	ug/L	0.514303	-2.74801	ug/L	0.514303	18.72%
V 292.402†	-54.1	-0.196785	ug/L	0.6469277	-0.196785	ug/L	0.6469277	328.75%
Zn 206.200†	75.0	0.898842	ug/L	0.0207598	0.898842	ug/L	0.0207598	2.31%
Sn 189.927†	-21.6	-1.00458	ug/L	0.379608	-1.00458	ug/L	0.379608	37.79%

CURTIS & TOMPKINS BLANK USER REPORT FOR 239403 METALS Water
EPA 6010C

Inst : MET09 Lab ID : QC655108
Seqnum : 92362179013.1 Matrix : Water
File : met09_sn Batch : 190250 Time : 07-SEP-2012 13:33
Cal : 92362179001 Caldate : 07-SEP-2012
IDF : 1.0 Units : ug/L

50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Ch	Result	RL	Flags
Arsenic	A	ND	5.0	u
Cadmium	A	ND	5.0	!<a- u
Copper	A	ND	5.0	u
Lead	A	ND	**5.0**	!<a+ u **y**
Manganese	A	ND	5.0	u
Vanadium	A	ND	5.0	u
Zinc	A	ND	20	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	BLANK Abund	%Drift
Yttrium	A	6234829	6064234	-2.74

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

User canceled analysis.

==========

Sequence No.: 12 **Autosampler Location: 11**
Sample ID: qc655108,190250,1 **Date Collected: 9/7/2012 1:33:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655108,190250,1

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: qc655108,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6064233.7	97.2638	%	1.17786				1.21%
Y	705405.7	98.7473	%	3.56779				3.61%
Ag 328.068†	-167.0	-0.359715	ug/L	0.2582207	-0.359715	ug/L	0.2582207	71.78%
Al 308.215 R†	1.1	1.71160	ug/L	6.490698	1.71160	ug/L	6.490698	379.22%
As 188.979†	-28.6	-2.92098	ug/L	0.778329	-2.92098	ug/L	0.778329	26.65%
B 249.677†	-2428.1	-11.0972	ug/L	0.15881	-11.0972	ug/L	0.15881	1.43%
Ba 233.527†	-78.0	-0.729118	ug/L	0.0453579	-0.729118	ug/L	0.0453579	6.22%
Be 313.107†	-1256.7	-0.208165	ug/L	0.0431136	-0.208165	ug/L	0.0431136	20.71%
Ca 315.887 R†	-417.0	-40.2639	ug/L	6.91154	-40.2639	ug/L	6.91154	17.17%
Cd 214.440†	-228.5	-1.16129	ug/L	0.041233	-1.16129	ug/L	0.041233	3.55%
Co 228.616†	-56.5	-0.738402	ug/L	0.0921727	-0.738402	ug/L	0.0921727	12.48%
Cr 267.716†	-110.5	-0.459462	ug/L	0.2981639	-0.459462	ug/L	0.2981639	64.89%
Cu 324.752†	-51.6	-0.212007	ug/L	0.6546367	-0.212007	ug/L	0.6546367	308.78%
Fe 238.204 R†	-24.3	-5.13784	ug/L	1.626454	-5.13784	ug/L	1.626454	31.66%
K 766.490 R†	-143.2	-39.9835	ug/L	15.58585	-39.9835	ug/L	15.58585	38.98%
Mg 279.077 R†	-5.2	-2.97951	ug/L	5.544672	-2.97951	ug/L	5.544672	186.09%
Mn 257.610†	-621.6	-0.790323	ug/L	0.0187533	-0.790323	ug/L	0.0187533	2.37%
Mo 202.031†	-135.4	-3.43263	ug/L	0.214527	-3.43263	ug/L	0.214527	6.25%
Na 589.592 R†	-3372.6	-24.9986	ug/L	1.34491	-24.9986	ug/L	1.34491	5.38%
Ni 231.604†	-106.9	-0.825160	ug/L	0.2398308	-0.825160	ug/L	0.2398308	29.06%
Pb 220.353†	-5.9	-0.0960961	ug/L	0.25216449	-0.0960961	ug/L	0.25216449	262.41%
Sb 206.836†	-20.1	-1.17700	ug/L	1.408233	-1.17700	ug/L	1.408233	119.65%
Se 196.026†	-52.9	-3.98541	ug/L	0.859184	-3.98541	ug/L	0.859184	21.56%
Ti 334.940 R†	-56.1	-0.866662	ug/L	0.1177078	-0.866662	ug/L	0.1177078	13.58%
Tl 190.801†	-36.7	-3.92135	ug/L	1.385846	-3.92135	ug/L	1.385846	35.34%
V 292.402†	-259.1	-0.941710	ug/L	0.3686155	-0.941710	ug/L	0.3686155	39.14%
Zn 206.200†	-26.0	-0.311647	ug/L	0.1158115	-0.311647	ug/L	0.1158115	37.16%
Sn 189.927†	-28.5	-1.32792	ug/L	0.174381	-1.32792	ug/L	0.174381	13.13%

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 METALS Water
EPA 6010C

Type : BS
Inst : MET09
Seqnum : 92362179014.1
File : met09_sn
IDF : 1.0
Lab ID : QC655109
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 13:37
Cal : 92362179001
Units : ug/L

Type : BSD
Inst : MET09
Seqnum : 92362179015.1
File : met09_sn
IDF : 1.0
Lab ID : QC655110
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 13:41
Cal : 92362179001

BS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
BSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Spiked	BS	Ch	%Rec	BSD	Ch	%Rec	Limits	RPD	Lim	Flags
Arsenic	100.0	89.90	A	90	93.04	A	93	79-127	3	21	u
Cadmium	50.00	46.89	A	94	47.71	A	95	80-120	2	20	!<a- u
Copper	250.0	237.9	A	95	241.0	A	96	77-120	1	20	u
Lead	100.0	93.16	A	93	93.74	A	94	78-120	1	20	!<a+ u **y**
Manganese	50.00	48.67	A	97	49.13	A	98	80-120	1	20	u
Vanadium	500.0	470.9	A	94	477.4	A	95	80-120	1	20	u
Zinc	500.0	470.7	A	94	479.5	A	96	80-120	2	20	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	BS Abund	%Drift
Yttrium	A	6234829	5895079	-5.45

ISTD (ICAL 002)	Ch	ICAL Abund	BSD Abund	%Drift
Yttrium	A	6234829	5906185	-5.27

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

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Sequence No.: 13 **Autosampler Location: 12**
Sample ID: qc655109,190250,1 **Date Collected: 9/7/2012 1:37:51 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655109,190250,1

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: qc655109,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5895078.8	94.5508	%	0.52376				0.55%
Y	680175.9	95.2155	%	1.11120				1.17%
Ag 328.068†	21766.7	46.8791	ug/L	0.22566	46.8791	ug/L	0.22566	0.48%
Al 308.215 R†	1221.9	1836.56	ug/L	87.190	1836.56	ug/L	87.190	4.75%
As 188.979†	879.2	89.9027	ug/L	0.17363	89.9027	ug/L	0.17363	0.19%
B 249.677†	204766.0	935.862	ug/L	8.4975	935.862	ug/L	8.4975	0.91%
Ba 233.527†	201029.6	1878.20	ug/L	11.894	1878.20	ug/L	11.894	0.63%
Be 313.107†	302544.1	50.1153	ug/L	0.30146	50.1153	ug/L	0.30146	0.60%
Ca 315.887 R†	197257.4	19045.7	ug/L	53.73	19045.7	ug/L	53.73	0.28%
Cd 214.440†	9225.4	46.8925	ug/L	0.39431	46.8925	ug/L	0.39431	0.84%
Co 228.616†	35096.5	458.097	ug/L	3.0778	458.097	ug/L	3.0778	0.67%
Cr 267.716†	44761.6	186.152	ug/L	0.7012	186.152	ug/L	0.7012	0.38%
Cu 324.752†	57895.3	237.876	ug/L	1.0345	237.876	ug/L	1.0345	0.43%
Fe 238.204 R†	4447.6	939.824	ug/L	24.5299	939.824	ug/L	24.5299	2.61%
K 766.490 R†	32014.7	8940.87	ug/L	87.266	8940.87	ug/L	87.266	0.98%
Mg 279.077 R†	32224.7	18406.2	ug/L	672.61	18406.2	ug/L	672.61	3.65%
Mn 257.610†	38279.5	48.6678	ug/L	0.34901	48.6678	ug/L	0.34901	0.72%
Mo 202.031†	14375.9	364.408	ug/L	4.6955	364.408	ug/L	4.6955	1.29%
Na 589.592 R†	2495263.7	18495.6	ug/L	48.01	18495.6	ug/L	48.01	0.26%
Ni 231.604†	59818.8	461.700	ug/L	4.0183	461.700	ug/L	4.0183	0.87%
Pb 220.353†	5754.0	93.1611	ug/L	0.95143	93.1611	ug/L	0.95143	1.02%
Sb 206.836†	7841.7	459.034	ug/L	3.4266	459.034	ug/L	3.4266	0.75%
Se 196.026†	1216.4	91.6390	ug/L	1.03870	91.6390	ug/L	1.03870	1.13%
Ti 334.940 R†	57227.9	884.207	ug/L	24.9737	884.207	ug/L	24.9737	2.82%
Tl 190.801†	845.5	90.2741	ug/L	1.22797	90.2741	ug/L	1.22797	1.36%
V 292.402†	129531.8	470.865	ug/L	1.9934	470.865	ug/L	1.9934	0.42%
Zn 206.200†	39266.9	470.705	ug/L	2.8703	470.705	ug/L	2.8703	0.61%
Sn 189.927†	19537.0	909.535	ug/L	7.6698	909.535	ug/L	7.6698	0.84%

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Sequence No.: 14 **Autosampler Location: 13**
Sample ID: qc655110,190250,1 **Date Collected: 9/7/2012 1:41:39 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655110,190250,1

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: qc655110,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5906184.9	94.7289	%	0.61099				0.64%
Y	680118.3	95.2074	%	1.02202				1.07%
Ag 328.068†	22010.0	47.4031	ug/L	0.55811	47.4031	ug/L	0.55811	1.18%
Al 308.215 R†	1280.0	1923.83	ug/L	29.137	1923.83	ug/L	29.137	1.51%
As 188.979†	909.8	93.0400	ug/L	0.36382	93.0400	ug/L	0.36382	0.39%
B 249.677†	207760.4	949.548	ug/L	2.6695	949.548	ug/L	2.6695	0.28%
Ba 233.527†	203392.9	1900.28	ug/L	11.068	1900.28	ug/L	11.068	0.58%
Be 313.107†	305539.1	50.6114	ug/L	0.16382	50.6114	ug/L	0.16382	0.32%
Ca 315.887 R†	202190.8	19522.0	ug/L	46.76	19522.0	ug/L	46.76	0.24%
Cd 214.440†	9386.1	47.7093	ug/L	0.33447	47.7093	ug/L	0.33447	0.70%
Co 228.616†	35643.0	465.216	ug/L	4.0174	465.216	ug/L	4.0174	0.86%
Cr 267.716†	45417.6	188.881	ug/L	0.7766	188.881	ug/L	0.7766	0.41%
Cu 324.752†	58652.5	240.987	ug/L	1.8106	240.987	ug/L	1.8106	0.75%
Fe 238.204 R†	4624.8	977.270	ug/L	10.9241	977.270	ug/L	10.9241	1.12%
K 766.490 R†	32529.6	9084.68	ug/L	78.511	9084.68	ug/L	78.511	0.86%
Mg 279.077 R†	33218.4	18973.8	ug/L	149.34	18973.8	ug/L	149.34	0.79%
Mn 257.610†	38646.0	49.1337	ug/L	0.42207	49.1337	ug/L	0.42207	0.86%
Mo 202.031†	14615.9	370.492	ug/L	2.7276	370.492	ug/L	2.7276	0.74%
Na 589.592 R†	2619511.1	19416.5	ug/L	14.80	19416.5	ug/L	14.80	0.08%
Ni 231.604†	60622.8	467.905	ug/L	1.6527	467.905	ug/L	1.6527	0.35%
Pb 220.353†	5790.0	93.7435	ug/L	1.84636	93.7435	ug/L	1.84636	1.97%
Sb 206.836†	7952.3	465.508	ug/L	4.3801	465.508	ug/L	4.3801	0.94%
Se 196.026†	1212.8	91.3635	ug/L	1.96391	91.3635	ug/L	1.96391	2.15%
Ti 334.940 R†	58550.5	904.642	ug/L	6.6739	904.642	ug/L	6.6739	0.74%
Tl 190.801†	858.4	91.6471	ug/L	0.86877	91.6471	ug/L	0.86877	0.95%
V 292.402†	131331.0	477.406	ug/L	1.5387	477.406	ug/L	1.5387	0.32%
Zn 206.200†	40004.0	479.542	ug/L	2.5226	479.542	ug/L	2.5226	0.53%
Sn 189.927†	19767.3	920.253	ug/L	4.8165	920.253	ug/L	4.8165	0.52%

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 METALS Water
EPA 6010C

Type : MSS	Type : MS	Type : MSD
Inst : MET09	Inst : MET09	Inst : MET09
Seqnum : 92362179016	Seqnum : 92362179017.1	Seqnum : 92362179018.1
File : met09_sn	File : met09_sn	File : met09_sn
IDF : 1.0	IDF : 1.0	IDF : 1.0
Lab ID : 239404-015	Lab ID : QC655111	Lab ID : QC655112
Matrix : Water	Matrix : Water	Matrix : Water
Batch : 190250	Batch : 190250	Batch : 190250
Time : 07-SEP-2012 13:45	Time : 07-SEP-2012 13:50	Time : 07-SEP-2012 13:54
Cal : 92362179001	Cal : 92362179001	Cal : 92362179001
Units : ug/L		

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS	Ch	Spiked	MS	Ch	%Rec	MSD	Ch	%Rec	Limits	RPD	Lim	Flags
Arsenic	ND	A	100.0	94.19	A	94	92.73	A	93	68-135	2	32	u
Cadmium	ND	A	50.00	48.18	A	96	48.21	A	96	76-120	0	20	!<a- u
Copper	ND	A	250.0	244.4	A	98	246.8	A	99	71-120	1	27	u
Lead	ND	A	100.0	94.03	A	94	95.22	A	95	65-120	1	29	!<a+ u **y**
Manganese	ND	A	50.00	50.26	A	101	50.34	A	101	66-130	0	22	u
Vanadium	ND	A	500.0	483.3	A	97	485.6	A	97	78-120	0	20	u
Zinc	ND	A	500.0	483.1	A	97	484.6	A	97	75-124	0	27	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	MS Abund	%Drift
Yttrium	A	6234829	5888577	-5.55

ISTD (ICAL 002)	Ch	ICAL Abund	MSD Abund	%Drift
Yttrium	A	6234829	5856122	-6.07

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

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Sequence No.: 16 **Autosampler Location: 15**
Sample ID: qc655111,190250,1 **Date Collected: 9/7/2012 1:50:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655111,190250,1

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: qc655111,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5888576.9	94.4465	%	1.04664				1.11%
Y	693843.6	97.1288	%	1.48871				1.53%
Ag 328.068†	22555.4	48.5777	ug/L	0.55761	48.5777	ug/L	0.55761	1.15%
Al 308.215 R†	1302.2	1957.28	ug/L	6.907	1957.28	ug/L	6.907	0.35%
As 188.979†	921.1	94.1877	ug/L	1.28917	94.1877	ug/L	1.28917	1.37%
B 249.677†	209743.8	958.613	ug/L	16.0848	958.613	ug/L	16.0848	1.68%
Ba 233.527†	205246.2	1917.59	ug/L	27.195	1917.59	ug/L	27.195	1.42%
Be 313.107†	309639.0	51.2905	ug/L	0.62922	51.2905	ug/L	0.62922	1.23%
Ca 315.887 R†	208443.3	20125.7	ug/L	25.64	20125.7	ug/L	25.64	0.13%
Cd 214.440†	9478.8	48.1806	ug/L	0.47384	48.1806	ug/L	0.47384	0.98%
Co 228.616†	36146.4	471.743	ug/L	7.1088	471.743	ug/L	7.1088	1.51%
Cr 267.716†	45931.5	191.018	ug/L	1.9263	191.018	ug/L	1.9263	1.01%
Cu 324.752†	59488.5	244.422	ug/L	3.3980	244.422	ug/L	3.3980	1.39%
Fe 238.204 R†	4877.2	1030.60	ug/L	7.013	1030.60	ug/L	7.013	0.68%
K 766.490 R†	32705.8	9133.90	ug/L	37.438	9133.90	ug/L	37.438	0.41%
Mg 279.077 R†	33378.8	19065.4	ug/L	88.22	19065.4	ug/L	88.22	0.46%
Mn 257.610†	39530.5	50.2583	ug/L	0.81674	50.2583	ug/L	0.81674	1.63%
Mo 202.031†	14713.4	372.965	ug/L	4.5803	372.965	ug/L	4.5803	1.23%
Na 589.592 R†	2804213.6	20785.6	ug/L	39.38	20785.6	ug/L	39.38	0.19%
Ni 231.604†	61427.6	474.117	ug/L	6.1808	474.117	ug/L	6.1808	1.30%
Pb 220.353†	5807.9	94.0328	ug/L	1.11402	94.0328	ug/L	1.11402	1.18%
Sb 206.836†	8024.8	469.748	ug/L	8.3123	469.748	ug/L	8.3123	1.77%
Se 196.026†	1249.2	94.1079	ug/L	3.16238	94.1079	ug/L	3.16238	3.36%
Ti 334.940 R†	60641.6	936.951	ug/L	16.4604	936.951	ug/L	16.4604	1.76%
Tl 190.801†	872.4	93.1428	ug/L	1.32558	93.1428	ug/L	1.32558	1.42%
V 292.402†	132938.8	483.250	ug/L	5.3619	483.250	ug/L	5.3619	1.11%
Zn 206.200†	40297.4	483.058	ug/L	5.7797	483.058	ug/L	5.7797	1.20%
Sn 189.927†	19893.6	926.135	ug/L	10.5775	926.135	ug/L	10.5775	1.14%

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Sequence No.: 17 **Autosampler Location: 16**
Sample ID: qc655112,190250,1 **Date Collected: 9/7/2012 1:54:04 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655112,190250,1

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: qc655112,190250,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5856121.6	93.9259	%	0.70325				0.75%
Y	717008.1	100.371	%	1.8020				1.80%
Ag 328.068†	22321.1	48.0730	ug/L	0.08550	48.0730	ug/L	0.08550	0.18%
Al 308.215 R†	1422.8	2138.53	ug/L	38.823	2138.53	ug/L	38.823	1.82%
As 188.979†	906.8	92.7270	ug/L	1.54568	92.7270	ug/L	1.54568	1.67%
B 249.677†	211925.3	968.583	ug/L	8.4024	968.583	ug/L	8.4024	0.87%
Ba 233.527†	206270.7	1927.16	ug/L	11.876	1927.16	ug/L	11.876	0.62%
Be 313.107†	311658.6	51.6251	ug/L	0.39416	51.6251	ug/L	0.39416	0.76%
Ca 315.887 R†	217725.5	21022.0	ug/L	80.55	21022.0	ug/L	80.55	0.38%
Cd 214.440†	9484.8	48.2112	ug/L	0.39211	48.2112	ug/L	0.39211	0.81%
Co 228.616†	36256.5	473.056	ug/L	2.8822	473.056	ug/L	2.8822	0.61%
Cr 267.716†	46122.8	191.813	ug/L	1.1226	191.813	ug/L	1.1226	0.59%
Cu 324.752†	60069.7	246.810	ug/L	1.3025	246.810	ug/L	1.3025	0.53%
Fe 238.204 R†	5234.8	1106.17	ug/L	7.239	1106.17	ug/L	7.239	0.65%
K 766.490 R†	31709.0	8855.52	ug/L	168.198	8855.52	ug/L	168.198	1.90%
Mg 279.077 R†	34020.7	19432.1	ug/L	234.85	19432.1	ug/L	234.85	1.21%
Mn 257.610†	39594.6	50.3397	ug/L	0.48912	50.3397	ug/L	0.48912	0.97%
Mo 202.031†	14788.0	374.856	ug/L	4.3278	374.856	ug/L	4.3278	1.15%
Na 589.592 R†	3345668.7	24799.0	ug/L	96.46	24799.0	ug/L	96.46	0.39%
Ni 231.604†	61771.9	476.775	ug/L	2.8437	476.775	ug/L	2.8437	0.60%
Pb 220.353†	5881.1	95.2190	ug/L	1.06804	95.2190	ug/L	1.06804	1.12%
Sb 206.836†	8029.6	470.029	ug/L	6.2295	470.029	ug/L	6.2295	1.33%
Se 196.026†	1242.2	93.5758	ug/L	0.98953	93.5758	ug/L	0.98953	1.06%
Ti 334.940 R†	64471.8	996.131	ug/L	11.5712	996.131	ug/L	11.5712	1.16%
Tl 190.801†	880.0	93.9562	ug/L	0.47775	93.9562	ug/L	0.47775	0.51%
V 292.402†	133573.1	485.556	ug/L	3.1240	485.556	ug/L	3.1240	0.64%
Zn 206.200†	40430.0	484.648	ug/L	2.5238	484.648	ug/L	2.5238	0.52%
Sn 189.927†	19917.3	927.236	ug/L	8.9371	927.236	ug/L	8.9371	0.96%

CURTIS & TOMPKINS SERIAL DILUTION FOR 239403 METALS Water
EPA 6010C

Type : MSS
Inst : MET09
Seqnum : 92362179016
File : met09_sn
IDF : 1.0
Lab ID : 239404-015
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 13:45
Cal : 92362179001
Units : ug/L

Type : SER
Inst : MET09
Seqnum : 92362179019.1
File : met09_sn
IDF : 5.0
Lab ID : QC655113
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 13:57
Cal : 92362179001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
SER: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS	Ch	RL	SER	Ch	RL	%D	Lim	Flags
Arsenic	ND	A	5.000	ND	A	25.00		10	u
Cadmium	ND	A	5.000	ND	A	25.00		10	!<a- u
Copper	ND	A	5.000	ND	A	25.00		10	u
Lead	ND	A	5.000	ND	A	**25.00**		10	!<a+ u **y**
Manganese	ND	A	5.000	ND	A	25.00		10	u
Vanadium	ND	A	5.000	ND	A	25.00		10	u
Zinc	ND	A	20.00	ND	A	100.0		10	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	SER Abund	%Drift
Yttrium	A	6234829	5970008	-4.25

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

Sequence No.: 18 **Autosampler Location: 17**
Sample ID: qc655113,190250,5 **Date Collected: 9/7/2012 1:57:54 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655113,190250,5

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: qc655113,190250,5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5970007.6	95.7525	%	0.67884				0.71%
Y	697278.7	97.6096	%	2.27560				2.33%
Ag 328.068†	-154.5	-0.332827	ug/L	0.5287740	-0.332827	ug/L	0.5287740	158.87%
Al 308.215 R†	-1.9	-2.82978	ug/L	5.557585	-2.82978	ug/L	5.557585	196.40%
As 188.979†	-22.0	-2.25070	ug/L	1.091389	-2.25070	ug/L	1.091389	48.49%
B 249.677†	-1933.4	-8.83629	ug/L	0.676950	-8.83629	ug/L	0.676950	7.66%
Ba 233.527†	24.7	0.230917	ug/L	0.0313942	0.230917	ug/L	0.0313942	13.60%
Be 313.107†	-881.1	-0.145957	ug/L	0.0240923	-0.145957	ug/L	0.0240923	16.51%
Ca 315.887 R†	-350.2	-33.8163	ug/L	6.66573	-33.8163	ug/L	6.66573	19.71%
Cd 214.440†	-253.7	-1.28947	ug/L	0.010426	-1.28947	ug/L	0.010426	0.81%
Co 228.616†	-43.1	-0.562670	ug/L	0.0985237	-0.562670	ug/L	0.0985237	17.51%
Cr 267.716†	-161.2	-0.670450	ug/L	0.3373516	-0.670450	ug/L	0.3373516	50.32%
Cu 324.752†	99.0	0.406656	ug/L	0.1618912	0.406656	ug/L	0.1618912	39.81%
Fe 238.204 R†	-34.7	-7.33688	ug/L	1.141311	-7.33688	ug/L	1.141311	15.56%
K 766.490 R†	158.7	44.3197	ug/L	96.07581	44.3197	ug/L	96.07581	216.78%
Mg 279.077 R†	-26.3	-15.0000	ug/L	5.19927	-15.0000	ug/L	5.19927	34.66%
Mn 257.610†	-727.3	-0.924660	ug/L	0.0213239	-0.924660	ug/L	0.0213239	2.31%
Mo 202.031†	-93.9	-2.38138	ug/L	0.056642	-2.38138	ug/L	0.056642	2.38%
Na 589.592 R†	1449.1	10.7409	ug/L	6.90854	10.7409	ug/L	6.90854	64.32%
Ni 231.604†	-46.4	-0.358260	ug/L	0.1104673	-0.358260	ug/L	0.1104673	30.83%
Pb 220.353†	-58.3	-0.944145	ug/L	1.1283844	-0.944145	ug/L	1.1283844	119.51%
Sb 206.836†	-32.8	-1.91796	ug/L	3.415150	-1.91796	ug/L	3.415150	178.06%
Se 196.026†	-37.8	-2.84808	ug/L	1.543351	-2.84808	ug/L	1.543351	54.19%
Ti 334.940 R†	-50.1	-0.774653	ug/L	0.1958470	-0.774653	ug/L	0.1958470	25.28%
Tl 190.801†	-33.0	-3.52469	ug/L	0.883836	-3.52469	ug/L	0.883836	25.08%
V 292.402†	-242.3	-0.880855	ug/L	0.5267343	-0.880855	ug/L	0.5267343	59.80%
Zn 206.200†	-75.0	-0.899160	ug/L	0.0381008	-0.899160	ug/L	0.0381008	4.24%
Sn 189.927†	-25.9	-1.20653	ug/L	0.212170	-1.20653	ug/L	0.212170	17.59%

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR 239403 METALS Water
EPA 6010C

Type : MSS
Inst : MET09
Seqnum : 92362179016
File : met09_sn
IDF : 1.0
Lab ID : 239404-015
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 13:45
Cal : 92362179001
Units : ug/L

Type : PDS
Inst : MET09
Seqnum : 92362179020.1
File : met09_sn
IDF : 1.0
Lab ID : QC655114
Matrix : Water
Batch : 190250
Time : 07-SEP-2012 14:02
Cal : 92362179001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S19831 (100X), S19832 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Arsenic	ND	A	100.0	105.4	A	105	75-125	u
Cadmium	ND	A	50.00	55.77	A	112	75-125	!<a- u
Copper	ND	A	250.0	285.8	A	114	75-125	u
Lead	ND	A	100.0	108.8	A	109	75-125	!<a+ u **y**
Manganese	ND	A	50.00	58.91	A	118	75-125	u
Vanadium	ND	A	500.0	560.6	A	112	75-125	u
Zinc	ND	A	500.0	568.3	A	114	75-125	!<a+ u

ISTD (ICAL 002)	Ch	ICAL Abund	PDS Abund	%Drift
Yttrium	A	6234829	5850109	-6.17

!=warning +=high bias -=low bias <=opening a=ICSA u=use y=RL raised

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Sequence No.: 19 **Autosampler Location: 18**
Sample ID: qc655114,190250,1,s19831 **Date Collected: 9/7/2012 2:02:44 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655114,190250,1,s19831

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: qc655114,190250,1,s19831

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5850108.9	93.8295	%	1.06724				1.14%
Y	712059.9	99.6788	%	1.56532				1.57%
Ag 328.068†	15127.7	32.5805	ug/L	0.32526	32.5805	ug/L	0.32526	1.00%
Al 308.215 R†	1541.7	2317.29	ug/L	53.113	2317.29	ug/L	53.113	2.29%
As 188.979†	1030.3	105.359	ug/L	2.5692	105.359	ug/L	2.5692	2.44%
B 249.677†	249641.1	1140.96	ug/L	21.785	1140.96	ug/L	21.785	1.91%
Ba 233.527†	237166.0	2215.81	ug/L	27.130	2215.81	ug/L	27.130	1.22%
Be 313.107†	363672.5	60.2410	ug/L	0.76348	60.2410	ug/L	0.76348	1.27%
Ca 315.887 R†	239952.3	23168.0	ug/L	207.37	23168.0	ug/L	207.37	0.90%
Cd 214.440†	10971.2	55.7663	ug/L	0.67849	55.7663	ug/L	0.67849	1.22%
Co 228.616†	42241.9	551.260	ug/L	7.2322	551.260	ug/L	7.2322	1.31%
Cr 267.716†	54022.1	224.665	ug/L	2.9868	224.665	ug/L	2.9868	1.33%
Cu 324.752†	69552.6	285.773	ug/L	4.3840	285.773	ug/L	4.3840	1.53%
Fe 238.204 R†	5693.7	1203.14	ug/L	22.718	1203.14	ug/L	22.718	1.89%
K 766.490 R†	37055.3	10348.6	ug/L	184.31	10348.6	ug/L	184.31	1.78%
Mg 279.077 R†	38311.4	21882.9	ug/L	320.06	21882.9	ug/L	320.06	1.46%
Mn 257.610†	46332.7	58.9064	ug/L	0.85621	58.9064	ug/L	0.85621	1.45%
Mo 202.031†	17141.4	434.509	ug/L	5.8483	434.509	ug/L	5.8483	1.35%
Na 589.592 R†	3555696.9	26355.8	ug/L	212.27	26355.8	ug/L	212.27	0.81%
Ni 231.604†	72321.6	558.200	ug/L	9.0516	558.200	ug/L	9.0516	1.62%
Pb 220.353†	6717.9	108.768	ug/L	1.7300	108.768	ug/L	1.7300	1.59%
Sb 206.836†	9194.9	538.245	ug/L	11.9132	538.245	ug/L	11.9132	2.21%
Se 196.026†	1419.1	106.908	ug/L	2.7810	106.908	ug/L	2.7810	2.60%
Ti 334.940 R†	71885.8	1110.68	ug/L	15.188	1110.68	ug/L	15.188	1.37%
Tl 190.801†	1033.9	110.392	ug/L	0.3816	110.392	ug/L	0.3816	0.35%
V 292.402†	154211.0	560.578	ug/L	7.4284	560.578	ug/L	7.4284	1.33%
Zn 206.200†	47408.7	568.304	ug/L	6.1750	568.304	ug/L	6.1750	1.09%
Sn 189.927†	23103.4	1075.56	ug/L	10.881	1075.56	ug/L	10.881	1.01%

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 METALS Water: EPA 6010C

Inst : MET09
Calnum : 92362179001
Units : ug/L

Reviewer : ---
Date : 07-SEP-2012 12:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met09_sn	92362179002	CRI5.1	07-SEP-2012 12:23	S20200
L2	met09_sn	92362179003	CS100	07-SEP-2012 12:28	S20215
L3	met09_sn	92362179004	CS1K	07-SEP-2012 12:32	S20214
L4	met09_sn	92362179005	CS10K	07-SEP-2012 12:36	S20216
L5	met09_sn	92362179006	CS100K	07-SEP-2012 12:41	S20217

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Arsenic	A	4.9400	9.4610	9.4330	9.7825		LOR0	0.00000	0.10226		8.4041	1.000	0.998	
Cadmium	A	170.80	201.40	202.35	196.68		LOR0	0.00000	0.00508		192.81	1.000	0.998	
Copper	A	220.10	247.95	242.87	243.39		LOR0	0.00000	0.00411		238.58	1.000	0.998	
Lead	A	63.200	63.510	61.747	61.764		LOR0	0.00000	0.01619		62.555	1.000	0.998	
Manganese	A	714.14	846.13	820.66	786.20		LOR0	0.00000	0.00127		791.78	1.000	0.998	
Vanadium	A	233.38	275.29	270.67	275.14		LOR0	0.00000	0.00364		263.62	1.000	0.998	
Zinc	A	80.525	84.027	82.543	83.430		LOR0	0.00000	0.01199		82.631	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Arsenic	A	5.0000	**-49**	100.00	-3	1000.0	-4	10000	0		
Cadmium	A	5.0000	-13	100.00	2	1000.0	3	10000	0		
Copper	A	5.0000	-10	100.00	2	1000.0	0	10000	0		
Lead	A	5.0000	2	100.00	3	1000.0	0	10000	0		
Manganese	A	5.0000	-9	100.00	8	1000.0	4	10000	0		
Vanadium	A	5.0000	-15	100.00	0	1000.0	-2	10000	0		
Zinc	A	20.000	-3	100.00	1	1000.0	-1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

92362179001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 METALS Water
EPA 6010C

Inst : MET09
Calnum : 92362179001 Cal Date : 07-SEP-2012

ICV 92362179007 (07-SEP-2012) stds: S20644

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Arsenic	A	5000	5100	ug/L	2	10	
Cadmium	A	5000	5192	ug/L	4	10	
Copper	A	5000	5052	ug/L	1	10	
Lead	A	5000	5006	ug/L	0	10	
Manganese	A	5000	5119	ug/L	2	10	
Vanadium	A	5000	5100	ug/L	2	10	
Zinc	A	5000	5071	ug/L	1	10	

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: ICALBLK, **Date Collected: 9/7/2012 12:19:02 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:09 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICALBLK,

Analyte	Back Pressure	Flow
All	175.0 kPa	0.55 L/min

Mean Data: ICALBLK,

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	12.6	55.73	443.65%	[0.00]	ug/L
Al 308.215 R	55.6	9.17	16.50%	[0.00]	ug/L
As 188.979	-0.9	3.92	439.07%	[0.00]	ug/L
B 249.677	5710.9	148.58	2.60%	[0.00]	ug/L
Ba 233.527	91.7	8.48	9.25%	[0.00]	ug/L
Be 313.107	-3616.5	258.54	7.15%	[0.00]	ug/L
Ca 315.887 R	1607.9	269.97	16.79%	[0.00]	ug/L
Cd 214.440	226.8	12.29	5.42%	[0.00]	ug/L
Co 228.616	68.3	9.86	14.43%	[0.00]	ug/L
Cr 267.716	-389.5	42.36	10.87%	[0.00]	ug/L
Cu 324.752	3960.8	123.87	3.13%	[0.00]	ug/L
Fe 238.204 R	7.3	16.30	222.75%	[0.00]	ug/L
K 766.490 R	321.2	382.25	119.00%	[0.00]	ug/L
Mg 279.077 R	-455.2	2.34	0.51%	[0.00]	ug/L
Mn 257.610	776.7	31.46	4.05%	[0.00]	ug/L
Mo 202.031	142.8	7.91	5.54%	[0.00]	ug/L
Na 589.592 R	2717.0	317.79	11.70%	[0.00]	ug/L
Ni 231.604	1049.5	11.10	1.06%	[0.00]	ug/L
Pb 220.353	-35.9	24.37	67.89%	[0.00]	ug/L
Sb 206.836	93.9	11.40	12.14%	[0.00]	ug/L
Se 196.026	125.8	11.42	9.09%	[0.00]	ug/L
Ti 334.940 R	188.2	13.59	7.22%	[0.00]	ug/L
Tl 190.801	26.7	4.55	17.05%	[0.00]	ug/L
V 292.402	-1253.3	95.40	7.61%	[0.00]	ug/L
Zn 206.200	267.6	7.27	2.72%	[0.00]	ug/L
Sn 189.927	34.0	4.28	12.60%	[0.00]	ug/L

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: ICAL,CRI5.1 **Date Collected: 9/7/2012 12:23:46 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:10 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CRI5.1

Analyte	Back Pressure	Flow
All	175.0 kPa	0.55 L/min

Mean Data: ICAL,CRI5.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6234829.2	33948.04	0.54%	100.000	%
Y	714354.4	12473.46	1.75%	100.000	%
Ag 328.068†	2122.1	68.25	3.22%	[5.0]	ug/L
Al 308.215 R†	65.9	2.24	3.39%	[100]	ug/L
As 188.979†	24.7	13.97	56.60%	[5.0]	ug/L
B 249.677†	21406.4	294.87	1.38%	[100]	ug/L
Ba 233.527†	489.5	0.43	0.09%	[5.0]	ug/L
Be 313.107†	11164.5	235.08	2.11%	[2.0]	ug/L
Ca 315.887 R†	2129.3	89.86	4.22%	[200]	ug/L
Cd 214.440†	854.0	5.99	0.70%	[5.0]	ug/L
Co 228.616†	327.0	5.97	1.83%	[5.0]	ug/L
Cr 267.716†	1141.1	104.01	9.11%	[5.0]	ug/L
Cu 324.752†	1100.5	167.34	15.21%	[5.0]	ug/L
Fe 238.204 R†	480.3	4.47	0.93%	[100]	ug/L
K 766.490 R†	1795.3	134.14	7.47%	[500]	ug/L
Mg 279.077 R†	332.5	5.89	1.77%	[200]	ug/L
Mn 257.610†	3570.7	132.38	3.71%	[5.0]	ug/L
Mo 202.031†	115.9	2.78	2.40%	[5.0]	ug/L
Na 589.592 R†	73695.4	2604.39	3.53%	[500]	ug/L
Ni 231.604†	525.2	21.33	4.06%	[5.0]	ug/L
Pb 220.353†	316.0	23.06	7.30%	[5.0]	ug/L
Sb 206.836†	202.4	49.02	24.22%	[10]	ug/L
Se 196.026†	102.6	12.44	12.12%	[10]	ug/L
Ti 334.940 R†	581.5	3.85	0.66%	[10]	ug/L
Tl 190.801†	78.1	12.02	15.39%	[10]	ug/L
V 292.402†	1166.9	80.64	6.91%	[5.0]	ug/L
Zn 206.200†	1610.5	7.99	0.50%	[20]	ug/L
Sn 189.927†	845.0	8.26	0.98%	[40]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	424.4	0.00000	1.000000	
Al 308.215 R	1	Lin Thru 0	0.0	0.6593	0.00000	1.000000	
As 188.979	1	Lin Thru 0	0.0	4.937	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	214.1	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	97.90	0.00000	1.000000	
Be 313.107	1	Lin Thru 0	0.0	5582	0.00000	1.000000	
Ca 315.887 R	1	Lin Thru 0	0.0	10.65	0.00000	1.000000	
Cd 214.440	1	Lin Thru 0	0.0	170.8	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	65.40	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	228.2	0.00000	1.000000	
Cu 324.752	1	Lin Thru 0	0.0	220.1	0.00000	1.000000	
Fe 238.204 R	1	Lin Thru 0	0.0	4.803	0.00000	1.000000	
K 766.490 R	1	Lin Thru 0	0.0	3.591	0.00000	1.000000	
Mg 279.077 R	1	Lin Thru 0	0.0	1.663	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	714.1	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	23.17	0.00000	1.000000	
Na 589.592 R	1	Lin Thru 0	0.0	147.4	0.00000	1.000000	
Ni 231.604	1	Lin Thru 0	0.0	105.0	0.00000	1.000000	
Pb 220.353	1	Lin Thru 0	0.0	63.20	0.00000	1.000000	
Sb 206.836	1	Lin Thru 0	0.0	20.24	0.00000	1.000000	
Se 196.026	1	Lin Thru 0	0.0	10.26	0.00000	1.000000	
Ti 334.940 R	1	Lin Thru 0	0.0	58.15	0.00000	1.000000	
Tl 190.801	1	Lin Thru 0	0.0	7.808	0.00000	1.000000	
V 292.402	1	Lin Thru 0	0.0	233.4	0.00000	1.000000	
Zn 206.200	1	Lin Thru 0	0.0	80.52	0.00000	1.000000	
Sn 189.927	1	Lin Thru 0	0.0	21.12	0.00000	1.000000	

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Sequence No.: 3 **Autosampler Location: 3**
Sample ID: ICAL,CS100 **Date Collected: 9/7/2012 12:28:33 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:11 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS100

Analyte	Back Pressure	Flow
All	175.0 kPa	0.55 L/min

Mean Data: ICAL,CS100

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6059171.3	144255.61	2.38%	97.1826	%
Y	706193.6	8010.11	1.13%	98.8576	%
Ag 328.068†	46630.6	1877.08	4.03%	[100]	ug/L
As 188.979†	946.1	37.71	3.99%	[100]	ug/L
Ba 233.527†	11084.9	246.58	2.22%	[100]	ug/L
Be 313.107†	616196.7	18682.02	3.03%	[100]	ug/L
Cd 214.440†	20139.6	466.76	2.32%	[100]	ug/L
Co 228.616†	7541.5	167.81	2.23%	[100]	ug/L
Cr 267.716†	24635.7	990.22	4.02%	[100]	ug/L
Cu 324.752†	24795.3	1319.15	5.32%	[100]	ug/L
Mn 257.610†	84613.3	3324.30	3.93%	[100]	ug/L
Mo 202.031†	3839.0	90.09	2.35%	[100]	ug/L
Ni 231.604†	12765.4	318.28	2.49%	[100]	ug/L
Pb 220.353†	6351.0	144.28	2.27%	[100]	ug/L
Sb 206.836†	1697.6	26.48	1.56%	[100]	ug/L
Se 196.026†	1260.0	37.31	2.96%	[100]	ug/L
Ti 334.940 R†	6129.9	121.02	1.97%	[100]	ug/L
Tl 190.801†	957.3	15.91	1.66%	[100]	ug/L
V 292.402†	27528.5	1264.21	4.59%	[100]	ug/L
Zn 206.200†	8402.7	198.02	2.36%	[100]	ug/L
Sn 189.927†	2165.3	57.65	2.66%	[100]	ug/L

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Sequence No.: 4 **Autosampler Location: 4**
Sample ID: ICAL,CS1K **Date Collected: 9/7/2012 12:32:25 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:11 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS1K

Analyte	Back Pressure	Flow
All	175.0 kPa	0.55 L/min

Mean Data: ICAL,CS1K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6315860.3	28966.60	0.46%	101.300	%
Y	700236.7	12848.52	1.83%	98.0237	%
Ag 328.068†	459381.0	1781.92	0.39%	[1000]	ug/L
Al 308.215 R†	684.6	9.23	1.35%	[1000]	ug/L
As 188.979†	9433.0	96.68	1.02%	[1000]	ug/L
B 249.677†	212769.9	905.18	0.43%	[1000]	ug/L
Ba 233.527†	109081.7	493.51	0.45%	[1000]	ug/L
Be 313.107†	6035713.7	21090.59	0.35%	[1000]	ug/L
Ca 315.887 R†	10864.0	131.92	1.21%	[1000]	ug/L
Cd 214.440†	202352.3	1219.33	0.60%	[1000]	ug/L
Co 228.616†	76404.0	374.09	0.49%	[1000]	ug/L
Cr 267.716†	240594.4	811.84	0.34%	[1000]	ug/L
Cu 324.752†	242867.6	665.82	0.27%	[1000]	ug/L
Fe 238.204 R†	5059.5	68.40	1.35%	[1000]	ug/L
K 766.490 R†	3311.6	35.74	1.08%	[1000]	ug/L
Mg 279.077 R†	1797.9	16.18	0.90%	[1000]	ug/L
Mn 257.610†	820657.6	4900.85	0.60%	[1000]	ug/L
Mo 202.031†	38346.3	352.26	0.92%	[1000]	ug/L
Na 589.592 R†	144074.0	2796.04	1.94%	[1000]	ug/L
Ni 231.604†	129477.2	505.11	0.39%	[1000]	ug/L
Pb 220.353†	61747.2	760.61	1.23%	[1000]	ug/L
Sb 206.836†	16381.8	275.12	1.68%	[1000]	ug/L
Se 196.026†	12696.7	199.09	1.57%	[1000]	ug/L
Ti 334.940 R†	61520.7	1446.21	2.35%	[1000]	ug/L
Tl 190.801†	9394.4	72.96	0.78%	[1000]	ug/L
V 292.402†	270665.1	1073.74	0.40%	[1000]	ug/L
Zn 206.200†	82542.6	260.83	0.32%	[1000]	ug/L
Sn 189.927†	21173.7	184.37	0.87%	[1000]	ug/L

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Sequence No.: 5 **Autosampler Location: 5**
Sample ID: ICAL,CS10K **Date Collected: 9/7/2012 12:36:19 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:12 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS10K

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: ICAL,CS10K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	5924784.6	57333.41	0.97%	95.0272	%
Y	702635.3	282.94	0.04%	98.3595	%
Ag 328.068†	931091.0	8415.72	0.90%	[2000]	ug/L
Al 308.215 R†	6701.9	65.69	0.98%	[10000]	ug/L
As 188.979†	97825.0	735.28	0.75%	[10000]	ug/L
B 249.677†	2188600.2	26940.61	1.23%	[10000]	ug/L
Ba 233.527†	1070125.1	9118.62	0.85%	[10000]	ug/L
Ca 315.887 R†	105160.9	890.36	0.85%	[10000]	ug/L
Cd 214.440†	1966780.4	11727.82	0.60%	[10000]	ug/L
Co 228.616†	762886.7	6778.15	0.89%	[10000]	ug/L
Cr 267.716†	2404547.5	24089.12	1.00%	[10000]	ug/L
Cu 324.752†	2433889.2	36988.90	1.52%	[10000]	ug/L
Fe 238.204 R†	49620.8	497.06	1.00%	[10000]	ug/L
K 766.490 R†	34011.3	380.71	1.12%	[10000]	ug/L
Mg 279.077 R†	17556.8	102.60	0.58%	[10000]	ug/L
Mn 257.610†	7862000.8	54762.93	0.70%	[10000]	ug/L
Mo 202.031†	394610.7	3215.02	0.81%	[10000]	ug/L
Na 589.592 R†	1491779.4	5477.50	0.37%	[10000]	ug/L
Ni 231.604†	1295631.3	13774.35	1.06%	[10000]	ug/L
Pb 220.353†	617642.9	9468.51	1.53%	[10000]	ug/L
Sb 206.836†	170901.5	1438.06	0.84%	[10000]	ug/L
Se 196.026†	132801.4	211.00	0.16%	[10000]	ug/L
Ti 334.940 R†	647546.1	8747.04	1.35%	[10000]	ug/L
Tl 190.801†	93658.2	981.20	1.05%	[10000]	ug/L
V 292.402†	2751373.6	31098.15	1.13%	[10000]	ug/L
Zn 206.200†	834301.1	6443.67	0.77%	[10000]	ug/L
Sn 189.927†	214833.2	1756.99	0.82%	[10000]	ug/L

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Sequence No.: 6 **Autosampler Location: 6**
Sample ID: ICAL,CS100K **Date Collected: 9/7/2012 12:41:18 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:12 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS100K

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: ICAL,CS100K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	5468449.3	35193.77	0.64%	87.7081	%
Y	666811.1	7945.60	1.19%	93.3446	%
Al 308.215 R†	66526.8	418.22	0.63%	[100000]	ug/L
Ca 315.887 R†	1035540.8	6849.35	0.66%	[100000]	ug/L
Fe 238.204 R†	473005.8	1510.68	0.32%	[100000]	ug/L
K 766.490 R†	358253.1	613.03	0.17%	[100000]	ug/L
Mg 279.077 R†	175069.7	1942.60	1.11%	[100000]	ug/L
Na 589.592 R†	13476753.3	301210.27	2.24%	[100000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin Thru 0	0.0	464.3	0.00000	0.999986	
Al 308.215 R	4	Lin Thru 0	0.0	0.6653	0.00000	1.000000	
As 188.979	4	Lin Thru 0	0.0	9.779	0.00000	0.999994	
B 249.677	3	Lin Thru 0	0.0	218.8	0.00000	0.999996	
Ba 233.527	4	Lin Thru 0	0.0	107.0	0.00000	0.999998	
Be 313.107	3	Lin Thru 0	0.0	6037	0.00000	0.999998	
Ca 315.887 R	4	Lin Thru 0	0.0	10.36	0.00000	0.999999	
Cd 214.440	4	Lin Thru 0	0.0	196.7	0.00000	0.999996	
Co 228.616	4	Lin Thru 0	0.0	76.29	0.00000	1.000000	
Cr 267.716	4	Lin Thru 0	0.0	240.5	0.00000	1.000000	
Cu 324.752	4	Lin Thru 0	0.0	243.4	0.00000	1.000000	
Fe 238.204 R	4	Lin Thru 0	0.0	4.732	0.00000	0.999988	
K 766.490 R	4	Lin Thru 0	0.0	3.581	0.00000	0.999987	
Mg 279.077 R	4	Lin Thru 0	0.0	1.751	0.00000	1.000000	
Mn 257.610	4	Lin Thru 0	0.0	786.5	0.00000	0.999990	
Mo 202.031	4	Lin Thru 0	0.0	39.45	0.00000	0.999996	
Na 589.592 R	4	Lin Thru 0	0.0	134.9	0.00000	0.999944	
Ni 231.604	4	Lin Thru 0	0.0	129.6	0.00000	1.000000	
Pb 220.353	4	Lin Thru 0	0.0	61.76	0.00000	1.000000	
Sb 206.836	4	Lin Thru 0	0.0	17.08	0.00000	0.999992	
Se 196.026	4	Lin Thru 0	0.0	13.27	0.00000	0.999990	
Ti 334.940 R	4	Lin Thru 0	0.0	64.72	0.00000	0.999988	
Tl 190.801	4	Lin Thru 0	0.0	9.366	0.00000	1.000000	
V 292.402	4	Lin Thru 0	0.0	275.1	0.00000	0.999999	
Zn 206.200	4	Lin Thru 0	0.0	83.42	0.00000	0.999999	
Sn 189.927	4	Lin Thru 0	0.0	21.48	0.00000	0.999999	

Sequence No.: 7 **Autosampler Location: 218**
Sample ID: s20644 **Date Collected: 9/7/2012 12:46:10 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:13 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20644

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: s20644

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5842499.4	93.7074	%	0.13201				0.14%
Y	692572.0	96.9508	%	0.33590				0.35%
Ag 328.068†	467390.1	1006.62	ug/L	3.829	1006.62	ug/L	3.829	0.38%
QC value within limits for Ag 328.068 Recovery = 100.66%								
Al 308.215 R†	13756.2	20676.1	ug/L	341.48	20676.1	ug/L	341.48	1.65%
QC value within limits for Al 308.215 R Recovery = 103.38%								
As 188.979†	49869.2	5099.62	ug/L	20.666	5099.62	ug/L	20.666	0.41%
QC value within limits for As 188.979 Recovery = 101.99%								
B 249.677†	1130241.5	5165.66	ug/L	31.858	5165.66	ug/L	31.858	0.62%
QC value within limits for B 249.677 Recovery = 103.31%								
Ba 233.527†	544735.2	5089.40	ug/L	25.365	5089.40	ug/L	25.365	0.50%
QC value within limits for Ba 233.527 Recovery = 101.79%								
Be 313.107†	3167233.8	524.640	ug/L	2.6229	524.640	ug/L	2.6229	0.50%
QC value within limits for Be 313.107 Recovery = 104.93%								
Ca 315.887 R†	213676.3	20631.0	ug/L	309.88	20631.0	ug/L	309.88	1.50%
QC value within limits for Ca 315.887 R Recovery = 103.15%								
Cd 214.440†	1021372.6	5191.62	ug/L	37.027	5191.62	ug/L	37.027	0.71%
QC value within limits for Cd 214.440 Recovery = 103.83%								
Co 228.616†	385330.0	5039.85	ug/L	20.481	5039.85	ug/L	20.481	0.41%
QC value within limits for Co 228.616 Recovery = 100.80%								
Cr 267.716†	1214345.8	5050.16	ug/L	20.728	5050.16	ug/L	20.728	0.41%
QC value within limits for Cr 267.716 Recovery = 101.00%								
Cu 324.752†	1229635.2	5052.24	ug/L	31.032	5052.24	ug/L	31.032	0.61%
QC value within limits for Cu 324.752 Recovery = 101.04%								
Fe 238.204 R†	101496.6	21447.2	ug/L	247.46	21447.2	ug/L	247.46	1.15%
QC value within limits for Fe 238.204 R Recovery = 107.24%								
K 766.490 R†	68921.8	19248.1	ug/L	258.50	19248.1	ug/L	258.50	1.34%
QC value within limits for K 766.490 R Recovery = 96.24%								
Mg 279.077 R†	35714.3	20399.4	ug/L	388.85	20399.4	ug/L	388.85	1.91%
QC value within limits for Mg 279.077 R Recovery = 102.00%								
Mn 257.610†	4026673.8	5119.43	ug/L	28.043	5119.43	ug/L	28.043	0.55%
QC value within limits for Mn 257.610 Recovery = 102.39%								
Mo 202.031†	205033.0	5197.30	ug/L	18.788	5197.30	ug/L	18.788	0.36%
QC value within limits for Mo 202.031 Recovery = 103.95%								
Na 589.592 R†	2942577.9	21811.2	ug/L	318.22	21811.2	ug/L	318.22	1.46%
QC value within limits for Na 589.592 R Recovery = 109.06%								
Ni 231.604†	651878.4	5031.40	ug/L	24.554	5031.40	ug/L	24.554	0.49%
QC value within limits for Ni 231.604 Recovery = 100.63%								
Pb 220.353†	309186.6	5005.91	ug/L	50.557	5005.91	ug/L	50.557	1.01%
QC value within limits for Pb 220.353 Recovery = 100.12%								
Sb 206.836†	87839.6	5141.89	ug/L	11.051	5141.89	ug/L	11.051	0.21%
QC value within limits for Sb 206.836 Recovery = 102.84%								
Se 196.026†	67410.6	5078.28	ug/L	28.405	5078.28	ug/L	28.405	0.56%
QC value within limits for Se 196.026 Recovery = 101.57%								
Ti 334.940 R†	324457.4	5013.07	ug/L	78.289	5013.07	ug/L	78.289	1.56%
QC value within limits for Ti 334.940 R Recovery = 100.26%								
Tl 190.801†	47587.9	5080.86	ug/L	16.913	5080.86	ug/L	16.913	0.33%
QC value within limits for Tl 190.801 Recovery = 101.62%								
V 292.402†	1402886.5	5099.68	ug/L	16.716	5099.68	ug/L	16.716	0.33%
QC value within limits for V 292.402 Recovery = 101.99%								
Zn 206.200†	423023.0	5070.92	ug/L	24.658	5070.92	ug/L	24.658	0.49%
QC value within limits for Zn 206.200 Recovery = 101.42%								
Sn 189.927†	109105.3	5079.33	ug/L	15.788	5079.33	ug/L	15.788	0.31%
QC value within limits for Sn 189.927 Recovery = 101.59%								

All analyte(s) passed QC.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179008.1 File : met09_sn Time : 07-SEP-2012 12:51
Cal : 92362179001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.971	ug/L	
Cadmium	A	ND	5.000	0.7671	ug/L	
Copper	A	ND	5.000	2.558	ug/L	
Lead	A	ND	5.000	2.159	ug/L	
Manganese	A	ND	5.000	0.8105	ug/L	
Vanadium	A	ND	5.000	0.9140	ug/L	
Zinc	A	ND	20.00	4.517	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6155614	-1.27

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Sequence No.: 8 **Autosampler Location: 221**
Sample ID: ICB **Date Collected: 9/7/2012 12:51:08 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:13 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6155614.3	98.7295	%	1.07899				1.09%
Y	700186.9	98.0168	%	0.74410				0.76%
Ag 328.068†	-99.3	-0.213805	ug/L	0.2478395	-0.213805	ug/L	0.2478395	115.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	1.2	1.81624	ug/L	9.102004	1.81624	ug/L	9.102004	501.14%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	-20.3	-2.08015	ug/L	1.456794	-2.08015	ug/L	1.456794	70.03%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2532.7	11.5756	ug/L	0.62778	11.5756	ug/L	0.62778	5.42%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-42.2	-0.394557	ug/L	0.0542734	-0.394557	ug/L	0.0542734	13.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-445.3	-0.0737661	ug/L	0.04282809	-0.0737661	ug/L	0.04282809	58.06%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	-72.7	-7.02368	ug/L	9.056958	-7.02368	ug/L	9.056958	128.95%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	-81.6	-0.414945	ug/L	0.0559936	-0.414945	ug/L	0.0559936	13.49%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-29.5	-0.385220	ug/L	0.1488858	-0.385220	ug/L	0.1488858	38.65%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-2.5	-0.0102057	ug/L	0.16358247	-0.0102057	ug/L	0.16358247	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-56.3	-0.231394	ug/L	0.9238013	-0.231394	ug/L	0.9238013	399.23%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	-13.3	-2.82069	ug/L	2.647088	-2.82069	ug/L	2.647088	93.85%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	-94.3	-26.3278	ug/L	40.68344	-26.3278	ug/L	40.68344	154.53%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	-30.5	-17.4210	ug/L	1.01693	-17.4210	ug/L	1.01693	5.84%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	-497.2	-0.632176	ug/L	0.0767198	-0.632176	ug/L	0.0767198	12.14%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.3	0.209257	ug/L	0.4798451	0.209257	ug/L	0.4798451	229.31%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	-26.1	-0.193324	ug/L	1.9425894	-0.193324	ug/L	1.9425894	>999.9%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	-71.7	-0.553642	ug/L	0.1545096	-0.553642	ug/L	0.1545096	27.91%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	39.0	0.631553	ug/L	0.2283665	0.631553	ug/L	0.2283665	36.16%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.6	0.153693	ug/L	1.8976945	0.153693	ug/L	1.8976945	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-4.9	-0.367650	ug/L	2.4141278	-0.367650	ug/L	2.4141278	656.64%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	-30.5	-0.471924	ug/L	0.2595536	-0.471924	ug/L	0.2595536	55.00%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	2.8	0.295446	ug/L	0.2805176	0.295446	ug/L	0.2805176	94.95%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-128.7	-0.467681	ug/L	0.1205631	-0.467681	ug/L	0.1205631	25.78%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-21.8	-0.260973	ug/L	0.1180670	-0.260973	ug/L	0.1180670	45.24%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	-11.4	-0.532786	ug/L	0.1420610	-0.532786	ug/L	0.1420610	26.66%
QC value within limits for Sn 189.927 Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179009.1 File : met09_sn Time : 07-SEP-2012 12:56
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20220

Analyte	Ch	Quant	IQL	Units	Flags
Arsenic	A	[2.630]	5.000	ug/L	
Cadmium	A	[-1.863]	5.000	ug/L	!a-
Lead	A	[4.696]	5.000	ug/L	!a+
Zinc	A	[5.109]	20.00	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19210	ug/L	96
Copper	A	20000	20740	ug/L	104
Manganese	A	20000	18310	ug/L	92
Nickel	A	20000	17970	ug/L	90
Vanadium	A	20000	20110	ug/L	101
Aluminum	R	500000	537100	ug/L	107
Calcium	R	500000	502600	ug/L	101
Iron	R	200000	204000	ug/L	102
Magnesium	R	500000	509200	ug/L	102
Titanium	R	20000	21220	ug/L	106

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5242601	-15.91

!=warning +=high bias -=low bias a=ICSA

==========

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: s20220 **Date Collected: 9/7/2012 12:56:00 PM**
Analyst: **Data Type: Reprocessed on 9/7/2012 1:13:14 PM**
Logged In Analyst (Original) : met09
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20220

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: s20220

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5242601.2	84.0857	%	0.39162				0.47%
Y	637450.3	89.2345	%	2.23444				2.50%
Ag 328.068†	1179.2	2.53965	ug/L	0.415788	2.53965	ug/L	0.415788	16.37%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	357343.3	537101	ug/L	1127.2	537101	ug/L	1127.2	0.21%
QC value within limits for Al 308.215 R Recovery = 107.42%								
As 188.979†	25.7	2.63011	ug/L	6.092960	2.63011	ug/L	6.092960	231.66%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	11967.6	54.6967	ug/L	2.48057	54.6967	ug/L	2.48057	4.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	417.9	3.90470	ug/L	0.280511	3.90470	ug/L	0.280511	7.18%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-273.0	-0.0452244	ug/L	0.07010766	-0.0452244	ug/L	0.07010766	155.02%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	5205445.8	502599	ug/L	18200.5	502599	ug/L	18200.5	3.62%
QC value within limits for Ca 315.887 R Recovery = 100.52%								
Cd 214.440†	-366.4	-1.86251	ug/L	0.453512	-1.86251	ug/L	0.453512	24.35%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	3437.8	-1.62351	ug/L	1.640190	-1.62351	ug/L	1.640190	101.03%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	4619638.0	19211.9	ug/L	68.88	19211.9	ug/L	68.88	0.36%
QC value within limits for Cr 267.716 Recovery = 96.06%								
Cu 324.752†	5046807.7	20736.0	ug/L	26.27	20736.0	ug/L	26.27	0.13%
QC value within limits for Cu 324.752 Recovery = 103.68%								
Fe 238.204 R†	965270.8	203971	ug/L	7469.4	203971	ug/L	7469.4	3.66%
QC value within limits for Fe 238.204 R Recovery = 101.99%								
K 766.490 R†	762.2	212.873	ug/L	10.8915	212.873	ug/L	10.8915	5.12%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	891496.7	509208	ug/L	18389.8	509208	ug/L	18389.8	3.61%
QC value within limits for Mg 279.077 R Recovery = 101.84%								
Mn 257.610†	14398124.3	18305.5	ug/L	126.47	18305.5	ug/L	126.47	0.69%
QC value within limits for Mn 257.610 Recovery = 91.53%								
Mo 202.031†	-99.7	-2.52666	ug/L	0.156602	-2.52666	ug/L	0.156602	6.20%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	11166.2	82.7668	ug/L	2.21643	82.7668	ug/L	2.21643	2.68%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	2328631.7	17973.1	ug/L	64.77	17973.1	ug/L	64.77	0.36%
QC value less than the lower limit for Ni 231.604 Recovery = 89.87%								
Pb 220.353†	290.1	4.69638	ug/L	1.004023	4.69638	ug/L	1.004023	21.38%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-24.7	-1.44462	ug/L	15.022230	-1.44462	ug/L	15.022230	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	39.3	2.96088	ug/L	19.335328	2.96088	ug/L	19.335328	653.03%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	1373460.3	21220.8	ug/L	313.87	21220.8	ug/L	313.87	1.48%
QC value within limits for Ti 334.940 R Recovery = 106.10%								
Tl 190.801†	-81.7	-8.72107	ug/L	12.755957	-8.72107	ug/L	12.755957	146.27%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	5533063.1	20113.4	ug/L	56.06	20113.4	ug/L	56.06	0.28%
QC value within limits for V 292.402 Recovery = 100.57%								
Zn 206.200†	426.2	5.10890	ug/L	1.052748	5.10890	ug/L	1.052748	20.61%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	-294.4	-13.7047	ug/L	4.01009	-13.7047	ug/L	4.01009	29.26%
QC value within limits for Sn 189.927 Recovery = Not calculated								

QC Failed. Continue with analysis.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179010.1 File : met09_sn Time : 07-SEP-2012 13:14
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	525.6	ug/L	5	20	
Cadmium	A	1000	1010	ug/L	1	20	
Copper	A	500.0	558.6	ug/L	12	20	
Lead	A	1000	930.6	ug/L	-7	20	
Manganese	A	500.0	517.5	ug/L	4	20	
Vanadium	A	500.0	529.4	ug/L	6	20	
Zinc	A	1000	981.3	ug/L	-2	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5145166	-17.48

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: ICALBLK, **Date Collected: 9/7/2012 1:14:25 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
User canceled analysis.

==========

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: s20222 **Date Collected: 9/7/2012 1:14:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20222

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: s20222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5145165.9	82.5230	%	0.29801				0.36%
Y	634780.2	88.8607	%	1.08357				1.22%
Ag 328.068†	522831.8	1126.02	ug/L	4.944	1126.02	ug/L	4.944	0.44%
QC value within limits for Ag 328.068 Recovery = 112.60%								
Al 308.215 R†	338483.2	508754	ug/L	2324.7	508754	ug/L	2324.7	0.46%
QC value within limits for Al 308.215 R Recovery = 101.75%								
As 188.979†	5140.2	525.632	ug/L	6.9447	525.632	ug/L	6.9447	1.32%
QC value within limits for As 188.979 Recovery = 105.13%								
B 249.677†	11309.8	51.6901	ug/L	2.87033	51.6901	ug/L	2.87033	5.55%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	55082.8	514.632	ug/L	2.0708	514.632	ug/L	2.0708	0.40%
QC value within limits for Ba 233.527 Recovery = 102.93%								
Be 313.107†	3221291.1	533.595	ug/L	2.3074	533.595	ug/L	2.3074	0.43%
QC value within limits for Be 313.107 Recovery = 106.72%								
Ca 315.887 R†	5000715.2	482832	ug/L	2769.5	482832	ug/L	2769.5	0.57%
QC value within limits for Ca 315.887 R Recovery = 96.57%								
Cd 214.440†	198786.2	1010.43	ug/L	5.985	1010.43	ug/L	5.985	0.59%
QC value within limits for Cd 214.440 Recovery = 101.04%								
Co 228.616†	39012.7	465.685	ug/L	2.6282	465.685	ug/L	2.6282	0.56%
QC value within limits for Co 228.616 Recovery = 93.14%								
Cr 267.716†	119339.2	496.302	ug/L	1.0962	496.302	ug/L	1.0962	0.22%
QC value within limits for Cr 267.716 Recovery = 99.26%								
Cu 324.752†	135944.1	558.558	ug/L	3.6359	558.558	ug/L	3.6359	0.65%
QC value within limits for Cu 324.752 Recovery = 111.71%								
Fe 238.204 R†	912967.5	192919	ug/L	1070.9	192919	ug/L	1070.9	0.56%
QC value within limits for Fe 238.204 R Recovery = 96.46%								
K 766.490 R†	637.1	177.915	ug/L	76.8370	177.915	ug/L	76.8370	43.19%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	872429.8	498318	ug/L	2662.3	498318	ug/L	2662.3	0.53%
QC value within limits for Mg 279.077 R Recovery = 99.66%								
Mn 257.610†	407062.3	517.531	ug/L	2.8329	517.531	ug/L	2.8329	0.55%
QC value within limits for Mn 257.610 Recovery = 103.51%								
Mo 202.031†	19858.5	503.384	ug/L	0.8327	503.384	ug/L	0.8327	0.17%
QC value within limits for Mo 202.031 Recovery = 100.68%								
Na 589.592 R†	10270.7	76.1295	ug/L	5.42440	76.1295	ug/L	5.42440	7.13%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	119494.8	922.298	ug/L	5.1873	922.298	ug/L	5.1873	0.56%
QC value within limits for Ni 231.604 Recovery = 92.23%								
Pb 220.353†	57479.7	930.629	ug/L	3.1867	930.629	ug/L	3.1867	0.34%
QC value within limits for Pb 220.353 Recovery = 93.06%								
Sb 206.836†	9233.4	540.498	ug/L	22.2817	540.498	ug/L	22.2817	4.12%
QC value within limits for Sb 206.836 Recovery = 108.10%								
Se 196.026†	6696.7	504.483	ug/L	10.3888	504.483	ug/L	10.3888	2.06%
QC value within limits for Se 196.026 Recovery = 100.90%								
Ti 334.940 R†	1344203.0	20768.8	ug/L	165.53	20768.8	ug/L	165.53	0.80%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	4250.3	453.800	ug/L	4.4202	453.800	ug/L	4.4202	0.97%
QC value within limits for Tl 190.801 Recovery = 90.76%								
V 292.402†	145630.4	529.386	ug/L	1.1814	529.386	ug/L	1.1814	0.22%
QC value within limits for V 292.402 Recovery = 105.88%								
Zn 206.200†	81863.7	981.328	ug/L	6.1543	981.328	ug/L	6.1543	0.63%
QC value within limits for Zn 206.200 Recovery = 98.13%								

Sn 189.927† -287.0 -13.3588 ug/L 2.64223 -13.3588 ug/L 2.64223 19.78%
QC value within limits for Sn 189.927 Recovery = Not calculated
All analyte(s) passed QC.

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179012.1 File : met09_sn Time : 07-SEP-2012 13:23
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20319

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	20.00	17.58	ug/L	-12	30	
Cadmium	A	20.00	20.03	ug/L	0	30	
Copper	A	20.00	20.46	ug/L	2	30	
Lead	A	20.00	20.03	ug/L	0	30	
Manganese	A	20.00	21.40	ug/L	7	30	
Vanadium	A	20.00	19.70	ug/L	-2	30	
Zinc	A	80.00	83.12	ug/L	4	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6025843	-3.35

User canceled analysis.

==========

Sequence No.: 11 **Autosampler Location: 7**
Sample ID: s20319 **Date Collected: 9/7/2012 1:23:35 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20319

Analyte	Back Pressure	Flow
All	176.0 kPa	0.55 L/min

Mean Data: s20319

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6025842.5	96.6481	%	0.73078				0.76%
Y	691245.8	96.7651	%	2.36012				2.44%
Ag 328.068†	9286.2	19.9998	ug/L	0.09579	19.9998	ug/L	0.09579	0.48%
QC value within limits for Ag 328.068 Recovery = 100.00%								
Al 308.215 R†	329.7	495.522	ug/L	13.5368	495.522	ug/L	13.5368	2.73%
QC value within limits for Al 308.215 R Recovery = 123.88%								
As 188.979†	171.9	17.5756	ug/L	0.39716	17.5756	ug/L	0.39716	2.26%
QC value within limits for As 188.979 Recovery = 87.88%								
B 249.677†	88477.0	404.375	ug/L	7.1499	404.375	ug/L	7.1499	1.77%
QC value within limits for B 249.677 Recovery = 101.09%								
Ba 233.527†	2172.1	20.2934	ug/L	0.15412	20.2934	ug/L	0.15412	0.76%
QC value within limits for Ba 233.527 Recovery = 101.47%								
Be 313.107†	50171.5	8.31071	ug/L	0.121233	8.31071	ug/L	0.121233	1.46%
QC value within limits for Be 313.107 Recovery = 103.88%								
Ca 315.887 R†	9171.0	885.488	ug/L	30.1977	885.488	ug/L	30.1977	3.41%
QC value within limits for Ca 315.887 R Recovery = 110.69%								
Cd 214.440†	3941.1	20.0326	ug/L	0.17488	20.0326	ug/L	0.17488	0.87%
QC value within limits for Cd 214.440 Recovery = 100.16%								
Co 228.616†	1509.7	19.6974	ug/L	0.22312	19.6974	ug/L	0.22312	1.13%
QC value within limits for Co 228.616 Recovery = 98.49%								
Cr 267.716†	4910.3	20.4207	ug/L	0.61161	20.4207	ug/L	0.61161	3.00%
QC value within limits for Cr 267.716 Recovery = 102.10%								
Cu 324.752†	4978.6	20.4559	ug/L	0.76421	20.4559	ug/L	0.76421	3.74%
QC value within limits for Cu 324.752 Recovery = 102.28%								
Fe 238.204 R†	2187.5	462.239	ug/L	11.9911	462.239	ug/L	11.9911	2.59%
QC value within limits for Fe 238.204 R Recovery = 115.56%								
K 766.490 R†	6598.6	1842.81	ug/L	36.087	1842.81	ug/L	36.087	1.96%
QC value within limits for K 766.490 R Recovery = 92.14%								
Mg 279.077 R†	1586.0	905.890	ug/L	20.0242	905.890	ug/L	20.0242	2.21%
QC value within limits for Mg 279.077 R Recovery = 113.24%								
Mn 257.610†	16834.7	21.4033	ug/L	0.22262	21.4033	ug/L	0.22262	1.04%
QC value within limits for Mn 257.610 Recovery = 107.02%								
Mo 202.031†	698.0	17.6942	ug/L	0.23535	17.6942	ug/L	0.23535	1.33%
QC value within limits for Mo 202.031 Recovery = 88.47%								
Na 589.592 R†	285208.8	2114.05	ug/L	46.741	2114.05	ug/L	46.741	2.21%
QC value within limits for Na 589.592 R Recovery = 105.70%								
Ni 231.604†	2555.8	19.7265	ug/L	0.20640	19.7265	ug/L	0.20640	1.05%
QC value within limits for Ni 231.604 Recovery = 98.63%								
Pb 220.353†	1237.2	20.0308	ug/L	0.67234	20.0308	ug/L	0.67234	3.36%
QC value within limits for Pb 220.353 Recovery = 100.15%								
Sb 206.836†	740.7	43.3596	ug/L	1.97025	43.3596	ug/L	1.97025	4.54%
QC value within limits for Sb 206.836 Recovery = 108.40%								
Se 196.026†	494.0	37.2157	ug/L	0.53074	37.2157	ug/L	0.53074	1.43%
QC value within limits for Se 196.026 Recovery = 93.04%								
Ti 334.940 R†	2699.9	41.7158	ug/L	0.55257	41.7158	ug/L	0.55257	1.32%
QC value within limits for Ti 334.940 R Recovery = 104.29%								
Tl 190.801†	361.0	38.5462	ug/L	0.02030	38.5462	ug/L	0.02030	0.05%
QC value within limits for Tl 190.801 Recovery = 96.37%								
V 292.402†	5418.8	19.6980	ug/L	0.26925	19.6980	ug/L	0.26925	1.37%
QC value within limits for V 292.402 Recovery = 98.49%								
Zn 206.200†	6933.8	83.1174	ug/L	0.72624	83.1174	ug/L	0.72624	0.87%
QC value within limits for Zn 206.200 Recovery = 103.90%								
Sn 189.927†	3538.7	164.742	ug/L	1.3364	164.742	ug/L	1.3364	0.81%
QC value within limits for Sn 189.927 Recovery = 102.96%								

All analyte(s) passed QC.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179022.1 File : met09_sn Time : 07-SEP-2012 14:11
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	8.4041	10.172	5000	5201	ug/L	4	10	
Cadmium	A	192.81	206.61	5000	5251	ug/L	5	10	
Copper	A	238.58	257.32	5000	5286	ug/L	6	10	
Lead	A	62.555	61.909	5000	5012	ug/L	0	10	
Manganese	A	791.78	823.36	5000	5234	ug/L	5	10	
Vanadium	A	263.62	289.11	5000	5255	ug/L	5	10	
Zinc	A	82.631	86.477	5000	5183	ug/L	4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5733344	-8.04

Sequence No.: 21 **Autosampler Location: 218**
Sample ID: s20645 **Date Collected: 9/7/2012 2:11:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20645

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: s20645

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5733344.1	91.9567	%	0.48583				0.53%
Y	683473.3	95.6771	%	1.56371				1.63%
Ag 328.068†	474371.9	1021.66	ug/L	9.716	1021.66	ug/L	9.716	0.95%
QC value within limits for Ag 328.068 Recovery = 102.17%								
Al 308.215 R†	14155.2	21275.8	ug/L	660.53	21275.8	ug/L	660.53	3.10%
QC value within limits for Al 308.215 R Recovery = 106.38%								
As 188.979†	50861.5	5201.09	ug/L	51.204	5201.09	ug/L	51.204	0.98%
QC value within limits for As 188.979 Recovery = 104.02%								
B 249.677†	1162761.0	5314.28	ug/L	12.171	5314.28	ug/L	12.171	0.23%
QC value within limits for B 249.677 Recovery = 106.29%								
Ba 233.527†	560726.4	5238.80	ug/L	15.108	5238.80	ug/L	15.108	0.29%
QC value within limits for Ba 233.527 Recovery = 104.78%								
Be 313.107†	3280974.6	543.481	ug/L	1.0799	543.481	ug/L	1.0799	0.20%
QC value within limits for Be 313.107 Recovery = 108.70%								
Ca 315.887 R†	219398.2	21183.5	ug/L	687.73	21183.5	ug/L	687.73	3.25%
QC value within limits for Ca 315.887 R Recovery = 105.92%								
Cd 214.440†	1033027.4	5250.87	ug/L	4.766	5250.87	ug/L	4.766	0.09%
QC value within limits for Cd 214.440 Recovery = 105.02%								
Co 228.616†	399633.7	5226.99	ug/L	7.427	5226.99	ug/L	7.427	0.14%
QC value within limits for Co 228.616 Recovery = 104.54%								
Cr 267.716†	1252065.6	5207.03	ug/L	13.601	5207.03	ug/L	13.601	0.26%
QC value within limits for Cr 267.716 Recovery = 104.14%								
Cu 324.752†	1286606.8	5286.32	ug/L	18.043	5286.32	ug/L	18.043	0.34%
QC value within limits for Cu 324.752 Recovery = 105.73%								
Fe 238.204 R†	103149.6	21796.5	ug/L	591.04	21796.5	ug/L	591.04	2.71%
QC value within limits for Fe 238.204 R Recovery = 108.98%								
K 766.490 R†	70588.8	19713.6	ug/L	667.32	19713.6	ug/L	667.32	3.39%
QC value within limits for K 766.490 R Recovery = 98.57%								
Mg 279.077 R†	36771.1	21003.1	ug/L	682.96	21003.1	ug/L	682.96	3.25%
QC value within limits for Mg 279.077 R Recovery = 105.02%								
Mn 257.610†	4116824.0	5234.05	ug/L	11.933	5234.05	ug/L	11.933	0.23%
QC value within limits for Mn 257.610 Recovery = 104.68%								
Mo 202.031†	206706.4	5239.72	ug/L	43.263	5239.72	ug/L	43.263	0.83%
QC value within limits for Mo 202.031 Recovery = 104.79%								
Na 589.592 R†	3033323.6	22483.8	ug/L	731.16	22483.8	ug/L	731.16	3.25%
QC value greater than the upper limit for Na 589.592 R Recovery = 112.42%								
Ni 231.604†	672047.4	5187.07	ug/L	9.738	5187.07	ug/L	9.738	0.19%
QC value within limits for Ni 231.604 Recovery = 103.74%								
Pb 220.353†	309545.2	5011.72	ug/L	28.859	5011.72	ug/L	28.859	0.58%
QC value within limits for Pb 220.353 Recovery = 100.23%								
Sb 206.836†	88032.5	5153.18	ug/L	44.486	5153.18	ug/L	44.486	0.86%
QC value within limits for Sb 206.836 Recovery = 103.06%								
Se 196.026†	68991.1	5197.34	ug/L	67.182	5197.34	ug/L	67.182	1.29%
QC value within limits for Se 196.026 Recovery = 103.95%								
Ti 334.940 R†	334878.8	5174.09	ug/L	92.010	5174.09	ug/L	92.010	1.78%
QC value within limits for Ti 334.940 R Recovery = 103.48%								
Tl 190.801†	47912.4	5115.50	ug/L	44.798	5115.50	ug/L	44.798	0.88%
QC value within limits for Tl 190.801 Recovery = 102.31%								
V 292.402†	1445572.1	5254.85	ug/L	11.933	5254.85	ug/L	11.933	0.23%
QC value within limits for V 292.402 Recovery = 105.10%								
Zn 206.200†	432383.3	5183.12	ug/L	8.384	5183.12	ug/L	8.384	0.16%
QC value within limits for Zn 206.200 Recovery = 103.66%								
Sn 189.927†	110651.0	5151.29	ug/L	34.802	5151.29	ug/L	34.802	0.68%
QC value within limits for Sn 189.927 Recovery = 103.03%								

QC Failed. Continue with analysis.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179023.1 File : met09_sn Time : 07-SEP-2012 14:16
Cal : 92362179001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.971	ug/L	
Cadmium	A	ND	5.000	0.7671	ug/L	
Copper	A	ND	5.000	2.558	ug/L	
Lead	A	ND	5.000	2.159	ug/L	
Manganese	A	ND	5.000	0.8105	ug/L	
Vanadium	A	ND	5.000	0.9140	ug/L	
Zinc	A	ND	20.00	4.517	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6156635	-1.25

Sequence No.: 22 **Autosampler Location: 221**
Sample ID: ccb **Date Collected: 9/7/2012 2:16:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ccb

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: ccb

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6156634.7	98.7458	%	0.41651				0.42%
Y	713613.3	99.8963	%	0.63800				0.64%
Ag 328.068†	-212.9	-0.458540	ug/L	0.2081658	-0.458540	ug/L	0.2081658	45.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	-0.6	-0.874714	ug/L	2.0803097	-0.874714	ug/L	2.0803097	237.83%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	-4.3	-0.439515	ug/L	0.5160609	-0.439515	ug/L	0.5160609	117.42%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-1122.6	-5.13056	ug/L	0.236842	-5.13056	ug/L	0.236842	4.62%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-32.7	-0.305814	ug/L	0.0148402	-0.305814	ug/L	0.0148402	4.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-789.5	-0.130783	ug/L	0.0486082	-0.130783	ug/L	0.0486082	37.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	-401.7	-38.7887	ug/L	8.43113	-38.7887	ug/L	8.43113	21.74%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	-127.1	-0.646278	ug/L	0.0115592	-0.646278	ug/L	0.0115592	1.79%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-27.6	-0.361757	ug/L	0.0556837	-0.361757	ug/L	0.0556837	15.39%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-50.2	-0.208920	ug/L	0.2064116	-0.208920	ug/L	0.2064116	98.80%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-93.0	-0.382168	ug/L	0.0964055	-0.382168	ug/L	0.0964055	25.23%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	-41.1	-8.68399	ug/L	0.657132	-8.68399	ug/L	0.657132	7.57%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	159.5	44.5307	ug/L	81.92887	44.5307	ug/L	81.92887	183.98%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	-47.4	-27.0962	ug/L	2.23852	-27.0962	ug/L	2.23852	8.26%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	-474.1	-0.602759	ug/L	0.0210429	-0.602759	ug/L	0.0210429	3.49%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-15.7	-0.398102	ug/L	0.3212588	-0.398102	ug/L	0.3212588	80.70%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	-741.1	-5.49293	ug/L	2.020196	-5.49293	ug/L	2.020196	36.78%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	-65.6	-0.506513	ug/L	0.0812913	-0.506513	ug/L	0.0812913	16.05%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-88.7	-1.43530	ug/L	0.468422	-1.43530	ug/L	0.468422	32.64%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-9.8	-0.571217	ug/L	1.0363253	-0.571217	ug/L	1.0363253	181.42%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-17.5	-1.31986	ug/L	0.772735	-1.31986	ug/L	0.772735	58.55%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	-19.1	-0.295357	ug/L	0.3401914	-0.295357	ug/L	0.3401914	115.18%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	-5.6	-0.598002	ug/L	0.9237982	-0.598002	ug/L	0.9237982	154.48%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-41.2	-0.149774	ug/L	0.5749624	-0.149774	ug/L	0.5749624	383.89%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-77.0	-0.923346	ug/L	0.0517519	-0.923346	ug/L	0.0517519	5.60%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	-10.4	-0.483833	ug/L	0.0748930	-0.483833	ug/L	0.0748930	15.48%
QC value within limits for Sn 189.927 Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179034.1 File : met09_sn Time : 07-SEP-2012 15:11
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	500.0	532.7	ug/L	7	20	
Cadmium	A	1000	1005	ug/L	1	20	
Copper	A	500.0	558.8	ug/L	12	20	
Lead	A	1000	925.2	ug/L	-7	20	
Manganese	A	500.0	511.8	ug/L	2	20	
Vanadium	A	500.0	528.1	ug/L	6	20	
Zinc	A	1000	991.1	ug/L	-1	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5063588	-18.79

Sequence No.: 33 **Autosampler Location: 10**
Sample ID: s20222 **Date Collected: 9/7/2012 3:11:49 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20222

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: s20222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5063588.1	81.2145	%	0.08905				0.11%
Y	624726.5	87.4533	%	0.56995				0.65%
Ag 328.068†	523244.1	1126.91	ug/L	6.773	1126.91	ug/L	6.773	0.60%
QC value within limits for Ag 328.068 Recovery = 112.69%								
Al 308.215 R†	362391.5	544689	ug/L	2952.7	544689	ug/L	2952.7	0.54%
QC value within limits for Al 308.215 R Recovery = 108.94%								
As 188.979†	5209.8	532.749	ug/L	5.6029	532.749	ug/L	5.6029	1.05%
QC value within limits for As 188.979 Recovery = 106.55%								
B 249.677†	10271.4	46.9445	ug/L	3.10415	46.9445	ug/L	3.10415	6.61%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	55200.0	515.727	ug/L	5.3240	515.727	ug/L	5.3240	1.03%
QC value within limits for Ba 233.527 Recovery = 103.15%								
Be 313.107†	3212611.6	532.157	ug/L	2.2453	532.157	ug/L	2.2453	0.42%
QC value within limits for Be 313.107 Recovery = 106.43%								
Ca 315.887 R†	5220679.2	504070	ug/L	1440.9	504070	ug/L	1440.9	0.29%
QC value within limits for Ca 315.887 R Recovery = 100.81%								
Cd 214.440†	197773.7	1005.28	ug/L	5.881	1005.28	ug/L	5.881	0.58%
QC value within limits for Cd 214.440 Recovery = 100.53%								
Co 228.616†	39095.8	464.893	ug/L	4.2077	464.893	ug/L	4.2077	0.91%
QC value within limits for Co 228.616 Recovery = 92.98%								
Cr 267.716†	118918.4	494.552	ug/L	5.1370	494.552	ug/L	5.1370	1.04%
QC value within limits for Cr 267.716 Recovery = 98.91%								
Cu 324.752†	135994.9	558.766	ug/L	1.9477	558.766	ug/L	1.9477	0.35%
QC value within limits for Cu 324.752 Recovery = 111.75%								
Fe 238.204 R†	975715.7	206178	ug/L	1008.2	206178	ug/L	1008.2	0.49%
QC value within limits for Fe 238.204 R Recovery = 103.09%								
K 766.490 R†	1044.2	291.617	ug/L	41.4291	291.617	ug/L	41.4291	14.21%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	891467.4	509192	ug/L	2330.5	509192	ug/L	2330.5	0.46%
QC value within limits for Mg 279.077 R Recovery = 101.84%								
Mn 257.610†	402549.0	511.793	ug/L	3.9035	511.793	ug/L	3.9035	0.76%
QC value within limits for Mn 257.610 Recovery = 102.36%								
Mo 202.031†	20247.4	513.242	ug/L	5.1492	513.242	ug/L	5.1492	1.00%
QC value within limits for Mo 202.031 Recovery = 102.65%								
Na 589.592 R†	106147.8	786.796	ug/L	6.3806	786.796	ug/L	6.3806	0.81%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	118924.7	917.897	ug/L	9.5641	917.897	ug/L	9.5641	1.04%
QC value within limits for Ni 231.604 Recovery = 91.79%								
Pb 220.353†	57143.0	925.178	ug/L	19.1721	925.178	ug/L	19.1721	2.07%
QC value within limits for Pb 220.353 Recovery = 92.52%								
Sb 206.836†	8988.9	526.188	ug/L	28.5250	526.188	ug/L	28.5250	5.42%
QC value within limits for Sb 206.836 Recovery = 105.24%								
Se 196.026†	7253.2	546.408	ug/L	11.3816	546.408	ug/L	11.3816	2.08%
QC value within limits for Se 196.026 Recovery = 109.28%								
Ti 334.940 R†	1399533.7	21623.7	ug/L	173.42	21623.7	ug/L	173.42	0.80%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	4373.4	466.938	ug/L	6.6688	466.938	ug/L	6.6688	1.43%
QC value within limits for Tl 190.801 Recovery = 93.39%								
V 292.402†	145265.9	528.061	ug/L	5.6296	528.061	ug/L	5.6296	1.07%
QC value within limits for V 292.402 Recovery = 105.61%								
Zn 206.200†	82682.4	991.142	ug/L	10.0091	991.142	ug/L	10.0091	1.01%
QC value within limits for Zn 206.200 Recovery = 99.11%								
Sn 189.927†	-285.8	-13.3052	ug/L	3.25249	-13.3052	ug/L	3.25249	24.45%
QC value within limits for Sn 189.927 Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179035.1 File : met09_sn Time : 07-SEP-2012 15:16
Cal : 92362179001 Caldate : 07-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Arsenic	A	8.4041	9.8741	5000	5049	ug/L	1	10	
Cadmium	A	192.81	202.46	5000	5145	ug/L	3	10	
Copper	A	238.58	246.37	5000	5061	ug/L	1	10	
Lead	A	62.555	60.514	5000	4899	ug/L	-2	10	
Manganese	A	791.78	795.82	5000	5059	ug/L	1	10	
Vanadium	A	263.62	280.08	5000	5091	ug/L	2	10	
Zinc	A	82.631	84.447	5000	5061	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	5772787	-7.41

Sequence No.: 34 **Autosampler Location: 218**
Sample ID: s20645 **Date Collected: 9/7/2012 3:16:49 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20645

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: s20645

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5772786.7	92.5893	%	0.39037				0.42%
Y	682927.8	95.6007	%	1.67692				1.75%
Ag 328.068†	462684.1	996.485	ug/L	20.9395	996.485	ug/L	20.9395	2.10%
QC value within limits for Ag 328.068 Recovery = 99.65%								
Al 308.215 R†	14322.8	21527.7	ug/L	206.82	21527.7	ug/L	206.82	0.96%
QC value within limits for Al 308.215 R Recovery = 107.64%								
As 188.979†	49370.5	5048.62	ug/L	127.020	5048.62	ug/L	127.020	2.52%
QC value within limits for As 188.979 Recovery = 100.97%								
B 249.677†	1111881.1	5081.74	ug/L	21.223	5081.74	ug/L	21.223	0.42%
QC value within limits for B 249.677 Recovery = 101.63%								
Ba 233.527†	543076.4	5073.90	ug/L	21.321	5073.90	ug/L	21.321	0.42%
QC value within limits for Ba 233.527 Recovery = 101.48%								
Be 313.107†	3138458.7	519.874	ug/L	2.2470	519.874	ug/L	2.2470	0.43%
QC value within limits for Be 313.107 Recovery = 103.97%								
Ca 315.887 R†	217651.8	21014.8	ug/L	198.66	21014.8	ug/L	198.66	0.95%
QC value within limits for Ca 315.887 R Recovery = 105.07%								
Cd 214.440†	1012286.2	5145.44	ug/L	15.131	5145.44	ug/L	15.131	0.29%
QC value within limits for Cd 214.440 Recovery = 102.91%								
Co 228.616†	383305.5	5013.17	ug/L	16.183	5013.17	ug/L	16.183	0.32%
QC value within limits for Co 228.616 Recovery = 100.26%								
Cr 267.716†	1207451.2	5021.49	ug/L	20.304	5021.49	ug/L	20.304	0.40%
QC value within limits for Cr 267.716 Recovery = 100.43%								
Cu 324.752†	1231837.6	5061.29	ug/L	31.407	5061.29	ug/L	31.407	0.62%
QC value within limits for Cu 324.752 Recovery = 101.23%								
Fe 238.204 R†	104112.5	22000.0	ug/L	118.81	22000.0	ug/L	118.81	0.54%
QC value within limits for Fe 238.204 R Recovery = 110.00%								
K 766.490 R†	67335.1	18805.0	ug/L	105.06	18805.0	ug/L	105.06	0.56%
QC value within limits for K 766.490 R Recovery = 94.02%								
Mg 279.077 R†	35793.6	20444.7	ug/L	288.87	20444.7	ug/L	288.87	1.41%
QC value within limits for Mg 279.077 R Recovery = 102.22%								
Mn 257.610†	3979086.1	5058.93	ug/L	19.886	5058.93	ug/L	19.886	0.39%
QC value within limits for Mn 257.610 Recovery = 101.18%								
Mo 202.031†	205809.3	5216.98	ug/L	112.242	5216.98	ug/L	112.242	2.15%
QC value within limits for Mo 202.031 Recovery = 104.34%								
Na 589.592 R†	3271428.1	24248.7	ug/L	97.36	24248.7	ug/L	97.36	0.40%
QC value greater than the upper limit for Na 589.592 R Recovery = 121.24%								
Ni 231.604†	645278.2	4980.46	ug/L	20.192	4980.46	ug/L	20.192	0.41%
QC value within limits for Ni 231.604 Recovery = 99.61%								
Pb 220.353†	302571.1	4898.80	ug/L	64.833	4898.80	ug/L	64.833	1.32%
QC value within limits for Pb 220.353 Recovery = 97.98%								
Sb 206.836†	86956.9	5090.22	ug/L	112.007	5090.22	ug/L	112.007	2.20%
QC value within limits for Sb 206.836 Recovery = 101.80%								
Se 196.026†	67091.8	5054.26	ug/L	117.010	5054.26	ug/L	117.010	2.32%
QC value within limits for Se 196.026 Recovery = 101.09%								
Ti 334.940 R†	328762.8	5079.59	ug/L	42.502	5079.59	ug/L	42.502	0.84%
QC value within limits for Ti 334.940 R Recovery = 101.59%								
Tl 190.801†	47402.3	5061.04	ug/L	97.759	5061.04	ug/L	97.759	1.93%
QC value within limits for Tl 190.801 Recovery = 101.22%								
V 292.402†	1400384.2	5090.58	ug/L	18.056	5090.58	ug/L	18.056	0.35%
QC value within limits for V 292.402 Recovery = 101.81%								
Zn 206.200†	422236.5	5061.49	ug/L	21.677	5061.49	ug/L	21.677	0.43%
QC value within limits for Zn 206.200 Recovery = 101.23%								
Sn 189.927†	108609.9	5056.26	ug/L	97.295	5056.26	ug/L	97.295	1.92%
QC value within limits for Sn 189.927 Recovery = 101.13%								

QC Failed. Continue with analysis.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 6010C

Inst : MET09 IDF : 1.0
Seqnum : 92362179036.1 File : met09_sn Time : 07-SEP-2012 15:21
Cal : 92362179001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Arsenic	A	ND	5.000	2.971	ug/L	
Cadmium	A	ND	5.000	0.7671	ug/L	
Copper	A	ND	5.000	2.558	ug/L	
Lead	A	ND	5.000	2.159	ug/L	
Manganese	A	ND	5.000	0.8105	ug/L	
Vanadium	A	ND	5.000	0.9140	ug/L	
Zinc	A	ND	20.00	4.517	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6234829	6214519	-0.33

Sequence No.: 35 **Autosampler Location: 221**
Sample ID: ccb **Date Collected: 9/7/2012 3:21:49 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ccb

Analyte	Back Pressure	Flow
All	177.0 kPa	0.55 L/min

Mean Data: ccb

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6214518.8	99.6742	%	0.67083				0.67%
Y	700833.3	98.1072	%	1.21927				1.24%
Ag 328.068†	-74.3	-0.159988	ug/L	0.2693925	-0.159988	ug/L	0.2693925	168.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	10.7	16.0496	ug/L	1.60669	16.0496	ug/L	1.60669	10.01%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	-12.2	-1.24495	ug/L	0.786408	-1.24495	ug/L	0.786408	63.17%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	425.1	1.94309	ug/L	1.021704	1.94309	ug/L	1.021704	52.58%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-45.3	-0.423644	ug/L	0.0380526	-0.423644	ug/L	0.0380526	8.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1205.8	-0.199729	ug/L	0.0588003	-0.199729	ug/L	0.0588003	29.44%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	-308.7	-29.8047	ug/L	5.28176	-29.8047	ug/L	5.28176	17.72%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	-131.9	-0.670267	ug/L	0.0468615	-0.670267	ug/L	0.0468615	6.99%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-41.0	-0.537474	ug/L	0.1878057	-0.537474	ug/L	0.1878057	34.94%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-15.9	-0.0661615	ug/L	0.19842619	-0.0661615	ug/L	0.19842619	299.91%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-167.5	-0.688306	ug/L	0.3711017	-0.688306	ug/L	0.3711017	53.92%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	-0.2	-0.0383793	ug/L	2.31197193	-0.0383793	ug/L	2.31197193	>999.9%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	-20.0	-5.58243	ug/L	33.372869	-5.58243	ug/L	33.372869	597.82%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	9.1	5.19950	ug/L	4.773718	5.19950	ug/L	4.773718	91.81%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	-574.1	-0.729928	ug/L	0.0304296	-0.729928	ug/L	0.0304296	4.17%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-14.6	-0.370694	ug/L	0.3807675	-0.370694	ug/L	0.3807675	102.72%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	19333.4	143.304	ug/L	8.1972	143.304	ug/L	8.1972	5.72%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	-109.6	-0.845706	ug/L	0.0801292	-0.845706	ug/L	0.0801292	9.47%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.5	-0.0249651	ug/L	0.56617450	-0.0249651	ug/L	0.56617450	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-18.2	-1.06476	ug/L	2.484244	-1.06476	ug/L	2.484244	233.32%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-13.4	-1.01023	ug/L	1.047331	-1.01023	ug/L	1.047331	103.67%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	16.0	0.246599	ug/L	0.2802170	0.246599	ug/L	0.2802170	113.63%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	-14.3	-1.53115	ug/L	0.264568	-1.53115	ug/L	0.264568	17.28%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-4.7	-0.0171144	ug/L	0.20659385	-0.0171144	ug/L	0.20659385	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-85.2	-1.02157	ug/L	0.057050	-1.02157	ug/L	0.057050	5.58%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	-11.0	-0.511629	ug/L	0.2189077	-0.511629	ug/L	0.2189077	42.79%
QC value within limits for Sn 189.927 Recovery = Not calculated								

All analyte(s) passed QC.

Mercury Raw Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052362260

Instrument : MET34
Method : EPA 7470A

Begun : 09/07/12 13:40
SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	190269	ICALBLK	CAL BLANK			09/07/12 13:40	1.0		
002	190269	ICAL	CAL 1			09/07/12 13:42	1.0	1	
003	190269	ICAL	CAL 2			09/07/12 13:43	1.0	1	
004	190269	ICAL	CAL 3			09/07/12 13:45	1.0	1	
005	190269	ICAL	CAL 4			09/07/12 13:47	1.0	1	
006	190269	ICAL	CAL 5			09/07/12 13:49	1.0	1	
007	190269	ICV				09/07/12 13:52	1.0	2	
008	190269	ICB				09/07/12 13:54	1.0		
009	190269	BLANK	QC655196	Water	190269	09/07/12 13:56	1.0		
010	190269	LCS	QC655197	Water	190269	09/07/12 13:57	1.0		
011	190269	MSS	239391-003	Water	190269	09/07/12 13:59	1.0		
012	190269	MS	QC655198	Water	190269	09/07/12 14:01	1.0		
013	190269	MSD	QC655199	Water	190269	09/07/12 14:03	1.0		
014	190269	SER	QC655200	Water	190269	09/07/12 14:04	5.0		
015	190269	SAMPLE	239391-002	Filtrate	190269	09/07/12 14:06	1.0		
016	190269	SAMPLE	239391-004	Filtrate	190269	09/07/12 14:08	1.0		
017	190269	SAMPLE	239391-005	Water	190269	09/07/12 14:09	1.0		
018	190269	SAMPLE	239267-002	Water	190269	09/07/12 14:11	1.0		
019	190269	CCV				09/07/12 14:13	1.0	3	
020	190269	CCB				09/07/12 14:14	1.0		
021	190269	SAMPLE	239382-001	Water	190269	09/07/12 14:16	1.0		
022	190269	SAMPLE	239403-007	Water	190269	09/07/12 14:18	1.0		
023	190269	SAMPLE	239403-008	Water	190269	09/07/12 14:20	1.0		
024	190269	SAMPLE	239404-015	Water	190269	09/07/12 14:21	1.0		
025	190269	SAMPLE	239426-001	Water	190269	09/07/12 14:23	1.0		
026	190269	SAMPLE	239427-001	Water	190269	09/07/12 14:25	1.0		
027	190269	XSAMPLE	239267-005	Filtrate	190269	09/07/12 14:26	1.0		
028	190269	SAMPLE	239267-005	Filtrate	190269	09/07/12 14:31	1.0		
029	190269	CCV				09/07/12 14:32	1.0	3	
030	190269	CCB				09/07/12 14:34	1.0		
031	190269	BLANK	QC655201	WET Leachate	190270	09/07/12 14:51	1.0		
032	190269	BS	QC655202	WET Leachate	190270	09/07/12 14:53	1.0		
033	190269	BSD	QC655203	WET Leachate	190270	09/07/12 14:55	1.0		
034	190269	MSS	239300-001	WET Leachate	190270	09/07/12 14:56	1.0		
035	190269	MS	QC655204	WET Leachate	190270	09/07/12 14:58	1.0		
036	190269	MSD	QC655205	WET Leachate	190270	09/07/12 15:00	1.0		
037	190269	SAMPLE	239300-002	WET Leachate	190270	09/07/12 15:01	1.0		
038	190269	SAMPLE	239300-003	WET Leachate	190270	09/07/12 15:03	1.0		
039	190269	SAMPLE	239300-004	WET Leachate	190270	09/07/12 15:05	1.0		
040	190269	SAMPLE	239300-005	WET Leachate	190270	09/07/12 15:07	1.0		
041	190269	CCV				09/07/12 15:08	1.0	3	
042	190269	CCB				09/07/12 15:10	1.0		
043	190269	SAMPLE	239300-006	WET Leachate	190270	09/07/12 15:12	1.0		
044	190269	SAMPLE	239300-007	WET Leachate	190270	09/07/12 15:13	1.0		
045	190269	SAMPLE	239300-008	WET Leachate	190270	09/07/12 15:15	1.0		
046	190269	SAMPLE	239300-009	WET Leachate	190270	09/07/12 15:17	1.0		
047	190269	SAMPLE	239300-010	WET Leachate	190270	09/07/12 15:19	1.0		
048	190269	SAMPLE	239300-011	WET Leachate	190270	09/07/12 15:20	1.0		
049	190269	SAMPLE	239296-001	WET Leachate	190270	09/07/12 15:22	1.0		
050	190269	SAMPLE	239296-002	WET Leachate	190270	09/07/12 15:24	1.0		
051	190269	SAMPLE	239296-003	WET Leachate	190270	09/07/12 15:25	1.0		
052	190269	SAMPLE	239296-004	WET Leachate	190270	09/07/12 15:27	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1052362260

Instrument : MET34 Begun : 09/07/12 13:40
Method : EPA 7470A SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	190269	CCV				09/07/12 15:29	1.0	3	
054	190269	CCB				09/07/12 15:30	1.0		
055	190269	SAMPLE	239296-005	WET Leachate	190270	09/07/12 15:32	1.0		
056	190269	SAMPLE	239296-006	WET Leachate	190270	09/07/12 15:34	1.0		
057	190269	SAMPLE	239296-007	WET Leachate	190270	09/07/12 15:36	1.0		
058	190269	SAMPLE	239296-008	WET Leachate	190270	09/07/12 15:37	1.0		
059	190269	SAMPLE	239296-009	WET Leachate	190270	09/07/12 15:39	1.0		
060	190269	CCV				09/07/12 15:41	1.0	3	
061	190269	CCB				09/07/12 15:42	1.0		

CRT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 61.

CRT 09/07/12 : On run 27, the sample vial was not on the rack during analysis. The run was aborted and the sample was reran on run 28.

Standards used: 1=S20657 2=S20659 3=S20660

Method: m34hgppb Operator: Admin Date of Analysis: 07 Sep 2012 12:54:40

Date	Sample ID	Extended ID	Type	µ Abs.	Conc.	Units
07 Sep 2012 13:40:32	CAL Blank - 1		S	312	-	ppb
07 Sep 2012 13:42:16	CAL 1 - 1		S	1266	-	ppb
07 Sep 2012 13:43:59	CAL 2 - 1		S	2685	-	ppb
07 Sep 2012 13:45:41	CAL 3 - 1		S	9497	-	ppb
07 Sep 2012 13:47:24	CAL 4 - 1		S	23626	-	ppb
07 Sep 2012 13:49:06	CAL 5 - 1		S	47694	-	ppb
07 Sep 2012 13:52:51	ICV,s20659 - 1		C	22061	92.3% 4.6155	ppb
07 Sep 2012 13:54:31	ICB - 1		C	145	-0.0161	ppb
07 Sep 2012 13:56:14	QC655196 - 1	190269,1	U	246	0.0053	ppb
07 Sep 2012 13:57:56	QC655197 - 1	190269,1	U	11198	2.3198	ppb
07 Sep 2012 13:59:38	239391-003 - 1	190269,1	U	644	0.0894	ppb
07 Sep 2012 14:01:19	QC655198 - 1	190269,1	U	10652	2.2044	ppb
07 Sep 2012 14:03:01	QC655199 - 1	190269,1	U	10371	2.1450	ppb
07 Sep 2012 14:04:44	QC655200 - 1	190269,5	U	-131	-0.0744	ppb
07 Sep 2012 14:06:27	239391-002 - 1	190269,1	U	625	0.0854	ppb
07 Sep 2012 14:08:09	239391-004 - 1	190269,1	U	287	0.0139	ppb
07 Sep 2012 14:09:51	239391-005 - 1	190269,1	U	300	0.0167	ppb
07 Sep 2012 14:11:34	239267-002 - 1	190269,1	U	373	0.0321	ppb
07 Sep 2012 14:13:17	CCV,s20660 - 1		C	22484	94.1% 4.7049	ppb
07 Sep 2012 14:14:58	CCB - 1		C	147	-0.0157	ppb
07 Sep 2012 14:16:40	239382-001 - 1	190269,1	U	63	-0.0334	ppb
07 Sep 2012 14:18:23	239403-007 - 1	190269,1	U	268	0.0099	ppb
07 Sep 2012 14:20:06	239403-008 - 1	190269,1	U	254	0.0070	ppb
07 Sep 2012 14:21:47	239404-015 - 1	190269,1	U	240	0.0040	ppb
07 Sep 2012 14:23:29	239426-001 - 1	190269,1	U	211	-0.0021	ppb
07 Sep 2012 14:25:11	239427-001 - 1	190269,1	U	302	0.0171	ppb
07 Sep 2012 14:26:52	239267-005 - 1	190269,1	U	0	-0.0467	ppb
07 Sep 2012 14:31:11	239267-005 - 1	190269,1	U	462	0.0509	ppb
07 Sep 2012 14:32:52	CCV,s20660 - 1		C	25074	105.0% 5.2523	ppb
07 Sep 2012 14:34:34	CCB - 1		C	114	-0.0226	ppb
07 Sep 2012 14:51:44	QC655201 - 1	190270,1	U	258	0.0078	ppb
07 Sep 2012 14:53:25	QC655202 - 1	190270,1	U	11928	2.4741	ppb
07 Sep 2012 14:55:07	QC655203 - 1	190270,1	U	12222	2.5362	ppb
07 Sep 2012 14:56:49	239300-001 - 1	190270,1	U	216	-0.0011	ppb
07 Sep 2012 14:58:32	QC655204 - 1	190270,1	U	9885	2.0423	ppb
07 Sep 2012 15:00:14	QC655205 - 1	190270,1	U	9616	1.9855	ppb
07 Sep 2012 15:01:58	239300-002 - 1	190270,1	U	128	-0.0197	ppb
07 Sep 2012 15:03:42	239300-003 - 1	190270,1	U	263	0.0089	ppb
07 Sep 2012 15:05:24	239300-004 - 1	190270,1	U	302	0.0171	ppb
07 Sep 2012 15:07:06	239300-005 - 1	190270,1	U	286	0.0137	ppb
07 Sep 2012 15:08:49	CCV,s20660 - 1		C	26049	109.2% 5.4583	ppb
07 Sep 2012 15:10:30	CCB - 1		C	92	-0.0273	ppb
07 Sep 2012 15:12:13	239300-006 - 1	190270,1	U	377	0.0329	ppb
07 Sep 2012 15:13:55	239300-007 - 1	190270,1	U	325	0.0220	ppb
07 Sep 2012 15:15:39	239300-008 - 1	190270,1	U	333	0.0236	ppb
07 Sep 2012 15:17:20	239300-009 - 1	190270,1	U	305	0.0177	ppb
07 Sep 2012 15:19:02	239300-010 - 1	190270,1	U	274	0.0112	ppb
07 Sep 2012 15:20:44	239300-011 - 1	190270,1	U	671	0.0951	ppb
07 Sep 2012 15:22:25	239296-001 - 1	190270,1	U	316	0.0201	ppb
07 Sep 2012 15:24:07	239296-002 - 1	190270,1	U	260	0.0082	ppb
07 Sep 2012 15:25:49	239296-003 - 1	190270,1	U	338	0.0247	ppb
07 Sep 2012 15:27:31	239296-004 - 1	190270,1	U	289	0.0143	ppb
07 Sep 2012 15:29:13	CCV,s20660 - 1		C	26386	110.6% 5.5296	ppb
07 Sep 2012 15:30:54	CCB - 1		C	117	-0.0220	ppb
07 Sep 2012 15:32:37	239296-005 - 1	190270,1	U	302	0.0171	ppb
07 Sep 2012 15:34:19	239296-006 - 1	190270,1	U	399	0.0376	ppb
07 Sep 2012 15:36:02	239296-007 - 1	190270,1	U	269	0.0101	ppb
07 Sep 2012 15:37:45	239296-008 - 1	190270,1	U	305	0.0177	ppb
07 Sep 2012 15:39:28	239296-009 - 1	190270,1	U	354	0.0281	ppb
07 Sep 2012 15:41:10	CCV,s20660 - 1		C	26084	109.3% 5.4657	ppb
07 Sep 2012 15:42:51	CCB - 1		C	112	-0.0231	ppb

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 7470A

Inst	: MET34	Lab ID	: 239403-007	Client ID	: FB.09042012
Seqnum	: 1052362260022	Matrix	: Water	Acct	: ARCSF (JG)
File	: 190269	Batch	: 190269	Time	: 07-SEP-2012 14:18
Cal	: 1052362260001	Caldate	: 07-SEP-2012	Caltype	: WATER
IDF	: 1.0			Units	: ug/L

50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Result	RL	Blank	Flags
Mercury	ND	0.20		u

u=use

1052362260022

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 7470A

Inst	: MET34	Lab ID	: 239403-008	Client ID	: EB.09042012
Seqnum	: 1052362260023	Matrix	: Water	Acct	: ARCSF (JG)
File	: 190269	Batch	: 190269	Time	: 07-SEP-2012 14:20
Cal	: 1052362260001	Caldate	: 07-SEP-2012	Caltype	: WATER
IDF	: 1.0			Units	: ug/L

50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Result	RL	Blank	Flags
Mercury	ND	0.20		u

u=use

1052362260023

CURTIS & TOMPKINS BLANK USER REPORT FOR 239403 METALS Water
EPA 7470A

Inst	: MET34	Lab ID	: QC655196		
Seqnum	: 1052362260009.8	Matrix	: Water		
File	: 190269	Batch	: 190269	Time	: 07-SEP-2012 13:56
Cal	: 1052362260001	Caldate	: 07-SEP-2012	Caltype	: WATER
IDF	: 1.0			Units	: mg/L

50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Result	RL	Flags
Mercury	ND	0.00020	u

u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 METALS Water
EPA 7470A

Type : LCS
Inst : MET34
Seqnum : 1052362260010.8
File : 190269
IDF : 1.0
Lab ID : QC655197
Matrix : Water
Batch : 190269
Time : 07-SEP-2012 13:57
Cal : 1052362260001
Caltype : WATER
Units : mg/L

LCS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	Spiked	LCS	%Rec	Limits	Flags
Mercury	0.002500	0.002320	93	80-120	u

u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 METALS Water
EPA 7470A

Type : MSS	Type : MS	Type : MSD
Inst : MET34	Inst : MET34	Inst : MET34
Seqnum : 1052362260011	Seqnum : 1052362260012.8	Seqnum : 1052362260013.8
File : 190269	File : 190269	File : 190269
IDF : 1.0	IDF : 1.0	IDF : 1.0
Lab ID : 239391-003	Lab ID : QC655198	Lab ID : QC655199
Matrix : Water	Matrix : Water	Matrix : Water
Batch : 190269	Batch : 190269	Batch : 190269
Time : 07-SEP-2012 13:59	Time : 07-SEP-2012 14:01	Time : 07-SEP-2012 14:03
Cal : 1052362260001	Cal : 1052362260001	Cal : 1052362260001
Caltype : WATER	Caltype : WATER	Caltype : WATER
Units : mg/L		

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Mercury	0.00008940 J	0.002500	0.002204	85	0.002145	82	64-124	3	40	u

u=use

CURTIS & TOMPKINS SERIAL DILUTION FOR 239403 METALS Water
EPA 7470A

Type	: MSS	Type	: SER
Inst	: MET34	Inst	: MET34
Seqnum	: 1052362260011	Seqnum	: 1052362260014.4
File	: 190269	File	: 190269
IDF	: 1.0	IDF	: 5.0
Lab ID	: 239391-003	Lab ID	: QC655200
Matrix	: Water	Matrix	: Water
Batch	: 190269	Batch	: 190269
Time	: 07-SEP-2012 13:59	Time	: 07-SEP-2012 14:04
Cal	: 1052362260001	Cal	: 1052362260001
Caltype	: WATER	Caltype	: WATER
Units	: mg/L		

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
SER: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS	RL	SER	RL	%D	Lim	Flags
Mercury	0.00008940 J	0.0002000	ND	0.001000		10	u

u=use

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 METALS Water: EPA 7470A

Inst : MET34
Calnum : 1052362260001
Units : ug/L

Date : 07-SEP-2012 13:40
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	190269	1052362260002	CAL 1	07-SEP-2012 13:42	S20657 (500X)
L2	190269	1052362260003	CAL 2	07-SEP-2012 13:43	S20657 (200X)
L3	190269	1052362260004	CAL 3	07-SEP-2012 13:45	S20657 (50X)
L4	190269	1052362260005	CAL 4	07-SEP-2012 13:47	S20657 (20X)
L5	190269	1052362260006	CAL 5	07-SEP-2012 13:49	S20657 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	6330.0	5370.0	4748.5	4725.2	4769.4	LINR	-0.0467	2.11E-4		5188.6	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.2000	10	0.5000	4	2.0000	-2	5.0000	-1	10.000	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 METALS Water
EPA 7470A

Inst : MET34
Calnum : 1052362260001 Cal Date : 07-SEP-2012 Type : WATER

ICV 1052362260007 (07-SEP-2012) stds: S20659

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	4.616	ug/L	-8	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260008 File : 190269 Time : 07-SEP-2012 13:54
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260019 File : 190269 Time : 07-SEP-2012 14:13
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5188.6	4496.8	5.000	4.705	ug/L	-6	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260020 File : 190269 Time : 07-SEP-2012 14:14
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260029 File : 190269 Time : 07-SEP-2012 14:32
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	5188.6	5014.8	5.000	5.252	ug/L	5	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Water
EPA 7470A

Inst : MET34 IDF : 1.0
Seqnum : 1052362260030 File : 190269 Time : 07-SEP-2012 14:34
Cal : 1052362260001 Caldate : 07-SEP-2012 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.02014	ug/L	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239403
ANALYTICAL REPORT
Metals
Matrix: Soil

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
EX36B015A.2	239403-005
EX36B163A.2	239403-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
METALS (EPA 6010C AND EPA 7471B)
SOIL

Laboratory number:	**239403**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/04/12**
Samples Received:	**09/04/12**

This data package contains sample and QC results for two soil samples, requested for the above referenced project on 09/04/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Metals (EPA 6010C and EPA 7471B) Soil:
No analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 23403

Chain of Custody # _____

Project No: CA0007611.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: E Manton and D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None
1	EX36B116D.2	04/04/12	1150		X			1					X
2	EX36B116A.2	04/04/12	1155		X			1					X
3	EX36B116B.2	04/04/12	1140		X			1					X
4	EX36B116C.2	04/04/12	1200		X			1					X
5	EX36B015A.2	04/04/12	1250		X			1					X
6	EX36B163A.2	04/04/12	1315		X			2					X
7	FB.090420120	04/04/12	1455	X				9	3		1		5
8	EB.090420120	04/04/12	1505	X				3			1		2
	Temp Blank												

ANALYTICAL REQUEST

Big(2-Ethylhexyl)phthlate by 8270D	Copper by EPA 6010C	Mercury by EPA 7471B	Alpha-BHC by EPA 8081B	PCBs by 8082	TPHd by 8015	TPHg by 8015	SVOCs by 8270	Pesticides by 8081	Metals by 6010/7174
X									
X									
X									
X									
	X	X							
	X	X	X						
				X	X	X	X	X	X
							X	X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

RECEIVED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 239403 Date Received 9/4/12 Number of coolers 1
Client ARCADIS Project CA000761.0001

Date Opened 9/4/12 By (print) EL (sign) [signature]
Date Logged in ~~EL~~ 9/6/12 By (print) ~~EL~~ JG (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? (YES) NO N/A
17. Did you document your preservative check? (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239403

Sample	pH: <2	>9	>12	Other
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
-008a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: EL
Date: 9/6/12

Results & QC Summary

Curtis & Tompkins, Ltd.

Copper

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Copper	Batch#:	190253
Matrix:	Soil	Sampled:	09/04/12
Units:	mg/Kg	Received:	09/04/12
Basis:	dry	Prepared:	09/06/12
Diln Fac:	1.000	Analyzed:	09/07/12

Field ID	Type	Lab ID	Result	LOQ	DL	Moisture
EX36B015A.2	SAMPLE	239403-005	77	0.28	0.092	13%
EX36B163A.2	SAMPLE	239403-006	190	0.29	0.097	13%
	BLANK	QC655129	0.13 U	0.26	0.086	

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Mercury by Cold Vapor AA

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7471B
Analyte:	Mercury	Sampled:	09/04/12
Matrix:	Soil	Received:	09/04/12
Units:	mg/Kg	Prepared:	09/07/12
Basis:	dry	Analyzed:	09/07/12
Batch#:	190272		

Field ID	Type	Lab ID	Result	LOQ	DL	Moisture	Diln Fac
EX36B015A.2	SAMPLE	239403-005	3.1	0.20	0.063	13%	10.00
EX36B163A.2	SAMPLE	239403-006	0.92	0.097	0.031	13%	5.000
	BLANK	QC655210	0.013 U	0.017	0.0052		1.000

U= Not Detected at or above DL
DL= Detection Limit
LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Copper

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Copper	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	190253
MSS Lab ID:	239378-001	Sampled:	09/05/12
Matrix:	Soil	Received:	09/05/12
Units:	mg/Kg	Prepared:	09/06/12
Basis:	dry	Analyzed:	09/07/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
BS	QC655130		12.50	12.38	99	80-120			
BSD	QC655131		12.50	12.40	99	80-120		0	20
MS	QC655132	15.94	13.23	29.76	104	48-150	10%		
MSD	QC655133		13.62	30.58	108	48-150	10%	1	39

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Copper

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Copper	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	190253
MSS Lab ID:	239378-001	Sampled:	09/05/12
Lab ID:	QC655134	Received:	09/05/12
Matrix:	Soil	Analyzed:	09/07/12
Units:	mg/Kg		

MSS Result	MSS LOQ	Result	LOQ	Moisture %	Diff	Lim
15.94	0.2619	15.82	1.309	10%	1	10

LOQ= Limit of Quantitation

Curtis & Tompkins, Ltd.

Batch QC Report

Copper

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	EPA 3050B
Project#:	CA000761.0001	Analysis:	EPA 6010C
Analyte:	Copper	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	190253
MSS Lab ID:	239378-001	Sampled:	09/05/12
Lab ID:	QC655135	Received:	09/05/12
Matrix:	Soil	Analyzed:	09/07/12
Units:	mg/Kg		

MSS Result	Spiked	Result	%REC	Limits	Moisture
15.94	12.63	27.71	93	75-125	10%

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7471B
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	190272
MSS Lab ID:	239220-005	Sampled:	08/24/12
Matrix:	Soil	Received:	08/29/12
Units:	mg/Kg	Prepared:	09/07/12
Basis:	dry	Analyzed:	09/07/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
BS	QC655211		0.2083	0.2133	102	80-120			
BSD	QC655212		0.2083	0.2167	104	80-120		2	20
MS	QC655213	0.1747	0.3533	0.5695	112	76-138	39%		
MSD	QC655214		0.3473	0.5599	111	76-138	39%	1	42

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	239403	Location:	Hunters Point Parcel E
Client:	Arcadis	Prep:	METHOD
Project#:	CA000761.0001	Analysis:	EPA 7471B
Analyte:	Mercury	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	190272
MSS Lab ID:	239220-005	Sampled:	08/24/12
Lab ID:	QC655215	Received:	08/29/12
Matrix:	Soil	Analyzed:	09/07/12
Units:	mg/Kg		

MSS Result	MSS LOQ	Result	LOQ	Moisture %	Diff	Lim
0.1747	0.02687	0.1008 U	0.1344	39%	NC	10

U= Not Detected at or above DL
NC= Not Calculated
LOQ= Limit of Quantitation

REPORTING SUMMARY FOR 239403 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CU	HG
239403-005	MET08	09/07/12 09:57	1.0	+	
239403-005	MET14	09/07/12 15:26	1.0		
239403-005	MET14	09/07/12 15:36	10.0		+
239403-006	MET08	09/07/12 10:01	1.0	+	
239403-006	MET14	09/07/12 15:28	1.0		
239403-006	MET14	09/07/12 15:38	5.0		+
QC655129	MET08	09/07/12 09:01	1.0	+	
QC655130	MET08	09/07/12 09:06	1.0	+	
QC655131	MET08	09/07/12 09:10	1.0	+	
QC655132	MET08	09/07/12 09:17	1.0	+	
QC655133	MET08	09/07/12 09:20	1.0	+	
QC655134	MET08	09/07/12 09:24	5.0	+	
QC655135	MET08	09/07/12 09:28	1.0	+	
QC655210	MET14	09/07/12 14:09	1.0		+
QC655211	MET14	09/07/12 14:12	1.0		+
QC655212	MET14	09/07/12 14:14	1.0		+
QC655213	MET14	09/07/12 14:18	1.0		+
QC655214	MET14	09/07/12 14:21	1.0		+
QC655215	MET14	09/07/12 14:23	5.0		+

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82361903

Instrument : MET08 Begun : 09/07/12 07:43
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met08_sr_6010	ICALBLK				09/07/12 07:43	1.0		
002	met08_sr_6010	ICAL	CRI5.1			09/07/12 07:48	1.0	1	
003	met08_sr_6010	ICAL	CS100			09/07/12 07:53	1.0	2	
004	met08_sr_6010	ICAL	CS1K			09/07/12 07:57	1.0	3	
005	met08_sr_6010	ICAL	CS10K			09/07/12 08:01	1.0	4	
006	met08_sr_6010	ICAL	CS100K			09/07/12 08:06	1.0	5	
007	met08_sr_6010	ICV				09/07/12 08:12	1.0	6	
008	met08_sr_6010	ICB				09/07/12 08:17	1.0		
009	met08_sr_6010	ICSA				09/07/12 08:22	1.0	7	10:AL=520000
010	met08_sr_6010	ICSAB				09/07/12 08:35	1.0	8	5:AL=520000
011	met08_sr_6010	XCRI				09/07/12 08:41	1.0	9	
012	met08_sr_6010	CRI				09/07/12 08:45	1.0	9	
013	met08_sr_6010	BLANK	QC655129	Soil	190253	09/07/12 09:01	1.0		
014	met08_sr_6010	BS	QC655130	Soil	190253	09/07/12 09:06	1.0		
015	met08_sr_6010	BSD	QC655131	Soil	190253	09/07/12 09:10	1.0		
016	met08_sr_6010	MSS	239378-001	Soil	190253	09/07/12 09:14	1.0		3:FE=340000
017	met08_sr_6010	MS	QC655132	Soil	190253	09/07/12 09:17	1.0		
018	met08_sr_6010	MSD	QC655133	Soil	190253	09/07/12 09:20	1.0		
019	met08_sr_6010	SER	QC655134	Soil	190253	09/07/12 09:24	5.0		
020	met08_sr_6010	PDS	QC655135	Soil	190253	09/07/12 09:28	1.0	10 11	3:FE=350000
021	met08_sr_6010	CCV				09/07/12 09:31	1.0	12	
022	met08_sr_6010	CCB				09/07/12 09:36	1.0		
023	met08_sr_6010	SAMPLE	239389-001	Soil	190253	09/07/12 09:41	1.0		3:FE=360000
024	met08_sr_6010	SAMPLE	239397-001	Soil	190253	09/07/12 09:44	1.0		3:FE=380000
025	met08_sr_6010	SAMPLE	239397-002	Soil	190253	09/07/12 09:48	1.0		3:FE=430000
026	met08_sr_6010	SAMPLE	239408-001	Soil	190253	09/07/12 09:51	1.0		5:FE=490000
027	met08_sr_6010	SAMPLE	239402-001	Soil	190253	09/07/12 09:54	1.0		2:FE=240000
028	met08_sr_6010	SAMPLE	239403-005	Soil	190253	09/07/12 09:57	1.0		6:MG=1200000
029	met08_sr_6010	SAMPLE	239403-006	Soil	190253	09/07/12 10:01	1.0		7:MG=1500000
030	met08_sr_6010	SAMPLE	239397-001	Soil	190253	09/07/12 10:04	1.0		3:FE=380000
031	met08_sr_6010	CCV				09/07/12 10:07	1.0	12	
032	met08_sr_6010	CCB				09/07/12 10:12	1.0		
033	met08_sr_6010	ICSAB				09/07/12 10:17	1.0	8	5:AL=530000
034	met08_sr_6010	XBLANK	QC655108	Water	190250	09/07/12 10:40	1.0		
035	met08_sr_6010	XBS	QC655109	Water	190250	09/07/12 10:45	1.0		
036	met08_sr_6010	XBSD	QC655110	Water	190250	09/07/12 10:49	1.0		
037	met08_sr_6010	XMSS	239404-015	Water	190250	09/07/12 10:53	1.0		3:FE=340000
038	met08_sr_6010	XMS	QC655111	Water	190250	09/07/12 10:56	1.0		
039	met08_sr_6010	XMSD	QC655112	Water	190250	09/07/12 11:00	1.0		
040	met08_sr_6010	XSER	QC655113	Water	190250	09/07/12 11:03	5.0		
041	met08_sr_6010	XPDS	QC655114	Water	190250	09/07/12 11:07	1.0	13	
042	met08_sr_6010	XCCV				09/07/12 11:10	1.0	12	
043	met08_sr_6010	XCCB				09/07/12 11:15	1.0		
044	met08_sr_6010	XSAMPLE	239403-007	Water	190250	09/07/12 11:20	1.0		
045	met08_sr_6010	XSAMPLE	239403-008	Water	190250	09/07/12 11:24	1.0		
046	met08_sr_6010	XSAMPLE	239369-001	Water	190250	09/07/12 11:27	1.0		
047	met08_sr_6010	XSAMPLE	239374-001	Water	190250	09/07/12 11:30	1.0		
048	met08_sr_6010	XSAMPLE	239377-001	Water	190250	09/07/12 11:33	1.0		
049	met08_sr_6010	CCV				09/07/12 11:38	1.0	12	
050	met08_sr_6010	CCB				09/07/12 11:44	1.0		
051	met08_sr_6010	ICSAB				09/07/12 11:48	1.0	8	5:AL=530000
052	met08_sr_6010	BLANK	QC655185	Soil	190267	09/07/12 12:14	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82361903

Instrument : MET08 Begun : 09/07/12 07:43
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met08_sr_6010	BS	QC655186	Soil	190267	09/07/12 12:19	1.0		
054	met08_sr_6010	BSD	QC655187	Soil	190267	09/07/12 12:23	1.0		
055	met08_sr_6010	MSS	239425-001	Soil	190267	09/07/12 12:27	1.0		4:FE=380000
056	met08_sr_6010	MSS	239425-001	Soil	190267	09/07/12 12:30	1.0		4:FE=380000
057	met08_sr_6010	MS	QC655188	Soil	190267	09/07/12 12:33	1.0		
058	met08_sr_6010	MSD	QC655189	Soil	190267	09/07/12 12:37	1.0		2:FE=390000
059	met08_sr_6010	SER	QC655190	Soil	190267	09/07/12 12:42	5.0		
060	met08_sr_6010	PDS	QC655191	Soil	190267	09/07/12 12:46	1.0	10 11	1:FE=380000
061	met08_sr_6010	SAMPLE	239432-002	Soil	190267	09/07/12 12:49	1.0		5:CA=440000
062	met08_sr_6010	CCV				09/07/12 12:53	1.0	12	
063	met08_sr_6010	CCB				09/07/12 12:58	1.0		
064	met08_sr_6010	SAMPLE	239432-002	Soil	190267	09/07/12 13:04	1.0		5:CA=440000
065	met08_sr_6010	SAMPLE	239425-002	Soil	190267	09/07/12 13:07	1.0		4:FE=330000
066	met08_sr_6010	CCV				09/07/12 13:14	1.0	12	
067	met08_sr_6010	CCB				09/07/12 13:19	1.0		
068	met08_sr_6010	ICSAB				09/07/12 13:24	1.0	8	5:AL=500000
069	met08_sr_6010	SAMPLE	239425-003	Soil	190267	09/07/12 13:30	1.0		3:FE=320000
070	met08_sr_6010	SAMPLE	239425-004	Soil	190267	09/07/12 13:33	1.0		4:FE=300000
071	met08_sr_6010	SAMPLE	239425-005	Soil	190267	09/07/12 13:37	1.0		3:FE=330000
072	met08_sr_6010	SAMPLE	239425-006	Soil	190267	09/07/12 13:40	1.0		4:FE=310000
073	met08_sr_6010	SAMPLE	239425-006	Soil	190267	09/07/12 13:46	1.0		4:FE=300000
074	met08_sr_6010	CCV				09/07/12 13:49	1.0	12	
075	met08_sr_6010	CCB				09/07/12 13:55	1.0		
076	met08_sr_6010	ICSAB				09/07/12 14:00	1.0	8	5:CA=480000

NT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 76.

PRW 09/07/12 : 34-48 were in the wrong autosampler location. Samples were x'd out and re-ran on MET09.

Standards used: 1=S20200 2=S20215 3=S20214 4=S20216 5=S20217 6=S20644 7=S20220 8=S20222 9=S20319 10=S20436 11=S20437 12=S20645 13=S19831

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 82361903

Date : 09/07/12 Reference : met08_sr_6010
Sequence : MET08 09/07/12 Analyzed : 09/07/12 07:48

#	Type	Sample ID	Y A
		ICAL STD	1808473
		LOWER LIMIT	542542
		UPPER LIMIT	2170167
008	ICB		1976997
009	ICSA		1636938
010	ICSAB		1577047
013	BLANK	QC655129	1959566
014	BS	QC655130	1875046
015	BSD	QC655131	1838333
017	MS	QC655132	1874702
018	MSD	QC655133	1857746
019	SER	QC655134	1873288
020	PDS	QC655135	1931119
021	CCV		1850391
022	CCB		1956122
028	SAMPLE	239403-005	1720803
029	SAMPLE	239403-006	1654543
031	CCV		1877983
032	CCB		1970450
033	ICSAB		1604534

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 METALS Soil: EPA 6010C

Inst : MET08
Calnum : 82361903001
Units : ug/L

Date : 07-SEP-2012 07:43
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met08_sr_6010	82361903002	CRI5.1	07-SEP-2012 07:48	S20200
L2	met08_sr_6010	82361903003	CS100	07-SEP-2012 07:53	S20215
L3	met08_sr_6010	82361903004	CS1K	07-SEP-2012 07:57	S20214
L4	met08_sr_6010	82361903005	CS10K	07-SEP-2012 08:01	S20216
L5	met08_sr_6010	82361903006	CS100K	07-SEP-2012 08:06	S20217

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Copper	A	78.780	103.86	109.11	109.57		LOR0	0.00000	0.00913		100.33	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Copper	A	5.0000	**-28**	100.00	-5	1000.0	0	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 METALS Soil
EPA 6010C

Inst : MET08
Calnum : 82361903001 Cal Date : 07-SEP-2012

ICV 82361903007 (07-SEP-2012) stds: S20644

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Copper	A	5000	4906	ug/L	-2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903008.1 File : met08_sr_6010 Time : 07-SEP-2012 08:17
Cal : 82361903001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Copper	A	ND	5.000	3.219	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1976997	9.32

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903009.1 File : met08_sr_6010 Time : 07-SEP-2012 08:22
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20220

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19520	ug/L	98
Copper	A	20000	20890	ug/L	104
Manganese	A	20000	19070	ug/L	95
Nickel	A	20000	18320	ug/L	92
Vanadium	A	20000	20110	ug/L	101
Aluminum	R	500000	518700	ug/L	104
Calcium	R	500000	502700	ug/L	101
Iron	R	200000	196200	ug/L	98
Magnesium	R	500000	509300	ug/L	102
Titanium	R	20000	21400	ug/L	107

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1636938	-9.49

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903010.1 File : met08_sr_6010 Time : 07-SEP-2012 08:35
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Copper	A	500.0	555.5	ug/L	11	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1577047	-12.80

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903012.1 File : met08_sr_6010 Time : 07-SEP-2012 08:45
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20319

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Copper	A	20.00	18.51	ug/L	-7	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1885342	4.25

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903021.1 File : met08_sr_6010 Time : 07-SEP-2012 09:31
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Copper	A	100.33	108.96	5000	4972	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1850391	2.32

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903022.1 File : met08_sr_6010 Time : 07-SEP-2012 09:36
Cal : 82361903001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Copper	A	ND	5.000	3.219	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1956122	8.16

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903031.1 File : met08_sr_6010 Time : 07-SEP-2012 10:07
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Copper	A	100.33	109.08	5000	4978	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1877983	3.84

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903032.1 File : met08_sr_6010 Time : 07-SEP-2012 10:12
Cal : 82361903001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Copper	A	ND	5.000	3.219	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1970450	8.96

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903033.1 File : met08_sr_6010 Time : 07-SEP-2012 10:17
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Copper	A	500.0	560.4	ug/L	12	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1604534	-11.28

SAMPLE PREPARATION SUMMARY

Batch # : 190253
Started By : MCB
Method : 3050B
Spike #1 ID : S20436
Prep Date : 06-SEP-2012 21:00
SOP Version : 3050B_ICP_rv9
Spike #2 ID : S20437
Analysis : ICAP
Finished By : MCB
Units : g

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239378-001		Soil	1.1	50	1	45.45						T22/ICP	
239389-001		Soil	1.11	50	1	45.05						T22/ICP	
239397-001		Soil	1.07	50	1	46.73						T22/ICP	
239397-002		Soil	1.06	50	1	47.17						T22/ICP	
239402-001		Soil	1.1	50	1	45.45						T22/ICP	
239403-005		Soil	1.08	50	1	46.30						CU	
239403-006		Soil	1.02	50	1	49.02						CU	
239408-001		Soil	1.09	50	1	45.87						T22/ICP	
QC655129	BLANK	Soil	1	50	1	50.0							
QC655130	BS	Soil	1	50	1	50.0		.5	.5				
QC655131	BSD	Soil	1	50	1	50.0		.5	.5				
QC655132	MS	Soil	1.05	50	1	47.62		.5	.5				
QC655133	MSD	Soil	1.02	50	1	49.02		.5	.5				
QC655134	SER	Soil	1.1	50	1	45.45							
QC655135	PDS	Soil	1.1	50	1	45.45							

Analyst: NT Date: 09/07/12 Reviewer: PRW Date: 09/07/12

Soil Digestion for ICP & ICP-MS — Curtis & Tompkins, Ltd.

LIMS Batch #: 190253 | Scale Used: ☒ Metals Prep ☐ ____ | Digestion Method: ☒ EPA 3050b ☐ ____ | BK-3342 Page 87

Date Digested: 9/6/12

Digested by: MCB III

HCUST

Lvl.	Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID	Comments
	BLANK		1.0	☒50 ☐____	Y		
	BS		↓	☒50 ☐____			
	BSD		↓	☒50 ☐____			
III	MS-378-001	A	1.05	☒50 ☐____		✓	
5	MSD-378-001	↓	1.02	☒50 ☐____		✓	
	239378-001		1.10	☒50 ☐____		✓	
	239389-001 (309-1)		1.11	☒50 ☐____		✓	
	239397-001		1.07	☒50 ☐____		✓	
↓	↓ -002	↓	1.06	☒50 ☐____		✓	
II 10	239408-001	B	1.09	☒50 ☐____		✓	
	239402-001	A	1.10	☒50 ☐____		✓	
	239403-005	↓	1.08	☒50 ☐____		✓	
↓	↓ -006	↓	1.02	☒50 ☐____		✓	
				☐50 ☐____			
15				☐50 ☐____			
				☐50 ☐____			
				☐50 ☐____			
				☐50 ☐____			
				☐50 ☐____			
20				☐50 ☐____			
				☐50 ☐____			
				☐50 ☐____			
				☐50 ☐____			
				☐50 ☐____			
				☐50 ☐____			

MCB III 9/6/12

	Reagent ID or LIMS #	Initials / Date
Digestion tubes, lot#	J143054-262	
.5 mL of spike solution (Std1) was added to all spikes	520436	MCB III 9/6/12
.5 mL of spike solution (Std2) was added to all spikes	520437	
Digestion Temperature (°C), Block and Probe Location	95° B-7	
Digestion begun at (time)	9:00 PM	
1:1 HNO3	L08023 JTBAKER	
concentrated HNO3	0000003890	
3mL 30% hydrogen peroxide	K52A02	
concentrated HCl	K30036	
Digestion ended at (time)	12:10 AM	
~~Filtered~~ thru' 541 Whatman	66546	
Relinquished to ICP group	ICP	

Michael C Brock III 9/6/12
Digestion Chemist / Date

Continued from page ____
Continued on page 1

Reviewed by / Date

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 842362266

Instrument : MET14 Begun : 09/07/12 13:46
Method : EPA 7471B SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	190272	ICALBLK	STD01REP1			09/07/12 13:46	1.0		
002	190272	ICAL	STD02REP1			09/07/12 13:48	1.0	1	
003	190272	ICAL	STD03REP1			09/07/12 13:51	1.0	1	
004	190272	ICAL	STD04REP1			09/07/12 13:53	1.0	1	
005	190272	ICAL	STD05REP1			09/07/12 13:55	1.0	1	
006	190272	ICAL	STD06REP1			09/07/12 13:57	1.0	1	
007	190272	ICV				09/07/12 14:04	1.0	2	
008	190272	ICB				09/07/12 14:06	1.0		
009	190272	BLANK	QC655210	Soil	190272	09/07/12 14:09	1.0		
010	190272	BS	QC655211	Soil	190272	09/07/12 14:12	1.0		
011	190272	BSD	QC655212	Soil	190272	09/07/12 14:14	1.0		
012	190272	MSS	239220-005	Soil	190272	09/07/12 14:16	1.0		
013	190272	MS	QC655213	Soil	190272	09/07/12 14:18	1.0		
014	190272	MSD	QC655214	Soil	190272	09/07/12 14:21	1.0		
015	190272	SER	QC655215	Soil	190272	09/07/12 14:23	5.0		
016	190272	SAMPLE	239220-001	Soil	190272	09/07/12 14:25	1.0		
017	190272	SAMPLE	239220-002	Soil	190272	09/07/12 14:27	1.0		
018	190272	SAMPLE	239220-003	Soil	190272	09/07/12 14:29	1.0		
019	190272	CCV				09/07/12 14:31	1.0	3	
020	190272	CCB				09/07/12 14:34	1.0		
021	190272	SAMPLE	239220-004	Soil	190272	09/07/12 14:37	1.0		
022	190272	SAMPLE	239408-001	Soil	190272	09/07/12 14:39	1.0		
023	190272	SAMPLE	239425-001	Soil	190272	09/07/12 14:46	20.0		
024	190272	SAMPLE	239425-002	Soil	190272	09/07/12 14:48	1.0		1:HG=160
025	190272	SAMPLE	239425-002	Soil	190272	09/07/12 14:59	100.0		
026	190272	SAMPLE	239425-003	Soil	190272	09/07/12 15:02	100.0		
027	190272	SAMPLE	239425-004	Soil	190272	09/07/12 15:04	100.0		
028	190272	SAMPLE	239425-005	Soil	190272	09/07/12 15:06	100.0		
029	190272	SAMPLE	239425-006	Soil	190272	09/07/12 15:08	100.0		
030	190272	CCV				09/07/12 15:10	1.0	3	
031	190272	CCB				09/07/12 15:12	1.0		
032	190272	SAMPLE	239432-002	Soil	190272	09/07/12 15:15	1.0		
033	190272	SAMPLE	239389-001	Soil	190272	09/07/12 15:17	1.0		
034	190272	SAMPLE	239397-001	Soil	190272	09/07/12 15:19	1.0		
035	190272	SAMPLE	239397-002	Soil	190272	09/07/12 15:21	1.0		
036	190272	SAMPLE	239402-001	Soil	190272	09/07/12 15:24	1.0		
037	190272	SAMPLE	239403-005	Soil	190272	09/07/12 15:26	1.0		1:HG=34
038	190272	SAMPLE	239403-006	Soil	190272	09/07/12 15:28	1.0		1:HG=12
039	190272	SAMPLE	239425-006	Soil	190272	09/07/12 15:31	10.0		
040	190272	SAMPLE	239403-005	Soil	190272	09/07/12 15:36	10.0		
041	190272	SAMPLE	239403-006	Soil	190272	09/07/12 15:38	5.0		
042	190272	CCV				09/07/12 15:41	1.0	3	
043	190272	CCB				09/07/12 15:43	1.0		

CRT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 43.

Standards used: 1=S20657 2=S20659 3=S20660

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 METALS Soil: EPA 7471B

Inst : MET14
Calnum : 842362266001
Units : ug/L

Date : 07-SEP-2012 13:46
X Axis : R

Reviewer : ---
Type : SOIL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	190272	842362266002	STD02REP1	07-SEP-2012 13:48	S20657 (500X)
L2	190272	842362266003	STD03REP1	07-SEP-2012 13:51	S20657 (200X)
L3	190272	842362266004	STD04REP1	07-SEP-2012 13:53	S20657 (50X)
L4	190272	842362266005	STD05REP1	07-SEP-2012 13:55	S20657 (20X)
L5	190272	842362266006	STD06REP1	07-SEP-2012 13:57	S20657 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	3515.0	3018.0	2745.5	2606.8	2478.6	LINR	-0.1355	4.05E-4		2872.8	0.999	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.2000	**-25**	0.5000	-5	2.0000	4	5.0000	3	10.000	-1

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

842362266001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 METALS Soil
EPA 7471B

Inst : MET14
Calnum : 842362266001 Cal Date : 07-SEP-2012 Type : SOIL

ICV 842362266007 (07-SEP-2012) stds: S20659

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	5.100	ug/L	2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266008 File : 190272 Time : 07-SEP-2012 14:06
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03605	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266019 File : 190272 Time : 07-SEP-2012 14:31
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2872.8	2785.4	5.000	5.510	ug/L	10	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266020 File : 190272 Time : 07-SEP-2012 14:34
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03605	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266030 File : 190272 Time : 07-SEP-2012 15:10
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2872.8	2790.6	5.000	5.520	ug/L	10	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266031 File : 190272 Time : 07-SEP-2012 15:12
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03605	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266042 File : 190272 Time : 07-SEP-2012 15:41
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2872.8	2816.0	5.000	5.570	ug/L	11	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266043 File : 190272 Time : 07-SEP-2012 15:43
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03605	ug/L	

SAMPLE PREPARATION SUMMARY

Batch # : 190272
Started By : CRT
Method : METHOD
Spike #1 ID : S20657

Prep Date : 07-SEP-2012 11:20

Analysis : HG
Finished By : CRT
Units : g

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
239220-001		Soil	.64	50	1	78.13						TAL/HG	See comment 1 below
239220-002		Soil	.63	50	1	79.37						TAL/HG	See comment 1 below
239220-003		Soil	.62	50	1	80.65						TAL/HG	See comment 1 below
239220-004		Soil	.61	50	1	81.97						TAL/HG	See comment 1 below
239220-005		Soil	.61	50	1	81.97						TAL/HG	See comment 2 below
239389-001		Soil	.6	50	1	83.33						T22/HG	alias: 239308-001
239397-001		Soil	.58	50	1	86.21						T22/HG	
239397-002		Soil	.62	50	1	80.65						T22/HG	
239402-001		Soil	.6	50	1	83.33						T22/HG	
239403-005		Soil	.57	50	1	87.72						HG	
239403-006		Soil	.59	50	1	84.75						HG	
239408-001		Soil	.58	50	1	86.21						T22/HG	
239425-001		Soil	.62	50	1	80.65						T22/HG	
239425-002		Soil	.61	50	1	81.97						T22/HG	
239425-003		Soil	.6	50	1	83.33						T22/HG	
239425-004		Soil	.59	50	1	84.75						T22/HG	
239425-005		Soil	.64	50	1	78.13						T22/HG	
239425-006		Soil	.59	50	1	84.75						T22/HG	
239432-002		Soil	.58	50	1	86.21						T22/HG	
QC655210	BLANK	Soil	.6	50	1	83.33							
QC655211	BS	Soil	.6	50	1	83.33		1.25					
QC655212	BSD	Soil	.6	50	1	83.33		1.25					
QC655213	MS	Soil	.58	50	1	86.21		1.25					
QC655214	MSD	Soil	.59	50	1	84.75		1.25					
QC655215	SER	Soil	.61	50	1	81.97							

Comment 1: Comp of containers A-B, post-MIS sample
Comment 2: MSS, SER, Comp of containers A-D, post-MIS sample

Analyst: CRT Date: 09/07/12 Reviewer: PRW Date: 09/07/12

Soil Digestion for Mercury Curtis & Tompkins, Ltd.

LIMS Batch #: 190272 Scale Used Digestion Method BK 3336

Date Digested: 9/7/12 ☑ Metals Prep ☑ EPA 7471A Page 58

☐ _____ ☐ _____

Sample #	container ID	Sample Weight (g)	Final Volume (mL)	Filtered? (y/n)	Comments
MB QC655210		0	☑ 50 ☐	X	
BS ↓ 11		0	☑ 50 ☐		
BSD ↓ 12		0	☑ 50 ☐		
239220-005		0.61	☑ 50 ☐		MSS, ser, comp of A-D, post MIS
MS ~~[illegible]~~ ort 9/7/12		0.58	☑ 50 ☐		QC655213
MSD ~~[illegible]~~		0.59	☑ 50 ☐		↓ 14
239220-001		0.64	☑ 50 ☐		comp of A-B, post MIS sample
-002		0.63	☑ 50 ☐		
-003		0.62	☑ 50 ☐		
-004		0.61	☑ 50 ☐		
239408-001	B	0.58	☑ 50 ☐		
239425-001	B	0.62	☑ 50 ☐		
-002		0.61	☑ 50 ☐		
-003		0.60	☑ 50 ☐		
-004		0.59	☑ 50 ☐		
-005		0.64	☑ 50 ☐		
-006		0.59	☑ 50 ☐		
239432-002	B	0.58	☑ 50 ☐		
239389-001	A	0.60	☑ 50 ☐		alias: 239308-001
239397-001	A	0.58	☑ 50 ☐		
-002		0.62	☑ 50 ☐		
239402-001	A	0.60	☑ 50 ☐		
239403-005		0.57	☑ 50 ☐		
-006		0.59	☑ 50 ☐		ORT 9/7/12
			☐ 50 ☐		

	Reagent ID/ LIMS# / Time	Initials / Date
Digestion Tubes, Lot #	EK120423	ORT 9/7/12
1.25 mL of spike standard was added to all spikes	5206 57	
☑ CAL digested with this batch — ICAL Source LIMS S#	58	
ICV / CCV LIMS S#	59/60	
Digestion Temperature (°C), Block and Probe Location	95°C / B-36	
Digestion Started at (time)	11:20	
Aqua Regia Acids (HNO3+ HCl)	9-7	
5% $KMnO_4$	~~8~~ CM 9-6	
NaCl.hydroxylamine hydrochloride	8-27	
Stannous Chloride	9-6	
Digestion Completd at (time)	11:50	
☑ filtered thru' 0.45 um syringe filter (lot #)	S.S. 20869103	

[signature] 9/7/12 Continued from page 1

Continued on page 1

Prep Chemist / Date **Reviewed by / Date** [signature] 9-7-12

Dilutions for 239403 METALS Soil
Curtis & Tompkins Laboratories

Type	Sample ID	IDFs
SAMPLE	239403-005	1X, 10X
SAMPLE	239403-006	1X, 5X
SER	QC655134	5X
SER	QC655215	5X

ICP Raw Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82361903

Instrument : MET08 Begun : 09/07/12 07:43
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met08_sr_6010	ICALBLK				09/07/12 07:43	1.0		
002	met08_sr_6010	ICAL	CRI5.1			09/07/12 07:48	1.0	1	
003	met08_sr_6010	ICAL	CS100			09/07/12 07:53	1.0	2	
004	met08_sr_6010	ICAL	CS1K			09/07/12 07:57	1.0	3	
005	met08_sr_6010	ICAL	CS10K			09/07/12 08:01	1.0	4	
006	met08_sr_6010	ICAL	CS100K			09/07/12 08:06	1.0	5	
007	met08_sr_6010	ICV				09/07/12 08:12	1.0	6	
008	met08_sr_6010	ICB				09/07/12 08:17	1.0		
009	met08_sr_6010	ICSA				09/07/12 08:22	1.0	7	10:AL=520000
010	met08_sr_6010	ICSAB				09/07/12 08:35	1.0	8	5:AL=520000
011	met08_sr_6010	XCRI				09/07/12 08:41	1.0	9	
012	met08_sr_6010	CRI				09/07/12 08:45	1.0	9	
013	met08_sr_6010	BLANK	QC655129	Soil	190253	09/07/12 09:01	1.0		
014	met08_sr_6010	BS	QC655130	Soil	190253	09/07/12 09:06	1.0		
015	met08_sr_6010	BSD	QC655131	Soil	190253	09/07/12 09:10	1.0		
016	met08_sr_6010	MSS	239378-001	Soil	190253	09/07/12 09:14	1.0		3:FE=340000
017	met08_sr_6010	MS	QC655132	Soil	190253	09/07/12 09:17	1.0		
018	met08_sr_6010	MSD	QC655133	Soil	190253	09/07/12 09:20	1.0		
019	met08_sr_6010	SER	QC655134	Soil	190253	09/07/12 09:24	5.0		
020	met08_sr_6010	PDS	QC655135	Soil	190253	09/07/12 09:28	1.0	10 11	3:FE=350000
021	met08_sr_6010	CCV				09/07/12 09:31	1.0	12	
022	met08_sr_6010	CCB				09/07/12 09:36	1.0		
023	met08_sr_6010	SAMPLE	239389-001	Soil	190253	09/07/12 09:41	1.0		3:FE=360000
024	met08_sr_6010	SAMPLE	239397-001	Soil	190253	09/07/12 09:44	1.0		3:FE=380000
025	met08_sr_6010	SAMPLE	239397-002	Soil	190253	09/07/12 09:48	1.0		3:FE=430000
026	met08_sr_6010	SAMPLE	239408-001	Soil	190253	09/07/12 09:51	1.0		5:FE=490000
027	met08_sr_6010	SAMPLE	239402-001	Soil	190253	09/07/12 09:54	1.0		2:FE=240000
028	met08_sr_6010	SAMPLE	239403-005	Soil	190253	09/07/12 09:57	1.0		6:MG=1200000
029	met08_sr_6010	SAMPLE	239403-006	Soil	190253	09/07/12 10:01	1.0		7:MG=1500000
030	met08_sr_6010	SAMPLE	239397-001	Soil	190253	09/07/12 10:04	1.0		3:FE=380000
031	met08_sr_6010	CCV				09/07/12 10:07	1.0	12	
032	met08_sr_6010	CCB				09/07/12 10:12	1.0		
033	met08_sr_6010	ICSAB				09/07/12 10:17	1.0	8	5:AL=530000
034	met08_sr_6010	XBLANK	QC655108	Water	190250	09/07/12 10:40	1.0		
035	met08_sr_6010	XBS	QC655109	Water	190250	09/07/12 10:45	1.0		
036	met08_sr_6010	XBSD	QC655110	Water	190250	09/07/12 10:49	1.0		
037	met08_sr_6010	XMSS	239404-015	Water	190250	09/07/12 10:53	1.0		3:FE=340000
038	met08_sr_6010	XMS	QC655111	Water	190250	09/07/12 10:56	1.0		
039	met08_sr_6010	XMSD	QC655112	Water	190250	09/07/12 11:00	1.0		
040	met08_sr_6010	XSER	QC655113	Water	190250	09/07/12 11:03	5.0		
041	met08_sr_6010	XPDS	QC655114	Water	190250	09/07/12 11:07	1.0	13	
042	met08_sr_6010	XCCV				09/07/12 11:10	1.0	12	
043	met08_sr_6010	XCCB				09/07/12 11:15	1.0		
044	met08_sr_6010	XSAMPLE	239403-007	Water	190250	09/07/12 11:20	1.0		
045	met08_sr_6010	XSAMPLE	239403-008	Water	190250	09/07/12 11:24	1.0		
046	met08_sr_6010	XSAMPLE	239369-001	Water	190250	09/07/12 11:27	1.0		
047	met08_sr_6010	XSAMPLE	239374-001	Water	190250	09/07/12 11:30	1.0		
048	met08_sr_6010	XSAMPLE	239377-001	Water	190250	09/07/12 11:33	1.0		
049	met08_sr_6010	CCV				09/07/12 11:38	1.0	12	
050	met08_sr_6010	CCB				09/07/12 11:44	1.0		
051	met08_sr_6010	ICSAB				09/07/12 11:48	1.0	8	5:AL=530000
052	met08_sr_6010	BLANK	QC655185	Soil	190267	09/07/12 12:14	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 82361903

Instrument : MET08 Begun : 09/07/12 07:43
Method : EPA 6010C SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met08_sr_6010	BS	QC655186	Soil	190267	09/07/12 12:19	1.0		
054	met08_sr_6010	BSD	QC655187	Soil	190267	09/07/12 12:23	1.0		
055	met08_sr_6010	MSS	239425-001	Soil	190267	09/07/12 12:27	1.0		4:FE=380000
056	met08_sr_6010	MSS	239425-001	Soil	190267	09/07/12 12:30	1.0		4:FE=380000
057	met08_sr_6010	MS	QC655188	Soil	190267	09/07/12 12:33	1.0		
058	met08_sr_6010	MSD	QC655189	Soil	190267	09/07/12 12:37	1.0		2:FE=390000
059	met08_sr_6010	SER	QC655190	Soil	190267	09/07/12 12:42	5.0		
060	met08_sr_6010	PDS	QC655191	Soil	190267	09/07/12 12:46	1.0	10 11	1:FE=380000
061	met08_sr_6010	SAMPLE	239432-002	Soil	190267	09/07/12 12:49	1.0		5:CA=440000
062	met08_sr_6010	CCV				09/07/12 12:53	1.0	12	
063	met08_sr_6010	CCB				09/07/12 12:58	1.0		
064	met08_sr_6010	SAMPLE	239432-002	Soil	190267	09/07/12 13:04	1.0		5:CA=440000
065	met08_sr_6010	SAMPLE	239425-002	Soil	190267	09/07/12 13:07	1.0		4:FE=330000
066	met08_sr_6010	CCV				09/07/12 13:14	1.0	12	
067	met08_sr_6010	CCB				09/07/12 13:19	1.0		
068	met08_sr_6010	ICSAB				09/07/12 13:24	1.0	8	5:AL=500000
069	met08_sr_6010	SAMPLE	239425-003	Soil	190267	09/07/12 13:30	1.0		3:FE=320000
070	met08_sr_6010	SAMPLE	239425-004	Soil	190267	09/07/12 13:33	1.0		4:FE=300000
071	met08_sr_6010	SAMPLE	239425-005	Soil	190267	09/07/12 13:37	1.0		3:FE=330000
072	met08_sr_6010	SAMPLE	239425-006	Soil	190267	09/07/12 13:40	1.0		4:FE=310000
073	met08_sr_6010	SAMPLE	239425-006	Soil	190267	09/07/12 13:46	1.0		4:FE=300000
074	met08_sr_6010	CCV				09/07/12 13:49	1.0	12	
075	met08_sr_6010	CCB				09/07/12 13:55	1.0		
076	met08_sr_6010	ICSAB				09/07/12 14:00	1.0	8	5:CA=480000

NT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 76.

PRW 09/07/12 : 34-48 were in the wrong autosampler location. Samples were x'd out and re-ran on MET09.

Standards used: 1=S20200 2=S20215 3=S20214 4=S20216 5=S20217 6=S20644 7=S20220 8=S20222 9=S20319 10=S20436 11=S20437 12=S20645 13=S19831

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst	: MET08	Lab ID	: 239403-005	Client ID	: EX36B015A.2
Seqnum	: 82361903028	Matrix	: Soil	Acct	: ARCSF (JG)
File	: met08_sr_6010	Batch	: 190253	Time	: 07-SEP-2012 09:57
Cal	: 82361903001	Caldate	: 07-SEP-2012		
IDF	: 1.0			Units	: mg/Kg

1.08 g --> 50.0 ml = 46.30 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Copper	A	67	**0.24**		u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1808473	1720803	-4.85

u=use y=RL raised

Sequence No.: 27 **Autosampler Location: 24**
Sample ID: 239403-005,190253,1 **Date Collected: 9/7/2012 9:57:46 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239403-005,190253,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: 239403-005,190253,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1720803.0	95.1523	%	0.92349				0.97%
Y	96206.9	107.406	%	2.4151				2.25%
Ag 328.068†	5309.4	7.61080	ug/L	0.332013	7.61080	ug/L	0.332013	4.36%
Al 308.215 R†	685576.3	636406	ug/L	3640.2	636406	ug/L	3640.2	0.57%
As 188.979†	1788.5	89.5052	ug/L	5.98172	89.5052	ug/L	5.98172	6.68%
B 249.677†	90547.9	465.809	ug/L	2.5090	465.809	ug/L	2.5090	0.54%
Ba 233.527†	1272464.4	3295.61	ug/L	11.047	3295.61	ug/L	11.047	0.34%
Be 313.107†	35534.0	7.62035	ug/L	0.163980	7.62035	ug/L	0.163980	2.15%
Ca 315.887 R†	2697383.9	330647	ug/L	6152.2	330647	ug/L	6152.2	1.86%
Cd 214.440†	1114.0	4.68103	ug/L	0.246538	4.68103	ug/L	0.246538	5.27%
Co 228.616†	80066.8	570.848	ug/L	6.1390	570.848	ug/L	6.1390	1.08%
Cr 267.716†	550523.0	6220.25	ug/L	0.482	6220.25	ug/L	0.482	0.01%
Cu 324.752†	159397.2	1454.77	ug/L	6.694	1454.77	ug/L	6.694	0.46%
Fe 238.204 R†	3248619.0	736284	ug/L	13476.3	736284	ug/L	13476.3	1.83%
K 766.490 R†	54541.6	14777.7	ug/L	67.03	14777.7	ug/L	67.03	0.45%
Mg 279.077 R†	1132484.7	1189740	ug/L	23481.2	1189740	ug/L	23481.2	1.97%
Mn 257.610†	26787959.9	16740.4	ug/L	361.67	16740.4	ug/L	361.67	2.16%
Mo 202.031†	-528.9	-15.1382	ug/L	2.16916	-15.1382	ug/L	2.16916	14.33%
Na 589.592 R†	53011.0	6262.39	ug/L	42.533	6262.39	ug/L	42.533	0.68%
Ni 231.604†	377290.5	7662.67	ug/L	7.652	7662.67	ug/L	7.652	0.10%
Pb 220.353†	16561.7	283.546	ug/L	4.5661	283.546	ug/L	4.5661	1.61%
Sb 206.836†	-2163.4	-68.4139	ug/L	1.74532	-68.4139	ug/L	1.74532	2.55%
Se 196.026†	1050.8	34.7812	ug/L	12.85326	34.7812	ug/L	12.85326	36.95%
Ti 334.940 R†	2860604.3	40821.0	ug/L	172.28	40821.0	ug/L	172.28	0.42%
Tl 190.801†	73.9	3.95988	ug/L	17.797265	3.95988	ug/L	17.797265	449.44%
V 292.402†	244451.6	1637.38	ug/L	0.394	1637.38	ug/L	0.394	0.02%
Zn 206.200†	112509.8	1429.82	ug/L	5.498	1429.82	ug/L	5.498	0.38%
Sn 189.927†	145.0	6.76179	ug/L	3.098684	6.76179	ug/L	3.098684	45.83%
Sr 421.552 R	1406840.8	3162.35	ug/L	51.049	3162.35	ug/L	51.049	1.61%

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 6010C

Inst : MET08 Lab ID : 239403-006 Client ID : EX36B163A.2
Seqnum : 82361903029 Matrix : Soil Acct : ARCSF (JG)
File : met08_sr_6010 Batch : 190253 Time : 07-SEP-2012 10:01
Cal : 82361903001 Caldate : 07-SEP-2012
IDF : 1.0 Units : mg/Kg

1.02 g --> 50.0 ml = 49.02 ml/g PDF

Analyte	Ch	Result	RL	Blank	Flags
Copper	A	160	**0.25**		u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SAMPLE Abund	%Drift
Yttrium	A	1808473	1654543	-8.51

u=use y=RL raised

Sequence No.: 28 **Autosampler Location: 25**
Sample ID: 239403-006,190253,1 **Date Collected: 9/7/2012 10:01:04 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 239403-006,190253,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: 239403-006,190253,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1654543.0	91.4884	%	0.87907				0.96%
Y	94503.3	105.504	%	1.4979				1.42%
Ag 328.068†	5151.3	7.38413	ug/L	0.157590	7.38413	ug/L	0.157590	2.13%
Al 308.215 R†	669238.1	621239	ug/L	2084.1	621239	ug/L	2084.1	0.34%
As 188.979†	3575.8	178.949	ug/L	8.5107	178.949	ug/L	8.5107	4.76%
B 249.677†	70666.3	363.531	ug/L	4.9724	363.531	ug/L	4.9724	1.37%
Ba 233.527†	1354645.8	3508.46	ug/L	7.999	3508.46	ug/L	7.999	0.23%
Be 313.107†	37627.9	8.06940	ug/L	0.092489	8.06940	ug/L	0.092489	1.15%
Ca 315.887 R†	1882707.3	230783	ug/L	6254.2	230783	ug/L	6254.2	2.71%
Cd 214.440†	1351.3	5.67809	ug/L	0.014403	5.67809	ug/L	0.014403	0.25%
Co 228.616†	104278.4	777.278	ug/L	9.0287	777.278	ug/L	9.0287	1.16%
Cr 267.716†	553759.3	6256.82	ug/L	22.765	6256.82	ug/L	22.765	0.36%
Cu 324.752†	362271.4	3306.34	ug/L	18.435	3306.34	ug/L	18.435	0.56%
Fe 238.204 R†	3098402.4	702238	ug/L	18144.2	702238	ug/L	18144.2	2.58%
K 766.490 R†	45465.1	12318.5	ug/L	73.95	12318.5	ug/L	73.95	0.60%
Mg 279.077 R†	1466163.2	1540280	ug/L	40643.4	1540280	ug/L	40643.4	2.64%
Mn 257.610†	25847956.2	16153.0	ug/L	314.77	16153.0	ug/L	314.77	1.95%
Mo 202.031†	1827.1	52.2942	ug/L	0.52620	52.2942	ug/L	0.52620	1.01%
Na 589.592 R†	41655.8	4920.94	ug/L	23.139	4920.94	ug/L	23.139	0.47%
Ni 231.604†	703909.9	14296.2	ug/L	26.57	14296.2	ug/L	26.57	0.19%
Pb 220.353†	24737.3	423.517	ug/L	7.6116	423.517	ug/L	7.6116	1.80%
Sb 206.836†	-2739.9	-86.6452	ug/L	16.67360	-86.6452	ug/L	16.67360	19.24%
Se 196.026†	1589.5	52.6149	ug/L	13.87900	52.6149	ug/L	13.87900	26.38%
Ti 334.940 R†	2409344.2	34381.5	ug/L	82.20	34381.5	ug/L	82.20	0.24%
Tl 190.801†	8.7	0.466028	ug/L	2.9731011	0.466028	ug/L	2.9731011	637.97%
V 292.402†	201214.2	1347.77	ug/L	4.850	1347.77	ug/L	4.850	0.36%
Zn 206.200†	167529.0	2129.02	ug/L	0.855	2129.02	ug/L	0.855	0.04%
Sn 189.927†	303.2	14.1436	ug/L	3.18585	14.1436	ug/L	3.18585	22.53%
Sr 421.552 R	1082815.5	2446.45	ug/L	20.625	2446.45	ug/L	20.625	0.84%

CURTIS & TOMPKINS BLANK USER REPORT FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 Lab ID : QC655129
Seqnum : 82361903013.6 Matrix : Soil
File : met08_sr_6010 Batch : 190253 Time : 07-SEP-2012 09:01
Cal : 82361903001 Caldate : 07-SEP-2012
IDF : 1.0 Units : mg/Kg

1.00 g --> 50.0 ml = 50.0 ml/g PDF

Analyte	Ch	Result	RL	Flags
Copper	A	ND	**0.26**	u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	BLANK Abund	%Drift
Yttrium	A	1808473	1959566	8.35

u=use y=RL raised

User canceled analysis.

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Sequence No.: 12 **Autosampler Location: 11**
Sample ID: qc655129,190253,1 **Date Collected: 9/7/2012 9:01:13 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655129,190253,1

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: qc655129,190253,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1959565.5	108.355	%	3.3216				3.07%
Y	97081.8	108.383	%	2.4363				2.25%
Ag 328.068†	-220.3	-0.315862	ug/L	0.3705010	-0.315862	ug/L	0.3705010	117.30%
Al 308.215 R†	29.2	27.1374	ug/L	12.84481	27.1374	ug/L	12.84481	47.33%
As 188.979†	-13.4	-0.668958	ug/L	0.9303923	-0.668958	ug/L	0.9303923	139.08%
B 249.677†	1773.4	9.12302	ug/L	0.172956	9.12302	ug/L	0.172956	1.90%
Ba 233.527†	150.7	0.390194	ug/L	0.0168452	0.390194	ug/L	0.0168452	4.32%
Be 313.107†	-167.9	-0.0360042	ug/L	0.07334725	-0.0360042	ug/L	0.07334725	203.72%
Ca 315.887 R†	986.4	120.912	ug/L	0.2113	120.912	ug/L	0.2113	0.17%
Cd 214.440†	17.0	0.0712880	ug/L	0.04437588	0.0712880	ug/L	0.04437588	62.25%
Co 228.616†	31.8	0.257019	ug/L	0.1514652	0.257019	ug/L	0.1514652	58.93%
Cr 267.716†	50.1	0.566394	ug/L	0.1112526	0.566394	ug/L	0.1112526	19.64%
Cu 324.752†	-40.2	-0.366769	ug/L	1.7935105	-0.366769	ug/L	1.7935105	489.00%
Fe 238.204 R†	53.2	12.0649	ug/L	0.85324	12.0649	ug/L	0.85324	7.07%
K 766.490 R†	-65.4	-17.7219	ug/L	74.46464	-17.7219	ug/L	74.46464	420.19%
Mg 279.077 R†	17.5	18.4005	ug/L	6.46491	18.4005	ug/L	6.46491	35.13%
Mn 257.610†	251.9	0.157442	ug/L	0.0571922	0.157442	ug/L	0.0571922	36.33%
Mo 202.031†	8.2	0.234623	ug/L	0.0955885	0.234623	ug/L	0.0955885	40.74%
Na 589.592 R†	808.7	95.5369	ug/L	7.80833	95.5369	ug/L	7.80833	8.17%
Ni 231.604†	68.1	1.38264	ug/L	0.261141	1.38264	ug/L	0.261141	18.89%
Pb 220.353†	24.7	0.423063	ug/L	0.6105746	0.423063	ug/L	0.6105746	144.32%
Sb 206.836†	54.8	1.73138	ug/L	1.016411	1.73138	ug/L	1.016411	58.71%
Se 196.026†	-51.6	-1.70740	ug/L	1.194559	-1.70740	ug/L	1.194559	69.96%
Ti 334.940 R†	-56.8	-0.809949	ug/L	0.0530271	-0.809949	ug/L	0.0530271	6.55%
Tl 190.801†	22.5	1.20363	ug/L	1.062117	1.20363	ug/L	1.062117	88.24%
V 292.402†	44.2	0.295781	ug/L	0.1026563	0.295781	ug/L	0.1026563	34.71%
Zn 206.200†	1250.2	15.8883	ug/L	0.22081	15.8883	ug/L	0.22081	1.39%
Sn 189.927†	204.1	9.52159	ug/L	0.443880	9.52159	ug/L	0.443880	4.66%
Sr 421.552 R	-1130.6	-2.52214	ug/L	0.926527	-2.52214	ug/L	0.926527	36.74%

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 METALS Soil
EPA 6010C

Type : BS
Inst : MET08
Seqnum : 82361903014.6
File : met08_sr_6010
IDF : 1.0
Lab ID : QC655130
Matrix : Soil
Batch : 190253
Time : 07-SEP-2012 09:06
Cal : 82361903001
Units : mg/Kg

Type : BSD
Inst : MET08
Seqnum : 82361903015.6
File : met08_sr_6010
IDF : 1.0
Lab ID : QC655131
Matrix : Soil
Batch : 190253
Time : 07-SEP-2012 09:10
Cal : 82361903001

BS: 1.00 g --> 50.0 ml = 50.0 ml/g PDF
BSD: 1.00 g --> 50.0 ml = 50.0 ml/g PDF

Analyte	Spiked	BS	Ch	%Rec	BSD	Ch	%Rec	Limits	RPD	Lim	Flags
Copper	12.50	12.38	A	99	12.40	A	99	80-120	0	20	u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	BS Abund	%Drift
Yttrium	A	1808473	1875046	3.68

ISTD (ICAL 002)	Ch	ICAL Abund	BSD Abund	%Drift
Yttrium	A	1808473	1838333	1.65

u=use y=RL raised

Sequence No.: 13 **Autosampler Location: 12**
Sample ID: qc655130,190253,1 **Date Collected: 9/7/2012 9:06:13 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655130,190253,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: qc655130,190253,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1875045.8	103.681	%	1.0576				1.02%
Y	94862.3	105.905	%	1.2409				1.17%
Ag 328.068†	133536.7	191.419	ug/L	1.2701	191.419	ug/L	1.2701	0.66%
Al 308.215 R†	21782.3	20220.0	ug/L	38.83	20220.0	ug/L	38.83	0.19%
As 188.979†	19687.1	985.239	ug/L	6.8584	985.239	ug/L	6.8584	0.70%
B 249.677†	191648.9	985.907	ug/L	3.5392	985.907	ug/L	3.5392	0.36%
Ba 233.527†	762299.5	1974.31	ug/L	11.708	1974.31	ug/L	11.708	0.59%
Be 313.107†	238907.9	51.2345	ug/L	0.27956	51.2345	ug/L	0.27956	0.55%
Ca 315.887 R†	167237.7	20500.1	ug/L	111.76	20500.1	ug/L	111.76	0.55%
Cd 214.440†	48516.7	203.863	ug/L	1.1103	203.863	ug/L	1.1103	0.54%
Co 228.616†	61066.7	489.625	ug/L	3.3006	489.625	ug/L	3.3006	0.67%
Cr 267.716†	172648.5	1950.72	ug/L	14.925	1950.72	ug/L	14.925	0.77%
Cu 324.752†	27123.5	247.548	ug/L	1.0884	247.548	ug/L	1.0884	0.44%
Fe 238.204 R†	89762.4	20344.2	ug/L	54.40	20344.2	ug/L	54.40	0.27%
K 766.490 R†	35623.9	9652.08	ug/L	65.744	9652.08	ug/L	65.744	0.68%
Mg 279.077 R†	19270.2	20244.4	ug/L	99.24	20244.4	ug/L	99.24	0.49%
Mn 257.610†	802845.9	501.718	ug/L	2.7367	501.718	ug/L	2.7367	0.55%
Mo 202.031†	13874.5	397.116	ug/L	3.0233	397.116	ug/L	3.0233	0.76%
Na 589.592 R†	171029.8	20204.4	ug/L	194.73	20204.4	ug/L	194.73	0.96%
Ni 231.604†	24059.1	488.633	ug/L	2.5273	488.633	ug/L	2.5273	0.52%
Pb 220.353†	112494.4	1925.96	ug/L	5.631	1925.96	ug/L	5.631	0.29%
Sb 206.836†	61113.9	1932.61	ug/L	20.977	1932.61	ug/L	20.977	1.09%
Se 196.026†	29204.8	966.715	ug/L	5.2011	966.715	ug/L	5.2011	0.54%
Ti 334.940 R†	70068.7	999.886	ug/L	17.6609	999.886	ug/L	17.6609	1.77%
Tl 190.801†	18100.1	970.396	ug/L	7.7113	970.396	ug/L	7.7113	0.79%
V 292.402†	74233.4	497.227	ug/L	3.6408	497.227	ug/L	3.6408	0.73%
Zn 206.200†	39830.9	506.187	ug/L	3.8905	506.187	ug/L	3.8905	0.77%
Sn 189.927†	20960.8	977.641	ug/L	6.8649	977.641	ug/L	6.8649	0.70%
Sr 421.552 R	-1112.5	-2.08741	ug/L	0.542941	-2.08741	ug/L	0.542941	26.01%

Sequence No.: 14 **Autosampler Location: 13**
Sample ID: qc655131,190253,1 **Date Collected: 9/7/2012 9:10:20 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655131,190253,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: qc655131,190253,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1838333.2	101.651	%	0.5231				0.51%
Y	94605.9	105.619	%	1.5301				1.45%
Ag 328.068†	135406.1	194.099	ug/L	0.4294	194.099	ug/L	0.4294	0.22%
Al 308.215 R†	21775.3	20213.5	ug/L	116.52	20213.5	ug/L	116.52	0.58%
As 188.979†	19783.0	990.039	ug/L	4.5606	990.039	ug/L	4.5606	0.46%
B 249.677†	193179.7	993.782	ug/L	6.4244	993.782	ug/L	6.4244	0.65%
Ba 233.527†	770377.3	1995.23	ug/L	6.045	1995.23	ug/L	6.045	0.30%
Be 313.107†	240614.4	51.6004	ug/L	0.26280	51.6004	ug/L	0.26280	0.51%
Ca 315.887 R†	168793.8	20690.8	ug/L	119.05	20690.8	ug/L	119.05	0.58%
Cd 214.440†	48604.2	204.231	ug/L	1.1848	204.231	ug/L	1.1848	0.58%
Co 228.616†	61292.6	491.396	ug/L	2.0449	491.396	ug/L	2.0449	0.42%
Cr 267.716†	173758.5	1963.26	ug/L	10.781	1963.26	ug/L	10.781	0.55%
Cu 324.752†	27176.1	248.028	ug/L	2.7545	248.028	ug/L	2.7545	1.11%
Fe 238.204 R†	90078.3	20415.8	ug/L	128.22	20415.8	ug/L	128.22	0.63%
K 766.490 R†	35942.1	9738.32	ug/L	65.343	9738.32	ug/L	65.343	0.67%
Mg 279.077 R†	19446.5	20429.6	ug/L	76.33	20429.6	ug/L	76.33	0.37%
Mn 257.610†	808933.1	505.522	ug/L	2.2982	505.522	ug/L	2.2982	0.45%
Mo 202.031†	13986.0	400.306	ug/L	1.1727	400.306	ug/L	1.1727	0.29%
Na 589.592 R†	168907.4	19953.6	ug/L	464.33	19953.6	ug/L	464.33	2.33%
Ni 231.604†	24106.5	489.596	ug/L	3.4503	489.596	ug/L	3.4503	0.70%
Pb 220.353†	112581.7	1927.46	ug/L	8.891	1927.46	ug/L	8.891	0.46%
Sb 206.836†	61840.8	1955.59	ug/L	8.079	1955.59	ug/L	8.079	0.41%
Se 196.026†	29348.4	971.466	ug/L	2.4824	971.466	ug/L	2.4824	0.26%
Ti 334.940 R†	71901.8	1026.04	ug/L	13.349	1026.04	ug/L	13.349	1.30%
Tl 190.801†	18247.7	978.308	ug/L	3.8365	978.308	ug/L	3.8365	0.39%
V 292.402†	74628.1	499.871	ug/L	2.1615	499.871	ug/L	2.1615	0.43%
Zn 206.200†	39980.6	508.089	ug/L	2.0878	508.089	ug/L	2.0878	0.41%
Sn 189.927†	21132.0	985.625	ug/L	3.1591	985.625	ug/L	3.1591	0.32%
Sr 421.552 R	-536.9	-0.799634	ug/L	0.3510591	-0.799634	ug/L	0.3510591	43.90%

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 METALS Soil
EPA 6010C

Type	: MSS	Type	: MS	Type	: MSD
Inst	: MET08	Inst	: MET08	Inst	: MET08
Seqnum	: 82361903016	Seqnum	: 82361903017.6	Seqnum	: 82361903018.6
File	: met08_sr_6010	File	: met08_sr_6010	File	: met08_sr_6010
IDF	: 1.0	IDF	: 1.0	IDF	: 1.0
Lab ID	: 239378-001	Lab ID	: QC655132	Lab ID	: QC655133
Matrix	: Soil	Matrix	: Soil	Matrix	: Soil
Batch	: 190253	Batch	: 190253	Batch	: 190253
Time	: 07-SEP-2012 09:14	Time	: 07-SEP-2012 09:17	Time	: 07-SEP-2012 09:20
Cal	: 82361903001	Cal	: 82361903001	Cal	: 82361903001
Units	: mg/Kg				

MSS: 1.10 g --> 50.0 ml = 45.45 ml/g PDF
 MS: 1.05 g --> 50.0 ml = 47.62 ml/g PDF
MSD: 1.02 g --> 50.0 ml = 49.02 ml/g PDF

Analyte	MSS	Ch	Spiked	MS	Ch	%Rec	Spiked	MSD	Ch	%Rec	Limits	RPD	Lim	Flags
Copper	14.35	A	11.90	26.78	A	104	12.25	27.52	A	108	48-150	1	39	u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	MS Abund	%Drift
Yttrium	A	1808473	1874702	3.66

ISTD (ICAL 002)	Ch	ICAL Abund	MSD Abund	%Drift
Yttrium	A	1808473	1857746	2.72

u=use y=RL raised

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Sequence No.: 16 **Autosampler Location: 15**
Sample ID: qc655132,190253,1 **Date Collected: 9/7/2012 9:17:37 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655132,190253,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: qc655132,190253,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1874702.4	103.662	%	1.2001				1.16%
Y	97978.8	109.385	%	0.7970				0.73%
Ag 328.068†	129464.4	185.582	ug/L	0.5761	185.582	ug/L	0.5761	0.31%
Al 308.215 R†	336278.0	312160	ug/L	2303.1	312160	ug/L	2303.1	0.74%
As 188.979†	21897.1	1095.84	ug/L	31.815	1095.84	ug/L	31.815	2.90%
B 249.677†	203435.7	1046.54	ug/L	8.719	1046.54	ug/L	8.719	0.83%
Ba 233.527†	1588107.9	4113.11	ug/L	5.572	4113.11	ug/L	5.572	0.14%
Be 313.107†	253676.7	54.4017	ug/L	0.07525	54.4017	ug/L	0.07525	0.14%
Ca 315.887 R†	382678.1	46908.9	ug/L	415.60	46908.9	ug/L	415.60	0.89%
Cd 214.440†	45452.7	190.988	ug/L	0.5040	190.988	ug/L	0.5040	0.26%
Co 228.616†	75275.2	577.184	ug/L	1.0507	577.184	ug/L	1.0507	0.18%
Cr 267.716†	195224.8	2205.81	ug/L	1.757	2205.81	ug/L	1.757	0.08%
Cu 324.752†	61624.7	562.429	ug/L	5.9481	562.429	ug/L	5.9481	1.06%
Fe 238.204 R†	1517534.1	343942	ug/L	7474.5	343942	ug/L	7474.5	2.17%
K 766.490 R†	119916.6	32490.7	ug/L	315.63	32490.7	ug/L	315.63	0.97%
Mg 279.077 R†	58527.2	61486.0	ug/L	687.97	61486.0	ug/L	687.97	1.12%
Mn 257.610†	7518164.9	4698.28	ug/L	1.030	4698.28	ug/L	1.030	0.02%
Mo 202.031†	12210.9	349.500	ug/L	11.4587	349.500	ug/L	11.4587	3.28%
Na 589.592 R†	183193.5	21641.3	ug/L	218.86	21641.3	ug/L	218.86	1.01%
Ni 231.604†	40232.8	817.117	ug/L	0.4300	817.117	ug/L	0.4300	0.05%
Pb 220.353†	106362.1	1820.98	ug/L	56.296	1820.98	ug/L	56.296	3.09%
Sb 206.836†	32485.8	1027.30	ug/L	42.550	1027.30	ug/L	42.550	4.14%
Se 196.026†	26834.8	888.264	ug/L	32.0603	888.264	ug/L	32.0603	3.61%
Ti 334.940 R†	1112715.7	15878.5	ug/L	127.06	15878.5	ug/L	127.06	0.80%
Tl 190.801†	15925.4	853.802	ug/L	9.7129	853.802	ug/L	9.7129	1.14%
V 292.402†	266487.4	1784.98	ug/L	1.839	1784.98	ug/L	1.839	0.10%
Zn 206.200†	105635.6	1342.46	ug/L	1.426	1342.46	ug/L	1.426	0.11%
Sn 189.927†	18495.1	862.636	ug/L	28.6960	862.636	ug/L	28.6960	3.33%
Sr 421.552 R	167595.9	375.013	ug/L	1.4889	375.013	ug/L	1.4889	0.40%

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Sequence No.: 17 **Autosampler Location: 16**
Sample ID: qc655133,190253,1 **Date Collected: 9/7/2012 9:20:50 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655133,190253,1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: qc655133,190253,1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1857745.8	102.725	%	0.6401				0.62%
Y	98358.9	109.809	%	2.6744				2.44%
Ag 328.068†	132468.7	189.888	ug/L	0.8559	189.888	ug/L	0.8559	0.45%
Al 308.215 R†	334913.0	310892	ug/L	1948.1	310892	ug/L	1948.1	0.63%
As 188.979†	22050.2	1103.50	ug/L	36.840	1103.50	ug/L	36.840	3.34%
B 249.677†	205333.2	1056.30	ug/L	0.467	1056.30	ug/L	0.467	0.04%
Ba 233.527†	1589122.9	4115.74	ug/L	21.576	4115.74	ug/L	21.576	0.52%
Be 313.107†	257303.5	55.1794	ug/L	0.31090	55.1794	ug/L	0.31090	0.56%
Ca 315.887 R†	388923.9	47674.5	ug/L	79.70	47674.5	ug/L	79.70	0.17%
Cd 214.440†	46103.4	193.723	ug/L	0.9525	193.723	ug/L	0.9525	0.49%
Co 228.616†	76204.7	583.929	ug/L	3.3956	583.929	ug/L	3.3956	0.58%
Cr 267.716†	200378.2	2264.03	ug/L	10.173	2264.03	ug/L	10.173	0.45%
Cu 324.752†	61523.0	561.500	ug/L	1.3486	561.500	ug/L	1.3486	0.24%
Fe 238.204 R†	1541931.0	349471	ug/L	9646.3	349471	ug/L	9646.3	2.76%
K 766.490 R†	120211.3	32570.6	ug/L	227.27	32570.6	ug/L	227.27	0.70%
Mg 279.077 R†	58493.6	61450.6	ug/L	141.63	61450.6	ug/L	141.63	0.23%
Mn 257.610†	7552353.7	4719.65	ug/L	26.192	4719.65	ug/L	26.192	0.55%
Mo 202.031†	12367.3	353.976	ug/L	11.7373	353.976	ug/L	11.7373	3.32%
Na 589.592 R†	184431.0	21787.5	ug/L	133.48	21787.5	ug/L	133.48	0.61%
Ni 231.604†	40524.0	823.032	ug/L	4.1893	823.032	ug/L	4.1893	0.51%
Pb 220.353†	107835.1	1846.19	ug/L	48.669	1846.19	ug/L	48.669	2.64%
Sb 206.836†	34380.5	1087.22	ug/L	38.400	1087.22	ug/L	38.400	3.53%
Se 196.026†	26952.5	892.161	ug/L	52.3844	892.161	ug/L	52.3844	5.87%
Ti 334.940 R†	1141344.3	16287.1	ug/L	394.89	16287.1	ug/L	394.89	2.42%
Tl 190.801†	16066.4	861.363	ug/L	13.5369	861.363	ug/L	13.5369	1.57%
V 292.402†	264096.3	1768.96	ug/L	5.663	1768.96	ug/L	5.663	0.32%
Zn 206.200†	102525.6	1302.94	ug/L	8.498	1302.94	ug/L	8.498	0.65%
Sn 189.927†	18941.2	883.441	ug/L	18.6136	883.441	ug/L	18.6136	2.11%
Sr 421.552 R	166617.9	372.826	ug/L	7.5406	372.826	ug/L	7.5406	2.02%

CURTIS & TOMPKINS SERIAL DILUTION FOR 239403 METALS Soil
EPA 6010C

Type : MSS
Inst : MET08
Seqnum : 82361903016
File : met08_sr_6010
IDF : 1.0
Lab ID : 239378-001
Matrix : Soil
Batch : 190253
Time : 07-SEP-2012 09:14
Cal : 82361903001
Units : mg/Kg

Type : SER
Inst : MET08
Seqnum : 82361903019.4
File : met08_sr_6010
IDF : 5.0
Lab ID : QC655134
Matrix : Soil
Batch : 190253
Time : 07-SEP-2012 09:24
Cal : 82361903001

MSS: 1.10 g --> 50.0 ml = 45.45 ml/g PDF
SER: 1.10 g --> 50.0 ml = 45.45 ml/g PDF

Analyte	MSS	Ch	RL	SER	Ch	RL	%D	Lim	Flags
Copper	14.35	A	0.2357	14.24	A	**1.179**	1	10	u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	SER Abund	%Drift
Yttrium	A	1808473	1873288	3.58

u=use y=RL raised

Sequence No.: 18 **Autosampler Location: 17**
Sample ID: qc655134,190253,5 **Date Collected: 9/7/2012 9:24:04 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655134,190253,5

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: qc655134,190253,5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1873288.4	103.584	%	0.4615				0.45%
Y	95332.6	106.430	%	2.0310				1.91%
Ag 328.068†	541.4	0.776108	ug/L	0.1349297	0.776108	ug/L	0.1349297	17.39%
Al 308.215 R†	57570.8	53441.8	ug/L	189.35	53441.8	ug/L	189.35	0.35%
As 188.979†	900.5	45.0679	ug/L	2.21347	45.0679	ug/L	2.21347	4.91%
B 249.677†	9681.2	49.8033	ug/L	1.92884	49.8033	ug/L	1.92884	3.87%
Ba 233.527†	184268.2	477.244	ug/L	4.0723	477.244	ug/L	4.0723	0.85%
Be 313.107†	5867.1	1.25822	ug/L	0.056231	1.25822	ug/L	0.056231	4.47%
Ca 315.887 R†	49422.1	6058.18	ug/L	46.660	6058.18	ug/L	46.660	0.77%
Cd 214.440†	503.0	2.11340	ug/L	0.053044	2.11340	ug/L	0.053044	2.51%
Co 228.616†	4224.9	28.6424	ug/L	0.22549	28.6424	ug/L	0.22549	0.79%
Cr 267.716†	8304.2	93.8277	ug/L	0.36083	93.8277	ug/L	0.36083	0.38%
Cu 324.752†	6866.3	62.6669	ug/L	0.32650	62.6669	ug/L	0.32650	0.52%
Fe 238.204 R†	332541.9	75369.0	ug/L	503.86	75369.0	ug/L	503.86	0.67%
K 766.490 R†	17766.6	4813.75	ug/L	89.478	4813.75	ug/L	89.478	1.86%
Mg 279.077 R†	8886.6	9335.85	ug/L	110.359	9335.85	ug/L	110.359	1.18%
Mn 257.610†	1522867.0	951.676	ug/L	9.4898	951.676	ug/L	9.4898	1.00%
Mo 202.031†	-38.4	-1.10005	ug/L	0.346213	-1.10005	ug/L	0.346213	31.47%
Na 589.592 R†	3930.4	464.317	ug/L	9.7240	464.317	ug/L	9.7240	2.09%
Ni 231.604†	3706.3	75.2746	ug/L	0.35218	75.2746	ug/L	0.35218	0.47%
Pb 220.353†	2041.1	34.9450	ug/L	0.88917	34.9450	ug/L	0.88917	2.54%
Sb 206.836†	-53.7	-1.69920	ug/L	2.175276	-1.69920	ug/L	2.175276	128.02%
Se 196.026†	-25.9	-0.857840	ug/L	1.0090856	-0.857840	ug/L	1.0090856	117.63%
Ti 334.940 R†	208543.1	2975.92	ug/L	63.524	2975.92	ug/L	63.524	2.13%
Tl 190.801†	1.0	0.0534079	ug/L	0.73705692	0.0534079	ug/L	0.73705692	>999.9%
V 292.402†	40900.7	273.960	ug/L	1.7731	273.960	ug/L	1.7731	0.65%
Zn 206.200†	14401.9	183.026	ug/L	0.3170	183.026	ug/L	0.3170	0.17%
Sn 189.927†	53.7	2.50456	ug/L	0.334774	2.50456	ug/L	0.334774	13.37%
Sr 421.552 R	32419.4	72.4916	ug/L	2.34385	72.4916	ug/L	2.34385	3.23%

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR 239403 METALS Soil EPA 6010C

Type : MSS
Inst : MET08
Seqnum : 82361903016
File : met08_sr_6010
IDF : 1.0
Lab ID : 239378-001
Matrix : Soil
Batch : 190253
Time : 07-SEP-2012 09:14
Cal : 82361903001
Units : ug/L

Type : PDS
Inst : MET08
Seqnum : 82361903020.4
File : met08_sr_6010
IDF : 1.0
Lab ID : QC655135
Matrix : Soil
Batch : 190253
Time : 07-SEP-2012 09:28
Cal : 82361903001

MSS: 1.10 g --> 50.0 ml = 45.45 ml/g PDF
PDS: 1.10 g --> 50.0 ml = 45.45 ml/g PDF

PDS standards: S20436 (100X), S20437 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Copper	315.6	A	250.0	548.7	A	93	75-125	u **y**

ISTD (ICAL 002)	Ch	ICAL Abund	PDS Abund	%Drift
Yttrium	A	1808473	1931119	6.78

u=use y=RL raised

Sequence No.: 19 **Autosampler Location: 18**
Sample ID: qc655135,190253,1,s20346 **Date Collected: 9/7/2012 9:28:07 AM**
Analyst: MET08 **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: qc655135,190253,1,s20346

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: qc655135,190253,1,s20346

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1931119.2	106.782	%	0.7524				0.70%
Y	102269.1	114.174	%	1.2217				1.07%
Ag 328.068†	129598.9	185.774	ug/L	0.7463	185.774	ug/L	0.7463	0.40%
Al 308.215 R†	279815.2	259746	ug/L	413.5	259746	ug/L	413.5	0.16%
As 188.979†	22906.0	1146.33	ug/L	9.683	1146.33	ug/L	9.683	0.84%
B 249.677†	216892.5	1115.77	ug/L	2.817	1115.77	ug/L	2.817	0.25%
Ba 233.527†	1580377.6	4093.09	ug/L	19.836	4093.09	ug/L	19.836	0.48%
Be 313.107†	251832.5	54.0062	ug/L	0.30256	54.0062	ug/L	0.30256	0.56%
Ca 315.887 R†	378249.7	46366.0	ug/L	382.36	46366.0	ug/L	382.36	0.82%
Cd 214.440†	47974.2	201.583	ug/L	1.0679	201.583	ug/L	1.0679	0.53%
Co 228.616†	75893.8	583.128	ug/L	2.0199	583.128	ug/L	2.0199	0.35%
Cr 267.716†	200273.1	2262.85	ug/L	8.191	2262.85	ug/L	8.191	0.36%
Cu 324.752†	60115.6	548.656	ug/L	2.9181	548.656	ug/L	2.9181	0.53%
Fe 238.204 R†	1563428.0	354343	ug/L	2240.3	354343	ug/L	2240.3	0.63%
K 766.490 R†	117620.7	31868.7	ug/L	191.40	31868.7	ug/L	191.40	0.60%
Mg 279.077 R†	58384.8	61336.4	ug/L	507.64	61336.4	ug/L	507.64	0.83%
Mn 257.610†	7676316.6	4797.11	ug/L	22.302	4797.11	ug/L	22.302	0.46%
Mo 202.031†	12845.7	367.667	ug/L	3.4391	367.667	ug/L	3.4391	0.94%
Na 589.592 R†	180593.4	21334.2	ug/L	95.90	21334.2	ug/L	95.90	0.45%
Ni 231.604†	39067.2	793.445	ug/L	5.3143	793.445	ug/L	5.3143	0.67%
Pb 220.353†	112520.4	1926.41	ug/L	13.401	1926.41	ug/L	13.401	0.70%
Sb 206.836†	58587.9	1852.73	ug/L	2.850	1852.73	ug/L	2.850	0.15%
Se 196.026†	27864.9	922.362	ug/L	10.3987	922.362	ug/L	10.3987	1.13%
Ti 334.940 R†	1075126.3	15342.1	ug/L	156.21	15342.1	ug/L	156.21	1.02%
Tl 190.801†	16194.4	868.224	ug/L	4.9818	868.224	ug/L	4.9818	0.57%
V 292.402†	261689.4	1752.84	ug/L	4.918	1752.84	ug/L	4.918	0.28%
Zn 206.200†	101935.8	1295.44	ug/L	7.391	1295.44	ug/L	7.391	0.57%
Sn 189.927†	19828.1	924.810	ug/L	5.2586	924.810	ug/L	5.2586	0.57%
Sr 421.552 R	165207.4	369.686	ug/L	2.8333	369.686	ug/L	2.8333	0.77%

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 METALS Soil: EPA 6010C

Inst : MET08
Calnum : 82361903001
Units : ug/L

Date : 07-SEP-2012 07:43
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met08_sr_6010	82361903002	CRI5.1	07-SEP-2012 07:48	S20200
L2	met08_sr_6010	82361903003	CS100	07-SEP-2012 07:53	S20215
L3	met08_sr_6010	82361903004	CS1K	07-SEP-2012 07:57	S20214
L4	met08_sr_6010	82361903005	CS10K	07-SEP-2012 08:01	S20216
L5	met08_sr_6010	82361903006	CS100K	07-SEP-2012 08:06	S20217

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Copper	A	78.780	103.86	109.11	109.57		LOR0	0.00000	0.00913		100.33	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Copper	A	5.0000	**-28**	100.00	-5	1000.0	0	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 METALS Soil
EPA 6010C

Inst : MET08
Calnum : 82361903001 Cal Date : 07-SEP-2012

ICV 82361903007 (07-SEP-2012) stds: S20644

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Copper	A	5000	4906	ug/L	-2	10	

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: ICALBLK, **Date Collected: 9/7/2012 7:43:02 AM**
Analyst: **Data Type: Reprocessed on 9/7/2012 8:32:19 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICALBLK,

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: ICALBLK,

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	1906.3	141.63	7.43%	[0.00]	ug/L
Al 308.215 R	-236.5	8.64	3.65%	[0.00]	ug/L
As 188.979	14.8	13.05	87.87%	[0.00]	ug/L
B 249.677	-2791.3	12.13	0.43%	[0.00]	ug/L
Ba 233.527	36.7	6.09	16.58%	[0.00]	ug/L
Be 313.107	633.1	52.93	8.36%	[0.00]	ug/L
Ca 315.887 R	-274.5	11.37	4.14%	[0.00]	ug/L
Cd 214.440	-27.6	7.29	26.39%	[0.00]	ug/L
Co 228.616	-275.2	16.02	5.82%	[0.00]	ug/L
Cr 267.716	-351.8	12.38	3.52%	[0.00]	ug/L
Cu 324.752	508.4	56.76	11.16%	[0.00]	ug/L
Fe 238.204 R	114.1	2.67	2.34%	[0.00]	ug/L
K 766.490 R	1319.4	76.74	5.82%	[0.00]	ug/L
Mg 279.077 R	-26.9	1.19	4.43%	[0.00]	ug/L
Mn 257.610	2555.4	51.12	2.00%	[0.00]	ug/L
Mo 202.031	-9.0	5.48	60.65%	[0.00]	ug/L
Na 589.592 R	-747.5	104.39	13.97%	[0.00]	ug/L
Ni 231.604	-361.3	12.40	3.43%	[0.00]	ug/L
Pb 220.353	1.6	54.77	>999.9%	[0.00]	ug/L
Sb 206.836	-286.3	30.73	10.73%	[0.00]	ug/L
Se 196.026	136.1	95.72	70.35%	[0.00]	ug/L
Ti 334.940 R	258.7	65.66	25.37%	[0.00]	ug/L
Tl 190.801	-87.7	14.59	16.64%	[0.00]	ug/L
V 292.402	-310.0	11.17	3.60%	[0.00]	ug/L
Zn 206.200	40.0	6.22	15.54%	[0.00]	ug/L
Sn 189.927	-32.3	8.63	26.69%	[0.00]	ug/L
Sr 421.552 R	57868.3	314.22	0.54%	[0.00]	ug/L

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Sequence No.: 2 **Autosampler Location: 2**
Sample ID: ICAL,CRI5.1 **Date Collected: 9/7/2012 7:48:01 AM**
Analyst: **Data Type: Reprocessed on 9/7/2012 8:32:22 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CRI5.1

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: ICAL,CRI5.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1808472.8	22921.42	1.27%	100.000	%
Y	89572.8	506.62	0.57%	100.000	%
Ag 328.068†	3822.4	410.81	10.75%	[5]	ug/L
Al 308.215 R†	113.1	5.51	4.87%	[100]	ug/L
As 188.979†	72.6	22.55	31.07%	[5]	ug/L
B 249.677†	19383.9	225.73	1.16%	[100]	ug/L
Ba 233.527†	2037.9	22.13	1.09%	[5]	ug/L
Be 313.107†	10180.2	286.99	2.82%	[2]	ug/L
Ca 315.887 R†	1848.5	8.22	0.44%	[200]	ug/L
Cd 214.440†	1248.7	18.90	1.51%	[5]	ug/L
Co 228.616†	650.6	15.32	2.35%	[5]	ug/L
Cr 267.716†	463.9	6.21	1.34%	[5]	ug/L
Cu 324.752†	393.9	87.61	22.24%	[5]	ug/L
Fe 238.204 R†	484.2	5.53	1.14%	[100]	ug/L
K 766.490 R†	2198.2	11.72	0.53%	[500]	ug/L
Mg 279.077 R†	219.1	8.14	3.72%	[200]	ug/L
Mn 257.610†	8619.0	138.36	1.61%	[5]	ug/L
Mo 202.031†	170.5	9.76	5.72%	[5]	ug/L
Na 589.592 R†	4681.0	47.90	1.02%	[500]	ug/L
Ni 231.604†	267.3	3.99	1.49%	[5]	ug/L
Pb 220.353†	337.6	0.40	0.12%	[5]	ug/L
Sb 206.836†	349.3	9.31	2.67%	[10]	ug/L
Se 196.026†	168.9	1.69	1.00%	[10]	ug/L
Ti 334.940 R†	665.1	18.42	2.77%	[10]	ug/L
Tl 190.801†	199.6	9.95	4.99%	[10]	ug/L
V 292.402†	766.3	14.38	1.88%	[5]	ug/L
Zn 206.200†	1683.5	23.32	1.39%	[20]	ug/L
Sn 189.927†	891.7	4.77	0.53%	[40]	ug/L
Sr 421.552 R	2370.3	233.45	9.85%	[5]	ug/L

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Sequence No.: 3 **Autosampler Location: 3**
Sample ID: ICAL,CS100 **Date Collected: 9/7/2012 7:53:04 AM**
Analyst: **Data Type: Reprocessed on 9/7/2012 8:32:24 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS100

Analyte	Back Pressure	Flow
All	133.0 kPa	0.55 L/min

Mean Data: ICAL,CS100

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1899872.9	12373.18	0.65%	105.054	%
Y	92160.9	583.63	0.63%	102.889	%
Ag 328.068†	69606.7	471.38	0.68%	[100]	ug/L
As 188.979†	1916.8	19.55	1.02%	[100]	ug/L
Ba 233.527†	39833.4	161.34	0.41%	[100]	ug/L
Be 313.107†	465224.9	2229.21	0.48%	[100]	ug/L
Cd 214.440†	24227.6	134.61	0.56%	[100]	ug/L
Co 228.616†	12190.2	86.28	0.71%	[100]	ug/L
Cr 267.716†	8866.9	64.35	0.73%	[100]	ug/L
Cu 324.752†	10386.1	94.10	0.91%	[100]	ug/L
Mn 257.610†	166900.4	920.58	0.55%	[100]	ug/L
Mo 202.031†	3456.5	17.00	0.49%	[100]	ug/L
Ni 231.604†	4836.4	31.70	0.66%	[100]	ug/L
Pb 220.353†	5794.8	31.50	0.54%	[100]	ug/L
Sb 206.836†	3117.5	32.39	1.04%	[100]	ug/L
Se 196.026†	2826.5	61.25	2.17%	[100]	ug/L
Ti 334.940 R†	6924.4	67.28	0.97%	[100]	ug/L
Tl 190.801†	1876.1	17.93	0.96%	[100]	ug/L
V 292.402†	14913.9	88.49	0.59%	[100]	ug/L
Zn 206.200†	7776.7	46.45	0.60%	[100]	ug/L
Sn 189.927†	2127.7	9.01	0.42%	[100]	ug/L
Sr 421.552 R	45079.3	538.08	1.19%	[100]	ug/L

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: ICAL,CS1K **Date Collected: 9/7/2012 7:57:06 AM**
Analyst: **Data Type: Reprocessed on 9/7/2012 8:32:25 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS1K

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: ICAL,CS1K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1890991.9	11176.14	0.59%	104.563	%
Y	95841.5	1674.49	1.75%	106.998	%
Ag 328.068†	703743.0	5074.27	0.72%	[1000]	ug/L
Al 308.215 R†	1159.0	45.54	3.93%	[1000]	ug/L
As 188.979†	19926.4	118.31	0.59%	[1000]	ug/L
B 249.677†	193770.7	1537.91	0.79%	[1000]	ug/L
Ba 233.527†	401747.4	4791.68	1.19%	[1000]	ug/L
Be 313.107†	4663138.6	30423.06	0.65%	[1000]	ug/L
Ca 315.887 R†	8791.8	140.60	1.60%	[1000]	ug/L
Cd 214.440†	246315.9	2565.34	1.04%	[1000]	ug/L
Co 228.616†	127789.9	1539.04	1.20%	[1000]	ug/L
Cr 267.716†	90467.4	819.13	0.91%	[1000]	ug/L
Cu 324.752†	109113.7	969.13	0.89%	[1000]	ug/L
Fe 238.204 R†	4539.2	144.75	3.19%	[1000]	ug/L
K 766.490 R†	2831.4	82.54	2.92%	[1000]	ug/L
Mg 279.077 R†	1006.3	30.83	3.06%	[1000]	ug/L
Mn 257.610†	1682061.3	10717.34	0.64%	[1000]	ug/L
Mo 202.031†	35147.9	217.37	0.62%	[1000]	ug/L
Na 589.592 R†	9144.4	91.99	1.01%	[1000]	ug/L
Ni 231.604†	50396.4	408.39	0.81%	[1000]	ug/L
Pb 220.353†	59201.3	401.27	0.68%	[1000]	ug/L
Sb 206.836†	31531.7	177.26	0.56%	[1000]	ug/L
Se 196.026†	29876.4	149.36	0.50%	[1000]	ug/L
Ti 334.940 R†	72097.7	1200.48	1.67%	[1000]	ug/L
Tl 190.801†	19272.0	130.36	0.68%	[1000]	ug/L
V 292.402†	148939.0	1099.71	0.74%	[1000]	ug/L
Zn 206.200†	79913.2	1044.86	1.31%	[1000]	ug/L
Sn 189.927†	21897.1	112.14	0.51%	[1000]	ug/L
Sr 421.552 R	467488.6	6404.30	1.37%	[1000]	ug/L

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Sequence No.: 5 **Autosampler Location: 5**
Sample ID: ICAL,CS10K **Date Collected: 9/7/2012 8:01:17 AM**
Analyst: **Data Type: Reprocessed on 9/7/2012 8:32:28 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS10K

Analyte	Back Pressure	Flow
All	136.0 kPa	0.55 L/min

Mean Data: ICAL,CS10K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1855943.0	21686.99	1.17%	102.625	%
Y	91300.6	439.47	0.48%	101.929	%
Ag 328.068†	1392171.9	10168.08	0.73%	[2000]	ug/L
Al 308.215 R†	11408.9	79.25	0.69%	[10000]	ug/L
As 188.979†	199827.0	7502.62	3.75%	[10000]	ug/L
B 249.677†	1943946.0	12504.05	0.64%	[10000]	ug/L
Ba 233.527†	3859509.6	32199.91	0.83%	[10000]	ug/L
Ca 315.887 R†	86974.9	202.62	0.23%	[10000]	ug/L
Cd 214.440†	2379030.5	14293.46	0.60%	[10000]	ug/L
Co 228.616†	1242295.8	8726.17	0.70%	[10000]	ug/L
Cr 267.716†	884853.1	8388.66	0.95%	[10000]	ug/L
Cu 324.752†	1095739.7	1485.75	0.14%	[10000]	ug/L
Fe 238.204 R†	45763.6	214.51	0.47%	[10000]	ug/L
K 766.490 R†	37183.1	172.84	0.46%	[10000]	ug/L
Mg 279.077 R†	10089.2	81.68	0.81%	[10000]	ug/L
Mn 257.610†	15993694.9	215568.79	1.35%	[10000]	ug/L
Mo 202.031†	349362.1	1435.93	0.41%	[10000]	ug/L
Na 589.592 R†	89626.2	1763.30	1.97%	[10000]	ug/L
Ni 231.604†	492259.7	3355.64	0.68%	[10000]	ug/L
Pb 220.353†	584015.3	4188.65	0.72%	[10000]	ug/L
Sb 206.836†	316234.8	9891.60	3.13%	[10000]	ug/L
Se 196.026†	302139.4	11739.79	3.89%	[10000]	ug/L
Ti 334.940 R†	700566.3	19828.06	2.83%	[10000]	ug/L
Tl 190.801†	186460.9	6342.36	3.40%	[10000]	ug/L
V 292.402†	1492981.8	10242.90	0.69%	[10000]	ug/L
Zn 206.200†	786759.7	6660.63	0.85%	[10000]	ug/L
Sn 189.927†	214356.7	7979.61	3.72%	[10000]	ug/L
Sr 421.552 R	4479934.5	18389.08	0.41%	[10000]	ug/L

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: ICAL,CS100K **Date Collected: 9/7/2012 8:06:48 AM**
Analyst: **Data Type: Reprocessed on 9/7/2012 8:32:29 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICAL,CS100K

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: ICAL,CS100K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1742211.2	7969.22	0.46%	96.3360	%
Y	89192.5	1152.27	1.29%	99.5755	%
Al 308.215 R†	107661.9	340.70	0.32%	[100000]	ug/L
Ca 315.887 R†	815244.3	7268.85	0.89%	[100000]	ug/L
Fe 238.204 R†	441053.0	3118.68	0.71%	[100000]	ug/L
K 766.490 R†	369058.9	2423.65	0.66%	[100000]	ug/L
Mg 279.077 R†	95130.2	743.78	0.78%	[100000]	ug/L
Na 589.592 R†	845992.5	17179.66	2.03%	[100000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin Thru 0	0.0	697.6	0.00000	0.999990	
Al 308.215 R	4	Lin Thru 0	0.0	1.077	0.00000	0.999982	
As 188.979	4	Lin Thru 0	0.0	19.98	0.00000	1.000000	
B 249.677	3	Lin Thru 0	0.0	194.4	0.00000	1.000000	
Ba 233.527	4	Lin Thru 0	0.0	386.1	0.00000	0.999992	
Be 313.107	3	Lin Thru 0	0.0	4663	0.00000	1.000000	
Ca 315.887 R	4	Lin Thru 0	0.0	8.158	0.00000	0.999978	
Cd 214.440	4	Lin Thru 0	0.0	238.0	0.00000	0.999994	
Co 228.616	4	Lin Thru 0	0.0	124.3	0.00000	0.999996	
Cr 267.716	4	Lin Thru 0	0.0	88.50	0.00000	0.999998	
Cu 324.752	4	Lin Thru 0	0.0	109.6	0.00000	1.000000	
Fe 238.204 R	4	Lin Thru 0	0.0	4.412	0.00000	0.999993	
K 766.490 R	4	Lin Thru 0	0.0	3.691	0.00000	0.999997	
Mg 279.077 R	4	Lin Thru 0	0.0	0.9519	0.00000	0.999982	
Mn 257.610	4	Lin Thru 0	0.0	1600	0.00000	0.999987	
Mo 202.031	4	Lin Thru 0	0.0	34.94	0.00000	1.000000	
Na 589.592 R	4	Lin Thru 0	0.0	8.465	0.00000	0.999982	
Ni 231.604	4	Lin Thru 0	0.0	49.24	0.00000	0.999997	
Pb 220.353	4	Lin Thru 0	0.0	58.41	0.00000	0.999999	
Sb 206.836	4	Lin Thru 0	0.0	31.62	0.00000	1.000000	
Se 196.026	4	Lin Thru 0	0.0	30.21	0.00000	0.999999	
Ti 334.940 R	4	Lin Thru 0	0.0	70.08	0.00000	0.999996	
Tl 190.801	4	Lin Thru 0	0.0	18.65	0.00000	0.999994	
V 292.402	4	Lin Thru 0	0.0	149.3	0.00000	1.000000	
Zn 206.200	4	Lin Thru 0	0.0	78.69	0.00000	0.999999	
Sn 189.927	4	Lin Thru 0	0.0	21.44	0.00000	0.999998	
Sr 421.552 R	4	Lin Thru 0	0.0	448.2	0.00000	0.999991	

Sequence No.: 7 **Autosampler Location: 217**
Sample ID: s20644 **Date Collected: 9/7/2012 8:12:07 AM**
Analyst: **Data Type: Reprocessed on 9/7/2012 8:32:30 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20644

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: s20644

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1806962.1	99.9165	%	0.70750				0.71%
Y	90617.0	101.166	%	1.0299				1.02%
Ag 328.068†	686161.5	983.582	ug/L	3.4302	983.582	ug/L	3.4302	0.35%
QC value within limits for Ag 328.068 Recovery = 98.36%								
Al 308.215 R†	22303.6	20703.9	ug/L	162.72	20703.9	ug/L	162.72	0.79%
QC value within limits for Al 308.215 R Recovery = 103.52%								
As 188.979†	100484.9	5028.75	ug/L	39.286	5028.75	ug/L	39.286	0.78%
QC value within limits for As 188.979 Recovery = 100.58%								
B 249.677†	983586.9	5059.91	ug/L	10.620	5059.91	ug/L	10.620	0.21%
QC value within limits for B 249.677 Recovery = 101.20%								
Ba 233.527†	1925281.4	4986.37	ug/L	1.444	4986.37	ug/L	1.444	0.03%
QC value within limits for Ba 233.527 Recovery = 99.73%								
Be 313.107†	2359994.3	506.107	ug/L	1.1735	506.107	ug/L	1.1735	0.23%
QC value within limits for Be 313.107 Recovery = 101.22%								
Ca 315.887 R†	170626.4	20915.5	ug/L	94.66	20915.5	ug/L	94.66	0.45%
QC value within limits for Ca 315.887 R Recovery = 104.58%								
Cd 214.440†	1189676.4	4998.92	ug/L	5.364	4998.92	ug/L	5.364	0.11%
QC value within limits for Cd 214.440 Recovery = 99.98%								
Co 228.616†	610195.6	4901.22	ug/L	2.312	4901.22	ug/L	2.312	0.05%
QC value within limits for Co 228.616 Recovery = 98.02%								
Cr 267.716†	436026.3	4926.58	ug/L	22.942	4926.58	ug/L	22.942	0.47%
QC value within limits for Cr 267.716 Recovery = 98.53%								
Cu 324.752†	537504.6	4905.63	ug/L	22.139	4905.63	ug/L	22.139	0.45%
QC value within limits for Cu 324.752 Recovery = 98.11%								
Fe 238.204 R†	91441.4	20724.8	ug/L	112.09	20724.8	ug/L	112.09	0.54%
QC value within limits for Fe 238.204 R Recovery = 103.62%								
K 766.490 R†	74104.9	20078.3	ug/L	115.49	20078.3	ug/L	115.49	0.58%
QC value within limits for K 766.490 R Recovery = 100.39%								
Mg 279.077 R†	20066.6	21081.1	ug/L	144.88	21081.1	ug/L	144.88	0.69%
QC value within limits for Mg 279.077 R Recovery = 105.41%								
Mn 257.610†	7917642.5	4947.92	ug/L	2.226	4947.92	ug/L	2.226	0.04%
QC value within limits for Mn 257.610 Recovery = 98.96%								
Mo 202.031†	177293.8	5074.49	ug/L	11.986	5074.49	ug/L	11.986	0.24%
QC value within limits for Mo 202.031 Recovery = 101.49%								
Na 589.592 R†	178293.6	21062.5	ug/L	151.37	21062.5	ug/L	151.37	0.72%
QC value within limits for Na 589.592 R Recovery = 105.31%								
Ni 231.604†	241016.9	4894.99	ug/L	2.563	4894.99	ug/L	2.563	0.05%
QC value within limits for Ni 231.604 Recovery = 97.90%								
Pb 220.353†	283121.9	4847.20	ug/L	12.722	4847.20	ug/L	12.722	0.26%
QC value within limits for Pb 220.353 Recovery = 96.94%								
Sb 206.836†	159458.5	5042.56	ug/L	35.915	5042.56	ug/L	35.915	0.71%
QC value within limits for Sb 206.836 Recovery = 100.85%								
Se 196.026†	148496.7	4915.42	ug/L	49.684	4915.42	ug/L	49.684	1.01%
QC value within limits for Se 196.026 Recovery = 98.31%								
Ti 334.940 R†	359587.5	5131.34	ug/L	16.426	5131.34	ug/L	16.426	0.32%
QC value within limits for Ti 334.940 R Recovery = 102.63%								
Tl 190.801†	93129.8	4992.94	ug/L	38.445	4992.94	ug/L	38.445	0.77%
QC value within limits for Tl 190.801 Recovery = 99.86%								
V 292.402†	751069.0	5030.78	ug/L	19.953	5030.78	ug/L	19.953	0.40%
QC value within limits for V 292.402 Recovery = 100.62%								
Zn 206.200†	387193.9	4920.61	ug/L	4.511	4920.61	ug/L	4.511	0.09%
QC value within limits for Zn 206.200 Recovery = 98.41%								
Sn 189.927†	108115.2	5042.63	ug/L	44.212	5042.63	ug/L	44.212	0.88%
QC value within limits for Sn 189.927 Recovery = 100.85%								
Sr 421.552 R	223451.9	498.939	ug/L	4.1427	498.939	ug/L	4.1427	0.83%
QC value within limits for Sr 421.552 R Recovery = 99.79%								

All analyte(s) passed QC.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903008.1 File : met08_sr_6010 Time : 07-SEP-2012 08:17
Cal : 82361903001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Copper	A	ND	5.000	3.219	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1976997	9.32

Sequence No.: 8 **Autosampler Location: 220**
Sample ID: ICB **Date Collected: 9/7/2012 8:17:28 AM**
Analyst: **Data Type: Reprocessed on 9/7/2012 8:32:34 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1976996.5	109.319	%	0.8235				0.75%
Y	95478.9	106.594	%	1.1365				1.07%
Ag 328.068†	-331.8	-0.475566	ug/L	0.4405024	-0.475566	ug/L	0.4405024	92.63%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	12.9	11.9695	ug/L	2.63661	11.9695	ug/L	2.63661	22.03%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	21.1	1.05448	ug/L	1.044693	1.05448	ug/L	1.044693	99.07%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	5388.4	27.7196	ug/L	0.85848	27.7196	ug/L	0.85848	3.10%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	90.5	0.234378	ug/L	0.0870801	0.234378	ug/L	0.0870801	37.15%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-67.7	-0.0145132	ug/L	0.01719770	-0.0145132	ug/L	0.01719770	118.50%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	-4.8	-0.587252	ug/L	0.9302821	-0.587252	ug/L	0.9302821	158.41%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	87.2	0.366481	ug/L	0.0949202	0.366481	ug/L	0.0949202	25.90%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	73.7	0.594597	ug/L	0.2329363	0.594597	ug/L	0.2329363	39.18%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	55.8	0.630601	ug/L	0.1435855	0.630601	ug/L	0.1435855	22.77%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-61.0	-0.556854	ug/L	1.3140867	-0.556854	ug/L	1.3140867	235.98%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	-0.6	-0.136571	ug/L	0.8497923	-0.136571	ug/L	0.8497923	622.24%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	-466.9	-126.491	ug/L	59.4574	-126.491	ug/L	59.4574	47.01%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	4.8	5.08088	ug/L	3.769182	5.08088	ug/L	3.769182	74.18%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	756.0	0.472418	ug/L	0.0886753	0.472418	ug/L	0.0886753	18.77%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	29.5	0.844398	ug/L	0.0997500	0.844398	ug/L	0.0997500	11.81%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	159.5	18.8431	ug/L	2.00275	18.8431	ug/L	2.00275	10.63%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	52.1	1.05797	ug/L	0.085545	1.05797	ug/L	0.085545	8.09%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	80.2	1.37285	ug/L	0.370536	1.37285	ug/L	0.370536	26.99%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	76.9	2.43075	ug/L	0.529737	2.43075	ug/L	0.529737	21.79%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-27.0	-0.892243	ug/L	1.9474454	-0.892243	ug/L	1.9474454	218.26%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	-64.3	-0.917516	ug/L	0.2294110	-0.917516	ug/L	0.2294110	25.00%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	24.8	1.33207	ug/L	0.937196	1.33207	ug/L	0.937196	70.36%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	68.0	0.455694	ug/L	0.0816970	0.455694	ug/L	0.0816970	17.93%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	52.2	0.663890	ug/L	0.1669908	0.663890	ug/L	0.1669908	25.15%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	38.7	1.80502	ug/L	0.248884	1.80502	ug/L	0.248884	13.79%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	-1700.6	-3.79420	ug/L	1.175538	-3.79420	ug/L	1.175538	30.98%
QC value within limits for Sr 421.552 R Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903009.1 File : met08_sr_6010 Time : 07-SEP-2012 08:22
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20220

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19520	ug/L	98
Copper	A	20000	20890	ug/L	104
Manganese	A	20000	19070	ug/L	95
Nickel	A	20000	18320	ug/L	92
Vanadium	A	20000	20110	ug/L	101
Aluminum	R	500000	518700	ug/L	104
Calcium	R	500000	502700	ug/L	101
Iron	R	200000	196200	ug/L	98
Magnesium	R	500000	509300	ug/L	102
Titanium	R	20000	21400	ug/L	107

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1636938	-9.49

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: s20220 **Date Collected: 9/7/2012 8:22:34 AM**
Analyst: **Data Type: Reprocessed on 9/7/2012 8:32:36 AM**
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20220

Analyte	Back Pressure	Flow
All	135.0 kPa	0.55 L/min

Mean Data: s20220

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1636938.4	90.5150	%	0.89253				0.99%
Y	84790.4	94.6609	%	0.47212				0.50%
Ag 328.068†	-1931.0	-2.76807	ug/L	0.343596	-2.76807	ug/L	0.343596	12.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	558805.8	518727	ug/L	3893.9	518727	ug/L	3893.9	0.75%
QC value within limits for Al 308.215 R Recovery = 103.75%								
As 188.979†	-64.0	-3.20292	ug/L	4.550149	-3.20292	ug/L	4.550149	142.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	14705.7	75.6510	ug/L	3.70232	75.6510	ug/L	3.70232	4.89%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-49.9	-0.129362	ug/L	0.2514138	-0.129362	ug/L	0.2514138	194.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-4702.1	-1.00837	ug/L	0.016114	-1.00837	ug/L	0.016114	1.60%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	4101377.2	502749	ug/L	5184.0	502749	ug/L	5184.0	1.03%
QC value within limits for Ca 315.887 R Recovery = 100.55%								
Cd 214.440†	-892.7	-3.75122	ug/L	0.202762	-3.75122	ug/L	0.202762	5.41%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	5179.5	3.15494	ug/L	1.295552	3.15494	ug/L	1.295552	41.06%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1727470.8	19518.4	ug/L	99.06	19518.4	ug/L	99.06	0.51%
QC value within limits for Cr 267.716 Recovery = 97.59%								
Cu 324.752†	2288408.5	20885.6	ug/L	294.03	20885.6	ug/L	294.03	1.41%
QC value within limits for Cu 324.752 Recovery = 104.43%								
Fe 238.204 R†	865523.1	196167	ug/L	2115.4	196167	ug/L	2115.4	1.08%
QC value within limits for Fe 238.204 R Recovery = 98.08%								
K 766.490 R†	-829.6	-224.779	ug/L	90.5786	-224.779	ug/L	90.5786	40.30%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	484833.4	509344	ug/L	6584.8	509344	ug/L	6584.8	1.29%
QC value within limits for Mg 279.077 R Recovery = 101.87%								
Mn 257.610†	30519966.9	19072.7	ug/L	192.07	19072.7	ug/L	192.07	1.01%
QC value within limits for Mn 257.610 Recovery = 95.36%								
Mo 202.031†	-30.6	-0.874450	ug/L	0.9045643	-0.874450	ug/L	0.9045643	103.44%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	379.4	44.8220	ug/L	6.60506	44.8220	ug/L	6.60506	14.74%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	902257.0	18324.6	ug/L	66.69	18324.6	ug/L	66.69	0.36%
QC value within limits for Ni 231.604 Recovery = 91.62%								
Pb 220.353†	89.1	1.52558	ug/L	1.335314	1.52558	ug/L	1.335314	87.53%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-213.4	-6.74924	ug/L	10.254855	-6.74924	ug/L	10.254855	151.94%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-215.3	-7.12740	ug/L	29.055579	-7.12740	ug/L	29.055579	407.66%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	1499887.0	21403.5	ug/L	174.71	21403.5	ug/L	174.71	0.82%
QC value within limits for Ti 334.940 R Recovery = 107.02%								
Tl 190.801†	-15.9	-0.854776	ug/L	19.6134820	-0.854776	ug/L	19.6134820	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	3002290.8	20109.8	ug/L	74.55	20109.8	ug/L	74.55	0.37%
QC value within limits for V 292.402 Recovery = 100.55%								
Zn 206.200†	771.9	9.80950	ug/L	0.832248	9.80950	ug/L	0.832248	8.48%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	-251.7	-11.7400	ug/L	0.88275	-11.7400	ug/L	0.88275	7.52%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	-4631.6	-0.361207	ug/L	0.8750708	-0.361207	ug/L	0.8750708	242.26%
QC value within limits for Sr 421.552 R Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903010.1 File : met08_sr_6010 Time : 07-SEP-2012 08:35
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Copper	A	500.0	555.5	ug/L	11	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1577047	-12.80

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Sequence No.: 1 **Autosampler Location: 1**
Sample ID: ICALBLK, **Date Collected: 9/7/2012 8:34:17 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
User canceled analysis.

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Sequence No.: 10 **Autosampler Location: 10**
Sample ID: s20222 **Date Collected: 9/7/2012 8:35:53 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20222

Analyte	Back Pressure	Flow
All	133.0 kPa	0.55 L/min

Mean Data: s20222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1577047.4	87.2033	%	1.19100				1.37%
Y	84210.2	94.0131	%	1.86649				1.99%
Ag 328.068†	773522.8	1108.81	ug/L	2.989	1108.81	ug/L	2.989	0.27%
QC value within limits for Ag 328.068 Recovery = 110.88%								
Al 308.215 R†	561425.4	521159	ug/L	6152.5	521159	ug/L	6152.5	1.18%
QC value within limits for Al 308.215 R Recovery = 104.23%								
As 188.979†	10302.7	515.599	ug/L	19.8355	515.599	ug/L	19.8355	3.85%
QC value within limits for As 188.979 Recovery = 103.12%								
B 249.677†	15880.6	81.6951	ug/L	2.61689	81.6951	ug/L	2.61689	3.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	204800.5	530.422	ug/L	2.0280	530.422	ug/L	2.0280	0.38%
QC value within limits for Ba 233.527 Recovery = 106.08%								
Be 313.107†	2459824.2	527.516	ug/L	1.3908	527.516	ug/L	1.3908	0.26%
QC value within limits for Be 313.107 Recovery = 105.50%								
Ca 315.887 R†	4008582.9	491374	ug/L	5111.2	491374	ug/L	5111.2	1.04%
QC value within limits for Ca 315.887 R Recovery = 98.27%								
Cd 214.440†	240723.4	1011.50	ug/L	1.907	1011.50	ug/L	1.907	0.19%
QC value within limits for Cd 214.440 Recovery = 101.15%								
Co 228.616†	64165.8	477.087	ug/L	10.8979	477.087	ug/L	10.8979	2.28%
QC value within limits for Co 228.616 Recovery = 95.42%								
Cr 267.716†	44479.6	502.566	ug/L	2.4695	502.566	ug/L	2.4695	0.49%
QC value within limits for Cr 267.716 Recovery = 100.51%								
Cu 324.752†	60870.8	555.548	ug/L	1.9513	555.548	ug/L	1.9513	0.35%
QC value within limits for Cu 324.752 Recovery = 111.11%								
Fe 238.204 R†	857692.8	194392	ug/L	632.7	194392	ug/L	632.7	0.33%
QC value within limits for Fe 238.204 R Recovery = 97.20%								
K 766.490 R†	-791.2	-214.382	ug/L	74.3325	-214.382	ug/L	74.3325	34.67%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	473171.5	497092	ug/L	1843.6	497092	ug/L	1843.6	0.37%
QC value within limits for Mg 279.077 R Recovery = 99.42%								
Mn 257.610†	767795.3	479.814	ug/L	1.2419	479.814	ug/L	1.2419	0.26%
QC value within limits for Mn 257.610 Recovery = 95.96%								
Mo 202.031†	18214.5	521.334	ug/L	8.2552	521.334	ug/L	8.2552	1.58%
QC value within limits for Mo 202.031 Recovery = 104.27%								
Na 589.592 R†	264.7	31.2756	ug/L	8.60704	31.2756	ug/L	8.60704	27.52%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	45840.8	931.015	ug/L	22.0481	931.015	ug/L	22.0481	2.37%
QC value within limits for Ni 231.604 Recovery = 93.10%								
Pb 220.353†	55140.6	944.037	ug/L	18.4314	944.037	ug/L	18.4314	1.95%
QC value within limits for Pb 220.353 Recovery = 94.40%								
Sb 206.836†	16097.8	509.062	ug/L	14.2059	509.062	ug/L	14.2059	2.79%
QC value within limits for Sb 206.836 Recovery = 101.81%								
Se 196.026†	15500.5	513.084	ug/L	15.2808	513.084	ug/L	15.2808	2.98%
QC value within limits for Se 196.026 Recovery = 102.62%								
Ti 334.940 R†	1529124.1	21820.7	ug/L	523.75	21820.7	ug/L	523.75	2.40%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	8947.9	479.723	ug/L	17.0894	479.723	ug/L	17.0894	3.56%
QC value within limits for Tl 190.801 Recovery = 95.94%								
V 292.402†	80817.4	541.328	ug/L	1.5328	541.328	ug/L	1.5328	0.28%
QC value within limits for V 292.402 Recovery = 108.27%								
Zn 206.200†	77993.8	991.177	ug/L	2.6921	991.177	ug/L	2.6921	0.27%

QC value within limits for Zn 206.200 Recovery = 99.12%

Sn 189.927†		-72.3	-3.37258 ug/L		1.975392	-3.37258 ug/L	1.975392	58.57%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552 R		206094.2	469.564 ug/L		7.1798	469.564 ug/L	7.1798	1.53%

QC value within limits for Sr 421.552 R Recovery = 93.91%

All analyte(s) passed QC.

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903012.1 File : met08_sr_6010 Time : 07-SEP-2012 08:45
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20319

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Copper	A	20.00	18.51	ug/L	-7	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1885342	4.25

User canceled analysis.

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Sequence No.: 11 **Autosampler Location: 7**
Sample ID: s20319 **Date Collected: 9/7/2012 8:45:15 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20319

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: s20319

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1885341.8	104.250	%	1.3267				1.27%
Y	95032.4	106.095	%	1.3571				1.28%
Ag 328.068†	13961.9	20.0137	ug/L	0.56769	20.0137	ug/L	0.56769	2.84%
QC value within limits for Ag 328.068 Recovery = 100.07%								
Al 308.215 R†	480.5	446.067	ug/L	3.2027	446.067	ug/L	3.2027	0.72%
QC value within limits for Al 308.215 R Recovery = 111.52%								
As 188.979†	380.7	19.0534	ug/L	1.25004	19.0534	ug/L	1.25004	6.56%
QC value within limits for As 188.979 Recovery = 95.27%								
B 249.677†	79350.2	408.204	ug/L	3.1545	408.204	ug/L	3.1545	0.77%
QC value within limits for B 249.677 Recovery = 102.05%								
Ba 233.527†	7868.1	20.3778	ug/L	0.27212	20.3778	ug/L	0.27212	1.34%
QC value within limits for Ba 233.527 Recovery = 101.89%								
Be 313.107†	37709.0	8.08681	ug/L	0.025240	8.08681	ug/L	0.025240	0.31%
QC value within limits for Be 313.107 Recovery = 101.09%								
Ca 315.887 R†	7032.4	862.041	ug/L	8.2482	862.041	ug/L	8.2482	0.96%
QC value within limits for Ca 315.887 R Recovery = 107.76%								
Cd 214.440†	4935.9	20.7403	ug/L	0.36710	20.7403	ug/L	0.36710	1.77%
QC value within limits for Cd 214.440 Recovery = 103.70%								
Co 228.616†	2513.4	20.1542	ug/L	0.27695	20.1542	ug/L	0.27695	1.37%
QC value within limits for Co 228.616 Recovery = 100.77%								
Cr 267.716†	1820.9	20.5740	ug/L	0.35695	20.5740	ug/L	0.35695	1.73%
QC value within limits for Cr 267.716 Recovery = 102.87%								
Cu 324.752†	2028.1	18.5096	ug/L	0.40058	18.5096	ug/L	0.40058	2.16%
QC value within limits for Cu 324.752 Recovery = 92.55%								
Fe 238.204 R†	1895.7	429.645	ug/L	4.7987	429.645	ug/L	4.7987	1.12%
QC value within limits for Fe 238.204 R Recovery = 107.41%								
K 766.490 R†	6923.2	1875.80	ug/L	41.081	1875.80	ug/L	41.081	2.19%
QC value within limits for K 766.490 R Recovery = 93.79%								
Mg 279.077 R†	842.0	884.559	ug/L	11.7784	884.559	ug/L	11.7784	1.33%
QC value within limits for Mg 279.077 R Recovery = 110.57%								
Mn 257.610†	33446.9	20.9017	ug/L	0.21699	20.9017	ug/L	0.21699	1.04%
QC value within limits for Mn 257.610 Recovery = 104.51%								
Mo 202.031†	722.4	20.6753	ug/L	0.12331	20.6753	ug/L	0.12331	0.60%
QC value within limits for Mo 202.031 Recovery = 103.38%								
Na 589.592 R†	17736.1	2095.23	ug/L	17.453	2095.23	ug/L	17.453	0.83%
QC value within limits for Na 589.592 R Recovery = 104.76%								
Ni 231.604†	1012.2	20.5567	ug/L	0.20785	20.5567	ug/L	0.20785	1.01%
QC value within limits for Ni 231.604 Recovery = 102.78%								
Pb 220.353†	1198.0	20.5099	ug/L	0.38508	20.5099	ug/L	0.38508	1.88%
QC value within limits for Pb 220.353 Recovery = 102.55%								
Sb 206.836†	1240.8	39.2392	ug/L	1.85378	39.2392	ug/L	1.85378	4.72%
QC value within limits for Sb 206.836 Recovery = 98.10%								
Se 196.026†	1112.2	36.8144	ug/L	2.29862	36.8144	ug/L	2.29862	6.24%
QC value within limits for Se 196.026 Recovery = 92.04%								
Ti 334.940 R†	2812.9	40.1410	ug/L	0.52132	40.1410	ug/L	0.52132	1.30%
QC value within limits for Ti 334.940 R Recovery = 100.35%								
Tl 190.801†	767.4	41.1402	ug/L	0.22818	41.1402	ug/L	0.22818	0.55%
QC value within limits for Tl 190.801 Recovery = 102.85%								
V 292.402†	2974.9	19.9265	ug/L	0.23732	19.9265	ug/L	0.23732	1.19%
QC value within limits for V 292.402 Recovery = 99.63%								
Zn 206.200†	6560.9	83.3785	ug/L	1.11096	83.3785	ug/L	1.11096	1.33%
QC value within limits for Zn 206.200 Recovery = 104.22%								
Sn 189.927†	3455.4	161.166	ug/L	2.6531	161.166	ug/L	2.6531	1.65%
QC value within limits for Sn 189.927 Recovery = 100.73%								
Sr 421.552 R	9289.4	20.7439	ug/L	0.54295	20.7439	ug/L	0.54295	2.62%

All analyte(s) passed QC.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903021.1 File : met08_sr_6010 Time : 07-SEP-2012 09:31
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Copper	A	100.33	108.96	5000	4972	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1850391	2.32

Sequence No.: 20 **Autosampler Location: 217**
Sample ID: s20645 **Date Collected: 9/7/2012 9:31:21 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20645

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: s20645

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1850390.8	102.318	%	0.6020				0.59%
Y	94142.7	105.102	%	0.3298				0.31%
Ag 328.068†	679365.0	973.840	ug/L	1.3778	973.840	ug/L	1.3778	0.14%
QC value within limits for Ag 328.068 Recovery = 97.38%								
Al 308.215 R†	21908.9	20337.5	ug/L	64.34	20337.5	ug/L	64.34	0.32%
QC value within limits for Al 308.215 R Recovery = 101.69%								
As 188.979†	97271.4	4867.94	ug/L	113.602	4867.94	ug/L	113.602	2.33%
QC value within limits for As 188.979 Recovery = 97.36%								
B 249.677†	977158.2	5026.83	ug/L	14.883	5026.83	ug/L	14.883	0.30%
QC value within limits for B 249.677 Recovery = 100.54%								
Ba 233.527†	1910311.1	4947.60	ug/L	16.107	4947.60	ug/L	16.107	0.33%
QC value within limits for Ba 233.527 Recovery = 98.95%								
Be 313.107†	2338613.7	501.522	ug/L	0.9996	501.522	ug/L	0.9996	0.20%
QC value within limits for Be 313.107 Recovery = 100.30%								
Ca 315.887 R†	165920.6	20338.6	ug/L	40.52	20338.6	ug/L	40.52	0.20%
QC value within limits for Ca 315.887 R Recovery = 101.69%								
Cd 214.440†	1192779.0	5011.96	ug/L	12.402	5011.96	ug/L	12.402	0.25%
QC value within limits for Cd 214.440 Recovery = 100.24%								
Co 228.616†	609244.7	4893.61	ug/L	12.822	4893.61	ug/L	12.822	0.26%
QC value within limits for Co 228.616 Recovery = 97.87%								
Cr 267.716†	429650.5	4854.54	ug/L	18.687	4854.54	ug/L	18.687	0.38%
QC value within limits for Cr 267.716 Recovery = 97.09%								
Cu 324.752†	544789.5	4972.12	ug/L	11.482	4972.12	ug/L	11.482	0.23%
QC value within limits for Cu 324.752 Recovery = 99.44%								
Fe 238.204 R†	90228.3	20449.8	ug/L	48.18	20449.8	ug/L	48.18	0.24%
QC value within limits for Fe 238.204 R Recovery = 102.25%								
K 766.490 R†	71310.7	19321.2	ug/L	36.53	19321.2	ug/L	36.53	0.19%
QC value within limits for K 766.490 R Recovery = 96.61%								
Mg 279.077 R†	19458.9	20442.7	ug/L	30.96	20442.7	ug/L	30.96	0.15%
QC value within limits for Mg 279.077 R Recovery = 102.21%								
Mn 257.610†	7882908.7	4926.22	ug/L	12.692	4926.22	ug/L	12.692	0.26%
QC value within limits for Mn 257.610 Recovery = 98.52%								
Mo 202.031†	175385.4	5019.87	ug/L	17.706	5019.87	ug/L	17.706	0.35%
QC value within limits for Mo 202.031 Recovery = 100.40%								
Na 589.592 R†	169958.5	20077.8	ug/L	34.70	20077.8	ug/L	34.70	0.17%
QC value within limits for Na 589.592 R Recovery = 100.39%								
Ni 231.604†	239384.0	4861.83	ug/L	21.259	4861.83	ug/L	21.259	0.44%
QC value within limits for Ni 231.604 Recovery = 97.24%								
Pb 220.353†	281155.4	4813.53	ug/L	19.719	4813.53	ug/L	19.719	0.41%
QC value within limits for Pb 220.353 Recovery = 96.27%								
Sb 206.836†	155252.8	4909.56	ug/L	94.748	4909.56	ug/L	94.748	1.93%
QC value within limits for Sb 206.836 Recovery = 98.19%								
Se 196.026†	144574.4	4785.58	ug/L	99.457	4785.58	ug/L	99.457	2.08%
QC value within limits for Se 196.026 Recovery = 95.71%								
Ti 334.940 R†	357849.5	5106.54	ug/L	26.531	5106.54	ug/L	26.531	0.52%
QC value within limits for Ti 334.940 R Recovery = 102.13%								
Tl 190.801†	90426.4	4848.00	ug/L	77.173	4848.00	ug/L	77.173	1.59%
QC value within limits for Tl 190.801 Recovery = 96.96%								
V 292.402†	739699.1	4954.63	ug/L	13.399	4954.63	ug/L	13.399	0.27%
QC value within limits for V 292.402 Recovery = 99.09%								
Zn 206.200†	386970.1	4917.77	ug/L	12.909	4917.77	ug/L	12.909	0.26%
QC value within limits for Zn 206.200 Recovery = 98.36%								
Sn 189.927†	104357.4	4867.36	ug/L	93.869	4867.36	ug/L	93.869	1.93%
QC value within limits for Sn 189.927 Recovery = 97.35%								
Sr 421.552 R	222337.5	496.440	ug/L	1.6930	496.440	ug/L	1.6930	0.34%
QC value within limits for Sr 421.552 R Recovery = 99.29%								

All analyte(s) passed QC.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903022.1 File : met08_sr_6010 Time : 07-SEP-2012 09:36
Cal : 82361903001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Copper	A	ND	5.000	3.219	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1956122	8.16

Sequence No.: 21 **Autosampler Location: 220**
Sample ID: ccb **Date Collected: 9/7/2012 9:36:41 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ccb

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: ccb

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1956122.1	108.164	%	1.0892				1.01%
Y	94207.3	105.174	%	4.6131				4.39%
Ag 328.068†	-302.0	-0.432953	ug/L	0.2849952	-0.432953	ug/L	0.2849952	65.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	13.4	12.3948	ug/L	14.31230	12.3948	ug/L	14.31230	115.47%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	-13.2	-0.660477	ug/L	0.8928151	-0.660477	ug/L	0.8928151	135.18%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	4360.8	22.4335	ug/L	0.34411	22.4335	ug/L	0.34411	1.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	120.6	0.312468	ug/L	0.0456491	0.312468	ug/L	0.0456491	14.61%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-100.5	-0.0215611	ug/L	0.01566260	-0.0215611	ug/L	0.01566260	72.64%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	4.1	0.500806	ug/L	2.9543554	0.500806	ug/L	2.9543554	589.92%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	104.1	0.437554	ug/L	0.0954636	0.437554	ug/L	0.0954636	21.82%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	45.5	0.367893	ug/L	0.0575597	0.367893	ug/L	0.0575597	15.65%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	53.2	0.600717	ug/L	0.1193967	0.600717	ug/L	0.1193967	19.88%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-124.8	-1.13863	ug/L	1.010587	-1.13863	ug/L	1.010587	88.75%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	11.4	2.57530	ug/L	1.336190	2.57530	ug/L	1.336190	51.88%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	-57.2	-15.4907	ug/L	66.77869	-15.4907	ug/L	66.77869	431.09%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	6.6	6.95090	ug/L	7.398634	6.95090	ug/L	7.398634	106.44%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	20.3	0.0126726	ug/L	0.04965061	0.0126726	ug/L	0.04965061	391.79%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	18.0	0.516042	ug/L	0.2667258	0.516042	ug/L	0.2667258	51.69%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	167.7	19.8136	ug/L	20.27317	19.8136	ug/L	20.27317	102.32%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	50.2	1.01864	ug/L	0.040223	1.01864	ug/L	0.040223	3.95%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	63.5	1.08744	ug/L	0.346957	1.08744	ug/L	0.346957	31.91%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	73.9	2.33587	ug/L	1.857833	2.33587	ug/L	1.857833	79.53%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-33.1	-1.09535	ug/L	1.147898	-1.09535	ug/L	1.147898	104.80%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	-54.1	-0.772450	ug/L	0.0185551	-0.772450	ug/L	0.0185551	2.40%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	36.3	1.94483	ug/L	0.936851	1.94483	ug/L	0.936851	48.17%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	82.1	0.549708	ug/L	0.0323339	0.549708	ug/L	0.0323339	5.88%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	66.4	0.843913	ug/L	0.1306213	0.843913	ug/L	0.1306213	15.48%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	22.9	1.06586	ug/L	0.384404	1.06586	ug/L	0.384404	36.07%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	-1439.4	-3.21140	ug/L	0.317077	-3.21140	ug/L	0.317077	9.87%
QC value within limits for Sr 421.552 R Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903031.1 File : met08_sr_6010 Time : 07-SEP-2012 10:07
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20645

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Copper	A	100.33	109.08	5000	4978	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1877983	3.84

Sequence No.: 30 **Autosampler Location: 217**
Sample ID: s20645 **Date Collected: 9/7/2012 10:07:34 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20645

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: s20645

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1877982.8	103.844	%	0.4478				0.43%
Y	97986.1	109.393	%	1.8092				1.65%
Ag 328.068†	668722.6	958.585	ug/L	2.9564	958.585	ug/L	2.9564	0.31%
QC value within limits for Ag 328.068 Recovery = 95.86%								
Al 308.215 R†	22206.4	20613.7	ug/L	137.39	20613.7	ug/L	137.39	0.67%
QC value within limits for Al 308.215 R Recovery = 103.07%								
As 188.979†	95828.9	4795.75	ug/L	21.296	4795.75	ug/L	21.296	0.44%
QC value within limits for As 188.979 Recovery = 95.91%								
B 249.677†	955848.6	4917.21	ug/L	18.215	4917.21	ug/L	18.215	0.37%
QC value within limits for B 249.677 Recovery = 98.34%								
Ba 233.527†	1878988.3	4866.48	ug/L	24.273	4866.48	ug/L	24.273	0.50%
QC value within limits for Ba 233.527 Recovery = 97.33%								
Be 313.107†	2303713.8	494.038	ug/L	1.8811	494.038	ug/L	1.8811	0.38%
QC value within limits for Be 313.107 Recovery = 98.81%								
Ca 315.887 R†	165367.8	20270.9	ug/L	109.35	20270.9	ug/L	109.35	0.54%
QC value within limits for Ca 315.887 R Recovery = 101.35%								
Cd 214.440†	1171255.8	4921.52	ug/L	14.008	4921.52	ug/L	14.008	0.28%
QC value within limits for Cd 214.440 Recovery = 98.43%								
Co 228.616†	598058.0	4803.36	ug/L	18.169	4803.36	ug/L	18.169	0.38%
QC value within limits for Co 228.616 Recovery = 96.07%								
Cr 267.716†	421771.7	4765.52	ug/L	20.208	4765.52	ug/L	20.208	0.42%
QC value within limits for Cr 267.716 Recovery = 95.31%								
Cu 324.752†	545395.3	4977.65	ug/L	11.559	4977.65	ug/L	11.559	0.23%
QC value within limits for Cu 324.752 Recovery = 99.55%								
Fe 238.204 R†	91660.7	20774.5	ug/L	107.53	20774.5	ug/L	107.53	0.52%
QC value within limits for Fe 238.204 R Recovery = 103.87%								
K 766.490 R†	68948.2	18681.1	ug/L	165.76	18681.1	ug/L	165.76	0.89%
QC value within limits for K 766.490 R Recovery = 93.41%								
Mg 279.077 R†	19542.7	20530.6	ug/L	111.32	20530.6	ug/L	111.32	0.54%
QC value within limits for Mg 279.077 R Recovery = 102.65%								
Mn 257.610†	7761925.6	4850.61	ug/L	18.730	4850.61	ug/L	18.730	0.39%
QC value within limits for Mn 257.610 Recovery = 97.01%								
Mo 202.031†	172958.1	4950.39	ug/L	16.435	4950.39	ug/L	16.435	0.33%
QC value within limits for Mo 202.031 Recovery = 99.01%								
Na 589.592 R†	166586.9	19679.5	ug/L	111.29	19679.5	ug/L	111.29	0.57%
QC value within limits for Na 589.592 R Recovery = 98.40%								
Ni 231.604†	235522.9	4783.41	ug/L	24.699	4783.41	ug/L	24.699	0.52%
QC value within limits for Ni 231.604 Recovery = 95.67%								
Pb 220.353†	276602.0	4735.57	ug/L	14.858	4735.57	ug/L	14.858	0.31%
QC value within limits for Pb 220.353 Recovery = 94.71%								
Sb 206.836†	153387.5	4850.58	ug/L	19.704	4850.58	ug/L	19.704	0.41%
QC value within limits for Sb 206.836 Recovery = 97.01%								
Se 196.026†	141266.9	4676.10	ug/L	19.451	4676.10	ug/L	19.451	0.42%
QC value within limits for Se 196.026 Recovery = 93.52%								
Ti 334.940 R†	366497.5	5229.94	ug/L	82.762	5229.94	ug/L	82.762	1.58%
QC value within limits for Ti 334.940 R Recovery = 104.60%								
Tl 190.801†	88871.8	4764.66	ug/L	21.485	4764.66	ug/L	21.485	0.45%
QC value within limits for Tl 190.801 Recovery = 95.29%								
V 292.402†	730536.0	4893.25	ug/L	9.502	4893.25	ug/L	9.502	0.19%
QC value within limits for V 292.402 Recovery = 97.87%								
Zn 206.200†	379123.8	4818.06	ug/L	23.299	4818.06	ug/L	23.299	0.48%
QC value within limits for Zn 206.200 Recovery = 96.36%								
Sn 189.927†	102073.3	4760.83	ug/L	16.953	4760.83	ug/L	16.953	0.36%
QC value within limits for Sn 189.927 Recovery = 95.22%								
Sr 421.552 R	232174.9	518.390	ug/L	7.4760	518.390	ug/L	7.4760	1.44%
QC value within limits for Sr 421.552 R Recovery = 103.68%								

All analyte(s) passed QC.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903032.1 File : met08_sr_6010 Time : 07-SEP-2012 10:12
Cal : 82361903001 Caldate : 07-SEP-2012

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Copper	A	ND	5.000	3.219	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1970450	8.96

Sequence No.: 31 **Autosampler Location: 220**
Sample ID: ccb **Date Collected: 9/7/2012 10:12:53 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ccb

Analyte	Back Pressure	Flow
All	134.0 kPa	0.55 L/min

Mean Data: ccb

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1970449.6	108.957	%	1.1742				1.08%
Y	98932.7	110.450	%	3.6840				3.34%
Ag 328.068†	-445.2	-0.638113	ug/L	0.1714362	-0.638113	ug/L	0.1714362	26.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215 R†	18.1	16.8119	ug/L	12.33135	16.8119	ug/L	12.33135	73.35%
QC value within limits for Al 308.215 R Recovery = Not calculated								
As 188.979†	2.9	0.146917	ug/L	1.2279280	0.146917	ug/L	1.2279280	835.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	3887.1	19.9966	ug/L	0.29830	19.9966	ug/L	0.29830	1.49%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	72.1	0.186831	ug/L	0.0297286	0.186831	ug/L	0.0297286	15.91%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-228.6	-0.0490150	ug/L	0.01356666	-0.0490150	ug/L	0.01356666	27.68%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887 R†	12.1	1.47720	ug/L	0.920625	1.47720	ug/L	0.920625	62.32%
QC value within limits for Ca 315.887 R Recovery = Not calculated								
Cd 214.440†	129.2	0.542754	ug/L	0.0236611	0.542754	ug/L	0.0236611	4.36%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	48.5	0.391454	ug/L	0.0872016	0.391454	ug/L	0.0872016	22.28%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	53.8	0.607575	ug/L	0.1039162	0.607575	ug/L	0.1039162	17.10%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-80.2	-0.732187	ug/L	0.3670236	-0.732187	ug/L	0.3670236	50.13%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 238.204 R†	15.5	3.52018	ug/L	1.869039	3.52018	ug/L	1.869039	53.09%
QC value within limits for Fe 238.204 R Recovery = Not calculated								
K 766.490 R†	-504.4	-136.657	ug/L	53.0740	-136.657	ug/L	53.0740	38.84%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	16.5	17.3599	ug/L	6.34343	17.3599	ug/L	6.34343	36.54%
QC value within limits for Mg 279.077 R Recovery = Not calculated								
Mn 257.610†	-144.1	-0.0900573	ug/L	0.02135115	-0.0900573	ug/L	0.02135115	23.71%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	15.3	0.438347	ug/L	0.2002912	0.438347	ug/L	0.2002912	45.69%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592 R†	162.8	19.2329	ug/L	5.92431	19.2329	ug/L	5.92431	30.80%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	56.4	1.14596	ug/L	0.054770	1.14596	ug/L	0.054770	4.78%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	48.8	0.836191	ug/L	0.5244881	0.836191	ug/L	0.5244881	62.72%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	87.9	2.77938	ug/L	1.103732	2.77938	ug/L	1.103732	39.71%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	12.0	0.396102	ug/L	1.0575141	0.396102	ug/L	1.0575141	266.98%
QC value within limits for Se 196.026 Recovery = Not calculated								
Ti 334.940 R†	-49.1	-0.700664	ug/L	0.5506875	-0.700664	ug/L	0.5506875	78.60%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	30.5	1.63766	ug/L	1.129067	1.63766	ug/L	1.129067	68.94%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	73.9	0.494761	ug/L	0.0298095	0.494761	ug/L	0.0298095	6.03%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	59.8	0.759333	ug/L	0.0219715	0.759333	ug/L	0.0219715	2.89%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Sn 189.927†	28.1	1.31041	ug/L	0.188977	1.31041	ug/L	0.188977	14.42%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	404.1	0.901921	ug/L	0.0810260	0.901921	ug/L	0.0810260	8.98%
QC value within limits for Sr 421.552 R Recovery = Not calculated								

All analyte(s) passed QC.

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 239403 METALS Soil
EPA 6010C

Inst : MET08 IDF : 1.0
Seqnum : 82361903033.1 File : met08_sr_6010 Time : 07-SEP-2012 10:17
Cal : 82361903001 Caldate : 07-SEP-2012
Standards: S20222

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Copper	A	500.0	560.4	ug/L	12	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1808473	1604534	-11.28

Sequence No.: 32 **Autosampler Location: 10**
Sample ID: s20222 **Date Collected: 9/7/2012 10:17:58 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: s20222

Analyte	Back Pressure	Flow
All	133.0 kPa	0.55 L/min

Mean Data: s20222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1604534.0	88.7232	%	1.08837				1.23%
Y	89149.4	99.5274	%	1.20588				1.21%
Ag 328.068†	777768.8	1114.90	ug/L	3.992	1114.90	ug/L	3.992	0.36%
QC value within limits for Ag 328.068 Recovery = 111.49%								
Al 308.215 R†	571923.1	530904	ug/L	1143.3	530904	ug/L	1143.3	0.22%
QC value within limits for Al 308.215 R Recovery = 106.18%								
As 188.979†	10249.4	512.931	ug/L	25.5158	512.931	ug/L	25.5158	4.97%
QC value within limits for As 188.979 Recovery = 102.59%								
B 249.677†	17909.7	92.1338	ug/L	1.20943	92.1338	ug/L	1.20943	1.31%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	204935.4	530.771	ug/L	2.0941	530.771	ug/L	2.0941	0.39%
QC value within limits for Ba 233.527 Recovery = 106.15%								
Be 313.107†	2465476.3	528.728	ug/L	2.0254	528.728	ug/L	2.0254	0.38%
QC value within limits for Be 313.107 Recovery = 105.75%								
Ca 315.887 R†	4151370.2	508877	ug/L	5683.6	508877	ug/L	5683.6	1.12%
QC value within limits for Ca 315.887 R Recovery = 101.78%								
Cd 214.440†	241471.2	1014.64	ug/L	3.593	1014.64	ug/L	3.593	0.35%
QC value within limits for Cd 214.440 Recovery = 101.46%								
Co 228.616†	64192.0	475.636	ug/L	14.1723	475.636	ug/L	14.1723	2.98%
QC value within limits for Co 228.616 Recovery = 95.13%								
Cr 267.716†	44448.9	502.220	ug/L	1.8967	502.220	ug/L	1.8967	0.38%
QC value within limits for Cr 267.716 Recovery = 100.44%								
Cu 324.752†	61397.2	560.352	ug/L	3.5677	560.352	ug/L	3.5677	0.64%
QC value within limits for Cu 324.752 Recovery = 112.07%								
Fe 238.204 R†	890030.9	201721	ug/L	822.7	201721	ug/L	822.7	0.41%
QC value within limits for Fe 238.204 R Recovery = 100.86%								
K 766.490 R†	-1009.6	-273.545	ug/L	11.8167	-273.545	ug/L	11.8167	4.32%
QC value within limits for K 766.490 R Recovery = Not calculated								
Mg 279.077 R†	488163.6	512842	ug/L	2830.8	512842	ug/L	2830.8	0.55%
QC value within limits for Mg 279.077 R Recovery = 102.57%								
Mn 257.610†	768219.0	480.078	ug/L	1.5585	480.078	ug/L	1.5585	0.32%
QC value within limits for Mn 257.610 Recovery = 96.02%								
Mo 202.031†	18355.4	525.366	ug/L	15.8967	525.366	ug/L	15.8967	3.03%
QC value within limits for Mo 202.031 Recovery = 105.07%								
Na 589.592 R†	273.5	32.3077	ug/L	5.36608	32.3077	ug/L	5.36608	16.61%
QC value within limits for Na 589.592 R Recovery = Not calculated								
Ni 231.604†	46310.3	940.549	ug/L	4.3483	940.549	ug/L	4.3483	0.46%
QC value within limits for Ni 231.604 Recovery = 94.05%								
Pb 220.353†	55514.5	950.438	ug/L	15.8819	950.438	ug/L	15.8819	1.67%
QC value within limits for Pb 220.353 Recovery = 95.04%								
Sb 206.836†	15723.8	497.235	ug/L	18.5804	497.235	ug/L	18.5804	3.74%
QC value within limits for Sb 206.836 Recovery = 99.45%								
Se 196.026†	15109.5	500.142	ug/L	18.6021	500.142	ug/L	18.6021	3.72%
QC value within limits for Se 196.026 Recovery = 100.03%								
Ti 334.940 R†	1593799.4	22743.6	ug/L	571.81	22743.6	ug/L	571.81	2.51%
QC value within limits for Ti 334.940 R Recovery = Not calculated								
Tl 190.801†	9005.5	482.810	ug/L	7.7434	482.810	ug/L	7.7434	1.60%
QC value within limits for Tl 190.801 Recovery = 96.56%								
V 292.402†	81553.5	546.259	ug/L	1.4125	546.259	ug/L	1.4125	0.26%
QC value within limits for V 292.402 Recovery = 109.25%								
Zn 206.200†	77963.5	990.790	ug/L	3.6423	990.790	ug/L	3.6423	0.37%
QC value within limits for Zn 206.200 Recovery = 99.08%								
Sn 189.927†	-98.4	-4.59005	ug/L	1.794835	-4.59005	ug/L	1.794835	39.10%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552 R	220630.7	502.303	ug/L	6.1049	502.303	ug/L	6.1049	1.22%
QC value within limits for Sr 421.552 R Recovery = 100.46%								

All analyte(s) passed QC.

Mercury Raw Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 842362266

Instrument : MET14 Begun : 09/07/12 13:46
Method : EPA 7471B SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	190272	ICALBLK	STD01REP1			09/07/12 13:46	1.0		
002	190272	ICAL	STD02REP1			09/07/12 13:48	1.0	1	
003	190272	ICAL	STD03REP1			09/07/12 13:51	1.0	1	
004	190272	ICAL	STD04REP1			09/07/12 13:53	1.0	1	
005	190272	ICAL	STD05REP1			09/07/12 13:55	1.0	1	
006	190272	ICAL	STD06REP1			09/07/12 13:57	1.0	1	
007	190272	ICV				09/07/12 14:04	1.0	2	
008	190272	ICB				09/07/12 14:06	1.0		
009	190272	BLANK	QC655210	Soil	190272	09/07/12 14:09	1.0		
010	190272	BS	QC655211	Soil	190272	09/07/12 14:12	1.0		
011	190272	BSD	QC655212	Soil	190272	09/07/12 14:14	1.0		
012	190272	MSS	239220-005	Soil	190272	09/07/12 14:16	1.0		
013	190272	MS	QC655213	Soil	190272	09/07/12 14:18	1.0		
014	190272	MSD	QC655214	Soil	190272	09/07/12 14:21	1.0		
015	190272	SER	QC655215	Soil	190272	09/07/12 14:23	5.0		
016	190272	SAMPLE	239220-001	Soil	190272	09/07/12 14:25	1.0		
017	190272	SAMPLE	239220-002	Soil	190272	09/07/12 14:27	1.0		
018	190272	SAMPLE	239220-003	Soil	190272	09/07/12 14:29	1.0		
019	190272	CCV				09/07/12 14:31	1.0	3	
020	190272	CCB				09/07/12 14:34	1.0		
021	190272	SAMPLE	239220-004	Soil	190272	09/07/12 14:37	1.0		
022	190272	SAMPLE	239408-001	Soil	190272	09/07/12 14:39	1.0		
023	190272	SAMPLE	239425-001	Soil	190272	09/07/12 14:46	20.0		
024	190272	SAMPLE	239425-002	Soil	190272	09/07/12 14:48	1.0		1:HG=160
025	190272	SAMPLE	239425-002	Soil	190272	09/07/12 14:59	100.0		
026	190272	SAMPLE	239425-003	Soil	190272	09/07/12 15:02	100.0		
027	190272	SAMPLE	239425-004	Soil	190272	09/07/12 15:04	100.0		
028	190272	SAMPLE	239425-005	Soil	190272	09/07/12 15:06	100.0		
029	190272	SAMPLE	239425-006	Soil	190272	09/07/12 15:08	100.0		
030	190272	CCV				09/07/12 15:10	1.0	3	
031	190272	CCB				09/07/12 15:12	1.0		
032	190272	SAMPLE	239432-002	Soil	190272	09/07/12 15:15	1.0		
033	190272	SAMPLE	239389-001	Soil	190272	09/07/12 15:17	1.0		
034	190272	SAMPLE	239397-001	Soil	190272	09/07/12 15:19	1.0		
035	190272	SAMPLE	239397-002	Soil	190272	09/07/12 15:21	1.0		
036	190272	SAMPLE	239402-001	Soil	190272	09/07/12 15:24	1.0		
037	190272	SAMPLE	239403-005	Soil	190272	09/07/12 15:26	1.0		1:HG=34
038	190272	SAMPLE	239403-006	Soil	190272	09/07/12 15:28	1.0		1:HG=12
039	190272	SAMPLE	239425-006	Soil	190272	09/07/12 15:31	10.0		
040	190272	SAMPLE	239403-005	Soil	190272	09/07/12 15:36	10.0		
041	190272	SAMPLE	239403-006	Soil	190272	09/07/12 15:38	5.0		
042	190272	CCV				09/07/12 15:41	1.0	3	
043	190272	CCB				09/07/12 15:43	1.0		

CRT 09/07/12 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 43.

Standards used: 1=S20657 2=S20659 3=S20660

Protocol: m14hgppb
POST-RUN REPORT

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Standard: 1 Rep: 1           Seq:  1      13:46:25 07 Sep 12   HG

Hg    .000    ppb      169
          Bkgd 1   15818515                                    =
                                                              =
*** Standard: 2 Rep: 1           Seq:  2      13:48:39 07 Sep 12   HG

Hg    .200    ppb      703
          Bkgd 1   15819586                                    =
                                                              =
*** Standard: 3 Rep: 1           Seq:  3      13:51:06 07 Sep 12   HG

Hg    .500    ppb      1509
          Bkgd 1   15818911                                    =
                                                              =
*** Standard: 4 Rep: 1           Seq:  4      13:53:20 07 Sep 12   HG

Hg    2.00    ppb      5491
          Bkgd 1   15820062                                    =
                                                              =
*** Standard: 5 Rep: 1           Seq:  5      13:55:24 07 Sep 12   HG

Hg    5.00    ppb      13034
          Bkgd 1   15812232                                    =
                                                              =
*** Standard: 6 Rep: 1           Seq:  6      13:57:30 07 Sep 12   HG

Hg    10.0    ppb      24786
          Bkgd 1   15811333                                    =
                                                              =
*** Check Standard: 2  Ck2s20659    Seq:  7      14:04:44 07 Sep 12   HG
Line  Flag            Intensities
Hg                  12930
          Bkgd 1   15780977                                    =
                                                              =
*** Check Standard: 1  Ck1ICB       Seq:  8      14:06:48 07 Sep 12   HG
Line  Flag            Intensities
Hg                  159
          Bkgd 1   15780400                                    =
                                                              =
*** Sample ID: QC655210          Seq:  9      14:09:01 07 Sep 12   HG
                    190272,1
Hg   -.039    ppb      238
          Bkgd 1   15784383                                    =
                                                              =
===============================================================================
```

Protocol: m14hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: QC655211 Seq: 10 14:12:33 07 Sep 12 HG
190272,1
Hg 2.56 ppb 6662
Bkgd 1 15767000 =
=
==========
*** Sample ID: QC655212 Seq: 11 14:14:40 07 Sep 12 HG
190272,1
Hg 2.60 ppb 6747
Bkgd 1 15764377 =
=
==========
*** Sample ID: 239220-005 Seq: 12 14:16:43 07 Sep 12 HG
190272,1
Hg 1.30 ppb 3534
Bkgd 1 15766183 =
=
==========
*** Sample ID: QC655213 Seq: 13 14:18:57 07 Sep 12 HG
190272,1
Hg 4.03 ppb 10274
Bkgd 1 15767480 =
=
==========
*** Sample ID: QC655214 Seq: 14 14:21:04 07 Sep 12 HG
190272,1
Hg 4.03 ppb 10279
Bkgd 1 15757408 =
=
==========
*** Sample ID: QC655215 Seq: 15 14:23:13 07 Sep 12 HG
190272,5
Hg .046 ppb 449
Bkgd 1 15756095 =
=
==========
*** Sample ID: 239220-001 Seq: 16 14:25:30 07 Sep 12 HG
190272,1
Hg 1.87 ppb 4950
Bkgd 1 15771538 =
=
==========
*** Sample ID: 239220-002 Seq: 17 14:27:36 07 Sep 12 HG
190272,1
Hg .918 ppb 2601
Bkgd 1 15776313 =
=
==========

Protocol: m14hgppb
POST-RUN REPORT

Line Conc. Units SD/RSD 1 2 3 4 5

*** Sample ID: 239220-003 Seq: 18 14:29:41 07 Sep 12 HG
190272,1
Hg 1.21 ppb 3317
Bkgd 1 15762428 =
=
*** Check Standard: 5 Ck5s20660 Seq: 19 14:31:45 07 Sep 12 HG
Line Flag Intensities
Hg 13927
Bkgd 1 15754568 =
=
*** Check Standard: 6 Ck6CCB Seq: 20 14:34:12 07 Sep 12 HG
Line Flag Intensities
Hg 45
Bkgd 1 15740046 =
=
*** Sample ID: 239220-004 Seq: 21 14:37:17 07 Sep 12 HG
190272,1
Hg 1.81 ppb 4799
Bkgd 1 15753548 =
=
==========
*** Sample ID: 239408-001 Seq: 22 14:39:20 07 Sep 12 HG
190272,1
Hg 2.28 ppb 5950
Bkgd 1 15754763 =
=
==========
*** Sample ID: 239425-001 Seq: 23 14:46:35 07 Sep 12 HG
190272,20
Hg 9.83 ppb 24593
Bkgd 1 15718907 =
=
==========
*** Sample ID: 239425-002 Seq: 24 14:48:39 07 Sep 12 HG
190272,1
Hg 156. ppb 384927
Bkgd 1 15724911 =
=
*** Sample ID: 239425-002 Seq: 25 14:59:59 07 Sep 12 HG
190272,100
Hg 1.59 ppb 4249
Bkgd 1 15746323 =
=
==========
*** Sample ID: 239425-003 Seq: 26 15:02:17 07 Sep 12 HG
190272,100
Hg 1.40 ppb 3796
Bkgd 1 15747700 =
=

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: 239425-004          Seq:  27     15:04:33 07 Sep 12   HG
                    190272,100
Hg    1.35    ppb      3664
          Bkgd 1   15746549                                  =
                                                        =
==========================================================================
*** Sample ID: 239425-005          Seq:  28     15:06:37 07 Sep 12   HG
                    190272,100
Hg    1.59    ppb      4262
          Bkgd 1   15751042                                  =
                                                        =
==========================================================================
*** Sample ID: 239425-006          Seq:  29     15:08:43 07 Sep 12   HG
                    190272,100
Hg   -.071    ppb      159
          Bkgd 1   15740188                                  =
                                                        =
*** Check Standard: 5  Ck5s20660    Seq:  30      15:10:47 07 Sep 12   HG
Line  Flag            Intensities
Hg                  13953
          Bkgd 1   15748314                                  =
                                                        =
*** Check Standard: 6  Ck6CCB       Seq:  31      15:12:53 07 Sep 12   HG
Line  Flag            Intensities
Hg                  287
          Bkgd 1   15745462                                  =
                                                        =
*** Sample ID: 239432-002          Seq:  32     15:15:00 07 Sep 12   HG
                    190272,1
Hg    .389    ppb      1295
          Bkgd 1   15748019                                  =
                                                        =
==========================================================================
*** Sample ID: 239389-001          Seq:  33     15:17:17 07 Sep 12   HG
                    190272,1
Hg    .052    ppb      464
          Bkgd 1   15733703                                  =
                                                        =
==========================================================================
*** Sample ID: 239397-001          Seq:  34     15:19:24 07 Sep 12   HG
                    190272,1
Hg    .052    ppb      462
          Bkgd 1   15736436                                  =
                                                        =
==========================================================================
```

Protocol: m14hgppb
POST-RUN REPORT

Line Conc. Units SD/RSD 1 2 3 4 5

*** Sample ID: 239397-002 Seq: 35 15:21:54 07 Sep 12 HG
190272,1
Hg -.020 ppb 285
Bkgd 1 15734438 =
=

==========

*** Sample ID: 239402-001 Seq: 36 15:24:29 07 Sep 12 HG
190272,1
Hg 4.25 ppb 10820
Bkgd 1 15722686 =
=

==========

*** Sample ID: 239403-005 Seq: 37 15:26:38 07 Sep 12 HG
190272,1
Hg 33.5 ppb 83102
Bkgd 1 15724210 =
=

==========

*** Sample ID: 239403-006 Seq: 38 15:28:52 07 Sep 12 HG
190272,1
Hg 11.8 ppb 29413
Bkgd 1 15726025 =
=

==========

*** Sample ID: 239425-006 Seq: 39 15:31:02 07 Sep 12 HG
190272,10
Hg 1.28 ppb 3503
Bkgd 1 15728447 =
=

==========

*** Sample ID: 239403-005 Seq: 40 15:36:52 07 Sep 12 HG
190272,10
Hg 3.11 ppb 8021
Bkgd 1 15703598 =
=

==========

*** Sample ID: 239403-006 Seq: 41 15:38:59 07 Sep 12 HG
190272,5
Hg 1.89 ppb 4995
Bkgd 1 15711180 =
=

*** Check Standard: 5 Ck5s20660 Seq: 42 15:41:03 07 Sep 12 HG
Line Flag Intensities
Hg 14080
Bkgd 1 15710024 =
=

Protocol: m14hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 6 Ck6CCB Seq: 43 15:43:08 07 Sep 12 HG

Line	Flag	Intensities						
Hg		198						
	Bkgd 1	15712530					=	
							=	

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 7471B

Inst	: MET14	Lab ID	: 239403-005	Client ID	: EX36B015A.2
Seqnum	: 842362266040	Matrix	: Soil	Acct	: ARCSF (JG)
File	: 190272	Batch	: 190272	Time	: 07-SEP-2012 15:36
Cal	: 842362266001	Caldate	: 07-SEP-2012	Caltype	: SOIL
IDF	: 10.0			Units	: mg/Kg

0.57 g --> 50.0 ml = 87.72 ml/g PDF

Analyte	Result	RL	Blank	Flags
Mercury	2.7	0.18		u

u=use

CURTIS & TOMPKINS SAMPLE USER REPORT FOR EPA 7471B

Inst	: MET14	Lab ID	: 239403-006	Client ID	: EX36B163A.2
Seqnum	: 842362266041	Matrix	: Soil	Acct	: ARCSF (JG)
File	: 190272	Batch	: 190272	Time	: 07-SEP-2012 15:38
Cal	: 842362266001	Caldate	: 07-SEP-2012	Caltype	: SOIL
IDF	: 5.0			Units	: mg/Kg

0.59 g --> 50.0 ml = 84.75 ml/g PDF

Analyte	Result	RL	Blank	Flags
Mercury	0.80	0.085		u

u=use

CURTIS & TOMPKINS BLANK USER REPORT FOR 239403 METALS Soil
EPA 7471B

Inst	: MET14	Lab ID	: QC655210		
Seqnum	: 842362266009.8	Matrix	: Soil		
File	: 190272	Batch	: 190272	Time	: 07-SEP-2012 14:09
Cal	: 842362266001	Caldate	: 07-SEP-2012	Caltype	: SOIL
IDF	: 1.0			Units	: mg/Kg

0.60 g --> 50.0 ml = 83.33 ml/g PDF

Analyte	Result	RL	Flags
Mercury	ND	0.017	u

u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 METALS Soil
EPA 7471B

Type	: BS	Type	: BSD
Inst	: MET14	Inst	: MET14
Seqnum	: 842362266010.8	Seqnum	: 842362266011.7
File	: 190272	File	: 190272
IDF	: 1.0	IDF	: 1.0
Lab ID	: QC655211	Lab ID	: QC655212
Matrix	: Soil	Matrix	: Soil
Batch	: 190272	Batch	: 190272
Time	: 07-SEP-2012 14:12	Time	: 07-SEP-2012 14:14
Cal	: 842362266001	Cal	: 842362266001
Caltype	: SOIL	Caltype	: SOIL
Units	: mg/Kg		

BS: 0.60 g --> 50.0 ml = 83.33 ml/g PDF
BSD: 0.60 g --> 50.0 ml = 83.33 ml/g PDF

Analyte	Spiked	BS	%Rec	BSD	%Rec	Limits	RPD	Lim	Flags
Mercury	0.2083	0.2133	102	0.2167	104	80-120	2	20	u

u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 239403 METALS Soil
EPA 7471B

Type : MSS	Type : MS	Type : MSD
Inst : MET14	Inst : MET14	Inst : MET14
Seqnum : 842362266012.1	Seqnum : 842362266013.7	Seqnum : 842362266014.7
File : 190272	File : 190272	File : 190272
IDF : 1.0	IDF : 1.0	IDF : 1.0
Lab ID : 239220-005	Lab ID : QC655213	Lab ID : QC655214
Matrix : Soil	Matrix : Soil	Matrix : Soil
Batch : 190272	Batch : 190272	Batch : 190272
Time : 07-SEP-2012 14:16	Time : 07-SEP-2012 14:18	Time : 07-SEP-2012 14:21
Cal : 842362266001	Cal : 842362266001	Cal : 842362266001
Caltype : SOIL	Caltype : SOIL	Caltype : SOIL
Units : mg/Kg		

MSS: 0.61 g --> 50.0 ml = 81.97 ml/g PDF
MS: 0.58 g --> 50.0 ml = 86.21 ml/g PDF
MSD: 0.59 g --> 50.0 ml = 84.75 ml/g PDF

Analyte	MSS	Spiked	MS	%Rec	Spiked	MSD	%Rec	Limits	RPD	Lim	Flags
Mercury	0.1066	0.2155	0.3474	112	0.2119	0.3415	111	76-138	1	42	u

u=use

CURTIS & TOMPKINS SERIAL DILUTION FOR 239403 METALS Soil
EPA 7471B

Type	: MSS	Type	: SER
Inst	: MET14	Inst	: MET14
Seqnum	: 842362266012.1	Seqnum	: 842362266015.5
File	: 190272	File	: 190272
IDF	: 1.0	IDF	: 5.0
Lab ID	: 239220-005	Lab ID	: QC655215
Matrix	: Soil	Matrix	: Soil
Batch	: 190272	Batch	: 190272
Time	: 07-SEP-2012 14:16	Time	: 07-SEP-2012 14:23
Cal	: 842362266001	Cal	: 842362266001
Caltype	: SOIL	Caltype	: SOIL
Units	: mg/Kg		

MSS: 0.61 g --> 50.0 ml = 81.97 ml/g PDF
SER: 0.61 g --> 50.0 ml = 81.97 ml/g PDF

Analyte	MSS	RL	SER	RL	%D	Lim	Flags
Mercury	0.1066	0.01639	ND	0.08197		10	u

u=use

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 239403 METALS Soil: EPA 7471B

Inst : MET14
Calnum : 842362266001
Units : ug/L

Date : 07-SEP-2012 13:46
X Axis : R

Reviewer : ---
Type : SOIL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	190272	842362266002	STD02REP1	07-SEP-2012 13:48	S20657 (500X)
L2	190272	842362266003	STD03REP1	07-SEP-2012 13:51	S20657 (200X)
L3	190272	842362266004	STD04REP1	07-SEP-2012 13:53	S20657 (50X)
L4	190272	842362266005	STD05REP1	07-SEP-2012 13:55	S20657 (20X)
L5	190272	842362266006	STD06REP1	07-SEP-2012 13:57	S20657 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	3515.0	3018.0	2745.5	2606.8	2478.6	LINR	-0.1355	4.05E-4		2872.8	0.999	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.2000	**-25**	0.5000	-5	2.0000	4	5.0000	3	10.000	-1

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

842362266001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 239403 METALS Soil
EPA 7471B

Inst : MET14
Calnum : 842362266001 Cal Date : 07-SEP-2012 Type : SOIL

ICV 842362266007 (07-SEP-2012) stds: S20659

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	5.100	ug/L	2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266008 File : 190272 Time : 07-SEP-2012 14:06
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03605	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266019 File : 190272 Time : 07-SEP-2012 14:31
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2872.8	2785.4	5.000	5.510	ug/L	10	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266020 File : 190272 Time : 07-SEP-2012 14:34
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03605	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266030 File : 190272 Time : 07-SEP-2012 15:10
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2872.8	2790.6	5.000	5.520	ug/L	10	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266031 File : 190272 Time : 07-SEP-2012 15:12
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03605	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266042 File : 190272 Time : 07-SEP-2012 15:41
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL
Standards: S20660

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2872.8	2816.0	5.000	5.570	ug/L	11	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 239403 METALS Soil
EPA 7471B

Inst : MET14 IDF : 1.0
Seqnum : 842362266043 File : 190272 Time : 07-SEP-2012 15:43
Cal : 842362266001 Caldate : 07-SEP-2012 Caltype : SOIL

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03605	ug/L	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239403
ANALYTICAL REPORT
Wet Chemistry

Arcadis	Project : CA000761.0001
100 Montgomery St.	Location : Hunters Point Parcel E
San Francisco, CA 94104	Level : IV
	Contract # : N624730-11-D-226

Sample ID	Lab ID
EX36B116D.2	239403-001
EX36B116A.2	239403-002
EX36B116B.2	239403-003
EX36B116C.2	239403-004
EX36B015A.2	239403-005
EX36B163A.2	239403-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/20/2012

John Goyette
Senior Program Manager
(510) 204-2233

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE
WET CHEMISTRY (ASTM D2216/CLP)

Laboratory number:	**239403**
Client:	**Arcadis**
Project:	**CA000761.0001**
Location:	**Hunters Point Parcel E**
Request Date:	**09/04/12**
Samples Received:	**09/04/12**

This data package contains sample and QC results for six soil samples, requested for the above referenced project on 09/04/12. See attached cooler receipt form for any sample receipt problems or discrepancies.

Moisture (ASTM D2216/CLP):
No analytical problems were encountered.

Chain of Custody

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 23403

Chain of Custody # _____

Project No: CA0007611.0001
Project Name: Hunter's Point
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☒ RUSH 5 day ☐ Standard

Sampler: E Manton and D Feucht
Report To: Drew Feucht
Company: ARCADIS
Telephone: 510-697-7738
Email: Drew.Feucht@arcadis-us.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None
1	EX36B116D.2	04/04/12	1150		X			1					X
2	EX36B116A.2	04/04/12	1155		X			1					X
3	EX36B116B.2	04/04/12	1140		X			1					X
4	EX36B116C.2	04/04/12	1200		X			1					X
5	EX36B015A.2	04/04/12	1250		X			1					X
6	EX36B163A.2	04/04/12	1315		X			2					X
7	FB.090420120	04/04/12	1455	X				9	3		1		5
8	EB.090420120	04/04/12	1505	X				3			1		2
	Temp Blank												

ANALYTICAL REQUEST

Big(2-Ethylhexyl)phthlate by 8270D	Copper by EPA 6010C	Mercury by EPA 7471B	Alpha-BHC by EPA 8081B	PCBs by 8082	TPHd by 8015	TPHg by 8015	SVOCs by 8270	Pesticides by 8081	Metals by 6010/7174
X									
X									
X									
X									
	X	X							
	X	X	X						
				X	X	X	X	X	X
							X	X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

RECEIVED BY:
DATE: 9/4/12 TIME: 1550
DATE: 9/4/12 TIME: 1815
DATE: TIME:

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 239403 Date Received 9/4/12 Number of coolers 1
Client ARCADIS Project CA000761.0001

Date Opened 9/4/12 By (print) EL (sign) [signature]
Date Logged in ~~EL~~ 9/6/12 By (print) ~~EL~~ JG (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? (YES) NO N/A
17. Did you document your preservative check? (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 239403

Sample	pH: <2	>9	>12	Other
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
-008a	[X]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: EL
Date: 9/6/12

Page 1 of 1

Results & QC Summary

Percent Moisture Summary Report

Batch: 190242
Date: 09/06/12
Method: CLP SOW 390
Analyst: MFV

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
239397-001	11.3782	17.2080	16.4870	88	12
239397-002	11.5688	17.7444	17.0451	89	11
239403-001	11.1627	17.9381	17.1409	88	12
239403-002	11.0996	17.1289	16.4988	90	10
239403-003	11.0647	18.4371	18.0595	95	5
239403-004	11.4341	17.5977	17.0817	92	8
239403-005	11.2952	17.7369	16.8766	87	13
239403-006	11.2229	19.9708	18.8336	87	13
QC655069	11.3448	18.5148	17.7252	89	11
of 239397-002			RPD:	0.4%	2.8%

Moisture LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 190242
Date: 9-6-12

Page: **42**
Benchbook#: **BK 3348**
Scale Used
☑ Leachates Analytical
☐ _____

	Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
	BLK	K07	11.3529	Ø	11.3528	
	239397-001 A	CT24	11.3782	17.2080	16.4870	
	↓ -002	PHX	11.5688	17.7444	17.0451	
	SDUP ↓ -002	TEC	11.3448	18.5148	17.7252	
5	239403-001	1X	11.1627	17.9381	17.1409	
	-002	B107	11.0996	17.1289	16.4988	
	-003	B105	11.0647	18.4371	18.0595	
	-004	CT29	11.4341	17.5977	17.0817	
	-005	DZD	11.2952	17.7369	16.8766	
10	↓ -006 ↓	K04	11.2229	19.9708	18.8336	
15						
20						

MW 9-6-12

Date/ Time IN: 9-6-12 1815
Temp (F) IN: 105
Date/ Time OUT: 9-7-12 1320
Temp (F) OUT: 105

9-6-12
Extraction Chemist **Date**

9/7/12
Reviewed by **Date**

PROJECT AE 163 METTLER Notebook No. BK2394 45

Continued From Page

DATE	ANALYST	0.2000	0.5000	1.0000	2.0000	5.0000	10.0000	20.0000	50.0000	100.0000	SET
9-6-12	MN	0.2001	0.5000	1.0001	2.0001	5.0001	10.0002	20.0001	50.0001	100.0001	10827
9-7-12	MN	0.2000	0.5000	1.0000	2.0000	5.0000	10.0001	20.0000	50.0001	100.0000	10827

Continued on Page

Read and Understood By

Signed Date Signed Date

Appendix F: Response to Comments Table

Responses to Review Comments
Final Parcel E Soil Excavation Characterization Technical Memorandum
Hunters Point Naval Shipyard (HPNS), San Francisco, California dated, June 2013

Comments provided by U.S. Environmental Protection Agency (EPA), dated February 13, 2013

General Comments

Item	Sect	Pg	Par	Table or Figure	Comments	Responses
1				Figure 8 Figure 9	The vertical extent of contamination could not be verified in several areas using the data presented in the Draft Technical Memorandum for Parcel E Soil Excavation Characterization, Hunters Point Naval Shipyard, San Francisco, California, January 2013 (the Memo); these areas include, but are not limited to: Figure 8 - Soil Boring Locations and Results - Redevelopment Block EOS-3 shows an unlabeled sample location at EX03SS368 with a red dot indicating a detected soil concentration greater than or equal to ten times the remedial goal (RG); however, the discussion of EX03SS368 in Section 6.3, Redevelopment Block EOS-3, Page 6-7, simply notes that volume to be excavated is 3 feet below ground surface (ft bgs), but does not cite the sample(s) or location(s) that delineate the vertical extent of contamination. Further, it appears from the figure that the sample depth at the red location was 2 ft bgs and that no sample was collected below that depth to delineate the vertical extent of contamination. Figure 9 - Soil Boring Locations and Results - Redevelopment Block EOS-4 (North)	The non-bolded green dots shown in the figures without a label are historical sample locations that had results below the PAL. These historical sample locations were presented in the Final Parcel E Feasibility Study (ERRG 2011), and the subsequent Final Parcel E Soil Investigation Work Plan/Sampling Analysis Plan (WP/SAP) (ARCADIS 2012), as boring locations providing COC delineation to the proposed excavation areas. To help reference these historical sample locations in the 2011 Feasibility Study, the boring names will be added to all the figures. Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the remedial action and collected from the excavation bottoms and side walls to confirm the final extent of the proposed excavation areas. This should alleviate any concerns that the proposed excavation areas presented in this TM will not completely remove, both laterally and vertically, the COC concentrations in soil that are above the PAL.

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Hunters Point Naval Shipyard (HPNS), San Francisco, California dated, June 2013

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General Comments

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					shows an unlabeled sample location at EX380803 with a red dot indicating a detected soil concentration greater than or equal to ten times the RG; however, the discussion of EX380803 in Section 6.5, Redevelopment Block EOS-4, Page 6-9, simply notes that volume to be excavated is 3 ft bgs, but does not cite the sample(s) or location(s) that delineate the vertical 2 extent of contamination. Further, it would appear from the figure that the sample depth at the red location was 2 ft bgs and that no sample was collected below that depth to delineate the vertical extent of contamination. From the data presented in the Memo it is not possible to verify that the proposed excavation depths will remove all contamination above the project action levels (PALs). Please consider labeling all sample locations and provide a summary table that includes previous sample depths and contaminant concentrations or a reference where this data can be found.	
2				Figure 3 Figure 4	There appears to be some soil boring locations on figures that are not labeled with sample location identifiers (i.e., these dots presumably represent previous sample locations), such as:	The boring names for the historical green dots will be added to all the figures. The historical sample results were provided in the Final Revised Remedial Investigation Report for Parcel E (RI; Barajas & Associates 2008), and the proposed excavation areas were partially delineated by the historical green dots and were presented and accepted in the Final Feasibility Study Report for Parcel E (FS;

Responses to Review Comments
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Hunters Point Naval Shipyard (HPNS), San Francisco, California dated, June 2013

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General Comments

Item	Sect	Pg	Par	Table or Figure	Comments	Responses
					Figure 3 - Soil Boring Locations and Results - Redevelopment Block EOS-1 (North), the blue dot in the center of EX02B412 and the green dot east of EX02B412A Figure 4 - Soil Boring Locations and Results - Redevelopment Block EOS-1, (South), the green dot south of EX02GR93SW and the green dot between EX02SS310 and EX02GR179SW Figure 4 - Soil Boring Locations and Results - Redevelopment Block EOS-4, (North), the two green dots south of EX14B026 Please revise all figures in the Memo to identify all sample locations to facilitate verification of the delineation and proposed excavation boundaries.	ERRG 2011), and the Final Sampling and Analysis Plan (SAP; ARCADIS 2012).
3				Figure 6 Figure 7	There are several proposed excavation areas with dashed lines that reflect uncertainty on the figures presented in the memo such as EX02B401 on Figure 7, Soil Boring Locations and Results - Redevelopment Block EOS-2 (Southeast) and EX02B415 on Figure 6, Soil Boring Locations and Results - Redevelopment Block EOS-2 (Southwest); however, the Memo does not discuss how the uncertainty associated with these excavation areas will be managed.	The following text will be added to the second to last sentence in Section 6.2, EX02B401: *The dashed line along the southwest side of the proposed excavation area is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area.* The following text will replace the second to last sentence in Section

Responses to Review Comments
Final Parcel E Soil Excavation Characterization Technical Memorandum
Hunters Point Naval Shipyard (HPNS), San Francisco, California dated, June 2013

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General Comments

Item	Sect	Pg	Par	Table or Figure	Comments	Responses
					For example, the extent of contamination associated with these excavations has not been delineated in one direction and it is unclear if additional samples will be collected during another pre-remedial design sampling event or if the intent is to address this by collecting extra confirmation samples at the same depth as the original contamination along the undelineated edge after the initial excavation has been completed. Please revise the text to explain how the lack of data to delineate the extent of contamination will be addressed.	6.2, EX02B415: *The dashed line along the southwest side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area.*
4					The depth of previous excavations and the associated contaminants of concern (COCs) are not provided on the figures. Since it appears that some of these previous excavations were utilized to generate the excavation boundaries, the depth of the prior excavations and the associated COCs should be specified on the figures. Please revise the figures to present this information.	The depth of the previous excavations will be added to the figures.
5					The Memo does not discuss how excavations located along the shoreline riprap will be handled. Since it was not possible to complete borings and delineate the extent of contamination beneath the riprap, the Memo and upcoming Remedial Design/Remedial Action Work Plan (RD/RAWP) should	The following text will be added as the second to last sentence in Section 6.4, EX02B493: *The proposed soil boring location along the west side of this excavation area was not accessible due to riprap. The approach for accessing and excavating this area will be addressed as part of the remedial design.*

Responses to Review Comments
Final Parcel E Soil Excavation Characterization Technical Memorandum
Hunters Point Naval Shipyard (HPNS), San Francisco, California dated, June 2013

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General Comments

Item	Sect	Pg	Par	Table or Figure	Comments	Responses
					explain how these areas will be addressed. For example, one approach could be to completely excavate soil to the depth of delineation in these areas along riprap. Please revise the Memo to address this issue.	The following text will be added as the second to last sentence in Section 6.4, EX02G105: *The proposed soil boring locations along the northeast and southeast sides of this excavation area were not accessible due to riprap. The approach for accessing and excavating these areas will be addressed as part of the remedial design.* The following text will be added as the second to last sentence in Section 6.4, EX02GR93SW: *The proposed soil boring location along the southwest side of this excavation area was not accessible due to riprap. The approach for accessing and excavating this area will be addressed as part of the remedial design.*
6					Lead and Copper exceedances over PALs appear to be widespread. Are these detections consistent with the Navy conceptual site model for how these metals were released and may subsequently migrate?	The purpose of the Parcel E soil characterization presented in the Final WP/SAP (ARCADIS 2012) was to delineate the extent of site constituents of concern in soil at hotspots previously identified in the Final FS (ERRG 2011). The current Technical Memorandum (TM) is presenting the analytical results of this soil investigation and proposing soil excavation areas based on the vertical and lateral delineation of the site constituents of concern. The fate and transport of lead and copper are addressed as part of the site conceptual model in the RI (Barajas & Associates 2008), and were not included as part of this TM. Addressing the site conceptual model was not a goal presented in the Final Parcel E Soil Characterization WP/SAP.
7					The Mercury exceedances over its PAL are of a concern especially due to the	Please see the response to General Comment 6.

Comments provided by U.S. Environmental Protection Agency (EPA), dated February 13, 2013

General Comments

Item	Sect	Pg	Par	Table or Figure	Comments	Responses
					mobility of Mercury (which has been demonstrated at other areas at HPNS). Did the Navy's Parcel E FS ensure that the PAL for Mercury is sufficiently low so that post-removal concentrations of Mercury below its PAL will not migrate to groundwater and the Bay at concentrations of concern?	
8					The Memo was printed single-sided, which does not meet the requirements of Executive Order 13514 Federal Leadership in Environmental, Energy, and Economic Performance, dated October 5, 2009. Specifically, this Executive Order requires reducing printing paper use. The text and tables should be printed double-sided to reduce paper use. When this Memo is reprinted, please print it double-sided to the extent possible. Please ensure that future documents are printed double-sided.	All future documents will be printed two-sided.

Responses to Review Comments
Final Parcel E Soil Excavation Characterization Technical Memorandum
Hunters Point Naval Shipyard (HPNS), San Francisco, California dated, June 2013

Comments provided by U.S. Environmental Protection Agency (EPA) dated February 2013

Specific Comments

Item	Sect	Pg	Par	Table or Figure	Comments	Responses
1					Section 4.5.2, Metals, Page 4-9; Section 6.4, Redevelopment Bock MU-1, Page 6-10; and Figure 13, Soil Boring Locations and Results - Redevelopment Block MU-1: Section 4.5.2 states that mercury was detected at "240 mg/kg [milligrams per kilogram] at EX05MW85AB, which was the only sample above the PAL of 11.4 mg/kg" and Figure 13 shows that EX05MW85AB is located on the edge of the proposed excavation but there are no sampling locations to the northwest. At a minimum, this excavation should be extended to the northwest. Additionally, Section 6.4 indicates that the depth of EX05MW85AB was 4 ft bgs, but proposed excavation activities are only to 5 ft bgs. If there was a release of elemental mercury, there could be significant contamination at depth. Excavation to 5 ft bgs may not be sufficient, so it is recommended that this excavation be extended to 6 ft bgs unless there is data to substantiate a shallower depth. Further, a bottom sample should be collected in close proximity to the former sample location in addition to the standard bottom samples to ensure that contamination does not extend below the excavation bottom (note that if this location	The proposed excavation area EX05MW85A is currently defined by 7 borings with concentrations below the PAL, and each excavation side is bounded by at least 2 relatively equal-spaced borings below the PAL. In all other instances, and as described in the WP/SAP, the geometric shape (in this case a square) of the proposed excavation area is defined by one boring below the PAL on each respective side. This was the delineation protocol that was proposed and accepted in the Final WP/SAP. Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the remedial action and collected from the excavation bottoms and side walls. Based on what was presented and approved in the Final WP/SAP, the proposed excavation depths correspond to the delineation depths as follows (as presented in the introduction of Section 6.0): *For excavation areas where the COCs were delineated from 1.5 to 2.0 feet bgs the proposed excavation depth is approximately 3 feet bgs, and for areas where the COCs were delineated from 3.5 to 4.0 feet bgs the proposed excavation depth is approximately 5 feet bgs. The maximum excavation depth is the top 10 feet of soil, which is based on the Baseline Human Health Risk Assessment presented in the Final Revised RI Report for Parcel E (Barajas & Associates 2008).* Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the remedial action and collected from the excavation bottoms and side walls to confirm the final extent of the proposed excavation areas.

Comments provided by U.S. Environmental Protection Agency (EPA) dated February 2013

Specific Comments

Item	Sect	Pg	Par	Table or Figure	Comments	Responses
					is a monitoring well as suggested by the location identifier, this sample should be collected beyond the well boring to ensure that the grout used to construct the well has not impacted the soil chemistry). Please revise the Memo to indicate that the extent of contamination in the vicinity of excavation EX05MW85A is not delineated vertically or horizontally. Also, please extend this excavation to the northwest or collect additional samples to delineate the extent of contamination prior to opening this excavation. In addition, please provide data to substantiate that contamination only extends to 4 ft bgs or revise the proposed excavation depth to 6 ft bgs. Finally, please ensure that a bottom sample is collected in close proximity to EX05MW85AB.	

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Specific Comments

Item	Sect	Pg	Par	Table or Figure	Comments	Responses
2	6.1				Redevelopment Block EOS-1, Page 6-2; Figure 3, Soil Boring Locations and Results - Redevelopment Block EOS-1 (North): The Memo states that extent of contamination for EX02B456 is defined "to the west by two previous sample locations below the PAL," but there is only one green dot in the southwestern portion of EX02B456. It appears that sampling is needed to the west of this area or the excavation should be extended to the west. Please provide data points that delineate the contamination or change the recommendation for this area.	As presented on Figure 3 and in the text, EX02B456 is defined by two sample locations to the west. There is one green dot to the northwest of the proposed excavation area, and also one to the southwest. These two green dot locations with COC concentrations below the PAL define the two corners that make up the western side of proposed excavation area EX02B456.
3	6.2				Redevelopment Block EOS-2, Page 6-4; Figure 5, Soil Boring Locations and Results - Redevelopment Block EOS-2 (North): The Memo states that "EX02B405 in Figure 5 is defined to the north by one previous sample location below the PAL;" however, there are no data points north of EX02B405 on Figure 5. The confirmation sample on the north sidewall should be collected at the same depth(s) as the original sample(s) with contamination above the RGs. Please revise the Memo to state that confirmation samples at the same depth as the original contamination will be collected to confirm	The text in Section 6.2, EX02B405 will be changed to the following to add clarification on the direction of the delineation borings: ***EX02B405*** *in Figure 5 is defined to the* ***northwest*** *by one previous sample location below the PAL, to the* ***northeast*** *by EX02B405A, to the* ***southeast*** *by EX02B405B, and to the* ***southwest*** *by EX02B405C. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 10 feet bgs is approximately 148 cubic yards of soil.* These four green dots adequately define the proposed excavation area, as presented and accepted in the Final WP/SAP. Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the remedial action and collected from the

Responses to Review Comments
Final Parcel E Soil Excavation Characterization Technical Memorandum
Hunters Point Naval Shipyard (HPNS), San Francisco, California dated, June 2013

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Specific Comments

Item	Sect	Pg	Par	Table or Figure	Comments	Responses
					delineation or extend the proposed excavation area to the north.	excavation bottoms and side walls.
4				Figure 3	Soil Boring Locations and Results - Redevelopment Block EOS-1 (North): Area EX02B412 does not appear to be have been delineated to the east, especially in the southeast area. The proposed excavation appears to be to delineated to the west, but there do not appear to be any data points to the southeast of the unlabeled red dot (hot spot) location. Since this red dot is on the edge of the proposed excavation, if additional sampling will not be done, the excavation should be extended to the east and southeast to ensure that sufficient soil is excavated. It is understood that the prior excavation immediately to the east may have been utilized to delineate the eastern extent of the excavation, but the depth of this excavation is not provided. Please provide the depth of 4 this prior excavation and explain how the extent of contamination will be addressed without analytical data to the southeast of the hot spot.	The southeast side of proposed excavation area EX02B412 has been dashed to show uncertainty in the vicinity of the previous trench/excavation area. Also, the following text will be added as the second to last sentence in Section 6.2, EX02B412: *The dashed line along the southeast side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent in the vicinity of the previous trench/excavation area. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area.* Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the remedial action and collected from the excavation bottoms and side walls to confirm the final extent of the proposed excavation areas.
5				Figure 3	Soil Boring Locations and Results - Redevelopment Block EOS-1 (North): There do not appear to be any data points southeast of EX02B122 (e.g., southeast of EX02B288A); therefore, the area appears not	Proposed excavation area EX02B122 is defined to the southeast by boring EX02B524D, as well as the PCB Hot Spot and Northwest Removal Action Area outlined in purple on the southern end of Figure 3. This removal action area was excavated to a depth of approximately 11 feet bgs, therefore any COCs associated with

Responses to Review Comments
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Specific Comments

Item	Sect	Pg	Par	Table or Figure	Comments	Responses
					to be delineated. Please revise the Memo to indicate that EX02B122 is not horizontally delineated to the southwest or revise Figure 3 to depict all samples that delineated the horizontal extent of contamination.	either proposed excavation area EX02B122 or EX02B288 were excavated as part of this removal action. This removal action area is defined in the legend of Figure 3, and details of the excavation depth are provided within the same purple removal action area shown in Figure 4. To alleviate confusion the same label for the removal action area will be added within the purple outline of Figure 3.
6				Figure 7	Soil Boring Locations and Results - Redevelopment Block EOS-2 (Southeast): There do not appear to be any data points west of EX02B401 and the area appears not to be delineated. This is one of the proposed excavations with a dashed boundary, indicating uncertainty in the extent of contamination. Please explain how the extent of contamination along the western boundary will be addressed.	The following text will be added to the second to last sentence in Section 6.2, EX02B401: *The dashed line along the northwest side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area*
7				Figure 8	Soil Boring Locations and Results, Redevelopment Block EOS-3: There are no data points in close proximity north of EX03SS368, so it appears that the extent of contamination has not been delineated to the north. Please revise the Memo to indicate that EX03SS368 is not horizontally delineated to the north and discuss how this will be addressed.	Proposed excavation area EX03SS368 is defined on the northeast and northwest by two data points below the PAL, and therefore the extent of contamination is horizontally delineated to the north. Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the remedial action and collected from the excavation bottoms and side walls to confirm the final extent of the proposed excavation areas.
8				Figure 8	Soil Boring Locations and Results, Redevelopment Block EOS-3: The basis for extending EX02B098D to the west is not apparent from Figure 8 as there do not appear	The following text will be added as the second to last sentence in Section 6.3, EX02B098D: *The proposed excavation area was extended to the west to account*

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					to be any samples to the west of EX02B098D. This does not appear to be consistent with other proposed excavations, which were not extended in a similar manner when data was not available to delineate the excavation boundaries. Please explain why the proposed excavation area for EX02B098D was extended to the west.	*for the additional undefined area created by step-out borings EX02B098DC and EX02B098DC1.*
9				Figure 15	Soil Boring Locations and Results - Redevelopment Block MU-1 (South): The closest sample north or northeast of EXB003B is approximately 45 feet from the hot spot borings so the extent of contamination in the vicinity of this excavation does not appear to be delineated. Please revise the Memo to indicate that EXB003B has not been delineated to the northeast and explain how this data gap will be addressed.	A previous trench/excavation area is present on the northeast side of EX13B003B and on the west side of EX13B021, however the cross-hatched area was inadvertently left off the figure. This previous excavation area will be added to the final version, and the northwest side of proposed excavation area EX13B023 has been dashed to show uncertainty in the vicinity of the previous trench/excavation area. Also, the following text will be added as the second to last sentence in Section 6.2, EX13B023: *The dashed line along the northwest side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent in the vicinity of the previous trench/excavation area. Confirmation soil samples will be collected as part of the final RD to provide delineation on this side of the proposed excavation area.*
10				Figure 17	Soil Boring Locations and Results - Redevelopment Block MU-2 (South): Figure 17 does not include any data points to the north, east, or south of EX14MW10A so the extent of copper and zinc does not appear to be delineated. Also, the legend indicates	The previous excavation of EX14MW10A is currently addressed at the end of Section 3.2.3 *Deviations from the Final SAP* with the following text: *Initial delineation borings were not collected in the vicinity of EX14MW10A because this was previously excavated to a depth of*

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					the black box around this area means it was previously excavated to 3 ft bgs, but the note under the location identifier says that the delineated depth is 2 ft bgs; this inconsistency should be resolved. Finally, this location is not discussed in the text in Sections 4 or 6. Please revise the Memo to include EX14MW10A, to indicate that the extent of contamination in the vicinity of EX14MW10A has not been delineated to the north, east, or south, and to reconcile the discrepancy between the delineated vertical depth and previous excavations.	*approximately 3 feet bgs (Figure 17). The excavation area was still open and active during the soil sampling activities discussed in this Technical Memorandum.* This area would not be presented in Section 4 *Soil Analytical Results* because there were no soil samples collected. The following text will be added to Section 6 *Recommendation:* *EX14MW10A in Figure 17: Initial delineation borings were not collected in the vicinity of EX14MW10A because this was previously excavated to a depth of approximately 3 feet bgs. The excavation area was still open and active during the soil sampling activities discussed in this Technical Memorandum. No further excavation activities are recommended for this area.* Additionally, the legend indicates what depth the area was already excavated to, and the note adjacent to the location on the figure says that the COCs for this area have been delineated to a depth of 2 ft bgs. The text in both the legend and adjacent to the area were presented in this way to show that the delineated depth of COCs for EX14MW10A (2 ft bgs) were addressed by the previous excavation to a depth of approximately 3 ft bgs.
11				Figure 18	Soil Boring Locations and Results - Redevelopment Block MU-3 (North): Even though EX72SS23 appears on the parcel boundary, the excavation should be extended to the south to ensure contamination does not extend across the Parcel E-2 boundary, since there are	Samples were not collected south of EX72SS23 because this area is outside of Parcel E. To identify that the south side of this proposed excavation area is not delineated, a dashed line will be added to show uncertainty. Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the final RD and collected

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					no samples in Parcel E-2 that would indicate that this location should be addressed. It is unlikely that this contamination "honors" the parcel boundary, so the text should not state that the extent of contamination is bounded by the parcel boundary. Please revise the Memo to delete text that states that the extent of contamination is bounded by the parcel boundary. Also, please extend this excavation to the south to ensure the removal of all contamination and include collection of sidewall samples at the same depth as the original contaminated sample(s). Alternatively, please propose additional sampling to delineate the extent of contamination.	from the excavation bottoms and side walls to confirm the final extent of the proposed excavations.
12				Figure 19	Soil Boring Locations and Results - Redevelopment Block MU-3 (South): The sample result for the location on the south side may be artificially low because of its proximity to the previous trench excavation; if this is the case, the extent of contamination has not been delineated to the south. In addition, no samples have been collected to the north on the eastern side of the former trench (henceforth, the eastern portion of the proposed excavation). Please revise the Memo to acknowledge that the extent of contamination associated with	The soil sample result on the south side of EX04B011 was from a previous investigation and appears to be outside of the previous trench boundary. To alleviate confusion within the proposed excavation area, the narrow trench has been removed from the figure. The excavation area is currently defined to the north and south by two historical soil samples below the PAL, and the eastern and western sides were defined by three samples collected during this current investigation. The eastern side of this proposed excavation area currently is defined by borings EX04B011B and EX04B011C. Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the final RD and collected

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					EX04B011 has not been delineated to the south or to the north of the eastern portion of the proposed excavation and explain how these data gaps will be addressed.	from the excavation bottoms and side walls to confirm the final extent of the proposed excavations.

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1	3.0				Please include a brief summary of the technical approach used for sampling during this investigation.	The following text will be included in Section 3.0 *Soil Sampling*, second paragraph, second sentence: *This investigation included the collection of soil samples from various depths within delineation soil borings. If the concentration of at least one COC within an initial delineation boring met or exceeded the PAL, additional step-out soil borings were advanced to further delineate the concentration of COCs. The distance and direction of each contingency boring was determined in the field based on the concentrations of the delineation borings, the existing data of the surrounding contingency borings, and the site logistics.*
2	3.0				Please include a summary table that lists the specific analytical suite used for each soil sample, sample group, or sampling area; alternately, please include a reference to SAP Worksheet #18. Please list any deviations.	The specific analytical methods are currently presented in Section 4.0 *Soil Analytical Result*, and the current Table 1 indicates what analytes were analyzed at each specific boring location. The following text will be added to Section 3.2, first paragraph, last

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						sentence: *The Location-Specific Sampling Methods can be found in Worksheet #18 of the SAP, and any deviations from these methods are provided in Section 3.2.3 of this Technical Memorandum.*
3	6				Please include a brief summary of the technical approach used for defining the lateral limits of proposed excavations. It is not clear in this technical memorandum whether excavation limits were consistently defined. Several possible scenarios have been identified, as follows: - Lateral excavation limits are defined *at* the sample locations where COCs in soil are less than 5 times the RG (e.g., EX15B027, Figure 9); - Lateral excavation limits are defined *by the approximate halfway point* between a sample location where COCs in soil are equal or greater than 10 times the RG and a sample location where COCs in soil are less than 5 times the RG (e.g., EX02B369, Figure 10); and/or - Lateral excavation limits *are beyond* sample locations where COCs in soil are less than 5 times the RG (e.g., EX05B104, Figure 13). Please clarify.	Currently the second paragraph of Section 6.0 *Recommendations* states the following about the technical approach for defining the lateral limits of the proposed excavation areas: *The proposed excavation extents from the FS and Final SAP were modified inside an area defined by the soil sample locations from previous investigations below the PAL, as well as those identified below the PAL during this soil investigation. The excavation areas were modified to maintain the basic original equilateral square or rectangle shapes presented in the FS. The proposed excavation areas are shown on Figures 3 through 20, and the excavation areas and volumes are provided in Table 3.* Additionally, the following text will be added to Section 6.0, second to last sentence: *Any changes to the approximate lateral excavation limits were defined similar to the extents first presented in the FS, and then presented in the Final SAP. These lateral limits were defined either at the halfway point between where the COC concentrations in soil are less than the PAL, at the location where the COC concentrations in soil are less than the PAL, or just beyond where the COC concentrations in soil are less than the PAL.*

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4	6				It is unclear whether certain excavation areas are adequately delineated. For example, the western border of Excavation Area EX05B104 (~100 feet) has been delineated using a single sampling location; however, this seems like a much larger distance than the majority of the other proposed excavation areas. Please define the maximum acceptable distance in which a single sampling location can be used to delineate the border of an excavation.	A maximum acceptable distance in which a single sampling location can be used to delineate the border of an excavation was not presented or established in the Final WP/SAP. The excavation areas proposed in the FS were based on 20-ft x 20-ft Tier 2 excavation areas, and 40-ft x 40-ft Tier 1 excavation areas. For each of these different sized excavation areas a single delineation boring on each side of the proposed area was presented in the Final WP/SAP. For areas where excavation areas of equal size were located immediately adjacent to one another (creating a single rectangle either 40-ft x 20-ft or 80-ft x 40 ft), two delineation borings were proposed on the longer side of the proposed area. In the case of proposed excavation area EX05B104, the original proposed excavation area presented in the FS was larger (~80 ft by 80 ft) because of multiple detected soil concentrations above the Tier 1 criteria (red dots); however because the sides were of equal distance, a single boring in the center of each side of the proposed excavation area was presented in the Final WP/SAP to provide adequate delineation. The western and eastern sides of EX05B104 were later expanded due to the additional step-out sample collected to the north; however the single boring on the western side of the proposed excavation area still remains nearly centered along this boundary and provides adequate delineation to propose an excavation extent. Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the final RD and collected from the excavation bottoms and side walls to confirm the final extent of the proposed excavations.
5	1,4, 6				The document defines Project Action Levels (PALs) as a level that is either 5 times or 10 times the ROD established Remediation Goal. While we agree that the use of PALs is	The PALs are defined correctly in the introduction of the document; however the Tier 2 PAL was not correctly identified as the concentration threshold used to laterally and vertically delineate the proposed excavation areas. The following will be added to Section

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					a good one, the document does not distinguish when, where, and under what conditions, the 5x vs. the 10x will be used to justify additional sampling, excavation or to justify halting excavation. A potential solution would be to utilize the already introduced term "Tier 1 PAL" and/or "Tier 2 PAL" instead of the less specific "PAL".	1.1, under the Tier 2 bullet, second sentence: *The Tier 2 PAL was the concentration threshold used to laterally and vertically delineate the proposed excavation areas. The side of a proposed excavation area was considered defined when an adjacent soil concentration was less than the Tier 2 PAL.* Additionally, the term PAL currently used within the text to define the concentration threshold for the excavation area delineation will be updated to "Tier 2 PAL".
6				All Figures	Please label (identify) previous sample locations that were used to delineate the extent of contamination in soil. Also, please label (identify) the proposed sample boring locations that were not sampled during this investigation.	The historical and inaccessible boring locations will be labeled in the figures.

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1	4.0	4-1			It is not clear whether the compounds discussed for each area/compound group were the only compounds detected or were the only compounds included in the analytical suite. For example, in Section 4.1.2, were B(a)A and B(a)P the only SVOCs included in the analytical suite for samples collected in EOS-1? Or were B(a)A and B(a)P the only SVOCs detected in samples collected in EOS-1? The summary table requested in Comment #2 would help address this comment.	Section 4 is currently broken down by Redevelopment Block, and then by the specific compounds analyzed within each Redevelopment Block, as well as the number of times each compound was analyzed. To clarify what the compounds listed in section 4.1.2 represent, the following text will be added as the last sentence prior to the bullets for each compound presented: *The select SVOCs/metals/PCBs/etc analyzed from each analytical suite are provided in Table 1, and the select VOCs detected are provided below:*
2	6	3-5			Several excavation areas are not fully defined due to inaccessibility or other reasons (e.g., excavations adjacent to the shoreline). Please add a brief discussion to Section 6 regarding excavation areas that are not fully defined. Provide any additional recommended actions at these locations to account for an incomplete delineation (e.g., additional wall sampling requirements during excavation).	The following text will be added to the second to last sentence in the last paragraph of Section 6.0 *Recommendations*: *For proposed excavation areas where the lateral extents were not fully defined due to inaccessibility, soil confirmation (or bottom) samples will be proposed and implemented as part of the final RD and collected from the excavation bottoms and side walls to confirm the final extent of the proposed excavations.* Additionally, the following template text will be added to excavation areas EX02GR73SW, EX02B412, EX02B256, EX02B415, EX02B401, EX11SS022, EX02G105, EX02B493, EX13B003B, EX13B021, EX02GR184SW, EX02SS310, EX02GR179SW, EX02B461, EX02GP040, EX02GR93SW, EX02GP008, EX12SS17, and EX12SS16 within Section 6.0: *The dashed line along the (north/south/east/west) boundary is used to*

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						show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area.

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1	3.0	3-1			Typo DTP	Will be corrected to "DPT"
2	3.2	3-2			Please define "regular samples." Are these initial delineation soil samples and step-out soil samples?	The text will be corrected to: *A total of 283 initial and step-out soil samples, 17 field quality control….etc*
3	3.2.3				It is not always clear whether the referenced locations are proposed excavation areas, active excavation areas, or boring locations. Please use consistent terminology throughout for clarity (i.e., refer to locations A and B as Boring A and Excavation Area B). For example, EOS-4, bullet 1, on page 3-5, references EX14B026 without clarifying whether this is an excavation area or a boring location. Same comment applies to MU-2, bullet 1, on page 3-6.	Text will be added to these sections to clarify what are borings and excavation areas.
4				Table 1	Please define Y indicator.	The Y indicator will be defined in Table 1

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1	6.0				In the descriptions provided for defining each of the proposed excavation areas, please make sure to specify if the defining parameters are either sample locations or excavation areas. For example, the second sentence in subsection EX02B122 should be changed to state that the east side is defined by sample location EX02B524C for clarification as it is not an excavation area.	Text will be added to these sections to clarify what are borings and excavation areas.
2	6.1				(a) EX02B122B subsection. The area labeled as the "PCB Hot Spot" Removal Action Area outlined in purple in Figure 3 does not define excavation area EX02B122B to the north as stated in the text. It is actually the hatched previous excavation area to the north that may instead correspond with the second phase of the PCB hot spot removal implemented in 2012. Please verify and correct the text accordingly. (b) EX02B256 subsection. Please see comment below regarding Figure 4 and update text accordingly as needed. (c) EX02B412 subsection. Please specify if the previously detected soil concentration for one or more COC greater than or equal to 10 times the RG on the southeast border of the proposed EX02B412 excavation area still remains in place or if it was removed as a	(a)The text will be updated to indicate the following: ***EX02B122B*** *in Figure 3 is defined to the north by the second phase of the PCB Hot Spot Removal Action Area completed in 2012* (b) As discussed in the comment below, the sample locations located east of EX02B256 that exceeded 10 times the selected action level were removed during the previous excavation work; however these previous sample locations are the justification for the proposed Tier 1 excavation area and therefore should remain on Figure 4 to provide reference. (c) The southeast side of proposed excavation area EX02B412 has been dashed to show uncertainty in the vicinity of the previous trench/excavation area. Also, the following text will be added as the second to last sentence in Section 6.2, EX02B412: *The dashed line along the southeast side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent in the vicinity of the previous trench/excavation area. Confirmation soil*

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					component of the previous trench / excavation area. If it remains in place, consideration should be given to expand the excavation area to encompass this sample accordingly. (d) EX02GR71SW subsection. It does not appear that the EX02GR71SW excavation area is defined on the south by the PCB Hot Spot removal action area as stated in the text. Please verify and correct the text accordingly.	*samples will be collected as part of the final RD to provide delineation on this side of the proposed excavation area.* Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the final RD and collected from the excavation bottoms and side walls to confirm the final extent of the proposed excavations. (d) The text of the EX02GR71SW subsection will be revised to the following: ***EX02GR71SW*** *in Figure 3 is defined to the north by boring EX02GR71SWB, to the east by boring EX02B412A to the south by boring EX02GR71SWA, and to the west by the PCB Hot Spot Removal Action Area. The total proposed area is approximately 70 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 7.8 cubic yards of soil.*
3	6.2				Redevelopment Block EOS-2. EX02B461 subsection. The eastern boundary of excavation area EX02B461 is actually defined by sample EX02B461B instead of EX02B461A as presented in the text.	The name of the boring will be updated to "EX02B461B" within the text, and the following text will be added as the second to last sentence in Section 6.2, EX02B461: *The dashed lines along northwest corner are used to show uncertainty for this corner of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area.*
4	6.3			Figure 8	(a) General comment for future reference.	(a) This general comment has been noted, and soil confirmation (or

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					Please be aware that a soil confirmation sampling strategy with clearly defined exit criteria will be required in the forthcoming RD for the proposed excavation areas located in the vicinity of IR-03 that have TPH or TPH components listed in the COCs. (b) EX02MW173A subsection. While the text states that this excavation area is defined to the west by sample EX02MW173F, the location of this sample does not appear in the vicinity of excavation area EX02MW173A according to Figure 8. Please verify if either a typographical error is presented in the text or if an additional sampling location needs to be added to Figure 8. (c) EX02GP050 subsection. Sample "EX02GP40B" should be revised to EX02GP**0**40B. (d) EX02GP051A subsection. The text states that this excavation area is defined to the west by sample EX02GP40AB. However, sample EX02GP40AB does not exist and sample EX02GP**0**40AB appears to be a location where detected soil concentration (for one or more COC) is greater than or equal to 10 times the RG (Tier 1 location).	bottom) samples will be proposed and implemented as part of the final RD and collected from the excavation bottoms and side walls to confirm the final extent of the proposed excavations. (b) EX02MW173F was a typographical error, and the correct boring that defines the west side of EX02MW173A is EX02GP040F. The text will be updated accordingly. (c) Boring EX02GP040B will be updated in the text accordingly. (d) Boring EX02GP040A defines EX02GP051A to the west and the text will be revised accordingly. (e) The text will be revised to the following: ***EX03B220*** *is defined to the north by* ***boring*** *EX03B220A, to the east by* ***boring*** *EX03B220B, to the south by a previous sample location below the PAL, and to the west by a previous sample location below the PAL. The total proposed area is approximately 400 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 44 cubic yards of soil.* (f) The text will be revised to the following: ***EX03B343*** *is defined to the north by EX03B344D1, to the east and south by proposed excavation areas EX02MW146 and EX02GP016A, and to the west by boring* ***EX03B344D3****. The total proposed area is approximately 858 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 95 cubic yards of soil.*

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					The sample which defines the EX02GP051A excavation area to the west appears to be sample EX02GP040A according to Figure 8. Please verify and make the appropriate changes to the text or figure, as needed. (e) EX03B220 subsection. The text describes EX03B220A as a proposed excavation area but on Figure 8 is appears to be a soil sample location. Please verify and make appropriate changes to the text or figure, as needed. (f) EX03B343 subsection. While the text states that the proposed excavation area is defined to the west by (soil sample) EX03B344D2, this sample appears to be a location where the detected soil concentration for one or more COC is greater than or equal to 5 times the RG (Tier 2 Location). Please consider replacing this sample in the text with soil sample EX03B344D3 instead. (g) EX03B367 subsection. While the text states that the proposed excavation area is defined to the north by (soil samples) EX02TA40BA and EX02TA40BA1, these samples appear to be locations where the detected soil concentration for one or more COC is greater than or equal to 10	(g) The text will be revised to the following: ***EX03B367*** *is defined to the north by boring* ***EX02TA40BA2****, to the east by boring EX03B367A1, to the south by proposed excavation area EX02GP040, and to the west by proposed excavation area EX02TA40B. The total proposed area is approximately 1,614 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 179 cubic yards of soil.* (h) The text will be revised to the following: ***EX03SS368*** *is defined to the north by a previous sample location below the PAL, to the east by boring* ***EX03SS368B****, to the south by* a *previous sample location below the PAL, and to the west by EX03SS368A. The total proposed area is approximately 1,600 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 178 cubic yards of soil.*

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					times the RG (Tier 1 Location). Please consider replacing these samples in the text with soil sample EX02TA40BA2 instead. (h) EX03SS368 subsection. The text identifies soil sample "EX03SS368" as defining the proposed excavation area to the east, but the location of this sample does not appear in Figure 8. In addition, the text states that the proposed excavation area is defined to the south by proposed excavation area EX02GP040 which actually appears to be at least 150 feet to the southeast of excavation area EX03SS368. Please clarify and revise the text accordingly.	
5	6.4				(a) EX02B493 subsection. The text describes EX02B493B as a proposed excavation area but on Figure 11 is appears to be a soil sample location. Please verify and make appropriate changes to the text or figure, as needed. (b) EX02G105 subsection. The text describes the proposed excavation area as being defined to the north by a previous sampling location below the PAL. However, according to the sample locations presented on Figure 11, it appears that all proposed samples to the north were inaccessible. Please verify	(a)The text will be revised to the following: ***EX02B493*** *in Figure 11 is defined to the north by* ***boring EX02B493B****, to the east by boring EX02B493C, to the south by a previous sample location below the PAL, and to the west by proposed excavation area EX02G105 (area to the west was inaccessible). The dashed line along the west side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the final RD to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 751 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 83 cubic yards of soil.*

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					and correct the text accordingly. (c) EX02GR93SW subsection. The text describes the proposed excavation area as being defined to the south by proposed excavation area EX02G105 which generally appears over 60 feet to the south. In addition, according to the sample locations presented on Figure 11, it appears that a proposed sample to the southwest was inaccessible. Please verify and correct the text accordingly. (d) EX11SS022 subsection. While the text states that the proposed excavation area is defined to the west by soil sample EX11SS022A, the location of the soil sample appears to be directly within the proposed excavation area. Please verify and clarify in the text accordingly. Consideration should be given to also add a dashed line to the western border of the proposed excavation area in Figure 10. (e) EX15B027 subsection. Soil sample location "EX15B027B2" is referenced and stated as defining the proposed excavation area to the east, but is not present in Figure 9. Please consider removing from the text accordingly.	(b) The text will be revised to the following: ***EX02G105*** *in Figure 11* ***is not defined to the north or east because this area was inaccessible due to rip rap along the shoreline,*** *EX02G105 is defined to the south by the shoreline and a previous sample location below the PAL, and to the west by the shoreline. The dashed lines along the north and east sides are used to show uncertainty for these sides of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on these sides of the proposed excavation area. The total proposed area is approximately 1,874 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 208 cubic yards of soil.* (c) The text will be revised to the following: ***EX02GR93SW*** *in Figure 11 is defined to the north by a previous sample location below the PAL, and to the east EX02GR93SWA and a previous sample location below the PAL. The proposed soil boring location along the southwest side of this proposed excavation area was not accessible due to riprap. The approach for accessing and excavating this area will be addressed as part of the remedial design. The dashed lines along the south and west sides are used to show uncertainty for these sides of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on these sides of the proposed excavation area. The total proposed area is approximately 2,053*

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					(f) EX380803 subsection. Please briefly describe why the proposed excavation area terminates to the northwest immediately along the locations where historic detected soil concentrations were 10 and 5 times the RG.	*square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 228 cubic yards of soil.* (d) A dashed line will be added to the west side of EX11SS022 in Figure 10, and the text will be revised to the following: ***EX11SS022*** *in Figure 10 is defined to the north by a previous sample location below the PAL and* ***boring EX11SS022A****, to the east and southeast by a previous soil excavation, and to the south by a previous sample location below the PAL. The dashed line along the west side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the final RD to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 290 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 32 cubic yards of soil.* (e) The text will be revised to the following: ***EX15B027*** *in Figure 9 is defined to the north by EX15B027A and a previous sample location below the PAL, to the east by EX15B027A and* ***EX15B027B1****, to the south by EX15B027B1 and a previous sample location below the PAL, and to the west by previous soil sample locations below the PAL. The total proposed area is approximately 2,214 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 246 cubic yards of soil.* (f) The proposed excavation area was revised from the extent presented in the FS to the current extent due to the previous samples

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						locations below the PAL. The extent will be revised in Figure 9 to extend further north of Redevelopment Block boundary and the red and blue locations.
6	6.5				(a) EX13B003B subsection. Please see comment below regarding Figures 12 through 17 and the "parcel boundary" to the west of this proposed excavation area. (b) EX13B021 subsection. Please see comment below regarding Figures 12 through 17 and the "parcel boundary" to the south of this proposed excavation area. (c) EX36B078 subsection. The figure that this proposed excavation area is presented in is Figure 13 instead of Figure 14.	(a)The west side of proposed excavation area EX13B003B does terminate along the redevelopment block boundary and not the Parcel E boundary; therefore the west side of this proposed area will be dashed to show uncertainty. The text will be revised to the following: ***EX13B003B*** *in Figure 15 is defined to the north by a previous sample location below the PAL, to the east by a previous sample location below the PAL and proposed excavation area EX13B023, and to the south by proposed excavation area EX13B021. The dashed line along the west side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the final RD to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 1,769 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 197 cubic yards of soil.* (b) The south side of proposed excavation area EX13B021 does terminate along the redevelopment block boundary and not the Parcel E boundary; therefore the west side of this proposed area will be dashed to show uncertainty. The text will be revised to the following: ***EX13B021*** *in Figure 15 is defined to the north by proposed excavation area EX13B023, to the east by EX13B021A, and to the west proposed excavation area EX13B003B. The dashed line along the south side is used to show uncertainty for this side of the*

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						proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the final RD to provide delineation on this side of the proposed excavation area. The total proposed area is approximately 1,332 square feet, and the total volume to be excavated to 3.0 feet bgs is approximately 148 cubic yards of soil. *(*c) The text will be revised to indicate that EX36B078 is shown on Figure 13 instead of Figure 14.
7				Figure 3	Please label the southern portion of the map that corresponds to the "Northwest and Central Removal Action Area."	This portion of the map will be labeled.
8				Figure 4	Please clarify if the soil sampling locations exceeding 10 times the selected action level located immediately to the west of excavation area EX02B256 and within the "Previous Trench / Excavation Area" are still in place or were they removed during the previous excavation event.	These sample locations located east of EX02B256 that exceeded 10 times the selected action level were removed during the previous excavation work; however these previous sample locations are the justification for the proposed Tier 1 excavation area and therefore should remain on Figure 4 to provide reference.
9				Figure 9	The text in Section 3.2.3 (Deviations from the Final SAP), first bullet point of EOS-4 subsection states that initial delineation borings were not collected in the vicinity of EX14B026 because this was previously excavated to a depth of approximately 3 feet below ground surface (bgs) and was still	The initially proposed locations around EX14B026 will be included on Figure 9.

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					open and active during sampling activities. Please revise the figure to include those initially proposed soil boring locations around EX14B026 that were not collected / completed.	
10				Figure 10	Please add the proposed boring location that was inaccessible north of excavation area EX02B468 and to the east of excavation area EX02B355 to the figure.	The initially proposed locations north of excavation area EX02B468 and to the east of excavation area EX02B355 will be added to Figure 10.
11				Figure 12 through Figure 17	The Parcel E boundary may to be incorrectly drawn corresponding instead with what appears to be Redevelopment Block boundaries in these figures. Please verify and correct accordingly.	These areas were addressed accordingly in Item 6 (a) and (b) above.
12				Figure 17	The text in Section 3.2.3 (Deviations from the Final SAP), first bullet point of MU-2 subsection states that initial delineation borings were not collected in the vicinity of EX14MW10A because this was previously excavated to a depth of approximately 3 feet below ground surface (bgs) and was still open and active during sampling activities. Please revise the figure to include those initially proposed soil boring locations around EX14MW10A that were not collected / completed.	The initially proposed locations around EX14MW10A will be included on Figure 17.

Responses to Review Comments
Final Parcel E Soil Excavation Characterization Technical Memorandum
Hunters Point Naval Shipyard (HPNS), San Francisco, California dated, June 2013

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1	1.1				This section states that an objective of the investigation was to characterize the horizontal and vertical extent of contaminants of concern (COCs) at the proposed excavation areas surrounding Tier 1 and Tier 2 locations, as well as from pothole sampling conducted in 2010. It is not clear from the information presented how the vertical extent of COCs was characterized or confirmed. It appears, from Figure 21, that soil samples, from both initial delineation borings as well as step-out contingency	
1	1.1				borings, were analyzed from the depth interval where the maximum COC concentrations were previously observed. Although this is good for delineating the lateral extent, it is not clear how this investigation provided additional information regarding the vertical extent of COCs. Please clarify whether characterization of the vertical extent of COCs was an objective of the investigation, or whether the Navy intends to rely primarily on excavation confirmation sampling to verify the vertical extent.	In Figure 21 the final step in the decision tree describes how this investigation identified the sample depths for vertical delineation at the initial delineation and step-out borings. The sample depth was chosen based on the depth of the maximum concentration for each COC associated with the Tier 1 or Tier 2 "hotspot" being defined. If more than 1of the 3 depth intervals presented in Figure 21 and in Worksheet #11 of the Final SAP had samples being collected for more than one COC, only the sample interval with the highest COC concentration was analyzed. The following text will be added to Section 3, at the end of the first paragraph of the Tech Memo to reference where the information concerning the Project Quality Objectives/Systematic Planning Process Statements can be found. *The project quality objectives and the planning process is presented in detail in Worksheet #11 of the SAP.*
2					Does the blue line labeled "Shoreline Area"	No samples were collected bayward of the MHW so no samples were

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					in several of the figures depict the mean high water (MHW) line, which separates soil from sediment? Were all sediment samples (located bayward of MHW) compared to sediment project action levels (PALs)?	compared to the sediment PALs.
3	6.1			Figure 3	The symbol depicting TPH soil concentrations greater than the source criterion does not clearly indicate whether the sample is from the current investigation (for other COCs, current sample locations are outlined in black) or from a previous investigation. For clarity, please revise the symbol to clearly identity current and previous sampling locations. Please make this change on all applicable figures. In addition, at EX02B456, TPH concentrations are not bound to the west. The excavation area EX02B412 does not include a Tier 1 location (depicted by a red dot). It is not clear whether the previous excavation area to the east bounds the excavation. What was the depth of this removal action and were all COCs above Tier 2 PALs removed above 10 feet bgs?	This symbol description will be revised to the following: *Detected TPH soil concentration from a previous boring location is greater than the source criterion.* Figure 3 will be revised with a dashed line added to the western boundary of excavation area EX02B456 to show uncertainty, and the following text will be added as the second to last sentence in Section 6.2, EX02B456: *The dashed line along western boundary is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area.* The southeast side of proposed excavation area EX02B412 has been dashed to show uncertainty in the vicinity of the previous trench/excavation area. Also, the following text will be added as the second to last sentence in Section 6.2, EX02B412: *The dashed line along the southeast side is used to show uncertainty for this side of the proposed excavation area because no current soil*

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						data can provide certainty on the proposed excavation extent in the vicinity of the previous trench/excavation area. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area. Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the remedial action and collected from the excavation bottoms and side walls to confirm the final extent of the proposed excavation areas.
4	6.1			Figure 4	EX02GR39SW, EX02B256, EX02GR179SW, EX02SS310, and EX02GR184SW are partially defined by the Northwest and Central Removal Action Area. Please confirm that the completion report for this removal action documented that no COCs exceeding Tier 2 PALs remain above 10 ft. bgs. Figure 4 also depicts a previous trench/excavation area (in hatched pattern) to the east of EX02B256. What was the depth of this excavation and clean fill?	The Northwest and Central Removal Action Area was a previous excavation that removed all soil to a depth of approximately 11 feet bgs, with is one-foot deeper than the maximum excavation depth proposed in the Final SAP and the draft TM. This previous excavation would have addressed all Tier 1 and Tier 2 COC concentration to our maximum excavation depth of 10 feet bgs. The east side of proposed excavation area EX02B256 has been dashed to show uncertainty in the vicinity of the previous trench/excavation area. Also, the following text will be added as the second to last sentence in Section 6.2, EX02B412: *The dashed line along the east side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent in the vicinity of the previous trench/excavation area. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area.* Additionally, soil confirmation (or bottom) samples will be proposed and implemented as part of the remedial action and collected from the

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						excavation bottoms and side walls to confirm the final extent of the proposed excavation areas.
5	6.3			Figure 8	EX02TA40B is not bound to the northwest by samples below Tier 2 PALs.	Proposed excavation area EX02TA40B is currently defined at each corner of the proposed square: NW corner: Previous boring location below the Tier 2 PAL NE corner: Previous boring location below the Tier 2 PAL and EX02TA40BA2 SE corner: EX02MW173AB SW corner: EX02MW173AA
6	6.5			Figure 15	EX13003B is not bound to the northeast and EX13B023 is not bound to the northwest.	A previous trench/excavation area is present on the northeast side of EX13B003B and on the west side of EX13B021; however the cross-hatched area was inadvertently left off the figure. This previous excavation area will be included on the figure, and the northwest side of proposed excavation area EX13B023 has been dashed to show uncertainty in the vicinity of the previous trench/excavation area. Also, the following text will be added as the second to last sentence in Section 6.2, EX13B023: *The dashed line along the northwest side is used to show uncertainty for this side of the proposed excavation area because no current soil data can provide certainty on the proposed excavation extent in the vicinity of the previous trench/excavation area. Confirmation soil samples will be collected as part of the remedial action to provide delineation on this side of the proposed excavation area.*
7	3.2.2			Figure 21	The text and Figure 21 are not consistent in describing the placement of step-out contingency borings. The text states that …"for Tier 1 concentrations the step-out	The text in Figure 21 for the step-out borings will be updated to the following:

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					boring was 20 feet from the initial boring, and for Tier 2 the step-out boring was 10 feet…." Figure 21 indicates the step-out boring was either placed at the edge of the proposed excavation area or 10 feet from the proposed excavation area, depending on whether the PAL exceedance (from the initial boring) was isolated and for a single COC. Please revise the text and/or the figure to be consistent.	For "Yes": *Collect an initial soil boring at the edge of the proposed excavation area, or for additional step-out borings a sample will be collected 10 feet from the initial boring for Tier 2 exceedances, and 20 feet from the initial boring for Tier1 exceedances.* *For "No": Collect an initial soil boring 10 feet from the proposed excavation area, or for additional step-out borings a sample will be collected 10 feet from the initial boring for Tier 2 exceedances, and 20 feet from the initial boring for Tier 1 exceedances.*