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THIRD QUARTER 2004 OPERATIONS AND MAINTENANCE STATUS REPORT FOR AIR SPARGING SYSTEM AT JET ENGINE TEST CELL NAS CECIL FIELD FL

2/1/2005

CH2MHILL CONSTRUCTORS INC

Third Quarter 2004
Operations and Maintenance Status Report

Air Sparging System
Jet Engine Test Cell

Former Naval Air Station Cecil Field
Jacksonville, Florida

Contract No. N62467-98-D-0995
Contract Task Order No. 0086

Submitted to:

U.S. Naval Facilities
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Prepared by:

115 Perimeter Center Place, N.E.
Suite 700
Atlanta, GA 30346

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Acronyms

ABB-ES	ABB Environmental Services
Acfm	actual cubic feet per minute
AS	air sparging
AST	aboveground storage tank
bls	below land surface
BTEX	benzene, toluene, ethylbenzene, xylene
bTOC	blow top of casing
CA	Contamination Assessment
CAR	Contamination Assessment Report
CH2M HILL	CH2M HILL Constructors, Inc.
cfm	cubic feet per minute
CTO	Contract Task Order
DO	dissolved oxygen
EPA	U.S. Environmental Protection Agency
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FID	flame ionization detector
FL-PRO	Florida Petroleum Residual Organic
GCTLs	groundwater cleanup target levels
JETC	Jet Engine Test Cell
LNAPL	light non-aqueous phase liquids
mg/L	milligrams per liter
MTBE	methyl tert butyl ether
NADSC	Natural Attenuation Default Source Concentration
NAS	Naval Air Station
NAVFAC EFD SOUTH	Naval Facilities Engineering Command, Southern Division
NGVD	National Geodetic Vertical Datum
O&M	operation and maintenance
ORP	oxygen-reduction potential
OWS	oil/water separator

PAH	polynuclear aromatic hydrocarbon
ppm	parts per million
psi	pounds per square inch
PVC	polyvinyl chloride
RAP	Remedial Action Plan
RAPA	Remedial Action Plan Addendum
SARA	Site Assessment Report Addendum
TRPH	total recoverable pertoleum hydrocarbon
TtNUS	Tetra Tech NUS, Inc.
USACE	U.S. Army Corps of Engineers
UST	underground storage tank
VOC	volatile organic compound

1.0 Introduction

CH2M HILL Constructors, Inc. (CH2M HILL) has been contracted by the Department of the Navy, Naval Facilities Engineering Command Engineering Field Division South (NAVFAC EFD SOUTH), to provide operation and maintenance (O&M) services at the Jet Engine Test Cell (JETC), at the former Naval Air Station (NAS) Cecil Field, Jacksonville, Florida, under Response Action Contract No. N62467-98-D-0995, Contract Task Order (CTO) No. 0086.

An air sparging (AS) system was installed at the JETC site to reduce the concentration and volume of petroleum hydrocarbon contaminants in site groundwater. The purpose of this 3rd Quarter 2004 Operation and Maintenance Status Report is to provide a summary of activities performed at the site during the period from July 1, 2004, to September 30, 2004.

1.1 Objective

The objective of the remedial action at the JETC is to reduce the concentrations and volume of petroleum contaminants in the groundwater to Florida Department of Environmental Protection (FDEP) Groundwater Cleanup Target Levels (GCTLs), as specified in Table I of Chapter 62-777, Florida Administrative Code (FAC). AS is the technology currently utilized to achieve this objective.

1.2 Site History

The JETC site is located near the intersection of Flightline Road and Cecil Pines Street, and includes Buildings 339, 334, 328, and 811. The JETC facility was previously used by the Navy and is currently used by the private sector to test jet engines. Jet engines were mounted and operated in Buildings 334, 339, and 811. Building 811 was demolished and only the foundation remains (Tetra Tech NUS, Inc. [TtNUS], 2002).

The following petroleum storage and handing units were associated with the JETC:

- Two 20,000-gallon JP-5 underground storage tanks (USTs) (designated 339-TC1 and 339-TC2) located in a fuel tank yard between Buildings 811 and 339
- One 5,000-gallon JP-5 aboveground storage tank (AST) (designated 339-TC3) within a 3-foot high concrete block containment wall located in the eastern portion of the tank yard
- One 940-gallon 10W engine oil AST (designated 334P), within a rubber containment structure on a concrete pad on the north side of Building 334
- Two oil/water separators (OWSs); designated 325-OW and 334-OW at Building 334, and one OWS (designated 339-OW) at Building 339

Environmental investigations began at the JETC site in 1989 near the area of the two 20,000-gallon JP-5 USTs, as a result of leaks discovered during tightness testing and

reported overfilling spills. ABB Environmental Services, Inc. (ABB-ES) began a preliminary Contamination Assessment (CA) in 1990 that identified contaminated soil [defined as having a flame ionization detector (FID) reading of greater than 50 parts per million (ppm)]. The U.S. Army Corps of Engineers (USACE) and ABB-ES conducted a full CA from 1991 to 1994. Free product, soil, and groundwater contamination associated with the two 20,000-gallon JP-5 USTs were identified and delineated during the CA and CA Report (CAR) Addendum field efforts (TtNUS, 2002).

In addition, soil contamination was identified at OWS 334-OW. Soil excavation activities were conducted at the 334-OW site in 1999; however, all of the contaminated soil was not removed. The remaining petroleum storage/handling units did not indicate the presence of soil or groundwater contamination in excess of regulatory levels (TtNUS, 2002).

In May 1999, a groundwater Monitoring Only Plan for natural attenuation was approved by the FDEP for the JETC site. Quarterly groundwater sampling was conducted under this plan from July 1999 to October 2000. Based on quarterly sampling results, it was determined that additional delineation of the groundwater contamination at the site was required (TtNUS, 2002).

TtNUS conducted additional field investigation activities in 2001 to further define the extent of the impacted groundwater at the JETC site. The Site Assessment Report Addendum (SARA) field investigation delineated the extent of groundwater contamination at the site and concluded that not all of the contaminated soil identified by previous investigations was removed from the vicinity of the OWS at the site. Groundwater contamination appeared to be limited to two separate plumes located in the northern and southern area of Buildings 334 and 339. TtNUS recommended that the two plumes be managed as one site due to their proximity and that the remaining petroleum-contaminated soil associated with OWS 334-OW be excavated and disposed of offsite. TtNUS prepared a Remedial Action Plan (RAP) to address remediation of the soil and groundwater at the site (TtNUS, 2002).

TtNUS submitted to FDEP for approval a RAP in September 2002 and a RAP Addendum (RAPA) in January 2003 to select the remedial alternative to remediate the contaminated soil and groundwater at the site. AS for groundwater and excavation for soil were selected as the remedial alternatives. FDEP approval on the RAP and RAPA was received in February 2003.

CH2M HILL installed an AS system in accordance with the RAP (TtNUS, 2002), RAPA (TtNUS, 2003), and Work Plan Addendum No. 18, Installation of Air Sparging Systems at the Jet Engine Test Cell (JETC) and Building 271 (CH2M HILL, 2003) from September to November 2003. The AS system operation commenced on November 24, 2003. A site plan showing the JETC site and the AS system layout is provided as Figure 1-1.

1.3 Remediation System/Technology Description

AS is a physical treatment method of expediting the transfer of volatile organic compounds (VOCs) from the soil and groundwater to the sparging air. Atmospheric air is injected into air sparge wells, which are screened within the groundwater contaminant plume. As the injected air passes upward through the VOC laden groundwater and soil, VOCs are partitioned to the passing air and migrate to the vadose zone.

The JETC AS system consists of 10 AS wells (AS-01 through AS-10), rotary vane-type compressor, receiver tank, and associated piping and instrumentation. AS wells are screened from approximately 28 to 30 feet below land surface (bls). The AS system is designed for each AS well to operate at an airflow rate of 10 cubic feet per minute (cfm) at an injection pressure of 15 pounds per square inch (psi). The locations of the AS wells are shown on Figure 1-1.

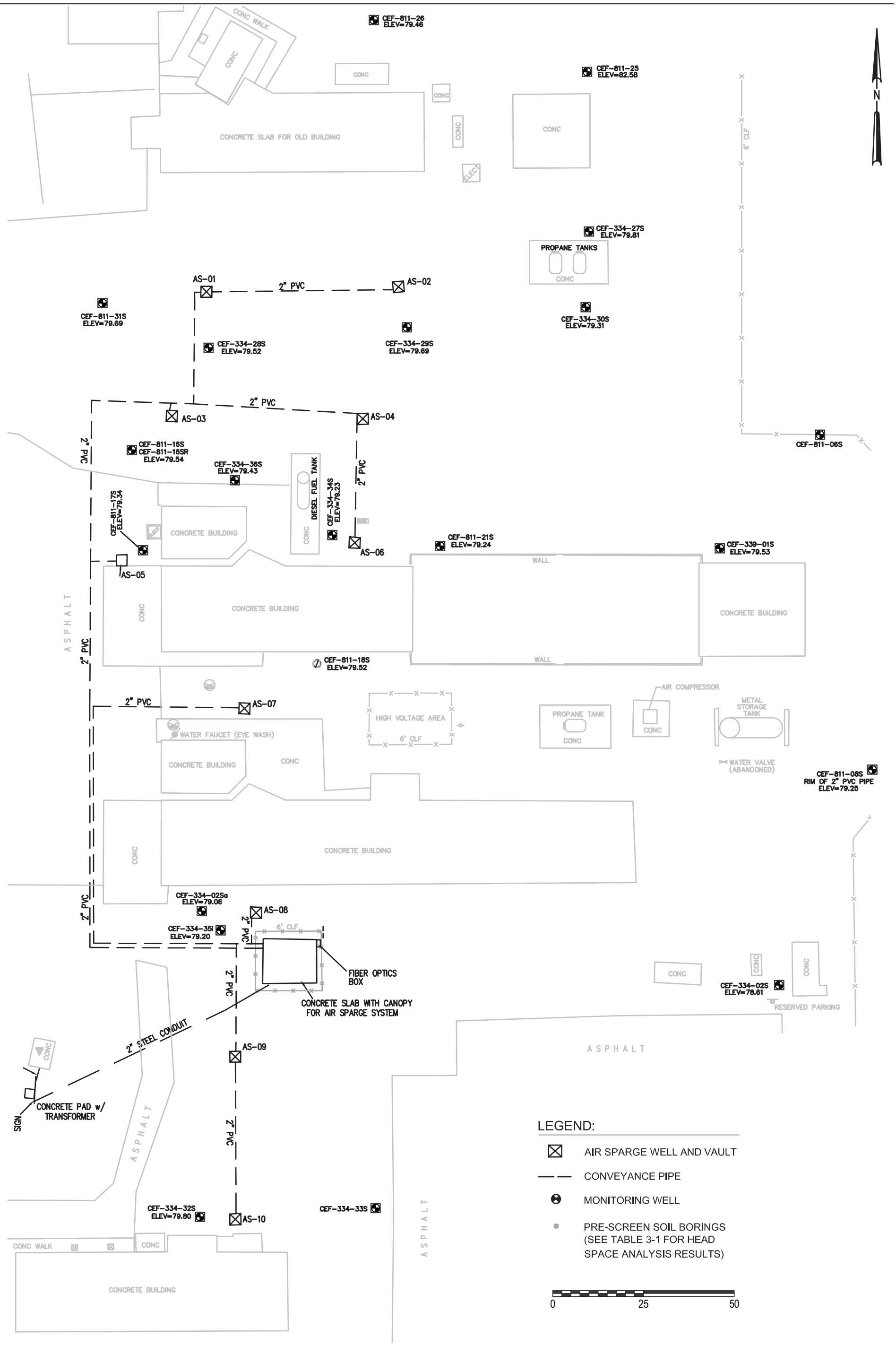

Figure 1-1
Site Layout for Jet Engine Test Cell
Former Naval Air Station, Cecil Field
Jacksonville, Florida

CH2MHILL

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2.0 System Performance Monitoring

O&M checks of the system were performed weekly during the monitoring period. During an O&M check, a preventative maintenance checklist (based upon manufacturers' recommendations) is completed, and any required maintenance activity is performed. All meters and gauges at the system are read and recorded during the O&M check. Well vault gauges and meters are read and recorded on a monthly basis.

2.1 AS System Operational Efficiencies

	Period	To Date
Hours of Possible Operation	2208	7415.5
Hours of Actual Operation	1483.9	5611.5
Percent Hours of Operation	67.2%	75.7%

2.2 AS System Summary of Maintenance and Downtime

During the 3rd Quarter 2004, the AS system ran a total of 61.8 days out of a possible 92 days resulting in 724.1 hours of downtime. The AS system downtime is detailed as follows:

- Down for a total of 367.6 hours due to power interruptions. After each occurrence, the panel alarm was reset and the air compressor was restarted.
- Manually shut down for a total of 26.8 hours to replace cracked underground AS piping polyvinyl chloride (PVC) fittings at the edge of the system compound. The fittings were replaced and the system restarted.
- Down for a total of 329.7 hours due to automatic shut off caused by high level in the condensate holding tank.

2.3 AS System Pressure/Flow Rate Monitoring

During the monitoring period, injection pressure was measured at each AS wellhead on a monthly basis. The wellhead pressures for the operating AS wells averaged 10.9 psi, compared to the design pressure of 15 psi. The AS wellhead pressure data are provided in Table 2-1.

TABLE 2-1
Air Sparging Well Measurements
JETC, 3rd Quarter 2004

Air Sparge Well	Date	Wellhead Pressure (psi)	Flow Rate (acfm)
AS-01	07/27/2004	11	6
	08/25/2004	11	7
	09/22/2004	10	6.5
AS-02	07/27/2004	12	8
	08/25/2004	10	8
	09/22/2004	11	8.5
AS-03	07/27/2004	11.5	7.5
	08/25/2004	11	8.5
	09/22/2004	12	9
AS-04	07/27/2004	10	7
	08/25/2004	11.5	6
	09/22/2004	10	8
AS-05	07/27/2004	11	8
	08/25/2004	12	9
	09/22/2004	9	8.5
AS-06	07/27/2004	10	5.5
	08/25/2004	9	6
	09/22/2004	11	9
AS-07	07/27/2004	12	7
	08/25/2004	10	7
	09/22/2004	11	8.5
AS-08	07/27/2004	12.5	9
	08/25/2004	10.5	9
	09/22/2004	11	9
AS-09	07/27/2004	11.5	7
	08/25/2004	11.5	8.5
	09/22/2004	12	8
AS-10	07/27/2004	10	8
	08/25/2004	12	9
	09/22/2004	10.5	9

psi = pounds per square inch

acfm = actual cubic feet per minute

2.4 Water Level Measurements

Depth to groundwater measurements were recorded on September 27, 2004, from 15 monitoring wells during the monitoring period. The results from the groundwater level measurement surveys are provided in Table 2-2. Light non-aqueous phase liquid (LNAPL) was not detected in monitoring wells during the monitoring period.

The potentiometric surface of the groundwater at the site based on September 27, 2004, water levels are depicted on Figure 2-1. In general, the groundwater flows radially from the center of the site to the north, east, and south toward monitoring wells CEF-811-06S and NG-24S, respectively.

TABLE 2-2
Water Level Measurements
JETC, 3rd Quarter 2004

Monitoring Well	Date	TOC Elevation (feet)	Depth to Water (feet bTOC)	Water Level Elevation (feet NGVD)
CEF-334-01S	09/27/04	79.00	2.59	76.41
CEF-334-02S	09/27/04	78.61	2.32	76.29
CEF-334-02SA	09/27/04	79.06	2.56	76.50
CEF-334-32S	09/27/04	79.80	3.12	76.68
CEF-334-33S	09/27/04	79.24	2.85	76.39
CEF-334-34S	09/27/04	79.23	2.00	77.23
CEF-339-28S	09/27/04	79.52	2.69	76.83
CEF-339-29S	09/27/04	79.89	3.05	76.84
CEF-339-30S	09/27/04	79.31	2.56	76.75
CEF-811-06S	09/27/04	78.02	2.88	75.14
CEF-811-08S	09/27/04	79.26	2.93	76.33
CEF-811-16SR	09/27/04	79.54	2.39	77.15
CEF-811-17S	09/27/04	79.34	2.28	77.06
CEF-811-18S	09/27/04	79.52	2.95	76.57
NG-24S	09/27/04	78.17	2.97	75.20

Top of Casing Elevations and data prior to 04/27/00 obtained from BEI.

TOC - top of casing

bTOC - Below top of casing

Elevation is referenced to National Geodetic Vertical Datum 1929 (NGVD 1929).

Depth to water measured from top of casing.

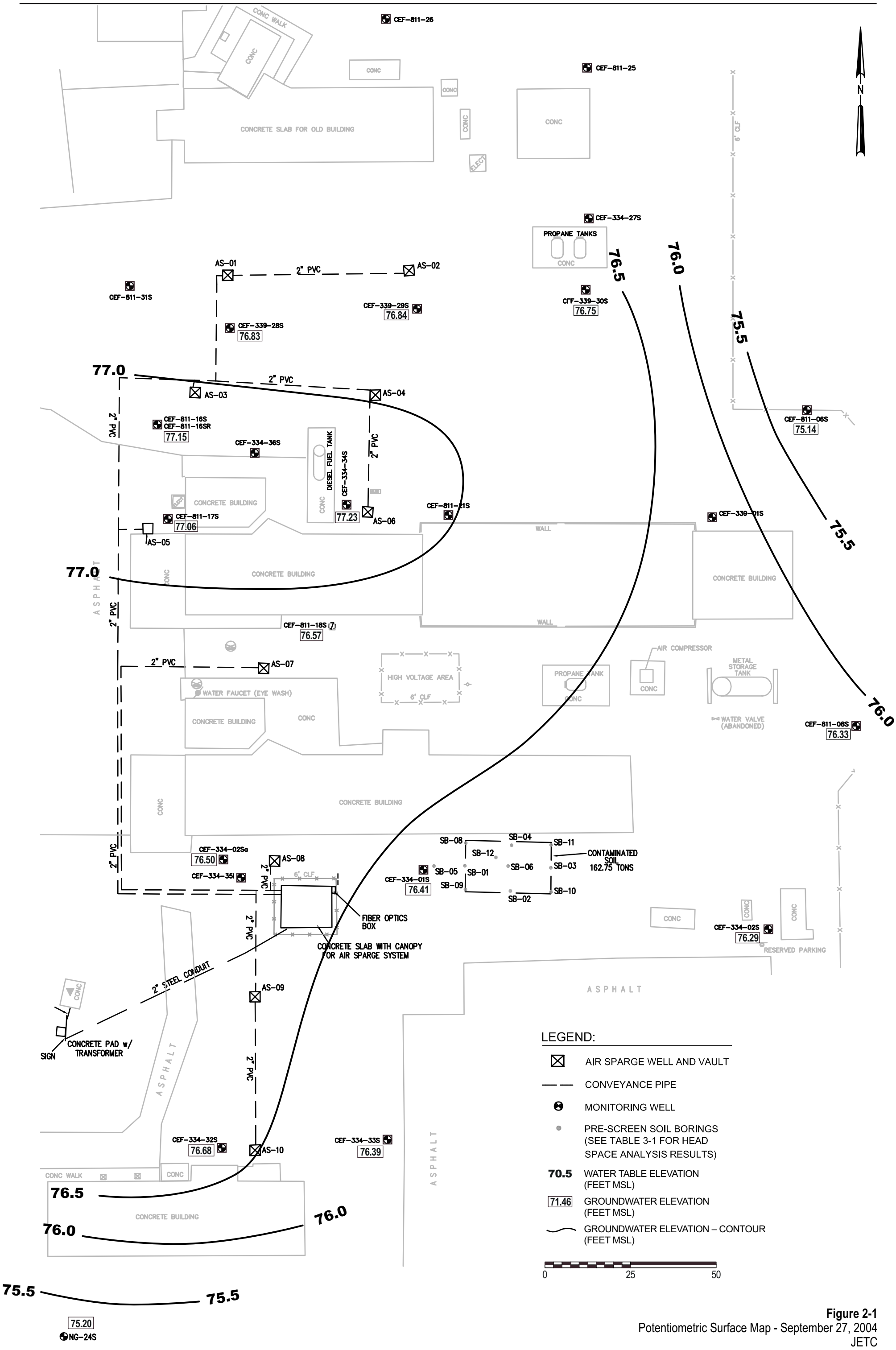

Figure 2-1
Potentiometric Surface Map - September 27, 2004
JETC
Former Naval Air Station, Cecil Field
Jacksonville, Florida

CH2MHILL

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3.0 Summary of Sampling and Laboratory Analytical Results

3.1 Vapor Monitoring

Air emissions concentrations were monitored on September 22, 2004, by collecting air samples from AS well vaults AS-01, AS-02, AS-03, AS-04, AS-05, AS-06, AS-07, AS-08, AS-10, and the fiberoptic junction box located south of Building 334 for analysis by U.S. Environmental Protection Agency (EPA) Method 18, TO-14. Air emissions screening is required to demonstrate that the 13.7 pounds per day Hazardous Air Pollutant threshold is not exceeded and local receptors will not be exposed to hazardous vapor emissions including migration to confined spaces. The air emissions screening locations were selected as representative confined spaces within the AS system radius of influence. Analytical results are summarized in Table 3-1. Historic air sample analytical results are presented on Table A-1 in Appendix A. Copies of the analytical laboratory reports from the air sampling events are provided in Appendix B.

The parameter carbon disulfide was detected at well vault AS-01 (sample ID 86-JETC-AS1-A-0922-04) and the fiber optic box (sample ID 86-JETC-FB-A-0922-04). This was the only analyte detected in the air samples. Because only one parameter was detected at low concentrations in two air samples, it was determined that the 13.7 pounds per day of VOCs was not exceeded during the AS system operation.

During the 2nd Quarter 2004, the parameters 1,2,4-trimethylbenzene and toluene were detected at AS-06 and AS-07 well vaults, respectively. These were the only analyte detections in the 2nd Quarter 2004 air samples. Only three parameters were detected during the last two quarterly air sampling events, which indicates that future air emissions will not exceed the 13.7 pounds per day threshold.

3.2 Groundwater Monitoring

CH2M HILL conducted the 3rd Quarter 2004 groundwater monitoring event on September 28, 2004. Groundwater samples were collected from 10 monitoring wells (CEF-334-02SA, CEF-334-32S, CEF-334-33S, CEF-334-34S, CEF-334-28S, CEF-334-29S, CEF-334-16SR, CEF-334-17S, CEF-334-18S, and NG-24S) during the monitoring period. The groundwater samples were laboratory analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tert butyl ether (MTBE) by EPA Method 8260B, the 16 listed polynuclear aromatic hydrocarbons (PAHs) and 1- and 2-methylnaphthalene by EPA Method 8310, and Total Recoverable Petroleum Hydrocarbons (TRPH) by the Florida Petroleum Residual Organic (FL-PRO) Method. The laboratory analytical results for the BETX and other detected parameters from the 3rd Quarter 2004 groundwater monitoring event are summarized in Table 3-2. The locations of the monitoring wells are shown on Figure 1-1. Historical groundwater sample analytical results are presented on Table A-2 in Appendix A.

Copies of the analytical laboratory reports from the groundwater monitoring events are provided in Appendix C.

Field parameters consisting of pH, temperature, dissolved oxygen (DO), and specific conductivity were measured during purging of the monitoring wells. The field parameters are summarized in Table 3-3. As expected, the aquifer at the JETC site within the treatment area remains highly aerobic with DO measurements above 1 milligram per liter (mg/L) and oxidation-reduction potential (ORP) measurements greater than 50 millivolts.

TRPH was the only parameter detected at a concentration above a GCTL in the groundwater sample collected from monitoring wells CEF-334-34S during the 3rd Quarter 2004. As compared to the baseline and 1st Quarter groundwater sampling results (See Table A-2 in Appendix A), in general, the 3rd Quarter 2004 groundwater VOC concentrations have decreased. However, the TRPH concentration remains relatively similar in well CEF-339-34S. The decreasing trend indicates that the air sparge system has been successful at reducing the groundwater contamination at the site.

TABLE 3-1
Summary of Air Analytical Results
JETC, 3rd Quarter 2004

Parameter	Station ID	Air Sparge-1	Air Sparge-2	Air Sparge-3	Air Sparge-4	Air Sparge-6	Air Sparge-7	Air Sparge-8	Air Sparge-10	Fiberoptic Box
	Sample ID	**86-JETC-AS1-A-0922-04**	**86-JETC-AS2-A-0922-04**	**86-JETC-AS3-A-0922-04**	**86-JETC-AS4-A-0922-04**	**86-JETC-AS6-A-0922-04**	**86-JETC-AS7-A-0922-04**	**86-JETC-AS8-A-0922-04**	**86-JETC-AS10-A-0922-04**	**86-JETC-FB-A-0922-04**
	Sample Date	**9/22/2004**	**9/22/2004**	**9/22/2004**	**9/22/2004**	**9/22/2004**	**9/22/2004**	**9/22/2004**	**9/22/2004**	**9/22/2004**
Volitale Organic Compounds		**milligrams per cubic meter (mg/m3)**								
1,1,1-Trichloroethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,1,2,2-Tetrachloroethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,1,2-trichloro-1,2,2-trifluoroethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,1,2-Trichloroethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,1-Dichloroethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,1-Dichloroethene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,2,4-Trichlorobenzene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,2,4-Trimethylbenzene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,2-Dibromoethane (Ethylene dibromide)		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,2-Dichlorobenzene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,2-Dichloroethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,2-Dichloropropane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,3,5-Trimethylbenzene (Mesitylene)		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,3-Dichlorobenzene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
1,4-Dichlorobenzene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
2-Chlorotoluene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
4-Ethyltoluene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Benzene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Bromodichloromethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Bromoform		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Bromomethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Carbon disulfide		**0.041 J**	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	**0.058 J**
Carbon tetrachloride		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Chlorobenzene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Chloroethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Chloroform		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Chloromethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
cis-1,2-Dichloroethene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
cis-1,3-Dichloropropene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Dichlorodifluoromethane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Ethylbenzene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Freon 114		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Hexachlorobutadiene		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
Hexane		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U
m,p-Xylene (sum of isomers)		0.13 U	0.13 U	0.13 U	0.14 U	10 U	0.14 U	0.13 U	0.13 U	0.13 U
Methylene chloride		0.065 U	0.064 U	0.067 U	0.068 U	5.1 U	0.068 U	0.067 U	0.067 U	0.067 U

TABLE 3-2
Summary of Detected Parameters in Groundwater Samples
JETC, 3rd Quarter 2004

Parameter	Station ID		CEF-334-05SA	CEF-334-32S	CEF-334-33S	CEF-334-34S	CEF-339-28S	CEF-339-29S	CEF-811-16SR	CEF-811-17S	CEF-811-18S	NG-24S
	Sample ID		86-334-2SA-Q3-04	86-334-32S-Q3-04	86-334-33S-Q3-04	86-334-34S-Q3-04	86-339-28S-Q3-04	86-339-29S-Q3-04	86-811-16SR-Q3-04	86-811-17S-Q3-04	86-811-18S-Q3-04	86-NG-24S-Q3-04
	Sample Date		09/28/2004	09/28/2004	09/28/2004	09/29/2004	09/29/2004	09/29/2004	09/28/2004	09/29/2004	09/28/2004	09/28/2004
	GCTL[1]	NADSC[1]										
	micrograms per liter (ug/L)											
Volatile organic compounds												
Benzene	1.0	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	30	300	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1.36 J	5 U
Tert-butyl methyl ether	50	500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	40	400	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes, total	20	200	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Semi-volatile organic compounds												
1-Methylnaphthalene	20	200	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	14.9	1 U
Naphthalene	20	200	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	8.92	0.25 U
TRPH												
petroleum hydrocarbons	5000	50000	1200	103	100 U	**8270**	866	265	67.5 J	204	1670	100 U

Notes:
GCTL - Groundwater Cleanup Target Level
NADSC - Natural Attenuation Default Source Concentration
1 = Ch 62-777 FAC Groundwater Cleanup Target Levels (GCTLs)
U - The analyte was analyzed for , but not detected.
J - Result is estimated
B-The analyte was detected in the associated method and/or calibration blank.
Bold indicates concentration exceeds Groundwater Target Cleanup Level
Shade indicates concentration exceeds Natural Attenuation Default Concentration
NA [a] - Not available sample bottles broke during shipment

TABLE 3-3
Field Parameter Measurements
JETC, 3rd Quarter 2004

		Groundwater					
Well	**Sample Date**	**pH**	**Conductivity (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (oC)**	**ORP (mV)**
CEF-334-01S	09/29/2004			Well damaged			
CEF-334-02S	09/29/2004	6.71	0.503	20	4.11	26.1	51
CEF-334-02SA	09/29/2004	6.39	0.186	517	6.7	26.8	-47
CEF-334-32S	09/29/2004	6.14	0.138	68	6.57	25.8	164
CEF-334-33S	09/29/2004	6.05	0.101	130	7.57	27.1	179
CEF-334-34S	09/29/2004	6.8	0.095	662	9.42	25.5	28
CEF-339-28S	09/29/2004	6.91	0.747	80	1.33	27	98
CEF-339-29S	09/29/2004	6.96	0.561	123	7.57	27.3	98
CEF-339-30S	09/29/2004	6.31	0.326	61	1.51	26.3	-85
CEF-811-06S	09/29/2004	5.98	0.119	83	4.18	27.1	153
CEF-811-08S	09/29/2004	6.33	0.121	128	5.29	26.9	83
CEF-811-16SR	09/29/2004	5.94	0.174	999	3.02	27.2	100
CEF-811-17S	09/29/2004	7.28	0.312	347	9.3	26.8	93
CEF-811-18S	09/29/2004	6.05	0.219	36	1.51	25.7	-120
NG-24S	09/29/2004	6.34	0.335	132	7.1	28.9	191

Note: All measurements taken using direct reading instruments in the field.
% = percent
mS/cm = milliSiemens per centimeter
NTU = nephelometric turbidity units
mg/L = milligrams per liter
^{o}C = degrees Celsius
ORP = oxygen reducing potential
mV = millivolts

4.0 Conclusions and Recommendations

The AS systems operated with minimal downtime during the monitoring period with a resulting operational efficiency of 67.2 percent.

The parameter carbon disulfide was detected at well vault AS-01 and the fiber optic box. This was the only analyte detected in the air samples. Because only one parameter was detected at such low concentrations in two air samples, it was determined that the emission standard of 13.7 pounds per day of VOCs was not exceeded during the AS system operation. CH2M HILL recommends the air sampling program at the JETC site be discontinued.

TRPH detected in monitoring wells CEF-334-34S and CEF-339-28S was the only parameter detected at concentrations above a GCTL during the 3rd Quarter 2004. As compared to the baseline and 1st Quarter groundwater sampling results, in general, the 3rd Quarter 2004 groundwater VOC concentrations have decreased. This decreasing trend indicates that the air sparge system has been successful at reducing the groundwater contamination at the site.

Based on the 3rd Quarter 2004 groundwater monitoring results, along with the decreasing contaminant trend since AS system startup, CH2M HILL recommends continuing operation of the AS system.

5.0 References

CH2M HILL Constructors, Inc. 2003. Work Plan Addendum No. 18, Work Plan Addendum No. 18 Installation of Air Sparging Systems at the Jet Engine Test Cell and Building 271, Naval Air Station Cecil Field, Jacksonville, Florida. August.

Tetra Tech NUS, Inc. 2002. Remedial Action Plan for Jet Engine Test Cell and Oil-Water Separator 334-OW at Naval Air Station Cecil Field, Jacksonville, Florida. September.

Tetra Tech NUS, Inc. 2003. Remedial Action Plan Addendum for Jet Engine Test Cell and Oil-Water Separator 334-OW at Naval Air Station Cecil Field, Jacksonville, Florida. January.

Appendix A

Historical Analytical Results

TABLE A-1
Historical Air Analytical Results
JETC, 3rd Quarter 2004

Station ID	Air Sparg 1							Air Sparg 2						
Sample ID	**86-JETC-AS1-A-1202-03**	**86-JETC-AS1-A-1210-03**	**86-JETC-AS1-A-1215-03**	**86-JETC-AS1-A-1223-03**	**86-JETC-AS1-A-0120-04**	**86-JETC-AS1-A-0408-04**	**86-JETC-AS1-A-0624-04**	**86-JETC-AS2-A-1202-03**	**86-JETC-AS2-A-1210-03**	**86-JETC-AS2-A-1215-03**	**86-JETC-AS2-A-1223-03**	**86-JETC-AS2-A-0120-04**	**86-JETC-AS2-A-0408-04**	**86-JETC-AS2-A-0624-04**
Sample Date	**12/2/2003**	**12/10/2003**	**12/15/2003**	**12/23/2003**	**1/20/2004**	**4/8/2004**	**6/24/2004**	**12/2/2003**	**12/10/2003**	**12/15/2003**	**12/23/2003**	**1/20/2004**	**4/8/2004**	**6/24/2004**
Parameter	**mg/m3**													
Volitale Organic Compounds														
1,2,4-Trimethylbenzene	0.067 U	2.1	0.068 U	0.068 U	0.052 J	0.069 U	0.07 U	0.34	0.059 J	0.067 U	0.068 U	0.058 J	0.069 U	0.072 U
1,3,5-Trimethylbenzene (Mesitylene)	0.067 U	0.58	0.068 U	0.068 U	0.067 U	0.069 U	0.07 U	0.11	0.055 J	0.067 U	0.068 U	0.067 U	0.069 U	0.072 U
4-ETHYLTOLUENE	0.067 U	1.4	0.068 U	0.068 U	0.067 U	0.069 U	0.07 U	0.23	0.049 J	0.067 U	0.068 U	0.06 J	0.069 U	0.072 U
Benzene	0.067 U	0.37	0.068 U	0.068 U	0.067 U	0.069 U	0.07 U	0.066 U	0.068 U	0.067 U	0.068 U	0.067 U	0.069 U	0.072 U
Carbon disulfide	0.067 U	0.067 U	0.068 U	0.068 U	0.067 U	0.12	0.07 U	0.066 U	0.068 U	0.067 U	0.068 U	0.067 U	0.069 U	0.072 U
Ethylbenzene	0.067 U	0.32	0.068 U	0.068 U	0.067 U	0.069 U	0.07 U	0.066 U	0.068 U	0.067 U	0.068 U	0.067 U	0.069 U	0.072 U
HEXANE	0.067 U	0.2	0.068 JB	0.058 J	0.067 U	0.069 U	0.07 U	0.066 U	0.068 U	0.067 U	0.078 JB	0.067 U	0.069 U	0.072 U
m-xylene (1,3-dimethylbenzene)	0.13 U	1.6	0.14 U	0.14 U	0.13 U	NA	0.14 U	0.13 U	0.14 U	0.13 U	0.14 U	0.13 U	NA	0.14 U
Methylene chloride	0.067 U	0.067 U	0.068 U	0.068 U	0.067 U	0.069 U	0.07 U	0.066 U	0.068 U	0.067 U	0.068 U	0.067 U	0.069 U	0.072 U
o-Xylene (1,2-Dimethylbenzene)	0.067 U	0.67	0.068 U	0.068 U	0.067 U	0.069 U	0.07 U	0.067	0.068 U	0.067 U	0.068 U	0.067 U	0.069 U	0.072 U
tert-butyl methyl ether	0.067 U	0.25	0.068 U	0.068 U	0.067 U	0.069 U	0.07 U	0.066 U	0.068 U	0.067 U	0.068 U	0.067 U	0.069 U	0.072 U
Tetrachloroethene (PCE)	1.5	0.067 U	0.068 U	0.068 U	0.067 U	0.069 U	0.07 U	0.066 U	0.068 U	0.067 U	0.068 U	0.067 U	0.069 U	0.072 U
Toluene	0.067 U	0.44	0.068 U	0.068 U	0.067 U	0.069 U	0.07 U	0.066 U	0.068 U	0.067 U	0.068 U	0.067 U	0.069 U	0.072 U

Notes
NA - not analyzed
U - The analyte was analyzed for , but not detected.
J - estimated value
B- Analyte detected in Blank

TABLE A-1
Historical Air Analytical Results
JETC, 3rd Quarter 2004

Station ID	Air Sparg 3							Air Sparg 4						
Sample ID	86-JETC-AS3-A-1202-03	86-JETC-AS3-A-1210-03	86-JETC-AS3-A-1215-03	86-JETC-AS3-A-1223-03	86-JETC-AS3-A-0120-04	86-JETC-AS3-A-0408-04	86-JETC-AS3-A-0624-04	86-JETC-AS4-A-1202-03	86-JETC-AS4-A-1210-03	86-JETC-AS4-A-1215-03	86-JETC-AS4-A-1223-03	86-JETC-AS4-A-0120-04	86-JETC-AS4-A-0408-04	86-JETC-AS4-A-0624-04
Sample Date	12/2/2003	12/10/2003	12/15/2003	12/23/2003	1/20/2004	4/8/2004	6/24/2004	12/2/2003	12/10/2003	12/15/2003	12/23/2003	1/20/2004	4/8/2004	6/24/2004
Parameter	mg/m3													
Volitale Organic Compounds														
1,2,4-Trimethylbenzene	11 JB	6.4 J	21 B	13 JB	3.8	0.068 U	0.072 U	0.35 J	6.3 J	20 JB	10 JB	4.6	0.19	0.072 U
1,3,5-Trimethylbenzene (Mesitylene)	2.9 J	2.1 J	4.9 JB	3.4 JB	2	0.1	0.072 U	0.41 J	1.1 J	2.2 JB	1.4 JB	1	0.37	0.072 U
4-ETHYLTOLUENE	4.4 J	3.8 J	6.7 JB	4.1 JB	1.4	0.068 U	0.072 U	0.33 J	1.8 J	3 JB	2 JB	1	0.061 J	0.072 U
Benzene	0.067 J	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.072 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.069 U	0.072 U
Carbon disulfide	0.067 U	0.068 U	0.048 J	0.067 U	0.067 U	0.068 U	0.072 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.069 U	0.072 U
Ethylbenzene	12 J	2.3 J	2.5 JB	0.88 JB	0.16	0.068 U	0.072 U	0.12 J	0.42 J	0.48 JB	0.21 JB	0.063 J	0.069 U	0.072 U
HEXANE	0.57 J	0.068 U	0.069 U	0.067 JB	0.067 U	0.068 U	0.072 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.069 U	0.072 U
m-xylene (1,3-dimethylbenzene)	11 J	2.3 J	2.9 JB	1 JB	0.24	NA	0.14 U	0.13 U	0.38 J	0.5 JB	0.18 JB	0.13 U	NA	0.14 U
Methylene chloride	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.072 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.069 U	0.072 U
o-Xylene (1,2-Dimethylbenzene)	0.82 J	0.25 J	0.39 JB	0.17 JB	0.065 J	0.068 U	0.072 U	0.066 U	0.068 U	0.043 JB	0.066 U	0.067 U	0.069 U	0.072 U
tert-butyl methyl ether	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.072 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.069 U	0.072 U
Tetrachloroethene (PCE)	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.072 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.069 U	0.072 U
Toluene	0.067 U	0.068 U	0.048 JB	0.067 U	0.067 U	0.068 U	0.072 U	0.066 U	0.068 U	0.044 JB	0.066 U	0.067 U	0.069 U	0.072 U

Notes
NA - not analyzed
U - The analyte was analyzed for , but no
J - estimated value
B- Analyte detected in Blank

TABLE A-1
Historical Air Analytical Results
JETC, 3rd Quarter 2004

Station ID	Air Sparg 5							Air Sparg 6						
Sample ID	86-JETC-AS5-A-1202-03	86-JETC-AS5-A-1210-03	86-JETC-AS5-A-1215-03	86-JETC-AS5-A-1223-03	86-JETC-AS5-A-0120-04	86-JETC-AS5-A-0408-04	86-JETC-AS5-A-0624-04	86-JETC-AS6-A-1202-03	86-JETC-AS6-A-1210-03	86-JETC-AS6-A-1215-03	86-JETC-AS6-A-1223-03	86-JETC-AS6-A-0120-04	86-JETC-AS6-A-0408-04	86-JETC-AS6-A-0624-04
Sample Date	12/2/2003	12/10/2003	12/15/2003	12/23/2003	1/20/2004	4/8/2004	6/24/2004	12/2/2003	12/10/2003	12/15/2003	12/23/2003	1/20/2004	4/8/2004	6/24/2004
Parameter			mg/m3											
Volitale Organic Compounds														
1,2,4-Trimethylbenzene	0.067 U	0.068 U	0.13 JB	0.067 U	0.067 U	0.068 U	0.075 U	0.11	0.068 U	0.21 JB	0.17 JB	0.16	0.07 U	**0.079**
1,3,5-Trimethylbenzene (Mesitylene)	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.075 U	0.066 U	0.068 U	0.056 JB	0.062 JB	0.067 U	0.07 U	0.072 U
4-ETHYLTOLUENE	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.075 U	0.11	0.068 U	0.13 JB	0.14 JB	0.11	0.07 U	0.072 U
Benzene	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.075 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.07 U	0.072 U
Carbon disulfide	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.075 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.07 U	0.072 U
Ethylbenzene	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.075 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.07 U	0.072 U
HEXANE	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.075 U	0.066 U	0.068 U	0.068 U	0.095 JB	0.067 U	0.07 U	0.072 U
m-xylene (1,3-dimethylbenzene)	0.13 U	0.14 U	0.14 U	0.13 U	0.13 U	NA	0.15 U	0.13 U	0.14 U	0.14 U	0.16 JB	0.13 U	NA	0.14 U
Methylene chloride	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.075 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.07 U	0.072 U
o-Xylene (1,2-Dimethylbenzene)	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.075 U	0.066 U	0.068 U	0.068 U	0.081 JB	0.067 U	0.07 U	0.072 U
tert-butyl methyl ether	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.075 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.07 U	0.072 U
Tetrachloroethene (PCE)	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.075 U	0.066 U	0.068 U	0.068 U	0.066 U	0.067 U	0.07 U	0.072 U
Toluene	0.067 U	0.068 U	0.069 U	0.067 U	0.067 U	0.068 U	0.075 U	0.066 U	0.068 U	0.068 U	0.05 J	0.067 U	0.07 U	0.072 U

Notes
NA - not analyzed
U - The analyte was analyzed for , but no
J - estimated value
B- Analyte detected in Blank

TABLE A-1
Historical Air Analytical Results
JETC, 3rd Quarter 2004

Station ID	Air Sparg 7							Air Sparg 8						
Sample ID	**86-JETC-AS7-A-1202-03**	**86-JETC-AS7-A-1210-03**	**86-JETC-AS7-A-1215-03**	**86-JETC-AS7-A-1223-03**	**86-JETC-AS7-A-0120-04**	**86-JETC-AS7-A-0408-04**	**86-JETC-AS7-A-0624-04**	**86-JETC-AS8-A-1202-03**	**86-JETC-AS8-A-1210-03**	**86-JETC-AS8-A-1215-03**	**86-JETC-AS8-A-1223-03**	**86-JETC-AS8-A-0120-04**	**86-JETC-AS8-A-0408-04**	**86-JETC-AS8-A-0624-04**
Sample Date	**12/2/2003**	**12/10/2003**	**12/15/2003**	**12/23/2003**	**1/20/2004**	**4/8/2004**	**6/24/2004**	**12/2/2003**	**12/10/2003**	**12/15/2003**	**12/23/2003**	**1/20/2004**	**4/8/2004**	**6/24/2004**
Parameter	**mg/m3**													**mg/m3**
Volitale Organic Compounds														
1,2,4-Trimethylbenzene	0.068 U	0.069 U	0.12 JB	0.24 JB	0.47	0.069 U	0.07 U	0.068 U	0.068 U	0.069 U	0.067 U	0.069 U	0.068 U	0.07 U
1,3,5-Trimethylbenzene (Mesitylene)	0.068 U	0.069 U	0.068 U	0.063 JB	0.068 U	0.069 U	0.07 U	0.068 U	0.068 U	0.069 U	0.067 U	0.069 U	0.068 U	0.07 U
4-ETHYLTOLUENE	0.068 U	0.069 U	0.089 JB	0.2 JB	0.18	0.069 U	0.07 U	0.068 U	0.068 U	0.069 U	0.067 U	0.069 U	0.068 U	0.07 U
Benzene	0.068 U	0.069 U	0.068 U	0.066 U	0.068 U	0.069 U	0.07 U	0.068 U	0.068 U	0.069 U	0.067 U	0.069 U	0.068 U	0.07 U
Carbon disulfide	0.068 U	0.069 U	0.068 U	0.066 U	0.068 U	0.069 U	0.07 U	0.068 U	0.068 U	0.069 U	0.067 U	0.069 U	0.068 U	0.07 U
Ethylbenzene	0.068 U	0.069 U	0.068 U	0.066 U	0.068 U	0.069 U	0.07 U	0.068 U	0.068 U	0.069 U	0.067 U	0.069 U	0.068 U	0.07 U
HEXANE	0.068 U	0.069 U	0.098 JB	0.079 JB	0.068 U	0.069 U	0.07 U	0.068 U	0.068 U	0.077 JB	0.067 U	0.069 U	0.068 U	0.07 U
m-xylene (1,3-dimethylbenzene)	0.14 U	0.14 U	0.12 JB	0.11 JB	0.14 U		0.14 U	0.14 U	0.14 U	0.14 U	0.13 U	0.14 U	NA	0.14 U
Methylene chloride	0.068 U	0.069 U	0.068 U	0.066 U	0.068 U	0.069 U	0.07 U	0.068 U	0.068 U	0.069 U	0.067 U	0.069 U	0.068 U	0.07 U
o-Xylene (1,2-Dimethylbenzene)	0.068 U	0.069 U	0.044 JB	0.059 JB	0.068 U	0.069 U	0.07 U	0.068 U	0.068 U	0.069 U	0.067 U	0.069 U	0.068 U	0.07 U
tert-butyl methyl ether	0.068 U	0.069 U	0.068 U	0.066 U	0.068 U	0.069 U	0.07 U	0.068 U	0.068 U	0.069 U	0.067 U	0.069 U	0.068 U	0.07 U
Tetrachloroethene (PCE)	0.068 U	0.069 U	0.068 U	0.066 U	0.068 U	0.069 U	0.07 U	0.068 U	0.068 U	0.069 U	0.067 U	0.069 U	0.068 U	0.07 U
Toluene	0.068 U	0.069 U	0.068 JB	0.083 JB	0.068 U	0.069 U	**0.048 J**	0.068 U	0.068 U	0.069 U	0.067 U	0.069 U	0.068 U	0.07 U

Notes
NA - not analyzed
U - The analyte was analyzed for , but no
J - estimated value
B- Analyte detected in Blank

TABLE A-1
Historical Air Analytical Results
JETC, 3rd Quarter 2004

Station ID	Air Sparg 10					
Sample ID	86-JETC-AS10-A-1202-03	86-JETC-AS10-A-1210-03	86-JETC-AS10-A-1215-03	86-JETC-AS10-A-1223-03	86-JETC-AS10-A-0120-04	86-JETC-AS10-A-0408-04
Sample Date	12/2/2003	12/10/2003	12/15/2003	12/23/2003	1/20/2004	4/8/2004
Parameter						
Volitale Organic Compounds						
1,2,4-Trimethylbenzene	5	0.068 U	0.1 JB	0.067 U	0.069 U	0.069 U
1,3,5-Trimethylbenzene (Mesitylene)	1.3	0.068 U	0.07 U	0.067 U	0.069 U	0.069 U
4-ETHYLTOLUENE	3.1	0.068 U	0.068 JB	0.067 U	0.069 U	0.069 U
Benzene	0.066 U	0.068 U	0.07 U	0.067 U	0.069 U	0.069 U
Carbon disulfide	0.066 U	0.056 J	0.07 U	0.067 U	0.069 U	0.069 U
Ethylbenzene	0.48	0.068 U	0.07 U	0.067 U	0.069 U	0.069 U
HEXANE	0.066 U	0.068 U	0.074 JB	0.067 U	0.069 U	0.069 U
m-xylene (1,3-dimethylbenzene)	2.3	0.14 U	0.14 U	0.13 U	0.14 U	
Methylene chloride	0.066 U	0.068 U	0.07 U	0.067 U	0.069 U	0.069 U
o-Xylene (1,2-Dimethylbenzene)	1.3	0.068 U	0.07 U	0.067 U	0.069 U	0.069 U
tert-butyl methyl ether	0.066 U	0.068 U	0.07 U	0.067 U	0.069 U	0.069 U
Tetrachloroethene (PCE)	0.066 U	0.068 U	0.07 U	0.067 U	0.069 U	0.069 U
Toluene	0.45	0.068 U	0.07 U	0.067 U	0.069 U	0.069 U

Notes
NA - not analyzed
U - The analyte was analyzed for , but no
J - estimated value
B- Analyte detected in Blank

TABLE A-2

Historical Groundwater Analytical Results

JETC, 3rd Quarter 2004

Parameter	Station ID		CEF-334-01S	CEF-334-02S	CEF-334-02SA			CEF-334-32S			CEF-334-33S		
	Sample ID		86-334-1S-Q4-03	86-334-2S-Q4-03	86-334-2SA-Q4-03	86-334-2SA-Q1-04	86-334-2SA-Q2-04	86-334-32S-Q4-03	86-334-32S-Q1-04	86-334-32S-Q2-04	86-334-33S-Q4-03	86-334-33S-Q1-04	86-334-33S-Q2-04
	Sample Date		10/29/2003	10/29/2003	10/28/2003	04/28/2004	06/29/2004	10/28/2003	04/28/2004	06/29/2004	10/28/2003	04/28/2004	06/29/2004
	GCTL[1]	NADSC[1]											
	micrograms per liter (ug/L)												
Volatile organic compounds													
Benzene	1.0	10	0.5 U	0.5 U	**1.05**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	30	300	1.94 J	5 U	20.9	5 U	1.79 J	1.05 J	5 U	5 U	5 U	5 U	5 U
tert-butyl methyl ether	50	500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	40	400	5 U	5 U	1.45 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes, total	20	200	1.2 J	10 U	**24.6**	10 U	10 U	4.29 J	10 U	10 U	10 U	10 U	10 U
Semi-volatile organic compounds							0.14 U						
1-methylnaphthalene	20	200	4.18 J	1 U	**51.2 J**	1 U	2.76	14.2 J	1 U	3.98	0.448 J	1 U	1 U
2-Methylnaphthalene	20	200	2.73	1 U	**84.2**	1 U	1.99	15.9	1 U	2.54	0.877 J	1 U	1 U
Benzo(k)fluoranthene*	0.5	5	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenz(a,h)anthracene*	0.2	2	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Naphthalene	20	200	5.62	0.25 U	**102**	0.25 U	5.16 J	10.9	0.25 U	0.495	2.92	0.25 U	0.817
TRPH													
petroleum hydrocarbons	5000	50000	279 JB	100 U	**5710 JB**	1090 JB	2040	955 JB	337 JB	100 U	100 U	165 JB	120 U

Notes:

GCTL - Groundwater Cleanup Target Level

NADC - Natural Attenuation Default Concentration

1 = Ch 62-777 FAC Groundwater Cleanup Target Levels (GCTLs)

U - The analyte was analyzed for , but not detected.

J - Result is estimated

B-The analyte was detected in the associated method and/or calibration blank.

Bold indicates concentration exceeds Groundwater Target Cleanup Level

Shade indicates concentration exceeds Natural Attenuation Default Concentration

NA - Not Available at time of rule adoption

NA [a] - Not available sample bottles broke during shipment

* Compound was analyzed using best developed available technology (BDAT), lower reporting or detection limits are not achievable by current technology.

TABLE A-2

Historical Groundwater Analytical Results

Parameter	Station ID		CEF-334-34S			CEF-339-28S			CEF-339-29S			CEF-339-30S	CEF-811-06S
	Sample ID		86-334-34S-Q4-03	86-334-34S-Q1-04	86-334-34S-Q2-04	86-339-28S-Q4-03	86-339-28S-Q1-04	86-339-28S-Q2-04	86-339-29S-Q4-03	86-339-29S-Q1-04	86-339-29S-Q2-04	86-339-30S-Q4-03	86-811-6S-Q4-03
	Sample Date		10/29/2003	04/29/2004	06/30/2004	10/29/2003	04/29/2004	06/30/2004	10/29/2003	04/29/2004	06/30/2004	10/29/2003	10/29/2003
	GCTL[1]	NADSC[1]											
Volatile organic compounds													
Benzene	1.0	10	0.5 U	0.5 U	0.5 U	**1.08**	0.5 U	0.5 U	0.59	0.5 U	0.5 U	0.139 J	0.5 U
Ethylbenzene	30	300	5 U	5 U	5 U	5 U	5 U	5 U	4.57 J	5 U	5 U	3.63 J	5 U
tert-butyl methyl ether	50	500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	40	400	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes, total	20	200	10 U	10 U	10 U	10 U	10 U	10 U	4.74 J	10 U	10 U	2.41 J	10 U
Semi-volatile organic compounds													
1-methylnaphthalene	20	200	1 U	1 U	1 U	**40**	1 U	1 U	14.2	1 U	1 U	**24.6 J**	1 U
2-Methylnaphthalene	20	200	1 U	1 U	1 U	**50.8**	1 U	1 U	13.3	1 U	1 U	12.8	1 U
Benzo(k)fluoranthene*	0.5	5	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U
Dibenz(a,h)anthracene*	0.2	2	0.1 U	0.1 U	0.1 U	**0.5 U**	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U
Naphthalene	20	200	0.25 U	0.25 U	0.25 U	**68**	0.25 U	0.25 U	**33.9**	0.25 U	0.25 U	15	0.25 U
TRPH													
petroleum hydrocarbons	5000	50000	**8990 JB**	984 JB	**5090**	1950 JB	**11200 JB**	**9130**	1640 JB	1170 JB	693	2540 JB	255 JB

Notes:

GCTL - Groundwater Cleanup Target Level

NADC - Natural Attenuation Default Concentration

1 = Ch 62-777 FAC Groundwater Cleanup Target Levels (GCTLs)

U - The analyte was analyzed for , but not detected.

J - Result is estimated

B-The analyte was detected in the associated method and/or calibration blank.

Bold indicates concentration exceeds Groundwater Target Cleanup Level

Shade indicates concentration exceeds Natural Attenuation Default Concentration

NA - Not Available at time of rule adoption

* Compound was analyzed using best developed available technology (BDAT), lower reporting or detection limits are not achievable by current technology.

Appendix B

Laboratory Analytical Reports for Air Samples

NAS Cecil Field

PREPARED FOR:	CTO 86/NAS Cecil Field, Jet C 3rd Qtr. Air Sampling Event 2004
FINAL REVIEWER/ INITIAL REVIEWER	Camden Robinson/ Associate Project Chemist/CCI
COPIES:	Mike Halil/J.A.Jones Env. Services
DATE:	October 19, 2004
SUBJECT:	Quality Assessment for Samples Collected September 22, 2004

This quality assurance memorandum is based upon a review of analytical data generated for the air samples collected September 22, 2004 at the Naval Air Station Cecil Field in Jacksonville, Florida. The samples were collected as a part of the Jet C 3rd quarter air sampling event conducted at the site. Table 1-1 presents a summary of the CCI sample identification numbers, dates of collection, sample matrices, and the analyses performed.

Severn Trent Laboratory (STL) of Pensacola, Florida served as the laboratory for the air samples collected during these sampling events for volatile organic compound (VOC) analysis by modified EPA method TO-14.

Data for the analyses were reviewed for adherence to the specified analytical protocols in accordance with CCI Sampling Analysis Plan. All analysis results have been validated or qualified according to general guidance provided in the Department of Defense (DOD) Quality Systems Manual - Version 2 Final (based on NELAP Voted Version 14 – 29 June 2002).

The findings of this quality assurance report are based upon the comprehensive review of the following results summaries reported according to the CCI Level C (CLP-like data deliverables format): chain of custody documentation, holding times, laboratory method blank analyses, bromofluorobenzene (BFB) mass tuning results, initial and continuing calibration, internal standard area performance summaries, target compound identification, laboratory control sample results, sample results, detection limits/sensitivity, and electronic data deliverables.

The analyses were performed acceptably, but require several qualifying statements; it is recommended that the analytical data be used only with the qualifying statements provided below. Any aspects of the data, which are not discussed in this report, should be considered qualitatively and quantitatively valid as reported, based on the deliverables reviewed. The validated and qualified results are presented in the data summary tables. Attachment A contains a copy of the chain of custody and the validated sample results.

Table 1-1

Summary Sample Data Reviewed

NAS Cecil Field

Sample Number	Laboratory ID	Date Sampled	Matrix	Analysis
86-JETC-AS1-A-0922-04	C409412*1	09/22/2004	Air	[1]
86-JETC-AS2-A-0922-04	C409412*2	09/22/2004	Air	[1]
86-JETC-AS3-A-0922-04	C409412*3	09/22/2004	Air	[1]
86-JETC-AS4-A-0922-04	C409412*4	09/22/2004	Air	[1]
86-JETC-AS6-A-0922-04	C409412*5	09/22/2004	Air	[1]
86-JETC-AS7-A-0922-04	C409412*6	09/22/2004	Air	[1]
86-JETC-AS8-A-0922-04	C409412*7	09/22/2004	Air	[1]
86-JETC-AS10-A-0922-04	C409412*8	09/22/2004	Air	[1]
86-JETC-FB-A-0922-04	C409412*9	09/22/2004	Air	[1]

ANALYSES PERFORMED CODES:

[1] - Volatile organic compounds (VOC) by EPA method TO-14

General Data Qualifiers

As required by U.S. EPA protocols, all compounds which were qualitatively identified at concentrations below their respective reporting limits (RL) but above the method detection limit (MDL) have been qualified with "J" qualifiers on the data summary reports to indicate that they are quantitative estimates.

Summary

The volatile air analyses were performed acceptably, but required qualifying statements. This analytical quality assurance report has identified the aspects of the data, which required qualification. These qualifiers are noted on the attached analytical sample summary reports. A support documentation package has been prepared for this quality assurance review and is filed with the NAS Cecil Field/JET C 3rd Quarter Air Sampling Event project file.

Attachment A

VALID QUALIFIERS

QUALIFIER	
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit
J	The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R/UR	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.
B	The analyte was detected in the associated method and/or calibration blank.
JB	The analyte detected in the associated field, equipment, and/or trip blank.

QUALIFICATION CODE REFERENCE

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect.
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
K	Second source %D was noncompliant.	Second source %D was noncompliant.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
MB	Presumed contamination from preparation (method) blank.	Presumed contamination from preparation (method) blank or calibration blank.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or high RPD.	MS/MSD recovery was poor or high RPD.
G	Result is over the calibration range. No other acceptable result was provided.	Result is over the calibration range. Not other acceptable result was provided.
E	Not applicable.	Lab duplicate RPD showed poor agreement.
Z	Field duplicate RPD showed poor agreement.	Field duplicate RPD showed poor agreement
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D was not within control limits.
TN	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination from trip blank.	Not applicable.
+	False positive—reported compound was not present.	Not applicable.
-	False negative—compound was present but not reported.	Not applicable.
F	Presumed contamination from FB or ER.	Presumed contamination from FB or ER.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.
D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Confirmation analysis RPD exceeded 40%.	Post Digestion Spike recovery was not within control limits.
T/D	Not applicable.	Total metals results were less than the dissolved metals result.
SD	Not applicable.	Seed correction factor was below the acceptable limit.
M	Reported values may be biased due to apparent matrix interferences. (AIR ANALYSIS ONLY)	Not applicable

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-1	86-JETC-AS1-A-0922-04	Air	09/24/04	09/22/04 16:35	
09412-2	86-JETC-AS2-A-0922-04	Air	09/24/04	09/22/04 16:37	
09412-3	86-JETC-AS3-A-0922-04	Air	09/24/04	09/22/04 16:39	
09412-4	86-JETC-AS4-A-0922-04	Air	09/24/04	09/22/04 16:41	
09412-5	86-JETC-AS6-A-0922-04	Air	09/24/04	09/22/04 16:45	

Parameter	Units	Lab Sample IDs 09412-1	09412-2	09412-3	09412-4	09412-5
Volatile Organic Compounds in Air						
Benzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Bromodichloromethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Bromoform	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Bromomethane (Methyl bromide)	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Carbon disulfide	mg/m3	0.041J	0.064U	0.067U	0.068U	5.1U
Carbon tetrachloride	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Chlorobenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Chloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Chloroform	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Chloromethane (Methyl chloride)	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
2-Chlorotoluene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Dibromochloromethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2-Dibromoethane (EDB)	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2-Dichlorobenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,3-Dichlorobenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,4-Dichlorobenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
trans-1,4-Dichloro-2-butene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Dichlorodifluoromethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1-Dichloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2-Dichloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1-Dichloroethene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
cis-1,2-Dichloroethene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
trans-1,2-Dichloroethene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2-Dichloropropane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
cis-1,3-Dichloropropene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-1	86-JETC-AS1-A-0922-04	Air	09/24/04	09/22/04 16:35	
09412-2	86-JETC-AS2-A-0922-04	Air	09/24/04	09/22/04 16:37	
09412-3	86-JETC-AS3-A-0922-04	Air	09/24/04	09/22/04 16:39	
09412-4	86-JETC-AS4-A-0922-04	Air	09/24/04	09/22/04 16:41	
09412-5	86-JETC-AS6-A-0922-04	Air	09/24/04	09/22/04 16:45	

Parameter	Units	Lab Sample IDs 09412-1	09412-2	09412-3	09412-4	09412-5
Volatile Organic Compounds in Air						
trans-1,3-Dichloropropene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Dichlorotetrafluoroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Ethylbenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Hexane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
4-Ethyltoluene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Hexachlorobutadiene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Methylene chloride (Dichloromethane)	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Methyl t-butyl ether (MTBE)	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Styrene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1,2,2-Tetrachloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Tetrachloroethene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Toluene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2,4-Trichlorobenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1,1-Trichloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1,2-Trichloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Trichloroethene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Trichlorofluoromethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2,4-Trimethylbenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,3,5-Trimethylbenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Vinyl chloride	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
o-Xylene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
m&p-Xylene	mg/m3	0.13U	0.13U	0.13U	0.14U	10U
Surrogate - 1,2-Dichloroethane-d4 *	%	101 %	102 %	104 %	101 %	102 %

CL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-1	86-JETC-AS1-A-0922-04	Air	09/24/04	09/22/04 16:35	
09412-2	86-JETC-AS2-A-0922-04	Air	09/24/04	09/22/04 16:37	
09412-3	86-JETC-AS3-A-0922-04	Air	09/24/04	09/22/04 16:39	
09412-4	86-JETC-AS4-A-0922-04	Air	09/24/04	09/22/04 16:41	
09412-5	86-JETC-AS6-A-0922-04	Air	09/24/04	09/22/04 16:45	

Parameter	Units	Lab Sample IDs 09412-1	09412-2	09412-3	09412-4	09412-5
Volatile Organic Compounds in Air						
Surrogate - Toluene-d8 *	%	101 %	103 %	102 %	101 %	101 %
Surrogate - 4-Bromofluorobenzene *	%	102 %	102 %	102 %	107 %	101 %
Dilution Factor		1	1	1	1	1
Prep Date		10/05/04	10/05/04	10/05/04	10/05/04	10/05/04
Prep Time		09:32	10:09	10:45	11:20	14:59
Analysis Date		10/05/04	10/05/04	10/05/04	10/05/04	10/05/04
Analysis Time		09:32	10:09	10:45	11:20	14:59
Batch ID		MAA069	MAA069	MAA069	MAA069	MAA069
Prep Method		MOD-TO14	MOD-TO14	MOD-TO14	MOD-TO14	MOD-TO14
Analyst		DWB	DWB	DWB	DWB	DWB
Quantitation Factor		2.18	2.12	2.24	2.25	169.89

C.L

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-6	86-JETC-AS7-A-0922-04	Air	09/24/04	09/22/04 16:47	
09412-7	86-JETC-AS8-A-0922-04	Air	09/24/04	09/22/04 16:49	
09412-8	86-JETC-AS10-A-0922-04	Air	09/24/04	09/22/04 16:51	
09412-9	86-JETC-FB-A-0922-04	Air	09/24/04	09/22/04 16:53	

Parameter	Units	Lab Sample IDs 09412-6	09412-7	09412-8	09412-9
Volatile Organic Compounds in Air					
Benzene	mg/m3	0.068U	0.067U	0.067U	0.067U
Bromodichloromethane	mg/m3	0.068U	0.067U	0.067U	0.067U
Bromoform	mg/m3	0.068U	0.067U	0.067U	0.067U
Bromomethane (Methyl bromide)	mg/m3	0.068U	0.067U	0.067U	0.067U
Carbon disulfide	mg/m3	0.068U	0.067U	0.067U	0.058J
Carbon tetrachloride	mg/m3	0.068U	0.067U	0.067U	0.067U
Chlorobenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
Chloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
Chloroform	mg/m3	0.068U	0.067U	0.067U	0.067U
Chloromethane (Methyl chloride)	mg/m3	0.068U	0.067U	0.067U	0.067U
2-Chlorotoluene	mg/m3	0.068U	0.067U	0.067U	0.067U
Dibromochloromethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2-Dibromoethane (EDB)	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2-Dichlorobenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,3-Dichlorobenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,4-Dichlorobenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
trans-1,4-Dichloro-2-butene	mg/m3	0.068U	0.067U	0.067U	0.067U
Dichlorodifluoromethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1-Dichloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2-Dichloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1-Dichloroethene	mg/m3	0.068U	0.067U	0.067U	0.067U
cis-1,2-Dichloroethene	mg/m3	0.068U	0.067U	0.067U	0.067U
trans-1,2-Dichloroethene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2-Dichloropropane	mg/m3	0.068U	0.067U	0.067U	0.067U
cis-1,3-Dichloropropene	mg/m3	0.068U	0.067U	0.067U	0.067U
trans-1,3-Dichloropropene	mg/m3	0.068U	0.067U	0.067U	0.067U

CL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-6	86-JETC-AS7-A-0922-04	Air	09/24/04	09/22/04 16:47	
09412-7	86-JETC-AS8-A-0922-04	Air	09/24/04	09/22/04 16:49	
09412-8	86-JETC-AS10-A-0922-04	Air	09/24/04	09/22/04 16:51	
09412-9	86-JETC-FB-A-0922-04	Air	09/24/04	09/22/04 16:53	

Parameter	Units	Lab Sample IDs 09412-6	09412-7	09412-8	09412-9
Volatile Organic Compounds in Air					
Dichlorotetrafluoroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
Ethylbenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
Hexane	mg/m3	0.068U	0.067U	0.067U	0.067U
4-Ethyltoluene	mg/m3	0.068U	0.067U	0.067U	0.067U
Hexachlorobutadiene	mg/m3	0.068U	0.067U	0.067U	0.067U
Methylene chloride (Dichloromethane)	mg/m3	0.068U	0.067U	0.067U	0.067U
Methyl t-butyl ether (MTBE)	mg/m3	0.068U	0.067U	0.067U	0.067U
Styrene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1,2,2-Tetrachloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
Tetrachloroethene	mg/m3	0.068U	0.067U	0.067U	0.067U
Toluene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2,4-Trichlorobenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1,1-Trichloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1,2-Trichloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
Trichloroethene	mg/m3	0.068U	0.067U	0.067U	0.067U
Trichlorofluoromethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2,4-Trimethylbenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,3,5-Trimethylbenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
Vinyl chloride	mg/m3	0.068U	0.067U	0.067U	0.067U
o-Xylene	mg/m3	0.068U	0.067U	0.067U	0.067U
m&p-Xylene	mg/m3	0.14U	0.13U	0.13U	0.13U
Surrogate - 1,2-Dichloroethane-d4 *	%	103 %	101 %	103 %	103 %
Surrogate - Toluene-d8 *	%	101 %	101 %	101 %	101 %

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-6	86-JETC-AS7-A-0922-04	Air	09/24/04	09/22/04 16:47	
09412-7	86-JETC-AS8-A-0922-04	Air	09/24/04	09/22/04 16:49	
09412-8	86-JETC-AS10-A-0922-04	Air	09/24/04	09/22/04 16:51	
09412-9	86-JETC-FB-A-0922-04	Air	09/24/04	09/22/04 16:53	

Parameter	Units	Lab Sample IDs 09412-6	09412-7	09412-8	09412-9
Volatile Organic Compounds in Air					
Surrogate -					
4-Bromofluorobenzene *	%	103 %	103 %	101 %	101 %
Dilution Factor		1	1	1	1
Prep Date		10/05/04	10/05/04	10/05/04	10/05/04
Prep Time		11:57	13:09	13:45	14:22
Analysis Date		10/05/04	10/05/04	10/05/04	10/05/04
Analysis Time		11:57	13:09	13:45	14:22
Batch ID		MAA069	MAA069	MAA069	MAA069
Prep Method		MOD-TO14	MOD-TO14	MOD-TO14	MOD-TO14
Analyst		DWB	DWB	DWB	DWB
Quantitation Factor		2.25	2.24	2.23	2.22

C+

CH2MHILL Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No: (770) 604-9182
Fax No: (770) 604-9282

C40942

CHAIN-OF-CUSTODY RECORD

COC NUMBER 171591-032 page 1 of 1

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
Former NAS Cecil Field	171591	STL - Pensacola Stephanie Akers	Jeff Marks CH2M Hill Constuctors, Inc.	6219 Authority Ave. Building 1 Jacksonville, FL 32221 (904) 7774812 FAX: (904) 7774262
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
JETC Quarterly Air Sampling Event	0086	6696	Bonnie Hogue CH2M Hill Constuctors, Inc.	115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 (770)604-9182 Ext.561 FAX:604-9282
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Jeff Marks	Ph:(904)777-4812 Fax:(904) 777-4262	Ph:(850) 474-1001 Fax: (850) 478-2671		

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	Volatiles by 18/TO 14										SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	86-JETC-AS1-A-0922-04	Air Sparge - 1	Air	09/22/04	1635	III/C	14	1										Grab	Summa Canister	128
2	86-JETC-AS2-A-0922-04	Air Sparge - 2	Air	09/22/04	1637	III/C	14	1										Grab	Summa Canister	071
3	86-JETC-AS3-A-0922-04	Air Sparge - 3	Air	09/22/04	1639	III/C	14	1										Grab	Summa Canister	018
4	86-JETC-AS4-A-0922-04	Air Sparge - 4	Air	09/22/04	1641	III/C	14	1										Grab	Summa Canister	210
5	86-JETC-AS6-A-0922-04	Air Sparge - 6	Air	09/22/04	1645	III/C	14	1										Grab	Summa Canister	064
6	86-JETC-AS7-A-0922-04	Air Sparge - 7	Air	09/22/04	1647	III/C	14	1										Grab	Summa Canister	050
7	86-JETC-AS8-A-0922-04	Air Sparge - 8	Air	09/22/04	1649	III/C	14	1										Grab	Summa Canister	044
8	86-JETC-AS10-A-0922-04	Air Sparge - 10	Air	09/22/04	1651	III/C	14	1										Grab	Summa Canister	225
9	86-JETC-FB-A-0922-04	Fiberoptic Box	Air	09/22/04	1653	III/C	14	1										Grab	Summa Canister	165
10																				

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Randy Dumaop AGVIQ Environmental Services	UPS Tracking Numbers:1Z2AE0480392702420, 1Z2AE0480394475039, 1Z2AE0480394543054.	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
R. Dumaop	9/23/2004	11:00	UPS Tracking Numbers:1Z2AE0480392702420, 1Z2AE0480394475039, 1Z2AE0480394543054.	9/23/2004	11:00
Printed Name and Signature:			Printed Name and Signature:		
			Raven Hedania	9-24-04	1002
Printed Name and Signature:			Printed Name and Signature:		

CH2M HILL C40942

Distribution: [ ] **Original** - Laboratory (To be returned with Analytical Report); [ ] **Copy 1** - Project File; [ ] **Copy 2** - PMO

Form CCI001, Rev 02/00

SEVERN TRENT STL

STL Pensacola
3355 McLemore Drive
Pensacola, FL 32514

Tel: 850 474 1001 Fax: 850 478 2671
www.stl-inc.com

CASE NARRATIVE

STL Order Number: **C409412**
Project: **CH2M Hill Constructors**
CTO-0086, Bldg. JETC Qterly, Former NAS Cecil Fld FL

The samples were received at STL Pensacola on September 24, 2004. See the PSIF (Project Sample Inspection Form) for additional information regarding sample receipt and inspection.

Client samples associated with this data package and their STL Pensacola designations are listed in the LIMS report and in the departmental case narrative.

There were no problems associated with the analysis of the client's samples.

Matrix spike/matrix spike duplicate analyses are not performed for GCMS air analyses.

See the department-specific case narrative for additional information regarding sample analysis.

I certify that this data package is in compliance with the terms and conditions of the CCI contract and statement of work both technically and for completeness, for other than the condition detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance manager or his/her designee, as verified by the following signature.

SCAkers

Stephanie C. Akers
Project Manager/QA

October 11, 2004

Error Report Summary

-

Error Level	Process Name	Process Description	Number
	No errors or warnings.		

Error Report Detail

-

Process	Message	Resolution
--		
	-- Post-import QC Query began at: 10/11/2004 11:55	
	Key: SDG [C409412]	
	-- Post-import QC Query ended at: 10/11/2004 11:55	
	Key:	

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STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Report

For: Mrs. Melissa Osborne
CH2M Hill Constructors, Inc. (CCI)
115 Perimeter Center Place, NE Suite 700
Atlanta, GA 30346
CC:

Order Number: C409412
SDG Number:
Client Project ID: 171591, CTO-0086
Project: JETC QTLY AIR SAMPLING, FORMER NAS CECIL FIELD
Report Date: 10/07/2004
Sampled By: Client
Sample Received Date: 09/24/2004
Requisition Number:
Purchase Order: 6696

SAkers

Stephanie Akers, Project Manager
SAkers@stl-inc.com

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Sample Summary

Order: C409412
Date Received: 09/24/2004

Client: CH2M Hill Constructors, Inc. (CCI)
Project: JETC QTLY AIR SAMPLING, FORMER NAS CECIL FIELD

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
86-JETC-AS1-A-0922-04	C409412*1	Air	09/22/2004 16:35
86-JETC-AS2-A-0922-04	C409412*2	Air	09/22/2004 16:37
86-JETC-AS3-A-0922-04	C409412*3	Air	09/22/2004 16:39
86-JETC-AS4-A-0922-04	C409412*4	Air	09/22/2004 16:41
86-JETC-AS6-A-0922-04	C409412*5	Air	09/22/2004 16:45
86-JETC-AS7-A-0922-04	C409412*6	Air	09/22/2004 16:47
86-JETC-AS8-A-0922-04	C409412*7	Air	09/22/2004 16:49
86-JETC-AS10-A-0922-04	C409412*8	Air	09/22/2004 16:51
86-JETC-FB-A-0922-04	C409412*9	Air	09/22/2004 16:53

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-1	86-JETC-AS1-A-0922-04	Air	09/24/04	09/22/04 16:35	
09412-2	86-JETC-AS2-A-0922-04	Air	09/24/04	09/22/04 16:37	
09412-3	86-JETC-AS3-A-0922-04	Air	09/24/04	09/22/04 16:39	
09412-4	86-JETC-AS4-A-0922-04	Air	09/24/04	09/22/04 16:41	
09412-5	86-JETC-AS6-A-0922-04	Air	09/24/04	09/22/04 16:45	

Parameter	Units	Lab Sample IDs 09412-1	09412-2	09412-3	09412-4	09412-5
Volatile Organic Compounds in Air						
Benzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Bromodichloromethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Bromoform	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Bromomethane (Methyl bromide)	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Carbon disulfide	mg/m3	0.041J	0.064U	0.067U	0.068U	5.1U
Carbon tetrachloride	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Chlorobenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Chloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Chloroform	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Chloromethane (Methyl chloride)	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
2-Chlorotoluene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Dibromochloromethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2-Dibromoethane (EDB)	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2-Dichlorobenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,3-Dichlorobenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,4-Dichlorobenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
trans-1,4-Dichloro-2-butene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Dichlorodifluoromethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1-Dichloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2-Dichloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1-Dichloroethene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
cis-1,2-Dichloroethene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
trans-1,2-Dichloroethene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2-Dichloropropane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
cis-1,3-Dichloropropene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-1	86-JETC-AS1-A-0922-04	Air	09/24/04	09/22/04 16:35	
09412-2	86-JETC-AS2-A-0922-04	Air	09/24/04	09/22/04 16:37	
09412-3	86-JETC-AS3-A-0922-04	Air	09/24/04	09/22/04 16:39	
09412-4	86-JETC-AS4-A-0922-04	Air	09/24/04	09/22/04 16:41	
09412-5	86-JETC-AS6-A-0922-04	Air	09/24/04	09/22/04 16:45	

Parameter	Units	Lab Sample IDs 09412-1	09412-2	09412-3	09412-4	09412-5
Volatile Organic Compounds in Air						
trans-1,3-Dichloropropene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Dichlorotetrafluoroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Ethylbenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Hexane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
4-Ethyltoluene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Hexachlorobutadiene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Methylene chloride (Dichloromethane)	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Methyl t-butyl ether (MTBE)	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Styrene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1,2,2-Tetrachloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Tetrachloroethene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Toluene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2,4-Trichlorobenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1,1-Trichloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1,2-Trichloroethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Trichloroethene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Trichlorofluoromethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,1,2-Trichloro-1,2,2-trifluor oethane	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,2,4-Trimethylbenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
1,3,5-Trimethylbenzene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
Vinyl chloride	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
o-Xylene	mg/m3	0.065U	0.064U	0.067U	0.068U	5.1U
m&p-Xylene	mg/m3	0.13U	0.13U	0.13U	0.14U	10U
Surrogate - 1,2-Dichloroethane-d4 *	%	101 %	102 %	104 %	101 %	102 %

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-1	86-JETC-AS1-A-0922-04	Air	09/24/04	09/22/04 16:35	
09412-2	86-JETC-AS2-A-0922-04	Air	09/24/04	09/22/04 16:37	
09412-3	86-JETC-AS3-A-0922-04	Air	09/24/04	09/22/04 16:39	
09412-4	86-JETC-AS4-A-0922-04	Air	09/24/04	09/22/04 16:41	
09412-5	86-JETC-AS6-A-0922-04	Air	09/24/04	09/22/04 16:45	

Parameter	Units	Lab Sample IDs 09412-1	09412-2	09412-3	09412-4	09412-5
Volatile Organic Compounds in Air						
Surrogate - Toluene-d8 *	%	101 %	103 %	102 %	101 %	101 %
Surrogate - 4-Bromofluorobenzene *	%	102 %	102 %	102 %	107 %	101 %
Dilution Factor		1	1	1	1	1
Prep Date		10/05/04	10/05/04	10/05/04	10/05/04	10/05/04
Prep Time		09:32	10:09	10:45	11:20	14:59
Analysis Date		10/05/04	10/05/04	10/05/04	10/05/04	10/05/04
Analysis Time		09:32	10:09	10:45	11:20	14:59
Batch ID		MAA069	MAA069	MAA069	MAA069	MAA069
Prep Method		MOD-TO14	MOD-TO14	MOD-TO14	MOD-TO14	MOD-TO14
Analyst		DWB	DWB	DWB	DWB	DWB
Quantitation Factor		2.18	2.12	2.24	2.25	169.89

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-6	86-JETC-AS7-A-0922-04	Air	09/24/04	09/22/04 16:47	
09412-7	86-JETC-AS8-A-0922-04	Air	09/24/04	09/22/04 16:49	
09412-8	86-JETC-AS10-A-0922-04	Air	09/24/04	09/22/04 16:51	
09412-9	86-JETC-FB-A-0922-04	Air	09/24/04	09/22/04 16:53	

Parameter	Units	Lab Sample IDs 09412-6	09412-7	09412-8	09412-9
Volatile Organic Compounds in Air					
Benzene	mg/m3	0.068U	0.067U	0.067U	0.067U
Bromodichloromethane	mg/m3	0.068U	0.067U	0.067U	0.067U
Bromoform	mg/m3	0.068U	0.067U	0.067U	0.067U
Bromomethane (Methyl bromide)	mg/m3	0.068U	0.067U	0.067U	0.067U
Carbon disulfide	mg/m3	0.068U	0.067U	0.067U	0.058J
Carbon tetrachloride	mg/m3	0.068U	0.067U	0.067U	0.067U
Chlorobenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
Chloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
Chloroform	mg/m3	0.068U	0.067U	0.067U	0.067U
Chloromethane (Methyl chloride)	mg/m3	0.068U	0.067U	0.067U	0.067U
2-Chlorotoluene	mg/m3	0.068U	0.067U	0.067U	0.067U
Dibromochloromethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2-Dibromoethane (EDB)	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2-Dichlorobenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,3-Dichlorobenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,4-Dichlorobenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
trans-1,4-Dichloro-2-butene	mg/m3	0.068U	0.067U	0.067U	0.067U
Dichlorodifluoromethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1-Dichloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2-Dichloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1-Dichloroethene	mg/m3	0.068U	0.067U	0.067U	0.067U
cis-1,2-Dichloroethene	mg/m3	0.068U	0.067U	0.067U	0.067U
trans-1,2-Dichloroethene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2-Dichloropropane	mg/m3	0.068U	0.067U	0.067U	0.067U
cis-1,3-Dichloropropene	mg/m3	0.068U	0.067U	0.067U	0.067U
trans-1,3-Dichloropropene	mg/m3	0.068U	0.067U	0.067U	0.067U

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-6	86-JETC-AS7-A-0922-04	Air	09/24/04	09/22/04 16:47	
09412-7	86-JETC-AS8-A-0922-04	Air	09/24/04	09/22/04 16:49	
09412-8	86-JETC-AS10-A-0922-04	Air	09/24/04	09/22/04 16:51	
09412-9	86-JETC-FB-A-0922-04	Air	09/24/04	09/22/04 16:53	

Parameter	Units	Lab Sample IDs 09412-6	09412-7	09412-8	09412-9
Volatile Organic Compounds in Air					
Dichlorotetrafluoroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
Ethylbenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
Hexane	mg/m3	0.068U	0.067U	0.067U	0.067U
4-Ethyltoluene	mg/m3	0.068U	0.067U	0.067U	0.067U
Hexachlorobutadiene	mg/m3	0.068U	0.067U	0.067U	0.067U
Methylene chloride (Dichloromethane)	mg/m3	0.068U	0.067U	0.067U	0.067U
Methyl t-butyl ether (MTBE)	mg/m3	0.068U	0.067U	0.067U	0.067U
Styrene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1,2,2-Tetrachloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
Tetrachloroethene	mg/m3	0.068U	0.067U	0.067U	0.067U
Toluene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2,4-Trichlorobenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1,1-Trichloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1,2-Trichloroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
Trichloroethene	mg/m3	0.068U	0.067U	0.067U	0.067U
Trichlorofluoromethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/m3	0.068U	0.067U	0.067U	0.067U
1,2,4-Trimethylbenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
1,3,5-Trimethylbenzene	mg/m3	0.068U	0.067U	0.067U	0.067U
Vinyl chloride	mg/m3	0.068U	0.067U	0.067U	0.067U
o-Xylene	mg/m3	0.068U	0.067U	0.067U	0.067U
m&p-Xylene	mg/m3	0.14U	0.13U	0.13U	0.13U
Surrogate - 1,2-Dichloroethane-d4 *	%	103 %	101 %	103 %	103 %
Surrogate - Toluene-d8 *	%	101 %	101 %	101 %	101 %

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-6	86-JETC-AS7-A-0922-04	Air	09/24/04	09/22/04 16:47	
09412-7	86-JETC-AS8-A-0922-04	Air	09/24/04	09/22/04 16:49	
09412-8	86-JETC-AS10-A-0922-04	Air	09/24/04	09/22/04 16:51	
09412-9	86-JETC-FB-A-0922-04	Air	09/24/04	09/22/04 16:53	

Parameter	Units	Lab Sample IDs 09412-6	09412-7	09412-8	09412-9
Volatile Organic Compounds in Air					
Surrogate -					
4-Bromofluorobenzene *	%	103 %	103 %	101 %	101 %
Dilution Factor		1	1	1	1
Prep Date		10/05/04	10/05/04	10/05/04	10/05/04
Prep Time		11:57	13:09	13:45	14:22
Analysis Date		10/05/04	10/05/04	10/05/04	10/05/04
Analysis Time		11:57	13:09	13:45	14:22
Batch ID		MAA069	MAA069	MAA069	MAA069
Prep Method		MOD-T014	MOD-T014	MOD-T014	MOD-T014
Analyst		DWB	DWB	DWB	DWB
Quantitation Factor		2.25	2.24	2.23	2.22

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-10	Method Blank	QC-A	09/24/04		
09412-11	LCS True Value	QC-A	09/24/04		
09412-12	Lab Control Standard Result	QC-A	09/24/04		
09412-13	Lab Control Standard % Recovery	QC-A	09/24/04		
09412-14	LCS Accuracy Control Limit (%R)	QC-A	09/24/04		

Parameter	Units	Lab Sample IDs 09412-10	09412-11	09412-12	09412-13	09412-14
Volatile Organic Compounds in Air						
Benzene	mg/m3	0.030U	0.5000	0.5079	102 %	87-116
Bromodichloromethane	mg/m3	0.030U				
Bromoform	mg/m3	0.030U				
Bromomethane (Methyl bromide)	mg/m3	0.030U				
Carbon disulfide	mg/m3	0.030U				
Carbon tetrachloride	mg/m3	0.030U				
Chlorobenzene	mg/m3	0.030U	0.5000	0.5100	102 %	88-111
Chloroethane	mg/m3	0.030U				
Chloroform	mg/m3	0.030U				
Chloromethane (Methyl chloride)	mg/m3	0.030U				
2-Chlorotoluene	mg/m3	0.030U				
Dibromochloromethane	mg/m3	0.030U				
1,2-Dibromoethane (EDB)	mg/m3	0.030U				
1,2-Dichlorobenzene	mg/m3	0.030U				
1,3-Dichlorobenzene	mg/m3	0.030U				
1,4-Dichlorobenzene	mg/m3	0.030U				
trans-1,4-Dichloro-2-butene	mg/m3	0.030U				
Dichlorodifluoromethane	mg/m3	0.030U				
1,1-Dichloroethane	mg/m3	0.030U				
1,2-Dichloroethane	mg/m3	0.030U				
1,1-Dichloroethene	mg/m3	0.030U	0.5000	0.5569	111 %	58-138
cis-1,2-Dichloroethene	mg/m3	0.030U				
trans-1,2-Dichloroethene	mg/m3	0.030U				
1,2-Dichloropropane	mg/m3	0.030U				
cis-1,3-Dichloropropene	mg/m3	0.030U				

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-10	Method Blank	QC-A	09/24/04		
09412-11	LCS True Value	QC-A	09/24/04		
09412-12	Lab Control Standard Result	QC-A	09/24/04		
09412-13	Lab Control Standard % Recovery	QC-A	09/24/04		
09412-14	LCS Accuracy Control Limit (%R)	QC-A	09/24/04		

Parameter	Units	Lab Sample IDs 09412-10	09412-11	09412-12	09412-13	09412-14
Volatile Organic Compounds in Air						
trans-1,3-Dichloropropene	mg/m3	0.030U				
Dichlorotetrafluoroethane	mg/m3	0.030U				
Ethylbenzene	mg/m3	0.030U				
Hexane	mg/m3	0.030U				
4-Ethyltoluene	mg/m3	0.030U				
Hexachlorobutadiene	mg/m3	0.030U				
Methylene chloride (Dichloromethane)	mg/m3	0.030U				
Methyl t-butyl ether (MTBE)	mg/m3	0.030U				
Styrene	mg/m3	0.030U				
1,1,2,2-Tetrachloroethane	mg/m3	0.030U				
Tetrachloroethene	mg/m3	0.030U				
Toluene	mg/m3	0.030U	0.5000	0.5222	104 %	86-113
1,2,4-Trichlorobenzene	mg/m3	0.030U				
1,1,1-Trichloroethane	mg/m3	0.030U				
1,1,2-Trichloroethane	mg/m3	0.030U				
Trichloroethene	mg/m3	0.030U	0.5000	0.5194	104 %	85-116
Trichlorofluoromethane	mg/m3	0.030U				
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/m3	0.030U				
1,2,4-Trimethylbenzene	mg/m3	0.030U				
1,3,5-Trimethylbenzene	mg/m3	0.030U				
Vinyl chloride	mg/m3	0.030U				
o-Xylene	mg/m3	0.030U				
m&p-Xylene	mg/m3	0.060U				
Surrogate - 1,2-Dichloroethane-d4 *	%	101 %	0.5000	0.5002	100 %	61-140

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-10	Method Blank	QC-A	09/24/04		
09412-11	LCS True Value	QC-A	09/24/04		
09412-12	Lab Control Standard Result	QC-A	09/24/04		
09412-13	Lab Control Standard % Recovery	QC-A	09/24/04		
09412-14	LCS Accuracy Control Limit (%R)	QC-A	09/24/04		

Parameter	Units	Lab Sample IDs 09412-10	09412-11	09412-12	09412-13	09412-14
Volatile Organic Compounds in Air						
Surrogate - Toluene-d8 *	%	99 %	0.5000	0.4992	100 %	90-109
Surrogate - 4-Bromofluorobenzene *	%	100 %	0.5000	0.5168	103 %	87-112
Dilution Factor		1		1		
Prep Date		10/05/04		10/05/04		
Prep Time		08:13		08:49		
Analysis Date		10/05/04		10/05/04		
Analysis Time		08:13		08:49		
Batch ID		MAA069	MAA069	MAA069	MAA069	
Prep Method		MOD-T014		MOD-T014		
Analyst		DWB		DWB		
Quantitation Factor		1		1		

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-15	Method Detection Limit (MDL)	QC-A	09/24/04		
09412-16	Reporting Limit (RL)	QC-A	09/24/04		

Parameter	Units	Lab Sample IDs 09412-15	09412-16
Volatile Organic Compounds in Air			
Benzene	mg/m3	0.018	0.030
Bromodichloromethane	mg/m3	0.017	0.030
Bromoform	mg/m3	0.018	0.030
Bromomethane (Methyl bromide)	mg/m3	0.021	0.030
Carbon disulfide	mg/m3	0.017	0.030
Carbon tetrachloride	mg/m3	0.017	0.030
Chlorobenzene	mg/m3	0.018	0.030
Chloroethane	mg/m3	0.020	0.030
Chloroform	mg/m3	0.017	0.030
Chloromethane (Methyl chloride)	mg/m3	0.026	0.030
2-Chlorotoluene	mg/m3	0.022	0.030
Dibromochloromethane	mg/m3	0.017	0.030
1,2-Dibromoethane (EDB)	mg/m3	0.015	0.030
1,2-Dichlorobenzene	mg/m3	0.018	0.030
1,3-Dichlorobenzene	mg/m3	0.018	0.030
1,4-Dichlorobenzene	mg/m3	0.017	0.030
trans-1,4-Dichloro-2-butene	mg/m3	0.015	0.030
Dichlorodifluoromethane	mg/m3	0.013	0.030
1,1-Dichloroethane	mg/m3	0.017	0.030
1,2-Dichloroethane	mg/m3	0.016	0.030
1,1-Dichloroethene	mg/m3	0.023	0.030
cis-1,2-Dichloroethene	mg/m3	0.017	0.030
trans-1,2-Dichloroethene	mg/m3	0.018	0.030
1,2-Dichloropropane	mg/m3	0.019	0.030
cis-1,3-Dichloropropene	mg/m3	0.016	0.030
trans-1,3-Dichloropropene	mg/m3	0.015	0.030
Dichlorotetrafluoroethane	mg/m3	0.019	0.030
Ethylbenzene	mg/m3	0.021	0.030

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09412-15	Method Detection Limit (MDL)	QC-A	09/24/04		
09412-16	Reporting Limit (RL)	QC-A	09/24/04		

Parameter	Units	Lab Sample IDs 09412-15	09412-16
Volatile Organic Compounds in Air			
Hexane	mg/m3	0.018	0.030
4-Ethyltoluene	mg/m3	0.021	0.030
Hexachlorobutadiene	mg/m3	0.021	0.030
Methylene chloride (Dichloromethane)	mg/m3	0.026	0.030
Methyl t-butyl ether (MTBE)	mg/m3	0.022	0.030
Styrene	mg/m3	0.020	0.030
1,1,2,2-Tetrachloroethane	mg/m3	0.019	0.030
Tetrachloroethene	mg/m3	0.019	0.030
Toluene	mg/m3	0.018	0.030
1,2,4-Trichlorobenzene	mg/m3	0.022	0.030
1,1,1-Trichloroethane	mg/m3	0.016	0.030
1,1,2-Trichloroethane	mg/m3	0.015	0.030
Trichloroethene	mg/m3	0.018	0.030
Trichlorofluoromethane	mg/m3	0.017	0.030
1,1,2-Trichloro-1,2,2-trifluor oethane	mg/m3	0.016	0.030
1,2,4-Trimethylbenzene	mg/m3	0.020	0.030
1,3,5-Trimethylbenzene	mg/m3	0.020	0.030
Vinyl chloride	mg/m3	0.019	0.030
o-Xylene	mg/m3	0.019	0.030
m&p-Xylene	mg/m3	0.035	0.060

SEVERN TRENT STL

Organic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
D	The result was obtained from a dilution.
E	The result exceeds the calibration range.
J	Estimated value because the analyte concentration is less than the reporting limit.
M	A matrix effect was present.
N	Presumptive evidence of a compound. The compound was identified qualitatively or as a Tentatively Identified Compound.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
P	Second-column or detector confirmation exceeded method criteria. Appropriate value is reported and data is flagged/qualified as instructed by method/regulation.
U or < or ND	The analyte was not detected.
*	The result is not within control limit(s).

Inorganic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
E	The reported value is estimated because of the presence of interference.
J	Estimated value because the analyte concentration is less than the reporting limit.
N	The spiked sample recovery is not within control limits.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
U or < or ND	The analyte was not detected.
*	Duplicate analysis not within control limits
M	The duplicate injection precision was not met.
S	The reported value was determined by the Method of Standard Addition (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance and post spike recovery is greater than or equal to 40%, the sample is flagged with a "W" and no further action is required.
+	The Standard Additions Correlation Coefficient is <0.995.
L	The result is not within control limit(s).

It is permissible to submit an Out-of-Control Events/Corrective Action form and/or Case Narrative in lieu of using above qualifiers.

When the laboratory receives a sample that does not meet EPA requirements for sample collection, preservation or holding time, the laboratory is required to reject the samples. The client must be notified and asked whether the lab should proceed with analysis. Data from any samples that do not meet sample acceptance criteria (collection, preservation and holding time), must be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF) in an unambiguous manner clearly defining the nature and substance of the variation. NPDES samples from North Carolina that do not meet EPA requirements for sample collection, preservation or holding time are non-reportable for NPDES compliance monitoring.

Abbreviations

ND	Not Detected at or above the STL Pensacola reporting limit (RL)
NS	Not Submitted
NA	Not Applicable
MDL	STL Pensacola Method Detection Limit

STL Pensacola

PROJECT SAMPLE INSPECTION FORM

SEVERN TRENT STL

Lab Order #: C40944D

Date Received: 9-24-04

1. Was there a Chain of Custody? Yes No+
2. Was Chain of Custody properly filled out and relinquished? Yes No+
3. Were all samples properly labeled and identified? Yes No+
4. Were samples received cold? (Criteria: 0.1° - 6°C: STL-SOP 1055) Yes No+ N/A
5. Did samples require splitting or compositing+? Yes+ No
6. Were samples received in proper containers for analysis requested? Yes No+
7. Were all sample containers received intact? Yes No+
8. Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)+* Yes No+ N/A
9. Is there sufficient volume for analysis requested? Yes No+ N/A (Cap)
10. Were samples received within Holding Time? (REFER TO STL-SOP 1040) Yes No+
11. Is Headspace (bubble) visible > ¼" diameter in VOA vial(s)?* Yes+ No N/A
12. **Were Trip Blanks Received?** Yes No N/A
13. **If yes, was analysis of Trip Blanks requested?** Yes No N/A
14. Were MS/MSD-specific bottles provided? Yes No+ N/A
15. If any issues, how was PM notified? PSIF ☐ Verbal ☐

Airbill Number(s): See airbills

Delivery By: UPS FedEx HD BUS DHL PE

(HD – Hand Delivery)

Cooler Number(s) & Temp(s) °C: BOX

(IE. #340L, 4°C, IR-1 – COOLER NUMBER, TEMPERATURE, THERMOMETER NUMBER)

Comments (reference item numbers above and list sample IDs/Tests where appropriate):

1 Summa canister was returned w/ "no sample" on label.

CH2MHILL Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No: (770) 604-9182
Fax No: (770) 604-9282

C40942

CHAIN-OF-CUSTODY RECORD

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Te
Former NAS Cecil Field	171591	STL - Pensacola Stephanie Akers	Jeff Marks CH2M Hill Constuctors, Inc.	6219 Authority Ave (904) 7774812 FA
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Te
JETC Quarterly Air Sampling Event	0086	6696	Bonnie Hogue CH2M Hill Constuctors, Inc.	115 Perimeter Cent (770)604-9182 Ext.5
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Te
Jeff Marks	Ph:(904)777-4812 Fax:(904) 777-4262	Ph:(850) 474-1001 Fax: (850) 478-2671		

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	Volatiles by 18/TO 14										SAMPLE (see cod back
1	86-JETC-AS1-A-0922-04	Air Sparge - 1	Air	09/22/04	1635	III/C	14	1										Gra
2	86-JETC-AS2-A-0922-04	Air Sparge - 2	Air	09/22/04	1637	III/C	14	1										Gra
3	86-JETC-AS3-A-0922-04	Air Sparge - 3	Air	09/22/04	1639	III/C	14	1										Gra
4	86-JETC-AS4-A-0922-04	Air Sparge - 4	Air	09/22/04	1641	III/C	14	1										Gra
5	86-JETC-AS6-A-0922-04	Air Sparge - 6	Air	09/22/04	1645	III/C	14	1										Gra
6	86-JETC-AS7-A-0922-04	Air Sparge - 7	Air	09/22/04	1647	III/C	14	1										Gra
7	86-JETC-AS8-A-0922-04	Air Sparge - 8	Air	09/22/04	1649	III/C	14	1										Gra
8	86-JETC-AS10-A-0922-04	Air Sparge - 10	Air	09/22/04	1651	III/C	14	1										Gra
9	86-JETC-FB-A-0922-04	Fiberoptic Box	Air	09/22/04	1653	III/C	14	1										Gra
10																		

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND
Randy Dumaop AGVIQ Environmental Services	UPS Tracking Numbers:1Z2AE0480392702420, 1Z2AE0480394475039, 1Z2AE0480394543054.	

RELINQUISHED BY	DATE	TIME	RECEIVED BY
Printed Name and Signature:			Printed Name and Signature:
R. Dumaop	9/23/2004	11:00	UPS Tracking Numbers:1Z2AE0480392702420, 1Z2AE0480394475039, 1Z2AE048039454
Printed Name and Signature:			Printed Name and Signature:
			Raven Hedaria
Printed Name and Signature:			Printed Name and Signature:

Distribution: [ ] Original - Laboratory (To be returned with Analytical Report); [ ] Copy 1 - Project File; [ ] Copy 2 - PMO

Volatiles by Modified TO14

Additional Information

AIR VOLATILE CASE NARRATIVE

LABORATORY NAME: STL PENSACOLA
CASE NUMBER: NA
SDG#: 409412
PROJECT NAME: JETC WEEKLY AIR SAMPLING, FORMER NAS CECIL FIELD

CLIENT ID#	STL ID #	STL SAMPLE NAME IN PACKAGE
86-JETC-AS1-A-092204	409412-1	AS1
86-JETC-AS2-A-092204	409412-2	AS2
86-JETC-AS3-A-092204	409412-3	AS3
86-JETC-AS4-A-092204	409412-4	AS4
86-JETC-AS6-A-092204	409412-5	AS6
86-JETC-AS7-A-092204	409412-6	AS7
86-JETC-AS8-A-092204	409412-7	AS8
86-JETC-AS10-A-092204	409412-8	AS10
86-JETC-FB-A-092204	409412-9	FB

The samples were received in good condition. When sample #5 was pressure checked it only showed 9 mm Hg. It appears that no sample was introduced into the Summa canister. The canister was pressurized and analyzed. The project manager was notified.

Larry Dilmore
GC/MS SUPERVISOR
October 6, 2004

2A

AIR VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name : STL PENSACOLA Contract : NA
Project : NA Site : NA Location : NA Group : NA
Lab File ID (Standard): CAM1005.D Date Analyzed : 5 Oct 2004
Instrument ID : MARILYN Time Analyzed : 7:36
GC Column : CAP ID : MARI Heated Purge (Y:N) : N
Level :

File	Sample	SMC1 #	SMC2 #	SMC3 #	SMC4 #	SMC5 #	SMC6 #	TOTAL OUT
094121	OS=09412-1 BT=A	101	101	102	0	0	0	0
094122	OS=09412-2 BT=A	102	103	102	0	0	0	0
094123	OS=09412-3 BT=A	104	102	102	0	0	0	0
094124	OS=09412-4 BT=A	101	101	107	0	0	0	0
094125	OS=09412-5 BT=A	102	101	101	0	0	0	0
094126	OS=09412-6 BT=A	103	101	103	0	0	0	0
094127	OS=09412-7 BT=A	101	101	103	0	0	0	0
094128	OS=09412-8 BT=A	103	101	101	0	0	0	0
094129	OS=09412-9 BT=A	103	101	101	0	0	0	0
MA069ABK	OS=09412-16 BT=	101	99	100	0	0	0	0
MA069LCS	OS=09412-12 BT=	100	100	103	0	0	0	0

QC Limits

SMC1 1,2-Dichloroethane-d4 SUBR#1

TO-14 NG-MG/M3 CONVERSION

order # 409412

Batch MAA068

	Actual ng result	Sample # 11 mg/m3 TRUE	12 mg/m3 RESULT	13 % REC	14 rec limit
Benzene	253.94	0.5000	0.5079	102%	87-116%
Chlorobenzene	255.02	0.5000	0.5100	102%	88-111%
1,1-Dichloroethene	278.46	0.5000	0.5569	111%	58-138%
Toluene	261.08	0.5000	0.5222	104%	86-113%
Trichloroethene	259.68	0.5000	0.5194	104%	85-116%
1,2-Dichloroethane-d4	250.11	0.5000	0.5002	100%	61-140%
Toluene-d8	249.60	0.5000	0.4992	100%	90-109%
4-Bromofluorobenzene	258.38	0.5000	0.5168	103%	87-112%

LCS Blank Summary Report

Data File : D:\HPCHEM\1\DATA\MARILYN\M100504\MA069LCS.D Vial: 4
Acq On : 5 Oct 2004 8:49 am Operator: DWB
Sample : OS=09412-12 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Multiplr: 1.00
MS Integration Params: rteint.p
Matrix : WATER

Method : D:\HPCHEM\1\METHODS\MARILYN\CRV093004 TO14\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Multiple Level Calibration

		Compound Name	Conc	Added	Recv(%)	QC Range	Q
10)	MC	1,1-Dichloroethene	278.46	250.00	111.38	58 to 138%	[ ]
12)		Methylene chloride	274.20	250.00	109.68	50 to 150%	[ ]
15)		trans-1,2-Dichloroet	259.91	250.00	103.96	50 to 150%	[ ]
17)	P	1,1-Dichloroethane	264.96	250.00	105.98	50 to 150%	[ ]
18)		cis-1,2-Dichloroethe	313.61	250.00	125.44	50 to 150%	[ ]
19)	C	Chloroform	256.94	250.00	102.78	50 to 150%	[ ]
21)		1,1,1-Trichloroethan	248.53	250.00	99.41	50 to 150%	[ ]
22)		Carbon tetrachloride	248.99	250.00	99.60	50 to 150%	[ ]
24)		1,2-Dichloroethane	257.50	250.00	103.00	50 to 150%	[ ]
25)		1,2-Dibromoethane	258.25	250.00	103.30	50 to 150%	[ ]
27)	M	Benzene	253.94	250.00	101.58	87 to 116%	[ ]
28)	M	Trichloroethene	259.68	250.00	103.87	85 to 116%	[ ]
29)	C	1,2-Dichloropropane	260.26	250.00	104.10	50 to 150%	[ ]
30)		Bromodichloromethane	251.39	250.00	100.56	50 to 150%	[ ]
31)		cis-1,3-Dichloroprop	263.01	250.00	105.20	50 to 150%	[ ]
33)	MC	Toluene	261.08	250.00	104.43	86 to 113%	[ ]
34)		trans-1,3-Dichloropr	238.78	250.00	95.51	50 to 150%	[ ]
35)		1,1,2-Trichloroethan	263.22	250.00	105.29	50 to 150%	[ ]
37)		Tetrachloroethene	261.78	250.00	104.71	50 to 150%	[ ]
38)		Dibromochloromethane	256.64	250.00	102.66	50 to 150%	[ ]
39)	MP	Chlorobenzene	255.02	250.00	102.01	88 to 111%	[ ]
40)	C	Ethylbenzene	259.14	250.00	103.66	50 to 150%	[ ]
41)		m,p-Xylene	536.50	500.00	107.30	50 to 150%	[ ]
42)		o-Xylene	256.35	250.00	102.54	50 to 150%	[ ]
43)		Styrene	284.89	250.00	113.96	50 to 150%	[ ]
44)	P	Bromoform	252.15	250.00	100.86	50 to 150%	[ ]
45)	P	1,1,2,2-Tetrachloroe	261.44	250.00	104.58	50 to 150%	[ ]
49)		1,3,5-Trimethylbenze	239.75	250.00	95.90	50 to 150%	[ ]
50)		2-Chlorotoluene	252.96	250.00	101.18	50 to 150%	[ ]
51)		1,2,4-Trimethylbenze	269.79	250.00	107.92	50 to 150%	[ ]
52)		1,3-Dichlorobenzene	267.45	250.00	106.98	50 to 150%	[ ]
53)		1,4-Dichlorobenzene	274.42	250.00	109.77	50 to 150%	[ ]
54)		1,2-Dichlorobenzene	266.34	250.00	106.53	50 to 150%	[ ]

4A

EPA SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

VBLKMA

Lab Name: STL PENSACOLA Contract: N/A

Lab Code: STL PN Case No.: N/A SAS No.: N/A SDG No.: C409412

Lab File ID: MA069ABK.D Lab Sample ID: OS=09412-16 BT=

Date Analyzed: 10/5/04 Time Analyzed: 8:13

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: MARILYN

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS MA	OS=09412-12 BT=A069	MA069LCS.D	8:49
02	AS1	OS=09412-1 BT=A069 R	094121.D	9:32
03	AS2	OS=09412-2 BT=A069 R	094122.D	10:09
04	AS3	OS=09412-3 BT=A069 R	094123.D	10:45
05	AS4	OS=09412-4 BT=A069 R	094124.D	11:20
06	AS7	OS=09412-6 BT=A069 R	094126.D	11:57
07	AS8	OS=09412-7 BT=A069 R	094127.D	13:09
08	AS10	OS=09412-8 BT=A069 R	094128.D	13:45
09	FB	OS=09412-9 BT=A069 R	094129.D	14:22
10	AS6	OS=09412-5 BT=A069 R	094125.D	14:59

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL PENSACOLA Contract: N/A

Lab Code: STL PN Case No.: N/A SAS No.: N/A SDG No.: C409412

Lab File ID: BFM0930A.D BFB Injection Date: 9/30/04

Instrument ID: MARILYN BFB Injection Time: 8:43

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.8
75	30.0 - 66.0% of mass 95	46.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	67.0
175	4.0 - 9.0% of mass 174	4.6 (6.9)1
176	93.0 - 101.0% of mass 174	65.7 (98.0)1
177	5.0 - 9.0% of mass 176	4.2 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0025	VSTD025	25MS30.D	9/30/04	9:20
02	VSTD0100	VSTD100	100MS30.D	9/30/04	9:57
03	VSTD0250	VSTD250	250MS30.D	9/30/04	10:33
04	VSTD0500	VSTD500	500MS30.D	9/30/04	11:10
05	VSTD1000	VSTD1000	1000MS30.D	9/30/04	11:47
06	VSTD1500	VSTD1500	1500MS30.D	9/30/04	12:23

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL PENSACOLA Contract: N/A

Lab Code: STL PN Case No.: N/A SAS No.: N/A SDG No.: C409412

Lab File ID: BFM1005A.D BFB Injection Date: 10/5/04

Instrument ID: MARILYN BFB Injection Time: 6:55

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.4
75	30.0 - 66.0% of mass 95	45.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	64.2
175	4.0 - 9.0% of mass 174	4.5 (7.0)1
176	93.0 - 101.0% of mass 174	63.0 (98.2)1
177	5.0 - 9.0% of mass 176	4.2 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0250	VSTD250	CAM1005.D	10/5/04	7:36
02	VBLKMA	OS=09412-16 BT=A069	MA069ABK.D	10/5/04	8:13
03	LCS MA	OS=09412-12 BT=A069	MA069LCS.D	10/5/04	8:49
04	AS1	OS=09412-1 BT=A069 R	094121.D	10/5/04	9:32
05	AS2	OS=09412-2 BT=A069 R	094122.D	10/5/04	10:09
06	AS3	OS=09412-3 BT=A069 R	094123.D	10/5/04	10:45
07	AS4	OS=09412-4 BT=A069 R	094124.D	10/5/04	11:20
08	AS7	OS=09412-6 BT=A069 R	094126.D	10/5/04	11:57
09	AS8	OS=09412-7 BT=A069 R	094127.D	10/5/04	13:09
10	AS10	OS=09412-8 BT=A069 R	094128.D	10/5/04	13:45
11	FB	OS=09412-9 BT=A069 R	094129.D	10/5/04	14:22
12	AS6	OS=09412-5 BT=A069 R	094125.D	10/5/04	14:59

Response Factor Report MARILYN

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 13:01:07 2004
Response via : Initial Calibration

DJB 9-30-04
9-30-04
D/O

Calibration Files

25	=25MS30.D	250	=250MS30.D	1500	=1500MS30.D
1000	=1000MS30.D	100	=100MS30.D	500	=500MS30.D

		Compound	25	250	1500	1000	100	500	Avg	%RSD
1)	I	Bromochloromethane IS	----------ISTD----------							
2)		Dichlorodifluoromet	1.831	1.570	1.370	1.464	1.510	1.616	1.560	10.11
3)		Dichlorotetrafluoro	1.058	1.278	1.320	1.255	1.255	1.358	1.254	8.30
4)	P	Chloromethane	1.033	1.029	1.004	0.986	0.964	1.075	1.015	3.88
5)	C	Vinyl chloride	1.066	1.098	1.136	1.109	1.014	1.153	1.096	4.59#
6)		Bromomethane	1.302	1.164	1.006	1.113	1.088	1.185	1.143	8.75
7)		Chloroethane	0.619	0.764	0.666	0.760	0.709	0.789	0.718	9.12
8)		Trichlorofluorometh	3.100	2.913	2.920	2.807	2.774	3.068	2.930	4.52
9)		1,1,2-Trichlorotrif	2.281	2.169	2.295	2.184	2.022	2.319	2.211	5.04
10)	MC	1,1-Dichloroethene	1.392	1.418	1.455	1.409	1.311	1.470	1.409	3.98#
11)		Iodomethane							0.000	-1.00
12)		Methylene chloride	1.703	1.623	1.649	1.630	1.625	1.688	1.653	2.08
13)		Carbon disulfide	4.438	4.238	4.408	4.257	4.088	4.428	4.310	3.24
14)		methyl-Tert-Butyl E	4.125	4.039	4.389	4.328	3.886	4.310	4.180	4.69
15)		trans-1,2-Dichloroe	1.845	1.836	1.820	1.806	1.728	1.922	1.826	3.44
16)		n-Hexane	2.441	1.836	1.722	1.746	1.941	1.912	1.933	13.64
17)	P	1,1-Dichloroethane	3.244	3.063	2.831	2.810	2.925	3.047	2.987	5.50
18)		cis-1,2-Dichloroeth	2.268	2.265	2.211	2.193	2.091	2.311	2.223	3.48
19)	C	Chloroform	3.608	3.544	3.381	3.426	3.241	3.608	3.468	4.20#
20)		Isooctane	8.494	6.278	5.924	5.928	6.618	6.399	6.607	14.58
21)		1,1,1-Trichloroetha	3.158	3.115	3.279	3.180	2.835	3.244	3.135	5.06
22)		Carbon tetrachlorid	2.752	2.712	2.965	2.841	2.465	2.887	2.770	6.32
23)	S	1,2-Dichloroethane	1.573	1.480	1.516	1.593	1.590	1.594	1.558	3.10
24)		1,2-Dichloroethane	1.748	1.737	1.854	1.838	1.672	1.840	1.782	4.12
25)		1,2-Dibromoethane	2.107	2.115	2.411	2.211	1.974	2.349	2.195	7.45
26)	I	1,4-Difluorobenzene I	----------ISTD----------							
27)	M	Benzene	0.950	0.931	0.891	0.887	0.857	0.930	0.908	3.85
28)	M	Trichloroethene	0.373	0.383	0.376	0.371	0.346	0.398	0.375	4.58
29)	C	1,2-Dichloropropane	0.310	0.328	0.325	0.327	0.309	0.339	0.323	3.58#
30)		Bromodichloromethan	0.598	0.622	0.618	0.625	0.570	0.627	0.610	3.61
31)		cis-1,3-Dichloropro	0.469	0.513	0.511	0.493	0.476	0.519	0.497	4.21
32)	S	Toluene-d8 SURR#2	0.894	0.895	0.895	0.883	0.895	0.897	0.893	0.59
33)	MC	Toluene	0.560	0.573	0.569	0.568	0.526	0.573	0.562	3.26#
34)		trans-1,3-Dichlorop	0.400	0.428	0.433	0.440	0.396	0.436	0.422	4.55
35)		1,1,2-Trichloroetha	0.267	0.293	0.291	0.295	0.270	0.300	0.286	4.84

Response Factor Report MARILYN

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 13:01:07 2004
Response via : Initial Calibration

Calibration Files
25 =25MS30.D 250 =250MS30.D 1500 =1500MS30.D
1000 =1000MS30.D 100 =100MS30.D 500 =500MS30.D

		Compound	25	250	1500	1000	100	500	Avg	%RSD
42)		o-Xylene	0.495	0.531	0.522	0.532	0.478	0.527	0.514	4.37
43)		Styrene	0.757	0.808	0.807	0.804	0.739	0.807	0.787	3.91
44)	P	Bromoform	0.367	0.423	0.422	0.443	0.374	0.430	0.410	7.63
45)	P	1,1,2,2-Tetrachloro	0.566	0.590	0.565	0.601	0.526	0.599	0.574	4.96
46)	S	4-Bromofluorobenzen	0.680	0.686	0.708	0.692	0.699	0.691	0.693	1.45
47)		1,4-Dichloro-2-bute	0.132	0.142	0.140	0.150	0.127	0.144	0.139	6.03
48)		4-Ethyltoluene	1.199	1.180	1.236	1.128	1.013	1.151	1.151	6.74
49)		1,3,5-Trimethylbenz	1.212	1.304	1.177	1.176	1.112	1.272	1.209	5.78
50)		2-Chlorotoluene	1.196	1.252	1.188	1.156	1.136	1.206	1.189	3.40
51)		1,2,4-Trimethylbenz	1.107	1.094	1.070	1.022	0.999	1.068	1.060	3.95
52)		1,3-Dichlorobenzene	0.661	0.694	0.674	0.654	0.650	0.684	0.670	2.60
53)		1,4-Dichlorobenzene	0.654	0.632	0.618	0.599	0.595	0.629	0.621	3.54
54)		1,2-Dichlorobenzene	0.577	0.639	0.614	0.608	0.561	0.633	0.605	5.08
55)		1,2,4-Trichlorobenz	0.366	0.365	0.340	0.324	0.336	0.345	0.346	4.80
56)		Napthalene	0.702	0.728	0.664	0.662	0.659	0.677	0.682	4.05
57)		Hexachlorobutadiene	0.210	0.231	0.203	0.192	0.197	0.196	0.205	7.04

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D Vial: 2
Acq On : 5 Oct 2004 7:36 Operator: DWB
Sample : VSTD250 Inst : MARILYN
Misc : AIR CC IC=09/30/04 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Multiple Level Calibration

DWB 10-5-04

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 2% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane IS#1	1.000	1.000	0.0	105	0.00
2		Dichlorodifluoromethane	1.560	1.568	-0.5	105	0.00
3		Dichlorotetrafluoroethane	1.254	1.373	-9.5#	113	0.00
4	P	Chloromethane	1.015	1.074	-5.8#	110	0.00
5	C	Vinyl chloride	1.096	1.179	-7.6#	113	0.00
6		Bromomethane	1.143	1.240	-8.5#	112	0.00
7		Chloroethane	0.718	0.833	-16.0#	115	0.00
8		Trichlorofluoromethane	2.930	3.039	-3.7#	110	0.00
9		1,1,2-Trichlorotrifluoroeth	2.211	2.213	-0.1	107	0.00
10	MC	1,1-Dichloroethene	1.409	1.475	-4.7#	109	0.00
11		Iodomethane	0.000	0.000	0.0	0#	-7.65#
12		Methylene chloride	1.653	1.819	-10.0#	118	0.00
13		Carbon disulfide	4.310	4.527	-5.0#	112	0.00
14		methyl-Tert-Butyl Ether	4.180	4.256	-1.8	111	0.00
15		trans-1,2-Dichloroethene	1.826	1.912	-4.7#	109	0.00
16		n-Hexane	1.933	2.150	-11.2#	123	0.00
17	P	1,1-Dichloroethane	2.987	3.263	-9.2#	112	0.00
18		cis-1,2-Dichloroethene	2.223	2.398	-7.9#	111	0.00
19	C	Chloroform	3.468	3.622	-4.4#	107	0.00
20		Isooctane	6.607	7.085	-7.2#	119	0.00
21		1,1,1-Trichloroethane	3.135	3.138	-0.1	106	0.00
22		Carbon tetrachloride	2.770	2.759	0.4	107	0.00
23	S	1,2-Dichloroethane d4 SURR#	1.558	1.565	-0.4	111	0.00
24		1,2-Dichloroethane	1.782	1.834	-2.9#	111	0.00
25		1,2-Dibromoethane	2.195	2.194	0.0	109	0.00
26	I	1,4-Difluorobenzene IS#2	1.000	1.000	0.0	111	0.00
27	M	Benzene	0.908	0.936	-3.1#	111	0.00
28	M	Trichloroethene	0.375	0.380	-1.3	110	0.00
29	C	1,2-Dichloropropane	0.323	0.338	-4.6#	114	0.00
30		Bromodichloromethane	0.610	0.619	-1.5	110	0.00
31		cis-1,3-Dichloropropene	0.497	0.524	-5.4#	113	0.00
32	S	Toluene-d8 SURR#2	0.893	0.896	-0.3	111	0.00
33	MC	Toluene	0.562	0.578	2.8#	112	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D
Acq On : 5 Oct 2004 7:36
Sample : VSTD250
Misc : AIR CC IC=09/30/04
MS Integration Params: rteint.p

Vial: 2
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 2% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	C	Ethylbenzene	0.430	0.436	-1.4#	110	0.00
41		m,p-Xylene	0.533	0.562	-5.4#	114	0.00
42		o-Xylene	0.514	0.533	-3.7#	113	0.00
43		Styrene	0.787	0.814	-3.4#	113	0.00
44	P	Bromoform	0.410	0.393	4.1#	105	0.00
45	P	1,1,2,2-Tetrachloroethane	0.574	0.570	0.7	109	0.00
46	S	4-Bromofluorobenzene SURR#3	0.693	0.705	-1.7	116	0.00
47		1,4-Dichloro-2-butene	0.139	0.137	1.4	108	0.00
48		4-Ethyltoluene	1.151	1.147	0.3	109	0.00
49		1,3,5-Trimethylbenzene	1.209	1.313	-8.6#	113	0.00
50		2-Chlorotoluene	1.189	1.252	-5.3#	112	0.00
51		1,2,4-Trimethylbenzene	1.060	1.076	-1.5	111	0.00
52		1,3-Dichlorobenzene	0.670	0.706	-5.4#	114	0.00
53		1,4-Dichlorobenzene	0.621	0.661	-6.4#	117	0.00
54		1,2-Dichlorobenzene	0.605	0.639	-5.6#	112	0.00
55		1,2,4-Trichlorobenzene	0.346	0.361	-4.3#	111	0.00
56		Napthalene	0.682	0.680	0.3	105	0.00
57		Hexachlorobutadiene	0.205	0.194	5.4#	94	0.00

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name : STL PENSACOLA Contract : NA
Project : NA Site : NA Location : NA Group : NA
Lab File ID (Standard): CAM1005.D Date Analyzed : 5 Oct 2004
Instrument ID : MARILYN Time Analyzed : 7:36
GC Column : CAP ID : MARI Heated Purge (Y:N) : N

	IS1 Area	#	RT	#	IS2 Area	#	RT	#	IS3 Area	#	RT	#
12 HOUR STD	313509		10.26		1772913		12.15		1303167		19.26	
UPPER LIMIT	627018		10.76		3545826		12.65		2606334		19.76	
LOWER LIMIT	156755		9.76		886457		11.65		651584		18.76	
File ID Sample												
094121 OS=09412-	299030		10.26		1683906		12.15		1266203		19.26	
094122 OS=09412-	294258		10.25		1632961		12.16		1235574		19.27	
094123 OS=09412-	312429		10.26		1723282		12.15		1291563		19.26	
094124 OS=09412-	317371		10.25		1763653		12.14		1319514		19.25	
094125 OS=09412-	311025		10.28		1710896		12.17		1274218		19.28	
094126 OS=09412-	309990		10.26		1768153		12.15		1318341		19.25	
094127 OS=09412-	295032		10.26		1638807		12.15		1238624		19.28	
094128 OS=09412-	303354		10.27		1707811		12.17		1272830		19.28	
094129 OS=09412-	305276		10.27		1703737		12.16		1265510		19.28	
MA069ABK OS=09412-	328284		10.25		1825930		12.16		1302680		19.26	
MA069LCS OS=09412-	318256		10.25		1765690		12.16		1274161		19.27	

IS1 = Bromochloromethane IS#1
IS2 = 1,4-Difluorobenzene IS#2

L i m s F i l e r

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-1	TO14	VM	MA	v1.0

LIMS Header Info

Analyst	DWB
Prep_Date	10.05.04
Prep_Time	09:32
Analysis_Date	10.05.04
Analysis_Time	09:32
Batch_ID	MAA069
Clock_ID	
Instrument_ID	MARILYN
Prep_Method	
Analytical_Method	
Dilution_Factor	1
Quantitation_Factor	0.00436
Initial_Vol	
Final_Vol	
Units	mg/m3

Initially Loaded - File : 094121.D Method : TO14S.M~W
@ D:\HPCHEM\1\DATA03\M100504\

Total Loaded Files : 1

	All	Selected
Total Results :	51	51
Targets :	48	48
Surrogates :	3	3

LIMS Results Info (All)

	Compound	Final Value Flags	CASNo	File ID	[/	Conc / Conc	RL / Added	RL@Mult / Limits	CFV] / %Rec}	T / S
1	Benzene	0.065U	71-43-2	094121.D	[	0.000	15,	0.065	<0.065]	T M
2	Bromodichloromethane	0.065U	75-27-4	094121.D	[	0.000	15,	0.065	<0.065]	T M
3	Bromoform	0.065U	75-25-2	094121.D	[	0.000	15,	0.065	<0.065]	T M
4	Bromomethane	0.065U	74-83-9	094121.D	[	0.000	15,	0.065	<0.065]	T M
5	Carbon disulfide	0.041J	75-15-0	094121.D	[	0.041<	15,	0.065	<0.065]	T M
6	Carbon tetrachloride	0.065U	56-23-5	094121.D	[	0.000	15,	0.065	<0.065]	T M
7	Chlorobenzene	0.065U	108-90-7	094121.D	[	0.000	15,	0.065	<0.065]	T M
8	Chloroethane	0.065U	75-00-3	094121.D	[	0.000	15,	0.065	<0.065]	T M
9	Chloroform	0.065U	67-66-3	094121.D	[	0.000	15,	0.065	<0.065]	T M
10	Chloromethane	0.065U	74-87-3	094121.D	[	0.000	15,	0.065	<0.065]	T M
11	2-Chlorotoluene	0.065U	95-49-8	094121.D	[	0.000	15,	0.065	<0.065]	T M
12	Dibromochloromethane	0.065U	124-48-1	094121.D	[	0.000	15,	0.065	<0.065]	T M
13	1,2-Dibromoethane	0.065U	106-93-4	094121.D	[	0.000	15,	0.065	<0.065]	T M
14	1,2-Dichlorobenzene	0.065U	95-50-1	094121.D	[	0.000	15,	0.065	<0.065]	T M
15	1,3-Dichlorobenzene	0.065U	541-73-1	094121.D	[	0.000	15,	0.065	<0.065]	T M
16	1,4-Dichlorobenzene	0.065U	106-46-7	094121.D	[	0.000	15,	0.065	<0.065]	T M
17	1,4-Dichloro-2-butene	0.065U	110-57-6	094121.D	[	0.000	15,	0.065	<0.065]	T M
18	Dichlorodifluoromethane	0.065U	75-71-8	094121.D	[	0.000	15,	0.065	<0.065]	T M
19	1,1-Dichloroethane	0.065U	75-34-3	094121.D	[	0.000	15,	0.065	<0.065]	T M
20	1,2-Dichloroethane	0.065U	107-06-2	094121.D	[	0.000	15,	0.065	<0.065]	T M
21	1,1-Dichloroethene	0.065U	75-35-4	094121.D	[	0.000	15,	0.065	<0.065]	T M
22	cis-1,2-Dichloroethene	0.065U	156-59-2	094121.D	[	0.000	15,	0.065	<0.065]	T M
23	trans-1,2-Dichloroethene	0.065U	156-60-5	094121.D	[	0.000	15,	0.065	<0.065]	T M
24	1,2-Dichloropropane	0.065U	78-87-5	094121.D	[	0.000	15,	0.065	<0.065]	T M

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-1	TO14	VM	MA	v1.0

LIMS Results Info ... Continued ... (All)

	Compound	Final Value Flags	CASNo	File ID	[Conc / { Conc	RL / Added	RL@Mult / Limits	CFV] / %Rec}	T / S
34	Styrene	0.065U	100-42-5	094121.D	[0.000	15,	0.065	<0.065]	T M
35	1,1,2,2-Tetrachloroethane	0.065U	79-34-5	094121.D	[0.000	15,	0.065	<0.065]	T M
36	Tetrachloroethene	0.065U	127-18-4	094121.D	[0.000	15,	0.065	<0.065]	T M
37	Toluene	0.065U	108-88-3	094121.D	[0.000	15,	0.065	<0.065]	T M
38	1,2,4-Trichlorobenzene	0.065U	120-82-1	094121.D	[0.000	15,	0.065	<0.065]	T M
39	1,1,1-Trichloroethane	0.065U	71-55-6	094121.D	[0.000	15,	0.065	<0.065]	T M
40	1,1,2-Trichloroethane	0.065U	79-00-5	094121.D	[0.000	15,	0.065	<0.065]	T M
41	Trichloroethene	0.065U	79-01-6	094121.D	[0.000	15,	0.065	<0.065]	T M
42	Trichlorofluoromethane	0.065U	75-69-4	094121.D	[0.000	15,	0.065	<0.065]	T M
43	1,1,2-Trichlorotrifluoroet	0.065U	76-13-1	094121.D	[0.000	15,	0.065	<0.065]	T M
44	1,2,4-Trimethylbenzene	0.065U	95-63-6	094121.D	[0.000	15,	0.065	<0.065]	T M
45	1,3,5-Trimethylbenzene	0.065U	108-67-8	094121.D	[0.000	15,	0.065	<0.065]	T M
46	Vinyl chloride	0.065U	75-01-4	094121.D	[0.000	15,	0.065	<0.065]	T M
47	o-Xylene	0.065U	95-47-6	094121.D	[0.000	15,	0.065	<0.065]	T M
48	m,p-Xylene	0.13U	108-38-3	094121.D	[0.000	30,	0.13	<0.13]	T M
49	1,2-Dichloroethane d4 SURR	101%	17060-07-0	094121.D	{ 252.797	250.000	61-140	101%}	S
50	Toluene-d8 SURR#2	101%	2037-26-5	094121.D	{ 253.336	250.000	90-109	101%}	S
51	4-Bromofluorobenzene SURR#	102%	460-00-4	094121.D	{ 254.848	250.000	87-112	102%}	S

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094121.D
Acq On : 5 Oct 2004 9:32
Sample : OS=09412-1 BT=A069 RLF=TO14
Misc : AIR UN=mg/m3 Pf/Pi=2.18 500ml
MS Integration Params: rteint.p
Quant Time: Oct 5 14:13 2004

Vial: 5
Operator: DWB
Inst : MARILYN
Multiplr: 0.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.26	128	299030	250.00 ng	0.00 95.38%
26) 1,4-Difluorobenzene IS#2	12.15	114	1683906	250.00 ng	0.00 94.98%
36) Chlorobenzene-d5 IS#3	19.26	117	1266203	250.00 ng	0.00 97.16%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.36	65	470969	252.80 ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 101.12%		
32) Toluene-d8 SURR#2	15.58	98	1523934	253.34 ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 101.34%		
46) 4-Bromofluorobenzene SURR#	22.35	95	894083	254.85 ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 101.94%		

Target Compounds

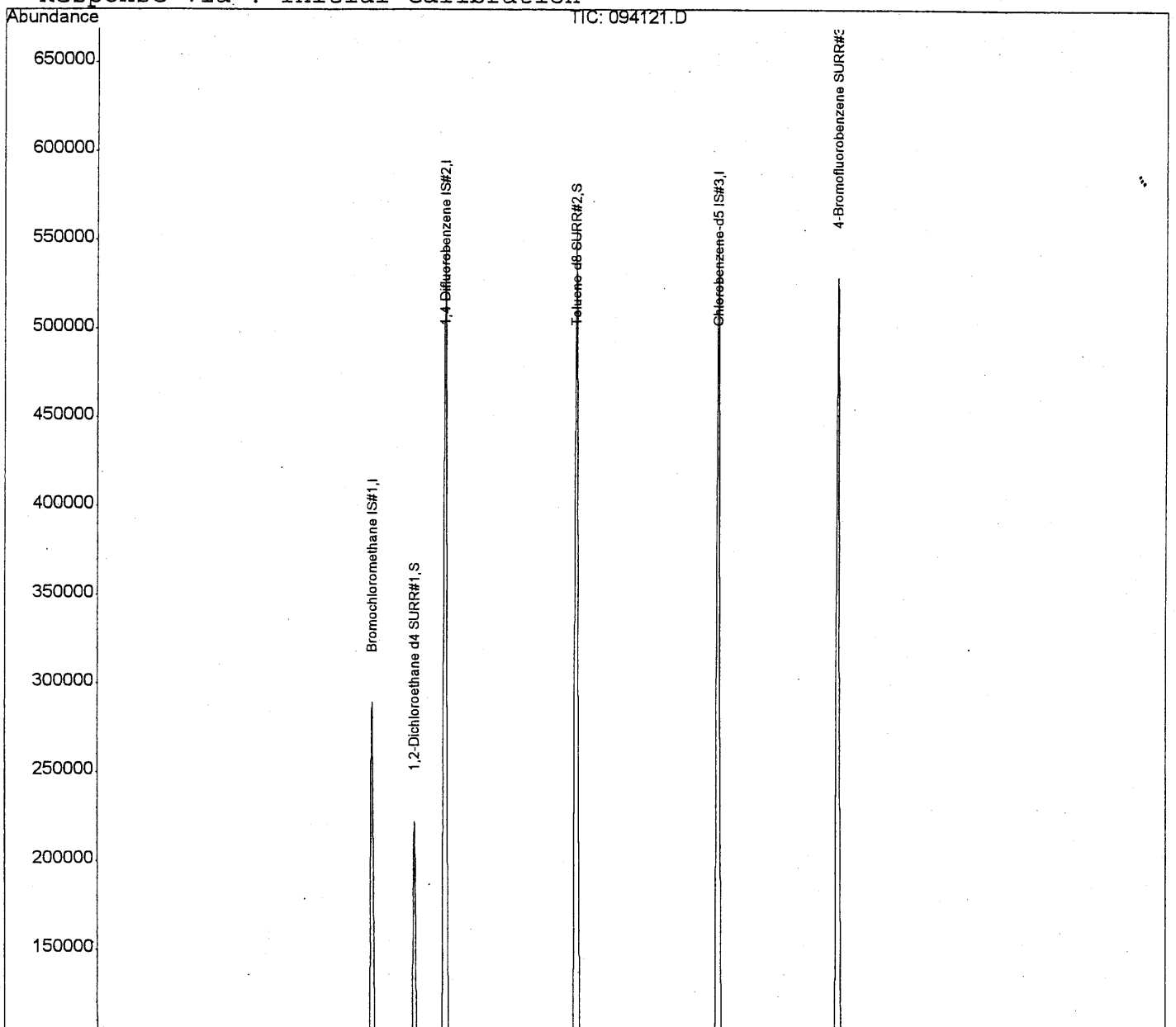
					Qvalue
13) Carbon disulfide	7.16	76	48748	0.04 ng	# 83

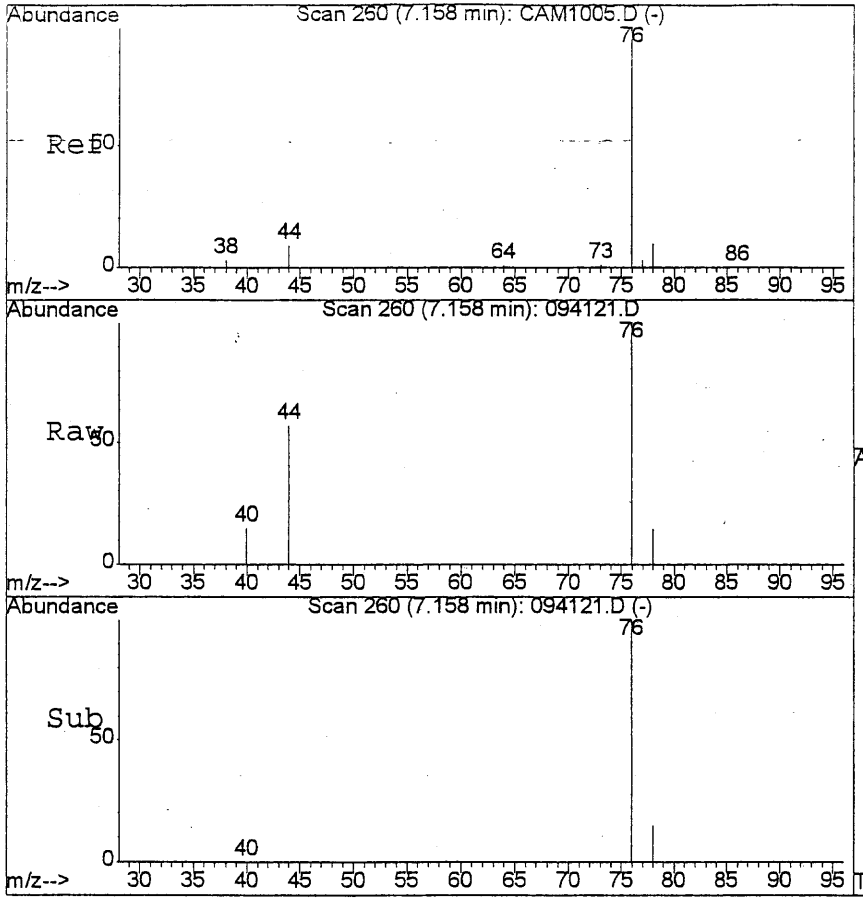
DWB 10-5-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094121.D Vial: 5
Acq On : 5 Oct 2004 9:32 Operator: DWB
Sample : OS=09412-1 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.18 500ml Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:13 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration

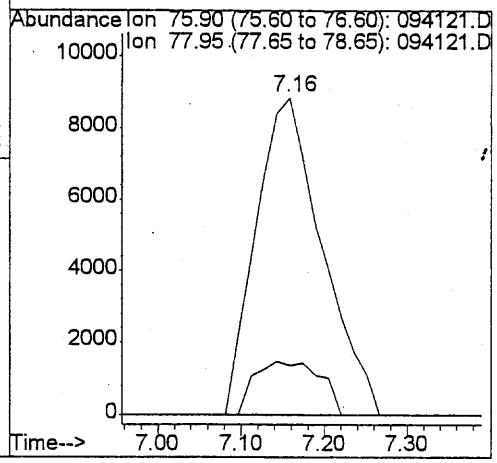




#13
Carbon disulfide
Concen: 0.04 ng
RT: 7.16 min Scan# 260
Delta R.T. 0.00 min
Lab File: 094121.D
Acq: 5 Oct 2004 9:32

Tgt Ion: 76 Resp: 48748

Ion	Ratio	Lower	Upper
76	100		
78	16.5	8.2	12.4#



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094121.D Vial: 5
Acq On : 5 Oct 2004 9:32 Operator: DWB
Sample : OS=09412-1 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.18 500ml Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:11 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

original

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.26	128	299030	250.00	ng	0.00 95.38%
26) 1,4-Difluorobenzene IS#2	12.15	114	1683906	250.00	ng	0.00 94.98%
36) Chlorobenzene-d5 IS#3	19.26	117	1266203	250.00	ng	0.00 97.16%

System Monitoring Compounds						
23) 1,2-Dichloroethane d4 SURR	11.36	65	470969	252.80	ng	0.00
Spiked Amount 250.000 Range 61 - 140 Recovery = 101.12%						
32) Toluene-d8 SURR#2	15.58	98	1523934	253.34	ng	0.00
Spiked Amount 250.000 Range 90 - 109 Recovery = 101.34%						
46) 4-Bromofluorobenzene SURR#	22.35	95	894083	254.85	ng	0.00
Spiked Amount 250.000 Range 87 - 112 Recovery = 101.94%						

Target Compounds						Qvalue
13) Carbon disulfide	7.16	76	48748	9.46	ng	# 83
33) Toluene	15.77	92	33893	8.96	ng B	# 90
56) Napthalene	29.74	128	28563	8.27	ng B	# 71

$= 2.18 P\left(\frac{500}{500}\right) / 500 = .00436$

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-2	TO14	VM	MA	v1.0

LIMS Header Info

Analyst	DWB
Prep_Date	10.05.04
Prep_Time	10:09
Analysis_Date	10.05.04
Analysis_Time	10:09
Batch_ID	MAA069
Clock_ID	
Instrument_ID	MARILYN
Prep_Method	
Analytical_Method	
Dilution_Factor	1
Quantitation_Factor	0.00424
Initial_Vol	
Final_Vol	
Units	mg/m3

Initially Loaded - File : 094122.D
@ D:\HPCHEM\1\DATA03\M100504\

Method : TO14S.M~W

Total Loaded Files : 1

	All	Selected
Total Results :	51	51
Targets :	48	48
Surrogates :	3	3

LIMS Results Info (All)

	Compound	Final Value Flags	CASNo	File ID	[(	Conc Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
1	Benzene	0.064U	71-43-2	094122.D	[	0.000	15,	0.064	<0.064]	T M
2	Bromodichloromethane	0.064U	75-27-4	094122.D	[	0.000	15,	0.064	<0.064]	T M
3	Bromoform	0.064U	75-25-2	094122.D	[	0.000	15,	0.064	<0.064]	T M
4	Bromomethane	0.064U	74-83-9	094122.D	[	0.000	15,	0.064	<0.064]	T M
5	Carbon disulfide	0.064U	75-15-0	094122.D	[	0.000	15,	0.064	<0.064]	T M
6	Carbon tetrachloride	0.064U	56-23-5	094122.D	[	0.000	15,	0.064	<0.064]	T M
7	Chlorobenzene	0.064U	108-90-7	094122.D	[	0.000	15,	0.064	<0.064]	T M
8	Chloroethane	0.064U	75-00-3	094122.D	[	0.000	15,	0.064	<0.064]	T M
9	Chloroform	0.064U	67-66-3	094122.D	[	0.000	15,	0.064	<0.064]	T M
10	Chloromethane	0.064U	74-87-3	094122.D	[	0.000	15,	0.064	<0.064]	T M
11	2-Chlorotoluene	0.064U	95-49-8	094122.D	[	0.000	15,	0.064	<0.064]	T M
12	Dibromochloromethane	0.064U	124-48-1	094122.D	[	0.000	15,	0.064	<0.064]	T M
13	1,2-Dibromoethane	0.064U	106-93-4	094122.D	[	0.000	15,	0.064	<0.064]	T M
14	1,2-Dichlorobenzene	0.064U	95-50-1	094122.D	[	0.000	15,	0.064	<0.064]	T M
15	1,3-Dichlorobenzene	0.064U	541-73-1	094122.D	[	0.000	15,	0.064	<0.064]	T M
16	1,4-Dichlorobenzene	0.064U	106-46-7	094122.D	[	0.000	15,	0.064	<0.064]	T M
17	1,4-Dichloro-2-butene	0.064U	110-57-6	094122.D	[	0.000	15,	0.064	<0.064]	T M
18	Dichlorodifluoromethane	0.064U	75-71-8	094122.D	[	0.000	15,	0.064	<0.064]	T M
19	1,1-Dichloroethane	0.064U	75-34-3	094122.D	[	0.000	15,	0.064	<0.064]	T M
20	1,2-Dichloroethane	0.064U	107-06-2	094122.D	[	0.000	15,	0.064	<0.064]	T M
21	1,1-Dichloroethene	0.064U	75-35-4	094122.D	[	0.000	15,	0.064	<0.064]	T M
22	cis-1,2-Dichloroethene	0.064U	156-59-2	094122.D	[	0.000	15,	0.064	<0.064]	T M
23	trans-1,2-Dichloroethene	0.064U	156-60-5	094122.D	[	0.000	15,	0.064	<0.064]	T M
24	1,2-Dichloropropane	0.064U	78-87-5	094122.D	[	0.000	15,	0.064	<0.064]	T M

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-2	TO14	VM	MA	v1.0

LIMS Results Info ... Continued ... (All)

	Compound	Final Value Flags	CASNo	File ID	[(	Conc Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
34	Styrene	0.064U	100-42-5	094122.D	[	0.000	15,	0.064	<0.064]	T M
35	1,1,2,2-Tetrachloroethane	0.064U	79-34-5	094122.D	[	0.000	15,	0.064	<0.064]	T M
36	Tetrachloroethene	0.064U	127-18-4	094122.D	[	0.000	15,	0.064	<0.064]	T M
37	Toluene	0.064U	108-88-3	094122.D	[	0.000	15,	0.064	<0.064]	T M
38	1,2,4-Trichlorobenzene	0.064U	120-82-1	094122.D	[	0.000	15,	0.064	<0.064]	T M
39	1,1,1-Trichloroethane	0.064U	71-55-6	094122.D	[	0.000	15,	0.064	<0.064]	T M
40	1,1,2-Trichloroethane	0.064U	79-00-5	094122.D	[	0.000	15,	0.064	<0.064]	T M
41	Trichloroethene	0.064U	79-01-6	094122.D	[	0.000	15,	0.064	<0.064]	T M
42	Trichlorofluoromethane	0.064U	75-69-4	094122.D	[	0.000	15,	0.064	<0.064]	T M
43	1,1,2-Trichlorotrifluoroet	0.064U	76-13-1	094122.D	[	0.000	15,	0.064	<0.064]	T M
44	1,2,4-Trimethylbenzene	0.064U	95-63-6	094122.D	[	0.000	15,	0.064	<0.064]	T M
45	1,3,5-Trimethylbenzene	0.064U	108-67-8	094122.D	[	0.000	15,	0.064	<0.064]	T M
46	Vinyl chloride	0.064U	75-01-4	094122.D	[	0.000	15,	0.064	<0.064]	T M
47	o-Xylene	0.064U	95-47-6	094122.D	[	0.000	15,	0.064	<0.064]	T M
48	m,p-Xylene	0.13U	108-38-3	094122.D	[	0.000	30,	0.13	<0.13]	T M
49	1,2-Dichloroethane d4 SURR	102%	17060-07-0	094122.D	(	255.899	250.000	61-140	102%)	S
50	Toluene-d8 SURR#2	103%	2037-26-5	094122.D	(	258.432	250.000	90-109	103%)	S
51	4-Bromofluorobenzene SURR#	102%	460-00-4	094122.D	(	256.178	250.000	87-112	102%)	S

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094122.D Vial: 6
Acq On : 5 Oct 2004 10:09 Operator: DWB
Sample : OS=09412-2 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.12 500ml Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:19 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.25	128	294258	250.00	ng	0.00 93.86%
26) 1,4-Difluorobenzene IS#2	12.16	114	1632961	250.00	ng	0.00 92.11%
36) Chlorobenzene-d5 IS#3	19.27	117	1235574	250.00	ng	0.00 94.81%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.35	65	469141	255.90	ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 102.36%			
32) Toluene-d8 SURR#2	15.58	98	1507553	258.43	ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 103.37%			
46) 4-Bromofluorobenzene SURR#	22.36	95	877010	256.18	ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 102.47%			

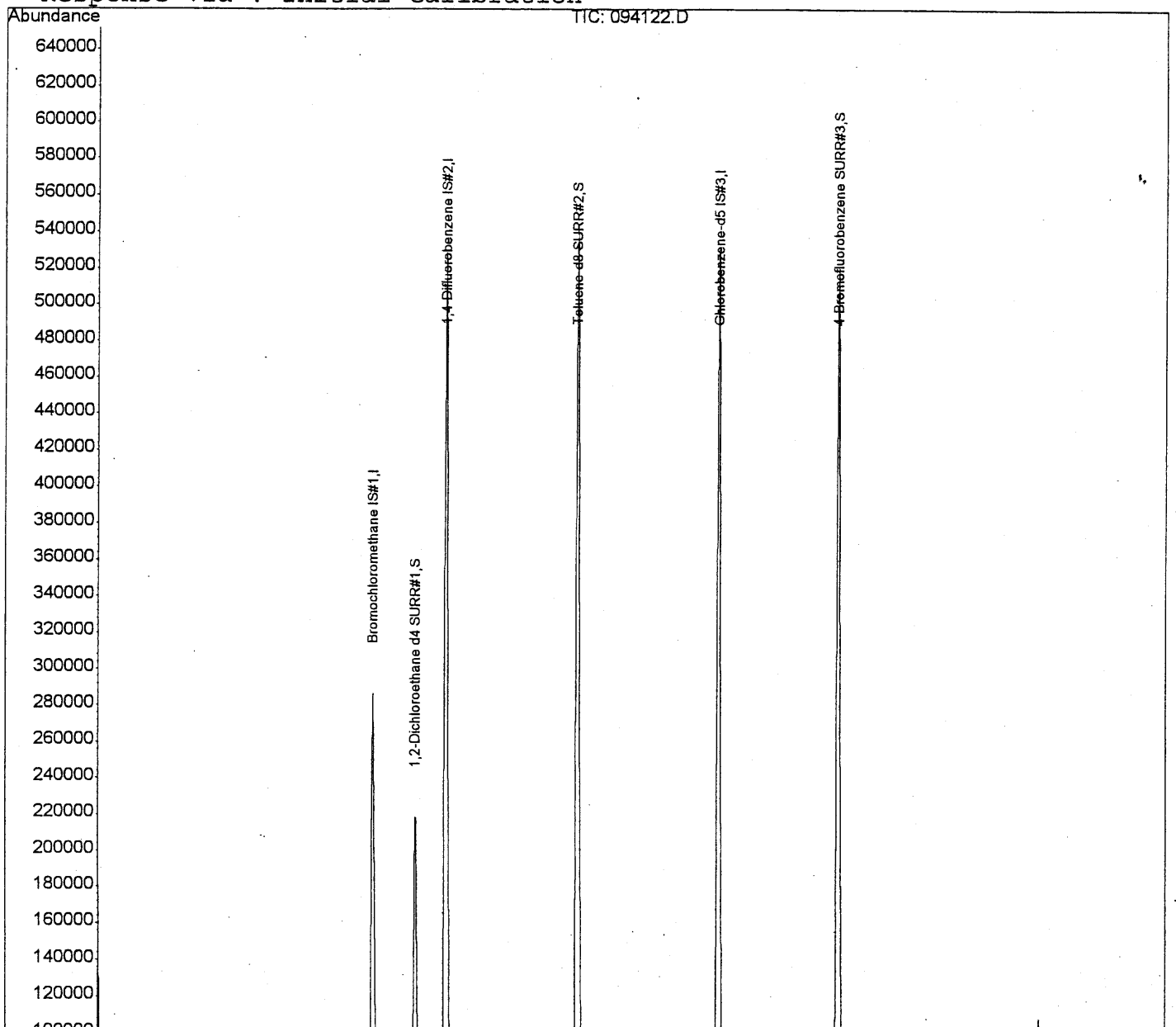
Target Compounds Qvalue

DWB 10-5-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094122.D Vial: 6
Acq On : 5 Oct 2004 10:09 Operator: DWB
Sample : OS=09412-2 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.12 500ml Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:19 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094122.D Vial: 6
Acq On : 5 Oct 2004 10:09 Operator: DWB
Sample : OS=09412-2 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.12 500ml Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:11 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

original

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.25	128	294258	250.00 ng	0.00 93.86%
26) 1,4-Difluorobenzene IS#2	12.16	114	1632961	250.00 ng	0.00 92.11%
36) Chlorobenzene-d5 IS#3	19.27	117	1235574	250.00 ng	0.00 94.81%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.35	65	469141	255.90 ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 102.36%		
32) Toluene-d8 SURR#2	15.58	98	1507553	258.43 ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 103.37%		
46) 4-Bromofluorobenzene SURR#	22.36	95	877010	256.18 ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 102.47%		

Target Compounds Qvalue

$m = 2.12\left(\frac{500}{500}\right)/500 = .00424$

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-3	TO14	VM	MA	v1.0

LIMS Header Info

Analyst	DWB
Prep_Date	10.05.04
Prep_Time	10:45
Analysis_Date	10.05.04
Analysis_Time	10:45
Batch_ID	MAA069
Clock_ID	
Instrument_ID	MARILYN
Prep_Method	
Analytical_Method	
Dilution_Factor	1
Quantitation_Factor	0.00448
Initially_Vol	
Final_Vol	
Units	mg/m3

Initially Loaded - File : 094123.D @ D:\HPCHEM\1\DATA03\M100504\

Method : TO14S.M~W

Total Loaded Files : 1

	All	Selected
Total Results :	51	51
Targets :	48	48
Surrogates :	3	3

LIMS Results Info (All)

	Compound	Final Value Flags	CASNo	File ID	[(	Conc Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
1	Benzene	0.067U	71-43-2	094123.D	[	0.000	15,	0.067	<0.067]	T M
2	Bromodichloromethane	0.067U	75-27-4	094123.D	[	0.000	15,	0.067	<0.067]	T M
3	Bromoform	0.067U	75-25-2	094123.D	[	0.000	15,	0.067	<0.067]	T M
4	Bromomethane	0.067U	74-83-9	094123.D	[	0.000	15,	0.067	<0.067]	T M
5	Carbon disulfide	0.067U	75-15-0	094123.D	[	0.000	15,	0.067	<0.067]	T M
6	Carbon tetrachloride	0.067U	56-23-5	094123.D	[	0.000	15,	0.067	<0.067]	T M
7	Chlorobenzene	0.067U	108-90-7	094123.D	[	0.000	15,	0.067	<0.067]	T M
8	Chloroethane	0.067U	75-00-3	094123.D	[	0.000	15,	0.067	<0.067]	T M
9	Chloroform	0.067U	67-66-3	094123.D	[	0.000	15,	0.067	<0.067]	T M
10	Chloromethane	0.067U	74-87-3	094123.D	[	0.000	15,	0.067	<0.067]	T M
11	2-Chlorotoluene	0.067U	95-49-8	094123.D	[	0.000	15,	0.067	<0.067]	T M
12	Dibromochloromethane	0.067U	124-48-1	094123.D	[	0.000	15,	0.067	<0.067]	T M
13	1,2-Dibromoethane	0.067U	106-93-4	094123.D	[	0.000	15,	0.067	<0.067]	T M
14	1,2-Dichlorobenzene	0.067U	95-50-1	094123.D	[	0.000	15,	0.067	<0.067]	T M
15	1,3-Dichlorobenzene	0.067U	541-73-1	094123.D	[	0.000	15,	0.067	<0.067]	T M
16	1,4-Dichlorobenzene	0.067U	106-46-7	094123.D	[	0.000	15,	0.067	<0.067]	T M
17	1,4-Dichloro-2-butene	0.067U	110-57-6	094123.D	[	0.000	15,	0.067	<0.067]	T M
18	Dichlorodifluoromethane	0.067U	75-71-8	094123.D	[	0.000	15,	0.067	<0.067]	T M
19	1,1-Dichloroethane	0.067U	75-34-3	094123.D	[	0.000	15,	0.067	<0.067]	T M
20	1,2-Dichloroethane	0.067U	107-06-2	094123.D	[	0.000	15,	0.067	<0.067]	T M
21	1,1-Dichloroethene	0.067U	75-35-4	094123.D	[	0.000	15,	0.067	<0.067]	T M
22	cis-1,2-Dichloroethene	0.067U	156-59-2	094123.D	[	0.000	15,	0.067	<0.067]	T M
23	trans-1,2-Dichloroethene	0.067U	156-60-5	094123.D	[	0.000	15,	0.067	<0.067]	T M
24	1,2-Dichloropropane	0.067U	78-87-5	094123.D	[	0.000	15,	0.067	<0.067]	T M

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-3	TO14	VM	MA	v1.0

LIMS Results Info ... Continued ... (All)

	Compound	Final Value Flags	CASNo	File ID	[Conc / (Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
34	Styrene	0.067U	100-42-5	094123.D	[0.000	15,	0.067	<0.067]	T M
35	1,1,2,2-Tetrachloroethane	0.067U	79-34-5	094123.D	[0.000	15,	0.067	<0.067]	T M
36	Tetrachloroethene	0.067U	127-18-4	094123.D	[0.000	15,	0.067	<0.067]	T M
37	Toluene	0.067U	108-88-3	094123.D	[0.000	15,	0.067	<0.067]	T M
38	1,2,4-Trichlorobenzene	0.067U	120-82-1	094123.D	[0.000	15,	0.067	<0.067]	T M
39	1,1,1-Trichloroethane	0.067U	71-55-6	094123.D	[0.000	15,	0.067	<0.067]	T M
40	1,1,2-Trichloroethane	0.067U	79-00-5	094123.D	[0.000	15,	0.067	<0.067]	T M
41	Trichloroethene	0.067U	79-01-6	094123.D	[0.000	15,	0.067	<0.067]	T M
42	Trichlorofluoromethane	0.067U	75-69-4	094123.D	[0.000	15,	0.067	<0.067]	T M
43	1,1,2-Trichlorotrifluoroet	0.067U	76-13-1	094123.D	[0.000	15,	0.067	<0.067]	T M
44	1,2,4-Trimethylbenzene	0.067U	95-63-6	094123.D	[0.000	15,	0.067	<0.067]	T M
45	1,3,5-Trimethylbenzene	0.067U	108-67-8	094123.D	[0.000	15,	0.067	<0.067]	T M
46	Vinyl chloride	0.067U	75-01-4	094123.D	[0.000	15,	0.067	<0.067]	T M
47	o-Xylene	0.067U	95-47-6	094123.D	[0.000	15,	0.067	<0.067]	T M
48	m,p-Xylene	0.13U	108-38-3	094123.D	[0.000	30,	0.13	<0.13]	T M
49	1,2-Dichloroethane d4 SURR	104%	17060-07-0	094123.D	(260.322	250.000	61-140	104%)	S
50	Toluene-d8 SURR#2	102%	2037-26-5	094123.D	(254.326	250.000	90-109	102%)	S
51	4-Bromofluorobenzene SURR#	102%	460-00-4	094123.D	(255.268	250.000	87-112	102%)	S

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094123.D Vial: 7
Acq On : 5 Oct 2004 10:45 Operator: DWB
Sample : OS=09412-3 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.24 500ml Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:21 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.26	128	312429	250.00 ng	0.00 99.66%
26) 1,4-Difluorobenzene IS#2	12.15	114	1723282	250.00 ng	0.00 97.20%
36) Chlorobenzene-d5 IS#3	19.26	117	1291563	250.00 ng	0.00 99.11%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.36	65	506720	260.32 ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 104.13%		
32) Toluene-d8 SURR#2	15.58	98	1565661	254.33 ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 101.73%		
46) 4-Bromofluorobenzene SURR#	22.35	95	913492	255.27 ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 102.11%		

Target Compounds Qvalue

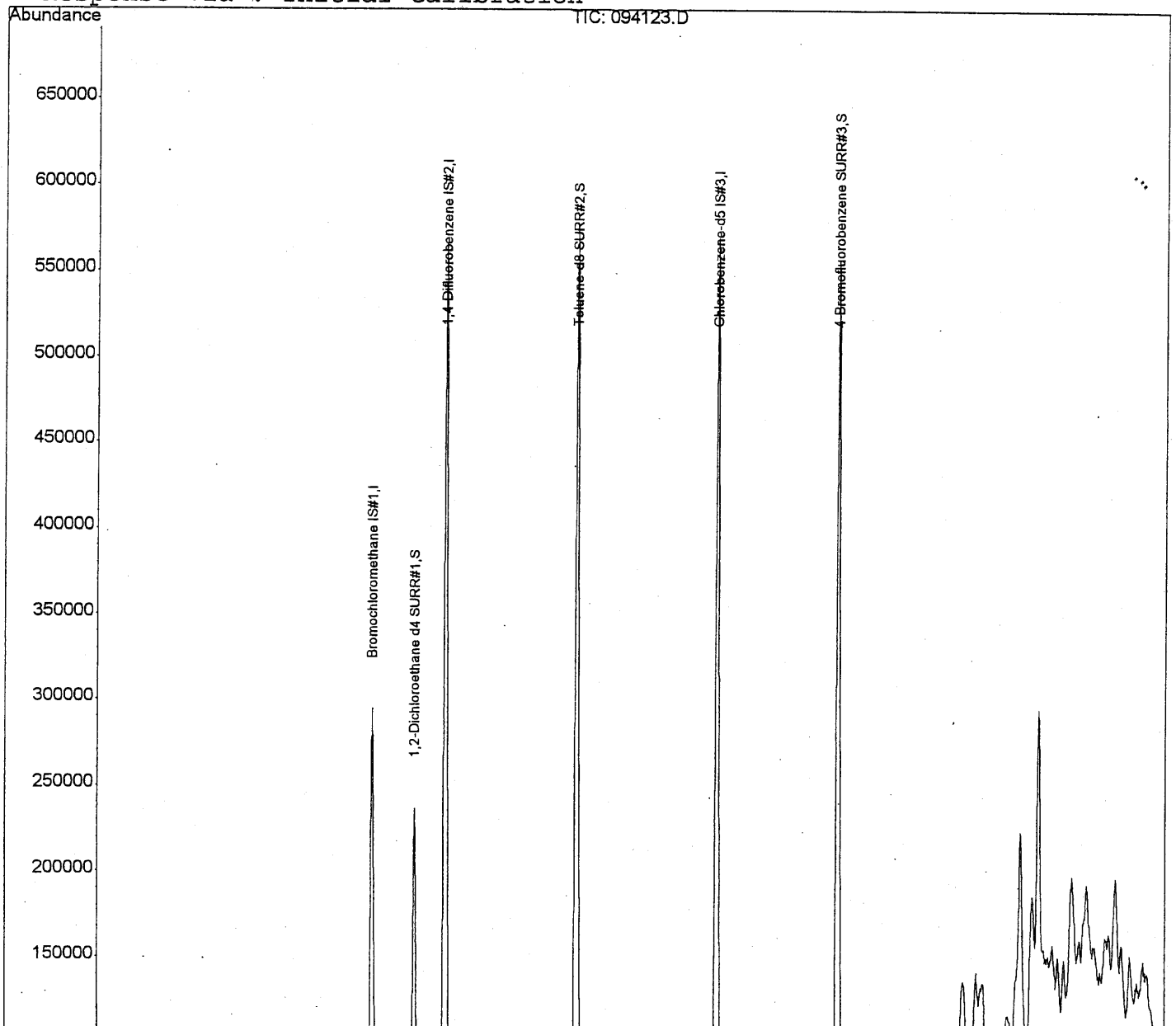
DWB 10-5-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094123.D
Acq On : 5 Oct 2004 10:45
Sample : OS=09412-3 BT=A069 RLF=TO14
Misc : AIR UN=mg/m3 Pf/Pi=2.24 500ml
MS Integration Params: rteint.p
Quant Time: Oct 5 14:21 2004

Vial: 7
Operator: DWB
Inst : MARILYN
Multiplr: 0.00
Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration



Quantification Report

Data File : D:\HPCHEM\1\DATA03\M100504\094123.D Vial: 7
Acq On : 5 Oct 2004 10:45 Operator: DWB
Sample : OS=09412-3 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.24 500ml Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:11 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Original

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.26	128	312429	250.00	ng	0.00 99.66%
26) 1,4-Difluorobenzene IS#2	12.15	114	1723282	250.00	ng	0.00 97.20%
36) Chlorobenzene-d5 IS#3	19.26	117	1291563	250.00	ng	0.00 99.11%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.36	65	506720	260.32	ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 104.13%			
32) Toluene-d8 SURR#2	15.58	98	1565661	254.33	ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 101.73%			
46) 4-Bromofluorobenzene SURR#	22.35	95	913492	255.27	ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 102.11%			

Target Compounds Qvalue

$m = 2.24\left(\frac{500}{500}\right)/500 = .00448$

L i m s F i l e r

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-4	TO14	VM	MA	v1.0

LIMS Header Info

Analyst	DWB
Prep_Date	10.05.04
Prep_Time	11:20
Analysis_Date	10.05.04
Analysis_Time	11:20
Batch_ID	MAA069
Clock_ID	
Instrument_ID	MARILYN
Prep_Method	
Analytical_Method	
Dilution_Factor	1
Quantitation_Factor	0.0045
Initial_Vol	
Final_Vol	
Units	mg/m3

Initially Loaded - File : 094124.D
@ D:\HPCHEM\1\DATA03\M100504\

Method : TO14S.M~W

Total Loaded Files : 1

	All	Selected
Total Results :	51	51
Targets :	48	48
Surrogates :	3	3

LIMS Results Info (All)

	Compound	Final Value Flags	CASNo	File ID	[(	Conc Conc	RL Added	RL@Mult Limits	CFV] #Rec)	T S
1	Benzene	0.068U	71-43-2	094124.D	[	0.000	15,	0.068	<0.068]	T M
2	Bromodichloromethane	0.068U	75-27-4	094124.D	[	0.000	15,	0.068	<0.068]	T M
3	Bromoform	0.068U	75-25-2	094124.D	[	0.000	15,	0.068	<0.068]	T M
4	Bromomethane	0.068U	74-83-9	094124.D	[	0.000	15,	0.068	<0.068]	T M
5	Carbon disulfide	0.068U	75-15-0	094124.D	[	0.000	15,	0.068	<0.068]	T M
6	Carbon tetrachloride	0.068U	56-23-5	094124.D	[	0.000	15,	0.068	<0.068]	T M
7	Chlorobenzene	0.068U	108-90-7	094124.D	[	0.000	15,	0.068	<0.068]	T M
8	Chloroethane	0.068U	75-00-3	094124.D	[	0.000	15,	0.068	<0.068]	T M
9	Chloroform	0.068U	67-66-3	094124.D	[	0.000	15,	0.068	<0.068]	T M
10	Chloromethane	0.068U	74-87-3	094124.D	[	0.000	15,	0.068	<0.068]	T M
11	2-Chlorotoluene	0.068U	95-49-8	094124.D	[	0.000	15,	0.068	<0.068]	T M
12	Dibromochloromethane	0.068U	124-48-1	094124.D	[	0.000	15,	0.068	<0.068]	T M
13	1,2-Dibromoethane	0.068U	106-93-4	094124.D	[	0.000	15,	0.068	<0.068]	T M
14	1,2-Dichlorobenzene	0.068U	95-50-1	094124.D	[	0.000	15,	0.068	<0.068]	T M
15	1,3-Dichlorobenzene	0.068U	541-73-1	094124.D	[	0.000	15,	0.068	<0.068]	T M
16	1,4-Dichlorobenzene	0.068U	106-46-7	094124.D	[	0.000	15,	0.068	<0.068]	T M
17	1,4-Dichloro-2-butene	0.068U	110-57-6	094124.D	[	0.000	15,	0.068	<0.068]	T M
18	Dichlorodifluoromethane	0.068U	75-71-8	094124.D	[	0.000	15,	0.068	<0.068]	T M
19	1,1-Dichloroethane	0.068U	75-34-3	094124.D	[	0.000	15,	0.068	<0.068]	T M
20	1,2-Dichloroethane	0.068U	107-06-2	094124.D	[	0.000	15,	0.068	<0.068]	T M
21	1,1-Dichloroethene	0.068U	75-35-4	094124.D	[	0.000	15,	0.068	<0.068]	T M
22	cis-1,2-Dichloroethene	0.068U	156-59-2	094124.D	[	0.000	15,	0.068	<0.068]	T M
23	trans-1,2-Dichloroethene	0.068U	156-60-5	094124.D	[	0.000	15,	0.068	<0.068]	T M
24	1,2-Dichloropropane	0.068U	78-87-5	094124.D	[	0.000	15,	0.068	<0.068]	T M

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-4	TO14	VM	MA	v1.0

LIMS Results Info ... Continued ... (All)

	Compound	Final Value Flags	CASNo	File ID	[Conc / (Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
34	Styrene	0.068U	100-42-5	094124.D	[0.000	15,	0.068	<0.068]	T M
35	1,1,2,2-Tetrachloroethane	0.068U	79-34-5	094124.D	[0.000	15,	0.068	<0.068]	T M
36	Tetrachloroethene	0.068U	127-18-4	094124.D	[0.000	15,	0.068	<0.068]	T M
37	Toluene	0.068U	108-88-3	094124.D	[0.000	15,	0.068	<0.068]	T M
38	1,2,4-Trichlorobenzene	0.068U	120-82-1	094124.D	[0.000	15,	0.068	<0.068]	T M
39	1,1,1-Trichloroethane	0.068U	71-55-6	094124.D	[0.000	15,	0.068	<0.068]	T M
40	1,1,2-Trichloroethane	0.068U	79-00-5	094124.D	[0.000	15,	0.068	<0.068]	T M
41	Trichloroethene	0.068U	79-01-6	094124.D	[0.000	15,	0.068	<0.068]	T M
42	Trichlorofluoromethane	0.068U	75-69-4	094124.D	[0.000	15,	0.068	<0.068]	T M
43	1,1,2-Trichlorotrifluoroet	0.068U	76-13-1	094124.D	[0.000	15,	0.068	<0.068]	T M
44	1,2,4-Trimethylbenzene	0.068U	95-63-6	094124.D	[0.000	15,	0.068	<0.068]	T M
45	1,3,5-Trimethylbenzene	0.068U	108-67-8	094124.D	[0.000	15,	0.068	<0.068]	T M
46	Vinyl chloride	0.068U	75-01-4	094124.D	[0.000	15,	0.068	<0.068]	T M
47	o-Xylene	0.068U	95-47-6	094124.D	[0.000	15,	0.068	<0.068]	T M
48	m,p-Xylene	0.14U	108-38-3	094124.D	[0.000	30,	0.14	<0.14]	T M
49	1,2-Dichloroethane d4 SURR	101%	17060-07-0	094124.D	(252.175	250.000	61-140	101%)	S
50	Toluene-d8 SURR#2	101%	2037-26-5	094124.D	(252.858	250.000	90-109	101%)	S
51	4-Bromofluorobenzene SURR#	107%	460-00-4	094124.D	(268.488	250.000	87-112	107%)	S

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094124.D
Acq On : 5 Oct 2004 11:20
Sample : OS=09412-4 BT=A069 RLF=TO14
Misc : AIR UN=mg/m3 Pf/Pi=2.25 500ml
MS Integration Params: rteint.p
Quant Time: Oct 5 14:24 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 0.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.25	128	317371	250.00 ng	0.00 101.23%
26) 1,4-Difluorobenzene IS#2	12.14	114	1763653	250.00 ng	0.00 99.48%
36) Chlorobenzene-d5 IS#3	19.25	117	1319514	250.00 ng	0.00 101.25%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.35	65	498626	252.17 ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 100.87%		
32) Toluene-d8 SURR#2	15.58	98	1593092	252.86 ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 101.14%		
46) 4-Bromofluorobenzene SURR#	22.35	95	981596	268.49 ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 107.40%		

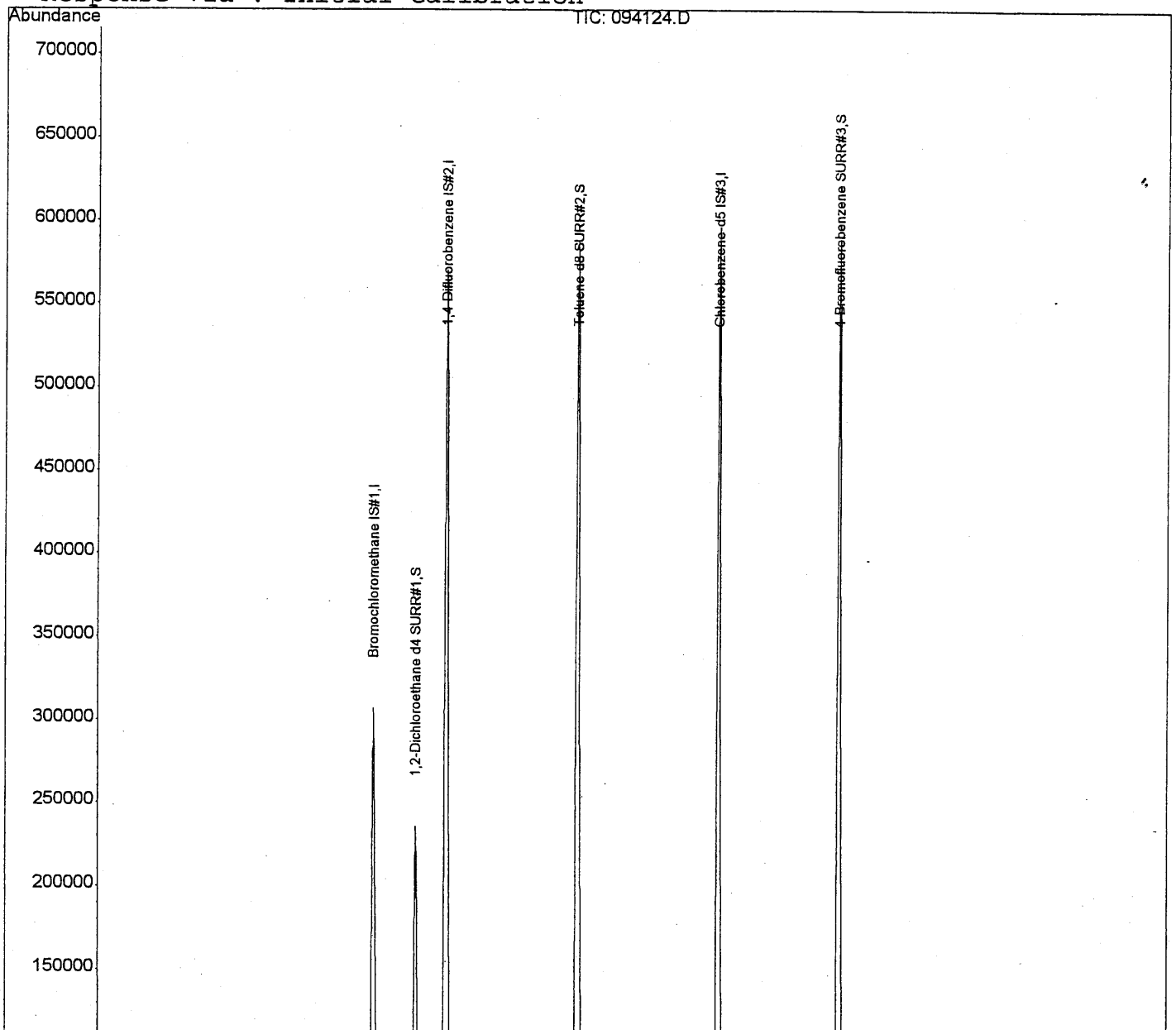
Target Compounds Qvalue

DWB 10-5-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094124.D Vial: 8
Acq On : 5 Oct 2004 11:20 Operator: DWB
Sample : OS=09412-4 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.25 500ml Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:24 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094124.D
Acq On : 5 Oct 2004 11:20
Sample : OS=09412-4 BT=A069 RLF=TO14
Misc : AIR UN=mg/m3 Pf/Pi=2.25 500ml
MS Integration Params: rteint.p
Quant Time: Oct 5 14:11 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

original

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.25	128	317371	250.00	ng	0.00 101.23%
26) 1,4-Difluorobenzene IS#2	12.14	114	1763653	250.00	ng	0.00 99.48%
36) Chlorobenzene-d5 IS#3	19.25	117	1319514	250.00	ng	0.00 101.25%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.35	65	498626	252.17	ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 100.87%			
32) Toluene-d8 SURR#2	15.58	98	1593092	252.86	ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 101.14%			
46) 4-Bromofluorobenzene SURR#	22.35	95	981596	268.49	ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 107.40%			

Target Compounds Qvalue

$.045\left(\frac{500}{500}\right)/500 = .0045$

L i m s F i l e r

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-5	TO14	VM	MA	v1.0

LIMS Header Info

Analyst	DWB
Prep_Date	10.05.04
Prep_Time	14:59
Analysis_Date	10.05.04
Analysis_Time	14:59
Batch_ID	MAA069
Clock_ID	
Instrument_ID	MARILYN
Prep_Method	
Analytical_Method	
Dilution_Factor	1
Quantitation_Factor	0.33778
Initial_Vol	
Final_Vol	
Units	mg/m3

Initially Loaded - File : 094125.D
@ D:\HPCHEM\1\DATA03\M100504\

Method : TO14S.M~W

Total Loaded Files : 1

	All	Selected
Total Results :	51	51
Targets :	48	48
Surrogates :	3	3

LIMS Results Info (All)

	Compound	Final Value Flags	CASNo	File ID	[(	Conc Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
1	Benzene	5.1U	71-43-2	094125.D	[	0.000	15,	5.1	<5.1]	T M
2	Bromodichloromethane	5.1U	75-27-4	094125.D	[	0.000	15,	5.1	<5.1]	T M
3	Bromoform	5.1U	75-25-2	094125.D	[	0.000	15,	5.1	<5.1]	T M
4	Bromomethane	5.1U	74-83-9	094125.D	[	0.000	15,	5.1	<5.1]	T M
5	Carbon disulfide	5.1U	75-15-0	094125.D	[	0.000	15,	5.1	<5.1]	T M
6	Carbon tetrachloride	5.1U	56-23-5	094125.D	[	0.000	15,	5.1	<5.1]	T M
7	Chlorobenzene	5.1U	108-90-7	094125.D	[	0.000	15,	5.1	<5.1]	T M
8	Chloroethane	5.1U	75-00-3	094125.D	[	0.000	15,	5.1	<5.1]	T M
9	Chloroform	5.1U	67-66-3	094125.D	[	0.000	15,	5.1	<5.1]	T M
10	Chloromethane	5.1U	74-87-3	094125.D	[	0.000	15,	5.1	<5.1]	T M
11	2-Chlorotoluene	5.1U	95-49-8	094125.D	[	0.000	15,	5.1	<5.1]	T M
12	Dibromochloromethane	5.1U	124-48-1	094125.D	[	0.000	15,	5.1	<5.1]	T M
13	1,2-Dibromoethane	5.1U	106-93-4	094125.D	[	0.000	15,	5.1	<5.1]	T M
14	1,2-Dichlorobenzene	5.1U	95-50-1	094125.D	[	0.000	15,	5.1	<5.1]	T M
15	1,3-Dichlorobenzene	5.1U	541-73-1	094125.D	[	0.000	15,	5.1	<5.1]	T M
16	1,4-Dichlorobenzene	5.1U	106-46-7	094125.D	[	0.000	15,	5.1	<5.1]	T M
17	1,4-Dichloro-2-butene	5.1U	110-57-6	094125.D	[	0.000	15,	5.1	<5.1]	T M
18	Dichlorodifluoromethane	5.1U	75-71-8	094125.D	[	0.000	15,	5.1	<5.1]	T M
19	1,1-Dichloroethane	5.1U	75-34-3	094125.D	[	0.000	15,	5.1	<5.1]	T M
20	1,2-Dichloroethane	5.1U	107-06-2	094125.D	[	0.000	15,	5.1	<5.1]	T M
21	1,1-Dichloroethene	5.1U	75-35-4	094125.D	[	0.000	15,	5.1	<5.1]	T M
22	cis-1,2-Dichloroethene	5.1U	156-59-2	094125.D	[	0.000	15,	5.1	<5.1]	T M
23	trans-1,2-Dichloroethene	5.1U	156-60-5	094125.D	[	0.000	15,	5.1	<5.1]	T M
24	1,2-Dichloropropane	5.1U	78-87-5	094125.D	[	0.000	15,	5.1	<5.1]	T M

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-5	TO14	VM	MA	v1.0

LIMS Results Info ... Continued ... (All)

	Compound	Final Value Flags	CASNo	File ID	(	Conc / Conc	RL / Added	RL@Mult / Limits	CFV] / %Rec)	T / S
34	Styrene	5.1U	100-42-5	094125.D	[	0.000	15,	5.1	<5.1]	T M
35	1,1,2,2-Tetrachloroethane	5.1U	79-34-5	094125.D	[	0.000	15,	5.1	<5.1]	T M
36	Tetrachloroethene	5.1U	127-18-4	094125.D	[	0.000	15,	5.1	<5.1]	T M
37	Toluene	5.1U	108-88-3	094125.D	[	0.000	15,	5.1	<5.1]	T M
38	1,2,4-Trichlorobenzene	5.1U	120-82-1	094125.D	[	0.000	15,	5.1	<5.1]	T M
39	1,1,1-Trichloroethane	5.1U	71-55-6	094125.D	[	0.000	15,	5.1	<5.1]	T M
40	1,1,2-Trichloroethane	5.1U	79-00-5	094125.D	[	0.000	15,	5.1	<5.1]	T M
41	Trichloroethene	5.1U	79-01-6	094125.D	[	0.000	15,	5.1	<5.1]	T M
42	Trichlorofluoromethane	5.1U	75-69-4	094125.D	[	0.000	15,	5.1	<5.1]	T M
43	1,1,2-Trichlorotrifluoroet	5.1U	76-13-1	094125.D	[	0.000	15,	5.1	<5.1]	T M
44	1,2,4-Trimethylbenzene	5.1U	95-63-6	094125.D	[	0.000	15,	5.1	<5.1]	T M
45	1,3,5-Trimethylbenzene	5.1U	108-67-8	094125.D	[	0.000	15,	5.1	<5.1]	T M
46	Vinyl chloride	5.1U	75-01-4	094125.D	[	0.000	15,	5.1	<5.1]	T M
47	o-Xylene	5.1U	95-47-6	094125.D	[	0.000	15,	5.1	<5.1]	T M
48	m,p-Xylene	10U	108-38-3	094125.D	[	0.000	30,	10	<10]	T M
49	1,2-Dichloroethane d4 SURR	102%	17060-07-0	094125.D	(	255.773	250.000	61-140	102%)	S
50	Toluene-d8 SURR#2	101%	2037-26-5	094125.D	(	252.948	250.000	90-109	101%)	S
51	4-Bromofluorobenzene SURR#	101%	460-00-4	094125.D	(	253.492	250.000	87-112	101%)	S

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094125.D Vial: 13
Acq On : 5 Oct 2004 14:59 Operator: DWB
Sample : OS=09412-5 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=168.89 500ml Multiplr: 0.34
MS Integration Params: rteint.p
Quant Time: Oct 5 15:30 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.28	128	311025	250.00	ng	0.03 99.21%
26) 1,4-Difluorobenzene IS#2	12.17	114	1710896	250.00	ng	0.03 96.50%
36) Chlorobenzene-d5 IS#3	19.28	117	1274218	250.00	ng	0.03 97.78%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	495628	255.77	ng	0.01
Spiked Amount 250.000 Range 61 - 140 Recovery = 102.31%						
32) Toluene-d8 SURR#2	15.61	98	1545985	252.95	ng	0.03
Spiked Amount 250.000 Range 90 - 109 Recovery = 101.18%						
46) 4-Bromofluorobenzene SURR#	22.38	95	894954	253.49	ng	0.03
Spiked Amount 250.000 Range 87 - 112 Recovery = 101.40%						

Target Compounds

						Qvalue
20) Isooctane	10.87	57	94524	3.88	ng	97

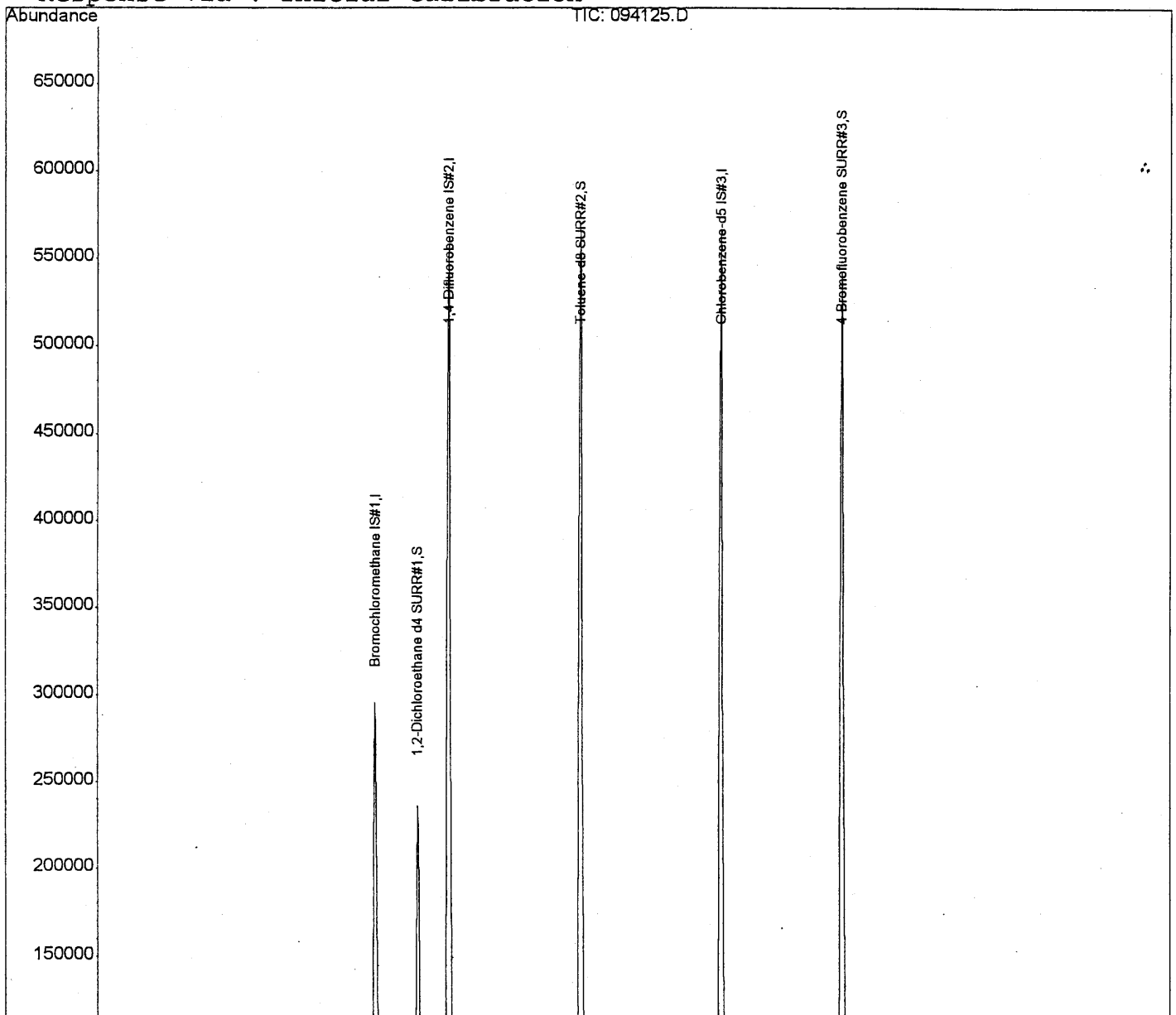
Not requested

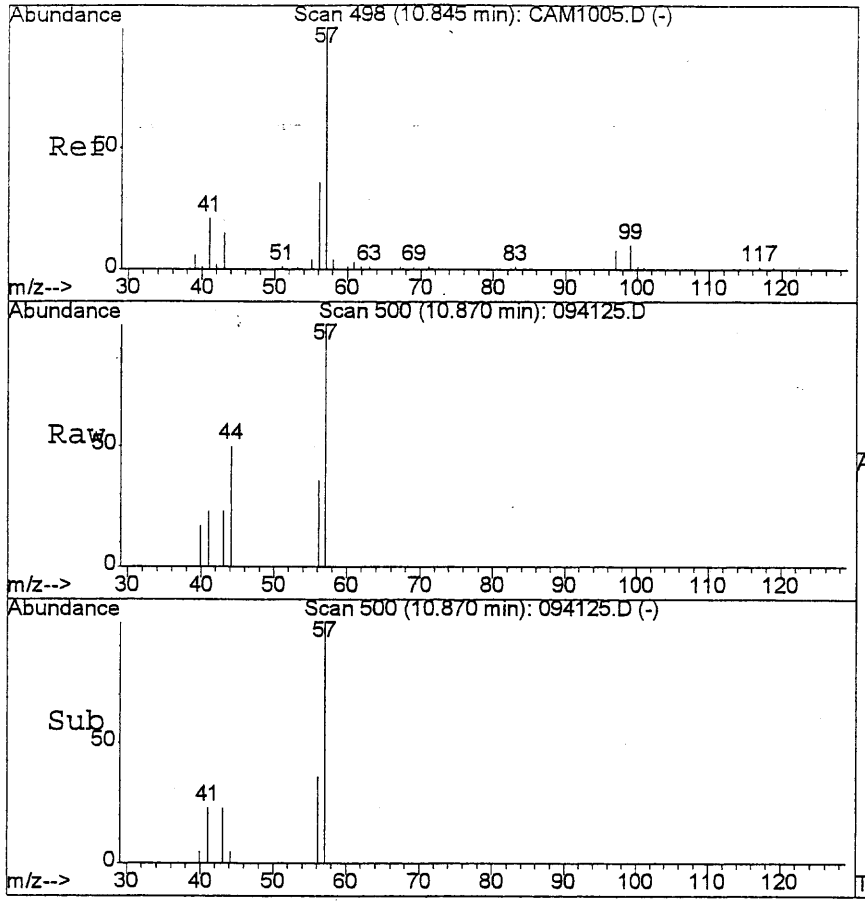
DWB 10-6-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094125.D Vial: 13
Acq On : 5 Oct 2004 14:59 Operator: DWB
Sample : OS=09412-5 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=168.89 500ml Multiplr: 0.34
MS Integration Params: rteint.p
Quant Time: Oct 5 15:30 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration

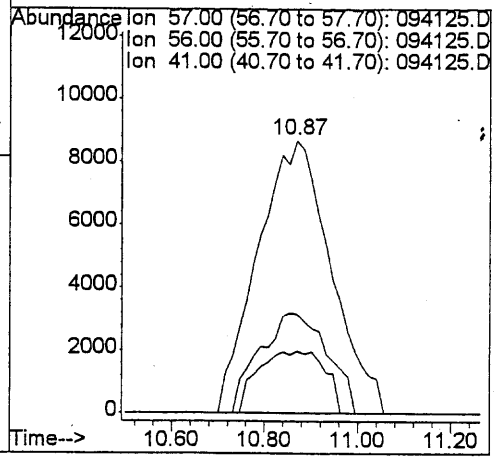




#20
Isooctane
Concen: 3.88 ng
RT: 10.87 min Scan# 500
Delta R.T. 0.03 min
Lab File: 094125.D
Acq: 5 Oct 2004 14:59

Tgt Ion: 57 Resp: 94524

Ion	Ratio	Lower	Upper
57	100		
56	34.0	16.4	56.4
41	20.7	10.5	31.5



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094125.D
Acq On : 5 Oct 2004 14:59
Sample : OS=09412-5 BT=A069 RLF=TO14
Misc : AIR UN=mg/m3 Pf/Pi=168.89 500ml
MS Integration Params: rteint.p
Quant Time: Oct 5 15:30 2004

Vial: 13
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

original

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.28	128	311025	250.00	ng	0.03 99.21%
26) 1,4-Difluorobenzene IS#2	12.17	114	1710896	250.00	ng	0.03 96.50%
36) Chlorobenzene-d5 IS#3	19.28	117	1274218	250.00	ng	0.03 97.78%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	495628	255.77	ng	0.01
Spiked Amount 250.000	Range 61 - 140		Recovery = 102.31%			
32) Toluene-d8 SURR#2	15.61	98	1545985	252.95	ng	0.03
Spiked Amount 250.000	Range 90 - 109		Recovery = 101.18%			
46) 4-Bromofluorobenzene SURR#	22.38	95	894954	253.49	ng	0.03
Spiked Amount 250.000	Range 87 - 112		Recovery = 101.40%			

Target Compounds

						Qvalue
20) Isooctane	10.87	57	94524	11.50	ng	97

$12.89 \left(\frac{100}{500}\right) / 500 = .33778$

L i m s F i l e r

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-6	TO14	VM	MA	v1.0

LIMS Header Info

Analyst	DWB
Prep_Date	10.05.04
Prep_Time	11:57
Analysis_Date	10.05.04
Analysis_Time	11:57
Batch_ID	MAA069
Clock_ID	
Instrument_ID	MARILYN
Prep_Method	
Analytical_Method	
Dilution_Factor	1
Quantitation_Factor	0.0045
Initial_Vol	
Final_Vol	
Units	mg/m3

Initially Loaded - File : 094126.D
@ D:\HPCHEM\1\DATA03\M100504\

Method : TO14S.M~W

Total Loaded Files : 1

	All	Selected
Total Results :	51	51
Targets :	48	48
Surrogates :	3	3

LIMS Results Info (All)

	Compound	Final Value Flags	CASNo	File ID	[Conc / (Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
1	Benzene	0.068U	71-43-2	094126.D	0.000	15,	0.068	<0.068]	T M
2	Bromodichloromethane	0.068U	75-27-4	094126.D	0.000	15,	0.068	<0.068]	T M
3	Bromoform	0.068U	75-25-2	094126.D	0.000	15,	0.068	<0.068]	T M
4	Bromomethane	0.068U	74-83-9	094126.D	0.000	15,	0.068	<0.068]	T M
5	Carbon disulfide	0.068U	75-15-0	094126.D	0.000	15,	0.068	<0.068]	T M
6	Carbon tetrachloride	0.068U	56-23-5	094126.D	0.000	15,	0.068	<0.068]	T M
7	Chlorobenzene	0.068U	108-90-7	094126.D	0.000	15,	0.068	<0.068]	T M
8	Chloroethane	0.068U	75-00-3	094126.D	0.000	15,	0.068	<0.068]	T M
9	Chloroform	0.068U	67-66-3	094126.D	0.000	15,	0.068	<0.068]	T M
10	Chloromethane	0.068U	74-87-3	094126.D	0.000	15,	0.068	<0.068]	T M
11	2-Chlorotoluene	0.068U	95-49-8	094126.D	0.000	15,	0.068	<0.068]	T M
12	Dibromochloromethane	0.068U	124-48-1	094126.D	0.000	15,	0.068	<0.068]	T M
13	1,2-Dibromoethane	0.068U	106-93-4	094126.D	0.000	15,	0.068	<0.068]	T M
14	1,2-Dichlorobenzene	0.068U	95-50-1	094126.D	0.000	15,	0.068	<0.068]	T M
15	1,3-Dichlorobenzene	0.068U	541-73-1	094126.D	0.000	15,	0.068	<0.068]	T M
16	1,4-Dichlorobenzene	0.068U	106-46-7	094126.D	0.000	15,	0.068	<0.068]	T M
17	1,4-Dichloro-2-butene	0.068U	110-57-6	094126.D	0.000	15,	0.068	<0.068]	T M
18	Dichlorodifluoromethane	0.068U	75-71-8	094126.D	0.000	15,	0.068	<0.068]	T M
19	1,1-Dichloroethane	0.068U	75-34-3	094126.D	0.000	15,	0.068	<0.068]	T M
20	1,2-Dichloroethane	0.068U	107-06-2	094126.D	0.000	15,	0.068	<0.068]	T M
21	1,1-Dichloroethene	0.068U	75-35-4	094126.D	0.000	15,	0.068	<0.068]	T M
22	cis-1,2-Dichloroethene	0.068U	156-59-2	094126.D	0.000	15,	0.068	<0.068]	T M
23	trans-1,2-Dichloroethene	0.068U	156-60-5	094126.D	0.000	15,	0.068	<0.068]	T M
24	1,2-Dichloropropane	0.068U	78-87-5	094126.D	0.000	15,	0.068	<0.068]	T M

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-6	TO14	VM	MA	v1.0

LIMS Results Info ... Continued ... (All)

	Compound	Final Value Flags	CASNo	File ID	[Conc / { Conc	RL / Added	RL@Mult / Limits	CFV] / %Rec}	T / S
34	Styrene	0.068U	100-42-5	094126.D	[0.000	15,	0.068	<0.068]	T M
35	1,1,2,2-Tetrachloroethane	0.068U	79-34-5	094126.D	[0.000	15,	0.068	<0.068]	T M
36	Tetrachloroethene	0.068U	127-18-4	094126.D	[0.000	15,	0.068	<0.068]	T M
37	Toluene	0.068U	108-88-3	094126.D	[0.000	15,	0.068	<0.068]	T M
38	1,2,4-Trichlorobenzene	0.068U	120-82-1	094126.D	[0.000	15,	0.068	<0.068]	T M
39	1,1,1-Trichloroethane	0.068U	71-55-6	094126.D	[0.000	15,	0.068	<0.068]	T M
40	1,1,2-Trichloroethane	0.068U	79-00-5	094126.D	[0.000	15,	0.068	<0.068]	T M
41	Trichloroethene	0.068U	79-01-6	094126.D	[0.000	15,	0.068	<0.068]	T M
42	Trichlorofluoromethane	0.068U	75-69-4	094126.D	[0.000	15,	0.068	<0.068]	T M
43	1,1,2-Trichlorotrifluoroet	0.068U	76-13-1	094126.D	[0.000	15,	0.068	<0.068]	T M
44	1,2,4-Trimethylbenzene	0.068U	95-63-6	094126.D	[0.000	15,	0.068	<0.068]	T M
45	1,3,5-Trimethylbenzene	0.068U	108-67-8	094126.D	[0.000	15,	0.068	<0.068]	T M
46	Vinyl chloride	0.068U	75-01-4	094126.D	[0.000	15,	0.068	<0.068]	T M
47	o-Xylene	0.068U	95-47-6	094126.D	[0.000	15,	0.068	<0.068]	T M
48	m,p-Xylene	0.14U	108-38-3	094126.D	[0.000	30,	0.14	<0.14]	T M
49	1,2-Dichloroethane d4 SURR	103%	17060-07-0	094126.D	{ 258.179	250.000	61-140	103%}	S
50	Toluene-d8 SURR#2	101%	2037-26-5	094126.D	{ 253.152	250.000	90-109	101%}	S
51	4-Bromofluorobenzene SURR#	103%	460-00-4	094126.D	{ 258.497	250.000	87-112	103%}	S

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094126.D Vial: 9
Acq On : 5 Oct 2004 11:57 Operator: DWB
Sample : OS=09412-6 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.25 500ml Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:26 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.26	128	309990	250.00 ng	0.00 98.88%
26) 1,4-Difluorobenzene IS#2	12.15	114	1768153	250.00 ng	0.00 99.73%
36) Chlorobenzene-d5 IS#3	19.25	117	1318341	250.00 ng	0.00 101.16%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.36	65	498626	258.18 ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 103.27%		
32) Toluene-d8 SURR#2	15.58	98	1599012	253.15 ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 101.26%		
46) 4-Bromofluorobenzene SURR#	22.35	95	944228	258.50 ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 103.40%		

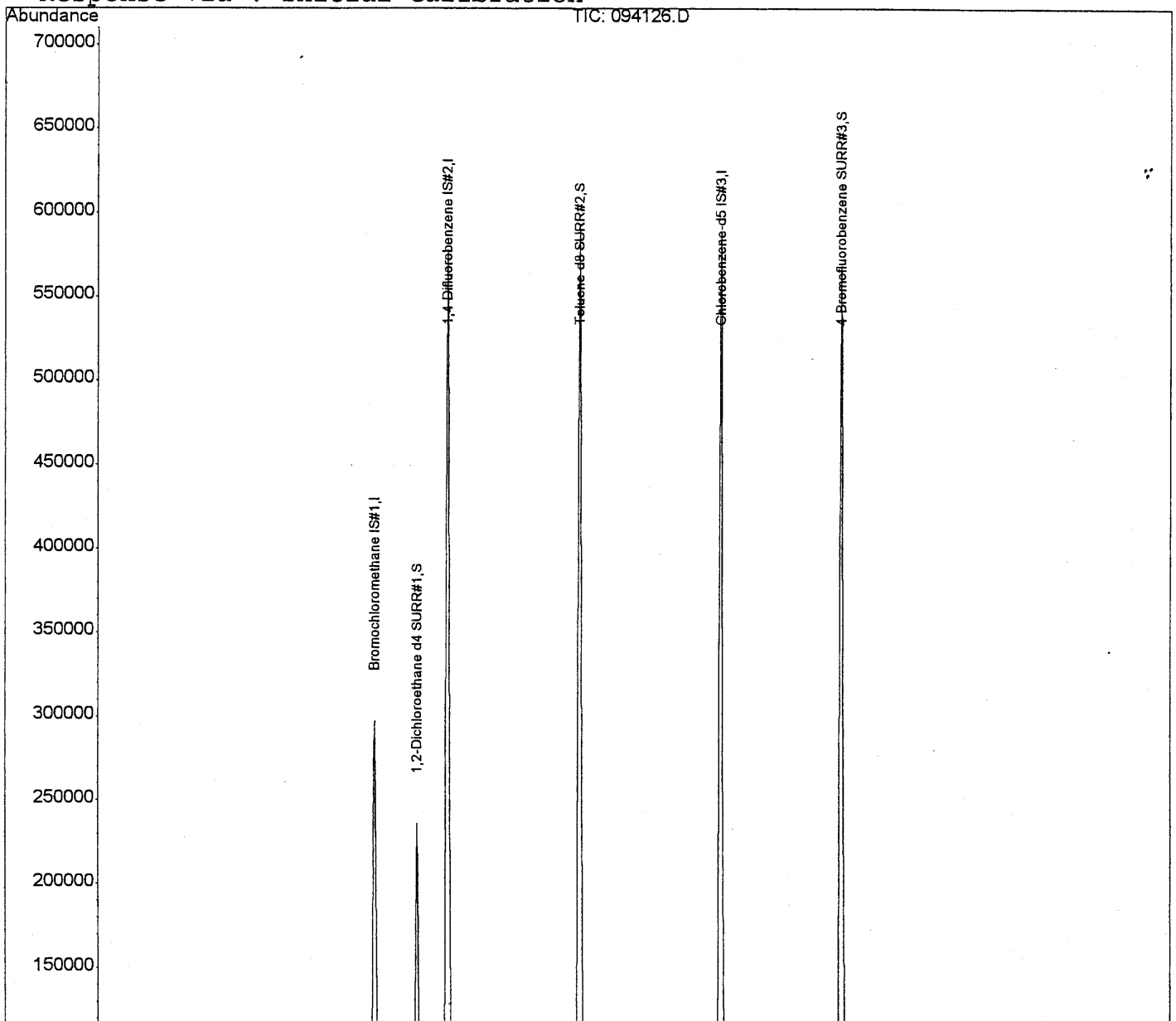
Target Compounds Qvalue

DWB 10-5-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094126.D Vial: 9
Acq On : 5 Oct 2004 11:57 Operator: DWB
Sample : OS=09412-6 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.25 500ml Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:26 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094126.D Vial: 9
Acq On : 5 Oct 2004 11:57 Operator: DWB
Sample : OS=09412-6 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.25 500ml Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:12 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

original

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.26	128	309990	250.00	ng	0.00 98.88%
26) 1,4-Difluorobenzene IS#2	12.15	114	1768153	250.00	ng	0.00 99.73%
36) Chlorobenzene-d5 IS#3	19.25	117	1318341	250.00	ng	0.00 101.16%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.36	65	498626	258.18	ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 103.27%			
32) Toluene-d8 SURR#2	15.58	98	1599012	253.15	ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 101.26%			
46) 4-Bromofluorobenzene SURR#	22.35	95	944228	258.50	ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 103.40%			

Target Compounds Qvalue

$m = 2.25\left(\frac{500}{500}\right)/500 = .0045$

L i m s F i l e r

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-7	TO14	VM	MA	v1.0

LIMS Header Info

Analyst	DWB
Prep_Date	10.05.04
Prep_Time	13:09
Analysis_Date	10.05.04
Analysis_Time	13:09
Batch_ID	MAA069
Clock_ID	
Instrument_ID	MARILYN
Prep_Method	
Analytical_Method	
Dilution_Factor	1
Quantitation_Factor	0.00448
Initial_Vol	
Final_Vol	
Units	mg/m3

Initially Loaded - File : 094127.D
@ D:\HPCHEM\1\DATA03\M100504\

Method : TO14S.M~W

Total Loaded Files : 1

	All	Selected
Total Results :	51	51
Targets :	48	48
Surrogates :	3	3

LIMS Results Info (All)

	Compound	Final Value Flags	CASNo	File ID	[/	Conc / Conc	RL / Added	RL@Mult / Limits	CFV] / %Rec]	T / S
1	Benzene	0.067U	71-43-2	094127.D	[	0.000	15,	0.067	<0.067]	T M
2	Bromodichloromethane	0.067U	75-27-4	094127.D	[	0.000	15,	0.067	<0.067]	T M
3	Bromoform	0.067U	75-25-2	094127.D	[	0.000	15,	0.067	<0.067]	T M
4	Bromomethane	0.067U	74-83-9	094127.D	[	0.000	15,	0.067	<0.067]	T M
5	Carbon disulfide	0.067U	75-15-0	094127.D	[	0.000	15,	0.067	<0.067]	T M
6	Carbon tetrachloride	0.067U	56-23-5	094127.D	[	0.000	15,	0.067	<0.067]	T M
7	Chlorobenzene	0.067U	108-90-7	094127.D	[	0.000	15,	0.067	<0.067]	T M
8	Chloroethane	0.067U	75-00-3	094127.D	[	0.000	15,	0.067	<0.067]	T M
9	Chloroform	0.067U	67-66-3	094127.D	[	0.000	15,	0.067	<0.067]	T M
10	Chloromethane	0.067U	74-87-3	094127.D	[	0.000	15,	0.067	<0.067]	T M
11	2-Chlorotoluene	0.067U	95-49-8	094127.D	[	0.000	15,	0.067	<0.067]	T M
12	Dibromochloromethane	0.067U	124-48-1	094127.D	[	0.000	15,	0.067	<0.067]	T M
13	1,2-Dibromoethane	0.067U	106-93-4	094127.D	[	0.000	15,	0.067	<0.067]	T M
14	1,2-Dichlorobenzene	0.067U	95-50-1	094127.D	[	0.000	15,	0.067	<0.067]	T M
15	1,3-Dichlorobenzene	0.067U	541-73-1	094127.D	[	0.000	15,	0.067	<0.067]	T M
16	1,4-Dichlorobenzene	0.067U	106-46-7	094127.D	[	0.000	15,	0.067	<0.067]	T M
17	1,4-Dichloro-2-butene	0.067U	110-57-6	094127.D	[	0.000	15,	0.067	<0.067]	T M
18	Dichlorodifluoromethane	0.067U	75-71-8	094127.D	[	0.000	15,	0.067	<0.067]	T M
19	1,1-Dichloroethane	0.067U	75-34-3	094127.D	[	0.000	15,	0.067	<0.067]	T M
20	1,2-Dichloroethane	0.067U	107-06-2	094127.D	[	0.000	15,	0.067	<0.067]	T M
21	1,1-Dichloroethene	0.067U	75-35-4	094127.D	[	0.000	15,	0.067	<0.067]	T M
22	cis-1,2-Dichloroethene	0.067U	156-59-2	094127.D	[	0.000	15,	0.067	<0.067]	T M
23	trans-1,2-Dichloroethene	0.067U	156-60-5	094127.D	[	0.000	15,	0.067	<0.067]	T M
24	1,2-Dichloropropane	0.067U	78-87-5	094127.D	[	0.000	15,	0.067	<0.067]	T M

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-7	TO14	VM	MA	v1.0

LIMS Results Info ... Continued ... (All)

	Compound	Final Value Flags	CASNo	File ID	[(	Conc Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S	
34	Styrene	0.067U	100-42-5	094127.D	[	0.000	15,	0.067	<0.067]	T	M
35	1,1,2,2-Tetrachloroethane	0.067U	79-34-5	094127.D	[	0.000	15,	0.067	<0.067]	T	M
36	Tetrachloroethene	0.067U	127-18-4	094127.D	[	0.000	15,	0.067	<0.067]	T	M
37	Toluene	0.067U	108-88-3	094127.D	[	0.000	15,	0.067	<0.067]	T	M
38	1,2,4-Trichlorobenzene	0.067U	120-82-1	094127.D	[	0.000	15,	0.067	<0.067]	T	M
39	1,1,1-Trichloroethane	0.067U	71-55-6	094127.D	[	0.000	15,	0.067	<0.067]	T	M
40	1,1,2-Trichloroethane	0.067U	79-00-5	094127.D	[	0.000	15,	0.067	<0.067]	T	M
41	Trichloroethene	0.067U	79-01-6	094127.D	[	0.000	15,	0.067	<0.067]	T	M
42	Trichlorofluoromethane	0.067U	75-69-4	094127.D	[	0.000	15,	0.067	<0.067]	T	M
43	1,1,2-Trichlorotrifluoroet	0.067U	76-13-1	094127.D	[	0.000	15,	0.067	<0.067]	T	M
44	1,2,4-Trimethylbenzene	0.067U	95-63-6	094127.D	[	0.000	15,	0.067	<0.067]	T	M
45	1,3,5-Trimethylbenzene	0.067U	108-67-8	094127.D	[	0.000	15,	0.067	<0.067]	T	M
46	Vinyl chloride	0.067U	75-01-4	094127.D	[	0.000	15,	0.067	<0.067]	T	M
47	o-Xylene	0.067U	95-47-6	094127.D	[	0.000	15,	0.067	<0.067]	T	M
48	m,p-Xylene	0.13U	108-38-3	094127.D	[	0.000	30,	0.13	<0.13]	T	M
49	1,2-Dichloroethane d4 SURR	101%	17060-07-0	094127.D	(	253.400	250.000	61-140	101%)	S	
50	Toluene-d8 SURR#2	101%	2037-26-5	094127.D	(	252.182	250.000	90-109	101%)	S	
51	4-Bromofluorobenzene SURR#	103%	460-00-4	094127.D	(	258.698	250.000	87-112	103%)	S	

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094127.D
Acq On : 5 Oct 2004 13:09
Sample : OS=09412-7 BT=A069 RLF=TO14
Misc : AIR UN=mg/m3 Pf/Pi=2.24 500ml
MS Integration Params: rteint.p
Quant Time: Oct 5 14:28 2004

Vial: 10
Operator: DWB
Inst : MARILYN
Multiplr: 0.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.26	128	295032	250.00 ng	0.00 94.11%
26) 1,4-Difluorobenzene IS#2	12.15	114	1638807	250.00 ng	0.00 92.44%
36) Chlorobenzene-d5 IS#3	19.28	117	1238624	250.00 ng	0.02 95.05%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.36	65	465781	253.40 ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 101.36%		
32) Toluene-d8 SURR#2	15.59	98	1476360	252.18 ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 100.87%		
46) 4-Bromofluorobenzene SURR#	22.38	95	887823	258.70 ng	0.02
Spiked Amount 250.000	Range 87 - 112		Recovery = 103.48%		

Target Compounds Qvalue

DWB 10-5-04

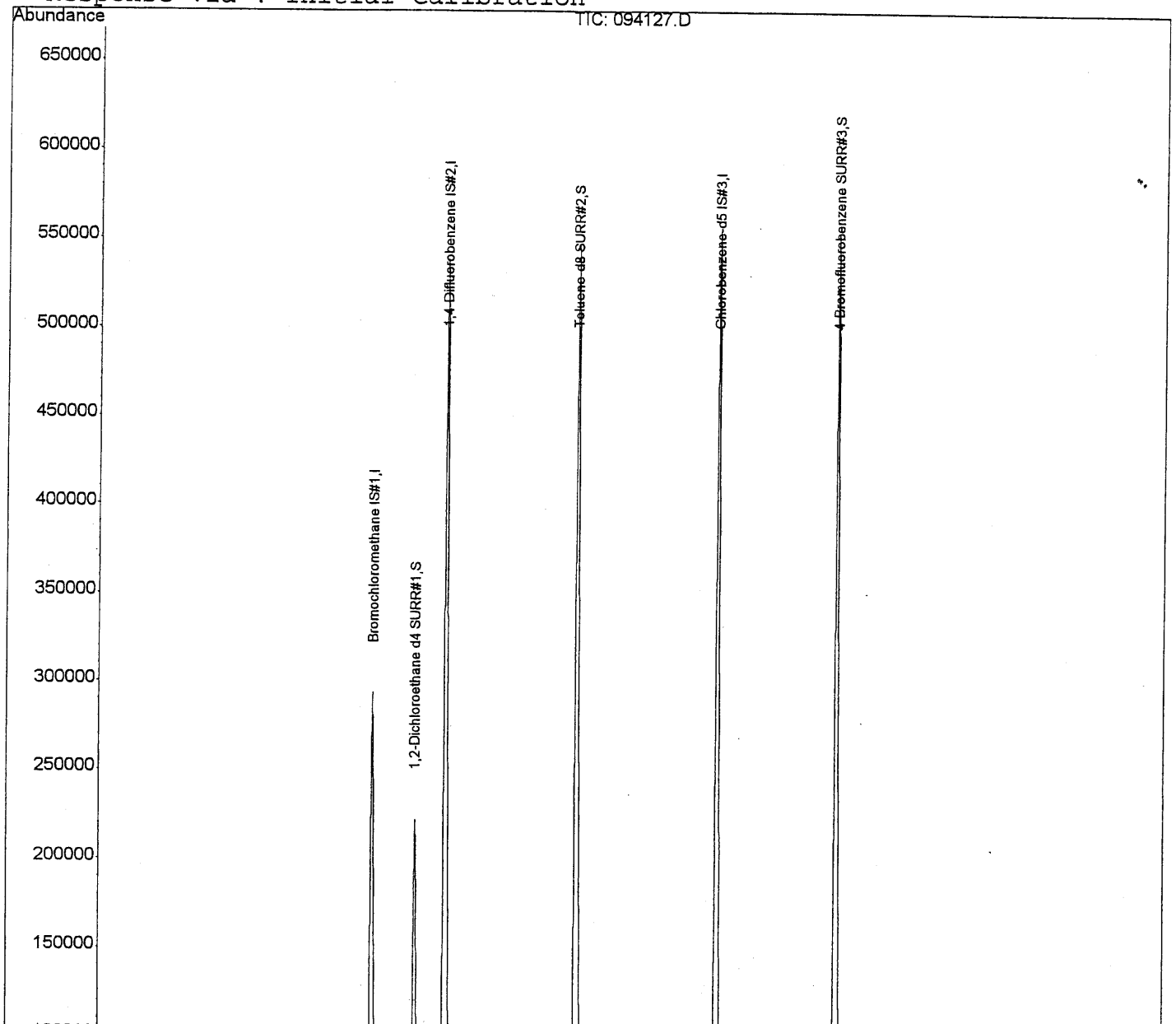
Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094127.D
Acq On : 5 Oct 2004 13:09
Sample : OS=09412-7 BT=A069 RLF=TO14
Misc : AIR UN=mg/m3 Pf/Pi=2.24 500ml
MS Integration Params: rteint.p
Quant Time: Oct 5 14:28 2004

Vial: 10
Operator: DWB
Inst : MARILYN
Multiplr: 0.00

Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094127.D Vial: 10
Acq On : 5 Oct 2004 13:09 Operator: DWB
Sample : OS=09412-7 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.24 500ml Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:12 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Signed

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.26	128	295032	250.00	ng	0.00 94.11%
26) 1,4-Difluorobenzene IS#2	12.15	114	1638807	250.00	ng	0.00 92.44%
36) Chlorobenzene-d5 IS#3	19.28	117	1238624	250.00	ng	0.02 95.05%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.36	65	465781	253.40	ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 101.36%			
32) Toluene-d8 SURR#2	15.59	98	1476360	252.18	ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 100.87%			
46) 4-Bromofluorobenzene SURR#	22.38	95	887823	258.70	ng	0.02
Spiked Amount 250.000	Range 87 - 112		Recovery = 103.48%			

Target Compounds Qvalue

m = 2.24 (500/500) / 500 = .00448

L i m s F i l e r

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-8	TO14	VM	MA	v1.0

LIMS Header Info

Analyst	DWB
Prep_Date	10.05.04
Prep_Time	13:45
Analysis_Date	10.05.04
Analysis_Time	13:45
Batch_ID	MAA069
Clock_ID	
Instrument_ID	MARILYN
Prep_Method	
Analytical_Method	
Dilution_Factor	1
Quantitation_Factor	0.00447
Initial_Vol	
Final_Vol	
Units	mg/m3

Initially Loaded - File : 094128.D
@ D:\HPCHEM\1\DATA03\M100504\

Method : TO14S.M~W

Total Loaded Files : 1

	All	Selected
Total Results :	51	51
Targets :	48	48
Surrogates :	3	3

LIMS Results Info (All)

	Compound	Final Value Flags	CASNo	File ID	[(	Conc Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
1	Benzene	0.067U	71-43-2	094128.D	[	0.000	15,	0.067	<0.067]	T M
2	Bromodichloromethane	0.067U	75-27-4	094128.D	[	0.000	15,	0.067	<0.067]	T M
3	Bromoform	0.067U	75-25-2	094128.D	[	0.000	15,	0.067	<0.067]	T M
4	Bromomethane	0.067U	74-83-9	094128.D	[	0.000	15,	0.067	<0.067]	T M
5	Carbon disulfide	0.067U	75-15-0	094128.D	[	0.000	15,	0.067	<0.067]	T M
6	Carbon tetrachloride	0.067U	56-23-5	094128.D	[	0.000	15,	0.067	<0.067]	T M
7	Chlorobenzene	0.067U	108-90-7	094128.D	[	0.000	15,	0.067	<0.067]	T M
8	Chloroethane	0.067U	75-00-3	094128.D	[	0.000	15,	0.067	<0.067]	T M
9	Chloroform	0.067U	67-66-3	094128.D	[	0.000	15,	0.067	<0.067]	T M
10	Chloromethane	0.067U	74-87-3	094128.D	[	0.000	15,	0.067	<0.067]	T M
11	2-Chlorotoluene	0.067U	95-49-8	094128.D	[	0.000	15,	0.067	<0.067]	T M
12	Dibromochloromethane	0.067U	124-48-1	094128.D	[	0.000	15,	0.067	<0.067]	T M
13	1,2-Dibromoethane	0.067U	106-93-4	094128.D	[	0.000	15,	0.067	<0.067]	T M
14	1,2-Dichlorobenzene	0.067U	95-50-1	094128.D	[	0.000	15,	0.067	<0.067]	T M
15	1,3-Dichlorobenzene	0.067U	541-73-1	094128.D	[	0.000	15,	0.067	<0.067]	T M
16	1,4-Dichlorobenzene	0.067U	106-46-7	094128.D	[	0.000	15,	0.067	<0.067]	T M
17	1,4-Dichloro-2-butene	0.067U	110-57-6	094128.D	[	0.000	15,	0.067	<0.067]	T M
18	Dichlorodifluoromethane	0.067U	75-71-8	094128.D	[	0.000	15,	0.067	<0.067]	T M
19	1,1-Dichloroethane	0.067U	75-34-3	094128.D	[	0.000	15,	0.067	<0.067]	T M
20	1,2-Dichloroethane	0.067U	107-06-2	094128.D	[	0.000	15,	0.067	<0.067]	T M
21	1,1-Dichloroethene	0.067U	75-35-4	094128.D	[	0.000	15,	0.067	<0.067]	T M
22	cis-1,2-Dichloroethene	0.067U	156-59-2	094128.D	[	0.000	15,	0.067	<0.067]	T M
23	trans-1,2-Dichloroethene	0.067U	156-60-5	094128.D	[	0.000	15,	0.067	<0.067]	T M
24	1,2-Dichloropropane	0.067U	78-87-5	094128.D	[	0.000	15,	0.067	<0.067]	T M

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-8	TO14	VM	MA	v1.0

LIMS Results Info ... Continued ... (All)

	Compound	Final Value Flags	CASNo	File ID	[Conc / (Conc	RL Added	RL@Mult Limits	CFV] / %Rec)	T / S
34	Styrene	0.067U	100-42-5	094128.D	[0.000	15,	0.067	<0.067]	T M
35	1,1,2,2-Tetrachloroethane	0.067U	79-34-5	094128.D	[0.000	15,	0.067	<0.067]	T M
36	Tetrachloroethene	0.067U	127-18-4	094128.D	[0.000	15,	0.067	<0.067]	T M
37	Toluene	0.067U	108-88-3	094128.D	[0.000	15,	0.067	<0.067]	T M
38	1,2,4-Trichlorobenzene	0.067U	120-82-1	094128.D	[0.000	15,	0.067	<0.067]	T M
39	1,1,1-Trichloroethane	0.067U	71-55-6	094128.D	[0.000	15,	0.067	<0.067]	T M
40	1,1,2-Trichloroethane	0.067U	79-00-5	094128.D	[0.000	15,	0.067	<0.067]	T M
41	Trichloroethene	0.067U	79-01-6	094128.D	[0.000	15,	0.067	<0.067]	T M
42	Trichlorofluoromethane	0.067U	75-69-4	094128.D	[0.000	15,	0.067	<0.067]	T M
43	1,1,2-Trichlorotrifluoroet	0.067U	76-13-1	094128.D	[0.000	15,	0.067	<0.067]	T M
44	1,2,4-Trimethylbenzene	0.067U	95-63-6	094128.D	[0.000	15,	0.067	<0.067]	T M
45	1,3,5-Trimethylbenzene	0.067U	108-67-8	094128.D	[0.000	15,	0.067	<0.067]	T M
46	Vinyl chloride	0.067U	75-01-4	094128.D	[0.000	15,	0.067	<0.067]	T M
47	o-Xylene	0.067U	95-47-6	094128.D	[0.000	15,	0.067	<0.067]	T M
48	m,p-Xylene	0.13U	108-38-3	094128.D	[0.000	30,	0.13	<0.13]	T M
49	1,2-Dichloroethane d4 SURR	103%	17060-07-0	094128.D	(257.223	250.000	61-140	103%)	S
50	Toluene-d8 SURR#2	101%	2037-26-5	094128.D	(251.742	250.000	90-109	101%)	S
51	4-Bromofluorobenzene SURR#	101%	460-00-4	094128.D	(253.096	250.000	87-112	101%)	S

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094128.D
Acq On : 5 Oct 2004 13:45
Sample : OS=09412-8 BT=A069 RLF=TO14
Misc : AIR UN=mg/m3 Pf/Pi=2.23 500ml
MS Integration Params: rteint.p
Quant Time: Oct 5 14:31 2004

Vial: 11
Operator: DWB
Inst : MARILYN
Multiplr: 0.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.27	128	303354	250.00 ng	0.01 96.76%
26) 1,4-Difluorobenzene IS#2	12.17	114	1707811	250.00 ng	0.03 96.33%
36) Chlorobenzene-d5 IS#3	19.28	117	1272830	250.00 ng	0.03 97.67%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	486145	257.22 ng	0.01
Spiked Amount 250.000	Range 61 - 140		Recovery = 102.89%		
32) Toluene-d8 SURR#2	15.61	98	1535843	251.74 ng	0.03
Spiked Amount 250.000	Range 90 - 109		Recovery = 100.70%		
46) 4-Bromofluorobenzene SURR#	22.38	95	892583	253.10 ng	0.03
Spiked Amount 250.000	Range 87 - 112		Recovery = 101.24%		

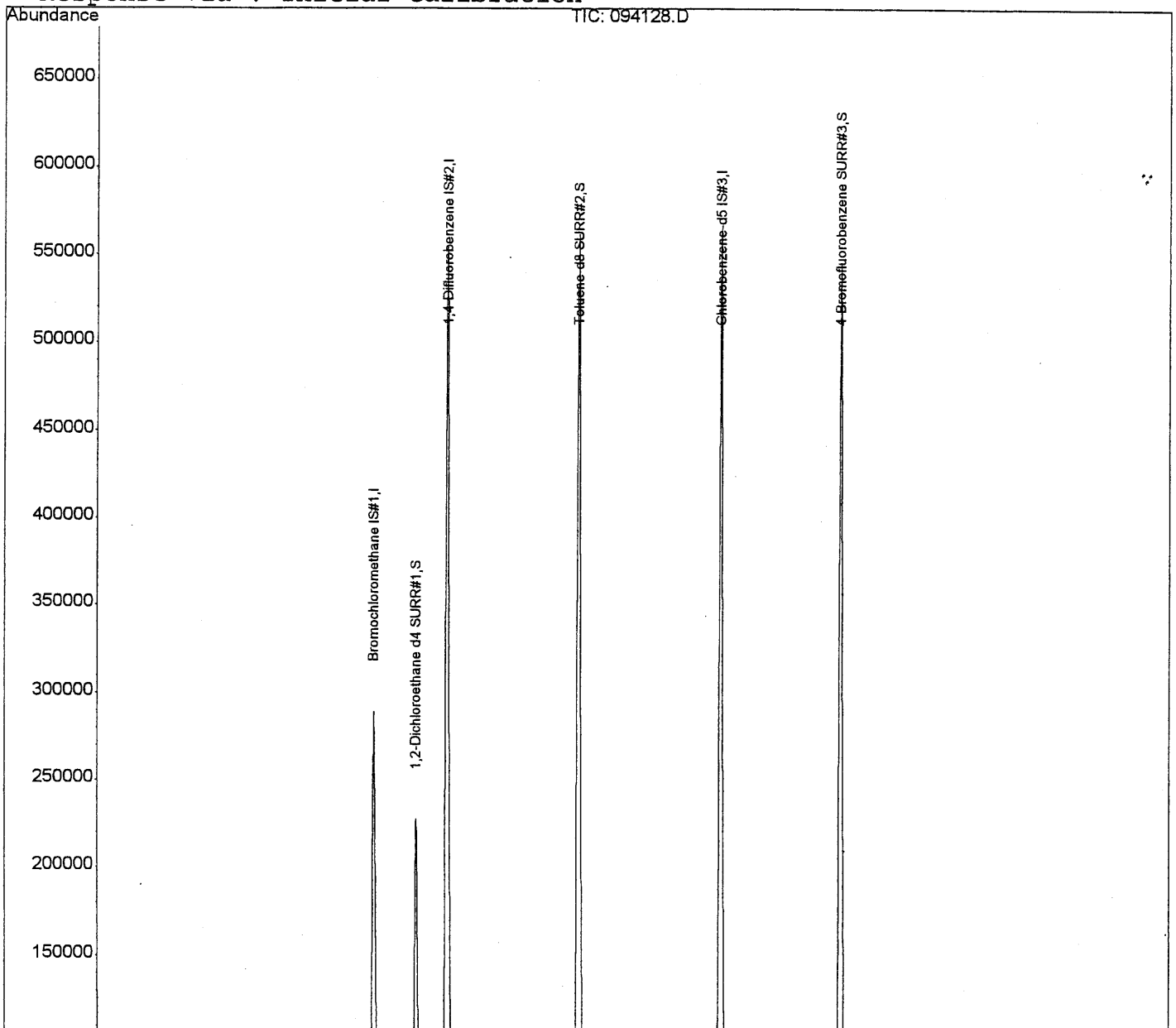
Target Compounds Qvalue

RWB 10-5-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094128.D Vial: 11
Acq On : 5 Oct 2004 13:45 Operator: DWB
Sample : OS=09412-8 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.23 500ml Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:31 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094128.D Vial: 11
Acq On : 5 Oct 2004 13:45 Operator: DWB
Sample : OS=09412-8 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.23 500ml Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 14:18 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Original

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.27	128	303354	250.00	ng	0.01 96.76%
26) 1,4-Difluorobenzene IS#2	12.17	114	1707811	250.00	ng	0.03 96.33%
36) Chlorobenzene-d5 IS#3	19.28	117	1272830	250.00	ng	0.03 97.67%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	486145	257.22	ng	0.01
Spiked Amount 250.000	Range 61 - 140		Recovery = 102.89%			
32) Toluene-d8 SURR#2	15.61	98	1535843	251.74	ng	0.03
Spiked Amount 250.000	Range 90 - 109		Recovery = 100.70%			
46) 4-Bromofluorobenzene SURR#	22.38	95	892583	253.10	ng	0.03
Spiked Amount 250.000	Range 87 - 112		Recovery = 101.24%			

Target Compounds Qvalue

$= 2.23 \left(\frac{500}{500}\right) / 500 = .0047$

L i m s F i l e r

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-9	TO14	VM	MA	v1.0

LIMS Header Info

Analyst	DWB
Prep_Date	10.05.04
Prep_Time	14:22
Analysis_Date	10.05.04
Analysis_Time	14:22
Batch_ID	MAA069
Clock_ID	
Instrument_ID	MARILYN
Prep_Method	
Analytical_Method	
Dilution_Factor	1
Quantitation_Factor	0.00444
Initial_Vol	
Final_Vol	
Units	mg/m3

Initially Loaded - File : 094129.D
@ D:\HPCHEM\1\DATA03\M100504\

Method : TO14S.M~W

Total Loaded Files : 1

	All	Selected
Total Results :	51	51
Targets :	48	48
Surrogates :	3	3

LIMS Results Info (All)

	Compound	Final Value Flags	CASNo	File ID	[(	Conc Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
1	Benzene	0.067U	71-43-2	094129.D	[	0.000	15,	0.067	<0.067]	T M
2	Bromodichloromethane	0.067U	75-27-4	094129.D	[	0.000	15,	0.067	<0.067]	T M
3	Bromoform	0.067U	75-25-2	094129.D	[	0.000	15,	0.067	<0.067]	T M
4	Bromomethane	0.067U	74-83-9	094129.D	[	0.000	15,	0.067	<0.067]	T M
5	Carbon disulfide	0.058J	75-15-0	094129.D	[	0.058<	15,	0.067	<0.067]	T M
6	Carbon tetrachloride	0.067U	56-23-5	094129.D	[	0.000	15,	0.067	<0.067]	T M
7	Chlorobenzene	0.067U	108-90-7	094129.D	[	0.000	15,	0.067	<0.067]	T M
8	Chloroethane	0.067U	75-00-3	094129.D	[	0.000	15,	0.067	<0.067]	T M
9	Chloroform	0.067U	67-66-3	094129.D	[	0.000	15,	0.067	<0.067]	T M
10	Chloromethane	0.067U	74-87-3	094129.D	[	0.000	15,	0.067	<0.067]	T M
11	2-Chlorotoluene	0.067U	95-49-8	094129.D	[	0.000	15,	0.067	<0.067]	T M
12	Dibromochloromethane	0.067U	124-48-1	094129.D	[	0.000	15,	0.067	<0.067]	T M
13	1,2-Dibromoethane	0.067U	106-93-4	094129.D	[	0.000	15,	0.067	<0.067]	T M
14	1,2-Dichlorobenzene	0.067U	95-50-1	094129.D	[	0.000	15,	0.067	<0.067]	T M
15	1,3-Dichlorobenzene	0.067U	541-73-1	094129.D	[	0.000	15,	0.067	<0.067]	T M
16	1,4-Dichlorobenzene	0.067U	106-46-7	094129.D	[	0.000	15,	0.067	<0.067]	T M
17	1,4-Dichloro-2-butene	0.067U	110-57-6	094129.D	[	0.000	15,	0.067	<0.067]	T M
18	Dichlorodifluoromethane	0.067U	75-71-8	094129.D	[	0.000	15,	0.067	<0.067]	T M
19	1,1-Dichloroethane	0.067U	75-34-3	094129.D	[	0.000	15,	0.067	<0.067]	T M
20	1,2-Dichloroethane	0.067U	107-06-2	094129.D	[	0.000	15,	0.067	<0.067]	T M
21	1,1-Dichloroethene	0.067U	75-35-4	094129.D	[	0.000	15,	0.067	<0.067]	T M
22	cis-1,2-Dichloroethene	0.067U	156-59-2	094129.D	[	0.000	15,	0.067	<0.067]	T M
23	trans-1,2-Dichloroethene	0.067U	156-60-5	094129.D	[	0.000	15,	0.067	<0.067]	T M
24	1,2-Dichloropropane	0.067U	78-87-5	094129.D	[	0.000	15,	0.067	<0.067]	T M

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-9	TO14	VM	MA	v1.0

LIMS Results Info ... Continued ... (All)

	Compound	Final Value Flags	CASNo	File ID	[Conc / { Conc	RL Added	RL@Mult Limits	CFV] %Rec}	T S
34	Styrene	0.067U	100-42-5	094129.D	[0.000	15,	0.067	<0.067]	T M
35	1,1,2,2-Tetrachloroethane	0.067U	79-34-5	094129.D	[0.000	15,	0.067	<0.067]	T M
36	Tetrachloroethene	0.067U	127-18-4	094129.D	[0.000	15,	0.067	<0.067]	T M
37	Toluene	0.067U	108-88-3	094129.D	[0.000	15,	0.067	<0.067]	T M
38	1,2,4-Trichlorobenzene	0.067U	120-82-1	094129.D	[0.000	15,	0.067	<0.067]	T M
39	1,1,1-Trichloroethane	0.067U	71-55-6	094129.D	[0.000	15,	0.067	<0.067]	T M
40	1,1,2-Trichloroethane	0.067U	79-00-5	094129.D	[0.000	15,	0.067	<0.067]	T M
41	Trichloroethene	0.067U	79-01-6	094129.D	[0.000	15,	0.067	<0.067]	T M
42	Trichlorofluoromethane	0.067U	75-69-4	094129.D	[0.000	15,	0.067	<0.067]	T M
43	1,1,2-Trichlorotrifluoroet	0.067U	76-13-1	094129.D	[0.000	15,	0.067	<0.067]	T M
44	1,2,4-Trimethylbenzene	0.067U	95-63-6	094129.D	[0.000	15,	0.067	<0.067]	T M
45	1,3,5-Trimethylbenzene	0.067U	108-67-8	094129.D	[0.000	15,	0.067	<0.067]	T M
46	Vinyl chloride	0.067U	75-01-4	094129.D	[0.000	15,	0.067	<0.067]	T M
47	o-Xylene	0.067U	95-47-6	094129.D	[0.000	15,	0.067	<0.067]	T M
48	m,p-Xylene	0.13U	108-38-3	094129.D	[0.000	30,	0.13	<0.13]	T M
49	1,2-Dichloroethane d4 SURR	103%	17060-07-0	094129.D	{ 257.487	250.000	61-140	103%}	S
50	Toluene-d8 SURR#2	101%	2037-26-5	094129.D	{ 253.299	250.000	90-109	101%}	S
51	4-Bromofluorobenzene SURR#	101%	460-00-4	094129.D	{ 252.678	250.000	87-112	101%}	S

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094129.D
Acq On : 5 Oct 2004 14:22
Sample : OS=09412-9 BT=A069 RLF=TO14
Misc : AIR UN=mg/m3 Pf/Pi=2.22 500ml
MS Integration Params: rteint.p
Quant Time: Oct 6 7:17 2004

Vial: 12
Operator: DWB
Inst : MARILYN
Multiplr: 0.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.27	128	305276	250.00 ng	0.01 97.37%
26) 1,4-Difluorobenzene IS#2	12.16	114	1703737	250.00 ng	0.01 96.10%
36) Chlorobenzene-d5 IS#3	19.28	117	1265510	250.00 ng	0.03 97.11%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	489726	257.49 ng	0.01
Spiked Amount 250.000	Range 61 - 140		Recovery = 103.00%		
32) Toluene-d8 SURR#2	15.60	98	1541652	253.30 ng	0.01
Spiked Amount 250.000	Range 90 - 109		Recovery = 101.32%		
46) 4-Bromofluorobenzene SURR#	22.38	95	885985	252.68 ng	0.03
Spiked Amount 250.000	Range 87 - 112		Recovery = 101.07%		

Target Compounds

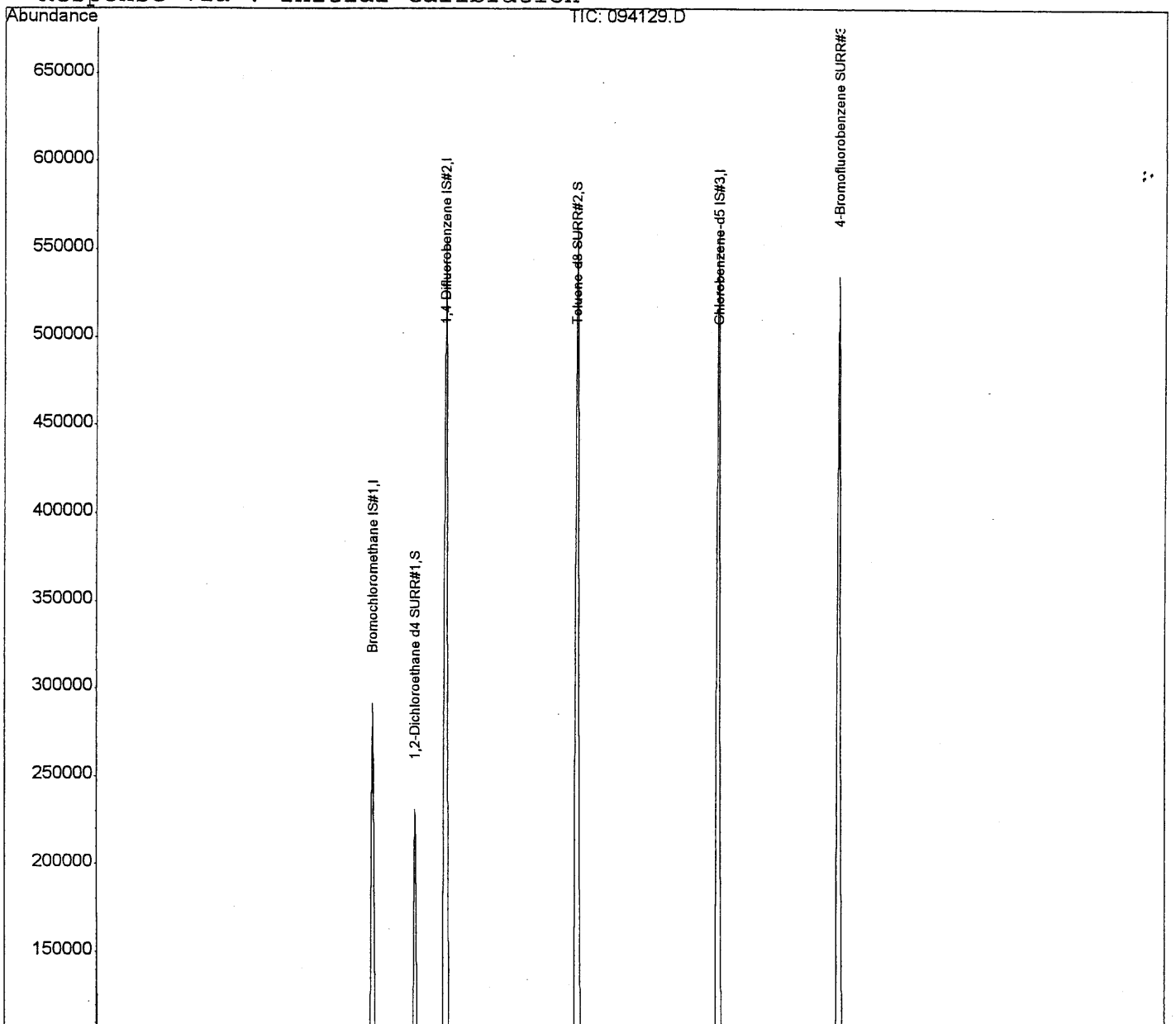
					Qvalue
13) Carbon disulfide	7.17	76	68555	0.06 ng #	91
20) Isooctane	10.84	57	93329	0.05 ng Not required	99

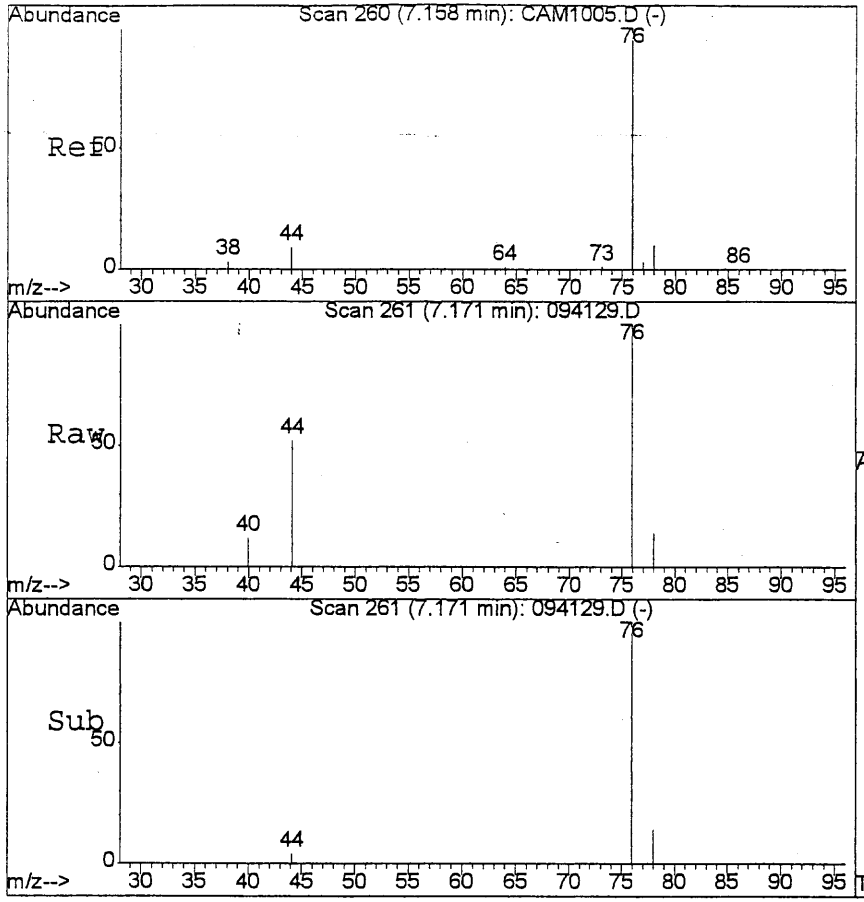
DWB 10-6-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094129.D Vial: 12
Acq On : 5 Oct 2004 14:22 Operator: DWB
Sample : OS=09412-9 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Pf/Pi=2.22 500ml Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 6 7:17 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration

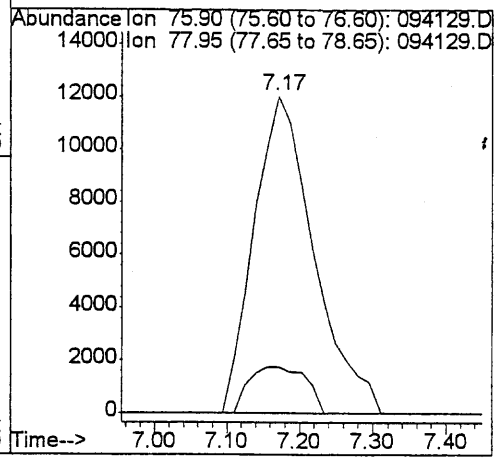


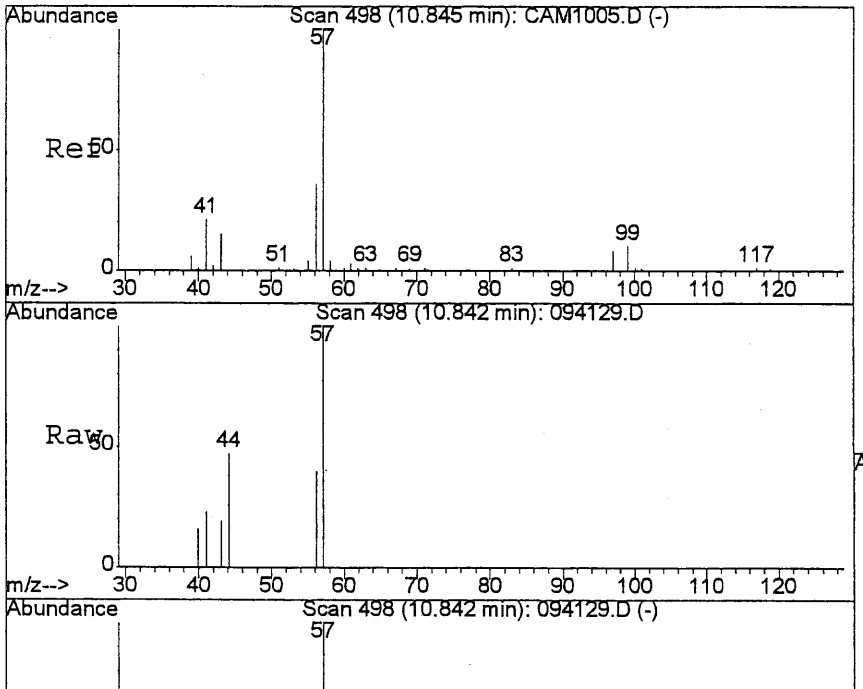


#13
Carbon disulfide
Concen: 0.06 ng
RT: 7.17 min Scan# 261
Delta R.T. 0.01 min
Lab File: 094129.D
Acq: 5 Oct 2004 14:22

Tgt Ion: 76 Resp: 68555

Ion	Ratio	Lower	Upper
76	100		
78	13.8	8.2	12.4#

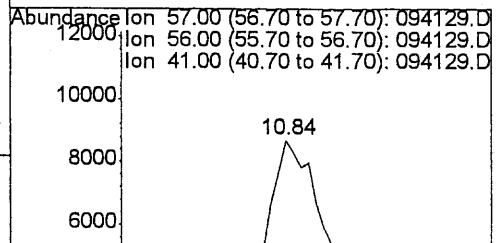




#20
Isooctane
Concen: 0.05 ng
RT: 10.84 min Scan# 498
Delta R.T. -0.00 min
Lab File: 094129.D
Acq: 5 Oct 2004 14:22

Tgt Ion: 57 Resp: 93329

Ion	Ratio	Lower	Upper
57	100		
56	35.4	16.4	56.4
41	21.2	10.5	31.5



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\094129.D
Acq On : 5 Oct 2004 14:22
Sample : OS=09412-9 BT=A069 RLF=TO14
Misc : AIR UN=mg/m3 Pf/Pi=2.22 500ml
MS Integration Params: rteint.p
Quant Time: Oct 5 14:53 2004

Vial: 12
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

original

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.27	128	305276	250.00	ng	0.01 97.37%
26) 1,4-Difluorobenzene IS#2	12.16	114	1703737	250.00	ng	0.01 96.10%
36) Chlorobenzene-d5 IS#3	19.28	117	1265510	250.00	ng	0.03 97.11%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	489726	257.49	ng	0.01
Spiked Amount 250.000	Range 61 - 140		Recovery = 103.00%			
32) Toluene-d8 SURR#2	15.60	98	1541652	253.30	ng	0.01
Spiked Amount 250.000	Range 90 - 109		Recovery = 101.32%			
46) 4-Bromofluorobenzene SURR#	22.38	95	885985	252.68	ng	0.03
Spiked Amount 250.000	Range 87 - 112		Recovery = 101.07%			

Target Compounds

						Qvalue
13) Carbon disulfide	7.17	76	68555	13.03	ng #	91
20) Isooctane	10.84	57	93329	11.57	ng	99

$\left(\frac{500}{500}\right)/500 = .00444$

Response Factor Report MARILYN

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 13:01:07 2004
Response via : Initial Calibration

Calibration Files
25 =25MS30.D 250 =250MS30.D 1500 =1500MS30.D
1000 =1000MS30.D 100 =100MS30.D 500 =500MS30.D

Dab 9-30-04
9-30-04

		Compound	25	250	1500	1000	100	500	Avg	%RSD
1)	I	Bromochloromethane IS	----------ISTD----------							
2)		Dichlorodifluoromet	1.831	1.570	1.370	1.464	1.510	1.616	1.560	10.11
3)		Dichlorotetrafluoro	1.058	1.278	1.320	1.255	1.255	1.358	1.254	8.30
4)	P	Chloromethane	1.033	1.029	1.004	0.986	0.964	1.075	1.015	3.88
5)	C	Vinyl chloride	1.066	1.098	1.136	1.109	1.014	1.153	1.096	4.59#
6)		Bromomethane	1.302	1.164	1.006	1.113	1.088	1.185	1.143	8.75
7)		Chloroethane	0.619	0.764	0.666	0.760	0.709	0.789	0.718	9.12
8)		Trichlorofluorometh	3.100	2.913	2.920	2.807	2.774	3.068	2.930	4.52
9)		1,1,2-Trichlorotrif	2.281	2.169	2.295	2.184	2.022	2.319	2.211	5.04
10)	MC	1,1-Dichloroethene	1.392	1.418	1.455	1.409	1.311	1.470	1.409	3.98#
11)		Iodomethane							0.000	-1.00
12)		Methylene chloride	1.703	1.623	1.649	1.630	1.625	1.688	1.653	2.08
13)		Carbon disulfide	4.438	4.238	4.408	4.257	4.088	4.428	4.310	3.24
14)		methyl-Tert-Butyl E	4.125	4.039	4.389	4.328	3.886	4.310	4.180	4.69
15)		trans-1,2-Dichloroe	1.845	1.836	1.820	1.806	1.728	1.922	1.826	3.44
16)		n-Hexane	2.441	1.836	1.722	1.746	1.941	1.912	1.933	13.64
17)	P	1,1-Dichloroethane	3.244	3.063	2.831	2.810	2.925	3.047	2.987	5.50
18)		cis-1,2-Dichloroeth	2.268	2.265	2.211	2.193	2.091	2.311	2.223	3.48
19)	C	Chloroform	3.608	3.544	3.381	3.426	3.241	3.608	3.468	4.20#
20)		Isooctane	8.494	6.278	5.924	5.928	6.618	6.399	6.607	14.58
21)		1,1,1-Trichloroetha	3.158	3.115	3.279	3.180	2.835	3.244	3.135	5.06
22)		Carbon tetrachlorid	2.752	2.712	2.965	2.841	2.465	2.887	2.770	6.32
23)	S	1,2-Dichloroethane	1.573	1.480	1.516	1.593	1.590	1.594	1.558	3.10
24)		1,2-Dichloroethane	1.748	1.737	1.854	1.838	1.672	1.840	1.782	4.12
25)		1,2-Dibromoethane	2.107	2.115	2.411	2.211	1.974	2.349	2.195	7.45
26)	I	1,4-Difluorobenzene I	----------ISTD----------							
27)	M	Benzene	0.950	0.931	0.891	0.887	0.857	0.930	0.908	3.85
28)	M	Trichloroethene	0.373	0.383	0.376	0.371	0.346	0.398	0.375	4.58
29)	C	1,2-Dichloropropane	0.310	0.328	0.325	0.327	0.309	0.339	0.323	3.58#
30)		Bromodichloromethan	0.598	0.622	0.618	0.625	0.570	0.627	0.610	3.61
31)		cis-1,3-Dichloropro	0.469	0.513	0.511	0.493	0.476	0.519	0.497	4.21
32)	S	Toluene-d8 SURR#2	0.894	0.895	0.895	0.883	0.895	0.897	0.893	0.59
33)	MC	Toluene	0.560	0.573	0.569	0.568	0.526	0.573	0.562	3.26#
34)		trans-1,3-Dichlorop	0.400	0.428	0.433	0.440	0.396	0.436	0.422	4.55
35)		1,1,2-Trichloroetha	0.267	0.293	0.291	0.295	0.270	0.300	0.286	4.24

Response Factor Report MARILYN

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 13:01:07 2004
Response via : Initial Calibration

Calibration Files
25 =25MS30.D 250 =250MS30.D 1500 =1500MS30.D
1000 =1000MS30.D 100 =100MS30.D 500 =500MS30.D

		Compound	25	250	1500	1000	100	500	Avg	%RSD
42)		o-Xylene	0.495	0.531	0.522	0.532	0.478	0.527	0.514	4.37
43)		Styrene	0.757	0.808	0.807	0.804	0.739	0.807	0.787	3.91
44)	P	Bromoform	0.367	0.423	0.422	0.443	0.374	0.430	0.410	7.63
45)	P	1,1,2,2-Tetrachloro	0.566	0.590	0.565	0.601	0.526	0.599	0.574	4.96
46)	S	4-Bromofluorobenzen	0.680	0.686	0.708	0.692	0.699	0.691	0.693	1.45
47)		1,4-Dichloro-2-bute	0.132	0.142	0.140	0.150	0.127	0.144	0.139	6.03
48)		4-Ethyltoluene	1.199	1.180	1.236	1.128	1.013	1.151	1.151	6.74
49)		1,3,5-Trimethylbenz	1.212	1.304	1.177	1.176	1.112	1.272	1.209	5.78
50)		2-Chlorotoluene	1.196	1.252	1.188	1.156	1.136	1.206	1.189	3.40
51)		1,2,4-Trimethylbenz	1.107	1.094	1.070	1.022	0.999	1.068	1.060	3.95
52)		1,3-Dichlorobenzene	0.661	0.694	0.674	0.654	0.650	0.684	0.670	2.60
53)		1,4-Dichlorobenzene	0.654	0.632	0.618	0.599	0.595	0.629	0.621	3.54
54)		1,2-Dichlorobenzene	0.577	0.639	0.614	0.608	0.561	0.633	0.605	5.08
55)		1,2,4-Trichlorobenz	0.366	0.365	0.340	0.324	0.336	0.345	0.346	4.80
56)		Napthalene	0.702	0.728	0.664	0.662	0.659	0.677	0.682	4.05
57)		Hexachlorobutadiene	0.210	0.231	0.203	0.192	0.197	0.196	0.205	7.04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\25MS30.D
Acq On : 30 Sep 2004 9:20
Sample : VSTD025
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:33 2004

Vial: 3
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M090804\CAM0908.D (8 Sep 2004 8:19)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.27	128	284988	250.00 ng	0.01 69.45%
26) 1,4-Difluorobenzene IS#2	12.17	114	1613018	250.00 ng	0.01 91.79%
36) Chlorobenzene-d5 IS#3	19.28	117	1163721	250.00 ng	0.01 88.46%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	448389	348.92 ng	0.01
Spiked Amount 250.000 Range 61 - 140 Recovery = 139.57%					
32) Toluene-d8 SURR#2	15.60	98	1441499	274.71 ng	0.00
Spiked Amount 250.000 Range 90 - 109 Recovery = 109.88%#					
46) 4-Bromofluorobenzene SURR#	22.38	95	790850	230.34 ng	0.00
Spiked Amount 250.000 Range 87 - 112 Recovery = 92.14%					

DWB 9-30-04

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.25	85	52170	28.20 ng	#	36
3) Dichlorotetrafluoroethane	3.44	135	30152m	20.35 ng	#	100
4) Chloromethane	3.68	50	29430	22.85 ng	#	100
5) Vinyl chloride	3.84	62	30382	21.50 ng	#	48
6) Bromomethane	4.61	94	37099	23.91 ng	#	100
7) Chloroethane	4.74	64	17640	15.66 ng	#	100
8) Trichlorofluoromethane	5.17	101	88356	29.47 ng		83
9) 1,1,2-Trichlorotrifluoroet	5.90	151	65010	26.54 ng	#	100
10) 1,1-Dichloroethene	6.24	96	39662	24.31 ng	#	100
12) Methylene chloride	7.08	49	48522	21.92 ng	#	100
13) Carbon disulfide	7.17	76	126489	24.40 ng	#	100
14) methyl-Tert-Butyl Ether	7.37	73	117554	31.58 ng	#	100
15) trans-1,2-Dichloroethene	7.63	96	52575	26.18 ng	#	100
16) n-Hexane	7.76	57	69558	43.52 ng	#	100
17) 1,1-Dichloroethane	8.44	63	92452	27.88 ng	#	100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\25MS30.D
Acq On : 30 Sep 2004 9:20
Sample : VSTD025
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:33 2004

Vial: 3
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
28) Trichloroethene	12.92	130	60226	20.25 ng	#	100
29) 1,2-Dichloropropane	13.29	63	50007	19.94 ng	#	100
30) Bromodichloromethane	13.81	83	96500	17.78 ng	#	1
31) cis-1,3-Dichloropropene	15.01	75	75691	20.06 ng	#	73
33) Toluene	15.78	92	90316	23.67 ng	#	100
34) trans-1,3-Dichloropropene	16.15	75	64472	21.26 ng	#	100
35) 1,1,2-Trichloroethane	16.54	97	43078	18.88 ng	#	100
37) Tetrachloroethene	17.36	164	49959	20.13 ng	#	100
38) Dibromochloromethane	17.84	127	52757	14.35 ng	#	100
39) Chlorobenzene	19.37	112	108277	21.84 ng	#	100
40) Ethylbenzene	19.48	106	49873	24.40 ng	#	100
41) m,p-Xylene	19.68	106	124007	47.47 ng	#	1
42) o-Xylene	20.80	106	57637	22.90 ng	#	100
43) Styrene	20.89	104	88131	21.94 ng	#	100
44) Bromoform	21.78	173	42749	13.21 ng	#	100
45) 1,1,2,2-Tetrachloroethane	22.13	83	65846	16.31 ng	#	100
47) 1,4-Dichloro-2-butene	22.69	75	15358	4.07 ng	#	6
48) 4-Ethyltoluene	23.06	105	139509	24.44 ng	#	68
49) 1,3,5-Trimethylbenzene	23.17	105	141007m	28.14 ng	#	74
50) 2-Chlorotoluene	23.25	91	139214	23.40 ng	#	100
51) 1,2,4-Trimethylbenzene	24.24	105	128878	27.45 ng	#	100
52) 1,3-Dichlorobenzene	25.23	146	76916	21.23 ng	#	95
53) 1,4-Dichlorobenzene	25.46	146	76114	21.17 ng	#	92
54) 1,2-Dichlorobenzene	26.25	146	67199	19.43 ng	#	100
55) 1,2,4-Trichlorobenzene	29.27	180	42605	21.64 ng	#	100
56) Napthalene	29.75	128	81707	22.32 ng	#	100
57) Hexachlorobutadiene	29.52	225	24386	21.82 ng	#	100

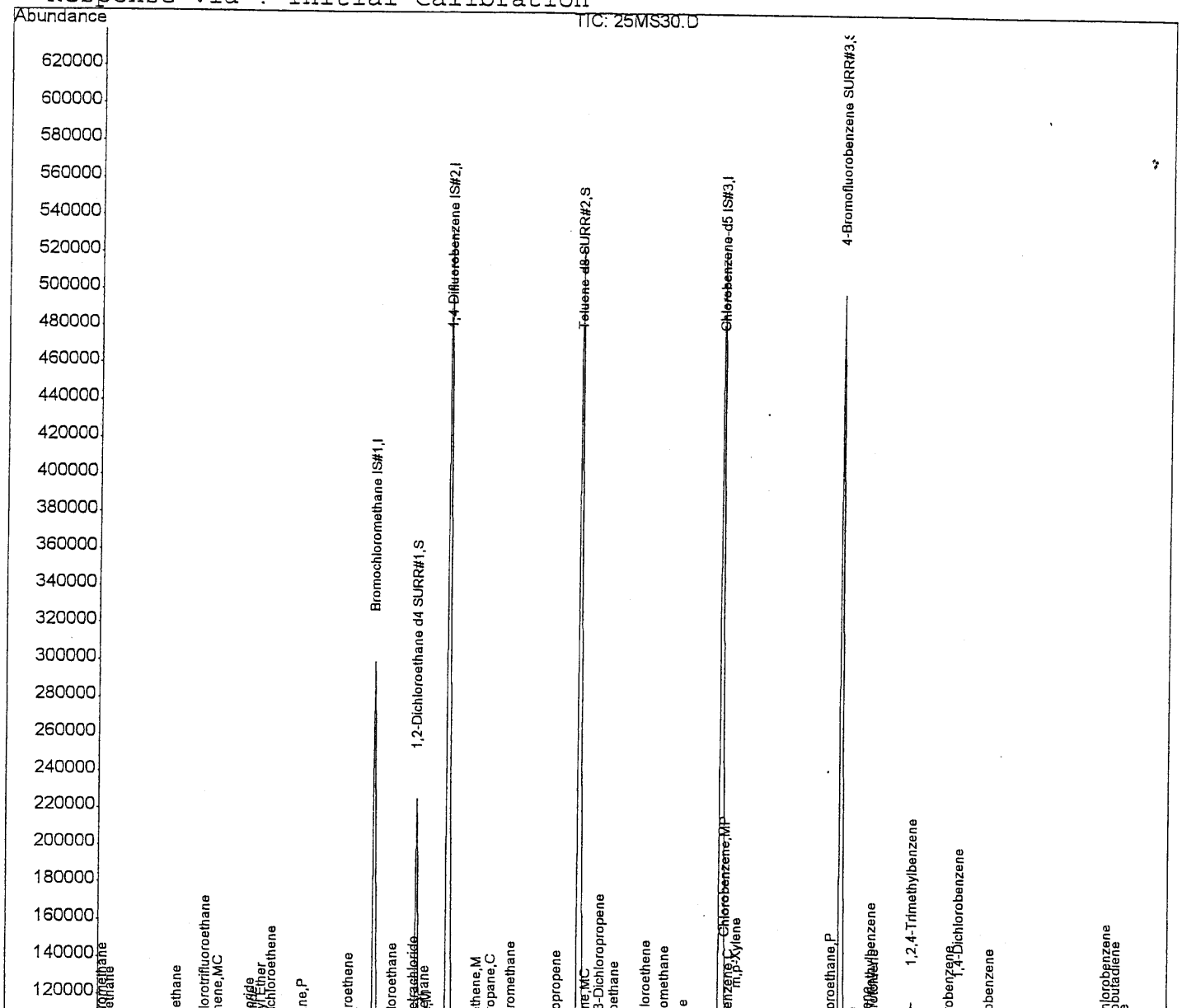
Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\25MS30.D
Acq On : 30 Sep 2004 9:20
Sample : VSTD025
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:33 2004

Vial: 3
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Initial Calibration

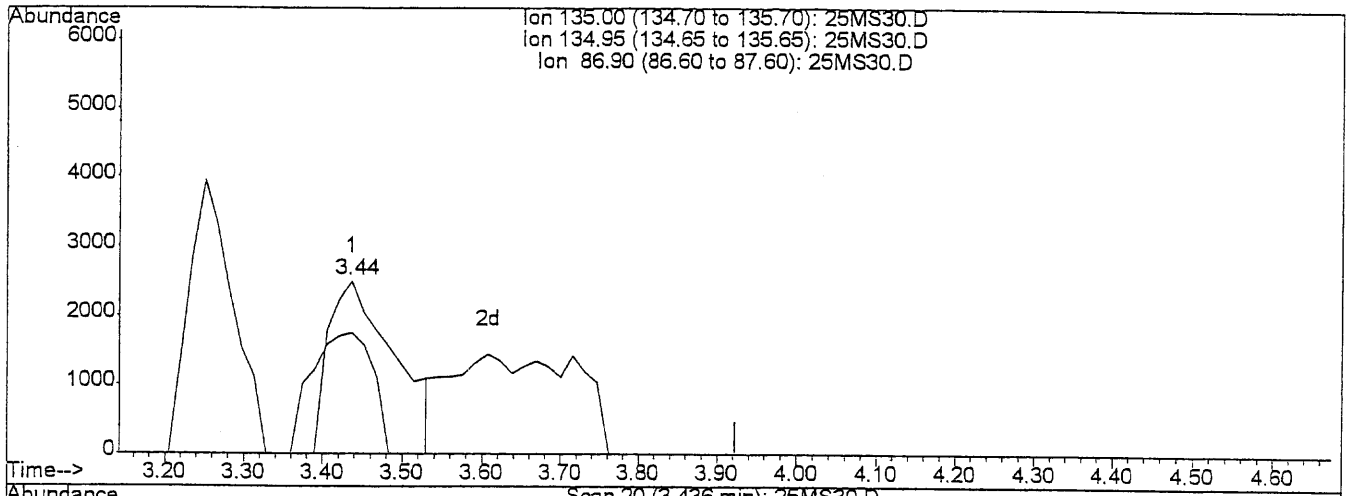


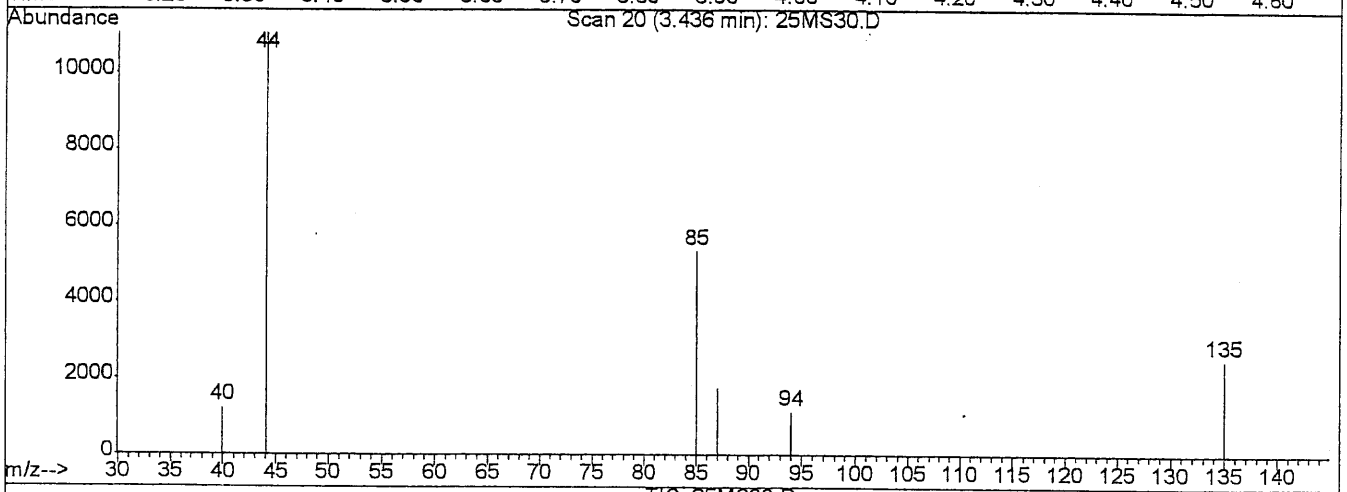
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA03\M093004\25MS30.D
Acq On : 30 Sep 2004 9:20
Sample : VSTD025
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 9:51 2004

Vial: 3
Operator: DWB
Inst : MARILYN
Multiplr: 1.00
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Multiple Level Calibration





TIC: 25MS30.D

(3) Dichlorotetrafluoroethane

3.44min 9.57ng

response 14187

Ion Exp% Act%

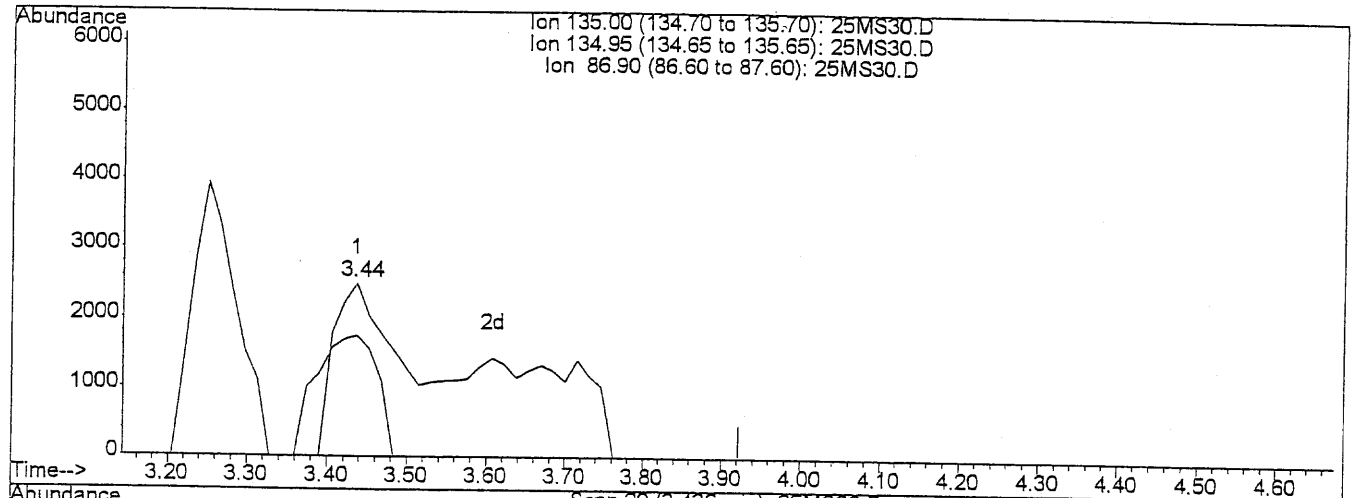
Quantitation Report (Qedit)

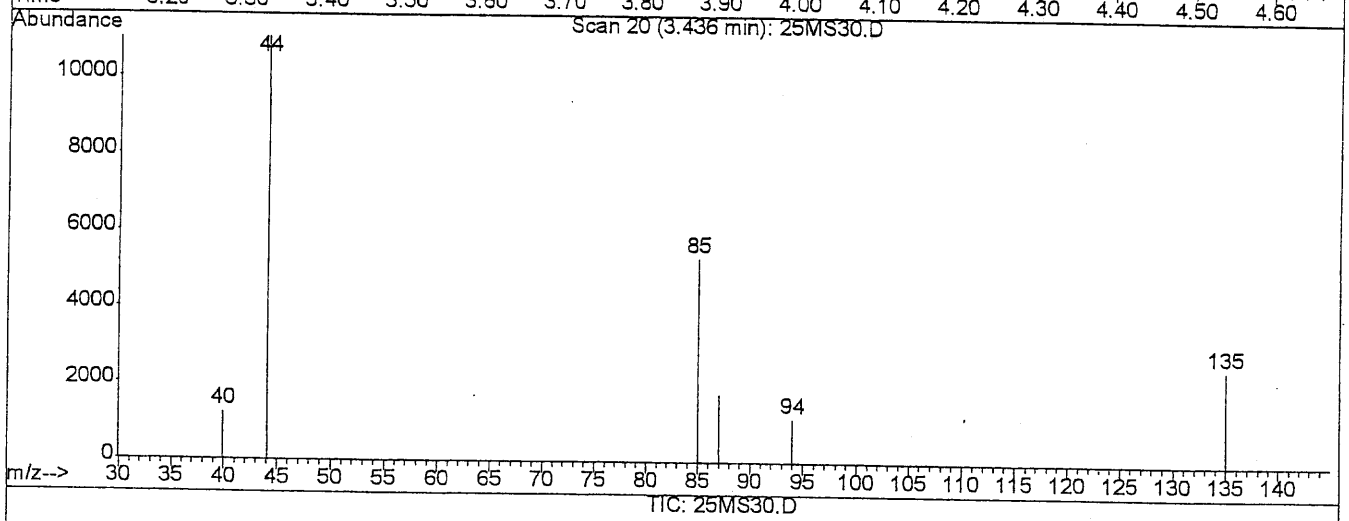
Data File : D:\HPCHEM\1\DATA03\M093004\25MS30.D
Acq On : 30 Sep 2004 9:20
Sample : VSTD025
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:32 2004

Vial: 3
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Multiple Level Calibration





TIC: 25MS30.D

(3) Dichlorotetrafluoroethane

3.44min 20.35ng m

response 30152

Ion Exp% Act%

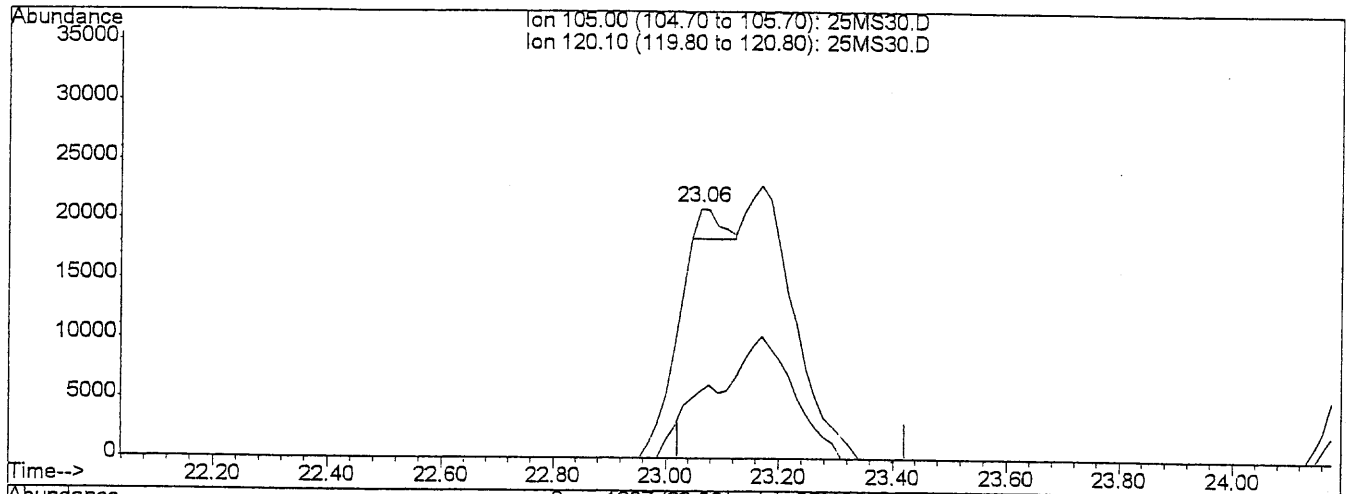
Quantitation Report (Qedit)

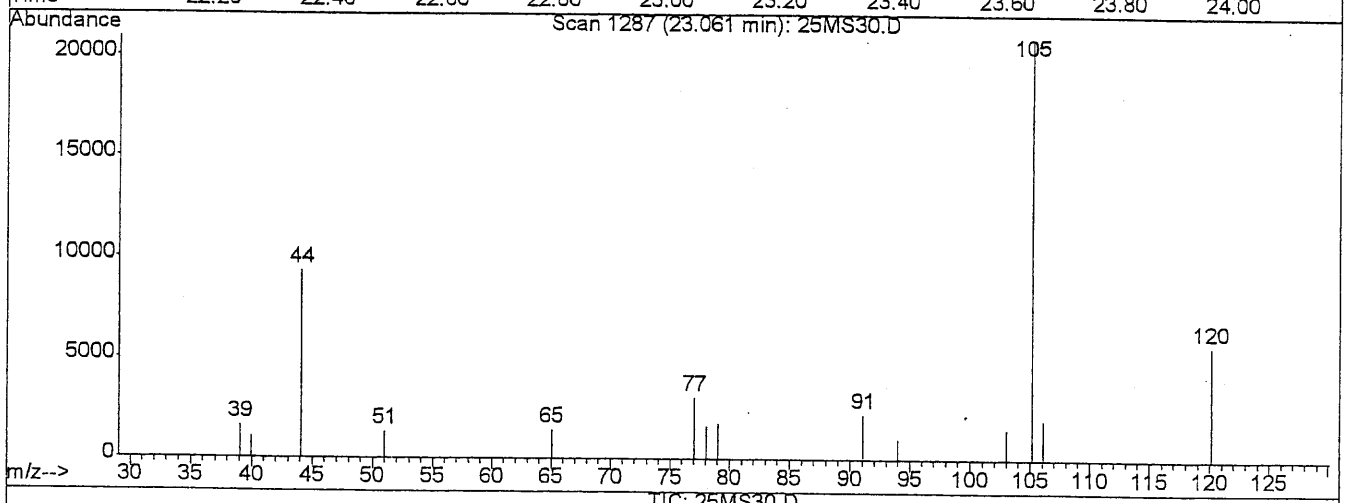
Data File : D:\HPCHEM\1\DATA03\M093004\25MS30.D
Acq On : 30 Sep 2004 9:20
Sample : VSTD025
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:32 2004

Vial: 3
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Multiple Level Calibration





TIC: 25MS30.D

(49) 1,3,5-Trimethylbenzene

23.06min 1.36ng

response 6803

Ion Exp% Act%

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\25MS30.D
Acq On : 30 Sep 2004 9:20
Sample : VSTD025
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 9:51 2004

Vial: 3
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M090804\CAM0908.D (8 Sep 2004 8:19)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.27	128	284988	250.00 ng	0.01 69.45%
26) 1,4-Difluorobenzene IS#2	12.17	114	1613018	250.00 ng	0.01 91.79%
36) Chlorobenzene-d5 IS#3	19.28	117	1163721	250.00 ng	0.01 88.46%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	448389	348.92 ng	0.01
Spiked Amount 250.000	Range 61 - 140		Recovery = 139.57%		
32) Toluene-d8 SURR#2	15.60	98	1441499	274.71 ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 109.88%#		
46) 4-Bromofluorobenzene SURR#	22.38	95	790850	230.34 ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 92.14%		

Original DW 9-30-04

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.25	85	52170	28.20 ng	#	36
3) Dichlorotetrafluoroethane	3.44	135	14187	9.57 ng	PE	100
4) Chloromethane	3.68	50	29430	22.85 ng	#	100
5) Vinyl chloride	3.84	62	30382	21.50 ng	#	48
6) Bromomethane	4.61	94	37099	23.91 ng	#	100
7) Chloroethane	4.74	64	17640	15.66 ng	#	100
8) Trichlorofluoromethane	5.17	101	88356	29.47 ng		83
9) 1,1,2-Trichlorotrifluoroet	5.90	151	65010	26.54 ng	#	100
10) 1,1-Dichloroethene	6.24	96	39662	24.31 ng	#	100
12) Methylene chloride	7.08	49	48522	21.92 ng	#	100
13) Carbon disulfide	7.17	76	126489	24.40 ng	#	100
14) methyl-Tert-Butyl Ether	7.37	73	117554	31.58 ng	#	100
15) trans-1,2-Dichloroethene	7.63	96	52575	26.18 ng	#	100
16) n-Hexane	7.76	57	69558	43.52 ng	#	100
17) 1,1-Dichloroethane	8.44	63	92452	27.88 ng	#	100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\25MS30.D
Acq On : 30 Sep 2004 9:20
Sample : VSTD025
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 9:51 2004

Vial: 3
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28) Trichloroethene	12.92	130	60226	20.25	ng	#	100
29) 1,2-Dichloropropane	13.29	63	50007	19.94	ng	#	100
30) Bromodichloromethane	13.81	83	96500	17.78	ng	#	1
31) cis-1,3-Dichloropropene	15.01	75	75691	20.06	ng	#	73
33) Toluene	15.78	92	90316	23.67	ng	#	100
34) trans-1,3-Dichloropropene	16.15	75	64472	21.26	ng	#	100
35) 1,1,2-Trichloroethane	16.54	97	43078	18.88	ng	#	100
37) Tetrachloroethene	17.36	164	49959	20.13	ng	#	100
38) Dibromochloromethane	17.84	127	52757	14.35	ng	#	100
39) Chlorobenzene	19.37	112	108277	21.84	ng	#	100
40) Ethylbenzene	19.48	106	49873	24.40	ng	#	100
41) m,p-Xylene	19.68	106	124007	47.47	ng	#	1
42) o-Xylene	20.80	106	57637	22.90	ng	#	100
43) Styrene	20.89	104	88131	21.94	ng	#	100
44) Bromoform	21.78	173	42749	13.21	ng	#	100
45) 1,1,2,2-Tetrachloroethane	22.13	83	65846	16.31	ng	#	100
47) 1,4-Dichloro-2-butene	22.69	75	15358	4.07	ng	#	6
48) 4-Ethyltoluene	23.06	105	139509	24.44	ng	#	68
49) 1,3,5-Trimethylbenzene	23.06	105	6803	1.36	ng	#	74
50) 2-Chlorotoluene	23.25	91	139214	23.40	ng	#	100
51) 1,2,4-Trimethylbenzene	24.24	105	128878	27.45	ng	#	100
52) 1,3-Dichlorobenzene	25.23	146	76916	21.23	ng	#	95
53) 1,4-Dichlorobenzene	25.46	146	76114	21.17	ng	#	92
54) 1,2-Dichlorobenzene	26.25	146	67199	19.43	ng	#	100
55) 1,2,4-Trichlorobenzene	29.27	180	42605	21.64	ng	#	100
56) Napthalene	29.75	128	81707	22.32	ng	#	100
57) Hexachlorobutadiene	29.52	225	24386	21.82	ng	#	100

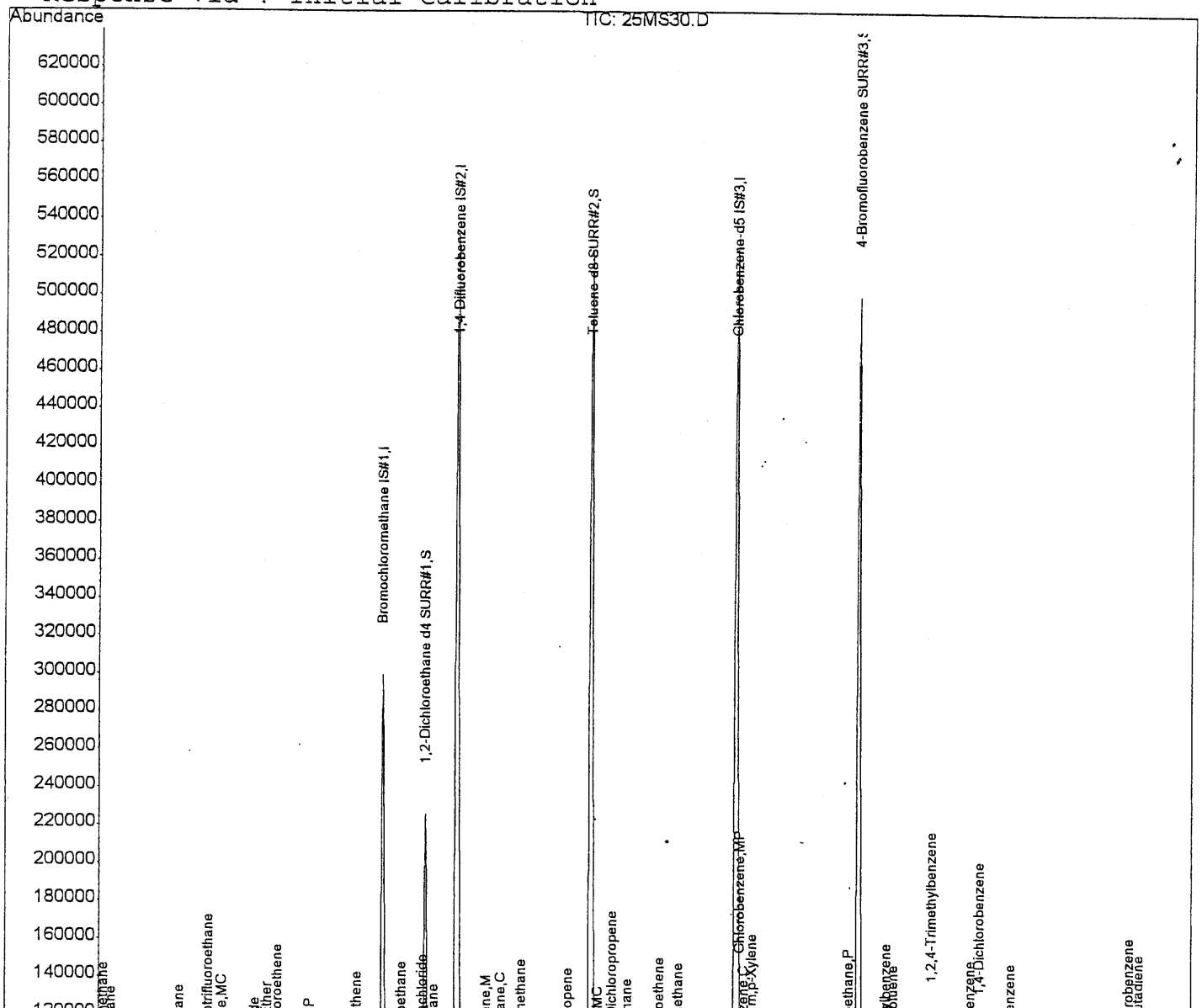
Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\25MS30.D
Acq On : 30 Sep 2004 9:20
Sample : VSTD025
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 9:51 2004

Vial: 3
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Initial Calibration



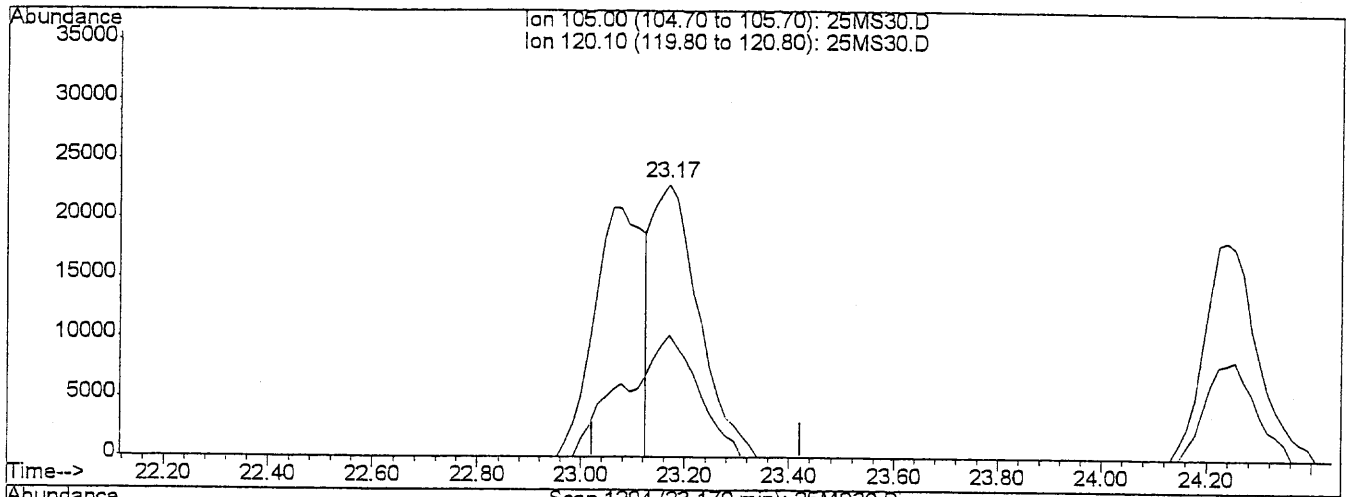
Quantitation Report (Qedit)

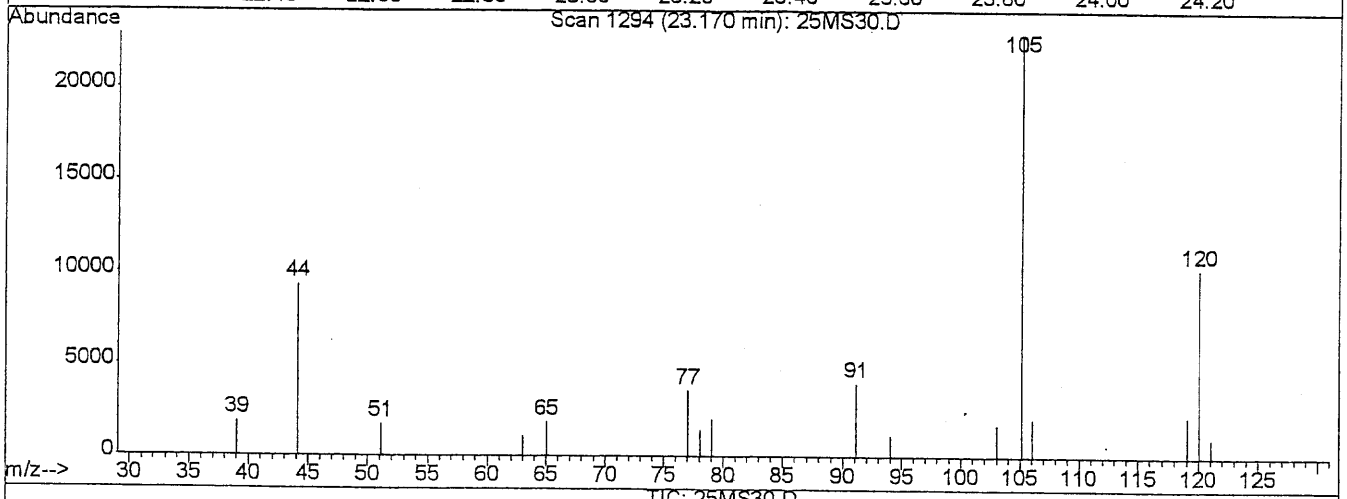
Data File : D:\HPCHEM\1\DATA03\M093004\25MS30.D
Acq On : 30 Sep 2004 9:20
Sample : VSTD025
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:33 2004

Vial: 3
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Multiple Level Calibration





TIC: 25MS30.D

(49) 1,3,5-Trimethylbenzene

23.17min 28.14ng m

response 141007

Ion Exp% Act%

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\100MS30.D Vial: 4
Acq On : 30 Sep 2004 9:57 Operator: DWB
Sample : VSTD100 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 10:36 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M090804\CAM0908.D (8 Sep 2004 8:19)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.27	128	277579	250.00	ng	0.02 67.65%
26) 1,4-Difluorobenzene IS#2	12.18	114	1539280	250.00	ng	0.02 87.59%
36) Chlorobenzene-d5 IS#3	19.29	117	1132118	250.00	ng	0.02 86.05%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	441221	352.51	ng	0.02
Spiked Amount 250.000 Range 61 - 140 Recovery = 141.00%#						
32) Toluene-d8 SURR#2	15.62	98	1378096	275.21	ng	0.02
Spiked Amount 250.000 Range 90 - 109 Recovery = 110.08%#						
46) 4-Bromofluorobenzene SURR#	22.38	95	791240	236.89	ng	0.00
Spiked Amount 250.000 Range 87 - 112 Recovery = 94.76%						

Target Compounds DdD 9-30-04

						Qvalue
2) Dichlorodifluoromethane	3.26	85	167669	93.04	ng	# 22
3) Dichlorotetrafluoroethane	3.44	135	139339m	96.54	ng	# 100
4) Chloromethane	3.69	50	107020	85.30	ng	# 100
5) Vinyl chloride	3.86	62	112541	81.77	ng	# 58
6) Bromomethane	4.60	94	120811	79.93	ng	# 100
7) Chloroethane	4.74	64	78702	71.72	ng	# 100
8) Trichlorofluoromethane	5.18	101	307968	105.45	ng	87
9) 1,1,2-Trichlorotrifluoroet	5.90	151	224453	94.10	ng	# 100
10) 1,1-Dichloroethene	6.23	96	145613	91.65	ng	# 100
12) Methylene chloride	7.08	49	180424	83.68	ng	# 100
13) Carbon disulfide	7.17	76	453905	89.91	ng	# 100
14) methyl-Tert-Butyl Ether	7.38	73	431502	119.02	ng	# 100
15) trans-1,2-Dichloroethene	7.65	96	191858	98.10	ng	# 100
16) n-Hexane	7.76	57	215541	138.44	ng	# 100
17) 1,1-Dichloroethane	8.44	63	324784	100.55	ng	# 100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\100MS30.D
Acq On : 30 Sep 2004 9:57
Sample : VSTD100
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:36 2004

Vial: 4
Operator: DWB
Inst : MARILYN
Multiplr: 1.00
Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28)	Trichloroethene	12.94	130	212802	74.96	ng	#	100
29)	1,2-Dichloropropane	13.31	63	189993	79.37	ng	#	100
30)	Bromodichloromethane	13.82	83	351113	67.80	ng	#	1
31)	cis-1,3-Dichloropropene	15.01	75	292910	81.33	ng	#	80
33)	Toluene	15.80	92	323576	88.85	ng	#	100
34)	trans-1,3-Dichloropropene	16.17	75	243920	84.30	ng	#	100
35)	1,1,2-Trichloroethane	16.56	97	166201	76.32	ng	#	100
37)	Tetrachloroethene	17.37	164	175377	72.64	ng	#	100
38)	Dibromochloromethane	17.83	127	198389	55.45	ng	#	100
39)	Chlorobenzene	19.38	112	395232	81.95	ng	#	100
40)	Ethylbenzene	19.49	106	177910	89.48	ng	#	100
41)	m,p-Xylene	19.69	106	464420	182.75	ng	#	1
42)	o-Xylene	20.80	106	216283	88.32	ng	#	100
43)	Styrene	20.88	104	334624	85.62	ng	#	100
44)	Bromoform	21.78	173	169544	53.86	ng	#	100
45)	1,1,2,2-Tetrachloroethane	22.14	83	238117	60.62	ng	#	100
47)	1,4-Dichloro-2-butene	22.69	75	57405	15.65	ng	#	1
48)	4-Ethyltoluene	23.07	105	458616	82.60	ng	#	34
49)	1,3,5-Trimethylbenzene	23.17	105	503667m	103.31	ng	#	0
50)	2-Chlorotoluene	23.25	91	514549	88.89	ng	#	100
51)	1,2,4-Trimethylbenzene	24.23	105	452385	99.05	ng	#	100
52)	1,3-Dichlorobenzene	25.23	146	294554	83.58	ng		95
53)	1,4-Dichlorobenzene	25.45	146	269616	77.08	ng	#	91
54)	1,2-Dichlorobenzene	26.26	146	254127	75.55	ng	#	100
55)	1,2,4-Trichlorobenzene	29.28	180	152343	79.53	ng	#	100
56)	Napthalene	29.74	128	298321	83.76	ng	#	100
57)	Hexachlorobutadiene	29.51	225	89145	82.00	ng	#	100

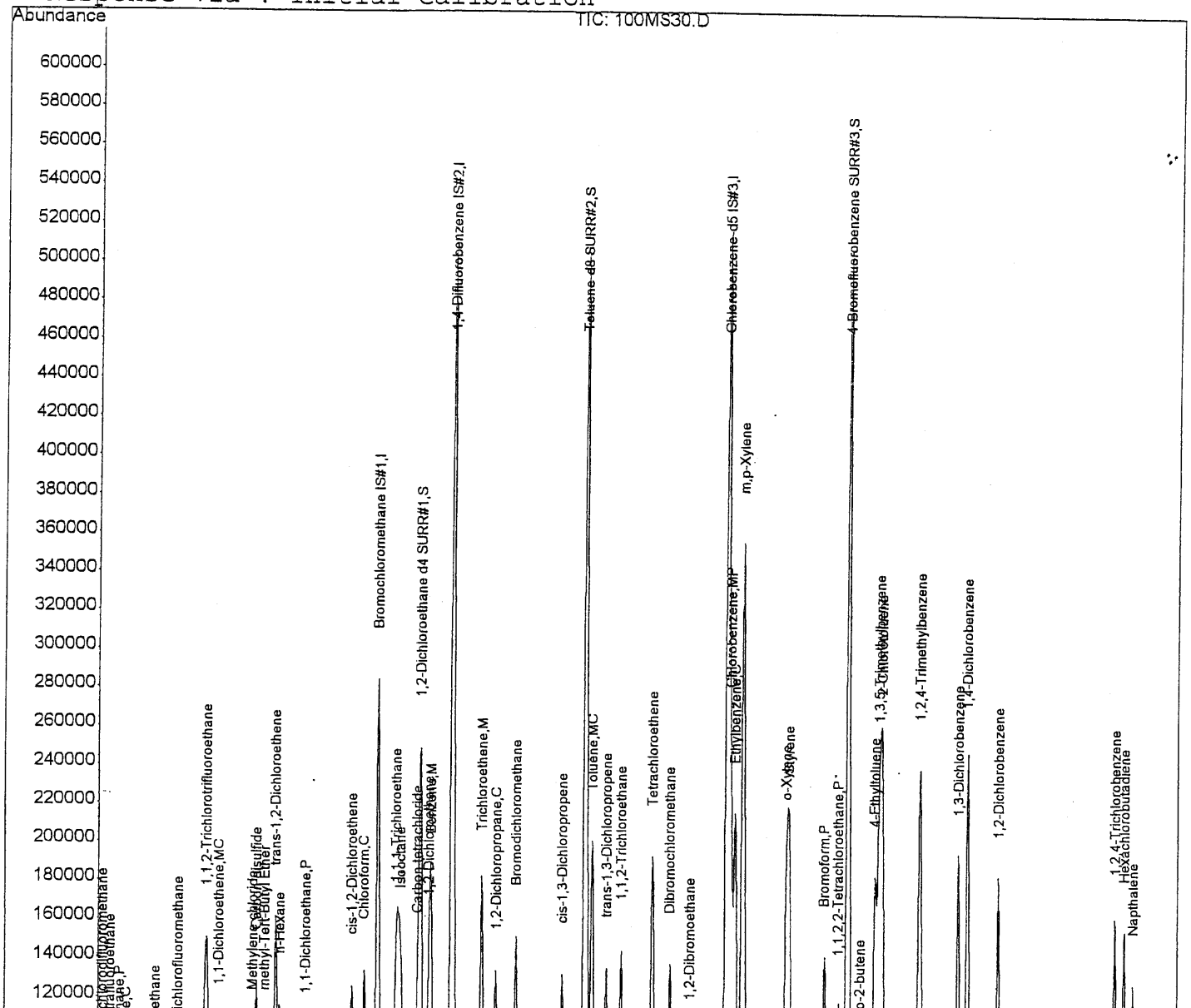
Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\100MS30.D
Acq On : 30 Sep 2004 9:57
Sample : VSTD100
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:36 2004

Vial: 4
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:37:33 2004
Response via : Initial Calibration



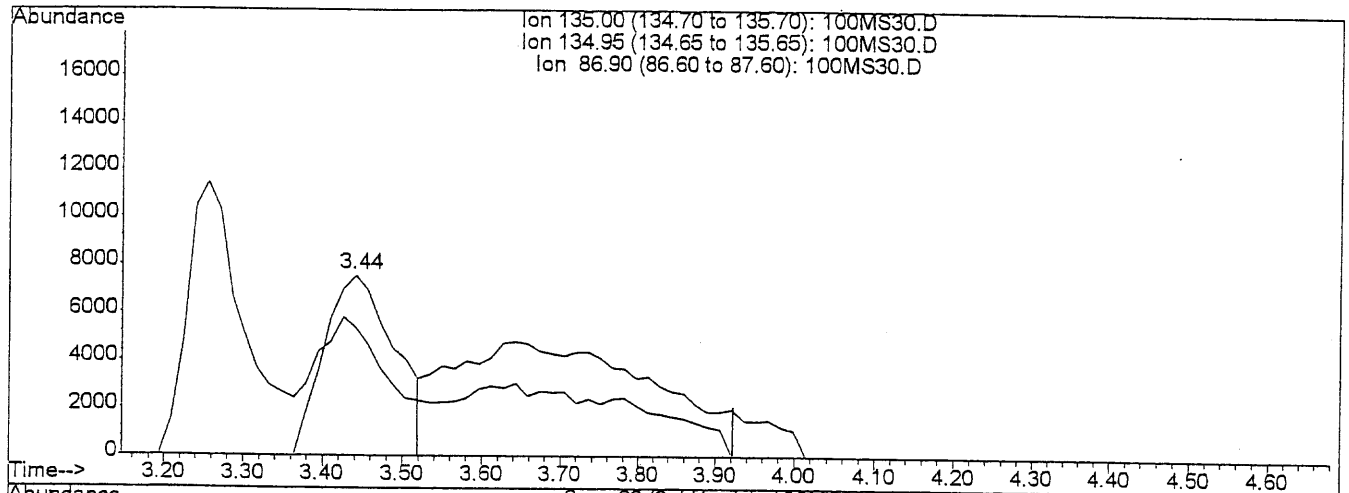
Quantitation Report (Qedit)

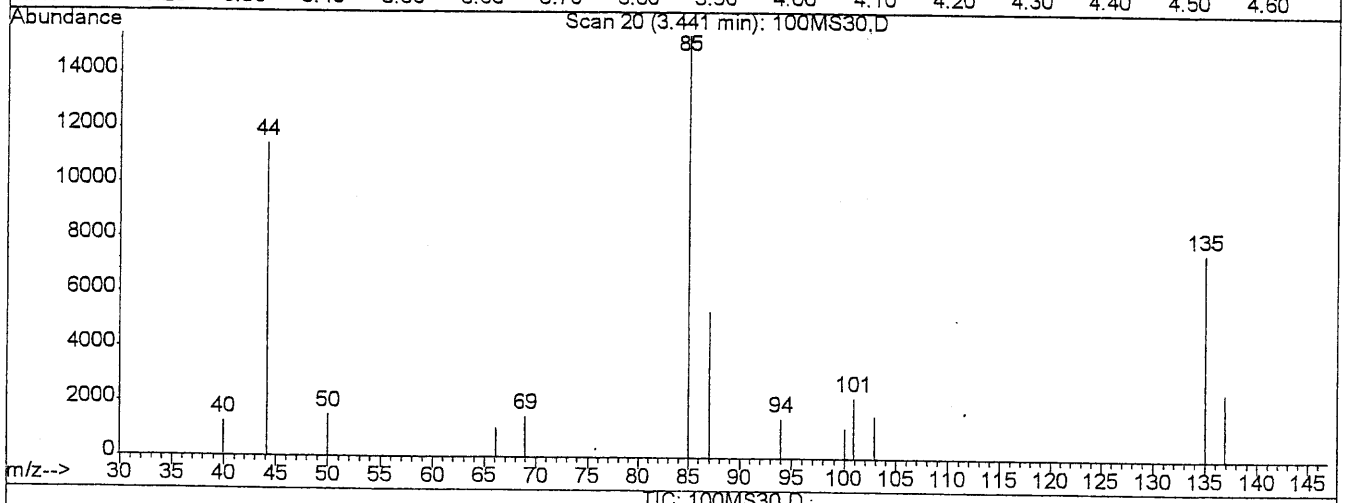
Data File : D:\HPCHEM\1\DATA03\M093004\100MS30.D
Acq On : 30 Sep 2004 9:57
Sample : VSTD100
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:28 2004

Vial: 4
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:35:10 2004
Response via : Multiple Level Calibration





TIC: 100MS30.D

(3) Dichlorotetrafluoroethane

3.44min 32.22ng

response 46501

Ion Exp% Act%

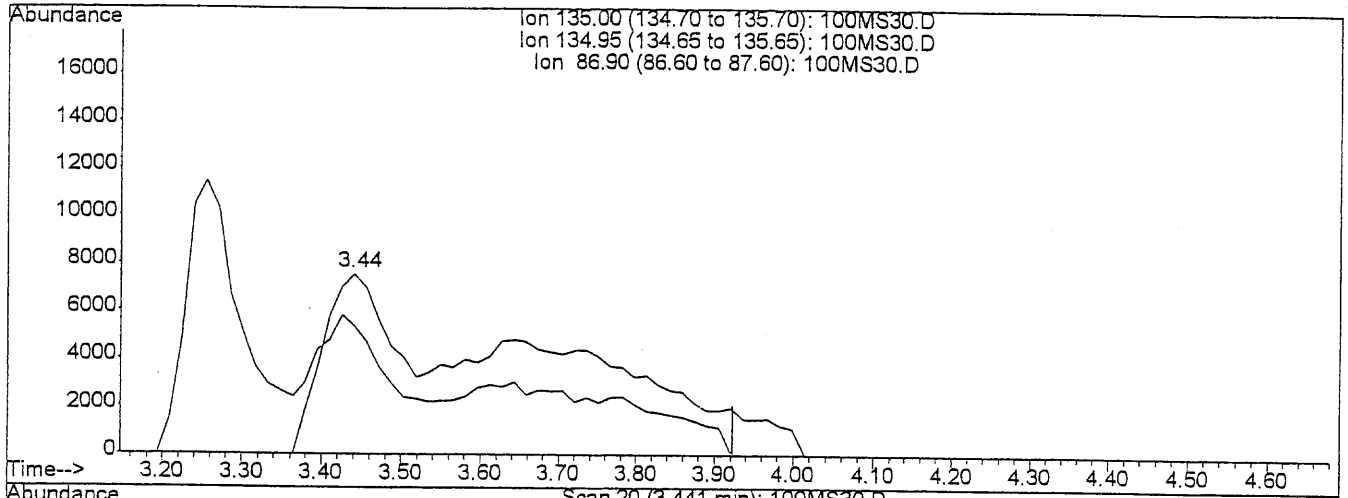
Quantitation Report (Qedit)

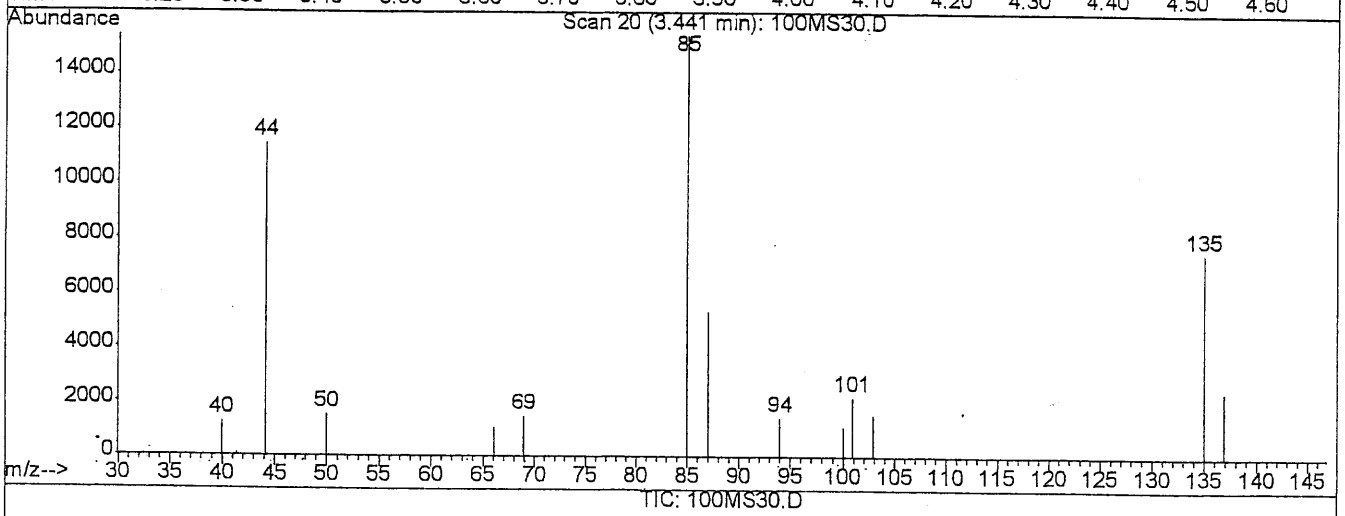
Data File : D:\HPCHEM\1\DATA03\M093004\100MS30.D
Acq On : 30 Sep 2004 9:57
Sample : VSTD100
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:36 2004

Vial: 4
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:35:10 2004
Response via : Multiple Level Calibration





TIC: 100MS30.D

(3) Dichlorotetrafluoroethane

3.44min 96.54ng m

response 139339

Ion Exp% Act%

DWB 9-30-04

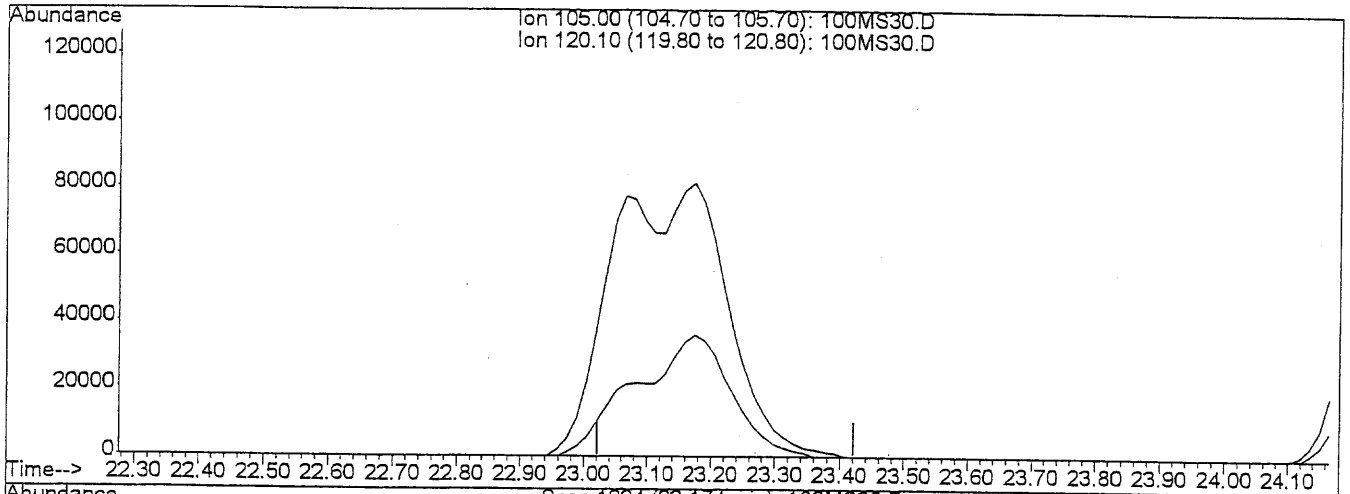
Quantitation Report (Qedit)

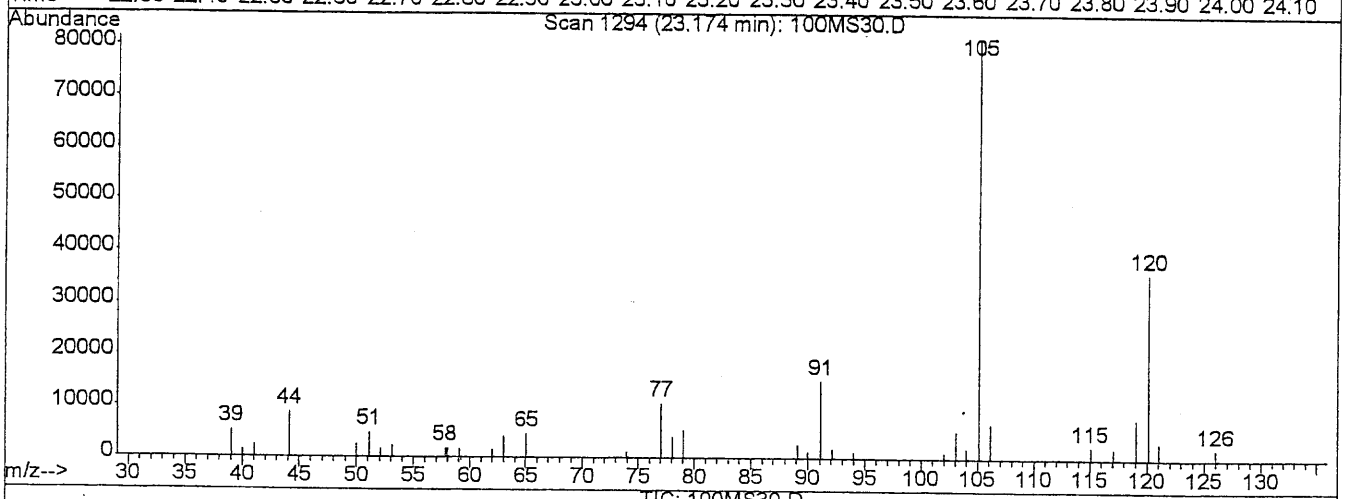
Data File : D:\HPCHEM\1\DATA03\M093004\100MS30.D
Acq On : 30 Sep 2004 9:57
Sample : VSTD100
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:36 2004

Vial: 4
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:35:10 2004
Response via : Multiple Level Calibration





TIC: 100MS30.D

(49) 1,3,5-Trimethylbenzene

23.17min 0.00ng

response 0

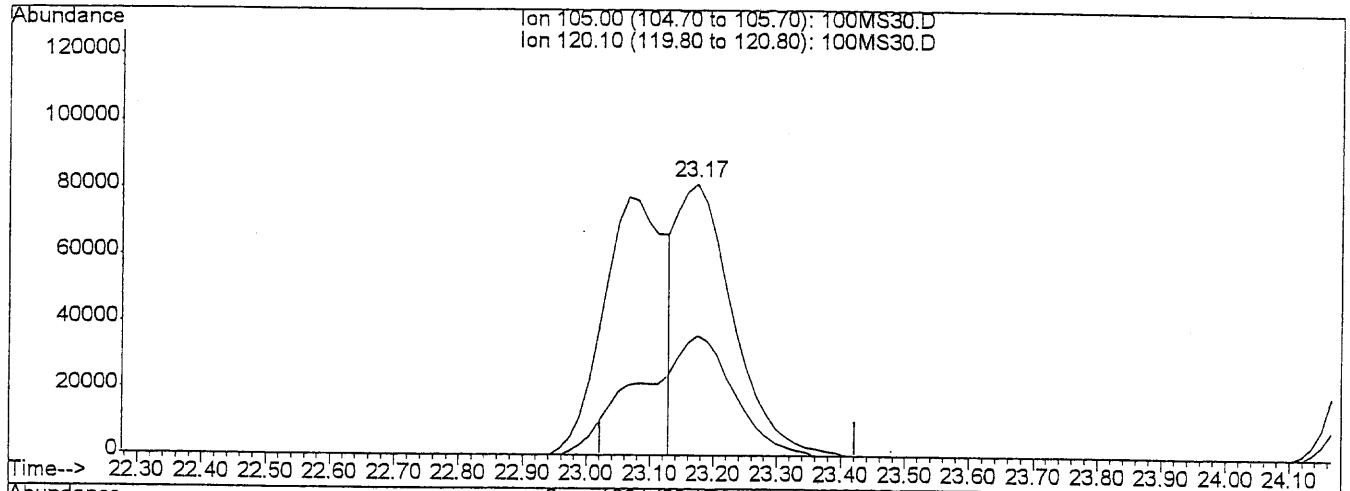
Quantitation Report (Qedit)

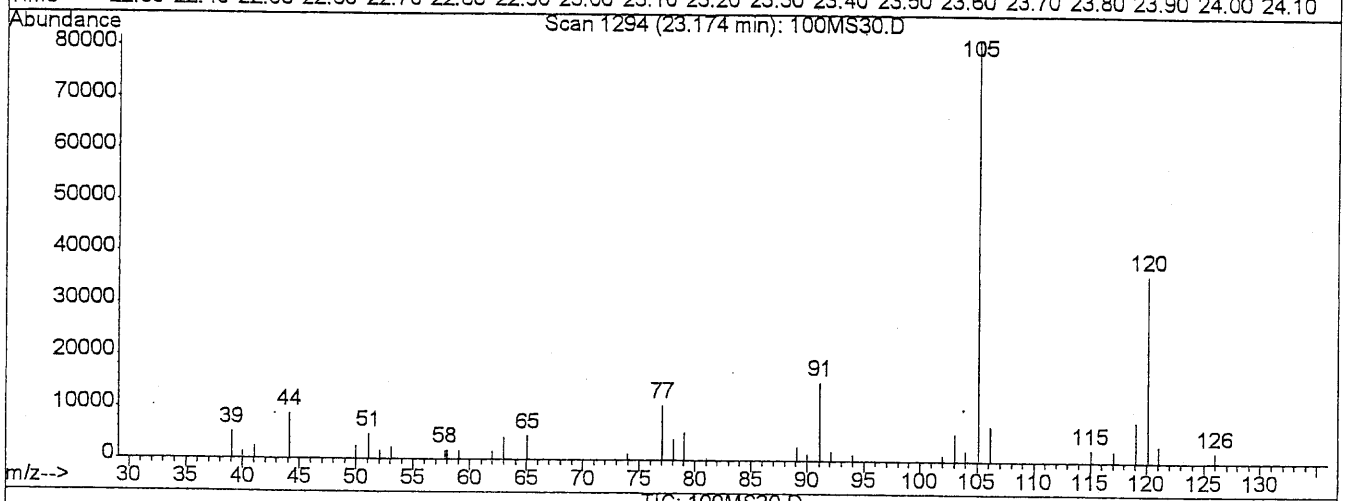
Data File : D:\HPCHEM\1\DATA03\M093004\100MS30.D
Acq On : 30 Sep 2004 9:57
Sample : VSTD100
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:36 2004

Vial: 4
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:35:10 2004
Response via : Multiple Level Calibration





TIC: 100MS30.D

(49) 1,3,5-Trimethylbenzene

23.17min 103.31ng m

response 503667

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\100MS30.D
Acq On : 30 Sep 2004 9:57
Sample : VSTD100
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:28 2004

Vial: 4
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M090804\CAM0908.D (8 Sep 2004 8:19)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.27	128	277579	250.00 ng	0.02 67.65%
26) 1,4-Difluorobenzene IS#2	12.18	114	1539280	250.00 ng	0.02 87.59%
36) Chlorobenzene-d5 IS#3	19.29	117	1132118	250.00 ng	0.02 86.05%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	441221	352.51 ng	0.02
Spiked Amount 250.000	Range 61 - 140		Recovery = 141.00%#		
32) Toluene-d8 SURR#2	15.62	98	1378096	275.21 ng	0.02
Spiked Amount 250.000	Range 90 - 109		Recovery = 110.08%#		
46) 4-Bromofluorobenzene SURR#	22.38	95	791240	236.89 ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 94.76%		

Target Compounds

original DW 9-30-04

						Qvalue
2) Dichlorodifluoromethane	3.26	85	167669	93.04 ng	#	22
3) Dichlorotetrafluoroethane	3.44	135	46501	32.22 ng	#	100
4) Chloromethane	3.69	50	107020	85.30 ng	#	100
5) Vinyl chloride	3.86	62	112541	81.77 ng	#	58
6) Bromomethane	4.60	94	120811	79.93 ng	#	100
7) Chloroethane	4.74	64	78702	71.72 ng	#	100
8) Trichlorofluoromethane	5.18	101	307968	105.45 ng		87
9) 1,1,2-Trichlorotrifluoroet	5.90	151	224453	94.10 ng	#	100
10) 1,1-Dichloroethene	6.23	96	145613	91.65 ng	#	100
12) Methylene chloride	7.08	49	180424	83.68 ng	#	100
13) Carbon disulfide	7.17	76	453905	89.91 ng	#	100
14) methyl-Tert-Butyl Ether	7.38	73	431502	119.02 ng	#	100
15) trans-1,2-Dichloroethene	7.65	96	191858	98.10 ng	#	100
16) n-Hexane	7.76	57	215541	138.44 ng	#	100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\100MS30.D
Acq On : 30 Sep 2004 9:57
Sample : VSTD100
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:28 2004

Vial: 4
Operator: DWB
Inst : MARILYN
Multiplr: 1.00
Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28)	Trichloroethene	12.94	130	212802	74.96	ng	#	100
29)	1,2-Dichloropropane	13.31	63	189993	79.37	ng	#	100
30)	Bromodichloromethane	13.82	83	351113	67.80	ng	#	1
31)	cis-1,3-Dichloropropene	15.01	75	292910	81.33	ng	#	80
33)	Toluene	15.80	92	323576	88.85	ng	#	100
34)	trans-1,3-Dichloropropene	16.17	75	243920	84.30	ng	#	100
35)	1,1,2-Trichloroethane	16.56	97	166201	76.32	ng	#	100
37)	Tetrachloroethene	17.37	164	175377	72.64	ng	#	100
38)	Dibromochloromethane	17.83	127	198389	55.45	ng	#	100
39)	Chlorobenzene	19.38	112	395232	81.95	ng	#	100
40)	Ethylbenzene	19.49	106	177910	89.48	ng	#	100
41)	m,p-Xylene	19.69	106	464420	182.75	ng	#	1
42)	o-Xylene	20.80	106	216283	88.32	ng	#	100
43)	Styrene	20.88	104	334624	85.62	ng	#	100
44)	Bromoform	21.78	173	169544	53.86	ng	#	100
45)	1,1,2,2-Tetrachloroethane	22.14	83	238117	60.62	ng	#	100
47)	1,4-Dichloro-2-butene	22.69	75	57405	15.65	ng	#	1
48)	4-Ethyltoluene	23.07	105	458616	82.60	ng	#	34
50)	2-Chlorotoluene	23.25	91	514549	88.89	ng	#	100
51)	1,2,4-Trimethylbenzene	24.23	105	452385	99.05	ng	#	100
52)	1,3-Dichlorobenzene	25.23	146	294554	83.58	ng		95
53)	1,4-Dichlorobenzene	25.45	146	269616	77.08	ng	#	91
54)	1,2-Dichlorobenzene	26.26	146	254127	75.55	ng	#	100
55)	1,2,4-Trichlorobenzene	29.28	180	152343	79.53	ng	#	100
56)	Napthalene	29.74	128	298321	83.76	ng	#	100
57)	Hexachlorobutadiene	29.51	225	89145	82.00	ng	#	100

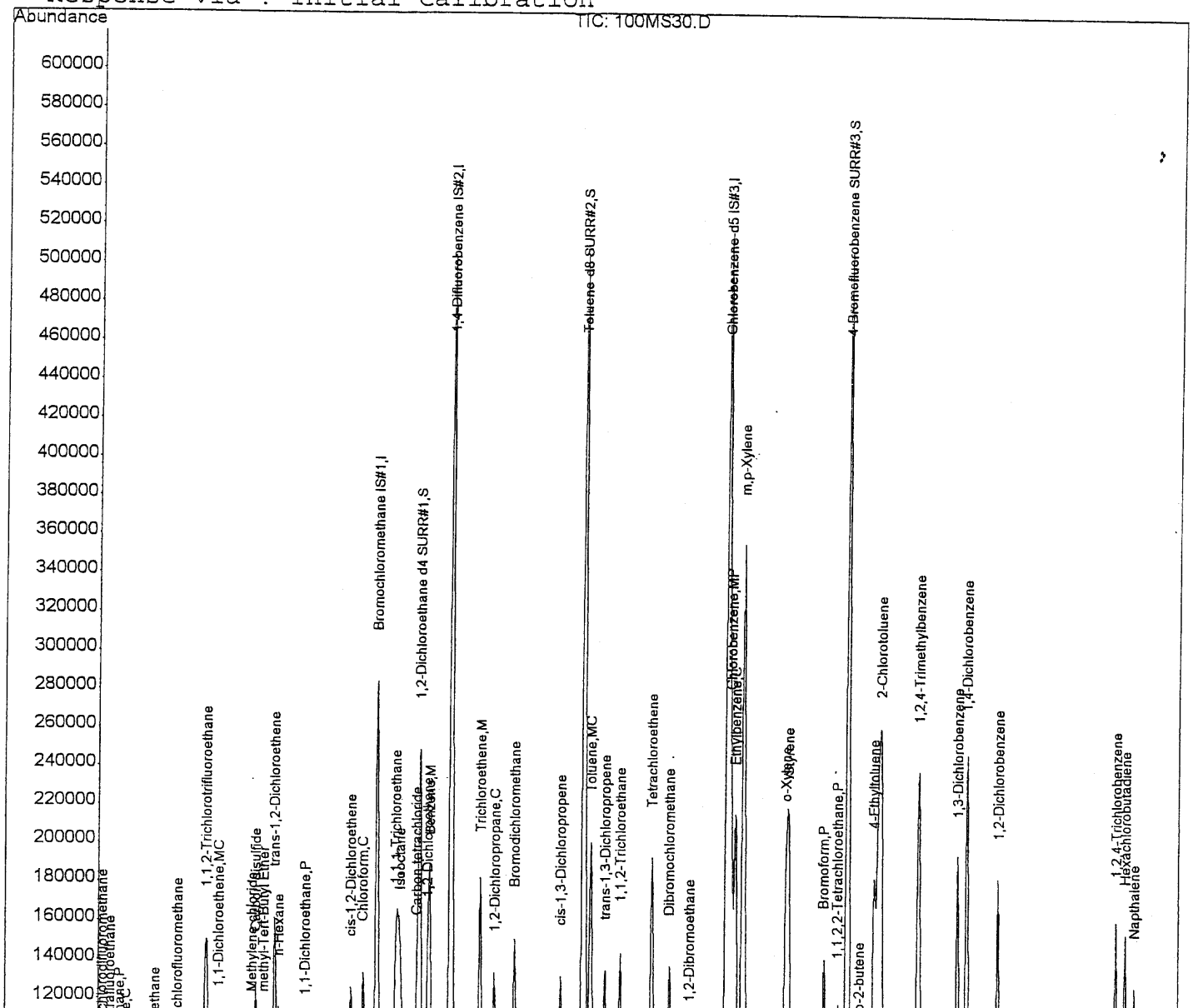
Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\100MS30.D
Acq On : 30 Sep 2004 9:57
Sample : VSTD100
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 10:28 2004

Vial: 4
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Wed Sep 29 14:22:55 2004
Response via : Initial Calibration



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\250MS30.D
Acq On : 30 Sep 2004 10:33
Sample : VSTD250
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 11:07 2004

Vial: 5
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:37:33 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M090804\CAM0908.D (8 Sep 2004 8:19)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.28	128	298394	250.00	ng	0.03 72.72%
26) 1,4-Difluorobenzene IS#2	12.17	114	1603933	250.00	ng	0.01 91.27%
36) Chlorobenzene-d5 IS#3	19.28	117	1158648	250.00	ng	0.01 88.07%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.38	65	441544	276.94	ng	0.03
Spiked Amount 250.000 Range 61 - 140 Recovery = 110.78%						
32) Toluene-d8 SURR#2	15.62	98	1435041	259.22	ng	0.03
Spiked Amount 250.000 Range 90 - 109 Recovery = 103.69%						
46) 4-Bromofluorobenzene SURR#	22.38	95	795128	210.83	ng	0.00
Spiked Amount 250.000 Range 87 - 112 Recovery = 84.33%#						

Target Compounds

DWB 9-30-04

						Qvalue
2) Dichlorodifluoromethane	3.25	85	468379	221.67	ng	# 26
3) Dichlorotetrafluoroethane	3.43	135	381266m	199.44	ng	# 100
4) Chloromethane	3.70	50	307166	206.14	ng	# 100
5) Vinyl chloride	3.85	62	327612	198.29	ng	# 59
6) Bromomethane	4.60	94	347310	207.73	ng	# 100
7) Chloroethane	4.74	64	227948	219.47	ng	# 100
8) Trichlorofluoromethane	5.17	101	869297	242.16	ng	86
9) 1,1,2-Trichlorotrifluoroet	5.91	151	647163	235.74	ng	# 100
10) 1,1-Dichloroethene	6.24	96	423004	223.44	ng	# 100
12) Methylene chloride	7.09	49	484322	190.12	ng	# 100
13) Carbon disulfide	7.17	76	1264711	213.86	ng	# 100
14) methyl-Tert-Butyl Ether	7.37	73	1205333	251.65	ng	# 100
15) trans-1,2-Dichloroethene	7.63	96	547953	232.65	ng	# 100
16) n-Hexane	7.76	57	547716	235.50	ng	# 100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\250MS30.D Vial: 5
Acq On : 30 Sep 2004 10:33 Operator: DWB
Sample : VSTD250 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 11:07 2004 Quant Results File: TO14S.RES

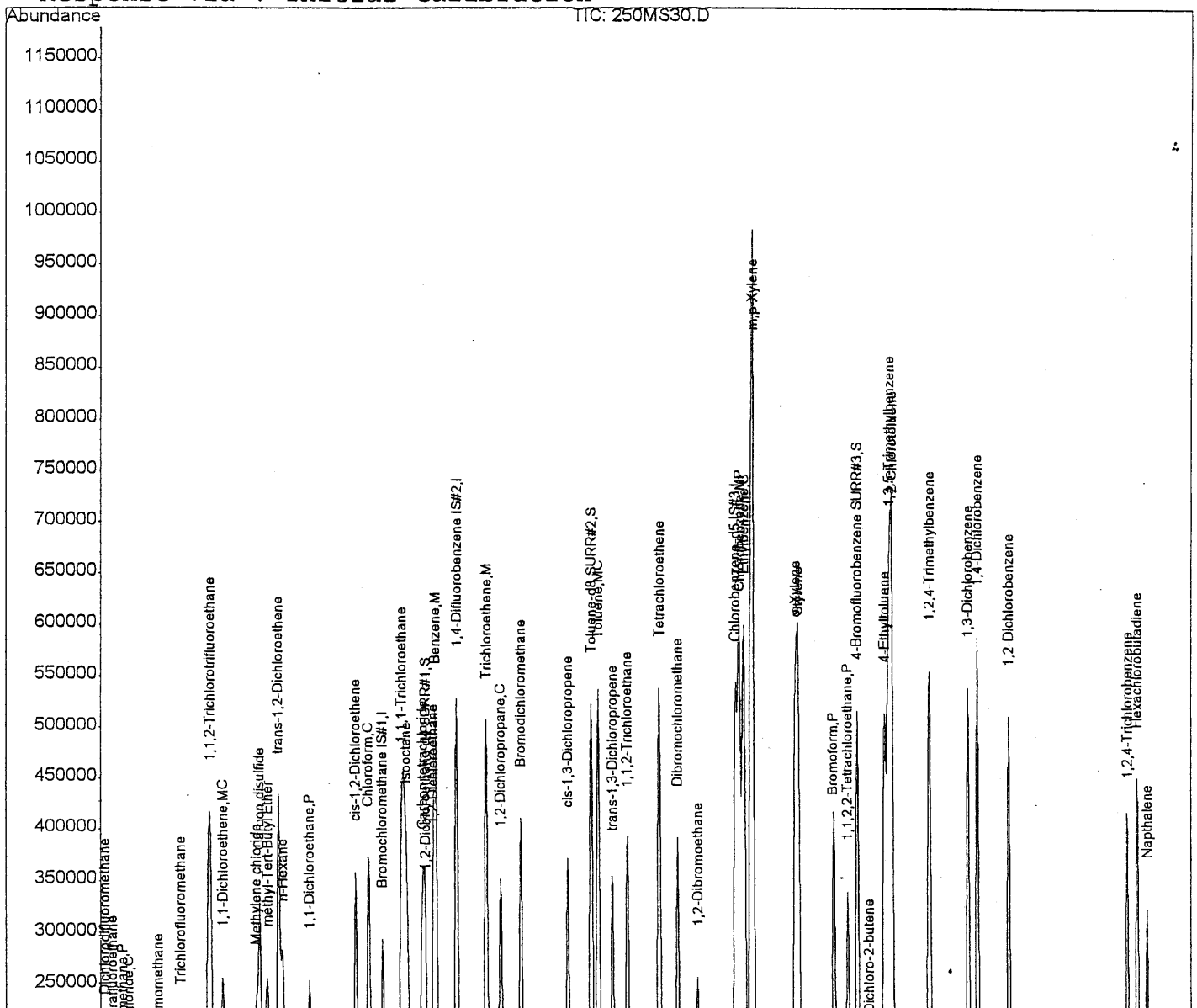
Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:37:33 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
28)	Trichloroethene	12.93	130	614594	213.03 ng	#	100
29)	1,2-Dichloropropane	13.29	63	526340	204.87 ng	#	100
30)	Bromodichloromethane	13.81	83	998409	203.77 ng	#	1
31)	cis-1,3-Dichloropropene	15.02	75	823162	214.25 ng	#	83
33)	Toluene	15.81	92	919192	227.21 ng	#	100
34)	trans-1,3-Dichloropropene	16.18	75	687161	219.54 ng	#	100
35)	1,1,2-Trichloroethane	16.55	97	470470	211.77 ng	#	100
37)	Tetrachloroethene	17.37	164	494017	211.29 ng	#	100
38)	Dibromochloromethane	17.84	127	569236	189.22 ng	#	100
39)	Chlorobenzene	19.39	112	1110015	220.28 ng	#	100
40)	Ethylbenzene	19.50	106	515730	229.48 ng	#	100
41)	m,p-Xylene	19.70	106	1288449	461.54 ng	#	1
42)	o-Xylene	20.81	106	614674	225.64 ng	#	100
43)	Styrene	20.89	104	936502	219.30 ng	#	100
44)	Bromoform	21.77	173	490058	197.39 ng	#	100
45)	1,1,2,2-Tetrachloroethane	22.15	83	683812	184.84 ng	#	100
47)	1,4-Dichloro-2-butene	22.69	75	165040	178.71 ng	#	1
48)	4-Ethyltoluene	23.07	105	1367590	221.85 ng	#	74
49)	1,3,5-Trimethylbenzene	23.18	105	1510501m	260.35 ng	#	0
50)	2-Chlorotoluene	23.26	91	1450319	222.88 ng	#	100
51)	1,2,4-Trimethylbenzene	24.24	105	1267909	240.76 ng	#	100
52)	1,3-Dichlorobenzene	25.23	146	804653	218.44 ng		95
53)	1,4-Dichlorobenzene	25.46	146	732792	204.59 ng	#	94
54)	1,2-Dichlorobenzene	26.25	146	740805	216.57 ng	#	100
55)	1,2,4-Trichlorobenzene	29.27	180	423317	218.45 ng	#	100
56)	Napthalene	29.77	128	843416	227.20 ng	#	100
57)	Hexachlorobutadiene	29.50	225	267996	240.59 ng	#	100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\250MS30.D Vial: 5
Acq On : 30 Sep 2004 10:33 Operator: DWB
Sample : VSTD250 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 11:07 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:37:33 2004
Response via : Initial Calibration



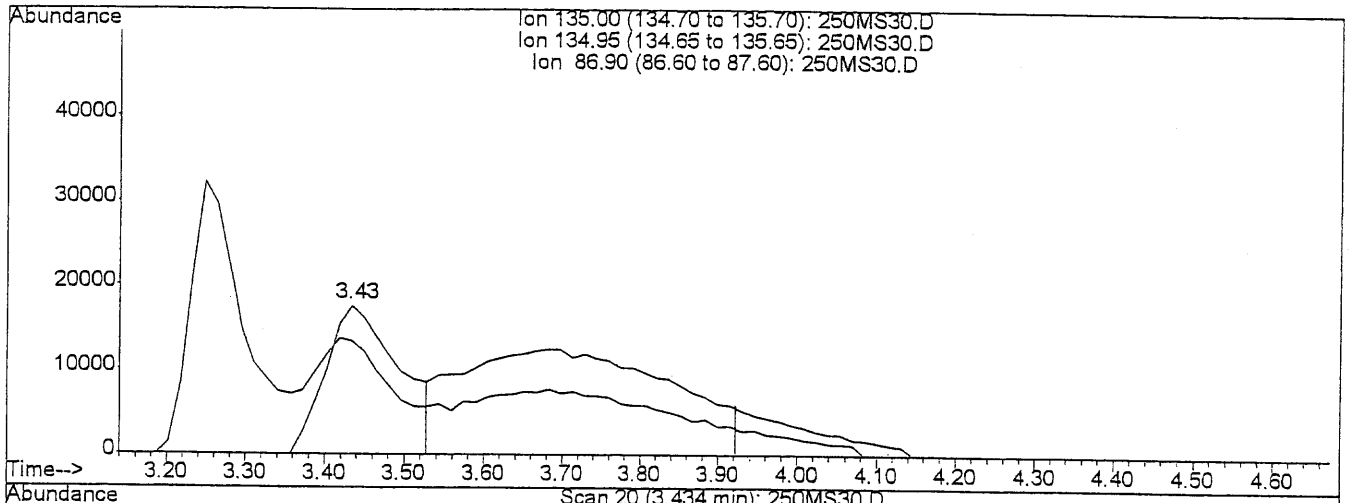
Quantitation Report (Qedit)

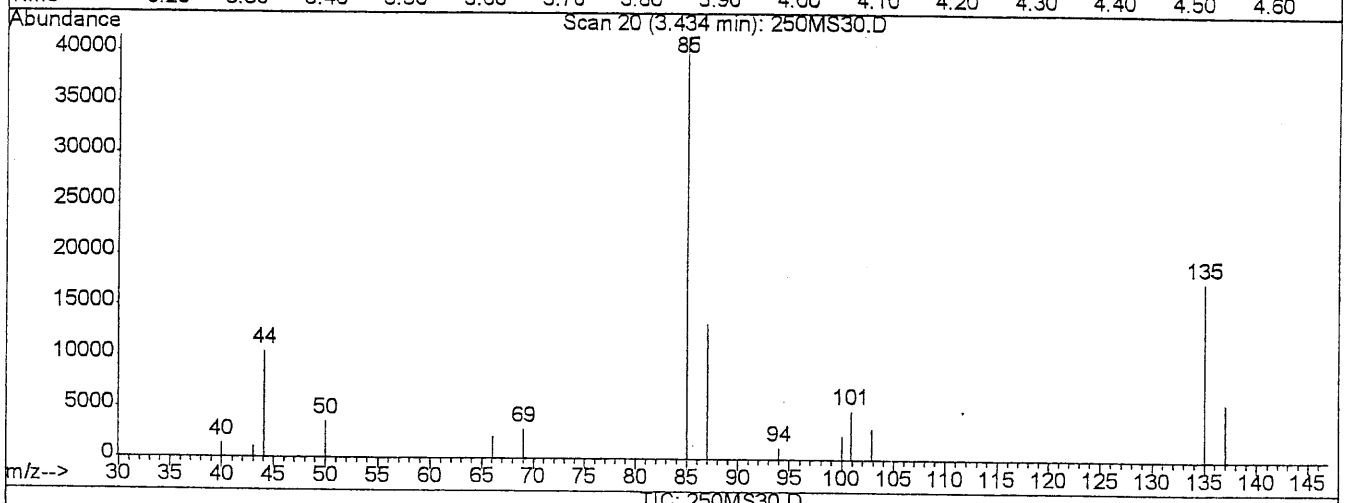
Data File : D:\HPCHEM\1\DATA03\M093004\250MS30.D
Acq On : 30 Sep 2004 10:33
Sample : VSTD250
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 11:04 2004

Vial: 5
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:37:33 2004
Response via : Multiple Level Calibration





TIC: 250MS30.D

(3) Dichlorotetrafluoroethane

3.43min 58.71ng

response 112228

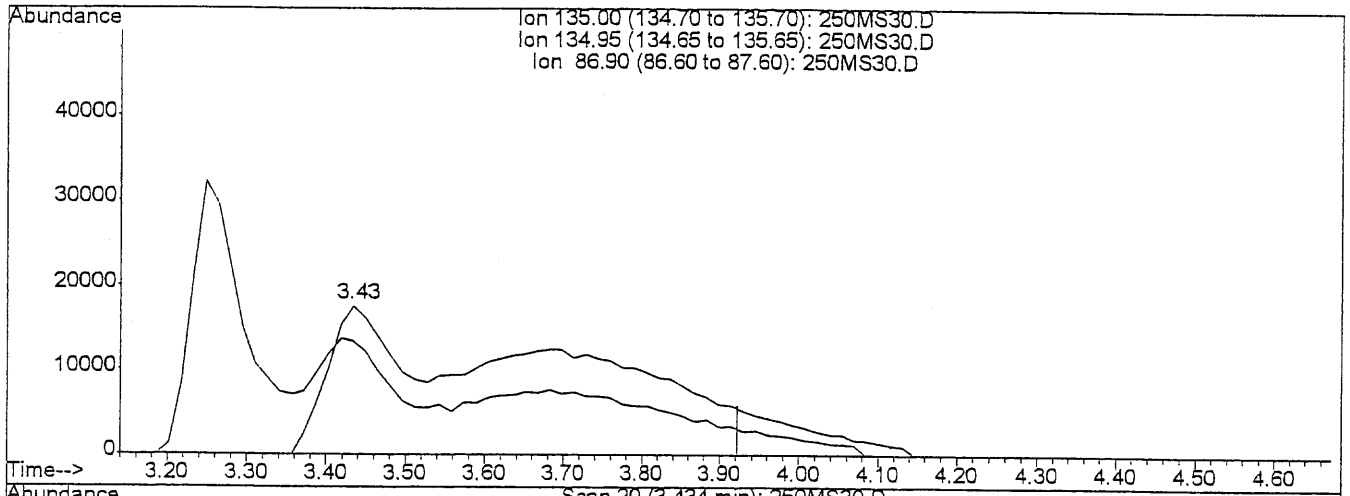
Quantitation Report (Qedit)

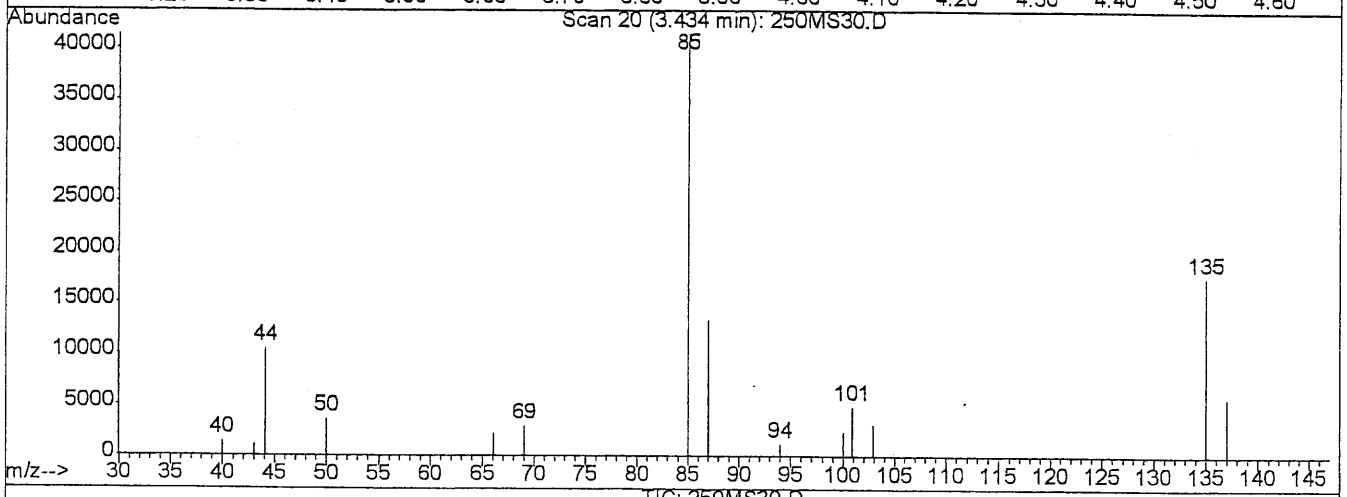
Data File : D:\HPCHEM\1\DATA03\M093004\250MS30.D
Acq On : 30 Sep 2004 10:33
Sample : VSTD250
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 11:06 2004

Vial: 5
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:37:33 2004
Response via : Multiple Level Calibration





TIC: 250MS30.D

(3) Dichlorotetrafluoroethane

3.43min 199.44ng m

response 381266

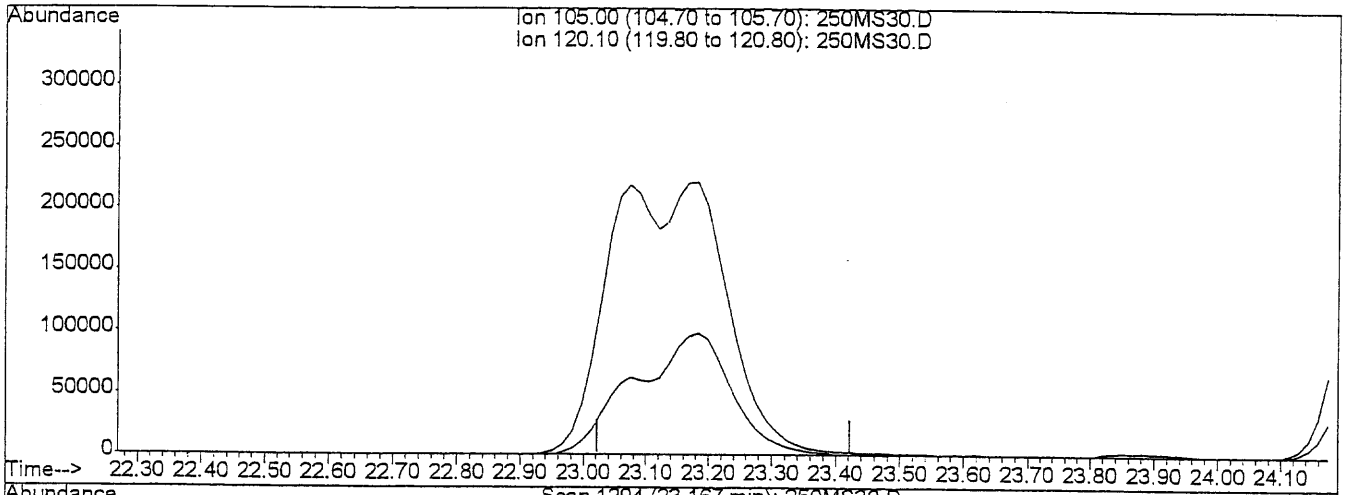
Quantitation Report (Qedit)

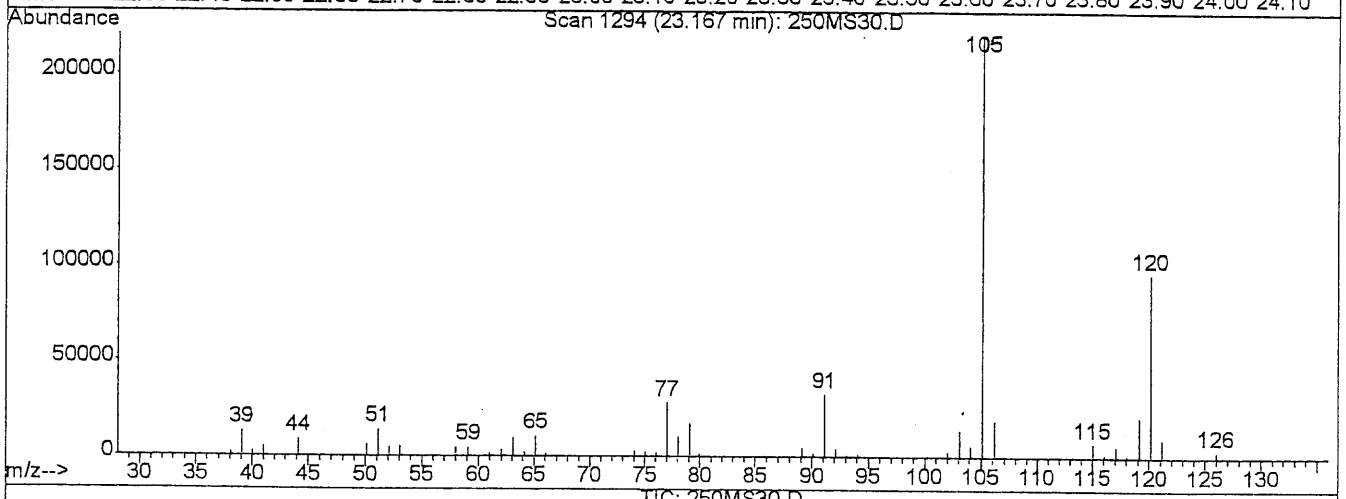
Data File : D:\HPCHEM\1\DATA03\M093004\250MS30.D
Acq On : 30 Sep 2004 10:33
Sample : VSTD250
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 11:06 2004

Vial: 5
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:37:33 2004
Response via : Multiple Level Calibration





(49) 1,3,5-Trimethylbenzene

23.17min 0.00ng

response 0

Ion Exp% Act%

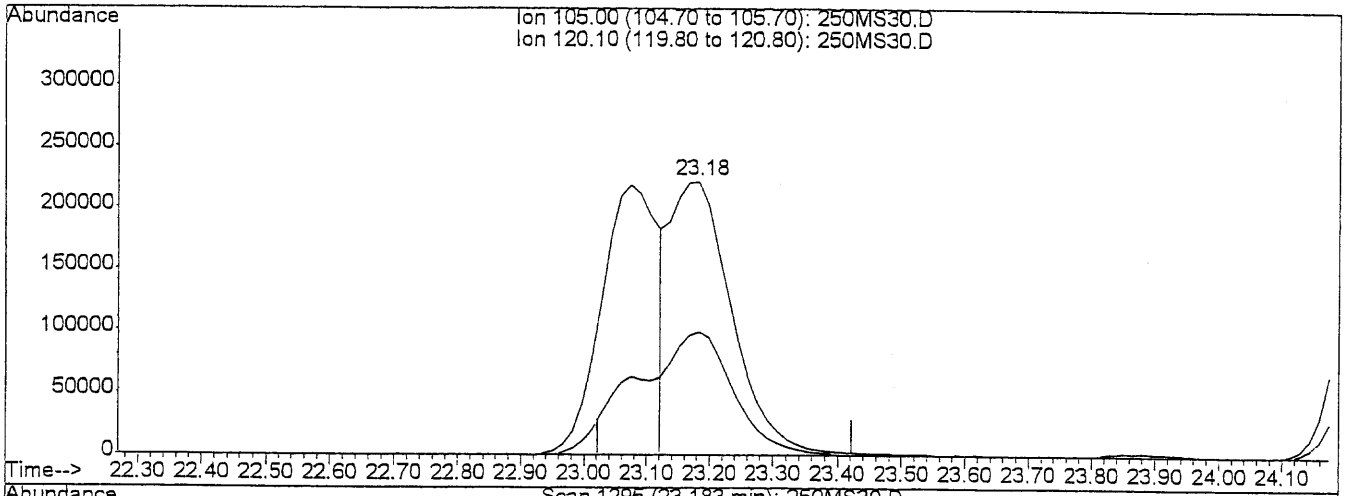
Quantitation Report (Qedit)

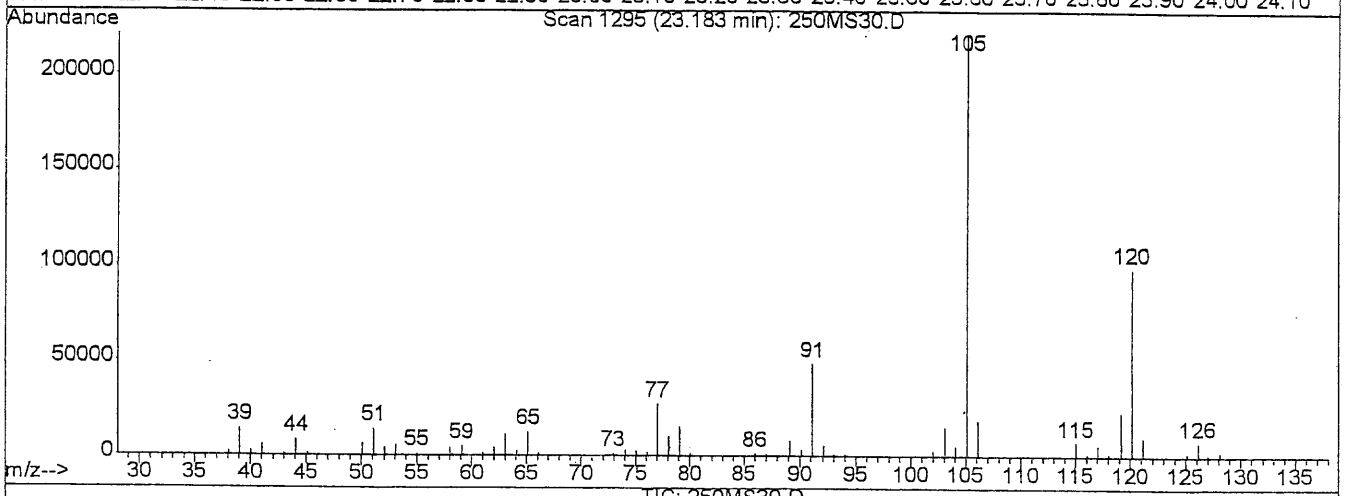
Data File : D:\HPCHEM\1\DATA03\M093004\250MS30.D
Acq On : 30 Sep 2004 10:33
Sample : VSTD250
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 11:07 2004

Vial: 5
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:37:33 2004
Response via : Multiple Level Calibration





TIC: 250MS30.D

(49) 1,3,5-Trimethylbenzene

23.18min 260.35ng m

response 1510501

Ion Exp% Act%

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\250MS30.D
Acq On : 30 Sep 2004 10:33
Sample : VSTD250
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 11:04 2004

Vial: 5
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:37:33 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M090804\CAM0908.D (8 Sep 2004 8:19)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.28	128	298394	250.00	ng	0.03 72.72%
26) 1,4-Difluorobenzene IS#2	12.17	114	1603933	250.00	ng	0.01 91.27%
36) Chlorobenzene-d5 IS#3	19.28	117	1158648	250.00	ng	0.01 88.07%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.38	65	441544	276.94	ng	0.03
Spiked Amount 250.000 Range 61 - 140 Recovery = 110.78%						
32) Toluene-d8 SURR#2	15.62	98	1435041	259.22	ng	0.03
Spiked Amount 250.000 Range 90 - 109 Recovery = 103.69%						
46) 4-Bromofluorobenzene SURR#	22.38	95	795128	210.83	ng	0.00
Spiked Amount 250.000 Range 87 - 112 Recovery = 84.33%#						

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.25	85	468379	221.67	ng	# 26
3) Dichlorotetrafluoroethane	3.43	135	112228	58.71	ng	# 100
4) Chloromethane	3.70	50	307166	206.14	ng	# 100
5) Vinyl chloride	3.85	62	327612	198.29	ng	# 59
6) Bromomethane	4.60	94	347310	207.73	ng	# 100
7) Chloroethane	4.74	64	227948	219.47	ng	# 100
8) Trichlorofluoromethane	5.17	101	869297	242.16	ng	86
9) 1,1,2-Trichlorotrifluoroet	5.91	151	647163	235.74	ng	# 100
10) 1,1-Dichloroethene	6.24	96	423004	223.44	ng	# 100
12) Methylene chloride	7.09	49	484322	190.12	ng	# 100
13) Carbon disulfide	7.17	76	1264711	213.86	ng	# 100
14) methyl-Tert-Butyl Ether	7.37	73	1205333	251.65	ng	# 100
15) trans-1,2-Dichloroethene	7.63	96	547953	232.65	ng	# 100
16) n-Hexane	7.76	57	547716	235.50	ng	# 100
17) 1,1-Dichloroethane	8.44	63	913854	230.42	ng	# 100

Benzene DD 9-30-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\250MS30.D
Acq On : 30 Sep 2004 10:33
Sample : VSTD250
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 11:04 2004

Vial: 5
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:37:33 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28) Trichloroethene	12.93	130	614594	213.03	ng	#	100
29) 1,2-Dichloropropane	13.29	63	526340	204.87	ng	#	100
30) Bromodichloromethane	13.81	83	998409	203.77	ng	#	1
31) cis-1,3-Dichloropropene	15.02	75	823162	214.25	ng	#	83
33) Toluene	15.81	92	919192	227.21	ng	#	100
34) trans-1,3-Dichloropropene	16.18	75	687161	219.54	ng	#	100
35) 1,1,2-Trichloroethane	16.55	97	470470	211.77	ng	#	100
37) Tetrachloroethene	17.37	164	494017	211.29	ng	#	100
38) Dibromochloromethane	17.84	127	569236	189.22	ng	#	100
39) Chlorobenzene	19.39	112	1110015	220.28	ng	#	100
40) Ethylbenzene	19.50	106	515730	229.48	ng	#	100
41) m,p-Xylene	19.70	106	1288449	461.54	ng	#	1
42) o-Xylene	20.81	106	614674	225.64	ng	#	100
43) Styrene	20.89	104	936502	219.30	ng	#	100
44) Bromoform	21.77	173	490058	197.39	ng	#	100
45) 1,1,2,2-Tetrachloroethane	22.15	83	683812	184.84	ng	#	100
47) 1,4-Dichloro-2-butene	22.69	75	165040	178.71	ng	#	1
48) 4-Ethyltoluene	23.07	105	1367590	221.85	ng	#	74
50) 2-Chlorotoluene	23.26	91	1450319	222.88	ng	#	100
51) 1,2,4-Trimethylbenzene	24.24	105	1267909	240.76	ng	#	100
52) 1,3-Dichlorobenzene	25.23	146	804653	218.44	ng		95
53) 1,4-Dichlorobenzene	25.46	146	732792	204.59	ng	#	94
54) 1,2-Dichlorobenzene	26.25	146	740805	216.57	ng	#	100
55) 1,2,4-Trichlorobenzene	29.27	180	423317	218.45	ng	#	100
56) Napthalene	29.77	128	843416	227.20	ng	#	100
57) Hexachlorobutadiene	29.50	225	267996	240.59	ng	#	100

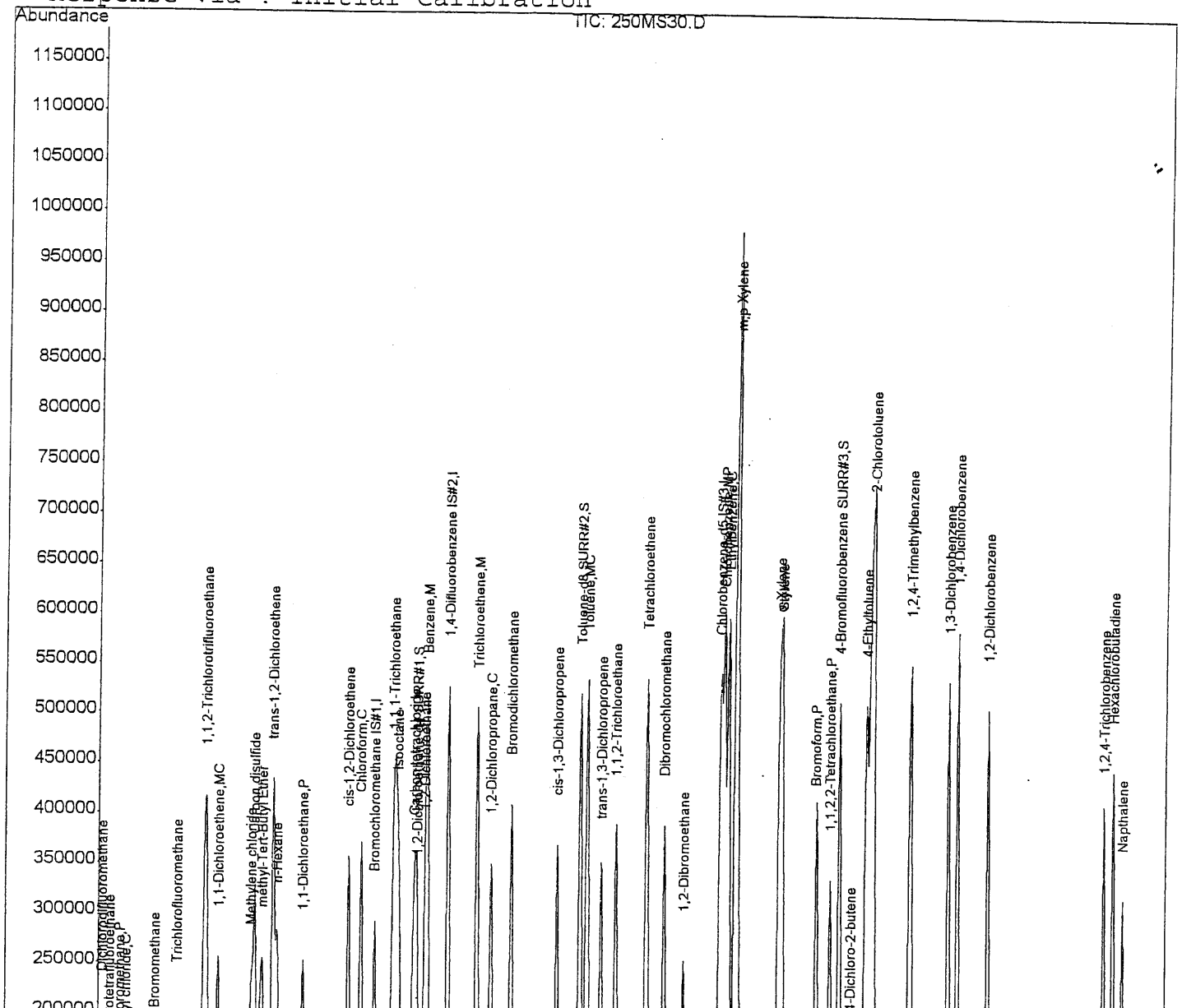
Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\250MS30.D
Acq On : 30 Sep 2004 10:33
Sample : VSTD250
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 11:04 2004

Vial: 5
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 10:37:33 2004
Response via : Initial Calibration



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\500MS30.D Vial: 6
Acq On : 30 Sep 2004 11:10 Operator: DWB
Sample : VSTD500 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 12:19 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M093004\250MS30.D (30 Sep 2004 10:33)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.27	128	284953	250.00 ng	-0.01 95.50%
26) 1,4-Difluorobenzene IS#2	12.16	114	1589816	250.00 ng	-0.01 99.12%
36) Chlorobenzene-d5 IS#3	19.30	117	1152282	250.00 ng	0.02 99.45%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	454332	289.08 ng	-0.01
Spiked Amount 250.000 Range 61 - 140 Recovery = 115.63%					
32) Toluene-d8 SURR#2	15.61	98	1426540	256.63 ng	-0.01
Spiked Amount 250.000 Range 90 - 109 Recovery = 102.65%					
46) 4-Bromofluorobenzene SURR#	22.38	95	795836	209.63 ng	0.00
Spiked Amount 250.000 Range 87 - 112 Recovery = 83.85%#					

Target Compounds DWB 9-30-04

					Qvalue
2) Dichlorodifluoromethane	3.25	85	921215	538.71 ng	100
3) Dichlorotetrafluoroethane	3.44	135	773930m	498.20 ng	1
4) Chloromethane	3.68	50	612921	490.71 ng	99
5) Vinyl chloride	3.85	62	656836	476.48 ng	99
6) Bromomethane	4.60	94	675388	507.00 ng	99
7) Chloroethane	4.74	64	449479	540.47 ng	97
8) Trichlorofluoromethane	5.17	101	1748375	585.27 ng	99
9) 1,1,2-Trichlorotrifluoroet	5.91	151	1321424	603.12 ng	99
10) 1,1-Dichloroethene	6.24	96	837721	542.16 ng	99
12) Methylene chloride	7.09	49	961985	439.95 ng	98
13) Carbon disulfide	7.17	76	2523800	518.69 ng	99
14) methyl-Tert-Butyl Ether	7.37	73	2456470	624.43 ng	97
15) trans-1,2-Dichloroethene	7.63	96	1095295	576.74 ng	100
16) n-Hexane	7.76	57	1089933	568.48 ng	100
17) 1,1-Dichloroethane	8.44	63	1736709	522.57 ng	100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\500MS30.D
Acq On : 30 Sep 2004 11:10
Sample : VSTD500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:19 2004

Vial: 6
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
28)	Trichloroethene	12.93	130	1265065	516.61 ng	100
29)	1,2-Dichloropropane	13.32	63	1076714	477.79 ng	99
30)	Bromodichloromethane	13.83	83	1992683	459.60 ng	99
31)	cis-1,3-Dichloropropene	15.02	75	1650832	488.97 ng	99
33)	Toluene	15.80	92	1823348	524.44 ng	99
34)	trans-1,3-Dichloropropene	16.17	75	1387771	500.88 ng	99
35)	1,1,2-Trichloroethane	16.55	97	952614	490.03 ng	100
37)	Tetrachloroethene	17.38	164	984547	499.37 ng	100
38)	Dibromochloromethane	17.84	127	1166686	446.53 ng	100
39)	Chlorobenzene	19.39	112	2200381	512.38 ng	98
40)	Ethylbenzene	19.50	106	1003765	525.58 ng	99
41)	m,p-Xylene	19.70	106	2508673	1051.28 ng	99
42)	o-Xylene	20.81	106	1214620	523.83 ng	100
43)	Styrene	20.89	104	1859819	508.84 ng	99
44)	Bromoform	21.79	173	991935	445.73 ng	99
45)	1,1,2,2-Tetrachloroethane	22.15	83	1379580	421.20 ng	100
47)	1,4-Dichloro-2-butene	22.70	75	332353	401.95 ng	98
48)	4-Ethyltoluene	23.08	105	2652328	491.56 ng	100
49)	1,3,5-Trimethylbenzene	23.18	105	2931012m	576.31 ng	0
50)	2-Chlorotoluene	23.26	91	2780238	482.29 ng	99
51)	1,2,4-Trimethylbenzene	24.24	105	2460567	530.29 ng	100
52)	1,3-Dichlorobenzene	25.23	146	1575250	485.07 ng	100
53)	1,4-Dichlorobenzene	25.46	146	1449128	468.95 ng	99
54)	1,2-Dichlorobenzene	26.27	146	1458855	488.15 ng	99
55)	1,2,4-Trichlorobenzene	29.27	180	794174	448.33 ng	100
56)	Napthalene	29.75	128	1560749	469.70 ng	100
57)	Hexachlorobutadiene	29.50	225	450833	424.46 ng	99

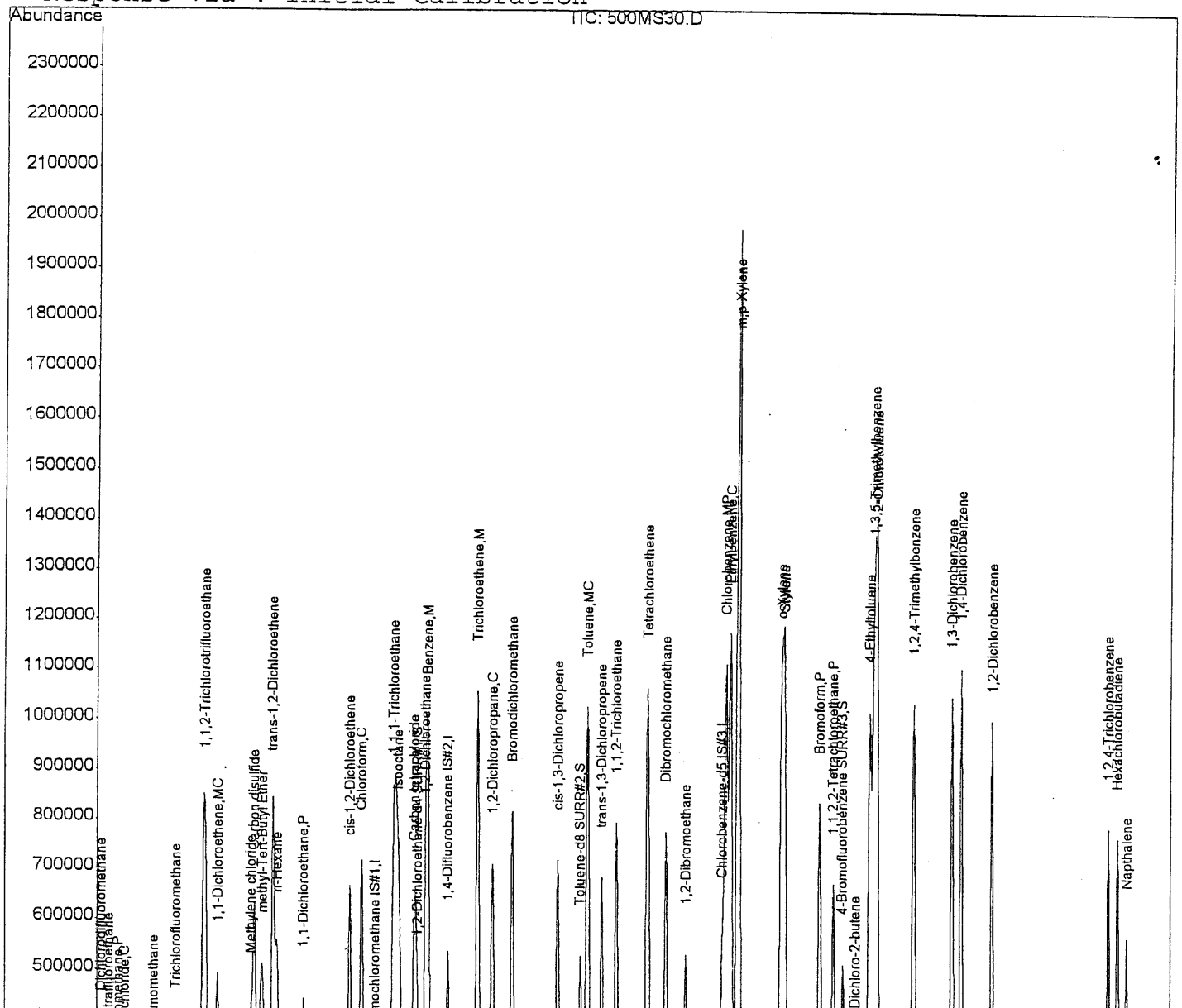
Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\500MS30.D
Acq On : 30 Sep 2004 11:10
Sample : VSTD500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:19 2004

Vial: 6
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Initial Calibration



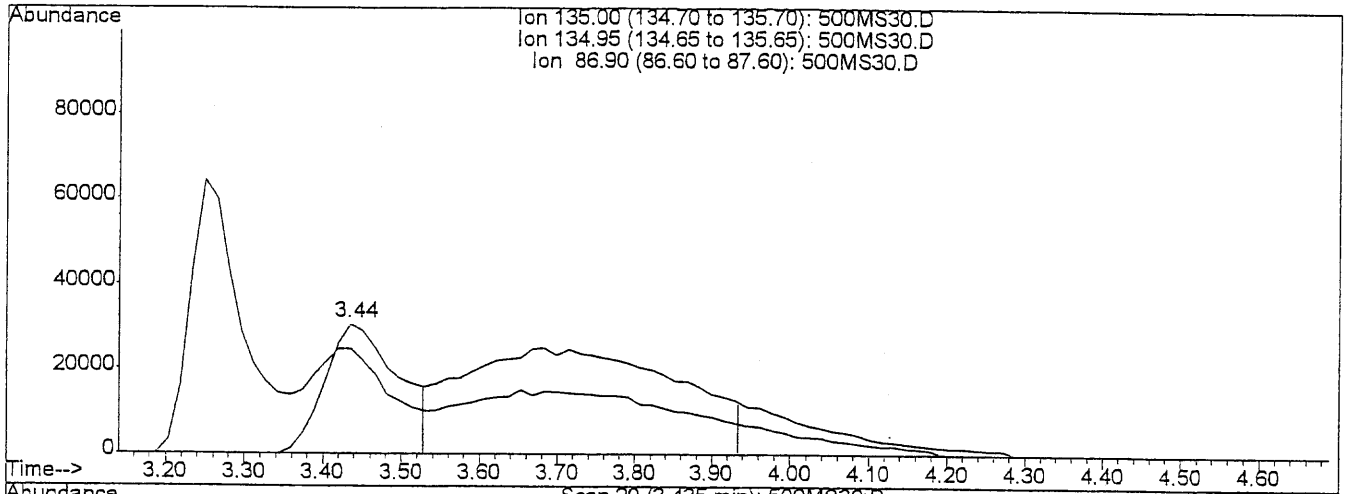
Quantitation Report (Qedit)

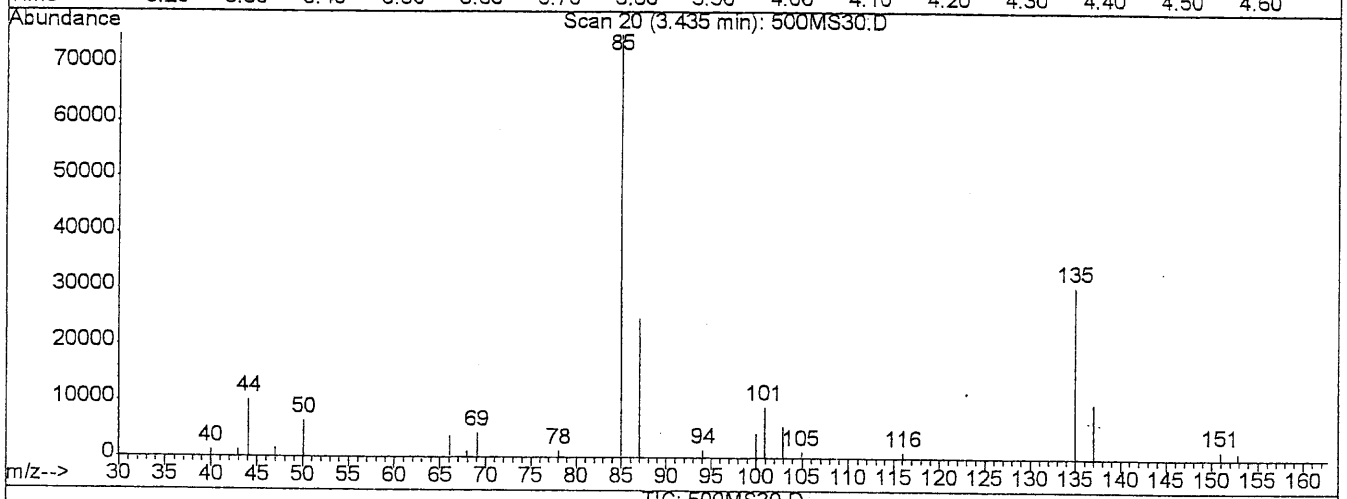
Data File : D:\HPCHEM\1\DATA03\M093004\500MS30.D
Acq On : 30 Sep 2004 11:10
Sample : VSTD500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 11:41 2004

Vial: 6
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Multiple Level Calibration





TIC: 500MS30.D

(3) Dichlorotetrafluoroethane

3.44min 128.40ng

response 199468

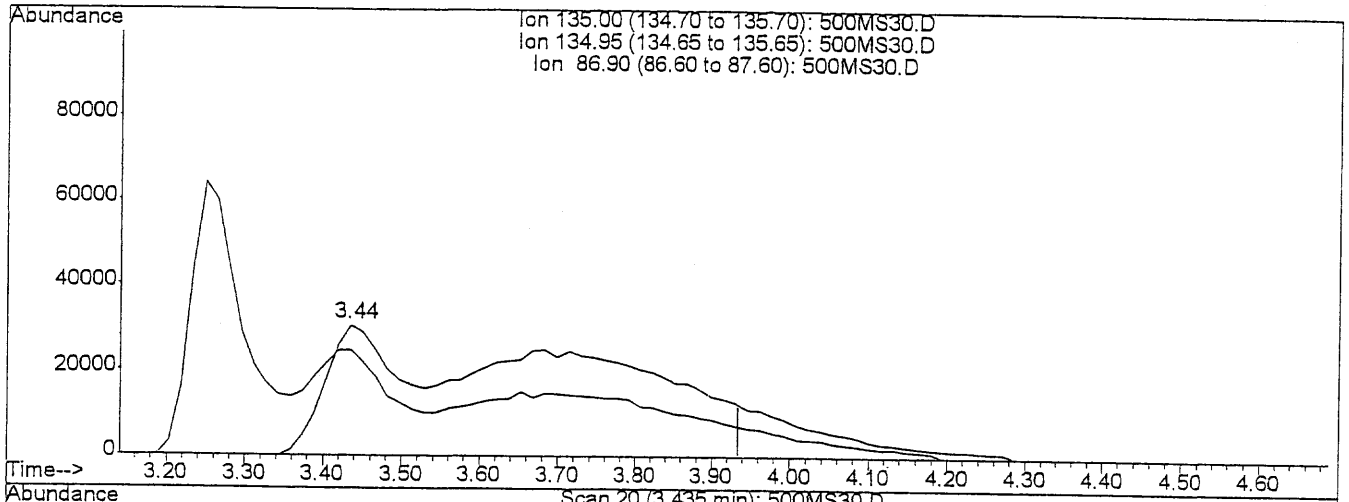
Quantitation Report (Qedit)

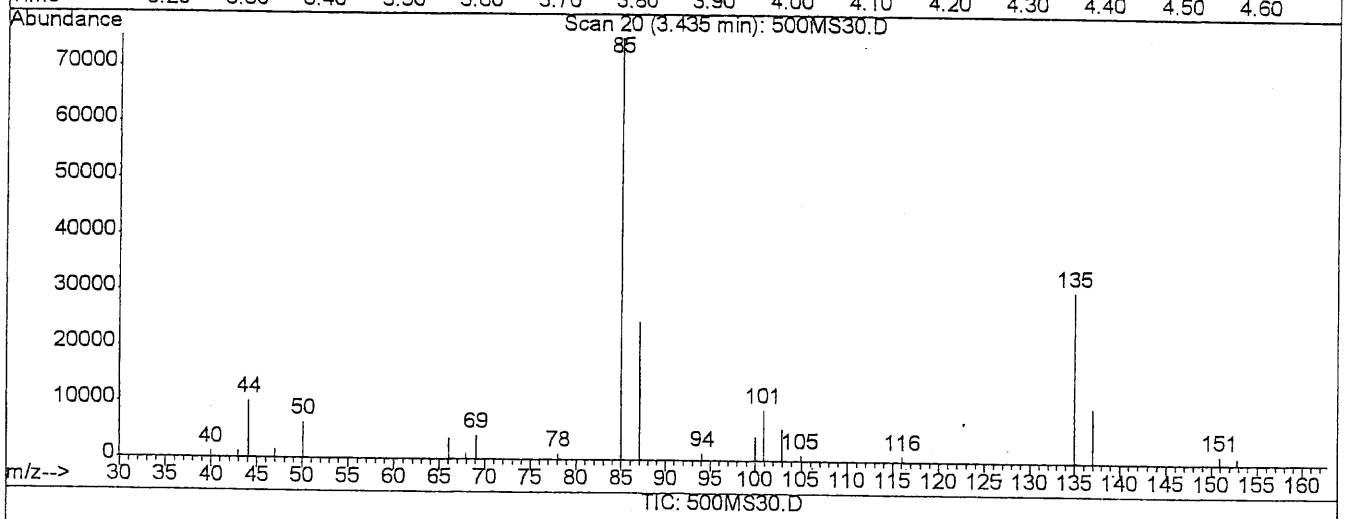
Data File : D:\HPCHEM\1\DATA03\M093004\500MS30.D
Acq On : 30 Sep 2004 11:10
Sample : VSTD500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:19 2004

Vial: 6
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Multiple Level Calibration





TIC: 500MS30.D

(3) Dichlorotetrafluoroethane

3.44min 498.20ng m

response 773930

Ion Exp% Act%

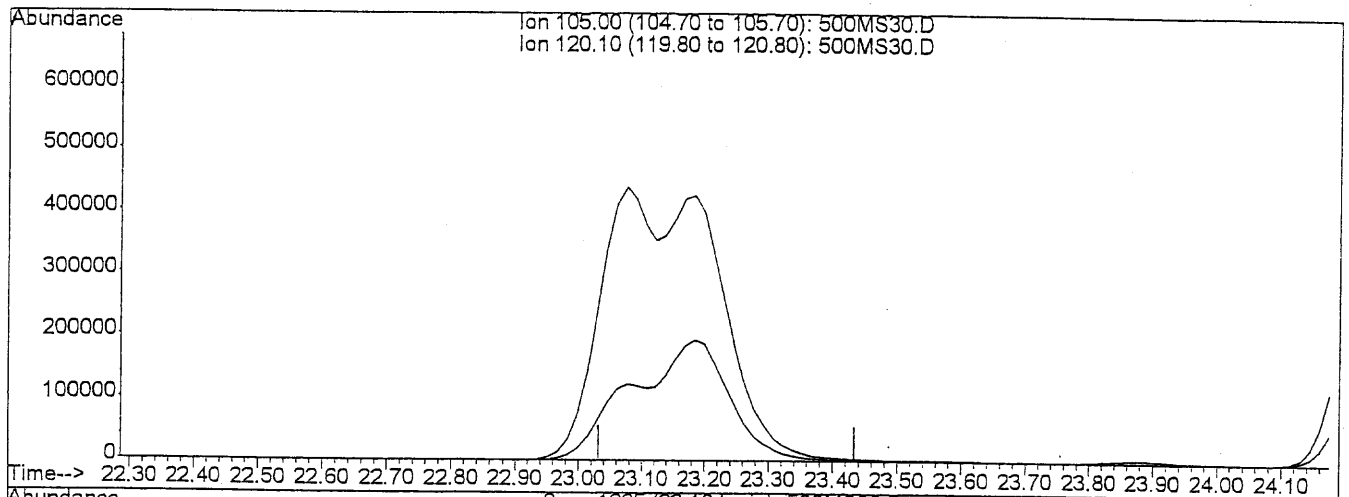
Quantitation Report (Qedit)

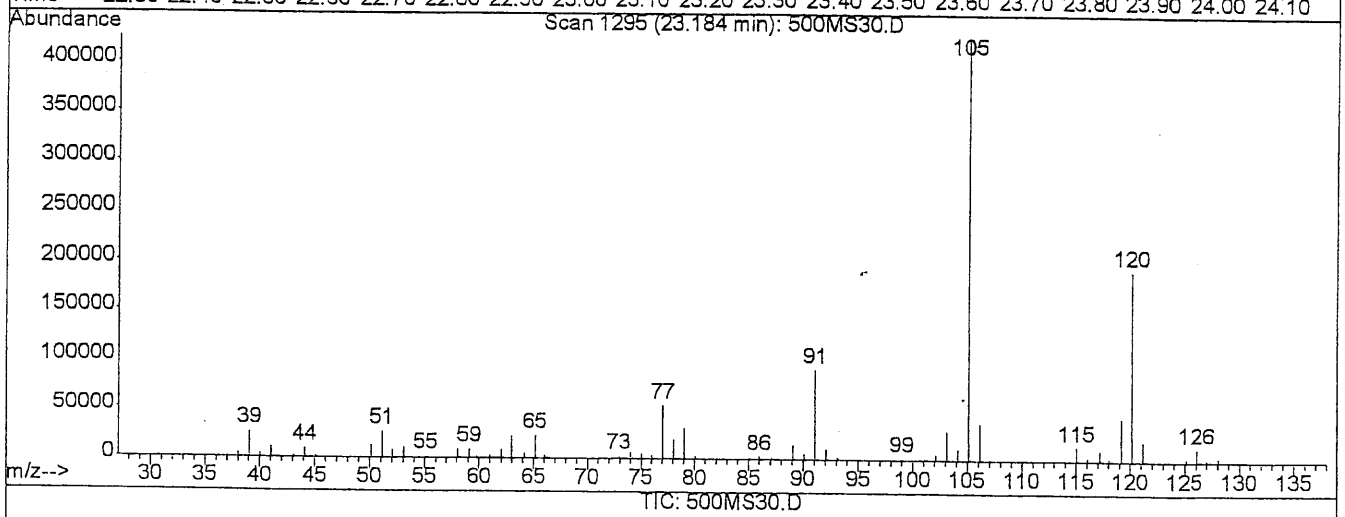
Data File : D:\HPCHEM\1\DATA03\M093004\500MS30.D
Acq On : 30 Sep 2004 11:10
Sample : VSTD500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:19 2004

Vial: 6
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Multiple Level Calibration





TIC: 500MS30.D

(49) 1,3,5-Trimethylbenzene

23.18min 0.00ng

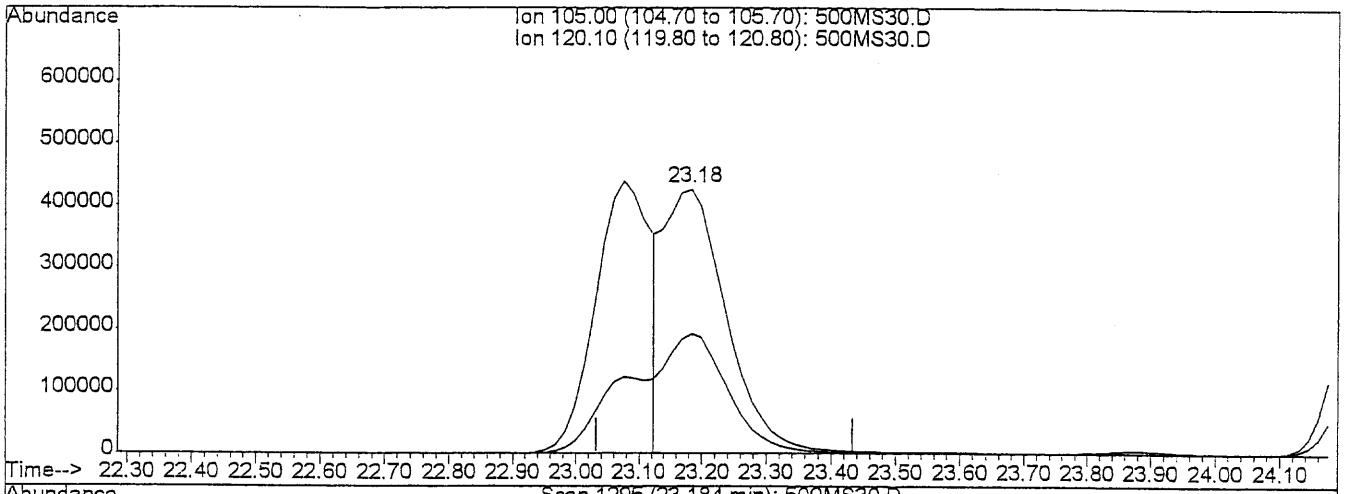
response 0

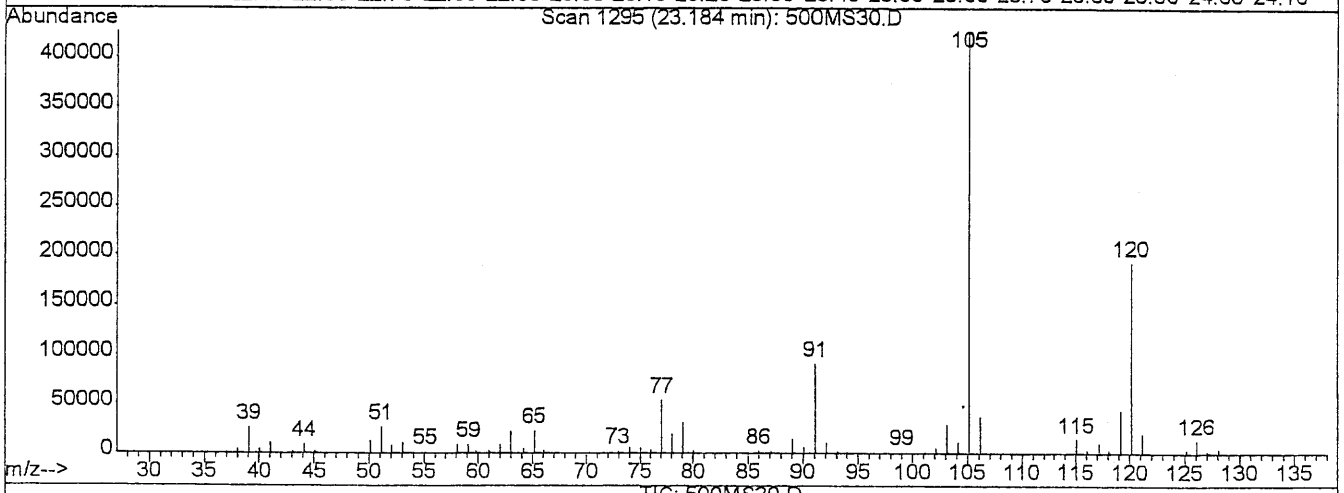
Quantitation Report (Qedit)

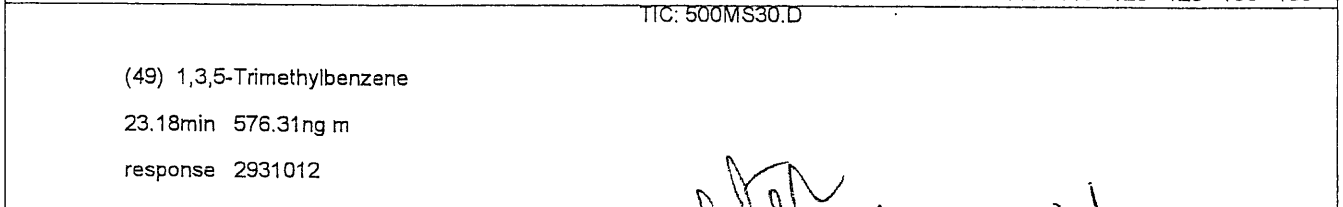
Data File : D:\HPCHEM\1\DATA03\M093004\500MS30.D
Acq On : 30 Sep 2004 11:10
Sample : VSTD500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:19 2004

Vial: 6
Operator: DWB
Inst : MARILYN
Multiplr: 1.00
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Multiple Level Calibration







(49) 1,3,5-Trimethylbenzene

23.18min 576.31ng m

response 2931012

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\500MS30.D Vial: 6
Acq On : 30 Sep 2004 11:10 Operator: DWB
Sample : VSTD500 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 11:41 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M093004\250MS30.D (30 Sep 2004 10:33)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.27	128	284953	250.00	ng	-0.01 95.50%
26) 1,4-Difluorobenzene IS#2	12.16	114	1589816	250.00	ng	-0.01 99.12%
36) Chlorobenzene-d5 IS#3	19.30	117	1152282	250.00	ng	0.02 99.45%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.37	65	454332	289.08	ng	-0.01
Spiked Amount 250.000 Range 61 - 140 Recovery = 115.63%						
32) Toluene-d8 SURR#2	15.61	98	1426540	256.63	ng	-0.01
Spiked Amount 250.000 Range 90 - 109 Recovery = 102.65%						
46) 4-Bromofluorobenzene SURR#	22.38	95	795836	209.63	ng	0.00
Spiked Amount 250.000 Range 87 - 112 Recovery = 83.85%#						

Original Rw 9-30-04

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.25	85	921215	538.71	ng	100
3) Dichlorotetrafluoroethane	3.44	135	199468	128.40	ng PC#	1
4) Chloromethane	3.68	50	612921	490.71	ng	99
5) Vinyl chloride	3.85	62	656836	476.48	ng	99
6) Bromomethane	4.60	94	675388	507.00	ng	99
7) Chloroethane	4.74	64	449479	540.47	ng	97
8) Trichlorofluoromethane	5.17	101	1748375	585.27	ng	99
9) 1,1,2-Trichlorotrifluoroet	5.91	151	1321424	603.12	ng	99
10) 1,1-Dichloroethene	6.24	96	837721	542.16	ng	99
12) Methylene chloride	7.09	49	961985	439.95	ng	98
13) Carbon disulfide	7.17	76	2523800	518.69	ng	99
14) methyl-Tert-Butyl Ether	7.37	73	2456470	624.43	ng	97
15) trans-1,2-Dichloroethene	7.63	96	1095295	576.74	ng	100
16) n-Hexane	7.76	57	1089933	568.48	ng	100
17) 1,1-Dichloroethane	8.44	63	1736709	522.57	ng	100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\500MS30.D
Acq On : 30 Sep 2004 11:10
Sample : VSTD500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 11:41 2004

Vial: 6
Operator: DWB
Inst : MARILYN
Multiplr: 1.00
Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
28)	Trichloroethene	12.93	130	1265065	516.61 ng	100
29)	1,2-Dichloropropane	13.32	63	1076714	477.79 ng	99
30)	Bromodichloromethane	13.83	83	1992683	459.60 ng	99
31)	cis-1,3-Dichloropropene	15.02	75	1650832	488.97 ng	99
33)	Toluene	15.80	92	1823348	524.44 ng	99
34)	trans-1,3-Dichloropropene	16.17	75	1387771	500.88 ng	99
35)	1,1,2-Trichloroethane	16.55	97	952614	490.03 ng	100
37)	Tetrachloroethene	17.38	164	984547	499.37 ng	100
38)	Dibromochloromethane	17.84	127	1166686	446.53 ng	100
39)	Chlorobenzene	19.39	112	2200381	512.38 ng	98
40)	Ethylbenzene	19.50	106	1003765	525.58 ng	99
41)	m,p-Xylene	19.70	106	2508673	1051.28 ng	99
42)	o-Xylene	20.81	106	1214620	523.83 ng	100
43)	Styrene	20.89	104	1859819	508.84 ng	99
44)	Bromoform	21.79	173	991935	445.73 ng	99
45)	1,1,2,2-Tetrachloroethane	22.15	83	1379580	421.20 ng	100
47)	1,4-Dichloro-2-butene	22.70	75	332353	401.95 ng	98
48)	4-Ethyltoluene	23.08	105	2652328	491.56 ng	100
50)	2-Chlorotoluene	23.26	91	2780238	482.29 ng	99
51)	1,2,4-Trimethylbenzene	24.24	105	2460567	530.29 ng	100
52)	1,3-Dichlorobenzene	25.23	146	1575250	485.07 ng	100
53)	1,4-Dichlorobenzene	25.46	146	1449128	468.95 ng	99
54)	1,2-Dichlorobenzene	26.27	146	1458855	488.15 ng	99
55)	1,2,4-Trichlorobenzene	29.27	180	794174	448.33 ng	100
56)	Napthalene	29.75	128	1560749	469.70 ng	100
57)	Hexachlorobutadiene	29.50	225	450833	424.46 ng	99

MA

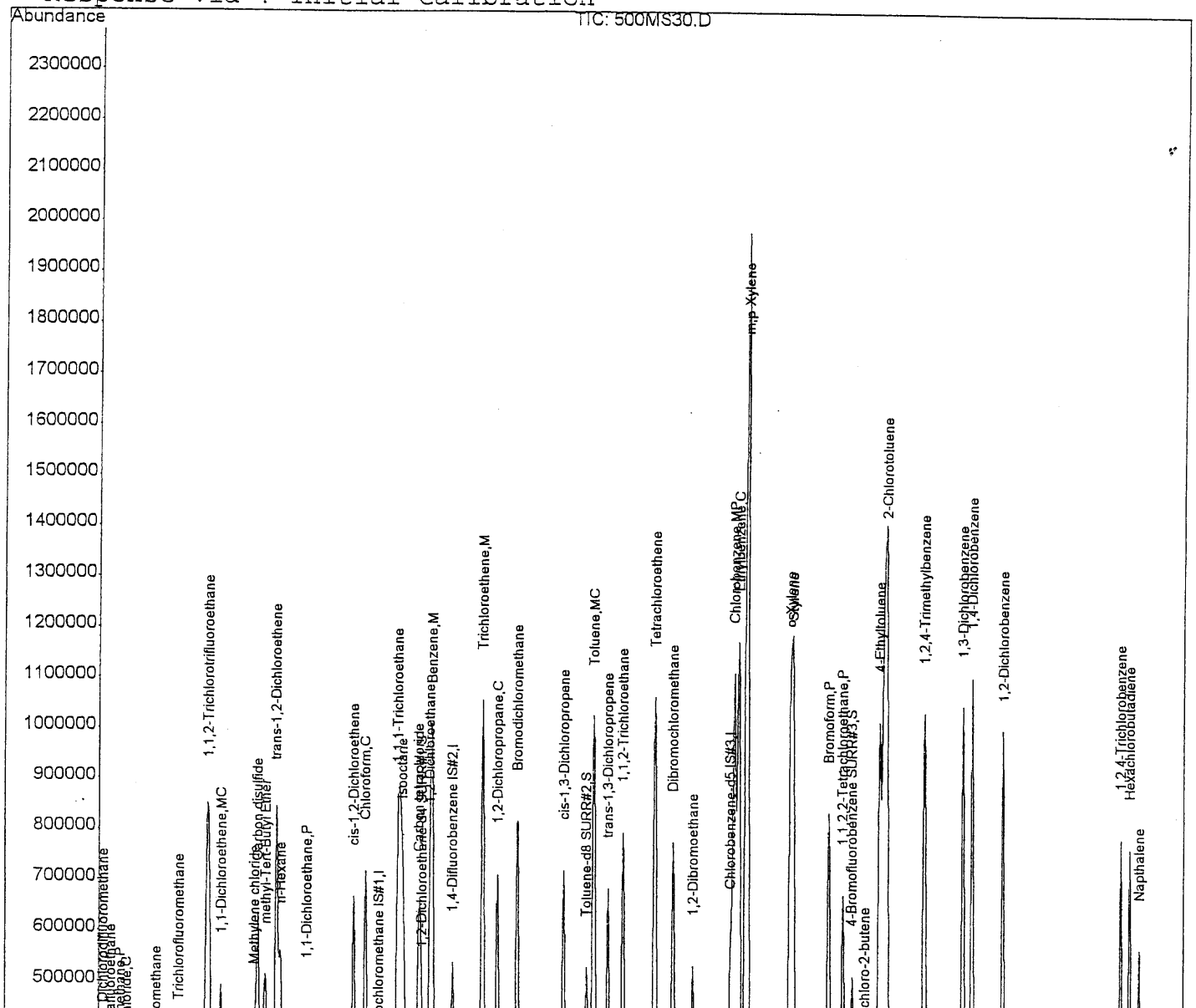
Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\500MS30.D
Acq On : 30 Sep 2004 11:10
Sample : VSTD500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 11:41 2004

Vial: 6
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Initial Calibration



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1000MS30.D Vial: 7
Acq On : 30 Sep 2004 11:47 Operator: DWB
Sample : VSTD1000 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 12:21 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M093004\250MS30.D (30 Sep 2004 10:33)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar.)
1) Bromochloromethane IS#1	10.28	128	289442	250.00	ng	0.00 97.00%
26) 1,4-Difluorobenzene IS#2	12.17	114	1631801	250.00	ng	0.00 101.74%
36) Chlorobenzene-d5 IS#3	19.30	117	1149211	250.00	ng	0.02 99.19%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.38	65	460938	288.74	ng	0.00
Spiked Amount 250.000 Range 61 - 140 Recovery = 115.50%						
32) Toluene-d8 SURR#2	15.63	98	1440095	252.40	ng	0.00
Spiked Amount 250.000 Range 90 - 109 Recovery = 100.96%						
46) 4-Bromofluorobenzene SURR#	22.39	95	795478	210.10	ng	0.02
Spiked Amount 250.000 Range 87 - 112 Recovery = 84.04%#						

DWB 9-30-04

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.25	85	1695377	976.04	ng	97
3) Dichlorotetrafluoroethane	3.74	135	1452929m	920.78	ng	# 1
4) Chloromethane	3.70	50	1141861	900.01	ng	# 96
5) Vinyl chloride	3.85	62	1283900	916.92	ng	99
6) Bromomethane	4.60	94	1288956	952.59	ng	100
7) Chloroethane	4.74	64	879869	1041.58	ng	# 90
8) Trichlorofluoromethane	5.17	101	3250141	1071.12	ng	100
9) 1,1,2-Trichlorotrifluoroet	5.90	151	2528005	1135.93	ng	100
10) 1,1-Dichloroethene	6.24	96	1631178	1039.30	ng	99
12) Methylene chloride	7.09	49	1886852	849.54	ng	98
13) Carbon disulfide	7.17	76	4928983	997.29	ng	98
14) methyl-Tert-Butyl Ether	7.37	73	5011297	1254.10	ng	97
15) trans-1,2-Dichloroethene	7.65	96	2091040	1083.98	ng	99
16) n-Hexane	7.76	57	2021822	1038.17	ng	97
17) 1,1-Dichloroethane	8.44	63	3252968	963.62	ng	100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1000MS30.D
Acq On : 30 Sep 2004 11:47
Sample : VSTD1000
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:21 2004

Vial: 7
Operator: DWB
Inst : MARILYN
Multiplr: 1.00
Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28)	Trichloroethene	12.93	130	2421775	963.53	ng		100
29)	1,2-Dichloropropane	13.30	63	2134390	922.77	ng		99
30)	Bromodichloromethane	13.81	83	4076300	915.98	ng		99
31)	cis-1,3-Dichloropropene	15.02	75	3215062	927.78	ng		99
33)	Toluene	15.83	92	3707563	1038.95	ng		99
34)	trans-1,3-Dichloropropene	16.20	75	2871269	1009.64	ng		99
35)	1,1,2-Trichloroethane	16.59	97	1925322	964.91	ng		100
37)	Tetrachloroethene	17.39	164	1863181	947.54	ng		100
38)	Dibromochloromethane	17.86	127	2323348	891.60	ng		99
39)	Chlorobenzene	19.39	112	4315330	1007.55	ng		98
40)	Ethylbenzene	19.51	106	2008518	1054.50	ng		100
41)	m,p-Xylene	19.70	106	4769589	2004.08	ng		99
42)	o-Xylene	20.83	106	2447547	1058.38	ng		97
43)	Styrene	20.91	104	3695574	1013.80	ng		99
44)	Bromoform	21.81	173	2036380	917.50	ng		100
45)	1,1,2,2-Tetrachloroethane	22.16	83	2762363	845.63	ng		100
47)	1,4-Dichloro-2-butene	22.70	75	687724	833.96	ng		98
48)	4-Ethyltoluene	23.09	105	5184478	963.42	ng		100
49)	1,3,5-Trimethylbenzene	23.20	105	5406784m	1065.94	ng	#	100
50)	2-Chlorotoluene	23.28	91	5314979	924.46	ng		99
51)	1,2,4-Trimethylbenzene	24.25	105	4697643	1015.13	ng		99
52)	1,3-Dichlorobenzene	25.24	146	3006843	928.38	ng		100
53)	1,4-Dichlorobenzene	25.48	146	2755494	894.09	ng		99
54)	1,2-Dichlorobenzene	26.27	146	2792721	936.98	ng		98
55)	1,2,4-Trichlorobenzene	29.29	180	1490860	843.88	ng		99
56)	Napthalene	29.75	128	3041133	917.66	ng		99
57)	Hexachlorobutadiene	29.52	225	882462	833.07	ng		100

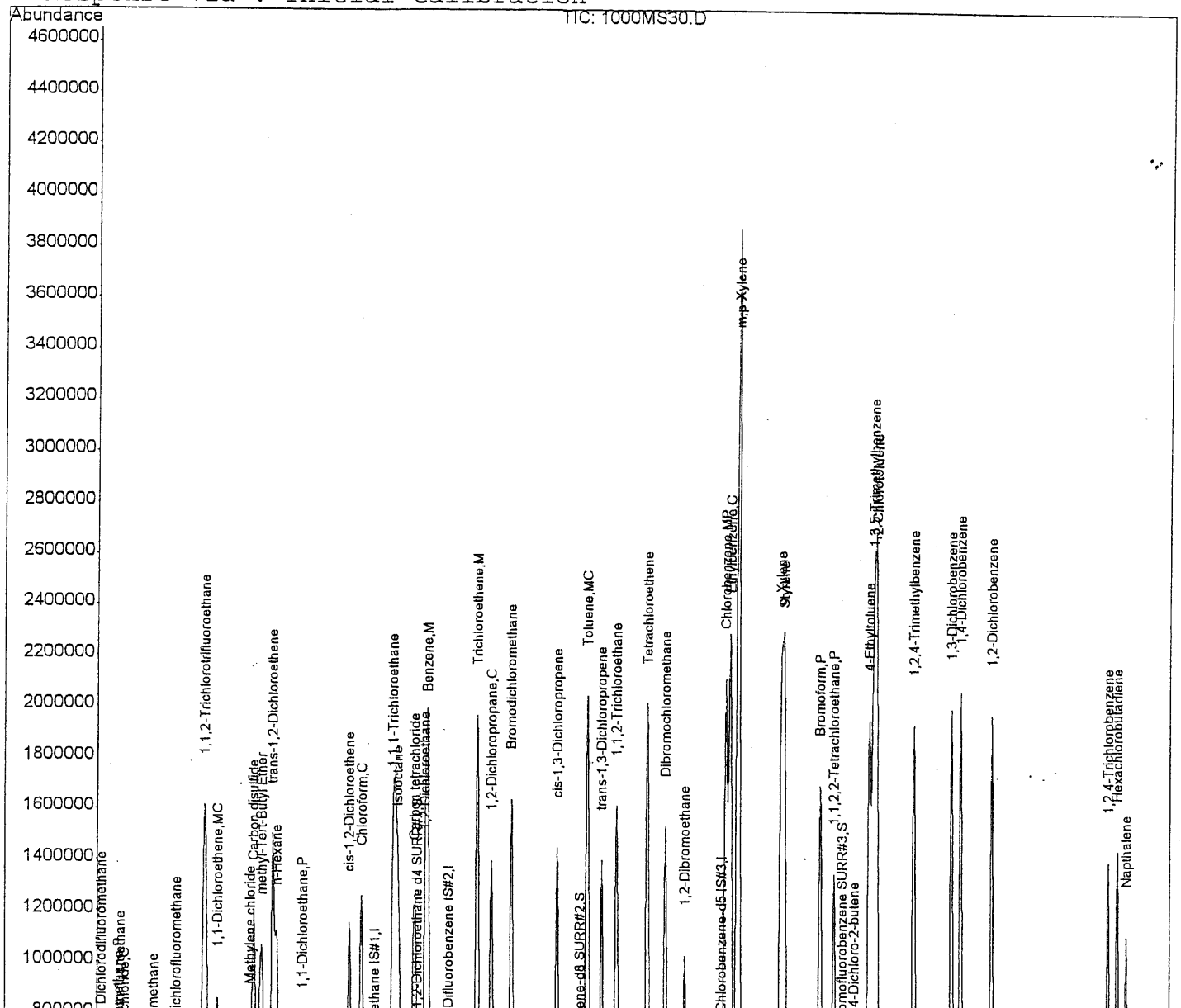
Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1000MS30.D
Acq On : 30 Sep 2004 11:47
Sample : VSTD1000
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:21 2004

Vial: 7
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:20:04 2004
Response via : Initial Calibration



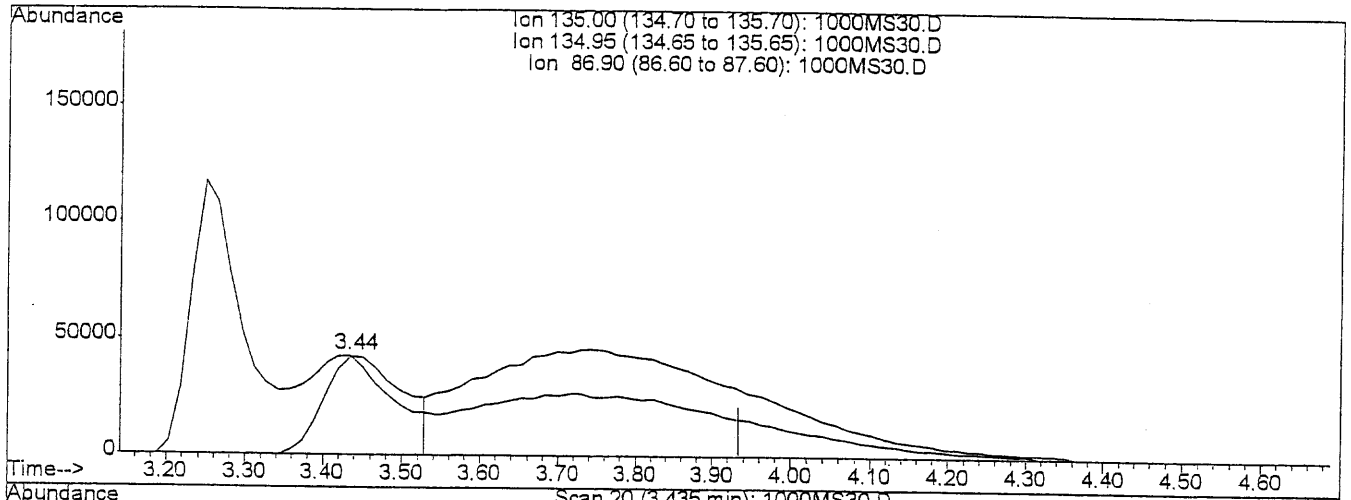
Quantitation Report (Qedit)

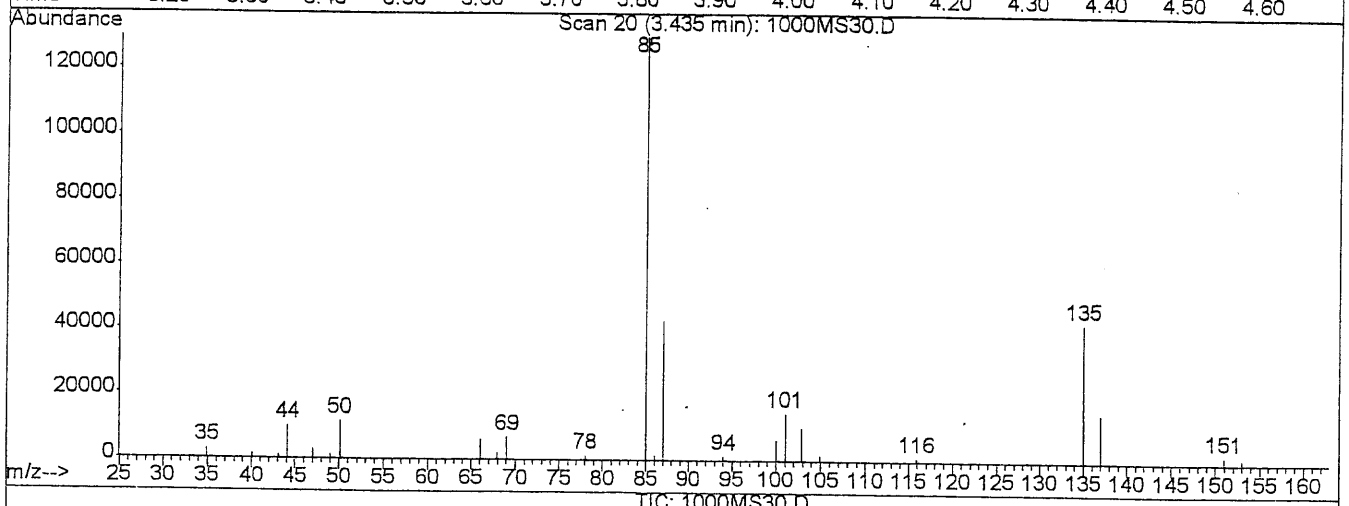
Data File : D:\HPCHEM\1\DATA03\M093004\1000MS30.D
Acq On : 30 Sep 2004 11:47
Sample : VSTD1000
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:17 2004

Vial: 7
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:20:04 2004
Response via : Multiple Level Calibration





TIC: 1000MS30.D

(3) Dichlorotetrafluoroethane

3.44min 187.35ng

response 295621

Ion Exp% Act%

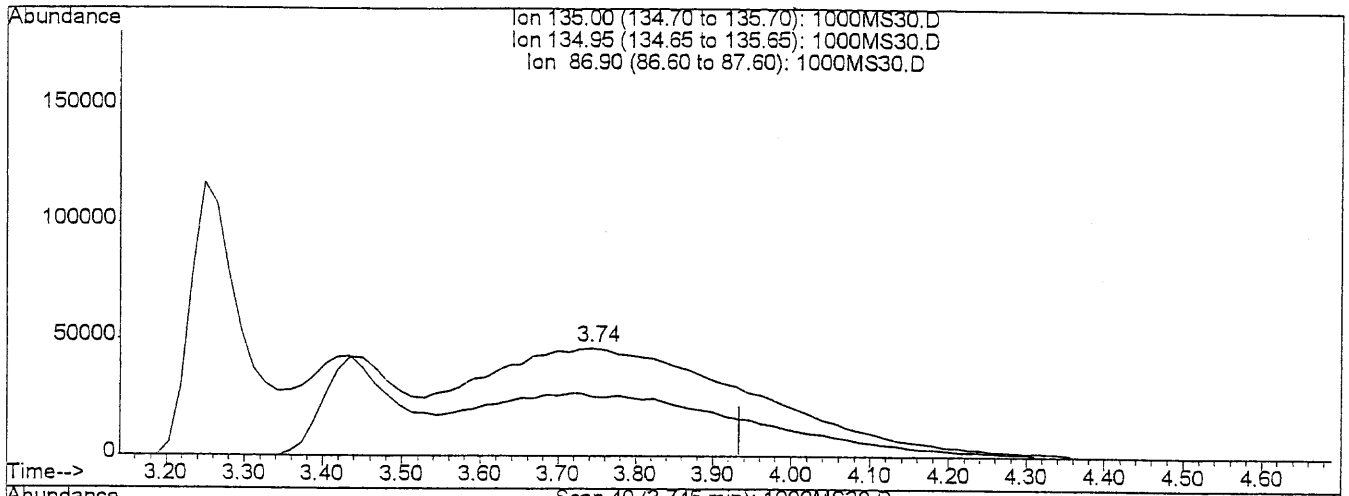
Quantitation Report (Qedit)

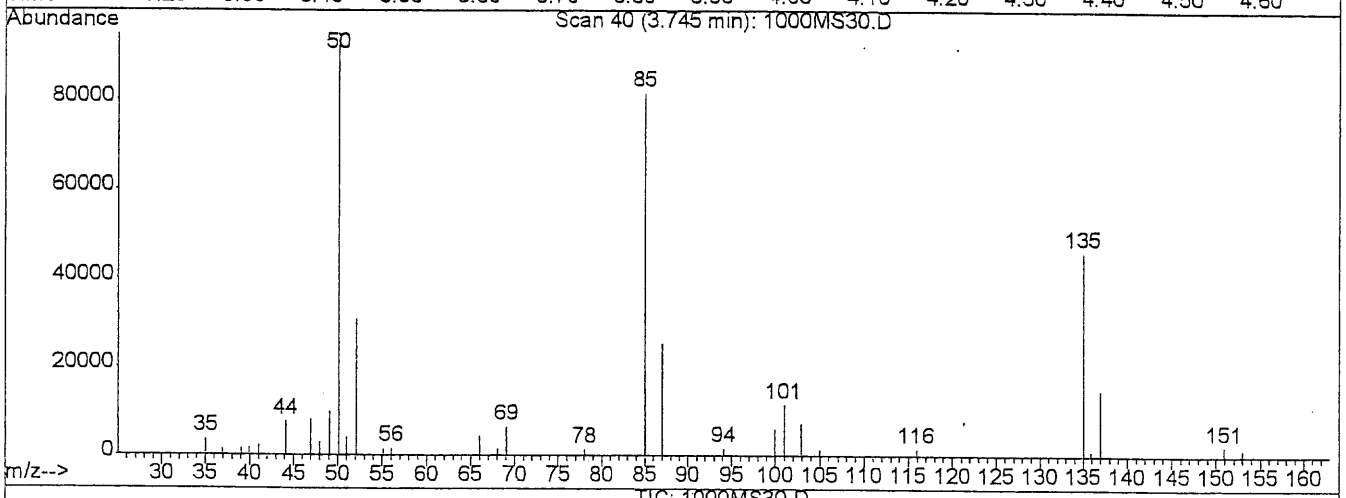
Data File : D:\HPCHEM\1\DATA03\M093004\1000MS30.D
Acq On : 30 Sep 2004 11:47
Sample : VSTD1000
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:21 2004

Vial: 7
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:20:04 2004
Response via : Multiple Level Calibration





(3) Dichlorotetrafluoroethane

3.74min 920.78ng m

response 1452929

Ion Exp% Act%

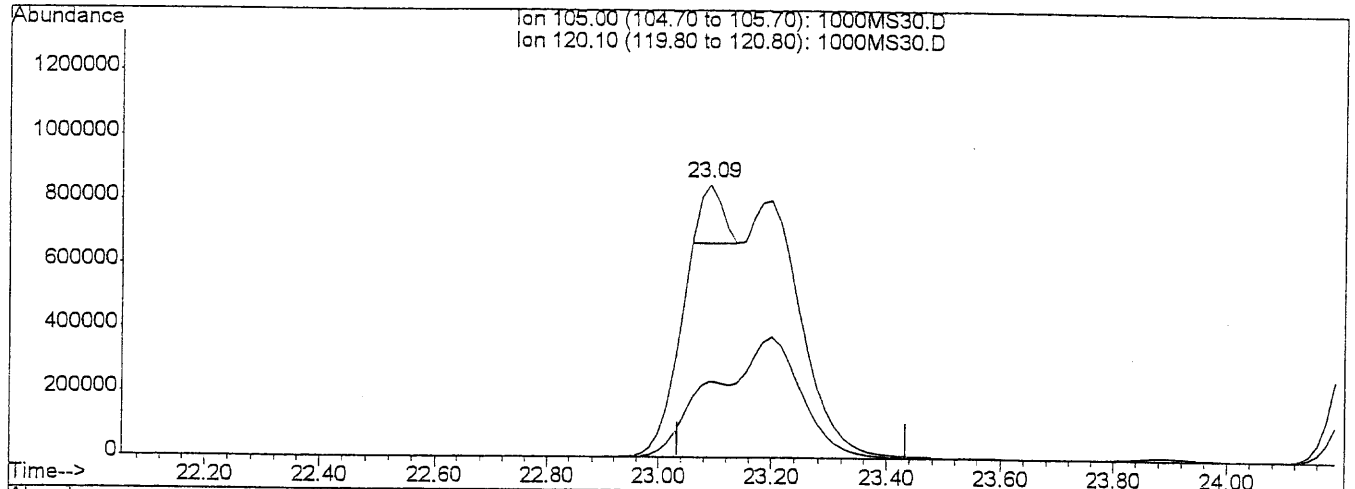
Quantitation Report (Qedit)

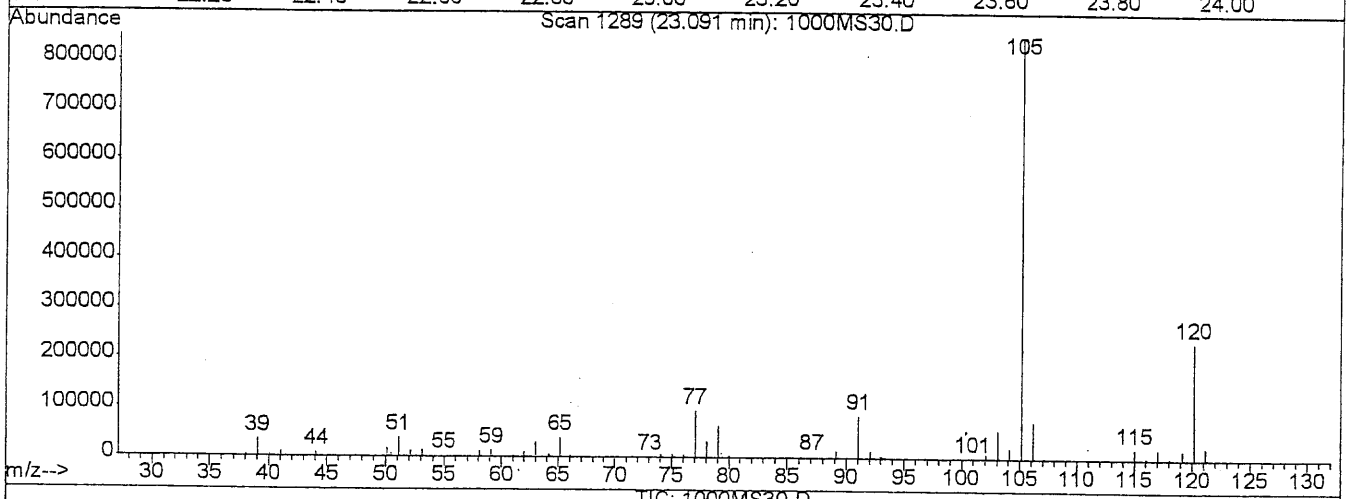
Data File : D:\HPCHEM\1\DATA03\M093004\1000MS30.D
Acq On : 30 Sep 2004 11:47
Sample : VSTD1000
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:21 2004

Vial: 7
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:20:04 2004
Response via : Multiple Level Calibration





TIC: 1000MS30.D

(49) 1,3,5-Trimethylbenzene

23.09min 91.78ng

response 465522

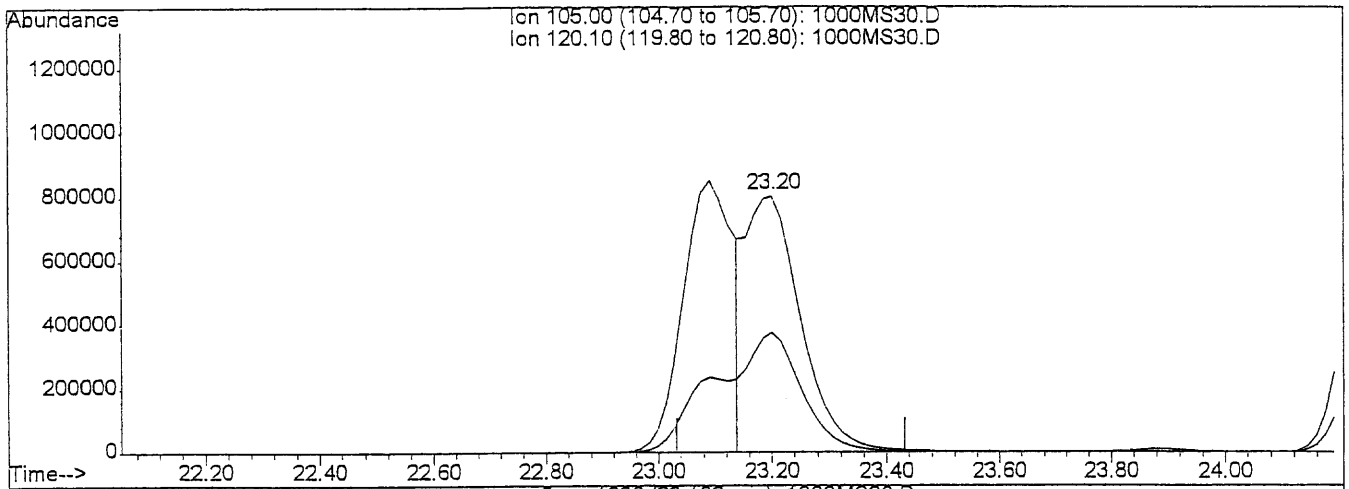
Ion Exp% Act%

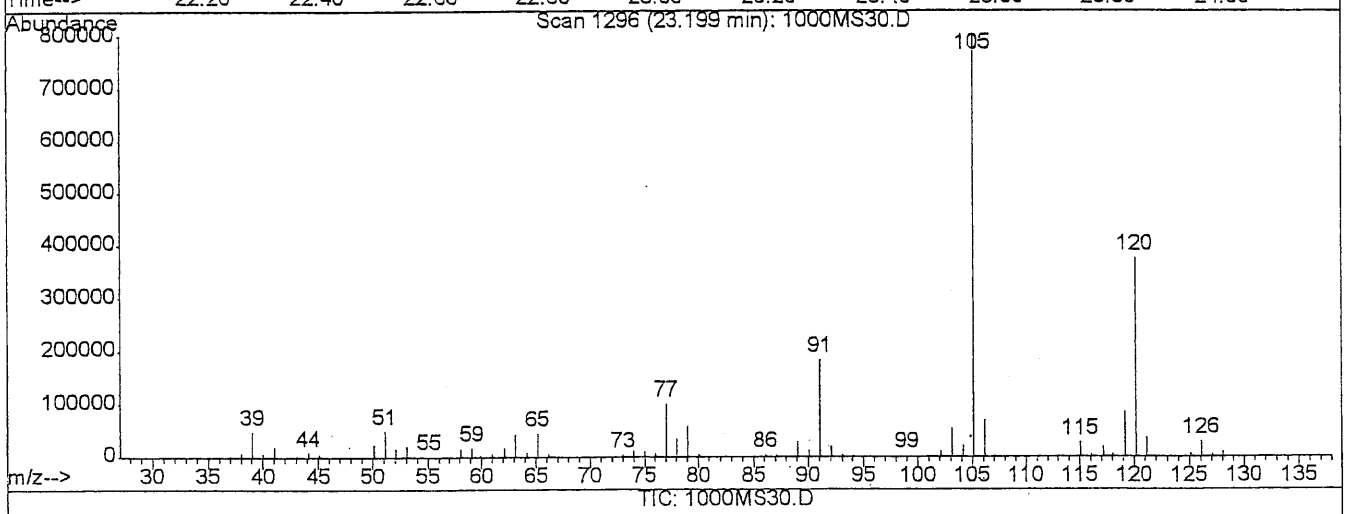
9-30-04

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA03\M093004\1000MS30.D Vial: 7
Acq On : 30 Sep 2004 11:47 Operator: DWB
Sample : VSTD1000 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 12:21 2004 Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:20:04 2004
Response via : Multiple Level Calibration





TIC: 1000MS30.D

(49) 1,3,5-Trimethylbenzene

23.20min 1065.94ng m

response 5406784

Ion Exp% Act%

9-30-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1000MS30.D Vial: 7
Acq On : 30 Sep 2004 11:47 Operator: DWB
Sample : VSTD1000 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 12:17 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M093004\250MS30.D (30 Sep 2004 10:33)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.28	128	289442	250.00	ng	0.00 97.00%
26) 1,4-Difluorobenzene IS#2	12.17	114	1631801	250.00	ng	0.00 101.74%
36) Chlorobenzene-d5 IS#3	19.30	117	1149211	250.00	ng	0.02 99.19%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.38	65	460938	288.74	ng	0.00
Spiked Amount 250.000 Range 61 - 140 Recovery = 115.50%						
32) Toluene-d8 SURR#2	15.63	98	1440095	252.40	ng	0.00
Spiked Amount 250.000 Range 90 - 109 Recovery = 100.96%						
46) 4-Bromofluorobenzene SURR#	22.39	95	795478	210.10	ng	0.02
Spiked Amount 250.000 Range 87 - 112 Recovery = 84.04%#						

Target Compounds

original NB 9-30-04

						Qvalue
2) Dichlorodifluoromethane	3.25	85	1695377	976.04	ng	97
3) Dichlorotetrafluoroethane	3.44	135	295621	187.35	ng #	1
4) Chloromethane	3.70	50	1141861	900.01	ng #	96
5) Vinyl chloride	3.85	62	1283900	916.92	ng	99
6) Bromomethane	4.60	94	1288956	952.59	ng	100
7) Chloroethane	4.74	64	879869	1041.58	ng #	90
8) Trichlorofluoromethane	5.17	101	3250141	1071.12	ng	100
9) 1,1,2-Trichlorotrifluoroet	5.90	151	2528005	1135.93	ng	100
10) 1,1-Dichloroethene	6.24	96	1631178	1039.30	ng	99
12) Methylene chloride	7.09	49	1886852	849.54	ng	98
13) Carbon disulfide	7.17	76	4928983	997.29	ng	98
14) methyl-Tert-Butyl Ether	7.37	73	5011297	1254.10	ng	97
15) trans-1,2-Dichloroethene	7.65	96	2091040	1083.98	ng	99
16) n-Hexane	7.76	57	2021822	1038.17	ng	97

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1000MS30.D Vial: 7
Acq On : 30 Sep 2004 11:47 Operator: DWB
Sample : VSTD1000 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 12:17 2004 Quant Results File: TO14S.RES

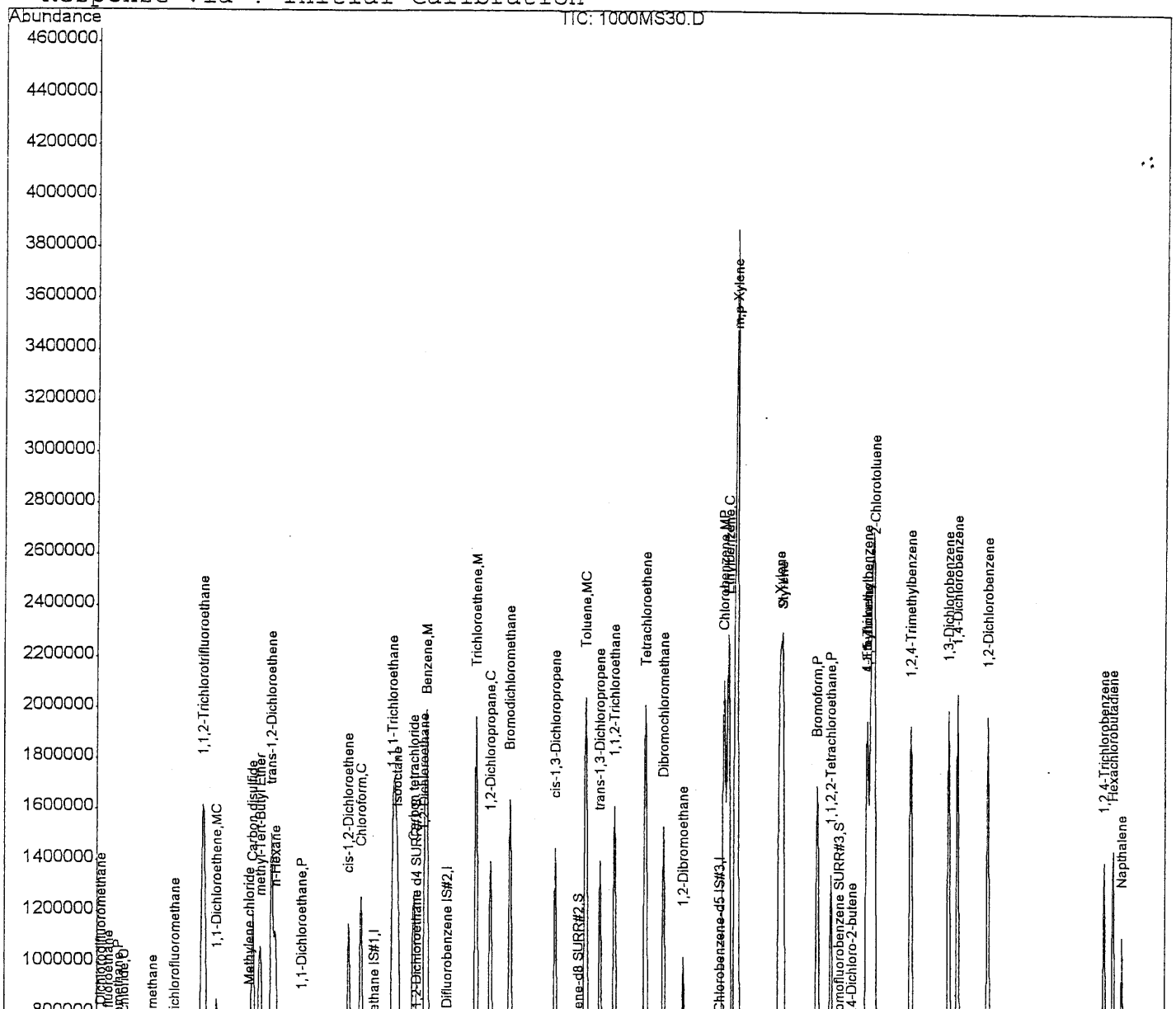
Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
28)	Trichloroethene	12.93	130	2421775	963.53	ng	100
29)	1,2-Dichloropropane	13.30	63	2134390	922.77	ng	99
30)	Bromodichloromethane	13.81	83	4076300	915.98	ng	99
31)	cis-1,3-Dichloropropene	15.02	75	3215062	927.78	ng	99
33)	Toluene	15.83	92	3707563	1038.95	ng	99
34)	trans-1,3-Dichloropropene	16.20	75	2871269	1009.64	ng	99
35)	1,1,2-Trichloroethane	16.59	97	1925322	964.91	ng	100
37)	Tetrachloroethene	17.39	164	1863181	947.54	ng	100
38)	Dibromochloromethane	17.86	127	2323348	891.60	ng	99
39)	Chlorobenzene	19.39	112	4315330	1007.55	ng	98
40)	Ethylbenzene	19.51	106	2008518	1054.50	ng	100
41)	m,p-Xylene	19.70	106	4769589	2004.08	ng	99
42)	o-Xylene	20.83	106	2447547	1058.38	ng	97
43)	Styrene	20.91	104	3695574	1013.80	ng	99
44)	Bromoform	21.81	173	2036380	917.50	ng	100
45)	1,1,2,2-Tetrachloroethane	22.16	83	2762363	845.63	ng	100
47)	1,4-Dichloro-2-butene	22.70	75	687724	833.96	ng	98
48)	4-Ethyltoluene	23.09	105	5184478	963.42	ng	100
49)	1,3,5-Trimethylbenzene	23.09	105	465522	91.78	ng	100
50)	2-Chlorotoluene	23.28	91	5314979	924.46	ng	99
51)	1,2,4-Trimethylbenzene	24.25	105	4697643	1015.13	ng	99
52)	1,3-Dichlorobenzene	25.24	146	3006843	928.38	ng	100
53)	1,4-Dichlorobenzene	25.48	146	2755494	894.09	ng	99
54)	1,2-Dichlorobenzene	26.27	146	2792721	936.98	ng	98
55)	1,2,4-Trichlorobenzene	29.29	180	1490860	843.88	ng	99
56)	Napthalene	29.75	128	3041133	917.66	ng	99
57)	Hexachlorobutadiene	29.52	225	882462	833.07	ng	100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1000MS30.D Vial: 7
Acq On : 30 Sep 2004 11:47 Operator: DWB
Sample : VSTD1000 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 12:17 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 11:07:37 2004
Response via : Initial Calibration



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D Vial: 8
Acq On : 30 Sep 2004 12:23 Operator: DWB
Sample : VSTD1500 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 13:00 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:22:34 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M093004\250MS30.D (30 Sep 2004 10:33)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.28	128	288230	250.00	ng	0.00 96.59%
26) 1,4-Difluorobenzene IS#2	12.17	114	1659557	250.00	ng	0.00 103.47%
36) Chlorobenzene-d5 IS#3	19.32	117	1192365	250.00	ng	0.04 102.91%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.38	65	436910	253.05	ng	0.00
Spiked Amount 250.000 Range 61 - 140 Recovery = 101.22%						
32) Toluene-d8 SURR#2	15.61	98	1485334	252.35	ng	-0.01
Spiked Amount 250.000 Range 90 - 109 Recovery = 100.94%						
46) 4-Bromofluorobenzene SURR#	22.40	95	844776	241.20	ng	0.02
Spiked Amount 250.000 Range 87 - 112 Recovery = 96.48%						

Target Compounds

							Qvalue
2) Dichlorodifluoromethane	3.25	85	2368852	1342.82	ng		99
3) Dichlorotetrafluoroethane	3.78	135	2282782m	1556.25	ng	#	1
4) Chloromethane	3.70	50	1736097	1448.21	ng		96
5) Vinyl chloride	3.86	62	1964463	1505.54	ng		99
6) Bromomethane	4.60	94	1740456	1312.22	ng		99
7) Chloroethane	4.74	64	1152417m	1380.80	ng	#	93
8) Trichlorofluoromethane	5.16	101	5049729m	1565.68	ng	#	97
9) 1,1,2-Trichlorotrifluoroet	5.90	151	3968880	1642.83	ng		100
10) 1,1-Dichloroethene	6.24	96	2517009	1583.10	ng		98
12) Methylene chloride	7.09	49	2852084	1431.55	ng		97
13) Carbon disulfide	7.17	76	7622939	1549.47	ng		98
14) methyl-Tert-Butyl Ether	7.37	73	7590741	1684.43	ng		97
15) trans-1,2-Dichloroethene	7.65	96	3148143	1544.20	ng		99
16) n-Hexane	7.76	57	2977270	1404.46	ng		99
17) 1,1-Dichloroethane	8.44	63	4895925	1439.68	ng		99
18) cis-1,2-Dichloroethene	9.62	61	[illegible]	[illegible]			[illegible]

Nab 9-30-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 13:00 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

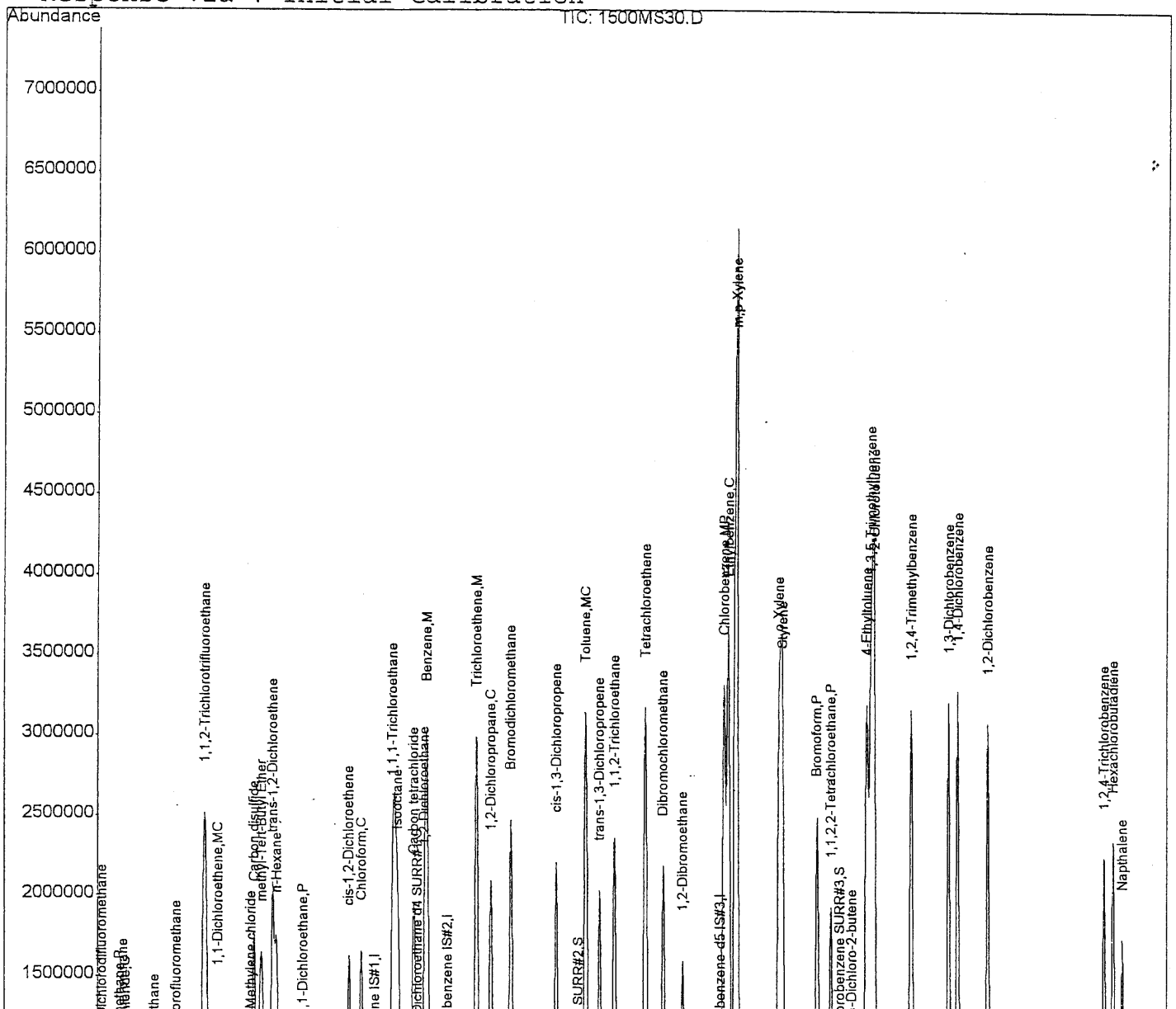
Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:22:34 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
28)	Trichloroethene	12.93	130	3747226	1493.01 ng		100
29)	1,2-Dichloropropane	13.31	63	3238081	1462.16 ng		99
30)	Bromodichloromethane	13.82	83	6154624	1467.03 ng		99
31)	cis-1,3-Dichloropropene	15.02	75	5086035	1513.64 ng		99
33)	Toluene	15.80	92	5669653	1535.76 ng		99
34)	trans-1,3-Dichloropropene	16.17	75	4306920	1523.09 ng		98
35)	1,1,2-Trichloroethane	16.57	97	2896040	1492.16 ng		100
37)	Tetrachloroethene	17.38	164	2967339	1487.41 ng		99
38)	Dibromochloromethane	17.84	127	3380631	1393.05 ng		99
39)	Chlorobenzene	19.41	112	6737136	1516.83 ng		98
40)	Ethylbenzene	19.52	106	3158818	1560.29 ng		100
41)	m,p-Xylene	19.72	106	7633026	3042.62 ng		100
42)	o-Xylene	20.82	106	3736602	1533.30 ng		99
43)	Styrene	20.91	104	5775213	1538.01 ng		99
44)	Bromoform	21.79	173	3016190	1458.85 ng		99
45)	1,1,2,2-Tetrachloroethane	22.17	83	4043623	1367.71 ng		99
47)	1,4-Dichloro-2-butene	22.71	75	1003103	1382.54 ng		96
48)	4-Ethyltoluene	23.09	105	8844238	1604.20 ng		99
49)	1,3,5-Trimethylbenzene	23.19	105	8418758m	1512.43 ng	#	100
50)	2-Chlorotoluene	23.28	91	8496622	1478.10 ng		98
51)	1,2,4-Trimethylbenzene	24.26	105	7657624	1546.63 ng		98
52)	1,3-Dichlorobenzene	25.25	146	4821997	1492.44 ng		100
53)	1,4-Dichlorobenzene	25.48	146	4418010	1460.40 ng		100
54)	1,2-Dichlorobenzene	26.27	146	4391578	1492.00 ng		98
55)	1,2,4-Trichlorobenzene	29.29	180	2432485	1434.04 ng		99
56)	Napthalene	29.75	128	4752155	1445.43 ng		99
57)	Hexachlorobutadiene	29.52	225	1452327	1445.90 ng		99

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D Vial: 8
Acq On : 30 Sep 2004 12:23 Operator: DWB
Sample : VSTD1500 Inst : MARILYN
Misc : AIR Curve shot Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 30 13:00 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:57:19 2004
Response via : Initial Calibration

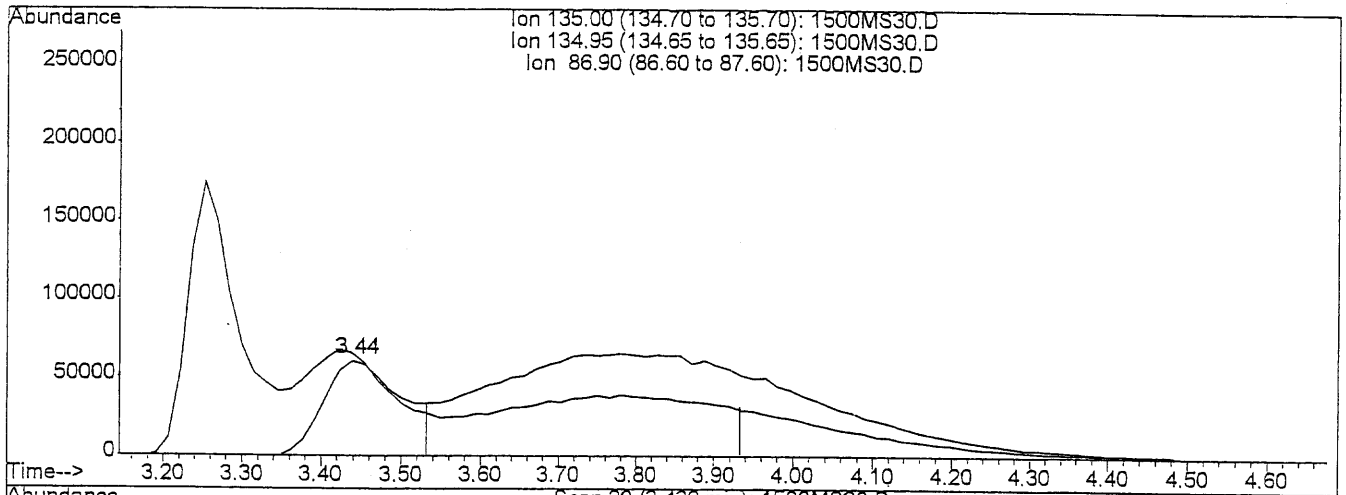


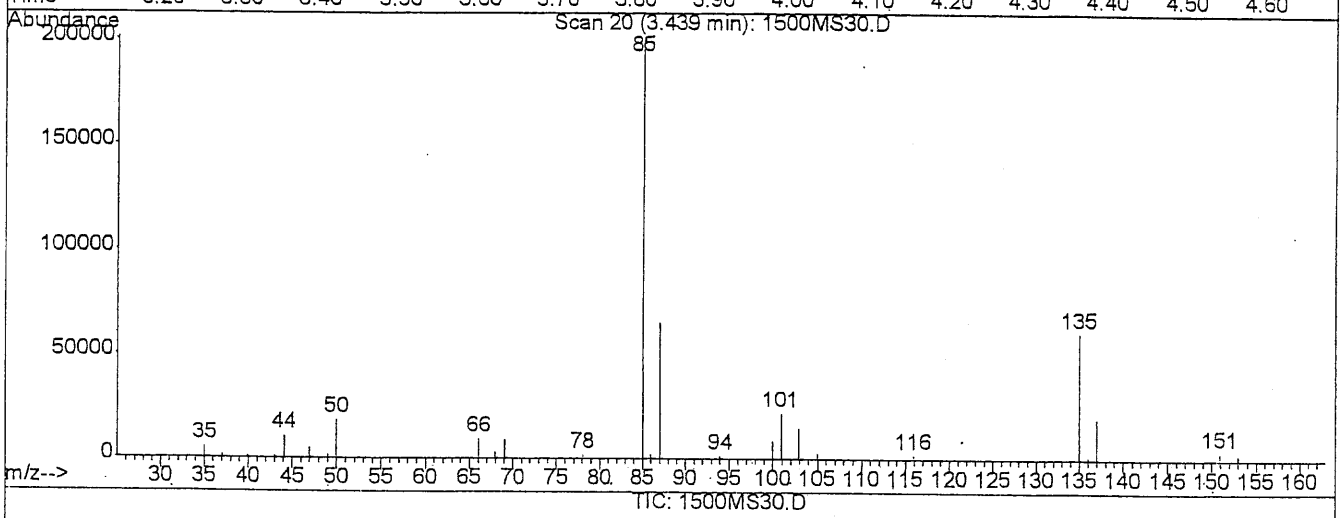
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:54 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:22:34 2004
Response via : Multiple Level Calibration





(3) Dichlorotetrafluoroethane

3.44min 282.27ng

response 414041

Ion	Exp%	Act%

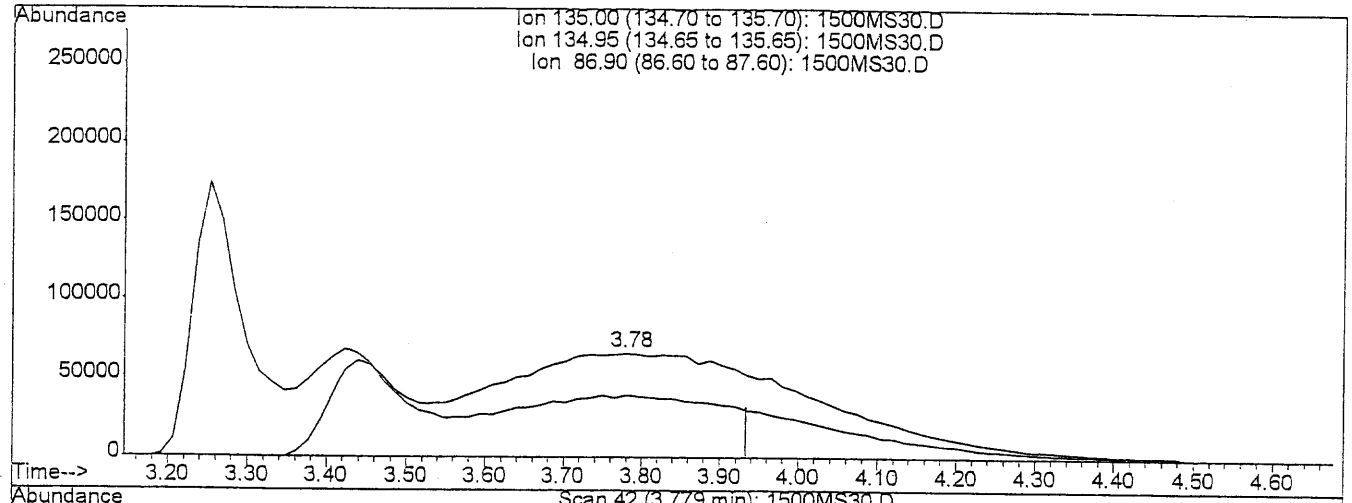
Quantitation Report (Qedit)

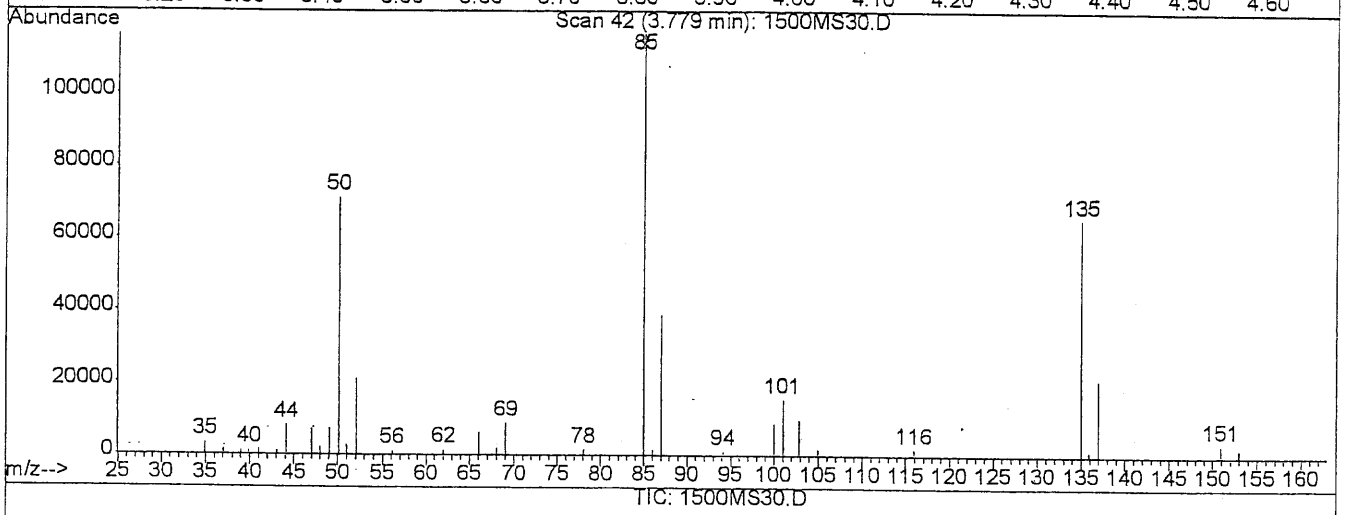
Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:56 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp:res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:22:34 2004
Response via : Multiple Level Calibration





TIC: 1500MS30.D

(3) Dichlorotetrafluoroethane

3.78min 1556.25ng m

response 2282782

Ion Exp% Act%

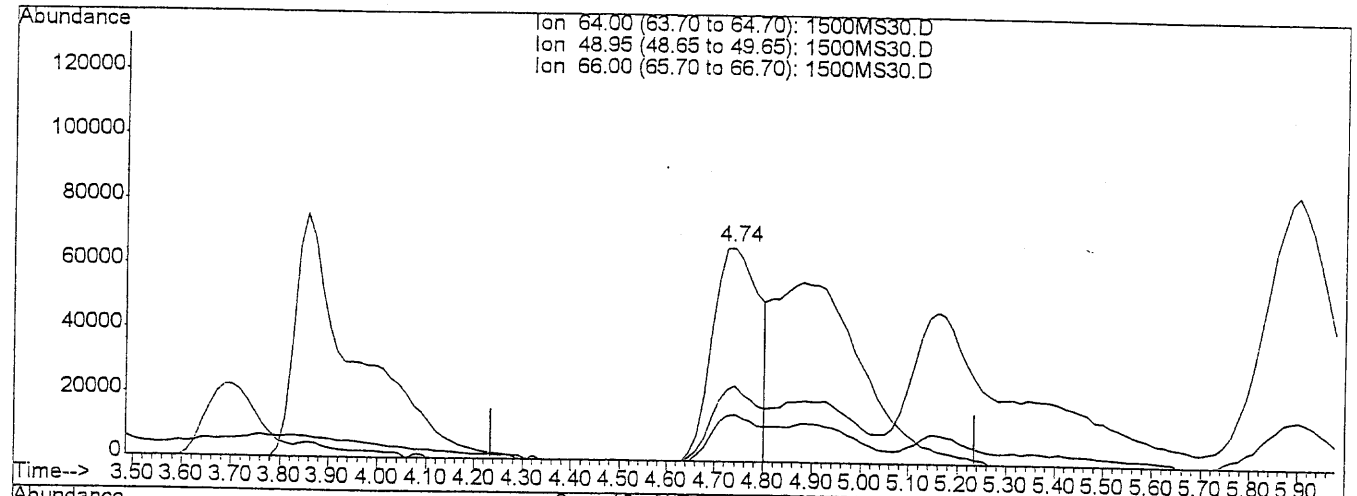
Quantitation Report (Qedit)

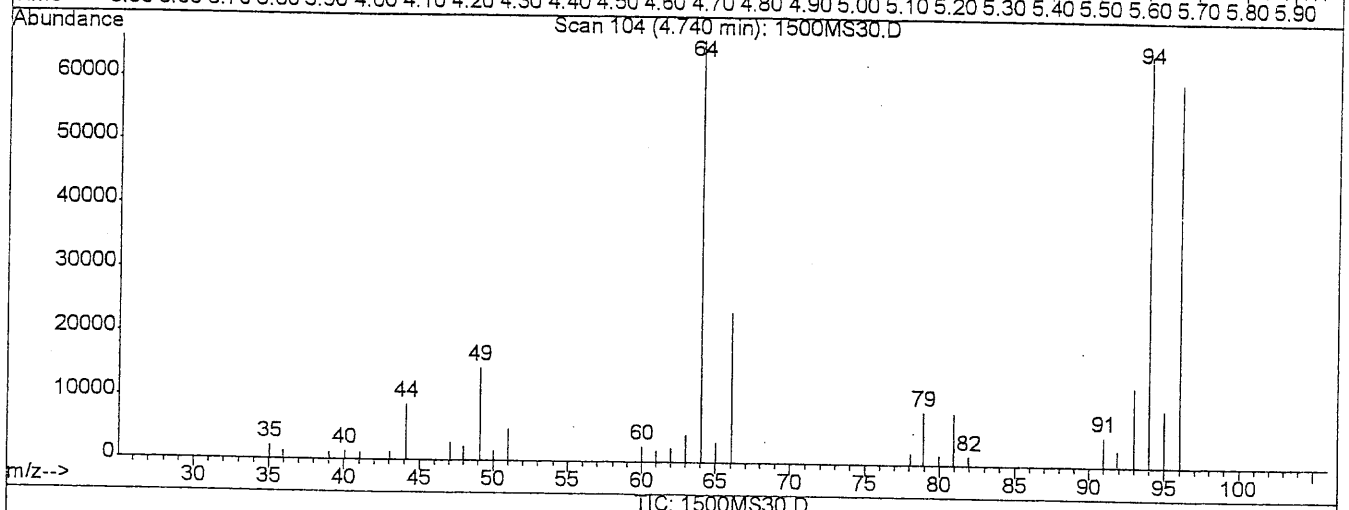
Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:56 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:22:34 2004
Response via : Multiple Level Calibration





TIC: 1500MS30.D

(7) Chloroethane

4.74min 536.32ng

response 447612

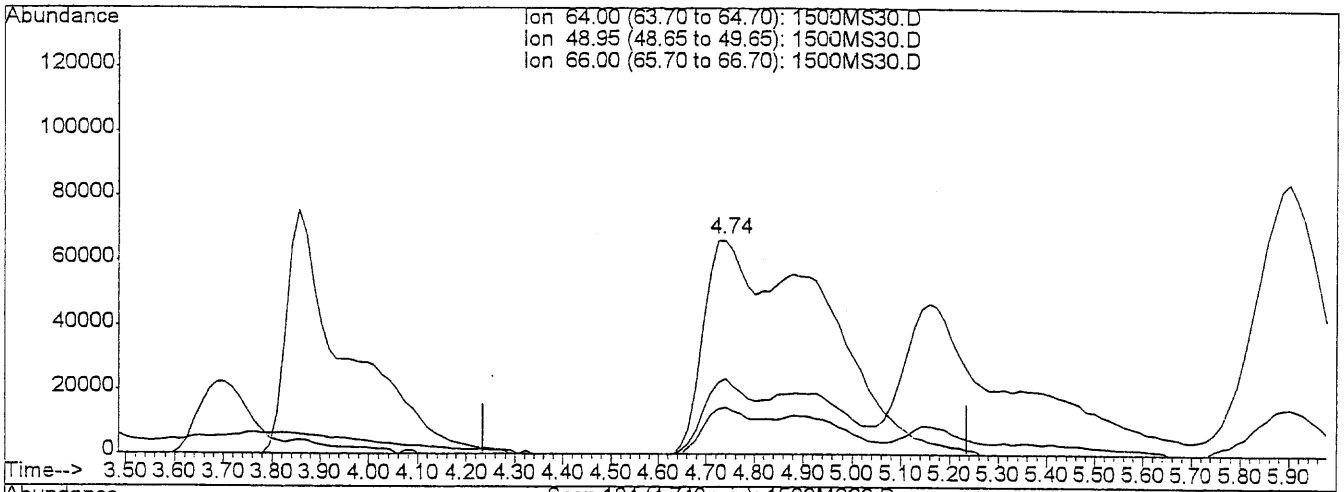
Ion	Exp%	Act%

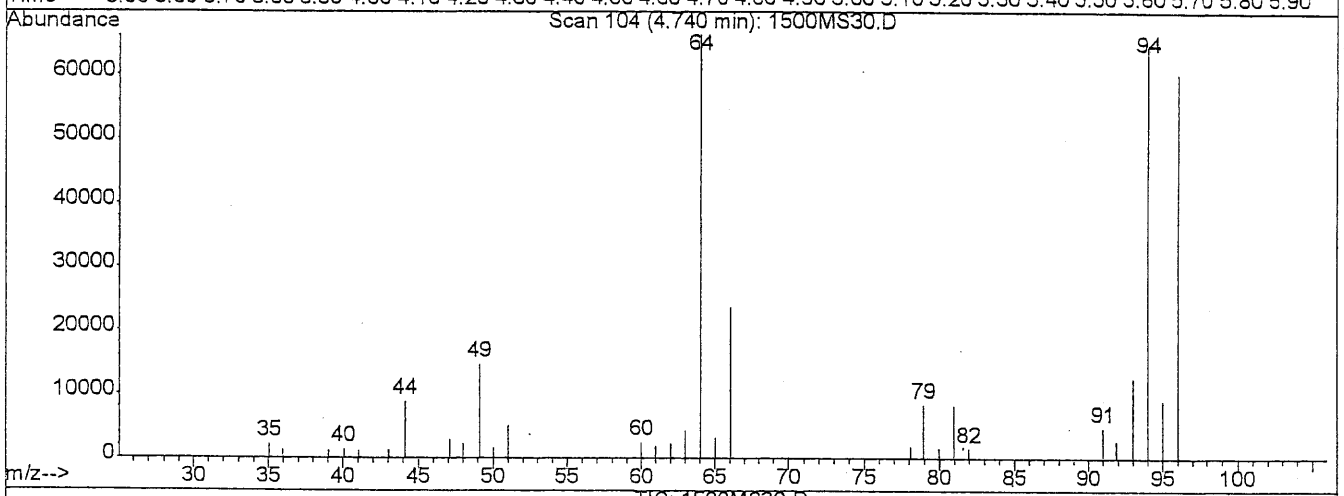
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:56 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:22:34 2004
Response via : Multiple Level Calibration





TIC: 1500MS30.D

(7) Chloroethane

4.74min 1380.80ng m

response 1152417

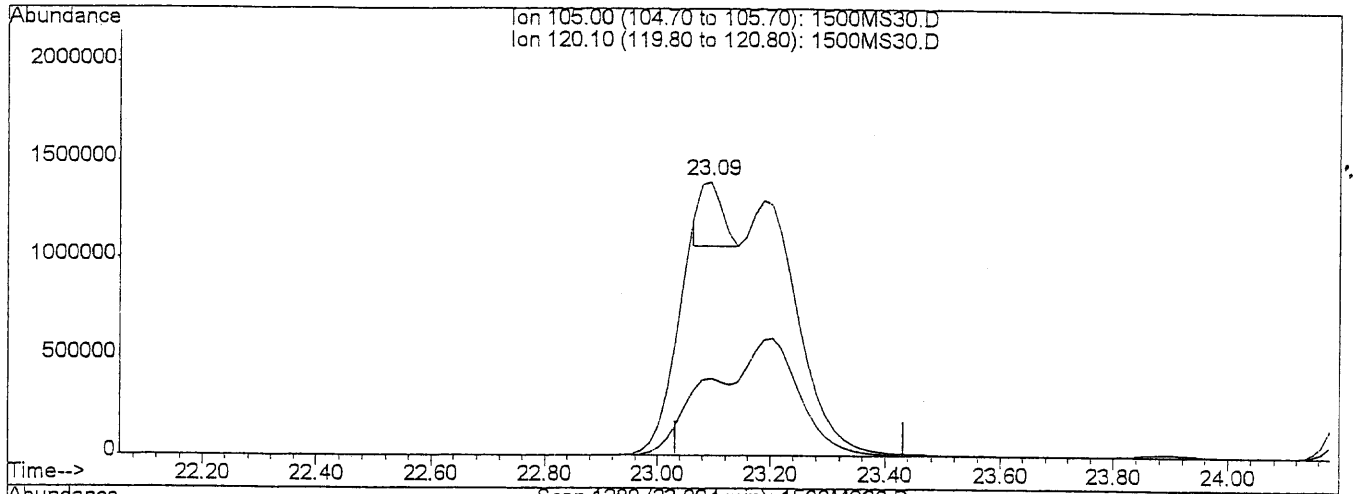
Ion	Exp%	Act%

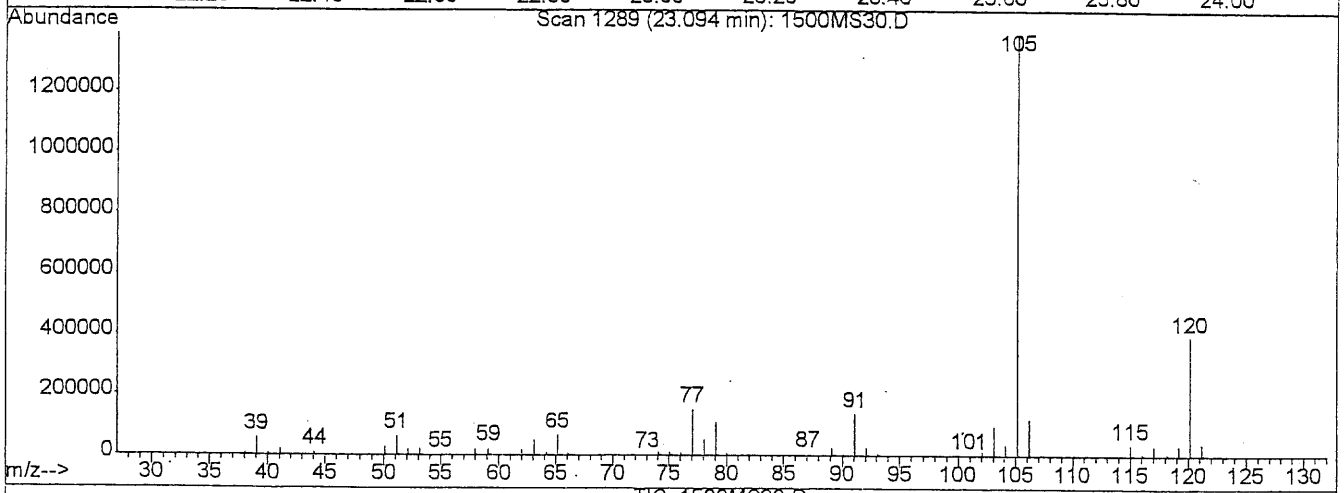
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:56 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:22:34 2004
Response via : Multiple Level Calibration





TIC: 1500MS30.D

(49) 1,3,5-Trimethylbenzene

23.09min 154.27ng

response 858729

Ion Exp% Act%

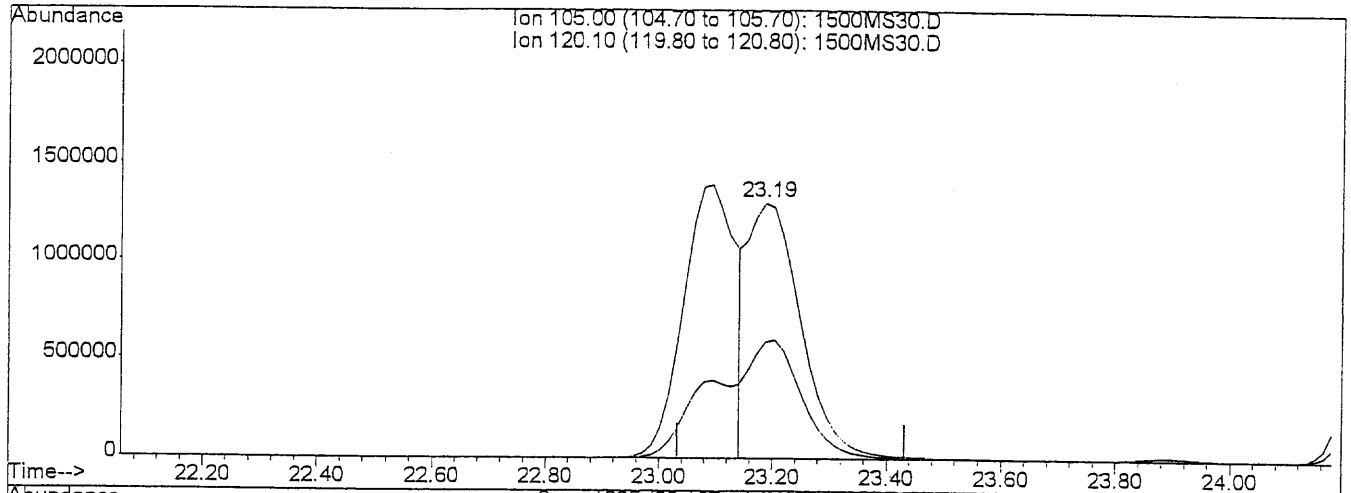
Quantitation Report (Qedit)

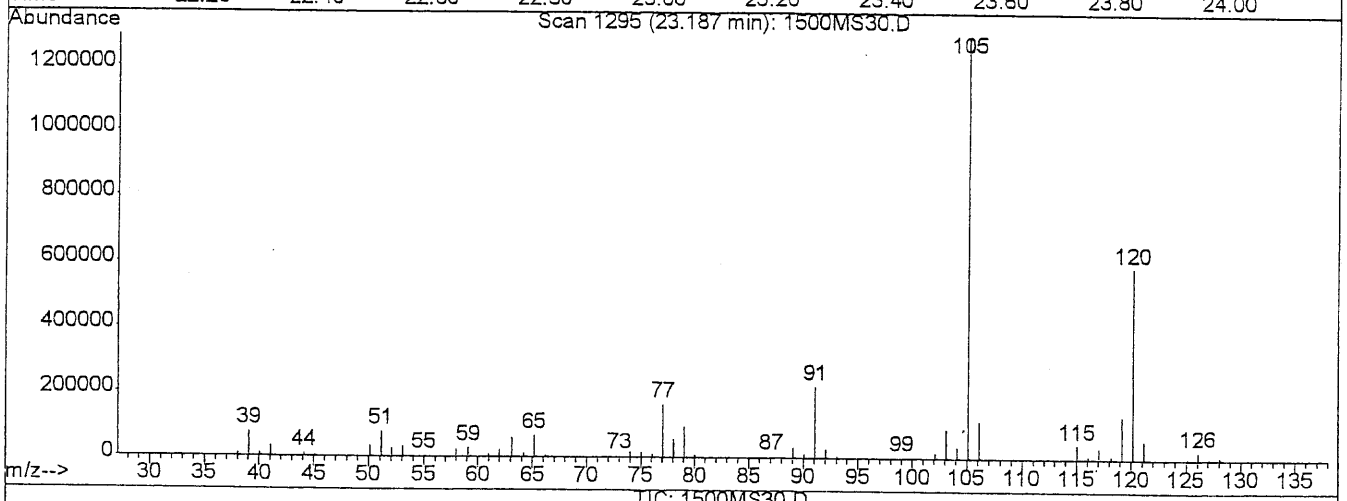
Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:56 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp:res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:22:34 2004
Response via : Multiple Level Calibration





TIC: 1500MS30.D

(49) 1,3,5-Trimethylbenzene

23.19min 1512.43ng m

response 8418758

Ion Exp% Act%

10-30-04

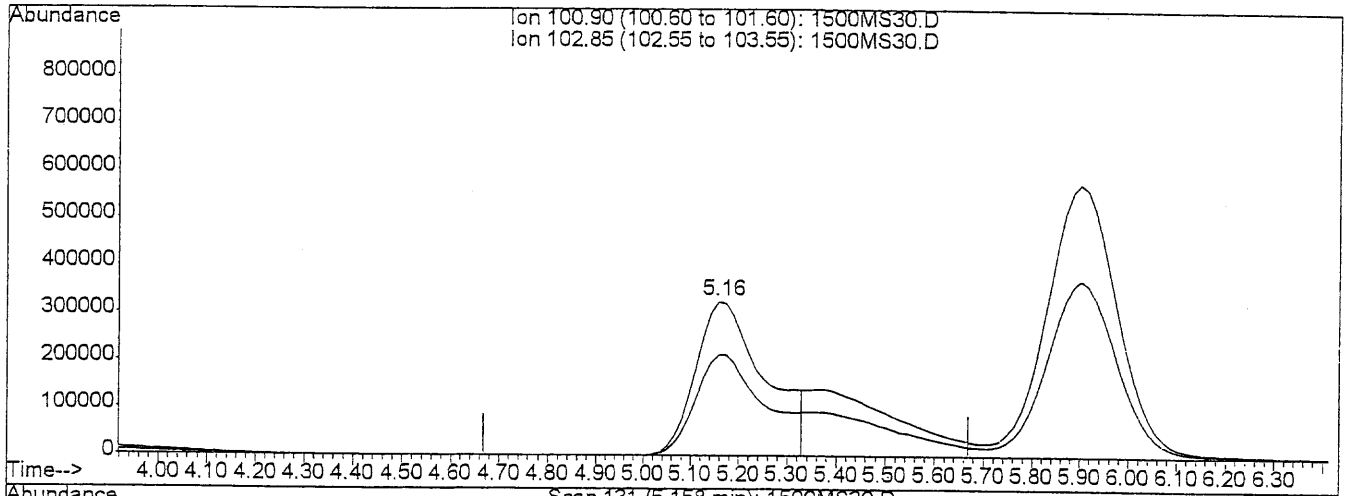
Quantitation Report (Qedit)

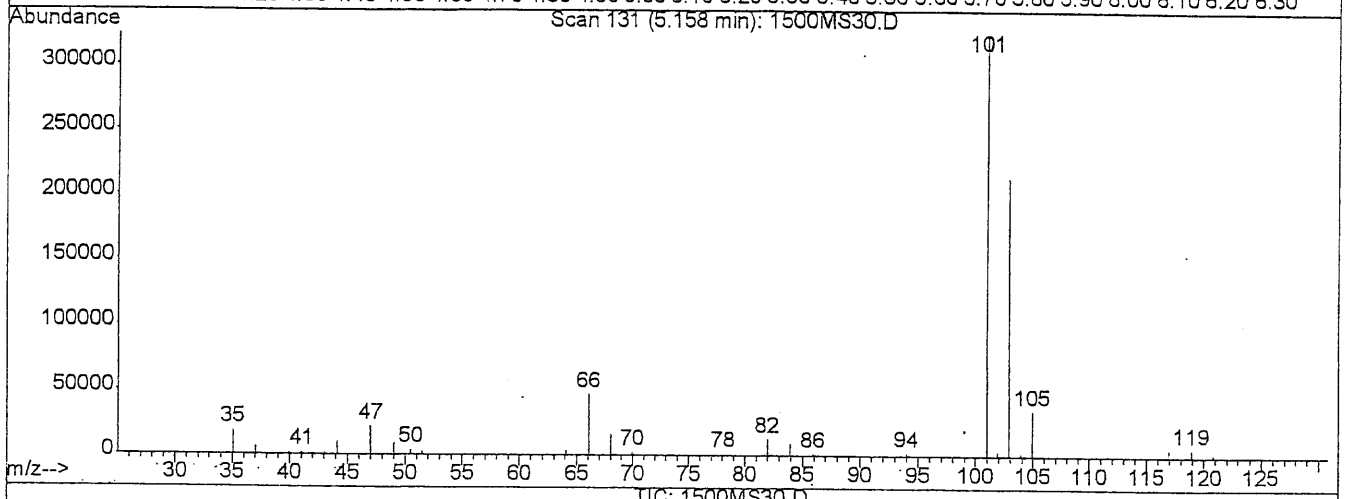
Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:56 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:57:19 2004
Response via : Multiple Level Calibration





TIC: 1500MS30.D

(8) Trichlorofluoromethane

5.16min 1001.33ng

response 3229551

Ion Exp% Act%

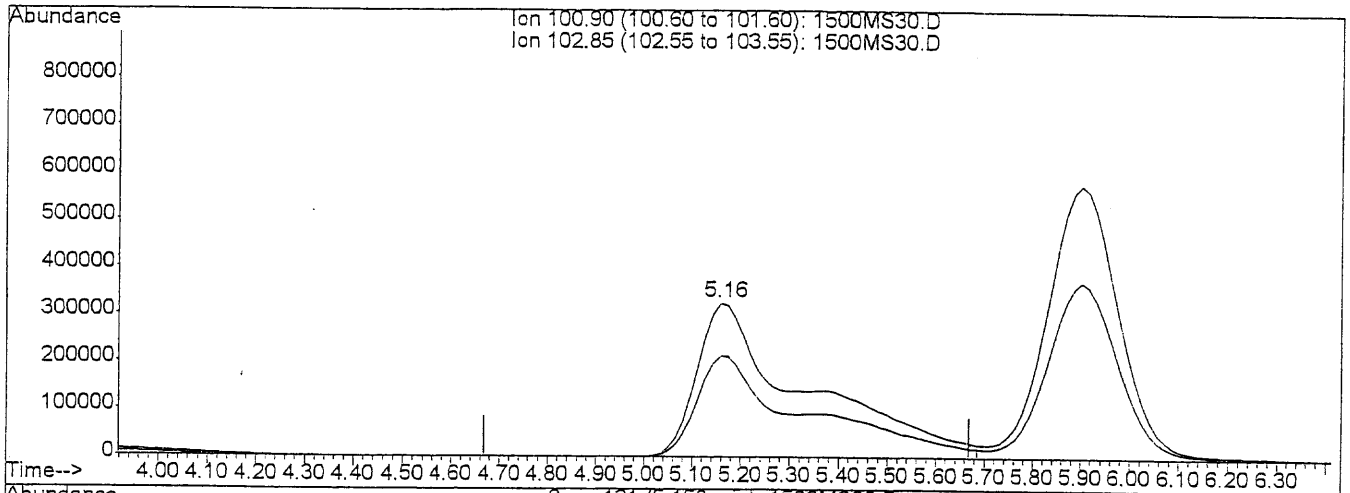
Quantitation Report (Qedit)

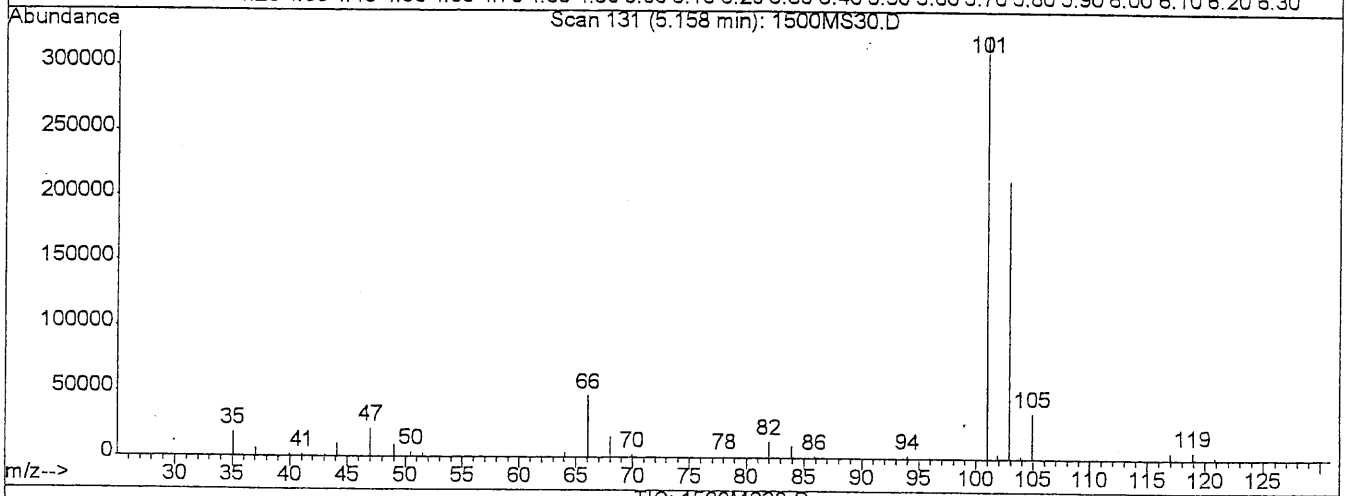
Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 13:00 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp:res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:57:19 2004
Response via : Multiple Level Calibration





TIC: 1500MS30.D

(8) Trichlorofluoromethane

5.16min 1565.68ng m

response 5049729

Ion Exp% Act%

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:54 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:22:34 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M093004\250MS30.D (30 Sep 2004 10:33)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.28	128	288230	250.00	ng	0.00 96.59%
26) 1,4-Difluorobenzene IS#2	12.17	114	1659557	250.00	ng	0.00 103.47%
36) Chlorobenzene-d5 IS#3	19.32	117	1192365	250.00	ng	0.04 102.91%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.38	65	436910	253.05	ng	0.00
Spiked Amount 250.000 Range 61 - 140 Recovery = 101.22%						
32) Toluene-d8 SURR#2	15.61	98	1485334	252.35	ng	-0.01
Spiked Amount 250.000 Range 90 - 109 Recovery = 100.94%						
46) 4-Bromofluorobenzene SURR#	22.40	95	844776	241.20	ng	0.02
Spiked Amount 250.000 Range 87 - 112 Recovery = 96.48%						

Target Compounds

original DJ 9-30-04

						Qvalue
2) Dichlorodifluoromethane	3.25	85	2368852	1342.82	ng	99
3) Dichlorotetrafluoroethane	3.44	135	414041	282.27	ng	1
4) Chloromethane	3.70	50	1736097	1448.21	ng	96
5) Vinyl chloride	3.86	62	1964463	1505.54	ng	99
6) Bromomethane	4.60	94	1740456	1312.22	ng	99
7) Chloroethane	4.74	64	447612	536.32	ng	93
8) Trichlorofluoromethane	5.16	101	3229551	1001.33	ng	97
9) 1,1,2-Trichlorotrifluoroet	5.90	151	3968880	1642.83	ng	100
10) 1,1-Dichloroethene	6.24	96	2517009	1583.10	ng	98
12) Methylene chloride	7.09	49	2852084	1431.55	ng	97
13) Carbon disulfide	7.17	76	7622939	1549.47	ng	98
14) methyl-Tert-Butyl Ether	7.37	73	7590741	1684.43	ng	97
15) trans-1,2-Dichloroethene	7.65	96	3148143	1544.20	ng	99
16) n-Hexane	7.76	57	2977270	1404.46	ng	99
17) 1,1-Dichloroethane	8.44	63	4895925	1439.68	ng	99

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:54 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:22:34 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
28) Trichloroethene	12.93	130	3747226	1493.01 ng	100
29) 1,2-Dichloropropane	13.31	63	3238081	1462.16 ng	99
30) Bromodichloromethane	13.82	83	6154624	1467.03 ng	99
31) cis-1,3-Dichloropropene	15.02	75	5086035	1513.64 ng	99
33) Toluene	15.80	92	5669653	1535.76 ng	99
34) trans-1,3-Dichloropropene	16.17	75	4306920	1523.09 ng	98
35) 1,1,2-Trichloroethane	16.57	97	2896040	1492.16 ng	100
37) Tetrachloroethene	17.38	164	2967339	1487.41 ng	99
38) Dibromochloromethane	17.84	127	3380631	1393.05 ng	99
39) Chlorobenzene	19.41	112	6737136	1516.83 ng	98
40) Ethylbenzene	19.52	106	3158818	1560.29 ng	100
41) m,p-Xylene	19.72	106	7633026	3042.62 ng	100
42) o-Xylene	20.82	106	3736602	1533.30 ng	99
43) Styrene	20.91	104	5775213	1538.01 ng	99
44) Bromoform	21.79	173	3016190	1458.85 ng	99
45) 1,1,2,2-Tetrachloroethane	22.17	83	4043623	1367.71 ng	99
47) 1,4-Dichloro-2-butene	22.71	75	1003103	1382.54 ng	96
48) 4-Ethyltoluene	23.09	105	8844238	1604.20 ng	99
49) 1,3,5-Trimethylbenzene	23.09	105	858729	154.27 ng – PK	100
50) 2-Chlorotoluene	23.28	91	8496622	1478.10 ng	98
51) 1,2,4-Trimethylbenzene	24.26	105	7657624	1546.63 ng	98
52) 1,3-Dichlorobenzene	25.25	146	4821997	1492.44 ng	100
53) 1,4-Dichlorobenzene	25.48	146	4418010	1460.40 ng	100
54) 1,2-Dichlorobenzene	26.27	146	4391578	1492.00 ng	98
55) 1,2,4-Trichlorobenzene	29.29	180	2432485	1434.04 ng	99
56) Napthalene	29.75	128	4752155	1445.43 ng	99
57) Hexachlorobutadiene	29.52	225	1452327	1445.90 ng	99

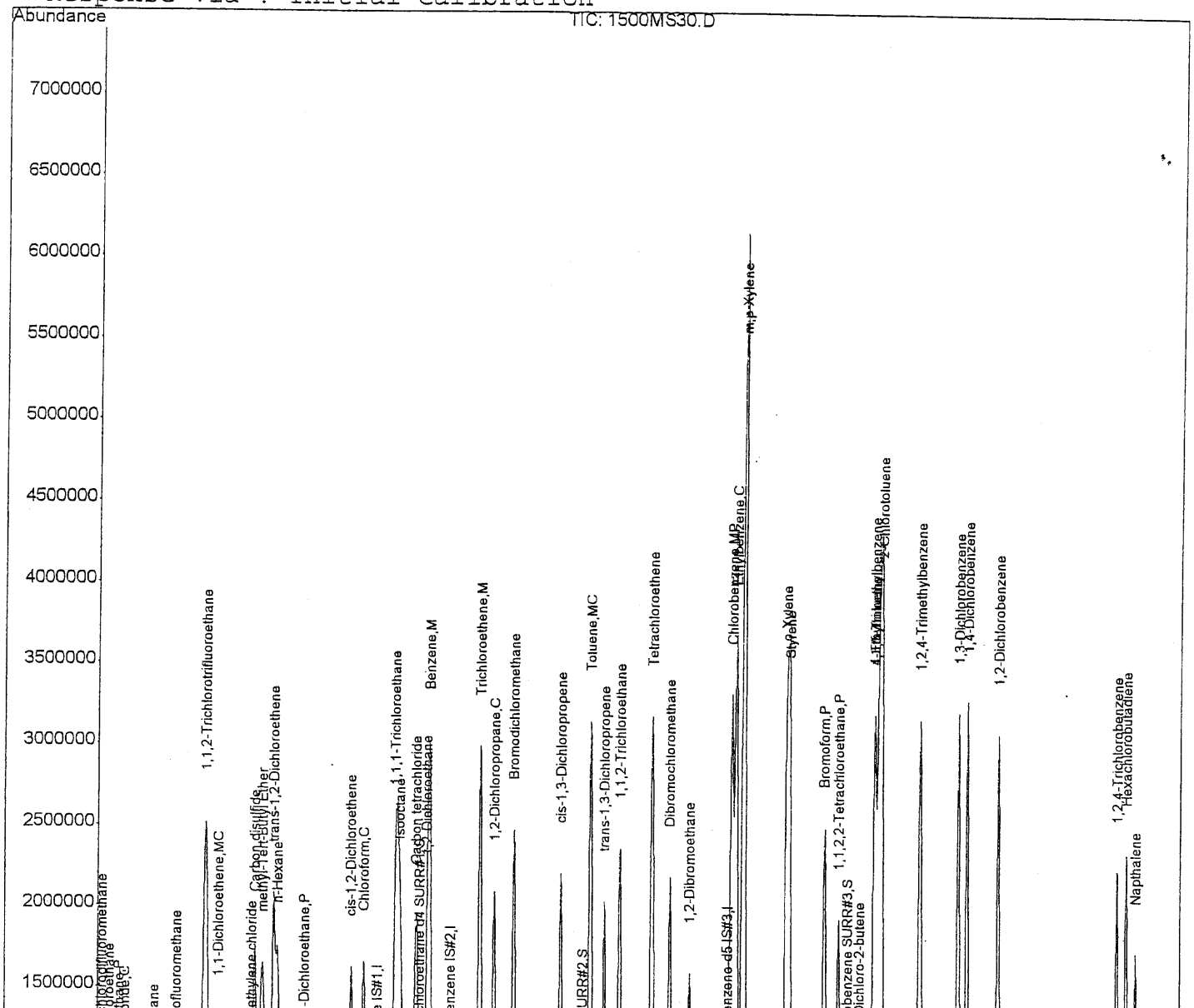
Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M093004\1500MS30.D
Acq On : 30 Sep 2004 12:23
Sample : VSTD1500
Misc : AIR Curve shot
MS Integration Params: rteint.p
Quant Time: Sep 30 12:54 2004

Vial: 8
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Thu Sep 30 12:22:34 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D
Acq On : 5 Oct 2004 7:36
Sample : VSTD250
Misc : AIR CC IC=09/30/04
MS Integration Params: rteint.p

Vial: 2
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Multiple Level Calibration

DWB 10-5-04

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 2% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane IS#1	1.000	1.000	0.0	105	0.00
2		Dichlorodifluoromethane	1.560	1.568	-0.5	105	0.00
3		Dichlorotetrafluoroethane	1.254	1.373	-9.5#	113	0.00
4	P	Chloromethane	1.015	1.074	-5.8#	110	0.00
5	C	Vinyl chloride	1.096	1.179	-7.6#	113	0.00
6		Bromomethane	1.143	1.240	-8.5#	112	0.00
7		Chloroethane	0.718	0.833	-16.0#	115	0.00
8		Trichlorofluoromethane	2.930	3.039	-3.7#	110	0.00
9		1,1,2-Trichlorotrifluoroeth	2.211	2.213	-0.1	107	0.00
10	MC	1,1-Dichloroethene	1.409	1.475	-4.7#	109	0.00
11		Iodomethane	0.000	0.000	0.0	0#	-7.65#
12		Methylene chloride	1.653	1.819	-10.0#	118	0.00
13		Carbon disulfide	4.310	4.527	-5.0#	112	0.00
14		methyl-Tert-Butyl Ether	4.180	4.256	-1.8	111	0.00
15		trans-1,2-Dichloroethene	1.826	1.912	-4.7#	109	0.00
16		n-Hexane	1.933	2.150	-11.2#	123	0.00
17	P	1,1-Dichloroethane	2.987	3.263	-9.2#	112	0.00
18		cis-1,2-Dichloroethene	2.223	2.398	-7.9#	111	0.00
19	C	Chloroform	3.468	3.622	-4.4#	107	0.00
20		Isooctane	6.607	7.085	-7.2#	119	0.00
21		1,1,1-Trichloroethane	3.135	3.138	-0.1	106	0.00
22		Carbon tetrachloride	2.770	2.759	0.4	107	0.00
23	S	1,2-Dichloroethane d4 SURR#	1.558	1.565	-0.4	111	0.00
24		1,2-Dichloroethane	1.782	1.834	-2.9#	111	0.00
25		1,2-Dibromoethane	2.195	2.194	0.0	109	0.00
26	I	1,4-Difluorobenzene IS#2	1.000	1.000	0.0	111	0.00
27	M	Benzene	0.908	0.936	-3.1#	111	0.00
28	M	Trichloroethene	0.375	0.380	-1.3	110	0.00
29	C	1,2-Dichloropropane	0.323	0.338	-4.6#	114	0.00
30		Bromodichloromethane	0.610	0.619	-1.5	110	0.00
31		cis-1,3-Dichloropropene	0.497	0.524	-5.4#	113	0.00
32	S	Toluene-d8 SURR#2	0.893	0.896	-0.3	111	0.00
33	MC	Toluene	0.562	0.578	[illegible]	[illegible]	[illegible]

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D Vial: 2
Acq On : 5 Oct 2004 7:36 Operator: DWB
Sample : VSTD250 Inst : MARILYN
Misc : AIR CC IC=09/30/04 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 2% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	C	Ethylbenzene	0.430	0.436	-1.4#	110	0.00
41		m,p-Xylene	0.533	0.562	-5.4#	114	0.00
42		o-Xylene	0.514	0.533	-3.7#	113	0.00
43		Styrene	0.787	0.814	-3.4#	113	0.00
44	P	Bromoform	0.410	0.393	4.1#	105	0.00
45	P	1,1,2,2-Tetrachloroethane	0.574	0.570	0.7	109	0.00
46	S	4-Bromofluorobenzene SURR#3	0.693	0.705	-1.7	116	0.00
47		1,4-Dichloro-2-butene	0.139	0.137	1.4	108	0.00
48		4-Ethyltoluene	1.151	1.147	0.3	109	0.00
49		1,3,5-Trimethylbenzene	1.209	1.313	-8.6#	113	0.00
50		2-Chlorotoluene	1.189	1.252	-5.3#	112	0.00
51		1,2,4-Trimethylbenzene	1.060	1.076	-1.5	111	0.00
52		1,3-Dichlorobenzene	0.670	0.706	-5.4#	114	0.00
53		1,4-Dichlorobenzene	0.621	0.661	-6.4#	117	0.00
54		1,2-Dichlorobenzene	0.605	0.639	-5.6#	112	0.00
55		1,2,4-Trichlorobenzene	0.346	0.361	-4.3#	111	0.00
56		Napthalene	0.682	0.680	0.3	105	0.00
57		Hexachlorobutadiene	0.205	0.194	5.4#	94	0.00

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D Vial: 2
Acq On : 5 Oct 2004 7:36 Operator: DWB
Sample : VSTD250 Inst : MARILYN
Misc : AIR CC IC=09/30/04 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 8:11 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Mon Oct 04 08:13:27 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100404\CAM1004.D (4 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.26	128	313509	250.00	ng	0.00 102.10%
26) 1,4-Difluorobenzene IS#2	12.15	114	1772913	250.00	ng	0.00 102.49%
36) Chlorobenzene-d5 IS#3	19.26	117	1303167	250.00	ng	0.00 104.48%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.36	65	490491	251.12	ng	0.00
Spiked Amount 250.000 Range 61 - 140 Recovery = 100.45%						
32) Toluene-d8 SURR#2	15.58	98	1588114	250.75	ng	0.00
Spiked Amount 250.000 Range 90 - 109 Recovery = 100.30%						
46) 4-Bromofluorobenzene SURR#	22.35	95	918899	254.49	ng	-0.02
Spiked Amount 250.000 Range 87 - 112 Recovery = 101.80%						

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.24	85	491570	251.25	ng	100
3) Dichlorotetrafluoroethane	3.43	135	430355m	273.68	ng	1
4) Chloromethane	3.69	50	336620	264.39	ng	99
5) Vinyl chloride	3.84	62	369582	268.94	ng	99
6) Bromomethane	4.59	94	388758	271.20	ng	96
7) Chloroethane	4.71	64	261286	290.27	ng	96
8) Trichlorofluoromethane	5.14	101	952804	259.28	ng	100
9) 1,1,2-Trichlorotrifluoroet	5.90	151	693858	250.20	ng	96
10) 1,1-Dichloroethene	6.21	96	462353	261.64	ng	97
12) Methylene chloride	7.07	49	570199	275.08	ng	97
13) Carbon disulfide	7.16	76	1419112	262.58	ng	99
14) methyl-Tert-Butyl Ether	7.36	73	1334310	254.56	ng	100
15) trans-1,2-Dichloroethene	7.62	96	599531	261.78	ng	98
16) n-Hexane	7.73	57	673987	278.04	ng	100
17) 1,1-Dichloroethane	8.41	63	1022833	273.09	ng	99

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D
Acq On : 5 Oct 2004 7:36
Sample : VSTD250
Misc : AIR CC IC=09/30/04
MS Integration Params: rteint.p
Quant Time: Oct 5 8:11 2004

Vial: 2
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Mon Oct 04 08:13:27 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
28)	Trichloroethene	12.90	130	673001	253.36 ng		99
29)	1,2-Dichloropropane	13.28	63	599324	261.70 ng		99
30)	Bromodichloromethane	13.79	83	1097544	253.69 ng		100
31)	cis-1,3-Dichloropropene	15.00	75	928446	263.54 ng		100
33)	Toluene	15.77	92	1024978	257.38 ng		99
34)	trans-1,3-Dichloropropene	16.14	75	768172	256.57 ng		99
35)	1,1,2-Trichloroethane	16.54	97	519885	256.37 ng		100
37)	Tetrachloroethene	17.35	164	551213	254.78 ng		99
38)	Dibromochloromethane	17.81	127	620110	248.97 ng		100
39)	Chlorobenzene	19.36	112	1254194	257.95 ng		99
40)	Ethylbenzene	19.47	106	567854	253.29 ng		99
41)	m,p-Xylene	19.67	106	1464073	526.94 ng		98
42)	o-Xylene	20.79	106	694469	259.10 ng		99
43)	Styrene	20.87	104	1060257	258.41 ng		98
44)	Bromoform	21.76	173	512279	239.72 ng		100
45)	1,1,2,2-Tetrachloroethane	22.12	83	743348	248.25 ng		100
47)	1,4-Dichloro-2-butene	22.66	75	178833	246.46 ng		99
48)	4-Ethyltoluene	23.05	105	1494394	249.04 ng	#	51
49)	1,3,5-Trimethylbenzene	23.16	105	1710882m	271.54 ng		0
50)	2-Chlorotoluene	23.24	91	1631050	263.14 ng		100
51)	1,2,4-Trimethylbenzene	24.21	105	1402173	253.74 ng		100
52)	1,3-Dichlorobenzene	25.20	146	920243	263.65 ng		100
53)	1,4-Dichlorobenzene	25.45	146	860952	265.85 ng		99
54)	1,2-Dichlorobenzene	26.24	146	833132	264.00 ng		99
55)	1,2,4-Trichlorobenzene	29.26	180	470043	260.51 ng		99
56)	Napthalene	29.73	128	885591	249.12 ng		99
57)	Hexachlorobutadiene	29.49	225	252914	237.00 ng		99

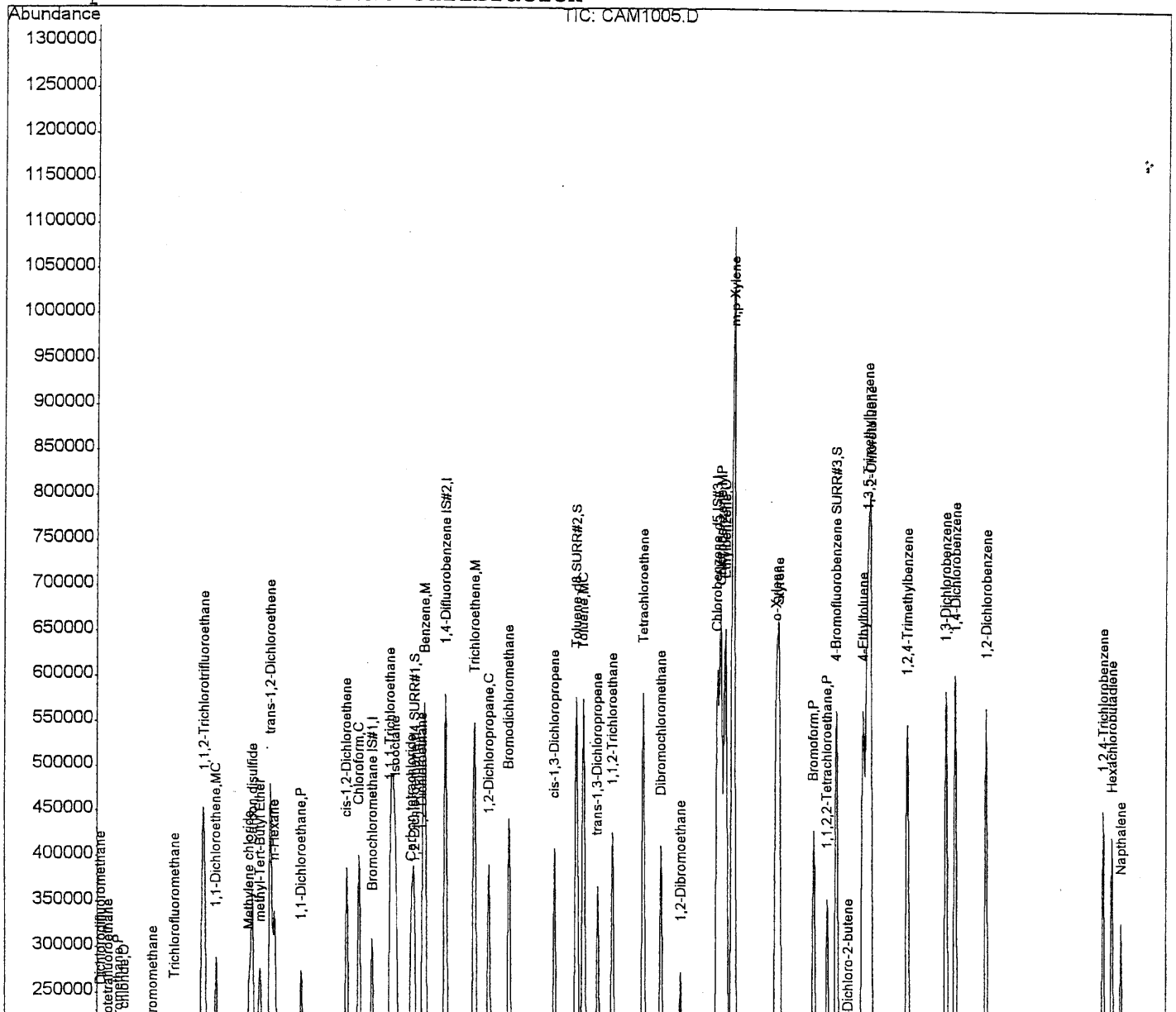
Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D
Acq On : 5 Oct 2004 7:36
Sample : VSTD250
Misc : AIR CC IC=09/30/04
MS Integration Params: rteint.p
Quant Time: Oct 5 8:11 2004

Vial: 2
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Mon Oct 04 08:13:27 2004
Response via : Initial Calibration



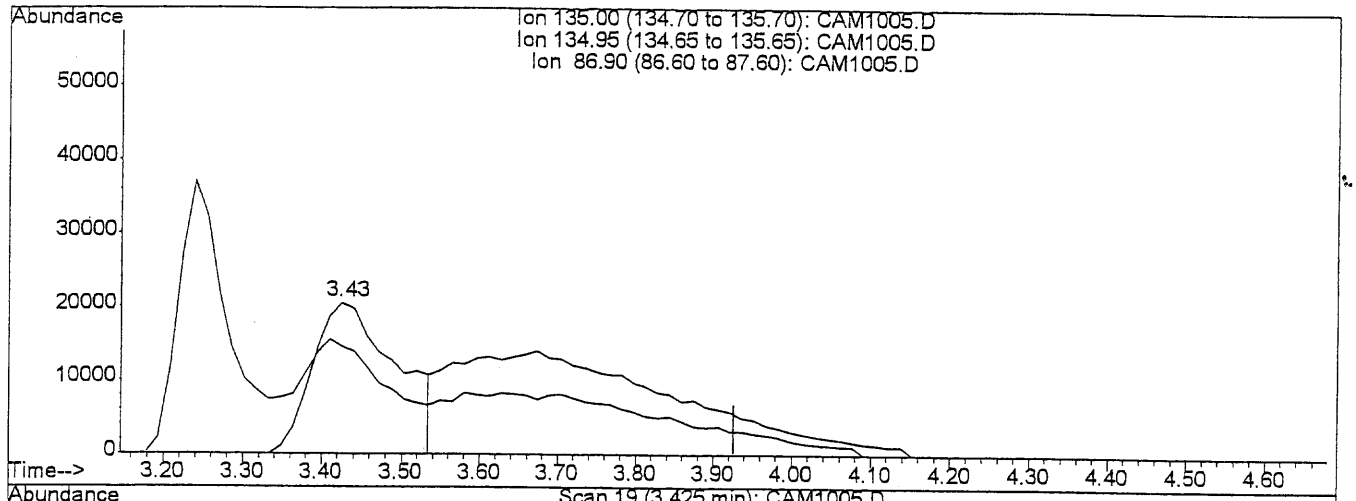
Quantitation Report (Qedit)

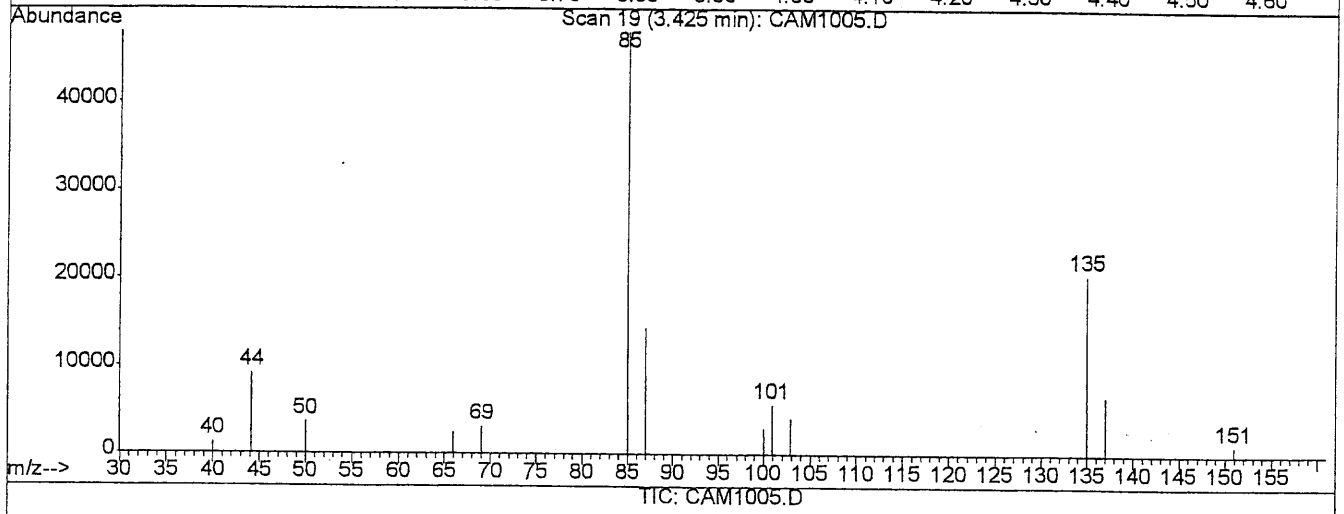
Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D
Acq On : 5 Oct 2004 7:36
Sample : VSTD250
Misc : AIR CC IC=09/30/04
MS Integration Params: rteint.p
Quant Time: Oct 5 8:07 2004

Vial: 2
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Mon Oct 04 08:13:27 2004
Response via : Multiple Level Calibration





TIC: CAM1005.D

(3) Dichlorotetrafluoroethane

3.43min 95.37ng

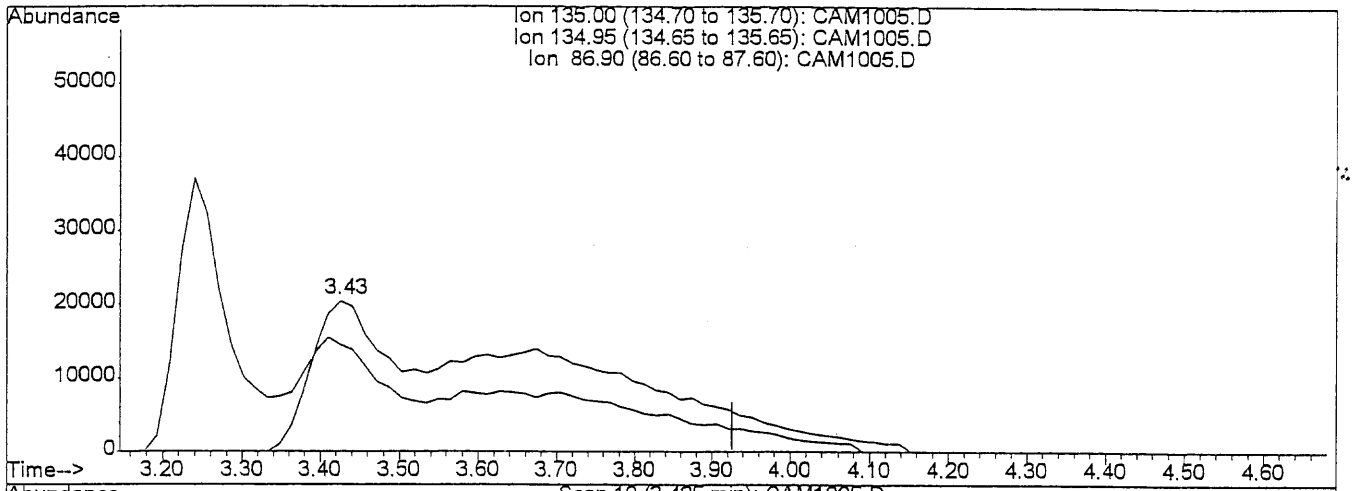
response 149969

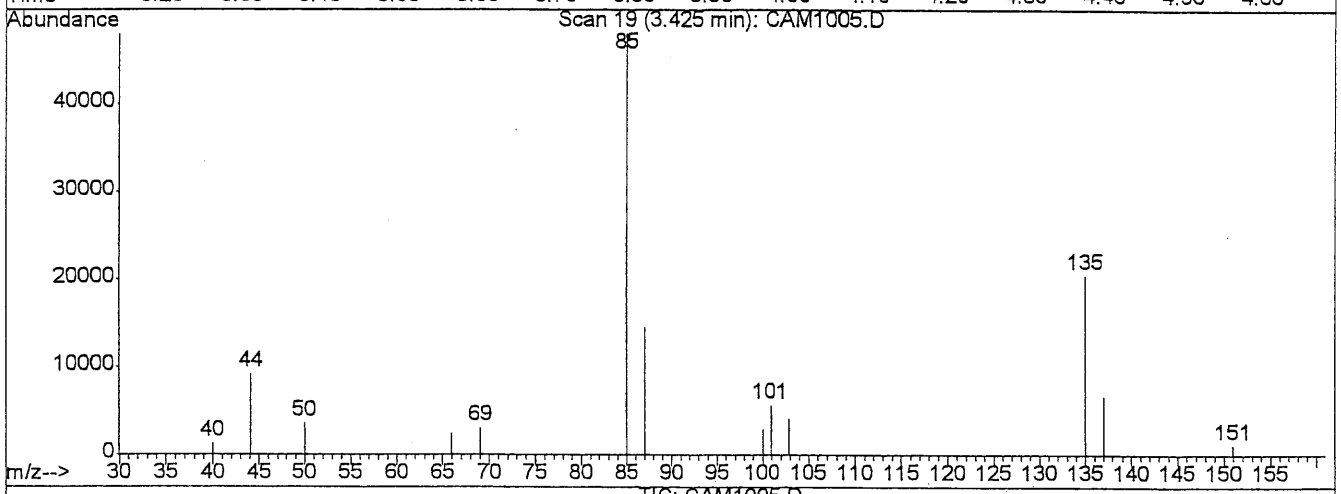
Ion	Exp%	Act%

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D Vial: 2
Acq On : 5 Oct 2004 7:36 Operator: DWB
Sample : VSTD250 Inst : MARILYN
Misc : AIR CC IC=09/30/04 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 8:10 2004 Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Mon Oct 04 08:13:27 2004
Response via : Multiple Level Calibration





TIC: CAM1005.D

(3) Dichlorotetrafluoroethane

3.43min 273.68ng m

response 430355

Ion	Exp%	Act%

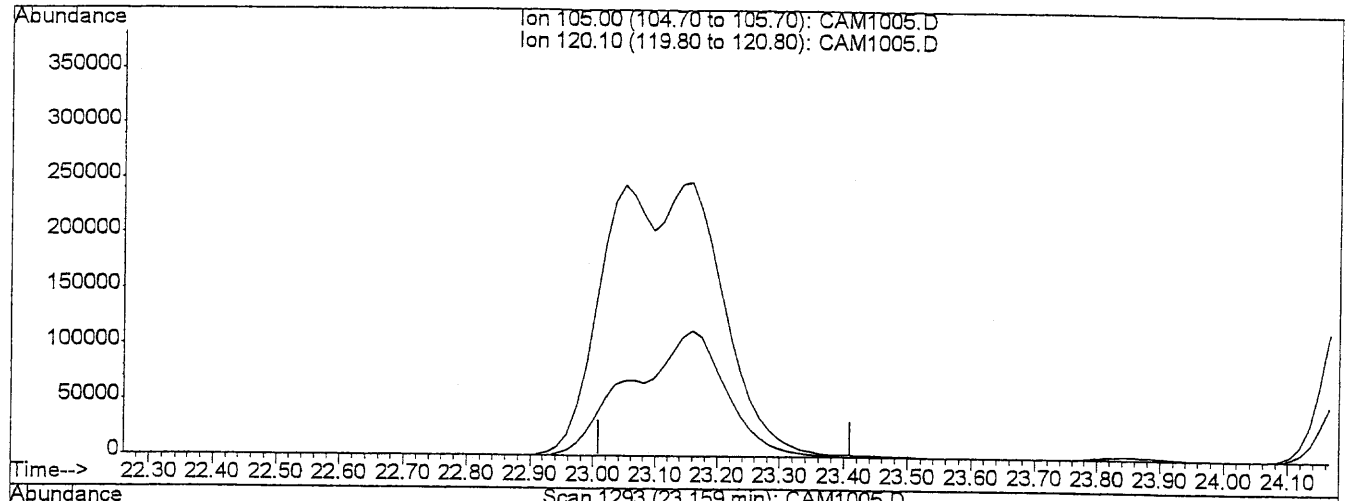
Quantitation Report (Qedit)

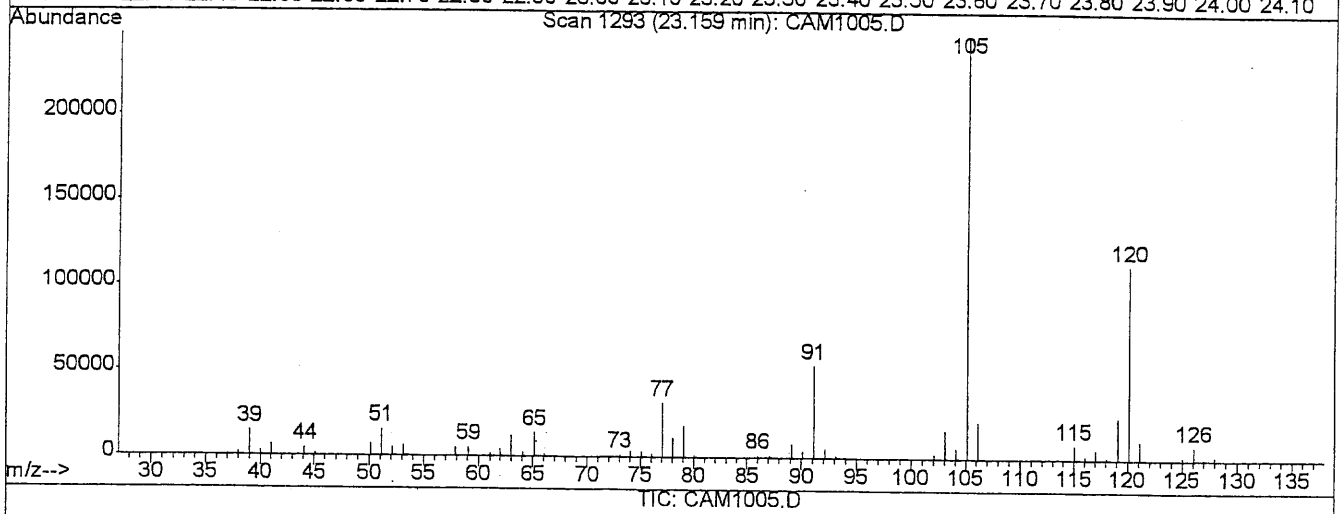
Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D
Acq On : 5 Oct 2004 7:36
Sample : VSTD250
Misc : AIR CC IC=09/30/04
MS Integration Params: rteint.p
Quant Time: Oct 5 8:10 2004

Vial: 2
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Mon Oct 04 08:13:27 2004
Response via : Multiple Level Calibration





TIC: CAM1005.D

(49) 1,3,5-Trimethylbenzene

23.16min 0.00ng

response 0

Ion	Exp%	Act%

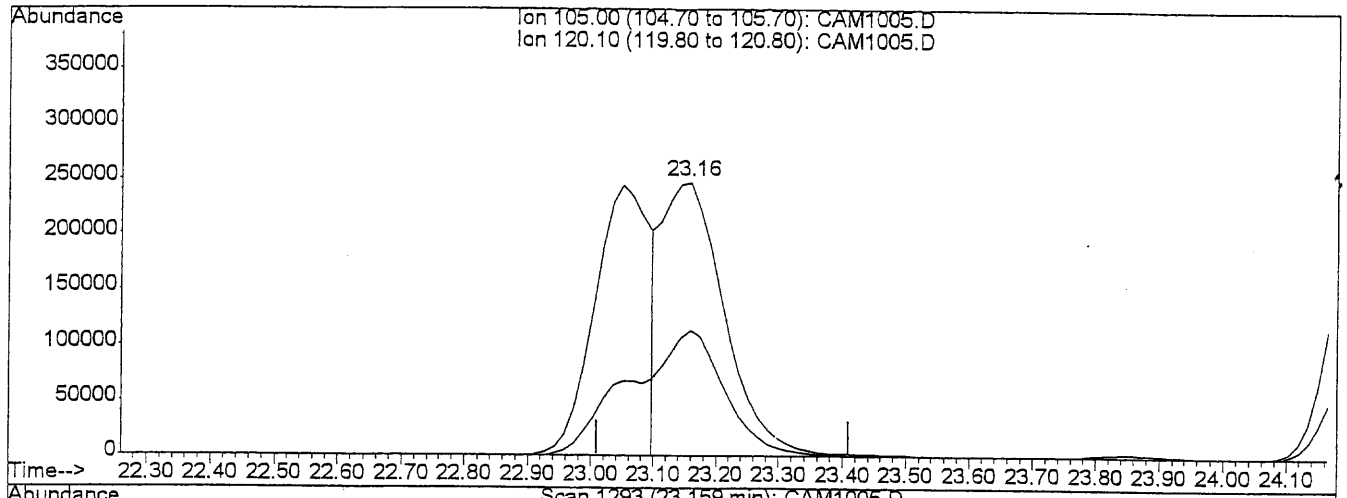
Quantitation Report (Qedit)

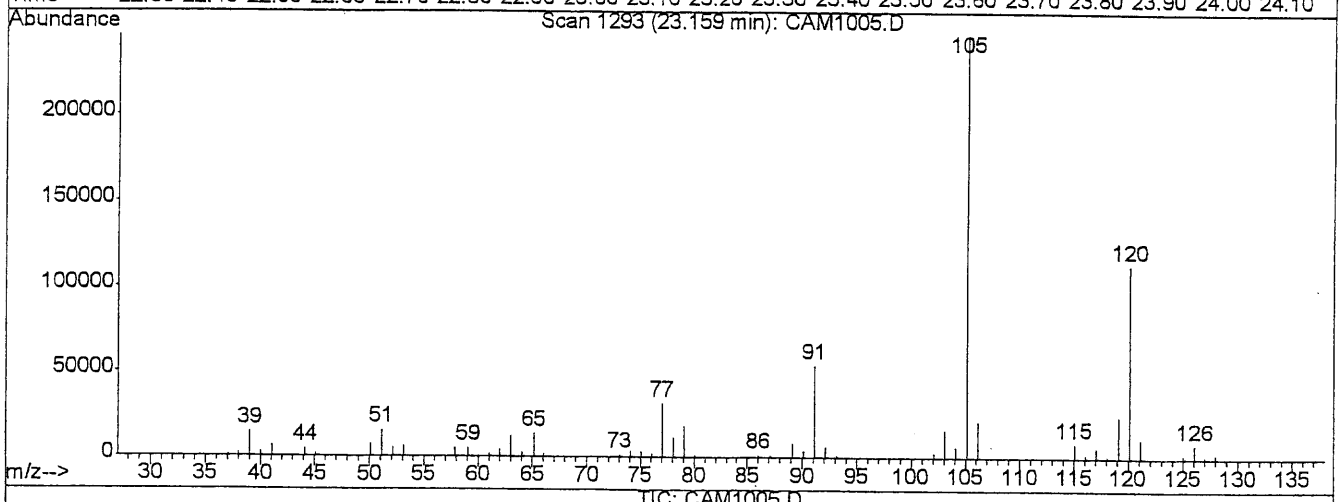
Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D
Acq On : 5 Oct 2004 7:36
Sample : VSTD250
Misc : AIR CC IC=09/30/04
MS Integration Params: rteint.p
Quant Time: Oct 5 8:11 2004

Vial: 2
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Mon Oct 04 08:13:27 2004
Response via : Multiple Level Calibration





TIC: CAM1005.D

(49) 1,3,5-Trimethylbenzene

23.16min 271.54ng m

response 1710882

Ion	Exp%	Act%

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D Vial: 2
Acq On : 5 Oct 2004 7:36 Operator: DWB
Sample : VSTD250 Inst : MARILYN
Misc : AIR CC IC=09/30/04 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 8:07 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Mon Oct 04 08:13:27 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100404\CAM1004.D (4 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.26	128	313509	250.00 ng	0.00 102.10%
26) 1,4-Difluorobenzene IS#2	12.15	114	1772913	250.00 ng	0.00 102.49%
36) Chlorobenzene-d5 IS#3	19.26	117	1303167	250.00 ng	0.00 104.48%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.36	65	490491	251.12 ng	0.00
Spiked Amount 250.000 Range 61 - 140 Recovery = 100.45%					
32) Toluene-d8 SURR#2	15.58	98	1588114	250.75 ng	0.00
Spiked Amount 250.000 Range 90 - 109 Recovery = 100.30%					
46) 4-Bromofluorobenzene SURR#	22.35	95	918899	254.49 ng	-0.02
Spiked Amount 250.000 Range 87 - 112 Recovery = 101.80%					

Target Compounds original DB 10-5-04

					Qvalue
2) Dichlorodifluoromethane	3.24	85	491570	251.25 ng	100
3) Dichlorotetrafluoroethane	3.43	135	149969	95.37 ng — NC	1
4) Chloromethane	3.69	50	336620	264.39 ng	99
5) Vinyl chloride	3.84	62	369582	268.94 ng	99
6) Bromomethane	4.59	94	388758	271.20 ng	96
7) Chloroethane	4.71	64	261286	290.27 ng	96
8) Trichlorofluoromethane	5.14	101	952804	259.28 ng	100
9) 1,1,2-Trichlorotrifluoroet	5.90	151	693858	250.20 ng	96
10) 1,1-Dichloroethene	6.21	96	462353	261.64 ng	97
12) Methylene chloride	7.07	49	570199	275.08 ng	97
13) Carbon disulfide	7.16	76	1419112	262.58 ng	99
14) methyl-Tert-Butyl Ether	7.36	73	1334310	254.56 ng	100
15) trans-1,2-Dichloroethene	7.62	96	599531	261.78 ng	98
16) n-Hexane	7.73	57	673987	278.04 ng	100
17) 1,1-Dichloroethane	8.41	63	1022833	273.09 ng	99
18) cis-1,2-Dichloroethene	9.59	61	751867	269.67 ng	98

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D
Acq On : 5 Oct 2004 7:36
Sample : VSTD250
Misc : AIR CC IC=09/30/04
MS Integration Params: rteint.p
Quant Time: Oct 5 8:07 2004

Vial: 2
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

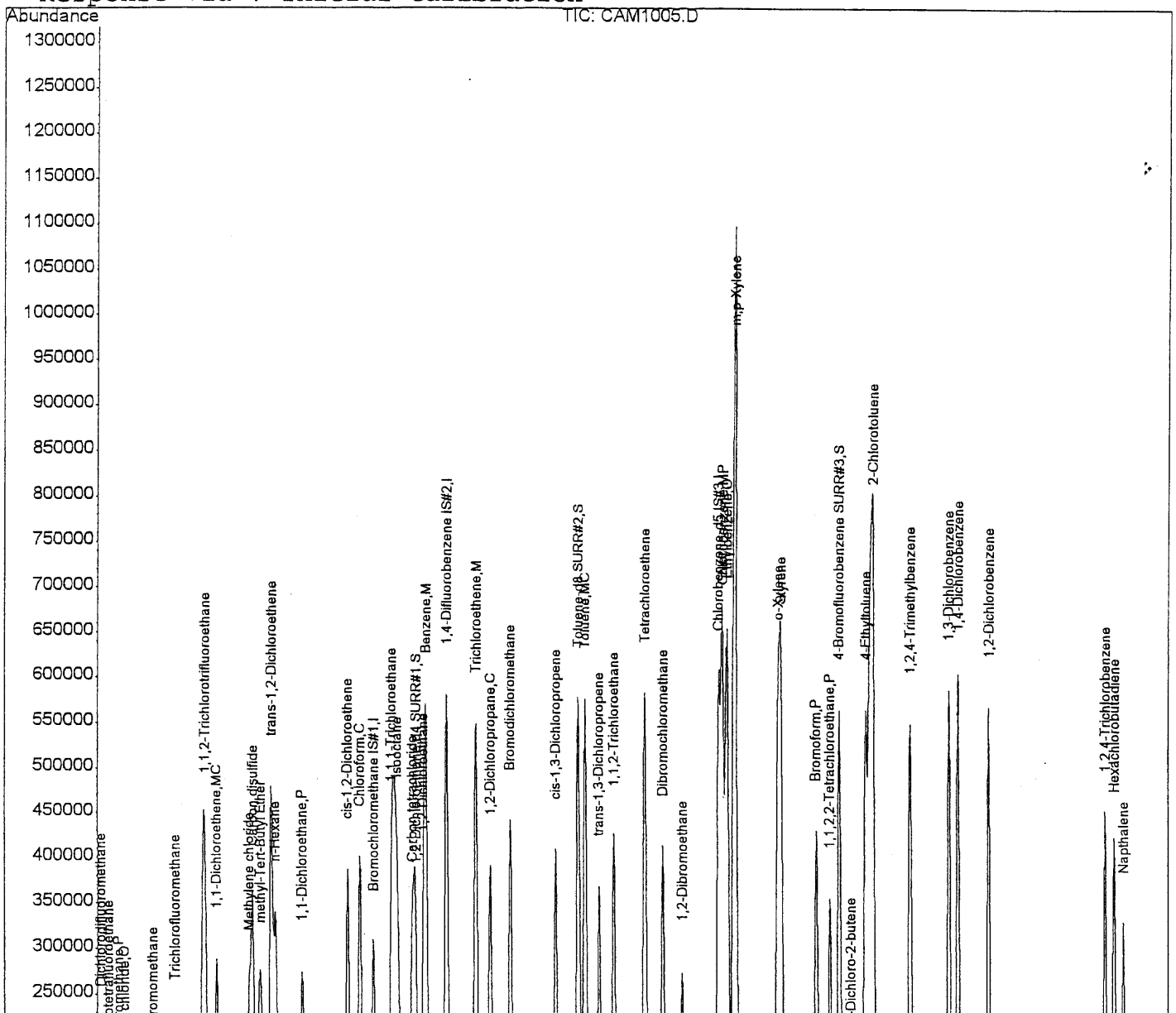
Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Mon Oct 04 08:13:27 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
28)	Trichloroethene	12.90	130	673001	253.36	ng	99
29)	1,2-Dichloropropane	13.28	63	599324	261.70	ng	99
30)	Bromodichloromethane	13.79	83	1097544	253.69	ng	100
31)	cis-1,3-Dichloropropene	15.00	75	928446	263.54	ng	100
33)	Toluene	15.77	92	1024978	257.38	ng	99
34)	trans-1,3-Dichloropropene	16.14	75	768172	256.57	ng	99
35)	1,1,2-Trichloroethane	16.54	97	519885	256.37	ng	100
37)	Tetrachloroethene	17.35	164	551213	254.78	ng	99
38)	Dibromochloromethane	17.81	127	620110	248.97	ng	100
39)	Chlorobenzene	19.36	112	1254194	257.95	ng	99
40)	Ethylbenzene	19.47	106	567854	253.29	ng	99
41)	m,p-Xylene	19.67	106	1464073	526.94	ng	98
42)	o-Xylene	20.79	106	694469	259.10	ng	99
43)	Styrene	20.87	104	1060257	258.41	ng	98
44)	Bromoform	21.76	173	512279	239.72	ng	100
45)	1,1,2,2-Tetrachloroethane	22.12	83	743348	248.25	ng	100
47)	1,4-Dichloro-2-butene	22.66	75	178833	246.46	ng	99
48)	4-Ethyltoluene	23.05	105	1494394	249.04	ng MA#	51
50)	2-Chlorotoluene	23.24	91	1631050	263.14	ng	100
51)	1,2,4-Trimethylbenzene	24.21	105	1402173	253.74	ng	100
52)	1,3-Dichlorobenzene	25.20	146	920243	263.65	ng	100
53)	1,4-Dichlorobenzene	25.45	146	860952	265.85	ng	99
54)	1,2-Dichlorobenzene	26.24	146	833132	264.00	ng	99
55)	1,2,4-Trichlorobenzene	29.26	180	470043	260.51	ng	99
56)	Napthalene	29.73	128	885591	249.12	ng	99
57)	Hexachlorobutadiene	29.49	225	252914	237.00	ng	99

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D Vial: 2
Acq On : 5 Oct 2004 7:36 Operator: DWB
Sample : VSTD250 Inst : MARILYN
Misc : AIR CC IC=09/30/04 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 8:07 2004 Quant Results File: TO14S.RES

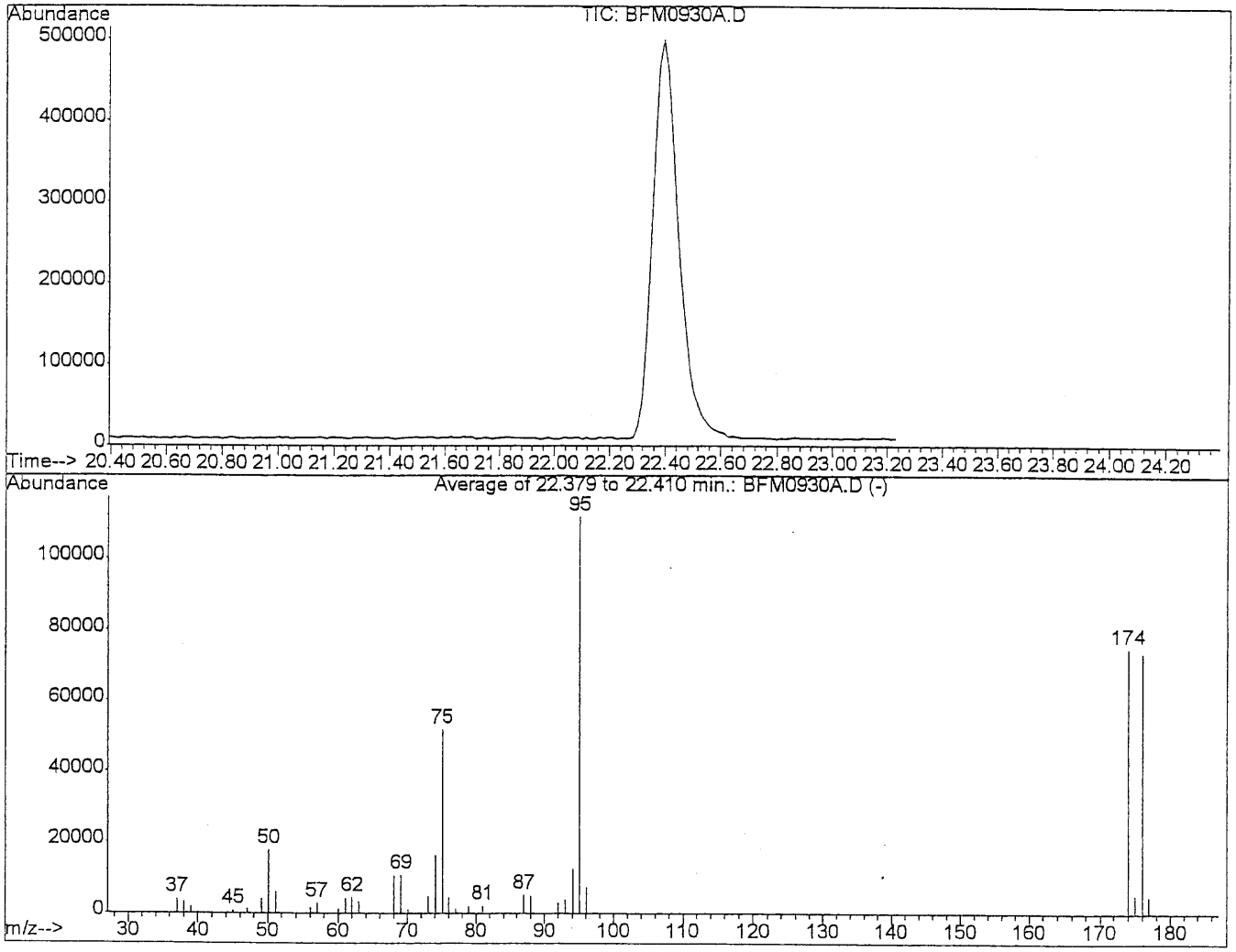
Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Mon Oct 04 08:13:27 2004
Response via : Initial Calibration



BFB

Data File : D:\HPCHEM\1\DATA03\M093004\BFM0930A.D
Acq On : 30 Sep 2004 8:43
Sample : BFB
Misc : TUNE
MS Integration Params: rteint.p
Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14

Vial: 1
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

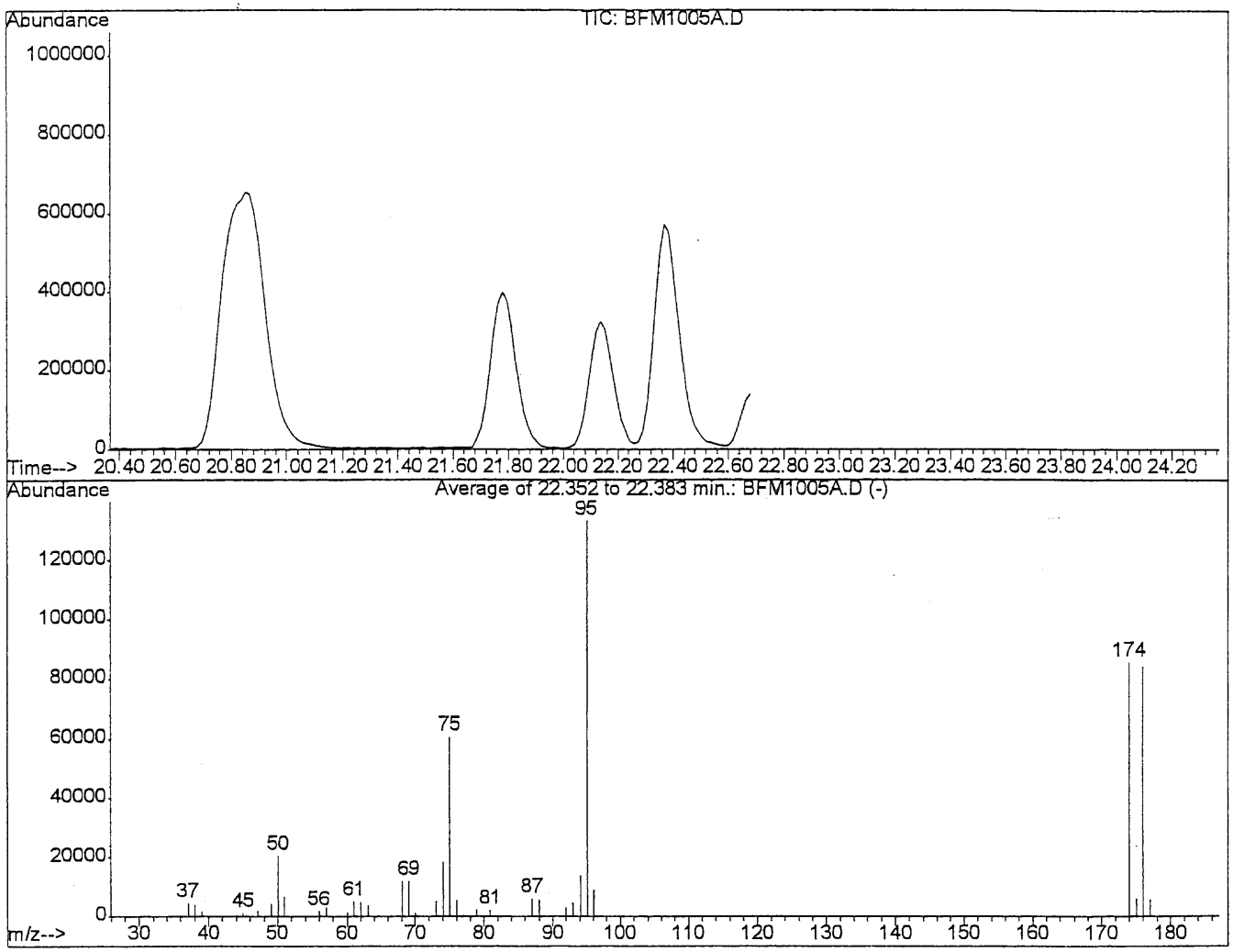


Spectrum Information: Average of 22.379 to 22.410 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.8	17502	Pass

BFB

Data File : D:\HPCHEM\1\DATA03\M100504\BFM1005A.D Vial: 1
Acq On : 5 Oct 2004 6:55 Operator: DWB
Sample : BFB Inst : MARILYN
Misc : TUNE Multiplr: 1.00
MS Integration Params: rteint.p
Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14



Spectrum Information: Average of 22.352 to 22.383 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.4	20469	PASS
75	95	30	60	45.4	60528	PASS

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-10	TO14	VM	MA	v1.0

LIMS Header Info

Analyst	DWB
Prep_Date	10.05.04
Prep_Time	08:13
Analysis_Date	10.05.04
Analysis_Time	08:13
Batch_ID	MAA069
Clock_ID	
Instrument_ID	MARILYN
Prep_Method	
Analytical_Method	
Dilution_Factor	1
Quantitation_Factor	0.002
Initial_Vol	
Final_Vol	
Units	mg/m3

Initially Loaded - File : MA069ABK.D Method : TO14S.M~W
@ D:\HPCHEM\1\DATA03\M100504\

Total Loaded Files : 1

	All	Selected
Total Results :	51	51
Targets :	48	48
Surrogates :	3	3

LIMS Results Info (All)

	Compound	Final Value Flags	CASNo	File ID	[(	Conc Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
1	Benzene	0.030U	71-43-2	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
2	Bromodichloromethane	0.030U	75-27-4	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
3	Bromoform	0.030U	75-25-2	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
4	Bromomethane	0.030U	74-83-9	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
5	Carbon disulfide	0.030U	75-15-0	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
6	Carbon tetrachloride	0.030U	56-23-5	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
7	Chlorobenzene	0.030U	108-90-7	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
8	Chloroethane	0.030U	75-00-3	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
9	Chloroform	0.030U	67-66-3	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
10	Chloromethane	0.030U	74-87-3	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
11	2-Chlorotoluene	0.030U	95-49-8	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
12	Dibromochloromethane	0.030U	124-48-1	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
13	1,2-Dibromoethane	0.030U	106-93-4	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
14	1,2-Dichlorobenzene	0.030U	95-50-1	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
15	1,3-Dichlorobenzene	0.030U	541-73-1	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
16	1,4-Dichlorobenzene	0.030U	106-46-7	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
17	1,4-Dichloro-2-butene	0.030U	110-57-6	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
18	Dichlorodifluoromethane	0.030U	75-71-8	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
19	1,1-Dichloroethane	0.030U	75-34-3	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
20	1,2-Dichloroethane	0.030U	107-06-2	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
21	1,1-Dichloroethene	0.030U	75-35-4	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
22	cis-1,2-Dichloroethene	0.030U	156-59-2	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
23	trans-1,2-Dichloroethene	0.030U	156-60-5	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M
24	1,2-Dichloropropane	0.030U	78-87-5	MA069ABK.D	[	0.000	15,	0.030	<0.030]	T M

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-10	TO14	VM	MA	v1.0

LIMS Results Info ... Continued ... (All)

	Compound	Final Value Flags	CASNo	File ID	[Conc / { Conc	RL / Added	RL@Mult / Limits	CFV] / %Rec}	T / S	
34	Styrene	0.030U	100-42-5	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
35	1,1,2,2-Tetrachloroethane	0.030U	79-34-5	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
36	Tetrachloroethene	0.030U	127-18-4	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
37	Toluene	0.030U	108-88-3	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
38	1,2,4-Trichlorobenzene	0.030U	120-82-1	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
39	1,1,1-Trichloroethane	0.030U	71-55-6	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
40	1,1,2-Trichloroethane	0.030U	79-00-5	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
41	Trichloroethene	0.030U	79-01-6	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
42	Trichlorofluoromethane	0.030U	75-69-4	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
43	1,1,2-Trichlorotrifluoroet	0.030U	76-13-1	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
44	1,2,4-Trimethylbenzene	0.030U	95-63-6	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
45	1,3,5-Trimethylbenzene	0.030U	108-67-8	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
46	Vinyl chloride	0.030U	75-01-4	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
47	o-Xylene	0.030U	95-47-6	MA069ABK.D	[0.000	15,	0.030	<0.030]	T	M
48	m,p-Xylene	0.060U	108-38-3	MA069ABK.D	[0.000	30,	0.060	<0.060]	T	M
49	1,2-Dichloroethane d4 SURR	101%	17060-07-0	MA069ABK.D	{ 253.662	250.000	61-140	101%}	S	
50	Toluene-d8 SURR#2	99%	2037-26-5	MA069ABK.D	{ 247.211	250.000	90-109	99%}	S	
51	4-Bromofluorobenzene SURR#	100%	460-00-4	MA069ABK.D	{ 250.157	250.000	87-112	100%}	S	

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\MA069ABK.D Vial: 3
Acq On : 5 Oct 2004 8:13 Operator: DWB
Sample : OS=09412-10 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 11:56 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.25	128	328284	250.00 ng	0.00 104.71%
26) 1,4-Difluorobenzene IS#2	12.16	114	1825930	250.00 ng	0.00 102.99%
36) Chlorobenzene-d5 IS#3	19.26	117	1302680	250.00 ng	0.00 99.96%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.35	65	518814	253.66 ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 101.46%		
32) Toluene-d8 SURR#2	15.59	98	1612510	247.21 ng	0.00
Spiked Amount 250.000	Range 90 - 109		Recovery = 98.88%		
46) 4-Bromofluorobenzene SURR#	22.36	95	902909	250.16 ng	0.00
Spiked Amount 250.000	Range 87 - 112		Recovery = 100.06%		

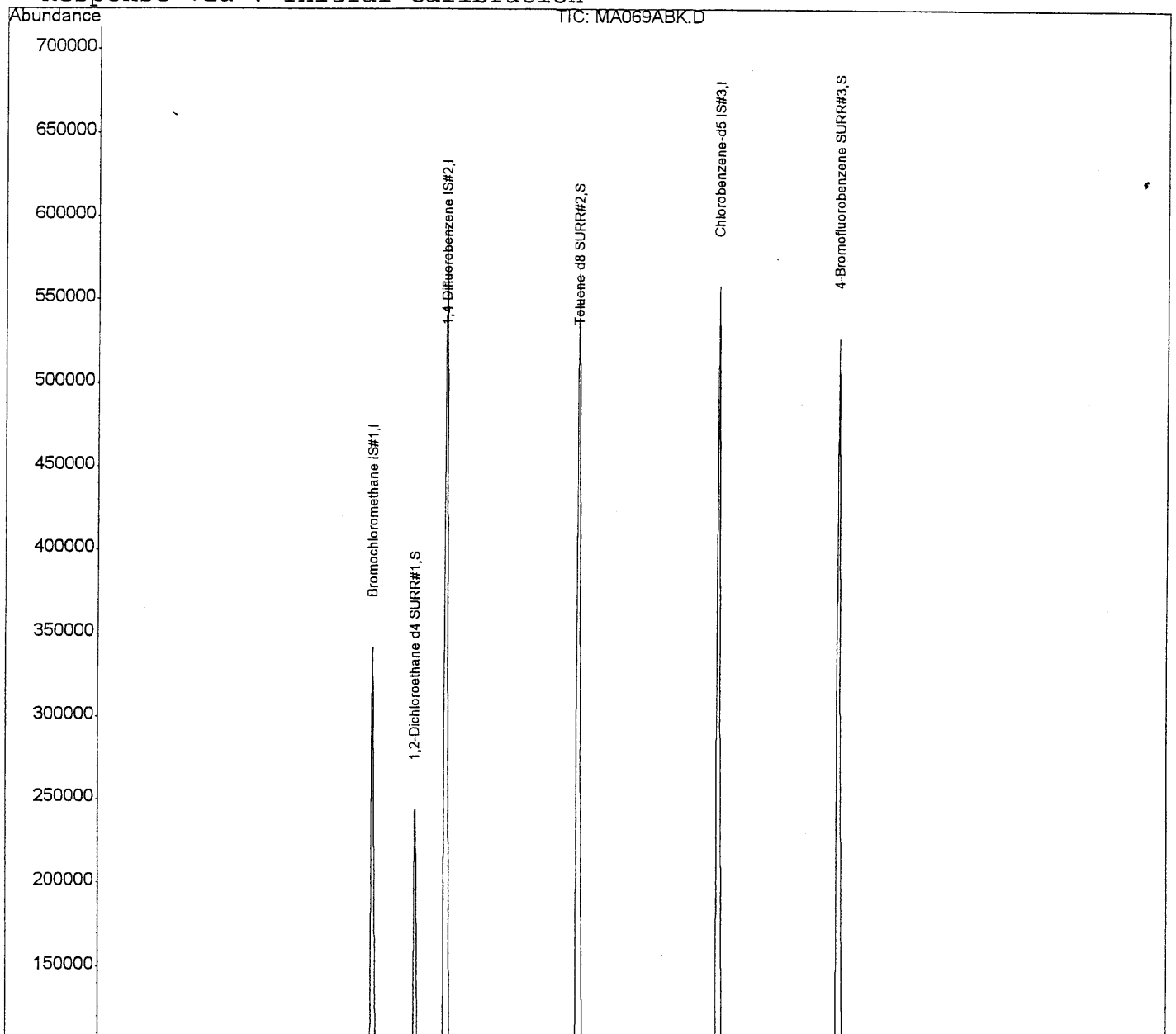
Target Compounds Qvalue

DWB 10-5-04

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\MA069ABK.D Vial: 3
Acq On : 5 Oct 2004 8:13 Operator: DWB
Sample : OS=09412-10 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 11:56 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\MA069ABK.D Vial: 3
Acq On : 5 Oct 2004 8:13 Operator: DWB
Sample : OS=BLANK BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 8:44 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Original

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.25	128	328284	250.00	ng	0.00 104.71%
26) 1,4-Difluorobenzene IS#2	12.16	114	1825930	250.00	ng	0.00 102.99%
36) Chlorobenzene-d5 IS#3	19.26	117	1302680	250.00	ng	0.00 99.96%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.35	65	518814	253.66	ng	0.00
Spiked Amount 250.000 Range 61 - 140 Recovery = 101.46%						
32) Toluene-d8 SURR#2	15.59	98	1612510	247.21	ng	0.00
Spiked Amount 250.000 Range 90 - 109 Recovery = 98.88%						
46) 4-Bromofluorobenzene SURR#	22.36	95	902909	250.16	ng	0.00
Spiked Amount 250.000 Range 87 - 112 Recovery = 100.06%						

Target Compounds

						Qvalue
56) Napthalene	29.74	128	27901	7.85	ng N	# 71

L i m s F i l e r

Printed ... 10/5/04 1:01:46 PM

Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-12	TO14	VM	MA	v1.0

LIMS Header Info

Analyst	DWB
Prep_Date	10.05.04
Prep_Time	08:49
Analysis_Date	10.05.04
Analysis_Time	08:49
Batch_ID	MAA069
Clock_ID	
Instrument_ID	MARILYN
Prep_Method	
Analytical_Method	
Dilution_Factor	1
Quantitation_Factor	0.002
Initial_Vol	
Final_Vol	
Units	mg/m3

Initially Loaded - File : MA069LCS.D Method : TO14S.M~W
@ D:\HPCHEM\1\DATA03\M100504\

Total Loaded Files : 1

	All	Selected
Total Results :	51	51
Targets :	48	48
Surrogates :	3	3

LIMS Results Info (All)

	Compound	Final Value Flags	CASNo	File ID	[Conc (	Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
1	Benzene	0.51	71-43-2	MA069LCS.D	[	0.508	15,	0.030	0.51]	T
2	Bromodichloromethane	0.50	75-27-4	MA069LCS.D	[	0.503	15,	0.030	0.50]	T
3	Bromoform	0.50	75-25-2	MA069LCS.D	[	0.504	15,	0.030	0.50]	T
4	Bromomethane	0.030U	74-83-9	MA069LCS.D	[	0.000	15,	0.030	<0.030]	T M
5	Carbon disulfide	0.030U	75-15-0	MA069LCS.D	[	0.000	15,	0.030	<0.030]	T M
6	Carbon tetrachloride	0.50	56-23-5	MA069LCS.D	[	0.498	15,	0.030	0.50]	T
7	Chlorobenzene	0.51	108-90-7	MA069LCS.D	[	0.510	15,	0.030	0.51]	T
8	Chloroethane	0.030U	75-00-3	MA069LCS.D	[	0.000	15,	0.030	<0.030]	T M
9	Chloroform	0.51	67-66-3	MA069LCS.D	[	0.514	15,	0.030	0.51]	T
10	Chloromethane	0.030U	74-87-3	MA069LCS.D	[	0.000	15,	0.030	<0.030]	T M
11	2-Chlorotoluene	0.51	95-49-8	MA069LCS.D	[	0.506	15,	0.030	0.51]	T
12	Dibromochloromethane	0.51	124-48-1	MA069LCS.D	[	0.513	15,	0.030	0.51]	T
13	1,2-Dibromoethane	0.52	106-93-4	MA069LCS.D	[	0.517	15,	0.030	0.52]	T
14	1,2-Dichlorobenzene	0.53	95-50-1	MA069LCS.D	[	0.533	15,	0.030	0.53]	T
15	1,3-Dichlorobenzene	0.54	541-73-1	MA069LCS.D	[	0.535	15,	0.030	0.54]	T
16	1,4-Dichlorobenzene	0.55	106-46-7	MA069LCS.D	[	0.549	15,	0.030	0.55]	T
17	1,4-Dichloro-2-butene	0.030U	110-57-6	MA069LCS.D	[	0.000	15,	0.030	<0.030]	T M
18	Dichlorodifluoromethane	0.030U	75-71-8	MA069LCS.D	[	0.000	15,	0.030	<0.030]	T M
19	1,1-Dichloroethane	0.53	75-34-3	MA069LCS.D	[	0.530	15,	0.030	0.53]	T
20	1,2-Dichloroethane	0.52	107-06-2	MA069LCS.D	[	0.515	15,	0.030	0.52]	T
21	1,1-Dichloroethene	0.56	75-35-4	MA069LCS.D	[	0.557	15,	0.030	0.56]	T
22	cis-1,2-Dichloroethene	0.63	156-59-2	MA069LCS.D	[	0.627	15,	0.030	0.63]	T
23	trans-1,2-Dichloroethene	0.52	156-60-5	MA069LCS.D	[	0.520	15,	0.030	0.52]	T
24	1,2-Dichloropropane	0.52	78-87-5	MA069LCS.D	[	0.521	15,	0.030	0.52]	T

Lims Filer

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Order/Sample	Det Code	Dept ID	Inst ID	Version
C409412-12	TO14	VM	MA	v1.0

LIMS Results Info ... Continued ... (All)

	Compound	Final Value Flags	CASNo	File ID	[Conc / (Conc	RL Added	RL@Mult Limits	CFV] %Rec)	T S
34	Styrene	0.57	100-42-5	MA069LCS.D	[0.570	15,	0.030	0.57]	T
35	1,1,2,2-Tetrachloroethane	0.52	79-34-5	MA069LCS.D	[0.523	15,	0.030	0.52]	T
36	Tetrachloroethene	0.52	127-18-4	MA069LCS.D	[0.524	15,	0.030	0.52]	T
37	Toluene	0.52	108-88-3	MA069LCS.D	[0.522	15,	0.030	0.52]	T
38	1,2,4-Trichlorobenzene	0.56	120-82-1	MA069LCS.D	[0.558	15,	0.030	0.56]	T
39	1,1,1-Trichloroethane	0.50	71-55-6	MA069LCS.D	[0.497	15,	0.030	0.50]	T
40	1,1,2-Trichloroethane	0.53	79-00-5	MA069LCS.D	[0.526	15,	0.030	0.53]	T
41	Trichloroethene	0.52	79-01-6	MA069LCS.D	[0.519	15,	0.030	0.52]	T
42	Trichlorofluoromethane	0.030U	75-69-4	MA069LCS.D	[0.000	15,	0.030	<0.030]	T M
43	1,1,2-Trichlorotrifluoroet	0.030U	76-13-1	MA069LCS.D	[0.000	15,	0.030	<0.030]	T M
44	1,2,4-Trimethylbenzene	0.54	95-63-6	MA069LCS.D	[0.540	15,	0.030	0.54]	T
45	1,3,5-Trimethylbenzene	0.48	108-67-8	MA069LCS.D	[0.479	15,	0.030	0.48]	T
46	Vinyl chloride	0.030U	75-01-4	MA069LCS.D	[0.000	15,	0.030	<0.030]	T M
47	o-Xylene	0.51	95-47-6	MA069LCS.D	[0.513	15,	0.030	0.51]	T
48	m,p-Xylene	1.1	108-38-3	MA069LCS.D	[1.073	30,	0.060	1.1]	T
49	1,2-Dichloroethane d4 SURR	100%	17060-07-0	MA069LCS.D	(250.109	250.000	61-140	100%)	S
50	Toluene-d8 SURR#2	100%	2037-26-5	MA069LCS.D	(249.601	250.000	90-109	100%)	S
51	4-Bromofluorobenzene SURR#	103%	460-00-4	MA069LCS.D	(258.376	250.000	87-112	103%)	S

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\MA069LCS.D Vial: 4
Acq On : 5 Oct 2004 8:49 Operator: DWB
Sample : OS=09412-12 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 9:26 2004 Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.25	128	318256	250.00	ng	0.00 101.51%
26) 1,4-Difluorobenzene IS#2	12.16	114	1765690	250.00	ng	0.01 99.59%
36) Chlorobenzene-d5 IS#3	19.27	117	1274161	250.00	ng	0.01 97.77%

System Monitoring Compounds

23) 1,2-Dichloroethane d4 SURR	11.35	65	495921	250.11	ng	0.00
Spiked Amount 250.000 Range 61 - 140 Recovery = 100.04%						
32) Toluene-d8 SURR#2	15.60	98	1574391	249.60	ng	0.01
Spiked Amount 250.000 Range 90 - 109 Recovery = 99.84%						
46) 4-Bromofluorobenzene SURR#	22.37	95	912158	258.38	ng	0.01
Spiked Amount 250.000 Range 87 - 112 Recovery = 103.35%						

DWB 10-5-04

Target Compounds

						Qvalue
10) 1,1-Dichloroethene	6.23	96	499529	0.56	ng	96
12) Methylene chloride	7.08	49	576967	0.55	ng	96
15) trans-1,2-Dichloroethene	7.64	96	604246	0.52	ng	97
17) 1,1-Dichloroethane	8.43	63	1007395	0.53	ng	99
18) cis-1,2-Dichloroethene	9.59	61	887590	0.63	ng	87
19) Chloroform	9.91	83	1134336	0.51	ng	100
20) Isooctane	10.86	57	149806	0.04	ng	98
21) 1,1,1-Trichloroethane	10.75	97	991922	0.50	ng	89
22) Carbon tetrachloride	11.28	117	878088	0.50	ng	99
24) 1,2-Dichloroethane	11.56	62	584020	0.52	ng	99
25) 1,2-Dibromoethane	18.32	107	721530	0.52	ng	100
27) Benzene	11.62	78	1628099	0.51	ng	100
28) Trichloroethene	12.90	130	686988	0.52	ng	99
29) 1,2-Dichloropropane	13.28	63	593594	0.52	ng	99
30) Bromodichloromethane	13.80	83	1083161	0.50	ng	98
31) cis-1,3-Dichloropropene	14.09	75	922822	0.53	ng	100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\MA069LCS.D Vial: 4
Acq On : 5 Oct 2004 8:49 Operator: DWB
Sample : OS=09412-12 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 9:26 2004 Quant Results File: TO14S.RES

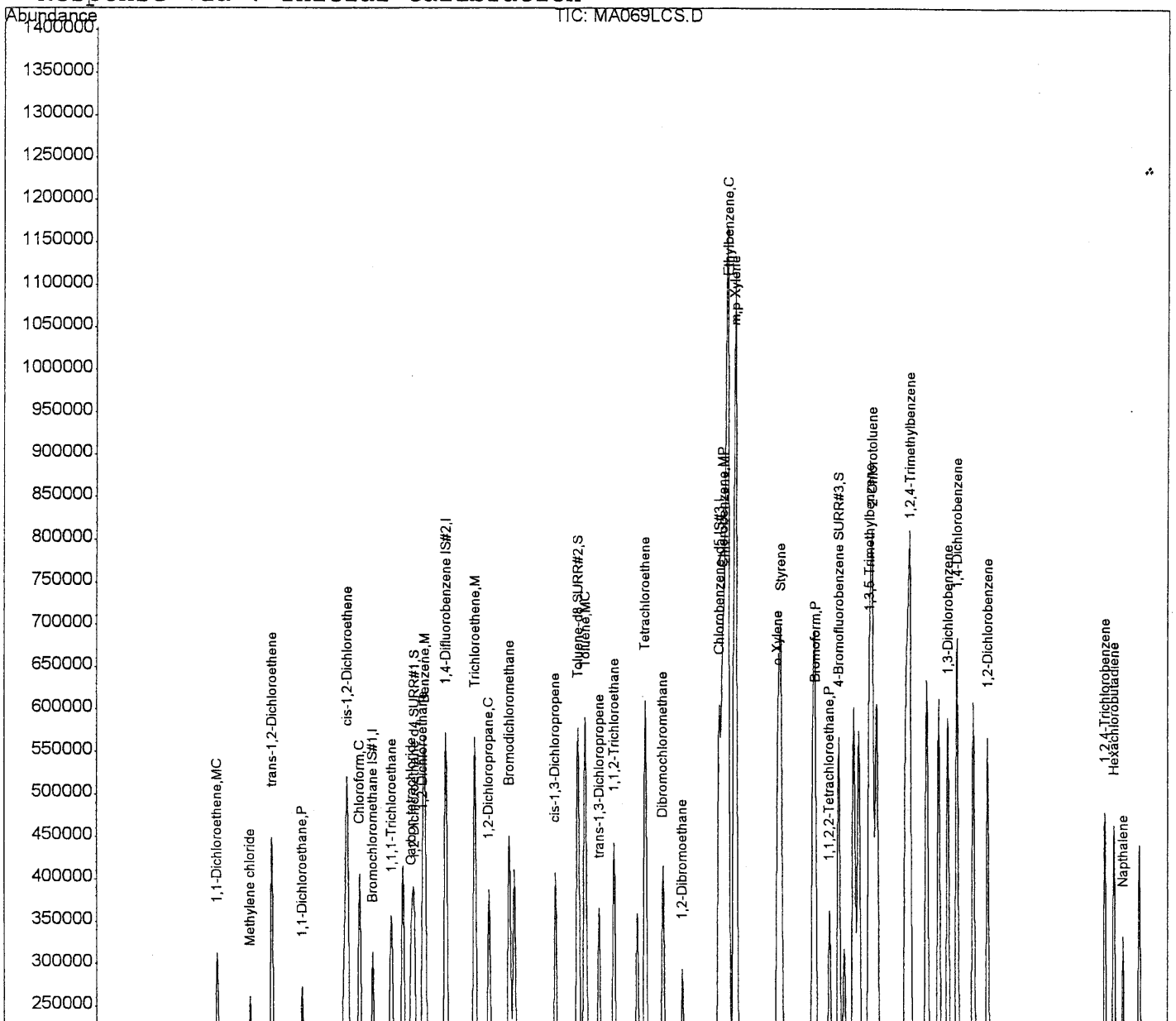
Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
41)	m,p-Xylene	19.67	106	1457480	1.07 ng		97
42)	o-Xylene	20.79	106	671812	0.51 ng		99
43)	Styrene	20.86	104	1142882	0.57 ng		98
44)	Bromoform	21.76	173	526841	0.50 ng		100
45)	1,1,2,2-Tetrachloroethane	22.12	83	765417	0.52 ng		100
49)	1,3,5-Trimethylbenzene	23.16	105	1476943	0.48 ng	#	100
50)	2-Chlorotoluene	23.23	91	1533019	0.51 ng		99
51)	1,2,4-Trimethylbenzene	24.21	105	1457686	0.54 ng	#	86
52)	1,3-Dichlorobenzene	25.22	146	912708	0.53 ng		100
53)	1,4-Dichlorobenzene	25.45	146	868918	0.55 ng		99
54)	1,2-Dichlorobenzene	26.24	146	821781	0.53 ng		99
55)	1,2,4-Trichlorobenzene	29.26	180	492077	0.56 ng		99
56)	Napthalene	29.72	128	891624	0.51 ng		99
57)	Hexachlorobutadiene	29.49	225	276044	0.53 ng		99

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\MA069LCS.D Vial: 4
Acq On : 5 Oct 2004 8:49 Operator: DWB
Sample : OS=09412-12 BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Multiplr: 0.00
MS Integration Params: rteint.p
Quant Time: Oct 5 9:26 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration



Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\MA069LCS.D
Acq On : 5 Oct 2004 8:49
Sample : OS=LCS BT=A069 RLF=TO14
Misc : AIR UN=mg/m3
MS Integration Params: rteint.p
Quant Time: Oct 5 9:20 2004

Vial: 4
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S
IS QA File : D:\HPCHEM\1\DATA03\M100504\CAM1005.D (5 Oct 2004 7:36)

original

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane IS#1	10.25	128	318256	250.00 ng	0.00 101.51%
26) 1,4-Difluorobenzene IS#2	12.16	114	1765690	250.00 ng	0.01 99.59%
36) Chlorobenzene-d5 IS#3	19.27	117	1274161	250.00 ng	0.01 97.77%

System Monitoring Compounds					
23) 1,2-Dichloroethane d4 SURR	11.35	65	495921	250.11 ng	0.00
Spiked Amount 250.000	Range 61 - 140		Recovery = 100.04%		
32) Toluene-d8 SURR#2	15.60	98	1574391	249.60 ng	0.01
Spiked Amount 250.000	Range 90 - 109		Recovery = 99.84%		
46) 4-Bromofluorobenzene SURR#	22.37	95	912158	258.38 ng	0.01
Spiked Amount 250.000	Range 87 - 112		Recovery = 103.35%		

original DO 10-5-04 ng report

Target Compounds					Qvalue
10) 1,1-Dichloroethene	6.23	96	499529	278.46 ng	96
12) Methylene chloride	7.08	49	576967	274.20 ng	96
15) trans-1,2-Dichloroethene	7.64	96	604246	259.91 ng	97
17) 1,1-Dichloroethane	8.43	63	1007395	264.96 ng	99
18) cis-1,2-Dichloroethene	9.59	61	887590	313.61 ng	87
19) Chloroform	9.91	83	1134336	256.94 ng	100
20) Isooctane	10.86	57	149806	17.81 ng	98
21) 1,1,1-Trichloroethane	10.75	97	991922	248.53 ng	89
22) Carbon tetrachloride	11.28	117	878088	248.99 ng	99
24) 1,2-Dichloroethane	11.56	62	584020	257.50 ng	99
25) 1,2-Dibromoethane	18.32	107	721530	258.25 ng	100
27) Benzene	11.62	78	1628099	253.94 ng	100
28) Trichloroethene	12.90	130	686988	259.68 ng	99
29) 1,2-Dichloropropane	13.28	63	593594	260.26 ng	99
	13.80	83	1083161	251.39 ng	98
			922822	263.01 ng	100

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\MA069LCS.D
Acq On : 5 Oct 2004 8:49
Sample : OS=LCS BT=A069 RLF=TO14
Misc : AIR UN=mg/m3
MS Integration Params: rteint.p
Quant Time: Oct 5 9:20 2004

Vial: 4
Operator: DWB
Inst : MARILYN
Multiplr: 1.00

Quant Results File: TO14S.RES

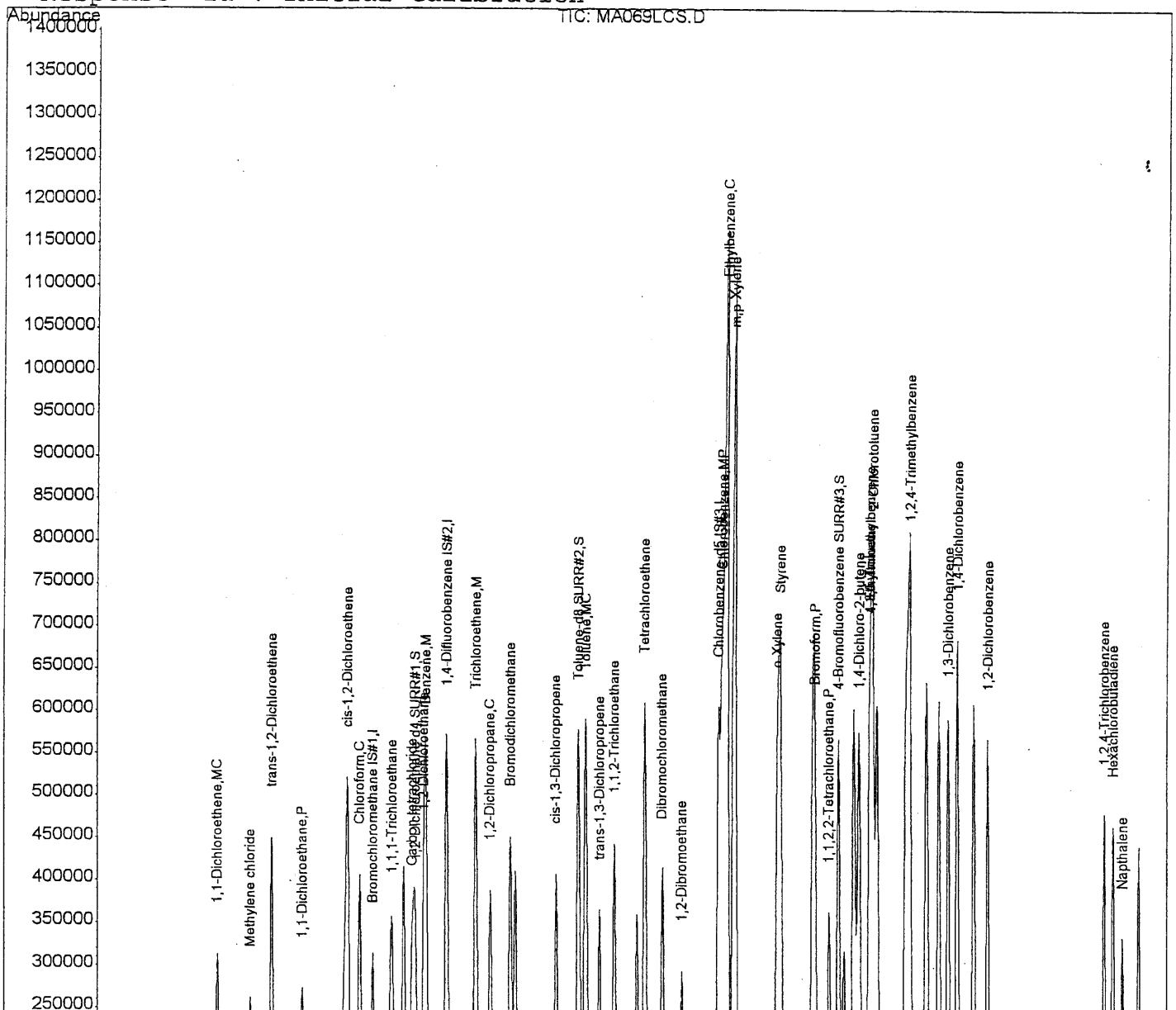
Quant Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration
DataAcq Meth : TO14S

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
41)	m,p-Xylene	19.67	106	1457480	536.50 ng		97
42)	o-Xylene	20.79	106	671812	256.35 ng		99
43)	Styrene	20.86	104	1142882	284.89 ng		98
44)	Bromoform	21.76	173	526841	252.15 ng		100
45)	1,1,2,2-Tetrachloroethane	22.12	83	765417	261.44 ng		100
47)	1,4-Dichloro-2-butene	22.89	75	77434	109.14 ng	K #	23
48)	4-Ethyltoluene	23.16	105	1534911	261.62 ng	FD #	53
49)	1,3,5-Trimethylbenzene	23.16	105	1476943	239.75 ng	#	100
50)	2-Chlorotoluene	23.23	91	1533019	252.96 ng		99
51)	1,2,4-Trimethylbenzene	24.21	105	1457686	269.79 ng	#	86
52)	1,3-Dichlorobenzene	25.22	146	912708	267.45 ng		100
53)	1,4-Dichlorobenzene	25.45	146	868918	274.42 ng		99
54)	1,2-Dichlorobenzene	26.24	146	821781	266.34 ng		99
55)	1,2,4-Trichlorobenzene	29.26	180	492077	278.93 ng		99
56)	Napthalene	29.72	128	891624	256.52 ng		99
57)	Hexachlorobutadiene	29.49	225	276044	264.57 ng		99

Quantitation Report

Data File : D:\HPCHEM\1\DATA03\M100504\MA069LCS.D Vial: 4
Acq On : 5 Oct 2004 8:49 Operator: DWB
Sample : OS=LCS BT=A069 RLF=TO14 Inst : MARILYN
Misc : AIR UN=mg/m3 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 5 9:20 2004 Quant Results File: TO14S.RES

Method : D:\HPCHEM\1\METHODS\TO14S.M (RTE Integrator)
Title : TO14
Last Update : Tue Oct 05 08:11:41 2004
Response via : Initial Calibration



STL Pensacola / GCMS Volatiles Run Log

Date 9-30-04 Instrument ID : MARILYN Method : TO14 /8260AIR /8260WATER /624MOD

Batch _____ 1 2 3 Batch _____ 1 2 3

IS# 9 -MSW- 18 - 01 * TO14 9 -MSW- 25 - 01 AIR-SPK 9 -MSW- 21 - 09

BFB 9 -MSW- 18 - 01 8260 -MSW- - W-SPK -MSW- -

TIME	POS #	METH	FILE NAME/ SAMPLE ID	DIL.	RR	PRES. pH<=2	MATRIX	QC PASS**	*INIT	COMMENTS
:			CM							Daily Cal Check / BFB tu
:			M BK	ST						Daily Method Blank
:			~~M LCS~~	~~50ppb~~		T1-T3	Time check			Batch# LCS
0843	1	TO14S	BFM0930A			Y N			AO	
0920	2		25MS30			Y N				
~~1033~~	3		100MS30			Y N				
1033	4		250MS30			Y N				
1110	5		500MS30			Y N				
1147	6		1000MS30			Y N				
1223	7		1500MS30			Y N				
1300	8		BK8			Y N				
1337	9		BK9			Y N				
NOT RAN	10		BK10			Y N				NOT RAN
1413	10		MA066MB1			Y N				
1450	11		MA066LLS			Y N				NOIS
1526	12		092481	500mL		Y N				PF/AI=2.29
1603	13		~~BK13~~ MA066LCR			Y N	Wat 9-30-04			
:						Y N				
:						Y N				
:						Y N				
:						Y N				

* The analyst whose name appears above is the analyst who removed the sample(s) from the sample storage refrigerator, mai and relinquished sample(s) back to the sample storage refrigerator.

** Iss and surrogates were checked automatically using the software and generic Forms II and VIII that are located in the

STL Pensacola / GCMS Volatiles Run Log

Date 10-5-04
Batch MA069 1 2 3
IS# 9 -MSW- 18 - 01
BFB 9 -MSW- 18 - 01

Instrument ID : MARILYN
Batch 1 2 3
TO14 9 -MSW- 25 - 01
8260 -MSW- -

Method : TO14 /8260AIR /8260WATER /624MOD
AIR-SPK 9 -MSW- 21 - 04
W-SPK -MSW- -

TIME	POS #	METH	FILE NAME/ SAMPLE ID	DIL.	RR	PRES. pH<=2	MATRIX	QC PASS**	*INIT	COMMENTS
:			CM							Daily Cal Check / BFB tu
:			M BK	ST						Daily Method Blank
:			M LCS	50ppb						Batch# LCS
0655	1	TO14S	BFM100SA			Y N			[illegible]	
0736	2		CAM100S			Y N				
0813	3		MA069ABK			Y N				
0849	4		MA069LCS			Y N				
0932	5		094121	50 [illegible]		Y N				PF/PI = 2.18
1009	6		094122	"		Y N				= 212
1045	7		094123	"		Y N				= 2.24
1120	8		094124	"		Y N				= 2.25
1157	9		094126	"		Y N				= 2.25
1309	10		094127	"		Y N				= 2.24
1345	11		094128	"		Y N				= 223
1422	12		094129	"		Y N				= 2.22
1459	13		094125	"		Y N				= 168.89
:						Y N				
:						Y N				
:						Y N				
:						Y N				
:						Y N				

* The analyst whose name appears above is the analyst who removed the sample(s) from the sample storage refrigerator, maint and relinquished sample(s) back to the sample storage refrigerator.
** Iss and surrogates were checked automatically using the software and generic Forms II and VIII that are located in the da

SEVERN TRENT STL

STL PENSACOLA
Certifications, Memberships & Affiliations

Alabama *Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)*

Arizona *Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)*

Arkansas *Department of Pollution Control and Ecology, (88-0689) (Environmental)*

California *Department of Health Services,* ***ELAP*** *Laboratory ID No. 2510 (Hazardous Waste and Wastewater)*

Connecticut *Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater)*

Florida *DOH,* ***NELAP*** *Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)*

Florida *DEP/DOH CompQAP # 980156*

Illinois *Environmental Laboratory Accreditation Program (ELAP),* ***NELAP*** *Laboratory ID No. 200041 (Wastewater and Hazardous Waste)*

Iowa *Department of Natural Resources, Laboratory ID No. 367 (Wastewater, UST, Solid Waste, & Contaminated Sites)*

Kansas *Department of Health & Environment,* ***NELAP*** *Laboratory ID No. E10253 (Wastewater and Hazardous Waste)*

Kentucky *NR&EPC, Laboratory ID No. 90043 (Drinking Water)*

Kentucky *Petroleum Storage Tank Env Assurance Fund, Laboratory ID No. 0053 (UST)*

Louisiana *DEQ, LELAP,* ***NELAP*** *Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental)*

Maryland *DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)*

Massachusetts *DEP, Laboratory ID No. M-FL094 (Wastewater)*

Michigan *Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)*

New Hampshire *DES ELAP,* ***NELAP*** *Laboratory ID No. 250502 (Drinking Water & Wastewater)*

New Jersey *DEP&E,* ***NELAP*** *Laboratory ID No. FL006 (Wastewater and Hazardous Waster)*

North Carolina *DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater)*

North Dakota *DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Arizona)*

Oklahoma *Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)*

Pennsylvania *Department of Environmental Resources,* ***NELAP*** *Laboratory ID No. 68-467 (Drinking Water & Wastewater)*

South Carolina *DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL)*

Tennessee *Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)*

Virginia *Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)*

Appendix C

Laboratory Analytical Reports for Groundwater Samples

Former NAS Cecil Field

PREPARED FOR: Former NAS Cecil Field JET C/3rd Qtr. GW Sampling Event

FINAL REVEIWER: Camden Robinson/ Associate Project Chemist/CCI

COPIES: Mike Halil /Project Manager/CCI

DATE: October 22, 2004

SUBJECT: Quality Assessment for Samples Collected September 2004

This quality assurance memorandum is based upon a review of analytical data generated for water samples and associated field quality control samples collected September 2004 at the Former Naval Air Station Cecil Field JET C in Jacksonville, Florida. The samples were collected as a part of the JET C quarterly groundwater sampling event conducted at the site. Table 1-1 presents a summary of the CCI sample identification numbers, laboratory sample identification numbers, dates of collection, and the analyses performed.

Gulf Coast Laboratory of Baton Rouge, Louisiana served as the laboratory for this JET C Quarterly Groundwater sampling event for the following analyses:

- Benzene, Etylbenzene, Toluene, Total Xylenes, and MTBE (BTEX + MTBE) by SW-846 method 8260B,
- Polyaromatic nuclear hydrocarbons (PAH) by HPLC method 8310,
- Total Petroluem Hydrocarbon by method FLA-PRO

Table 1-1 ***Summary Sample Data Reviewed Former NAS Cecil Field***

Sample Number	Lab Sample ID	Date Sampled	Analysis Required
86-334-2SA-Q3-04	20410010601	09/28/2004	[1], [2], [3]
86-334-32S-Q3-04	20410010602	09/28/2004	[1], [2], [3]
86-334-33S-Q3-04	20410010603	09/28/2004	[1], [2], [3]
86-334-34S-Q3-04	20410010604	09/29/2004	[1], [2], [3]
86-339-28S-Q3-04	20410010605	09/29/2004	[1], [2], [3]
86-339-29S-Q3-04	20410010606	09/29/2004	[1], [2], [3]
86-811-16SR-Q3-04	20410010607	09/28/2004	[1], [2], [3]

Sample Number	Lab Sample ID	Date Sampled	Analysis Required
86-811-17S-Q3-04	20410010608	09/29/2004	[1], [2], [3]
86-811-18S-Q3-04	20410010609	09/28/2004	[1], [2], [3]
86-NG-24S-Q3-04	20410010610	09/28/2004	[1], [2], [3]
*86-JETC-DUP-Q3-04	20410010613	09/28/2004	[1], [2], [3]
86-JETC-EB-Q3-04	20410010614	09/29/2004	[1], [2], [3]
86-JETC-TB-Q3-04	20410010615	09/28/2004	[1]

ANALYSES PERFORMED CODES:
[1] –Benzene, Ethylbenzene, Toluene, Total Xylenes, and MTBE (BTEX + MTBE) by method SW846 8260B,
[2] –Polyaromatic nuclear hydrocarbons (PAH) by HPLC method 8310,
[3] – Total Petroleum Hydrocarbons (TPH) by method FLA-PRO
** 86-JETC-DUP-Q3-04 blind field duplicate of 86-NG-24S-Q3-04*

Data for the analyses were reviewed for adherence to the specified analytical protocols in accordance with CCI Sampling Analysis Plan. All analysis results have been validated or qualified according to the Department of Defense (DOD) Quality Systems Manual-Version 2 June 2002.

The findings of this quality assurance report are based upon the comprehensive review of the following results summaries reported according to the CCI Level C (CLP-like data deliverables format): chain of custody documentation, holding times, laboratory method and field blank analyses, surrogate compound recoveries, matrix spike compound recoveries and reproducibility, bromofluorobenzene (BFB) mass tuning results, initial and continuing calibration, second source recovery and internal standard area performance summaries, target compound identification, laboratory control sample results, laboratory and blind field duplicate sample results, detection limits/sensitivity, and electronic data deliverables.

The analyses were performed acceptably, but require several qualifying statements; it is recommended that the analytical data be used only with the qualifying statements provided below. Any aspects of the data, which are not discussed in this report, should be considered qualitatively and quantitatively valid as reported, based on the deliverables reviewed. A result summary report presenting the validated and qualified results is presented in Attachment I.

General Data Qualifiers

As required by U.S. EPA protocols, all compounds which were qualitatively identified at concentrations below their respective reporting limits (RL) but above the method detection limit (MDL) have been qualified with "J" qualifiers on the data summary reports to indicate that they are quantitative estimates.

Organic Data Qualifiers

The sample presented below was analyzed at a dilution for polyaromatic hydrocarbon analysis. This dilution resulted in the surrogate compound being diluted below the instrument detection limit; therefore the surrogate recovery was not reported for the diluted analysis. This dilution was required to to reduce the effects of the matrix on the target compounds. Positive results for these compounds in the samples below have been reported from the diluted analyses. All other results and quantitation limits have been reported on the sample report summary from the initial analysis. However, higher quantitation limits have resulted for specific polyaromatic hydrocarbon compounds, which were not detected, in these samples. This should be noted when assessing these samples for the qualitative absence of specific polyaromatic hydrocarbon compounds.

Sample ID	Analysis	Dilution Factor
86-334-34S-Q3-04	PAH	10x

Sample 86-NG-24S-Q3-04 and its blind field duplicate sample 86-JETC-DUP-Q3-04 were submitted to the laboratory to evaluate sampling and analytical precision for those compounds determined to be confidently detected. All compounds met CCI's blind duplicate precision criteria of 30% for water samples relative percent difference (RPD) for volatile organic compounds and polyaromatic hydrocarbons analyses with the exception of total petroleum hydrocarbon analysis. A "J" qualifier was appended to this compound for the native sample 86-NG-24S-Q3-04 to indicate that the reported value should be considered quantitative estimates due to the field duplicate RPD exceedances. The RPD was not calculated for the compounds that were not detected in both samples.

Summary

The organic analyses were performed acceptably, but required qualifying statements. This analytical quality assurance report has identified the aspects of the data, which required qualification. These qualifiers are noted on the attached analytical sample summary reports. A support documentation package has been prepared for this quality assurance review and is filed with the Former NAS Cecil Field CTO 86/JET C quarterly groundwater sampling project file.

Attachment I

VALID QUALIFIERS

QUALIFIER	
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit
J	The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R/UR	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.
B	The analyte was detected in the associated method and/or calibration blank.
JB	The analyte detected in the associated field, equipment, and/or trip blank.

QUALIFICATION CODE REFERENCE

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect.
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
K	Second source %D was noncompliant.	Second source %D was noncompliant.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
MB	Presumed contamination from preparation (method) blank.	Presumed contamination from preparation (method) blank or calibration blank.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or high RPD.	MS/MSD recovery was poor or high RPD.
G	Result is over the calibration range. No other acceptable result was provided.	Result is over the calibration range. Not other acceptable result was provided.
E	Not applicable.	Lab duplicate RPD showed poor agreement.
Z	Field duplicate RPD showed poor agreement.	Field duplicate RPD showed poor agreement
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D was not within control limits.
TN	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination from trip blank.	Not applicable.
+	False positive—reported compound was not present.	Not applicable.
-	False negative—compound was present but not reported.	Not applicable.
F	Presumed contamination from FB or ER.	Presumed contamination from FB or ER.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.
D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Confirmation analysis RPD exceeded 40%.	Post Digestion Spike recovery was not within control limits.
T/D	Not applicable.	Total metals results were less than the dissolved metals result.
SD	Not applicable.	Seed correction factor was below the acceptable limit.
M	Reported values may be biased due to apparent matrix interferences. (AIR ANALYSIS ONLY)	Not applicable

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-334-2SA-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010601

Level: (low/med) LOW

Lab File ID: 2041002P/S4007

% Moisture: not dec.

Date Collected: 09/28/04 Time: 1415

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1713

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: JCK

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-334-32S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010602

Level: (low/med) LOW

Lab File ID: 2041002P/S4008

% Moisture: not dec.

Date Collected: 09/28/04 Time: 1125

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1734

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-334-33S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010603

Level: (low/med) LOW

Lab File ID: 2041002P/S4009

% Moisture: not dec.

Date Collected: 09/28/04 Time: 1035

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1755

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

C.K

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-334-34S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010604

Level: (low/med) LOW

Lab File ID: 2041002P/S4010

% Moisture: not dec.

Date Collected: 09/29/04 Time: 1320

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1816

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-339-28S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL Lab Sample ID: 20410010605

Level: (low/med) LOW Lab File ID: 2041002P/S4011

% Moisture: not dec. Date Collected: 09/29/04 Time: 1520

GC Column: DB-624-30M ID: .53 (mm Date Received: 10/01/04

Instrument ID: MSV3 Date Analyzed: 10/02/04 Time: 1836

Soil Extract Volume: (µL Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

C.K

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-339-29S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010606

Level: (low/med) LOW

Lab File ID: 2041002P/S4012

% Moisture: not dec.

Date Collected: 09/29/04 Time: 1415

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1857

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-811-16SR-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010607

Level: (low/med) LOW

Lab File ID: 2041002P/S4013

% Moisture: not dec.

Date Collected: 09/28/04 Time: 1610

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1918

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-811-17S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL Lab Sample ID: 20410010608

Level: (low/med) LOW Lab File ID: 2041002P/S4014

% Moisture: not dec. Date Collected: 09/29/04 Time: 1125

GC Column: DB-624-30M ID: .53 (mm Date Received: 10/01/04

Instrument ID: MSV3 Date Analyzed: 10/02/04 Time: 1939

Soil Extract Volume: (µL Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

C.F

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-811-18S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010609

Level: (low/med) LOW

Lab File ID: 2041002P/S4015

% Moisture: not dec.

Date Collected: 09/28/04 Time: 1515

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 2000

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	1.36	J	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-NG-24S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL Lab Sample ID: 20410010610

Level: (low/med) LOW Lab File ID: 2041002P/S4004

% Moisture: not dec. Date Collected: 09/28/04 Time: 1320

GC Column: DB-624-30M ID: .53 (mm Date Received: 10/01/04

Instrument ID: MSV3 Date Analyzed: 10/02/04 Time: 1610

Soil Extract Volume: (µL Dilution Factor: 1 Analyst: JCK

Soil Aliquot Volume: (µL Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-JETC-DUP-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL Lab Sample ID: 20410010613

Level: (low/med) LOW Lab File ID: 2041002P/S4016

% Moisture: not dec. Date Collected: Time:

GC Column: DB-624-30M ID: .53 (mm Date Received: 10/01/04

Instrument ID: MSV3 Date Analyzed: 10/02/04 Time: 2021

Soil Extract Volume: (µL Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-JETC-EB-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010614

Level: (low/med) LOW

Lab File ID: 2041002P/S4017

% Moisture: not dec.

Date Collected: 09/29/04 Time: 1545

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 2042

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-JETC-TB-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL Lab Sample ID: 20410010615

Level: (low/med) LOW Lab File ID: 2041002P/S4018

% Moisture: not dec. Date Collected: Time:

GC Column: DB-624-30M ID: .53 (mm Date Received: 10/01/04

Instrument ID: MSV3 Date Analyzed: 10/02/04 Time: 2103

Soil Extract Volume: (µL Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-334-2SA-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010601

Date Collected 09/28/04 Time: 1415

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1011

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008151

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

Sample ID 86-334-32S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010602

Date Collected 09/28/04 Time: 1125

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1018

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

CONCENTRATION UNITS: ug/L

Lab File ID: 041009/H0008152

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

C.A

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-334-33S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010603

Date Collected 09/28/04 Time: 1035

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1024

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008153

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-334-34S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010604

Date Collected 09/29/04 Time: 1320

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1031

Dilution Factor: 10 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008154

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	10.0	U	2.91	10.0
91-57-6	2-Methylnaphthalene	10.0	U	1.42	10.0
83-32-9	Acenaphthene	10.0	U	3.31	10.0
208-96-8	Acenaphthylene	10.0	U	1.53	10.0
120-12-7	Anthracene	1.00	U	0.240	1.00
56-55-3	Benzo(a)anthracene	1.00	U	0.320	1.00
50-32-8	Benzo(a)pyrene	1.00	U	0.330	1.00
205-99-2	Benzo(b)fluoranthene	1.00	U	0.160	1.00
191-24-2	Benzo(g,h,i)perylene	1.00	U	0.160	1.00
207-08-9	Benzo(k)fluoranthene	1.00	U	0.330	1.00
218-01-9	Chrysene	1.00	U	0.300	1.00
53-70-3	Dibenz(a,h)anthracene	1.00	U	0.290	1.00
206-44-0	Fluoranthene	1.00	U	0.440	1.00
86-73-7	Fluorene	5.00	U	0.990	5.00
193-39-5	Indeno(1,2,3-cd)pyrene	2.50	U	0.410	2.50
91-20-3	Naphthalene	2.50	U	1.24	2.50
85-01-8	Phenanthrene	1.00	U	0.250	1.00
129-00-0	Pyrene	1.00	U	0.340	1.00

C.F

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-339-28S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010605

Date Collected 09/29/04 Time: 1520

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1038

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008155

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

C.R.

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-339-29S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010606

Date Collected 09/29/04 Time: 1415

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1045

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008156

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

Sample ID 86-811-16SR-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010607

Date Collected 09/28/04 Time: 1610

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1052

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008157

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-811-17S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010608

Date Collected 09/29/04 Time: 1125

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1059

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008158

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID 86-811-18S-Q3-04
Lab Code: LA024 Case No.:
Contract:
Matrix: Water
SAS No.: SDG No.: 204100106
Sample wt/vol: 1000 Units: mL
Lab Sample ID: 20410010609
Level: (low/med) LOW
Date Collected 09/28/04 Time: 1515
% Moisture: decanted: (Y/N)
Date Received: 10/01/04
GC Column: 201TP-0.15 ID: 2.1 (mm)
Date Extracted: 10/01/04
Concentrated Extract Volume: 1000 (µL)
Date Analyzed: 10/09/04 Time: 1106
Soil Aliquot Volume: (µL)
Dilution Factor: 1 Analyst: RLW
Injection Volume: 1 (µL)
Prep Method: SW-846 8310
GPC Cleanup: (Y/N) N pH:
Analytical Method: SW-846 8310
Prep Batch: 280789 Analytical Batch: 281257
Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1
CONCENTRATION UNITS: ug/L
Lab File ID: 041009/H0008159

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	14.9		0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	8.92		0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Water
Sample wt/vol: 1000 Units: mL
Level: (low/med) LOW
% Moisture: decanted: (Y/N)
GC Column: 201TP-0.15 ID: 2.1 (mm)
Concentrated Extract Volume: 1000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 280789 Analytical Batch: 281257

Sample ID 86-NG-24S-Q3-04
Contract:
SAS No.: SDG No.: 204100106
Lab Sample ID: 20410010610
Date Collected 09/28/04 Time: 1320
Date Received: 10/01/04
Date Extracted: 10/01/04
Date Analyzed: 10/09/04 Time: 1113
Dilution Factor: 1 Analyst: RLW
Prep Method: SW-846 8310
Analytical Method: SW-846 8310
Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

CONCENTRATION UNITS: ug/L
Lab File ID: 041009/H0008160

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-JETC-DUP-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010613

Date Collected Time:

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1134

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008163

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Water
Sample wt/vol: 1000 Units: mL
Level: (low/med) LOW
% Moisture: decanted: (Y/N)
GC Column: 201TP-0.15 ID: 2.1 (mm)
Concentrated Extract Volume: 1000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 280789 Analytical Batch: 281257

Sample ID 86-JETC-EB-Q3-04
Contract:
SAS No.: SDG No.: 204100106
Lab Sample ID: 20410010614
Date Collected 09/29/04 Time: 1545
Date Received: 10/01/04
Date Extracted: 10/01/04
Date Analyzed: 10/09/04 Time: 1141
Dilution Factor: 1 Analyst: RLW
Prep Method: SW-846 8310
Analytical Method: SW-846 8310
Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

CONCENTRATION UNITS: ug/L
Lab File ID: 041009/H0008164

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

04

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-334-2SA-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010601

Date Collected 09/28/04 Time: 1415

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2132

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B015S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	1200		40.7	100

C-F

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-334-32S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010602

Date Collected 09/28/04 Time: 1125

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2201

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B016S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	103		40.7	100

C. L

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-334-33S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010603

Date Collected 09/28/04 Time: 1035

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2231

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B017S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	100	U	40.7	100

c.f

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID 86-334-34S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010604

Date Collected 09/29/04 Time: 1320

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2300

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B018S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	8270		40.7	100

C.L

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-339-28S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010605

Date Collected 09/29/04 Time: 1520

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2329

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B019S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	866		40.7	100

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-339-29S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010606

Date Collected 09/29/04 Time: 1415

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2358

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B020S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	265		40.7	100

CL

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-811-16SR-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010607

Date Collected 09/28/04 Time: 1610

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0027

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B021S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	67.5	J	40.7	100

C.L

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-811-17S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010608

Date Collected 09/29/04 Time: 1125

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0125

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B023S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	204		40.7	100

C.F

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-811-18S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010609

Date Collected 09/28/04 Time: 1515

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0154

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B024S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	1670		40.7	100

ok

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-NG-24S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010610

Date Collected 09/28/04 Time: 1320

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0223

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B025S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	100	U	40.7	100

CL

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-JETC-DUP-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010613

Date Collected Time:

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0350

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B028S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	1530	J	40.7	100

Z

CP

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-JETC-EB-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010614

Date Collected 09/29/04 Time: 1545

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0419

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B029S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	100	U	40.7	100

CH2MHILL Constructors, Inc.

115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278

Tel No: (770) 604-9182
Fax No: (770) 604-9282

CHZM Hill / 4380 / 20410 D1 06 / Due 10/8/04

CHAIN-OF-CUSTODY RECORD

COC NUMBER: 171591-034

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
Former N.A.S. Cecil Field JETC	271591	Gulf Coast Labs. Dano Merril	Jeff Marks / CH2M Hill Constuctors, Inc.	6219 Authority Ave. Jacksonville, FL 32221 (904) 7774812,FAX: (904) 7774262
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
JETC Quarterly GW Sampling Event	0086	6421	Bonnie Hogue / CH2M Hill Constuctors, Inc.	115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 (770)604-9182 Ext.561 FAX:604-9282
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Jeff Marks CH2M Hill Constuctors, Inc.	Ph:(904)777-4812 Fax:(904) 777-4262	Ph:(225) 769-4900		20410D1D6

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on SOP)	TAT (calendar days)	BTEX & MTBE by 8260B.	16 listed PAHs (incl 1- & 2-Methylnaphthalene) by 8310	TRPH bt FLO-PRO								SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)
1	86-334-2SA-Q3-04	CEF-334-02SA	W	09/28/04	1415	III/C	14	3	2	2								Grab		-1
2	86-334-32S-Q3-04	CEF-334-32S	W	09/28/04	1125	III/C	14	3	2	2								Grab		2
3	86-334-33S-Q3-04	CEF-334-33S	W	09/28/04	1035	III/C	14	3	2	2								Grab		3
4	86-334-34S-Q3-04	CEF-334-34S	W	09/29/04	1320	III/C	14	3	2	2								Grab		4
5	86-339-28S-Q3-04	CEF-339-28S	W	09/29/04	1520	III/C	14	3	1	2								Grab		5
6	86-339-29S-Q3-04	CEF-339-29S	W	09/29/04	1415	III/C	14	3	2	2								Grab		6
7	86-811-16SR-Q3-04	CEF-811-16SR	W	09/28/04	1610	III/C	14	3	2	2								Grab		7
8	86-811-17S-Q3-04	CEF-811-17S	W	09/29/04	1125	III/C	14	3	2	2								Grab		8
9	86-811-18S-Q3-04	CEF-811-18S	W	09/28/04	1515	III/C	14	3	2	2								Grab		9
10	86-NG-24S-Q3-04	NG-24S	W	09/28/04	1320	III/C	14	3	2	2								Grab	MS/MSD	10

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use):
Randy Dumaop AGVIQ Environmental Services	UPS Tracking Numbers: 1Z2AE0480194592086, 1Z2AE0480190098298, 1Z2AE0480192776104, 1Z2AE0480193961518, 1Z2AE0480193550524, 1Z2AE0480192599136, 1Z2AE0480191923349. (7 Coolers)	3°

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
R. Dumaop	9/30/2004	12:00	UPS Tracking Numbers: 1Z2AE0480194592086, 1Z2AE0480190098298, 1Z2AE0480192776104, 1Z2AE0480193961518, 1Z2AE0480193550524, 1Z2AE0480192599136, 1Z2AE0480191923349. (7 Coolers)	9/30/2004	12:00
Printed Name and Signature:			Printed Name and Signature:		
UPS # 1Z2AE0480190098298	10-1-04	1030	Richard W McIntosh / Rmm	10-1-04	1030
Printed Name and Signature:			Printed Name and Signature:		

000450

Distribution. [ ] Original - Laboratory (To be returned with Analytical Report); [ ] Copy 1 - Project File; [ ] Copy 2 - PMO

Form CCI001, Rev 02/00

CH2M Hill / 4380 / 204100106 / Due 10/8/04

CH2MHILL Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No: (770) 604-9182
Fax No: (770) 604-9282

CHAIN-OF-CUSTODY RECORD

COC NUMBER: 171591-0304

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
Former N.A.S. Cecil Field JETC	271591	Gulf Coast Labs. Dano Merril	Jeff Marks / CH2M Hill Constuctors, Inc.	6219 Authority Ave. Jacksonville, FL 32221 (904) 7774812,FAX: (904) 7774262
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
JETC Quarterly GW Sampling Event	0086	6421	Bonnie Hogue / CH2M Hill Constuctors, Inc.	115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 (770)604-9182 Ext.561 FAX:604-9282
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Jeff Marks CH2M Hill Constuctors, Inc.	Ph:(904)777-4812 Fax:(904) 777-4262	Ph:(225) 769-4900		204100106

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on SOP)	TAT (calendar days)	BTEX & MTBE by 8260B	16 listed PAHs (incl 1- & 2-Methylnaphthalene) by 8310	TRPH bt FLO-PRO								SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)
11	86-JETC-MS-Q3-04	Matrix Spike	W	09/28/04	1320	III/C	14	3	2	2								Grab	NG-24S	11
12	86-JETC-MSD-Q3-04	Matrix Spike Duplicate	W	09/28/04	1320	III/C	14	3	2	2								Grab	NG-24S	12
12	86-JETC-DUP-Q3-04	Duplicate	W	NA	NA	III/C	14	3	2	2								Grab		13
14	86-JETC-EB-Q3-04	Equipment Blank	W	09/29/04	1545	III/C	14	3	2	2								Grab		14
15	86-JETC-TB-Q3-04	Trip Blank	W	NA	NA	III/C	14	3										Grab	Prepared by Lab	15
16																				
17																				
18																				
19																				
20																				

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use):
Randy Dumaop AGVIQ Environmental Services	UPS Tracking Numbers: 1Z2AE0480194592086, 1Z2AE0480190098298, 1Z2AE0480192776104, 1Z2AE0480193961518, 1Z2AE0480193550524, 1Z2AE0480192599136, 1Z2AE0480191923349. (7 Coolers)	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
R. Dumaop	9/30/2004	12:00	UPS Tracking Numbers: 1Z2AE0480194592086, 1Z2AE0480190098298, 1Z2AE0480192776104, 1Z2AE0480193961518, 1Z2AE0480193550524, 1Z2AE0480192599136, 1Z2AE0480191923349. (7 Coolers)	9/30/2004	12:00
Printed Name and Signature:			Printed Name and Signature:		
Printed Name and Signature:			Printed Name and Signature:		

Distribution: [ ] Original - Laboratory (To be returned with Analytical Report); [ ] Copy 1 - Project File; [ ] Copy 2 - PMO

Form CC1001, Rev 02/00

000851

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 10/11/2004

GCAL Report 204100106

Deliver To	CH2M HILL Constructors Inc. 115 Perimeter Center Place Suite 700 Atlanta, GA 30346 770-604-9182 Ext. 614
Attn	Melissa Osborne

Customer CH2M Hill Constructors

Project CTO 86 Cecil Field - South Fue

7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402 • Phone 225.769.4900 • Fax 225.767.5717

CASE NARRATIVE

Client: CH2M Hill Constructors **Report:** 204100106

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

In the SW-846 8310 analysis, sample 20410010604 (86-334-34S-Q3-04), had to be diluted to eliminate interference from non-target background. This dilution is reflected in elevated detection limits. The surrogate recovery is reported as "DO", diluted out due to the dilution performed on this sample.

In the SW-846 8310 analysis for prep batch 280789, the LCS recovery for Dibenz(a,h)anthracene was below the lower control limit. All other batch QC was acceptable.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates an estimated value
U	Indicates the compound was analyzed for but not detected
B	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
B	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reporduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Curtis Ekker

CURTIS EKKER
DATA VALIDATION MANAGER
GCAL REPORT 204100106

THIS REPORT CONTAINS 455 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20410010601	86-334-2SA-Q3-04	Water	09/28/2004 14:15	10/01/2004 10:30
20410010602	86-334-32S-Q3-04	Water	09/28/2004 11:25	10/01/2004 10:30
20410010603	86-334-33S-Q3-04	Water	09/28/2004 10:35	10/01/2004 10:30
20410010604	86-334-34S-Q3-04	Water	09/29/2004 13:20	10/01/2004 10:30
20410010605	86-339-28S-Q3-04	Water	09/29/2004 15:20	10/01/2004 10:30
20410010606	86-339-29S-Q3-04	Water	09/29/2004 14:15	10/01/2004 10:30
20410010607	86-811-16SR-Q3-04	Water	09/28/2004 16:10	10/01/2004 10:30
20410010608	86-811-17S-Q3-04	Water	09/29/2004 11:25	10/01/2004 10:30
20410010609	86-811-18S-Q3-04	Water	09/28/2004 15:15	10/01/2004 10:30
20410010610	86-NG-24S-Q3-04	Water	09/28/2004 13:20	10/01/2004 10:30
20410010611	86-JETC-MS-Q3-04	Water	09/28/2004 13:20	10/01/2004 10:30
20410010612	86-JETC-MSD-Q3-04	Water	09/28/2004 13:20	10/01/2004 10:30
20410010613	86-JETC-DUP-Q3-04	Water		10/01/2004 10:30
20410010614	86-JETC-EB-Q3-04	Water	09/29/2004 15:45	10/01/2004 10:30
20410010615	86-JETC-TB-Q3-04	Water		10/01/2004 10:30

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

	SAMPLE NO.	SMC1	#	SMC2	#	SMC3	#	SMC4	#	TOT OUT
1 .	86-334-2SA-Q3-04	104		94		100		90		0
2 .	86-NG-24S-Q3-04	108		93		99		89		0
3 .	86-JETC-MS-Q3-04	106		95		100		92		0
4 .	86-JETC-MSD-Q3-04	104		93		99		92		0
5 .	86-JETC-DUP-Q3-04	105		96		101		90		0
6 .	86-JETC-EB-Q3-04	105		93		101		93		0
7 .	86-JETC-TB-Q3-04	106		95		100		93		0
8 .	LCS195439	109		93		99		85		0
9 .	MB195438	108		92		100		87		0
10 .	86-334-32S-Q3-04	105		95		100		90		0
11 .	86-334-33S-Q3-04	106		95		100		92		0
12 .	86-334-34S-Q3-04	106		92		97		86		0
13 .	86-339-28S-Q3-04	106		95		100		93		0
14 .	86-339-29S-Q3-04	108		95		99		92		0
15 .	86-811-16SR-Q3-04	106		96		101		92		0
16 .	86-811-17S-Q3-04	106		94		101		93		0
17 .	86-811-18S-Q3-04	103		96		100		92		0

		QC LIMITS
SMC 1	4-Bromofluorobenzene	75 - 120
SMC 2	Dibromofluoromethane	73 - 125
SMC 3	Toluene-d8	78 - 127
SMC 4	1,2-Dichloroethane-d4	70 - 123

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A

WATER VOLATILE MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix Spike - EPA Sample No: 86-NG-24S-Q3-04

Analytical Batch: 280825

SAMPLE NO. : 20410010611

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS % REC	#	QC. LIMITS
1,1-Dichloroethene	ug/L	25	0	26.5	106		72 - 138
Benzene	ug/L	25	0	22.8	91		77 - 119
Chlorobenzene	ug/L	25	0	26.3	105		78 - 116
Ethylbenzene	ug/L	25	0	25.9	104		76 - 118
Toluene	ug/L	25	0	24	96		78 - 114
Trichloroethene	ug/L	25	0	21.4	86		67 - 126
Xylene (total)	ug/L	75	0	82.2	110		77 - 119
tert-Butyl methyl ether (MTBE)	ug/L	25	0	25.2	101		61 - 135

SAMPLE NO. : 20410010612

COMPOUND	UNITS	SPIKE ADDED	MSD CONC.	MSD % REC	#	% RPD	#	QC. LIMITS REC	QC. LIMITS RPD
1,1-Dichloroethene	ug/L	25	25.4	102		4		72 - 138	0 - 14
Benzene	ug/L	25	22.6	90		.9		77 - 119	0 - 11
Chlorobenzene	ug/L	25	24.5	98		7		78 - 116	0 - 13
Ethylbenzene	ug/L	25	24.5	98		6		76 - 118	0 - 30
Toluene	ug/L	25	23.3	93		3		78 - 114	0 - 13
Trichloroethene	ug/L	25	20.3	81		5		67 - 126	0 - 14
Xylene (total)	ug/L	75	75.6	101		8		77 - 119	0 - 30
tert-Butyl methyl ether (MTBE)	ug/L	25	25.6	102		2		61 - 135	0 - 30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 8 outside limits

Spike Recovery: 0 out of 16 outside limits

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Analytical Batch: 280825

SAMPLE NO. : 195439

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS % REC	#	QC. LIMITS
1,1-Dichloroethene	ug/L	25	0	25.8	103		72 - 138
Benzene	ug/L	25	0	21.5	86		77 - 119
Chlorobenzene	ug/L	25	0	25.5	102		78 - 116
Ethylbenzene	ug/L	25	0	26	104		76 - 118
Toluene	ug/L	25	0	22.8	91		78 - 114
Trichloroethene	ug/L	25	0	20.1	80		67 - 126
Xylene (total)	ug/L	75	0	79.9	107		77 - 119
tert-Butyl methyl ether (MTBE)	ug/L	25	0	24.8	99		61 - 135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 0 outside limits

Spike Recovery: 0 out of 8 outside limits

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

MB195438

Lab Name: GCAL

Contract:

Lab Code: LA024 Case No.:

SAS No.: SDG No.: 204100106

Lab File ID: 2041002P/S4003

Lab Sample ID: 195438 Date Extracted:

GC Column: DB-624-30M ID: .53 (mm

Date Analyzed: 10/02/04 Time: 1527

Instrument ID: MSV3 Matrix: Water

Heated Purge: N

Level: LOW

Prep Batch: Analytical Batch: 280825

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1 .	LCS195439	195439	2041002P/S4002	10/02/04	1507
2 .	86-NG-24S-Q3-04	20410010610	2041002P/S4004	10/02/04	1610
3 .	86-JETC-MS-Q3-04	20410010611	2041002P/S4005	10/02/04	1631
4 .	86-JETC-MSD-Q3-04	20410010612	2041002P/S4006	10/02/04	1652
5 .	86-334-2SA-Q3-04	20410010601	2041002P/S4007	10/02/04	1713
6 .	86-334-32S-Q3-04	20410010602	2041002P/S4008	10/02/04	1734
7 .	86-334-33S-Q3-04	20410010603	2041002P/S4009	10/02/04	1755
8 .	86-334-34S-Q3-04	20410010604	2041002P/S4010	10/02/04	1816
9 .	86-339-28S-Q3-04	20410010605	2041002P/S4011	10/02/04	1836
10 .	86-339-29S-Q3-04	20410010606	2041002P/S4012	10/02/04	1857
11 .	86-811-16SR-Q3-04	20410010607	2041002P/S4013	10/02/04	1918
12 .	86-811-17S-Q3-04	20410010608	2041002P/S4014	10/02/04	1939
13 .	86-811-18S-Q3-04	20410010609	2041002P/S4015	10/02/04	2000
14 .	86-JETC-DUP-Q3-04	20410010613	2041002P/S4016	10/02/04	2021
15 .	86-JETC-EB-Q3-04	20410010614	2041002P/S4017	10/02/04	2042
16 .	86-JETC-TB-Q3-04	20410010615	2041002P/S4018	10/02/04	2103

5A

VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL

Contract:

Lab Code: LA024 Case No.:

SAS No.: SDG No.: 204100106

Lab File ID: 2040913/S3443

BFB Injection Date: 09/13/04

Instrument ID: MSV3

BFB Injection Time: 0829

GC Column: DB-624-30M ID: .53 (mm)

Analytical Batch: 280827

m / e	ION ABUNDANCE CRITERIA	% Relative Abundance			
50	15.0 - 40.0% of mass 95	22.15	(	)	
75	30.0 - 60.0% of mass 95	57.33	(	)	
95	Base Peak, 100% relative abundance	100	(	)	
96	5.0 -9.0% of mass 95	7.98	(	)	
173	Less than 2.0% of mass 174	0	(0	)	1
174	50.0 - 99.9% of mass 95	79.22	(	)	
175	5.0 - 9.0% of mass 174	7.07	(8.93	)	1
176	95.0 - 101.0% of mass 174	76.13	(96.11	)	1
177	5.0 - 9.0% of mass 176	5.48	(7.21	)	2

1- Value is % mass 174 2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1.	V3STD0.2	1207	2040913/S3447	09/13/04	1029
2.	V3STD0.4	1208	2040913/S3448	09/13/04	1050
3.	V3STD002	1206	2040913/S3449	09/13/04	1112
4.	V3STD005	1201	2040913/S3450	09/13/04	1133
5.	V3STD020	1202	2040913/S3451	09/13/04	1155
6.	V3STD050	1203	2040913/S3452	09/13/04	1217
7.	V3STD100	1204	2040913/S3453	09/13/04	1238
8.	V3STD200	1205	2040913/S3454	09/13/04	1300

5A

VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL

Contract:

Lab Code: LA024 Case No.:

SAS No.: SDG No.: 204100106

Lab File ID: 2041002P/S4000

BFB Injection Date: 10/02/04

Instrument ID: MSV3

BFB Injection Time: 1355

GC Column: DB-624-30M ID: .53 (mm

Analytical Batch: 280825

m / e	ION ABUNDANCE CRITERIA	% Relative Abundance			
50	15.0 - 40.0% of mass 95	25.78	(	)	
75	30.0 - 60.0% of mass 95	57.28	(	)	
95	Base Peak, 100% relative abundance	100	(	)	
96	5.0 -9.0% of mass 95	7.77	(	)	
173	Less than 2.0% of mass 174	0	(0	)	1
174	50.0 - 99.9% of mass 95	79.03	(	)	
175	5.0 - 9.0% of mass 174	6.4	(8.11	)	1
176	95.0 - 101.0% of mass 174	76.43	(96.72	)	1
177	5.0 - 9.0% of mass 176	5.76	(7.54	)	2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1 .	V3STD050	1400	2041002P/S4001	10/02/04	1430
2 .	LCS195439	195439	2041002P/S4002	10/02/04	1507
3 .	MB195438	195438	2041002P/S4003	10/02/04	1527
4 .	86-NG-24S-Q3-04	20410010610	2041002P/S4004	10/02/04	1610
5 .	86-JETC-MS-Q3-04	20410010611	2041002P/S4005	10/02/04	1631
6 .	86-JETC-MSD-Q3-04	20410010612	2041002P/S4006	10/02/04	1652
7 .	86-334-2SA-Q3-04	20410010601	2041002P/S4007	10/02/04	1713
8 .	86-334-32S-Q3-04	20410010602	2041002P/S4008	10/02/04	1734
9 .	86-334-33S-Q3-04	20410010603	2041002P/S4009	10/02/04	1755
10 .	86-334-34S-Q3-04	20410010604	2041002P/S4010	10/02/04	1816
11 .	86-339-28S-Q3-04	20410010605	2041002P/S4011	10/02/04	1836
12 .	86-339-29S-Q3-04	20410010606	2041002P/S4012	10/02/04	1857
13 .	86-811-16SR-Q3-04	20410010607	2041002P/S4013	10/02/04	1918
14 .	86-811-17S-Q3-04	20410010608	2041002P/S4014	10/02/04	1939
15 .	86-811-18S-Q3-04	20410010609	2041002P/S4015	10/02/04	2000
16 .	86-JETC-DUP-Q3-04	20410010613	2041002P/S4016	10/02/04	2021

5A

VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL

Contract:

Lab Code: LA024 Case No.:

SAS No.: SDG No.: 204100106

Lab File ID: 2041002P/S4000

BFB Injection Date: 10/02/04

Instrument ID: MSV3

BFB Injection Time: 1355

GC Column: DB-624-30M ID: .53 (mm

Analytical Batch: 280825

17 .	86-JETC-EB-Q3-04	20410010614	2041002P/S4017	10/02/04	2042
18 .	86-JETC-TB-Q3-04	20410010615	2041002P/S4018	10/02/04	2103

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GCAL

Contract:

Lab Code: LA024 Case No.:

SAS No.: SDG No.: 204100106

Lab File ID (Standard): 2041002P/S4001

Date Analyzed: 10/02/04

Instrument ID: MSV3

Time: 1430

GC Column: DB-624-30M ID: .53 (mm)

Heated Purge: (Y/N) N

Analytical Batch: 280825

	IS 1 Area	RT	IS 2 Area	RT	IS 3 Area	RT
12 HOUR STD	1380712	7.279	1068139	9.865	2615708	4.876

	EPA Sample	IS 1 Area	#	RT	#	IS 2 Area	#	RT	#	IS 3 Area	#	RT	#
1 .	LCS195439	1288074		7.28		1030165		9.86		2512828		4.88	
2 .	86-339-28S-Q3-04	1311413		7.28		1000342		9.87		2499202		4.88	
3 .	86-339-29S-Q3-04	1279442		7.28		1003456		9.86		2489732		4.88	
4 .	86-811-16SR-Q3-04	1278130		7.28		985095		9.86		2462818		4.88	
5 .	86-811-17S-Q3-04	1278751		7.28		982120		9.86		2438643		4.88	
6 .	86-811-18S-Q3-04	1240492		7.27		932713		9.86		2301215		4.88	
7 .	86-JETC-DUP-Q3-04	1314857		7.28		1006004		9.86		2451487		4.88	
8 .	86-JETC-EB-Q3-04	1293312		7.28		959007		9.86		2444383		4.89	
9 .	86-JETC-TB-Q3-04	1272972		7.28		960797		9.86		2452652		4.88	
10 .	MB195438	1380139		7.27		1066755		9.86		2704874		4.88	
11 .	86-NG-24S-Q3-04	1308236		7.28		1007946		9.87		2533693		4.88	
12 .	86-JETC-MS-Q3-04	1396553		7.28		1088789		9.86		2657114		4.88	
13 .	86-JETC-MSD-Q3-04	1406473		7.28		1066723		9.87		2627008		4.88	
14 .	86-334-2SA-Q3-04	1373723		7.28		1073645		9.86		2669671		4.88	
15 .	86-334-32S-Q3-04	1332936		7.28		1024768		9.86		2543205		4.88	
16 .	86-334-33S-Q3-04	1338074		7.28		1022112		9.86		2544693		4.88	
17 .	86-334-34S-Q3-04	1309246		7.28		984723		9.87		2581100		4.88	

IS 1 ID : Chlorobenzene-d5
IS 2 ID : 1,4-Dichlorobenzene-d4
IS 3 ID : Fluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RTLOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC limits

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-334-2SA-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010601

Level: (low/med) LOW

Lab File ID: 2041002P/S4007

% Moisture: not dec.

Date Collected: 09/28/04 Time: 1415

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1713

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: JCK

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4007.d
Lab Smp Id: 20410010601 Client Smp ID: 86-334-2SA-Q3-04
Inj Date : 02-OCT-2004 17:13
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010601*86-334-2SA-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

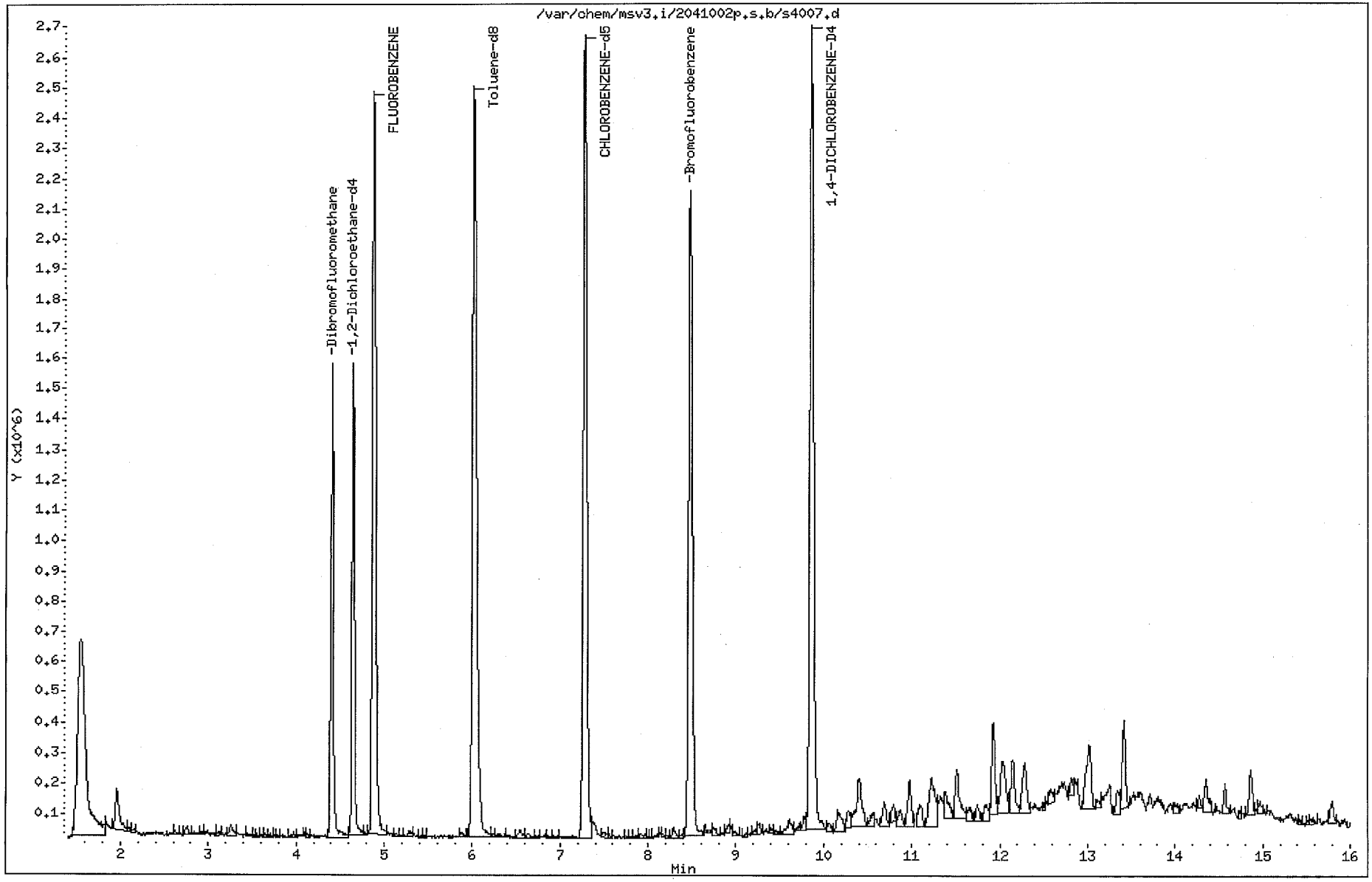
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.408	4.407	(0.904)	893975	46.7808	46.8	9282
$ 45 1,2-Dichloroethane-d4	67	4.648	4.641	(0.953)	569802	45.1268	45.1	9143
* 48 FLUOROBENZENE	96	4.877	4.876	(1.000)	2669671	50.0000		9668
$ 61 Toluene-d8	98	6.016	6.015	(1.233)	2805495	50.1746	50.2	9651
* 71 CHLOROBENZENE-d5	82	7.280	7.279	(1.000)	1373723	50.0000		5863
$ 82 Bromofluorobenzene	174	8.476	8.481	(1.164)	872746	52.2432	52.2	9354
* 97 1,4-DICHLOROBENZENE-D4	152	9.861	9.865	(1.000)	1073645	50.0000		4898

000015

Data File: /var/chem/msv3.i/2041002p.s.b/s4007.d
Date : 02-OCT-2004 17:13
Client ID: 86-334-2SA-Q3-04
Sample Info: 20410010601*86-334-2SA-Q3-04
Purge Volume: 5.0
Column phase: DB-624

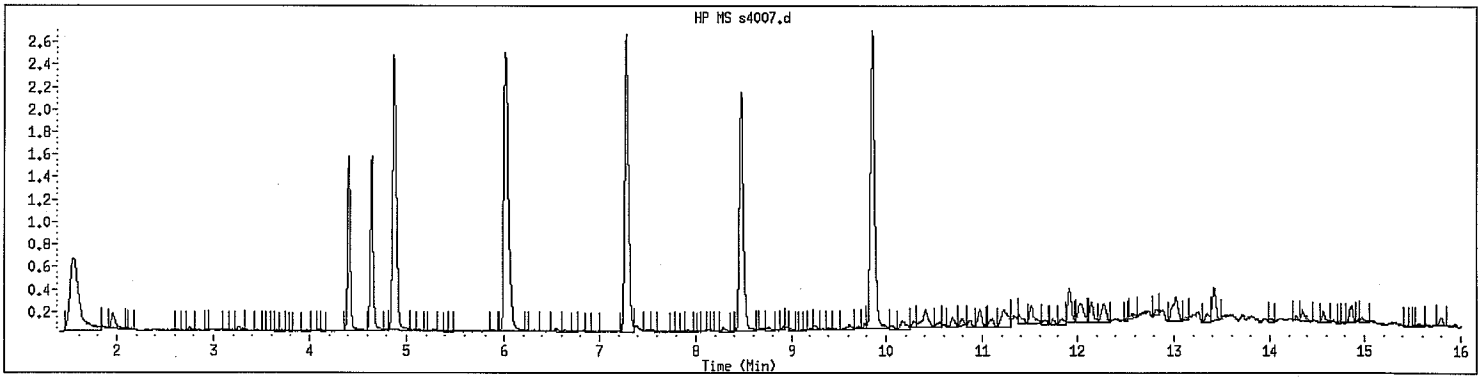
Instrument: msv3.i
Operator: JCK
Column diameter: 0.53



Data file : /var/chem/msv3.i/2041002p.s.b/s4007.d
Report Date: 10/03/2004 08:59

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 20410010601 SampleType : SAMPLE
Injection Date: 02-OCT-2004 17:13 Instrument : msv3.i
Operator : JCK
Sample Info : 20410010601*86-334-2SA-Q3-04
Misc Info : MSV~5300~*1*JCK
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Dilution : 1.0
Matrix : WATER
Integrator : HP RTE Compound Sublist: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-334-32S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010602

Level: (low/med) LOW

Lab File ID: 2041002P/S4008

% Moisture: not dec.

Date Collected: 09/28/04 Time: 1125

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1734

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4008.d
Lab Smp Id: 20410010602 Client Smp ID: 86-334-32S-Q3-04
Inj Date : 02-OCT-2004 17:34
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010602*86-334-32S-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

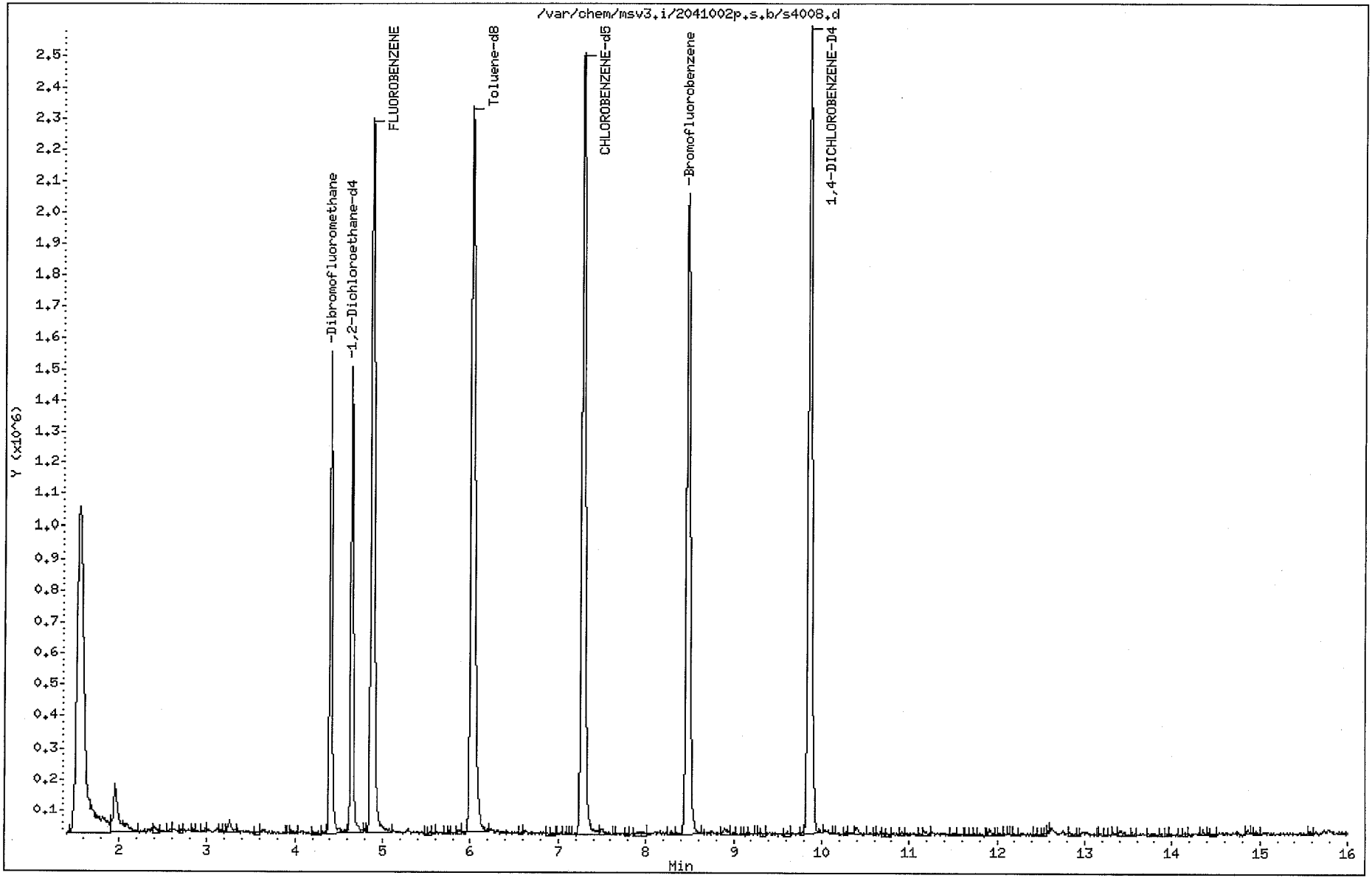
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.407	4.407	(0.904)	862129	47.3577	47.4	9303
$ 45 1,2-Dichloroethane-d4	67	4.648	4.641	(0.953)	543926	45.2197	45.2	9124
* 48 FLUOROBENZENE	96	4.877	4.876	(1.000)	2543205	50.0000		9612
$ 61 Toluene-d8	98	6.009	6.015	(1.232)	2676308	50.2443	50.2	9651
* 71 CHLOROBENZENE-d5	82	7.280	7.279	(1.000)	1332936	50.0000		5791
$ 82 Bromofluorobenzene	174	8.476	8.481	(1.164)	848106	52.3218	52.3	9278
* 97 1,4-DICHLOROBENZENE-D4	152	9.860	9.865	(1.000)	1024768	50.0000		4826

000019

Data File: /var/chem/msv3.i/2041002p.s.b/s4008.d
Date : 02-OCT-2004 17:34
Client ID: 86-334-32S-Q3-04
Sample Info: 20410010602*86-334-32S-Q3-04
Purge Volume: 5.0
Column phase: DB-624

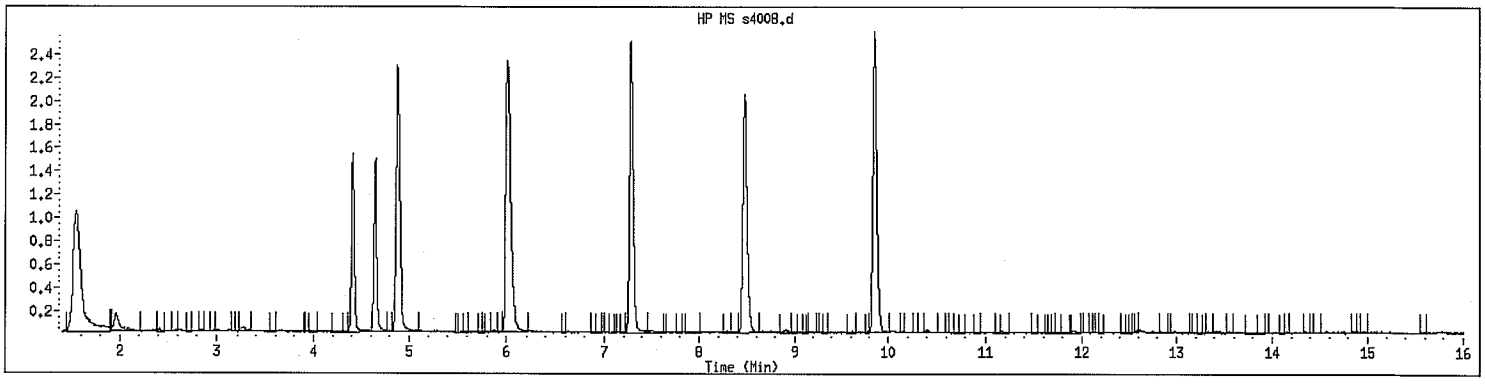
Instrument: msv3.i
Operator: JCK
Column diameter: 0.53



Data file : /var/chem/msv3.i/2041002p.s.b/s4008.d
Report Date: 10/03/2004 08:59

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 20410010602	SampleType	: SAMPLE
Injection Date	: 02-OCT-2004 17:34	Instrument	: msv3.i
Operator	: JCK		
Sample Info	: 20410010602*86-334-32S-Q3-04		
Misc Info	: MSV~5300~*1*JCK		
Method	: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-334-33S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010603

Level: (low/med) LOW

Lab File ID: 2041002P/S4009

% Moisture: not dec.

Date Collected: 09/28/04 Time: 1035

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1755

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4009.d
Lab Smp Id: 20410010603 Client Smp ID: 86-334-33S-Q3-04
Inj Date : 02-OCT-2004 17:55
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010603*86-334-33S-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

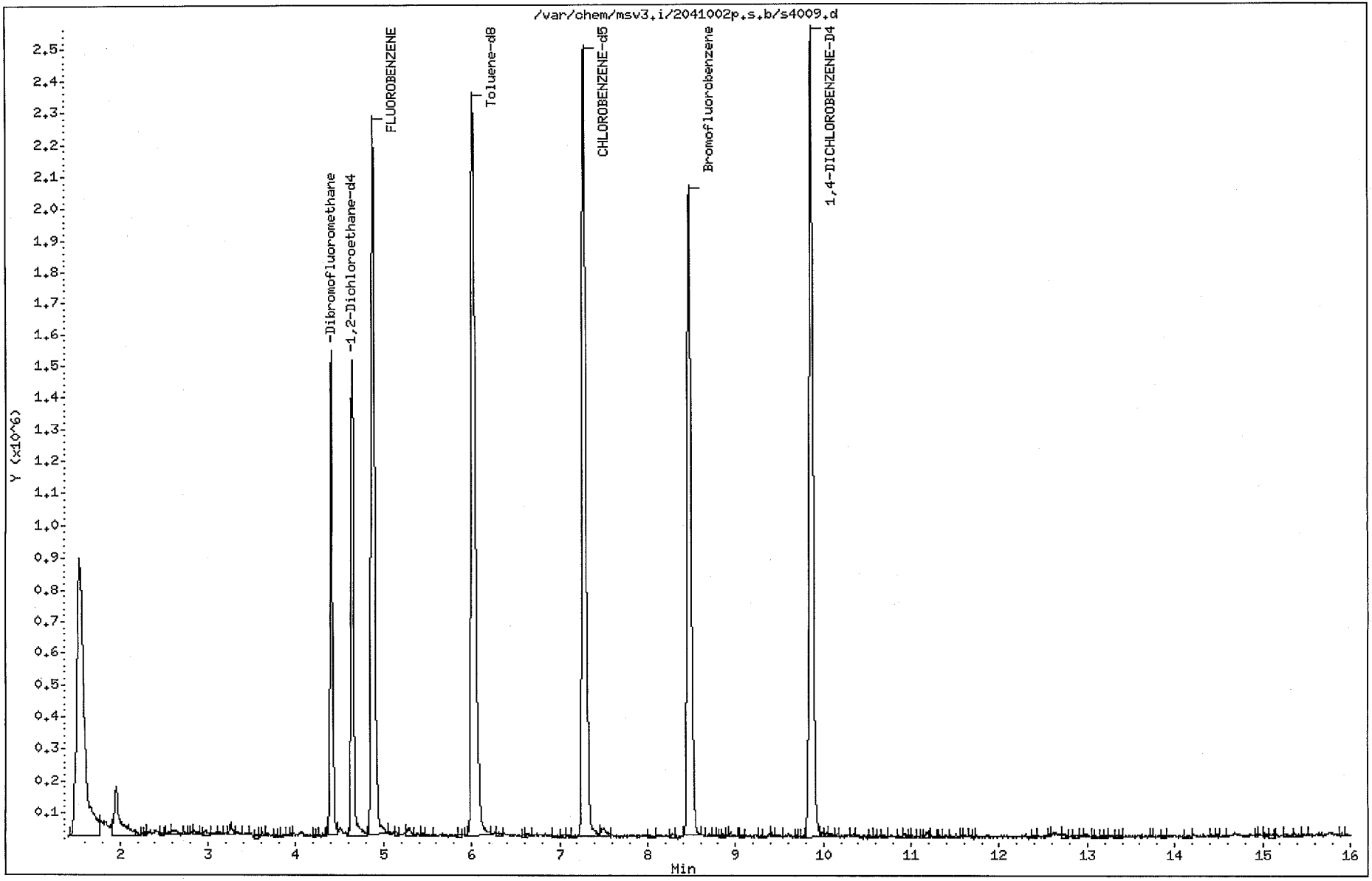
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.408	4.407	(0.904)	869256	47.7213	47.7	9347
$ 45 1,2-Dichloroethane-d4	67	4.648	4.641	(0.953)	553525	45.9908	46.0	9144
* 48 FLUOROBENZENE	96	4.877	4.876	(1.000)	2544693	50.0000		9638
$ 61 Toluene-d8	98	6.016	6.015	(1.233)	2664311	49.9898	50.0	9655
* 71 CHLOROBENZENE-d5	82	7.280	7.279	(1.000)	1338074	50.0000		5854
$ 82 Bromofluorobenzene	174	8.476	8.481	(1.164)	858942	52.7868	52.8	9347
* 97 1,4-DICHLOROBENZENE-D4	152	9.861	9.865	(1.000)	1022112	50.0000		4828

000023

Data File: /var/chem/msv3.i/2041002p.s.b/s4009.d
Date : 02-OCT-2004 17:55
Client ID: 86-334-33S-Q3-04
Sample Info: 20410010603*86-334-33S-Q3-04
Purge Volume: 5.0
Column phase: DB-624

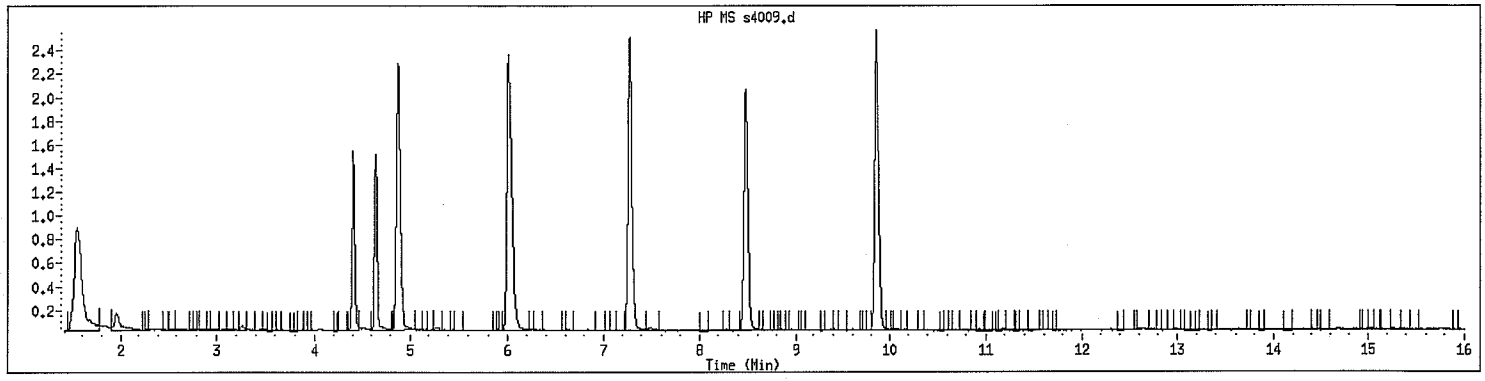
Instrument: msv3.i

Operator: JCK
Column diameter: 0.53



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 20410010603 SampleType : SAMPLE
Injection Date: 02-OCT-2004 17:55 Instrument : msv3.i
Operator : JCK
Sample Info : 20410010603*86-334-33S-Q3-04
Misc Info : MSV~5300~*1*JCK
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Dilution : 1.0
Matrix : WATER
Integrator : HP RTE Compound Sublist: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-334-34S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010604

Level: (low/med) LOW

Lab File ID: 2041002P/S4010

% Moisture: not dec.

Date Collected: 09/29/04 Time: 1320

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1816

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4010.d
Lab Smp Id: 20410010604 Client Smp ID: 86-334-34S-Q3-04
Inj Date : 02-OCT-2004 18:16
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010604*86-334-34S-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

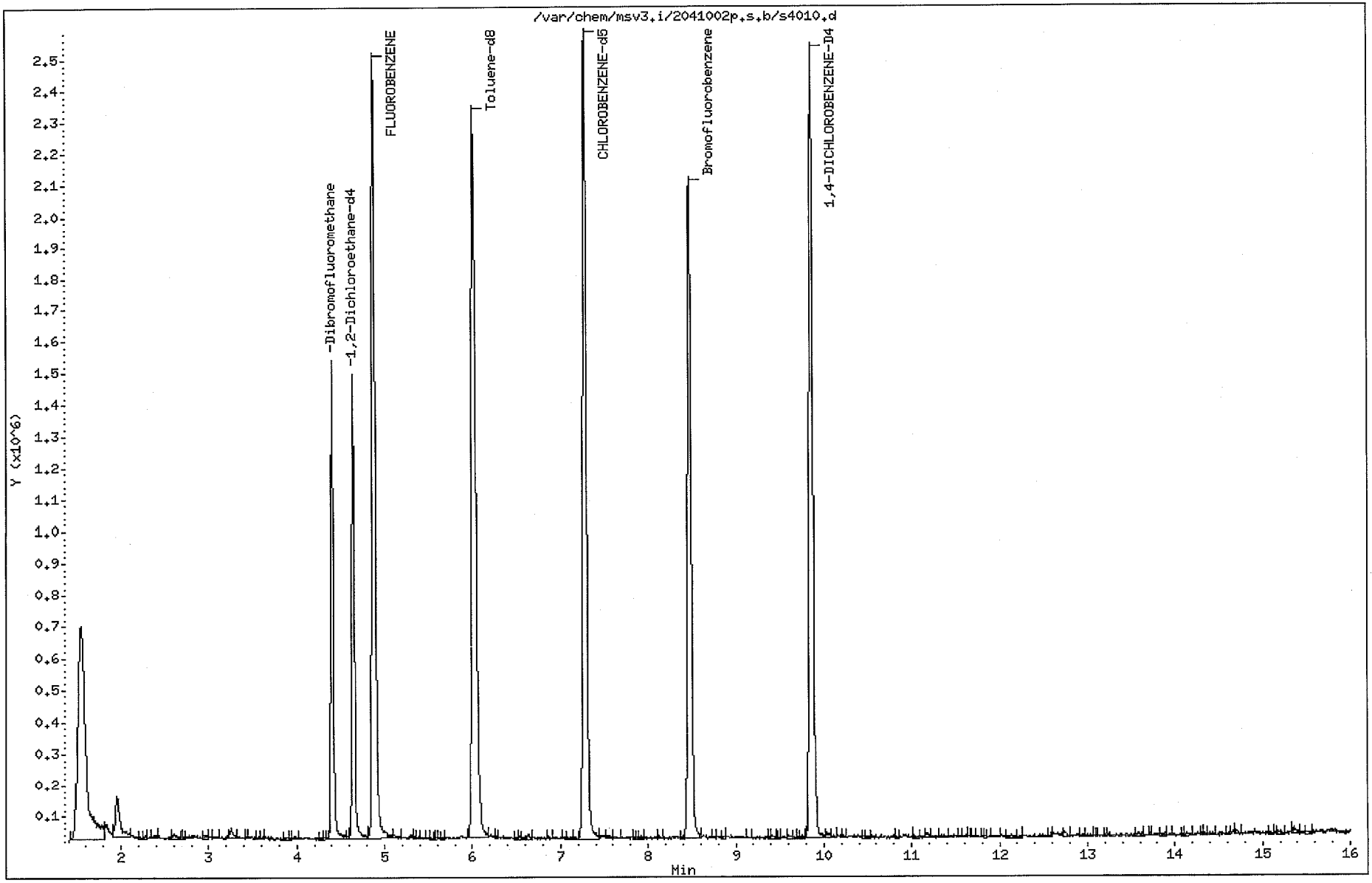
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.407	4.407	(0.904)	853977	46.2212	46.2	9303
$ 45 1,2-Dichloroethane-d4	67	4.642	4.641	(0.952)	527833	43.2375	43.2	9115
* 48 FLUOROBENZENE	96	4.877	4.876	(1.000)	2581100	50.0000		9701
$ 61 Toluene-d8	98	6.015	6.015	(1.233)	2623690	48.5333	48.5	9667
* 71 CHLOROBENZENE-d5	82	7.280	7.279	(1.000)	1309246	50.0000		5825
$ 82 Bromofluorobenzene	174	8.476	8.481	(1.164)	840537	52.7931	52.8	9347
* 97 1,4-DICHLOROBENZENE-D4	152	9.866	9.865	(1.000)	984723	50.0000		4780

000027

Data File: /var/chem/msv3.i/2041002p.s.b/s4010.d
Date : 02-OCT-2004 18:16
Client ID: 86-334-34S-Q3-04
Sample Info: 20410010604*86-334-34S-Q3-04
Purge Volume: 5.0
Column phase: DB-624

Instrument: msv3.i

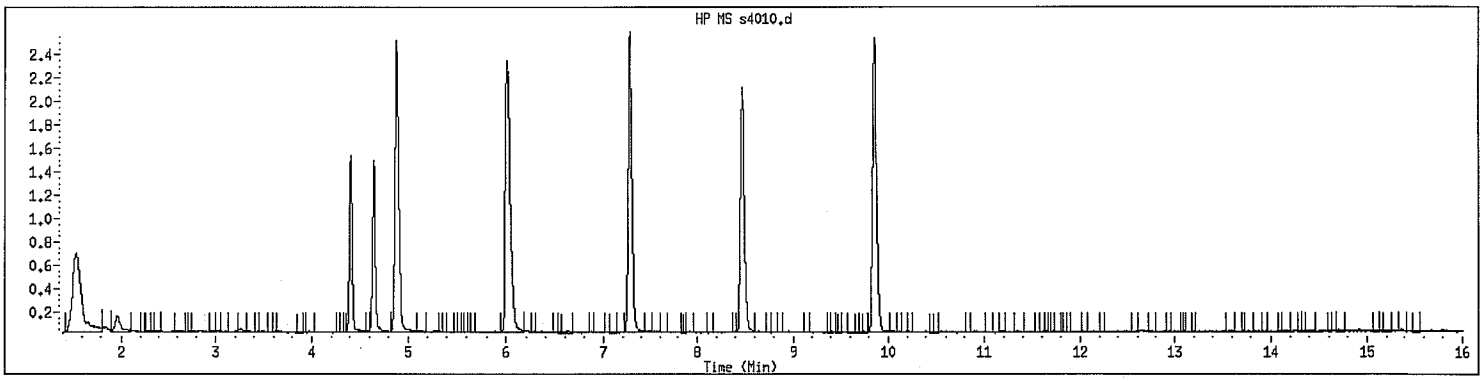
Operator: JCK
Column diameter: 0.53



Data file : /var/chem/msv3.i/2041002p.s.b/s4010.d
Report Date: 10/03/2004 09:00

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 20410010604 SampleType : SAMPLE
Injection Date: 02-OCT-2004 18:16 Instrument : msv3.i
Operator : JCK
Sample Info : 20410010604*86-334-34S-Q3-04
Misc Info : MSV~5300~*1*JCK
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Dilution : 1.0
Matrix : WATER
Integrator : HP RTE Compound Sublist: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-339-28S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010605

Level: (low/med) LOW

Lab File ID: 2041002P/S4011

% Moisture: not dec.

Date Collected: 09/29/04 Time: 1520

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1836

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4011.d
Lab Smp Id: 20410010605 Client Smp ID: 86-339-28S-Q3-04
Inj Date : 02-OCT-2004 18:36
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010605*86-339-28S-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

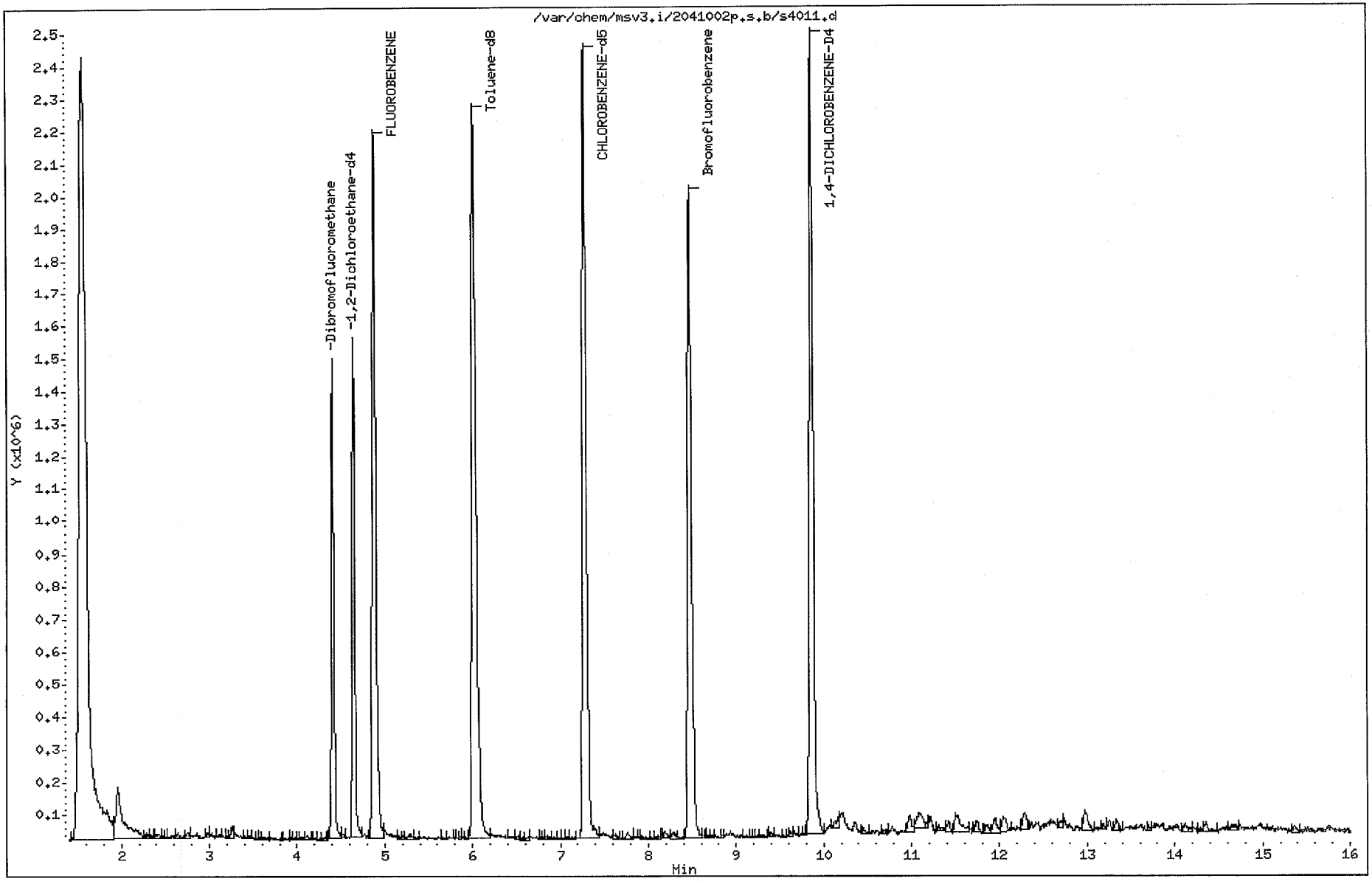
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.408	4.407	(0.904)	853419	47.7047	47.7	9295
$ 45 1,2-Dichloroethane-d4	67	4.648	4.641	(0.953)	550201	46.5467	46.5	9044
* 48 FLUOROBENZENE	96	4.877	4.876	(1.000)	2499202	50.0000		9648
$ 61 Toluene-d8	98	6.015	6.015	(1.233)	2616300	49.9826	50.0	9639
* 71 CHLOROBENZENE-d5	82	7.280	7.279	(1.000)	1311413	50.0000		5805
$ 82 Bromofluorobenzene	174	8.476	8.481	(1.164)	844850	52.9763	53.0	9378
* 97 1,4-DICHLOROBENZENE-D4	152	9.866	9.865	(1.000)	1000342	50.0000		4826

000031

Data File: /var/chem/msv3.i/2041002p.s.b/s4011.d
Date : 02-OCT-2004 18:36
Client ID: 86-339-28S-Q3-04
Sample Info: 20410010605*86-339-28S-Q3-04
Purge Volume: 5.0
Column phase: DB-624

Instrument: msv3.i

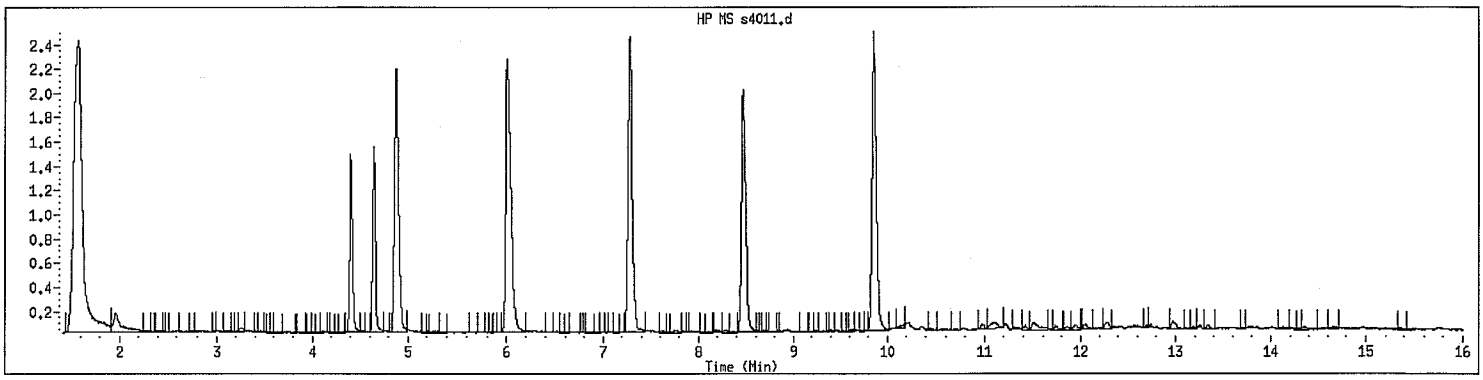
Operator: JCK
Column diameter: 0.53



Data file : /var/chem/msv3.i/2041002p.s.b/s4011.d
Report Date: 10/03/2004 09:00

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 20410010605 SampleType : SAMPLE
Injection Date: 02-OCT-2004 18:36 Instrument : msv3.i
Operator : JCK
Sample Info : 20410010605*86-339-28S-Q3-04
Misc Info : MSV~5300~*1*JCK
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Dilution : 1.0
Matrix : WATER
Integrator : HP RTE Compound Sublist: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-339-29S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010606

Level: (low/med) LOW

Lab File ID: 2041002P/S4012

% Moisture: not dec.

Date Collected: 09/29/04 Time: 1415

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1857

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4012.d
Lab Smp Id: 20410010606 Client Smp ID: 86-339-29S-Q3-04
Inj Date : 02-OCT-2004 18:57
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010606*86-339-29S-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

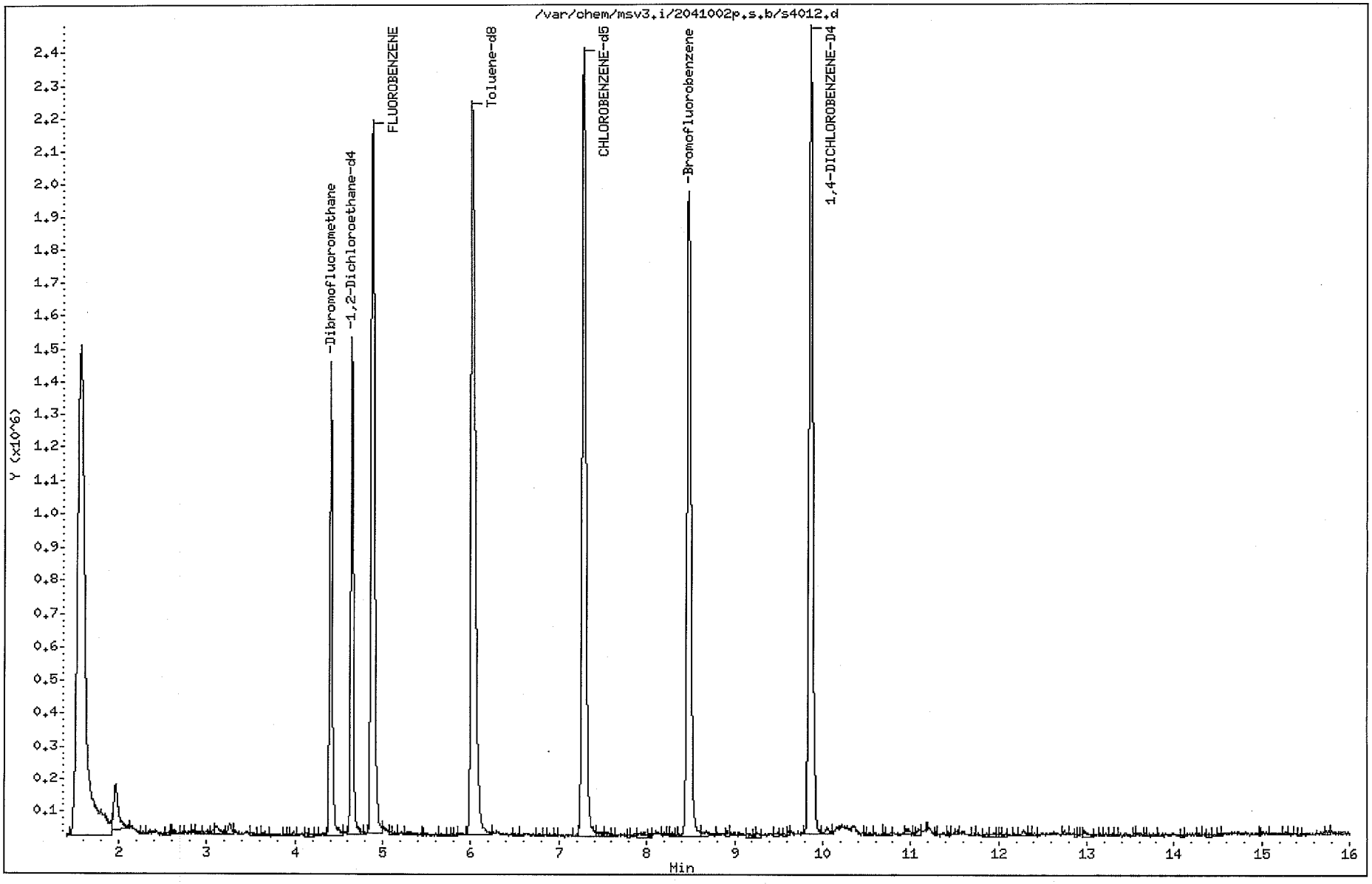
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.412	4.407	(0.904)	844433	47.3819	47.4	9327
$ 45 1,2-Dichloroethane-d4	67	4.647	4.641	(0.952)	543383	46.1447	46.1	9266
* 48 FLUOROBENZENE	96	4.882	4.876	(1.000)	2489732	50.0000		9678
$ 61 Toluene-d8	98	6.015	6.015	(1.232)	2581267	49.5008	49.5	9614
* 71 CHLOROBENZENE-d5	82	7.279	7.279	(1.000)	1279442	50.0000		5786
$ 82 Bromofluorobenzene	174	8.481	8.481	(1.165)	836528	53.7652	53.8	9237
* 97 1,4-DICHLOROBENZENE-D4	152	9.865	9.865	(1.000)	1003456	50.0000		4781

Data File: /var/chem/msv3.i/2041002p.s.b/s4012.d
Date : 02-OCT-2004 18:57
Client ID: 86-339-29S-Q3-04
Sample Info: 20410010606*86-339-29S-Q3-04
Purge Volume: 5.0
Column phase: DB-624

Instrument: msv3.i

Operator: JCK
Column diameter: 0.53

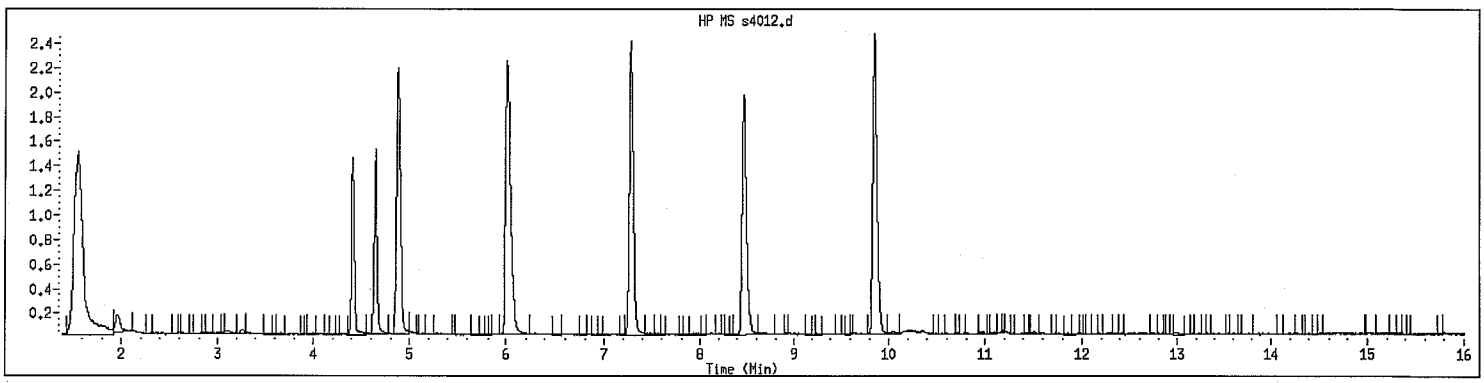
000035



Data file : /var/chem/msv3.i/2041002p.s.b/s4012.d
Report Date: 10/03/2004 09:00

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 20410010606	SampleType	: SAMPLE
Injection Date	: 02-OCT-2004 18:57	Instrument	: msv3.i
Operator	: JCK		
Sample Info	: 20410010606*86-339-29S-Q3-04		
Misc Info	: MSV~5300~*1*JCK		
Method	: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-811-16SR-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010607

Level: (low/med) LOW

Lab File ID: 2041002P/S4013

% Moisture: not dec.

Date Collected: 09/28/04 Time: 1610

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1918

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4013.d
Lab Smp Id: 20410010607 Client Smp ID: 86-811-16SR-Q3-04
Inj Date : 02-OCT-2004 19:18
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010607*86-811-16SR-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

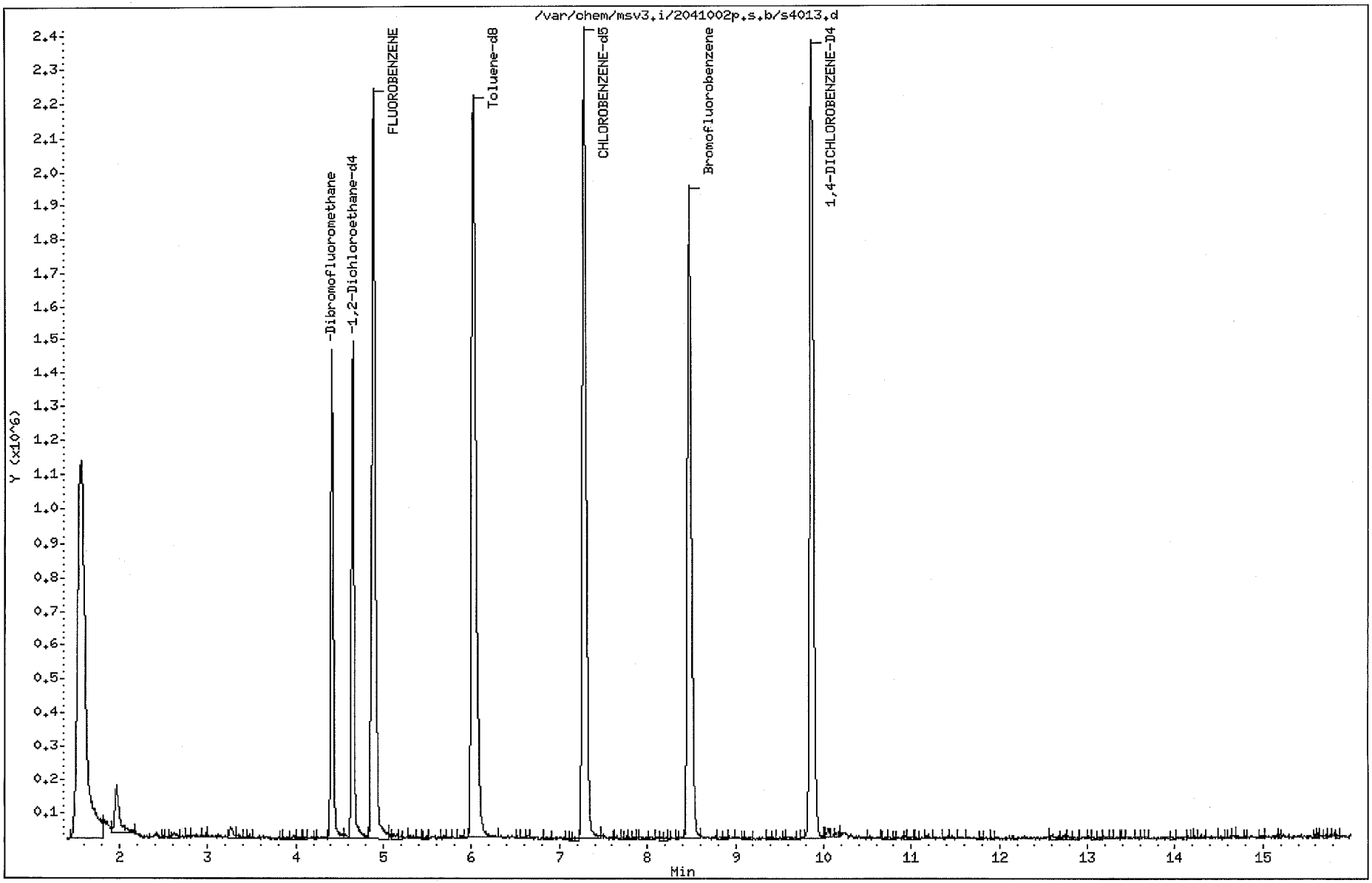
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.410	4.407	(0.903)	845526	47.9617	48.0	9344
$ 45 1,2-Dichloroethane-d4	67	4.650	4.641	(0.952)	537501	46.1441	46.1	9158
* 48 FLUOROBENZENE	96	4.885	4.876	(1.000)	2462818	50.0000		9587
$ 61 Toluene-d8	98	6.023	6.015	(1.233)	2602411	50.4517	50.5	9655
* 71 CHLOROBENZENE-d5	82	7.282	7.279	(1.000)	1278130	50.0000		5870
$ 82 Bromofluorobenzene	174	8.478	8.481	(1.164)	825593	53.1169	53.1	9335
* 97 1,4-DICHLOROBENZENE-D4	152	9.862	9.865	(1.000)	985095	50.0000		4791

000039

Data File: /var/chem/msv3.i/2041002p.s.b/s4013.d
Date : 02-OCT-2004 19:18
Client ID: 86-811-16SR-Q3-04
Sample Info: 20410010607*86-811-16SR-Q3-04
Purge Volume: 5.0
Column phase: DB-624

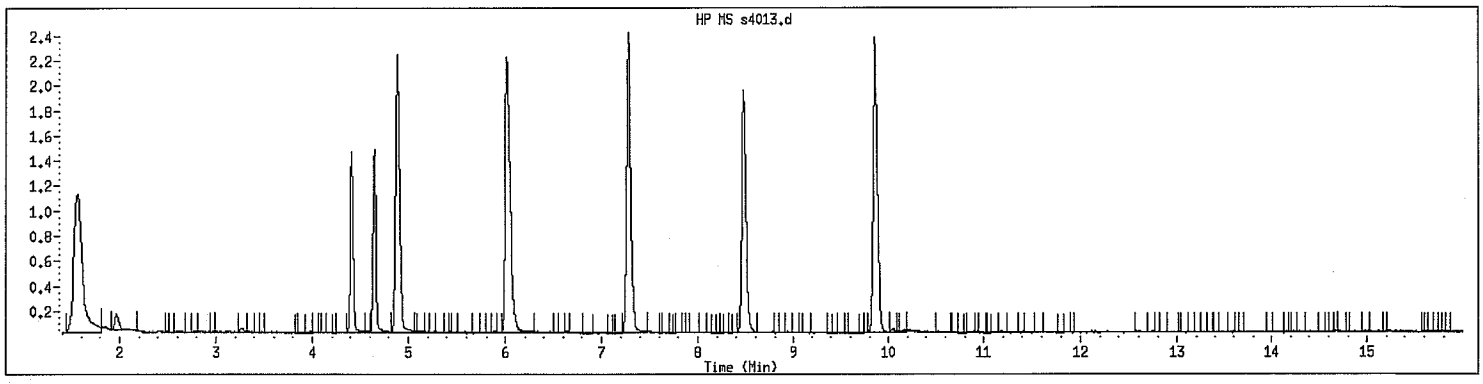
Instrument: msv3.i

Operator: JCK
Column diameter: 0.53



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 20410010607 SampleType : SAMPLE
Injection Date: 02-OCT-2004 19:18 Instrument : msv3.i
Operator : JCK
Sample Info : 20410010607*86-811-16SR-Q3-04
Misc Info : MSV~5300~*1*JCK
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Dilution : 1.0
Matrix : WATER
Integrator : HP RTE Compound Sublist: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-811-17S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010608

Level: (low/med) LOW

Lab File ID: 2041002P/S4014

% Moisture: not dec.

Date Collected: 09/29/04 Time: 1125

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1939

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4014.d
Lab Smp Id: 20410010608 Client Smp ID: 86-811-17S-Q3-04
Inj Date : 02-OCT-2004 19:39
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010608*86-811-17S-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

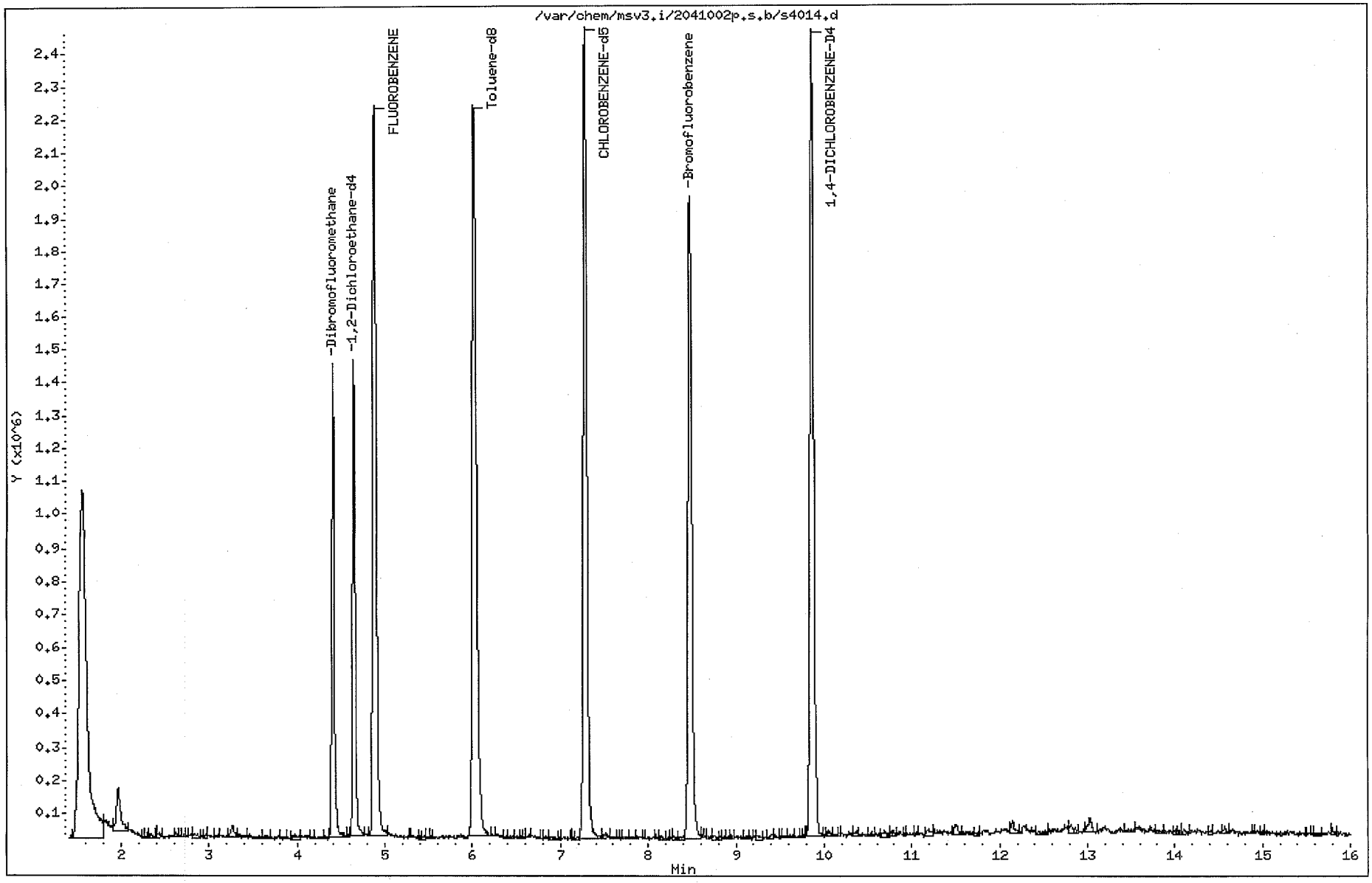
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.413	4.407	(0.904)	822675	47.1281	47.1	9192
$ 45 1,2-Dichloroethane-d4	67	4.647	4.641	(0.952)	534464	46.3382	46.3	9179
* 48 FLUOROBENZENE	96	4.882	4.876	(1.000)	2438643	50.0000		9566
$ 61 Toluene-d8	98	6.020	6.015	(1.233)	2569724	50.3119	50.3	9710
* 71 CHLOROBENZENE-d5	82	7.279	7.279	(1.000)	1278751	50.0000		5805
$ 82 Bromofluorobenzene	174	8.481	8.481	(1.165)	820905	52.7896	52.8	9272
* 97 1,4-DICHLOROBENZENE-D4	152	9.860	9.865	(1.000)	982120	50.0000		4805

000043

Data File: /var/chem/msv3.i/2041002p.s.b/s4014.d
Date : 02-OCT-2004 19:39
Client ID: 86-811-17S-Q3-04
Sample Info: 20410010608*86-811-17S-Q3-04
Purge Volume: 5.0
Column phase: DB-624

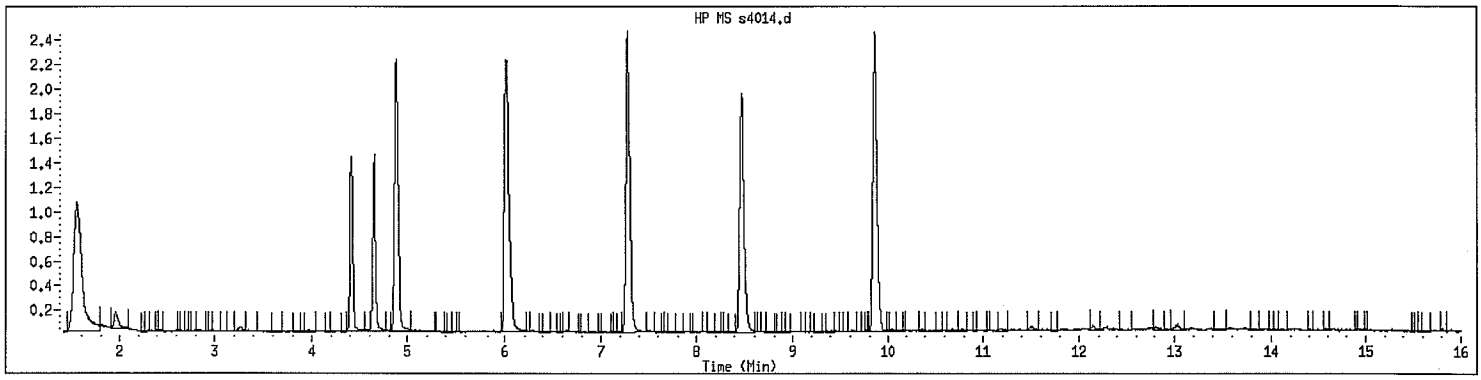
Instrument: msv3.i
Operator: JCK
Column diameter: 0.53



Data file : /var/chem/msv3.i/2041002p.s.b/s4014.d
Report Date: 10/03/2004 09:01

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 20410010608 SampleType : SAMPLE
Injection Date: 02-OCT-2004 19:39 Instrument : msv3.i
Operator : JCK
Sample Info : 20410010608*86-811-17S-Q3-04
Misc Info : MSV~5300~*1*JCK
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Dilution : 1.0
Matrix : WATER
Integrator : HP RTE Compound Sublist: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-811-18S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010609

Level: (low/med) LOW

Lab File ID: 2041002P/S4015

% Moisture: not dec.

Date Collected: 09/28/04 Time: 1515

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 2000

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	1.36	J	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4015.d
Lab Smp Id: 20410010609 Client Smp ID: 86-811-18S-Q3-04
Inj Date : 02-OCT-2004 20:00
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010609*86-811-18S-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.408	4.407	(0.904)	791107	48.0262	48.0	9243
$ 45 1,2-Dichloroethane-d4	67	4.648	4.641	(0.953)	498654	45.8153	45.8	9097
* 48 FLUOROBENZENE	96	4.877	4.876	(1.000)	2301215	50.0000		9705
$ 61 Toluene-d8	98	6.021	6.015	(1.235)	2414581	50.0976	50.1	9720
* 71 CHLOROBENZENE-d5	82	7.274	7.279	(1.000)	1240492	50.0000		5845
74 Ethylbenzene +	106	7.383	7.388	(1.015)	23077	1.36469	1.36	(aH)
$ 82 Bromofluorobenzene	174	8.476	8.481	(1.165)	776725	51.4890	51.5	9336
* 97 1,4-DICHLOROBENZENE-D4	152	9.861	9.865	(1.000)	932713	50.0000		4815

QC Flag Legend

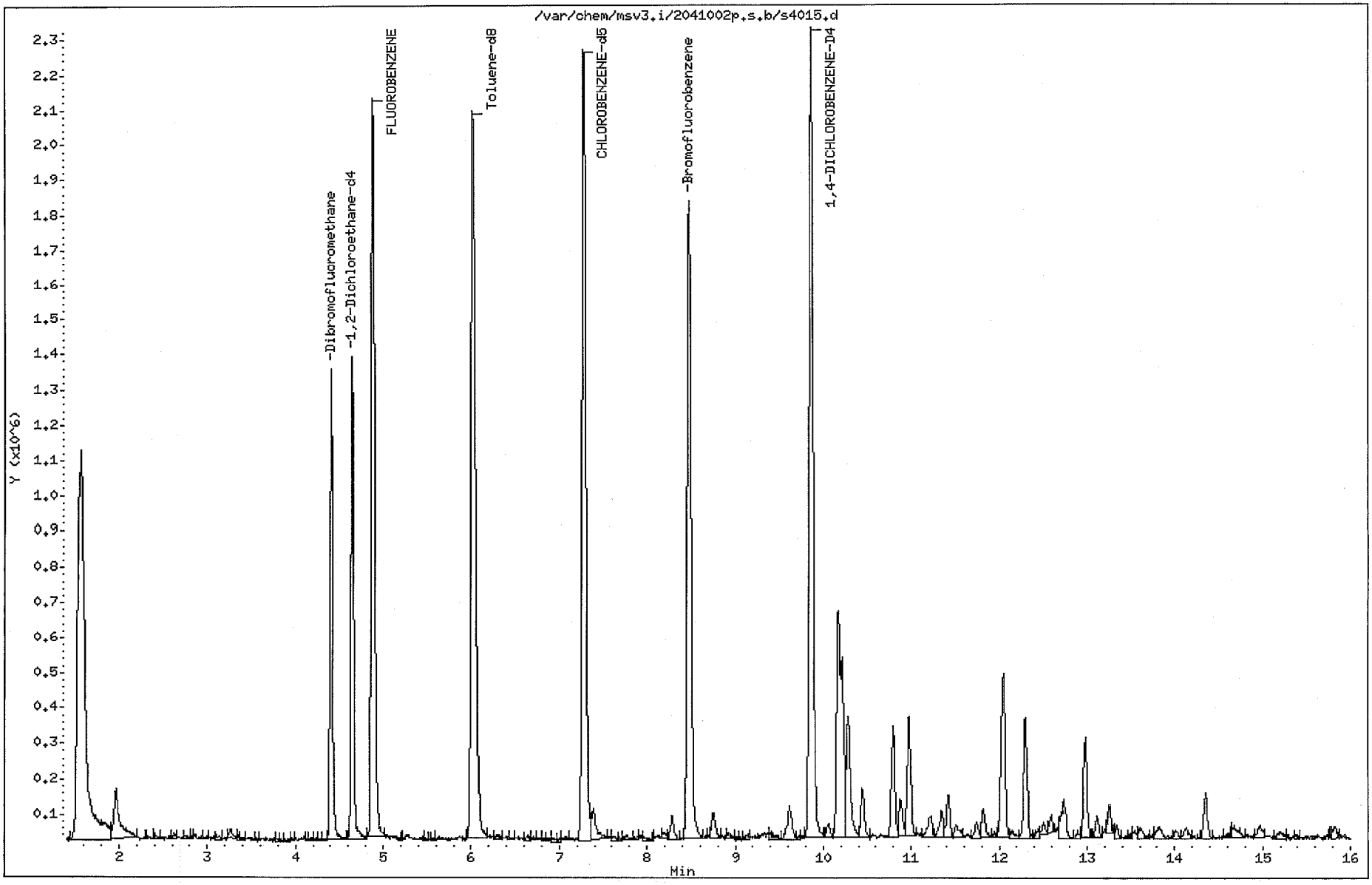
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: /var/chem/msv3.i/2041002p.s.b/s4015.d
Date : 02-OCT-2004 20:00
Client ID: 86-811-18S-Q3-04
Sample Info: 20410010609*86-811-18S-Q3-04
Purge Volume: 5.0
Column phase: DB-624

Instrument: msv3.i

Operator: JCK
Column diameter: 0.53

000047



Data File: /var/chem/msv3.i/2041002p.s.b/s4015.d

Date : 02-OCT-2004 20:00

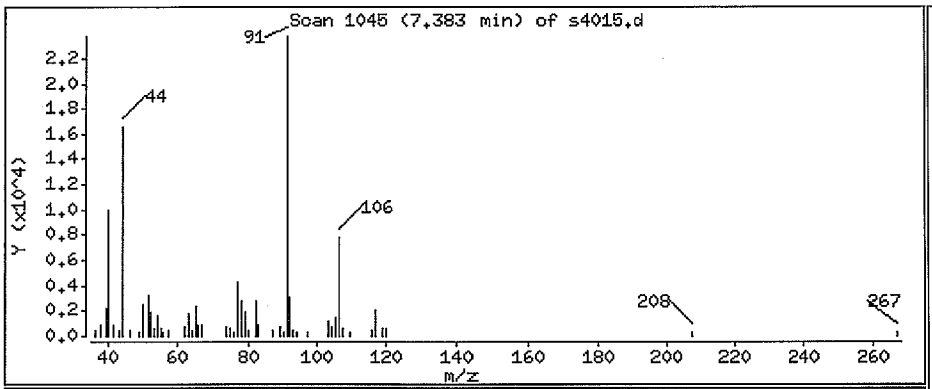
Client ID: 86-811-18S-Q3-04 | Instrument: msv3.i

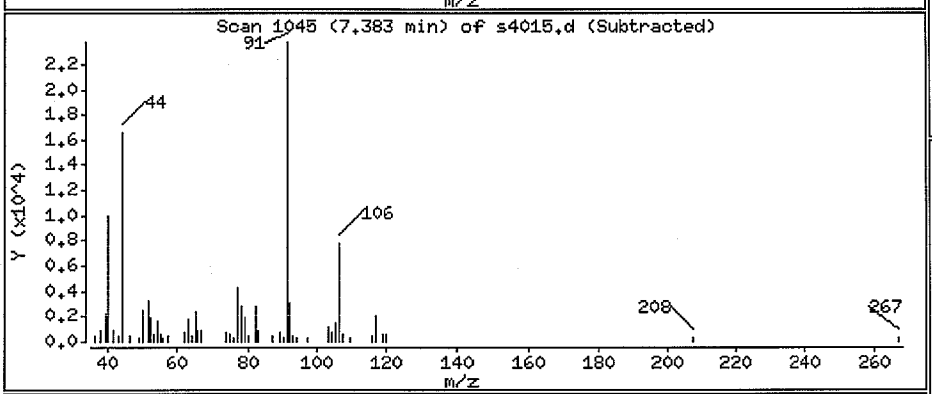
Sample Info: 20410010609*86-811-18S-Q3-04

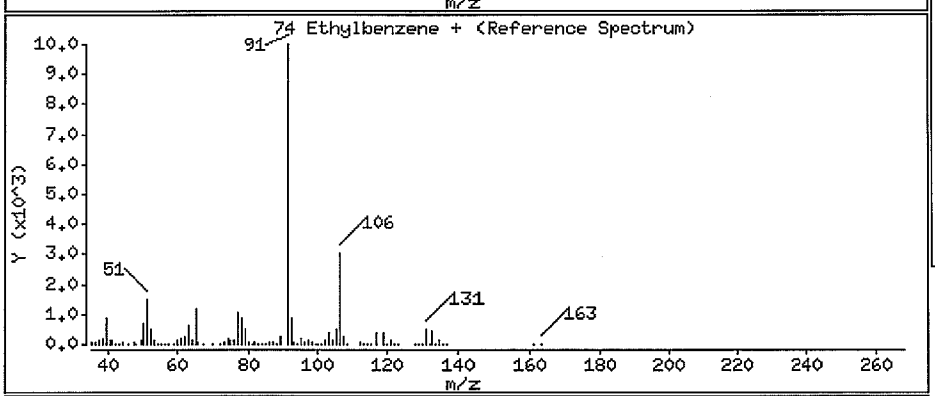
Purge Volume: 5.0 | Operator: JCK

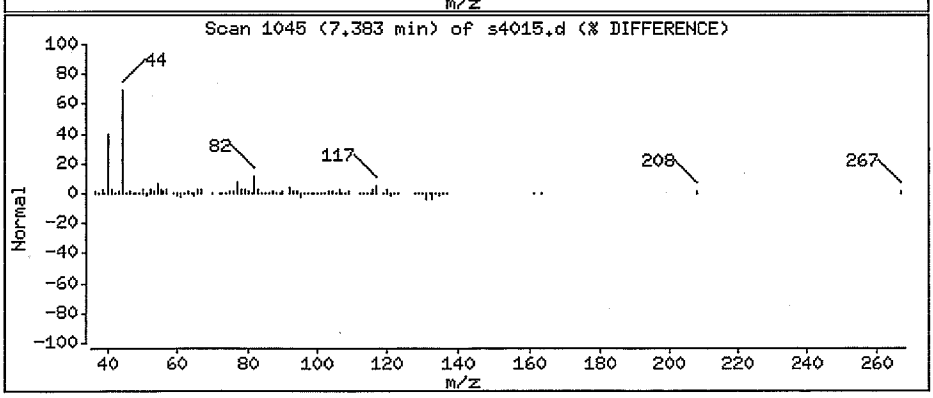
Column phase: DB-624 | Column diameter: 0.53

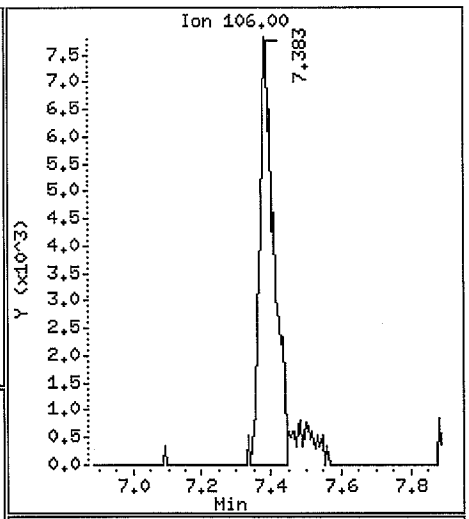
74 Ethylbenzene + | Concentration: 1.36 ug/L

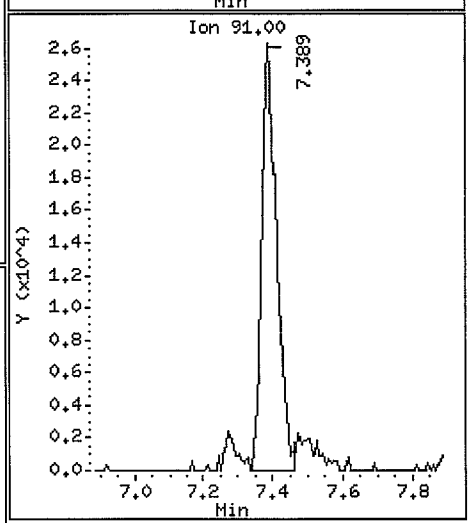








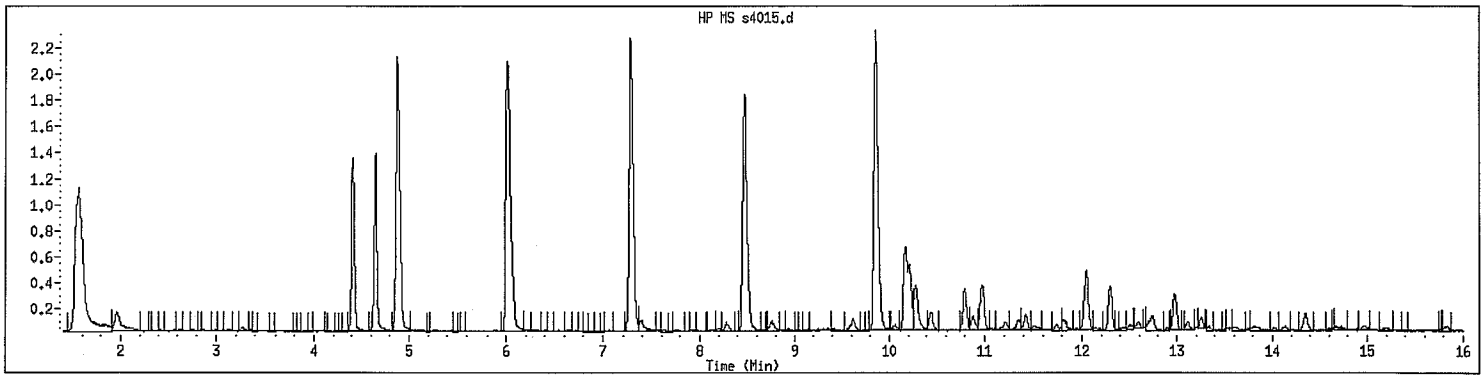




Data file : /var/chem/msv3.i/2041002p.s.b/s4015.d
Report Date: 10/03/2004 09:01

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 20410010609	SampleType	: SAMPLE
Injection Date	: 02-OCT-2004 20:00	Instrument	: msv3.i
Operator	: JCK		
Sample Info	: 20410010609*86-811-18S-Q3-04		
Misc Info	: MSV~5300~*1*JCK		
Method	: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-NG-24S-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med) LOW

% Moisture: not dec.

GC Column: DB-624-30M ID: .53 (mm

Instrument ID: MSV3

Soil Extract Volume: (µL

Soil Aliquot Volume: (µL

Lab Sample ID: 20410010610

Lab File ID: 2041002P/S4004

Date Collected: 09/28/04 Time: 1320

Date Received: 10/01/04

Date Analyzed: 10/02/04 Time: 1610

Dilution Factor: 1 Analyst: JCK

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4004.d
Lab Smp Id: 20410010610 Client Smp ID: 86-NG-24S-Q3-04
Inj Date : 02-OCT-2004 16:10
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010610*86-NG-24S-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.408	4.407	(0.904)	844594	46.5687	46.6	9254
$ 45 1,2-Dichloroethane-d4	67	4.648	4.641	(0.953)	535703	44.7032	44.7	9101
* 48 FLUOROBENZENE	96	4.877	4.876	(1.000)	2533693	50.0000		9502
$ 61 Toluene-d8	98	6.016	6.015	(1.233)	2638480	49.7201	49.7	9704
* 71 CHLOROBENZENE-d5	82	7.275	7.279	(1.000)	1308236	50.0000		5767
$ 82 Bromofluorobenzene	174	8.476	8.481	(1.165)	862591	54.2201	54.2	9306
* 97 1,4-DICHLOROBENZENE-D4	152	9.867	9.865	(1.000)	1007946	50.0000		4789

Data File: /var/chem/msv3.i/2041002p.s.b/s4004.d

Date : 02-OCT-2004 16:10

Client ID: 86-NG-24S-Q3-04

Sample Info: 20410010610*86-NG-24S-Q3-04

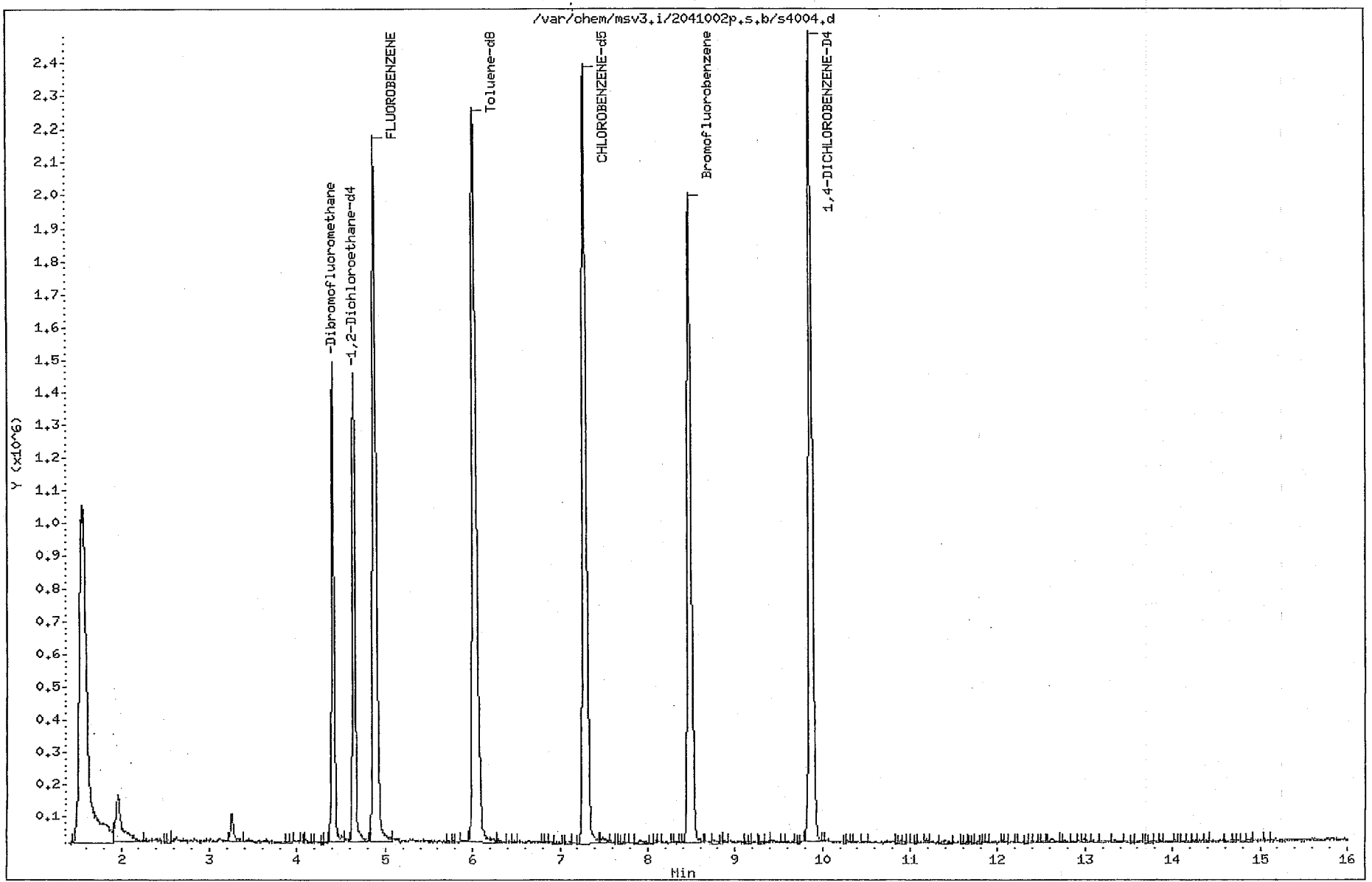
Purge Volume: 5.0

Column phase: DB-624

Instrument: msv3.i

Operator: JCK

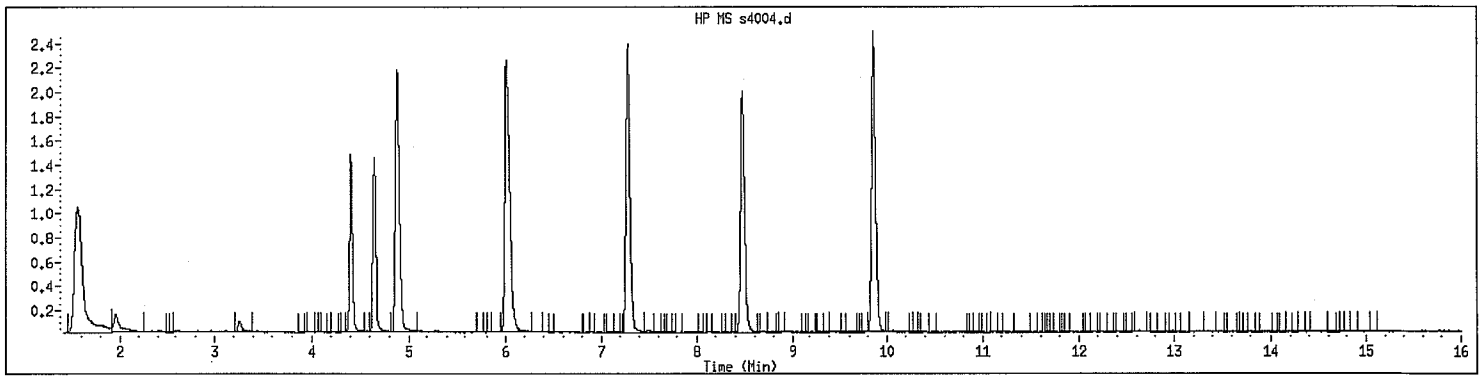
Column diameter: 0.53



000052

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 20410010610 SampleType : SAMPLE
Injection Date: 02-OCT-2004 16:10 Instrument : msv3.i
Operator : JCK
Sample Info : 20410010610*86-NG-24S-Q3-04
Misc Info : MSV~5300~*1*JCK
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Dilution : 1.0
Matrix : WATER
Integrator : HP RTE Compound Sublist: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-JETC-MS-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010611

Level: (low/med) LOW

Lab File ID: 2041002P/S4005

% Moisture: not dec.

Date Collected: 09/28/04 Time: 1320

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1631

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: JCK

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	22.8		0.225	0.500
100-41-4	Ethylbenzene	25.9		0.227	5.00
108-88-3	Toluene	24.0		0.213	5.00
1330-20-7	Xylene (total)	82.2		0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	25.2		0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4005.d
Lab Smp Id: 20410010611 Client Smp ID: 86-JETC-MS-Q3-04
Inj Date : 02-OCT-2004 16:31
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010611*86-JETC-MS-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 02-Oct-2004 16:24 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 5 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
1 Dichlorodifluoromethane	85	1.719	1.701	(0.352)	497350	21.7623	21.8	8114
2 Chloromethane ++	50	1.902	1.884	(0.389)	385702	27.8041	27.8	7962
3 Vinyl Chloride +	62	1.988	1.975	(0.407)	356240	25.0122	25.0	8189
5 Bromomethane	94	2.279	2.261	(0.467)	253112	62.9303	62.9	9445(R)
6 Chloroethane	64	2.359	2.341	(0.483)	138322	24.9659	25.0	8635
7 Trichlorofluoromethane	101	2.565	2.553	(0.525)	620232	24.4039	24.4	9253
9 Acrolein	56	2.863	2.856	(0.586)	100117	417.350	417	7801(AR)
10 1,1,2Trichlotrifluoroethane	101	2.943	2.931	(0.603)	379569	27.8998	27.9	8776
11 1,1-Dichloroethene +	96	2.949	2.936	(0.604)	286229	26.5088	26.5	9037
12 Acetone	43	2.989	2.971	(0.612)	134735	18.9406	18.9	(a)
13 Methyl Iodide	142	3.063	3.051	(0.627)	558923	27.3124	27.3	9433
14 Carbon Disulfide	76	3.126	3.114	(0.640)	1045889	25.6967	25.7	9542
17 Methyl Acetate	43	3.189	3.182	(0.653)	216911	29.0066	29.0	3355(H)
18 Methylene Chloride	49	3.264	3.251	(0.668)	537501	32.5953	32.6	9264(R)
20 Acrylonitrile	53	3.429	3.417	(0.702)	648881	146.689	147	7448

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
	21 MTBE	73	3.452	3.446	(0.707)	894785	25.2138	25.2	8971
	22 trans-1,2-Dichloroethene	61	3.452	3.446	(0.707)	498982	26.6983	26.7	
	24 Hexane	57	3.653	3.646	(0.748)	476555	28.3230	28.3	9413
	25 Vinyl Acetate	43	3.641	3.640	(0.746)	336180	37.0119	37.0	
	26 1,1-Dichloroethane ++	63	3.733	3.726	(0.764)	635813	22.4180	22.4	8627
M	30 Total 1,2-Dichloroethene	61				1118840	48.9458	48.9	0
	32 2-Butanone	43	4.105	4.098	(0.841)	208838	20.9840	21.0	(a)
	34 cis-1,2-Dichloroethene	61	4.110	4.104	(0.842)	619858	22.2474	22.2	
	35 2,2-Dichloropropane	77	4.122	4.115	(0.844)	573153	21.5256	21.5	9350
	37 Bromochloromethane	128	4.276	4.264	(0.876)	180594	21.6054	21.6	8423
	38 Chloroform +	83	4.305	4.298	(0.882)	722742	22.8928	22.9	9438
$	39 Dibromofluoromethane	111	4.414	4.407	(0.904)	900043	47.3209	47.3	9282
	40 1,1,1-Trichloroethane	97	4.459	4.453	(0.913)	653407	21.3853	21.4	9199
	42 Cyclohexane	56	4.517	4.510	(0.925)	601652	24.3641	24.4	9589
	43 1,1-Dichloropropene	75	4.568	4.561	(0.936)	515864	22.8212	22.8	9460
	44 Carbon Tetrachloride	117	4.579	4.573	(0.938)	549897	21.9905	22.0	8442
$	45 1,2-Dichloroethane-d4	67	4.648	4.641	(0.952)	575549	45.7974	45.8	9115
	46 1,2-Dichloroethane	62	4.700	4.693	(0.962)	645856	21.1588	21.2	8296
	47 Benzene	78	4.717	4.710	(0.966)	1329990	22.7585	22.8	8724
*	48 FLUOROBENZENE	96	4.883	4.876	(1.000)	2657114	50.0000		9623
	49 Trichloroethene	130	5.134	5.128	(1.052)	360461	21.4372	21.4	9583
	51 Methyl Cyclohexane	83	5.295	5.288	(1.084)	565444	23.7137	23.7	8906
	52 1,2-Dichloropropane +	63	5.289	5.282	(1.083)	372658	22.3527	22.4	8742
	55 Dibromomethane	93	5.369	5.362	(1.100)	285009	22.6595	22.7	8360
	56 Bromodichloromethane	83	5.461	5.460	(1.118)	543177	21.9582	22.0	9299
	58 1-Bromo-2-chloroethane	63	5.718	5.711	(1.171)	580799	23.1324	23.1	8867
	59 cis-1,3-Dichloropropene	75	5.787	5.786	(1.185)	593354	21.7498	21.7	
	60 4-methyl-2-pentanone	43	5.873	5.872	(1.203)	501313	26.3616	26.4	
$	61 Toluene-d8	98	6.021	6.015	(1.233)	2783851	50.0228	50.0	9750
	62 Toluene +	91	6.073	6.066	(1.244)	1544653	23.9775	24.0	8462
	63 trans-1,3-Dichloropropene	75	6.204	6.204	(1.271)	606084	21.2007	21.2	
M	138 Total-1-3 Dichloropropene	100				1199438	42.9376	42.9	0
	65 1,1,2-Trichloroethane	97	6.370	6.364	(0.875)	333110	26.0506	26.1	9338
	66 1,3-Dichloropropane	76	6.519	6.518	(0.895)	609225	27.9498	27.9	8900
	67 Tetrachloroethene	164	6.542	6.535	(0.899)	317730	25.7275	25.7	7214
	68 2-Hexanone	43	6.548	6.541	(0.899)	359034	28.6525	28.7	
	69 Dibromochloromethane	129	6.731	6.730	(0.925)	452340	24.0943	24.1	9398
	70 1,2-Dibromoethane(EDB)	107	6.862	6.861	(0.943)	374709	24.2534	24.3	8929
*	71 CHLOROBENZENE-d5	82	7.280	7.279	(1.000)	1396553	50.0000		6579
	72 Chlorobenzene ++	112	7.314	7.308	(1.005)	934326	26.2736	26.3	8012
	73 1,1,1,2-Tetrachloroethane	133	7.366	7.359	(1.012)	364153	23.3343	23.3	9031
	74 Ethylbenzene +	106	7.389	7.388	(1.015)	492290	25.8590	25.9	
	75 p,m-Xylene	106	7.492	7.497	(1.029)	1242029	55.2560	55.3	
	76 o-Xylene	106	7.909	7.914	(1.086)	593334	26.9164	26.9	
	77 Styrene	104	7.915	7.914	(1.087)	1040298	26.1391	26.1	9631
M	78 TOTAL XYLENE	106				1835363	82.1723	82.2	0
	79 Bromoform ++	173	8.133	8.132	(1.117)	327690	23.7755	23.8	9243

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
	80 Isopropylbenzene	105	8.287	8.292	(1.138)	1652250	26.0463	26.0	9664
$	82 Bromofluorobenzene	174	8.476	8.481	(1.164)	899689	52.9757	53.0	9371
	83 1,1,2,2-Tetrachloroethane++	83	8.585	8.584	(0.871)	465820	26.6040	26.6	8869
	84 trans-1,4-Dichloro-2-Butene	53	8.648	8.647	(0.877)	148833	28.0043	28.0	9148
	85 1,2,3-Trichloropropane	75	8.659	8.652	(0.878)	611433	27.6966	27.7	8608
	86 Bromobenzene	77	8.670	8.670	(0.879)	1056389	29.9870	30.0	9238
	87 n-Propylbenzene	91	8.751	8.744	(0.887)	2096224	30.0508	30.1	
	88 2-Chlorotoluene	91	8.882	8.887	(0.901)	1435468	28.8235	28.8	
	89 1,3,5-Trimethylbenzene	105	8.945	8.944	(0.907)	1404746	29.4391	29.4	9536(H)
	90 4-Chlorotoluene	91	9.002	9.001	(0.913)	1464923	29.5569	29.6	
	91 tert-butylbenzene	91	9.346	9.339	(0.948)	1207916	28.8725	28.9	9540
	93 1,2,4-Trimethylbenzene	105	9.403	9.402	(0.954)	1327635	29.4304	29.4	
	94 sec-Butylbenzene	105	9.615	9.614	(0.975)	1836472	29.6541	29.7	
	95 p-Isopropyltoluene	119	9.786	9.785	(0.992)	1405092	30.2168	30.2	9640
	96 1,3-Dichlorobenzene	146	9.786	9.785	(0.992)	791260	28.7026	28.7	
*	97 1,4-DICHLOROBENZENE-D4	152	9.861	9.865	(1.000)	1088789	50.0000		5443
	98 1,4-Dichlorobenzene	146	9.895	9.894	(1.003)	770851	27.0430	27.0	
	99 n-Butylbenzene	91	10.318	10.317	(1.046)	1349077	31.0976	31.1	9516
	100 1,2-Dichlorobenzene	146	10.387	10.380	(1.053)	742659	27.1030	27.1	
	101 1,2-Dibromo-3-Chloropropane	157	11.417	11.422	(1.158)	102940	25.1043	25.1	9316
	103 1,2,4-Trichlorobenzene	180	12.618	12.612	(1.280)	415906	25.6346	25.6	
	104 Hexachlorobutadiene	225	12.859	12.858	(1.304)	451889	30.6394	30.6	8674
	105 Naphthalene	128	12.985	12.978	(1.317)	705971	23.8760	23.9	9571
	106 1,2,3-Trichlorobenzene	180	13.339	13.338	(1.353)	383659	25.7794	25.8	

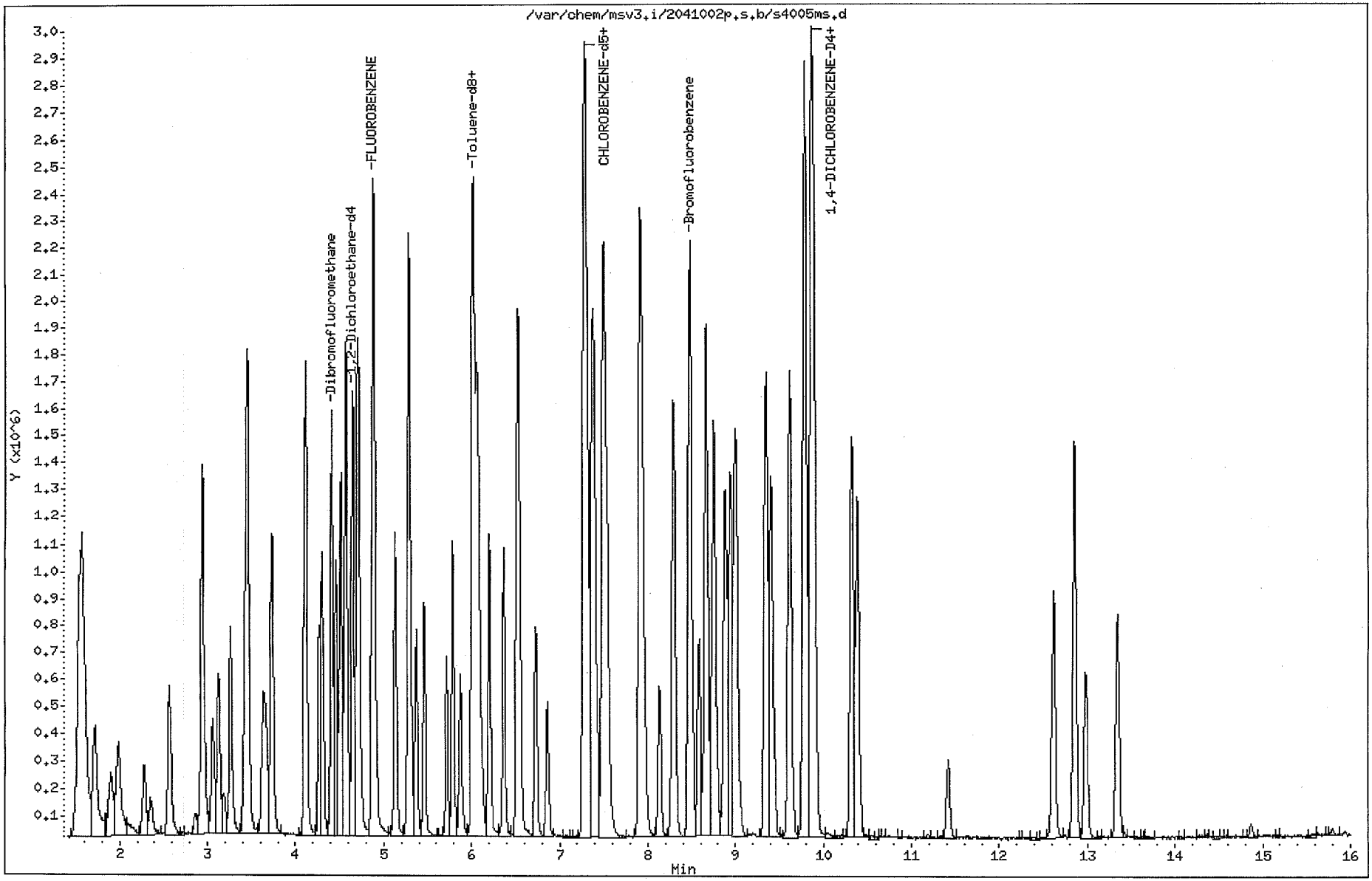
QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

000058

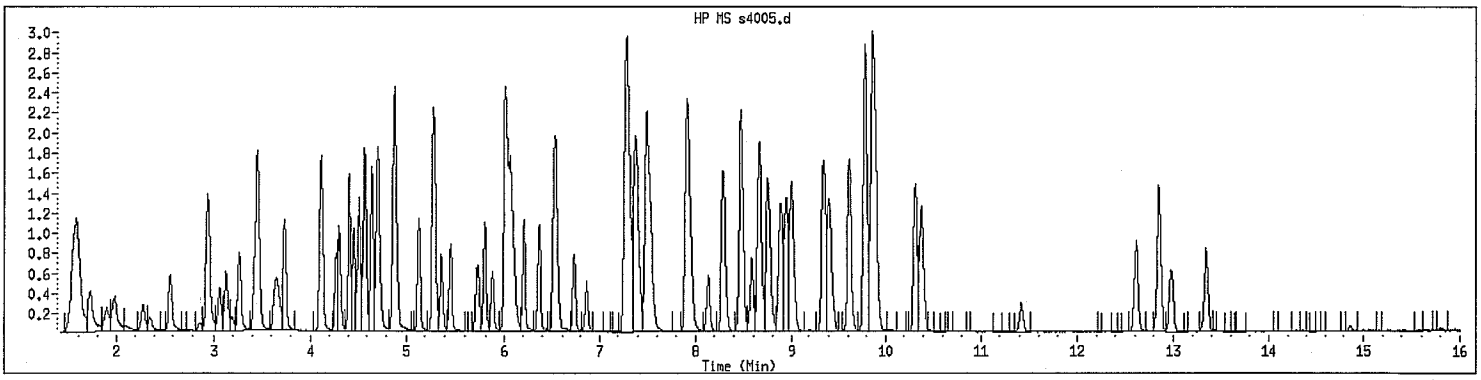
Data File: /var/chem/msv3.i/2041002p.s.b/s4005ms.d
Date : 02-OCT-2004 16:31
Client ID: 86-JETC-MS-Q3-04
Sample Info: 20410010611*86-JETC-MS-Q3-04
Purge Volume: 5.0
Column phase: DB-624

Instrument: msv3.i
Operator: JCK
Column diameter: 0.53



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 20410010611 SampleType : MS
Injection Date: 02-OCT-2004 16:31 Instrument : msv3.i
Operator : JCK
Sample Info : 20410010611*86-JETC-MS-Q3-04
Misc Info : MSV~5300~*1*JCK
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Dilution : 1.0
Matrix : WATER
Integrator : HP RTE Compound Sublist: 8260



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-JETC-MSD-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med) LOW

% Moisture: not dec.

GC Column: DB-624-30M ID: .53 (mm

Instrument ID: MSV3

Soil Extract Volume: (µL

Soil Aliquot Volume: (µL

Lab Sample ID: 20410010612

Lab File ID: 2041002P/S4006

Date Collected: 09/28/04 Time: 1320

Date Received: 10/01/04

Date Analyzed: 10/02/04 Time: 1652

Dilution Factor: 1 Analyst: JCK

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	22.6		0.225	0.500
100-41-4	Ethylbenzene	24.5		0.227	5.00
108-88-3	Toluene	23.3		0.213	5.00
1330-20-7	Xylene (total)	75.6		0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	25.6		0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4006.d
Lab Smp Id: 20410010612 Client Smp ID: 86-JETC-MSD-Q3-04
Inj Date : 02-OCT-2004 16:52
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010612*86-JETC-MSD-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 02-Oct-2004 16:24 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 6 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
1 Dichlorodifluoromethane	85	1.707	1.701	(0.350)	463604	20.5182	20.5	8113
2 Chloromethane ++	50	1.896	1.884	(0.388)	367168	26.7714	26.8	8035
3 Vinyl Chloride +	62	1.981	1.975	(0.406)	335657	23.8371	23.8	8255
5 Bromomethane	94	2.273	2.261	(0.466)	250993	63.1349	63.1	9434(R)
6 Chloroethane	64	2.348	2.341	(0.481)	126459	23.0863	23.1	9292
7 Trichlorofluoromethane	101	2.559	2.553	(0.524)	591317	23.5328	23.5	9344
9 Acrolein	56	2.863	2.856	(0.586)	100924	425.536	426	7973(AR)
10 1,1,2Trichlotrifluoroethane	101	2.937	2.931	(0.602)	346068	25.7289	25.7	8823
11 1,1-Dichloroethene +	96	2.937	2.936	(0.602)	271581	25.4404	25.4	8716
12 Acetone	43	2.989	2.971	(0.612)	123081	17.2425	17.2	(a)
13 Methyl Iodide	142	3.057	3.051	(0.626)	551305	27.2489	27.2	9503
14 Carbon Disulfide	76	3.120	3.114	(0.639)	985771	24.4972	24.5	9674
17 Methyl Acetate	43	3.189	3.182	(0.653)	229543	31.0476	31.0	3200(H)
18 Methylene Chloride	49	3.263	3.251	(0.668)	508944	31.1649	31.2	9377
20 Acrylonitrile	53	3.423	3.417	(0.701)	651653	149.004	149	7968

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
	21 MTBE	73	3.446	3.446	(0.706)	898801	25.6172	25.6	8627
	22 trans-1,2-Dichloroethene	61	3.452	3.446	(0.707)	479340	25.9413	25.9	
	24 Hexane	57	3.658	3.646	(0.749)	459234	27.6063	27.6	9399
	25 Vinyl Acetate	43	3.641	3.640	(0.746)	320290	35.6666	35.7	
	26 1,1-Dichloroethane ++	63	3.727	3.726	(0.763)	610840	21.7843	21.8	8566
M	30 Total 1,2-Dichloroethene	61				1061119	47.0613	47.1	0
	32 2-Butanone	43	4.110	4.098	(0.842)	227539	23.1251	23.1	(a)
	34 cis-1,2-Dichloroethene	61	4.110	4.104	(0.842)	581779	21.1200	21.1	
	35 2,2-Dichloropropane	77	4.121	4.115	(0.844)	541465	20.5686	20.6	9246
	37 Bromochloromethane	128	4.264	4.264	(0.873)	177163	21.4378	21.4	8602
	38 Chloroform +	83	4.304	4.298	(0.882)	698317	22.3726	22.4	9428
$	39 Dibromofluoromethane	111	4.407	4.407	(0.903)	878624	46.7242	46.7	9334
	40 1,1,1-Trichloroethane	97	4.459	4.453	(0.913)	627009	20.7565	20.8	9207
	42 Cyclohexane	56	4.516	4.510	(0.925)	552395	22.6258	22.6	9627
	43 1,1-Dichloropropene	75	4.568	4.561	(0.936)	474212	21.2190	21.2	9133
	44 Carbon Tetrachloride	117	4.579	4.573	(0.938)	514566	20.8134	20.8	8311
$	45 1,2-Dichloroethane-d4	67	4.648	4.641	(0.952)	572567	46.0823	46.1	9163
	46 1,2-Dichloroethane	62	4.699	4.693	(0.962)	634823	21.0357	21.0	8065
	47 Benzene	78	4.711	4.710	(0.965)	1305863	22.6017	22.6	8186
*	48 FLUOROBENZENE	96	4.882	4.876	(1.000)	2627008	50.0000		9634
	49 Trichloroethene	130	5.134	5.128	(1.052)	337465	20.2996	20.3	9595
	51 Methyl Cyclohexane	83	5.283	5.288	(1.082)	540458	22.9256	22.9	8851
	52 1,2-Dichloropropane +	63	5.289	5.282	(1.083)	373329	22.6496	22.6	8782
	55 Dibromomethane	93	5.369	5.362	(1.100)	273799	22.0178	22.0	8262
	56 Bromodichloromethane	83	5.460	5.460	(1.118)	495107	20.2443	20.2	9297
	58 1-Bromo-2-chloroethane	63	5.718	5.711	(1.171)	556604	22.4228	22.4	8894
	59 cis-1,3-Dichloropropene	75	5.786	5.786	(1.185)	570162	21.1392	21.1	
	60 4-methyl-2-pentanone	43	5.872	5.872	(1.203)	543702	28.9183	28.9	
$	61 Toluene-d8	98	6.021	6.015	(1.233)	2722646	49.4837	49.5	9725
	62 Toluene +	91	6.072	6.066	(1.244)	1482985	23.2841	23.3	8455
	63 trans-1,3-Dichloropropene	75	6.204	6.204	(1.271)	609845	21.5767	21.6	
M	138 Total-1-3 Dichloropropene	100				1180007	42.7261	42.7	0
	65 1,1,2-Trichloroethane	97	6.370	6.364	(0.875)	330877	25.6935	25.7	9286
	66 1,3-Dichloropropane	76	6.519	6.518	(0.895)	605376	27.5773	27.6	8897
	67 Tetrachloroethene	164	6.536	6.535	(0.898)	304208	24.4589	24.5	7894
	68 2-Hexanone	43	6.542	6.541	(0.899)	389724	30.8823	30.9	
	69 Dibromochloromethane	129	6.730	6.730	(0.925)	448685	23.7310	23.7	9453
	70 1,2-Dibromoethane(EDB)	107	6.862	6.861	(0.943)	381710	24.5323	24.5	8943
*	71 CHLOROBENZENE-d5	82	7.280	7.279	(1.000)	1406473	50.0000		6556
	72 Chlorobenzene ++	112	7.314	7.308	(1.005)	875763	24.4531	24.5	8031
	73 1,1,1,2-Tetrachloroethane	133	7.366	7.359	(1.012)	345189	21.9631	22.0	9018
	74 Ethylbenzene +	106	7.388	7.388	(1.015)	469908	24.5092	24.5	
	75 p,m-Xylene	106	7.497	7.497	(1.030)	1121420	49.5384	49.5	
	76 o-Xylene	106	7.909	7.914	(1.086)	579005	26.0811	26.1	
	77 Styrene	104	7.926	7.914	(1.089)	1008977	25.1733	25.2	9629
M	78 TOTAL XYLENE	106				1700425	75.6195	75.6	0
	79 Bromoform ++	173	8.132	8.132	(1.117)	330670	23.8225	23.8	9267

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
	80 Isopropylbenzene	105	8.287	8.292	(1.138)	1568665	24.5543	24.6	9718
$	82 Bromofluorobenzene	174	8.476	8.481	(1.164)	885956	51.7991	51.8	9411
	83 1,1,2,2-Tetrachloroethane++	83	8.584	8.584	(0.870)	489298	28.5229	28.5	8836
	84 trans-1,4-Dichloro-2-Butene	53	8.647	8.647	(0.876)	147382	28.3049	28.3	9017
	85 1,2,3-Trichloropropane	75	8.659	8.652	(0.878)	641371	29.6537	29.7	8727
	86 Bromobenzene	77	8.670	8.670	(0.879)	937577	27.1649	27.2	9215
	87 n-Propylbenzene	91	8.750	8.744	(0.887)	2011045	29.4261	29.4	
	88 2-Chlorotoluene	91	8.876	8.887	(0.900)	1372621	28.1317	28.1	
	89 1,3,5-Trimethylbenzene	105	8.950	8.944	(0.907)	1338712	28.6355	28.6	9430(H)
	90 4-Chlorotoluene	91	9.002	9.001	(0.912)	1410886	29.0555	29.1	
	91 tert-butylbenzene	91	9.345	9.339	(0.947)	1174963	28.6658	28.7	9553
	93 1,2,4-Trimethylbenzene	105	9.408	9.402	(0.954)	1302024	29.4597	29.5	
	94 sec-Butylbenzene	105	9.620	9.614	(0.975)	1735399	28.6017	28.6	
	95 p-Isopropyltoluene	119	9.786	9.785	(0.992)	1360082	29.8539	29.9	9560
	96 1,3-Dichlorobenzene	146	9.792	9.785	(0.992)	749566	27.7526	27.8	
*	97 1,4-DICHLOROBENZENE-D4	152	9.866	9.865	(1.000)	1066723	50.0000		5880
	98 1,4-Dichlorobenzene	146	9.895	9.894	(1.003)	759021	27.1788	27.2	
	99 n-Butylbenzene	91	10.318	10.317	(1.046)	1304029	30.6810	30.7	9582
	100 1,2-Dichlorobenzene	146	10.387	10.380	(1.053)	721789	26.8862	26.9	
	101 1,2-Dibromo-3-Chloropropane	157	11.416	11.422	(1.157)	106989	26.7084	26.7	9080
	103 1,2,4-Trichlorobenzene	180	12.612	12.612	(1.278)	422106	26.5549	26.6	
	104 Hexachlorobutadiene	225	12.853	12.858	(1.303)	428328	29.6427	29.6	8878
	105 Naphthalene	128	12.984	12.978	(1.316)	770123	26.5844	26.6	9517
	106 1,2,3-Trichlorobenzene	180	13.339	13.338	(1.352)	397175	27.2396	27.2	

QC Flag Legend

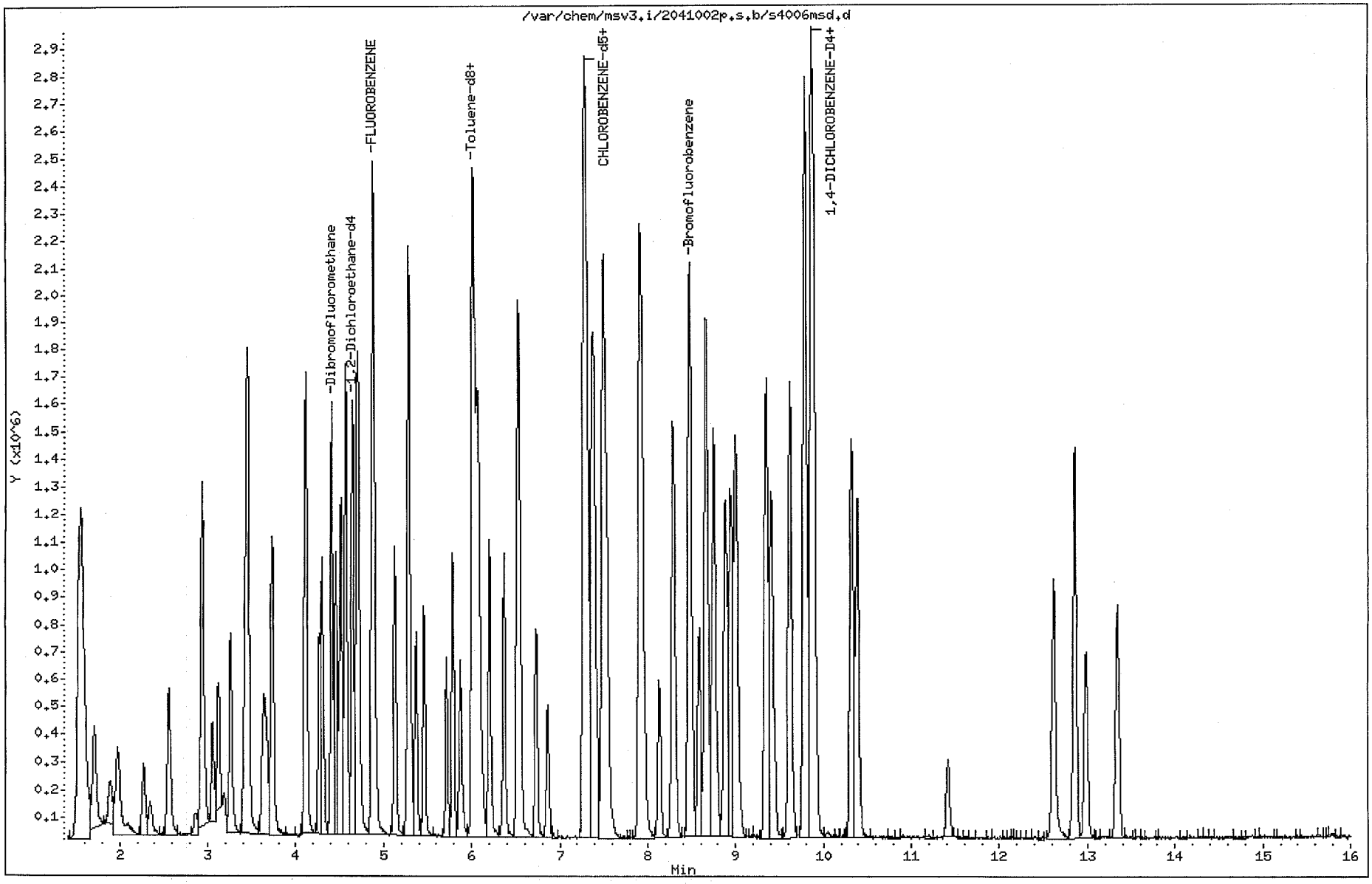
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

000064

Data File: /var/chem/msv3.i/2041002p.s.b/s4006msd.d
Date : 02-OCT-2004 16:52
Client ID: 86-JETC-MSD-Q3-04
Sample Info: 20410010612*86-JETC-MSD-Q3-04
Purge Volume: 5.0
Column phase: DB-624

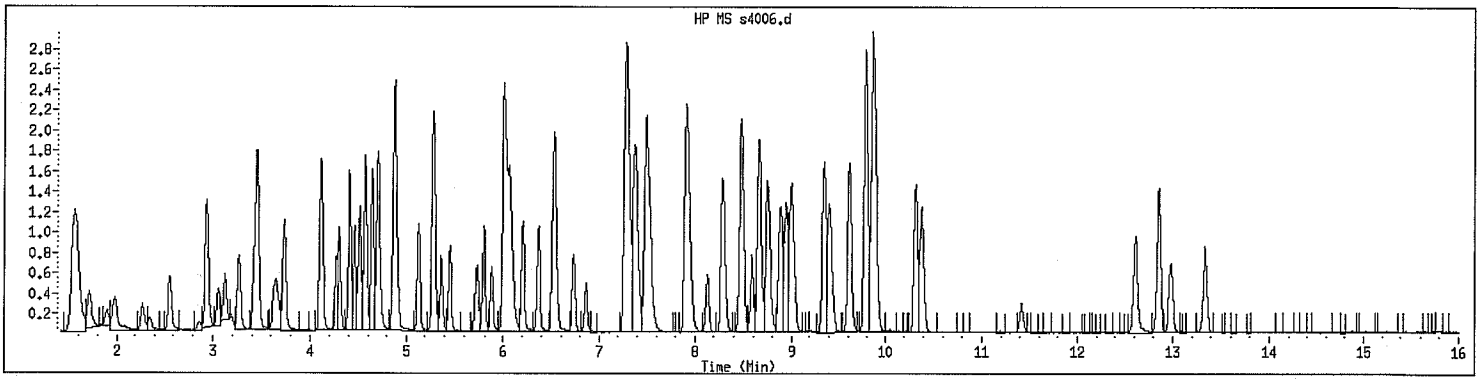
Instrument: msv3.i

Operator: JCK
Column diameter: 0.53



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 20410010612 SampleType : MSD
Injection Date: 02-OCT-2004 16:52 Instrument : msv3.i
Operator : JCK
Sample Info : 20410010612*86-JETC-MSD-Q3-04
Misc Info : MSV~5300~*1*JCK
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Dilution : 1.0
Matrix : WATER
Integrator : HP RTE Compound Sublist: 8260



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-JETC-DUP-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010613

Level: (low/med) LOW

Lab File ID: 2041002P/S4016

% Moisture: not dec.

Date Collected: Time:

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 2021

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4016.d
Lab Smp Id: 20410010613 Client Smp ID: 86-JETC-DUP-Q3-04
Inj Date : 02-OCT-2004 20:21
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010613*86-JETC-DUP-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

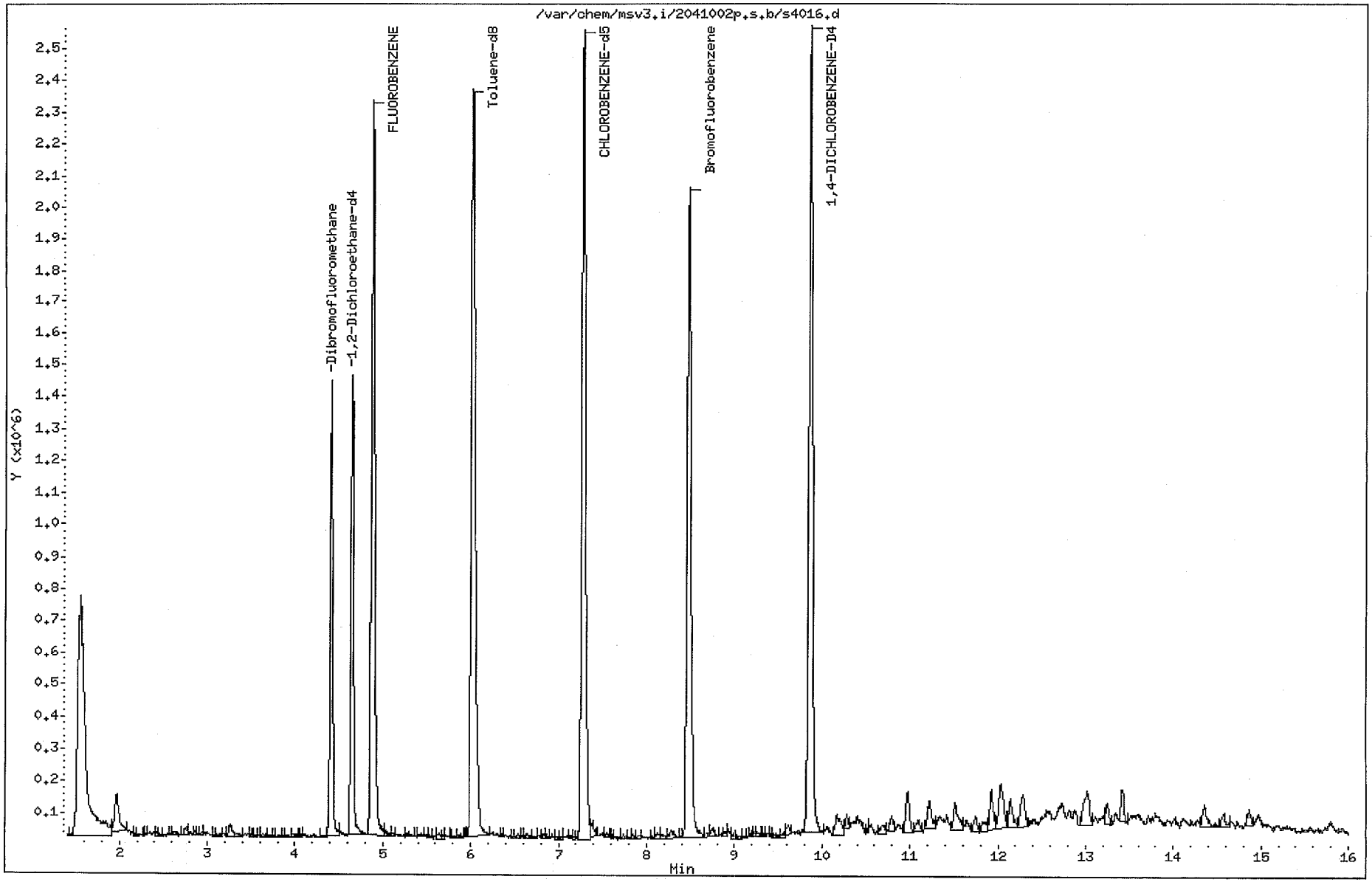
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.412	4.407	(0.904)	843523	48.0692	48.1	9259
$ 45 1,2-Dichloroethane-d4	67	4.647	4.641	(0.952)	521241	44.9550	45.0	9180
* 48 FLUOROBENZENE	96	4.882	4.876	(1.000)	2451487	50.0000		9623
$ 61 Toluene-d8	98	6.015	6.015	(1.232)	2585248	50.3506	50.4	9582
* 71 CHLOROBENZENE-d5	82	7.279	7.279	(1.000)	1314857	50.0000		5839
$ 82 Bromofluorobenzene	174	8.475	8.481	(1.164)	842931	52.7175	52.7	9262
* 97 1,4-DICHLOROBENZENE-D4	152	9.860	9.865	(1.000)	1006004	50.0000		4801

000068

Data File: /var/chem/msv3.i/2041002p.s.b/s4016.d
Date : 02-OCT-2004 20:21
Client ID: 86-JETC-DUP-Q3-04
Sample Info: 20410010613*86-JETC-DUP-Q3-04
Purge Volume: 5.0
Column phase: DB-624

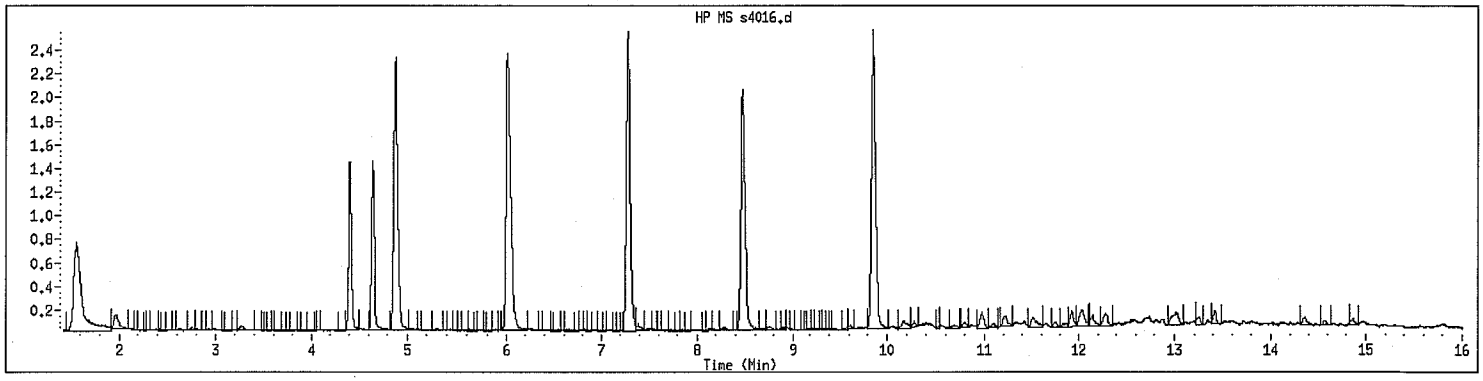
Instrument: msv3.i
Operator: JCK
Column diameter: 0.53



Data file : /var/chem/msv3.i/2041002p.s.b/s4016.d
Report Date: 10/03/2004 09:01

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 20410010613	SampleType	: SAMPLE
Injection Date	: 02-OCT-2004 20:21	Instrument	: msv3.i
Operator	: JCK		
Sample Info	: 20410010613*86-JETC-DUP-Q3-04		
Misc Info	: MSV~5300~*1*JCK		
Method	: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-JETC-EB-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010614

Level: (low/med) LOW

Lab File ID: 2041002P/S4017

% Moisture: not dec.

Date Collected: 09/29/04 Time: 1545

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 2042

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4017.d
Lab Smp Id: 20410010614 Client Smp ID: 86-JETC-EB-Q3-04
Inj Date : 02-OCT-2004 20:42
Operator : JCK Inst ID: msv3.i
Smp Info : 20410010614*86-JETC-EB-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:57 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.412	4.407	(0.903)	815286	46.5951	46.6	9290
$ 45 1,2-Dichloroethane-d4	67	4.647	4.641	(0.951)	534912	46.2681	46.3	9206
* 48 FLUOROBENZENE	96	4.887	4.876	(1.000)	2444383	50.0000		9593
$ 61 Toluene-d8	98	6.014	6.015	(1.231)	2575390	50.3044	50.3	9625
* 71 CHLOROBENZENE-d5	82	7.279	7.279	(1.000)	1293312	50.0000		5817
$ 82 Bromofluorobenzene	174	8.481	8.481	(1.165)	822137	52.2736	52.3	9333
* 97 1,4-DICHLOROBENZENE-D4	152	9.859	9.865	(1.000)	959007	50.0000		4796

Data File: /var/chem/msv3.i/2041002p.s.b/s4017.d

Date : 02-OCT-2004 20:42

Client ID: 86-JETC-EB-Q3-04

Sample Info: 20410010614*86-JETC-EB-Q3-04

Purge Volume: 5.0

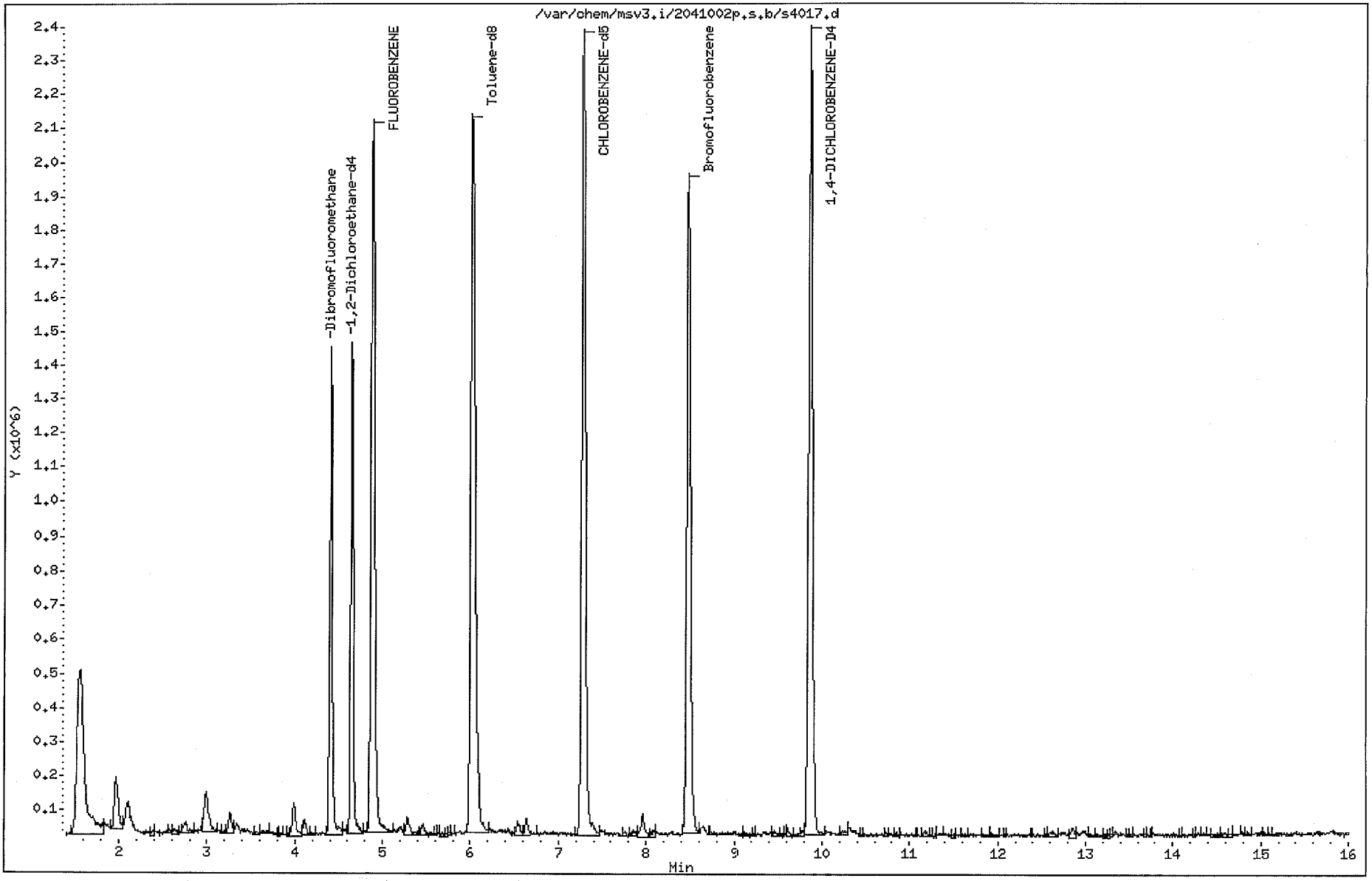
Column phase: DB-624

Instrument: msv3.i

Operator: JCK

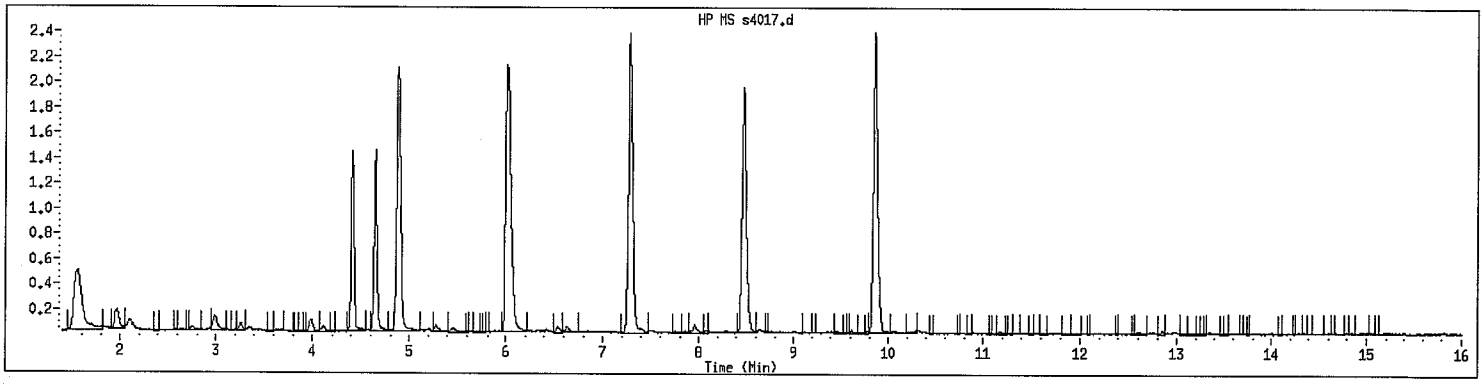
Column diameter: 0.53

000072



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 20410010614	SampleType	: SAMPLE
Injection Date	: 02-OCT-2004 20:42	Instrument	: msv3.i
Operator	: JCK		
Sample Info	: 20410010614*86-JETC-EB-Q3-04		
Misc Info	: MSV~5300~*1*JCK		
Method	: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: btex+lcset



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-JETC-TB-Q3-04

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20410010615

Level: (low/med) LOW

Lab File ID: 2041002P/S4018

% Moisture: not dec.

Date Collected: Time:

GC Column: DB-624-30M ID: .53 (mm

Date Received: 10/01/04

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 2103

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4018.d
Lab Smp Id: 20410010615 Client Smp ID: 86-JETC-TB-Q3-04
Inj Date : 02-OCT-2004 21:03
Operator : RJO Inst ID: msv3.i
Smp Info : 20410010615*86-JETC-TB-Q3-04
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 06:25 rsp Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: btex+lcset.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

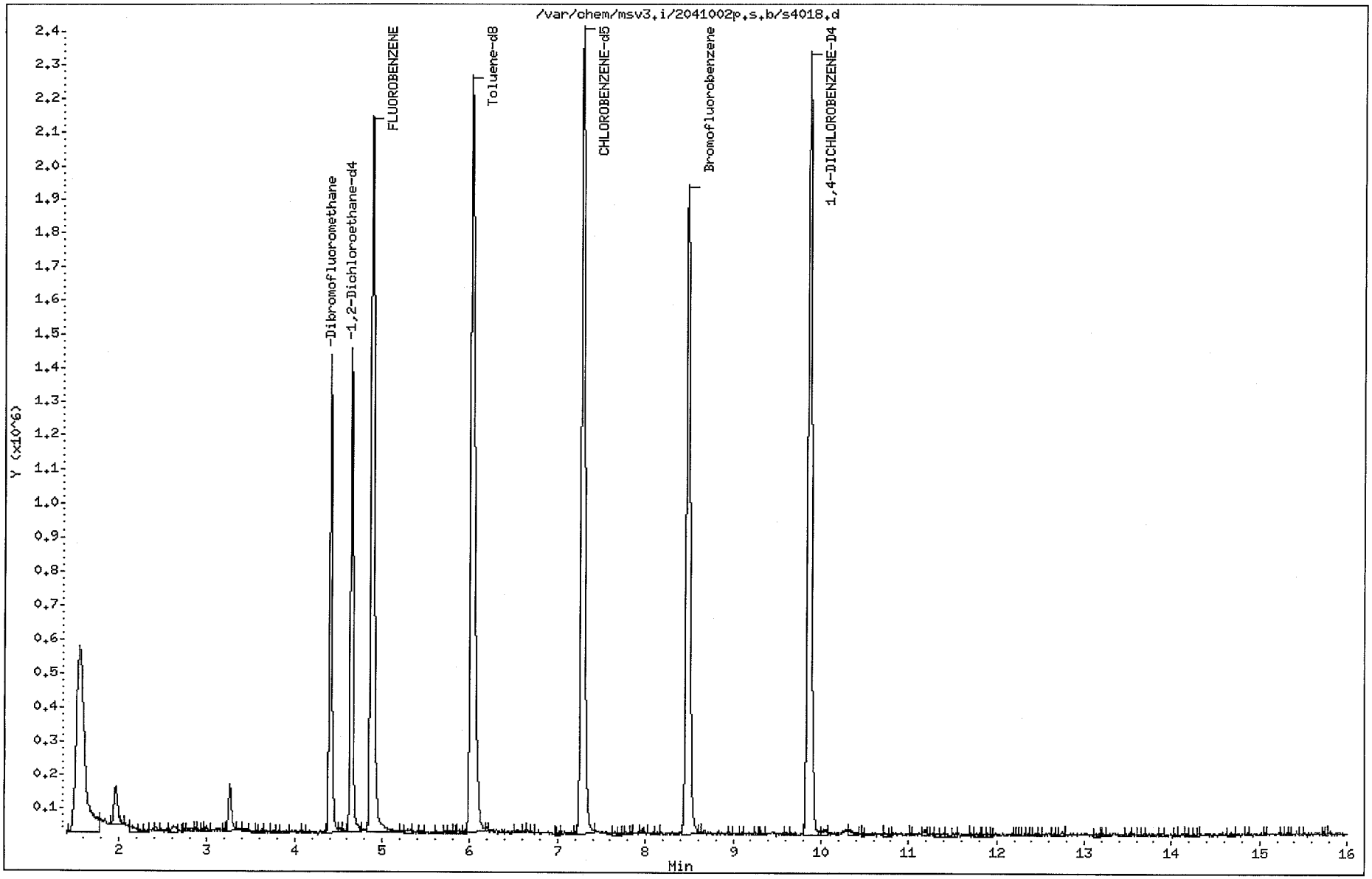
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
$ 39 Dibromofluoromethane	111	4.407	4.407	(0.904)	834949	47.5580	47.6	9305
$ 45 1,2-Dichloroethane-d4	67	4.647	4.641	(0.953)	541918	46.7161	46.7	9175
* 48 FLUOROBENZENE	96	4.876	4.876	(1.000)	2452652	50.0000		9627
$ 61 Toluene-d8	98	6.015	6.015	(1.234)	2569320	50.0166	50.0	9660
* 71 CHLOROBENZENE-d5	82	7.279	7.279	(1.000)	1272972	50.0000		5840
$ 82 Bromofluorobenzene	174	8.481	8.481	(1.165)	820848	53.0256	53.0	9220
* 97 1,4-DICHLOROBENZENE-D4	152	9.865	9.865	(1.000)	960797	50.0000		4785

Data File: /var/chem/msv3.i/2041002p.s.b/s4018.d
Date : 02-OCT-2004 21:03
Client ID: 86-JETC-TB-Q3-04
Sample Info: 20410010615*86-JETC-TB-Q3-04
Purge Volume: 5.0
Column phase: DB-624

Instrument: msv3.i
Operator: RJO
Column diameter: 0.53

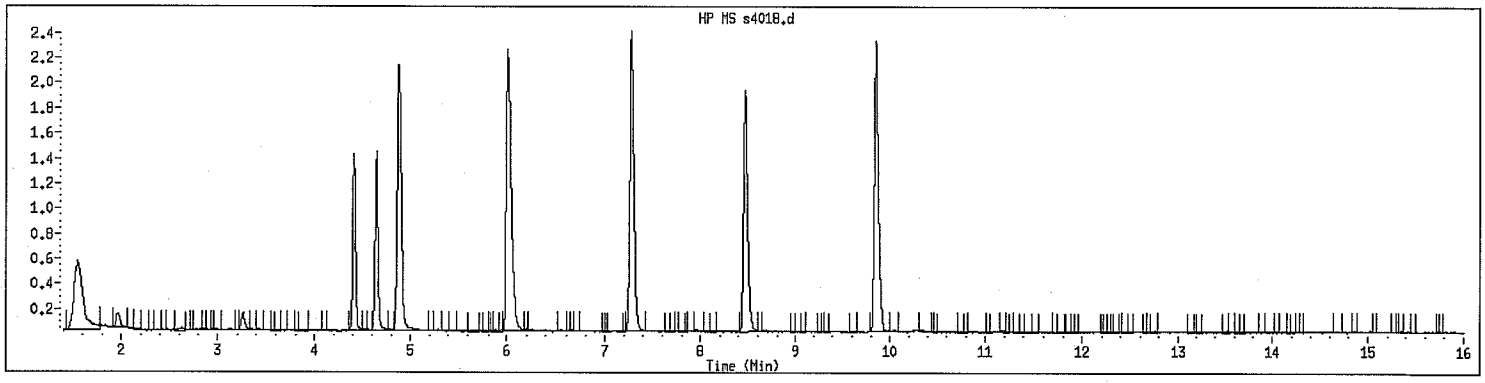
000076



Data file : /var/chem/msv3.i/2041002p.s.b/s4018.d
Report Date: 10/03/2004 06:53

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 20410010615	SampleType	: SAMPLE
Injection Date	: 02-OCT-2004 21:03	Instrument	: msv3.i
Operator	: RJO		
Sample Info	: 20410010615*86-JETC-TB-Q3-04		
Misc Info	: MSV~5300~*1*JCK		
Method	: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: btex+lcset



NO MANUAL INTEGRATIONS

GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

alibration File Names:
evel 1: /var/chem/msv3.i/2040907.s.b/s3198.d
evel 2: /var/chem/msv3.i/2040907.s.b/s3199.d
evel 3: /var/chem/msv3.i/2040907.s.b/s3200.d
evel 4: /var/chem/msv3.i/2040907.s.b/s3201.d
evel 5: /var/chem/msv3.i/2040907.s.b/s3202.d
evel 6: /var/chem/msv3.i/2040913.s.b/s3449.d
evel 7: /var/chem/msv3.i/2040913.s.b/s3447.d
evel 8: /var/chem/msv3.i/2040913.s.b/s3448.d

Compound	5 Level 1 / 0.2000 Level 7	20 Level 2 / 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
1 Dichlorodifluoromethane	0.47348	0.43912	0.42521	0.38434	0.42808	+++++					
	+++++	+++++					AVRG		0.43005		7.43073
2 Chloromethane ++	0.28758	0.26821	0.24832	0.22721	0.25433	0.28058					
	+++++	+++++					AVRG		0.26104		8.54726
3 Vinyl Chloride +	0.29434	0.26216	0.25128	0.23492	0.26330	0.27727					
	+++++	0.29281					AVRG		0.26801		8.09700
4 1,3-Butadiene	0.19741	0.17200	0.17213	0.17675	0.17535	+++++					
	+++++	+++++					AVRG		0.17873		5.95500
5 Bromomethane	24980	90057	170712	306610	568800	11769					
	+++++	+++++					LINR	-0.10865	0.06967		0.99576

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GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 0.2000 Level 7	20 Level 2 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
6 Chloroethane	0.11035	0.12066	0.11038	0.09945	0.08044	++++++					
	+++++	+++++					AVRG		0.10426		14.65586
7 Trichlorofluoromethane	0.50897	0.48123	0.47507	0.44321	0.48276	++++++					
	+++++	+++++					AVRG		0.47825		4.91566
8 Ethyl Ether	0.18418	0.18870	0.17396	0.17832	0.14040	++++++					
	+++++	+++++					AVRG		0.17311		11.05014
9 Acrolein	0.00424	0.00395	0.00393	0.00563	++++++	0.00481					
	+++++	+++++					AVRG		0.00451		15.92335
10 1,1,2Trichlotrifluoroethane	0.29083	0.26008	0.24295	0.22845	0.25772	++++++					
	+++++	+++++					AVRG		0.25601		9.08108
11 1,1-Dichloroethene +	0.21907	0.20039	0.19860	0.18363	0.19622	0.22118					
	+++++	+++++					AVRG		0.20318		7.08498
12 Acetone	36129	104385	260801	517124	912518	++++++					
	+++++	+++++					LINR	-0.06789	0.11352		0.99939
13 Methyl Iodide	0.37858	0.39480	0.39141	0.36568	0.40172	0.37828					
	+++++	+++++					AVRG		0.38508		3.43848
14 Carbon Disulfide	0.78416	0.76327	0.74804	0.69522	0.76419	0.84048					
	+++++	+++++					AVRG		0.76589		6.18475

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GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 0.2000 Level 7	20 Level 2 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
15 Acetonitrile	0.08049	0.05364	0.04959	0.04997	0.05595	+++++					
	+++++	+++++					AVRG		0.05793		22.24683
16 Ally Chloride	0.34035	0.34194	0.32611	0.33236	0.30288	+++++					
	+++++	+++++					AVRG		0.32873		4.80468
17 Methyl Acetate	0.14272	0.14551	0.14610	0.12675	0.14251	+++++					
	+++++	+++++					AVRG		0.14072		5.66507
18 Methylene Chloride	91426	281277	633661	1269583	2406799	+++++					
	+++++	+++++					LINR	-0.02475	0.29895		0.99808
19 tert-butyl alcohol	0.03543	0.03249	0.02910	0.03102	0.02726	+++++					
	+++++	+++++					AVRG		0.03106		10.10920
20 Acrylonitrile	0.09041	0.08901	0.08511	0.07368	0.07799	+++++					
	+++++	+++++					AVRG		0.08324		8.64618
21 MTBE	0.70507	0.68775	0.67644	0.62103	0.64866	+++++					
	+++++	+++++					AVRG		0.66779		4.97541
22 trans-1,2-Dichloroethene	0.37734	0.35635	0.34435	0.31053	0.32836	0.39322					
	+++++	+++++					AVRG		0.35169		8.71487
23 2-Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-

000080

GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 / 0.2000 Level 7	20 Level 2 / 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
24 Hexane	0.36743	0.27026	0.31732	0.29728	0.33079	++++++						
	++++++	++++++					AVRG		0.31662		11.50309	
25 Vinyl Acetate	0.16189	0.18027	0.15622	0.17054	0.18567	++++++						
	++++++	++++++					AVRG		0.17092		7.18202	
26 1,1-Dichloroethane ++	0.53961	0.55163	0.53556	0.48609	0.50150	0.58779						
	++++++	++++++					AVRG		0.53369		6.80214	
27 Isobutyl Alcohol	0.01008	0.00994	0.00981	0.01172	0.01012	++++++						
	++++++	++++++					AVRG		0.01033		7.60630	
28 2 Butanol	0.39796	0.38900	0.08929	0.38632	0.33340	++++++						
	++++++	++++++					AVRG		0.31919		41.04029	<-
29 Isopropyl Ether	0.79592	0.77801	0.75408	0.77263	0.66680	++++++						
	++++++	++++++					AVRG		0.75349		6.72891	
30 Total 1,2-Dichloroethene	0.47309	0.44920	0.43265	0.38777	0.40172	++++++						
	++++++	++++++					AVRG		0.42889		8.08479	
31 Chloroprene	0.45146	0.40735	0.41038	0.41385	0.38950	++++++						
	++++++	++++++					AVRG		0.41451		5.47408	
32 2-Butanone	0.21870	0.20828	0.18799	0.16018	0.16123	++++++						
	++++++	++++++					AVRG		0.18728		14.23265	

000081

GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 / 0.2000 Level 7	20 Level 2 / 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
33 Ethyl Acetate	0.27080	0.26781	0.25428	0.26368	0.19973	++++++					
	++++++	++++++					AVRG		0.25126		11.73067
34 cis-1,2-Dichloroethene	0.56883	0.54206	0.52096	0.46502	0.47508	0.57380					
	++++++	++++++					AVRG		0.52429		8.82235
35 2,2-Dichloropropane	0.52677	0.52036	0.48973	0.45776	0.47973	0.53191					
	++++++	++++++					AVRG		0.50104		5.94997
36 Propionitril	0.03973	0.03904	0.03943	0.04320	0.03727	++++++					
	++++++	++++++					AVRG		0.03973		5.43647
37 Bromochloromethane	0.15920	0.16178	0.15597	0.14122	0.14882	0.17676					
	++++++	++++++					AVRG		0.15729		7.70750
38 Chloroform +	0.62637	0.60329	0.58756	0.54107	0.55888	0.64731					
	++++++	++++++					AVRG		0.59408		6.75528
40 1,1,1-Trichloroethane	0.59325	0.59012	0.56875	0.53373	0.55711	0.60674					
	++++++	++++++					AVRG		0.57495		4.68718
41 n-Butanol	0.00817	0.00953	0.00859	0.00918	0.00871	++++++					
	++++++	++++++					AVRG		0.00884		5.98755
42 Cyclohexane	0.49507	0.47303	0.45354	0.42285	0.44035	0.50325					
	++++++	++++++					AVRG		0.46468		6.76886

000082

GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 0.2000 Level 7	20 Level 2 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
43 1,1-Dichloropropene	0.44375	0.43309	0.41459	0.38174	0.40424	0.47475					
	++++++	++++++					AVRG		0.42536		7.65565
44 Carbon Tetrachloride	0.49637	0.48794	0.46022	0.43881	0.46908	0.47089					
	++++++	++++++					AVRG		0.47055		4.34047
46 1,2-Dichloroethane	0.60606	0.59659	0.57247	0.52118	0.51935	0.63068					
	++++++	++++++					AVRG		0.57439		7.98918
47 Benzene	1.15279	1.08733	1.05806	0.96694	1.00582	1.18975					
	++++++	1.23705					AVRG		1.09968		8.94990
49 Trichloroethene	0.33157	0.31395	0.30708	0.28533	0.30860	0.35192					
	++++++	++++++					AVRG		0.31641		7.22187
50 2,3Dichloro-1-propene	0.51963	0.49259	0.44697	0.45183	0.43542	++++++					
	++++++	++++++					AVRG		0.46929		7.55441
51 Methyl Cyclohexane	0.49106	0.46885	0.43926	0.41241	0.43188	++++++					
	++++++	++++++					AVRG		0.44869		6.94949
52 1,2-Dichloropropane +	0.34093	0.31196	0.30508	0.27953	0.28559	0.35920					
	++++++	++++++					AVRG		0.31372		9.92431
53 Methyl Methacrylate	0.45632	0.44089	0.39362	0.40636	0.37950	++++++					
	++++++	++++++					AVRG		0.41534		7.77299

000083

GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 0.2000 Level 7	20 Level 2 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
54 1,4-Dioxane	0.00231	0.00248	0.00232	0.00250	0.00242	++++++					
	++++++	++++++					AVRG		0.00241		3.63020
55 Dibromomethane	0.25603	0.23846	0.23705	0.21531	0.22181	0.25144					
	++++++	++++++					AVRG		0.23668		6.74206
56 Bromodichloromethane	0.48002	0.47789	0.46858	0.43681	0.45584	0.47420					
	++++++	0.46505					AVRG		0.46548		3.24119
57 2-Chloroethyl vinyl ether	0.17971	0.17863	0.18958	0.18150	0.18808	++++++					
	++++++	++++++					AVRG		0.18350		2.72424
58 1-Bromo-2-chloroethane	0.48151	0.47683	0.46878	0.43608	0.44029	0.53126					
	++++++	++++++					AVRG		0.47246		7.28956
59 cis-1,3-Dichloropropene	0.53767	0.52707	0.51899	0.48212	0.50092	++++++					
	++++++	++++++					AVRG		0.51336		4.29166
138 Total-1-3 Dichloropropene	0.54012	0.53614	0.53136	0.50213	0.51851	++++++					
	++++++	++++++					AVRG		0.52565		2.94119
60 4-methyl-2-pentanone	0.37739	0.37740	0.36630	0.32532	0.34282	++++++					
	++++++	++++++					AVRG		0.35785		6.43289
62 Toluene +	1.27479	1.22309	1.15986	1.10677	1.12656	1.38233					
	++++++	++++++					AVRG		1.21223		8.58628

000084

GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 / 0.2000 Level 7	20 Level 2 / 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
63 trans-1,3-Dichloropropene	0.54257	0.54522	0.54373	0.52215	0.53609	+++++					
	+++++	+++++					AVRG		0.53795		1.76502
64 Ethyl Methacrylate	0.29279	0.29407	0.27306	0.28306	0.26540	+++++					
	+++++	+++++					AVRG		0.28168		4.41408
65 1,1,2-Trichloroethane	0.51494	0.47272	0.45514	0.41655	0.42161	0.49695					
	+++++	0.42674					AVRG		0.45781		8.46094
66 1,3-Dichloropropane	0.87550	0.83812	0.79738	0.70519	0.68577	+++++					
	+++++	+++++					AVRG		0.78039		10.58152
67 Tetrachloroethene	0.49638	0.44534	0.41811	0.37377	0.38020	0.53912					
	+++++	+++++					AVRG		0.44215		14.81184
68 2-Hexanone	0.52446	0.49450	0.46188	0.38127	0.38103	+++++					
	+++++	+++++					AVRG		0.44863		14.58926
69 Dibromochloromethane	0.72722	0.67979	0.67803	0.62325	0.63382	0.64195					
	+++++	0.72095					AVRG		0.67215		6.15830
70 1,2-Dibromoethane(EDB)	0.54943	0.56382	0.55167	0.49112	0.50912	0.61396					
	0.64284	0.50316					AVRG		0.55314		9.70153
72 Chlorobenzene ++	1.40329	1.29621	1.21705	1.11959	1.13624	1.46672					
	+++++	+++++					AVRG		1.27318		11.13036

000085

GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 0.2000 Level 7	20 Level 2 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
73 1,1,1,2-Tetrachloroethane	0.60223	0.55233	0.52289	0.46650	0.47145	0.56870					
	0.70948	0.57626					AVRG		0.55873		13.94184
74 Ethylbenzene +	0.79902	0.69333	0.66550	0.60396	0.60347	0.72425					
	+++++	+++++					AVRG		0.68159		11.00566
75 p,m-Xylene	0.88611	0.81084	0.79973	0.72055	0.73173	0.87959					
	+++++	+++++					AVRG		0.80476		8.73439
76 o-Xylene	0.80897	0.82880	0.79976	0.71153	0.72394	0.86228					
	+++++	+++++					AVRG		0.78921		7.53958
77 Styrene	1.51629	1.48870	1.42108	1.28457	1.29644	1.54223					
	+++++	+++++					AVRG		1.42489		7.83994
78 TOTAL XYLENE	0.86040	0.81683	0.79974	0.71755	0.72913	0.87382					
	+++++	+++++					AVRG		0.79958		8.14380
79 Bromoform ++	0.51072	0.50674	0.49924	0.45725	0.48288	0.53019					
	+++++	0.46716					AVRG		0.49345		5.21385
80 Isopropylbenzene	2.39518	2.31095	2.21491	1.99009	2.01103	2.42022					
	+++++	2.55552					AVRG		2.27113		9.33814
81 Cyclohexanone	66959	194759	443473	765069	1034128	+++++					
	+++++	+++++					LINR	-0.72088	0.03840		0.92354

980000

eport Date : 14-Oct-2004 16:00

GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 / 0.2000 Level 7	20 Level 2 / 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
83 1,1,2,2-Tetrachloroethane++	0.84759	0.77357	0.74858	0.70172	0.62930	0.84674					
	1.07428	0.81084					AVRG		0.80408		16.40525
84 trans-1,4-Dichloro-2-Butene	0.27400	0.25799	0.24994	0.23242	0.20597	+++++					
	+++++	+++++					AVRG		0.24406		10.66756
85 1,2,3-Trichloropropane	1.18491	1.06104	1.03339	0.93969	0.84993	+++++					
	+++++	+++++					AVRG		1.01379		12.50020
86 Bromobenzene	1.91578	1.73283	1.50957	1.56979	1.22680	1.75186					
	+++++	+++++					AVRG		1.61777		14.80676
87 n-Propylbenzene	3.54801	3.37565	3.25959	3.09311	2.74050	+++++					
	+++++	+++++					AVRG		3.20337		9.59675
88 2-Chlorotoluene	2.48738	2.41843	2.33949	2.22141	1.96845	+++++					
	+++++	+++++					AVRG		2.28703		8.90623
89 1,3,5-Trimethylbenzene	2.27751	2.33260	2.27382	2.13643	1.93609	+++++					
	+++++	+++++					AVRG		2.19129		7.29989
90 4-Chlorotoluene	2.58433	2.37240	2.27597	2.16684	1.98072	+++++					
	+++++	+++++					AVRG		2.27605		9.90921
91 tert-butylbenzene	2.12070	2.00859	1.93582	1.85997	1.68106	+++++					
	+++++	+++++					AVRG		1.92123		8.59473

GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 / 0.2000 Level 7	20 Level 2 / 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
92 Pentachloroethane	0.21523	0.19404	0.19967	0.20244	0.19560	++++++					
	++++++	++++++					AVRG		0.20140		4.17676
93 1,2,4-Trimethylbenzene	2.02011	2.17941	2.21049	2.07791	1.87013	++++++					
	++++++	++++++					AVRG		2.07161		6.57422
94 sec-Butylbenzene	3.11557	2.99830	2.91908	2.72989	2.45705	++++++					
	++++++	++++++					AVRG		2.84398		9.06648
95 p-Isopropyltoluene	2.24625	2.28382	2.24719	2.06299	1.83682	++++++					
	++++++	++++++					AVRG		2.13541		8.79873
96 1,3-Dichlorobenzene	1.43876	1.34263	1.29692	1.20080	1.05076	++++++					
	++++++	++++++					AVRG		1.26597		11.66655
98 1,4-Dichlorobenzene	1.45095	1.38091	1.31387	1.25337	1.14593	++++++					
	++++++	++++++					AVRG		1.30900		8.96051
99 n-Butylbenzene	1.89220	2.13317	2.09885	2.01159	1.82525	++++++					
	++++++	++++++					AVRG		1.99221		6.61633
100 1,2-Dichlorobenzene	1.37927	1.31876	1.28518	1.21172	1.09678	++++++					
	++++++	++++++					AVRG		1.25834		8.63901
101 1,2-Dibromo-3-Chloropropane	20088	80766	198905	392849	791246	7281					
	1336	1812					LINR	-0.02528	0.17928		0.99932

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GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 / 0.2000 Level 7	20 Level 2 / 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
102 Benzal Chloride	+++++	+++++	0.00141	0.00106	0.00061	+++++						
	+++++	+++++					AVRG		0.00103		39.25673	<-
103 1,2,4-Trichlorobenzene	0.69591	0.77824	0.76032	0.72669	0.67380	0.83544						
	+++++	+++++					AVRG		0.74507		7.90243	
104 Hexachlorobutadiene	0.78321	0.70489	0.68513	0.63877	0.57446	+++++						
	+++++	+++++					AVRG		0.67729		11.46058	
105 Naphthalene	1.29493	1.42021	1.43957	1.34556	1.28897	+++++						
	+++++	+++++					AVRG		1.35785		5.13175	
106 1,2,3-Trichlorobenzene	0.66474	0.72360	0.71317	0.68875	0.62694	+++++						
	+++++	+++++					AVRG		0.68344		5.69812	
135 Methacrylonitrile	0.15676	0.16698	0.16545	0.17914	0.15964	+++++						
	+++++	+++++					AVRG		0.16559		5.21960	
136 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	
137 1,5-Cyclooctadiene	0.44632	0.37170	0.37155	0.37297	0.36104	+++++						
	+++++	+++++					AVRG		0.38472		9.03805	

GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

Compound	5 Level 1 / 0.2000 Level 7	20 Level 2 / 0.4000 Level 8	50 Level 3	100 Level 4	200 Level 5	2 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
39 Dibromofluoromethane	0.37799	0.37556	0.36379	0.33102	0.34117	+++++					
	+++++	+++++					AVRG		0.35791		5.84775
45 1,2-Dichloroethane-d4	0.24942	0.24993	0.23898	0.22137	0.22272	+++++					
	+++++	+++++					AVRG		0.23648		5.87500
61 Toluene-d8	1.15538	1.08181	1.03196	0.96943	0.99751	+++++					
	+++++	+++++					AVRG		1.04722		7.02501
82 Bromofluorobenzene	0.67010	0.63554	0.60479	0.55441	0.57533	+++++					
	+++++	+++++					AVRG		0.60803		7.61011

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GCAL, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 07-SEP-2004 08:45
nd Cal Date : 13-SEP-2004 13:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
al Date : 14-Oct-2004 14:08 rsp

```
verage %RSD Results.
==================================================
alculated Average %RSD = 9.11774730
aximun Average %RSD    =         15
 Passed Average %RSD Test.
```

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

Data File: /var/chem/msv3.i/2040913.s.b/s3443.d

Date : 13-SEP-2004 08:29

Client ID: V3BFB

Instrument: msv3.i

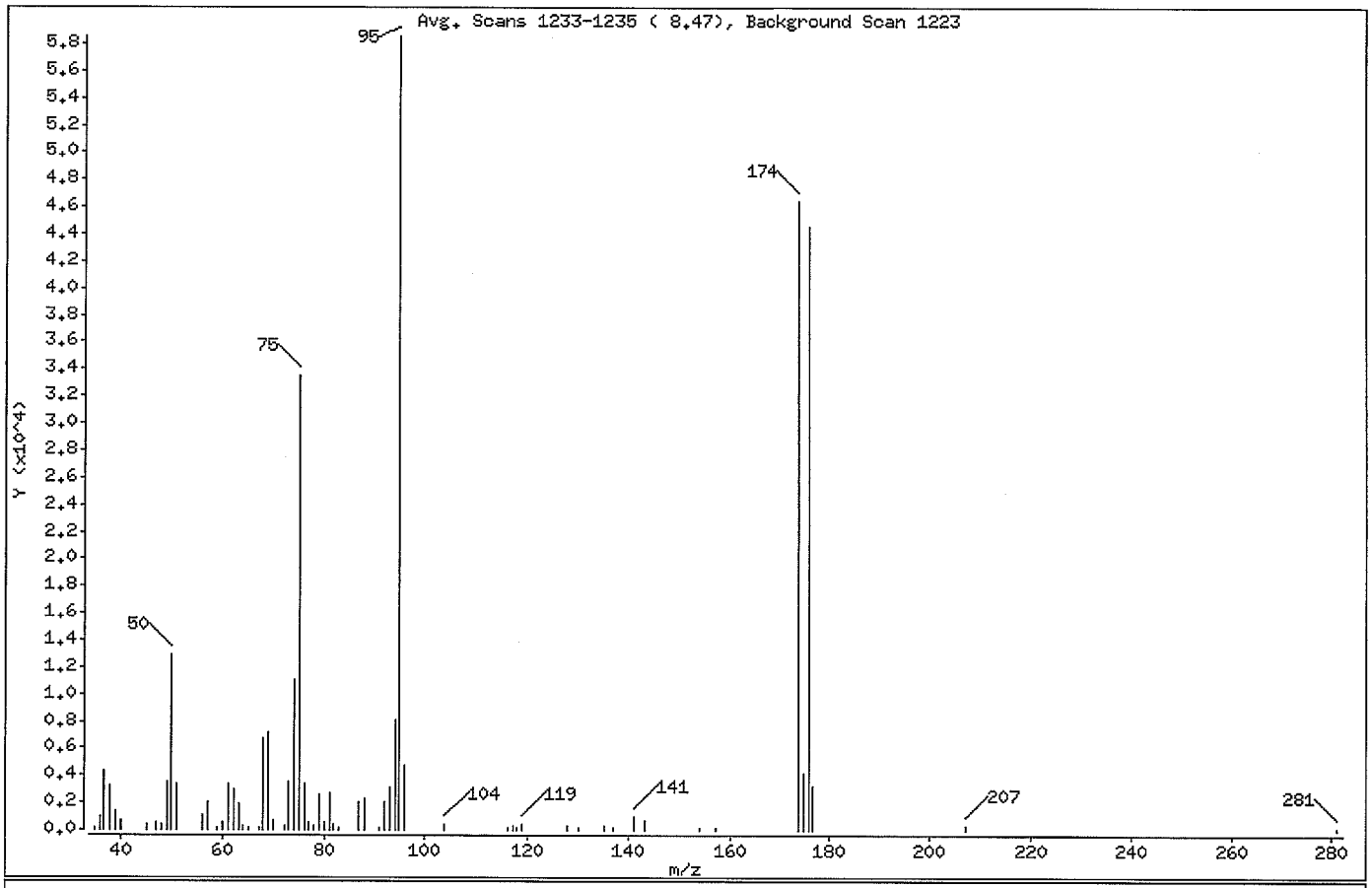
Sample Info: 1000*V3BFB

Operator: KCB

Column phase: DB-624-30M

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.15
75	30.00 - 60.00% of mass 95	57.33
96	5.00 - 9.00% of mass 95	7.98
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 99.99% of mass 95	79.22
175	5.00 - 9.00% of mass 174	7.07 (8.93)
176	95.00 - 101.00% of mass 174	76.14 (96.11)
177	5.00 - 9.00% of mass 176	5.49 (7.21)

Data File: /var/chem/msv3.i/2040913.s.b/s3443.d

Date : 13-SEP-2004 08:29

Client ID: V3BFB

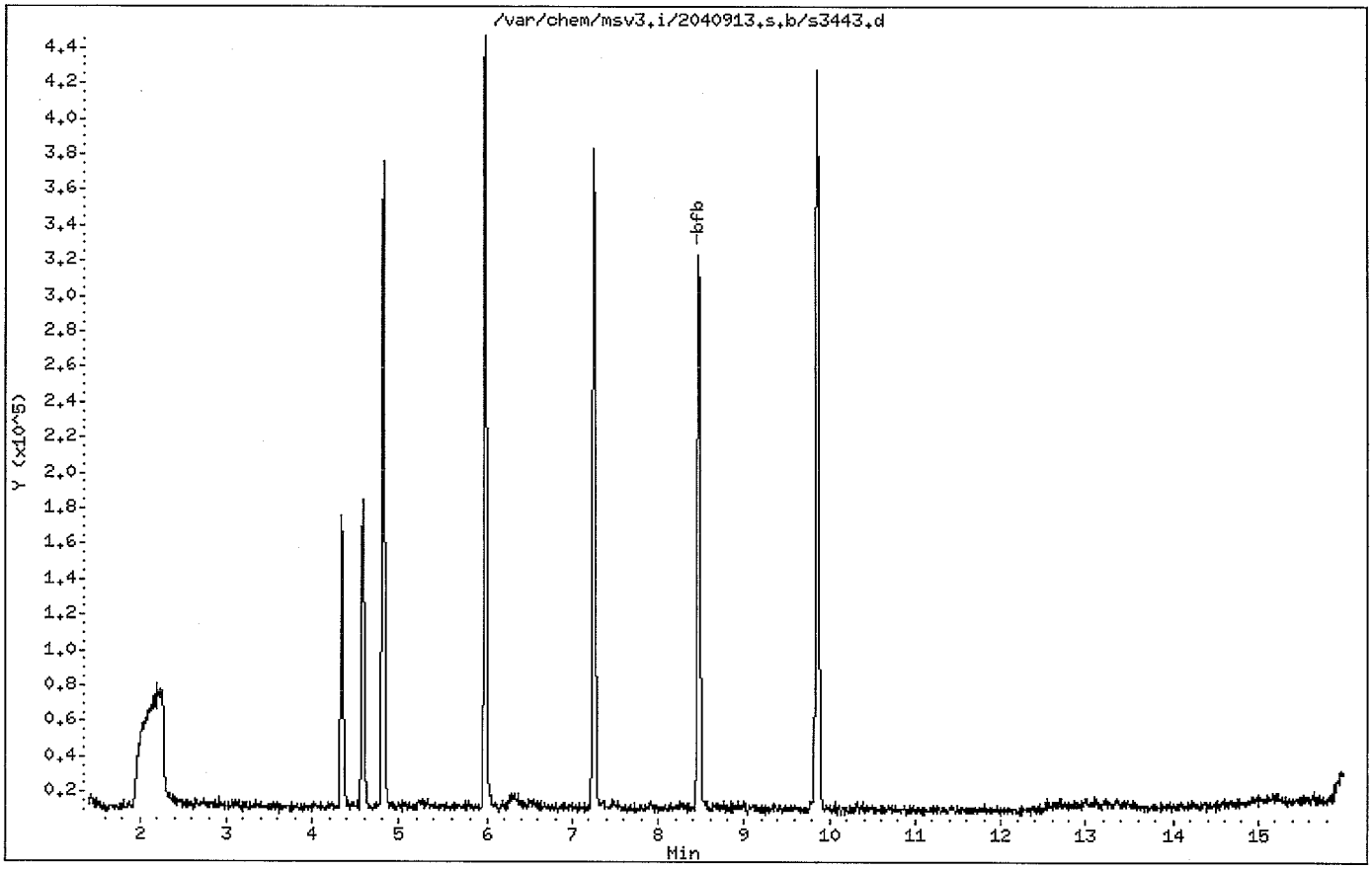
Instrument: msv3.i

Sample Info: 1000*V3BFB

Operator: KCB

Column phase: DB-624-30M

Column diameter: 0.53



Data File: /var/chem/msv3.i/2040913.s.b/s3443.d

Date : 13-SEP-2004 08:29

Client ID: V3BFB

Instrument: msv3.i

Sample Info: 1000*V3BFB

Operator: KCB

Column phase: DB-624-30M

Column diameter: 0.53

Data File: s3443.d
Spectrum: Avg. Scans 1233-1235 (8.47), Background Scan 1223
Location of Maximum: 95.00
Number of points: 64

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	115	62.00	2927	81.00	2745	130.00	134
36.00	930	63.00	1920	82.00	350	135.00	291
37.00	4296	64.00	217	83.00	107	137.00	180
38.00	3206	65.00	115	87.00	2049	141.00	886
39.00	1350	67.00	148	88.00	2308	143.00	659
40.00	614	68.00	6762	91.00	172	154.00	144
45.00	395	69.00	7192	92.00	2009	157.00	119
47.00	523	70.00	680	93.00	3052	174.00	46368
48.00	375	72.00	220	94.00	8139	175.00	4141
49.00	3550	73.00	3527	95.00	58536	176.00	44568
50.00	12964	74.00	11072	96.00	4674	177.00	3214
51.00	3302	75.00	33552	104.00	413	207.00	207
56.00	1017	76.00	3301	116.00	139	281.00	167
57.00	2015	77.00	548	117.00	247		
59.00	105	78.00	225	118.00	145		
60.00	491	79.00	2549	119.00	444		
61.00	3317	80.00	503	128.00	203		

GCAL, Inc.

Data file : /var/chem/msv3.i/2040913.s.b/s3447.d
Lab Smp Id: 1207 Client Smp ID: V3STD0.2
Inj Date : 13-SEP-2004 10:29
Operator : KCB Inst ID: msv3.i
Smp Info : 1207*V3STD0.2*5-17-14
Misc Info : MSV~5302~*1*KCB
Comment :
Method : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:27 rjo Quant Type: ISTD
Cal Date : 13-SEP-2004 10:29 Cal File: s3447.d
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
17 Methyl Acetate	43	3.618	3.618	(0.743)	4027	0.20000	0.583	6243(a)
18 Methylene Chloride	49	3.251	3.251	(0.668)	32602	0.20000	2.31	7745(a)
20 Acrylonitrile	53	3.423	3.423	(0.703)	5027	0.20000	1.30	3386(aM)
21 MTBE	73	3.452	3.452	(0.709)	9351	0.20000	0.277	8939(aM)
24 Hexane	57	3.612	3.612	(0.742)	8602	0.20000	0.601	5854(a)
$ 39 Dibromofluoromethane	111	4.407	4.407	(0.905)	6063	0.20000	0.431	5032(a)
40 1,1,1-Trichloroethane	97	4.871	4.871	(1.000)	145803	0.20000	6.64	1837
42 Cyclohexane	56	4.510	4.510	(0.926)	8631	0.20000	1.14	7059(a)
* 48 FLUOROBENZENE	96	4.871	4.871	(1.000)	2206559	50.0000		9624
51 Methyl Cyclohexane	83	5.283	5.283	(1.085)	10443	0.20000	0.546	7560(a)
58 1-Bromo-2-chloroethane	63	5.717	5.717	(1.174)	4273	0.20000	0.231	7423(aM)
M 138 Total-1-3 Dichloropropene	100				10339	0.40000	0.471	0(a)
67 Tetrachloroethene	164	6.536	6.536	(0.898)	5269	0.20000	0.482	5779(a)
69 Dibromochloromethane	129	6.742	6.742	(0.926)	4211	0.20000	0.267	8439(a)
70 1,2-Dibromoethane(EDB)	107	6.873	6.873	(0.944)	3106	0.20000	0.219	2007(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
* 71 CHLOROBENZENE-d5	82	7.279	7.279	(1.000)	1207927	50.0000		5827
M 78 TOTAL XYLENE	106				23695	0.20000	1.19	0 (a)
80 Isopropylbenzene	105	8.286	8.286	(1.138)	22924	0.20000	0.422	8851 (a)
83 1,1,2,2-Tetrachloroethane++	83	8.590	8.590	(0.870)	4379	0.20000	0.255	0 (aM)
* 97 1,4-DICHLOROBENZENE-D4	152	9.871	9.871	(1.000)	1019056	50.0000		4739
101 1,2-Dibromo-3-Chloropropane	157	11.451	11.451	(1.160)	1336	0.20000	0.513	4181 (aMH)
103 1,2,4-Trichlorobenzene	180	12.629	12.629	(1.279)	9906	0.20000	1.01	(aM)
104 Hexachlorobutadiene	225	12.858	12.858	(1.303)	14973	0.20000	1.24	8838 (a)
106 1,2,3-Trichlorobenzene	180	13.350	13.350	(1.352)	9474	0.20000	1.03	(aM)

QC Flag Legend

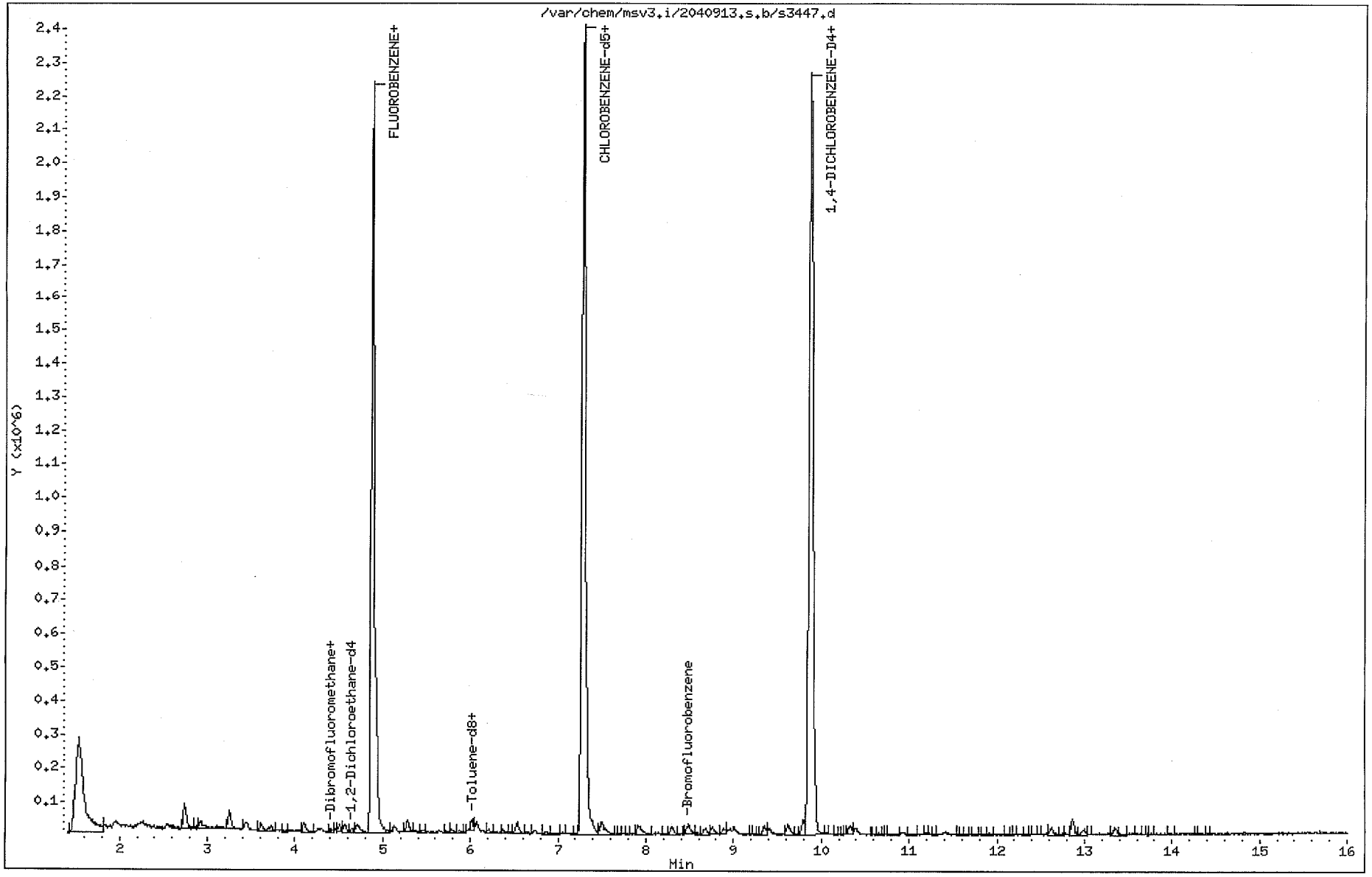
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /var/chem/msv3.i/2040913.s.b/s3447.d
Date : 13-SEP-2004 10:29
Client ID: V3STD0.2
Sample Info: 1207*V3STD0.2*5-17-14
Purge Volume: 5.0
Column phase: DB-624

Instrument: msv3.i

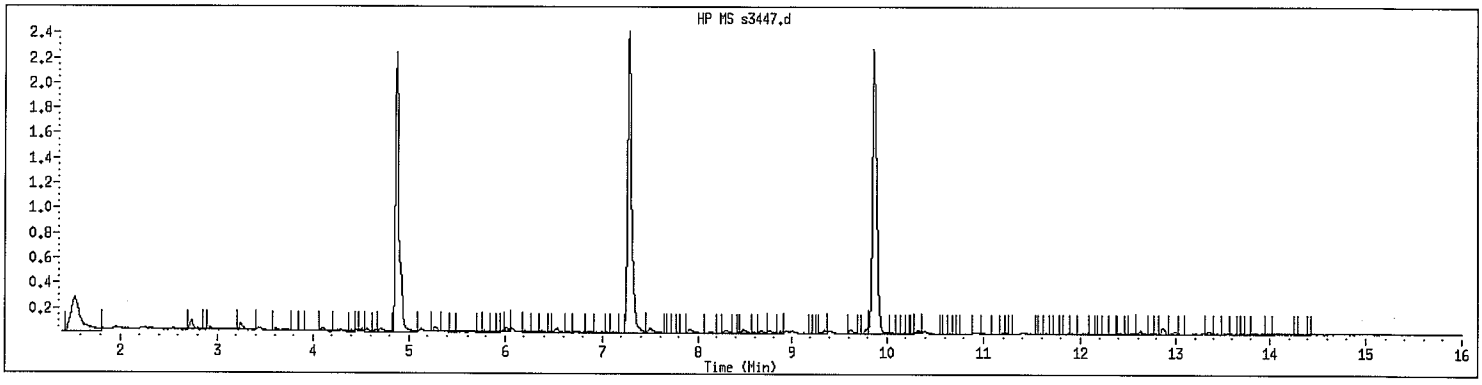
Operator: KCB
Column diameter: 0.53

000097



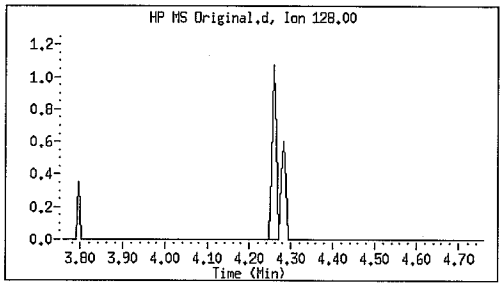
MANUAL INTEGRATION GRAPHIC REPORT

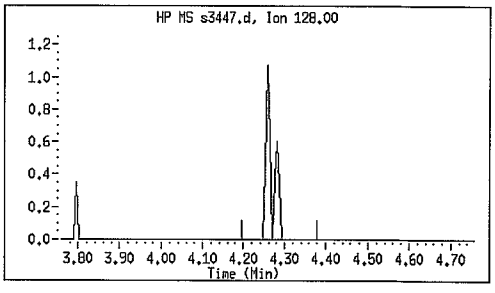
Lab ID	: 1207	SampleType	: CALIB_7
Injection Date	: 13-SEP-2004 10:29	Instrument	: msv3.i
Operator	: KCB		
Sample Info	: 1207*V3STD0.2*5-17-14		
Misc Info	: MSV~5302~*1*KCB		
Method	: /var/chem/msv3.i/2040913.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



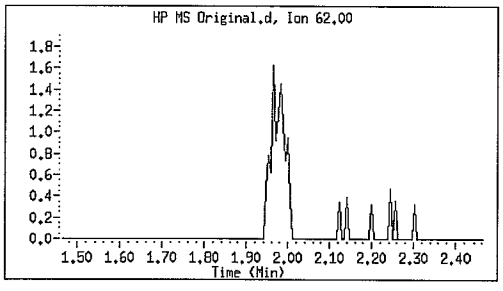
Original Final

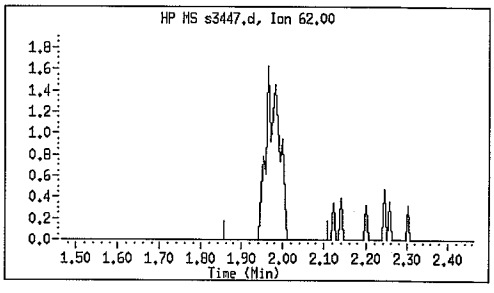
37 Bromochloromethane CAS#: 74-97-5





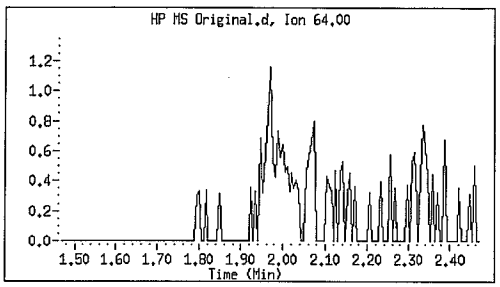
3 Vinyl Chloride + CAS#: 75-01-4

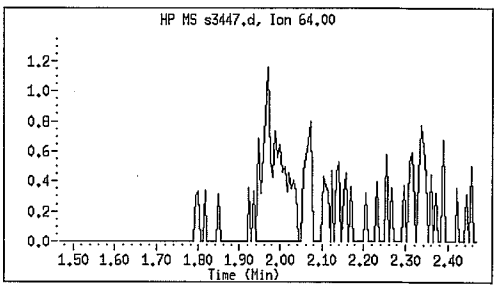




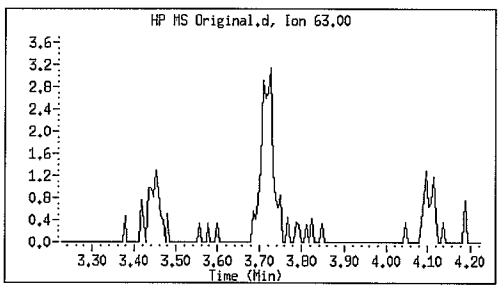
Original | Final

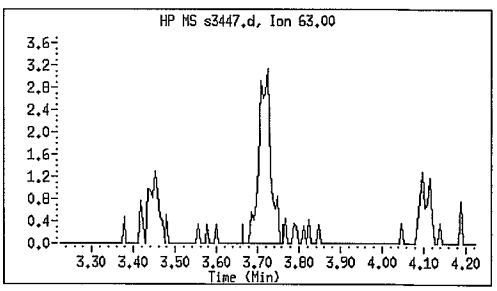
6 Chloroethane CAS#: 75-00-3



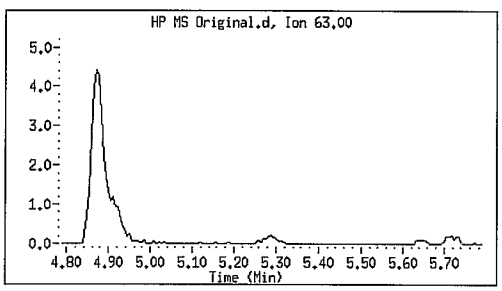


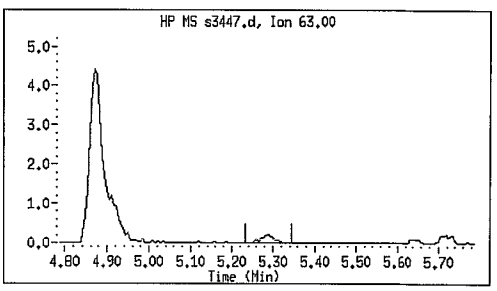
26 1,1-Dichloroethane ++ CAS#: 75-34-3



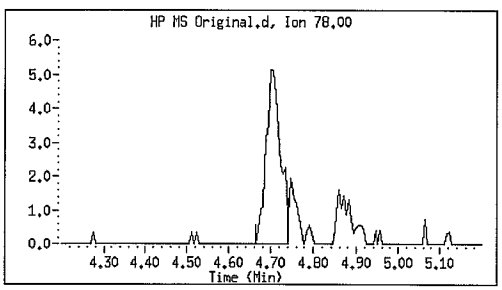


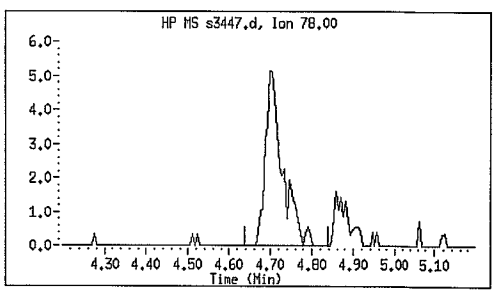
52 1,2-Dichloropropane + CAS#: 78-87-5



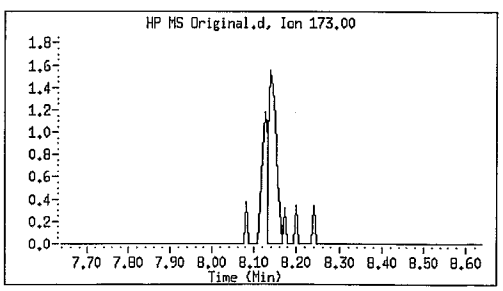


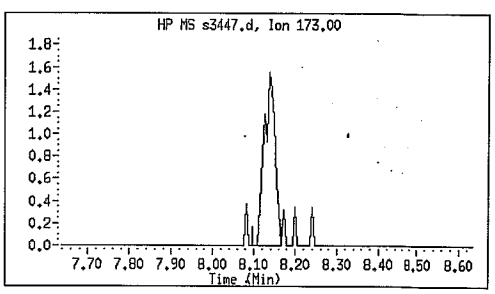
47 Benzene CAS#: 71-43-2





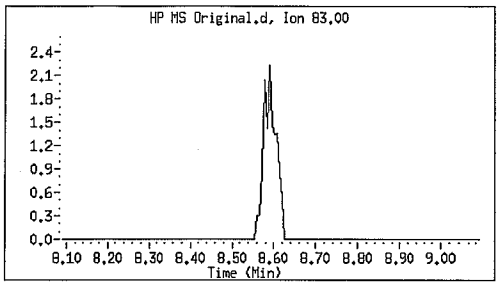
79 Bromoform ++ CAS#: 75-25-2

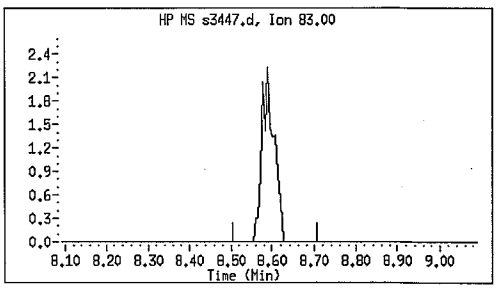




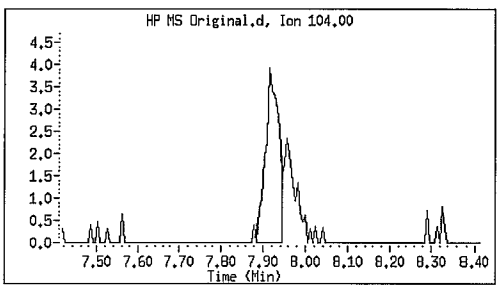
Original Final

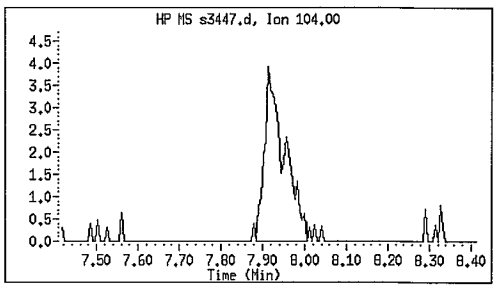
83 1,1,2,2-Tetrachloroethane++ CAS#: 79-34-5



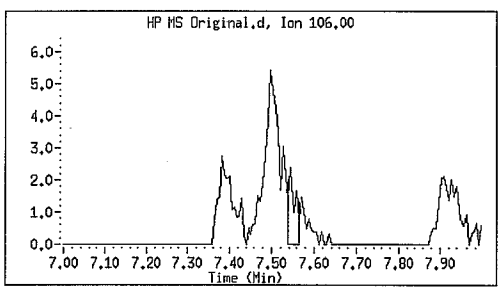


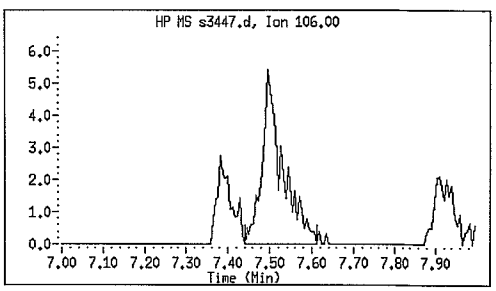
77 Styrene CAS#: 100-42-5



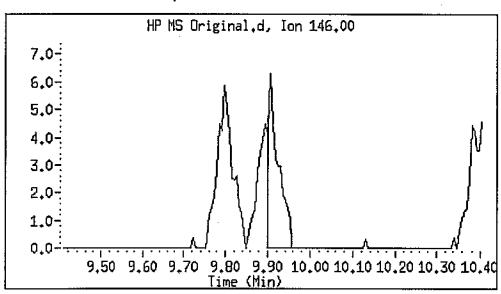


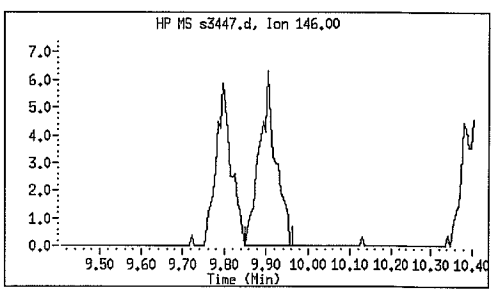
75 p,m-Xylene CAS#: 136777-61-2



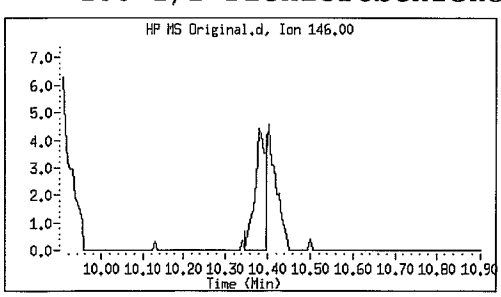


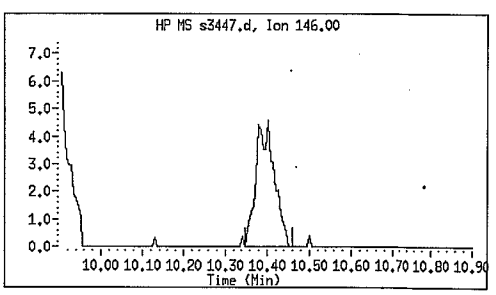
98 1,4-Dichlorobenzene CAS#: 106-46-7





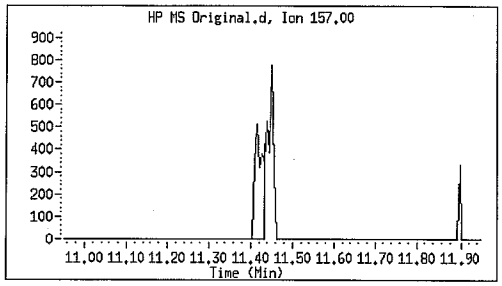
100 1,2-Dichlorobenzene CAS#: 95-50-1

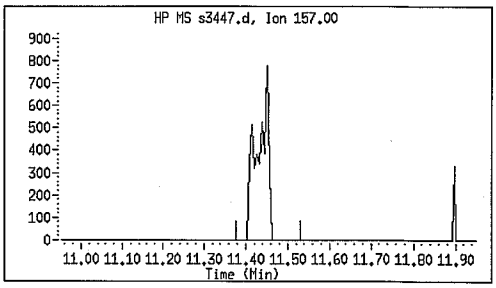




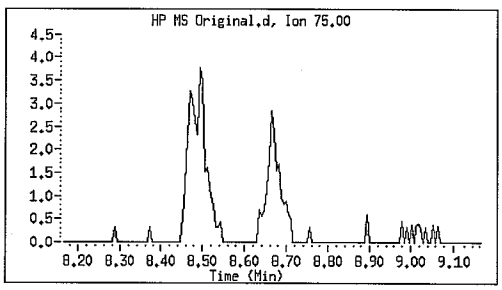
Original | Final

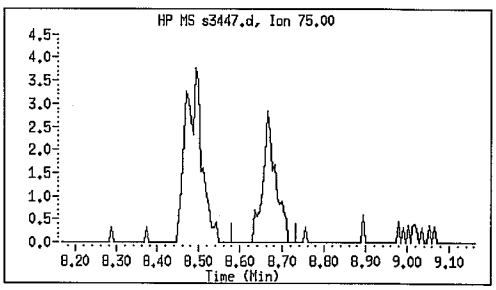
101 1,2-Dibromo-3-Chloropropane CAS#: 96-12-8



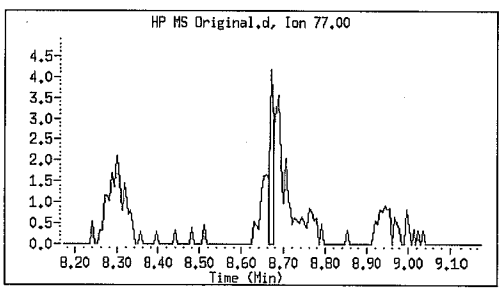


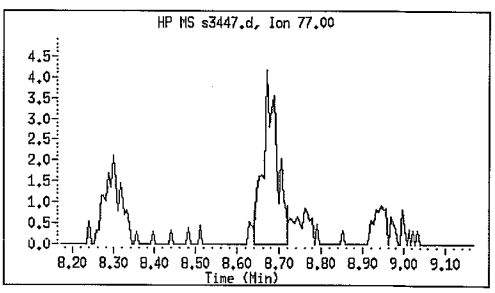
85 1,2,3-Trichloropropane CAS#: 96-18-4



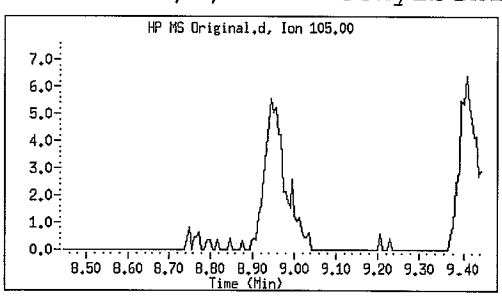


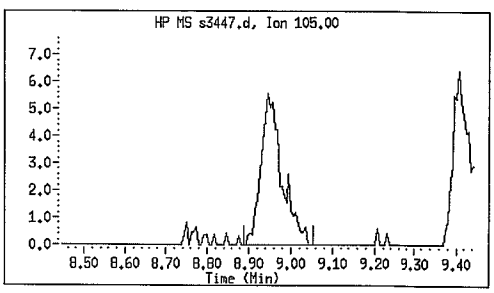
86 Bromobenzene CAS#: 108-86-1



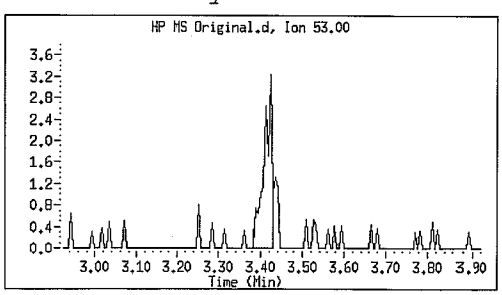


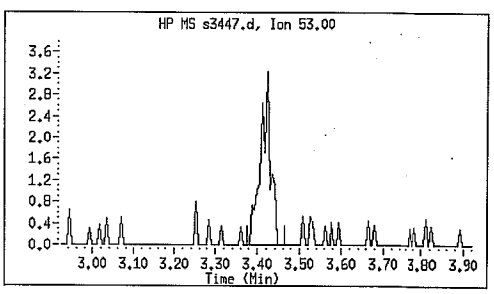
89 1,3,5-Trimethylbenzene CAS#: 108-67-8





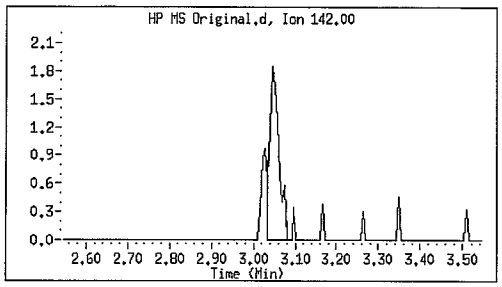
20 Acrylonitrile CAS#: 107-13-1

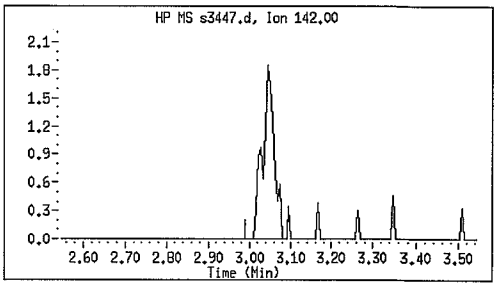




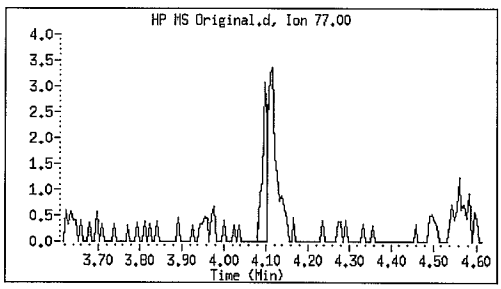
Original | Final

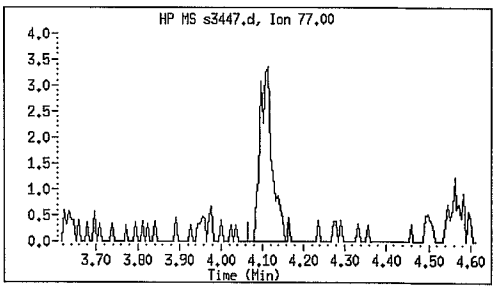
13 Methyl Iodide CAS#: 74-88-4



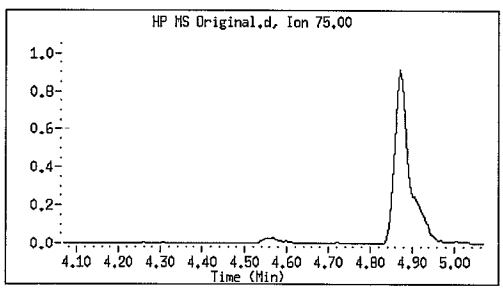


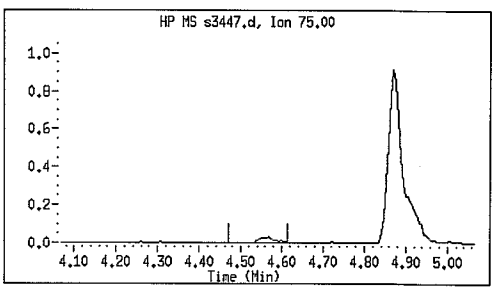
35 2,2-Dichloropropane CAS#: 594-20-7



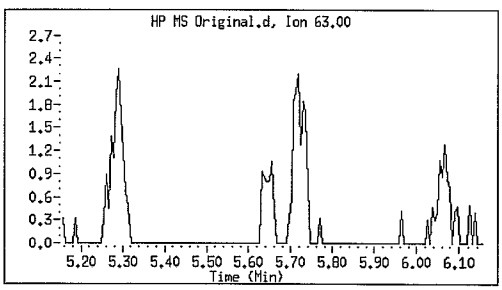


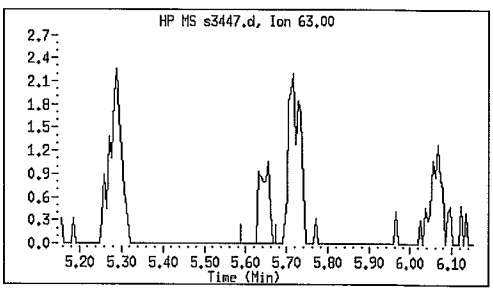
43 1,1-Dichloropropene CAS#: 563-58-6



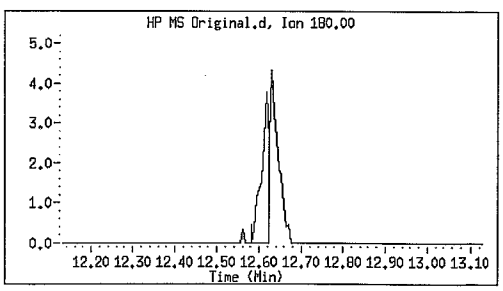


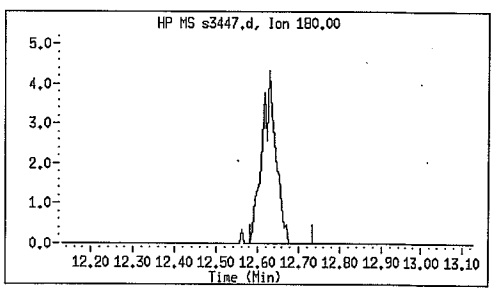
57 2-Chloroethyl vinyl ether CAS#: 110-75-8





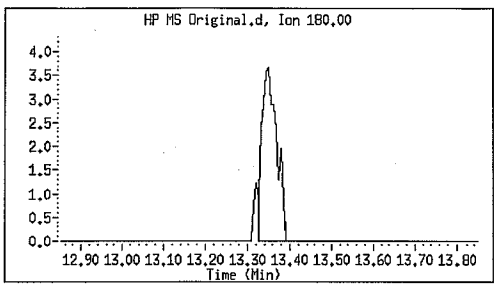
103 1,2,4-Trichlorobenzene CAS#: 120-82-1

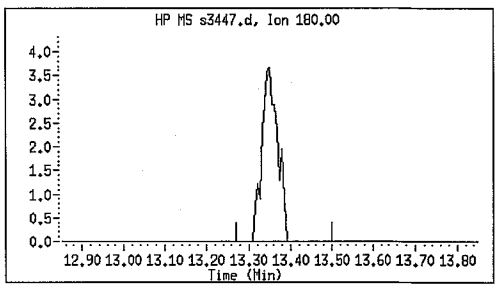




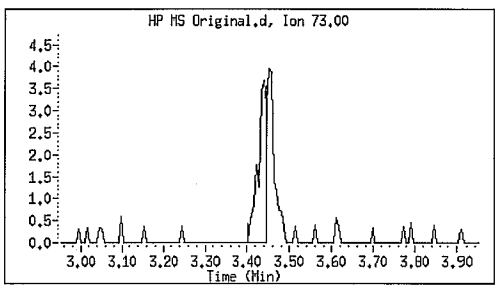
Original | Final

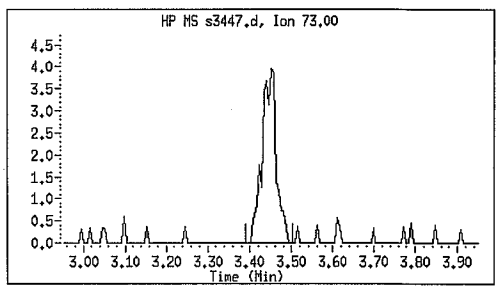
106 1,2,3-Trichlorobenzene CAS#: 87-61-6



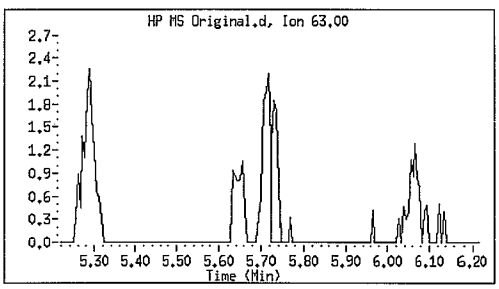


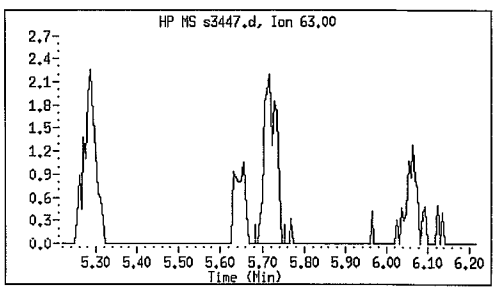
21 MTBE CAS#: 1634-04-4



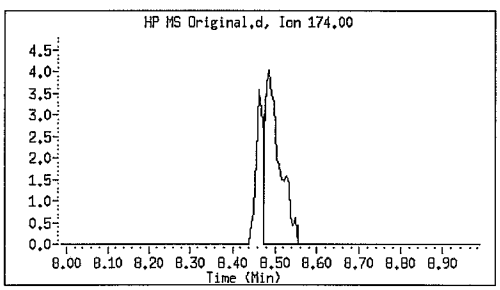


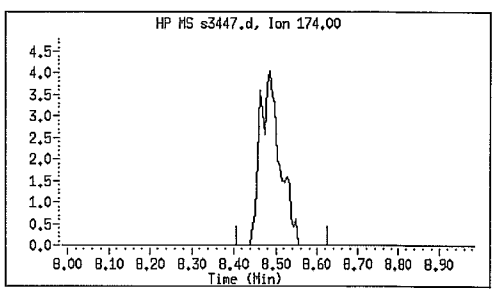
58 1-Bromo-2-chloroethane CAS#: 107-04-0



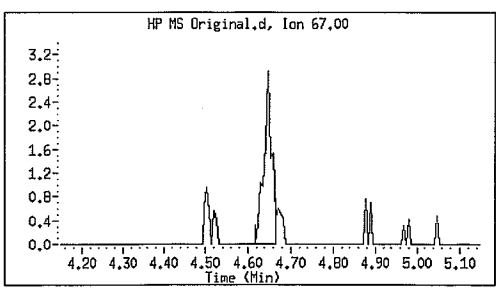


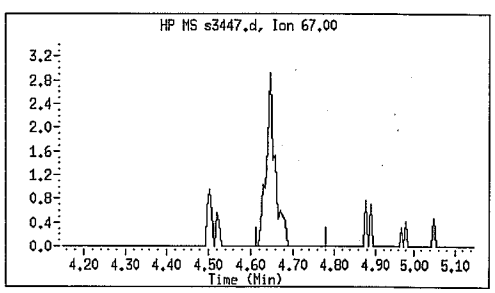
$ 82 Bromofluorobenzene CAS#: 460-00-4





$ 45 1,2-Dichloroethane-d4 CAS#: 17060-07-0





GCAL, Inc.

Data file : /var/chem/msv3.i/2040913.s.b/s3448.d
Lab Smp Id: 1208 Client Smp ID: V3STD0.4
Inj Date : 13-SEP-2004 10:50
Operator : KCB Inst ID: msv3.i
Smp Info : 1208*V3STD0.4*5-17-14
Misc Info : MSV~5302~*1*KCB
Comment :
Method : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:27 rjo Quant Type: ISTD
Cal Date : 13-SEP-2004 10:50 Cal File: s3448.d
Als bottle: 5 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
18 Methylene Chloride	49	3.246	3.246	(0.666)	29952	0.40000	2.32	7208(a)
20 Acrylonitrile	53	3.406	3.406	(0.699)	7467	0.40000	2.11	4592(a)
21 MTBE	73	3.435	3.435	(0.705)	13128	0.40000	0.424	8032(a)
24 Hexane	57	3.612	3.612	(0.742)	7128	0.40000	0.543	6290(a)
M 30 Total 1,2-Dichloroethene	61				17185	0.80000	1.05	0(a)
$ 39 Dibromofluoromethane	111	4.407	4.407	(0.905)	8819	0.40000	0.684	5208(a)
42 Cyclohexane	56	4.499	4.499	(0.924)	9321	0.40000	1.34	7555(a)
* 48 FLUOROBENZENE	96	4.871	4.871	(1.000)	2024782	50.0000		9598
51 Methyl Cyclohexane	83	5.277	5.277	(1.083)	7452	0.40000	0.424	8284(a)
58 1-Bromo-2-chloroethane	63	5.723	5.723	(1.175)	9272	0.40000	0.545	7881(a)
M 138 Total-1-3 Dichloropropene	100				17061	0.80000	0.847	0(a)
67 Tetrachloroethene	164	6.542	6.542	(0.899)	6247	0.40000	0.540	6131(a)
69 Dibromochloromethane	129	6.730	6.730	(0.925)	7170	0.40000	0.436	8122(a)
70 1,2-Dibromoethane(EDB)	107	6.873	6.873	(0.944)	5004	0.40000	0.356	3556(aM)
* 71 CHLOROBENZENE-d5	82	7.280	7.280	(1.000)	1243144	50.0000		5794

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
M 78 TOTAL XYLENE	106				27165	1.20000	1.33	0(a)
80 Isopropylbenzene	105	8.292	8.292	(1.139)	25415	0.40000	0.461	8909(a)
83 1,1,2,2-Tetrachloroethane++	83	8.590	8.590	(0.871)	6785	0.40000	0.392	0(aM)
* 97 1,4-DICHLOROBENZENE-D4	152	9.866	9.866	(1.000)	1045980	50.0000		4764
101 1,2-Dibromo-3-Chloropropane	157	11.428	11.428	(1.158)	1812	0.40000	0.612	4096(aM)

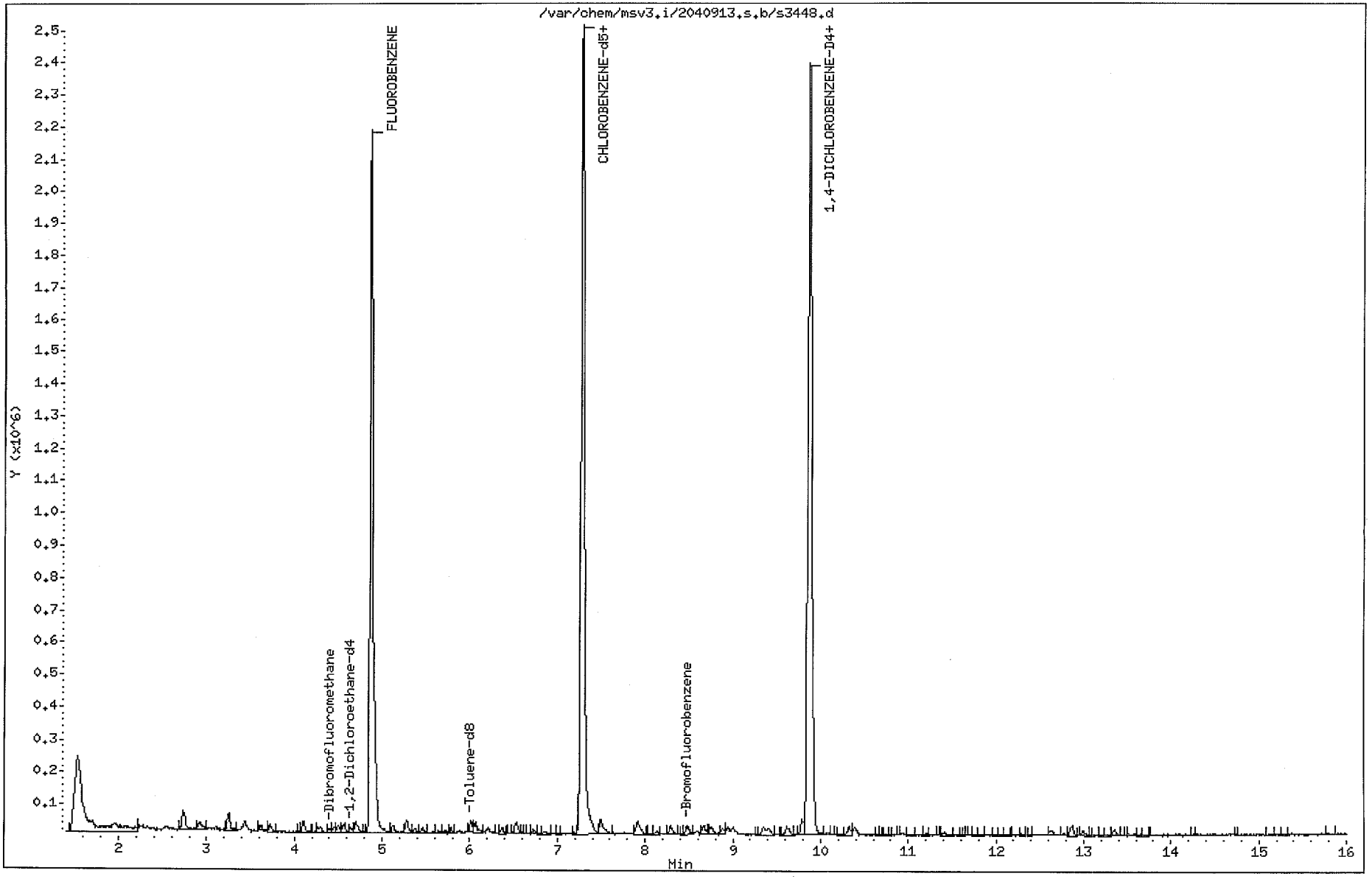
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

000106

Data File: /var/chem/msv3.i/2040913.s.b/s3448.d
Date : 13-SEP-2004 10:50
Client ID: V3STD0.4
Sample Info: 1208*V3STD0.4*5-17-14
Purge Volume: 5.0
Column phase: DB-624

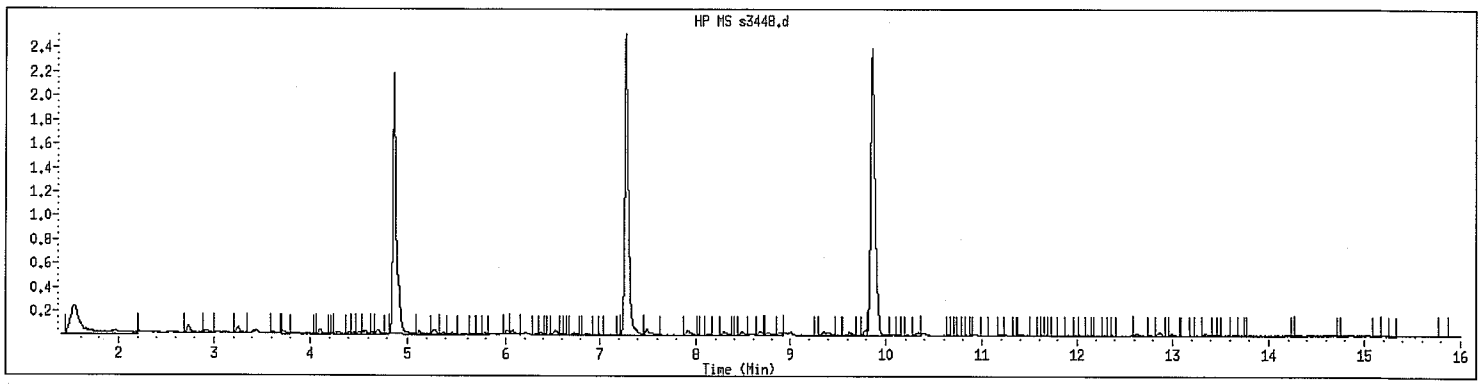
Instrument: msv3.i
Operator: KCB
Column diameter: 0.53



Data file : /var/chem/msv3.i/2040913.s.b/s3448.d
Report Date: 10/03/2004 08:27

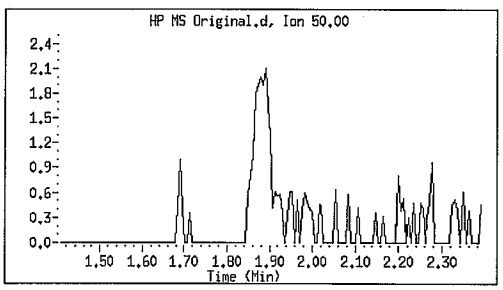
MANUAL INTEGRATION GRAPHIC REPORT

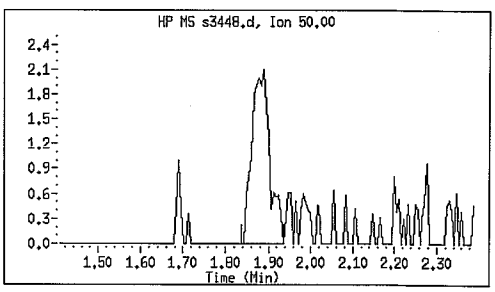
Lab ID	: 1208	SampleType	: CALIB_8
Injection Date	: 13-SEP-2004 10:50	Instrument	: msv3.i
Operator	: KCB		
Sample Info	: 1208*V3STD0.4*5-17-14		
Misc Info	: MSV~5302~*1*KCB		
Method	: /var/chem/msv3.i/2040913.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



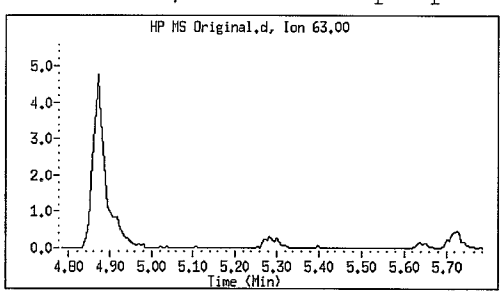
Original | Final

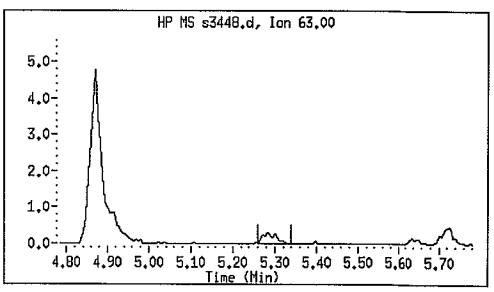
2 Chloromethane ++ CAS#: 74-87-3





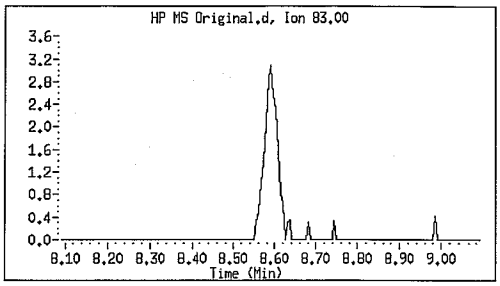
52 1,2-Dichloropropane + CAS#: 78-87-5

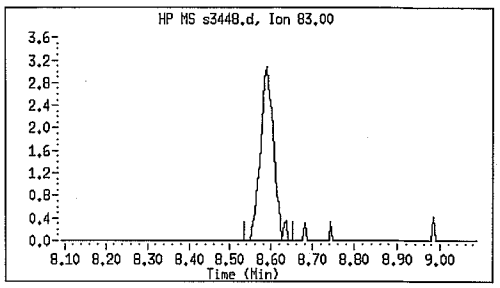




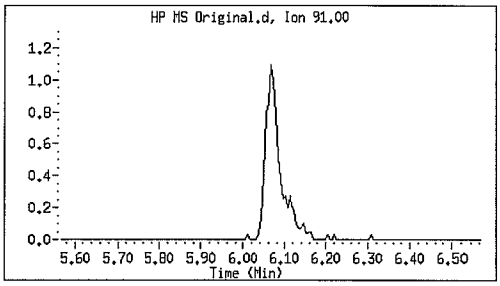
Original Final

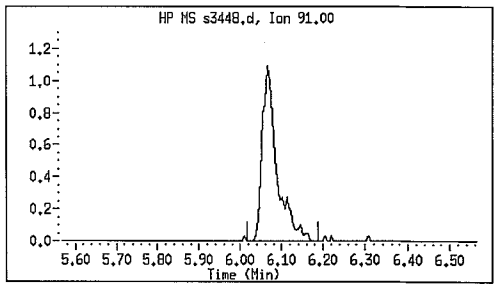
83 1,1,2,2-Tetrachloroethane++ CAS#: 79-34-5



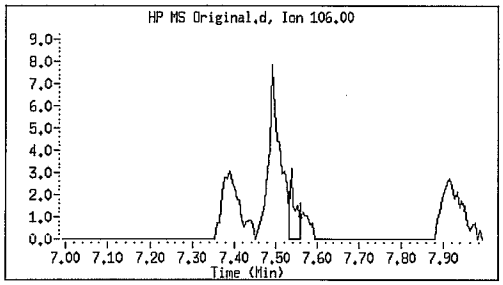


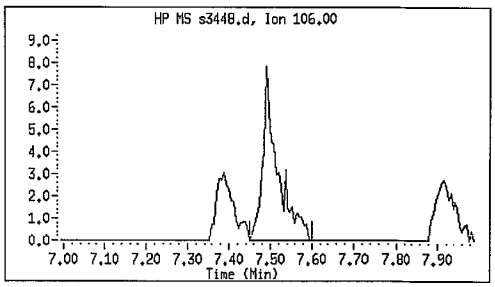
62 Toluene + CAS#: 108-88-3



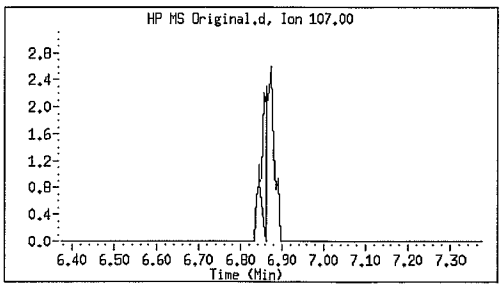


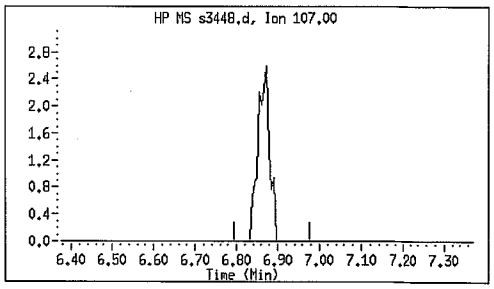
75 p,m-Xylene CAS#: 136777-61-2



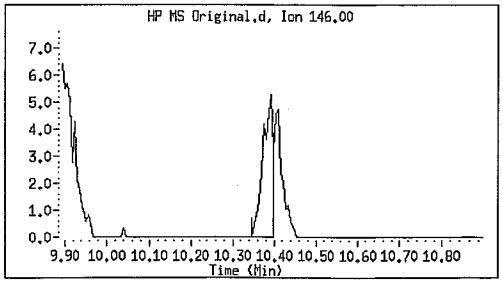


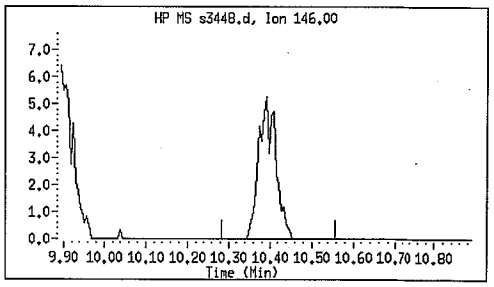
70 1,2-Dibromoethane(EDB) CAS#: 106-93-4





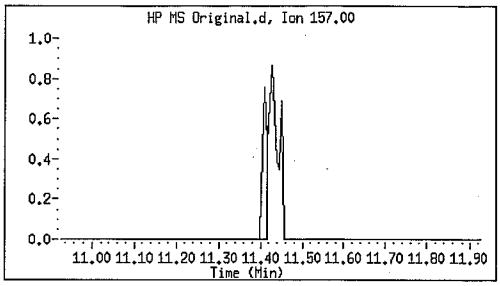
100 1,2-Dichlorobenzene CAS#: 95-50-1

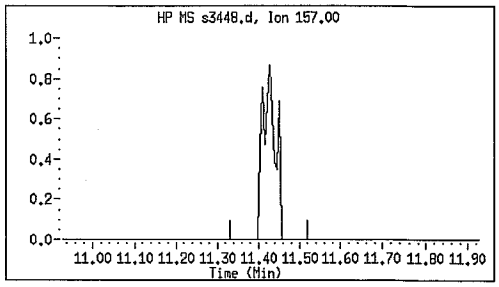




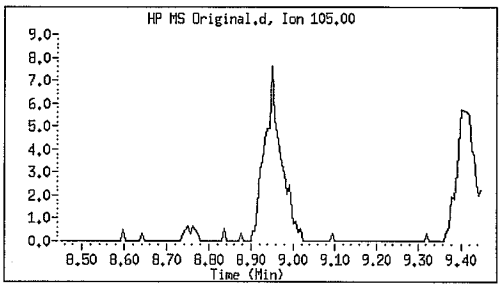
Original Final

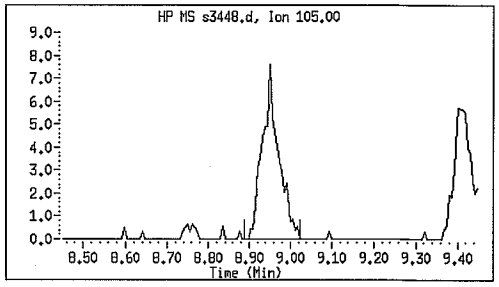
101 1,2-Dibromo-3-Chloropropane CAS#: 96-12-8



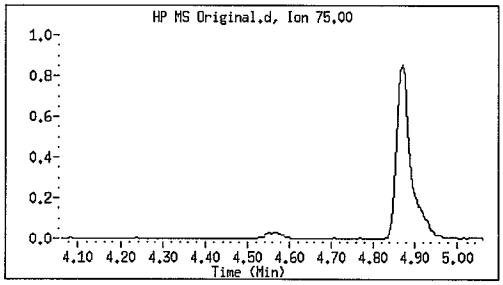


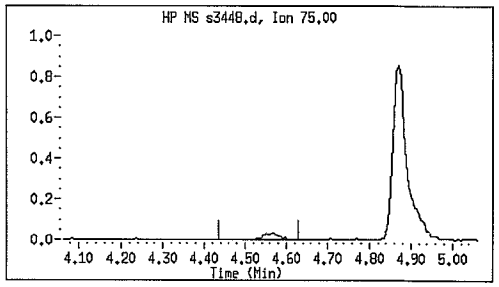
89 1,3,5-Trimethylbenzene CAS#: 108-67-8



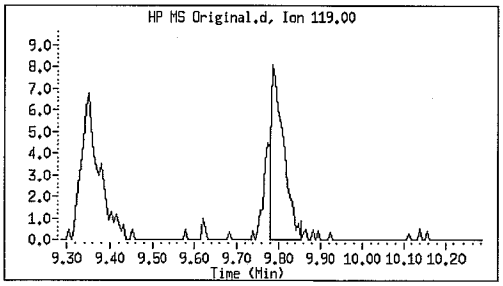


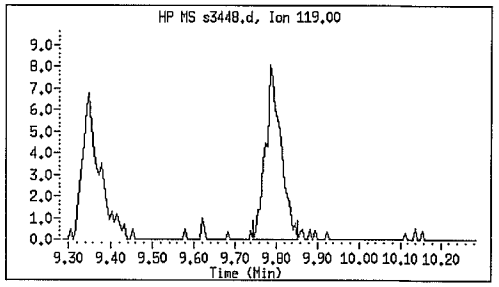
43 1,1-Dichloropropene CAS#: 563-58-6



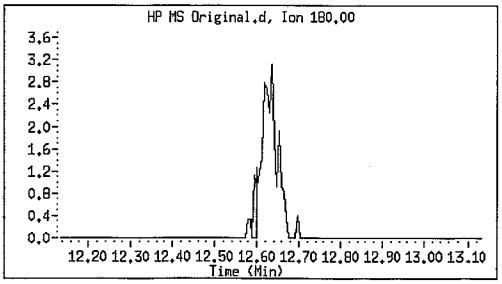


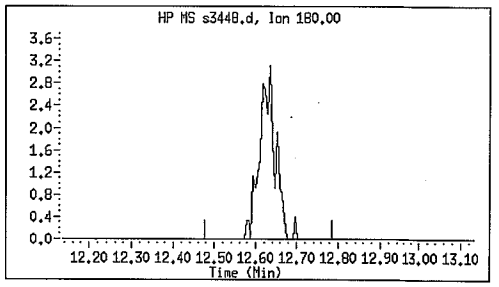
95 p-Isopropyltoluene CAS#: 99-87-6





103 1,2,4-Trichlorobenzene CAS#: 120-82-1





GCAL, Inc.

Data file : /var/chem/msv3.i/2040913.s.b/s3449.d
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Inj Date : 13-SEP-2004 11:12
Operator : KCB Inst ID: msv3.i
Smp Info : 1206*V3STD002*5-17-14
Misc Info : MSV~5302~*1*KCB
Comment :
Method : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:27 rjo Quant Type: ISTD
Cal Date : 13-SEP-2004 11:12 Cal File: s3449.d
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
1 Dichlorodifluoromethane	85	1.695	1.695	(0.348)	41079	2.00000	2.71	4836(a)
2 Chloromethane ++	50	1.872	1.872	(0.384)	22923	2.00000	2.26	4071(a)
3 Vinyl Chloride +	62	1.970	1.970	(0.404)	22652	2.00000	2.10	5097(a)
5 Bromomethane	94	2.239	2.239	(0.460)	11769	2.00000	4.52	5181(aM)
6 Chloroethane	64	2.313	2.313	(0.475)	12239	2.00000	2.25	6330(a)
7 Trichlorofluoromethane	101	2.530	2.530	(0.520)	44086	2.00000	2.28	7732(a)
9 Acrolein	56	2.839	2.839	(0.583)	1964	10.0000	3.30	2274(a)
10 1,1,2Trichlotrifluoroethane	101	2.908	2.908	(0.597)	23421	2.00000	2.17	7966(a)
11 1,1-Dichloroethene +	96	2.919	2.919	(0.599)	18070	2.00000	2.03	8971(a)
13 Methyl Iodide	142	3.034	3.034	(0.623)	30905	2.00000	1.75	6551(a)
14 Carbon Disulfide	76	3.097	3.097	(0.636)	68665	2.00000	2.09	7761(a)
17 Methyl Acetate	43	3.171	3.171	(0.651)	13823	2.00000	2.16	3388(aH)
18 Methylene Chloride	49	3.251	3.251	(0.668)	48506	2.00000	3.72	7944(a)
20 Acrylonitrile	53	3.406	3.406	(0.699)	36362	2.00000	10.2	7178(a)
21 MTBE	73	3.429	3.429	(0.704)	63858	2.00000	2.05	8642(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
	22 trans-1,2-Dichloroethene	61	3.434	3.434	(0.705)	32125	2.00000	2.16	(a)
	24 Hexane	57	3.606	3.606	(0.740)	24414	2.00000	1.84	8094(a)
	26 1,1-Dichloroethane ++	63	3.715	3.715	(0.763)	48021	2.00000	2.49	8658(a)
M	30 Total 1,2-Dichloroethene	61				79003	4.00000	4.73	0(a)
	34 cis-1,2-Dichloroethene	61	4.098	4.098	(0.841)	46878	2.00000	2.56	(a)
	35 2,2-Dichloropropane	77	4.110	4.110	(0.844)	43456	2.00000	2.34	9207(a)
	37 Bromochloromethane	128	4.264	4.264	(0.875)	14441	2.00000	2.29	8172(a)
	38 Chloroform +	83	4.293	4.293	(0.881)	52884	2.00000	2.46	9448(a)
$	39 Dibromofluoromethane	111	4.401	4.401	(0.904)	32597	2.00000	2.51	7881(a)
	40 1,1,1-Trichloroethane	97	4.447	4.447	(0.913)	49569	2.00000	2.44	9347(a)
	42 Cyclohexane	56	4.499	4.499	(0.924)	41114	2.00000	5.87	8764
	43 1,1-Dichloropropene	75	4.556	4.556	(0.935)	38786	2.00000	2.51	8820(a)
	44 Carbon Tetrachloride	117	4.562	4.562	(0.937)	38471	2.00000	2.39	8425(a)
$	45 1,2-Dichloroethane-d4	67	4.642	4.642	(0.953)	22139	2.00000	2.73	8820(a)
	46 1,2-Dichloroethane	62	4.693	4.693	(0.964)	51525	2.00000	2.65	7524(a)
*	48 FLUOROBENZENE	96	4.871	4.871	(1.000)	2042442	50.0000		9574
	49 Trichloroethene	130	5.117	5.117	(1.050)	28751	2.00000	2.34	9277(a)
	51 Methyl Cyclohexane	83	5.271	5.271	(1.082)	42630	2.00000	2.41	9130(a)
	52 1,2-Dichloropropane +	63	5.283	5.283	(1.085)	29346	2.00000	2.64	8537(a)
	55 Dibromomethane	93	5.368	5.368	(1.102)	20542	2.00000	2.39	7966(a)
	56 Bromodichloromethane	83	5.460	5.460	(1.121)	38741	2.00000	2.26	8460(a)
	57 2-Chloroethyl vinyl ether	63	5.637	5.637	(1.157)	16207	2.00000	2.23	8121(a)
	58 1-Bromo-2-chloroethane	63	5.717	5.717	(1.174)	43403	2.00000	2.53	8836(a)
	59 cis-1,3-Dichloropropene	75	5.780	5.780	(1.187)	42461	2.00000	2.13	(a)
	60 4-methyl-2-pentanone	43	5.872	5.872	(1.206)	33174	2.00000	2.96	(a)
$	61 Toluene-d8	98	6.009	6.009	(1.234)	102935	2.00000	2.67	9076(a)
	62 Toluene +	91	6.061	6.061	(1.244)	112933	2.00000	2.46	7305(a)
	63 trans-1,3-Dichloropropene	75	6.198	6.198	(1.273)	45961	2.00000	2.22	(a)
M	138 Total-1-3 Dichloropropene	100				88422	4.00000	4.35	0(a)
	65 1,1,2-Trichloroethane	97	6.364	6.364	(0.875)	24309	2.00000	2.11	9373(a)
	66 1,3-Dichloropropane	76	6.518	6.518	(0.896)	43623	2.00000	2.19	8092(a)
	67 Tetrachloroethene	164	6.536	6.536	(0.899)	26372	2.00000	2.32	6984(a)
	68 2-Hexanone	43	6.541	6.541	(0.899)	23487	2.00000	2.45	(a)
	69 Dibromochloromethane	129	6.730	6.730	(0.925)	31402	2.00000	1.94	9188(a)
	70 1,2-Dibromoethane(EDB)	107	6.867	6.867	(0.944)	30033	2.00000	2.17	7410(a)
*	71 CHLOROBENZENE-d5	82	7.274	7.274	(1.000)	1222917	50.0000		5821
	72 Chlorobenzene ++	112	7.302	7.302	(1.004)	71747	2.00000	2.21	3100(a)
	73 1,1,1,2-Tetrachloroethane	133	7.365	7.365	(1.013)	27819	2.00000	2.17	9031(a)
	74 Ethylbenzene +	106	7.388	7.388	(1.016)	35428	2.00000	2.04	(a)
	75 p,m-Xylene	106	7.491	7.491	(1.030)	86053	4.00000	4.23	(a)
	76 o-Xylene	106	7.903	7.903	(1.087)	42180	2.00000	2.17	(a)
	77 Styrene	104	7.914	7.914	(1.088)	75441	2.00000	2.14	9580(a)
M	78 TOTAL XYLENE	106				128233	6.00000	6.39	0
	79 Bromoform ++	173	8.132	8.132	(1.118)	25935	2.00000	2.31	8325(a)
	80 Isopropylbenzene	105	8.286	8.286	(1.139)	118389	2.00000	2.18	9649(a)
$	82 Bromofluorobenzene	174	8.475	8.475	(1.165)	34747	2.00000	2.46	9123(a)
	83 1,1,2,2-Tetrachloroethane++	83	8.584	8.584	(0.870)	34622	2.00000	2.05	8457(aM)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
84 trans-1,4-Dichloro-2-Butene	53	8.658	8.658	(0.878)	9751	2.00000	2.08	8336 (a)
85 1,2,3-Trichloropropane	75	8.658	8.658	(0.878)	43579	2.00000	2.02	8832 (a)
86 Bromobenzene	77	8.670	8.670	(0.879)	71631	2.00000	2.22	9293 (a)
87 n-Propylbenzene	91	8.756	8.756	(0.887)	144384	2.00000	2.12	(a)
88 2-Chlorotoluene	91	8.876	8.876	(0.900)	99926	2.00000	2.14	(a)
89 1,3,5-Trimethylbenzene	105	8.944	8.944	(0.907)	98753	2.00000	2.28	9364 (aH)
90 4-Chlorotoluene	91	9.002	9.002	(0.912)	104804	2.00000	2.14	(a)
91 tert-butylbenzene	91	9.351	9.351	(0.948)	85926	2.00000	2.33	9247 (a)
93 1,2,4-Trimethylbenzene	105	9.408	9.408	(0.954)	90623	2.00000	2.49	(a)
94 sec-Butylbenzene	105	9.631	9.631	(0.976)	126550	2.00000	2.14	(a)
95 p-Isopropyltoluene	119	9.791	9.791	(0.992)	98204	2.00000	2.26	9438 (a)
96 1,3-Dichlorobenzene	146	9.791	9.791	(0.992)	61407	2.00000	2.29	(a)
* 97 1,4-DICHLOROBENZENE-D4	152	9.866	9.866	(1.000)	1022216	50.0000		4784
98 1,4-Dichlorobenzene	146	9.894	9.894	(1.003)	62363	2.00000	2.30	(a)
99 n-Butylbenzene	91	10.323	10.323	(1.046)	94066	2.00000	2.76	9508 (a)
100 1,2-Dichlorobenzene	146	10.398	10.398	(1.054)	60051	2.00000	2.29	(a)
101 1,2-Dibromo-3-Chloropropane	157	11.433	11.433	(1.159)	7281	2.00000	2.03	7624 (aM)
103 1,2,4-Trichlorobenzene	180	12.629	12.629	(1.280)	34160	2.00000	3.46	(a)
104 Hexachlorobutadiene	225	12.869	12.869	(1.304)	31858	2.00000	2.62	8805 (a)
105 Naphthalene	128	12.984	12.984	(1.316)	51387	2.00000	2.77	8930 (a)
106 1,2,3-Trichlorobenzene	180	13.344	13.344	(1.353)	29558	2.00000	3.21	(a)

QC Flag Legend

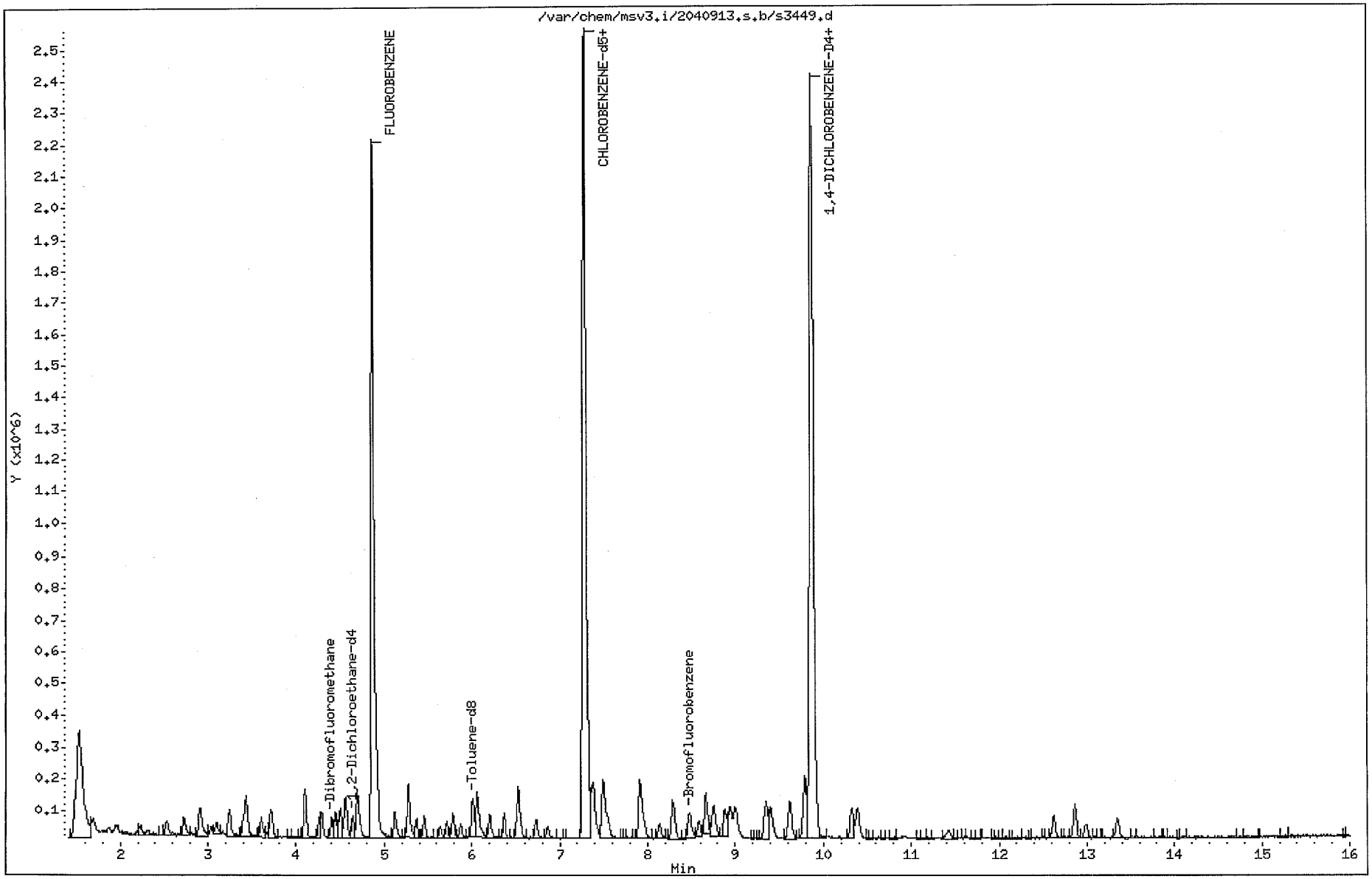
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

000113

Data File: /var/chem/msv3.i/2040913.s.b/s3449.d
Date : 13-SEP-2004 11:12
Client ID: V3STD002
Sample Info: 1206*V3STD002*5-17-14
Purge Volume: 5.0
Column phase: DB-624

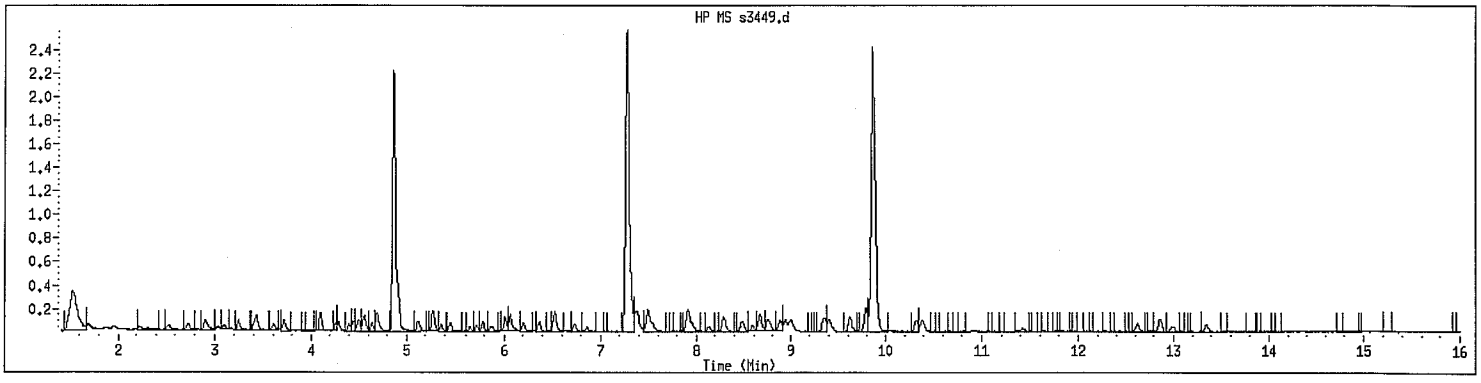
Instrument: msv3.i

Operator: KCB
Column diameter: 0.53



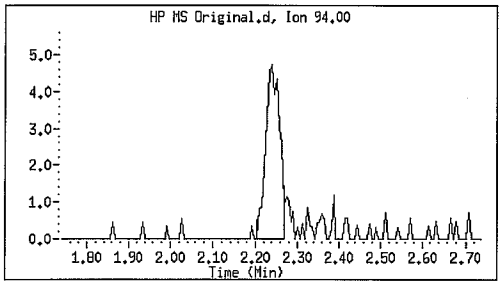
MANUAL INTEGRATION GRAPHIC REPORT

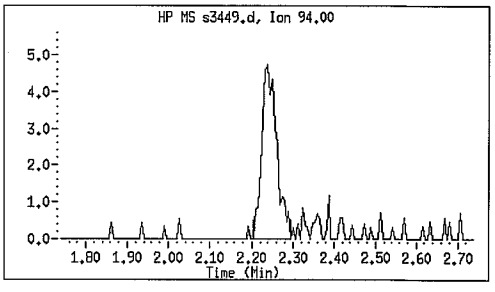
Lab ID	: 1206	SampleType	: CALIB_6
Injection Date	: 13-SEP-2004 11:12	Instrument	: msv3.i
Operator	: KCB		
Sample Info	: 1206*V3STD002*5-17-14		
Misc Info	: MSV~5302~*1*KCB		
Method	: /var/chem/msv3.i/2040913.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



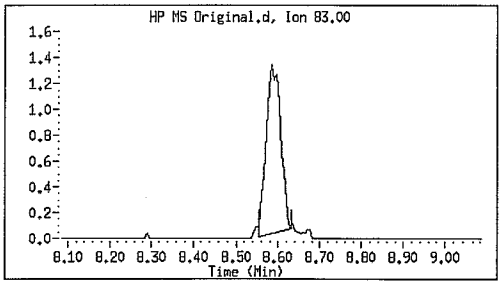
Original Final

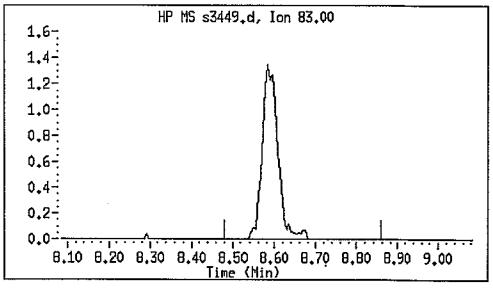
5 Bromomethane CAS#: 74-83-9





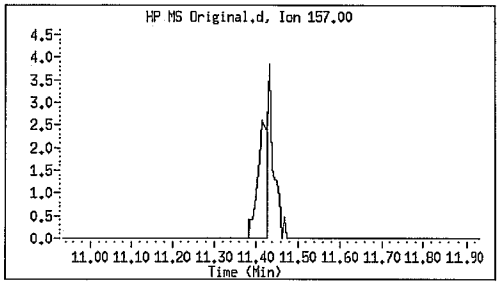
83 1,1,2,2-Tetrachloroethane++ CAS#: 79-34-5

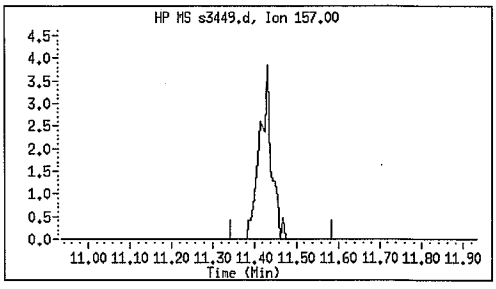




Original Final

101 1,2-Dibromo-3-Chloropropane CAS#: 96-12-8





GCAL, Inc.

Data file : /var/chem/msv3.i/2040913.s.b/s3450.d
Lab Smp Id: 1201 Client Smp ID: V3STD005
Inj Date : 13-SEP-2004 11:33
Operator : KCB Inst ID: msv3.i
Smp Info : 1201*V3STD005*5-17-14
Misc Info : MSV~5302~*1*KCB
Comment :
Method : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:27 rjo Quant Type: ISTD
Cal Date : 07-SEP-2004 12:59 Cal File: s3198.d
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	ON-COL (ppb)	SIMILARITY
1 Dichlorodifluoromethane	85	1.700	1.700	(0.349)	99805	5.00000	6.01	6920
2 Chloromethane ++	50	1.883	1.883	(0.387)	60619	5.00000	5.66	6275
3 Vinyl Chloride +	62	1.975	1.975	(0.406)	62045	5.00000	5.42	6771
5 Bromomethane	94	2.255	2.255	(0.463)	24980	5.00000	8.99	6691
6 Chloroethane	64	2.330	2.330	(0.478)	23261	5.00000	4.33	7270(a)
7 Trichlorofluoromethane	101	2.541	2.541	(0.522)	107287	5.00000	5.27	8730
9 Acrolein	56	2.845	2.845	(0.584)	4471	25.0000	7.71	3132(aM)
10 1,1,2Trichlotrifluoroethane	101	2.913	2.913	(0.598)	61304	5.00000	5.35	8068
11 1,1-Dichloroethene +	96	2.925	2.925	(0.601)	46178	5.00000	5.01	9167
12 Acetone	43	2.959	2.959	(0.608)	36129	5.00000	2.20	(a)
13 Methyl Iodide	142	3.045	3.045	(0.625)	79802	5.00000	4.49	8561(a)
14 Carbon Disulfide	76	3.108	3.108	(0.638)	165293	5.00000	4.91	9054(a)
17 Methyl Acetate	43	3.176	3.176	(0.652)	30084	5.00000	4.52	3598(aH)
18 Methylene Chloride	49	3.245	3.245	(0.666)	91426	5.00000	6.55	8956(a)
20 Acrylonitrile	53	3.417	3.417	(0.702)	95286	25.0000	26.0	6985

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
	21 MTBE	73	3.440	3.440	(0.706)	148623	5.00000	4.76	9019(a)
	22 trans-1,2-Dichloroethene	61	3.440	3.440	(0.706)	79541	5.00000	5.19	
	24 Hexane	57	3.611	3.611	(0.742)	77451	5.00000	5.53	8994
	25 Vinyl Acetate	43	3.611	3.611	(0.742)	34125	5.00000	1.79	(aH)
	26 1,1-Dichloroethane ++	63	3.714	3.714	(0.763)	113744	5.00000	5.62	8405
M	30 Total 1,2-Dichloroethene	61				199446	10.0000	11.3	0
	32 2-Butanone	43	4.103	4.103	(0.843)	46100	5.00000	4.18	(aH)
	34 cis-1,2-Dichloroethene	61	4.098	4.098	(0.841)	119905	5.00000	6.08	
	35 2,2-Dichloropropane	77	4.109	4.109	(0.844)	111038	5.00000	5.68	9336
	37 Bromochloromethane	128	4.264	4.264	(0.875)	33557	5.00000	5.20	8487
	38 Chloroform +	83	4.298	4.298	(0.882)	132033	5.00000	5.79	9506
$	39 Dibromofluoromethane	111	4.407	4.407	(0.905)	79676	5.00000	5.78	8833
	40 1,1,1-Trichloroethane	97	4.452	4.452	(0.914)	125051	5.00000	5.79	9279
	42 Cyclohexane	56	4.504	4.504	(0.925)	104357	5.00000	10.3	9184
	43 1,1-Dichloropropene	75	4.561	4.561	(0.937)	93538	5.00000	5.75	8818
	44 Carbon Tetrachloride	117	4.573	4.573	(0.939)	104630	5.00000	6.02	8061
$	45 1,2-Dichloroethane-d4	67	4.647	4.647	(0.954)	52576	5.00000	6.01	8976
	46 1,2-Dichloroethane	62	4.698	4.698	(0.965)	127752	5.00000	6.13	7730
	47 Benzene	78	4.704	4.704	(0.966)	242998	5.00000	2.36	7282(a)
*	48 FLUOROBENZENE	96	4.870	4.870	(1.000)	2107912	50.0000		9664
	49 Trichloroethene	130	5.133	5.133	(1.054)	69893	5.00000	5.49	9529
	51 Methyl Cyclohexane	83	5.276	5.276	(1.083)	103512	5.00000	5.54	9245
	52 1,2-Dichloropropane +	63	5.282	5.282	(1.085)	71866	5.00000	6.06	8439
	55 Dibromomethane	93	5.368	5.368	(1.102)	53969	5.00000	5.91	8148
	56 Bromodichloromethane	83	5.459	5.459	(1.121)	101183	5.00000	5.60	9081
	57 2-Chloroethyl vinyl ether	63	5.643	5.643	(1.159)	37881	5.00000	5.06	9173
	58 1-Bromo-2-chloroethane	63	5.717	5.717	(1.174)	101499	5.00000	5.67	8685
	59 cis-1,3-Dichloropropene	75	5.791	5.791	(1.189)	113337	5.00000	5.49	
	60 4-methyl-2-pentanone	43	5.877	5.877	(1.207)	79550	5.00000	6.49	
$	61 Toluene-d8	98	6.014	6.014	(1.235)	243543	5.00000	5.97	9444
	62 Toluene +	91	6.072	6.072	(1.247)	268715	5.00000	5.63	7389
	63 trans-1,3-Dichloropropene	75	6.209	6.209	(1.275)	114368	5.00000	5.36	
M	138 Total-1-3 Dichloropropene	100				227705	10.0000	10.8	0
	65 1,1,2-Trichloroethane	97	6.375	6.375	(0.876)	62898	5.00000	5.44	9145
	66 1,3-Dichloropropane	76	6.524	6.524	(0.896)	106940	5.00000	5.34	8138
	67 Tetrachloroethene	164	6.535	6.535	(0.898)	60631	5.00000	5.23	7481
	68 2-Hexanone	43	6.552	6.552	(0.900)	64061	5.00000	6.48	
	69 Dibromochloromethane	129	6.730	6.730	(0.925)	88828	5.00000	5.39	9309
	70 1,2-Dibromoethane(EDB)	107	6.861	6.861	(0.943)	67111	5.00000	4.89	8422(a)
*	71 CHLOROBENZENE-d5	82	7.279	7.279	(1.000)	1221472	50.0000		5930
	72 Chlorobenzene ++	112	7.313	7.313	(1.005)	171408	5.00000	5.29	4675
	73 1,1,1,2-Tetrachloroethane	133	7.365	7.365	(1.012)	73561	5.00000	5.63	8506
	74 Ethylbenzene +	106	7.393	7.393	(1.016)	97598	5.00000	5.54	
	75 p,m-Xylene	106	7.496	7.496	(1.030)	216472	10.0000	10.6	
	76 o-Xylene	106	7.937	7.937	(1.090)	98814	5.00000	5.11	
	77 Styrene	104	7.937	7.937	(1.090)	185210	5.00000	5.28	9673
M	78 TOTAL XYLENE	106				315286	15.0000	15.7	0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
79 Bromoform ++	173	8.137	8.137	(1.118)	62383	5.00000	5.46	9084
80 Isopropylbenzene	105	8.297	8.297	(1.140)	292565	5.00000	5.36	9604
$ 82 Bromofluorobenzene	174	8.480	8.480	(1.165)	81851	5.00000	5.69	8943
83 1,1,2,2-Tetrachloroethane++	83	8.595	8.595	(0.871)	81466	5.00000	5.15	8793
84 trans-1,4-Dichloro-2-Butene	53	8.646	8.646	(0.876)	26335	5.00000	5.88	9230
85 1,2,3-Trichloropropane	75	8.658	8.658	(0.877)	113887	5.00000	5.65	9201
86 Bromobenzene	77	8.669	8.669	(0.878)	184134	5.00000	5.95	9380
87 n-Propylbenzene	91	8.767	8.767	(0.888)	341015	5.00000	5.38	
88 2-Chlorotoluene	91	8.898	8.898	(0.901)	239073	5.00000	5.47	
89 1,3,5-Trimethylbenzene	105	8.950	8.950	(0.907)	218902	5.00000	5.41	9181 (M)
90 4-Chlorotoluene	91	9.018	9.018	(0.914)	248392	5.00000	5.42	
91 tert-butylbenzene	91	9.356	9.356	(0.948)	203830	5.00000	5.73	9268
93 1,2,4-Trimethylbenzene	105	9.402	9.402	(0.952)	194162	5.00000	5.62	
94 sec-Butylbenzene	105	9.625	9.625	(0.975)	299451	5.00000	5.37	
95 p-Isopropyltoluene	119	9.796	9.796	(0.992)	215897	5.00000	5.29	9584
96 1,3-Dichlorobenzene	146	9.796	9.796	(0.992)	138286	5.00000	5.46	
* 97 1,4-DICHLOROBENZENE-D4	152	9.871	9.871	(1.000)	961145	50.0000		4912
98 1,4-Dichlorobenzene	146	9.905	9.905	(1.003)	139457	5.00000	5.44	
99 n-Butylbenzene	91	10.323	10.323	(1.046)	181868	5.00000	5.57	9414
100 1,2-Dichlorobenzene	146	10.391	10.391	(1.053)	132568	5.00000	5.37	
101 1,2-Dibromo-3-Chloropropane	157	11.433	11.433	(1.158)	20088	5.00000	5.58	8779
103 1,2,4-Trichlorobenzene	180	12.629	12.629	(1.279)	66887	5.00000	6.77	
104 Hexachlorobutadiene	225	12.869	12.869	(1.304)	75278	5.00000	6.17	8753
105 Naphthalene	128	12.983	12.983	(1.315)	124462	5.00000	6.71	9208
106 1,2,3-Trichlorobenzene	180	13.350	13.350	(1.352)	63891	5.00000	6.89	

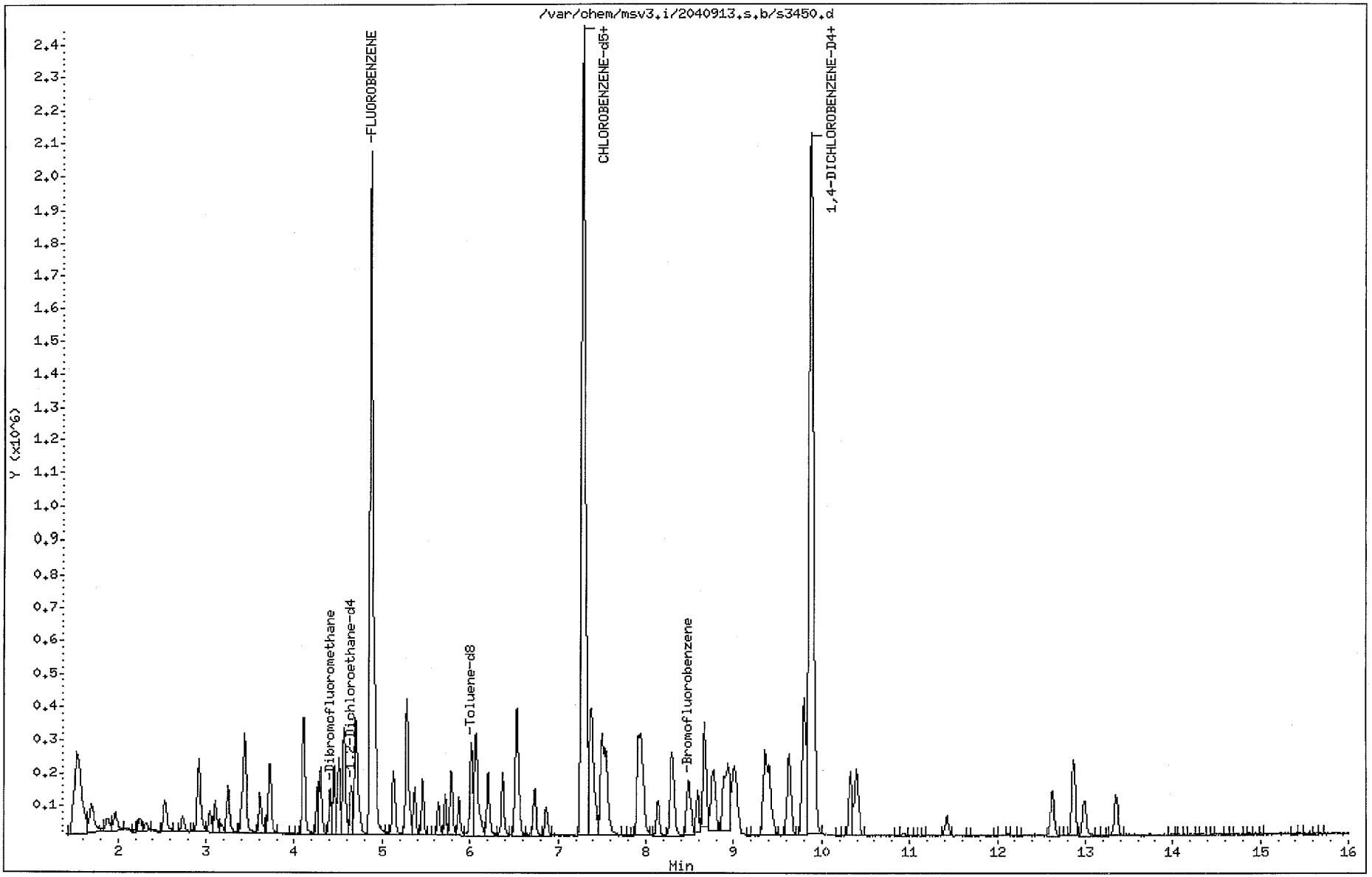
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /var/chem/msv3.i/2040913.s.b/s3450.d
Date : 13-SEP-2004 11:33
Client ID: V3STD005
Sample Info: 1201*V3STD005*5-17-14
Purge Volume: 5.0
Column phase: DB-624

Instrument: msv3.i
Operator: KCB
Column diameter: 0.53

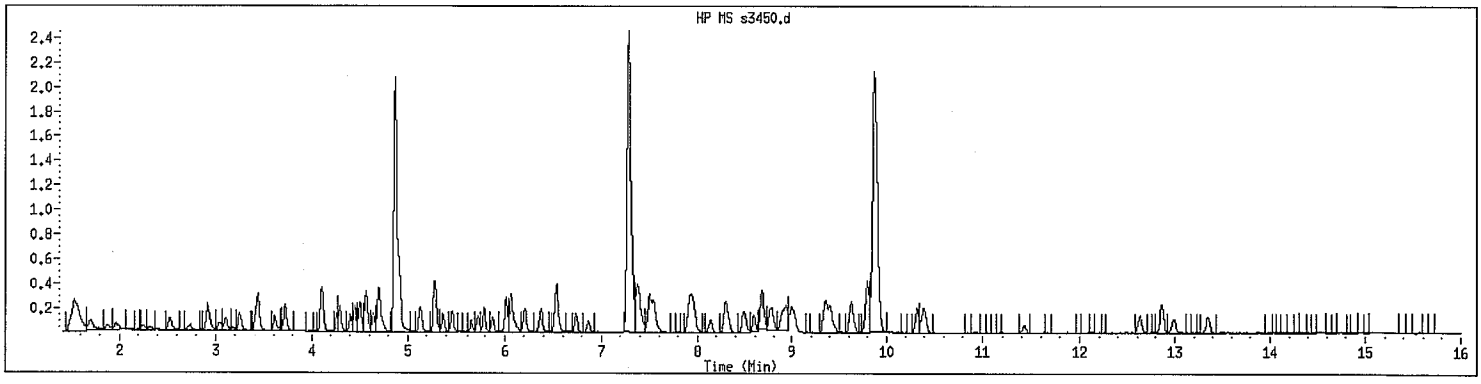
000119



Data file : /var/chem/msv3.i/2040913.s.b/s3450.d
Report Date: 10/03/2004 08:28

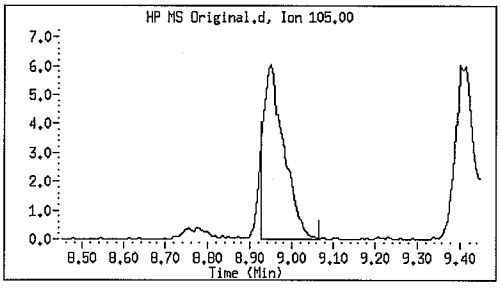
MANUAL INTEGRATION GRAPHIC REPORT

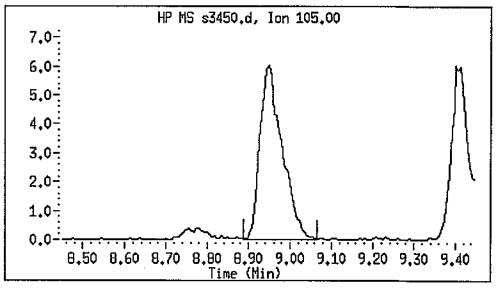
Lab ID	: 1201	SampleType	: CALIB_1
Injection Date	: 13-SEP-2004 11:33	Instrument	: msv3.i
Operator	: KCB		
Sample Info	: 1201*V3STD005*5-17-14		
Misc Info	: MSV~5302~*1*KCB		
Method	: /var/chem/msv3.i/2040913.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



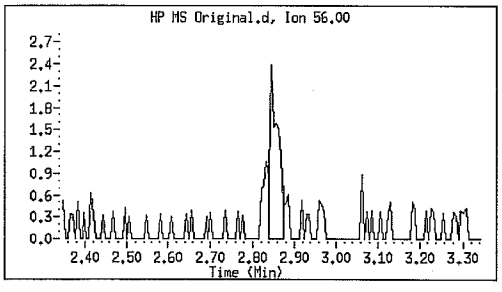
Original | Final

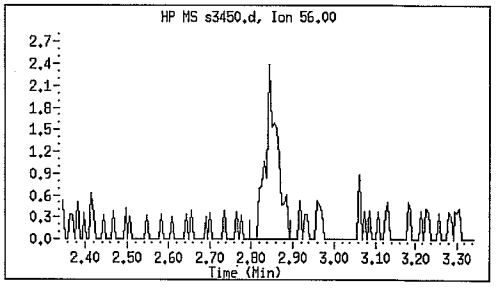
89 1,3,5-Trimethylbenzene CAS#: 108-67-8





9 Acrolein CAS#: 107-02-8





GCAL, Inc.

Data file : /var/chem/msv3.i/2040913.s.b/s3451.d
Lab Smp Id: 1202 Client Smp ID: V3STD020
Inj Date : 13-SEP-2004 11:55
Operator : KCB Inst ID: msv3.i
Smp Info : 1202*V3STD020*5-17-14
Misc Info : MSV~5302~*1*KCB
Comment :
Method : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:28 rjo Quant Type: ISTD
Cal Date : 07-SEP-2004 13:23 Cal File: s3199.d
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
1 Dichlorodifluoromethane	85	1.700	1.700	(0.349)	361913	20.0000	21.6	9134
2 Chloromethane ++	50	1.877	1.877	(0.385)	221049	20.0000	20.9	8420
3 Vinyl Chloride +	62	1.969	1.969	(0.404)	216063	20.0000	19.4	8653
5 Bromomethane	94	2.243	2.243	(0.461)	90057	20.0000	27.8	8961
6 Chloroethane	64	2.324	2.324	(0.477)	99441	20.0000	19.4	8750
7 Trichlorofluoromethane	101	2.535	2.535	(0.521)	396620	20.0000	19.9	9421
9 Acrolein	56	2.844	2.844	(0.584)	16287	100.000	30.6	4976
10 1,1,2Trichlotrifluoroethane	101	2.913	2.913	(0.598)	214350	20.0000	19.3	8492
11 1,1-Dichloroethene +	96	2.919	2.919	(0.599)	165155	20.0000	18.7	8997
12 Acetone	43	2.953	2.953	(0.606)	104385	20.0000	17.8	(a)
13 Methyl Iodide	142	3.039	3.039	(0.624)	325388	20.0000	19.1	9407
14 Carbon Disulfide	76	3.102	3.102	(0.637)	629070	20.0000	19.4	9687
17 Methyl Acetate	43	3.170	3.170	(0.651)	119923	20.0000	18.7	3455(H)
18 Methylene Chloride	49	3.245	3.245	(0.666)	281277	20.0000	20.4	9181
20 Acrylonitrile	53	3.411	3.411	(0.700)	366796	100.000	103	8315

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
	21 MTBE	73	3.434	3.434	(0.705)	566825	20.0000	19.1	8931
	22 trans-1,2-Dichloroethene	61	3.434	3.434	(0.705)	293691	20.0000	19.8	
	24 Hexane	57	3.611	3.611	(0.742)	222745	20.0000	16.8	9314
	25 Vinyl Acetate	43	3.611	3.611	(0.742)	148575	20.0000	9.46	(H)
	26 1,1-Dichloroethane ++	63	3.714	3.714	(0.763)	454639	20.0000	22.3	8568
M	30 Total 1,2-Dichloroethene	61				740444	40.0000	42.3	0
	32 2-Butanone	43	4.097	4.097	(0.841)	171656	20.0000	25.5	(H)
	34 cis-1,2-Dichloroethene	61	4.097	4.097	(0.841)	446753	20.0000	22.5	
	35 2,2-Dichloropropane	77	4.109	4.109	(0.844)	428867	20.0000	22.0	9339
	37 Bromochloromethane	128	4.263	4.263	(0.875)	133335	20.0000	21.1	8327
	38 Chloroform +	83	4.298	4.298	(0.882)	497213	20.0000	21.8	9321
$	39 Dibromofluoromethane	111	4.406	4.406	(0.905)	309526	20.0000	22.4	9325
	40 1,1,1-Trichloroethane	97	4.452	4.452	(0.914)	486362	20.0000	22.3	8996
	42 Cyclohexane	56	4.504	4.504	(0.925)	389859	20.0000	31.2	9387
	43 1,1-Dichloropropene	75	4.555	4.555	(0.935)	356944	20.0000	22.0	9313
	44 Carbon Tetrachloride	117	4.566	4.566	(0.938)	402148	20.0000	22.7	8091
$	45 1,2-Dichloroethane-d4	67	4.647	4.647	(0.954)	205984	20.0000	23.1	9182
	46 1,2-Dichloroethane	62	4.692	4.692	(0.964)	491696	20.0000	23.3	7774
	47 Benzene	78	4.698	4.698	(0.965)	896150	20.0000	21.1	7298
*	48 FLUOROBENZENE	96	4.870	4.870	(1.000)	2060438	50.0000		9634
	49 Trichloroethene	130	5.127	5.127	(1.053)	258747	20.0000	20.8	9544
	51 Methyl Cyclohexane	83	5.276	5.276	(1.083)	386411	20.0000	21.0	9441
	52 1,2-Dichloropropane +	63	5.287	5.287	(1.086)	257113	20.0000	21.8	8843
	55 Dibromomethane	93	5.367	5.367	(1.102)	196530	20.0000	21.5	8216
	56 Bromodichloromethane	83	5.459	5.459	(1.121)	393865	20.0000	21.8	9328
	57 2-Chloroethyl vinyl ether	63	5.636	5.636	(1.157)	147222	20.0000	20.2	9418
	58 1-Bromo-2-chloroethane	63	5.716	5.716	(1.174)	392991	20.0000	22.0	8810
	59 cis-1,3-Dichloropropene	75	5.791	5.791	(1.189)	434395	20.0000	21.3	
	60 4-methyl-2-pentanone	43	5.871	5.871	(1.206)	311047	20.0000	24.4	
$	61 Toluene-d8	98	6.014	6.014	(1.235)	891603	20.0000	22.0	9723
	62 Toluene +	91	6.066	6.066	(1.246)	1008042	20.0000	21.5	7271
	63 trans-1,3-Dichloropropene	75	6.203	6.203	(1.274)	449356	20.0000	21.3	
M	138 Total-1-3 Dichloropropene	100				883751	40.0000	42.6	0
	65 1,1,2-Trichloroethane	97	6.369	6.369	(0.875)	229521	20.0000	20.0	9359
	66 1,3-Dichloropropane	76	6.523	6.523	(0.896)	406934	20.0000	20.6	7984
	67 Tetrachloroethene	164	6.535	6.535	(0.898)	216226	20.0000	18.8	7533
	68 2-Hexanone	43	6.540	6.540	(0.899)	240094	20.0000	23.4	
	69 Dibromochloromethane	129	6.735	6.735	(0.925)	330060	20.0000	20.0	9376
	70 1,2-Dibromoethane(EDB)	107	6.867	6.867	(0.943)	273754	20.0000	20.1	9161
*	71 CHLOROBENZENE-d5	82	7.279	7.279	(1.000)	1213831	50.0000		6237
	72 Chlorobenzene ++	112	7.307	7.307	(1.004)	629350	20.0000	19.7	7246
	73 1,1,1,2-Tetrachloroethane	133	7.364	7.364	(1.012)	268176	20.0000	20.5	8748
	74 Ethylbenzene +	106	7.387	7.387	(1.015)	336633	20.0000	19.4	
	75 p,m-Xylene	106	7.496	7.496	(1.030)	787376	40.0000	39.1	
	76 o-Xylene	106	7.908	7.908	(1.086)	402411	20.0000	21.0	
	77 Styrene	104	7.919	7.919	(1.088)	722811	20.0000	20.8	9658
M	78 TOTAL XYLENE	106				1189787	60.0000	60.1	0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
79 Bromoform ++	173	8.142	8.142	(1.119)	246041	20.0000	21.3	9267
80 Isopropylbenzene	105	8.291	8.291	(1.139)	1122039	20.0000	20.6	9684
$ 82 Bromofluorobenzene	174	8.480	8.480	(1.165)	308577	20.0000	21.2	9310
83 1,1,2,2-Tetrachloroethane++	83	8.595	8.595	(0.871)	311800	20.0000	19.0	8774
84 trans-1,4-Dichloro-2-Butene	53	8.652	8.652	(0.877)	103986	20.0000	21.9	9062
85 1,2,3-Trichloropropane	75	8.663	8.663	(0.878)	427666	20.0000	20.6	8637
86 Bromobenzene	77	8.669	8.669	(0.878)	698440	20.0000	21.9	9378
87 n-Propylbenzene	91	8.755	8.755	(0.887)	1360604	20.0000	20.8	
88 2-Chlorotoluene	91	8.881	8.881	(0.900)	974784	20.0000	21.3	
89 1,3,5-Trimethylbenzene	105	8.944	8.944	(0.906)	940189	20.0000	21.9	9401(H)
90 4-Chlorotoluene	91	9.006	9.006	(0.912)	956228	20.0000	20.2	
91 tert-butylbenzene	91	9.350	9.350	(0.947)	809590	20.0000	21.3	9296
93 1,2,4-Trimethylbenzene	105	9.407	9.407	(0.953)	878443	20.0000	23.1	
94 sec-Butylbenzene	105	9.624	9.624	(0.975)	1208505	20.0000	20.7	
95 p-Isopropyltoluene	119	9.790	9.790	(0.992)	920526	20.0000	21.2	9648
96 1,3-Dichlorobenzene	146	9.790	9.790	(0.992)	541165	20.0000	20.5	
* 97 1,4-DICHLOROBENZENE-D4	152	9.870	9.870	(1.000)	1007660	50.0000		5548
98 1,4-Dichlorobenzene	146	9.905	9.905	(1.003)	556596	20.0000	20.6	
99 n-Butylbenzene	91	10.322	10.322	(1.046)	859805	20.0000	23.5	9464
100 1,2-Dichlorobenzene	146	10.385	10.385	(1.052)	531545	20.0000	20.5	
101 1,2-Dibromo-3-Chloropropane	157	11.421	11.421	(1.157)	80766	20.0000	20.9	9311
103 1,2,4-Trichlorobenzene	180	12.623	12.623	(1.279)	313680	20.0000	27.1	
104 Hexachlorobutadiene	225	12.869	12.869	(1.304)	284117	20.0000	21.6	8816
105 Naphthalene	128	12.994	12.994	(1.316)	572437	20.0000	26.9	9220
106 1,2,3-Trichlorobenzene	180	13.349	13.349	(1.352)	291656	20.0000	26.9	

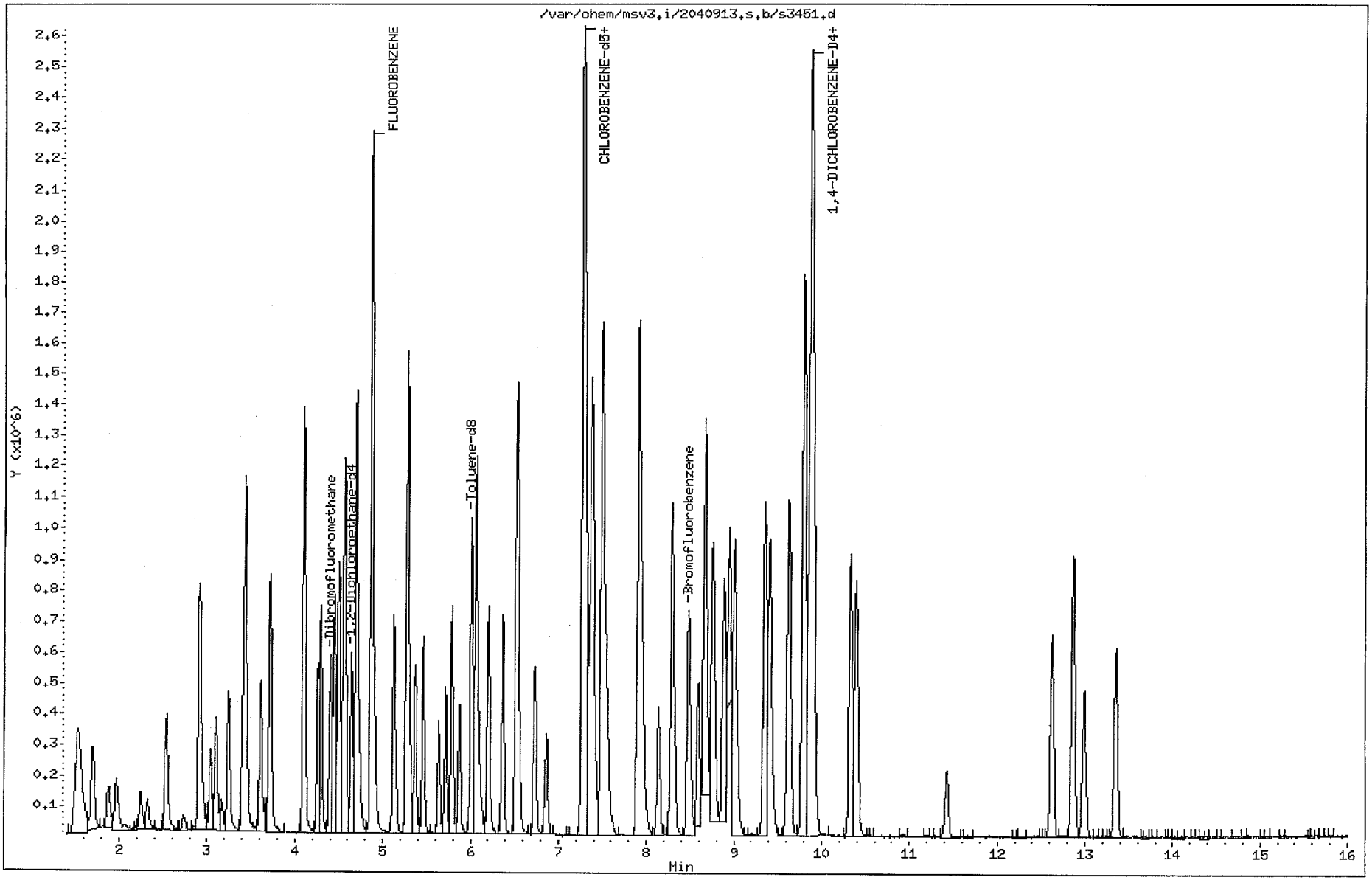
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: /var/chem/msv3.i/2040913.s.b/s3451.d
Date : 13-SEP-2004 11:55
Client ID: V3STD020
Sample Info: 1202*V3STD020*5-17-14
Purge Volume: 5.0
Column phase: DB-624

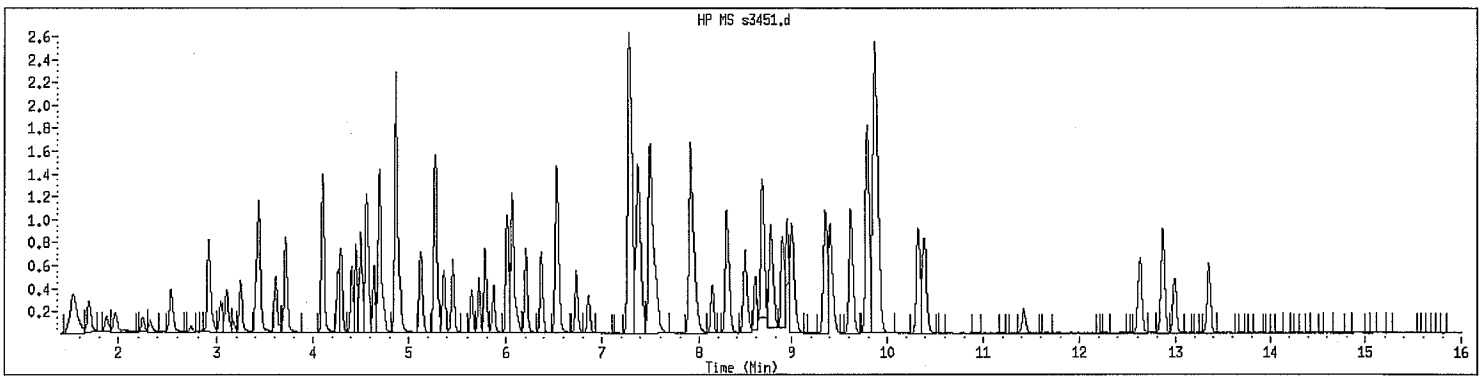
Instrument: msv3.i
Operator: KCB
Column diameter: 0.53

000124



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1202	SampleType	: CALIB_2
Injection Date	: 13-SEP-2004 11:55	Instrument	: msv3.i
Operator	: KCB		
Sample Info	: 1202*V3STD020*5-17-14		
Misc Info	: MSV~5302~*1*KCB		
Method	: /var/chem/msv3.i/2040913.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/msv3.i/2040913.s.b/s3452.d
Lab Smp Id: 1203 Client Smp ID: V3STD050
Inj Date : 13-SEP-2004 12:17
Operator : KCB Inst ID: msv3.i
Smp Info : 1203*V3STD050*5-17-14
Misc Info : MSV~5302~*1*KCB
Comment :
Method : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:28 rjo Quant Type: ISTD
Cal Date : 07-SEP-2004 13:47 Cal File: s3200.d
Als bottle: 9 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
1 Dichlorodifluoromethane	85	1.693	1.693	(0.348)	860169	50.0000	51.1	9730
2 Chloromethane ++	50	1.876	1.876	(0.385)	502323	50.0000	48.5	9074
3 Vinyl Chloride +	62	1.968	1.968	(0.404)	508308	50.0000	47.1	9133
5 Bromomethane	94	2.237	2.237	(0.459)	170712	50.0000	54.1	9275(M)
6 Chloroethane	64	2.311	2.311	(0.475)	223297	50.0000	46.5	9214
7 Trichlorofluoromethane	101	2.528	2.528	(0.519)	961025	50.0000	49.4	9443
9 Acrolein	56	2.843	2.843	(0.584)	39790	250.000	85.9	7188
10 1,1,2Trichlotrifluoroethane	101	2.906	2.906	(0.597)	491469	50.0000	46.0	7851
11 1,1-Dichloroethene +	96	2.917	2.917	(0.599)	401757	50.0000	47.6	9024
12 Acetone	43	2.952	2.952	(0.606)	260801	50.0000	52.5	
13 Methyl Iodide	142	3.038	3.038	(0.624)	791796	50.0000	48.6	9444
14 Carbon Disulfide	76	3.101	3.101	(0.637)	1513217	50.0000	48.3	9688
17 Methyl Acetate	43	3.169	3.169	(0.651)	295541	50.0000	50.4	3343(H)
18 Methylene Chloride	49	3.244	3.244	(0.666)	633661	50.0000	46.6	9230
20 Acrylonitrile	53	3.404	3.404	(0.699)	860878	250.000	248	9571(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
	21 MTBE	73	3.438	3.438	(0.706)	1368386	50.0000	48.2	8770
	22 trans-1,2-Dichloroethene	61	3.438	3.438	(0.706)	696584	50.0000	48.4	
	24 Hexane	57	3.610	3.610	(0.741)	641907	50.0000	49.8	9378
	25 Vinyl Acetate	43	3.610	3.610	(0.741)	316021	50.0000	25.7	(H)
	26 1,1-Dichloroethane ++	63	3.713	3.713	(0.763)	1083392	50.0000	53.0	8619
M	30 Total 1,2-Dichloroethene	61				1750437	100.000	101	0
	32 2-Butanone	43	4.096	4.096	(0.841)	380296	50.0000	64.0	(H)
	34 cis-1,2-Dichloroethene	61	4.096	4.096	(0.841)	1053853	50.0000	52.6	
	35 2,2-Dichloropropane	77	4.108	4.108	(0.844)	990674	50.0000	51.2	9188
	37 Bromochloromethane	128	4.262	4.262	(0.875)	315512	50.0000	50.7	8364
	38 Chloroform +	83	4.296	4.296	(0.882)	1188585	50.0000	52.1	9405
$	39 Dibromofluoromethane	111	4.405	4.405	(0.905)	735925	50.0000	52.7	9329
	40 1,1,1-Trichloroethane	97	4.451	4.451	(0.914)	1150524	50.0000	52.6	9147
	42 Cyclohexane	56	4.502	4.502	(0.925)	917468	50.0000	63.6	9482
	43 1,1-Dichloropropene	75	4.560	4.560	(0.937)	838686	50.0000	51.8	8495
	44 Carbon Tetrachloride	117	4.571	4.571	(0.939)	930981	50.0000	52.1	8042
$	45 1,2-Dichloroethane-d4	67	4.640	4.640	(0.953)	483427	50.0000	53.3	9118
	46 1,2-Dichloroethane	62	4.691	4.691	(0.964)	1158058	50.0000	53.8	8215
	47 Benzene	78	4.703	4.703	(0.966)	2140360	50.0000	57.8	7383
*	48 FLUOROBENZENE	96	4.869	4.869	(1.000)	2022915	50.0000		9658
	49 Trichloroethene	130	5.126	5.126	(1.053)	621201	50.0000	50.7	9500
	51 Methyl Cyclohexane	83	5.275	5.275	(1.083)	888592	50.0000	49.4	9399
	52 1,2-Dichloropropane +	63	5.286	5.286	(1.086)	617159	50.0000	52.1	8854
	55 Dibromomethane	93	5.366	5.366	(1.102)	479524	50.0000	52.2	8096
	56 Bromodichloromethane	83	5.464	5.464	(1.122)	947900	50.0000	52.2	9318
	57 2-Chloroethyl vinyl ether	63	5.641	5.641	(1.159)	383496	50.0000	52.7	9495
	58 1-Bromo-2-chloroethane	63	5.715	5.715	(1.174)	948295	50.0000	52.6	8750
	59 cis-1,3-Dichloropropene	75	5.790	5.790	(1.189)	1049881	50.0000	51.7	
	60 4-methyl-2-pentanone	43	5.876	5.876	(1.207)	741002	50.0000	55.7	
$	61 Toluene-d8	98	6.013	6.013	(1.235)	2087573	50.0000	51.7	9686
	62 Toluene +	91	6.064	6.064	(1.246)	2346291	50.0000	50.9	7585
	63 trans-1,3-Dichloropropene	75	6.207	6.207	(1.275)	1099924	50.0000	52.3	
M	138 Total-1-3 Dichloropropene	100				2149805	100.000	104	0
	65 1,1,2-Trichloroethane	97	6.373	6.373	(0.876)	552878	50.0000	48.5	9279
	66 1,3-Dichloropropane	76	6.522	6.522	(0.896)	968615	50.0000	49.6	8403
	67 Tetrachloroethene	164	6.534	6.534	(0.898)	507901	50.0000	44.8	7904
	68 2-Hexanone	43	6.545	6.545	(0.899)	561066	50.0000	52.8	
	69 Dibromochloromethane	129	6.734	6.734	(0.925)	823640	50.0000	49.8	9444
	70 1,2-Dibromoethane(EDB)	107	6.865	6.865	(0.943)	670141	50.0000	49.4	9353
*	71 CHLOROBENZENE-d5	82	7.277	7.277	(1.000)	1214749	50.0000		6545
	72 Chlorobenzene ++	112	7.306	7.306	(1.004)	1478414	50.0000	47.2	8433
	73 1,1,1,2-Tetrachloroethane	133	7.369	7.369	(1.013)	635176	50.0000	48.8	9147
	74 Ethylbenzene +	106	7.386	7.386	(1.015)	808411	50.0000	47.5	
	75 p,m-Xylene	106	7.495	7.495	(1.030)	1942942	100.000	97.9	
	76 o-Xylene	106	7.912	7.912	(1.087)	971503	50.0000	50.5	
	77 Styrene	104	7.918	7.918	(1.088)	1726256	50.0000	49.7	9656
M	78 TOTAL XYLENE	106				2914445	150.000	148	0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
79 Bromoform ++	173	8.141	8.141	(1.119)	606448	50.0000	51.4	9311
80 Isopropylbenzene	105	8.290	8.290	(1.139)	2690560	50.0000	49.1	9684
$ 82 Bromofluorobenzene	174	8.479	8.479	(1.165)	734665	50.0000	49.9	9399
83 1,1,2,2-Tetrachloroethane++	83	8.593	8.593	(0.871)	750170	50.0000	46.1	8795
84 trans-1,4-Dichloro-2-Butene	53	8.656	8.656	(0.877)	250473	50.0000	52.0	8883
85 1,2,3-Trichloropropane	75	8.662	8.662	(0.878)	1035586	50.0000	50.0	8777
86 Bromobenzene	77	8.673	8.673	(0.879)	1512776	50.0000	47.6	9256
87 n-Propylbenzene	91	8.754	8.754	(0.887)	3266516	50.0000	50.3	
88 2-Chlorotoluene	91	8.885	8.885	(0.900)	2344459	50.0000	51.2	
89 1,3,5-Trimethylbenzene	105	8.948	8.948	(0.907)	2278646	50.0000	52.7	9522
90 4-Chlorotoluene	91	9.005	9.005	(0.912)	2280807	50.0000	48.9	
91 tert-butylbenzene	91	9.349	9.349	(0.947)	1939928	50.0000	50.9	9359
93 1,2,4-Trimethylbenzene	105	9.406	9.406	(0.953)	2215184	50.0000	56.3	
94 sec-Butylbenzene	105	9.618	9.618	(0.974)	2925279	50.0000	50.6	
95 p-Isopropyltoluene	119	9.795	9.795	(0.992)	2251968	50.0000	52.0	9627
96 1,3-Dichlorobenzene	146	9.795	9.795	(0.992)	1299673	50.0000	49.8	
* 97 1,4-DICHLOROBENZENE-D4	152	9.869	9.869	(1.000)	1002124	50.0000		6163
98 1,4-Dichlorobenzene	146	9.904	9.904	(1.003)	1316657	50.0000	49.2	
99 n-Butylbenzene	91	10.333	10.333	(1.047)	2103312	50.0000	55.5	9520
100 1,2-Dichlorobenzene	146	10.390	10.390	(1.053)	1287905	50.0000	50.1	
101 1,2-Dibromo-3-Chloropropane	157	11.431	11.431	(1.158)	198905	50.0000	51.8	9220
103 1,2,4-Trichlorobenzene	180	12.627	12.627	(1.279)	761938	50.0000	60.3	
104 Hexachlorobutadiene	225	12.862	12.862	(1.303)	686589	50.0000	51.4	8933
105 Naphthalene	128	12.993	12.993	(1.317)	1442629	50.0000	61.8	9370
106 1,2,3-Trichlorobenzene	180	13.348	13.348	(1.352)	714681	50.0000	60.2	

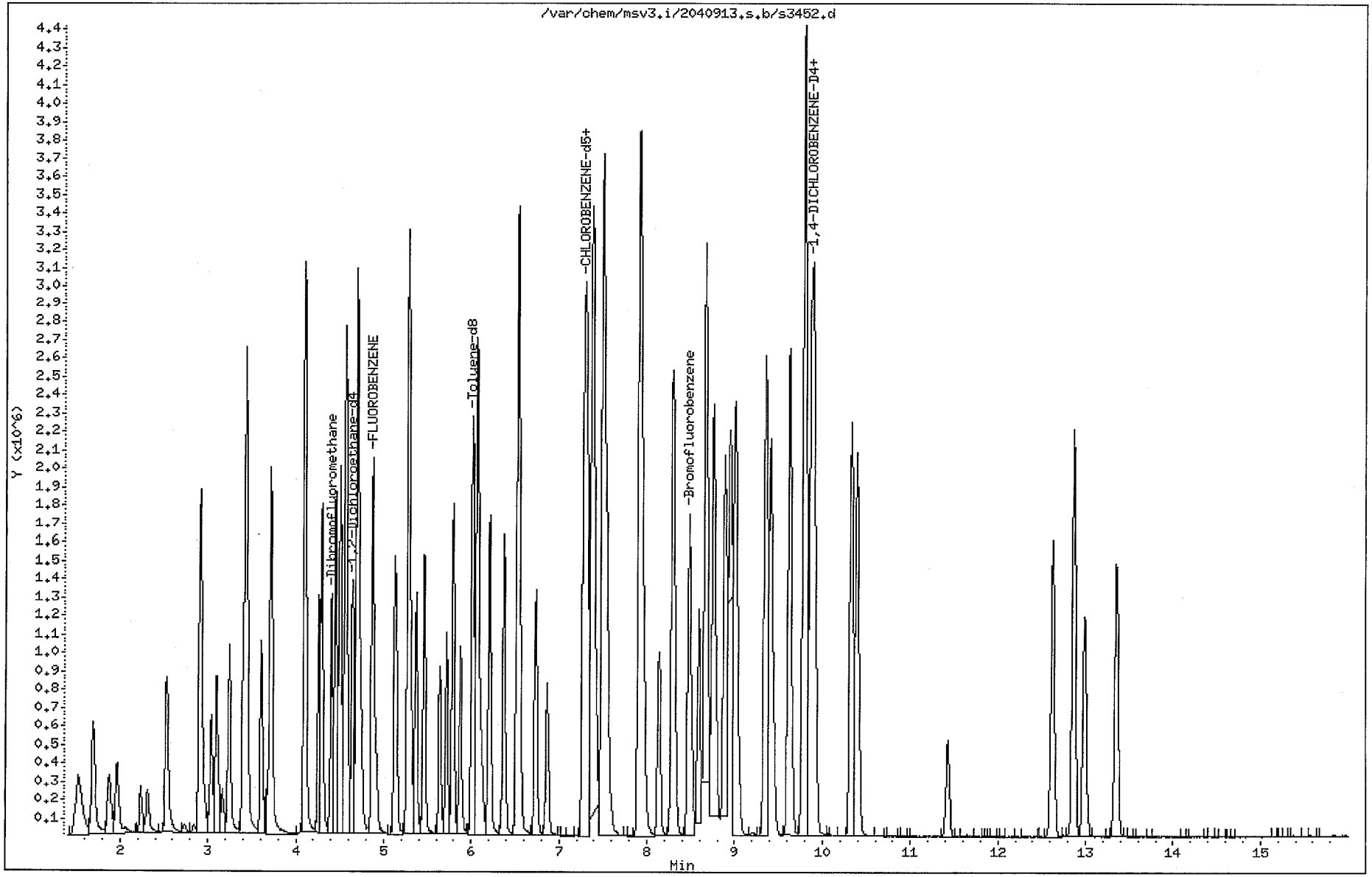
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /var/chem/msv3.i/2040913.s.b/s3452.d
Date : 13-SEP-2004 12:17
Client ID: V3STD050
Sample Info: 1203*V3STD050*5-17-14
Purge Volume: 5.0
Column phase: DB-624

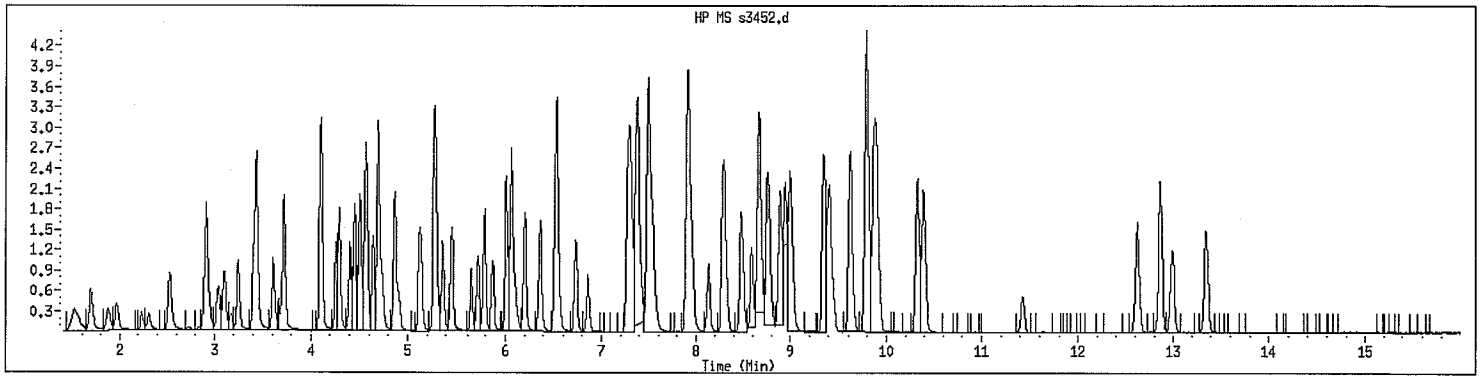
Instrument: msv3.i
Operator: KCB
Column diameter: 0.53

000129



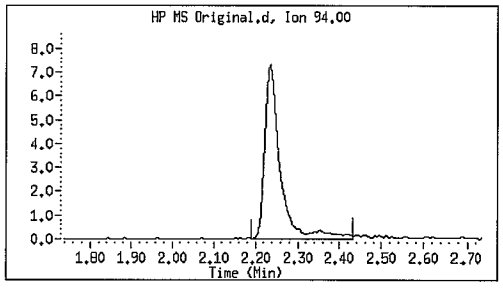
MANUAL INTEGRATION GRAPHIC REPORT

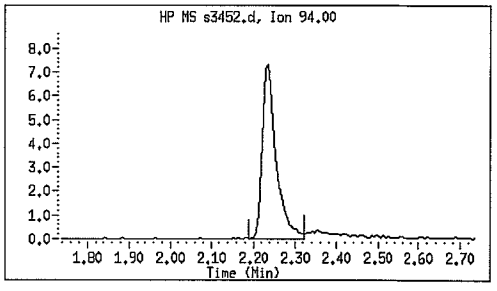
Lab ID	: 1203	SampleType	: CALIB_3
Injection Date	: 13-SEP-2004 12:17	Instrument	: msv3.i
Operator	: KCB		
Sample Info	: 1203*V3STD050*5-17-14		
Misc Info	: MSV~5302~*1*KCB		
Method	: /var/chem/msv3.i/2040913.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



Original Final

5 Bromomethane CAS#: 74-83-9





GCAL, Inc.

Data file : /var/chem/msv3.i/2040913.s.b/s3453.d
Lab Smp Id: 1204 Client Smp ID: V3STD100
Inj Date : 13-SEP-2004 12:38
Operator : KCB Inst ID: msv3.i
Smp Info : 1204*V3STD100*5-17-14
Misc Info : MSV~5302~*1*KCB
Comment :
Method : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:28 rjo Quant Type: ISTD
Cal Date : 07-SEP-2004 14:12 Cal File: s3201.d
Als bottle: 10 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
1 Dichlorodifluoromethane	85	1.701	1.701	(0.349)	1715735	100.000	91.7	9583
2 Chloromethane ++	50	1.884	1.884	(0.387)	1014279	100.000	89.4	9208
3 Vinyl Chloride +	62	1.970	1.970	(0.404)	1048705	100.000	89.9	9374
5 Bromomethane	94	2.239	2.239	(0.460)	306610	100.000	81.8	9482
6 Chloroethane	64	2.313	2.313	(0.475)	443970	100.000	87.6	9127
7 Trichlorofluoromethane	101	2.530	2.530	(0.520)	1978542	100.000	93.3	9313
9 Acrolein	56	2.845	2.845	(0.584)	125752	500.000	309	8188(A)
10 1,1,2Trichlotrifluoroethane	101	2.908	2.908	(0.597)	1019815	100.000	89.0	7770
11 1,1-Dichloroethene +	96	2.925	2.925	(0.601)	819715	100.000	90.5	9408
12 Acetone	43	2.954	2.954	(0.606)	517124	100.000	98.4	
13 Methyl Iodide	142	3.040	3.040	(0.624)	1632403	100.000	93.4	9319
14 Carbon Disulfide	76	3.103	3.103	(0.637)	3103529	100.000	92.0	9673
17 Methyl Acetate	43	3.171	3.171	(0.651)	565819	100.000	89.7	3248(H)
18 Methylene Chloride	49	3.246	3.246	(0.666)	1269583	100.000	85.4	9241
20 Acrylonitrile	53	3.406	3.406	(0.699)	1644547	500.000	439	9594(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
	21 MTBE	73	3.434	3.434	(0.705)	2772315	100.000	91.6	8967
	22 trans-1,2-Dichloroethene	61	3.434	3.434	(0.705)	1386219	100.000	89.4	
	24 Hexane	57	3.612	3.612	(0.742)	1327080	100.000	94.5	9429
	25 Vinyl Acetate	43	3.612	3.612	(0.742)	761315	100.000	73.0	
	26 1,1-Dichloroethane ++	63	3.715	3.715	(0.763)	2169924	100.000	94.9	8582
M	30 Total 1,2-Dichloroethene	61				3462086	200.000	182	0
	32 2-Butanone	43	4.098	4.098	(0.841)	715050	100.000	112	
	34 cis-1,2-Dichloroethene	61	4.098	4.098	(0.841)	2075867	100.000	92.6	
	35 2,2-Dichloropropane	77	4.110	4.110	(0.844)	2043460	100.000	94.8	9215
	37 Bromochloromethane	128	4.264	4.264	(0.875)	630395	100.000	92.7	8378
	38 Chloroform +	83	4.298	4.298	(0.883)	2415374	100.000	94.8	9514
$	39 Dibromofluoromethane	111	4.407	4.407	(0.905)	1477703	100.000	94.6	9345
	40 1,1,1-Trichloroethane	97	4.453	4.453	(0.914)	2382606	100.000	96.9	9129
	42 Cyclohexane	56	4.504	4.504	(0.925)	1887633	100.000	104	9496
	43 1,1-Dichloropropene	75	4.562	4.562	(0.937)	1704107	100.000	94.5	8536
	44 Carbon Tetrachloride	117	4.567	4.567	(0.938)	1958859	100.000	97.1	8262
$	45 1,2-Dichloroethane-d4	67	4.642	4.642	(0.953)	988218	100.000	96.3	9069
	46 1,2-Dichloroethane	62	4.693	4.693	(0.964)	2326575	100.000	95.6	8266
	47 Benzene	78	4.705	4.705	(0.966)	4316479	100.000	109	7286
*	48 FLUOROBENZENE	96	4.870	4.870	(1.000)	2232035	50.0000		9620
	49 Trichloroethene	130	5.134	5.134	(1.054)	1273740	100.000	94.2	9546
	51 Methyl Cyclohexane	83	5.277	5.277	(1.083)	1841044	100.000	93.0	9447
	52 1,2-Dichloropropane +	63	5.288	5.288	(1.086)	1247853	100.000	94.0	8936
	55 Dibromomethane	93	5.368	5.368	(1.102)	961164	100.000	93.8	8225
	56 Bromodichloromethane	83	5.460	5.460	(1.121)	1949966	100.000	96.1	9403
	57 2-Chloroethyl vinyl ether	63	5.643	5.643	(1.159)	810247	100.000	100	9425
	58 1-Bromo-2-chloroethane	63	5.717	5.717	(1.174)	1946696	100.000	96.4	8678
	59 cis-1,3-Dichloropropene	75	5.792	5.792	(1.189)	2152207	100.000	95.4	
	60 4-methyl-2-pentanone	43	5.872	5.872	(1.206)	1452255	100.000	95.2	
$	61 Toluene-d8	98	6.015	6.015	(1.235)	4327617	100.000	95.6	9693
	62 Toluene +	91	6.066	6.066	(1.246)	4940699	100.000	96.3	7510
	63 trans-1,3-Dichloropropene	75	6.209	6.209	(1.275)	2330922	100.000	99.2	
M	138 Total-1-3 Dichloropropene	100				4483129	200.000	195	0
	65 1,1,2-Trichloroethane	97	6.375	6.375	(0.876)	1147696	100.000	90.1	9275
	66 1,3-Dichloropropane	76	6.524	6.524	(0.896)	1942959	100.000	89.4	8139
	67 Tetrachloroethene	164	6.535	6.535	(0.898)	1029816	100.000	81.2	7818
	68 2-Hexanone	43	6.547	6.547	(0.899)	1050488	100.000	86.3	
	69 Dibromochloromethane	129	6.736	6.736	(0.925)	1717193	100.000	91.7	9335
	70 1,2-Dibromoethane(EDB)	107	6.867	6.867	(0.943)	1353141	100.000	89.2	9390
*	71 CHLOROBENZENE-d5	82	7.279	7.279	(1.000)	1377615	50.0000		7322
	72 Chlorobenzene ++	112	7.308	7.308	(1.004)	3084726	100.000	88.9	9450
	73 1,1,1,2-Tetrachloroethane	133	7.365	7.365	(1.012)	1285306	100.000	88.3	8673
	74 Ethylbenzene +	106	7.394	7.394	(1.016)	1664056	100.000	88.0	
	75 p,m-Xylene	106	7.497	7.497	(1.030)	3970580	200.000	180	
	76 o-Xylene	106	7.909	7.909	(1.086)	1960441	100.000	90.4	
	77 Styrene	104	7.920	7.920	(1.088)	3539295	100.000	90.3	9663
M	78 TOTAL XYLENE	106				5931021	300.000	270	0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
	79 Bromoform ++	173	8.138	8.138	(1.118)	1259824	100.000	93.3	9333
	80 Isopropylbenzene	105	8.292	8.292	(1.139)	5483169	100.000	88.3	9639
$	82 Bromofluorobenzene	174	8.481	8.481	(1.165)	1527538	100.000	90.9	9298
	83 1,1,2,2-Tetrachloroethane++	83	8.590	8.590	(0.870)	1517453	100.000	86.6	8696
	84 trans-1,4-Dichloro-2-Butene	53	8.658	8.658	(0.877)	502603	100.000	95.1	8582
	85 1,2,3-Trichloropropane	75	8.664	8.664	(0.877)	2032063	100.000	91.2	8545
	86 Bromobenzene	77	8.675	8.675	(0.878)	3394636	100.000	97.0	9132
	87 n-Propylbenzene	91	8.755	8.755	(0.886)	6688788	100.000	95.5	
	88 2-Chlorotoluene	91	8.881	8.881	(0.899)	4803747	100.000	96.5	
	89 1,3,5-Trimethylbenzene	105	8.944	8.944	(0.906)	4619982	100.000	98.0	9527(H)
	90 4-Chlorotoluene	91	9.007	9.007	(0.912)	4685748	100.000	93.5	
	91 tert-butylbenzene	91	9.351	9.351	(0.947)	4022153	100.000	96.5	9420
	93 1,2,4-Trimethylbenzene	105	9.408	9.408	(0.952)	4493442	100.000	103	
	94 sec-Butylbenzene	105	9.625	9.625	(0.974)	5903321	100.000	95.0	
	95 p-Isopropyltoluene	119	9.797	9.797	(0.992)	4461178	100.000	95.5	9658
	96 1,3-Dichlorobenzene	146	9.797	9.797	(0.992)	2596709	100.000	92.7	
*	97 1,4-DICHLOROBENZENE-D4	152	9.877	9.877	(1.000)	1081239	50.0000		8242
	98 1,4-Dichlorobenzene	146	9.900	9.900	(1.002)	2710390	100.000	94.0	
	99 n-Butylbenzene	91	10.323	10.323	(1.045)	4350022	100.000	103	9513
	100 1,2-Dichlorobenzene	146	10.392	10.392	(1.052)	2620310	100.000	94.6	
	101 1,2-Dibromo-3-Chloropropane	157	11.433	11.433	(1.158)	392849	100.000	95.7	9196
	103 1,2,4-Trichlorobenzene	180	12.623	12.623	(1.278)	1571444	100.000	107	
	104 Hexachlorobutadiene	225	12.869	12.869	(1.303)	1381329	100.000	94.1	8881
	105 Naphthalene	128	12.990	12.990	(1.315)	2909736	100.000	107	9327
	106 1,2,3-Trichlorobenzene	180	13.356	13.356	(1.352)	1489397	100.000	108	

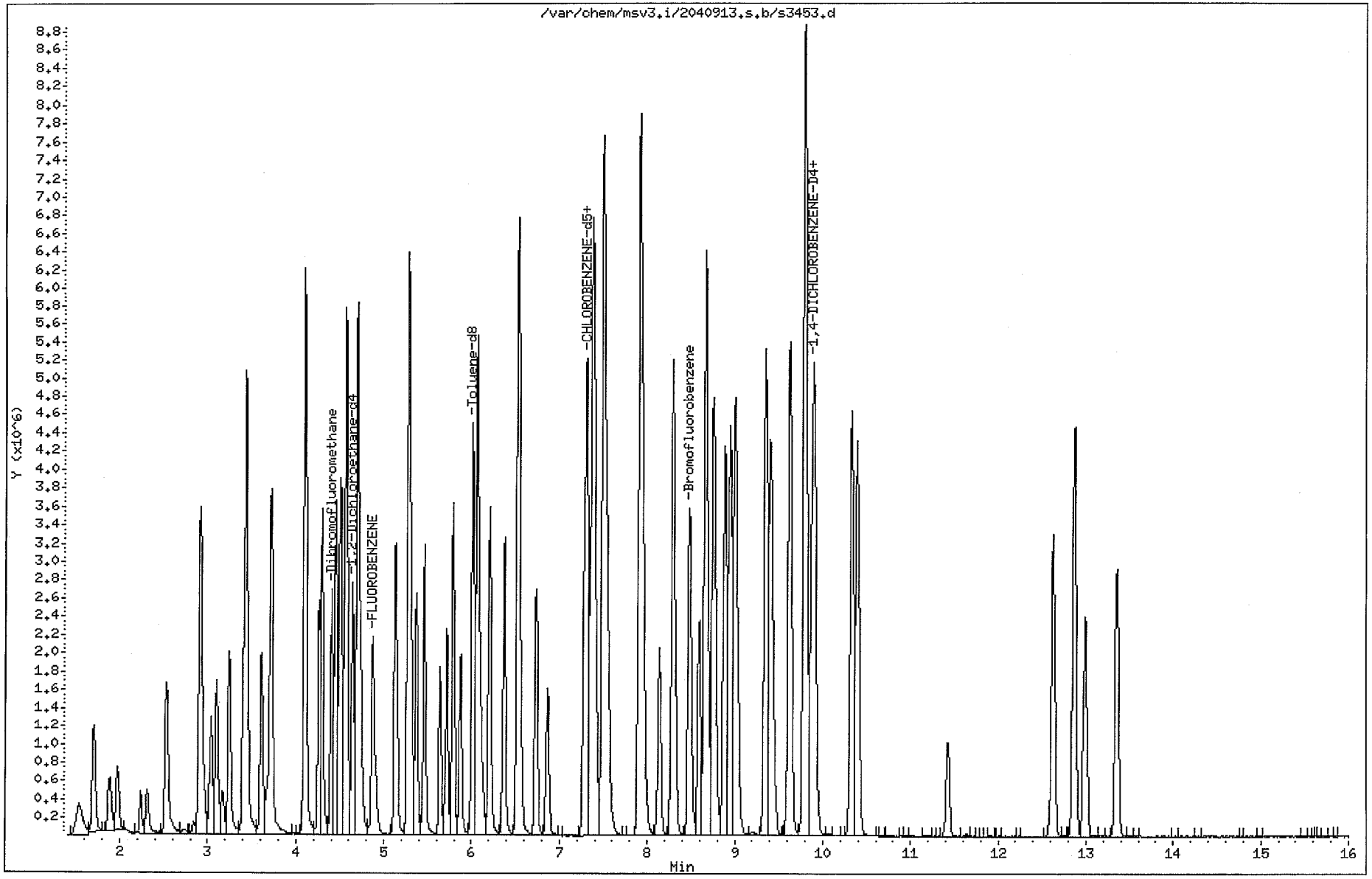
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Data File: /var/chem/msv3.i/2040913.s.b/s3453.d
Date : 13-SEP-2004 12:38
Client ID: V3STD100
Sample Info: 1204*V3STD100*5-17-14
Purge Volume: 5.0
Column phase: DB-624

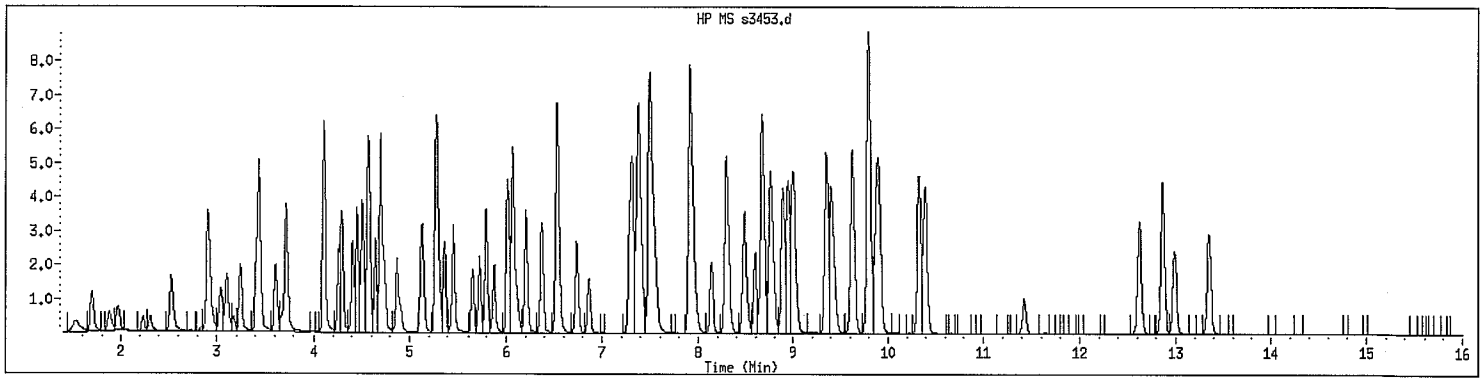
Instrument: msv3.i
Operator: KCB
Column diameter: 0.53

000134



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1204	SampleType	: CALIB_4
Injection Date	: 13-SEP-2004 12:38	Instrument	: msv3.i
Operator	: KCB		
Sample Info	: 1204*V3STD100*5-17-14		
Misc Info	: MSV~5302~*1*KCB		
Method	: /var/chem/msv3.i/2040913.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/msv3.i/2040913.s.b/s3454.d
Lab Smp Id: 1205 Client Smp ID: V3STD200
Inj Date : 13-SEP-2004 13:00
Operator : KCB Inst ID: msv3.i
Smp Info : 1205*V3STD200*5-17-14
Misc Info : MSV~5302~*1*KCB
Comment :
Method : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 08:28 rjo Quant Type: ISTD
Cal Date : 07-SEP-2004 14:37 Cal File: s3202.d
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
1 Dichlorodifluoromethane	85	1.702	1.702	(0.350)	3385838	200.000	199	9476
2 Chloromethane ++	50	1.885	1.885	(0.387)	2011563	200.000	198	9251
3 Vinyl Chloride +	62	1.971	1.971	(0.405)	2082492	200.000	202	9315(A)
5 Bromomethane	94	2.234	2.234	(0.459)	568800	200.000	159	9547
6 Chloroethane	64	2.308	2.308	(0.474)	636226	200.000	154	9073
7 Trichlorofluoromethane	101	2.526	2.526	(0.519)	3818308	200.000	202	9263(A)
9 Acrolein	56	2.846	2.846	(0.585)	393286	1000.00	1790	9158(A)
10 1,1,2Trichlotrifluoroethane	101	2.909	2.909	(0.598)	2038396	200.000	201	8053(A)
11 1,1-Dichloroethene +	96	2.915	2.915	(0.599)	1551956	200.000	197	8734
12 Acetone	43	2.955	2.955	(0.607)	912518	200.000	200	
13 Methyl Iodide	142	3.041	3.041	(0.625)	3177360	200.000	208	9339(A)
14 Carbon Disulfide	76	3.098	3.098	(0.637)	6044223	200.000	204	9683(A)
17 Methyl Acetate	43	3.172	3.172	(0.652)	1127145	200.000	203	3192(H)
18 Methylene Chloride	49	3.247	3.247	(0.667)	2406799	200.000	181	9156
20 Acrylonitrile	53	3.407	3.407	(0.700)	3084059	1000.00	937	9615(A)

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
	21	MTBE	73	3.441	3.441	(0.707)	5130460	200.000	194	8747
	22	trans-1,2-Dichloroethene	61	3.436	3.436	(0.706)	2597103	200.000	191	
	24	Hexane	57	3.607	3.607	(0.741)	2616336	200.000	209	9415
	25	Vinyl Acetate	43	3.607	3.607	(0.741)	1468516	200.000	217	(A)
	26	1,1-Dichloroethane ++	63	3.716	3.716	(0.764)	3966502	200.000	192	8588
M	30	Total 1,2-Dichloroethene	61				6354617	400.000	376	0
	32	2-Butanone	43	4.099	4.099	(0.842)	1275192	200.000	200	(A)
	34	cis-1,2-Dichloroethene	61	4.099	4.099	(0.842)	3757514	200.000	185	
	35	2,2-Dichloropropane	77	4.111	4.111	(0.845)	3794336	200.000	194	9159
	37	Bromochloromethane	128	4.265	4.265	(0.877)	1177044	200.000	194	8336
	38	Chloroform +	83	4.300	4.300	(0.884)	4420344	200.000	192	9444
$	39	Dibromofluoromethane	111	4.408	4.408	(0.906)	2698455	200.000	191	9282(A)
	40	1,1,1-Trichloroethane	97	4.454	4.454	(0.915)	4406343	200.000	196	9116
	42	Cyclohexane	56	4.505	4.505	(0.926)	3482852	200.000	193	9435
	43	1,1-Dichloropropene	75	4.563	4.563	(0.938)	3197259	200.000	195	8307
	44	Carbon Tetrachloride	117	4.568	4.568	(0.939)	3710099	200.000	199	8168
$	45	1,2-Dichloroethane-d4	67	4.643	4.643	(0.954)	1761576	200.000	188	9128
	46	1,2-Dichloroethane	62	4.694	4.694	(0.965)	4107694	200.000	184	8083
	47	Benzene	78	4.700	4.700	(0.966)	7955317	200.000	201	7012(A)
*	48	FLUOROBENZENE	96	4.866	4.866	(1.000)	1977326	50.0000		9645
	49	Trichloroethene	130	5.129	5.129	(1.054)	2440841	200.000	200	9445
	51	Methyl Cyclohexane	83	5.272	5.272	(1.083)	3415867	200.000	193	9399
	52	1,2-Dichloropropane +	63	5.289	5.289	(1.087)	2258854	200.000	188	8983
	55	Dibromomethane	93	5.369	5.369	(1.103)	1754399	200.000	190	8158
	56	Bromodichloromethane	83	5.461	5.461	(1.122)	3605404	200.000	196	9354
	57	2-Chloroethyl vinyl ether	63	5.644	5.644	(1.160)	1487569	200.000	205	9439(A)
	58	1-Bromo-2-chloroethane	63	5.718	5.718	(1.175)	3482412	200.000	191	8693
	59	cis-1,3-Dichloropropene	75	5.793	5.793	(1.190)	3961957	200.000	195	
	60	4-methyl-2-pentanone	43	5.879	5.879	(1.208)	2711451	200.000	192	
$	61	Toluene-d8	98	6.016	6.016	(1.236)	7889637	200.000	191	9671
	62	Toluene +	91	6.067	6.067	(1.247)	8910321	200.000	191	7401
	63	trans-1,3-Dichloropropene	75	6.211	6.211	(1.276)	4240100	200.000	199	
M	138	Total-1-3 Dichloropropene	100				8202057	400.000	395	0
	65	1,1,2-Trichloroethane	97	6.376	6.376	(0.876)	2076299	200.000	185	9291
	66	1,3-Dichloropropane	76	6.525	6.525	(0.896)	3377161	200.000	176	7923
	67	Tetrachloroethene	164	6.537	6.537	(0.898)	1872368	200.000	166	7666
	68	2-Hexanone	43	6.548	6.548	(0.899)	1876458	200.000	170	
	69	Dibromochloromethane	129	6.737	6.737	(0.925)	3121351	200.000	187	9436
	70	1,2-Dibromoethane(EDB)	107	6.869	6.869	(0.943)	2507214	200.000	187	9230
*	71	CHLOROBENZENE-d5	82	7.280	7.280	(1.000)	1231162	50.0000		8482
	72	Chlorobenzene ++	112	7.309	7.309	(1.004)	5595591	200.000	184	9490
	73	1,1,1,2-Tetrachloroethane	133	7.366	7.366	(1.012)	2321707	200.000	180	8615
	74	Ethylbenzene +	106	7.389	7.389	(1.015)	2971886	200.000	179	
	75	p,m-Xylene	106	7.498	7.498	(1.030)	7207003	400.000	371	
	76	o-Xylene	106	7.910	7.910	(1.086)	3565130	200.000	187	
	77	Styrene	104	7.921	7.921	(1.088)	6384531	200.000	185	9575
M	78	TOTAL XYLENE	106				10772133	600.000	558	0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
79 Bromoform ++	173	8.139	8.139	(1.118)	2377991	200.000	197	9280
80 Isopropylbenzene	105	8.299	8.299	(1.140)	9903619	200.000	179	9601
$ 82 Bromofluorobenzene	174	8.488	8.488	(1.166)	2833289	200.000	189	9192
83 1,1,2,2-Tetrachloroethane++	83	8.596	8.596	(0.871)	2777313	200.000	158	8709
84 trans-1,4-Dichloro-2-Butene	53	8.654	8.654	(0.877)	909003	200.000	169	9021
85 1,2,3-Trichloropropane	75	8.659	8.659	(0.877)	3751058	200.000	168	9023
86 Bromobenzene	77	8.671	8.671	(0.878)	5414290	200.000	154	9259
87 n-Propylbenzene	91	8.757	8.757	(0.887)	12094782	200.000	171	
88 2-Chlorotoluene	91	8.888	8.888	(0.900)	8687484	200.000	172	
89 1,3,5-Trimethylbenzene	105	8.951	8.951	(0.907)	8544658	200.000	177	9595(H)
90 4-Chlorotoluene	91	9.008	9.008	(0.912)	8741601	200.000	174	
91 tert-butylbenzene	91	9.357	9.357	(0.948)	7419136	200.000	175	9334
93 1,2,4-Trimethylbenzene	105	9.409	9.409	(0.953)	8253565	200.000	181	
94 sec-Butylbenzene	105	9.626	9.626	(0.975)	10843838	200.000	173	
95 p-Isopropyltoluene	119	9.798	9.798	(0.992)	8106520	200.000	172	9646
96 1,3-Dichlorobenzene	146	9.792	9.792	(0.992)	4637359	200.000	166	
* 97 1,4-DICHLOROBENZENE-D4	152	9.872	9.872	(1.000)	1103339	50.0000		8071
98 1,4-Dichlorobenzene	146	9.907	9.907	(1.003)	5057385	200.000	175	
99 n-Butylbenzene	91	10.330	10.330	(1.046)	8055470	200.000	183	9400
100 1,2-Dichlorobenzene	146	10.393	10.393	(1.053)	4840491	200.000	174	
101 1,2-Dibromo-3-Chloropropane	157	11.429	11.429	(1.158)	791246	200.000	199	9303
103 1,2,4-Trichlorobenzene	180	12.630	12.630	(1.279)	2973729	200.000	185	
104 Hexachlorobutadiene	225	12.871	12.871	(1.304)	2535296	200.000	170	8850
105 Naphthalene	128	12.996	12.996	(1.316)	5688668	200.000	190	9296
106 1,2,3-Trichlorobenzene	180	13.357	13.357	(1.353)	2766915	200.000	183	

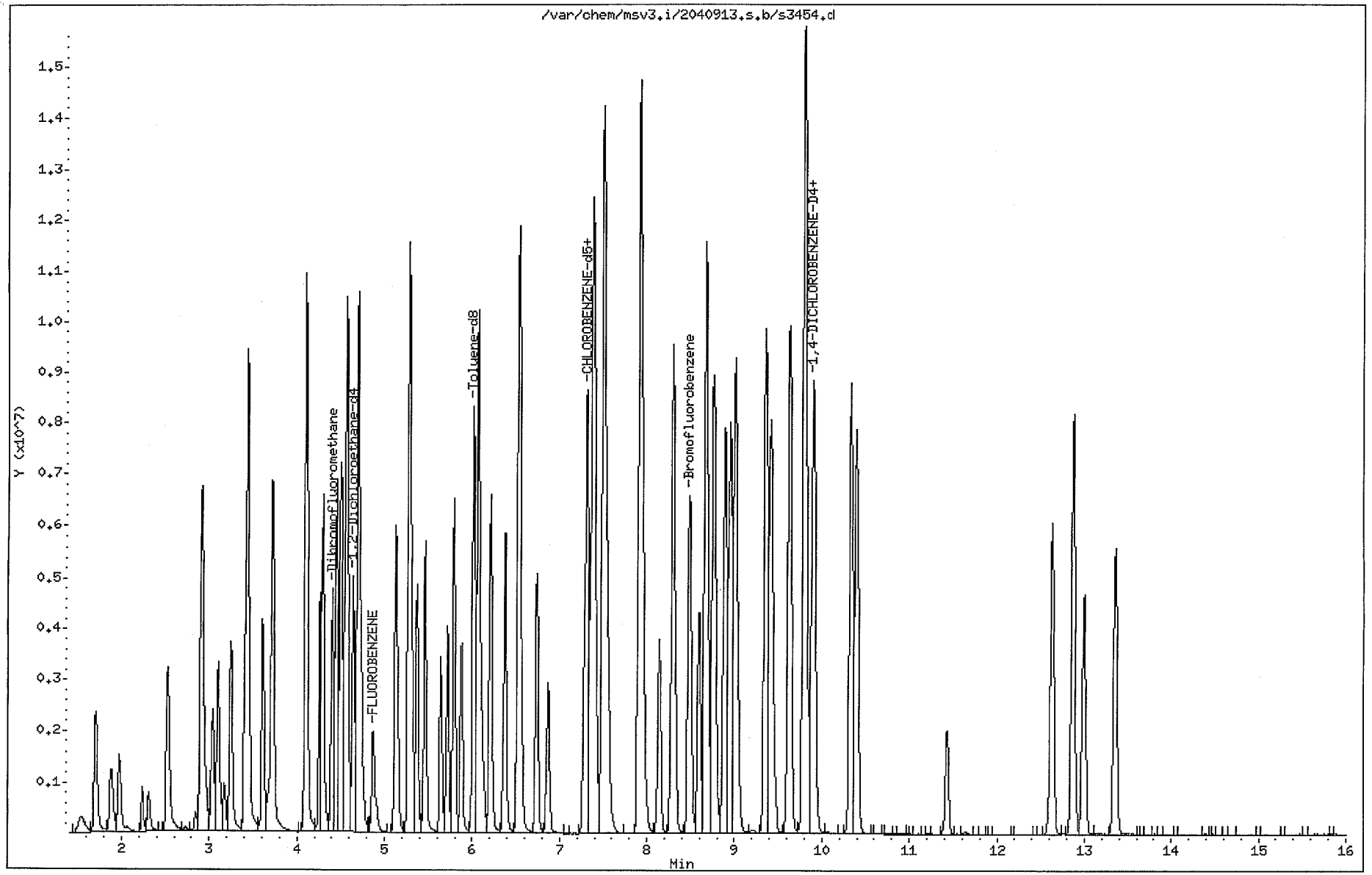
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Data File: /var/chem/msv3.i/2040913.s.b/s3454.d
Date : 13-SEP-2004 13:00
Client ID: V3STD200
Sample Info: 1205*V3STD200*5-17-14
Purge Volume: 5.0
Column phase: DB-624

Instrument: msv3.i
Operator: KCB
Column diameter: 0.53

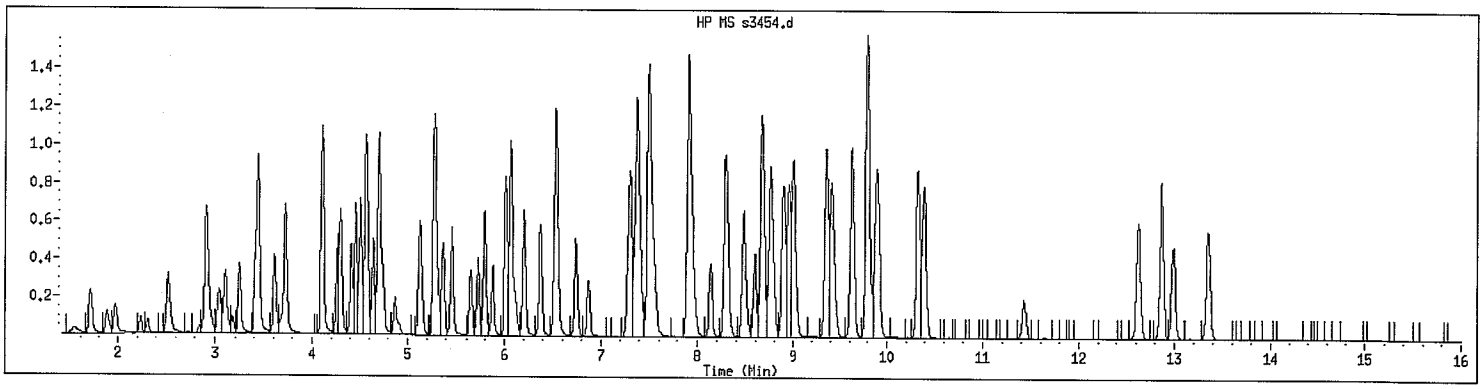
000139



Data file : /var/chem/msv3.i/2040913.s.b/s3454.d
Report Date: 10/03/2004 08:28

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1205	SampleType	: CALIB_5
Injection Date	: 13-SEP-2004 13:00	Instrument	: msv3.i
Operator	: KCB		
Sample Info	: 1205*V3STD200*5-17-14		
Misc Info	: MSV~5302~*1*KCB		
Method	: /var/chem/msv3.i/2040913.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



NO MANUAL INTEGRATIONS

Data file : /var/chem/msv3.i/2040913.s.b/s3456.d
Report Date: 10/07/2004 09:26

GCAL, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: ICV
Level: LOW
Data Type: MS DATA
SpikeList File: CH2-ICV.spk
Sublist File: 8260.sub
Method File: /var/chem/msv3.i/2040913.s.b/8260Bw3.m
Misc Info: MSV~5230~*1*KCB

Client SDG: 2040913.s
Fraction: VOA
Client Smp ID:
Operator: RJO
Sample Type: LCS
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1 Dichlorodifluoromethane	50.0	49.9	99.88	80-120
	2 Chloromethane ++	50.0	49.8	99.68	80-120
	3 Vinyl Chloride +	50.0	48.4	96.87	80-120
	5 Bromomethane	50.0	58.5	116.96	80-120
	6 Chloroethane	50.0	63.6	127.24*	80-120
	7 Trichlorofluoromethane	50.0	52.2	104.33	80-120
	9 Acrolein	250	422	168.83*	80-120
	11 1,1-Dichloroethene +	50.0	49.2	98.47	80-120
	12 Acetone	50.0	45.0	90.04	80-120
	13 Methyl Iodide	50.0	54.8	109.63	80-120
	14 Carbon Disulfide	50.0	50.9	101.87	80-120
	17 Methyl Acetate	50.0	54.0	108.07	80-120
	18 Methylene Chloride	50.0	55.7	111.50	80-120
	20 Acrylonitrile	250	272	108.87	80-120
	21 MTBE	50.0	54.6	109.25	80-120
	22 trans-1,2-Dichloroethene	50.0	51.2	102.32	80-120
	24 Hexane	50.0	51.2	102.34	80-120
	25 Vinyl Acetate	50.0	57.0	114.07	80-120
	26 1,1-Dichloroethane ++	50.0	44.2	88.42	80-120
M	30 Total 1,2-Dichloroethene	100	99.9	99.92	80-120
	32 2-Butanone	50.0	47.7	95.39	80-120
	34 cis-1,2-Dichloroethene	50.0	48.8	97.51	80-120
	35 2,2-Dichloropropane	50.0	49.3	98.59	80-120
	37 Bromochloromethane	50.0	51.9	103.75	80-120
	38 Chloroform +	50.0	50.6	101.26	80-120
	40 1,1,1-Trichloroethane	50.0	49.8	99.57	80-120
	43 1,1-Dichloropropene	50.0	48.2	96.31	80-120
	44 Carbon Tetrachloride	50.0	50.6	101.22	80-120
	46 1,2-Dichloroethane	50.0	49.8	99.54	80-120
	47 Benzene	50.0	46.8	93.55	80-120

Data file : /var/chem/msv3.i/2040913.s.b/s3456.d
Report Date: 10/07/2004 09:26

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	49 Trichloroethene	50.0	47.0	94.07	80-120
	52 1,2-Dichloropropane +	50.0	47.0	93.92	80-120
	55 Dibromomethane	50.0	48.1	96.24	80-120
	56 Bromodichloromethane	50.0	48.0	95.93	80-120
	57 2-Chloroethyl vinyl ether	50.0	53.7	107.48	80-120
	59 cis-1,3-Dichloropropene	50.0	49.1	98.22	80-120
	60 4-methyl-2-pentanone	50.0	48.6	97.29	80-120
	62 Toluene +	50.0	46.4	92.78	80-120
	63 trans-1,3-Dichloropropene	50.0	48.4	96.73	80-120
	65 1,1,2-Trichloroethane	50.0	54.6	109.17	80-120
	66 1,3-Dichloropropane	50.0	57.7	115.49	80-120
	67 Tetrachloroethene	50.0	53.4	106.87	80-120
	68 2-Hexanone	50.0	55.1	110.22	80-120
	69 Dibromochloromethane	50.0	53.1	106.29	80-120
	70 1,2-Dibromoethane(EDB)	50.0	50.2	100.33	80-120
	72 Chlorobenzene ++	50.0	50.1	100.13	80-120
	73 1,1,1,2-Tetrachloroethane	50.0	49.2	98.41	80-120
	74 Ethylbenzene +	50.0	50.0	100.01	80-120
	75 p,m-Xylene	100	102	101.95	80-120
	76 o-Xylene	50.0	52.1	104.14	80-120
	77 Styrene	50.0	51.6	103.20	80-120
M	78 TOTAL XYLENE	150	154	102.68	80-120
	79 Bromoform ++	50.0	53.1	106.21	80-120
	80 Isopropylbenzene	50.0	49.6	99.22	80-120
	83 1,1,2,2-Tetrachloroethane++	50.0	45.1	90.12	80-120
	84 trans-1,4-Dichloro-2-Butene	50.0	51.0	101.95	80-120
	85 1,2,3-Trichloropropane	50.0	50.2	100.48	80-120
	86 Bromobenzene	50.0	50.7	101.37	80-120
	87 n-Propylbenzene	50.0	49.4	98.83	80-120
	88 2-Chlorotoluene	50.0	48.9	97.71	80-120
	89 1,3,5-Trimethylbenzene	50.0	50.4	100.75	80-120
	90 4-Chlorotoluene	50.0	49.2	98.31	80-120
	91 tert-butylbenzene	50.0	48.9	97.84	80-120
	93 1,2,4-Trimethylbenzene	50.0	50.8	101.54	80-120
	94 sec-Butylbenzene	50.0	50.2	100.42	80-120
	95 p-Isopropyltoluene	50.0	51.2	102.45	80-120
	96 1,3-Dichlorobenzene	50.0	49.7	99.35	80-120
	98 1,4-Dichlorobenzene	50.0	48.9	97.74	80-120
	99 n-Butylbenzene	50.0	50.6	101.13	80-120
	100 1,2-Dichlorobenzene	50.0	49.1	98.30	80-120
	101 1,2-Dibromo-3-Chloropropane	50.0	54.5	108.97	80-120
	103 1,2,4-Trichlorobenzene	50.0	49.0	97.94	80-120
	104 Hexachlorobutadiene	50.0	48.4	96.78	80-120
	105 Naphthalene	50.0	52.4	104.86	80-120
	106 1,2,3-Trichlorobenzene	50.0	49.9	99.76	80-120
M	138 Total-1-3 Dichloropropene	100	97.5	97.46	80-120

Data file : /var/chem/msv3.i/2040913.s.b/s3456.d
Report Date: 10/07/2004 09:26

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 39 Dibromofluoromethane	50.0	50.9	101.81	73-125
$ 45 1,2-Dichloroethane-d4	50.0	51.4	102.77	70-123
$ 61 Toluene-d8	50.0	47.8	95.64	78-127
$ 82 Bromofluorobenzene	50.0	52.5	104.96	75-120

GCAL, Inc.

Data file : /var/chem/msv3.i/2040913.s.b/s3456.d
Lab Smp Id: ICV
Inj Date : 13-SEP-2004 13:51
Operator : RJO Inst ID: msv3.i
Smp Info : ICV
Misc Info : MSV~5230~*1*KCB
Comment :
Method : /var/chem/msv3.i/2040913.s.b/8260Bw3.m
Meth Date : 07-Oct-2004 09:26 rjo Quant Type: ISTD
Cal Date : 07-SEP-2004 14:37 Cal File: s3202.d
Als bottle: 13 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
1 Dichlorodifluoromethane	85	1.695	1.702	(0.348)	1000939	49.9396	49.9	9646
2 Chloromethane ++	50	1.878	1.885	(0.386)	606339	49.8388	49.8	8880
3 Vinyl Chloride +	62	1.969	1.971	(0.404)	604989	48.4341	48.4	9154
5 Bromomethane	94	2.233	2.234	(0.458)	207539	58.4823	58.5	9288
6 Chloroethane	64	2.307	2.308	(0.474)	309120	63.6175	63.6	9099(R)
7 Trichlorofluoromethane	101	2.530	2.526	(0.520)	1162771	52.1667	52.2	9270
9 Acrolein	56	2.839	2.846	(0.583)	88800	422.085	422	7848(AR)
10 1,1,2Trichlotrifluoroethane	101	2.908	2.909	(0.597)	603692	50.5965	50.6	7978
11 1,1-Dichloroethene +	96	2.919	2.915	(0.599)	466248	49.2366	49.2	9126
12 Acetone	43	2.954	2.955	(0.606)	256145	45.0211	45.0	
13 Methyl Iodide	142	3.039	3.041	(0.624)	983812	54.8169	54.8	9429
14 Carbon Disulfide	76	3.102	3.098	(0.637)	1818200	50.9364	50.9	9675
17 Methyl Acetate	43	3.171	3.172	(0.651)	354362	54.0328	54.0	3296(H)
18 Methylene Chloride	49	3.245	3.247	(0.666)	793984	55.7482	55.7	9243
20 Acrylonitrile	53	3.406	3.407	(0.699)	1055874	272.170	272	9336(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
	21 MTBE	73	3.434	3.441	(0.705)	1700155	54.6264	54.6	8811
	22 trans-1,2-Dichloroethene	61	3.434	3.436	(0.705)	838582	51.1610	51.2	
	24 Hexane	57	3.612	3.607	(0.742)	755115	51.1721	51.2	9341
	25 Vinyl Acetate	43	3.612	3.607	(0.742)	454335	57.0349	57.0	
	26 1,1-Dichloroethane ++	63	3.715	3.716	(0.763)	1099674	44.2105	44.2	8531
M	30 Total 1,2-Dichloroethene	61				2029966	99.9177	99.9	0
	32 2-Butanone	43	4.092	4.099	(0.840)	416273	47.6927	47.7	
	34 cis-1,2-Dichloroethene	61	4.098	4.099	(0.841)	1191384	48.7567	48.8	
	35 2,2-Dichloropropane	77	4.109	4.111	(0.844)	1151158	49.2964	49.3	9137
	37 Bromochloromethane	128	4.264	4.265	(0.875)	380291	51.8764	51.9	8463
	38 Chloroform +	83	4.298	4.300	(0.883)	1401842	50.6301	50.6	9380
$	39 Dibromofluoromethane	111	4.407	4.408	(0.905)	849174	50.9074	50.9	9304
	40 1,1,1-Trichloroethane	97	4.447	4.454	(0.913)	1334072	49.7858	49.8	9158
	42 Cyclohexane	56	4.498	4.505	(0.924)	1075155	49.6444	49.6	9562
	43 1,1-Dichloropropene	75	4.556	4.563	(0.935)	954632	48.1541	48.2	9193
	44 Carbon Tetrachloride	117	4.567	4.568	(0.938)	1109876	50.6083	50.6	8153
$	45 1,2-Dichloroethane-d4	67	4.641	4.643	(0.953)	566341	51.3844	51.4	9185
	46 1,2-Dichloroethane	62	4.693	4.694	(0.964)	1332286	49.7676	49.8	7888
	47 Benzene	78	4.699	4.700	(0.965)	2397361	46.7760	46.8	7194
*	48 FLUOROBENZENE	96	4.870	4.866	(1.000)	2330321	50.0000		9620
	49 Trichloroethene	130	5.128	5.129	(1.053)	693645	47.0372	47.0	9414
	51 Methyl Cyclohexane	83	5.277	5.272	(1.083)	1010861	48.3388	48.3	9393
	52 1,2-Dichloropropane +	63	5.282	5.289	(1.085)	686601	46.9589	47.0	8548
	55 Dibromomethane	93	5.368	5.369	(1.102)	530783	48.1176	48.1	8145
	56 Bromodichloromethane	83	5.460	5.461	(1.121)	1040611	47.9664	48.0	9340
	57 2-Chloroethyl vinyl ether	63	5.637	5.644	(1.157)	459593	53.7395	53.7	9477
	58 1-Bromo-2-chloroethane	63	5.717	5.718	(1.174)	1078088	48.9603	49.0	8838
	59 cis-1,3-Dichloropropene	75	5.791	5.793	(1.189)	1175042	49.1122	49.1	
	60 4-methyl-2-pentanone	43	5.877	5.879	(1.207)	811330	48.6468	48.6	
$	61 Toluene-d8	98	6.015	6.016	(1.235)	2333947	47.8198	47.8	9702
	62 Toluene +	91	6.066	6.067	(1.246)	2620863	46.3887	46.4	7069
	63 trans-1,3-Dichloropropene	75	6.209	6.211	(1.275)	1212623	48.3656	48.4	
M	138 Total-1-3 Dichloropropene	100				2387665	97.4604	97.5	0
	65 1,1,2-Trichloroethane	97	6.369	6.376	(0.874)	599819	54.5874	54.6	9330
	66 1,3-Dichloropropane	76	6.524	6.525	(0.896)	1081632	57.7459	57.7	8307
	67 Tetrachloroethene	164	6.535	6.537	(0.897)	567096	53.4365	53.4	7766
	68 2-Hexanone	43	6.547	6.548	(0.899)	593404	55.1085	55.1	
	69 Dibromochloromethane	129	6.736	6.737	(0.925)	857410	53.1471	53.1	9445
	70 1,2-Dibromoethane(EDB)	107	6.867	6.869	(0.943)	666012	50.1651	50.2	9262
*	71 CHLOROBENZENE-d5	82	7.285	7.280	(1.000)	1200096	50.0000		7183
	72 Chlorobenzene ++	112	7.313	7.309	(1.004)	1529912	50.0645	50.1	9264
	73 1,1,1,2-Tetrachloroethane	133	7.365	7.366	(1.011)	659889	49.2066	49.2	8345
	74 Ethylbenzene +	106	7.388	7.389	(1.014)	818028	50.0035	50.0	
	75 p,m-Xylene	106	7.497	7.498	(1.029)	1969275	101.952	102	
	76 o-Xylene	106	7.914	7.910	(1.086)	986312	52.0683	52.1	
	77 Styrene	104	7.920	7.921	(1.087)	1764683	51.5989	51.6	9644
M	78 TOTAL XYLENE	106				2955587	154.020	154	0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
79 Bromoform ++	173	8.143	8.139	(1.118)	628940	53.1027	53.1	9240
80 Isopropylbenzene	105	8.298	8.299	(1.139)	2704366	49.6110	49.6	9634
$ 82 Bromofluorobenzene	174	8.486	8.488	(1.165)	765873	52.4786	52.5	9192
83 1,1,2,2-Tetrachloroethane++	83	8.595	8.596	(0.870)	746054	45.0607	45.1	8681
84 trans-1,4-Dichloro-2-Butene	53	8.658	8.654	(0.877)	256178	50.9760	51.0	8864
85 1,2,3-Trichloropropane	75	8.664	8.659	(0.877)	1048805	50.2425	50.2	8758
86 Bromobenzene	77	8.675	8.671	(0.878)	1688403	50.6857	50.7	9218
87 n-Propylbenzene	91	8.761	8.757	(0.887)	3259269	49.4127	49.4	
88 2-Chlorotoluene	91	8.887	8.888	(0.900)	2300702	48.8555	48.9	
89 1,3,5-Trimethylbenzene	105	8.950	8.951	(0.906)	2272904	50.3740	50.4	9495(H)
90 4-Chlorotoluene	91	9.007	9.008	(0.912)	2303651	49.1541	49.2	
91 tert-butylbenzene	91	9.356	9.357	(0.947)	1935274	48.9203	48.9	9359
93 1,2,4-Trimethylbenzene	105	9.408	9.409	(0.952)	2165714	50.7713	50.8	
94 sec-Butylbenzene	105	9.631	9.626	(0.975)	2940324	50.2105	50.2	
95 p-Isopropyltoluene	119	9.797	9.798	(0.992)	2252259	51.2226	51.2	9687
96 1,3-Dichlorobenzene	146	9.802	9.792	(0.992)	1294879	49.6741	49.7	
* 97 1,4-DICHLOROBENZENE-D4	152	9.877	9.872	(1.000)	1029543	50.0000		6374
98 1,4-Dichlorobenzene	146	9.905	9.907	(1.003)	1317259	48.8715	48.9	
99 n-Butylbenzene	91	10.329	10.330	(1.046)	2074229	50.5646	50.6	9489
100 1,2-Dichlorobenzene	146	10.397	10.393	(1.053)	1273484	49.1497	49.1	
101 1,2-Dibromo-3-Chloropropane	157	11.427	11.429	(1.157)	205791	54.4831	54.5	9291
103 1,2,4-Trichlorobenzene	180	12.629	12.630	(1.279)	751251	48.9683	49.0	
104 Hexachlorobutadiene	225	12.869	12.871	(1.303)	674840	48.3893	48.4	8931
105 Naphthalene	128	12.995	12.996	(1.316)	1465837	52.4276	52.4	9366
106 1,2,3-Trichlorobenzene	180	13.350	13.357	(1.352)	701975	49.8825	49.9	

QC Flag Legend

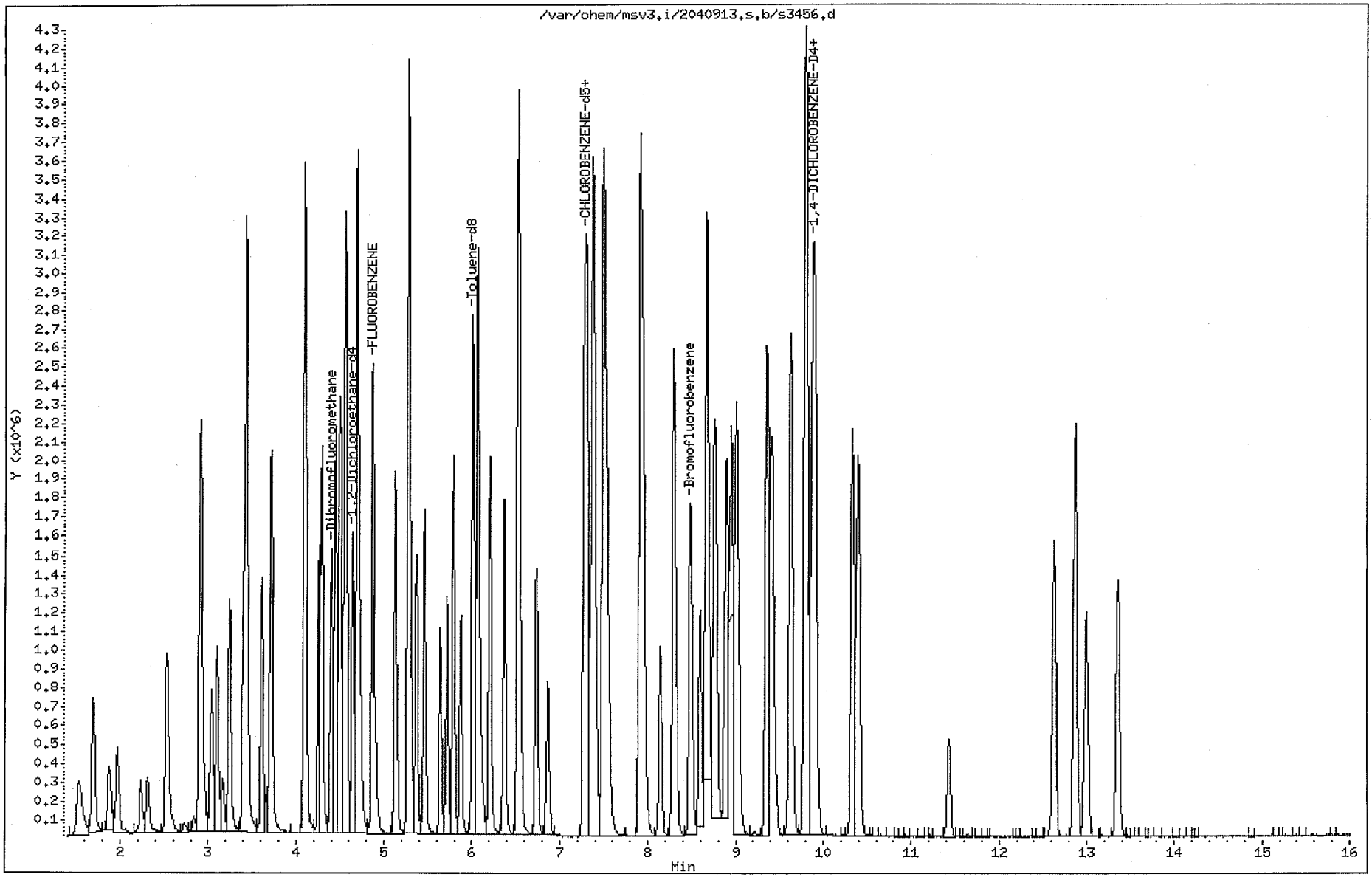
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: /var/chem/msv3.i/2040913.s.b/s3456.d
Date : 13-SEP-2004 13:51
Client ID:
Sample Info: ICV
Purge Volume: 5.0
Column phase: DB-624

Instrument: msv3.i

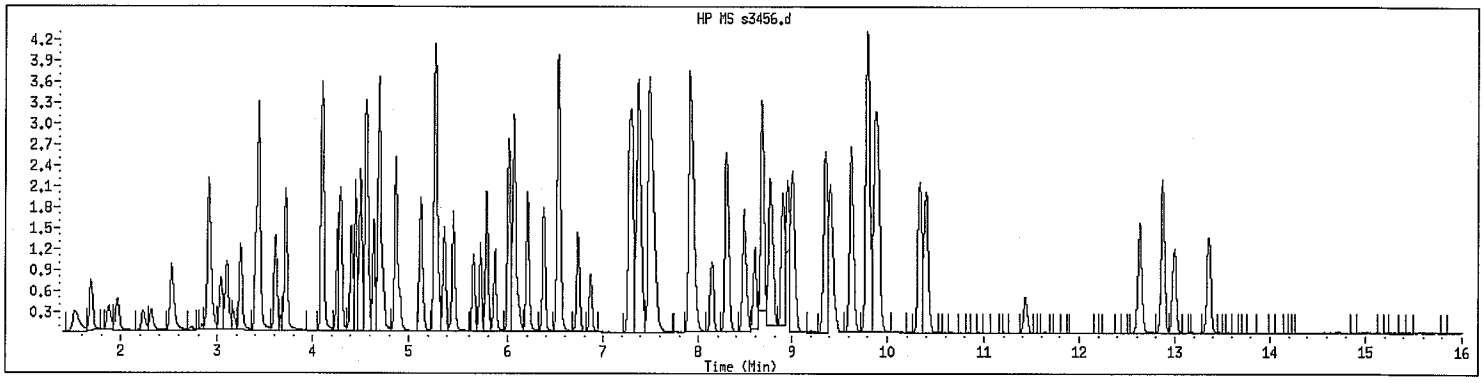
Operator: RJO
Column diameter: 0.53

000147



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: ICV	SampleType	: LCS
Injection Date	: 13-SEP-2004 13:51	Instrument	: msv3.i
Operator	: RJO		
Sample Info	: ICV		
Misc Info	: MSV~5230~*1*KCB		
Method	: /var/chem/msv3.i/2040913.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



NO MANUAL INTEGRATIONS

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv3.i
Lab File ID: s4001.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m

Injection Date: 02-OCT-2004 14:30
Init. Cal. Date(s): 07-SEP-2004 29-SEP-2004
Init. Cal. Times: 08:45 11:24
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	1 Dichlorodifluoromethane	0.43005	0.34902	0.34902	0.000	-18.84061	30.00000	Averaged	
	2 Chloromethane ++	0.26104	0.26909	0.26909	0.100	3.08411	30.00000	Averaged	
	3 Vinyl Chloride +	0.26801	0.25789	0.25789	0.000	-3.77574	20.00000	Averaged	
	5 Bromomethane	121	50.00000	0.17601	0.000	142	0.000e+00	Linear	<-
	6 Chloroethane	0.10426	0.09259	0.09259	0.000	-11.19172	30.00000	Averaged	
	7 Trichlorofluoromethane	0.47825	0.45544	0.45544	0.000	-4.76969	30.00000	Averaged	
	9 Acrolein	0.00451	0.01556	0.01556	0.000	245	30.00000	Averaged	<-
	10 1,1,2Trichlotrifluoroethane	0.25601	0.26882	0.26882	0.000	5.00363	30.00000	Averaged	
	11 1,1-Dichloroethene +	0.20318	0.20940	0.20940	0.000	3.06017	20.00000	Averaged	
	12 Acetone	42.41589	50.00000	0.10400	0.000	-15.16822	0.000e+00	Linear	<-
	13 Methyl Iodide	0.38508	0.44056	0.44056	0.000	14.40805	30.00000	Averaged	
	14 Carbon Disulfide	0.76589	0.75935	0.75935	0.000	-0.85483	30.00000	Averaged	
	17 Methyl Acetate	0.14072	0.16664	0.16664	0.000	18.42150	30.00000	Averaged	
	18 Methylene Chloride	60.20550	50.00000	0.36737	0.000	20.41101	0.000e+00	Linear	<-
	20 Acrylonitrile	0.08324	0.09233	0.09233	0.000	10.91875	30.00000	Averaged	
	21 MTBE	0.66779	0.69772	0.69772	0.000	4.48153	30.00000	Averaged	
	22 trans-1,2-Dichloroethene	0.35169	0.36042	0.36042	0.000	2.48262	30.00000	Averaged	
	24 Hexane	0.31662	0.34198	0.34198	0.000	8.01045	30.00000	Averaged	
	25 Vinyl Acetate	0.17092	0.23033	0.23033	0.000	34.75698	30.00000	Averaged	<-
	26 1,1-Dichloroethane ++	0.53369	0.46177	0.46177	0.100	-13.47699	30.00000	Averaged	
M	30 Total 1,2-Dichloroethene	0.42889	0.39927	0.39927	0.000	-6.90603	30.00000	Averaged	
	32 2-Butanone	0.18728	0.14962	0.14962	0.000	-20.10568	30.00000	Averaged	
	34 cis-1,2-Dichloroethene	0.52429	0.43811	0.43811	0.000	-16.43677	30.00000	Averaged	
	35 2,2-Dichloropropane	0.50104	0.40403	0.40403	0.000	-19.36188	30.00000	Averaged	
	37 Bromochloromethane	0.15729	0.13594	0.13594	0.000	-13.57411	30.00000	Averaged	
	38 Chloroform +	0.59408	0.52349	0.52349	0.000	-11.88152	20.00000	Averaged	
$	39 Dibromofluoromethane	0.35791	0.33657	0.33657	0.000	-5.96209	30.00000	Averaged	
	40 1,1,1-Trichloroethane	0.57495	0.47073	0.47073	0.000	-18.12575	30.00000	Averaged	
	42 Cyclohexane	0.46468	0.41029	0.41029	0.000	-11.70487	30.00000	Averaged	
	43 1,1-Dichloropropene	0.42536	0.36526	0.36526	0.000	-14.12822	30.00000	Averaged	
	44 Carbon Tetrachloride	0.47055	0.39046	0.39046	0.000	-17.02031	30.00000	Averaged	
$	45 1,2-Dichloroethane-d4	0.23648	0.21482	0.21482	0.000	-9.16277	30.00000	Averaged	
	46 1,2-Dichloroethane	0.57439	0.47994	0.47994	0.000	-16.44329	30.00000	Averaged	
	47 Benzene	1.09968	0.96223	0.96223	0.000	-12.49883	30.00000	Averaged	
	49 Trichloroethene	0.31641	0.26129	0.26129	0.000	-17.42063	30.00000	Averaged	
	51 Methyl Cyclohexane	0.44869	0.40729	0.40729	0.000	-9.22656	30.00000	Averaged	

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv3.i
Lab File ID: s4001.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m

Injection Date: 02-OCT-2004 14:30
Init. Cal. Date(s): 07-SEP-2004 29-SEP-2004
Init. Cal. Times: 08:45 11:24
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	52 1,2-Dichloropropane +	0.31372	0.26846	0.26846	0.000	-14.42700	20.00000	Averaged	
	55 Dibromomethane	0.23668	0.20843	0.20843	0.000	-11.93788	30.00000	Averaged	
	56 Bromodichloromethane	0.46548	0.39537	0.39537	0.000	-15.06285	30.00000	Averaged	
	57 2-Chloroethyl vinyl ether	0.18350	0.12571	0.12571	0.000	-31.49286	30.00000	Averaged	<-
	58 1-Bromo-2-chloroethane	0.47246	0.42152	0.42152	0.000	-10.78077	30.00000	Averaged	
	59 cis-1,3-Dichloropropene	0.51336	0.44243	0.44243	0.000	-13.81561	30.00000	Averaged	
	60 4-methyl-2-pentanone	0.35785	0.34685	0.34685	0.000	-3.07236	30.00000	Averaged	
$	61 Toluene-d8	1.04722	1.05004	1.05004	0.000	0.26923	30.00000	Averaged	
	62 Toluene +	1.21223	1.10805	1.10805	0.000	-8.59463	20.00000	Averaged	
	63 trans-1,3-Dichloropropene	0.53795	0.46147	0.46147	0.000	-14.21641	30.00000	Averaged	
M	138 Total-1-3 Dichloropropene	0.52565	0.45195	0.45195	0.000	-14.02070	30.00000	Averaged	
	65 1,1,2-Trichloroethane	0.45781	0.47095	0.47095	0.000	2.87055	30.00000	Averaged	
	66 1,3-Dichloropropane	0.78039	0.87128	0.87128	0.000	11.64698	30.00000	Averaged	
	67 Tetrachloroethene	0.44215	0.42391	0.42391	0.000	-4.12508	30.00000	Averaged	
	68 2-Hexanone	0.44863	0.49565	0.49565	0.000	10.48229	30.00000	Averaged	
	69 Dibromochloromethane	0.67215	0.64198	0.64198	0.000	-4.48862	30.00000	Averaged	
	70 1,2-Dibromoethane(EDB)	0.55314	0.54264	0.54264	0.000	-1.89735	30.00000	Averaged	
	72 Chlorobenzene ++	1.27318	1.28316	1.28316	0.300	0.78399	30.00000	Averaged	
	73 1,1,1,2-Tetrachloroethane	0.55873	0.51557	0.51557	0.000	-7.72446	30.00000	Averaged	
	74 Ethylbenzene +	0.68159	0.70320	0.70320	0.000	3.17039	20.00000	Averaged	
	75 p,m-Xylene	0.80476	0.85325	0.85325	0.000	6.02577	30.00000	Averaged	
	76 o-Xylene	0.78921	0.83771	0.83771	0.000	6.14521	30.00000	Averaged	
	77 Styrene	1.42489	1.49427	1.49427	0.000	4.86922	30.00000	Averaged	
M	78 TOTAL XYLENE	0.79958	0.84807	0.84807	0.000	6.06506	30.00000	Averaged	
	79 Bromoform ++	0.49345	0.47256	0.47256	0.100	-4.23419	30.00000	Averaged	
	80 Isopropylbenzene	2.27113	2.29136	2.29136	0.000	0.89061	30.00000	Averaged	
$	82 Bromofluorobenzene	0.60803	0.65386	0.65386	0.000	7.53607	30.00000	Averaged	
	83 1,1,2,2-Tetrachloroethane++	0.80408	0.88098	0.88098	0.300	9.56410	30.00000	Averaged	
	84 trans-1,4-Dichloro-2-Butene	0.24406	0.26532	0.26532	0.000	8.71069	30.00000	Averaged	
	85 1,2,3-Trichloropropane	1.01379	1.15480	1.15480	0.000	13.90881	30.00000	Averaged	
	86 Bromobenzene	1.61777	1.70005	1.70005	0.000	5.08602	30.00000	Averaged	
	87 n-Propylbenzene	3.20337	3.74318	3.74318	0.000	16.85134	30.00000	Averaged	
	88 2-Chlorotoluene	2.28703	2.59434	2.59434	0.000	13.43683	30.00000	Averaged	
	89 1,3,5-Trimethylbenzene	2.19129	2.49912	2.49912	0.000	14.04782	30.00000	Averaged	
	90 4-Chlorotoluene	2.27605	2.60663	2.60663	0.000	14.52416	30.00000	Averaged	

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv3.i
Lab File ID: s4001.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m

Injection Date: 02-OCT-2004 14:30
Init. Cal. Date(s): 07-SEP-2004 29-SEP-2004
Init. Cal. Times: 08:45 11:24
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
91 tert-butylbenzene	1.92123	2.15127	2.15127	0.000	11.97373	30.00000	Averaged
93 1,2,4-Trimethylbenzene	2.07161	2.40323	2.40323	0.000	16.00765	30.00000	Averaged
94 sec-Butylbenzene	2.84398	3.25595	3.25595	0.000	14.48596	30.00000	Averaged
95 p-Isopropyltoluene	2.13541	2.47716	2.47716	0.000	16.00352	30.00000	Averaged
96 1,3-Dichlorobenzene	1.26597	1.38533	1.38533	0.000	9.42841	30.00000	Averaged
98 1,4-Dichlorobenzene	1.30900	1.42248	1.42248	0.000	8.66892	30.00000	Averaged
99 n-Butylbenzene	1.99221	2.39676	2.39676	0.000	20.30653	30.00000	Averaged
100 1,2-Dichlorobenzene	1.25834	1.34863	1.34863	0.000	7.17527	30.00000	Averaged
101 1,2-Dibromo-3-Chloropropane	52.72779	50.00000	0.19359	0.000	5.45558	0.000e+00	Linear <-
103 1,2,4-Trichlorobenzene	0.74507	0.76992	0.76992	0.000	3.33602	30.00000	Averaged
104 Hexachlorobutadiene	0.67729	0.79366	0.79366	0.000	17.18169	30.00000	Averaged
105 Naphthalene	1.35785	1.35394	1.35394	0.000	-0.28765	30.00000	Averaged
106 1,2,3-Trichlorobenzene	0.68344	0.70976	0.70976	0.000	3.85099	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 14.88749
Maximun Average %D/Drift = 0.000e+00
* Failed Average %D/Drift Test.

Data File: /var/chem/msv3.i/2041002p.s.b/s4000.d

Date : 02-OCT-2004 13:55

Client ID: V3BFB

Instrument: msv3.i

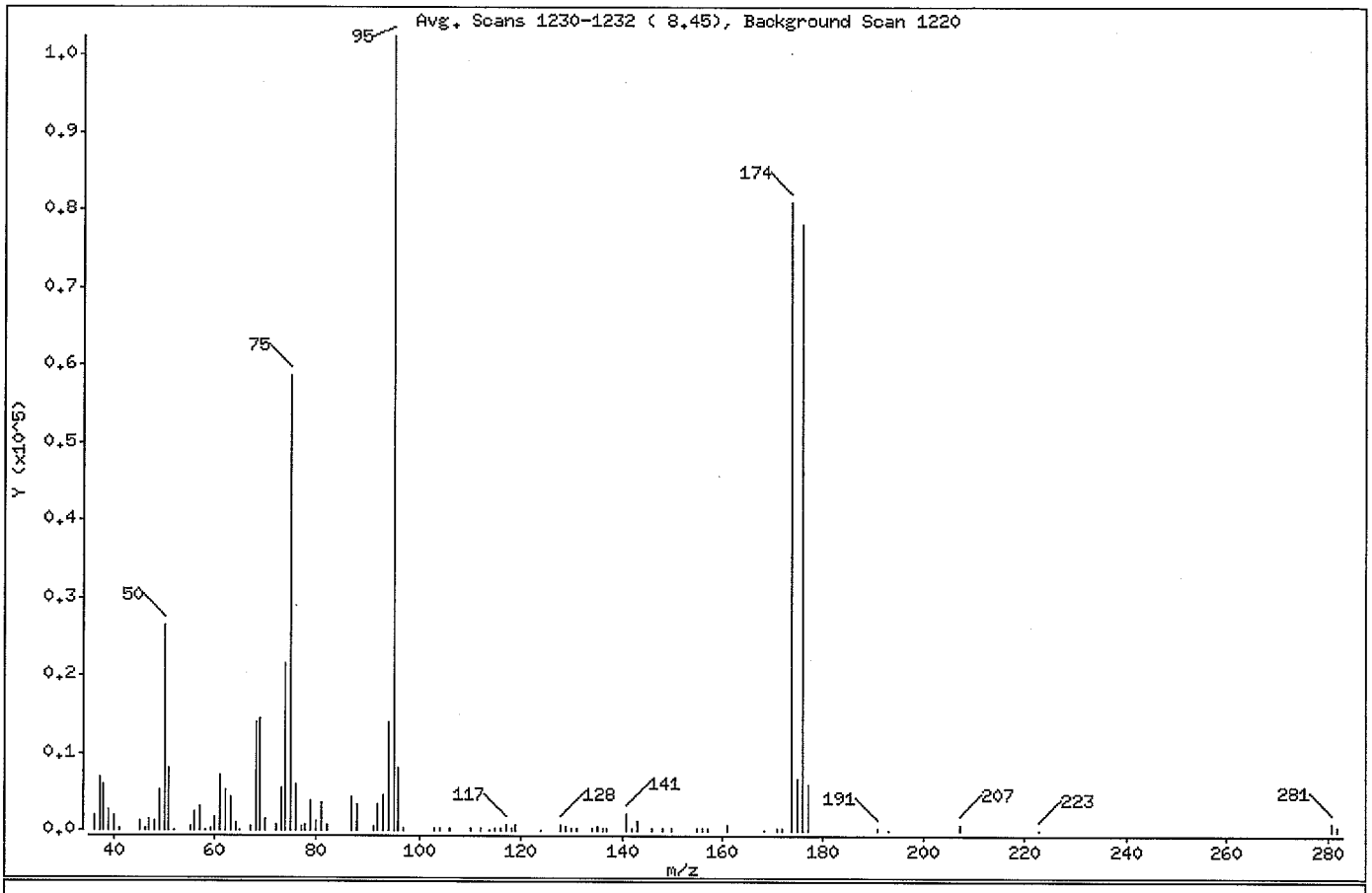
Sample Info: 1000*V3BFB

Operator: JCK

Column phase: DB-624-30M

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.78
75	30.00 - 60.00% of mass 95	57.28
96	5.00 - 9.00% of mass 95	7.77
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 99.99% of mass 95	79.03
175	5.00 - 9.00% of mass 174	6.41 (8.11)
176	95.00 - 101.00% of mass 174	76.43 (96.72)
177	5.00 - 9.00% of mass 176	5.76 (7.54)

Data File: /var/chem/msv3.i/2041002p.s.b/s4000.d

Date : 02-OCT-2004 13:55

Client ID: V3BFB

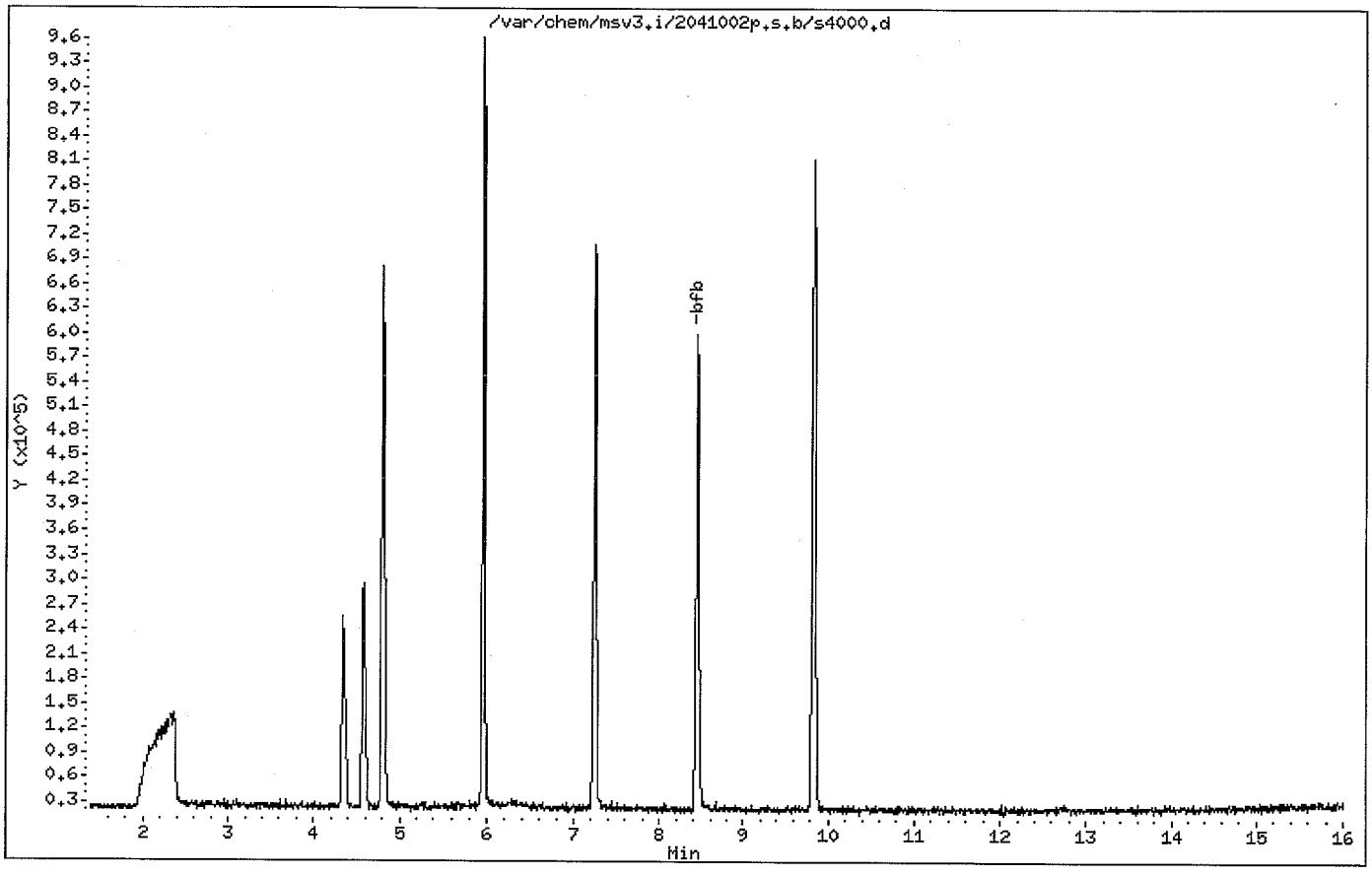
Instrument: msv3.i

Sample Info: 1000*V3BFB

Operator: JCK

Column phase: DB-624-30M

Column diameter: 0.53



Data File: /var/chem/msv3.i/2041002p.s.b/s4000.d

Date : 02-OCT-2004 13:55

Client ID: V3BFB

Instrument: msv3.i

Sample Info: 1000xV3BFB

Operator: JCK

Column phase: DB-624-30M

Column diameter: 0.53

Data File: s4000.d

Spectrum: Avg. Scans 1230-1232 (8.45), Background Scan 1220

Location of Maximum: 95.00

Number of points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1845	65.00	114	97.00	269	146.00	227
37.00	6903	67.00	509	103.00	119	148.00	151
38.00	5865	68.00	13871	104.00	263	150.00	201
39.00	2526	69.00	14478	106.00	337	155.00	129
40.00	1985	70.00	1420	110.00	137	156.00	146
41.00	248	72.00	761	112.00	257	157.00	171
45.00	1113	73.00	5521	114.00	104	161.00	598
46.00	305	74.00	21392	115.00	124	168.00	102
47.00	1497	75.00	58656	116.00	348	171.00	202
48.00	1174	76.00	5996	117.00	790	172.00	247
49.00	5197	77.00	503	118.00	133	174.00	80936
50.00	26408	78.00	599	119.00	708	175.00	6568
51.00	8068	79.00	3748	124.00	102	176.00	78280
52.00	112	80.00	1172	128.00	722	177.00	5902
55.00	555	81.00	3533	129.00	367	191.00	137
56.00	2442	82.00	599	130.00	314	193.00	116
57.00	3174	87.00	4166	131.00	152	207.00	695
58.00	100	88.00	3321	134.00	125	223.00	102
59.00	166	91.00	556	135.00	443	281.00	835
60.00	1587	92.00	3271	136.00	157	282.00	513
61.00	7177	93.00	4582	137.00	160		
62.00	5162	94.00	13985	141.00	2048		
63.00	4219	95.00	102416	142.00	290		
64.00	848	96.00	7955	143.00	1214		

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4001.d
Lab Smp Id: 1400 Client Smp ID: V3STD050
Inj Date : 02-OCT-2004 14:30
Operator : JCK Inst ID: msv3.i
Smp Info : 1400*V3STD050*5-17-14
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 02-Oct-2004 16:24 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
1 Dichlorodifluoromethane	85	1.701	1.701	(0.349)	912945	50.0000	40.6	9408
2 Chloromethane ++	50	1.884	1.884	(0.386)	703855	50.0000	51.5	8889
3 Vinyl Chloride +	62	1.975	1.975	(0.405)	674566	50.0000	48.1	8982
5 Bromomethane	94	2.261	2.261	(0.464)	460382	50.0000	121	9712
6 Chloroethane	64	2.341	2.341	(0.480)	242185	50.0000	44.4	9285
7 Trichlorofluoromethane	101	2.553	2.553	(0.524)	1191296	50.0000	47.6	9237
9 Acrolein	56	2.856	2.856	(0.586)	203546	250.000	862	8779(A)
10 1,1,2Trichlotrifluoroethane	101	2.931	2.931	(0.601)	703142	50.0000	52.5	8670
11 1,1-Dichloroethene +	96	2.936	2.936	(0.602)	547726	50.0000	51.5	8876
12 Acetone	43	2.971	2.971	(0.609)	272043	50.0000	42.4	
13 Methyl Iodide	142	3.051	3.051	(0.626)	1152386	50.0000	57.2	9475
14 Carbon Disulfide	76	3.114	3.114	(0.639)	1986227	50.0000	49.6	9733
17 Methyl Acetate	43	3.182	3.182	(0.653)	435877	50.0000	59.2	3175(H)
18 Methylene Chloride	49	3.251	3.251	(0.667)	960930	50.0000	60.2	9389
20 Acrylonitrile	53	3.417	3.417	(0.701)	1207510	250.000	277	8345(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
	21 MTBE	73	3.446	3.446	(0.707)	1825026	50.0000	52.2	9151
	22 trans-1,2-Dichloroethene	61	3.446	3.446	(0.707)	942758	50.0000	51.2	
	24 Hexane	57	3.646	3.646	(0.748)	894518	50.0000	54.0	9455
	25 Vinyl Acetate	43	3.640	3.640	(0.747)	602463	50.0000	67.4	
	26 1,1-Dichloroethane ++	63	3.726	3.726	(0.764)	1207852	50.0000	43.3	8555
M	30 Total 1,2-Dichloroethene	61				2088736	100.000	93.0	0
	32 2-Butanone	43	4.098	4.098	(0.840)	391368	50.0000	39.9	
	34 cis-1,2-Dichloroethene	61	4.104	4.104	(0.842)	1145978	50.0000	41.8	
	35 2,2-Dichloropropane	77	4.115	4.115	(0.844)	1056827	50.0000	40.3	9232
	37 Bromochloromethane	128	4.264	4.264	(0.874)	355577	50.0000	43.2	8533
	38 Chloroform +	83	4.298	4.298	(0.881)	1369307	50.0000	44.1	9339
$	39 Dibromofluoromethane	111	4.407	4.407	(0.904)	880364	50.0000	47.0	9248
	40 1,1,1-Trichloroethane	97	4.453	4.453	(0.913)	1231303	50.0000	40.9	9119
	42 Cyclohexane	56	4.510	4.510	(0.925)	1073200	50.0000	44.1	9526
	43 1,1-Dichloropropene	75	4.561	4.561	(0.935)	955425	50.0000	42.9	9403
	44 Carbon Tetrachloride	117	4.573	4.573	(0.938)	1021334	50.0000	41.5	8538
$	45 1,2-Dichloroethane-d4	67	4.641	4.641	(0.952)	561894	50.0000	45.4	9190
	46 1,2-Dichloroethane	62	4.693	4.693	(0.962)	1255382	50.0000	41.8	8628
	47 Benzene	78	4.710	4.710	(0.966)	2516911	50.0000	43.8	8643
*	48 FLUOROBENZENE	96	4.876	4.876	(1.000)	2615708	50.0000		9614
	49 Trichloroethene	130	5.128	5.128	(1.052)	683456	50.0000	41.3	9594
	51 Methyl Cyclohexane	83	5.288	5.288	(1.084)	1065363	50.0000	45.4	8769
	52 1,2-Dichloropropane +	63	5.282	5.282	(1.083)	702209	50.0000	42.8	8806
	55 Dibromomethane	93	5.362	5.362	(1.100)	545187	50.0000	44.0	8258
	56 Bromodichloromethane	83	5.460	5.460	(1.120)	1034171	50.0000	42.5	9371
	57 2-Chloroethyl vinyl ether	63	5.637	5.637	(1.156)	328821	50.0000	34.3	9513
	58 1-Bromo-2-chloroethane	63	5.711	5.711	(1.171)	1102586	50.0000	44.6	8862
	59 cis-1,3-Dichloropropene	75	5.786	5.786	(1.187)	1157273	50.0000	43.1	
	60 4-methyl-2-pentanone	43	5.872	5.872	(1.204)	907265	50.0000	48.5	
$	61 Toluene-d8	98	6.015	6.015	(1.234)	2746595	50.0000	50.1	9735
	62 Toluene +	91	6.066	6.066	(1.244)	2898326	50.0000	45.7	7830
	63 trans-1,3-Dichloropropene	75	6.204	6.204	(1.272)	1207082	50.0000	42.9	
M	138 Total-1-3 Dichloropropene	100				2364355	100.000	86.0	0
	65 1,1,2-Trichloroethane	97	6.364	6.364	(0.874)	650244	50.0000	51.4	9272
	66 1,3-Dichloropropane	76	6.518	6.518	(0.895)	1202991	50.0000	55.8	8886
	67 Tetrachloroethene	164	6.535	6.535	(0.898)	585303	50.0000	47.9	7546
	68 2-Hexanone	43	6.541	6.541	(0.899)	684355	50.0000	55.2	
	69 Dibromochloromethane	129	6.730	6.730	(0.925)	886383	50.0000	47.8	9524
	70 1,2-Dibromoethane(EDB)	107	6.861	6.861	(0.943)	749235	50.0000	49.1	9179
*	71 CHLOROBENZENE-d5	82	7.279	7.279	(1.000)	1380712	50.0000		7543
	72 Chlorobenzene ++	112	7.308	7.308	(1.004)	1771681	50.0000	50.4	8834
	73 1,1,1,2-Tetrachloroethane	133	7.359	7.359	(1.011)	711855	50.0000	46.1	8457
	74 Ethylbenzene +	106	7.388	7.388	(1.015)	970913	50.0000	51.6	
	75 p,m-Xylene	106	7.497	7.497	(1.030)	2356187	100.000	106	
	76 o-Xylene	106	7.914	7.914	(1.087)	1156641	50.0000	53.1	
	77 Styrene	104	7.914	7.914	(1.087)	2063152	50.0000	52.4	9667
M	78 TOTAL XYLENE	106				3512828	150.000	159	0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppb)	AMOUNTS ON-COL (ppb)	SIMILARITY
79 Bromoform ++	173	8.132	8.132	(1.117)	652469	50.0000	47.9	9212
80 Isopropylbenzene	105	8.292	8.292	(1.139)	3163702	50.0000	50.4	9598
$ 82 Bromofluorobenzene	174	8.481	8.481	(1.165)	902788	50.0000	53.8	9226
83 1,1,2,2-Tetrachloroethane++	83	8.584	8.584	(0.870)	941010	50.0000	54.8	8811
84 trans-1,4-Dichloro-2-Butene	53	8.647	8.647	(0.876)	283401	50.0000	54.4	9045
85 1,2,3-Trichloropropane	75	8.652	8.652	(0.877)	1233486	50.0000	57.0	9056
86 Bromobenzene	77	8.670	8.670	(0.879)	1815889	50.0000	52.5	9057
87 n-Propylbenzene	91	8.744	8.744	(0.886)	3998240	50.0000	58.4	
88 2-Chlorotoluene	91	8.887	8.887	(0.901)	2771113	50.0000	56.7	
89 1,3,5-Trimethylbenzene	105	8.944	8.944	(0.907)	2669407	50.0000	57.0	9635(H)
90 4-Chlorotoluene	91	9.001	9.001	(0.912)	2784243	50.0000	57.3	
91 tert-butylbenzene	91	9.339	9.339	(0.947)	2297857	50.0000	56.0	9440
93 1,2,4-Trimethylbenzene	105	9.402	9.402	(0.953)	2566982	50.0000	58.0	
94 sec-Butylbenzene	105	9.614	9.614	(0.974)	3477810	50.0000	57.2	
95 p-Isopropyltoluene	119	9.785	9.785	(0.992)	2645947	50.0000	58.0	9661
96 1,3-Dichlorobenzene	146	9.785	9.785	(0.992)	1479730	50.0000	54.7	
* 97 1,4-DICHLOROBENZENE-D4	152	9.865	9.865	(1.000)	1068139	50.0000		6890
98 1,4-Dichlorobenzene	146	9.894	9.894	(1.003)	1519408	50.0000	54.3	
99 n-Butylbenzene	91	10.317	10.317	(1.046)	2560076	50.0000	60.2	9556
100 1,2-Dichlorobenzene	146	10.380	10.380	(1.052)	1440525	50.0000	53.6	
101 1,2-Dibromo-3-Chloropropane	157	11.422	11.422	(1.158)	206783	50.0000	52.7	9295
103 1,2,4-Trichlorobenzene	180	12.612	12.612	(1.278)	822384	50.0000	51.7	
104 Hexachlorobutadiene	225	12.858	12.858	(1.303)	847744	50.0000	58.6	8733
105 Naphthalene	128	12.978	12.978	(1.315)	1446199	50.0000	49.9	9501
106 1,2,3-Trichlorobenzene	180	13.338	13.338	(1.352)	758119	50.0000	51.9	

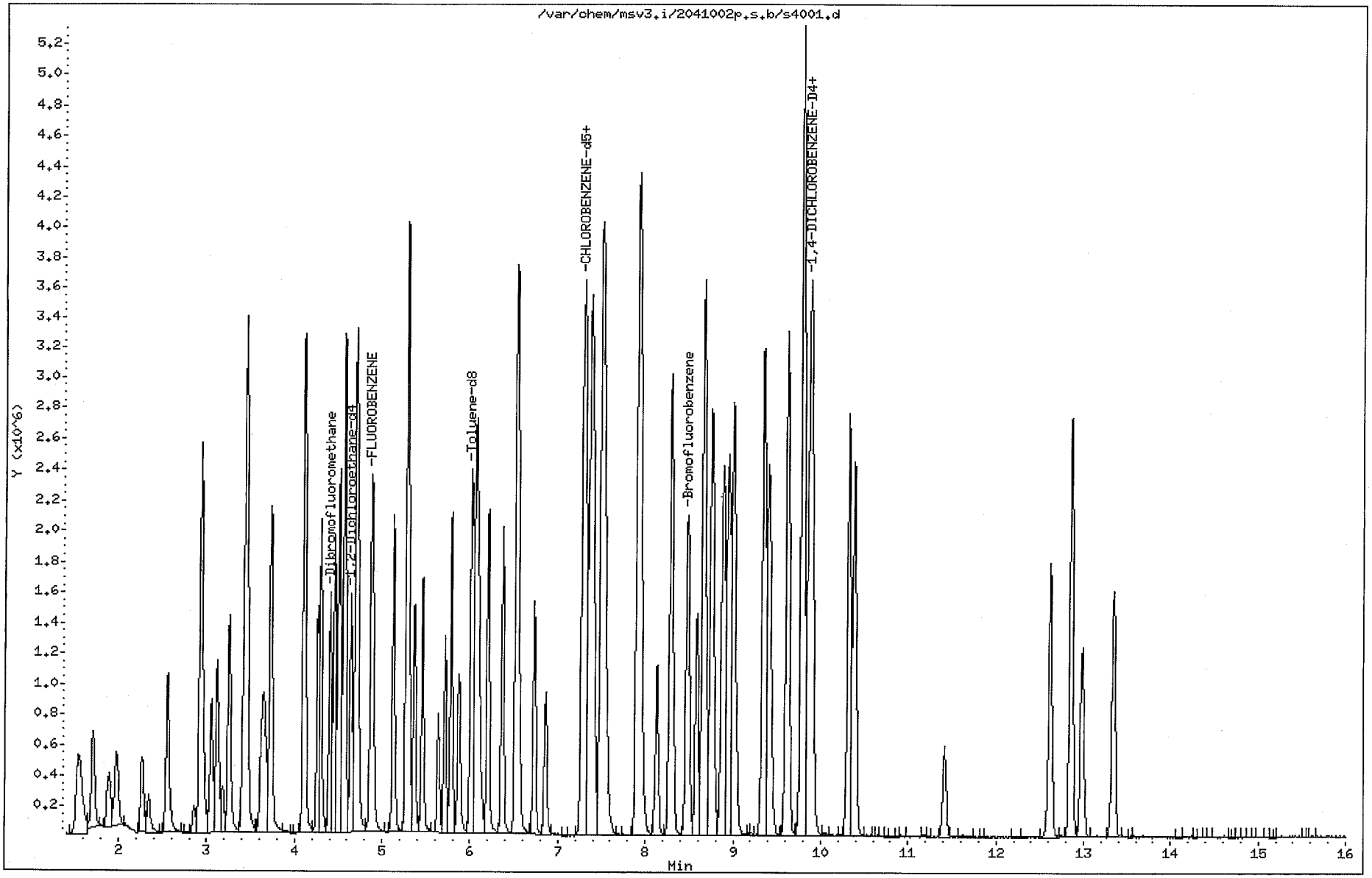
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Data File: /var/chem/msv3.i/2041002p.s.b/s4001.d
Date : 02-OCT-2004 14:30
Client ID: V3STD050
Sample Info: 1400*V3STD050*5-17-14
Purge Volume: 5.0
Column phase: DB-624

Instrument: msv3.i
Operator: JCK
Column diameter: 0.53

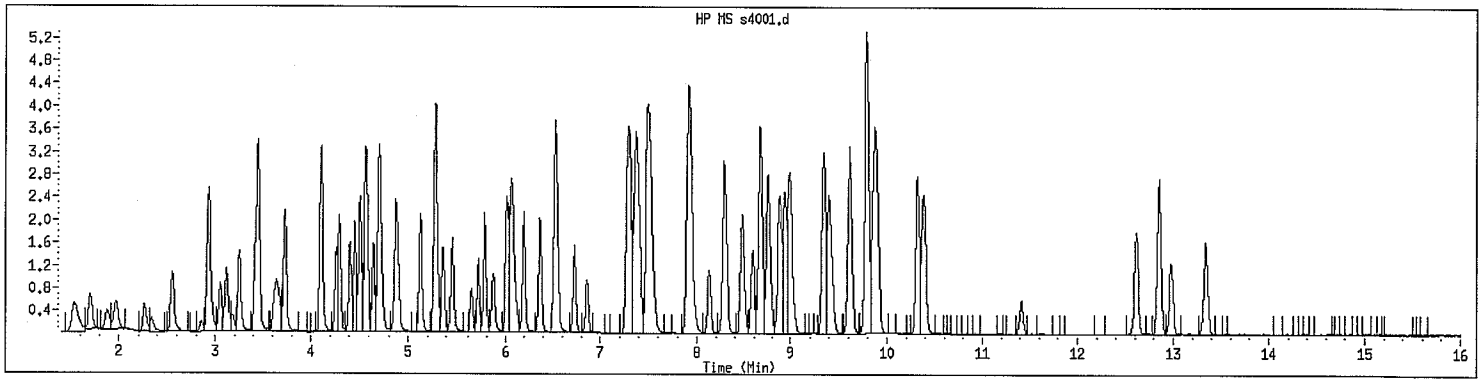
000158



Data file : /var/chem/msv3.i/2041002p.s.b/s4001.d
Report Date: 10/02/2004 16:24

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1400	SampleType	: CCALIB_3
Injection Date	: 02-OCT-2004 14:30	Instrument	: msv3.i
Operator	: JCK		
Sample Info	: 1400*V3STD050*5-17-14		
Misc Info	: MSV~5300~*1*JCK		
Method	: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB195438

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 195438

Level: (low/med) LOW

Lab File ID: 2041002P/S4003

% Moisture: not dec.

Date Collected: Time:

GC Column: DB-624-30M ID: .53 (mm

Date Received:

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1527

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: JCK

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	0.500	U	0.225	0.500
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00
75-35-4	1,1-Dichloroethene	5.00	U	0.229	5.00
79-01-6	Trichloroethene	5.00	U	0.270	5.00
108-90-7	Chlorobenzene	5.00	U	0.213	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4003.d
Lab Smp Id: 195438 Client Smp ID: MB for HBN 280825
Inj Date : 02-OCT-2004 15:27
Operator : JCK Inst ID: msv3.i
Smp Info : 195438*MB for HBN 280825
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 03-Oct-2004 06:20 rsp Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
18 Methylene Chloride	49	3.263	3.251	(0.668)	59240	2.42540	2.43	8115(a)
$ 39 Dibromofluoromethane	111	4.408	4.407	(0.903)	892638	46.1029	46.1	9296
$ 45 1,2-Dichloroethane-d4	67	4.648	4.641	(0.952)	555762	43.4421	43.4	9191
* 48 FLUOROBENZENE	96	4.882	4.876	(1.000)	2704874	50.0000		9472
$ 61 Toluene-d8	98	6.015	6.015	(1.232)	2839018	50.1133	50.1	9679
68 2-Hexanone	43	6.547	6.541	(0.900)	18606	1.50250	1.50	(a)
* 71 CHLOROBENZENE-d5	82	7.274	7.279	(1.000)	1380139	50.0000		5790
$ 82 Bromofluorobenzene	174	8.476	8.481	(1.165)	910022	54.2214	54.2	9302
* 97 1,4-DICHLOROBENZENE-D4	152	9.860	9.865	(1.000)	1066755	50.0000		4760
105 Naphthalene	128	12.984	12.978	(1.317)	32897	1.13556	1.14	9026(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /var/chem/msv3.i/2041002p.s.b/s4003.d

Date : 02-OCT-2004 15:27

Client ID: MB for HBN 280825

Sample Info: 195438*MB for HBN 280825

Purge Volume: 5.0

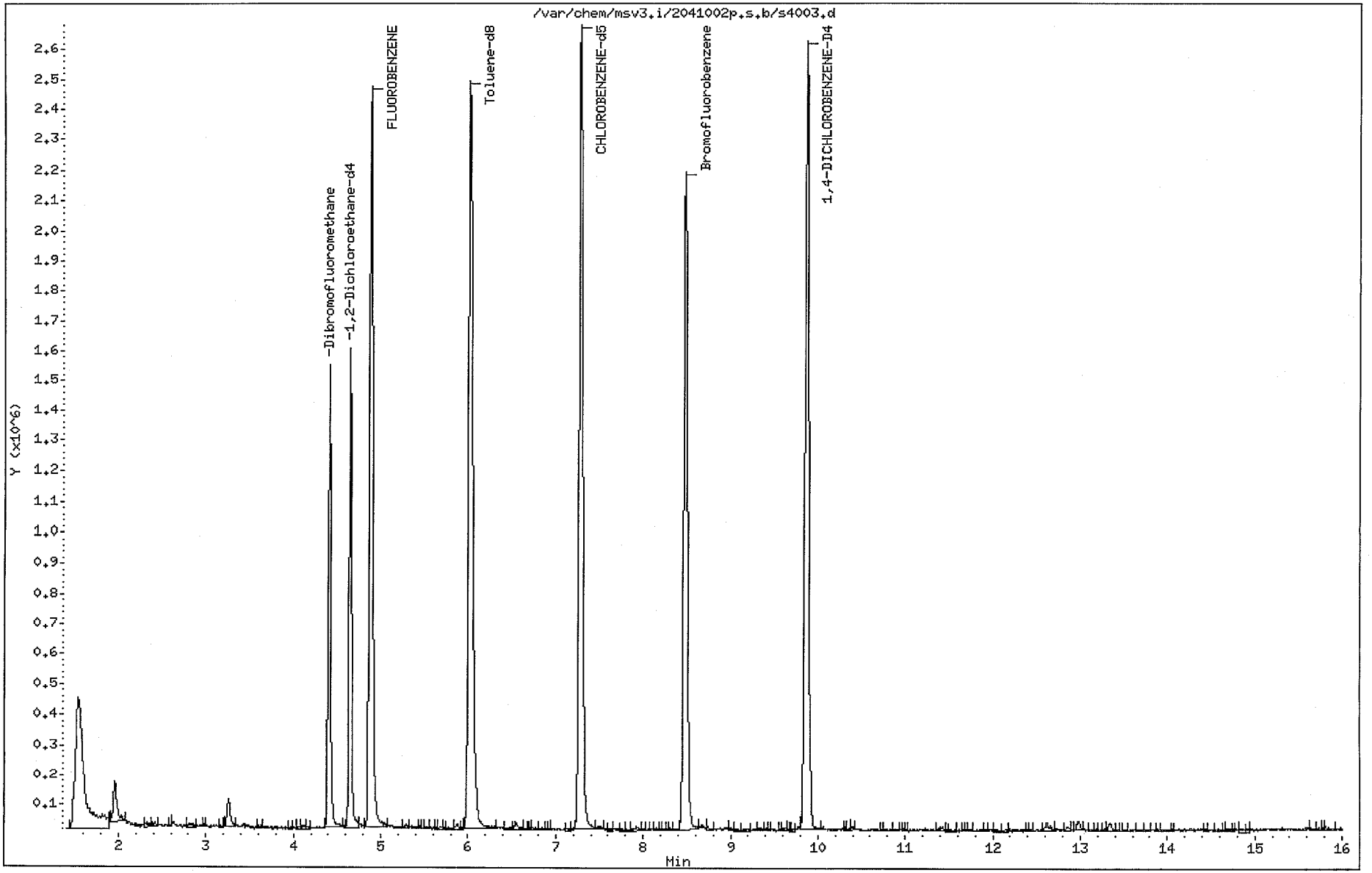
Column phase: DB-624

Instrument: msv3.i

Operator: JCK

Column diameter: 0.53

000162



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Date : 02-OCT-2004 15:27

Client ID: MB for HBN 280825

Instrument: msv3.i

Sample Info: 195438*MB for HBN 280825

Purge Volume: 5.0

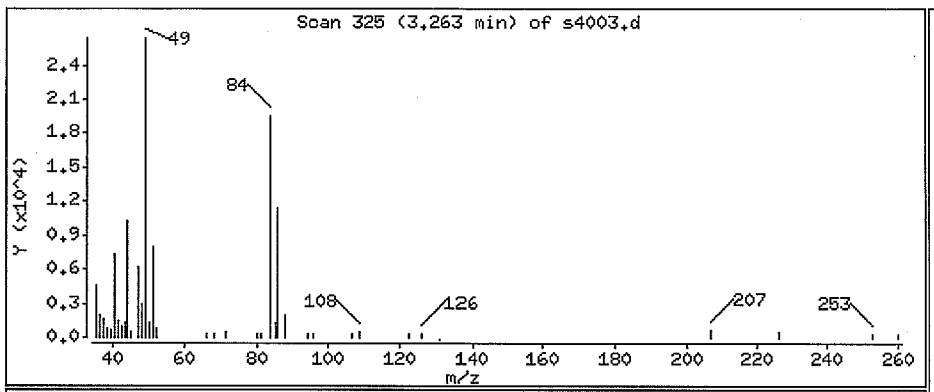
Operator: JCK

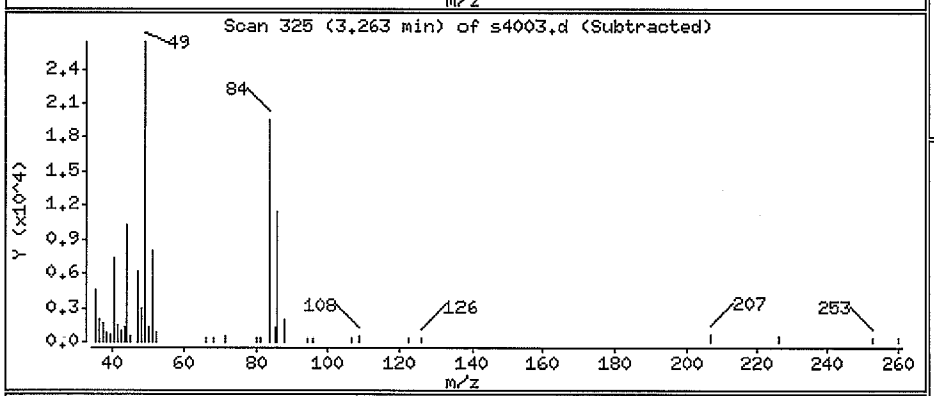
Column phase: DB-624

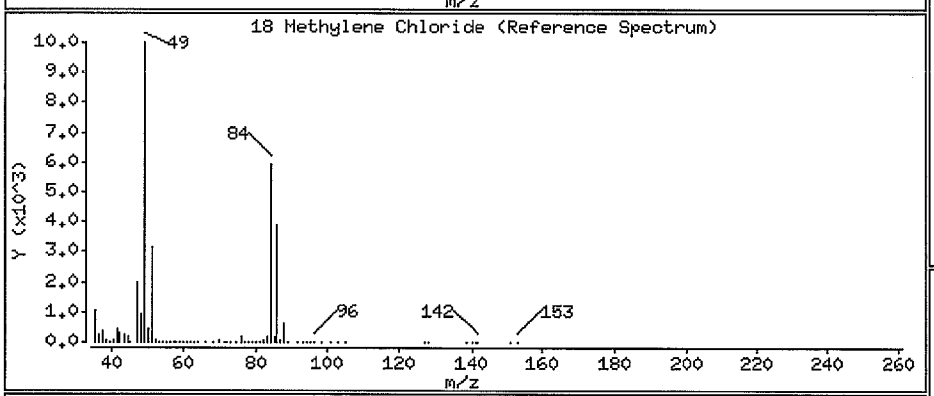
Column diameter: 0.53

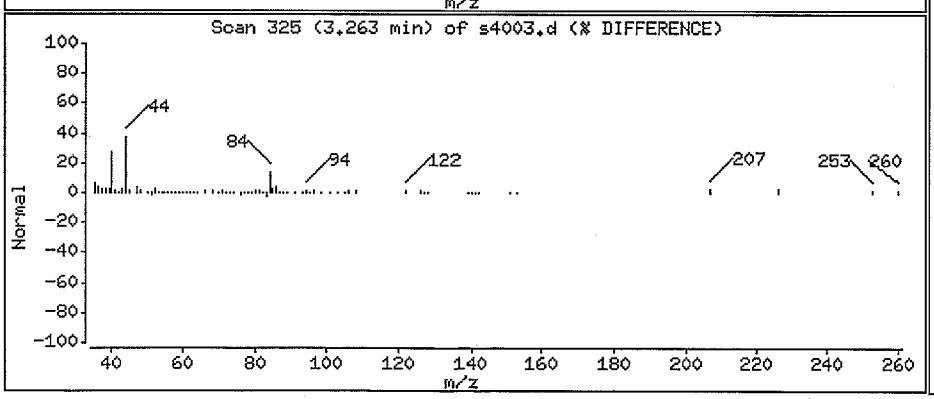
18 Methylene Chloride

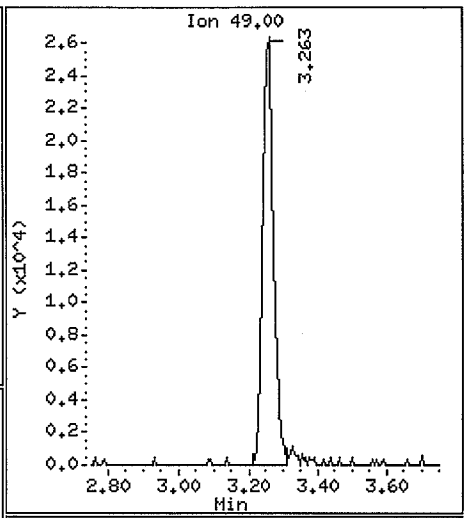
Concentration: 2.43 ug/L

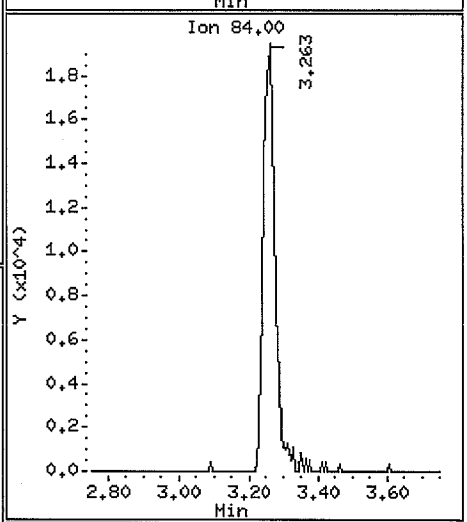


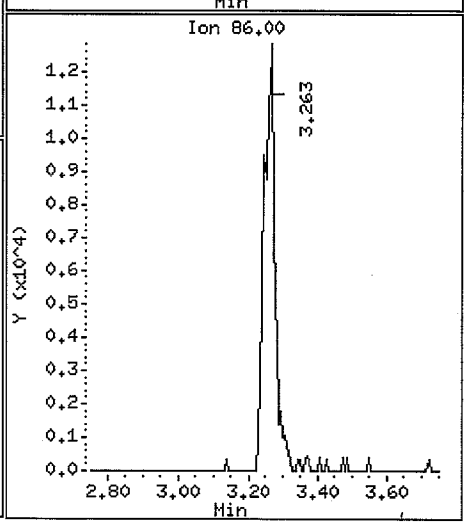












Data File: /var/chem/msv3.i/2041002p.s.b/s4003.d

Date : 02-OCT-2004 15:27

Client ID: MB for HBN 280825

Instrument: msv3.i

Sample Info: 195438*MB for HBN 280825

Purge Volume: 5.0

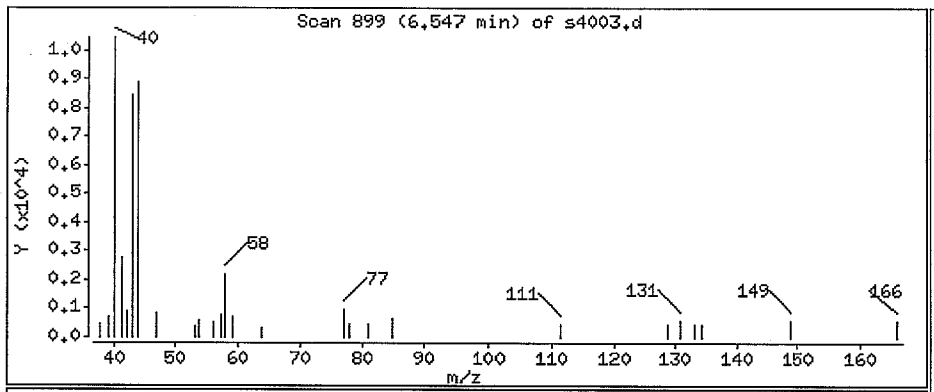
Operator: JCK

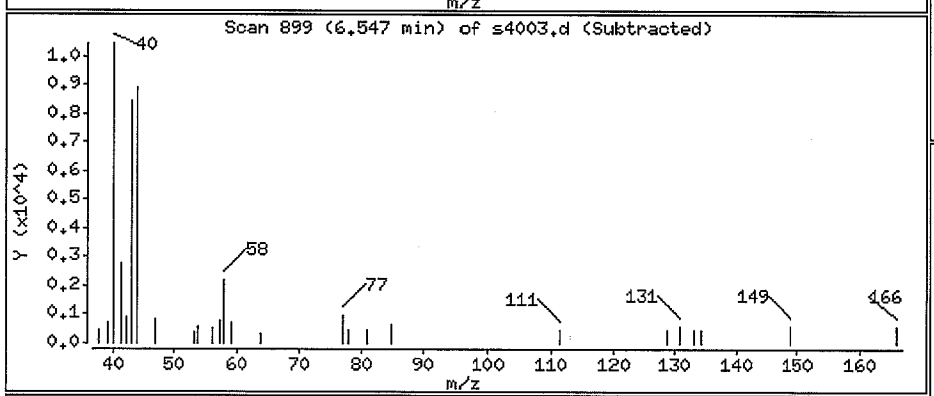
Column phase: DB-624

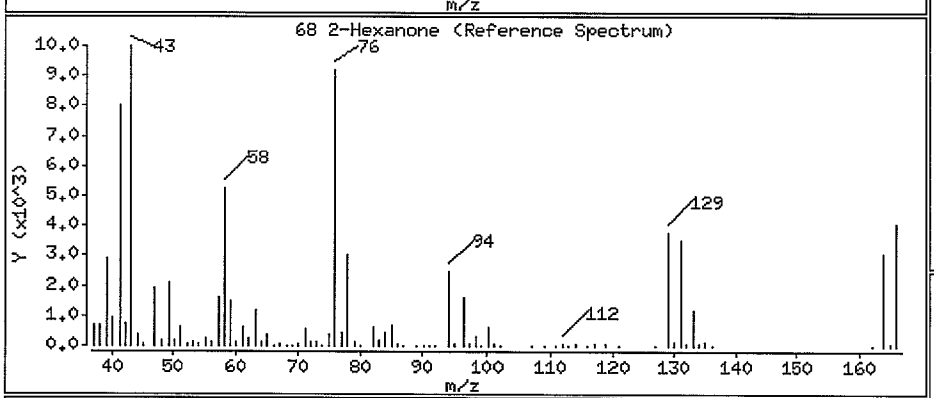
Column diameter: 0.53

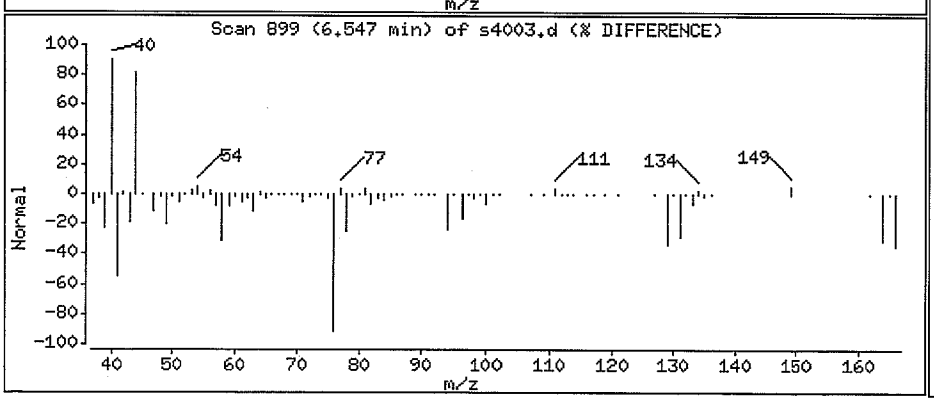
68 2-Hexanone

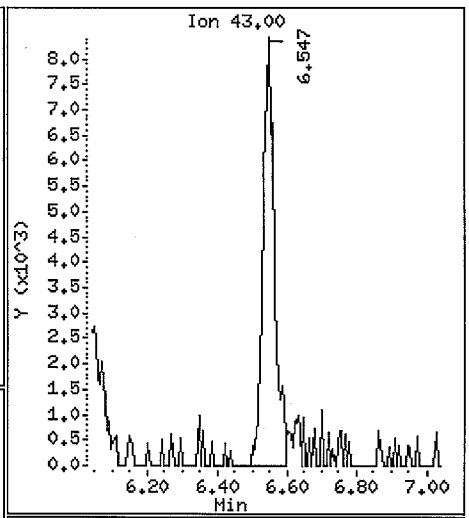
Concentration: 1.50 ug/L

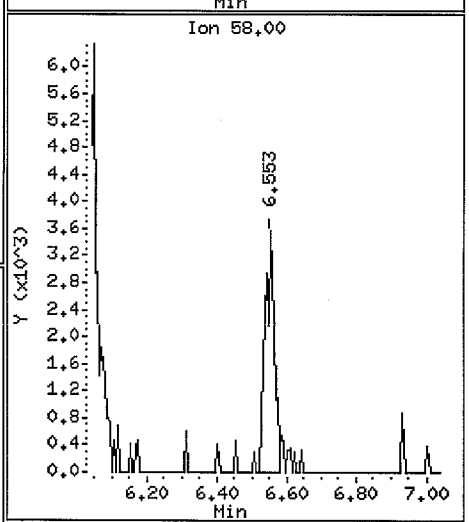


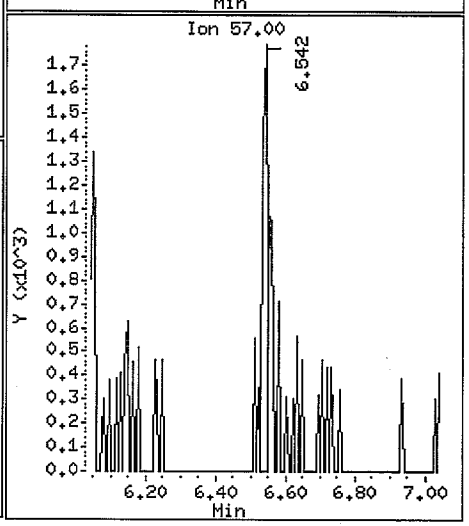












Data File: /var/chem/msv3.i/2041002p.s.b/s4003.d

Date : 02-OCT-2004 15:27

Client ID: MB for HBN 280825

Instrument: msv3.i

Sample Info: 195438*MB for HBN 280825

Purge Volume: 5.0

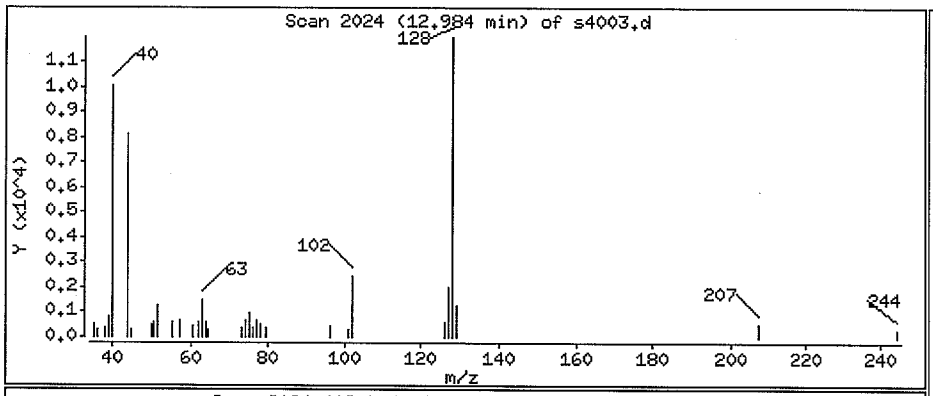
Operator: JCK

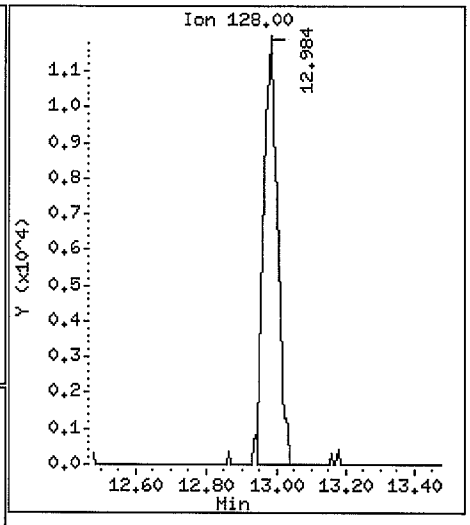
Column phase: DB-624

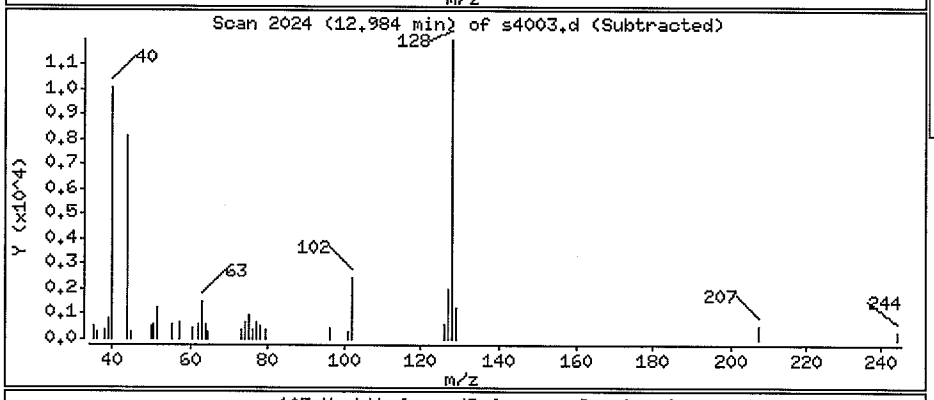
Column diameter: 0.53

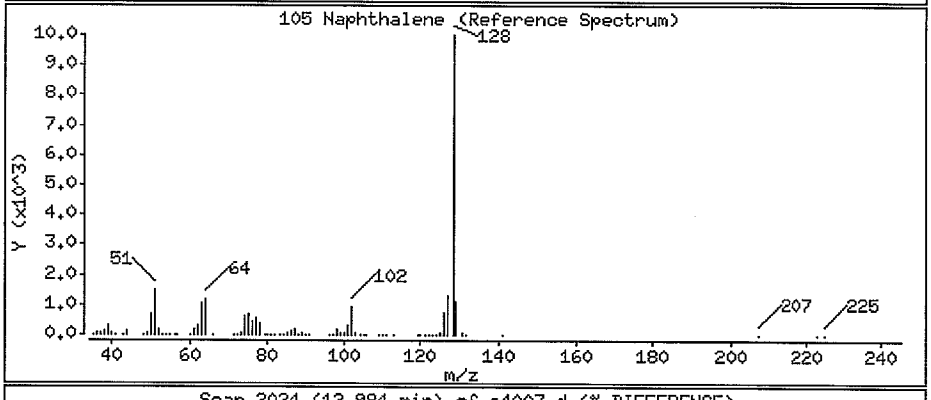
105 Naphthalene

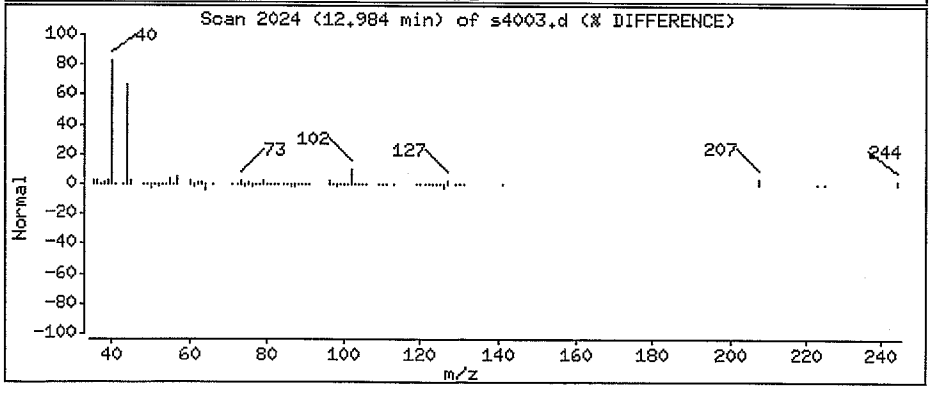
Concentration: 1.14 ug/L





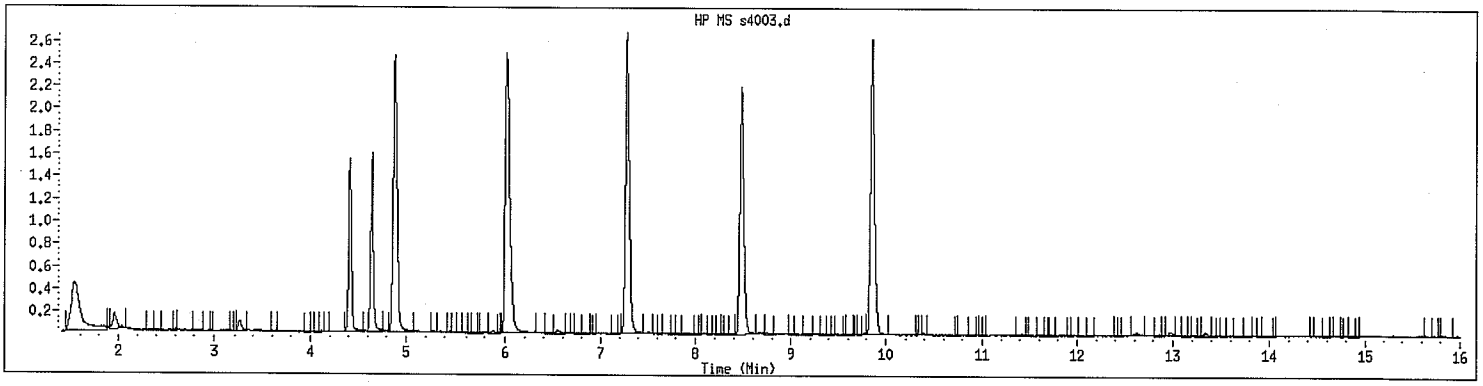






MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 195438	SampleType	: BLANK
Injection Date	: 02-OCT-2004 15:27	Instrument	: msv3.i
Operator	: JCK		
Sample Info	: 195438*MB for HBN 280825		
Misc Info	: MSV~5300~*1*JCK		
Method	: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



NO MANUAL INTEGRATIONS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

LCS195439

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 195439

Level: (low/med) LOW

Lab File ID: 2041002P/S4002

% Moisture: not dec.

Date Collected: Time:

GC Column: DB-624-30M ID: .53 (mm

Date Received:

Instrument ID: MSV3

Date Analyzed: 10/02/04 Time: 1507

Soil Extract Volume: (µL

Dilution Factor: 1 Analyst: JCK

Soil Aliquot Volume: (µL

Prep Batch: Analytical Batch: 280825

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	21.5		0.225	0.500
100-41-4	Ethylbenzene	26.0		0.227	5.00
108-88-3	Toluene	22.8		0.213	5.00
1330-20-7	Xylene (total)	79.9		0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	24.8		0.179	5.00
75-35-4	1,1-Dichloroethene	25.8		0.229	5.00
79-01-6	Trichloroethene	20.1		0.270	5.00
108-90-7	Chlorobenzene	25.5		0.213	5.00

GCAL, Inc.

Data file : /var/chem/msv3.i/2041002p.s.b/s4002.d
Lab Smp Id: 195439 Client Smp ID: LCS for HBN 280825
Inj Date : 02-OCT-2004 15:07
Operator : JCK Inst ID: msv3.i
Smp Info : 195439*LCS for HBN 280825
Misc Info : MSV~5300~*1*JCK
Comment :
Method : /var/chem/msv3.i/2041002p.s.b/8260Bw3.m
Meth Date : 02-Oct-2004 16:24 rjo Quant Type: ISTD
Cal Date : 29-SEP-2004 11:24 Cal File: s3853.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
1 Dichlorodifluoromethane	85	1.706	1.701	(0.350)	436518	20.1973	20.2	8933
2 Chloromethane ++	50	1.884	1.884	(0.386)	355287	27.0822	27.1	8396
3 Vinyl Chloride +	62	1.975	1.975	(0.405)	319065	23.6884	23.7	8618
5 Bromomethane	94	2.267	2.261	(0.464)	225619	59.0037	59.0	9686(R)
6 Chloroethane	64	2.341	2.341	(0.480)	125158	23.8870	23.9	9306
7 Trichlorofluoromethane	101	2.553	2.553	(0.523)	571447	23.7754	23.8	9266
9 Acrolein	56	2.856	2.856	(0.585)	88807	391.460	391	7572(AR)
10 1,1,2Trichlotrifluoroethane	101	2.931	2.931	(0.600)	337683	26.2462	26.2	8623
11 1,1-Dichloroethene +	96	2.936	2.936	(0.602)	263460	25.8011	25.8	8880
12 Acetone	43	2.971	2.971	(0.609)	129288	19.2682	19.3	(a)
13 Methyl Iodide	142	3.051	3.051	(0.625)	534112	27.5986	27.6	9526
14 Carbon Disulfide	76	3.119	3.114	(0.639)	948491	24.6418	24.6	9697
17 Methyl Acetate	43	3.182	3.182	(0.652)	194912	27.5614	27.6	3278(H)
18 Methylene Chloride	49	3.251	3.251	(0.666)	494519	31.6772	31.7	9523
20 Acrylonitrile	53	3.417	3.417	(0.700)	569426	136.119	136	8411

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
	21 MTBE	73	3.440	3.446	(0.705)	833618	24.8390	24.8	8535
	22 trans-1,2-Dichloroethene	61	3.451	3.446	(0.707)	457872	25.9054	25.9	
	24 Hexane	57	3.640	3.646	(0.746)	423934	26.6423	26.6	9305
	25 Vinyl Acetate	43	3.629	3.640	(0.743)	270628	31.5058	31.5	
	26 1,1-Dichloroethane ++	63	3.726	3.726	(0.763)	570151	21.2571	21.3	8616
M	30 Total 1,2-Dichloroethene	61				1021267	47.2874	47.3	0
	32 2-Butanone	43	4.104	4.098	(0.841)	190965	20.2899	20.3	(a)
	34 cis-1,2-Dichloroethene	61	4.104	4.104	(0.841)	563395	21.3820	21.4	
	35 2,2-Dichloropropane	77	4.115	4.115	(0.843)	499466	19.8353	19.8	9292
	37 Bromochloromethane	128	4.264	4.264	(0.873)	167387	21.1752	21.2	8743
	38 Chloroform +	83	4.298	4.298	(0.880)	650536	21.7888	21.8	9348
$	39 Dibromofluoromethane	111	4.407	4.407	(0.903)	836807	46.5224	46.5	9242
	40 1,1,1-Trichloroethane	97	4.458	4.453	(0.913)	596047	20.6281	20.6	9082
	42 Cyclohexane	56	4.510	4.510	(0.924)	516829	22.1309	22.1	9511
	43 1,1-Dichloropropene	75	4.567	4.561	(0.936)	445909	20.8591	20.9	8853
	44 Carbon Tetrachloride	117	4.573	4.573	(0.937)	495398	20.9486	20.9	8649
$	45 1,2-Dichloroethane-d4	67	4.647	4.641	(0.952)	504920	42.4843	42.5	9145
	46 1,2-Dichloroethane	62	4.693	4.693	(0.961)	583950	20.2291	20.2	8956
	47 Benzene	78	4.716	4.710	(0.966)	1189316	21.5199	21.5	9021
*	48 FLUOROBENZENE	96	4.882	4.876	(1.000)	2512828	50.0000		9488
	49 Trichloroethene	130	5.128	5.128	(1.050)	318941	20.0571	20.1	9629
	51 Methyl Cyclohexane	83	5.288	5.288	(1.083)	499517	22.1517	22.2	8684
	52 1,2-Dichloropropane +	63	5.282	5.282	(1.082)	337408	21.4004	21.4	8702
	55 Dibromomethane	93	5.368	5.362	(1.100)	252150	21.1982	21.2	8092
	56 Bromodichloromethane	83	5.460	5.460	(1.118)	486859	20.8116	20.8	9216
	57 2-Chloroethyl vinyl ether	63	5.637	5.637	(1.155)	150384	16.3070	16.3	9448(R)
	58 1-Bromo-2-chloroethane	63	5.717	5.711	(1.171)	490148	20.6429	20.6	8956
	59 cis-1,3-Dichloropropene	75	5.786	5.786	(1.185)	536927	20.8116	20.8	
	60 4-methyl-2-pentanone	43	5.877	5.872	(1.204)	434928	24.1840	24.2	
$	61 Toluene-d8	98	6.015	6.015	(1.232)	2601918	49.4383	49.4	9701
	62 Toluene +	91	6.072	6.066	(1.244)	1391291	22.8370	22.8	8735
	63 trans-1,3-Dichloropropene	75	6.203	6.204	(1.271)	561899	20.7837	20.8	
M	138 Total-1-3 Dichloropropene	100				1098826	41.5946	41.6	0
	65 1,1,2-Trichloroethane	97	6.364	6.364	(0.874)	304942	25.8562	25.9	9358
	66 1,3-Dichloropropane	76	6.518	6.518	(0.895)	560634	27.8866	27.9	8954
	67 Tetrachloroethene	164	6.535	6.535	(0.898)	283683	24.9052	24.9	7760
	68 2-Hexanone	43	6.541	6.541	(0.899)	346148	29.9506	30.0	
	69 Dibromochloromethane	129	6.730	6.730	(0.925)	420581	24.2893	24.3	9444
	70 1,2-Dibromoethane(EDB)	107	6.861	6.861	(0.943)	343402	24.0989	24.1	9032
*	71 CHLOROBENZENE-d5	82	7.279	7.279	(1.000)	1288074	50.0000		6596
	72 Chlorobenzene ++	112	7.308	7.308	(1.004)	836218	25.4952	25.5	7177
	73 1,1,1,2-Tetrachloroethane	133	7.365	7.359	(1.012)	338567	23.5219	23.5	9146
	74 Ethylbenzene +	106	7.394	7.388	(1.016)	456678	26.0086	26.0	
	75 p,m-Xylene	106	7.491	7.497	(1.029)	1096430	52.8865	52.9	
	76 o-Xylene	106	7.908	7.914	(1.086)	548280	26.9672	27.0	
	77 Styrene	104	7.920	7.914	(1.088)	970058	26.4269	26.4	9661
M	78 TOTAL XYLENE	106				1644710	79.8537	79.9	0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppb)	FINAL (ug/L)	SIMILARITY
79 Bromoform ++	173	8.132	8.132	(1.117)	301238	23.6970	23.7	9359
80 Isopropylbenzene	105	8.286	8.292	(1.138)	1484635	25.3751	25.4	9708
$ 82 Bromofluorobenzene	174	8.481	8.481	(1.165)	851929	54.3881	54.4	9267
83 1,1,2,2-Tetrachloroethane++	83	8.589	8.584	(0.871)	417220	25.1843	25.2	8916
84 trans-1,4-Dichloro-2-Butene	53	8.652	8.647	(0.878)	129320	25.7174	25.7	8784
85 1,2,3-Trichloropropane	75	8.658	8.652	(0.878)	573181	27.4414	27.4	8752
86 Bromobenzene	77	8.669	8.670	(0.879)	951320	28.5413	28.5	9240
87 n-Propylbenzene	91	8.750	8.744	(0.887)	1893285	28.6861	28.7	
88 2-Chlorotoluene	91	8.875	8.887	(0.900)	1294629	27.4749	27.5	
89 1,3,5-Trimethylbenzene	105	8.944	8.944	(0.907)	1242666	27.5244	27.5	9553(H)
90 4-Chlorotoluene	91	9.001	9.001	(0.913)	1306291	27.8561	27.9	
91 tert-butylbenzene	91	9.345	9.339	(0.948)	1084436	27.3961	27.4	9529
93 1,2,4-Trimethylbenzene	105	9.402	9.402	(0.954)	1216376	28.4985	28.5	
94 sec-Butylbenzene	105	9.619	9.614	(0.976)	1640961	28.0050	28.0	
95 p-Isopropyltoluene	119	9.785	9.785	(0.992)	1284373	29.1926	29.2	9695
96 1,3-Dichlorobenzene	146	9.785	9.785	(0.992)	724290	27.7684	27.8	
* 97 1,4-DICHLOROBENZENE-D4	152	9.860	9.865	(1.000)	1030165	50.0000		5425
98 1,4-Dichlorobenzene	146	9.900	9.894	(1.004)	732190	27.1485	27.1	
99 n-Butylbenzene	91	10.323	10.317	(1.047)	1223582	29.8099	29.8	9597
100 1,2-Dichlorobenzene	146	10.380	10.380	(1.053)	710834	27.4178	27.4	
101 1,2-Dibromo-3-Chloropropane	157	11.416	11.422	(1.158)	98661	25.4464	25.4	9380
103 1,2,4-Trichlorobenzene	180	12.617	12.612	(1.280)	397035	25.8641	25.9	
104 Hexachlorobutadiene	225	12.858	12.858	(1.304)	411149	29.4636	29.5	8670
105 Naphthalene	128	12.984	12.978	(1.317)	726336	25.9627	26.0	9556
106 1,2,3-Trichlorobenzene	180	13.344	13.338	(1.353)	372204	26.4329	26.4	

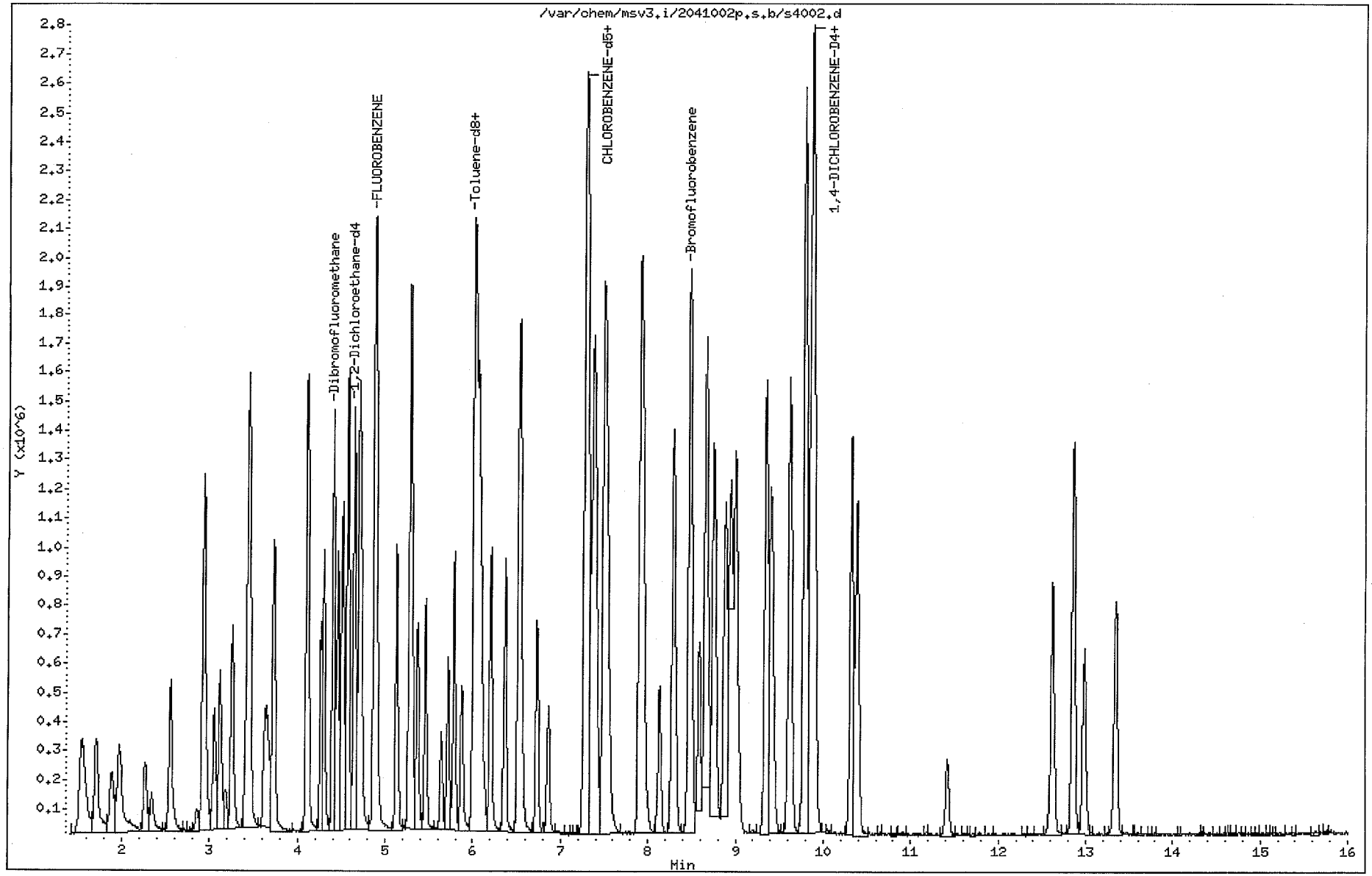
QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

0001171

Data File: /var/chem/msv3.i/2041002p.s.b/s4002.d
Date : 02-OCT-2004 15:07
Client ID: LCS for HBN 280825
Sample Info: 195439*LCS for HBN 280825
Purge Volume: 5.0
Column phase: DB-624

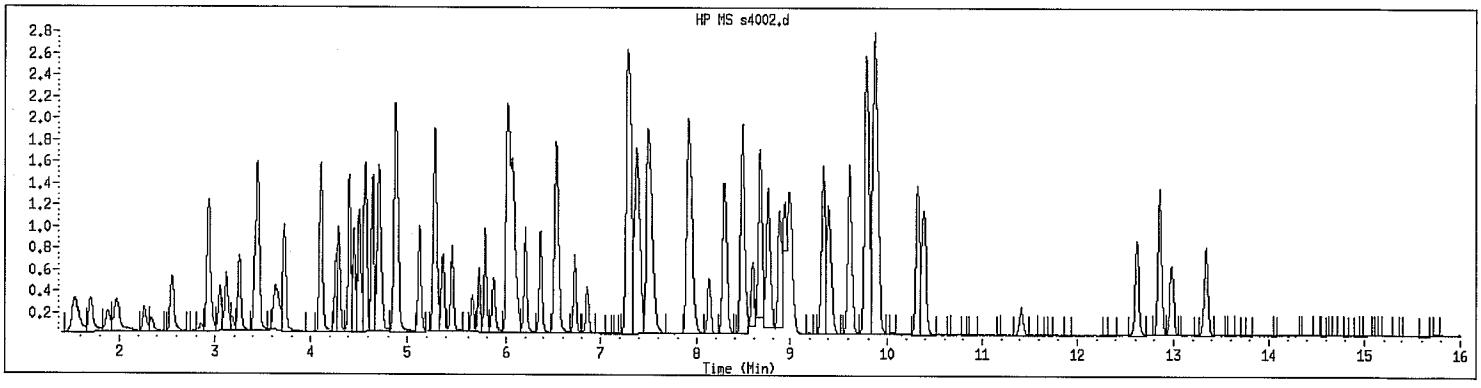
Instrument: msv3.i
Operator: JCK
Column diameter: 0.53



Data file : /var/chem/msv3.i/2041002p.s.b/s4002.d
Report Date: 10/02/2004 16:25

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 195439	SampleType	: LCS
Injection Date	: 02-OCT-2004 15:07	Instrument	: msv3.i
Operator	: JCK		
Sample Info	: 195439*LCS for HBN 280825		
Misc Info	: MSV~5300~*1*JCK		
Method	: /var/chem/msv3.i/2041002p.s.b/8260Bw3.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP RTE	Compound Sublist	: 8260



NO MANUAL INTEGRATIONS

LABORATORY CHRONICLE: GC-MS DEPARTMENT

Date: 02-OCT-2004
Instrument: msv3.i
Analyst(s): JCK

Standard	Conc ppm	
Int. Standard	50	5-18-4
Surrogate	50	5-18-4
8260	50	5-17-14
Ac/Ac/VA	250/50	5-18-8
CVE	50	5-18-12

Sample ID	Status/Comments	DataFile	WT VOL	Injection Time	DilFactor	ALS
1000		s3997.d	0.00	02-OCT-2004 12:31	1.000	2
1000		s3998.d	0.00	02-OCT-2004 12:55	1.000	2
1000		s3999.d	0.00	02-OCT-2004 13:17	1.000	2
1000		s4000.d	0.00	02-OCT-2004 13:55	1.000	2
1400		s4001.d	5.00	02-OCT-2004 14:30	1.000	1
195439		s4002.d	5.00	02-OCT-2004 15:07	1.000	2
195438		s4003.d	5.00	02-OCT-2004 15:27	1.000	3
20410010610		s4004.d	5.00	02-OCT-2004 16:10	1.000	4
20410010611		s4005ms.d	5.00	02-OCT-2004 16:31	1.000	5
20410010612		s4006msd.d	5.00	02-OCT-2004 16:52	1.000	6
20410010601		s4007.d	5.00	02-OCT-2004 17:13	1.000	7
20410010602		s4008.d	5.00	02-OCT-2004 17:34	1.000	8
20410010603		s4009.d	5.00	02-OCT-2004 17:55	1.000	9
20410010604		s4010.d	5.00	02-OCT-2004 18:16	1.000	10
20410010605		s4011.d	5.00	02-OCT-2004 18:36	1.000	11
20410010606		s4012.d	5.00	02-OCT-2004 18:57	1.000	12
20410010607		s4013.d	5.00	02-OCT-2004 19:18	1.000	13
20410010608		s4014.d	5.00	02-OCT-2004 19:39	1.000	14
20410010609		s4015.d	5.00	02-OCT-2004 20:00	1.000	15
20410010613		s4016.d	5.00	02-OCT-2004 20:21	1.000	16
20410010614		s4017.d	5.00	02-OCT-2004 20:42	1.000	1
20410010615		s4018.d	5.00	02-OCT-2004 21:03	1.000	2
20410011701		s4019.d	5.00	02-OCT-2004 21:23	1.000	3
20410011702		s4020.d	5.00	02-OCT-2004 21:44	1.000	4
20410011703		s4021.d	5.00	02-OCT-2004 22:05	1.000	5
20410011704		s4022.d	5.00	02-OCT-2004 22:26	1.000	6
20410011705		s4023.d	5.00	02-OCT-2004 22:47	1.000	7
20410011706		s4024.d	5.00	02-OCT-2004 23:08	1.000	8

REVISED 01/01/2000

LABORATORY CHRONICLE: GC-MS DEPARTMENT

Date: 13-SEP-2004
Instrument: msv3.i
Analyst(s): KCB

Standard	Conc ppm	
Int. Standard	50	5-18-4
Surrogate	50	5-18-4
8260	50	5-17-14
Ac/Ac/VA	250/50	5-18-8
CVE	50	5-17-9

Sample ID	Status/Comments	DataFile	WT VOL	Injection Time	DilFactor	ALS
1000		s3443.d	0.00	13-SEP-2004 08:29	1.000	2
1400		s3444.d	5.00	13-SEP-2004 09:02	1.000	1
1400		s3445.d	5.00	13-SEP-2004 09:34	1.000	1
MB		s3446.d	5.00	13-SEP-2004 10:07	1.000	3
1207		s3447.d	5.00	13-SEP-2004 10:29	1.000	4
1208		s3448.d	5.00	13-SEP-2004 10:50	1.000	5
1206		s3449.d	5.00	13-SEP-2004 11:12	1.000	6
1201		s3450.d	5.00	13-SEP-2004 11:33	1.000	7
1202		s3451.d	5.00	13-SEP-2004 11:55	1.000	8
1203		s3452.d	5.00	13-SEP-2004 12:17	1.000	9
1204		s3453.d	5.00	13-SEP-2004 12:38	1.000	10
1205		s3454.d	5.00	13-SEP-2004 13:00	1.000	11
BLANK		s3455.d	5.00	13-SEP-2004 13:22	1.000	12
ICV		s3456.d	5.00	13-SEP-2004 13:51	1.000	13
MDL 0.2 PPB		s3457.d	5.00	13-SEP-2004 14:47	1.000	14
MDL 0.2 PPB		s3458.d	5.00	13-SEP-2004 15:09	1.000	15
MDL 0.2 PPB		s3459.d	5.00	13-SEP-2004 15:31	1.000	16
MDL 0.2 PPB		s3460.d	5.00	13-SEP-2004 15:53	1.000	17
MDL 0.2 PPB		s3461.d	5.00	13-SEP-2004 16:15	1.000	18
MDL 0.2 PPB		s3462.d	5.00	13-SEP-2004 16:37	1.000	19
MDL 0.2 PPB		s3463.d	5.00	13-SEP-2004 16:59	1.000	20

REVISED 01/01/2000

STANDARD PREPARATION LOGBOOK

STANDARD NAME	STD#	STOCK STD	SUPPLIER	LOT#/ EXP DATE	WT/VOL g/ml	FINAL VOL(ml)	FINAL CONC	SOLVENT/ LOT#	INITIAL	DATE PREPARED	EXP DATE
Ac/Ac	5-17-1	Q-2143 Custom Mix	NSI	051104-04 11/04	1.25ml	10ml	50ppm	DI H_2O	RMS	8/1/04	11/04 ~~1/31/05~~ RMS
AC/AC ICV	5-17-2	Q2143 Custom Mix	NSI	072104-04 02/05	1.25ml	10ml	50ppm	DI H_2O	RJO	8-4-04	2-3-05
G24D	5-17-3	Q-3160	NSF	061404-06 Exp-12-04	1.25ml	10ml	250ppm	MeOH 034924	RV	8-8-04	12-30-04
APP mix-2	5-17-4	9305	Ads	121002 Exp-121005	1.25ml	~~10ml~~ 5ml 8-9-04	50ppm	MeOH 034924	RV	8-9-04	2-8-05
Dicyclopentadiene	5-17-5	Dicyclopentadiene	Aldrich	14218BB	.5g	10mL	50000ppm	MeOH 034924	KCB	8-11-04	2-11-05
Dicyclopentadiene	5-17-6	In-House 5-17-5	In-House 5-17-5	5-17-5 02/11/05	50µl	10ml	250ppm	MeOH 034924	RJO	8-12-04	2-12-05
2,2,4-Trimethylpentane	5-17-7	2,2,4-Tri-methylpentane	Aldrich	CA 02748CA	.5g	10mL	50000ppm	MeOH 034924	KCB	8/12/04	2/12/05
2,2,4 Trimethylpentane	5-17-8	In House 5-17-7	In House 5-17-7	5-17-7 02/12/05	50µl	10ml	250ppm	MeOH 034924	JCK	8/12/04	2-12-05
2-CVE	5-17-9	NSI 1000ppb 17-04-08	NSI	17-04-08 02-06	2.5mL	10mL	250ppm	MeOH 034924	JCK	8/12/04	2-12-05
Dicyclopentadiene	5-17-10	Ads 71181	Ads 1000ppm	010303 Exp 010306	1.25ml	5ml	250ppm	MeOH 034924	RV	8-13-04	2-12-05
2-2-4-Tri methylpentane	5-17-11	Ads 71187 1000ppm	Ads 1000ppm	020700 Exp 020705	1.25ml	5ml	250ppm	MeOH 034924	RV	8-13-04	2-12-05
8260 IS	5-17-12	NSF C-441-05	NSF	Exp 12/06 C-441-05	2.0ml	10ml	50ppm	CH_3OH 034924	RJO	8-16-04	2-15-05
AC/AC	5-17-13	Q-2143 custom Mix	NSI	02-05 072104-04	1.25ml	10ml	50ppm	DI H_2O	MEF	8-19-04	2-01-05
8260 SCD	5-17-14	Q-4116	NSF 2000ppm	112003-01 Exp-11-05	3.125 ml			MeOH 034924	RJO	8-22-04	2-21-05
		Q-4116	NSF 2000ppm	032204-01 Exp-04-05	3.125 ml	25ml	250 ppm				
		C-303-28	NSF 1000ppm	C-303-28 Exp-1206	6.250 ml						
		1-bromo-2chloroethane 1404-01-01	NSF 2000ppm	1404-01-01 Exp-12-05	3.125 ml						
Sodium Sulfate	5-17-15	Fisher 026306	Fisher	026306	200g/1000ml	1000mL DI H_2O	200g/L	DI H2O	KCB	8-25-04	2-25-05

000175

STANDARD PREPARATION LOGBOOK

STANDARD NAME	STD#	STOCK STD	SUPPLIER	LOT#/ EXP DATE	WT/VOL g/ml	FINAL VOL(ml)	FINAL CONC	SOLVENT/ LOT#	INITIAL	DATE PREPARED	EXP DATE
sodium bisulfate	5-18-1	Fisher 026306	Fisher	026306	200gm	1000 ml	200g/L	D/H2O	PW	8/28/04	2/27/05
App-mix-2	5-18-2	93015	Ads	081004 Exp-081007	2.5ml	10ml	50ppm	meOH 035345	RSP	8-28-04	2-27-05
App-mix-1	5-18-3	93014	Ads 2500ppm	120402 Exp-12-04-05	1.0ml ~~2.5ml~~ RSP 8/27/04	10ml	250ppm	meOH 035345	RSP	8-28-04	2-27-05
8260 IS/SS	5-18-4	C-440-05 SURRO.	NSI 2500ppm	C-440-05 Exp-02-06	0.5ml	50ml	RSP-8-28-04 ~~50ppm~~	meOH 035345	RSP	8-28-04	2-27-05
		C-441-05 INT-STD	NSI 2500ppm	C-441-05 Exp-12-06	0.5ml		25ppm				
8260 IS	5-18-5	C-441-05	NSI 2500ppm	C-441-05 Exp-12-06	0.5ml	50ppm	25ppm	meOH 035345	RSP	8-28-04	2-27-05
AC/AC	5-18-6	Q2143	NSI	0721-04-04 Exp-02-05	1.25ml	10ml	50ppm	DI H2O	RSP	9-2-04	02-28-05
8260 SS	5-18-7	NSI 2500µg/mL C-440-06	NSI	C-440-06 Exp 02/06	1.0mL JCK ~~2.5mL~~	10mL JCK ~~25.0mL~~	250 ppm	MeOH ~~035345~~	JCK	9-9-04	3-8-05
AC/AC	5-18-8	Q2143	NSI	0721-04-04 Exp 02-05	1.25ml	10ml	50 ppm	DI H2O	RFS	9-10-04	2-10-05 2-05
2-1 Ketone	5-18-9	C-109-10	NSI ~~Ads~~ 2000 ppm	C-109-10 Exp-11-04	1.25ml	10ml	200ppm	DI H2O	RV	9-10-04	11-30-04
2-1 IS/SS	5-18-10	C-157-05	NSI 2500ppm	C-157-05 Exp-10-05	.5ml	50ml	25ppm	meOH	RV	9-10-04	3-09-05
		233-04-07	NSI 2400ppm	233-04-07 Exp < 10-05	0.625ml			035345			
8260 IS/SS	5-18-11	C-440-06 Surr.	NSI 2500ppm	C-440-06 Exp-02-06	1.2mL	100mL	30 ppm	MeOH	JCK	9-13-04	3-12-05
		C-441-05 Int. Std.	NSI 2500ppm	C-441-05 Exp-12-06	1.2mL			035345			
2CV-E	5-18-12	NSI 1000ppm 17-04-08	NSI 1000ppm	17-04-08 02-06	2.5ml	10ml	250ppm	MEOH 034924	MEF	9-15-04	3-15-04
Dates 8-1-04 — 9-15-04 were reviewed by QA/QC on 9-23-04									DLH	—	—
8260 SS	5-18-13	NSI C-440-06	NSI	Exp-02-06 C-440-06 2500ppm	2.0ml	100ml	50ppm	meOH 035345	RSP	9-25-04	3-24-04
8260 IS	5-18-14	NSI C-441-05	NSI	C-441-05 2500ppm Exp-12-06	2.0ml	100ml	50ppm	meOH 035345	RSP	9-25-04	3-24-04

2E

WATER ORGANIC SURROGATE RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

GC Column (1): 201TP-0.15 ID: 2.1 (mm) GC Cloumn (2): ID: (mm)

Method: SW-846 8310

	EPA SAMPLE NO.	SMC1 1-(1)	Lo	Hi	F	SMC1 1-(2)	Lo	Hi	F	SMC2 2-(1)	Lo	Hi	F	SMC2 2-(2)	Lo	Hi	F	TOT OUT
1 .	86-334-2SA-Q3-04	80	40	140														0
2 .	86-334-32S-Q3-04	83	40	140														0
3 .	86-334-33S-Q3-04	84	40	140														0
4 .	86-334-34S-Q3-04	0	40	140	D													0
5 .	86-339-28S-Q3-04	81	40	140														0
6 .	86-339-29S-Q3-04	85	40	140														0
7 .	86-811-16SR-Q3-04	74	40	140														0
8 .	86-811-17S-Q3-04	76	40	140														0
9 .	86-811-18S-Q3-04	78	40	140														0
10 .	86-NG-24S-Q3-04	84	40	140														0
11 .	86-JETC-MS-Q3-04	82	40	140														0
12 .	86-JETC-MSD-Q3-04	77	40	140														0
13 .	86-JETC-DUP-Q3-04	95	40	140														0
14 .	86-JETC-EB-Q3-04	66	40	140														0
15 .	MB195299	85	40	140														0
16 .	LCS195300	84	40	140														0
17 .	LCSD195301	90	40	140														0

SMC 1 : p-Terphenyl SMC 2 :

Column to be used to flag recovery limits

* Value outside of contract required limits

D Surrogate diluted out

3E

WATER ORGANICS MS/MSD RECOVERY

Lab Name: GCAL Sample ID 86-NG-24S-Q3-04

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Contract: Method: SW-846 8310

Prep Batch: 280789 Analytical Batch: 281257

SAMPLE NO : 20410010611

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS % REC	MS % REC FLAG	QC. LIMITS
1-Methylnaphthalene	ug/L	5	0	4.74	95		40 - 140
2-Methylnaphthalene	ug/L	5	0	4.2	84		40 - 140
Acenaphthene	ug/L	5	0	3.31	66		40 - 140
Acenaphthylene	ug/L	5	0	4.33	87		40 - 140
Anthracene	ug/L	5	0	4.19	84		40 - 140
Benzo(a)anthracene	ug/L	5	0	4.28	86		40 - 140
Benzo(a)pyrene	ug/L	5	0	3.89	78		40 - 140
Benzo(b)fluoranthene	ug/L	5	0	4.15	83		40 - 140
Benzo(g,h,i)perylene	ug/L	5	0	3.62	72		40 - 140
Benzo(k)fluoranthene	ug/L	5	0	3.99	80		40 - 140
Chrysene	ug/L	5	0	4.25	85		40 - 140
Dibenz(a,h)anthracene	ug/L	5	0	3.24	65		40 - 140
Fluoranthene	ug/L	5	0	4.53	91		40 - 140
Fluorene	ug/L	5	0	4.41	88		40 - 140
Indeno(1,2,3-cd)pyrene	ug/L	5	0	3.79	76		40 - 140
Naphthalene	ug/L	5	0	4.47	89		40 - 140
Phenanthrene	ug/L	5	0	4.45	89		40 - 140
Pyrene	ug/L	5	0	4.45	89		40 - 140

RPD : 0 out of 18 outside limits

Spike Recovery: 0 out of 36 outside limits

3E
WATER ORGANICS MS/MSD RECOVERY

Lab Name: GCAL Sample ID 86-NG-24S-Q3-04

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Contract: Method: SW-846 8310

Prep Batch: 280789 Analytical Batch: 281257

SAMPLE NO : ***20410010612***

COMPOUND	UNITS	SPIKE ADDED	MSD CONC.	MSD % REC	REC FLAG	% RPD	RPD FLAG	QC. LIMITS REC	QC. LIMITS RPD
1-Methylnaphthalene	ug/L	5	4.44	89		7		40 - 140	0 - 30
2-Methylnaphthalene	ug/L	5	3.89	78		8		40 - 140	0 - 30
Acenaphthene	ug/L	5	4.26	85		25		40 - 140	0 - 30
Acenaphthylene	ug/L	5	4.02	80		7		40 - 140	0 - 30
Anthracene	ug/L	5	4.33	87		3		40 - 140	0 - 30
Benzo(a)anthracene	ug/L	5	4.37	87		2		40 - 140	0 - 30
Benzo(a)pyrene	ug/L	5	3.81	76		2		40 - 140	0 - 30
Benzo(b)fluoranthene	ug/L	5	3.78	76		9		40 - 140	0 - 30
Benzo(g,h,i)perylene	ug/L	5	3.69	74		2		40 - 140	0 - 30
Benzo(k)fluoranthene	ug/L	5	3.67	73		8		40 - 140	0 - 30
Chrysene	ug/L	5	4.36	87		3		40 - 140	0 - 30
Dibenz(a,h)anthracene	ug/L	5	3.34	67		3		40 - 140	0 - 30
Fluoranthene	ug/L	5	4.61	92		2		40 - 140	0 - 30
Fluorene	ug/L	5	4.56	91		3		40 - 140	0 - 30
Indeno(1,2,3-cd)pyrene	ug/L	5	4.08	82		7		40 - 140	0 - 30
Naphthalene	ug/L	5	4.58	92		2		40 - 140	0 - 30
Phenanthrene	ug/L	5	4.53	91		2		40 - 140	0 - 30
Pyrene	ug/L	5	4.57	91		3		40 - 140	0 - 30

RPD : 0 out of 18 outside limits

Spike Recovery: 0 out of 36 outside limits

3E

WATER ORGANICS LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Contract: Method: SW-846 8310

Prep Batch: 280789 Analytical Batch: 281257

SAMPLE NO : 195300

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*LCS CONCENTRATION*	*LCS % REC*	*LCS % REC FLAG*	*QC. LIMITS*
1-Methylnaphthalene	ug/L	5	0	4.42	88		40 - 140
2-Methylnaphthalene	ug/L	5	0	3.82	76		40 - 140
Acenaphthene	ug/L	5	0	4.47	89		40 - 140
Acenaphthylene	ug/L	5	0	4.12	82		40 - 140
Anthracene	ug/L	5	0	4.41	88		40 - 140
Benzo(a)anthracene	ug/L	5	0	4.41	88		40 - 140
Benzo(a)pyrene	ug/L	5	0	3.67	73		40 - 140
Benzo(b)fluoranthene	ug/L	5	0	4.03	81		40 - 140
Benzo(g,h,i)perylene	ug/L	5	0	2.36	47		40 - 140
Benzo(k)fluoranthene	ug/L	5	0	3.45	69		40 - 140
Chrysene	ug/L	5	0	4.42	88		40 - 140
Dibenz(a,h)anthracene	ug/L	5	0	1.88	38	*	40 - 140
Fluoranthene	ug/L	5	0	4.79	96		40 - 140
Fluorene	ug/L	5	0	4.61	92		40 - 140
Indeno(1,2,3-cd)pyrene	ug/L	5	0	3.19	64		40 - 140
Naphthalene	ug/L	5	0	4.55	91		40 - 140
Phenanthrene	ug/L	5	0	4.65	93		40 - 140
Pyrene	ug/L	5	0	4.78	96		40 - 140

RPD : 0 out of 18 outside limits

Spike Recovery: 1 out of 36 outside limits

3E

WATER ORGANICS LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Contract: Method: SW-846 8310

Prep Batch: 280789 Analytical Batch: 281257

SAMPLE NO : ***195301***

COMPOUND	UNITS	SPIKE ADDED	LCSD CONC.	LCSD % REC	REC FLAG	% RPD	RPD FLAG	QC. LIMITS REC	QC. LIMITS RPD
1-Methylnaphthalene	ug/L	5	3.92	78		12		40 - 140	0 - 30
2-Methylnaphthalene	ug/L	5	3.55	71		7		40 - 140	0 - 30
Acenaphthene	ug/L	5	3.58	72		22		40 - 140	0 - 30
Acenaphthylene	ug/L	5	3.93	79		5		40 - 140	0 - 30
Anthracene	ug/L	5	4.27	85		3		40 - 140	0 - 30
Benzo(a)anthracene	ug/L	5	4.53	91		3		40 - 140	0 - 30
Benzo(a)pyrene	ug/L	5	3.85	77		5		40 - 140	0 - 30
Benzo(b)fluoranthene	ug/L	5	4.25	85		5		40 - 140	0 - 30
Benzo(g,h,i)perylene	ug/L	5	2.43	49		3		40 - 140	0 - 30
Benzo(k)fluoranthene	ug/L	5	3.86	77		11		40 - 140	0 - 30
Chrysene	ug/L	5	4.59	92		4		40 - 140	0 - 30
Dibenz(a,h)anthracene	ug/L	5	1.99	40		6		40 - 140	0 - 30
Fluoranthene	ug/L	5	4.38	88		9		40 - 140	0 - 30
Fluorene	ug/L	5	4.48	90		3		40 - 140	0 - 30
Indeno(1,2,3-cd)pyrene	ug/L	5	3.54	71		10		40 - 140	0 - 30
Naphthalene	ug/L	5	5.21	104		14		40 - 140	0 - 30
Phenanthrene	ug/L	5	4.56	91		2		40 - 140	0 - 30
Pyrene	ug/L	5	4.53	91		5		40 - 140	0 - 30

RPD : 0 out of 18 outside limits

Spike Recovery: 1 out of 36 outside limits

4C

ORGANIC METHOD BLANK SUMMARY

Lab Name: GCAL

Sample ID MB195299

Lab Code: LA024 Case No.:

Contract:

Lab Sample ID: 195299

SAS No.: SDG No.: 204100106

Matrix: Water Sulfur Cleanup: (Y/N) N

Date Extracted: 10/01/04

Date Analyzed (1): 10/09/04 Time (1): 0950

Date Analyzed (2): Time (2):

Instrument ID (1): HPLC 1

Instrument ID (2):

GC Column (1): 201TP-0.15 ID: 2.1 (mm)

GC Column (2): ID: (mm)

Method: SW-846 8310

Prep Batch: 280789 Analytical Batch: 281257

Lab File ID: 041009/H000814

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATE ANALYZED	TIME ANALYZED
1.	LCS195300	195300	10/09/04	0957		
2.	LCSD195301	195301	10/09/04	1004		
3.	86-334-2SA-Q3-04	20410010601	10/09/04	1011		
4.	86-334-32S-Q3-04	20410010602	10/09/04	1018		
5.	86-334-33S-Q3-04	20410010603	10/09/04	1024		
6.	86-334-34S-Q3-04	20410010604	10/09/04	1031		
7.	86-339-28S-Q3-04	20410010605	10/09/04	1038		
8.	86-339-29S-Q3-04	20410010606	10/09/04	1045		
9.	86-811-16SR-Q3-04	20410010607	10/09/04	1052		
10.	86-811-17S-Q3-04	20410010608	10/09/04	1059		
11.	86-811-18S-Q3-04	20410010609	10/09/04	1106		
12.	86-NG-24S-Q3-04	20410010610	10/09/04	1113		
13.	86-JETC-MS-Q3-04	20410010611	10/09/04	1120		
14.	86-JETC-MSD-Q3-04	20410010612	10/09/04	1127		
15.	86-JETC-DUP-Q3-04	20410010613	10/09/04	1134		
16.	86-JETC-EB-Q3-04	20410010614	10/09/04	1141		

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

Sample ID 86-334-2SA-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010601

Date Collected 09/28/04 Time: 1415

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1011

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

CONCENTRATION UNITS: ug/L

Lab File ID: 041009/H0008151

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008151.d
Lab Smp Id: 20410010601 Client Smp ID: 20410010601
Inj Date : 09-OCT-2004 10:11
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010601
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
$ 11 p-Terphenyl	2.847	2.949	-0.102	11486	1.58786	1.59 (M)

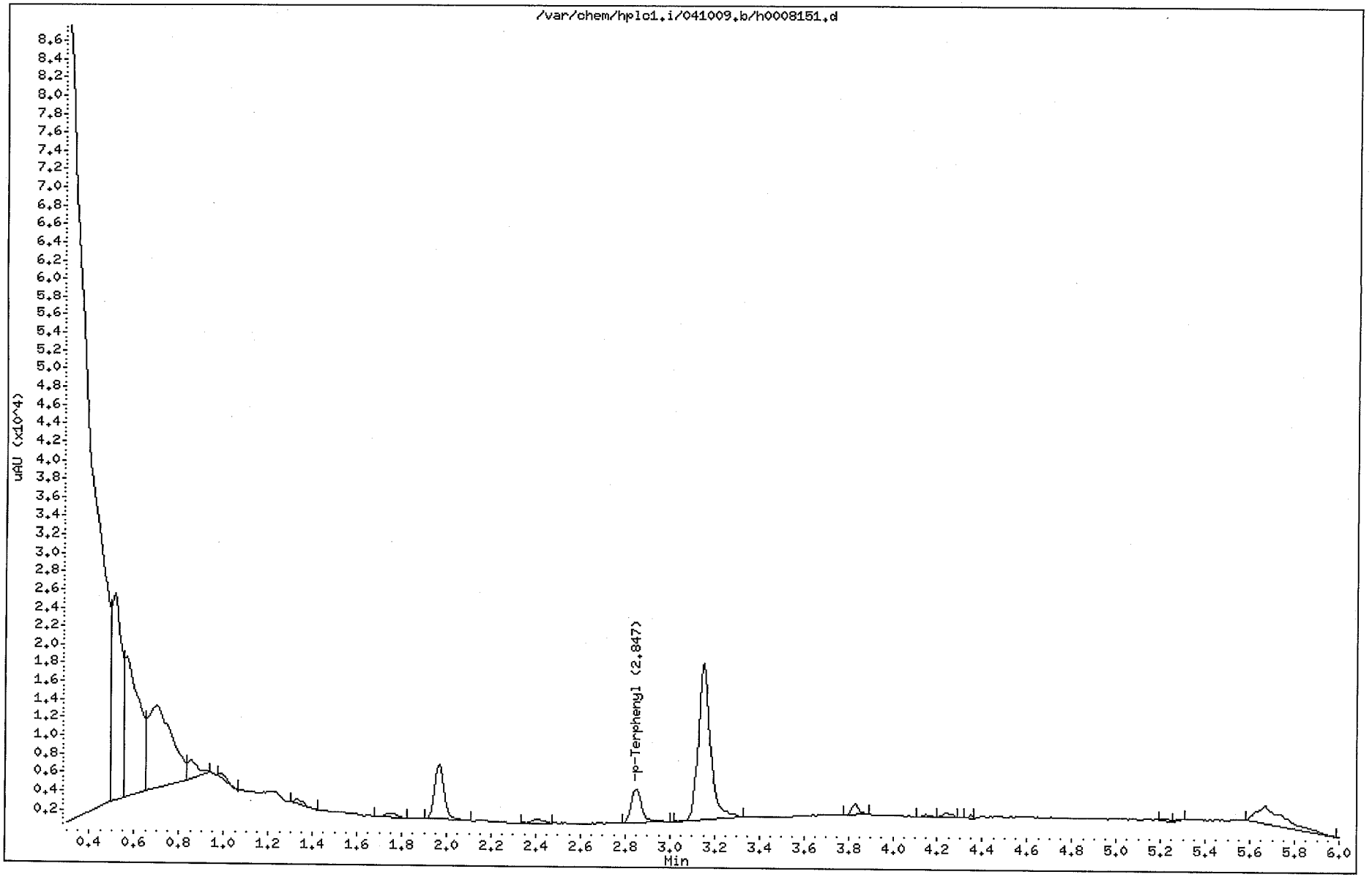
QC Flag Legend

M - Compound response manually integrated.

000185

Data File: /var/chem/hplc1.i/041009.b/h0008151.d
Date : 09-OCT-2004 10:11
Client ID: 20410010601
Sample Info: 20410010601
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-334-32S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010602

Date Collected 09/28/04 Time: 1125

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1018

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008152

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008152.d
Lab Smp Id: 20410010602 Client Smp ID: 20410010602
Inj Date : 09-OCT-2004 10:18
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010602
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
$ 11 p-Terphenyl	2.862	2.949	-0.087	11903	1.64554	1.65 (M)

QC Flag Legend

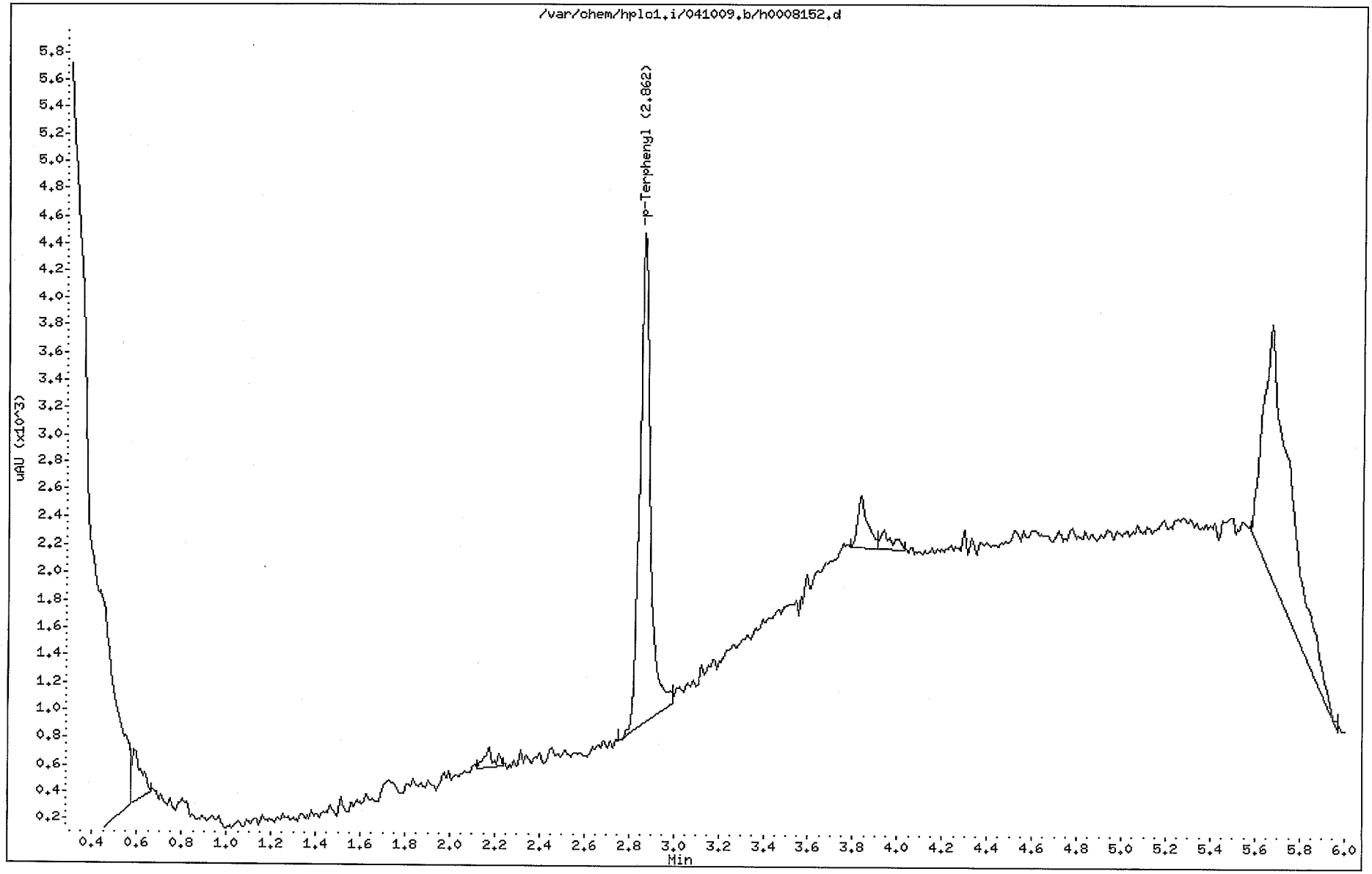
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008152.d
Date : 09-OCT-2004 10:18
Client ID: 20410010602
Sample Info: 20410010602
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000188



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-334-33S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010603

Date Collected 09/28/04 Time: 1035

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1024

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008153

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008153.d
Lab Smp Id: 20410010603 Client Smp ID: 20410010603
Inj Date : 09-OCT-2004 10:24
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010603
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
$ 11 p-Terphenyl	2.805	2.949	-0.144	12163	1.68151	1.68 (M)

QC Flag Legend

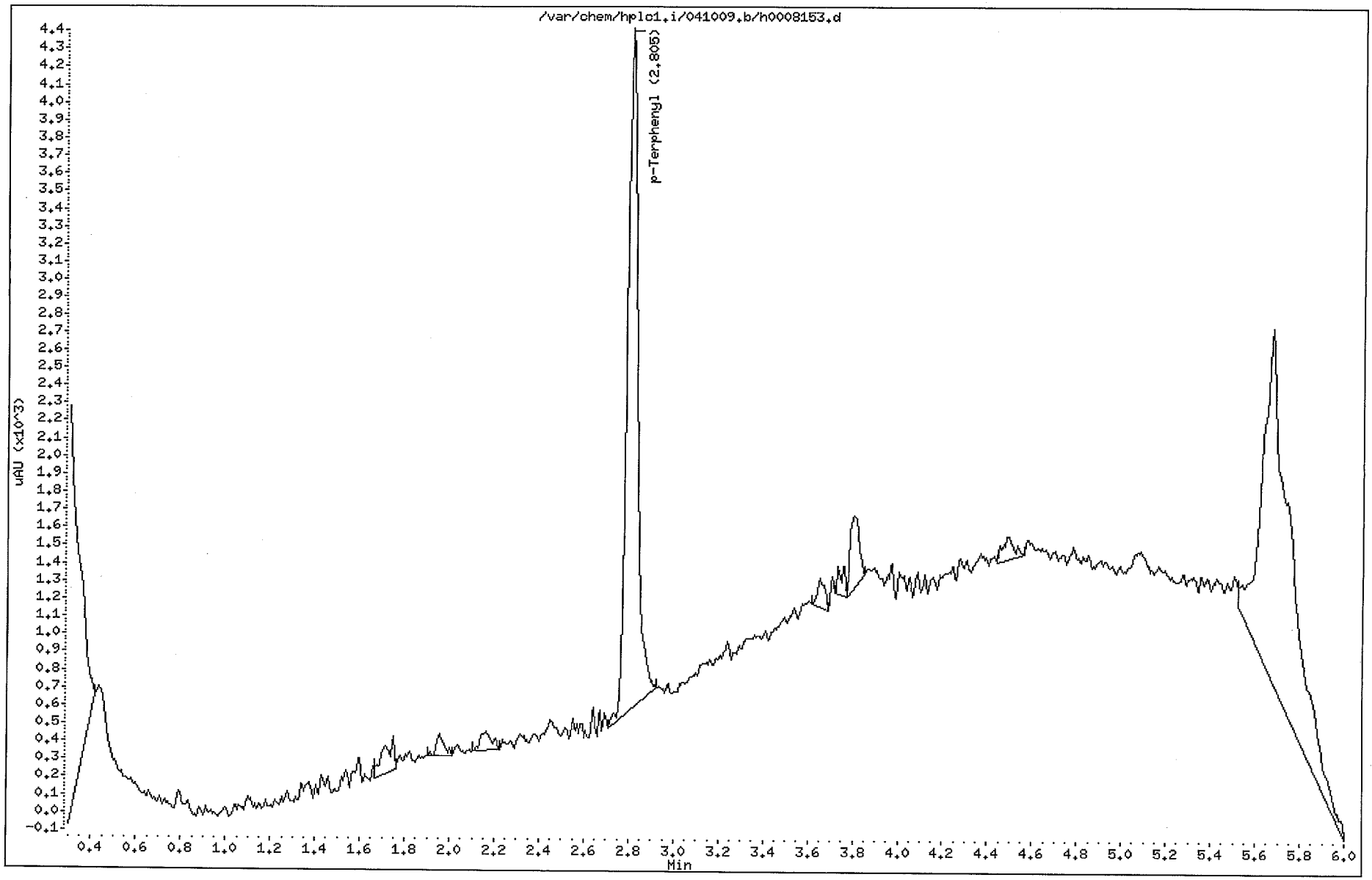
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008153.d
Date : 09-OCT-2004 10:24
Client ID: 20410010603
Sample Info: 20410010603
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000191



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-334-34S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010604

Date Collected 09/29/04 Time: 1320

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1031

Dilution Factor: 10 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008154

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	10.0	U	2.91	10.0
91-57-6	2-Methylnaphthalene	10.0	U	1.42	10.0
83-32-9	Acenaphthene	10.0	U	3.31	10.0
208-96-8	Acenaphthylene	10.0	U	1.53	10.0
120-12-7	Anthracene	1.00	U	0.240	1.00
56-55-3	Benzo(a)anthracene	1.00	U	0.320	1.00
50-32-8	Benzo(a)pyrene	1.00	U	0.330	1.00
205-99-2	Benzo(b)fluoranthene	1.00	U	0.160	1.00
191-24-2	Benzo(g,h,i)perylene	1.00	U	0.160	1.00
207-08-9	Benzo(k)fluoranthene	1.00	U	0.330	1.00
218-01-9	Chrysene	1.00	U	0.300	1.00
53-70-3	Dibenz(a,h)anthracene	1.00	U	0.290	1.00
206-44-0	Fluoranthene	1.00	U	0.440	1.00
86-73-7	Fluorene	5.00	U	0.990	5.00
193-39-5	Indeno(1,2,3-cd)pyrene	2.50	U	0.410	2.50
91-20-3	Naphthalene	2.50	U	1.24	2.50
85-01-8	Phenanthrene	1.00	U	0.250	1.00
129-00-0	Pyrene	1.00	U	0.340	1.00

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008154.d
Lab Smp Id: 20410010604 Client Smp ID: 20410010604
Inj Date : 09-OCT-2004 10:31
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010604@10
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

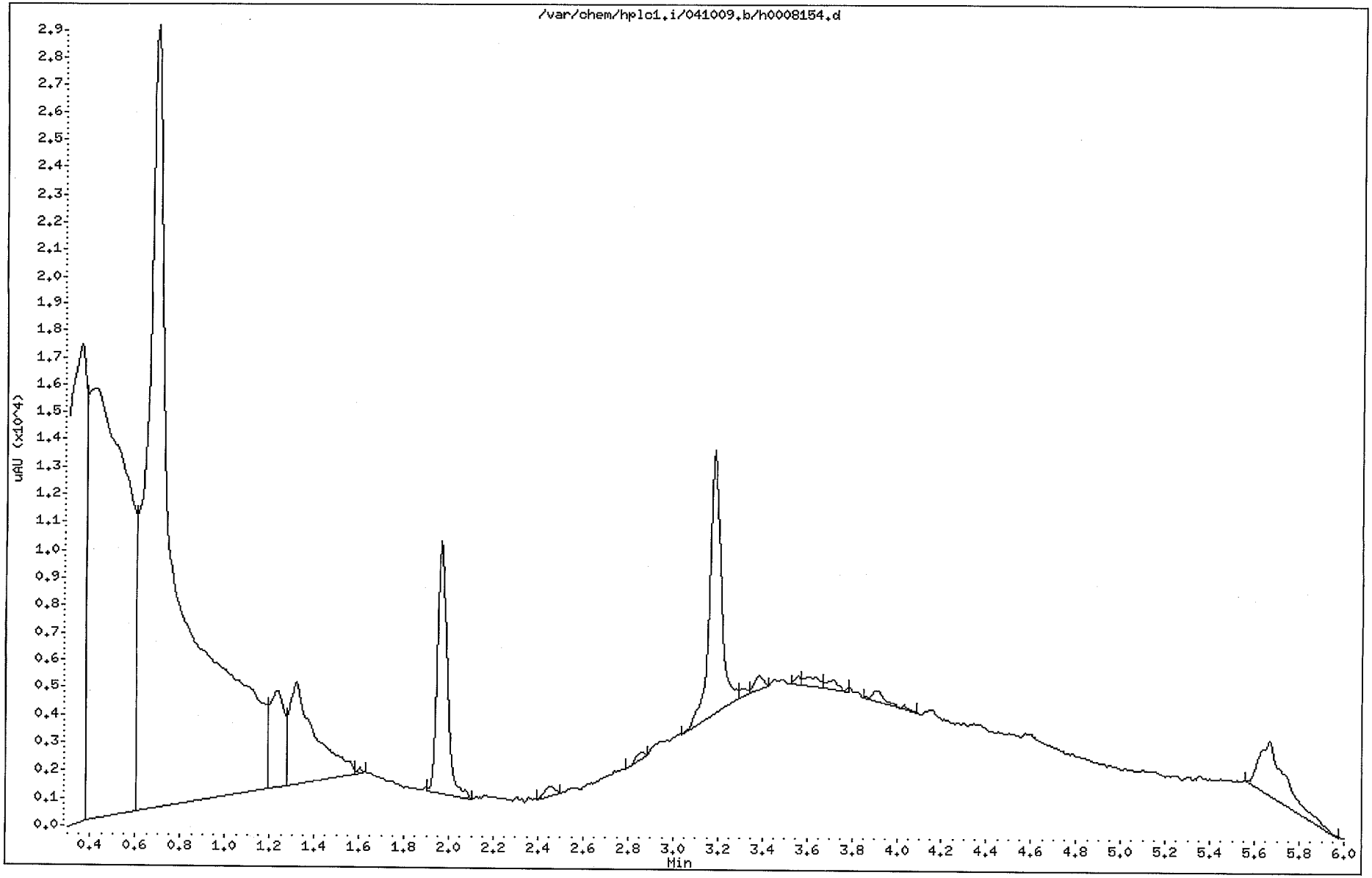
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)

Data File: /var/chem/hplc1.i/041009.b/h0008154.d
Date : 09-OCT-2004 10:31
Client ID: 20410010604
Sample Info: 20410010604@10
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000194



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-339-28S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010605

Date Collected 09/29/04 Time: 1520

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1038

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008155

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008155.d
Lab Smp Id: 20410010605 Client Smp ID: 20410010605
Inj Date : 09-OCT-2004 10:38
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010605
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
$ 11 p-Terphenyl	2.857	2.949	-0.092	11727	1.62118	1.62 (M)

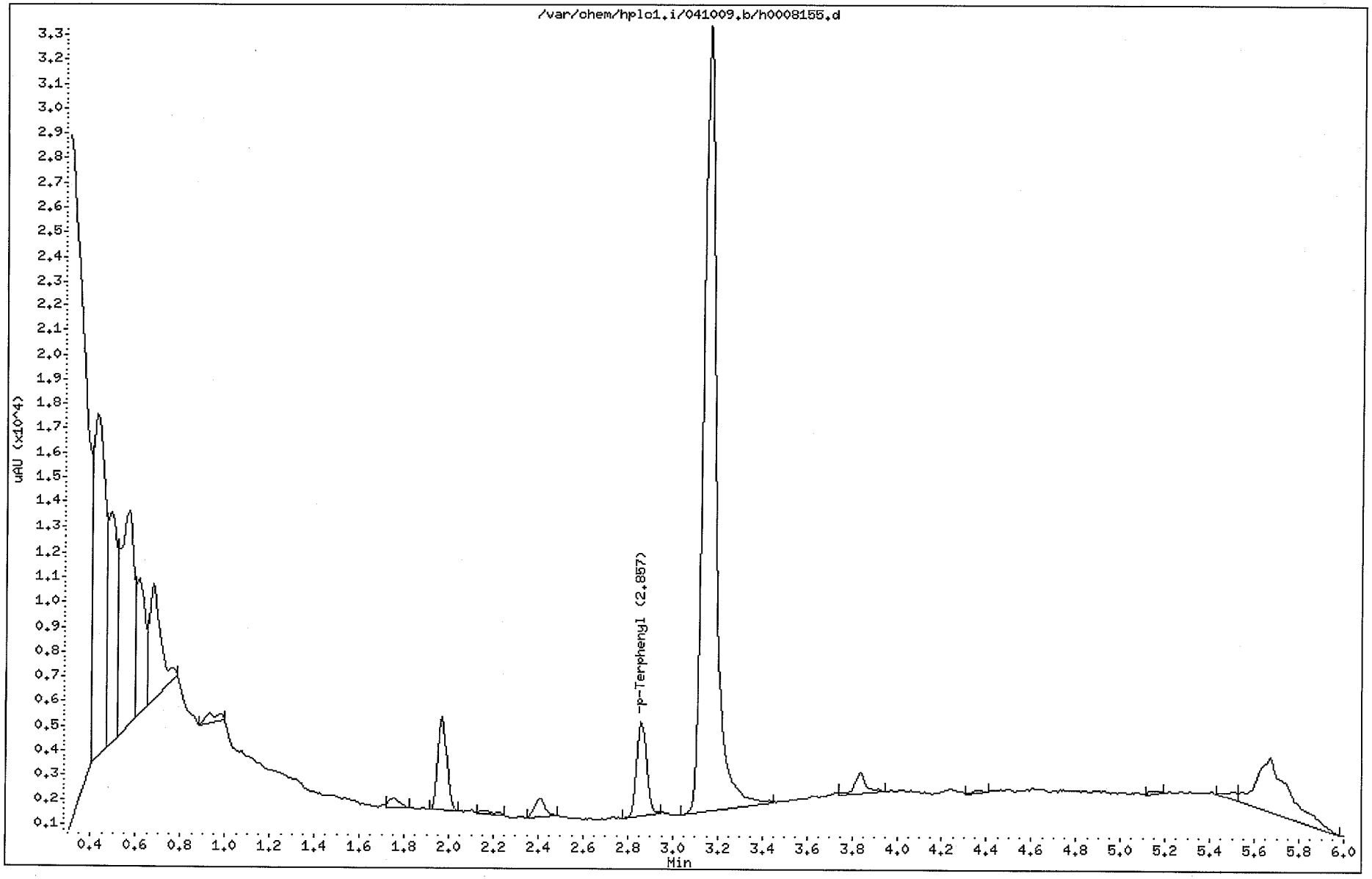
QC Flag Legend

M - Compound response manually integrated.

000197

Data File: /var/chem/hplc1.i/041009.b/h0008155.d
Date : 09-OCT-2004 10:38
Client ID: 20410010605
Sample Info: 20410010605
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-339-29S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010606

Date Collected 09/29/04 Time: 1415

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1045

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008156

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008156.d
Lab Smp Id: 20410010606 Client Smp ID: 20410010606
Inj Date : 09-OCT-2004 10:45
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010606
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
$ 11 p-Terphenyl	2.804	2.949	-0.145	12305	1.70111	1.70 (M)

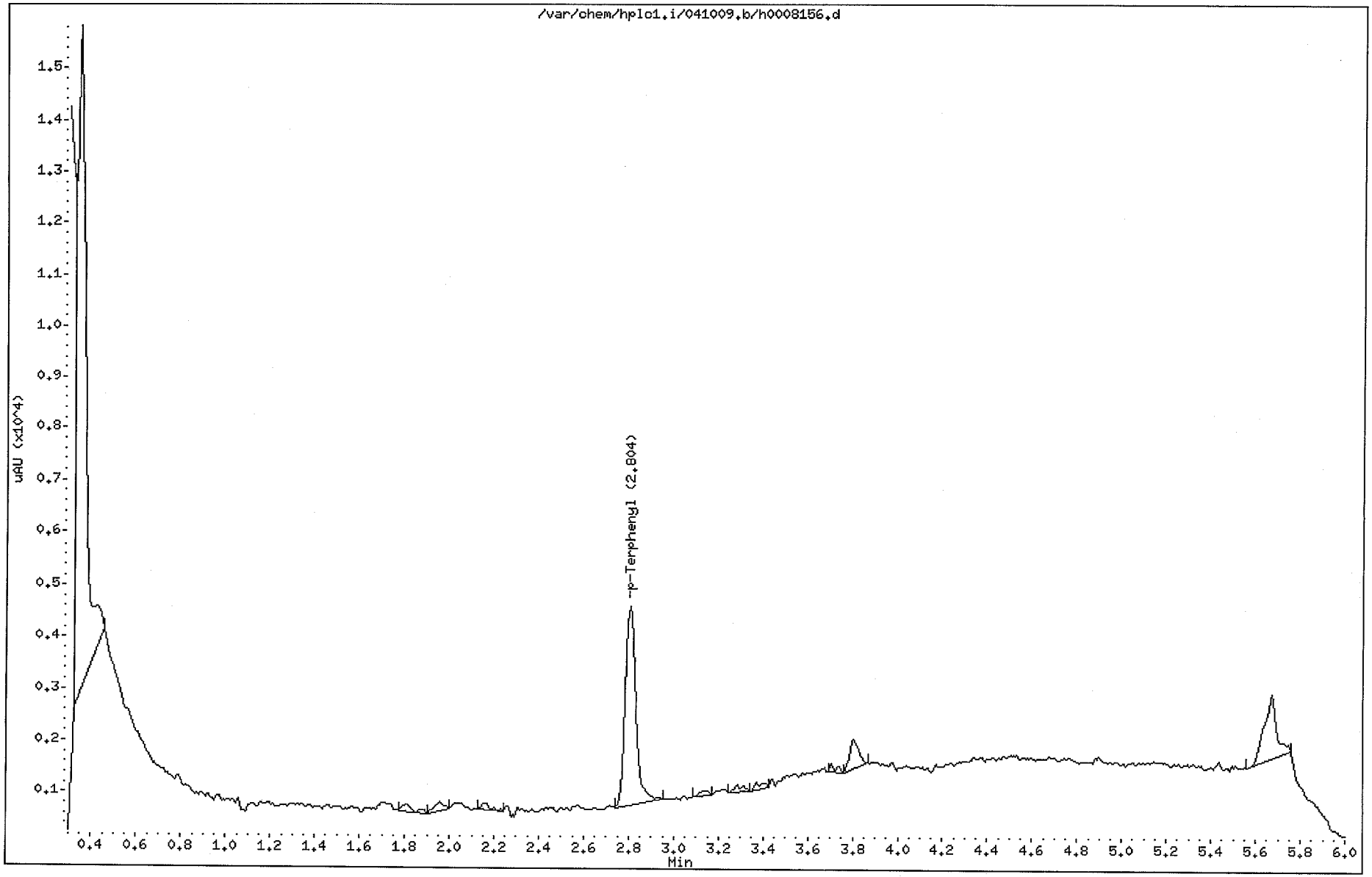
QC Flag Legend

M - Compound response manually integrated.

000200

Data File: /var/chem/hplc1.i/041009.b/h0008156.d
Date : 09-OCT-2004 10:45
Client ID: 20410010606
Sample Info: 20410010606
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-811-16SR-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010607

Date Collected 09/28/04 Time: 1610

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1052

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008157

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008157.d
Lab Smp Id: 20410010607 Client Smp ID: 20410010607
Inj Date : 09-OCT-2004 10:52
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010607
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
$ 11 p-Terphenyl	2.830	2.949	-0.119	10647	1.47193	1.47(M)

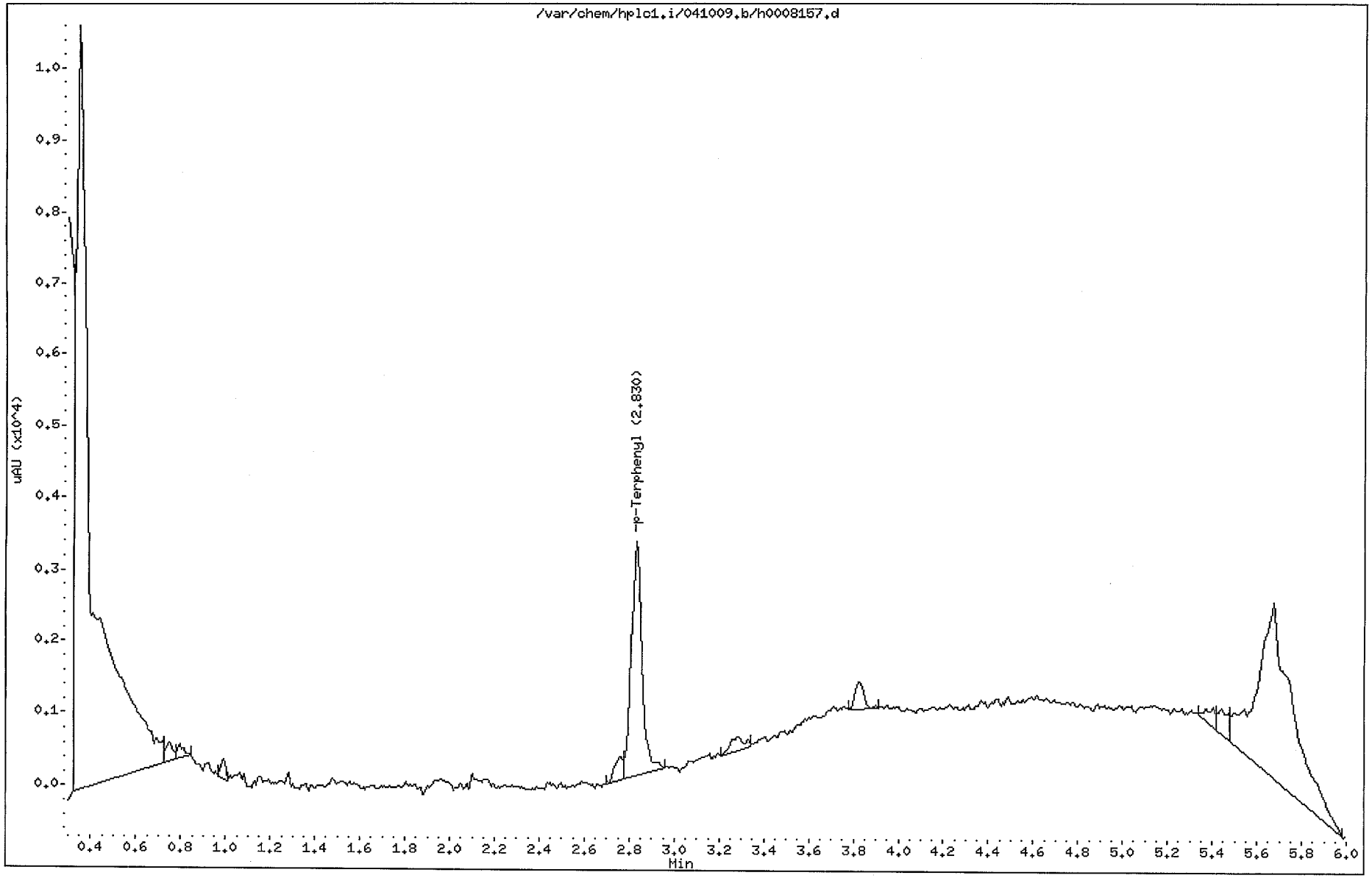
QC Flag Legend

M - Compound response manually integrated.

000203

Data File: /var/chem/hplc1.i/041009.b/h0008157.d
Date : 09-OCT-2004 10:52
Client ID: 20410010607
Sample Info: 20410010607
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-811-17S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010608

Date Collected 09/29/04 Time: 1125

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1059

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008158

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008158.d
Lab Smp Id: 20410010608 Client Smp ID: 20410010608
Inj Date : 09-OCT-2004 10:59
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010608
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
$ 11 p-Terphenyl	2.857	2.949	-0.092	10930	1.51108	1.51 (M)

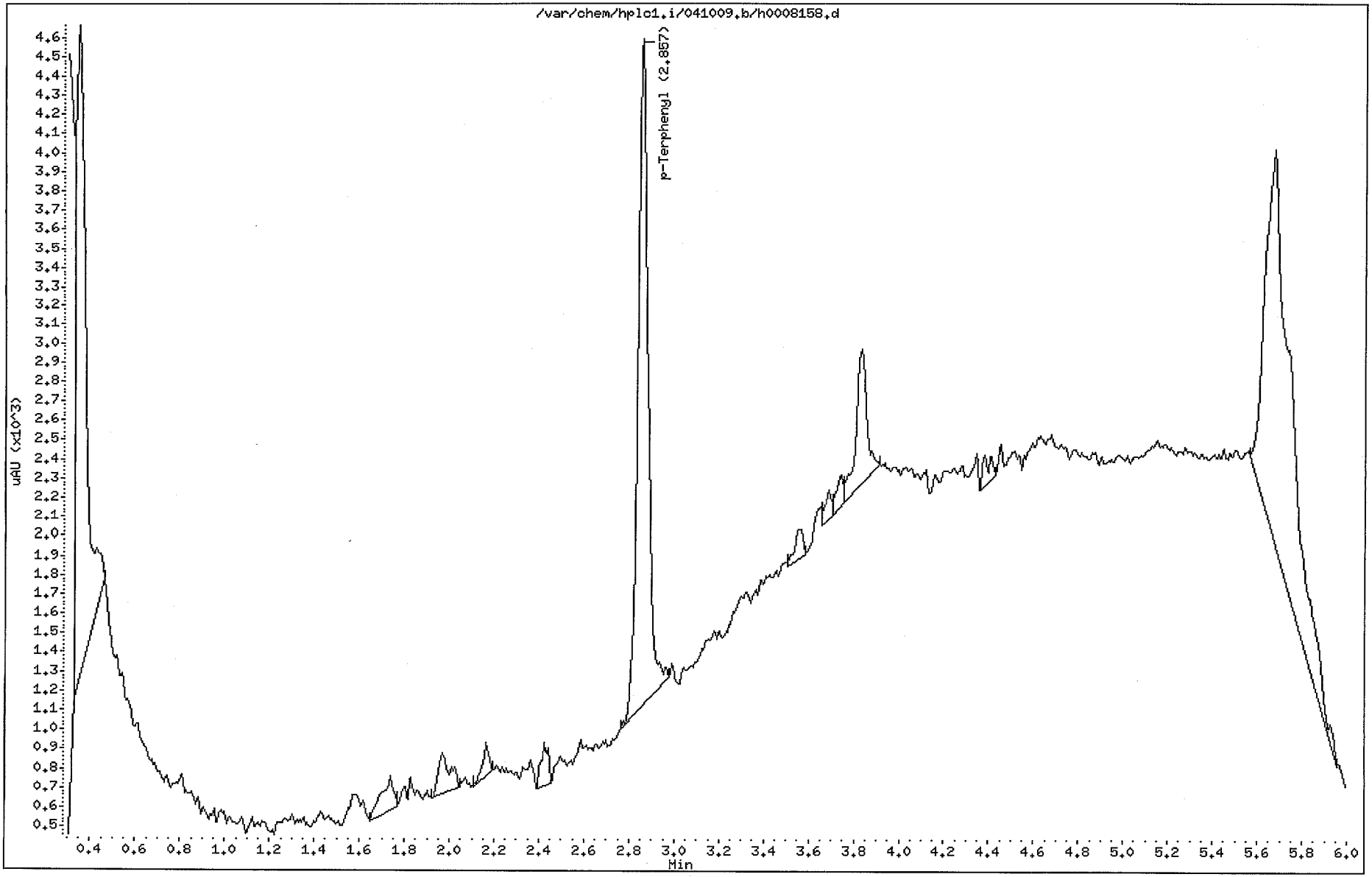
QC Flag Legend

M - Compound response manually integrated.

000206

Data File: /var/chem/hplc1.i/041009.b/h0008158.d
Date : 09-OCT-2004 10:59
Client ID: 20410010608
Sample Info: 20410010608
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

Sample ID 86-811-18S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010609

Date Collected 09/28/04 Time: 1515

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1106

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008159

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	14.9		0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	8.92		0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008159.d
Lab Smp Id: 20410010609 Client Smp ID: 20410010609
Inj Date : 09-OCT-2004 11:06
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010609
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
1 Naphthalene	0.991	1.009	-0.018	24180	8.91976	8.92(M)
3 1-Methynaphthalene	1.337	1.336	0.001	21581	14.8917	14.9(M)
$ 11 p-Terphenyl	2.804	2.949	-0.145	11284	1.55999	1.56(M)

QC Flag Legend

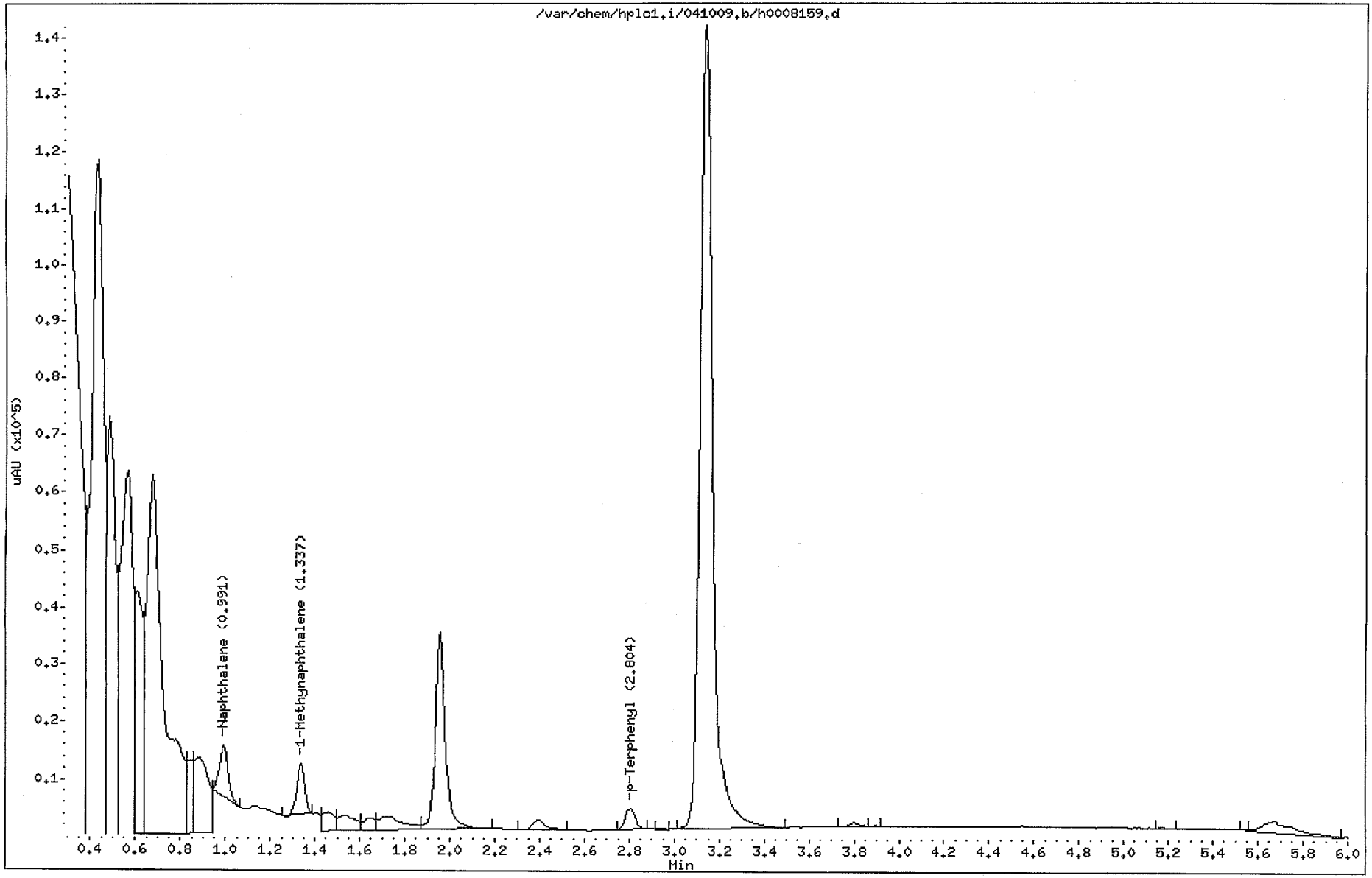
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008159.d
Date : 09-OCT-2004 11:06
Client ID: 20410010609
Sample Info: 20410010609
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000209



GCAL, Inc.

Data file : /var/chem/hplc1.i/041009F.b/h0008159.d
Lab Smp Id: 20410010609 Client Smp ID: 20410010609
Inj Date : 09-OCT-2004 11:06
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010609
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009F.b/flpnafld.m
Meth Date : 09-Oct-2004 10:32 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 12:08 Cal File: h0008230.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
1 Naphthalene	1.007	1.017	-0.010	77247	7.85620	7.86(M)
3 1-Methynaphthalene	1.337	1.353	-0.016	12562	6.53866	6.54
$ 11 p-Terphenyl	2.817	2.960	-0.143	11025	1.57488	1.57(M)

QC Flag Legend

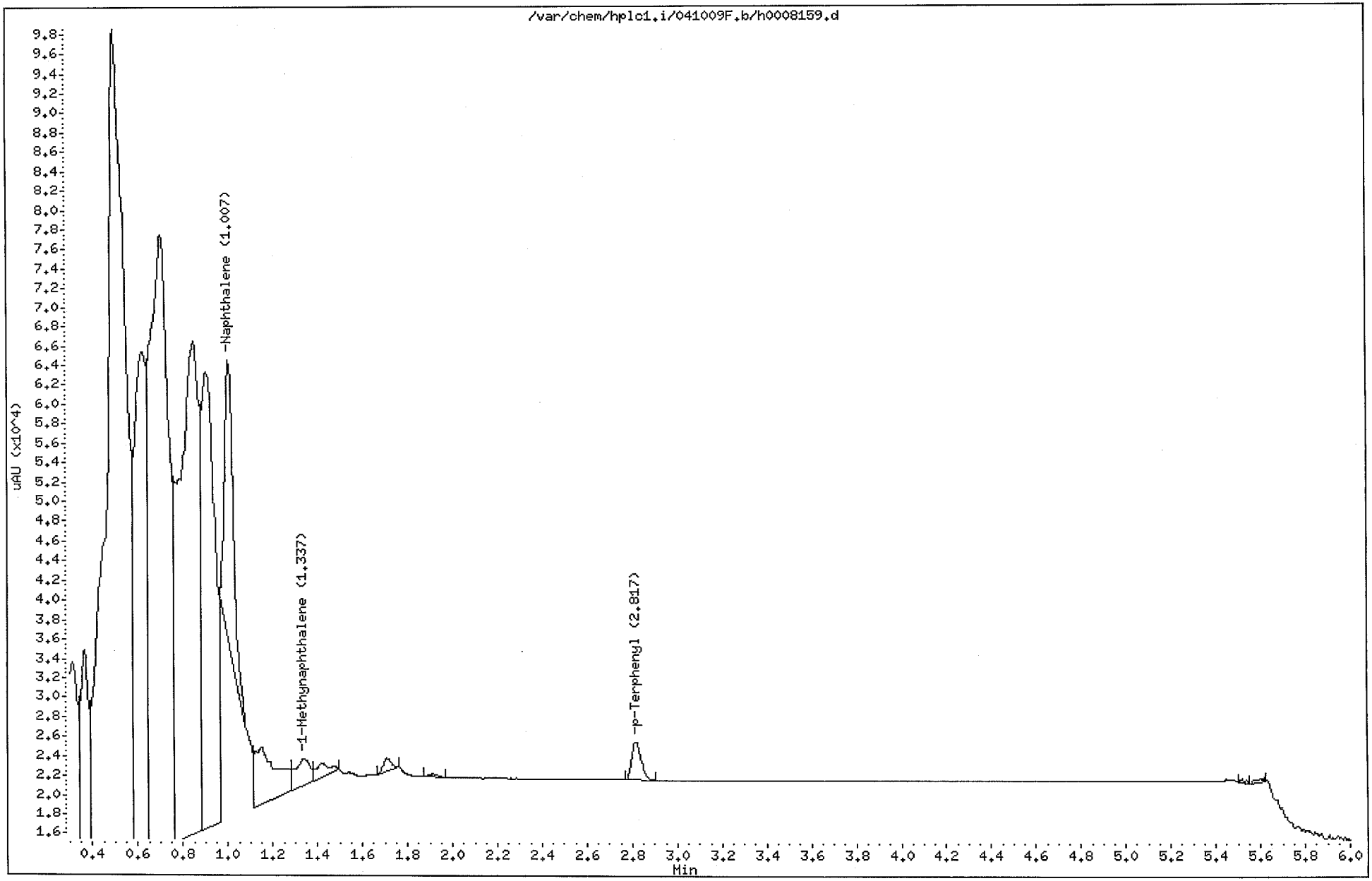
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009F.b/h0008159.d
Date : 09-OCT-2004 11:06
Client ID: 20410010609
Sample Info: 20410010609
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000211



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-NG-24S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010610

Date Collected 09/28/04 Time: 1320

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1113

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008160

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008160.d
Lab Smp Id: 20410010610 Client Smp ID: 20410010610
Inj Date : 09-OCT-2004 11:13
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010610
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
$ 11 p-Terphenyl	2.819	2.949	-0.130	12171	1.68264	1.68 (M)

QC Flag Legend

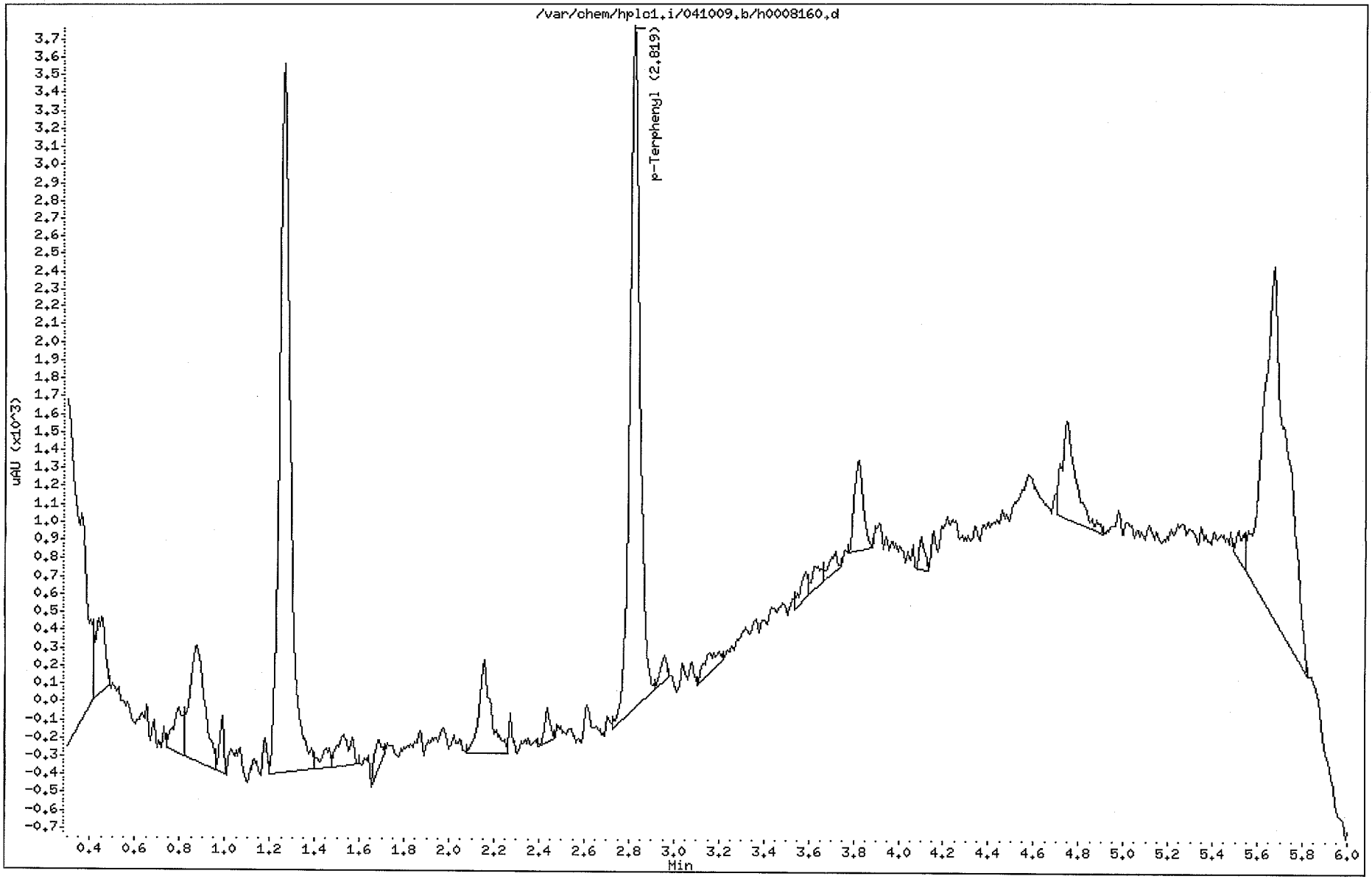
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008160.d
Date : 09-OCT-2004 11:13
Client ID: 20410010610
Sample Info: 20410010610
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000214



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

Sample ID 86-JETC-DUP-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010613

Date Collected Time:

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1134

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

CONCENTRATION UNITS: ug/L

Lab File ID: 041009/H0008163

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008163.d
Lab Smp Id: 20410010613 Client Smp ID: 20410010613
Inj Date : 09-OCT-2004 11:34
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010613
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
$ 11 p-Terphenyl	2.835	2.949	-0.114	13717	1.89642	1.90 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008163.d

Date : 09-OCT-2004 11:34

Client ID: 20410010613

Sample Info: 20410010613

Volume Injected (uL): 10.0

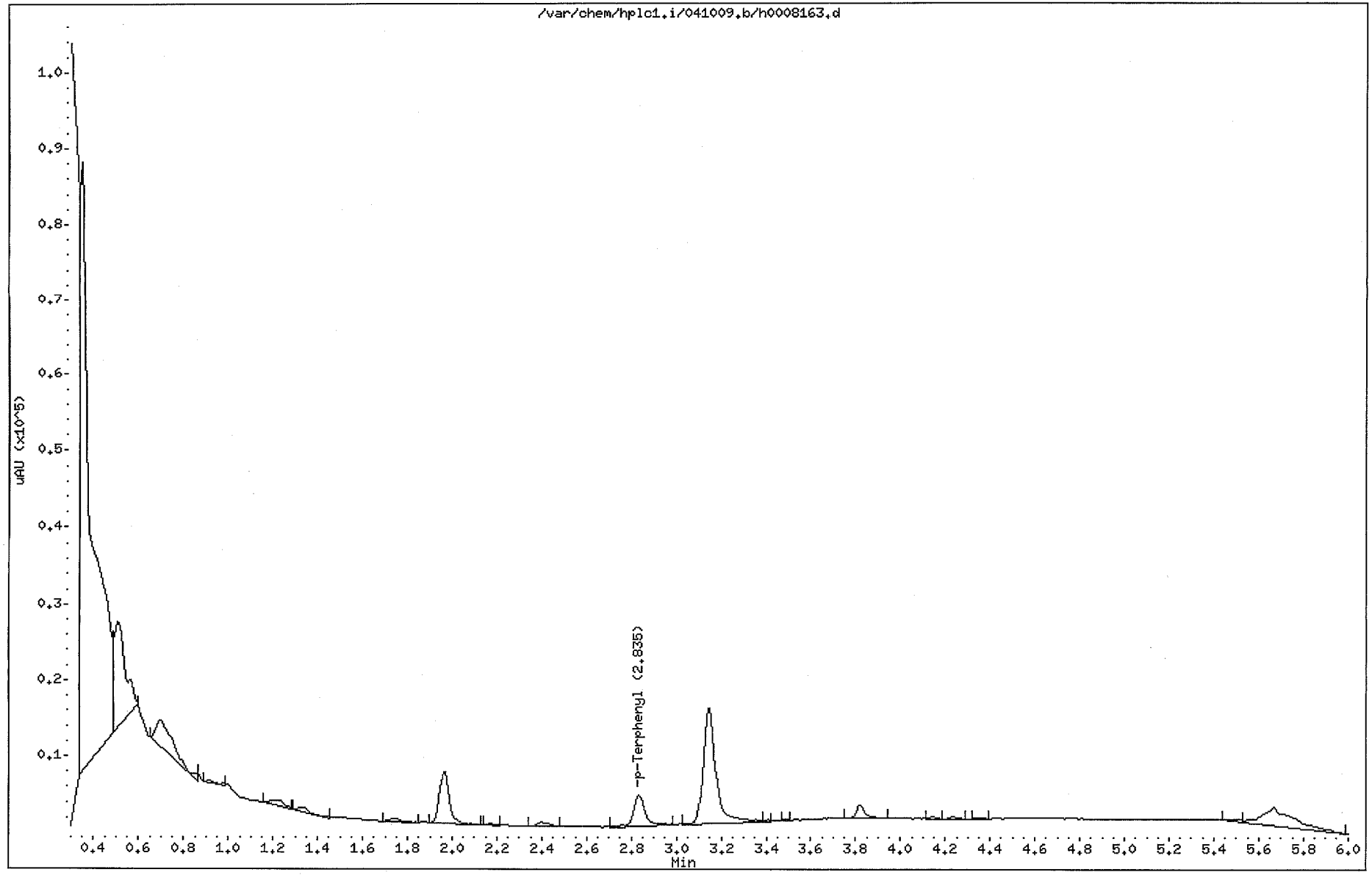
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw

Column diameter: 2.10

000217



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

Sample ID 86-JETC-EB-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010614

Date Collected 09/29/04 Time: 1545

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1141

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

CONCENTRATION UNITS: ug/L

Lab File ID: 041009/H0008164

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008164.d
Lab Smp Id: 20410010614 Client Smp ID: 20410010614
Inj Date : 09-OCT-2004 11:41
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010614
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
$ 11 p-Terphenyl	2.837	2.949	-0.112	9570	1.32304	1.32(M)

QC Flag Legend

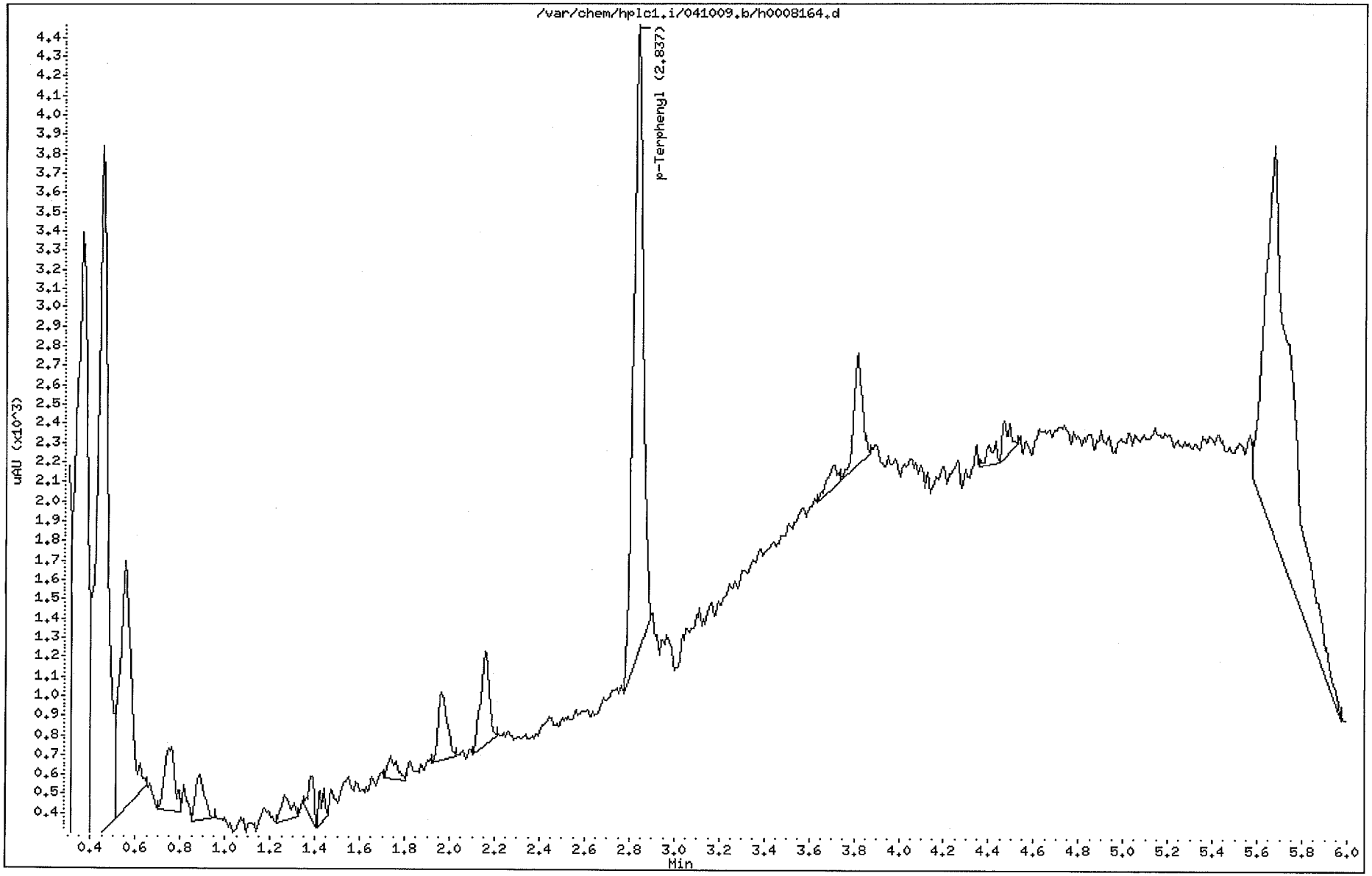
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008164.d
Date : 09-OCT-2004 11:41
Client ID: 20410010614
Sample Info: 20410010614
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000220



GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2004 15:08
End Cal Date : 07-OCT-2004 12:08
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplc1.i/041007.b/flpnauv.m
Cal Date : 07-Oct-2004 13:06 rlw
Curve Type : Average

Calibration File Names:
Level 1: /var/chem/hplc1.i/041007.b/h0008223.d
Level 2: /var/chem/hplc1.i/041007.b/h0008224.d
Level 3: /var/chem/hplc1.i/041007.b/h0008225.d
Level 4: /var/chem/hplc1.i/041007.b/h0008226.d
Level 5: /var/chem/hplc1.i/041007.b/h0008227.d
Level 6: /var/chem/hplc1.i/041007.b/h0008228.d
Level 7: /var/chem/hplc1.i/041007.b/h0008229.d
Level 8: /var/chem/hplc1.i/041007.b/h0008230.d

Compound	0.10000 Level 1 / 10.000 Level 7	0.25000 Level 2 / 20.000 Level 8	0.50000 Level 3	1.000 Level 4	2.500 Level 5	5.000 Level 6	___ RRF	% RSD
1 Naphthalene	+++++ / 2599	2844 / 2540	2936	2870	2836	2351	2711	7.979
2 Acenaphthylene	+++++ / 1748	+++++ / 1699	+++++	2006	2001	1571	1805	10.652
3 1-Methynaphthalene	+++++ / 1454	+++++ / 1433	+++++	1490	1540	1329	1449	5.411
4 2-Methylnaphthalene	+++++ / 2084	+++++ / 2054	+++++	1910	2116	1954	2024	4.347
5 Acenaphthene	+++++ / 984	+++++ / 934	+++++	901	1025	861	941	6.912
6 Fluorene	+++++ / 11499	+++++ / 11304	10994	11392	11684	11255	11355	2.058
7 Phenanthrene	26540 / 27072	27128 / 26509	25354	27948	27711	26767	26879	2.991

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2004 15:08
End Cal Date : 07-OCT-2004 12:08
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplc1.i/041007.b/flpnauv.m
Cal Date : 07-Oct-2004 13:06 rlw
Curve Type : Average

Compound	0.10000 Level 1	0.25000 Level 2	0.50000 Level 3	1.000 Level 4	2.500 Level 5	5.000 Level 6		
	10.000 Level 7	20.000 Level 8					RRF	% RSD
8 Anthracene	59260	55860	55392	60023	58325	56587		
	55280	51527					56532	4.785
9 Fluoranthene	6490	5688	6476	7693	7406	6885		
	7117	6853					6826	9.111
10 Pyrene	6580	5876	5008	6390	6865	6015		
	6210	5918					6108	9.167
12 Benzo(a)Anthracene	15930	15676	16226	16966	16552	16503		
	16562	16421					16354	2.467
13 Chrysene	28000	29716	25970	27349	27093	26839		
	26894	26490					27294	4.194
14 Benzo(b)Fluoranthene	19520	17904	22182	23192	20300	20102		
	20044	19774					20377	7.997
15 Benzo(k)Fluoranthene	11240	12932	13184	13623	12096	12580		
	12545	12370					12571	5.745
16 Benzo(a)Pyrene	17730	17492	16248	18568	16523	18340		
	18105	17941					17618	4.735
17 Dibenzo(a,h)Anthracene	3790	3760	4456	4802	4336	4272		
	4023	4006					4181	8.477
18 Benzo(g,h,i)Perylene	5250	5780	6924	8101	6876	6953		
	6786	6699					6671	12.742

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2004 15:08
End Cal Date : 07-OCT-2004 12:08
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplc1.i/041007.b/flpnauv.m
Cal Date : 07-Oct-2004 13:06 rlw
Curve Type : Average

Compound	0.10000 Level 1	0.25000 Level 2	0.50000 Level 3	1.000 Level 4	2.500 Level 5	5.000 Level 6	RRF	% RSD
	10.000 Level 7	20.000 Level 8						
19 Indeno(1,2,3-c,d)Pyrene	+++++	12784	12530	15380	14411	14828		
	14371	14363					14095	7.443
$ 11 p-Terphenyl	+++++	7116	7066	7532	7360	7229		
	7205	7128					7234	2.251

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2004 15:08
End Cal Date : 07-OCT-2004 12:08
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplc1.i/041007.b/flpnauv.m
Cal Date : 07-Oct-2004 13:06 rlw
Curve Type : Average

```
|Average %RSD Results.                                |
|=====================================================|
|Calculated Average %RSD = 6.28750133                 |
|Maximun Average %RSD    =         20                 |
|* Passed Average %RSD Test.                          |
|_____________________________________________________|
```

GCAL, Inc.

Data file : /var/chem/hplc1.i/041007.b/h0008223.d
Lab Smp Id: 8310STD00.1 Client Smp ID: 8310STD00.1
Inj Date : 07-OCT-2004 11:19
Operator : rlw Inst ID: hplc1.i
Smp Info : 8310STD00.1
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007.b/flpnauv.m
Meth Date : 07-Oct-2004 13:05 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
6 Fluorene	1.597	1.597	0.000	1351	0.10000	0.119
7 Phenanthrene	1.837	1.837	0.000	2654	0.10000	0.0987
8 Anthracene	2.078	2.078	0.000	5926	0.10000	0.105
9 Fluoranthene	2.311	2.311	0.000	649	0.10000	0.0951
10 Pyrene	2.491	2.491	0.000	658	0.10000	0.108(M)
$ 11 p-Terphenyl	2.951	2.951	0.000	829	0.10000	0.115
12 Benzo(a)Anthracene	3.138	3.138	0.000	1593	0.10000	0.0974
13 Chrysene	3.291	3.291	0.000	2800	0.10000	0.103
14 Benzo(b)Fluoranthene	3.777	3.777	0.000	1952	0.10000	0.0958(M)
15 Benzo(k)Fluoranthene	4.024	4.024	0.000	1124	0.10000	0.0894(M)
16 Benzo(a)Pyrene	4.211	4.211	0.000	1773	0.10000	0.101
17 Dibenzo(a,h)Anthracene	4.537	4.537	0.000	379	0.10000	0.0907(M)
18 Benzo(g,h,i)Perylene	4.671	4.671	0.000	525	0.10000	0.0787(M)

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
19 Indeno(1,2,3-c,d)Pyrene	4.844	4.844	0.000	1121	0.10000	0.0795

QC Flag Legend

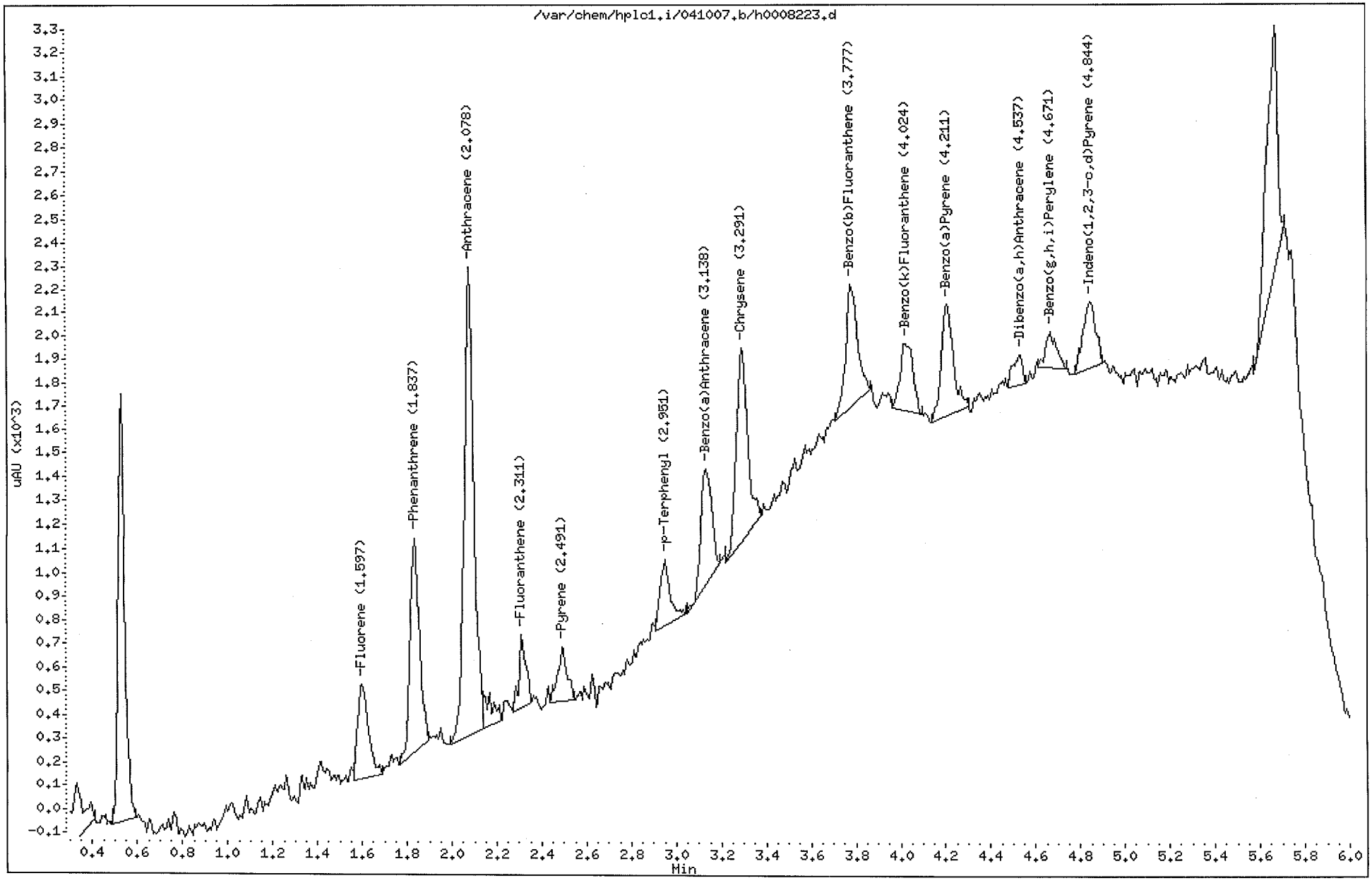
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041007.b/h0008223.d
Date : 07-OCT-2004 11:19
Client ID: 8310STD00.1
Sample Info: 8310STD00.1
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000227



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007.b/h0008224.d
Lab Smp Id: 8310STD0.25 Client Smp ID: 8310STD0.25
Inj Date : 07-OCT-2004 11:26
Operator : rlw Inst ID: hplc1.i
Smp Info : 8310STD0.25
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007.b/flpnauv.m
Meth Date : 07-Oct-2004 13:04 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:26 Cal File: h0008224.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.000	1.000	0.000	711	0.25000	0.262
4 2-Methylnaphthalene	1.420	1.420	0.000	503	0.25000	0.249
6 Fluorene	1.600	1.600	0.000	2704	0.25000	0.238
7 Phenanthrene	1.833	1.833	0.000	6782	0.25000	0.252
8 Anthracene	2.073	2.073	0.000	13965	0.25000	0.247
9 Fluoranthene	2.313	2.313	0.000	1422	0.25000	0.208
10 Pyrene	2.493	2.493	0.000	1469	0.25000	0.241
$ 11 p-Terphenyl	2.940	2.940	0.000	1779	0.25000	0.246
12 Benzo(a)Anthracene	3.127	3.127	0.000	3919	0.25000	0.240
13 Chrysene	3.280	3.280	0.000	7429	0.25000	0.272
14 Benzo(b)Fluoranthene	3.773	3.773	0.000	4476	0.25000	0.220
15 Benzo(k)Fluoranthene	4.020	4.020	0.000	3233	0.25000	0.257
16 Benzo(a)Pyrene	4.200	4.200	0.000	4373	0.25000	0.248

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
17 Dibenzo(a,h)Anthracene	4.513	4.513	0.000	940	0.25000	0.222
18 Benzo(g,h,i)Perylene	4.667	4.667	0.000	1445	0.25000	0.217(M)
19 Indeno(1,2,3-c,d)Pyrene	4.833	4.833	0.000	3196	0.25000	0.227

QC Flag Legend

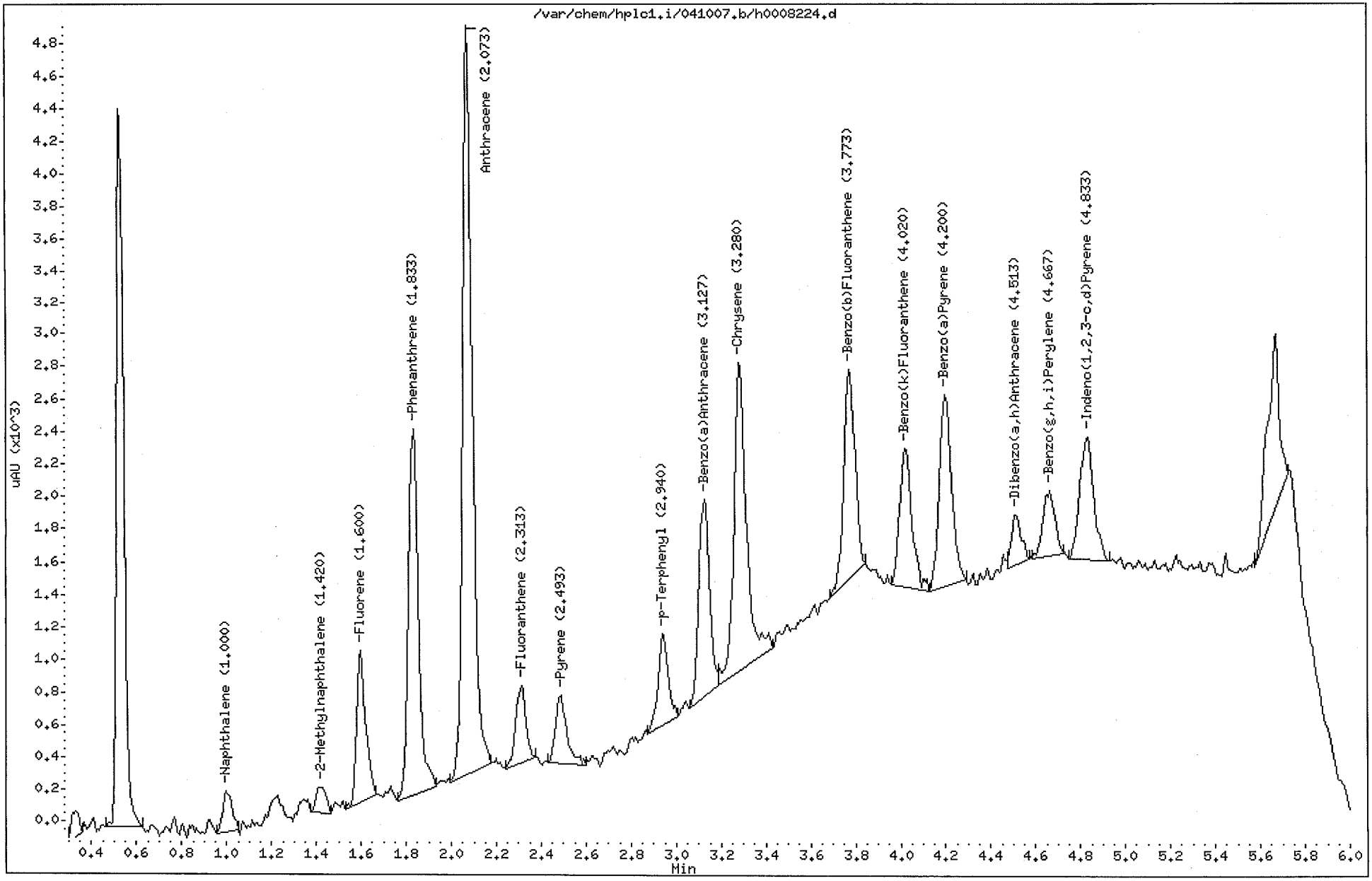
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041007.b/h0008224.d
Date : 07-OCT-2004 11:26
Client ID: 8310STD0.25
Sample Info: 8310STD0.25
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000230



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007.b/h0008225.d
Lab Smp Id: 8310STD0.50 Client Smp ID: 8310STD0.50
Inj Date : 07-OCT-2004 11:33
Operator : rlw Inst ID: hplc1.i
Smp Info : 8310STD0.50
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007.b/flpnauv.m
Meth Date : 07-Oct-2004 13:04 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:33 Cal File: h0008225.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

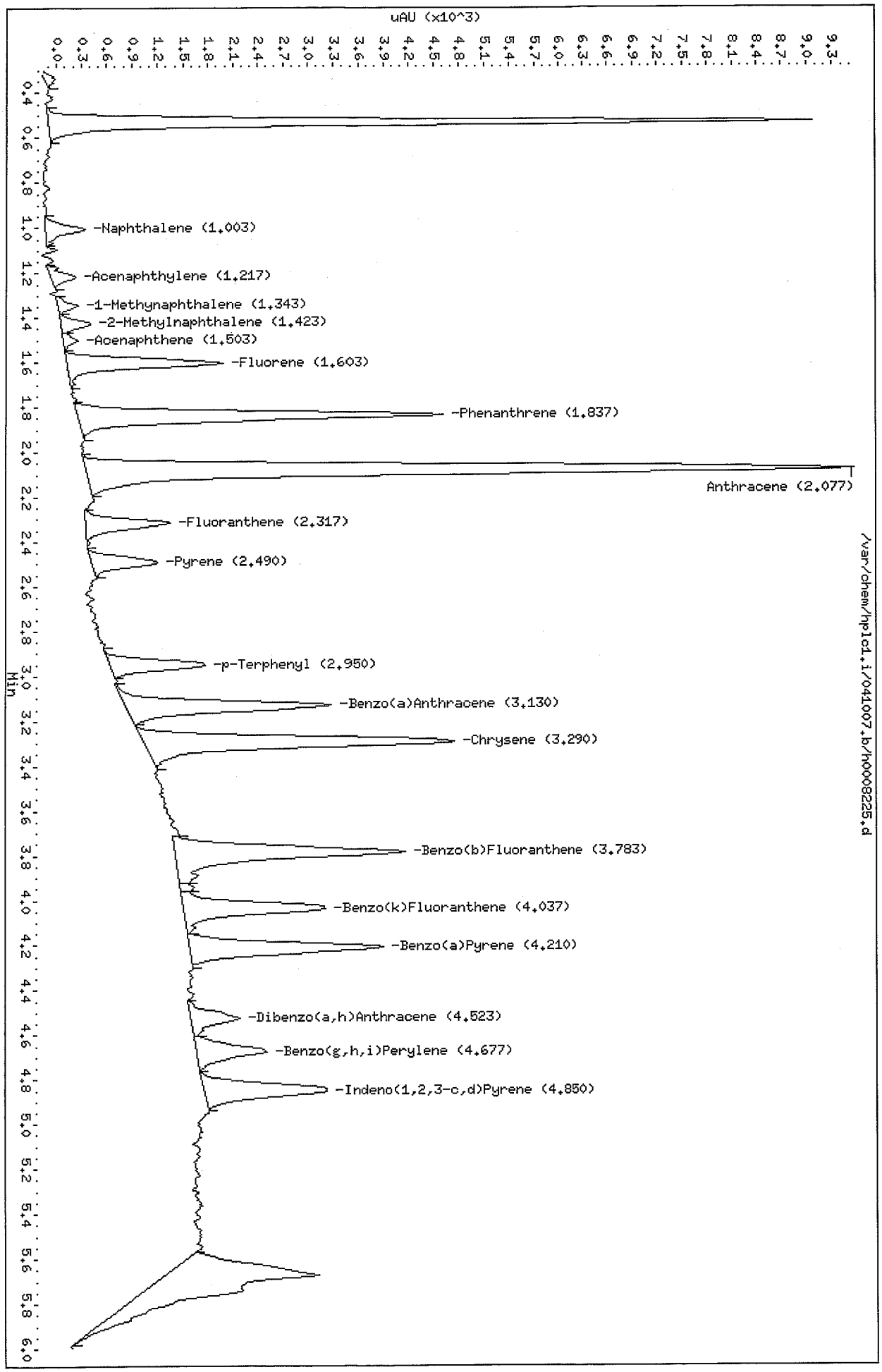
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.003	1.003	0.000	1468	0.50000	0.542
2 Acenaphthylene	1.217	1.217	0.000	892	0.50000	0.494
3 1-Methynaphthalene	1.343	1.343	0.000	588	0.50000	0.406
4 2-Methylnaphthalene	1.423	1.423	0.000	944	0.50000	0.466
5 Acenaphthene	1.503	1.503	0.000	414	0.50000	0.440
6 Fluorene	1.603	1.603	0.000	5497	0.50000	0.484
7 Phenanthrene	1.837	1.837	0.000	12677	0.50000	0.472
8 Anthracene	2.077	2.077	0.000	27696	0.50000	0.490
9 Fluoranthene	2.317	2.317	0.000	3238	0.50000	0.474
10 Pyrene	2.490	2.490	0.000	2504	0.50000	0.410
$ 11 p-Terphenyl	2.950	2.950	0.000	3533	0.50000	0.488
12 Benzo(a)Anthracene	3.130	3.130	0.000	8113	0.50000	0.496
13 Chrysene	3.290	3.290	0.000	12985	0.50000	0.476

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
14 Benzo(b)Fluoranthene	3.783	3.783	0.000	11091	0.50000	0.544
15 Benzo(k)Fluoranthene	4.037	4.037	0.000	6592	0.50000	0.524
16 Benzo(a)Pyrene	4.210	4.210	0.000	8124	0.50000	0.461
17 Dibenzo(a,h)Anthracene	4.523	4.523	0.000	2228	0.50000	0.526
18 Benzo(g,h,i)Perylene	4.677	4.677	0.000	3462	0.50000	0.519
19 Indeno(1,2,3-c,d)Pyrene	4.850	4.850	0.000	6265	0.50000	0.444

Data File: /var/chem/hplc1.i/041007.b/h0008225.d
Date : 07-OCT-2004 11:33
Client ID: 8310STD0.50
Sample Info: 8310STD0.50
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



000233

GCAL, Inc.

Data file : /var/chem/hplc1.i/041007.b/h0008226.d
Lab Smp Id: 8310SATD001 Client Smp ID: 8310SATD001
Inj Date : 07-OCT-2004 11:40
Operator : rlw Inst ID: hplc1.i
Smp Info : 8310SATD001
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007.b/flpnauv.m
Meth Date : 07-Oct-2004 13:04 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:40 Cal File: h0008226.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.007	1.007	0.000	2870	1.00000	1.06
2 Acenaphthylene	1.220	1.220	0.000	2006	1.00000	1.11
3 1-Methynaphthalene	1.340	1.340	0.000	1490	1.00000	1.03
4 2-Methylnaphthalene	1.427	1.427	0.000	1910	1.00000	0.944
5 Acenaphthene	1.500	1.500	0.000	901	1.00000	0.957
6 Fluorene	1.600	1.600	0.000	11392	1.00000	1.00
7 Phenanthrene	1.833	1.833	0.000	27948	1.00000	1.04
8 Anthracene	2.080	2.080	0.000	60023	1.00000	1.06
9 Fluoranthene	2.313	2.313	0.000	7693	1.00000	1.13
10 Pyrene	2.487	2.487	0.000	6390	1.00000	1.05
$ 11 p-Terphenyl	2.947	2.947	0.000	7532	1.00000	1.04
12 Benzo(a)Anthracene	3.127	3.127	0.000	16966	1.00000	1.04
13 Chrysene	3.287	3.287	0.000	27349	1.00000	1.00

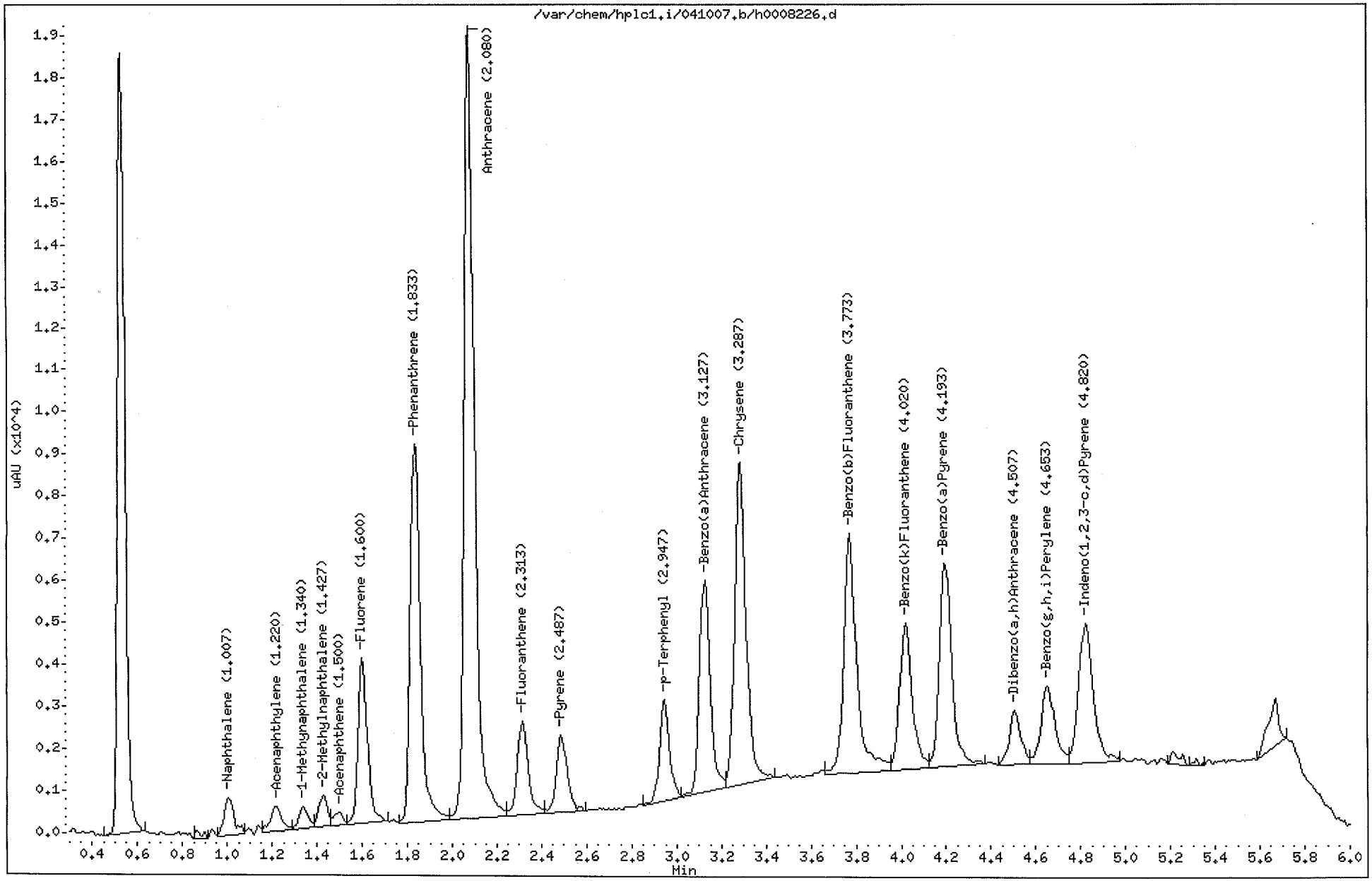
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
14 Benzo(b)Fluoranthene	3.773	3.773	0.000	23192	1.00000	1.14
15 Benzo(k)Fluoranthene	4.020	4.020	0.000	13623	1.00000	1.08
16 Benzo(a)Pyrene	4.193	4.193	0.000	18568	1.00000	1.05
17 Dibenzo(a,h)Anthracene	4.507	4.507	0.000	4802	1.00000	1.13
18 Benzo(g,h,i)Perylene	4.653	4.653	0.000	8101	1.00000	1.21
19 Indeno(1,2,3-c,d)Pyrene	4.820	4.820	0.000	15380	1.00000	1.09

Data File: /var/chem/hplc1.i/041007.b/h0008226.d
Date : 07-OCT-2004 11:40
Client ID: 8310SATD001
Sample Info: 8310SATD001
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000236



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007.b/h0008227.d
Lab Smp Id: 8310STD02.5 Client Smp ID: 8310STD02.5
Inj Date : 07-OCT-2004 11:47
Operator : rlw Inst ID: hplc1.i
Smp Info : 8310STD02.5
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007.b/flpnauv.m
Meth Date : 07-Oct-2004 13:04 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:47 Cal File: h0008227.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

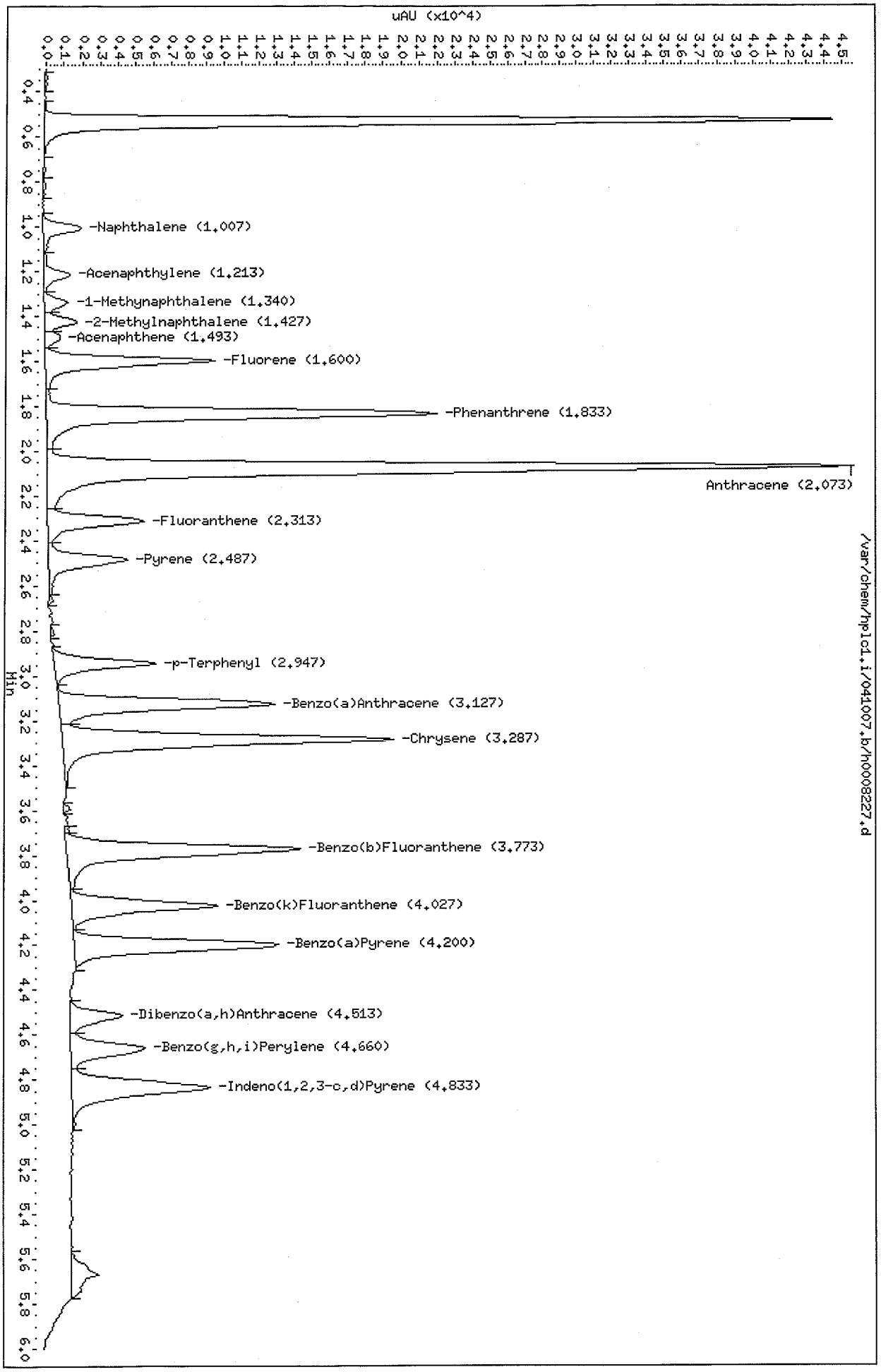
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.007	1.007	0.000	7090	2.50000	2.62
2 Acenaphthylene	1.213	1.213	0.000	5002	2.50000	2.77
3 1-Methynaphthalene	1.340	1.340	0.000	3850	2.50000	2.66
4 2-Methylnaphthalene	1.427	1.427	0.000	5291	2.50000	2.61
5 Acenaphthene	1.493	1.493	0.000	2562	2.50000	2.72
6 Fluorene	1.600	1.600	0.000	29210	2.50000	2.57
7 Phenanthrene	1.833	1.833	0.000	69278	2.50000	2.58
8 Anthracene	2.073	2.073	0.000	145812	2.50000	2.58
9 Fluoranthene	2.313	2.313	0.000	18515	2.50000	2.71
10 Pyrene	2.487	2.487	0.000	17162	2.50000	2.81
$ 11 p-Terphenyl	2.947	2.947	0.000	18400	2.50000	2.54
12 Benzo(a)Anthracene	3.127	3.127	0.000	41380	2.50000	2.53
13 Chrysene	3.287	3.287	0.000	67732	2.50000	2.48

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
14 Benzo(b)Fluoranthene	3.773	3.773	0.000	50750	2.50000	2.49
15 Benzo(k)Fluoranthene	4.027	4.027	0.000	30241	2.50000	2.41
16 Benzo(a)Pyrene	4.200	4.200	0.000	41307	2.50000	2.34
17 Dibenzo(a,h)Anthracene	4.513	4.513	0.000	10840	2.50000	2.56
18 Benzo(g,h,i)Perylene	4.660	4.660	0.000	17191	2.50000	2.58
19 Indeno(1,2,3-c,d)Pyrene	4.833	4.833	0.000	36027	2.50000	2.56

Data File: /var/chem/hplc1.i/041007.b/h0008227.d
Date : 07-OCT-2004 11:47
Client ID: 8310STD02.5
Sample Info: 8310STD02.5
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007.b/h0008228.d
Lab Smp Id: 8310STD005 Client Smp ID: 8310STD005
Inj Date : 07-OCT-2004 11:54
Operator : rlw Inst ID: hplc1.i
Smp Info : 8310STD005
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007.b/flpnauv.m
Meth Date : 07-Oct-2004 13:04 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:54 Cal File: h0008228.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.002	1.002	0.000	11754	5.00000	4.34(M)
2 Acenaphthylene	1.216	1.216	0.000	7857	5.00000	4.35
3 1-Methynaphthalene	1.342	1.342	0.000	6646	5.00000	4.59
4 2-Methylnaphthalene	1.429	1.429	0.000	9770	5.00000	4.83
5 Acenaphthene	1.496	1.496	0.000	4306	5.00000	4.58
6 Fluorene	1.602	1.602	0.000	56276	5.00000	4.96
7 Phenanthrene	1.836	1.836	0.000	133837	5.00000	4.98
8 Anthracene	2.083	2.083	0.000	282933	5.00000	5.00
9 Fluoranthene	2.316	2.316	0.000	34426	5.00000	5.04
10 Pyrene	2.489	2.489	0.000	30073	5.00000	4.92
$ 11 p-Terphenyl	2.949	2.949	0.000	36146	5.00000	5.00
12 Benzo(a)Anthracene	3.136	3.136	0.000	82514	5.00000	5.05
13 Chrysene	3.296	3.296	0.000	134197	5.00000	4.92

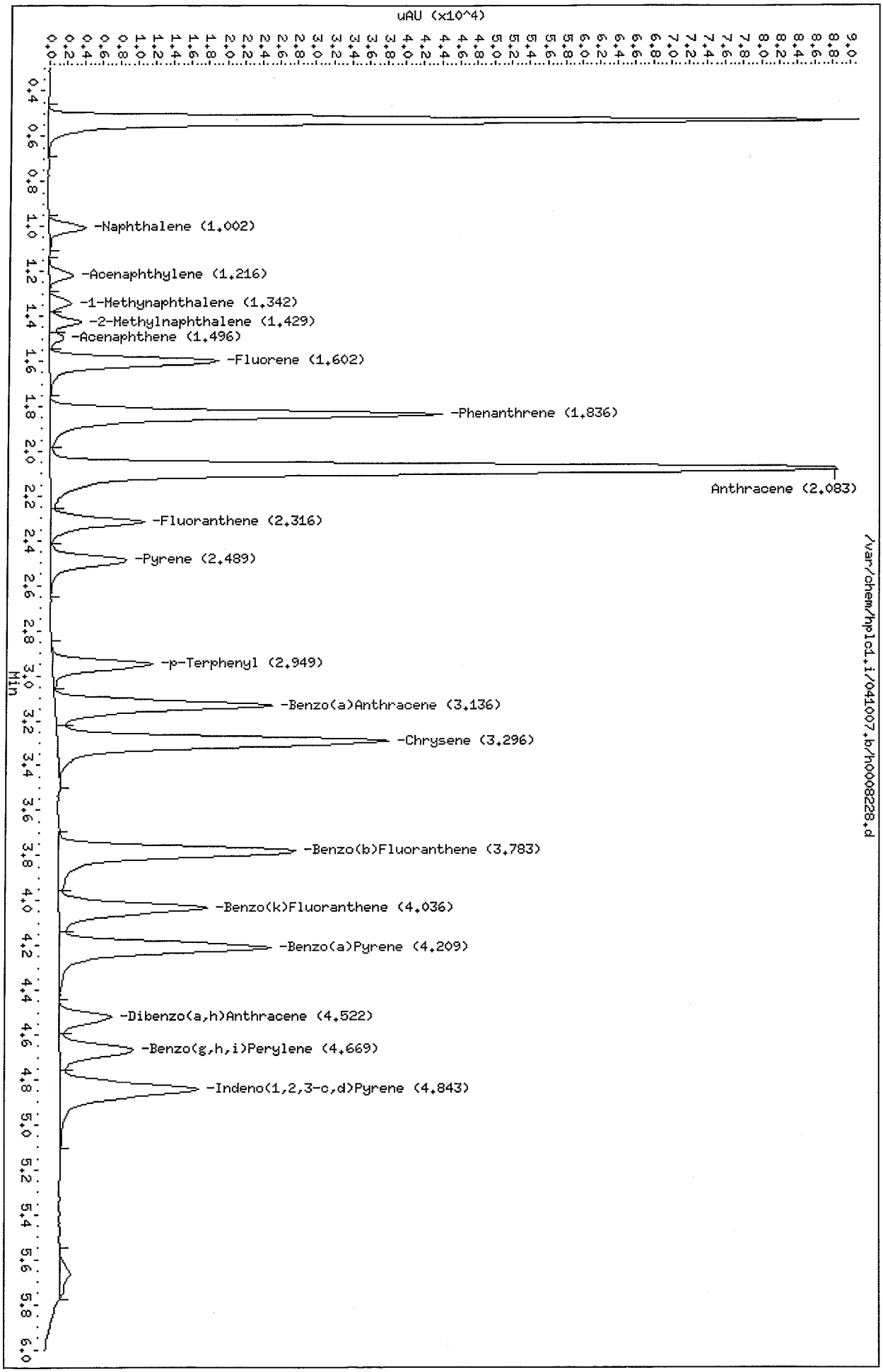
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
14 Benzo(b)Fluoranthene	3.783	3.783	0.000	100512	5.00000	4.93
15 Benzo(k)Fluoranthene	4.036	4.036	0.000	62899	5.00000	5.00
16 Benzo(a)Pyrene	4.209	4.209	0.000	91701	5.00000	5.20
17 Dibenzo(a,h)Anthracene	4.522	4.522	0.000	21360	5.00000	5.04
18 Benzo(g,h,i)Perylene	4.669	4.669	0.000	34763	5.00000	5.21
19 Indeno(1,2,3-c,d)Pyrene	4.843	4.843	0.000	74138	5.00000	5.26

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041007.b/h0008228.d
Date : 07-OCT-2004 11:54
Client ID: 8310STD005
Sample Info: 8310STD005
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



000242

GCAL, Inc.

Data file : /var/chem/hplc1.i/041007.b/h0008229.d
Lab Smp Id: 8310STD010 Client Smp ID: 8310STD010
Inj Date : 07-OCT-2004 12:01
Operator : rlw Inst ID: hplc1.i
Smp Info : 8310STD010
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007.b/flpnauv.m
Meth Date : 07-Oct-2004 13:04 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 12:01 Cal File: h0008229.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.006	1.006	0.000	25989	10.0000	9.59
2 Acenaphthylene	1.219	1.219	0.000	17478	10.0000	9.68
3 1-Methynaphthalene	1.339	1.339	0.000	14539	10.0000	10.0
4 2-Methylnaphthalene	1.426	1.426	0.000	20843	10.0000	10.3
5 Acenaphthene	1.492	1.492	0.000	9844	10.0000	10.5
6 Fluorene	1.599	1.599	0.000	114986	10.0000	10.1
7 Phenanthrene	1.832	1.832	0.000	270718	10.0000	10.1
8 Anthracene	2.072	2.072	0.000	552800	10.0000	9.78
9 Fluoranthene	2.312	2.312	0.000	71173	10.0000	10.4
10 Pyrene	2.486	2.486	0.000	62096	10.0000	10.2
$ 11 p-Terphenyl	2.946	2.946	0.000	72047	10.0000	9.96
12 Benzo(a)Anthracene	3.126	3.126	0.000	165618	10.0000	10.1
13 Chrysene	3.286	3.286	0.000	268941	10.0000	9.85

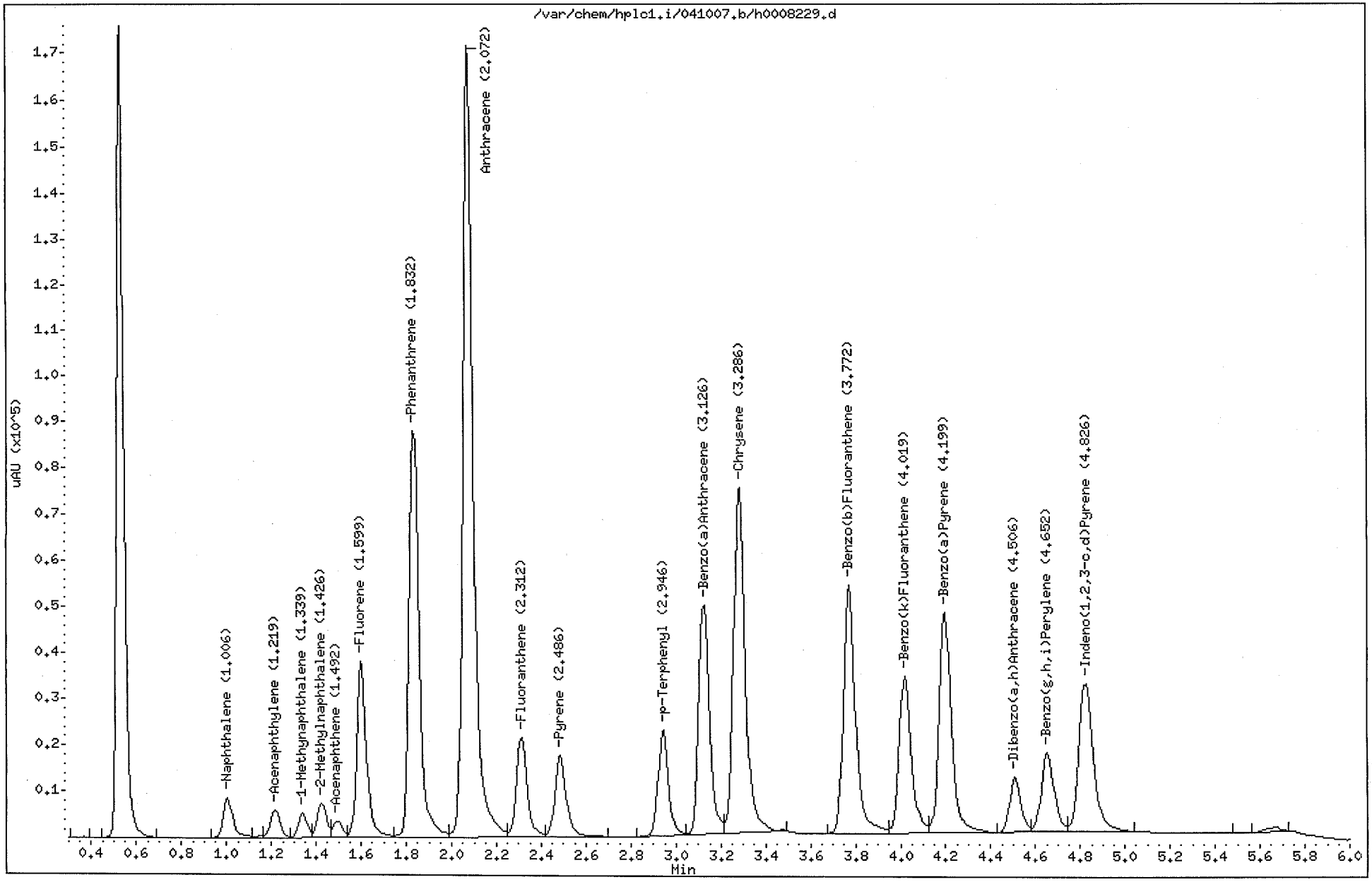
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
14 Benzo(b)Fluoranthene	3.772	3.772	0.000	200441	10.0000	9.84
15 Benzo(k)Fluoranthene	4.019	4.019	0.000	125446	10.0000	9.98
16 Benzo(a)Pyrene	4.199	4.199	0.000	181052	10.0000	10.3
17 Dibenzo(a,h)Anthracene	4.506	4.506	0.000	40228	10.0000	9.50
18 Benzo(g,h,i)Perylene	4.652	4.652	0.000	67865	10.0000	10.2
19 Indeno(1,2,3-c,d)Pyrene	4.826	4.826	0.000	143711	10.0000	10.2

Data File: /var/chem/hplc1.i/041007.b/h0008229.d
Date : 07-OCT-2004 12:01
Client ID: 8310STD010
Sample Info: 8310STD010
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000245



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007.b/h0008230.d
Lab Smp Id: 8310DTD020 Client Smp ID: 8310DTD020
Inj Date : 07-OCT-2004 12:08
Operator : rlw Inst ID: hplc1.i
Smp Info : 8310DTD020
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007.b/flpnauv.m
Meth Date : 07-Oct-2004 13:04 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 12:08 Cal File: h0008230.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.003	1.003	0.000	50803	20.0000	18.7
2 Acenaphthylene	1.217	1.217	0.000	33976	20.0000	18.8
3 1-Methynaphthalene	1.343	1.343	0.000	28658	20.0000	19.8
4 2-Methylnaphthalene	1.423	1.423	0.000	41076	20.0000	20.3
5 Acenaphthene	1.497	1.497	0.000	18680	20.0000	19.8
6 Fluorene	1.603	1.603	0.000	226083	20.0000	19.9
7 Phenanthrene	1.837	1.837	0.000	530172	20.0000	19.7
8 Anthracene	2.077	2.077	0.000	1030545	20.0000	18.2
9 Fluoranthene	2.310	2.310	0.000	137054	20.0000	20.1
10 Pyrene	2.483	2.483	0.000	118358	20.0000	19.4
$ 11 p-Terphenyl	2.943	2.943	0.000	142550	20.0000	19.7
12 Benzo(a)Anthracene	3.123	3.123	0.000	328421	20.0000	20.1
13 Chrysene	3.283	3.283	0.000	529796	20.0000	19.4

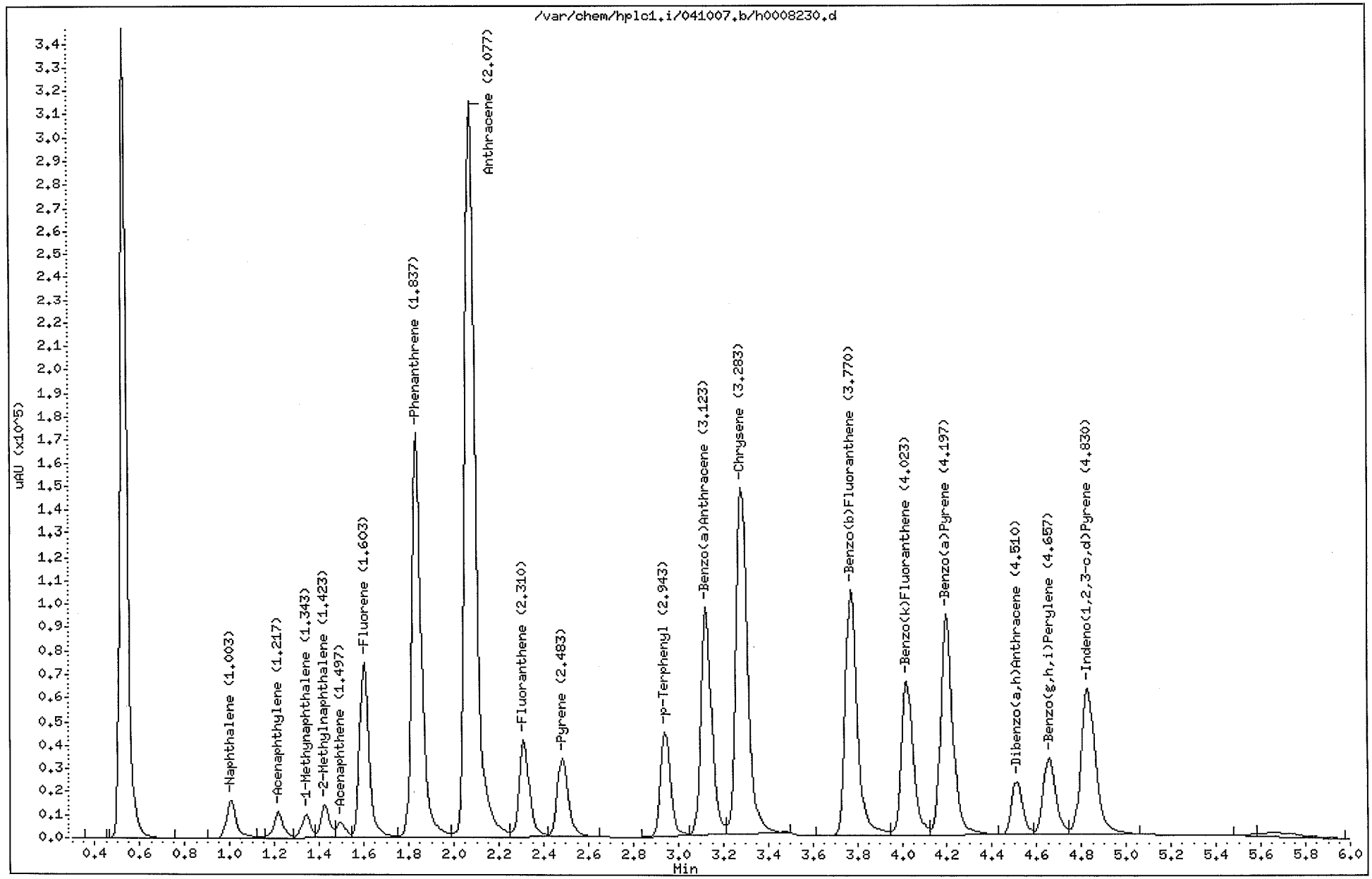
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
14 Benzo(b)Fluoranthene	3.770	3.770	0.000	395475	20.0000	19.4
15 Benzo(k)Fluoranthene	4.023	4.023	0.000	247406	20.0000	19.7
16 Benzo(a)Pyrene	4.197	4.197	0.000	358828	20.0000	20.4
17 Dibenzo(a,h)Anthracene	4.510	4.510	0.000	80128	20.0000	18.9
18 Benzo(g,h,i)Perylene	4.657	4.657	0.000	133981	20.0000	20.1
19 Indeno(1,2,3-c,d)Pyrene	4.830	4.830	0.000	287252	20.0000	20.4

Data File: /var/chem/hplc1.i/041007.b/h0008230.d
Date : 07-OCT-2004 12:08
Client ID: 8310DTD020
Sample Info: 8310DTD020
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000248



GCAL, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id:
Level: LOW
Data Type: LC DATA
SpikeList File: ICV.spk
Sublist File: all.sub
Method File: /var/chem/hplc1.i/041012.b/flpnauv.m
Misc Info:

Client SDG: 041012
Fraction: OTHER

Operator: rlw
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 Naphthalene	2.50	2.10	83.86	80-120
2 Acenaphthylene	2.50	2.16	86.27	80-120
3 1-Methynaphthalene	2.50	2.41	96.49	80-120
4 2-Methylnaphthalen	2.50	2.44	97.56	80-120
5 Acenaphthene	2.50	2.46	98.48	80-120
6 Fluorene	2.50	2.51	100.24	80-120
7 Phenanthrene	2.50	2.55	101.88	80-120
8 Anthracene	2.50	2.55	102.12	80-120
9 Fluoranthene	2.50	2.57	102.61	80-120
10 Pyrene	2.50	2.58	103.17	80-120
12 Benzo(a)Anthracene	2.50	2.47	98.78	80-120
13 Chrysene	2.50	2.39	95.45	80-120
14 Benzo(b)Fluoranthe	2.50	2.54	101.62	80-120
15 Benzo(k)Fluoranthe	2.50	2.49	99.68	80-120
16 Benzo(a)Pyrene	2.50	2.40	96.18	80-120
17 Dibenzo(a,h)Anthra	2.50	2.40	95.96	80-120
18 Benzo(g,h,i)Peryle	2.50	2.47	98.91	80-120
19 Indeno(1,2,3-c,d)P	2.50	2.50	99.92	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 11 p-Terphenyl	2.00	2.33	116.74	40-140

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc1.i
Lab File ID: h0008147.d
Analysis Type: WATER
Lab Sample ID: 8310CCV2.5
Method: /var/chem/hplc1.i/041009.b/flpnauv.m

Injection Date: 09-OCT-2004 09:31
Init. Cal. Date(s): 14-JAN-2004 07-OCT-2004
Init. Cal. Times: 15:08 12:08
Quant Type: ESTD

	COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 Naphthalene	2711	2452	0.010	9.54819	15.00000	Averaged
	2 Acenaphthylene	1805	1643	0.010	8.98413	15.00000	Averaged
	3 1-Methynaphthalene	1449	1354	0.010	6.54154	15.00000	Averaged
	4 2-Methylnaphthalene	2024	1912	0.010	5.51959	15.00000	Averaged
	5 Acenaphthene	941	913	0.010	3.00506	15.00000	Averaged
	6 Fluorene	11355	11152	0.010	1.78833	15.00000	Averaged
	7 Phenanthrene	26879	26668	0.010	0.78213	15.00000	Averaged
	8 Anthracene	56532	57670	0.010	-2.01284	15.00000	Averaged
	9 Fluoranthene	6826	6623	0.010	2.97135	15.00000	Averaged
	10 Pyrene	6108	5588	0.010	8.50107	15.00000	Averaged
$	11 p-Terphenyl	7234	7109	0.010	1.72567	15.00000	Averaged
	12 Benzo(a)Anthracene	16354	16306	0.010	0.29384	15.00000	Averaged
	13 Chrysene	27294	26598	0.010	2.55107	15.00000	Averaged
	14 Benzo(b)Fluoranthene	20377	20381	0.010	-0.01923	15.00000	Averaged
	15 Benzo(k)Fluoranthene	12571	12855	0.010	-2.25862	15.00000	Averaged
	16 Benzo(a)Pyrene	17618	17916	0.010	-1.68658	15.00000	Averaged
	17 Dibenzo(a,h)Anthracene	4181	3984	0.010	4.70381	15.00000	Averaged
	18 Benzo(g,h,i)Perylene	6671	6502	0.010	2.54218	15.00000	Averaged
	19 Indeno(1,2,3-c,d)Pyrene	14095	13979	0.010	0.82551	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 3.48741
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008147.d
Lab Smp Id: 8310CCV2.5 Client Smp ID: 8310CCV2.5
Inj Date : 09-OCT-2004 09:31
Operator : rlw Inst ID: hplc1.i
Smp Info : 8310CCV2.5
Misc Info : 4-14-1
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 10:34 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.009	1.009	0.000	6130	2.50000	2.26(M)
2 Acenaphthylene	1.216	1.216	0.000	4107	2.50000	2.28
3 1-Methynaphthalene	1.336	1.336	0.000	3386	2.50000	2.34
4 2-Methylnaphthalene	1.423	1.423	0.000	4780	2.50000	2.36
5 Acenaphthene	1.496	1.496	0.000	2282	2.50000	2.42
6 Fluorene	1.602	1.602	0.000	27879	2.50000	2.46(M)
7 Phenanthrene	1.836	1.836	0.000	66671	2.50000	2.48(M)
8 Anthracene	2.076	2.076	0.000	144174	2.50000	2.55(M)
9 Fluoranthene	2.316	2.316	0.000	16558	2.50000	2.43(M)
10 Pyrene	2.489	2.489	0.000	13971	2.50000	2.29
$ 11 p-Terphenyl	2.949	2.949	0.000	17772	2.50000	2.46
12 Benzo(a)Anthracene	3.129	3.129	0.000	40766	2.50000	2.49
13 Chrysene	3.289	3.289	0.000	66494	2.50000	2.44

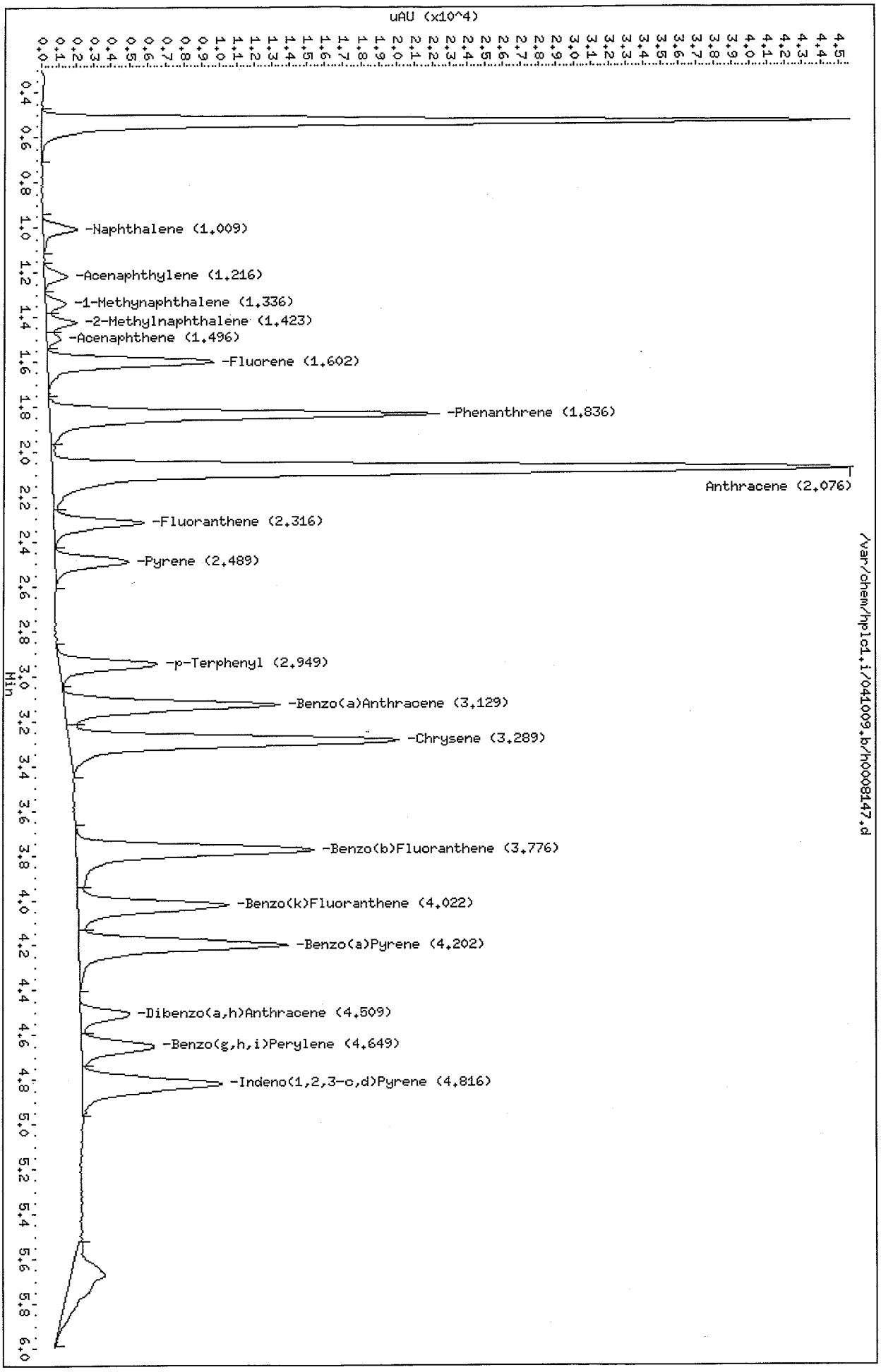
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
14 Benzo(b)Fluoranthene	3.776	3.776	0.000	50953	2.50000	2.50
15 Benzo(k)Fluoranthene	4.022	4.022	0.000	32138	2.50000	2.56
16 Benzo(a)Pyrene	4.202	4.202	0.000	44789	2.50000	2.54
17 Dibenzo(a,h)Anthracene	4.509	4.509	0.000	9960	2.50000	2.38
18 Benzo(g,h,i)Perylene	4.649	4.649	0.000	16254	2.50000	2.44
19 Indeno(1,2,3-c,d)Pyrene	4.816	4.816	0.000	34947	2.50000	2.48

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008147.d
Date : 09-OCT-2004 09:31
Client ID: 8310CCV2.5
Sample Info: 8310CCV2.5
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc1.i Injection Date: 09-OCT-2004 11:49
Lab File ID: h0008165.d Init. Cal. Date(s): 14-JAN-2004 07-OCT-2004
Analysis Type: WATER Init. Cal. Times: 15:08 12:08
Lab Sample ID: 8310CCV2.5 Quant Type: ESTD
Method: /var/chem/hplc1.i/041009.b/flpnauv.m

	COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 Naphthalene	2711	2565	0.010	5.36350	15.00000	Averaged
	2 Acenaphthylene	1805	1743	0.010	3.43498	15.00000	Averaged
	3 1-Methynaphthalene	1449	1381	0.010	4.69776	15.00000	Averaged
	4 2-Methylnaphthalene	2024	1973	0.010	2.52310	15.00000	Averaged
	5 Acenaphthene	941	946	0.010	-0.53981	15.00000	Averaged
	6 Fluorene	11355	11260	0.010	0.82942	15.00000	Averaged
	7 Phenanthrene	26879	27111	0.010	-0.86290	15.00000	Averaged
	8 Anthracene	56532	57522	0.010	-1.75246	15.00000	Averaged
	9 Fluoranthene	6826	7063	0.010	-3.47340	15.00000	Averaged
	10 Pyrene	6108	5934	0.010	2.84256	15.00000	Averaged
$	11 p-Terphenyl	7234	6973	0.010	3.60578	15.00000	Averaged
	12 Benzo(a)Anthracene	16354	15982	0.010	2.27789	15.00000	Averaged
	13 Chrysene	27294	26662	0.010	2.31659	15.00000	Averaged
	14 Benzo(b)Fluoranthene	20377	20148	0.010	1.12754	15.00000	Averaged
	15 Benzo(k)Fluoranthene	12571	12776	0.010	-1.62925	15.00000	Averaged
	16 Benzo(a)Pyrene	17618	17685	0.010	-0.37569	15.00000	Averaged
	17 Dibenzo(a,h)Anthracene	4181	4142	0.010	0.91493	15.00000	Averaged
	18 Benzo(g,h,i)Perylene	6671	6686	0.010	-0.22194	15.00000	Averaged
	19 Indeno(1,2,3-c,d)Pyrene	14095	14176	0.010	-0.57185	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 2.07165
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008165.d
Lab Smp Id: 8310CCV2.5 Client Smp ID: 8310CCV2.5
Inj Date : 09-OCT-2004 11:49
Operator : rlw Inst ID: hplc1.i
Smp Info : 8310CCV2.5
Misc Info : 4-14-1
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:50 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

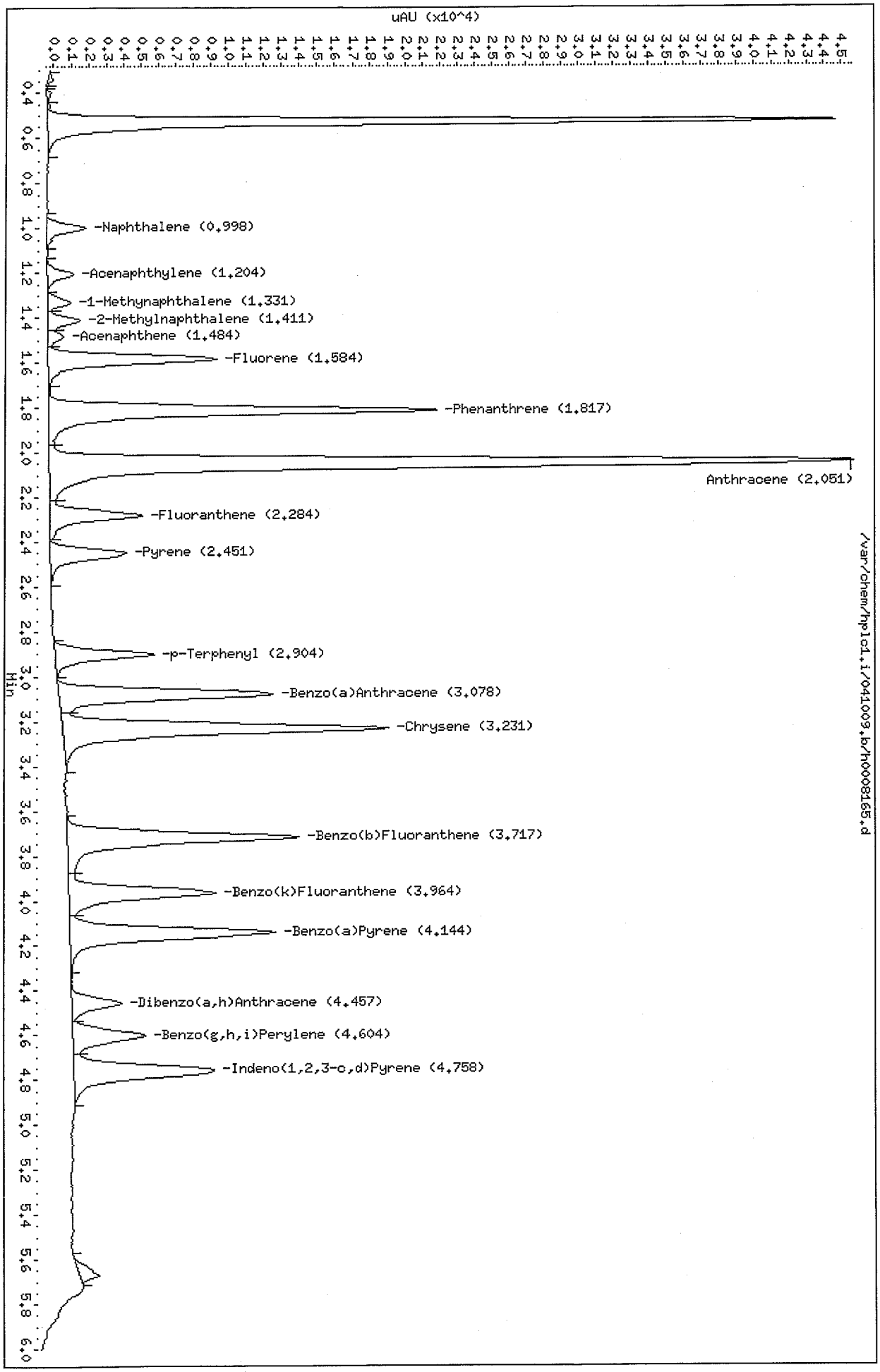
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	0.998	0.998	0.000	6413	2.50000	2.37
2 Acenaphthylene	1.204	1.204	0.000	4357	2.50000	2.41
3 1-Methynaphthalene	1.331	1.331	0.000	3452	2.50000	2.38
4 2-Methylnaphthalene	1.411	1.411	0.000	4931	2.50000	2.44
5 Acenaphthene	1.484	1.484	0.000	2365	2.50000	2.51
6 Fluorene	1.584	1.584	0.000	28151	2.50000	2.48
7 Phenanthrene	1.817	1.817	0.000	67776	2.50000	2.52
8 Anthracene	2.051	2.051	0.000	143806	2.50000	2.54
9 Fluoranthene	2.284	2.284	0.000	17657	2.50000	2.59
10 Pyrene	2.451	2.451	0.000	14835	2.50000	2.43
$ 11 p-Terphenyl	2.904	2.904	0.000	17432	2.50000	2.41
12 Benzo(a)Anthracene	3.078	3.078	0.000	39954	2.50000	2.44
13 Chrysene	3.231	3.231	0.000	66653	2.50000	2.44

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
14 Benzo(b)Fluoranthene	3.717	3.717	0.000	50368	2.50000	2.47
15 Benzo(k)Fluoranthene	3.964	3.964	0.000	31940	2.50000	2.54
16 Benzo(a)Pyrene	4.144	4.144	0.000	44211	2.50000	2.51
17 Dibenzo(a,h)Anthracene	4.457	4.457	0.000	10356	2.50000	2.48
18 Benzo(g,h,i)Perylene	4.604	4.604	0.000	16715	2.50000	2.51
19 Indeno(1,2,3-c,d)Pyrene	4.758	4.758	0.000	35439	2.50000	2.51

Data File: /var/chem/hplc1.i/041009.b/h0008165.d
Date : 09-OCT-2004 11:49
Client ID: 8310CCV2.5
Sample Info: 8310CCV2.5
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



000257

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2004 15:08
End Cal Date : 07-OCT-2004 12:08
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplc1.i/041007F.b/flpnafld.m
Cal Date : 08-Oct-2004 11:16 rlw

Calibration File Names:
Level 1: /var/chem/hplc1.i/041007F.b/h0008223.d
Level 2: /var/chem/hplc1.i/041007F.b/h0008224.d
Level 3: /var/chem/hplc1.i/041007F.b/h0008225.d
Level 4: /var/chem/hplc1.i/041007F.b/h0008226.d
Level 5: /var/chem/hplc1.i/041007F.b/h0008227.d
Level 6: /var/chem/hplc1.i/041007F.b/h0008228.d
Level 7: /var/chem/hplc1.i/041007F.b/h0008229.d
Level 8: /var/chem/hplc1.i/041007F.b/h0008230.d

Compound	0.1000 Level 1 / 10 Level 7	0.2500 Level 2 / 20 Level 8	0.5000 Level 3	1 Level 4	2 Level 5	5 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
1 Naphthalene	+++++	7748	11554	10548	10004	9985					
	9464	9525					AVRG		9833		11.81943
3 1-Methynaphthalene	+++++	+++++	+++++	1793	2044	1998					
	1812	1959					AVRG		1921		5.84952
4 2-Methylnaphthalene	+++++	+++++	+++++	1384	1652	1569					
	1548	1566					AVRG		1544		6.35207
5 Acenaphthene	+++++	+++++	+++++	3231	3659	3619					
	3557	3692					AVRG		3551		5.23733
7 Phenanthrene	13230	14124	13532	14453	14133	14421					
	14374	14260					AVRG		14066		3.17950

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2004 15:08
End Cal Date : 07-OCT-2004 12:08
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplc1.i/041007F.b/flpnafld.m
Cal Date : 08-Oct-2004 11:16 rlw

Compound	0.1000 Level 1 / 10 Level 7	0.2500 Level 2 / 20 Level 8	0.5000 Level 3	1 Level 4	2 Level 5	5 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
8 Anthracene	5660	5180	5594	5424	5580	5682					
	5622	5446					AVRG		5524		3.02620
9 Fluoranthene	5040	4180	4556	4609	4589	4581					
	4611	4535					AVRG		4588		5.04901
10 Pyrene	31760	30116	29040	30266	30141	29604					
	29570	+++++					AVRG		30071		2.85720
12 Benzo(a)Anthracene	20850	22136	23398	24735	24531	24386					
	24141	+++++					AVRG		23454		6.19414
13 Chrysene	203	482	1184	2709	8307	16453					
	34739	69036					LINR	0.13830	3481		0.99985
14 Benzo(b)Fluoranthene	17840	18028	19040	19545	20164	20155					
	20180	+++++					AVRG		19279		5.24106
15 Benzo(k)Fluoranthene	44150	43340	43962	44950	44441	44340					
	40294	+++++					AVRG		43640		3.56157
16 Benzo(a)Pyrene	35280	35880	36984	38198	38877	38535					
	37770	+++++					AVRG		37361		3.65876
17 Dibenzo(a,h)Anthracene	13270	14208	14662	15001	14354	14414					
	14564	14118					AVRG		14324		3.54602

000259

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2004 15:08
End Cal Date : 07-OCT-2004 12:08
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplc1.i/041007F.b/flpnafld.m
Cal Date : 08-Oct-2004 11:16 rlw

Compound	0.1000 Level 1 / 10 Level 7	0.2500 Level 2 / 20 Level 8	0.5000 Level 3	1 Level 4	2 Level 5	5 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
18 Benzo(g,h,i)Perylene	11340	11004	12346	12612	12266	12258					
	12542	12260					AVRG		12078		4.81845
19 Indeno(1,2,3-c,d)Pyrene	+++++	2620	3092	3408	3367	3513					
	4050	4006					AVRG		3437		14.54009
$ 11 p-Terphenyl	+++++	5156	6232	7276	7462	7630					
	7712	7540					AVRG		7001		13.64363

000260

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2004 15:08
End Cal Date : 07-OCT-2004 12:08
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplc1.i/041007F.b/flpnafld.m
Cal Date : 08-Oct-2004 11:16 rlw

Average %RSD Results.

Calculated Average %RSD = 7.14886999
Maximun Average %RSD = 20
* Passed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

GCAL, Inc.

Data file : /var/chem/hplc1.i/041007F.b/h0008223.d
Lab Smp Id: 8310STD00.1 Client Smp ID: 8310STD00.1
Inj Date : 07-OCT-2004 11:19
Operator : RLW Inst ID: hplc1.i
Smp Info : 8310STD00.1
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007F.b/flpnafld.m
Meth Date : 08-Oct-2004 11:15 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.020	1.020	0.000	1579	0.10000	0.161
7 Phenanthrene	1.853	1.853	0.000	1323	0.10000	0.0941
8 Anthracene	2.093	2.093	0.000	566	0.10000	0.102(M)
9 Fluoranthene	2.330	2.330	0.000	504	0.10000	0.110(M)
10 Pyrene	2.503	2.503	0.000	3176	0.10000	0.106
12 Benzo(a)Anthracene	3.147	3.147	0.000	2085	0.10000	0.0889(M)
13 Chrysene	3.303	3.303	0.000	203	0.10000	0.0719(M)
14 Benzo(b)Fluoranthene	3.803	3.803	0.000	1784	0.10000	0.0925
15 Benzo(k)Fluoranthene	4.047	4.047	0.000	4415	0.10000	0.101
16 Benzo(a)Pyrene	4.223	4.223	0.000	3528	0.10000	0.0944
17 Dibenzo(a,h)Anthracene	4.540	4.540	0.000	1327	0.10000	0.0926
18 Benzo(g,h,i)Perylene	4.690	4.690	0.000	1134	0.10000	0.0939(M)
19 Indeno(1,2,3-c,d)Pyrene	4.847	4.847	0.000	189	0.10000	0.0550(M)

QC Flag Legend

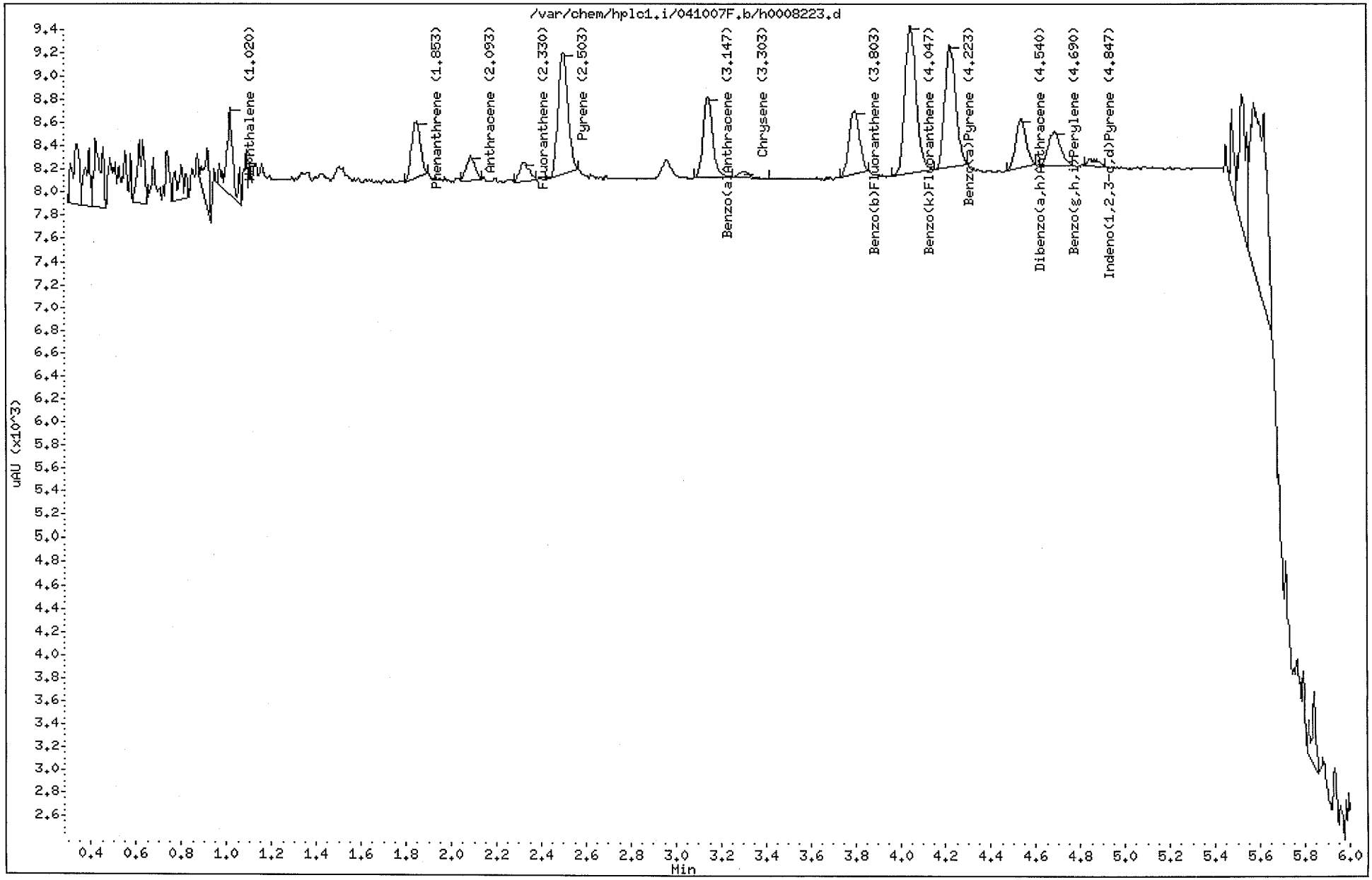
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041007F.b/h0008223.d
Date : 07-OCT-2004 11:19
Client ID: 8310STD00.1
Sample Info: 8310STD00.1
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: RLW
Column diameter: 2.10

000264



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007F.b/h0008224.d
Lab Smp Id: 8310STD0.25 Client Smp ID: 8310STD0.25
Inj Date : 07-OCT-2004 11:26
Operator : RLW Inst ID: hplc1.i
Smp Info : 8310STD0.25
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007F.b/flpnafld.m
Meth Date : 08-Oct-2004 11:15 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:26 Cal File: h0008224.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.013	1.013	0.000	1937	0.25000	0.197
5 Acenaphthene	1.503	1.503	0.000	699	0.25000	0.197
7 Phenanthrene	1.850	1.850	0.000	3531	0.25000	0.251
8 Anthracene	2.087	2.087	0.000	1295	0.25000	0.234
9 Fluoranthene	2.323	2.323	0.000	1045	0.25000	0.228
10 Pyrene	2.497	2.497	0.000	7529	0.25000	0.250
$ 11 p-Terphenyl	2.957	2.957	0.000	1289	0.25000	0.184
12 Benzo(a)Anthracene	3.137	3.137	0.000	5534	0.25000	0.236(M)
13 Chrysene	3.297	3.297	0.000	482	0.25000	0.171(M)
14 Benzo(b)Fluoranthene	3.787	3.787	0.000	4507	0.25000	0.234
15 Benzo(k)Fluoranthene	4.037	4.037	0.000	10835	0.25000	0.248
16 Benzo(a)Pyrene	4.213	4.213	0.000	8970	0.25000	0.240
17 Dibenzo(a,h)Anthracene	4.530	4.530	0.000	3552	0.25000	0.248

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
18 Benzo(g,h,i)Perylene	4.670	4.670	0.000	2751	0.25000	0.228
19 Indeno(1,2,3-c,d)Pyrene	4.840	4.840	0.000	655	0.25000	0.191(M)

QC Flag Legend

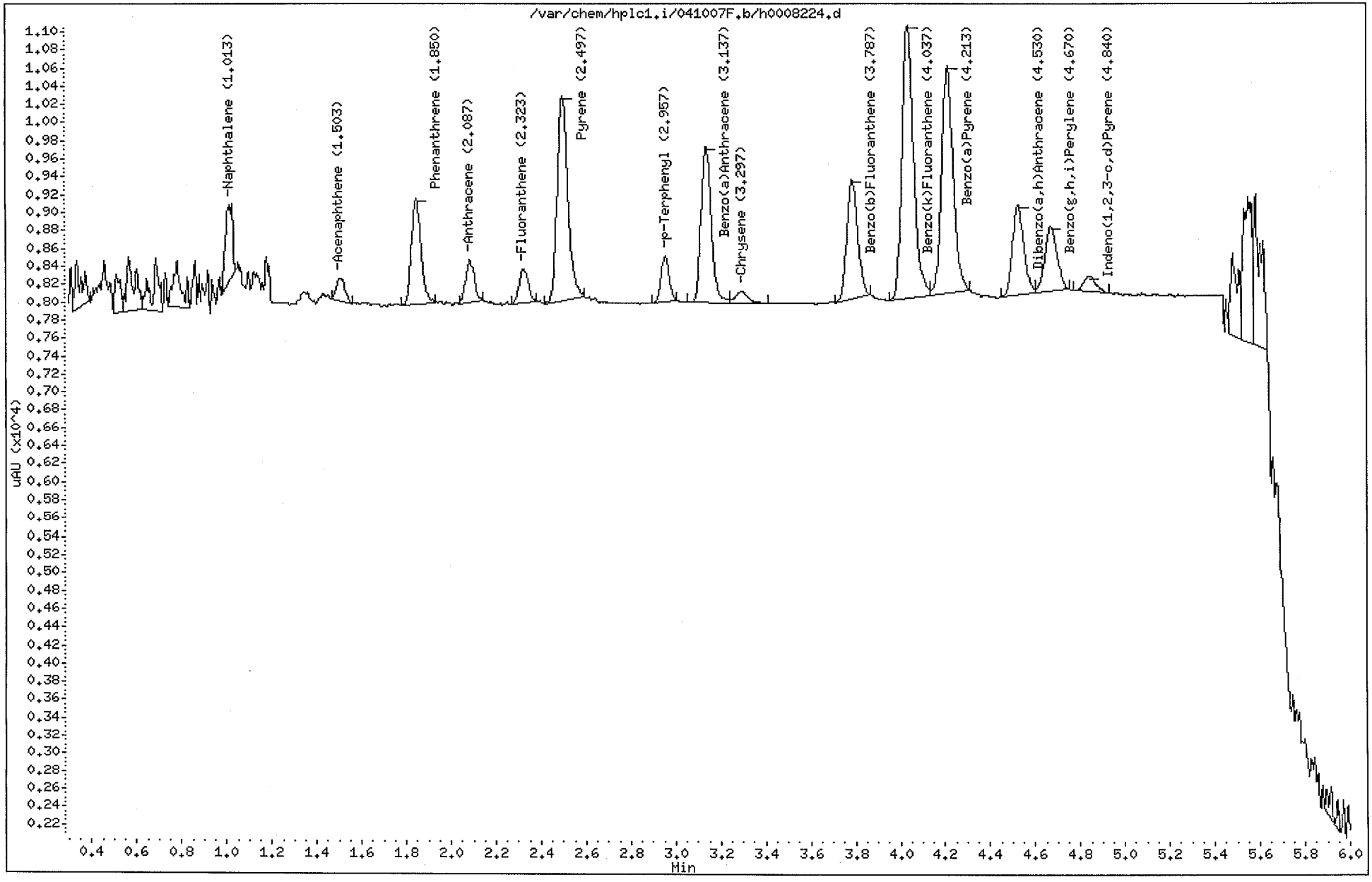
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041007F.b/h0008224.d
Date : 07-OCT-2004 11:26
Client ID: 8310STD0.25
Sample Info: 8310STD0.25
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: RLW
Column diameter: 2.10

000267



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007F.b/h0008225.d
Lab Smp Id: 8310STD0.50 Client Smp ID: 8310STD0.50
Inj Date : 07-OCT-2004 11:33
Operator : RLW Inst ID: hplc1.i
Smp Info : 8310STD0.50
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007F.b/flpnafld.m
Meth Date : 08-Oct-2004 11:15 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:33 Cal File: h0008225.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.017	1.017	0.000	5777	0.50000	0.588
3 1-Methynaphthalene	1.353	1.353	0.000	843	0.50000	0.439
4 2-Methylnaphthalene	1.443	1.443	0.000	661	0.50000	0.428
5 Acenaphthene	1.513	1.513	0.000	1658	0.50000	0.467
7 Phenanthrene	1.850	1.850	0.000	6766	0.50000	0.481
8 Anthracene	2.093	2.093	0.000	2797	0.50000	0.506
9 Fluoranthene	2.333	2.333	0.000	2278	0.50000	0.497
10 Pyrene	2.503	2.503	0.000	14520	0.50000	0.483
$ 11 p-Terphenyl	2.963	2.963	0.000	3116	0.50000	0.445
12 Benzo(a)Anthracene	3.147	3.147	0.000	11699	0.50000	0.499(M)
13 Chrysene	3.307	3.307	0.000	1184	0.50000	0.420(M)
14 Benzo(b)Fluoranthene	3.800	3.800	0.000	9520	0.50000	0.494
15 Benzo(k)Fluoranthene	4.047	4.047	0.000	21981	0.50000	0.504

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
16 Benzo(a)Pyrene	4.223	4.223	0.000	18492	0.50000	0.495
17 Dibenzo(a,h)Anthracene	4.540	4.540	0.000	7331	0.50000	0.512
18 Benzo(g,h,i)Perylene	4.687	4.687	0.000	6173	0.50000	0.511
19 Indeno(1,2,3-c,d)Pyrene	4.860	4.860	0.000	1546	0.50000	0.450

QC Flag Legend

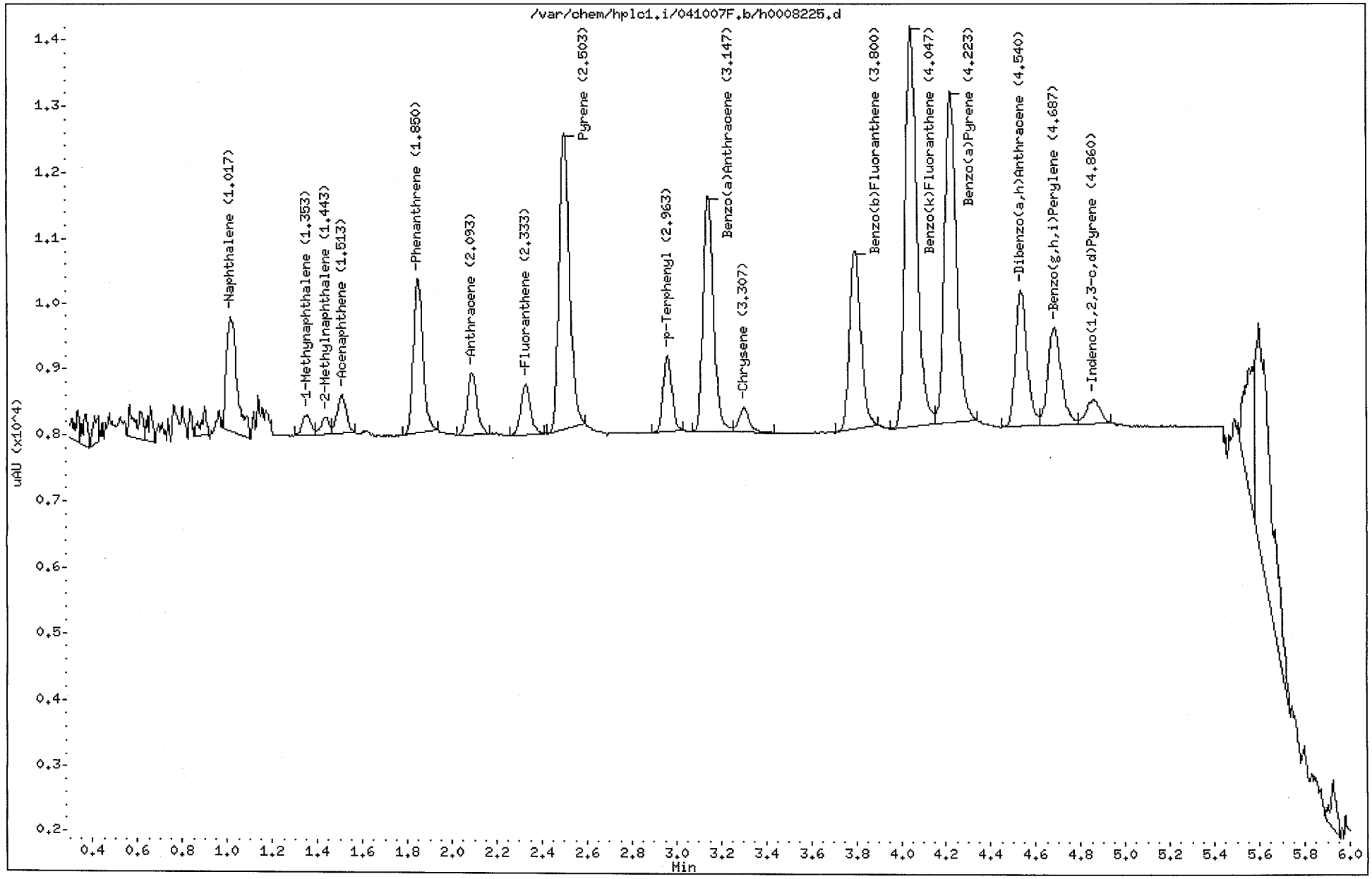
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041007F.b/h0008225.d
Date : 07-OCT-2004 11:33
Client ID: 8310STD0.50
Sample Info: 8310STD0.50
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: RLW
Column diameter: 2.10

000270



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007F.b/h0008226.d
Lab Smp Id: 8310SATD001 Client Smp ID: 8310SATD001
Inj Date : 07-OCT-2004 11:40
Operator : RLW Inst ID: hplc1.i
Smp Info : 8310SATD001
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007F.b/flpnafld.m
Meth Date : 08-Oct-2004 11:15 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:40 Cal File: h0008226.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.020	1.020	0.000	10548	1.00000	1.07
3 1-Methynaphthalene	1.357	1.357	0.000	1793	1.00000	0.933
4 2-Methylnaphthalene	1.440	1.440	0.000	1384	1.00000	0.896
5 Acenaphthene	1.510	1.510	0.000	3231	1.00000	0.910
7 Phenanthrene	1.850	1.850	0.000	14453	1.00000	1.03
8 Anthracene	2.093	2.093	0.000	5424	1.00000	0.982
9 Fluoranthene	2.327	2.327	0.000	4609	1.00000	1.00
10 Pyrene	2.500	2.500	0.000	30266	1.00000	1.01
$ 11 p-Terphenyl	2.960	2.960	0.000	7276	1.00000	1.04
12 Benzo(a)Anthracene	3.140	3.140	0.000	24735	1.00000	1.05
13 Chrysene	3.297	3.297	0.000	2709	1.00000	0.960
14 Benzo(b)Fluoranthene	3.787	3.787	0.000	19545	1.00000	1.01
15 Benzo(k)Fluoranthene	4.033	4.033	0.000	44950	1.00000	1.03

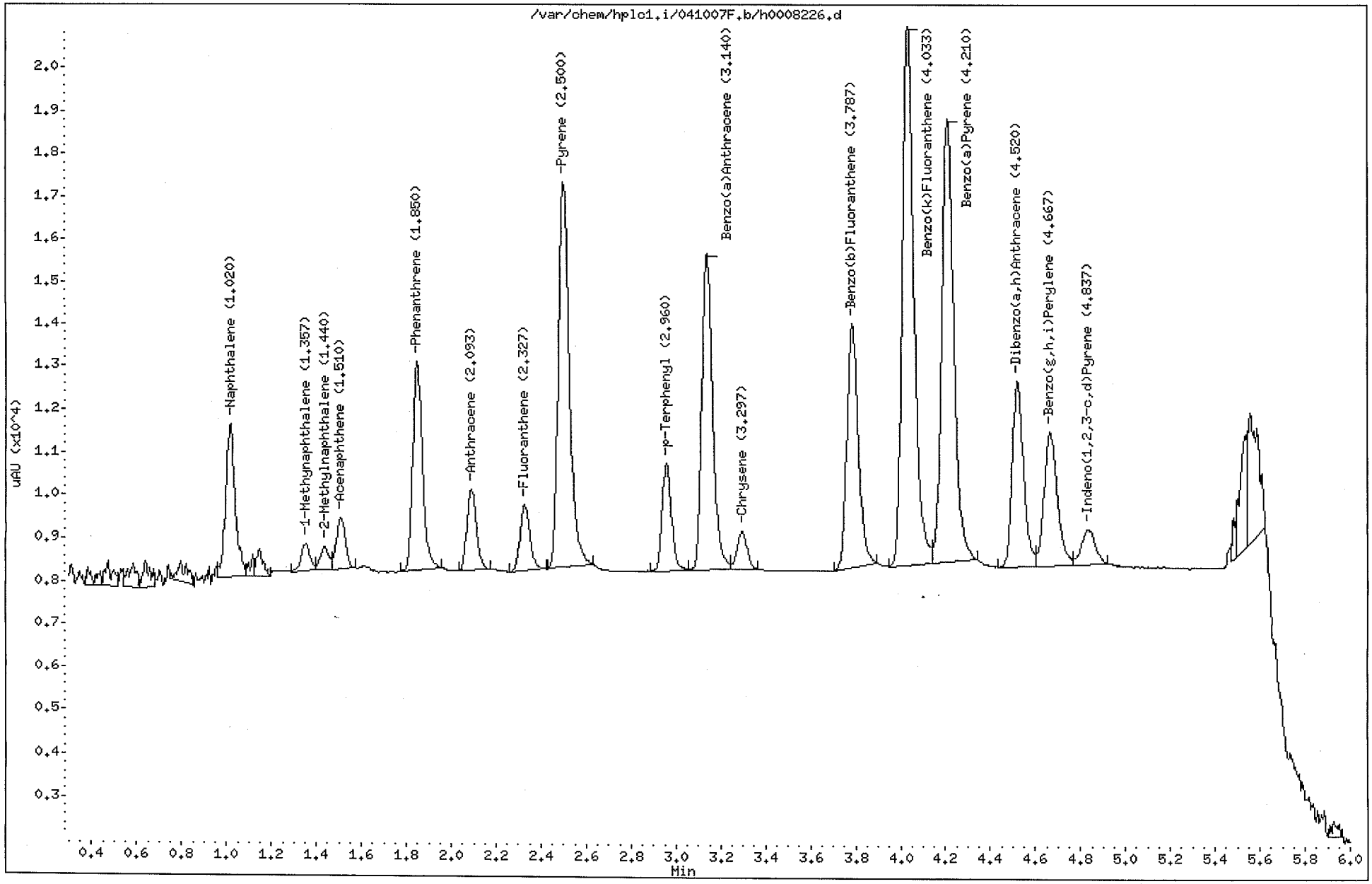
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
16 Benzo(a)Pyrene	4.210	4.210	0.000	38198	1.00000	1.02
17 Dibenzo(a,h)Anthracene	4.520	4.520	0.000	15001	1.00000	1.05
18 Benzo(g,h,i)Perylene	4.667	4.667	0.000	12612	1.00000	1.04
19 Indeno(1,2,3-c,d)Pyrene	4.837	4.837	0.000	3408	1.00000	0.992

Data File: /var/chem/hplc1.i/041007F.b/h0008226.d
Date : 07-OCT-2004 11:40
Client ID: 8310SATD001
Sample Info: 8310SATD001
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: RLW
Column diameter: 2.10

000273



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007F.b/h0008227.d
Lab Smp Id: 8310STD02.5 Client Smp ID: 8310STD02.5
Inj Date : 07-OCT-2004 11:47
Operator : RLW Inst ID: hplc1.i
Smp Info : 8310STD02.5
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007F.b/flpnafld.m
Meth Date : 08-Oct-2004 11:15 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:47 Cal File: h0008227.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.017	1.017	0.000	25010	2.50000	2.54
3 1-Methynaphthalene	1.353	1.353	0.000	5109	2.50000	2.66
4 2-Methylnaphthalene	1.437	1.437	0.000	4131	2.50000	2.68
5 Acenaphthene	1.507	1.507	0.000	9147	2.50000	2.58
7 Phenanthrene	1.847	1.847	0.000	35333	2.50000	2.51
8 Anthracene	2.087	2.087	0.000	13950	2.50000	2.53
9 Fluoranthene	2.323	2.323	0.000	11473	2.50000	2.50
10 Pyrene	2.497	2.497	0.000	75353	2.50000	2.51
$ 11 p-Terphenyl	2.957	2.957	0.000	18654	2.50000	2.66(M)
12 Benzo(a)Anthracene	3.140	3.140	0.000	61328	2.50000	2.61(M)
13 Chrysene	3.297	3.297	0.000	8307	2.50000	2.94(M)
14 Benzo(b)Fluoranthene	3.790	3.790	0.000	50410	2.50000	2.61
15 Benzo(k)Fluoranthene	4.037	4.037	0.000	111103	2.50000	2.55

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
16 Benzo(a)Pyrene	4.213	4.213	0.000	97192	2.50000	2.60
17 Dibenzo(a,h)Anthracene	4.527	4.527	0.000	35885	2.50000	2.51
18 Benzo(g,h,i)Perylene	4.677	4.677	0.000	30664	2.50000	2.54
19 Indeno(1,2,3-c,d)Pyrene	4.847	4.847	0.000	8417	2.50000	2.45

QC Flag Legend

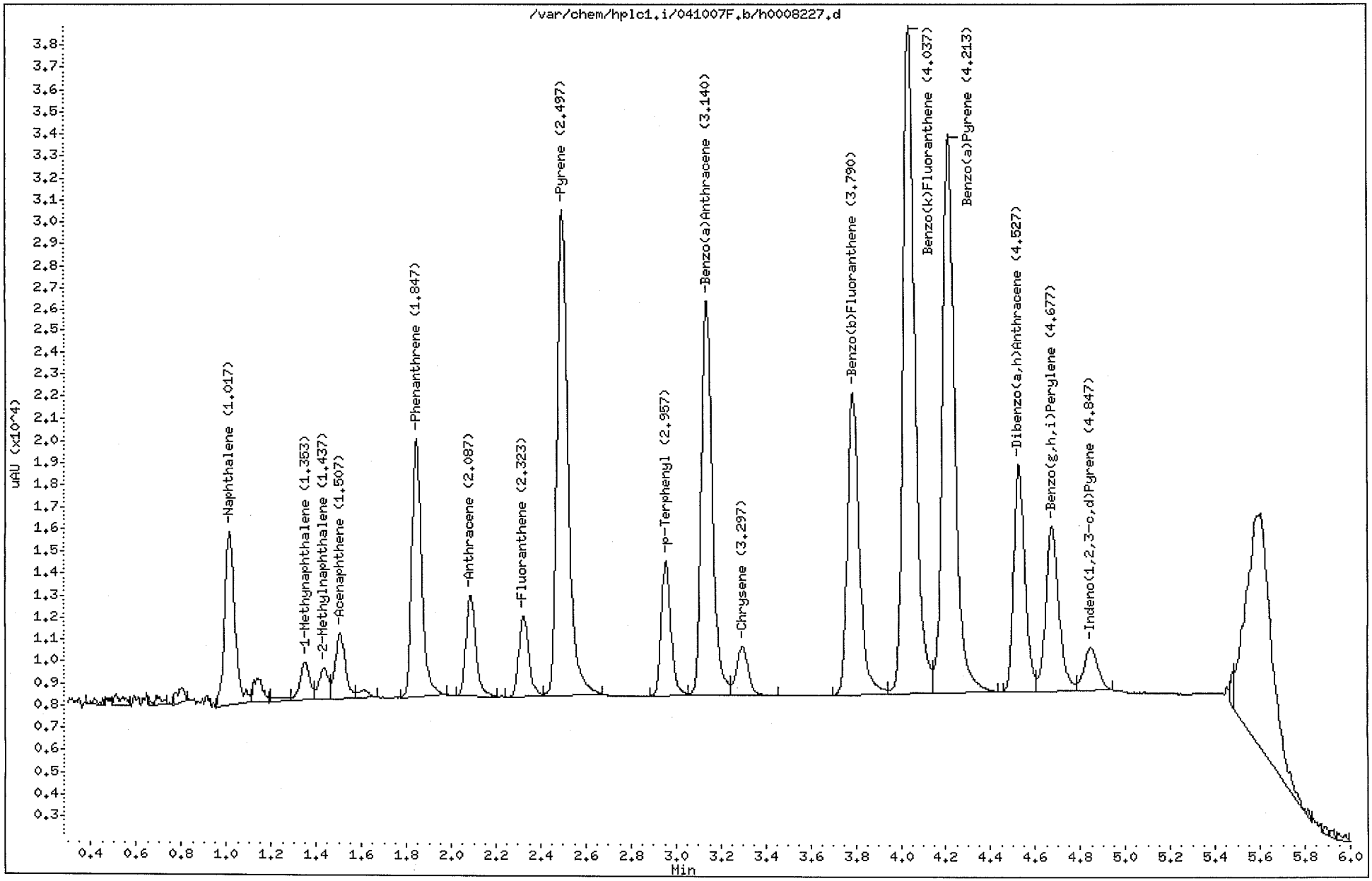
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041007F.b/h0008227.d
Date : 07-OCT-2004 11:47
Client ID: 8310STD02.5
Sample Info: 8310STD02.5
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: RLW
Column diameter: 2.10

000276



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007F.b/h0008228.d
Lab Smp Id: 8310STD005 Client Smp ID: 8310STD005
Inj Date : 07-OCT-2004 11:54
Operator : RLW Inst ID: hplc1.i
Smp Info : 8310STD005
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007F.b/flpnafld.m
Meth Date : 08-Oct-2004 11:15 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:54 Cal File: h0008228.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.020	1.020	0.000	49926	5.00000	5.08
3 1-Methynaphthalene	1.353	1.353	0.000	9988	5.00000	5.20
4 2-Methylnaphthalene	1.440	1.440	0.000	7843	5.00000	5.08
5 Acenaphthene	1.510	1.510	0.000	18093	5.00000	5.09
7 Phenanthrene	1.850	1.850	0.000	72105	5.00000	5.13
8 Anthracene	2.093	2.093	0.000	28412	5.00000	5.14
9 Fluoranthene	2.330	2.330	0.000	22907	5.00000	4.99
10 Pyrene	2.503	2.503	0.000	148020	5.00000	4.92
$ 11 p-Terphenyl	2.963	2.963	0.000	38148	5.00000	5.45
12 Benzo(a)Anthracene	3.147	3.147	0.000	121932	5.00000	5.20
13 Chrysene	3.307	3.307	0.000	16453	5.00000	5.83
14 Benzo(b)Fluoranthene	3.797	3.797	0.000	100775	5.00000	5.23
15 Benzo(k)Fluoranthene	4.047	4.047	0.000	221698	5.00000	5.08

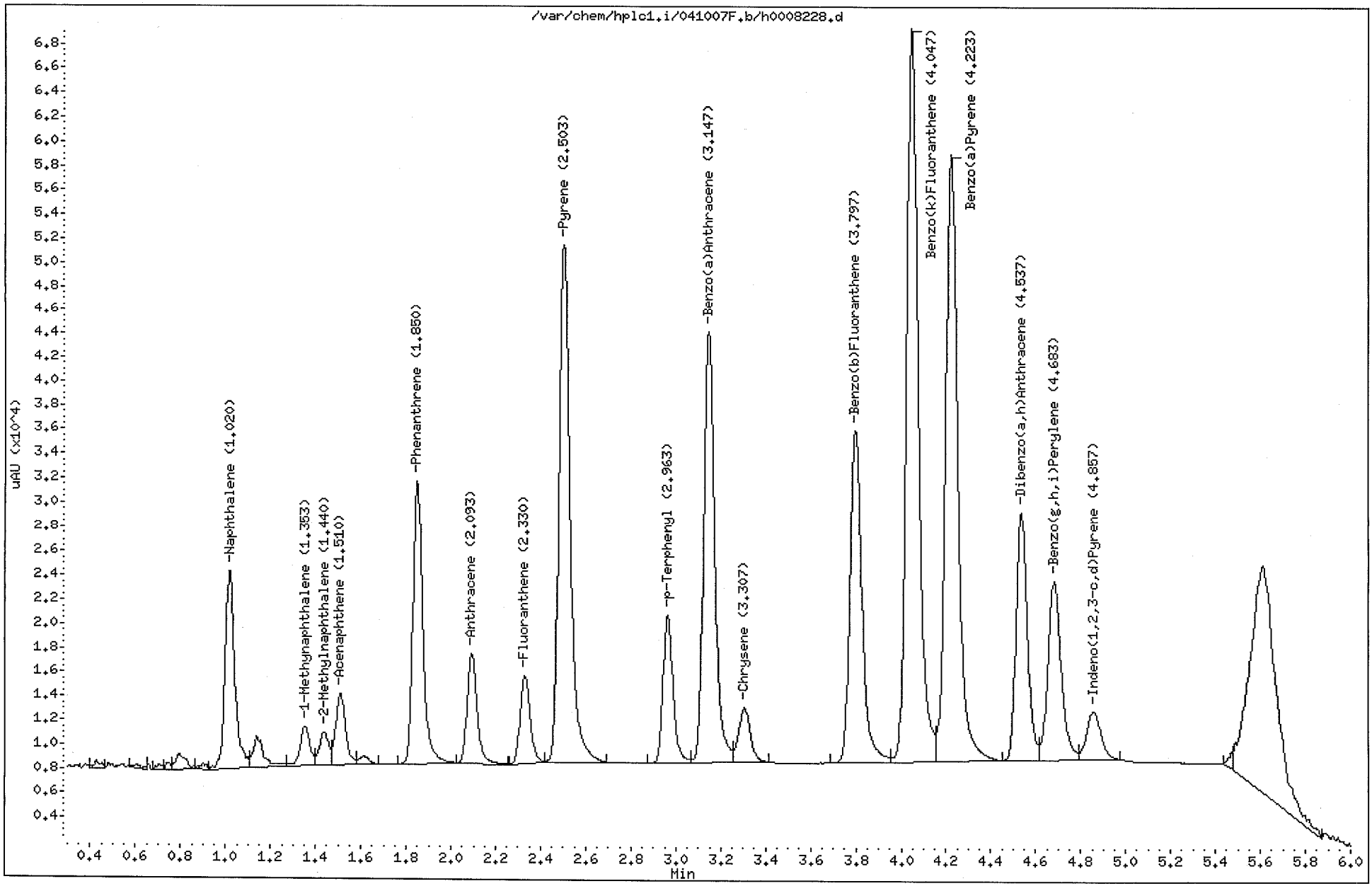
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
16 Benzo(a)Pyrene	4.223	4.223	0.000	192677	5.00000	5.16
17 Dibenzo(a,h)Anthracene	4.537	4.537	0.000	72072	5.00000	5.03
18 Benzo(g,h,i)Perylene	4.683	4.683	0.000	61290	5.00000	5.07
19 Indeno(1,2,3-c,d)Pyrene	4.857	4.857	0.000	17566	5.00000	5.11

Data File: /var/chem/hplc1.i/041007F.b/h0008228.d
Date : 07-OCT-2004 11:54
Client ID: 8310STD005
Sample Info: 8310STD005
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: RLW
Column diameter: 2.10

000279



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007F.b/h0008229.d
Lab Smp Id: 8310STD010 Client Smp ID: 8310STD010
Inj Date : 07-OCT-2004 12:01
Operator : RLW Inst ID: hplc1.i
Smp Info : 8310STD010
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007F.b/flpnafld.m
Meth Date : 08-Oct-2004 11:15 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 12:01 Cal File: h0008229.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.017	1.017	0.000	94638	10.0000	9.62
3 1-Methynaphthalene	1.353	1.353	0.000	18125	10.0000	9.43
4 2-Methylnaphthalene	1.437	1.437	0.000	15482	10.0000	10.0
5 Acenaphthene	1.510	1.510	0.000	35568	10.0000	10.0
7 Phenanthrene	1.847	1.847	0.000	143739	10.0000	10.2
8 Anthracene	2.087	2.087	0.000	56218	10.0000	10.2
9 Fluoranthene	2.327	2.327	0.000	46110	10.0000	10.1
10 Pyrene	2.497	2.497	0.000	295705	10.0000	9.83
$ 11 p-Terphenyl	2.957	2.957	0.000	77121	10.0000	11.0
12 Benzo(a)Anthracene	3.137	3.137	0.000	241406	10.0000	10.3
13 Chrysene	3.293	3.293	0.000	34739	10.0000	12.3
14 Benzo(b)Fluoranthene	3.787	3.787	0.000	201798	10.0000	10.5
15 Benzo(k)Fluoranthene	4.050	4.050	0.000	402944	10.0000	9.23

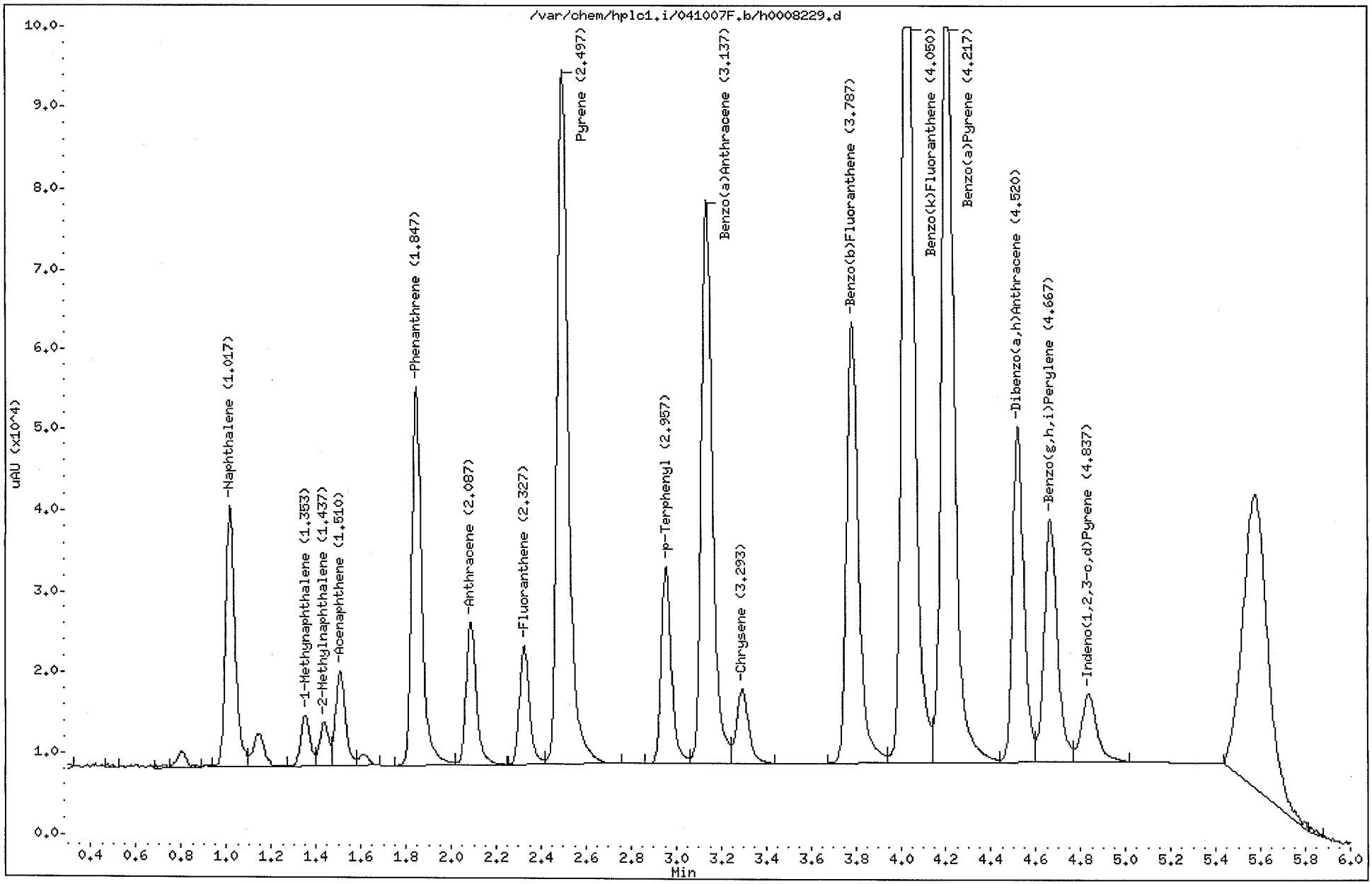
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
16 Benzo(a)Pyrene	4.217	4.217	0.000	377704	10.0000	10.1
17 Dibenzo(a,h)Anthracene	4.520	4.520	0.000	145635	10.0000	10.2
18 Benzo(g,h,i)Perylene	4.667	4.667	0.000	125418	10.0000	10.4
19 Indeno(1,2,3-c,d)Pyrene	4.837	4.837	0.000	40501	10.0000	11.8

Data File: /var/chem/hplc1.i/041007F.b/h0008229.d
Date : 07-OCT-2004 12:01
Client ID: 8310STD010
Sample Info: 8310STD010
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: RLW
Column diameter: 2.10

000282



GCAL, Inc.

Data file : /var/chem/hplc1.i/041007F.b/h0008230.d
Lab Smp Id: 8310DTD020 Client Smp ID: 8310DTD020
Inj Date : 07-OCT-2004 12:08
Operator : RLW Inst ID: hplc1.i
Smp Info : 8310DTD020
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041007F.b/flpnafld.m
Meth Date : 08-Oct-2004 11:15 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 12:08 Cal File: h0008230.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.017	1.017	0.000	190506	20.0000	19.4
3 1-Methynaphthalene	1.353	1.353	0.000	39185	20.0000	20.4
4 2-Methylnaphthalene	1.437	1.437	0.000	31326	20.0000	20.3
5 Acenaphthene	1.507	1.507	0.000	73831	20.0000	20.8
7 Phenanthrene	1.847	1.847	0.000	285195	20.0000	20.3
8 Anthracene	2.087	2.087	0.000	108923	20.0000	19.7
9 Fluoranthene	2.323	2.323	0.000	90706	20.0000	19.8
10 Pyrene	2.520	2.520	0.000	443454	20.0000	14.7
$ 11 p-Terphenyl	2.953	2.953	0.000	150798	20.0000	21.5
12 Benzo(a)Anthracene	3.153	3.153	0.000	401354	20.0000	17.1
13 Chrysene	3.293	3.293	0.000	69036	20.0000	24.5
14 Benzo(b)Fluoranthene	3.797	3.797	0.000	377612	20.0000	19.6
15 Benzo(k)Fluoranthene	4.067	4.067	0.000	529337	20.0000	12.1

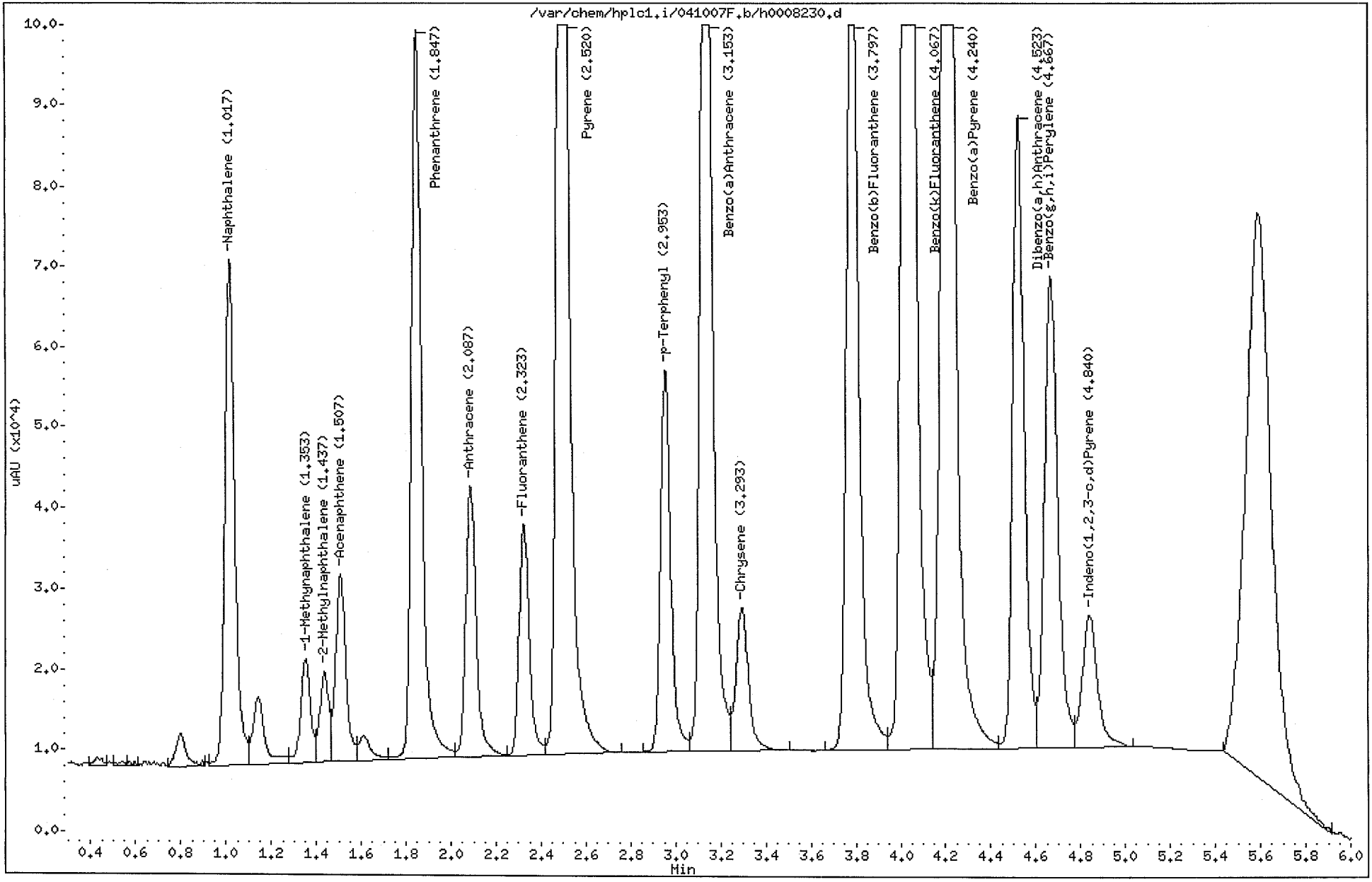
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
16 Benzo(a)Pyrene	4.240	4.240	0.000	524501	20.0000	14.0
17 Dibenzo(a,h)Anthracene	4.523	4.523	0.000	282355	20.0000	19.7
18 Benzo(g,h,i)Perylene	4.667	4.667	0.000	245205	20.0000	20.3
19 Indeno(1,2,3-c,d)Pyrene	4.840	4.840	0.000	80127	20.0000	23.3

Data File: /var/chem/hplc1.i/041007F.b/h0008230.d
Date : 07-OCT-2004 12:08
Client ID: 8310DTD020
Sample Info: 8310DTD020
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: RLW
Column diameter: 2.10

000285



GCAL, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id:
Level: LOW
Data Type: LC DATA
SpikeList File: ICV.spk
Sublist File: all.sub
Method File: /var/chem/hplc1.i/041012F.b/flpnafld.m
Misc Info:

Client SDG: 041012
Fraction: OTHER

Operator: rlw
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 Naphthalene	2.50	2.47	98.81	80-120
3 1-Methynaphthalene	2.50	2.40	96.19	80-120
4 2-Methylnaphthalen	2.50	2.47	98.69	80-120
5 Acenaphthene	2.50	2.56	102.25	80-120
7 Phenanthrene	2.50	2.52	100.83	80-120
8 Anthracene	2.50	2.44	97.77	80-120
9 Fluoranthene	2.50	2.35	94.19	80-120
10 Pyrene	2.50	2.65	105.98	80-120
12 Benzo(a)Anthracene	2.50	2.59	103.64	80-120
13 Chrysene	2.50	2.37	94.62	80-120
14 Benzo(b)Fluoranthe	2.50	2.65	105.94	80-120
15 Benzo(k)Fluoranthe	2.50	2.58	103.01	80-120
16 Benzo(a)Pyrene	2.50	2.68	107.26	80-120
17 Dibenzo(a,h)Anthra	2.50	2.58	103.10	80-120
18 Benzo(g,h,i)Peryle	2.50	2.67	106.88	80-120
19 Indeno(1,2,3-c,d)P	2.50	2.51	100.51	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 11 p-Terphenyl	2.00	2.69	134.35	40-140

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc1.i Injection Date: 09-OCT-2004 09:31
Lab File ID: h0008147.d Init. Cal. Date(s): 14-JAN-2004 07-OCT-2004
Analysis Type: WATER Init. Cal. Times: 15:08 12:08
Lab Sample ID: 8310CCV2.5 Quant Type: ESTD
Method: /var/chem/hplc1.i/041009F.b/flpnafld.m

COMPOUND	RRF / AMOUNT	RF2	CCAL RRF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Naphthalene	9833	10464	10464	0.010	-6.41687	15.00000	Averaged
3 1-Methynaphthalene	1921	2044	2044	0.010	-6.36949	15.00000	Averaged
4 2-Methylnaphthalene	1544	1660	1660	0.010	-7.52251	15.00000	Averaged
5 Acenaphthene	3551	3750	3750	0.010	-5.60266	15.00000	Averaged
7 Phenanthrene	14066	14676	14676	0.010	-4.33720	15.00000	Averaged
8 Anthracene	5524	5560	5560	0.010	-0.66653	15.00000	Averaged
9 Fluoranthene	4588	4351	4351	0.010	5.14976	15.00000	Averaged
10 Pyrene	30071	34547	34547	0.010	-14.88359	15.00000	Averaged
$ 11 p-Terphenyl	7001	7547	7547	0.010	-7.79787	15.00000	Averaged
12 Benzo(a)Anthracene	23454	25060	25060	0.010	-6.84780	15.00000	Averaged
13 Chrysene	2.45783	2.50000	3229	0.010	1.68675	15.00000	Linear
14 Benzo(b)Fluoranthene	19279	20828	20828	0.010	-8.03644	15.00000	Averaged
15 Benzo(k)Fluoranthene	43640	45327	45327	0.010	-3.86621	15.00000	Averaged
16 Benzo(a)Pyrene	37361	41410	41410	0.010	-10.83863	15.00000	Averaged
17 Dibenzo(a,h)Anthracene	14324	15110	15110	0.010	-5.48602	15.00000	Averaged
18 Benzo(g,h,i)Perylene	12078	13620	13620	0.010	-12.76143	15.00000	Averaged
19 Indeno(1,2,3-c,d)Pyrene	3437	3411	3411	0.010	0.74595	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.41269
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009F.b/h0008147.d
Lab Smp Id: 8310CCV2.5 Client Smp ID: 8310CCV2.5
Inj Date : 09-OCT-2004 09:31
Operator : RLW Inst ID: hplc1.i
Smp Info : 8310CCV2.5
Misc Info : 4-14-1
Comment :
Method : /var/chem/hplc1.i/041009F.b/flpnafld.m
Meth Date : 09-Oct-2004 10:32 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 12:08 Cal File: h0008230.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.017	1.017	0.000	26158	2.50000	2.66
3 1-Methynaphthalene	1.353	1.353	0.000	5108	2.50000	2.66
4 2-Methylnaphthalene	1.437	1.437	0.000	4150	2.50000	2.69
5 Acenaphthene	1.507	1.507	0.000	9375	2.50000	2.64
7 Phenanthrene	1.847	1.847	0.000	36689	2.50000	2.61
8 Anthracene	2.090	2.090	0.000	13900	2.50000	2.52
9 Fluoranthene	2.327	2.327	0.000	10878	2.50000	2.37
10 Pyrene	2.500	2.500	0.000	86366	2.50000	2.87
$ 11 p-Terphenyl	2.960	2.960	0.000	18867	2.50000	2.69
12 Benzo(a)Anthracene	3.140	3.140	0.000	62649	2.50000	2.67
13 Chrysene	3.300	3.300	0.000	8073	2.50000	2.46
14 Benzo(b)Fluoranthene	3.790	3.790	0.000	52070	2.50000	2.70
15 Benzo(k)Fluoranthene	4.037	4.037	0.000	113317	2.50000	2.60

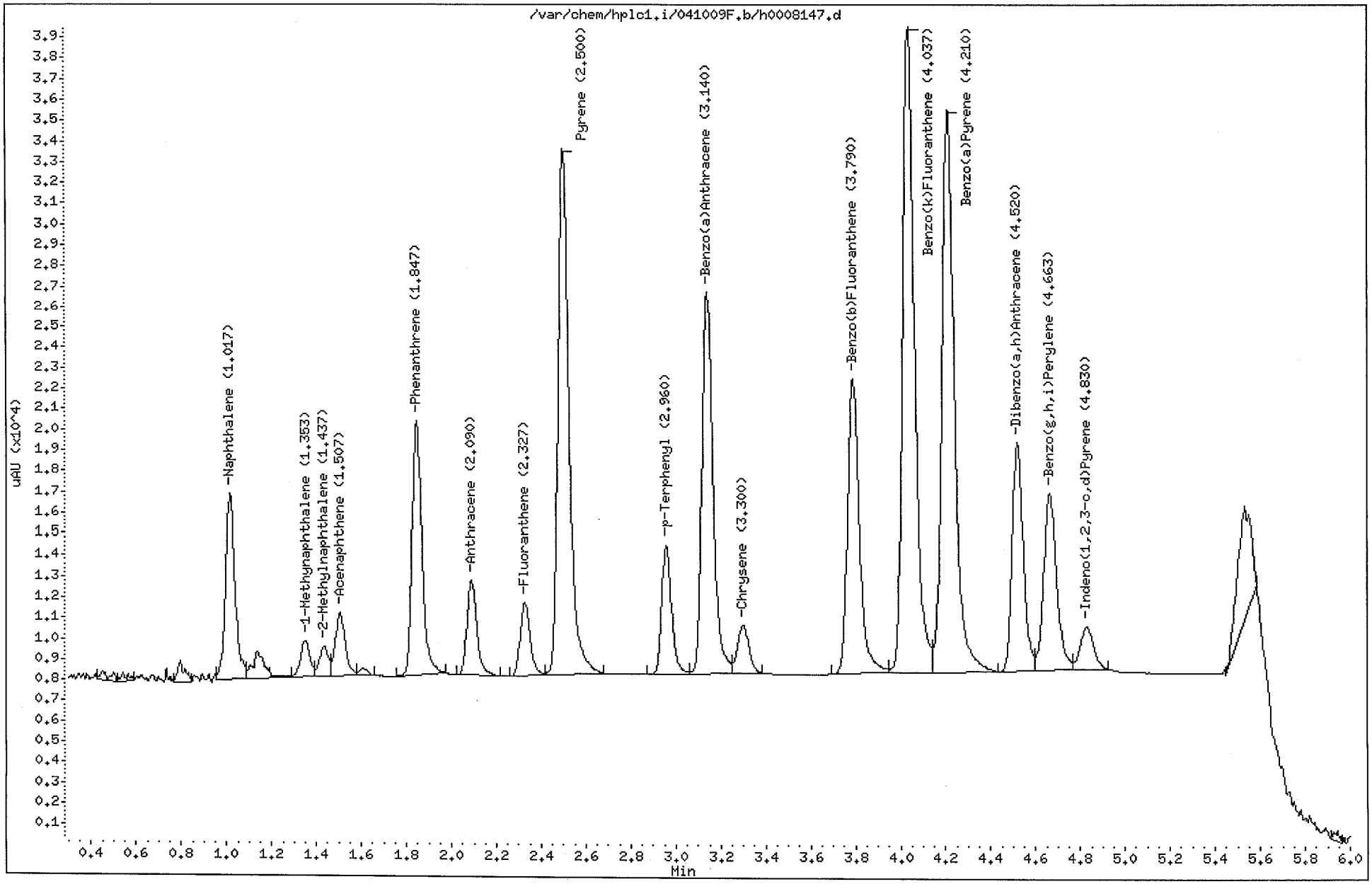
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
16 Benzo(a)Pyrene	4.210	4.210	0.000	103525	2.50000	2.77
17 Dibenzo(a,h)Anthracene	4.520	4.520	0.000	37774	2.50000	2.64
18 Benzo(g,h,i)Perylene	4.663	4.663	0.000	34049	2.50000	2.82
19 Indeno(1,2,3-c,d)Pyrene	4.830	4.830	0.000	8527	2.50000	2.48

Data File: /var/chem/hplc1.i/041009F.b/h0008147.d
Date : 09-OCT-2004 09:31
Client ID: 8310CCV2.5
Sample Info: 8310CCV2.5
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: RLW
Column diameter: 2.10

000290



GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc1.i Injection Date: 09-OCT-2004 11:49
Lab File ID: h0008165.d Init. Cal. Date(s): 14-JAN-2004 07-OCT-2004
Analysis Type: WATER Init. Cal. Times: 15:08 12:08
Lab Sample ID: 8310CCV2.5 Quant Type: ESTD
Method: /var/chem/hplc1.i/041009F.b/flpnafld.m

COMPOUND	RRF / AMOUNT	RF2	CCAL RRF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Naphthalene	9833	9252	9252	0.010	5.90376	15.00000	Averaged
3 1-Methynaphthalene	1921	1687	1687	0.010	12.20858	15.00000	Averaged
4 2-Methylnaphthalene	1544	1338	1338	0.010	13.31822	15.00000	Averaged
5 Acenaphthene	3551	3104	3104	0.010	12.60788	15.00000	Averaged
7 Phenanthrene	14066	13857	13857	0.010	1.48741	15.00000	Averaged
8 Anthracene	5524	5489	5489	0.010	0.62829	15.00000	Averaged
9 Fluoranthene	4588	4258	4258	0.010	7.19609	15.00000	Averaged
10 Pyrene	30071	27162	27162	0.010	9.67554	15.00000	Averaged
$ 11 p-Terphenyl	7001	7424	7424	0.010	-6.04556	15.00000	Averaged
12 Benzo(a)Anthracene	23454	22873	22873	0.010	2.47654	15.00000	Averaged
13 Chrysene	2.27034	2.50000	2968	0.010	9.18648	15.00000	Linear
14 Benzo(b)Fluoranthene	19279	19585	19585	0.010	-1.58854	15.00000	Averaged
15 Benzo(k)Fluoranthene	43640	43723	43723	0.010	-0.19038	15.00000	Averaged
16 Benzo(a)Pyrene	37361	36526	36526	0.010	2.23448	15.00000	Averaged
17 Dibenzo(a,h)Anthracene	14324	14053	14053	0.010	1.88798	15.00000	Averaged
18 Benzo(g,h,i)Perylene	12078	11485	11485	0.010	4.91301	15.00000	Averaged
19 Indeno(1,2,3-c,d)Pyrene	3437	3498	3498	0.010	-1.77744	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 5.48978
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009F.b/h0008165.d
Lab Smp Id: 8310CCV2.5 Client Smp ID: 8310CCV2.5
Inj Date : 09-OCT-2004 11:49
Operator : rlw Inst ID: hplc1.i
Smp Info : 8310CCV2.5
Misc Info : 4-14-1
Comment :
Method : /var/chem/hplc1.i/041009F.b/flpnafld.m
Meth Date : 14-Oct-2004 14:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 12:08 Cal File: h0008230.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

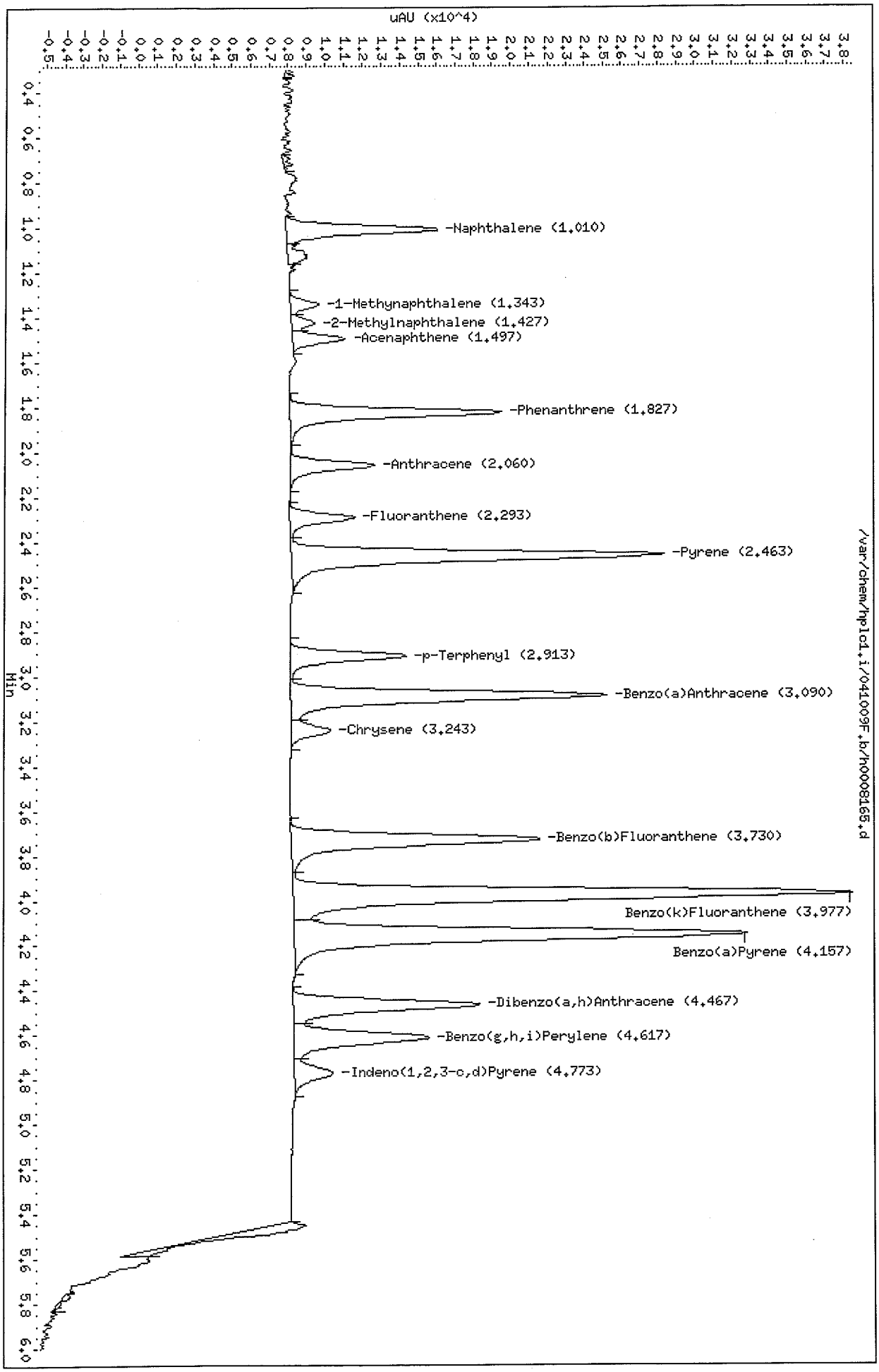
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
1 Naphthalene	1.010	1.010	0.000	23130	2.50000	2.35
3 1-Methynaphthalene	1.343	1.343	0.000	4216	2.50000	2.19
4 2-Methylnaphthalene	1.427	1.427	0.000	3345	2.50000	2.17
5 Acenaphthene	1.497	1.497	0.000	7759	2.50000	2.18
7 Phenanthrene	1.827	1.827	0.000	34641	2.50000	2.46
8 Anthracene	2.060	2.060	0.000	13722	2.50000	2.48
9 Fluoranthene	2.293	2.293	0.000	10644	2.50000	2.32
10 Pyrene	2.463	2.463	0.000	67903	2.50000	2.26
$ 11 p-Terphenyl	2.913	2.913	0.000	18560	2.50000	2.65
12 Benzo(a)Anthracene	3.090	3.090	0.000	57182	2.50000	2.44
13 Chrysene	3.243	3.243	0.000	7420	2.50000	2.27
14 Benzo(b)Fluoranthene	3.730	3.730	0.000	48962	2.50000	2.54
15 Benzo(k)Fluoranthene	3.977	3.977	0.000	109306	2.50000	2.50

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
16 Benzo(a)Pyrene	4.157	4.157	0.000	91314	2.50000	2.44
17 Dibenzo(a,h)Anthracene	4.467	4.467	0.000	35133	2.50000	2.45
18 Benzo(g,h,i)Perylene	4.617	4.617	0.000	28712	2.50000	2.38
19 Indeno(1,2,3-c,d)Pyrene	4.773	4.773	0.000	8744	2.50000	2.54

Data File: /var/chem/hplc1.i/041009F.b/h0008165.d
Date : 09-OCT-2004 11:49
Client ID: 8310CCV2.5
Sample Info: 8310CCV2.5
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



000294

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID MB195299

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 195299

Date Collected Time:

Date Received:

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 0950

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008148

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	1.00	U	0.291	1.00
91-57-6	2-Methylnaphthalene	1.00	U	0.142	1.00
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008148.d
Lab Smp Id: 195299 Client Smp ID: 195299
Inj Date : 09-OCT-2004 09:50
Operator : rlw Inst ID: hplc1.i
Smp Info : 195299*BLK
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
$ 11 p-Terphenyl	2.857	2.949	-0.092	12215	1.68867	1.69(M)
14 Benzo(b)Fluoranthene	2.857	3.776	-0.919	12215	0.01796	0.0180(M)

QC Flag Legend

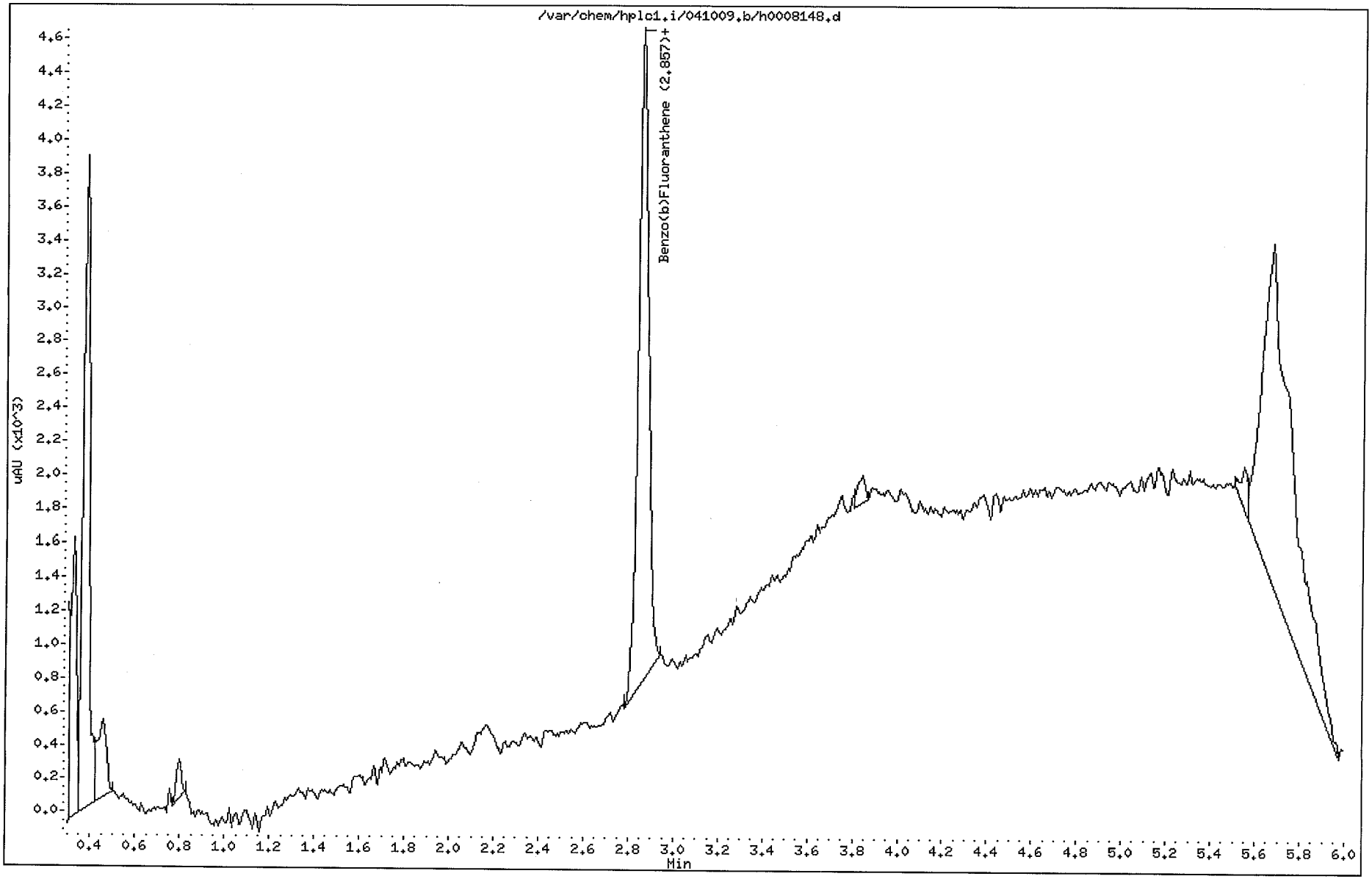
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008148.d
Date : 09-OCT-2004 09:50
Client ID: 195299
Sample Info: 195299*BLK
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000297



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

Sample ID LCS195300

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 195300

Date Collected Time:

Date Received:

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 0957

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008149

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	4.42		0.291	1.00
91-57-6	2-Methylnaphthalene	3.82		0.142	1.00
83-32-9	Acenaphthene	4.47		0.331	1.00
208-96-8	Acenaphthylene	4.12		0.153	1.00
120-12-7	Anthracene	4.41		0.024	0.100
56-55-3	Benzo(a)anthracene	4.41		0.032	0.100
50-32-8	Benzo(a)pyrene	3.67		0.033	0.100
205-99-2	Benzo(b)fluoranthene	4.03		0.016	0.100
191-24-2	Benzo(g,h,i)perylene	2.36		0.016	0.100
207-08-9	Benzo(k)fluoranthene	3.45		0.033	0.100
218-01-9	Chrysene	4.42		0.030	0.100
53-70-3	Dibenz(a,h)anthracene	1.88		0.029	0.100
206-44-0	Fluoranthene	4.79		0.044	0.100
86-73-7	Fluorene	4.61		0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	3.19		0.041	0.250
91-20-3	Naphthalene	4.55		0.124	0.250
85-01-8	Phenanthrene	4.65		0.025	0.100
129-00-0	Pyrene	4.78		0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008149.d
Lab Smp Id: 195300 Client Smp ID: 195300
Inj Date : 09-OCT-2004 09:57
Operator : rlw Inst ID: hplc1.i
Smp Info : 195300*LCS
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
1 Naphthalene	1.004	1.009	-0.005	12331	4.54878	4.55
2 Acenaphthylene	1.211	1.216	-0.005	7437	4.12031	4.12
3 1-Methynaphthalene	1.337	1.336	0.001	6410	4.42313	4.42
4 2-Methylnaphthalene	1.418	1.423	-0.005	7735	3.82221	3.82
5 Acenaphthene	1.491	1.496	-0.005	4206	4.46933	4.47
6 Fluorene	1.591	1.602	-0.011	52334	4.60903	4.61
7 Phenanthrene	1.824	1.836	-0.012	124894	4.64659	4.65
8 Anthracene	2.064	2.076	-0.012	249098	4.40634	4.41
9 Fluoranthene	2.297	2.316	-0.019	32693	4.78946	4.79
10 Pyrene	2.471	2.489	-0.018	29168	4.77568	4.78
$ 11 p-Terphenyl	2.837	2.949	-0.112	12158	1.68087	1.68(M)
12 Benzo(a)Anthracene	3.091	3.129	-0.038	72199	4.41464	4.41
13 Chrysene	3.244	3.289	-0.045	120567	4.41736	4.42

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
14 Benzo(b)Fluoranthene	3.724	3.776	-0.052	82085	4.02826	4.03
15 Benzo(k)Fluoranthene	3.958	4.022	-0.064	43373	3.45017	3.45
16 Benzo(a)Pyrene	4.138	4.202	-0.064	64657	3.66985	3.67
17 Dibenzo(a,h)Anthracene	4.438	4.509	-0.071	7868	1.88200	1.88(RM)
18 Benzo(g,h,i)Perylene	4.584	4.649	-0.065	15742	2.35973	2.36(M)
19 Indeno(1,2,3-c,d)Pyrene	4.731	4.816	-0.085	44954	3.18935	3.19(M)

QC Flag Legend

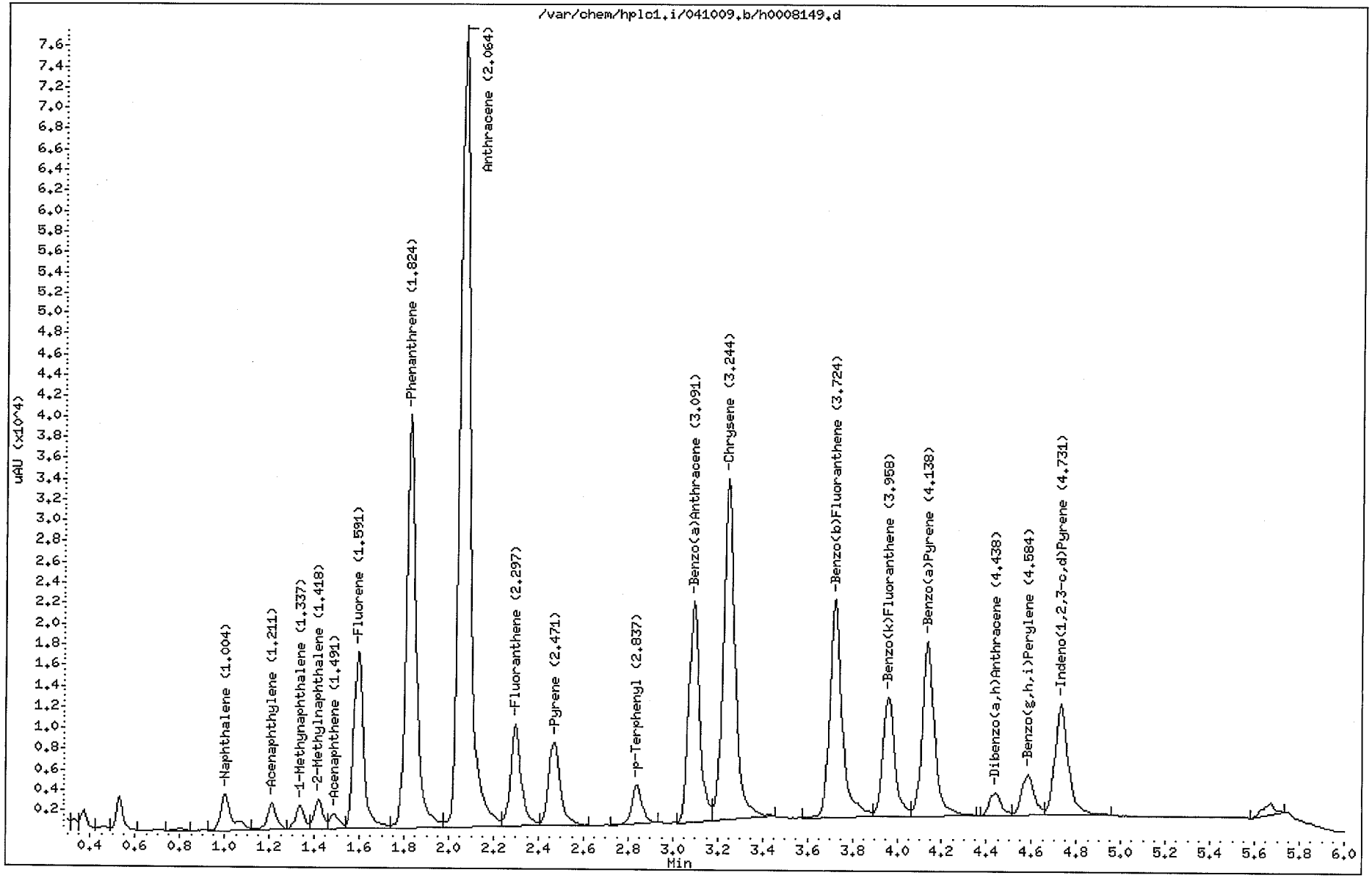
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008149.d
Date : 09-OCT-2004 09:57
Client ID: 195300
Sample Info: 195300WLCS
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000301



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID LCSD195301

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 195301

Date Collected Time:

Date Received:

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1004

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008150

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	3.92		0.291	1.00
91-57-6	2-Methylnaphthalene	3.55		0.142	1.00
83-32-9	Acenaphthene	3.58		0.331	1.00
208-96-8	Acenaphthylene	3.93		0.153	1.00
120-12-7	Anthracene	4.27		0.024	0.100
56-55-3	Benzo(a)anthracene	4.53		0.032	0.100
50-32-8	Benzo(a)pyrene	3.85		0.033	0.100
205-99-2	Benzo(b)fluoranthene	4.25		0.016	0.100
191-24-2	Benzo(g,h,i)perylene	2.43		0.016	0.100
207-08-9	Benzo(k)fluoranthene	3.86		0.033	0.100
218-01-9	Chrysene	4.59		0.030	0.100
53-70-3	Dibenz(a,h)anthracene	1.99		0.029	0.100
206-44-0	Fluoranthene	4.38		0.044	0.100
86-73-7	Fluorene	4.48		0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	3.54		0.041	0.250
91-20-3	Naphthalene	5.21		0.124	0.250
85-01-8	Phenanthrene	4.56		0.025	0.100
129-00-0	Pyrene	4.53		0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008150.d
Lab Smp Id: 195301 Client Smp ID: 195301
Inj Date : 09-OCT-2004 10:04
Operator : rlw Inst ID: hplc1.i
Smp Info : 195301*LCSD
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
1 Naphthalene	0.992	1.009	-0.017	14127	5.21131	5.21
2 Acenaphthylene	1.192	1.216	-0.024	7090	3.92806	3.93
3 1-Methynaphthalene	1.318	1.336	-0.018	5685	3.92285	3.92
4 2-Methylnaphthalene	1.398	1.423	-0.025	7184	3.54993	3.55
5 Acenaphthene	1.472	1.496	-0.024	3372	3.58312	3.58
6 Fluorene	1.572	1.602	-0.030	50893	4.48220	4.48(M)
7 Phenanthrene	1.798	1.836	-0.038	122668	4.56378	4.56(M)
8 Anthracene	2.025	2.076	-0.051	241469	4.27139	4.27(M)
9 Fluoranthene	2.258	2.316	-0.058	29894	4.37947	4.38(M)
10 Pyrene	2.425	2.489	-0.064	27687	4.53323	4.53(M)
$ 11 p-Terphenyl	2.792	2.949	-0.157	12936	1.78842	1.79(M)
12 Benzo(a)Anthracene	3.045	3.129	-0.084	74019	4.52595	4.53(M)
13 Chrysene	3.192	3.289	-0.097	125236	4.58846	4.59(M)

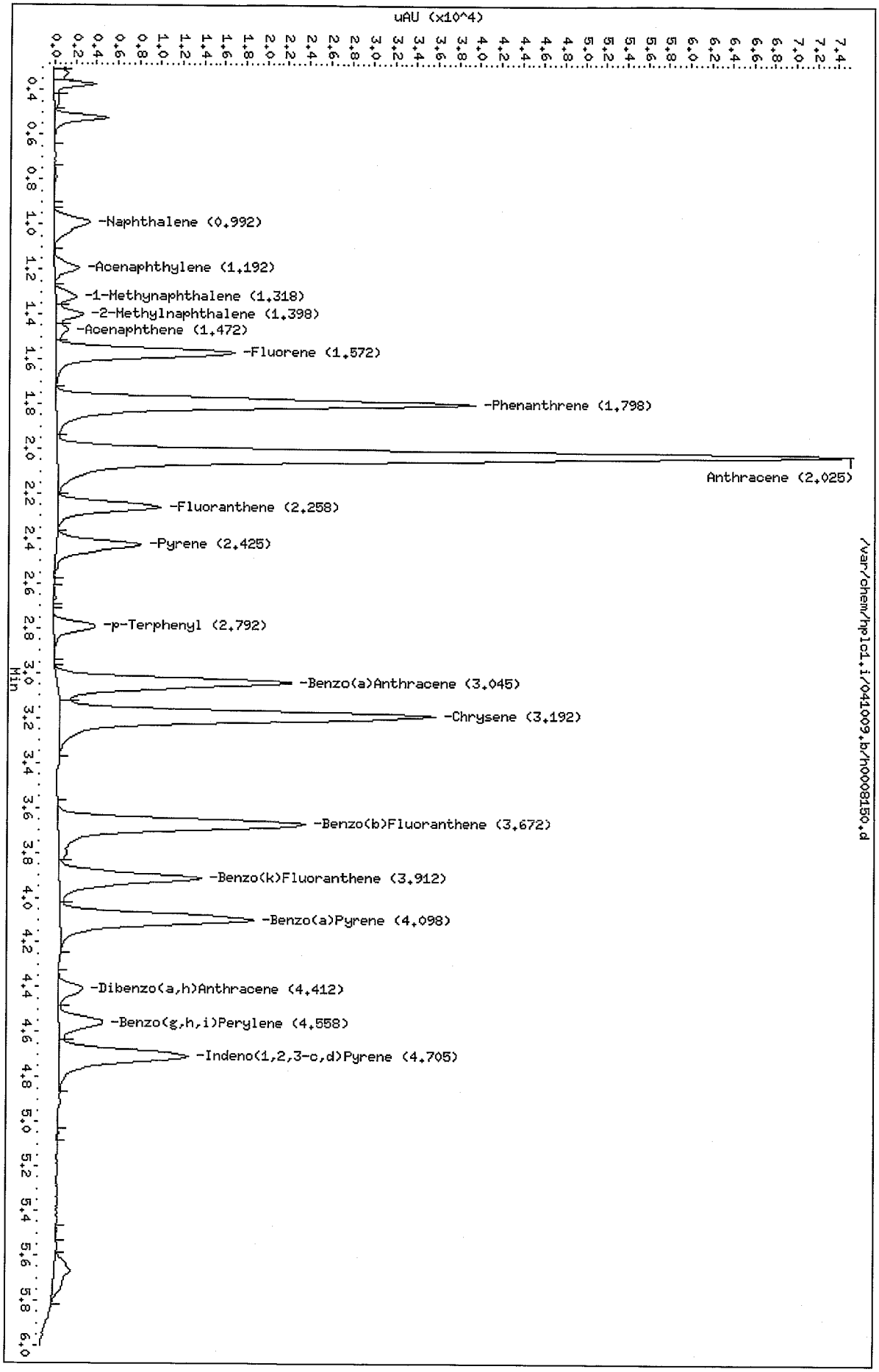
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
14 Benzo(b)Fluoranthene	3.672	3.776	-0.104	86566	4.24816	4.25 (M)
15 Benzo(k)Fluoranthene	3.912	4.022	-0.110	48475	3.85606	3.86 (M)
16 Benzo(a)Pyrene	4.098	4.202	-0.104	67858	3.85155	3.85 (M)
17 Dibenzo(a,h)Anthracene	4.412	4.509	-0.097	8306	1.98696	1.99 (RM)
18 Benzo(g,h,i)Perylene	4.558	4.649	-0.091	16208	2.42961	2.43 (M)
19 Indeno(1,2,3-c,d)Pyrene	4.705	4.816	-0.111	49904	3.54056	3.54 (M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008150.d
Date : 09-OCT-2004 10:04
Client ID: 195301
Sample Info: 195301MLCSD
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-JETC-MS-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010611

Date Collected 09/28/04 Time: 1320

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1120

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008161

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	4.74		0.291	1.00
91-57-6	2-Methylnaphthalene	4.20		0.142	1.00
83-32-9	Acenaphthene	3.31		0.331	1.00
208-96-8	Acenaphthylene	4.33		0.153	1.00
120-12-7	Anthracene	4.19		0.024	0.100
56-55-3	Benzo(a)anthracene	4.28		0.032	0.100
50-32-8	Benzo(a)pyrene	3.89		0.033	0.100
205-99-2	Benzo(b)fluoranthene	4.15		0.016	0.100
191-24-2	Benzo(g,h,i)perylene	3.62		0.016	0.100
207-08-9	Benzo(k)fluoranthene	3.99		0.033	0.100
218-01-9	Chrysene	4.25		0.030	0.100
53-70-3	Dibenz(a,h)anthracene	3.24		0.029	0.100
206-44-0	Fluoranthene	4.53		0.044	0.100
86-73-7	Fluorene	4.41		0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	3.79		0.041	0.250
91-20-3	Naphthalene	4.47		0.124	0.250
85-01-8	Phenanthrene	4.45		0.025	0.100
129-00-0	Pyrene	4.45		0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008161.d
Lab Smp Id: 20410010611 Client Smp ID: 20410010611
Inj Date : 09-OCT-2004 11:20
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010611
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
1 Naphthalene	0.992	1.009	-0.017	12117	4.46984	4.47
2 Acenaphthylene	1.198	1.216	-0.018	7815	4.32974	4.33
3 1-Methynaphthalene	1.325	1.336	-0.011	6870	4.74055	4.74
4 2-Methylnaphthalene	1.412	1.423	-0.011	8501	4.20072	4.20
5 Acenaphthene	1.478	1.496	-0.018	3117	3.31215	3.31
6 Fluorene	1.585	1.602	-0.017	50090	4.41141	4.41
7 Phenanthrene	1.818	1.836	-0.018	119534	4.44718	4.45
8 Anthracene	2.052	2.076	-0.024	237082	4.19379	4.19
9 Fluoranthene	2.292	2.316	-0.024	30891	4.52547	4.53
10 Pyrene	2.465	2.489	-0.024	27182	4.45051	4.45
$ 11 p-Terphenyl	2.838	2.949	-0.111	11771	1.62729	1.63(M)
12 Benzo(a)Anthracene	3.098	3.129	-0.031	69979	4.27889	4.28
13 Chrysene	3.258	3.289	-0.031	116117	4.25432	4.25

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
14 Benzo(b)Fluoranthene	3.745	3.776	-0.031	84604	4.15188	4.15
15 Benzo(k)Fluoranthene	3.998	4.022	-0.024	50154	3.98958	3.99
16 Benzo(a)Pyrene	4.178	4.202	-0.024	68476	3.88661	3.89
17 Dibenzo(a,h)Anthracene	4.492	4.509	-0.017	13531	3.23658	3.24
18 Benzo(g,h,i)Perylene	4.638	4.649	-0.011	24163	3.62199	3.62
19 Indeno(1,2,3-c,d)Pyrene	4.805	4.816	-0.011	53415	3.78960	3.79

QC Flag Legend

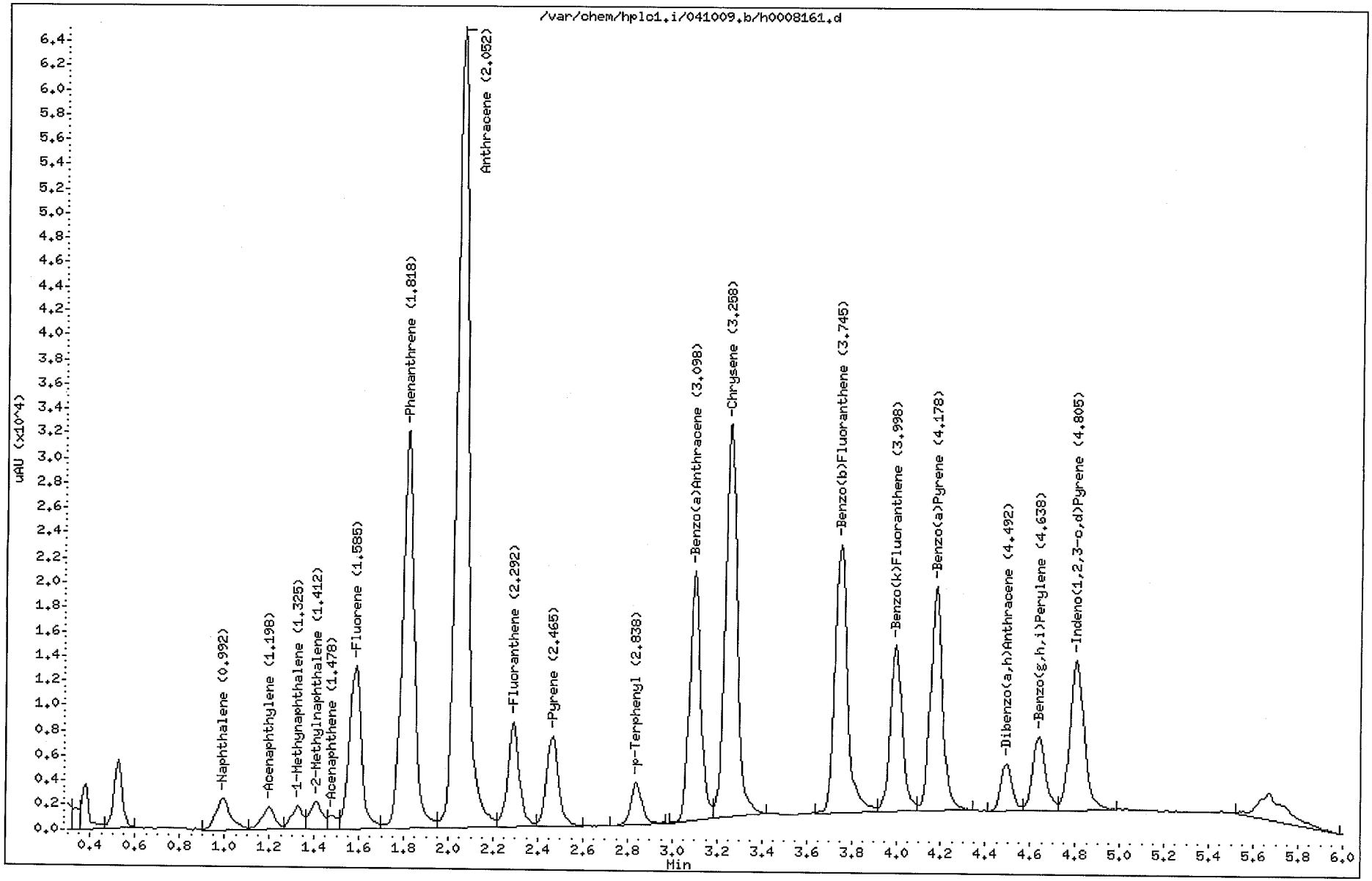
M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008161.d
Date : 09-OCT-2004 11:20
Client ID: 20410010611
Sample Info: 20410010611
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i

Operator: rlw
Column diameter: 2.10

000309



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280789 Analytical Batch: 281257

CONCENTRATION UNITS: ug/L

Sample ID 86-JETC-MSD-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010612

Date Collected 09/28/04 Time: 1320

Date Received: 10/01/04

Date Extracted: 10/01/04

Date Analyzed: 10/09/04 Time: 1127

Dilution Factor: 1 Analyst: RLW

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 041009/H0008162

CAS NO.	COMPOUND	RESULT		MDL	RL
90-12-0	1-Methylnaphthalene	4.44		0.291	1.00
91-57-6	2-Methylnaphthalene	3.89		0.142	1.00
83-32-9	Acenaphthene	4.26		0.331	1.00
208-96-8	Acenaphthylene	4.02		0.153	1.00
120-12-7	Anthracene	4.33		0.024	0.100
56-55-3	Benzo(a)anthracene	4.37		0.032	0.100
50-32-8	Benzo(a)pyrene	3.81		0.033	0.100
205-99-2	Benzo(b)fluoranthene	3.78		0.016	0.100
191-24-2	Benzo(g,h,i)perylene	3.69		0.016	0.100
207-08-9	Benzo(k)fluoranthene	3.67		0.033	0.100
218-01-9	Chrysene	4.36		0.030	0.100
53-70-3	Dibenz(a,h)anthracene	3.34		0.029	0.100
206-44-0	Fluoranthene	4.61		0.044	0.100
86-73-7	Fluorene	4.56		0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	4.08		0.041	0.250
91-20-3	Naphthalene	4.58		0.124	0.250
85-01-8	Phenanthrene	4.53		0.025	0.100
129-00-0	Pyrene	4.57		0.034	0.100

GCAL, Inc.

Data file : /var/chem/hplc1.i/041009.b/h0008162.d
Lab Smp Id: 20410010612 Client Smp ID: 20410010612
Inj Date : 09-OCT-2004 11:27
Operator : rlw Inst ID: hplc1.i
Smp Info : 20410010612
Misc Info :
Comment :
Method : /var/chem/hplc1.i/041009.b/flpnauv.m
Meth Date : 09-Oct-2004 12:22 rlw Quant Type: ESTD
Cal Date : 07-OCT-2004 11:19 Cal File: h0008223.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf*Vt/(Vo*Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	10.00000	unit correction factor
Vt	1000.00000	Sample Final Volume
Vo	1000.00000	Initial Sample Volume
Vi	10.00000	Injection Volume

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
1 Naphthalene	0.992	1.009	-0.017	12414	4.57940	4.58
2 Acenaphthylene	1.198	1.216	-0.018	7250	4.01671	4.02
3 1-Methynaphthalene	1.325	1.336	-0.011	6430	4.43693	4.44
4 2-Methylnaphthalene	1.405	1.423	-0.018	7865	3.88645	3.89
5 Acenaphthene	1.478	1.496	-0.018	4009	4.26000	4.26
6 Fluorene	1.578	1.602	-0.024	51726	4.55549	4.56
7 Phenanthrene	1.805	1.836	-0.031	121865	4.53390	4.53 (M)
8 Anthracene	2.032	2.076	-0.044	244935	4.33272	4.33 (M)
9 Fluoranthene	2.265	2.316	-0.051	31450	4.60745	4.61 (M)
10 Pyrene	2.432	2.489	-0.057	27897	4.56758	4.57
$ 11 p-Terphenyl	2.792	2.949	-0.157	11163	1.54324	1.54 (M)
12 Benzo(a)Anthracene	3.038	3.129	-0.091	71472	4.37023	4.37 (M)
13 Chrysene	3.192	3.289	-0.097	118928	4.35733	4.36 (M)

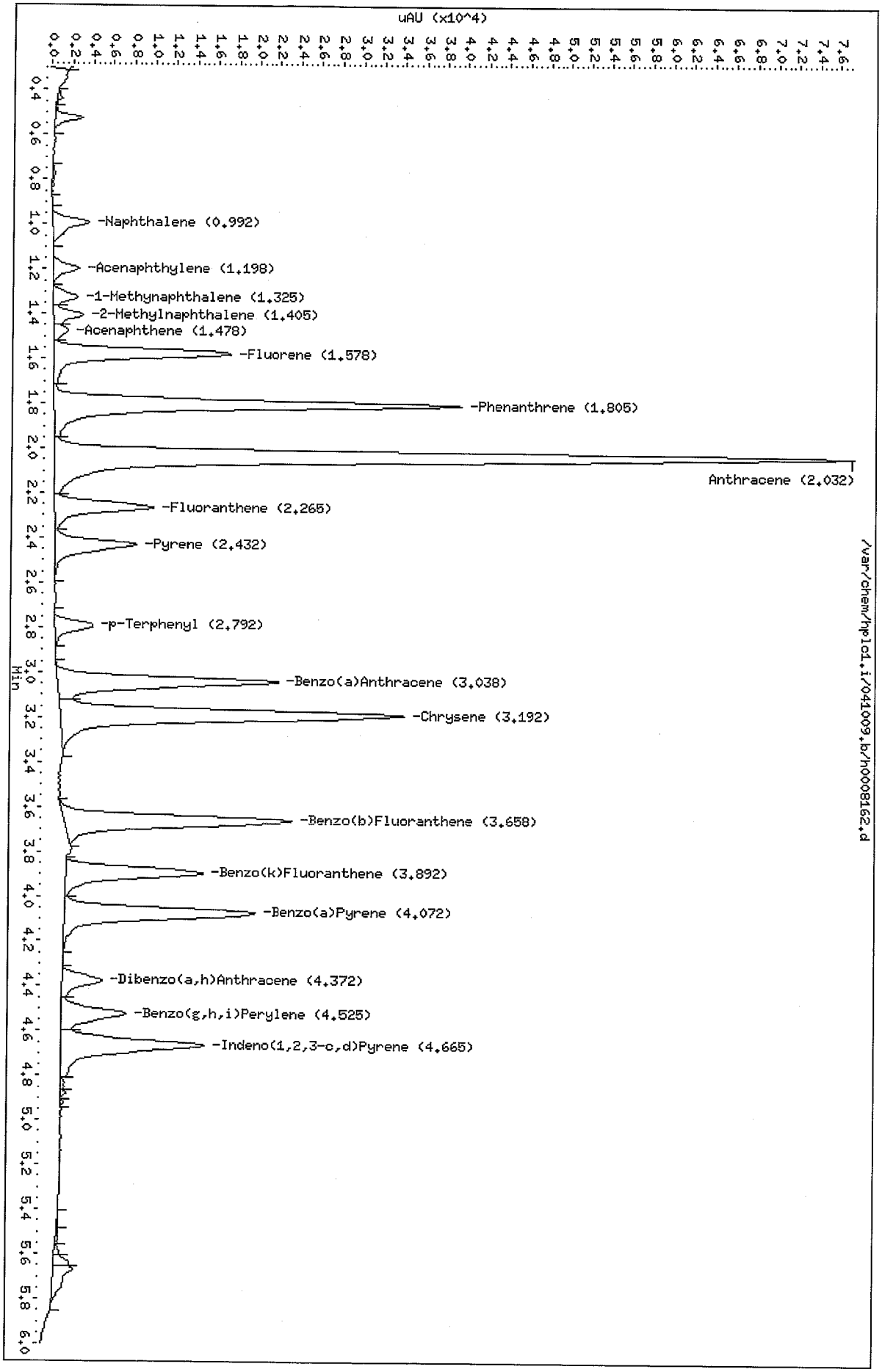
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
14 Benzo(b)Fluoranthene	3.658	3.776	-0.118	76997	3.77859	3.78 (M)
15 Benzo(k)Fluoranthene	3.892	4.022	-0.130	46102	3.66727	3.67 (M)
16 Benzo(a)Pyrene	4.072	4.202	-0.130	67126	3.80999	3.81 (M)
17 Dibenzo(a,h)Anthracene	4.372	4.509	-0.137	13968	3.34130	3.34 (M)
18 Benzo(g,h,i)Perylene	4.525	4.649	-0.124	24639	3.69334	3.69 (M)
19 Indeno(1,2,3-c,d)Pyrene	4.665	4.816	-0.151	57476	4.07773	4.08 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplc1.i/041009.b/h0008162.d
Date : 09-OCT-2004 11:27
Client ID: 20410010612
Sample Info: 20410010612
Volume Injected (uL): 10.0
Column phase: 201TP-0.15M

Instrument: hplc1.i
Operator: rlw
Column diameter: 2.10



000313

PAH SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	10/1/04 1400	BATCH NO:	280789
MATRIX:	WATER ☑ SOIL ☐ OTHER ☐	LEVEL:	LOW ☑ MEDIUM ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT (mL) g	FINAL VOLUME (mL)	Init pH	COMMENTS	METHOD
1	QC ACCOUNT	MB for HBN 280789 [EXTO/6308]	195299	1000	1.0	7		LIQUID LIQUID/3520
2	QC ACCOUNT	LCS for HBN 280789 [EXTO/6308]	195300	1000	1.0	7		
3	QC ACCOUNT	LCSD for HBN 280789 [EXTO/6308	195301	1000	1.0	7		SEPARATORY FUNNEL/3510
4	4380	86-334-2SA-Q3-04	20410010601	1000	1.0	7		
5	4380	86-334-32S-Q3-04	20410010602	1000	1.0	7		
6	4380	86-334-33S-Q3-04	20410010603	1000	1.0	7		
7	4380	86-334-34S-Q3-04	20410010604	1000	1.0	7		SONICATOR/3550
8	4380	86-339-28S-Q3-04	20410010605	1000	1.0	7		
9	4380	86-339-29S-Q3-04	20410010606	1000	1.0	7		SOXHLET/3540
10	4380	86-811-16SR-Q3-04	20410010607	1000	1.0	7		
11	4380	86-811-17S-Q3-04	20410010608	1000	1.0	7		
12	4380	86-811-18S-Q3-04	20410010609	1000	1.0	7		
13	4380	86-NG-24S-Q3-04	20410010610	1000	1.0	7		
14	4380	86-JETC-MS-Q3-04	20410010611	1000	1.0	7		
15	4380	86-JETC-MSD-Q3-04	20410010612	1000	1.0	7		
16	4380	86-JETC-DUP-Q3-04	20410010613	1000	1.0	7		
17	4380	86-JETC-EB-Q3-04	20410010614	1000	1.0	7		
18								
								Sodium Sulfate Lot No. 042563
20								
21								ACETONITRILE: 042316
22								
23				SKB 10/04/04				MeCL2 Lot No: 041084
24								
25								
26								
27								
28								

COMMENTS: SAMPLE PREPARATION INCLUDE DETERMINATION OF SAMPLE VOLUME/WEIGHT, SOLVENT EXTRACTION AND EVAPORATION OF SOLVENT TO FINAL VOLUME

SURROGATE ID	8-289-1			SPIKE ID	8-291-1	TECHNICIAN	DATE
VOLUME	0.5mL			VOLUME	1.0mL	[illegible]	10/1/04
CONCENTRATION	4.0 µg/mL			CONCENTRATION	5.0 µg/mL		
NaOH		ACID				SUPERVISOR	DATE
SPIKE WITNESS	GC					John Bailey	10/04/04

LABORATORY CHRONICLE: GC-MS DEPARTMENT

Date: 07-OCT-2004
Instrument: hplc1.i

Standard	Conc ppm	Lot No.
DFTPP	50	
Int. Standard	4000	

Inst. Conditions:

MISC:

Sample ID	ClientName	DataFile	WT VOL	Injection Time	DilFactor	ALS	Comments
8310STD00.1		h0008223.d	1000.00 ml	07-OCT-2004 11:19	1.000	1	
8310STD0.25		h0008224.d	1000.00 ml	07-OCT-2004 11:26	1.000	1	
8310STD0.50		h0008225.d	1000.00 ml	07-OCT-2004 11:33	1.000	1	
8310SATD001		h0008226.d	1000.00 ml	07-OCT-2004 11:40	1.000	1	
8310STD02.5		h0008227.d	1000.00 ml	07-OCT-2004 11:47	1.000	1	
8310STD005		h0008228.d	1000.00 ml	07-OCT-2004 11:54	1.000	1	
8310STD010		h0008229.d	1000.00 ml	07-OCT-2004 12:01	1.000	1	
8310DTD020		h0008230.d	1000.00 ml	07-OCT-2004 12:08	1.000	1	

REVISED 6-1-95 Supervisor Review: QA Review:

LABORATORY CHRONICLE: GC-MS DEPARTMENT

Date: 09-OCT-2004
Instrument: hplc1.i

Standard	Conc ppm	Lot No.
DFTPP	50	
Int. Standard	4000	

Inst. Conditions:

MISC:

Sample ID	ClientName	DataFile	WT VOL	Injection Time	DilFactor	ALS	Comments
8310CCV2.5		h0008147.d	1000.00 ml	09-OCT-2004 09:31	1.000	1	
195299		h0008148.d	1000.00 ml	09-OCT-2004 09:50	1.000	1	
195300		h0008149.d	1000.00 ml	09-OCT-2004 09:57	1.000	1	
195301		h0008150.d	1000.00 ml	09-OCT-2004 10:04	1.000	1	
20410010601		h0008151.d	1000.00 ml	09-OCT-2004 10:11	1.000	1	
20410010602		h0008152.d	1000.00 ml	09-OCT-2004 10:18	1.000	1	
20410010603		h0008153.d	1000.00 ml	09-OCT-2004 10:24	1.000	1	
20410010604		h0008154.d	1000.00 ml	09-OCT-2004 10:31	10.000	1	
20410010605		h0008155.d	1000.00 ml	09-OCT-2004 10:38	1.000	1	
20410010606		h0008156.d	1000.00 ml	09-OCT-2004 10:45	1.000	1	
20410010607		h0008157.d	1000.00 ml	09-OCT-2004 10:52	1.000	1	
20410010608		h0008158.d	1000.00 ml	09-OCT-2004 10:59	1.000	1	
20410010609		h0008159.d	1000.00 ml	09-OCT-2004 11:06	1.000	1	
20410010610		h0008160.d	1000.00 ml	09-OCT-2004 11:13	1.000	1	
20410010611		h0008161.d	1000.00 ml	09-OCT-2004 11:20	1.000	1	
20410010612		h0008162.d	1000.00 ml	09-OCT-2004 11:27	1.000	1	
20410010613		h0008163.d	1000.00 ml	09-OCT-2004 11:34	1.000	1	
20410010614		h0008164.d	1000.00 ml	09-OCT-2004 11:41	1.000	1	
8310CCV2.5		h0008165.d	1000.00 ml	09-OCT-2004 11:49	1.000	1	

REVISED 6-1-95 Supervisor Review: QA Review:

STANDARD PREPARATION LOGBOOK

STANDARD NAME	STD#	STOCK STD	SUPPLIER	LOT#/ EXP DATE	WT/VOL g/ml	FINAL VOL(ml)	FINAL CONC	SOLVENT/ LOT#	INITIAL	DATE PREPARED	EXP DATE
PIA CAL 5	4-14-1	4-13-16	In house	4-13-16 / 06-25-05	6.25 ml	50.0 ml	2.5 ppm	Acetonitrile / 031168	RLW	06-25-04	06-25-05
SKL BA 200	4-14-2	Skinner 200 Q-4235 B	NSI	041304-02/4-13-05	1.0 mL	5.0 mL	200 ppm	CH_2Cl_2			
10	4-14-3				50 uL	1.0 mL	10	DCM 030609	jar 3	063004	123004
50	4-14-4				250		50				
80	4-14-5				400		80				
120	4-14-6				600		120				
160	4-14-7				800		160				
SKLBNA jar3 063004 ~~SKL ICV 050~~	4-14-8	M-005A-10X M-005B-10X 200 ppm	ACCU ACCU	B0010103-3C/9-14-04 B3110139/111308	1.0 mL 1.0 mL	1 mL	2000	NA	jar3	063004	091404
SKL ICV 050	4-14-9	4-14-8	4-14-8	4-14-8 / 091404	250 ul 250 ul	~~250~~ jar3 063004 ~~250~~ / mL	500	DCM 030609			
Dates 6-25-04 — 6-30-04 were renewed by QA/QC on 7-29-04 DLH —											
ICV 050	4-14-10	625 Spike BNA Surry	NSI NSI	9-1-2 / 7/8/05 9-2-5 / 7/21/05	0.5 mL 0.5 mL	1.0 mL	50 ppm 50/100	DCM 036929	jar3	080204	070805
APP9 200	4-14-11	Q4113 C41104 323-03-02 847-02-05	NSI	060302 / 12-03-04 C-411-04 / 02-05 323-02-02 / 03-05 847-02-05 / 12-05	5.0 mL 1.0 1.8 1.0	10.0 mLs	200 ppm 200 400 200	DCM 030609	jar3	081804	120305
10	4-14-12	4-14-11	In-House	4-14-11 / 12-3-04	50 uL	1.0 mL	10 ppm				
50	4-14-13				250 uL		50				
80	4-14-14				400 uL		80				
120	4-14-15				600 uL		120				
160	4-14-16				800 uL		160				

STANDARD PREPARATION LOGBOOK

STANDARD NAME	STD#	STOCK STD	SUPPLIER	LOT#/ EXP DATE	WT/VOL g/ml	FINAL VOL(ml)	FINAL CONC	SOLVENT/ LOT#	INITIAL	DATE PREPARED	EXP DATE
BZ-66 TETRA	4-13-1	NA	ULTRA	T1366 12/2005	100.0	NA	NA	NA	CAB	NA	12/2005
BZ-170 HEPTA	4-13-2	NA	ULTRA	T0334 04/2007	100.0	NA	NA	NA	CAB	NA	04/2007
BZ 180 HEPTA	4-13-3	NA	ULTRA	R690B 03/2008	100.0	NA	NA	NA	CAB	NA	03/2008
BZ-44 TETRA	4-13-4	NA	ULTRA	R690B 03/2008	100.0	NA	NA	NA	CAB	NA	03/2008
BZ 187 HEPTA	4-13-5	NA	ULTRA	U0020 02/2007	100.0	NA	NA	NA	CAB	NA	02/2007
BZ128 T0478 Hex	4-13-6	NA	ULTRA	T0478 05/2007	100.0	NA	NA	NA	CAB	NA	05/2007
CHRYSENE D12	4-13-7	NA	ULTRA	W0097 03/2008	2000.0	NA	NA	NA	CAB	NA	03/2008
TCMX	4-13-8	NA	ULTRA	T0490 11/2007	2000.0	NA	NA	NA	CAB	NA	11/2007
PCBCONG010	4-13-9	4-11-5	Inhouse	4-11-5/05-01-05	100ul	1.0ml	10ppm	Hexane/036801	TLW	06-11-04	05-01-05
ApQ 10	4-13-10	200 ug/mL Q2423	NSI	111103-03 01/05	50 uL	pr3 061104 10/10ml	10 ppm	Dcm 030609	pr3	061104	010105
20	4-13-11				100	20	20				
40	4-13-12				200	40	40				
60	4-13-13				300	60	60				
80	4-13-14				400	80	80				
100	4-13-15				500	100	100				
Dates 5-5-04 — 6-11-04 were reviewed by QA/QC on 6-24-04 DLH											
~~4-13-16~~			RLW	06-25-04							
PNA Cal 8	4-13-16	2.0 mg/ml PAH Mix 2000 ug/ml P-Terphenyl	Accustd Ultra	B4060037 06-04-06 4-0559 05-01-07	500ul	50.0ml	20ppm	Acetonitrile/031168	TLW	06-25-04	06-25-05

000318

2E

WATER ORGANIC SURROGATE RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

GC Column (1): ID: (mm) GC Cloumn (2): ID: (mm)

Method: FLORIDA PRO

	EPA SAMPLE NO.	SMC1 1-(1)	Lo	Hi	F	SMC1 1-(2)	Lo	Hi	F	SMC2 2-(1)	Lo	Hi	F	SMC2 2-(2)	Lo	Hi	F	TOT OUT
1 .	86-334-2SA-Q3-04	86	25	132						97	25	132						0
2 .	86-334-32S-Q3-04	94	25	132						107	25	132						0
3 .	86-334-33S-Q3-04	89	25	132						102	25	132						0
4 .	86-334-34S-Q3-04	108	25	132						69	25	132						0
5 .	86-339-28S-Q3-04	92	25	132						92	25	132						0
6 .	86-339-29S-Q3-04	99	25	132						89	25	132						0
7 .	86-811-16SR-Q3-04	75	25	132						89	25	132						0
8 .	86-811-17S-Q3-04	94	25	132						81	25	132						0
9 .	86-811-18S-Q3-04	91	25	132						78	25	132						0
10 .	86-NG-24S-Q3-04	96	25	132						69	25	132						0
11 .	86-JETC-MS-Q3-04	92	25	132						69	25	132						0
12 .	86-JETC-MSD-Q3-04	94	25	132						60	25	132						0
13 .	86-JETC-DUP-Q3-04	97	25	132						69	25	132						0
14 .	86-JETC-EB-Q3-04	105	25	132						71	25	132						0
15 .	MB195302	90	25	132						100	25	132						0
16 .	LCS195303	81	25	132						93	25	132						0
17 .	LCSD195304	91	25	132						92	25	132						0

SMC 1 : O-Terphenyl SMC 2 : Nonatriacontane

Column to be used to flag recovery limits

* Value outside of contract required limits

D Surrogate diluted out

3E

WATER ORGANICS MS/MSD RECOVERY

Lab Name: GCAL Sample ID 86-NG-24S-Q3-04

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Contract: Method: FLORIDA PRO

Prep Batch: 280790 Analytical Batch: 281106

SAMPLE NO : 20410010611

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS % REC	MS % REC FLAG	QC. LIMITS
Petroleum Hydrocarbons	ug/L	1700	31.2	1450	83		41 - 101

SAMPLE NO : 20410010612

COMPOUND	UNITS	SPIKE ADDED	MSD CONC.	MSD % REC	REC FLAG	% RPD	RPD FLAG	QC. LIMITS REC	QC. LIMITS RPD
Petroleum Hydrocarbons	ug/L	1700	1580	91		9		41 - 101	0 - 20

RPD : 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

3E

WATER ORGANICS LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024 Case No.: SAS No.: SDG No.: 204100106

Contract: Method: FLORIDA PRO

Prep Batch: 280790 Analytical Batch: 281106

SAMPLE NO : 195303

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS % REC	LCS % REC FLAG	QC. LIMITS
Petroleum Hydrocarbons	ug/L	1700	0	1510	89		55 - 118

SAMPLE NO : 195304

COMPOUND	UNITS	SPIKE ADDED	LCSD CONC.	LCSD % REC	REC FLAG	% RPD	RPD FLAG	QC. LIMITS REC	QC. LIMITS RPD
Petroleum Hydrocarbons	ug/L	1700	1690	99		11		55 - 118	0 - 20

RPD : 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

4C

ORGANIC METHOD BLANK SUMMARY

Lab Name: GCAL

Sample ID MB195302

Lab Code: LA024 Case No.:

Contract:

Lab Sample ID: 195302

SAS No.: SDG No.: 204100106

Matrix: Water Sulfur Cleanup: (Y/N) N

Date Extracted: 10/04/04

Date Analyzed (1): 10/06/04 Time (1): 2005

Date Analyzed (2): Time (2):

Instrument ID (1): GCS14A

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

Method: FLORIDA PRO

Prep Batch: 280790 Analytical Batch: 281106

Lab File ID: 2041006P/SV14B

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATE ANALYZED	TIME ANALYZED
1.	LCS195303	195303	10/06/04	2034		
2.	LCSD195304	195304	10/06/04	2103		
3.	86-334-2SA-Q3-04	20410010601	10/06/04	2132		
4.	86-334-32S-Q3-04	20410010602	10/06/04	2201		
5.	86-334-33S-Q3-04	20410010603	10/06/04	2231		
6.	86-334-34S-Q3-04	20410010604	10/06/04	2300		
7.	86-339-28S-Q3-04	20410010605	10/06/04	2329		
8.	86-339-29S-Q3-04	20410010606	10/06/04	2358		
9.	86-811-16SR-Q3-04	20410010607	10/07/04	0027		
10.	86-811-17S-Q3-04	20410010608	10/07/04	0125		
11.	86-811-18S-Q3-04	20410010609	10/07/04	0154		
12.	86-NG-24S-Q3-04	20410010610	10/07/04	0223		
13.	86-JETC-MS-Q3-04	20410010611	10/07/04	0252		
14.	86-JETC-MSD-Q3-04	20410010612	10/07/04	0321		
15.	86-JETC-DUP-Q3-04	20410010613	10/07/04	0350		
16.	86-JETC-EB-Q3-04	20410010614	10/07/04	0419		

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-334-2SA-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010601

Date Collected 09/28/04 Time: 1415

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2132

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B015S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	1200		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b015.d
Lab Smp Id: 20410010601
Inj Date : 06-OCT-2004 21:32
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010601
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 65
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.123	7.125	-0.002	2430327890	889.558	1779.1168(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{2430327890 - 797577162}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 1195\ ug/L$$

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b015s.d
Lab Smp Id: 20410010601
Inj Date : 06-OCT-2004 21:32
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010601
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 65
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.122	7.128	-0.006	132195844	42.7686	85.5371
$ 18 Nonatriacontane	16.637	16.660	-0.023	665381318	291.108	582.2155

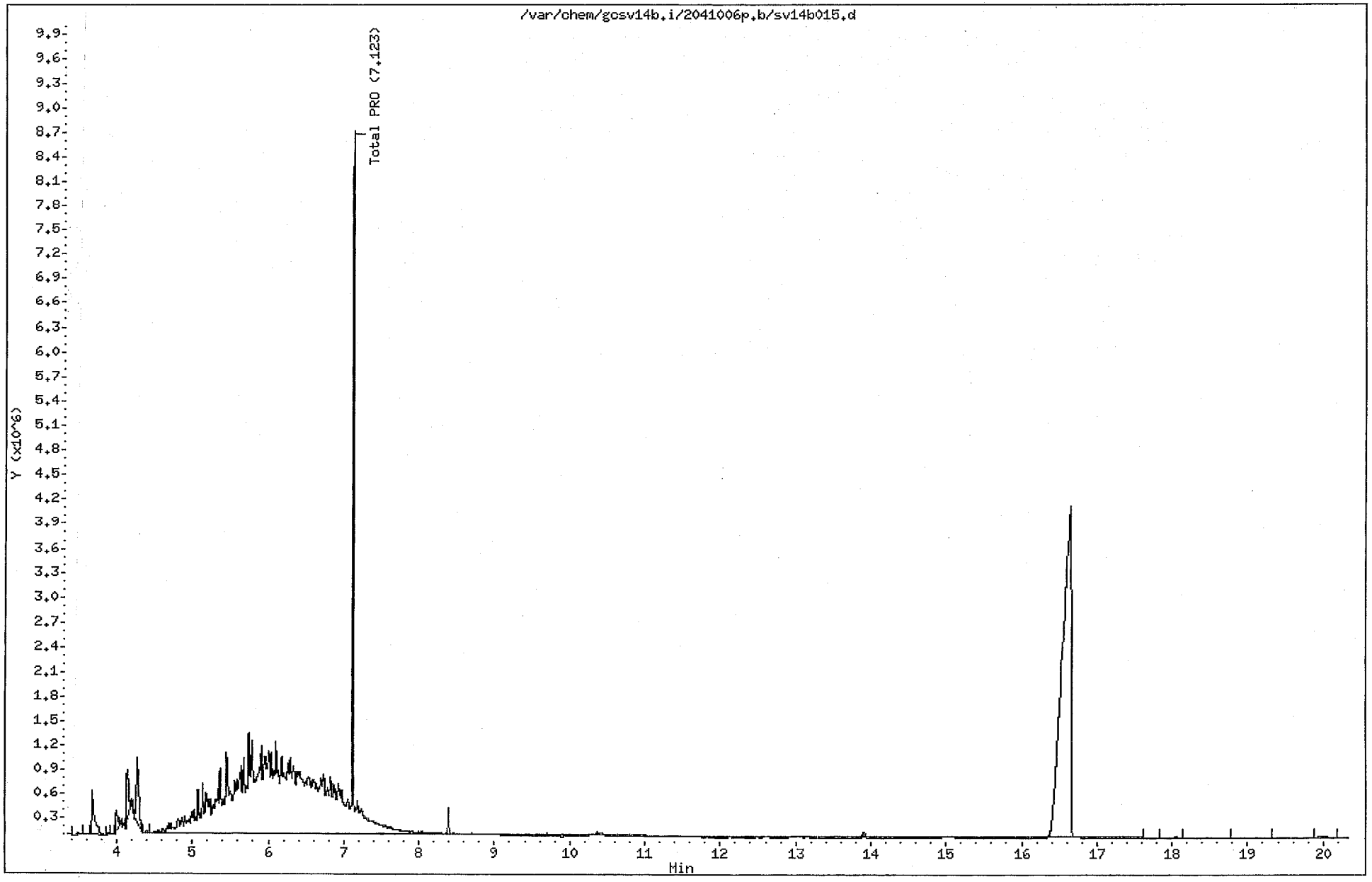
797577162

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b015.d
Date : 06-OCT-2004 21:32
Client ID:
Sample Info: 20410010601
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53

000326



Data File: /var/chem/gosv14b.i/2041006p.b/sv14b015s.d

Date : 06-OCT-2004 21:32

Client ID:

Instrument: gosv14b.i

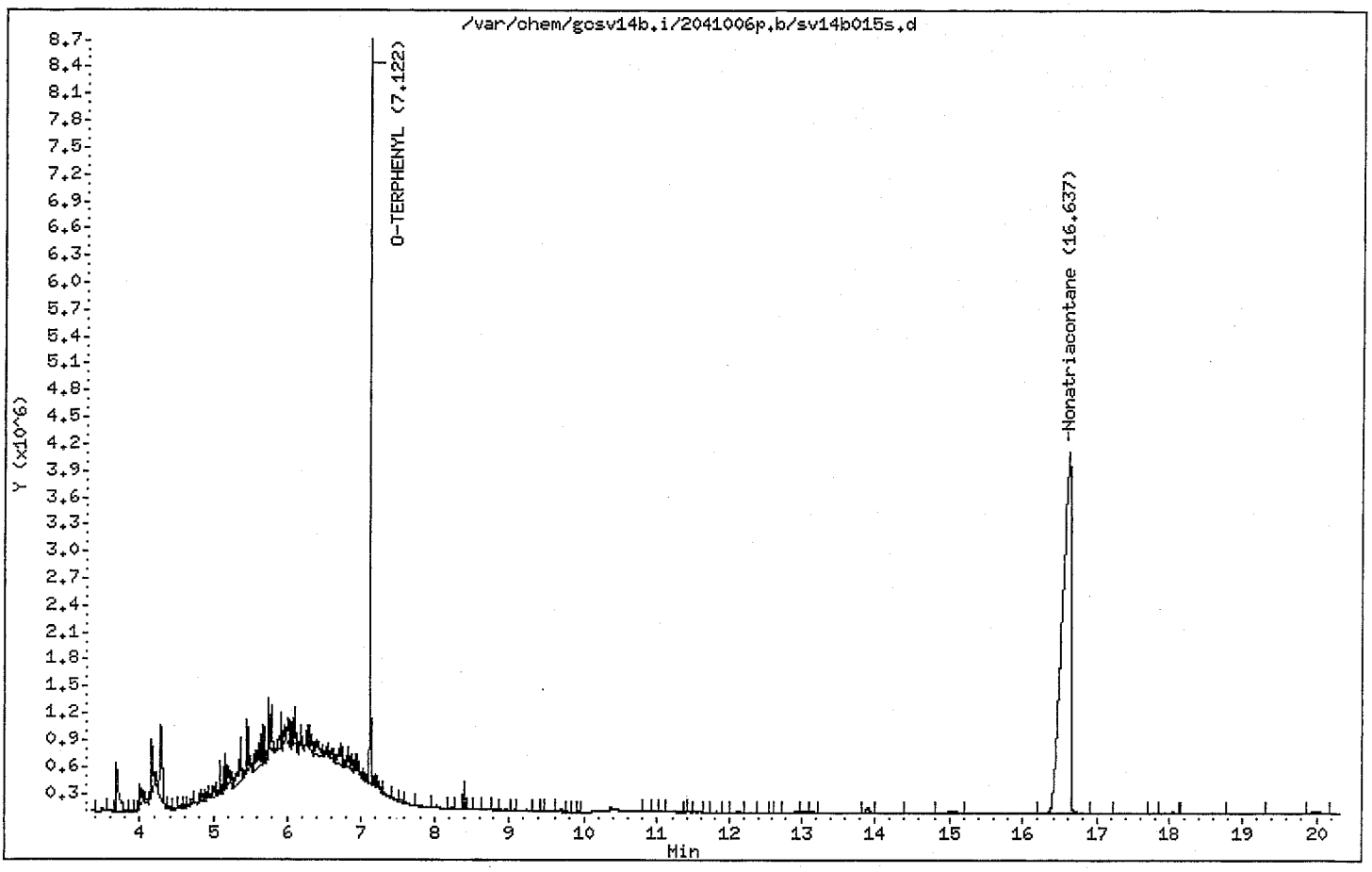
Sample Info: 20410010601

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID 86-334-32S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010602

Date Collected 09/28/04 Time: 1125

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2201

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B016S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	103		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b016.d
Lab Smp Id: 20410010602
Inj Date : 06-OCT-2004 22:01
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010602
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 66
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.122	7.125	-0.003	1016847722	372.191	744.3814(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{1016847722 - 875603817}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 103 \text{ ug/L}$$

dlb
10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b016s.d
Lab Smp Id: 20410010602
Inj Date : 06-OCT-2004 22:01
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010602
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 66
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.121	7.128	-0.007	144993115	46.9088	93.8175
$ 18 Nonatriacontane	16.649	16.660	-0.011	730610702	319.646	639.2919

875603817

Data File: /var/chem/gosv14b.i/2041006p.b/sv14b016s.d

Date : 06-OCT-2004 22:01

Client ID:

Instrument: gosv14b.i

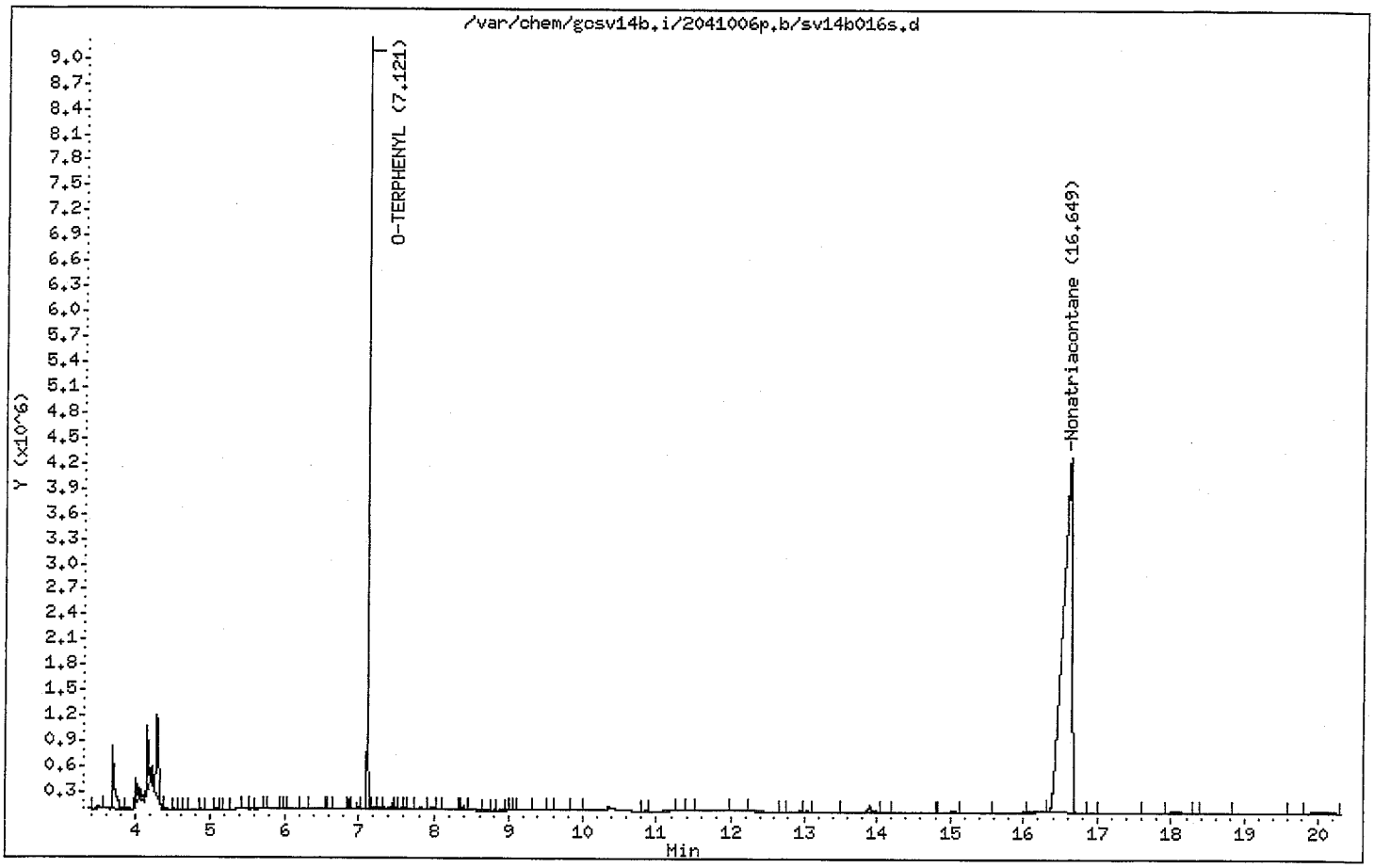
Sample Info: 20410010602

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

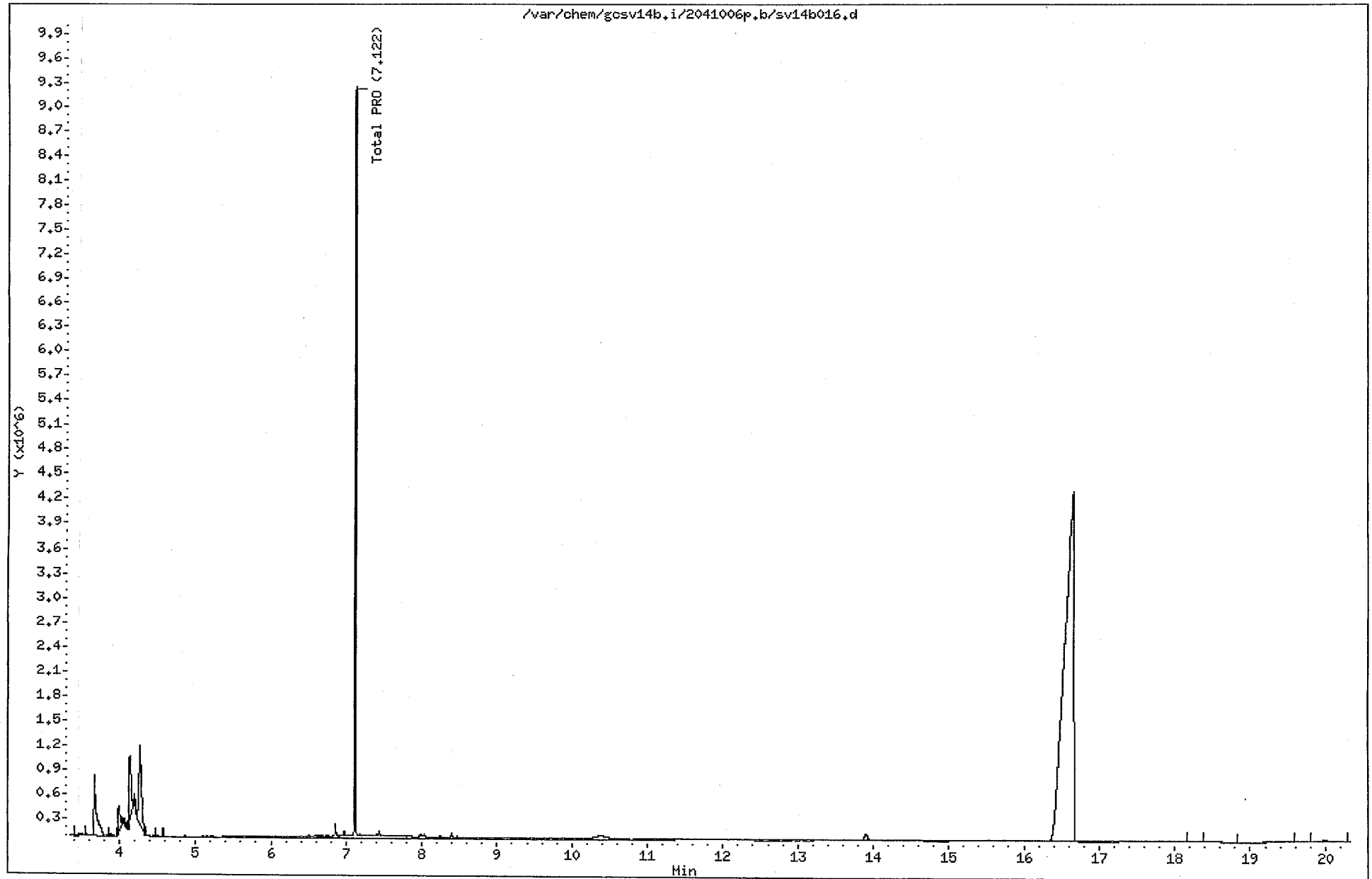
Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b016.d
Date : 06-OCT-2004 22:01
Client ID:
Sample Info: 20410010602
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i
Operator: dlb
Column diameter: 0.53

000332



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID 86-334-33S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010603

Date Collected 09/28/04 Time: 1035

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2231

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B017S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	100	U	40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b017.d
Lab Smp Id: 20410010603
Inj Date : 06-OCT-2004 22:31
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010603
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 67
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.121	7.125	-0.004	875227103	320.354	640.7083(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{875227103 - 836841380}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 28.1 \text{ ug/L}$$

dlb
10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b017s.d
Lab Smp Id: 20410010603
Inj Date : 06-OCT-2004 22:31
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010603
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 67
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.120	7.128	-0.008	137365894	44.4412	88.8823
$ 18 Nonatriacontane	16.631	16.660	-0.029	699475486	306.024	612.0482

83684/380

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b017s.d

Date : 06-OCT-2004 22:31

Client ID:

Instrument: gcsv14b.i

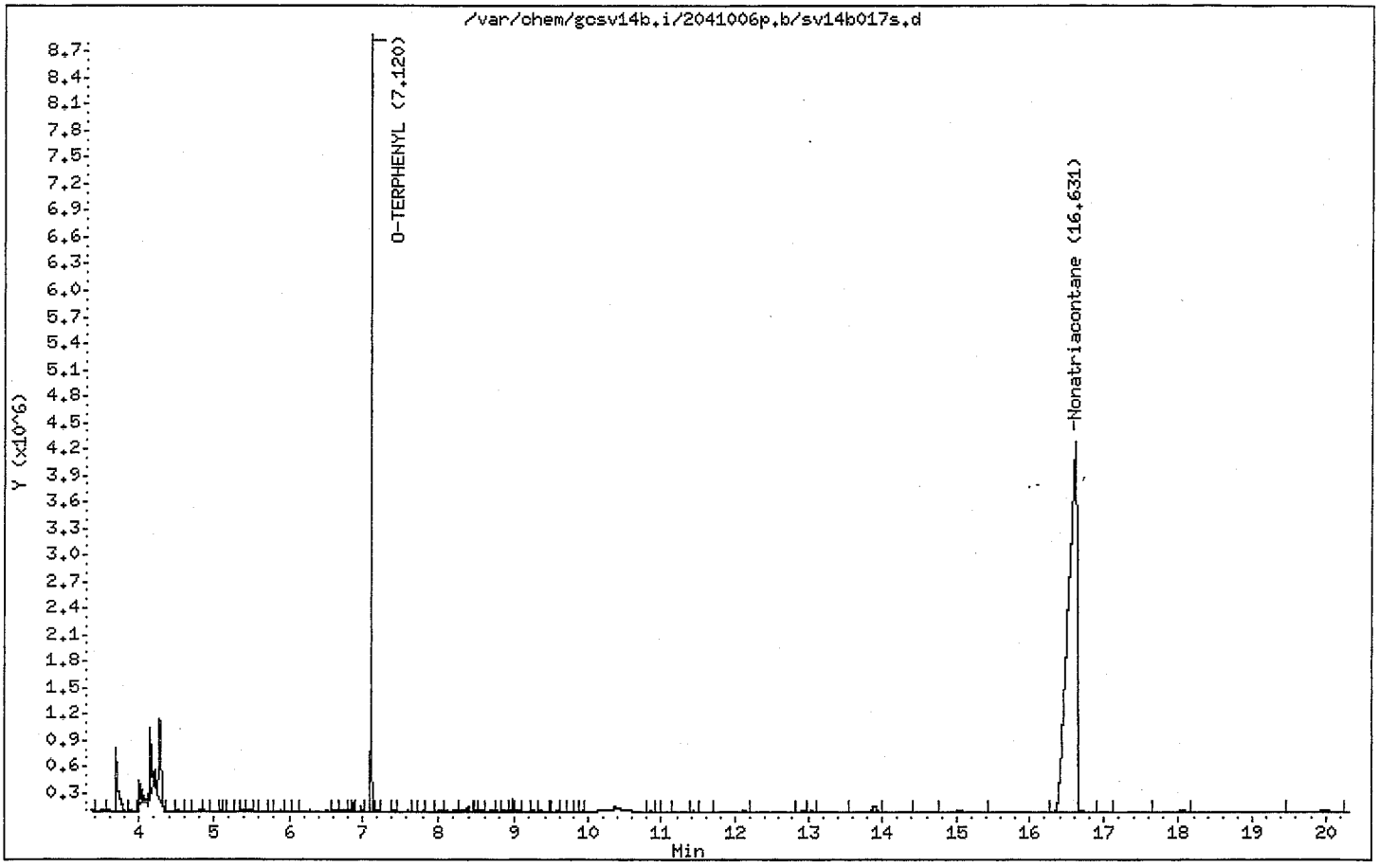
Sample Info: 20410010603

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b017.d

Date : 06-OCT-2004 22:31

Client ID:

Sample Info: 20410010603

Volume Injected (uL): 1.0

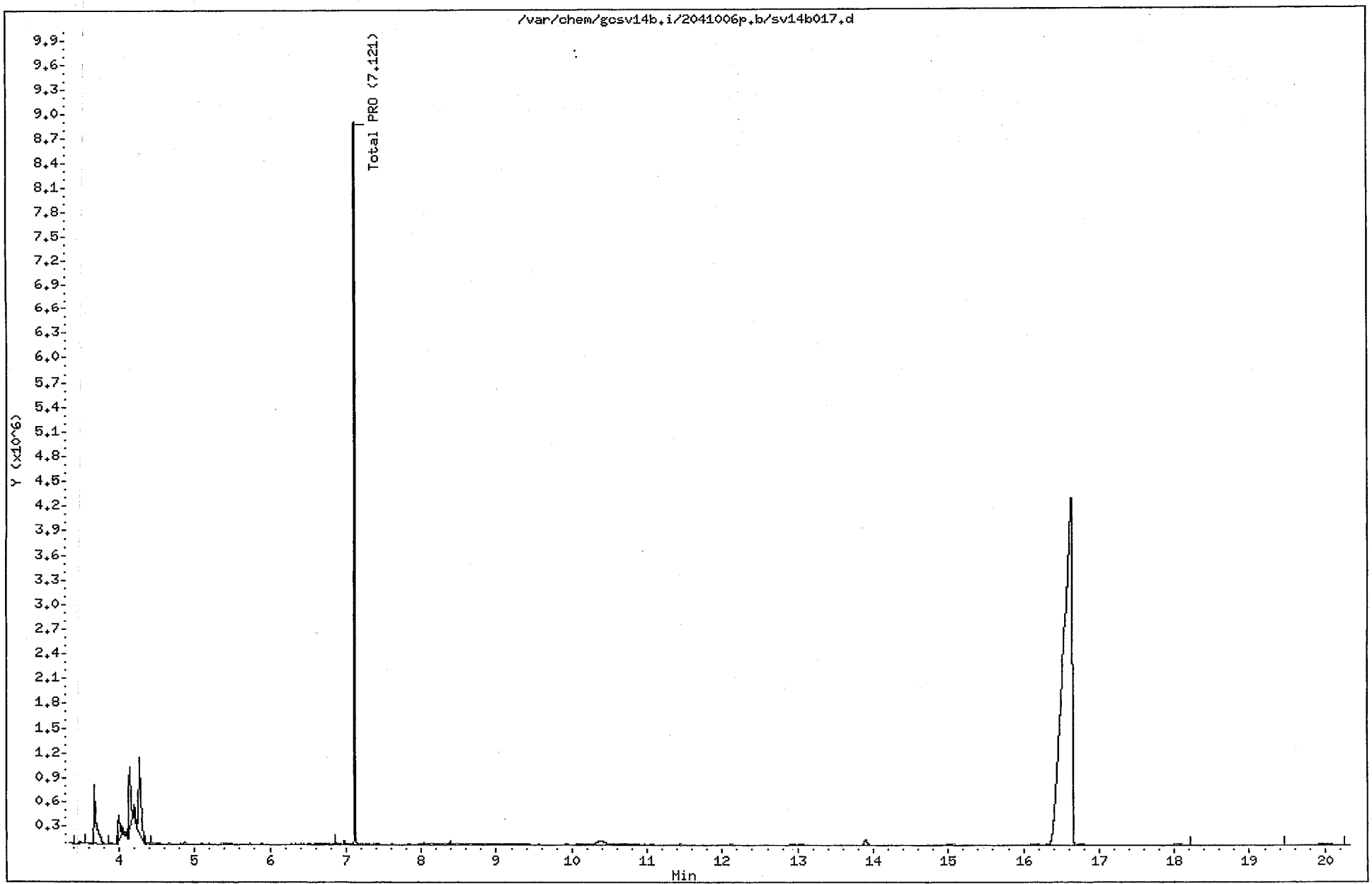
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb

Column diameter: 0.53

000337



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID 86-334-34S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010604

Date Collected 09/29/04 Time: 1320

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2300

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B018S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	8270		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b018.d
Lab Smp Id: 20410010604
Inj Date : 06-OCT-2004 23:00
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010604
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 68
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	FINAL (ug/L)
20 Total PRO	7.392	7.125	0.267	11944852410	4372.10	8744.2061(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{11944852410 - 641837083}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 8274 \text{ ug/L}$$

dlb
10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b018s.d
Lab Smp Id: 20410010604
Inj Date : 06-OCT-2004 23:00
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010604
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 68
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.127	7.128	-0.001	166781028	53.9577	107.9153
$ 18 Nonatriacontane	16.605	16.660	-0.055	475056055	207.839	415.6789

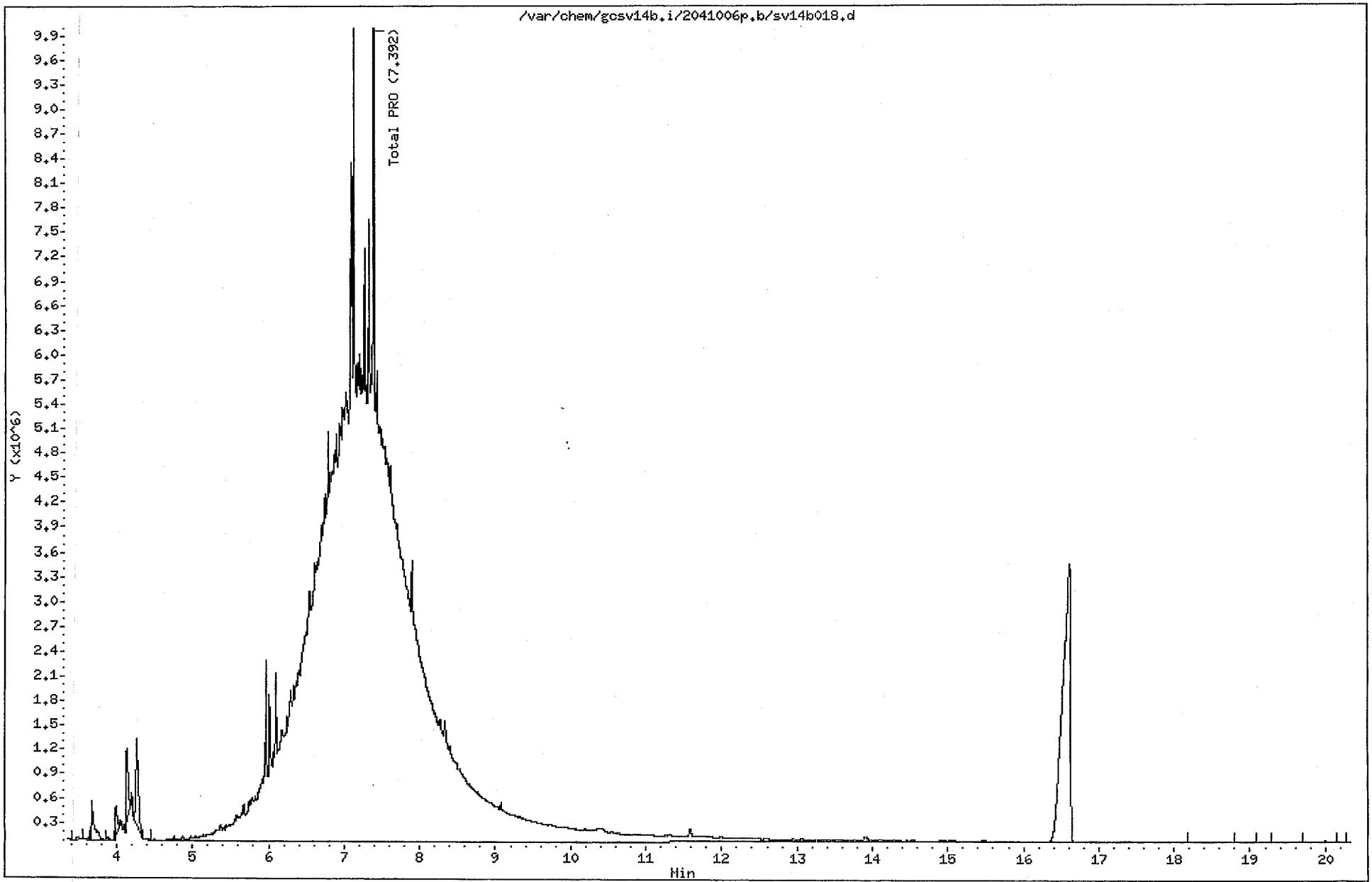
641837083

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b018.d
Date : 06-OCT-2004 23:00
Client ID:
Sample Info: 20410010604
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53

000341



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b018s.d

Date : 06-OCT-2004 23:00

Client ID:

Instrument: gcsv14b.i

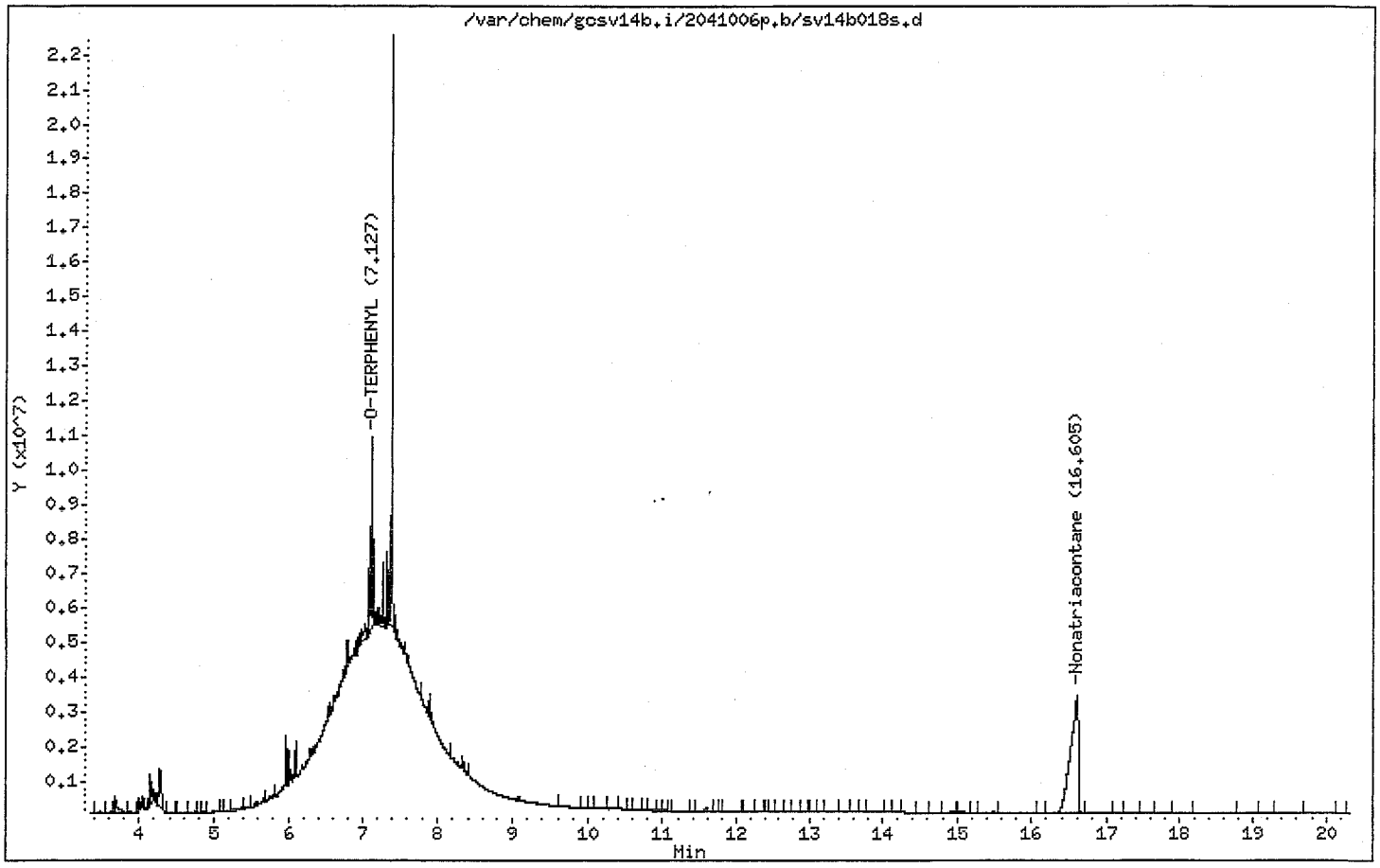
Sample Info: 20410010604

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-339-28S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010605

Date Collected 09/29/04 Time: 1520

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2329

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B019S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	866		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b019.d
Lab Smp Id: 20410010605
Inj Date : 06-OCT-2004 23:29
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010605
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 69
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.124	7.125	-0.001	1956800624	716.236	1432.4721(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{1956800624 - 774259674}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 866 \text{ ug/L}$$

dlb 10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b019s.d
Lab Smp Id: 20410010605
Inj Date : 06-OCT-2004 23:29
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010605
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 69
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	FINAL (ug/L)
$ 7 O-TERPHENYL	7.124	7.128	-0.004	142288639	46.0338	92.0676
$ 18 Nonatriacontane	16.643	16.660	-0.017	631971035	276.491	552.9811

774259674

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b019s.d

Date : 06-OCT-2004 23:29

Client ID:

Instrument: gcsv14b.i

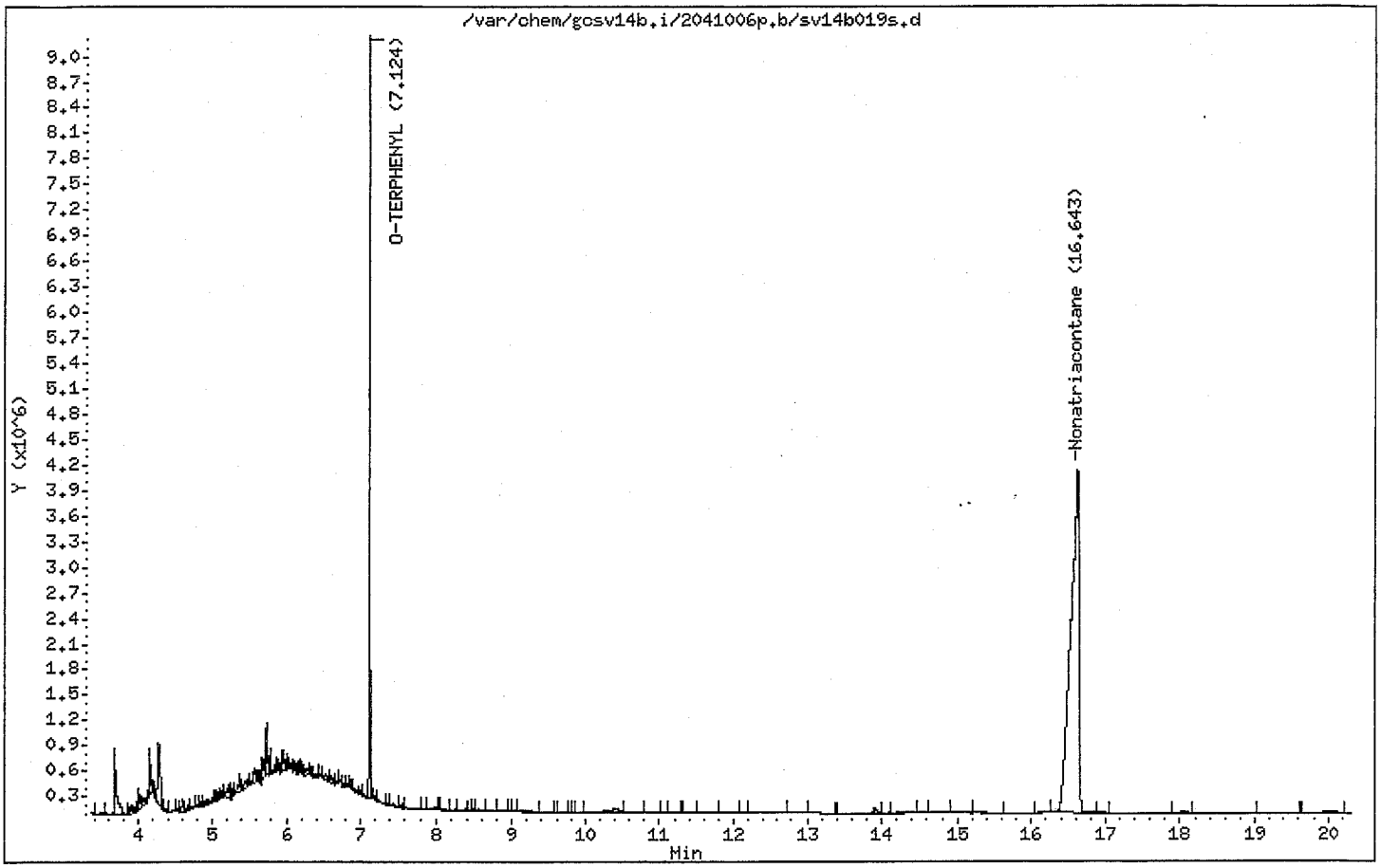
Sample Info: 20410010605

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

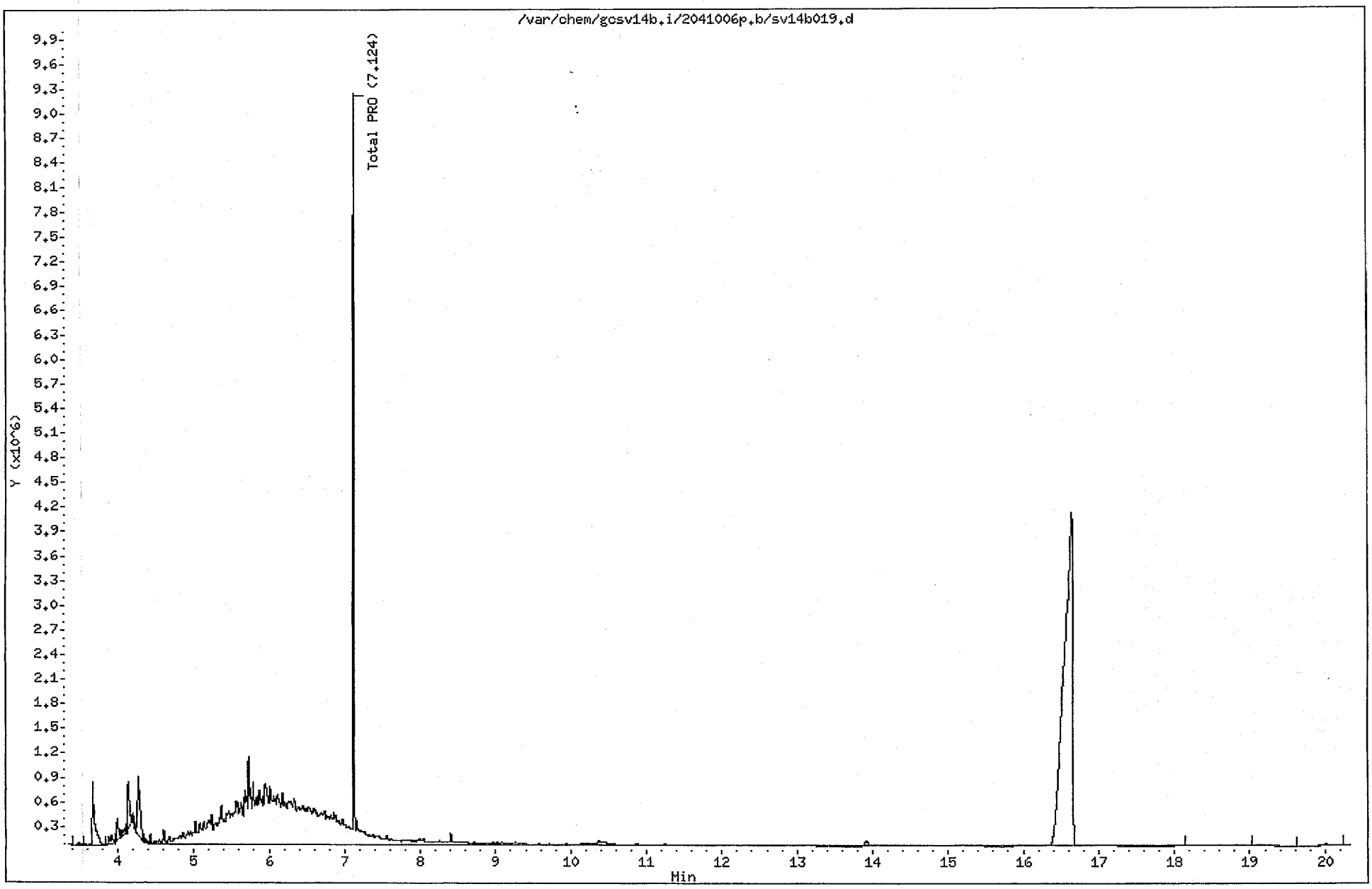
Column diameter: 0.53



000347

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b019.d
Date : 06-OCT-2004 23:29
Client ID:
Sample Info: 20410010605
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i
Operator: dlb
Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-339-29S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010606

Date Collected 09/29/04 Time: 1415

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2358

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B020S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	265		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b020.d
Lab Smp Id: 20410010606
Inj Date : 06-OCT-2004 23:58
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010606
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 70
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.123	7.125	-0.002	1125595707	411.995	823.9901(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{1125595707 - 763459306}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 265 \text{ ug/L}$$

dlb
10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b020s.d
Lab Smp Id: 20410010606
Inj Date : 06-OCT-2004 23:58
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010606
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 70
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.123	7.128	-0.005	153592494	49.6909	99.3817
$ 18 Nonatriacontane	16.637	16.660	-0.023	609866812	266.820	533.6397

763459306

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b020s.d

Date : 06-OCT-2004 23:58

Client ID:

Instrument: gcsv14b.i

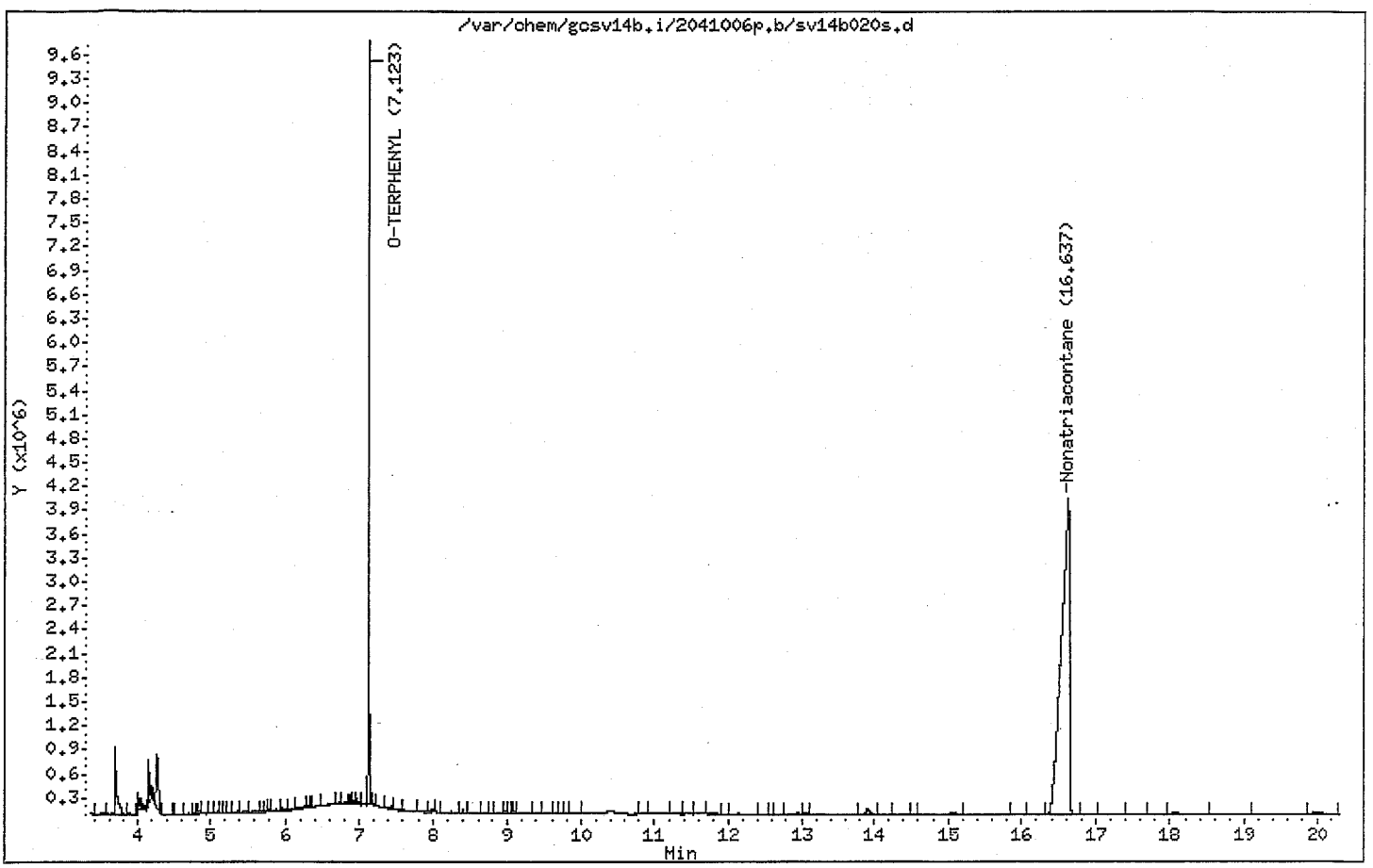
Sample Info: 20410010606

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

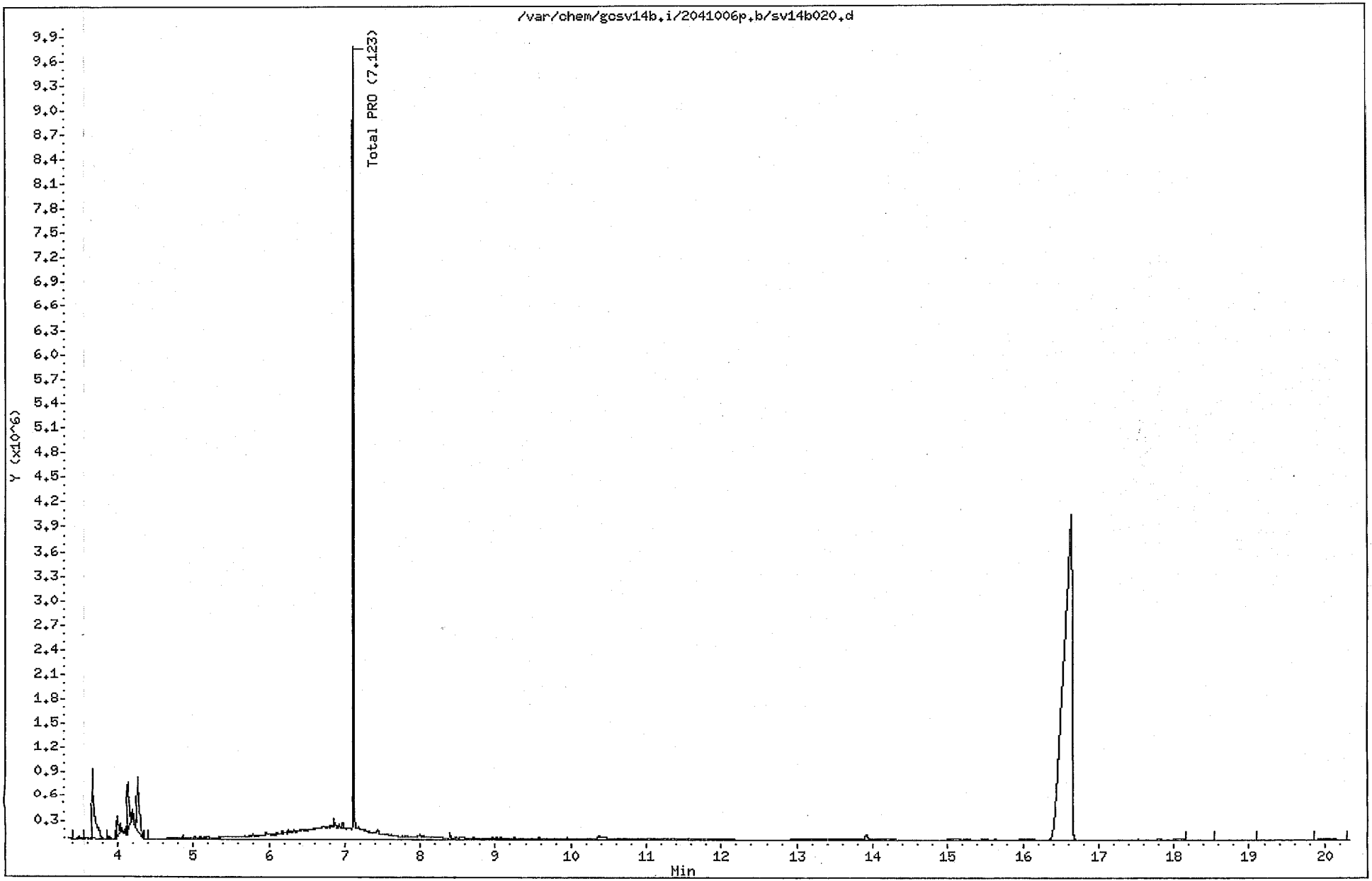
Column diameter: 0.53



000352

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b020.d
Date : 06-OCT-2004 23:58
Client ID:
Sample Info: 20410010606
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i
Operator: dlb
Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID 86-811-16SR-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010607

Date Collected 09/28/04 Time: 1610

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0027

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B021S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	67.5	J	40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b021.d
Lab Smp Id: 20410010607
Inj Date : 07-OCT-2004 00:27
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010607
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 71
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.120	7.125	-0.005	819889428	300.099	600.1984(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{819889428 - 727726510}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 67.5 \text{ ug/L}$$

dlb
10/07/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b021s.d
Lab Smp Id: 20410010607
Inj Date : 07-OCT-2004 00:27
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010607
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 71
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.120	7.128	-0.008	115867418	37.4859	74.9718(R)
$ 18 Nonatriacontane	16.624	16.660	-0.036	611859092	267.692	535.3830

727726510

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b021s.d

Date : 07-OCT-2004 00:27

Client ID:

Instrument: gcsv14b.i

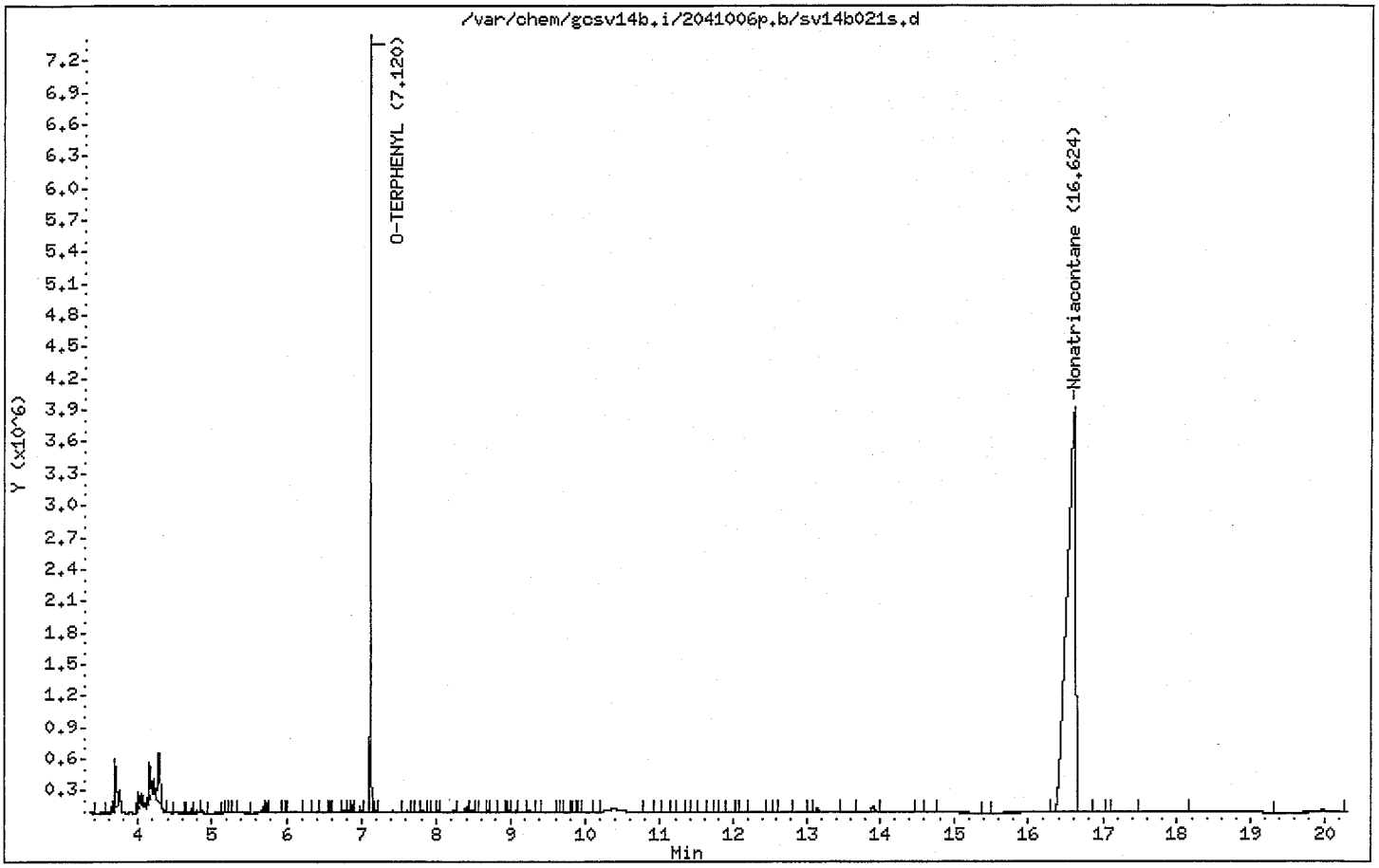
Sample Info: 20410010607

Volume Injected (uL): 1.0

Operator: dlb

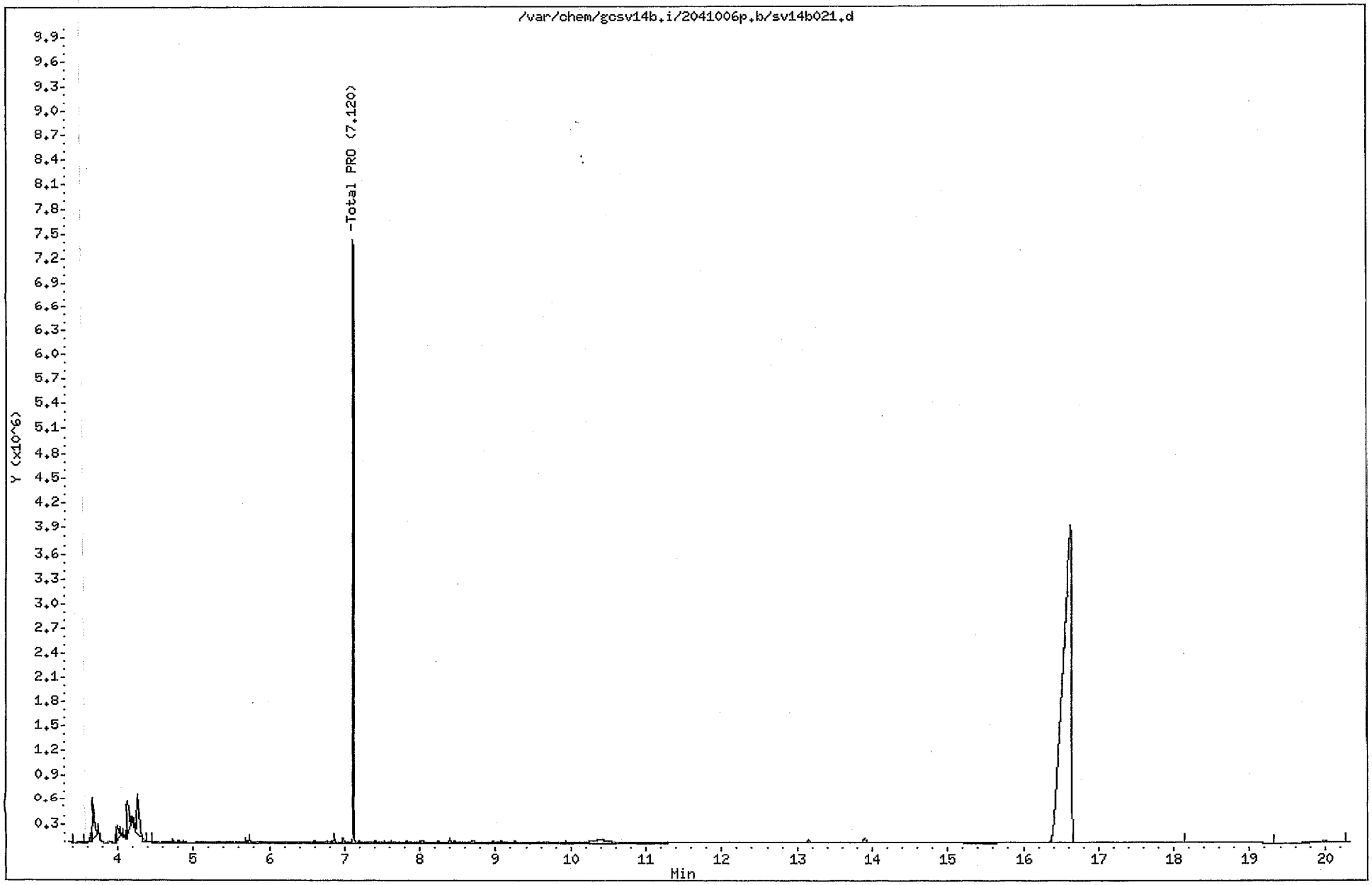
Column phase: DB-1

Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b021.d
Date : 07-OCT-2004 00:27
Client ID:
Sample Info: 20410010607
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i
Operator: dlb
Column diameter: 0.53



000357

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID 86-811-17S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010608

Date Collected 09/29/04 Time: 1125

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0125

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B023S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	204		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b023.d
Lab Smp Id: 20410010608
Inj Date : 07-OCT-2004 01:25
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010608
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 73
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	FINAL (ug/L)
20 Total PRO	7.121	7.125	-0.004	974155040	356.564	713.1283(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{974155040 - 696006070}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 204 \text{ ug/L}$$

dlb
10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b023s.d
Lab Smp Id: 20410010608
Inj Date : 07-OCT-2004 01:25
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010608
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 73
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.121	7.128	-0.007	144555301	46.7671	93.5342
$ 18 Nonatriacontane	16.609	16.660	-0.051	551450769	241.263	482.5251

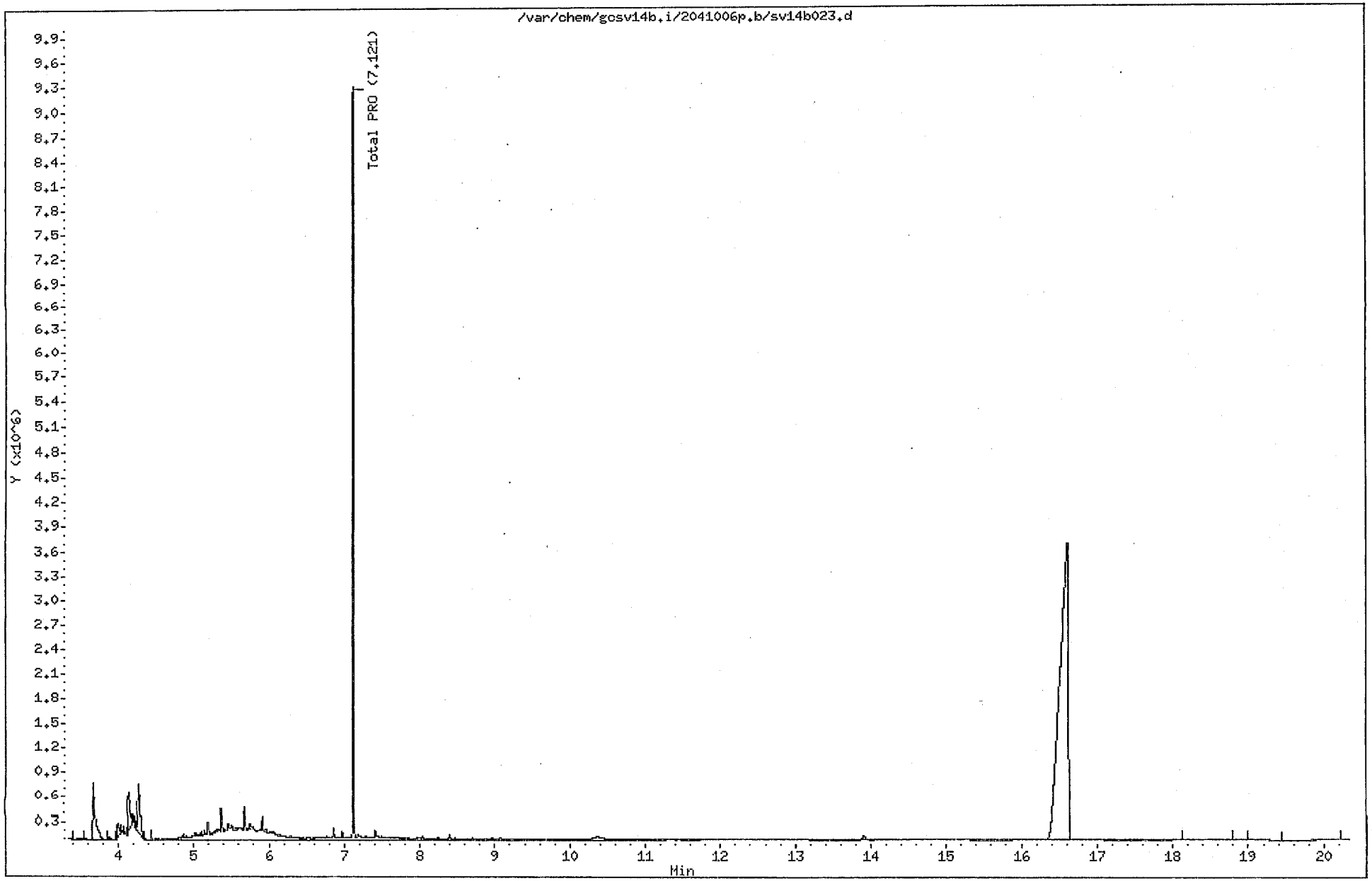
696006070

000361

Data File: /var/chem/gosv14b.i/2041006p.b/sv14b023.d
Date : 07-OCT-2004 01:25
Client ID:
Sample Info: 20410010608
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gosv14b.i

Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b023s.d

Date : 07-OCT-2004 01:25

Client ID:

Instrument: gcsv14b.i

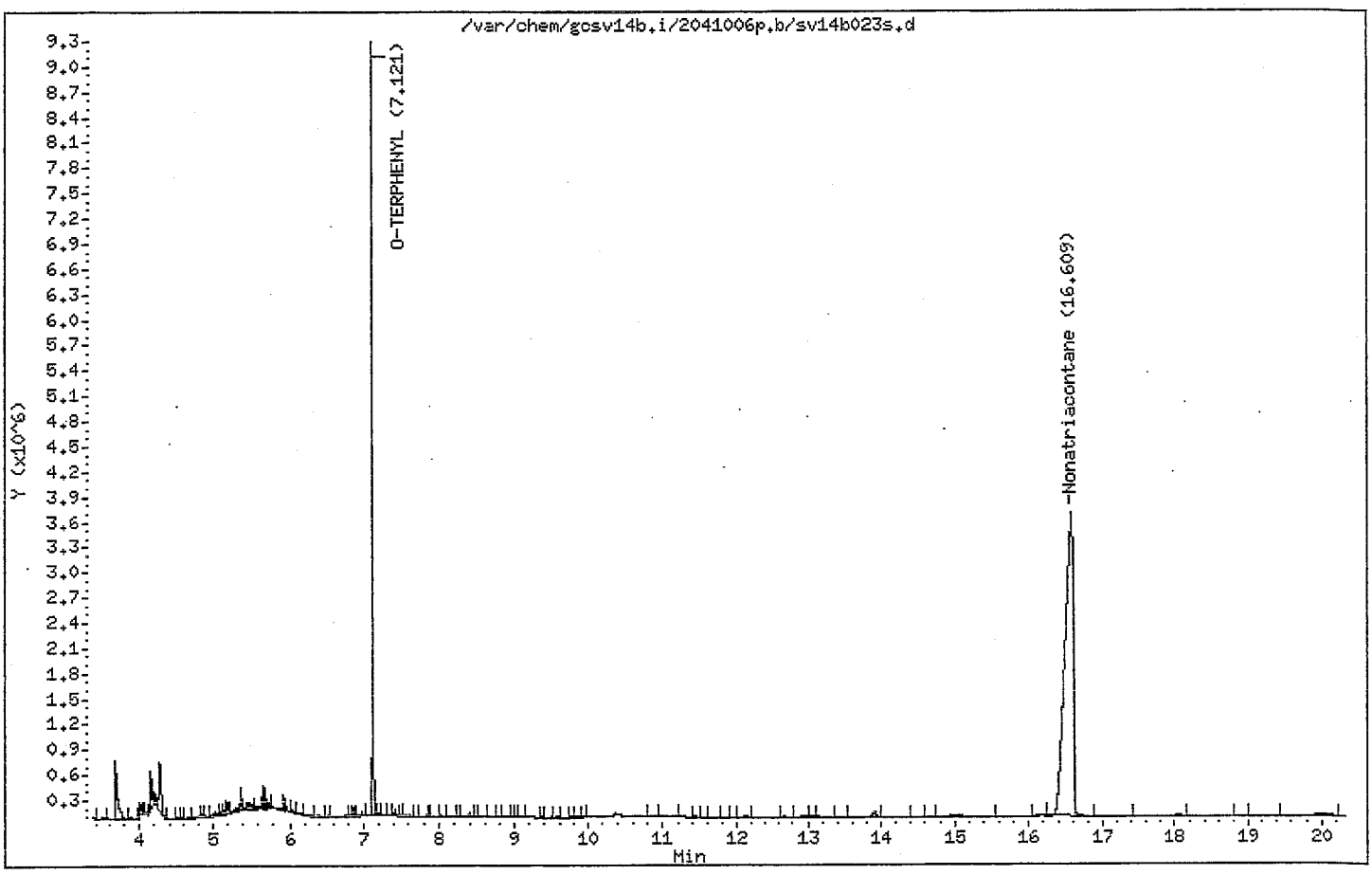
Sample Info: 20410010608

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-811-18S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010609

Date Collected 09/28/04 Time: 1515

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0154

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B024S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	1670		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b024.d
Lab Smp Id: 20410010609
Inj Date : 07-OCT-2004 01:54
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010609
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 74
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.122	7.125	-0.003	2952541745	1080.70	2161.4024(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{2952541745 - 673545212}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 1668 \text{ ug/L}$$

dlb
10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b024s.d
Lab Smp Id: 20410010609
Inj Date : 07-OCT-2004 01:54
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010609
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 74
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.121	7.128	-0.007	140851714	45.5689	91.1378
$ 18 Nonatriacontane	16.602	16.660	-0.058	532693498	233.056	466.1123

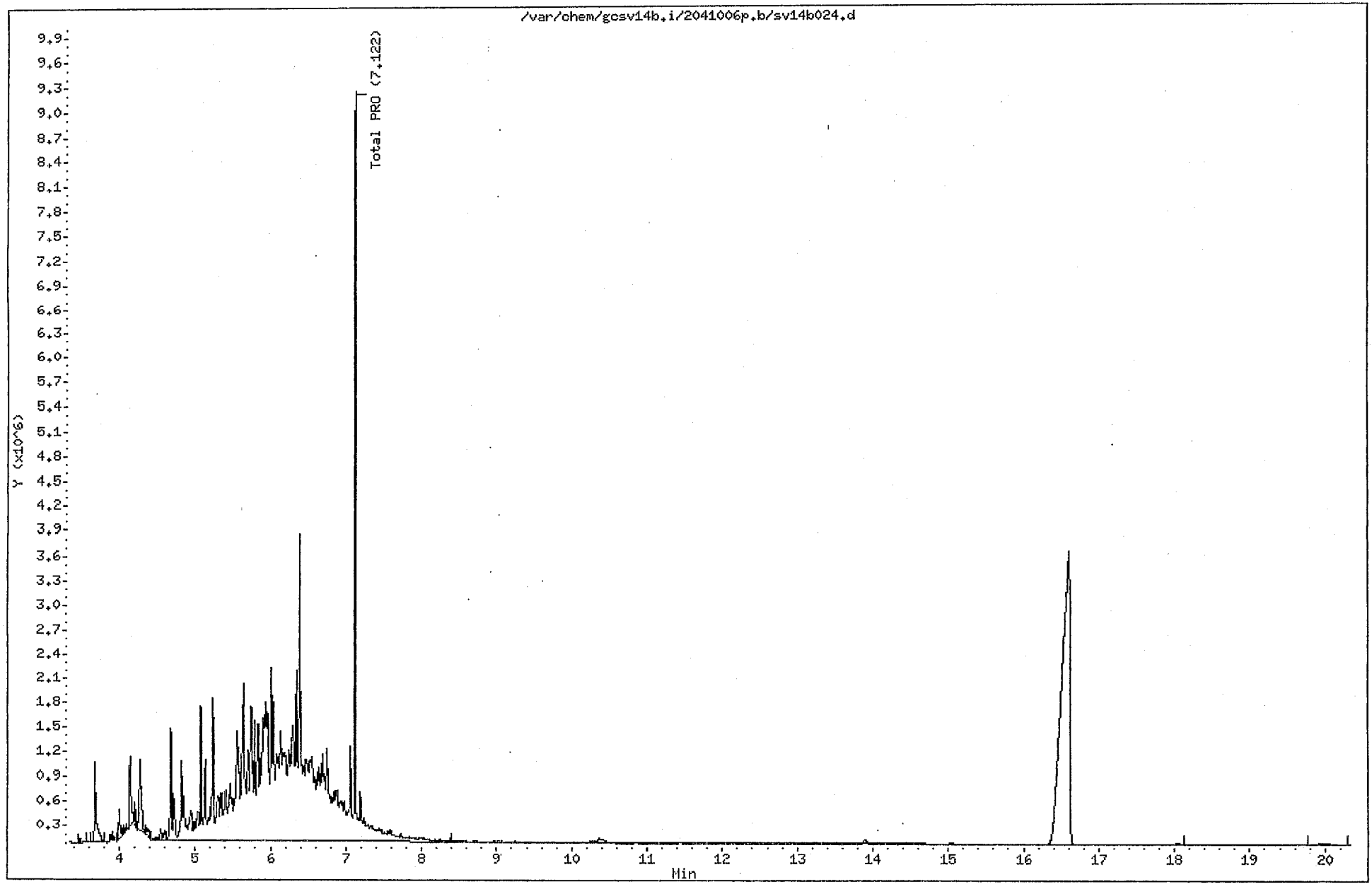
673545212

000366

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b024.d
Date : 07-OCT-2004 01:54
Client ID:
Sample Info: 20410010609
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b024s.d

Date : 07-OCT-2004 01:54

Client ID:

Instrument: gcsv14b.i

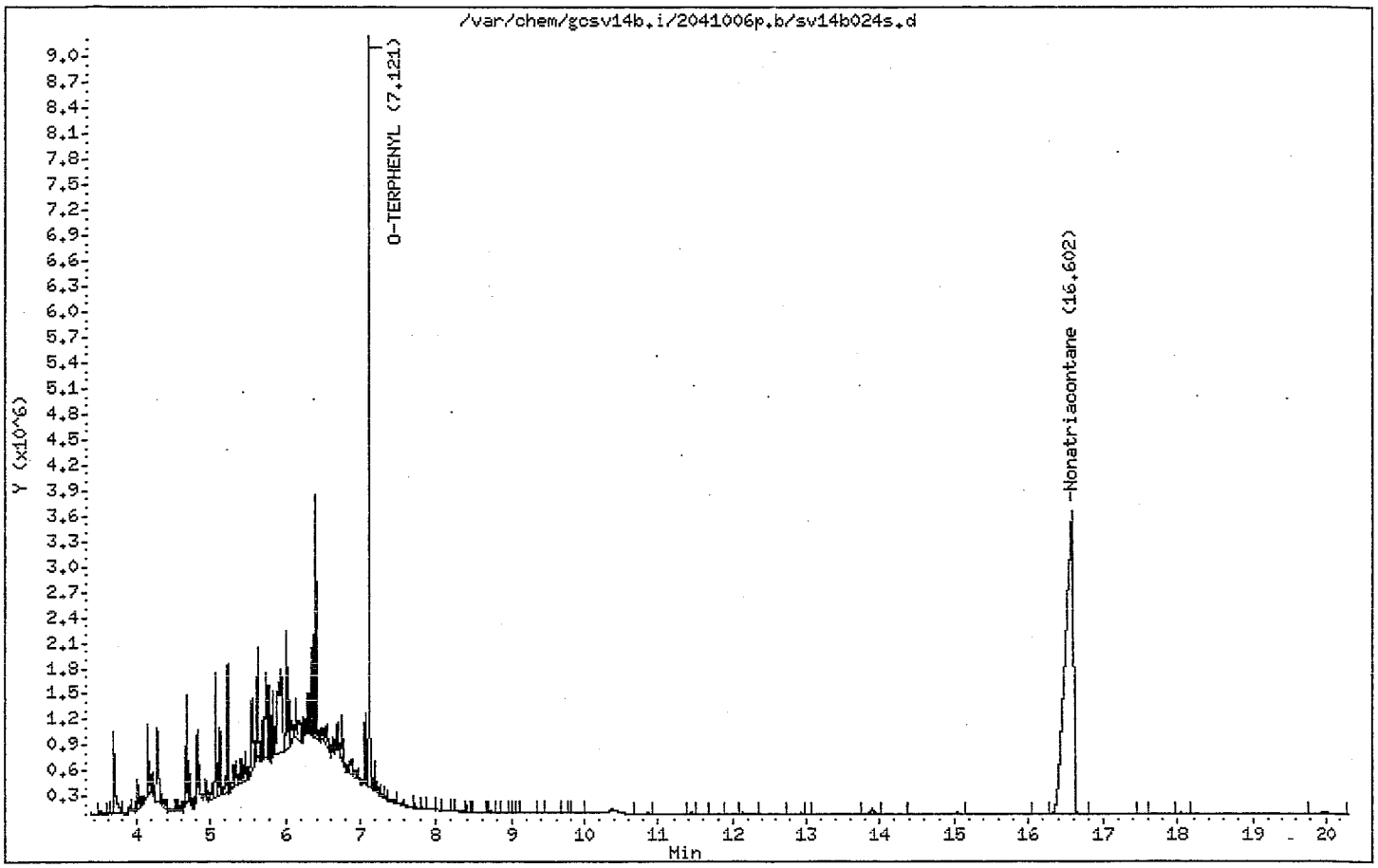
Sample Info: 20410010609

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID 86-NG-24S-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010610

Date Collected 09/28/04 Time: 1320

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0223

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B025S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	100	U	40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b025.d
Lab Smp Id: 20410010610
Inj Date : 07-OCT-2004 02:23
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010610
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 75
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.120	7.125	-0.005	663537160	242.871	485.7410(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{663537160 - 620975958}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 31.2 \text{ ug/L}$$

dlb
10/7/4

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b025s.d
Lab Smp Id: 20410010610
Inj Date : 07-OCT-2004 02:23
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010610
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 75
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.120	7.128	-0.008	148030880	47.8916	95.7831
$ 18 Nonatriacontane	16.584	16.660	-0.076	472945078	206.916	413.8318

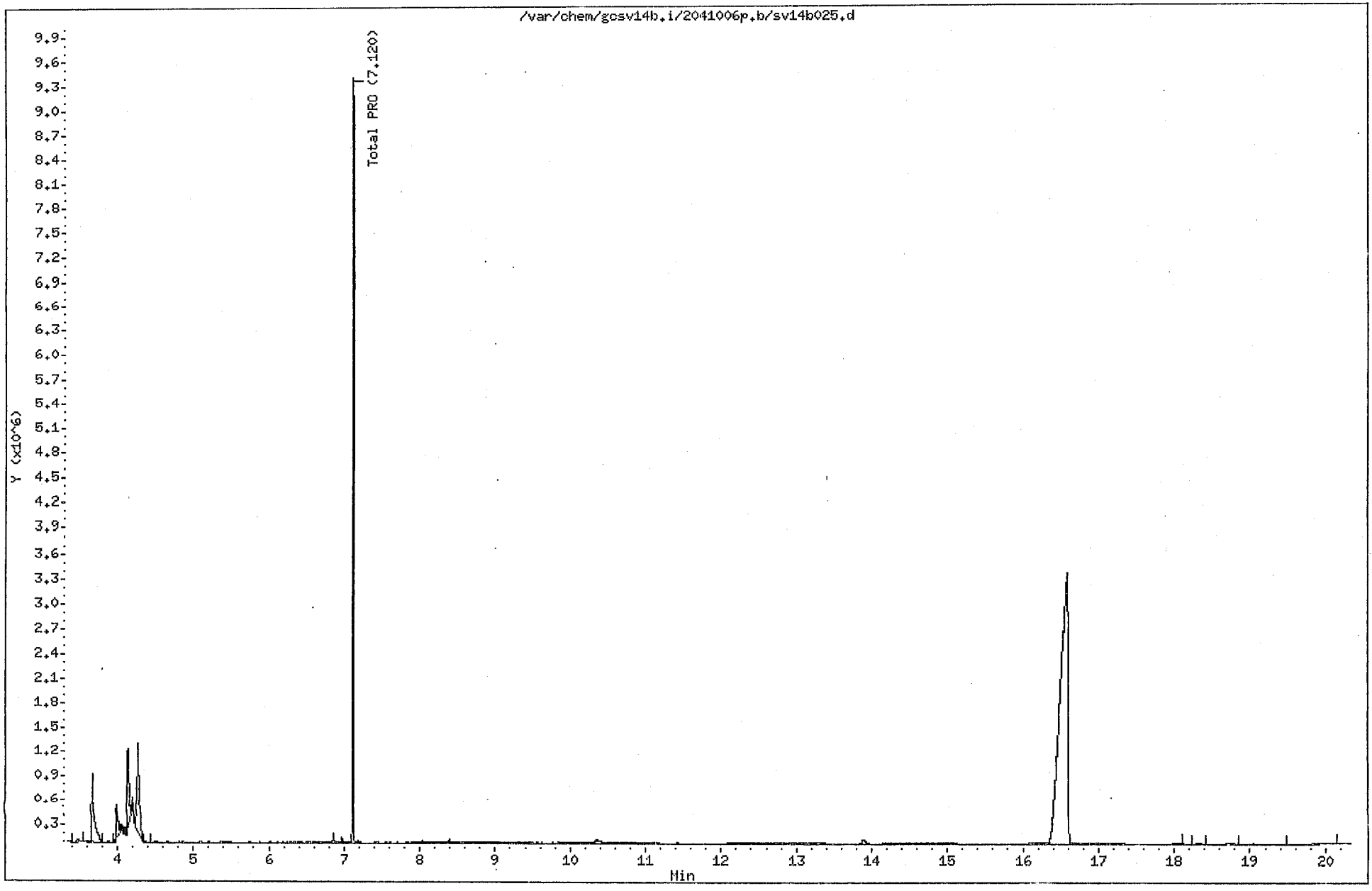
620975958

000374

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b025.d
Date : 07-OCT-2004 02:23
Client ID:
Sample Info: 20410010610
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gosv14b.i/2041006p.b/sv14b025s.d

Date : 07-OCT-2004 02:23

Client ID:

Instrument: gosv14b.i

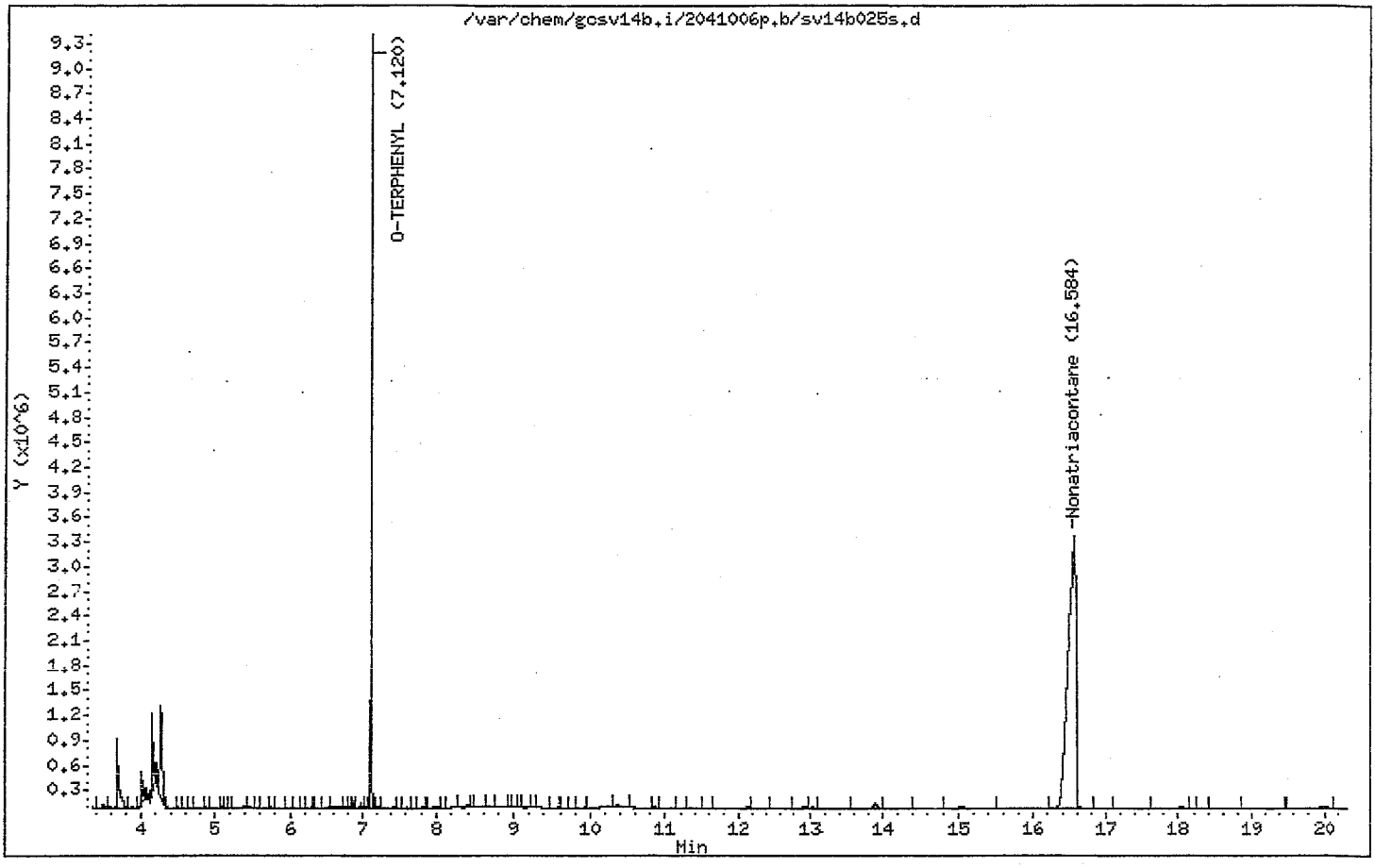
Sample Info: 20410010610

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-JETC-MS-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010611

Date Collected 09/28/04 Time: 1320

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0252

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B026S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	1450		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b026.d
Lab Smp Id: 20410010611
Inj Date : 07-OCT-2004 02:52
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010611
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 76
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.122	7.125	-0.003	2587872907	947.224	1894.4473(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{2587872907 - 613018516}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 1446 \text{ ug/L}$$

85% Rec.

dlb 10/7

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b026s.d
Lab Smp Id: 20410010611
Inj Date : 07-OCT-2004 02:52
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010611
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 76
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.121	7.128	-0.007	142563684	46.1228	92.2455
$ 18 Nonatriacontane	16.594	16.660	-0.066	470454832	205.826	411.6528

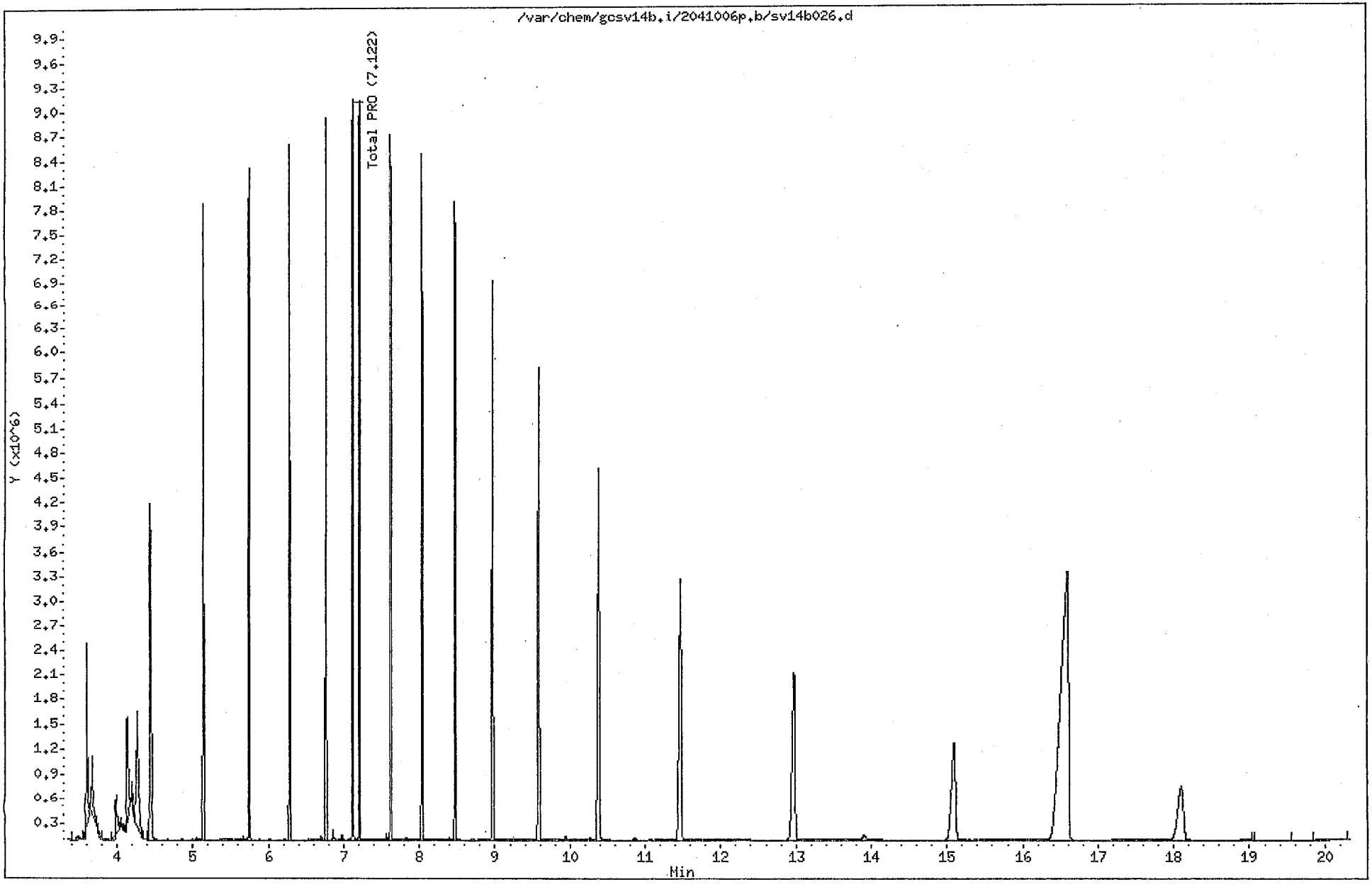
613018516

000376

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b026.d
Date : 07-OCT-2004 02:52
Client ID:
Sample Info: 20410010611
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b026s.d

Date : 07-OCT-2004 02:52

Client ID:

Instrument: gcsv14b.i

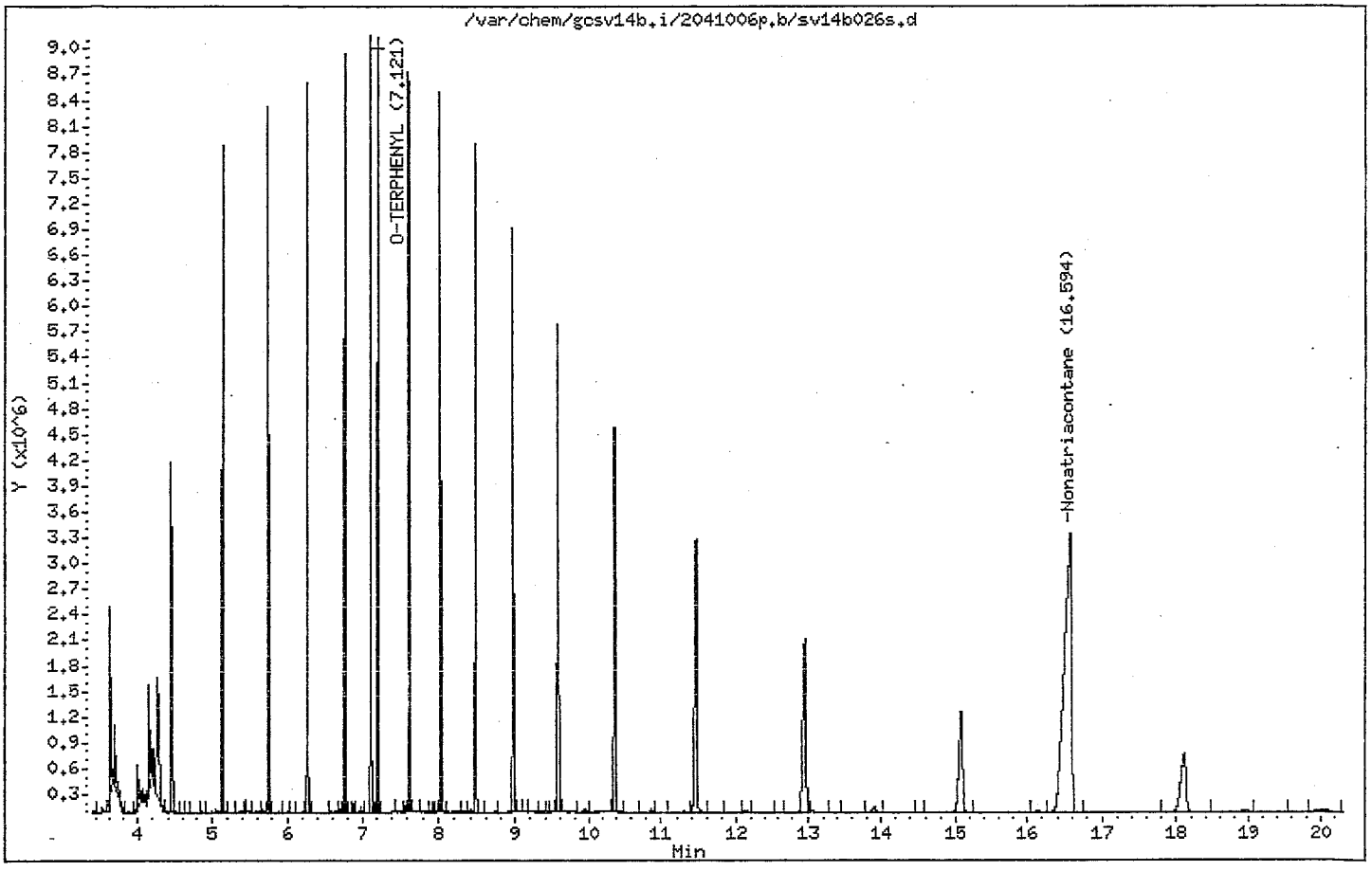
Sample Info: 20410010611

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID 86-JETC-MSD-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010612

Date Collected 09/28/04 Time: 1320

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0321

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B027S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	1580		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b027.d
Lab Smp Id: 20410010612
Inj Date : 07-OCT-2004 03:21
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010612
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.212	7.125	0.087	2712098158	992.693	1985.3862(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{2712098158 - 558867117}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 1576 \text{ ug/L}$$

93% Rec.

000379 10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b027s.d
Lab Smp Id: 20410010612
Inj Date : 07-OCT-2004 03:21
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010612
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.122	7.128	-0.006	145845582	47.1846	94.3691
$ 18 Nonatriacontane	16.585	16.660	-0.075	413021535	180.699	361.3981

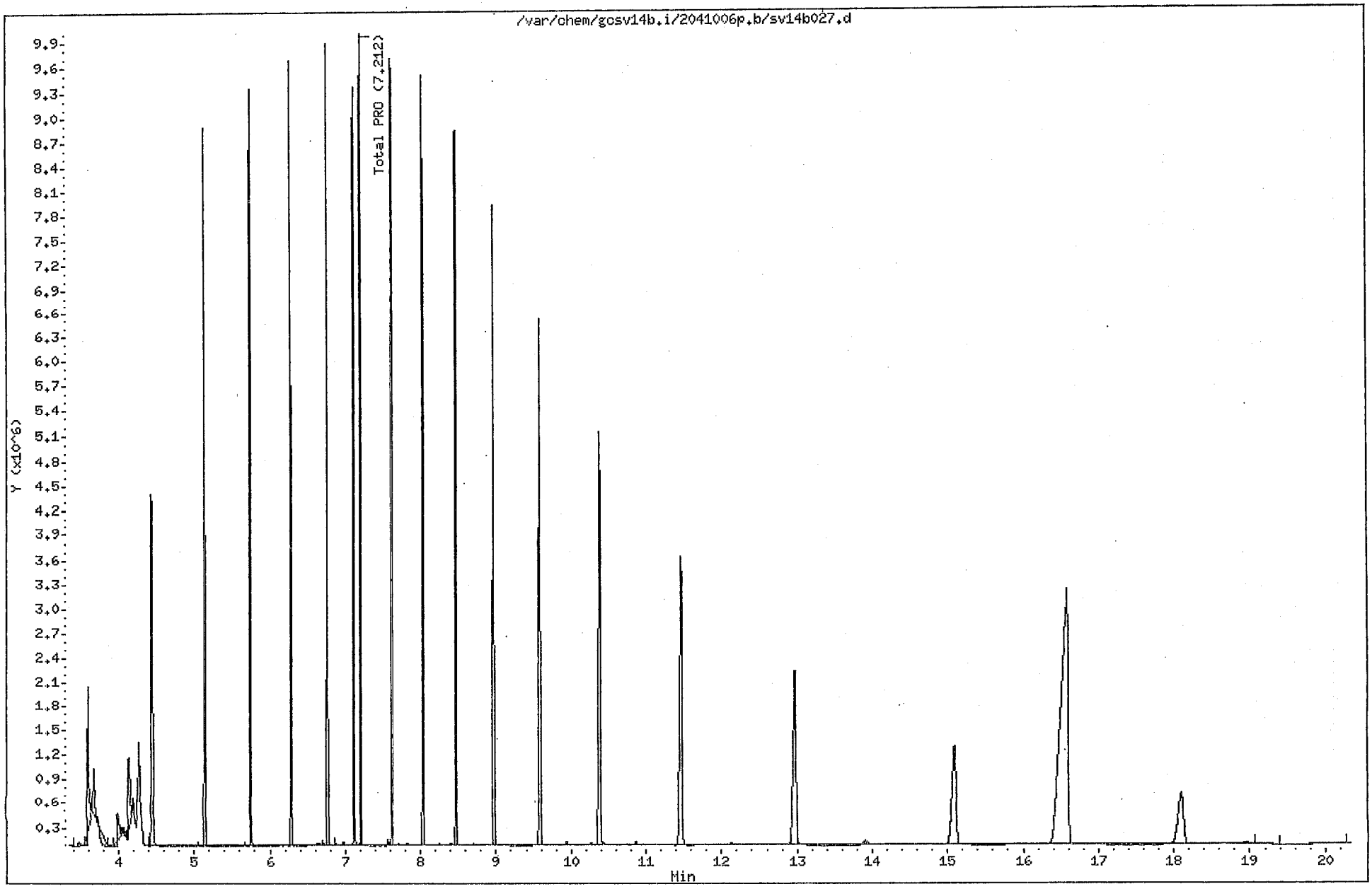
558867117

000381

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b027.d
Date : 07-OCT-2004 03:21
Client ID:
Sample Info: 20410010612
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gosv14b.i/2041006p.b/sv14b027s.d

Date : 07-OCT-2004 03:21

Client ID:

Instrument: gosv14b.i

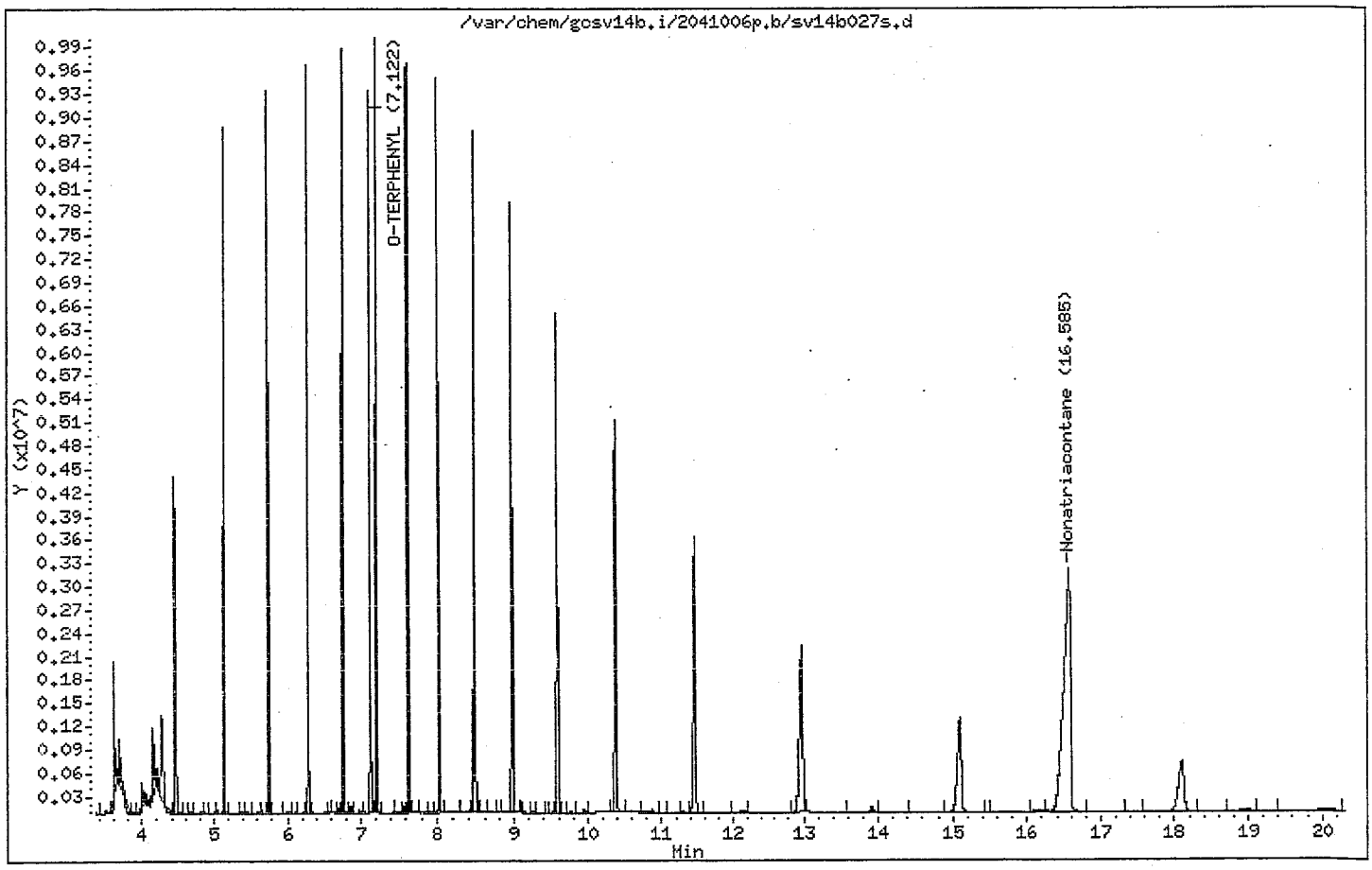
Sample Info: 20410010612

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

CONCENTRATION UNITS: ug/L

Sample ID 86-JETC-DUP-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010613

Date Collected Time:

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0350

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B028S

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	1530		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b028.d
Lab Smp Id: 20410010613
Inj Date : 07-OCT-2004 03:50
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010613
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 78
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	FINAL (ug/L)
20 Total PRO	7.122	7.125	-0.003	2708336503	991.316	1982.6325(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{2708336503 - 623933297}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 1526 \text{ ug/L}$$

dlb
10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b028s.d
Lab Smp Id: 20410010613
Inj Date : 07-OCT-2004 03:50
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010613
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 78
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS- ON-COLUMN (UG/ML)	FINAL (ug/L)
$ 7 O-TERPHENYL	7.122	7.128	-0.006	150269419	48.6158	97.2315
$ 18 Nonatriacontane	16.590	16.660	-0.070	473663878	207.230	414.4607

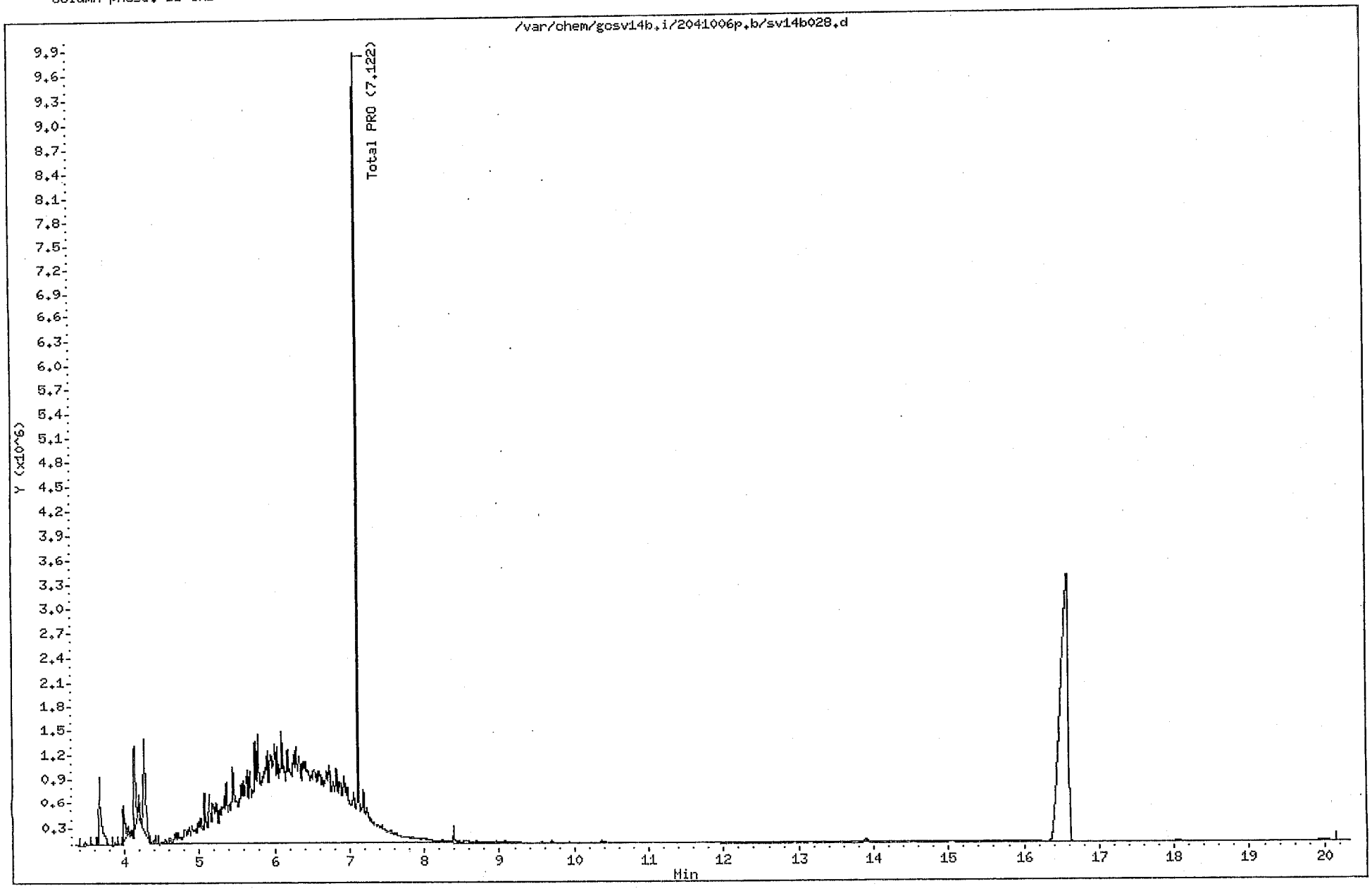
623933297

000386

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b028.d
Date : 07-OCT-2004 03:50
Client ID:
Sample Info: 20410010613
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b028s.d

Date : 07-OCT-2004 03:50

Client ID:

Instrument: gcsv14b.i

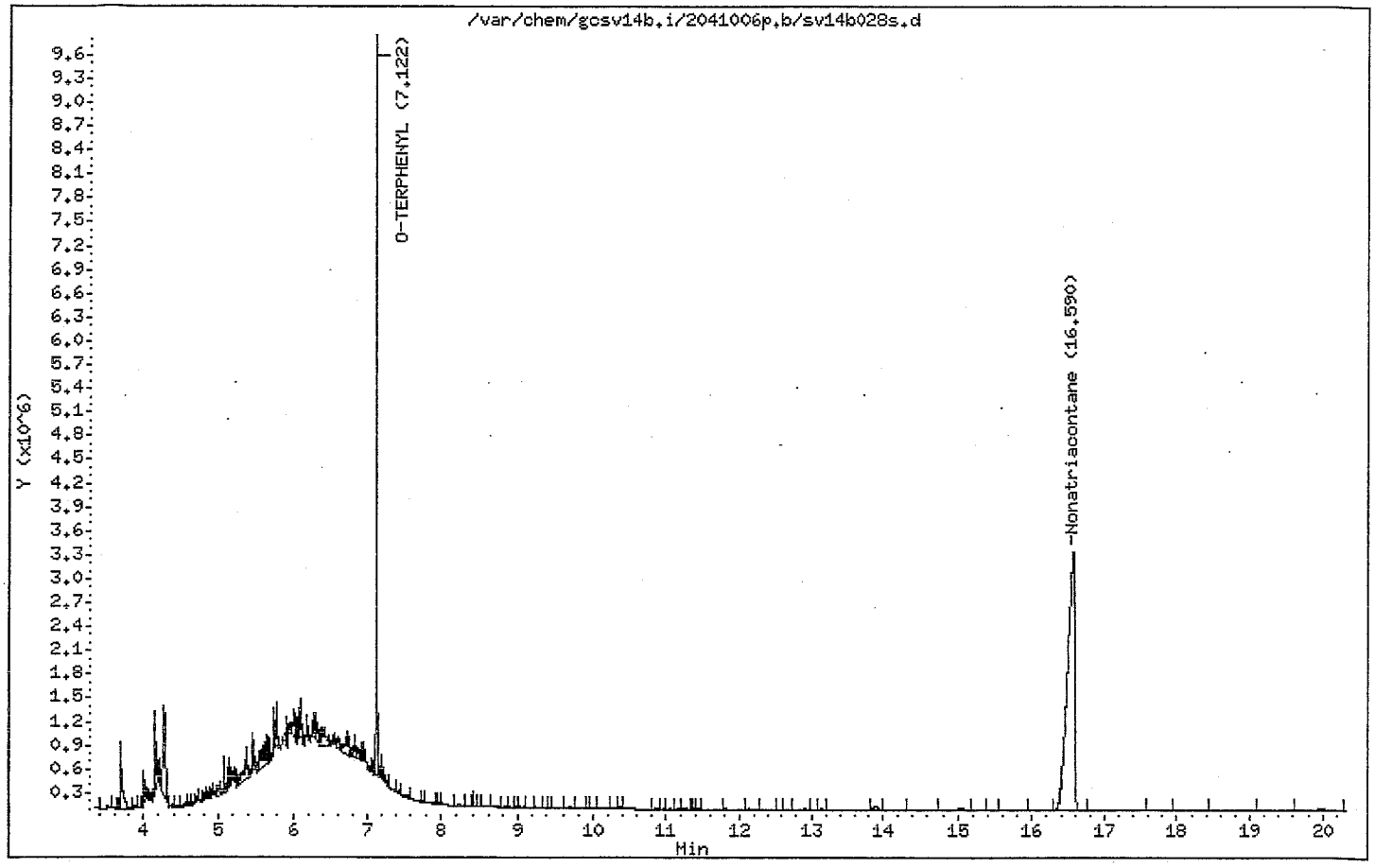
Sample Info: 20410010613

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID 86-JETC-EB-Q3-04

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 20410010614

Date Collected 09/29/04 Time: 1545

Date Received: 10/01/04

Date Extracted: 10/04/04

Date Analyzed: 10/07/04 Time: 0419

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B029S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	100	U	40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b029.d
Lab Smp Id: 20410010614
Inj Date : 07-OCT-2004 04:19
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010614
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 79
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.123	7.125	-0.002	674144350	246.753	493.5060(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{674144350 - 646000134}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 20.6 \text{ ug/L}$$

dlb 10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b029s.d
Lab Smp Id: 20410010614
Inj Date : 07-OCT-2004 04:19
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 20410010614
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 79
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.122	7.128	-0.006	161873324	52.3699	104.7398
$ 18 Nonatriacontane	16.603	16.660	-0.057	484126810	211.808	423.6159

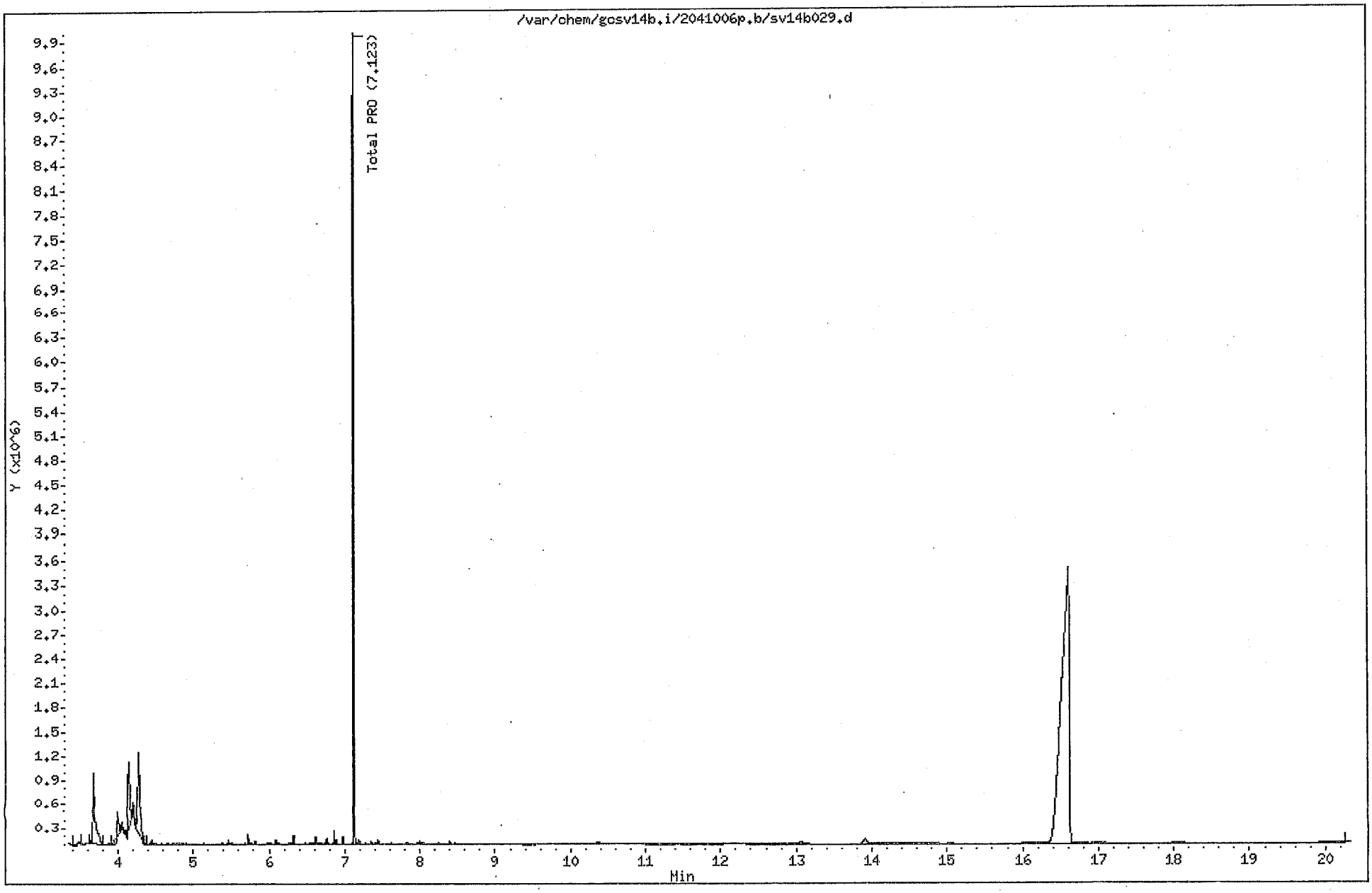
646000134

000391

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b029.d
Date : 07-OCT-2004 04:19
Client ID:
Sample Info: 20410010614
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b029s.d

Date : 07-OCT-2004 04:19

Client ID:

Instrument: gcsv14b.i

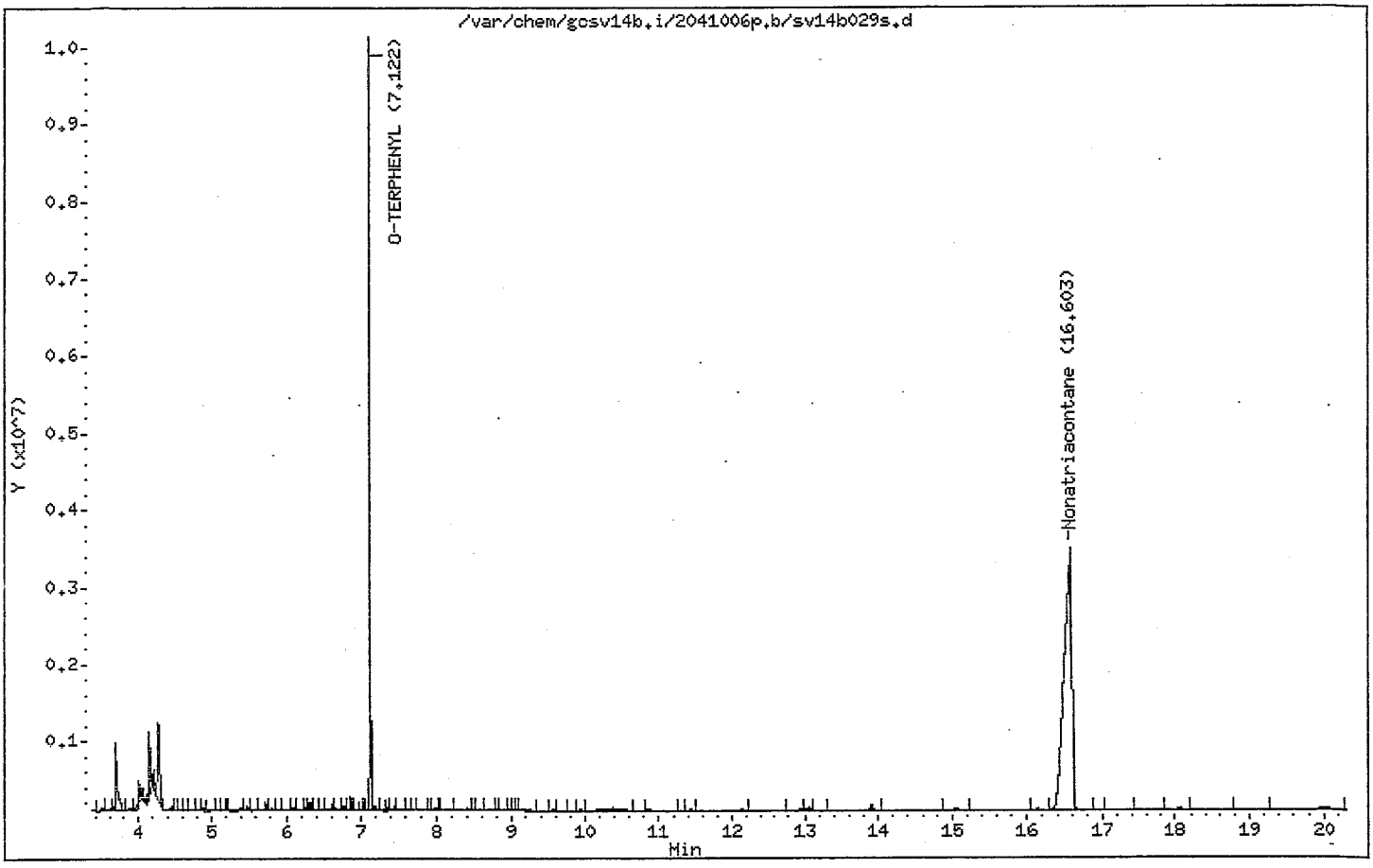
Sample Info: 20410010614

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-OCT-2004 16:09
End Cal Date : 06-OCT-2004 18:37
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Cal Date : 11-Oct-2004 11:58 dlb
Curve Type : Average

Calibration File Names:
Level 1: /var/chem/gcsv14b.i/2041006p.b/sv14b004s.d
Level 2: /var/chem/gcsv14b.i/2041006p.b/sv14b005s.d
Level 3: /var/chem/gcsv14b.i/2041006p.b/sv14b006s.d
Level 4: /var/chem/gcsv14b.i/2041006p.b/sv14b007s.d
Level 5: /var/chem/gcsv14b.i/2041006p.b/sv14b008s.d
Level 6: /var/chem/gcsv14b.i/2041006p.b/sv14b009s.d

Compound	6.000 Level 1	50.000 Level 2	150.000 Level 3	250.000 Level 4	350.000 Level 5	500.000 Level 6	___ RRF	% RSD	
20 Total PRO	3218334	2688422	2600503	2568074	2584973	+++++	2732061	10.094	
$ 7 O-TERPHENYL	2937070	3074843	3163752	3145822	3133309	+++++	3090959	2.985	
$ 18 Nonatriacontane	2556785	2660725	2543867	2129445	1537615	+++++	2285687	20.343	<-

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-OCT-2004 16:09
End Cal Date : 06-OCT-2004 18:37
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Cal Date : 11-Oct-2004 11:58 dlb
Curve Type : Average

```
|Average %RSD Results.                                |
|=====================================================|
|Calculated Average %RSD = 11.6638994                 |
|Maximun Average %RSD    =         20                |
|* Passed Average %RSD Test.                          |
|_____________________________________________________|
```

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b004.d
Lab Smp Id: 1201 6ppm
Inj Date : 06-OCT-2004 16:09
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1201 6ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 06-Oct-2004 17:41 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 16:09 Cal File: sv14b004.d
Als bottle: 54 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
20 Total PRO	7.148	7.130	0.018	1242159039	102.000	196.6663(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{1242159039 - 913889003}{102} = \frac{328270036}{102} = 3218334$$

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b004s.d
Lab Smp Id: 1201 6ppm
Inj Date : 06-OCT-2004 16:09
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1201 6ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 06-Oct-2004 17:43 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 16:09 Cal File: sv14b004s.d
Als bottle: 54 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
$ 7 O-TERPHENYL	7.147	7.129	0.018	146853512	50.0000	48.8541
$ 18 Nonatriacontane	16.816	16.683	0.133	767035491	300.000	294.0236

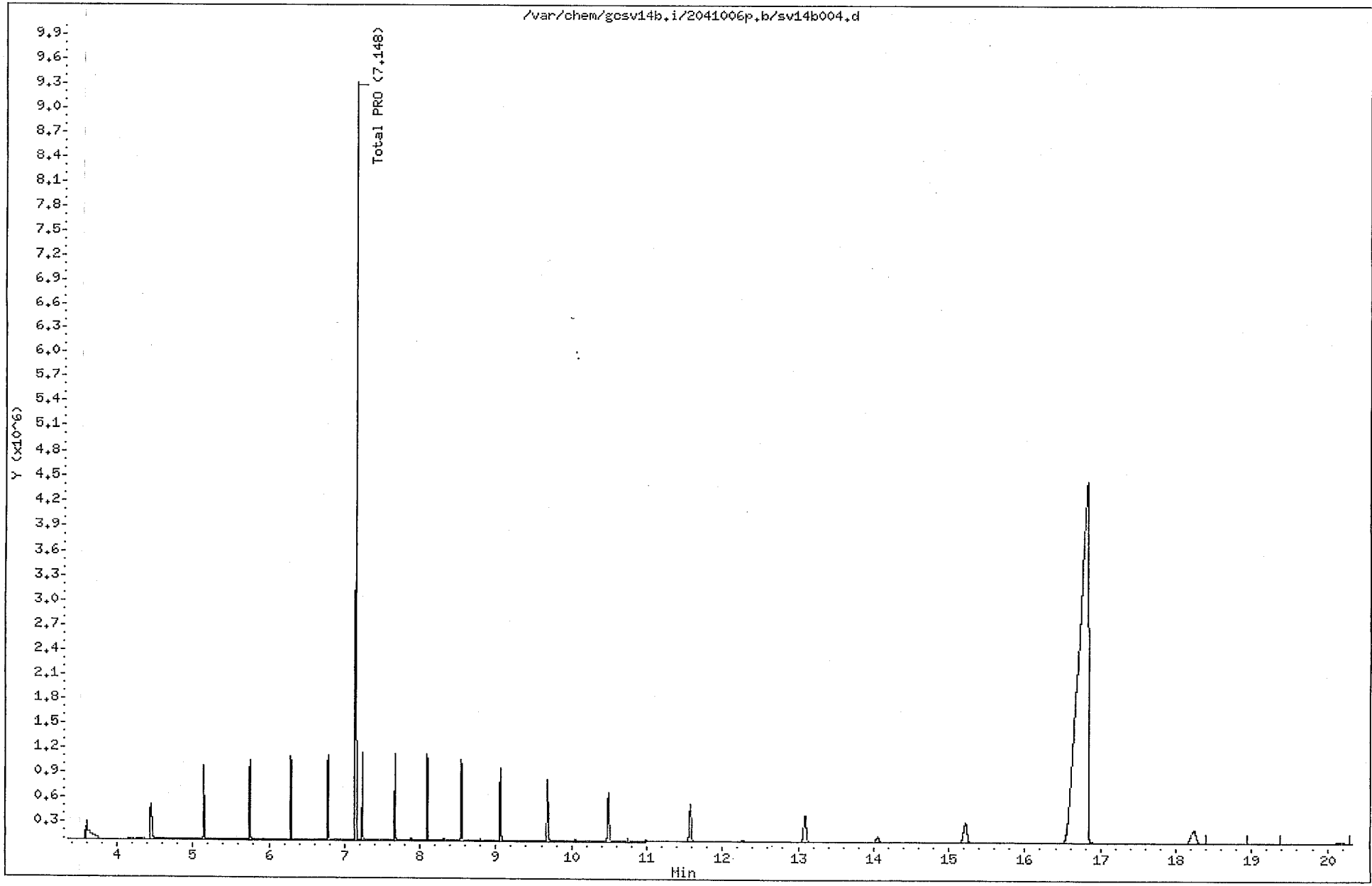
913889003

000397

Data File: /var/chem/gosv14b.i/2041006p.b/sv14b004.d
Date : 06-OCT-2004 16:09
Client ID:
Sample Info: 1201 6ppm
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gosv14b.i

Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b004s.d

Date : 06-OCT-2004 16:09

Client ID:

Instrument: gcsv14b.i

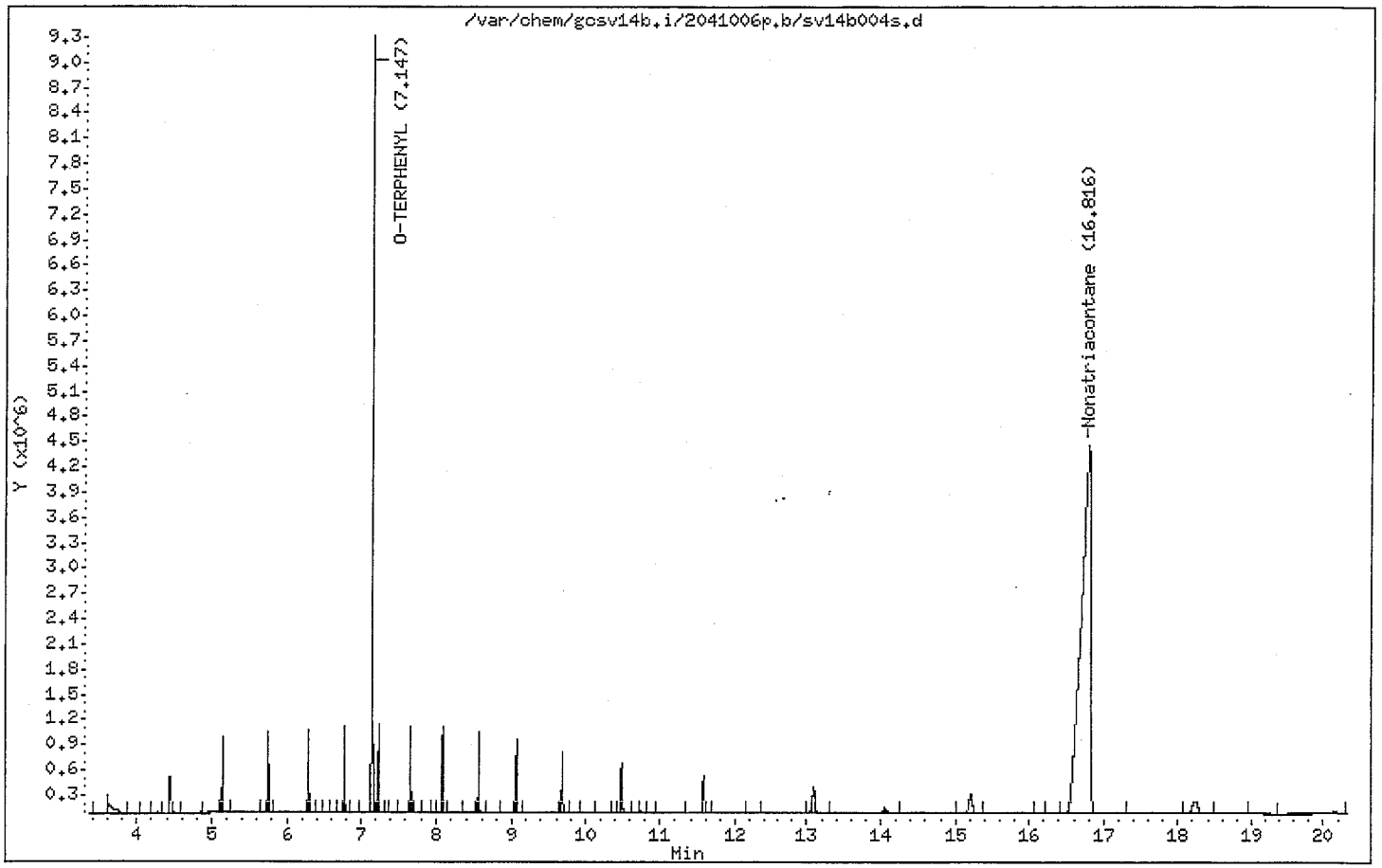
Sample Info: 1201 6ppm

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b005.d
Lab Smp Id: 1202 50ppm
Inj Date : 06-OCT-2004 16:39
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1202 50ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 06-Oct-2004 17:41 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 16:39 Cal File: sv14b005.d
Als bottle: 55 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
20 Total PRO	7.128	7.130	-0.002	3237118267	850.000	393.3472(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{3237118267 - 951959513}{850} = \frac{2285158754}{850} = 2688422$$

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b005s.d
Lab Smp Id: 1202 50ppm
Inj Date : 06-OCT-2004 16:39
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1202 50ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 06-Oct-2004 17:43 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 16:39 Cal File: sv14b005s.d
Als bottle: 55 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
$ 7 O-TERPHENYL	7.127	7.129	-0.002	153742137	50.0000	51.1458
$ 18 Nonatriacontane	16.707	16.683	0.024	798217376	300.000	300.0000

951959513

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b005.d

Date : 06-OCT-2004 16:39

Client ID:

Sample Info: 1202 50ppm

Volume Injected (uL): 1.0

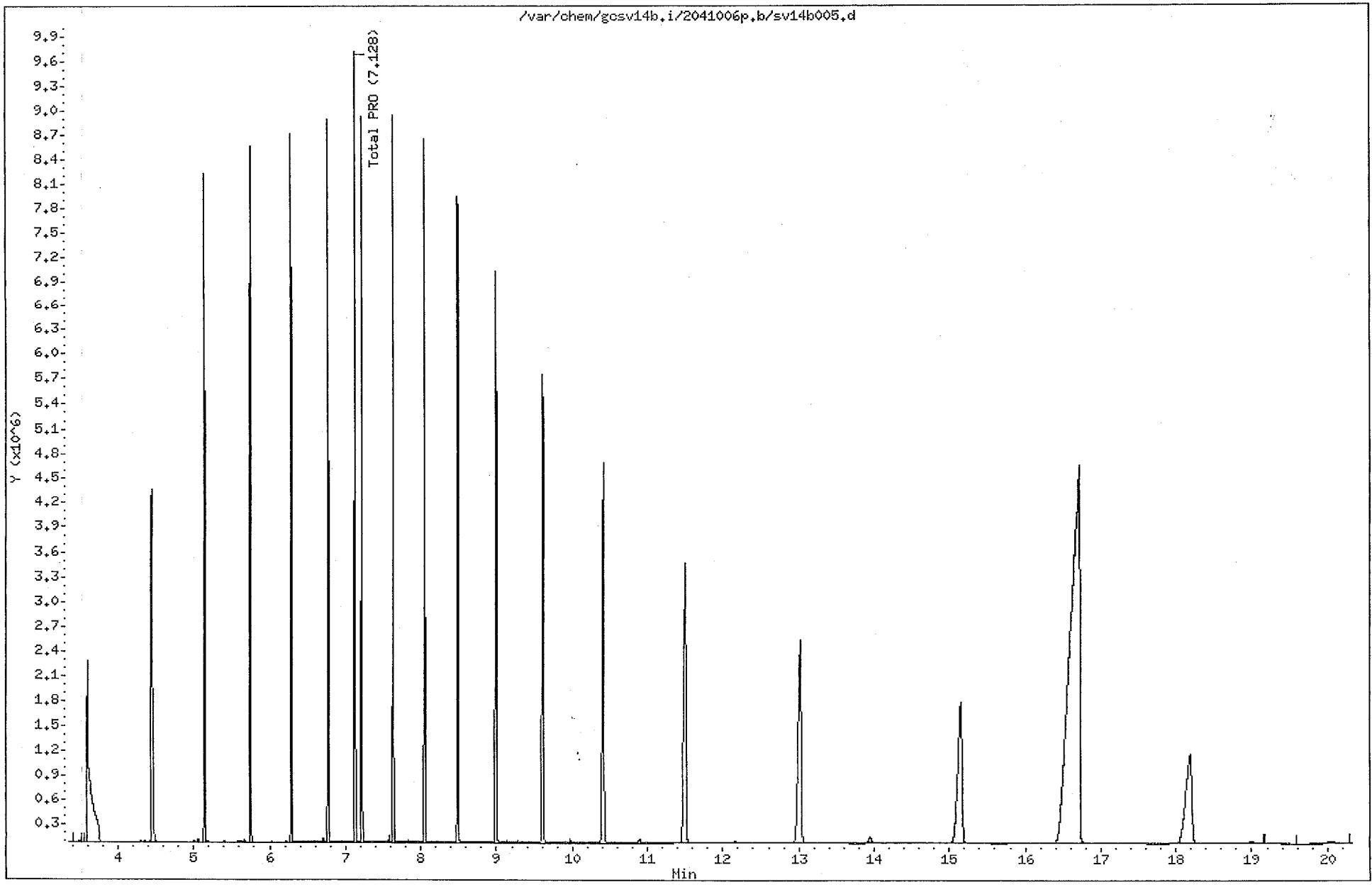
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb

Column diameter: 0.53

000401



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b005s.d

Date : 06-OCT-2004 16:39

Client ID:

Instrument: gcsv14b.i

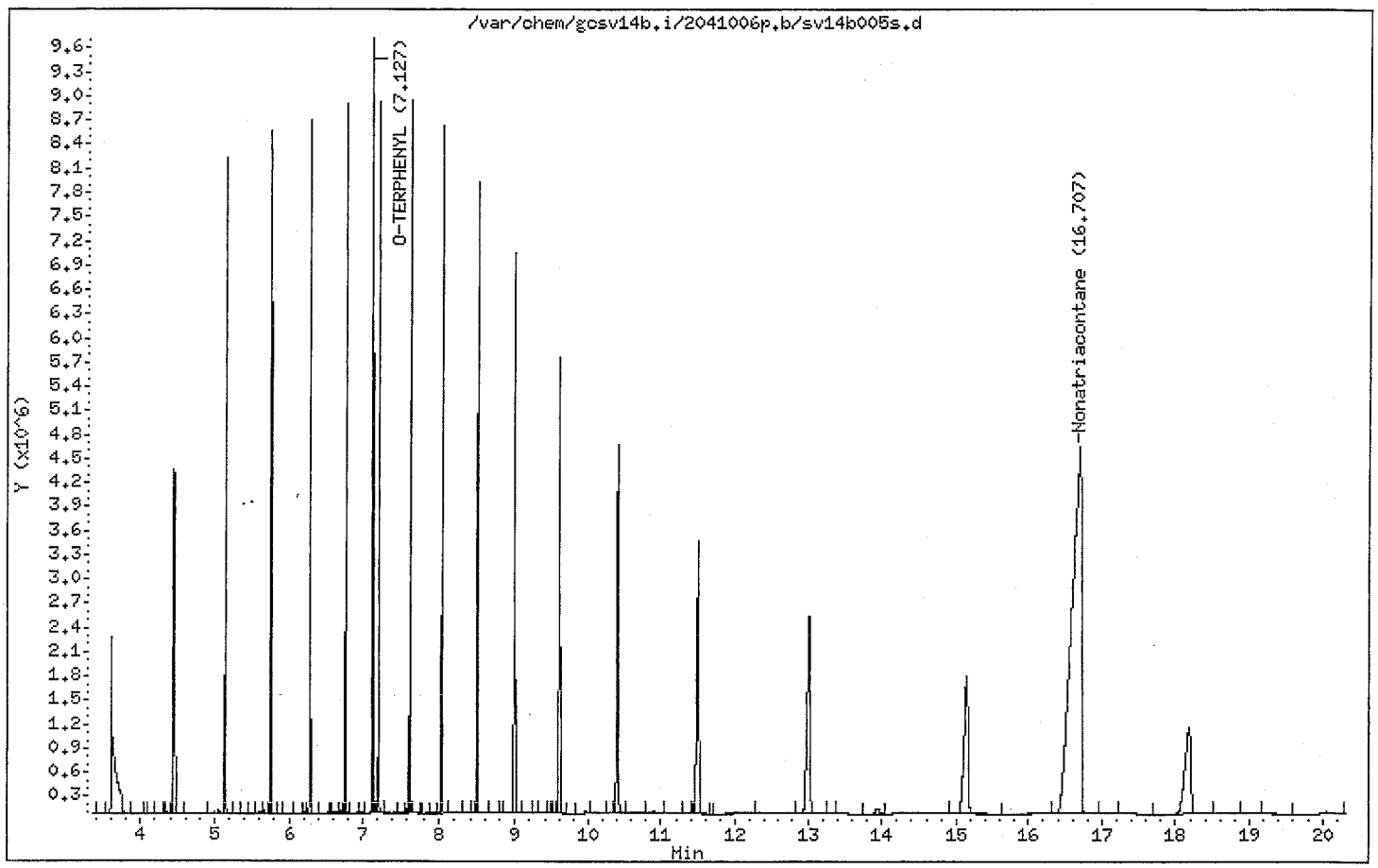
Sample Info: 1202 50ppm

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b006.d
Lab Smp Id: 1203 150ppm
Inj Date : 06-OCT-2004 17:08
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1203 150ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 06-Oct-2004 17:41 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 17:08 Cal File: sv14b006.d
Als bottle: 56 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
20 Total PRO	7.222	7.130	0.092	7552629468	2550.00	1166.6600(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{7552629468 - 921347629}{2550} = \frac{6631281839}{2550} = 2600503$$

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b006s.d
Lab Smp Id: 1203 150ppm
Inj Date : 06-OCT-2004 17:08
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1203 150ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 06-Oct-2004 17:43 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 17:08 Cal File: sv14b006s.d
Als bottle: 56 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

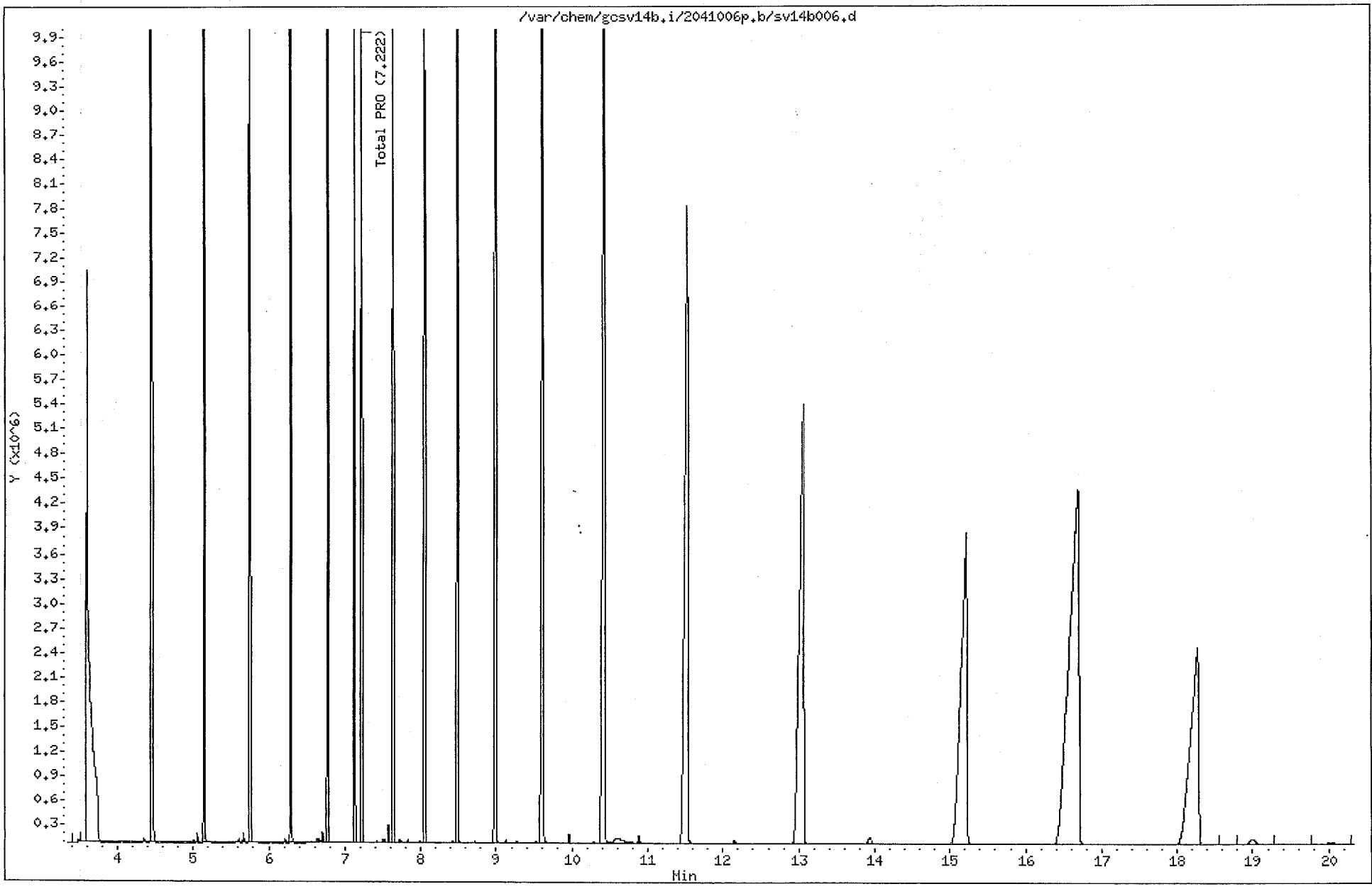
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
$ 7 O-TERPHENYL	7.126	7.129	-0.003	158187582	50.0000	51.7197
$ 18 Nonatriacontane	16.683	16.683	0.000	763160047	300.000	294.9837

921347629

000405

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b006.d
Date : 06-OCT-2004 17:08
Client ID:
Sample Info: 1203 150ppm
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i
Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b006s.d

Date : 06-OCT-2004 17:08

Client ID:

Instrument: gcsv14b.i

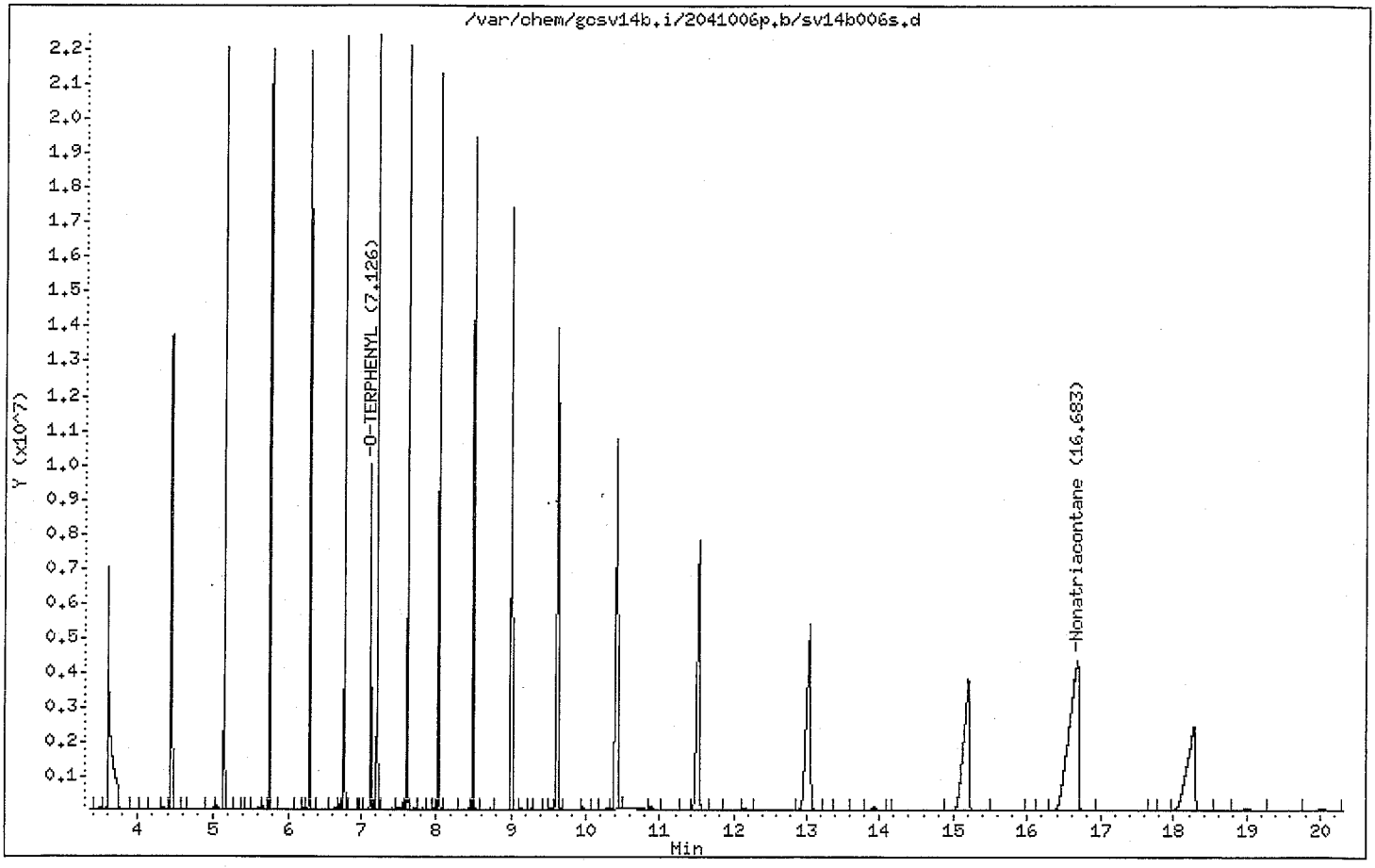
Sample Info: 1203 150ppm

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b007.d
Lab Smp Id: 1204 250ppm
Inj Date : 06-OCT-2004 17:38
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1204 250ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:33 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 17:38 Cal File: sv14b007.d
Als bottle: 57 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
20 Total PRO	7.225	7.130	0.095	11710438800	4250.00	3230.7325(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{11710438800 - 796124645}{4250} = \frac{10914314155}{4250} = 2568074$$

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b007s.d
Lab Smp Id: 1204 250ppm
Inj Date : 06-OCT-2004 17:38
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1204 250ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:36 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 17:38 Cal File: sv14b007s.d
Als bottle: 57 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
$ 7 O-TERPHENYL	7.125	7.129	-0.004	157291110	50.0000	50.8523
$ 18 Nonatriacontane	16.653	16.592	0.061	638833535	300.000	258.3540

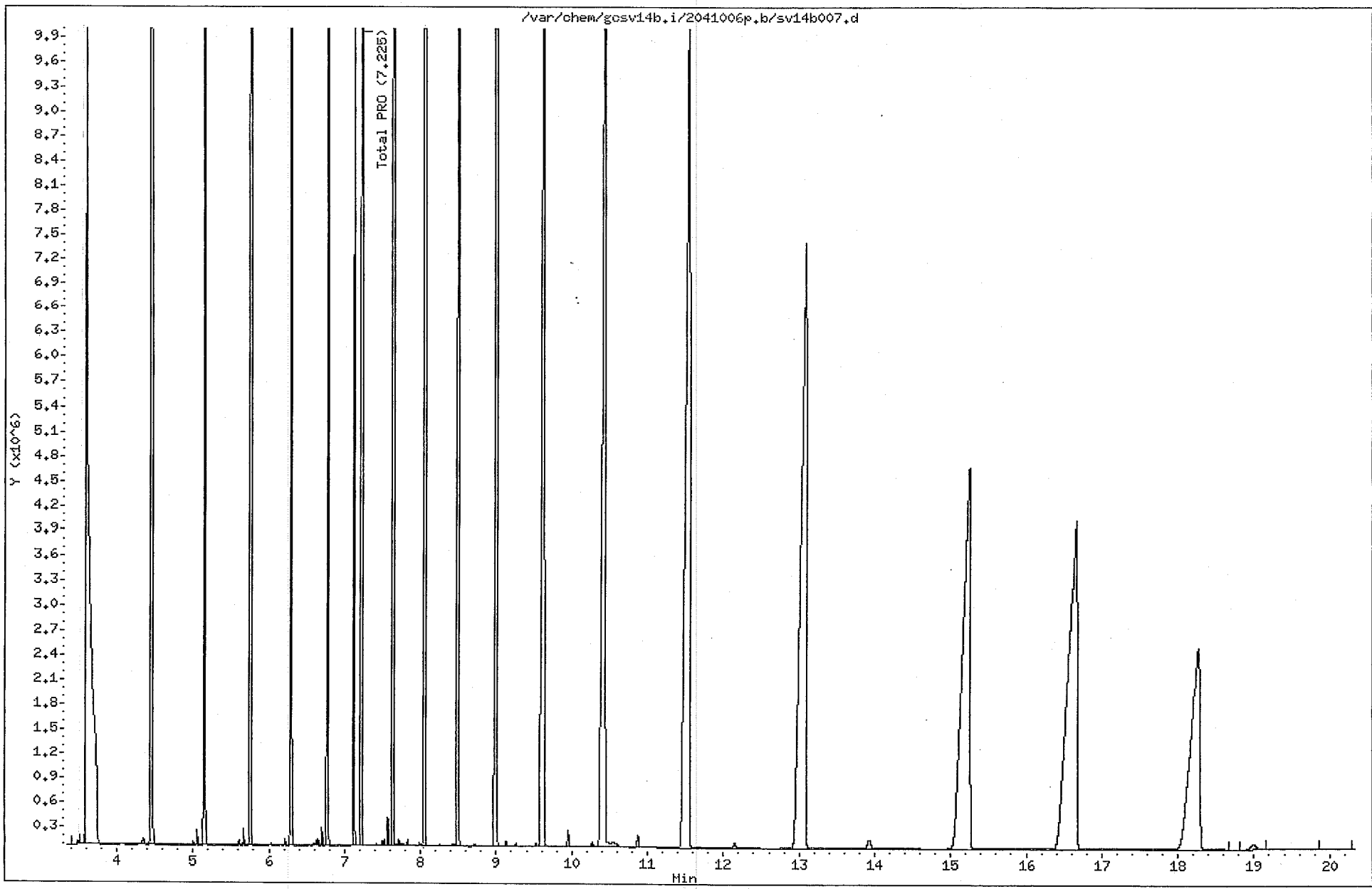
796124695

Data File: /var/chem/gosv14b.i/2041006p.b/sv14b007.d
Date : 06-OCT-2004 17:38
Client ID:
Sample Info: 1204 250ppm
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gosv14b.i

Operator: dlb
Column diameter: 0.53

000409



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b007s.d

Date : 06-OCT-2004 17:38

Client ID:

Instrument: gcsv14b.i

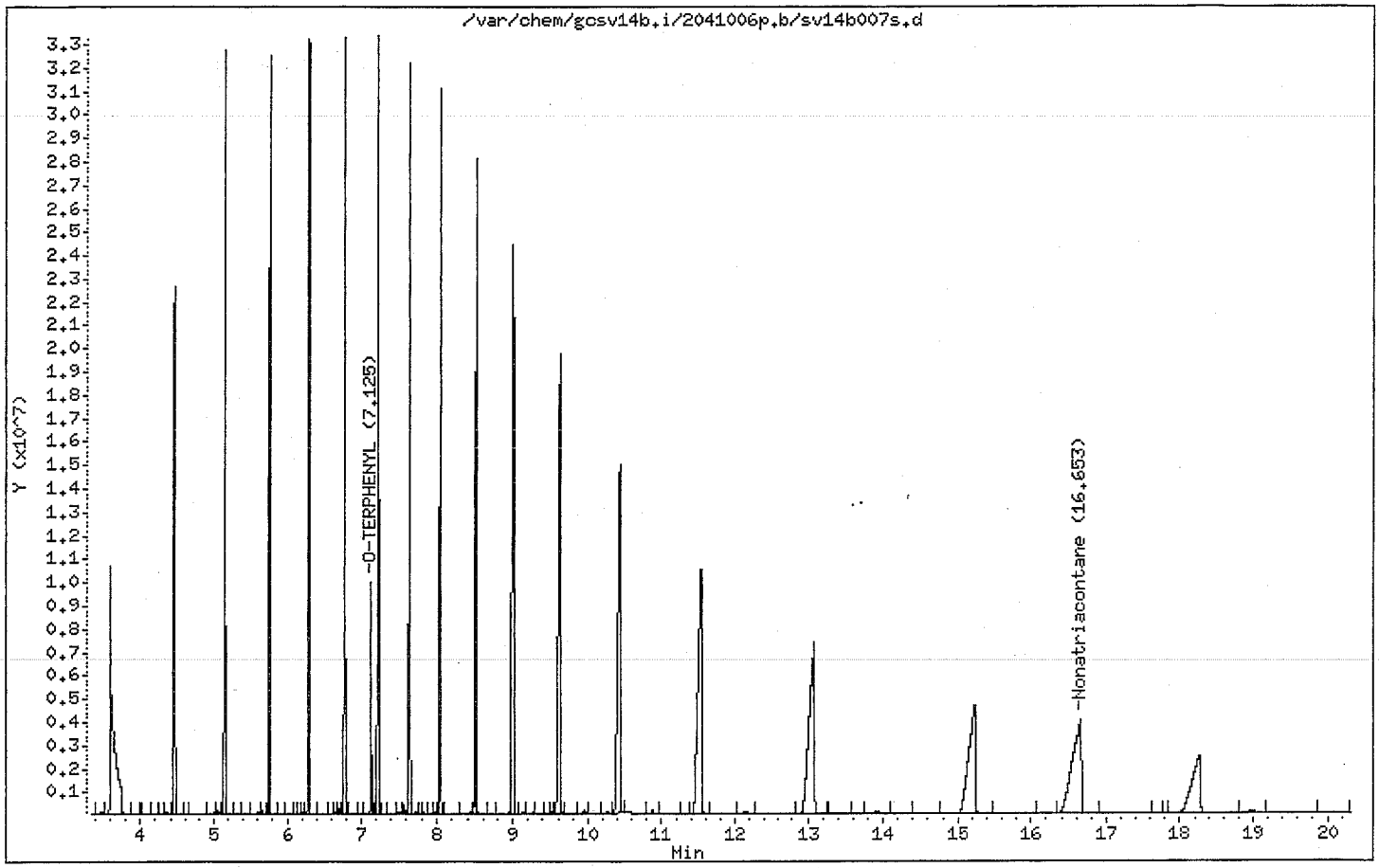
Sample Info: 1204 250ppm

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b008.d
Lab Smp Id: 1205 350ppm
Inj Date : 06-OCT-2004 18:07
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1205 350ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:33 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:07 Cal File: sv14b008.d
Als bottle: 58 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
20 Total PRO	6.784	7.130	-0.346	15998537610	5950.00	3932.3414(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{15998537610 - 617949938}{5950} = \frac{15380587672}{5950} = 2584973$$

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b008s.d
Lab Smp Id: 1205 350ppm
Inj Date : 06-OCT-2004 18:07
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1205 350ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:36 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:07 Cal File: sv14b008s.d
Als bottle: 58 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
$ 7 O-TERPHENYL	7.125	7.129	-0.004	156665442	50.0000	50.6500
$ 18 Nonatriacontane	16.618	16.592	0.026	461284496	300.000	201.8143

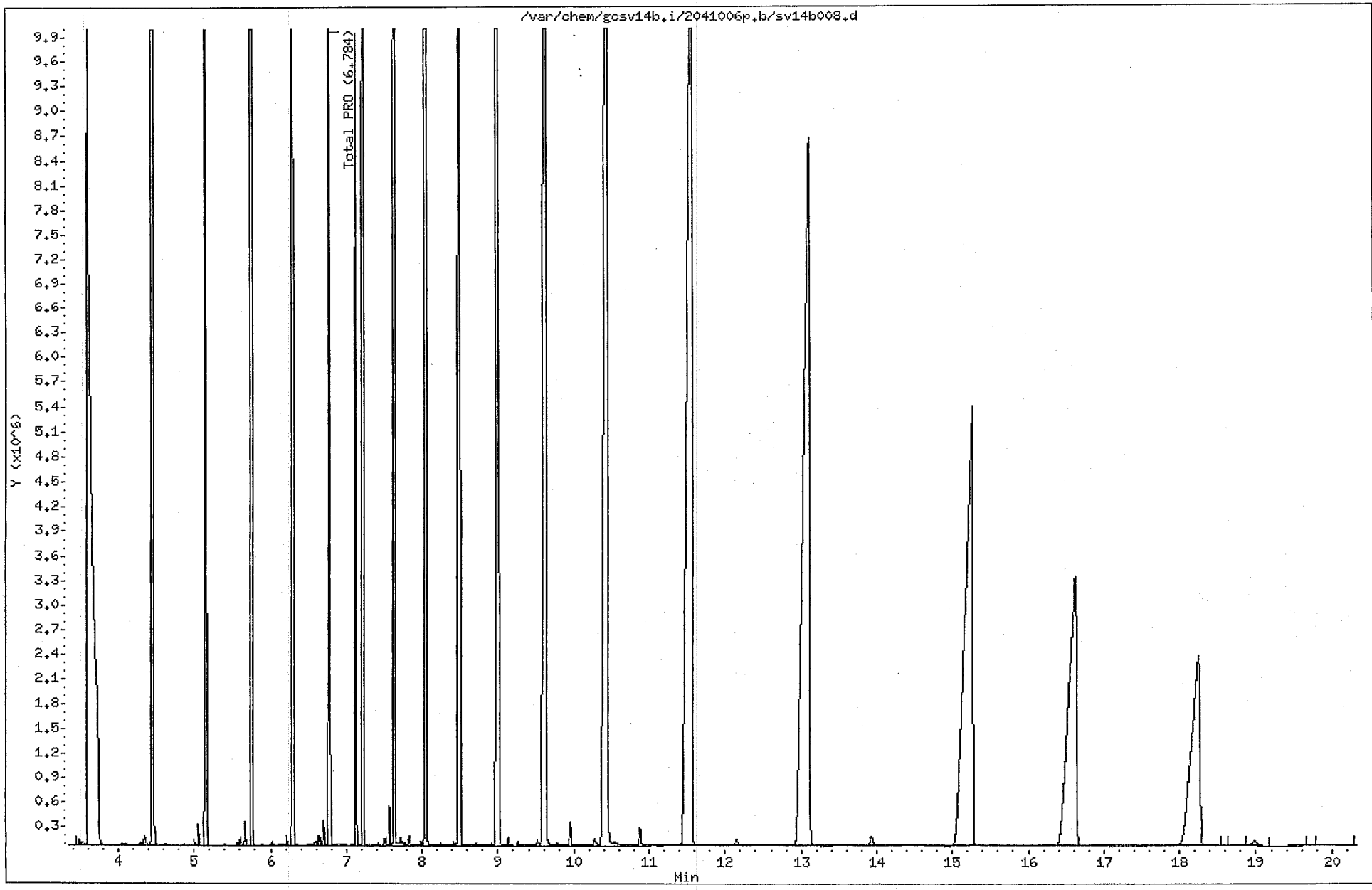
617949938

000413

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b008.d
Date : 06-OCT-2004 18:07
Client ID:
Sample Info: 1205 350ppm
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b008s.d

Date : 06-OCT-2004 18:07

Client ID:

Instrument: gcsv14b.i

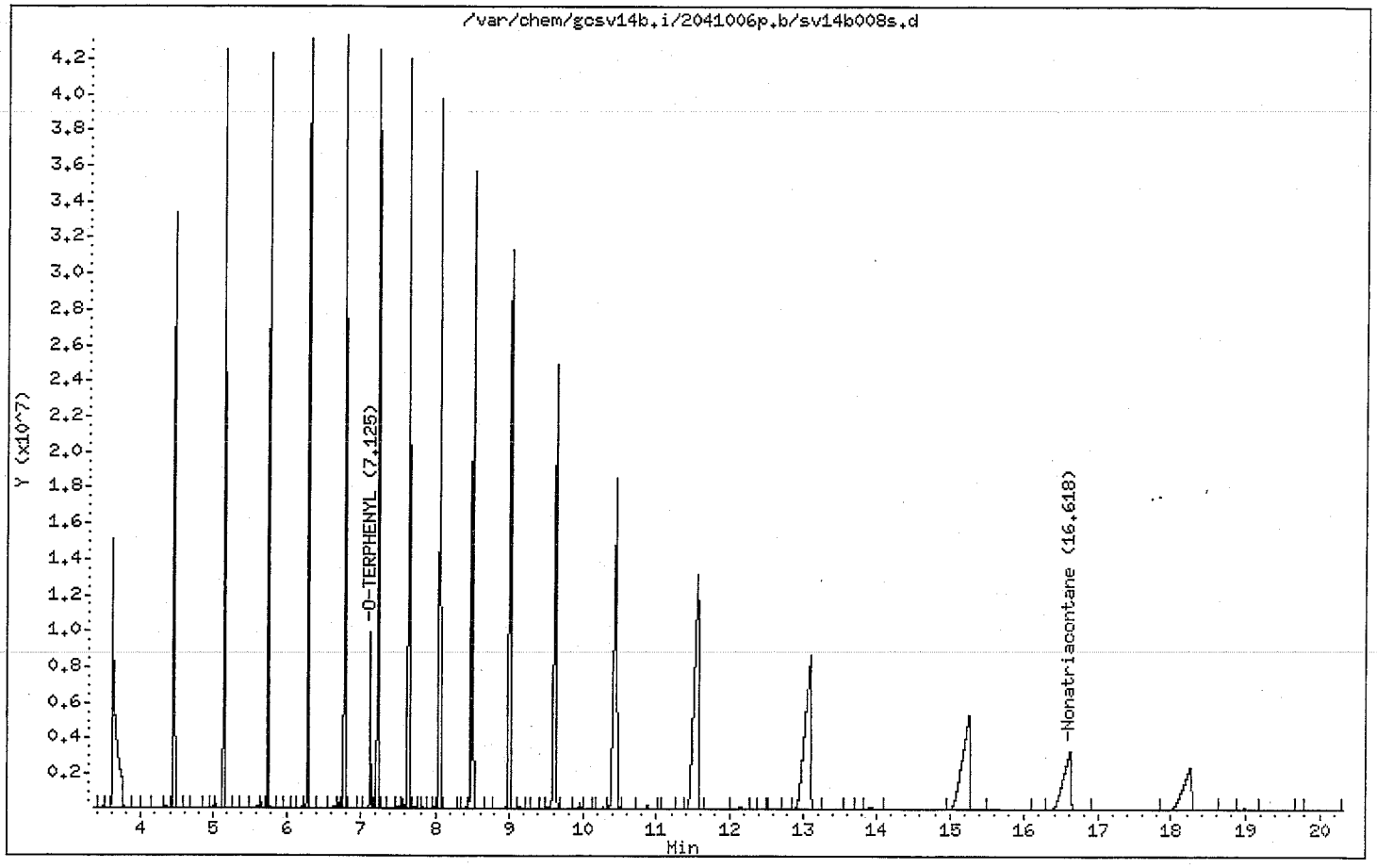
Sample Info: 1205 350ppm

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



LAB CONTROL SAMPLE

Lab Name: GCAL Date: 10/06/04

EPA Sample No.: FLPRO Time: 1906

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
FLPRO	850	916	108	85-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b010.d
Lab Smp Id: ICV 50ppm
Inj Date : 06-OCT-2004 19:06
Operator : dlb Inst ID: gcsv14b.i
Smp Info : ICV 50ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 60
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.632	7.125	0.507	2503261470	916.254	916253.8687(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{916254 - 850000}{850000} \cdot 100 = 7.8\%$$

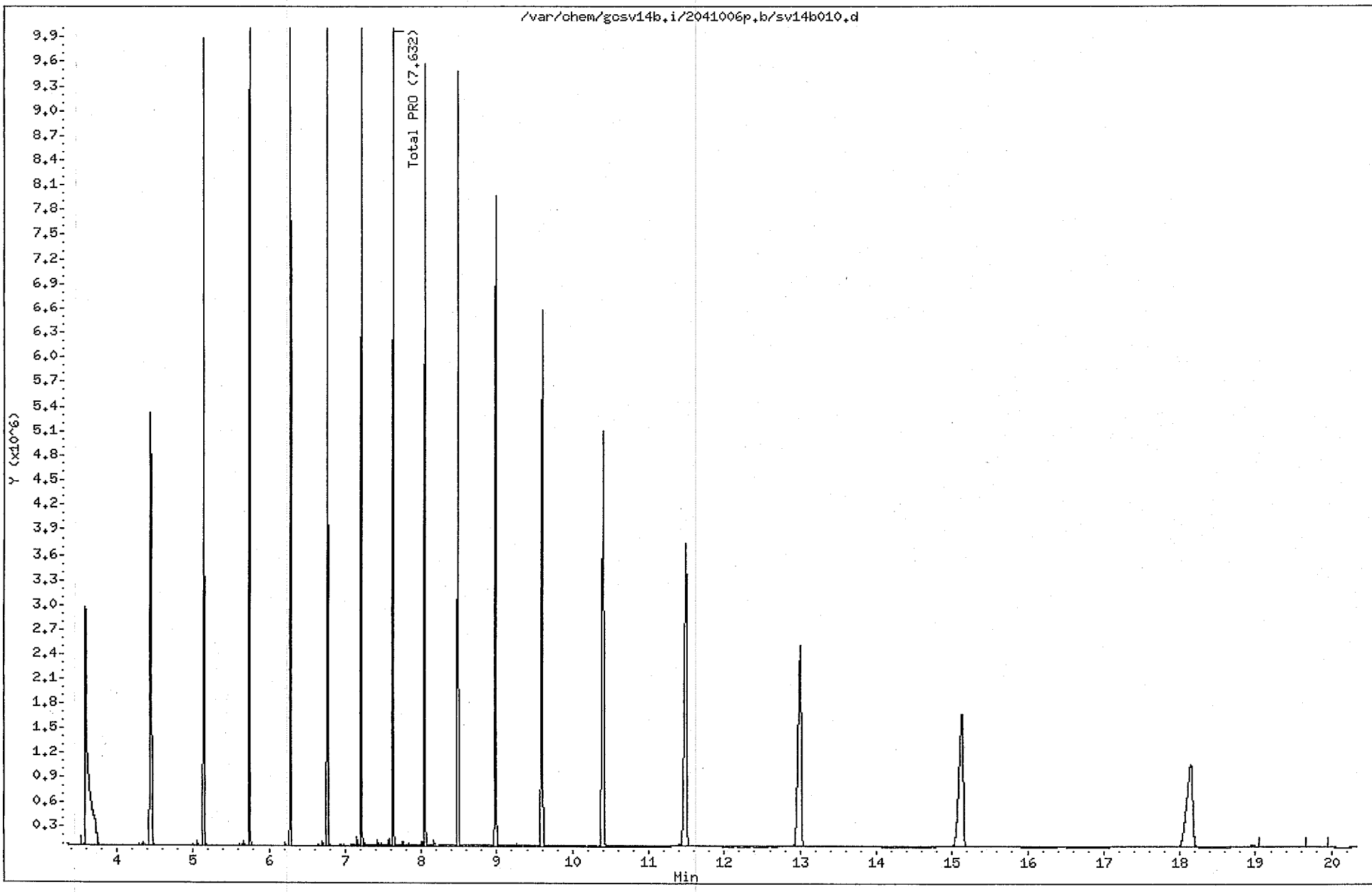
108% ✓ ICV criteria is 20% ✓

0004417

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b010.d
Date : 06-OCT-2004 19:06
Client ID:
Sample Info: ICV 50ppm
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53



7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GCAL

Instrument ID: GCSV14b Calibration Date: 10/07/04 Time: 0056

Lab File ID: SV14b022 Init. Calib. Date(s): 10/06/04 10/06/04

Init. Calib. Times: 1609 1837

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Total PRO	2732061	2696438		1.3	25
O-TERPHENYL	3090959	3130075		1.7	25
Nonatriacontane	2285687	2678190		17.2	25

All other compounds must meet a minimum RRF of 0.010.

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcsv14b.i Injection Date: 07-OCT-2004 00:56
Lab File ID: sv14b022s.d Init. Cal. Date(s): 06-OCT-2004 06-OCT-2004
Analysis Type: WATER Init. Cal. Times: 16:09 18:37
Lab Sample ID: 1400 50ppm Quant Type: ESTD
Method: /var/chem/gcsv14b.i/2041006p.b/flsur.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 7 O-TERPHENYL	3090959	3130075	0.010	-1.26549	25.00000	Averaged
$ 18 Nonatriacontane	2285687	2678190	0.010	-17.17222	25.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.49733
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

$$PRO = \frac{3251933274 - 959960879}{850} = \frac{2696438 - 2732061}{2732061} \cdot 100 = 1.3$$

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b022.d
Lab Smp Id: 1400 50ppm
Inj Date : 07-OCT-2004 00:56
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1400 50ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 72 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
20 Total PRO	7.122	7.125	-0.003	3251933274	850.000	1190.2857(M)

QC Flag Legend

M - Compound response manually integrated.

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b022s.d
Lab Smp Id: 1400 50ppm
Inj Date : 07-OCT-2004 00:56
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1400 50ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 72 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
$ 7 O-TERPHENYL	7.121	7.128	-0.007	156503744	50.0000	50.6327
$ 18 Nonatriacontane	16.658	16.660	-0.002	803457135	300.000	351.5166

959960879

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b022s.d

Date : 07-OCT-2004 00:56

Client ID:

Instrument: gcsv14b.i

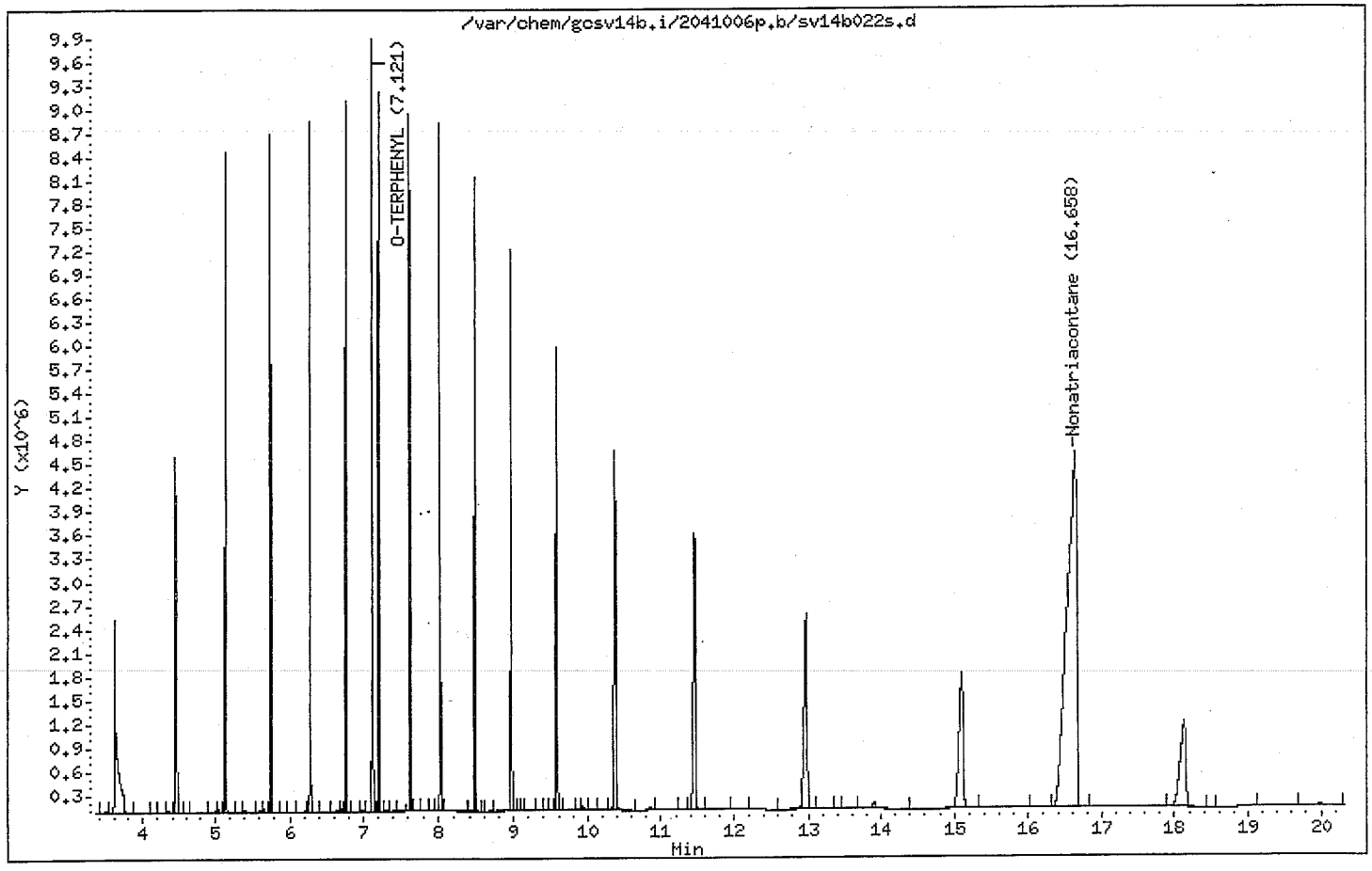
Sample Info: 1400 50ppm

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53

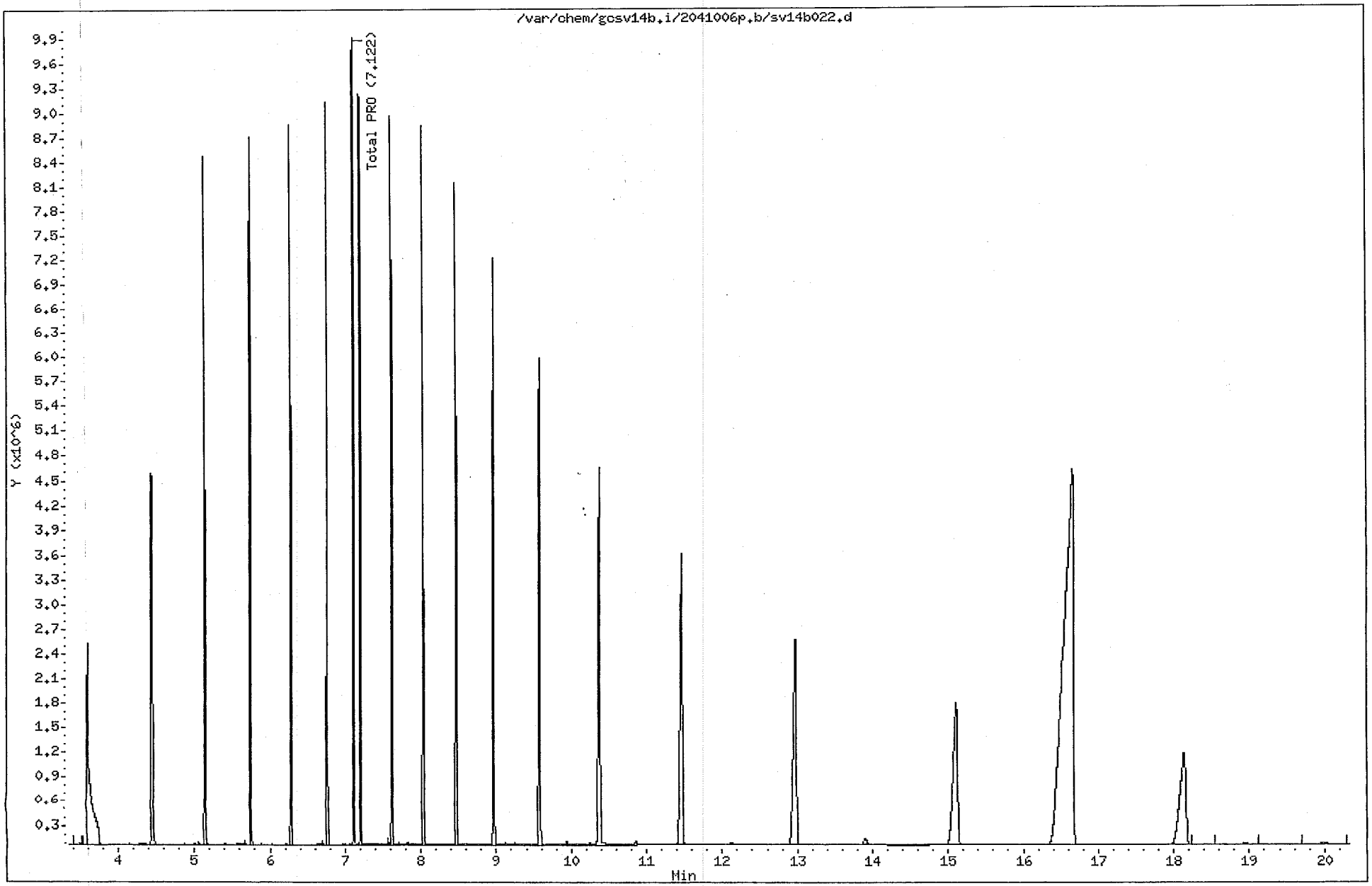


000423

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b022.d
Date : 07-OCT-2004 00:56
Client ID:
Sample Info: 1400 50ppm
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53



7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: GCAL

Instrument ID: GCSV14b Calibration Date: 10/07/04 Time: 0448

Lab File ID: SV14b030 Init. Calib. Date(s): 10/06/04 10/06/04

Init. Calib. Times: 1609 1837

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Total PRO	2732061	3149175		15.3	25
O-TERPHENYL	3090959	3180876		2.9	25
Nonatriacontane	2285687	2516214		10.1	25

All other compounds must meet a minimum RRF of 0.010.

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b030s.d
Report Date: 07-Oct-2004 06:55

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcsv14b.i
Lab File ID: sv14b030s.d
Analysis Type: WATER
Lab Sample ID: 1400 6ppm
Method: /var/chem/gcsv14b.i/2041006p.b/flsur.m

Injection Date: 07-OCT-2004 04:48
Init. Cal. Date(s): 06-OCT-2004 06-OCT-2004
Init. Cal. Times: 16:09 18:37
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 7 O-TERPHENYL	3090959	3180876	0.010	-2.90902	25.00000	Averaged
$ 18 Nonatriacontane	2285687	2516214	0.010	-10.08564	25.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.49733
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

PRO = $\frac{1235123750 - 913907857}{102} = \frac{3149175 - 2732061}{2732061} \cdot 100 = 15.3\%$

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b030.d
Lab Smp Id: 1400 6ppm
Inj Date : 07-OCT-2004 04:48
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1400 6ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 80 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
20 Total PRO	7.124	7.125	-0.001	1235123750	850.000	452.0849(M)

QC Flag Legend

M - Compound response manually integrated.

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b030s.d
Lab Smp Id: 1400 6ppm
Inj Date : 07-OCT-2004 04:48
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 1400 6ppm
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 80 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
$ 7 O-TERPHENYL	7.123	7.128	-0.005	159043782	50.0000	51.4545
$ 18 Nonatriacontane	16.660	16.660	0.000	754864075	300.000	330.2569

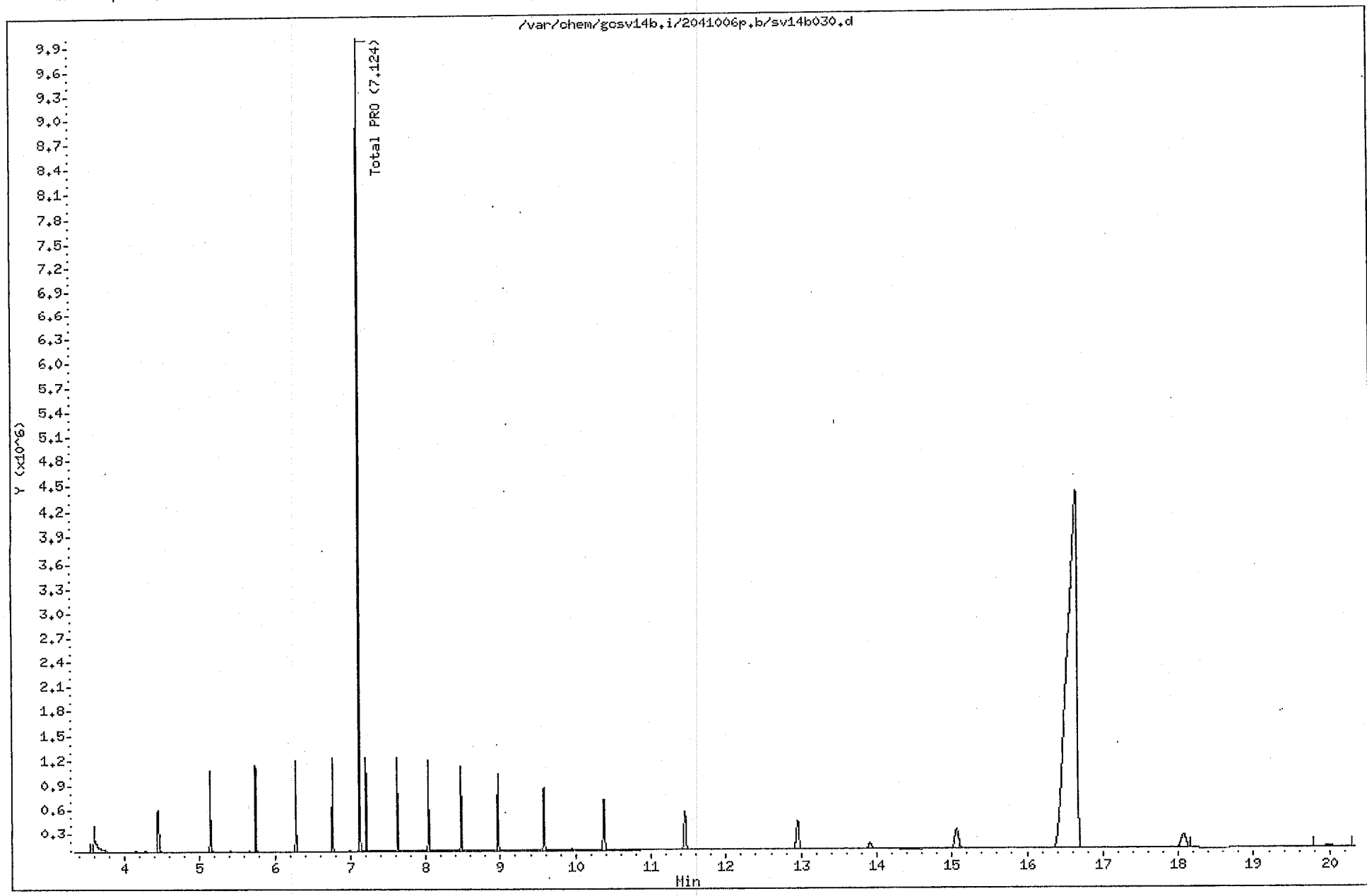
913907857

000428

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b030.d
Date : 07-OCT-2004 04:48
Client ID:
Sample Info: 1400 6ppm
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b030s.d

Date : 07-OCT-2004 04:48

Client ID:

Instrument: gcsv14b.i

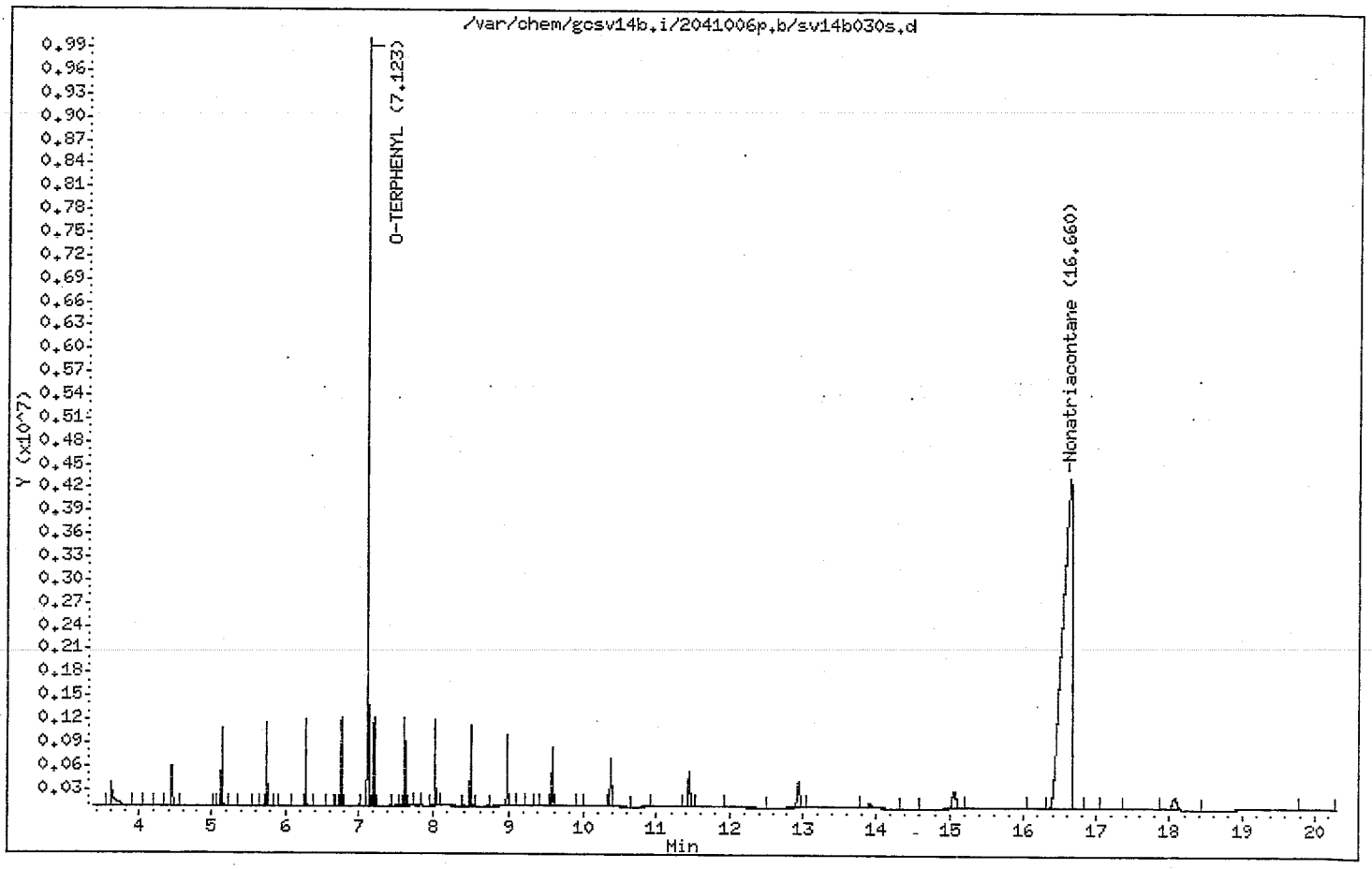
Sample Info: 1400 6ppm

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID MB195302

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 195302

Date Collected Time:

Date Received:

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2005

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B012S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	100	U	40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b012.d
Lab Smp Id: 195302
Inj Date : 06-OCT-2004 20:05
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 195302 blk
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 62
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.122	7.125	-0.003	853144932	312.272	624.5431(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{853144932 - 821463593}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 23.2 \quad <DL$$

dlb
10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b012s.d
Lab Smp Id: 195302
Inj Date : 06-OCT-2004 20:05
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 195302 blk
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 62
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.122	7.128	-0.006	139282008	45.0611	90.1221
$ 18 Nonatriacontane	16.643	16.660	-0.017	682181585	298.458	596.9159

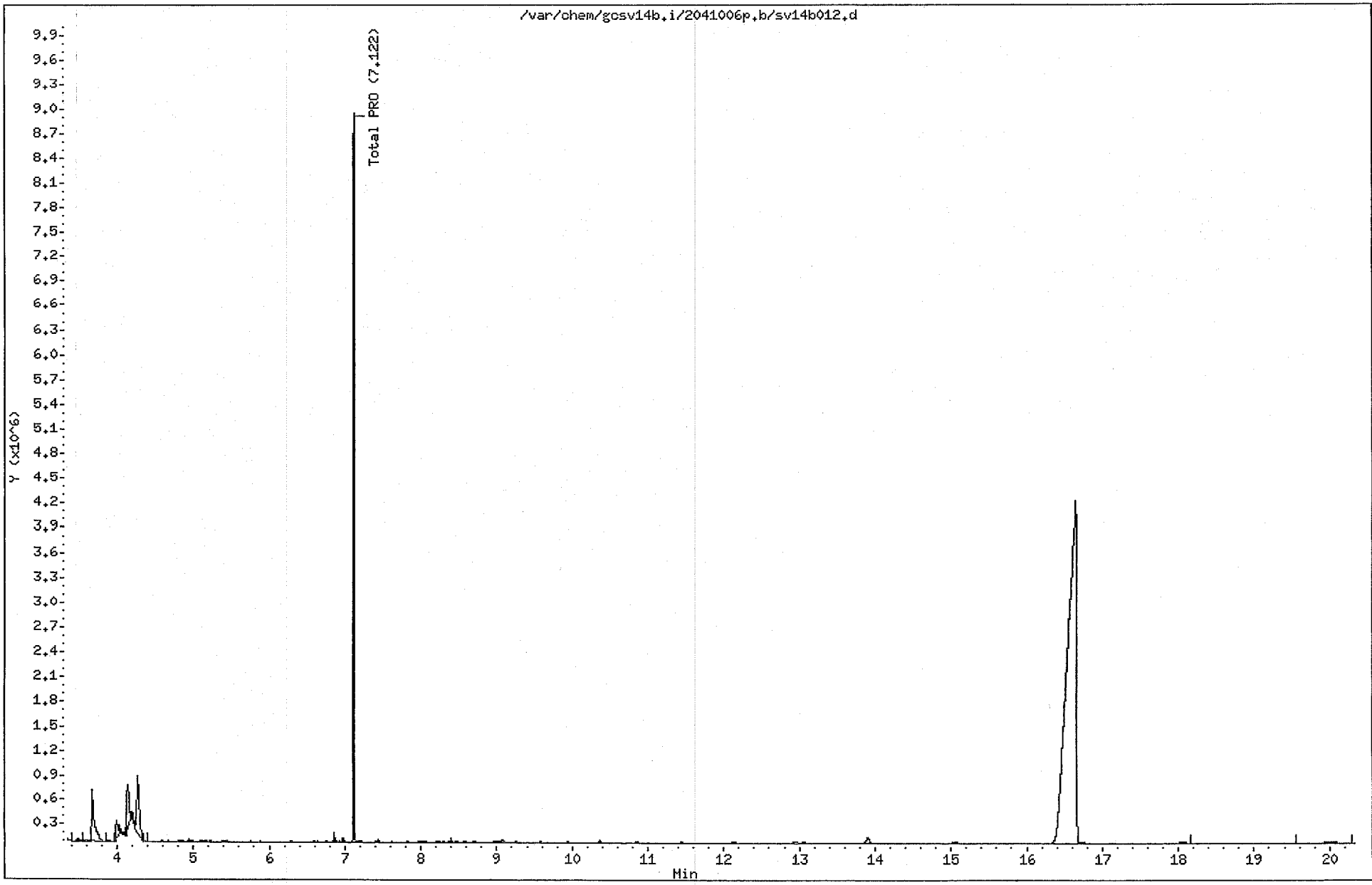
821463593

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b012.d
Date : 06-OCT-2004 20:05
Client ID:
Sample Info: 195302 blk
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53

000433



Data File: /var/chem/gosv14b.i/2041006p.b/sv14b012s.d

Date : 06-OCT-2004 20:05

Client ID:

Instrument: gosv14b.i

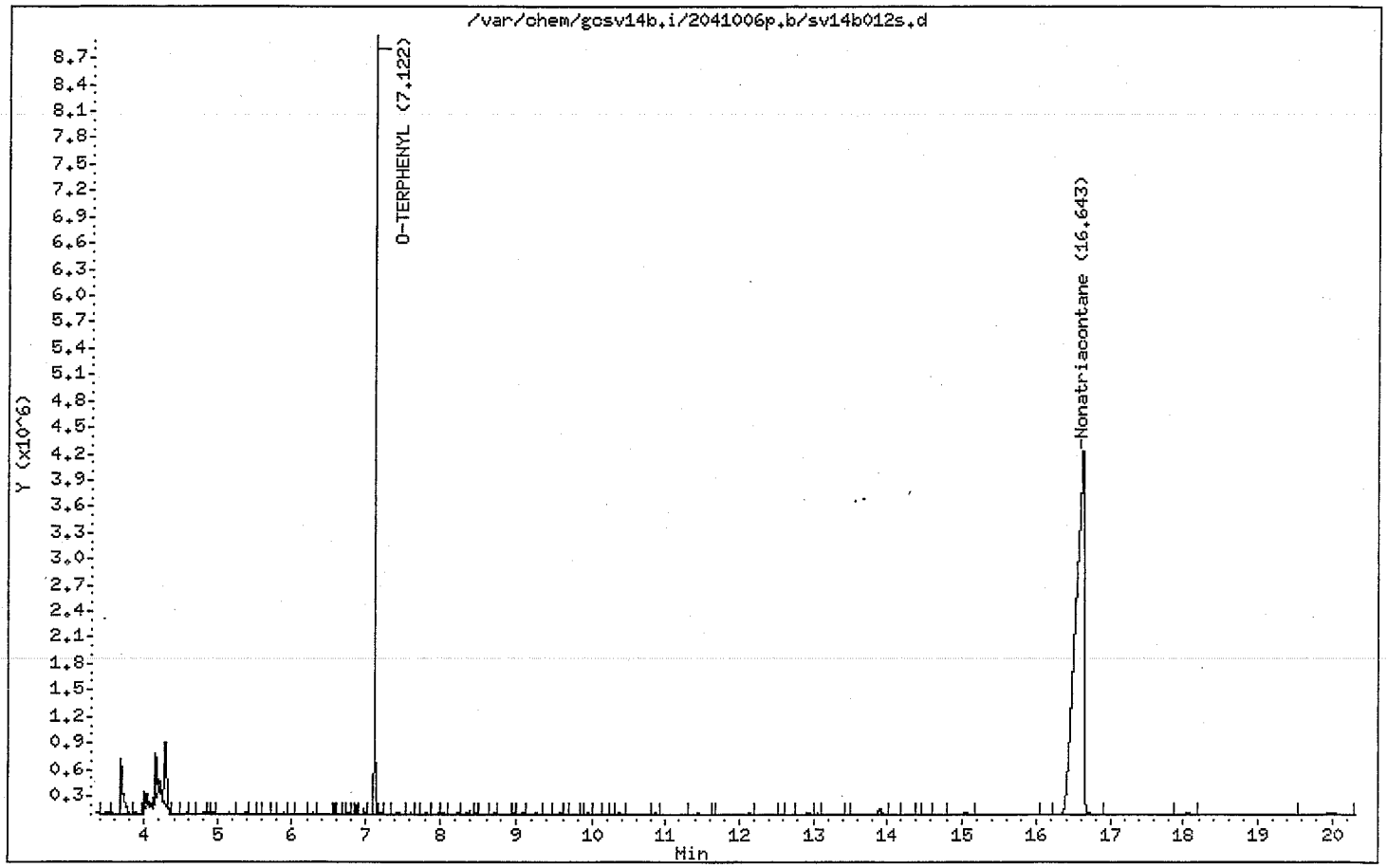
Sample Info: 195302 blk

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID LCS195303

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 195303

Date Collected Time:

Date Received:

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2034

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B013S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	1510		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b013.d
Lab Smp Id: 195303
Inj Date : 06-OCT-2004 20:34
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 195303 lcs
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 63
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.211	7.125	0.086	2824597431	1033.87	2067.7411(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{2824597431 - 760383236}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 1511 \text{ ug/L}$$

$$\%R = \frac{1511}{1700} \cdot 100 = 88.9\%$$

 dlb 10/7/04

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b013s.d
Lab Smp Id: 195303
Inj Date : 06-OCT-2004 20:34
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 195303 lcs
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 63
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

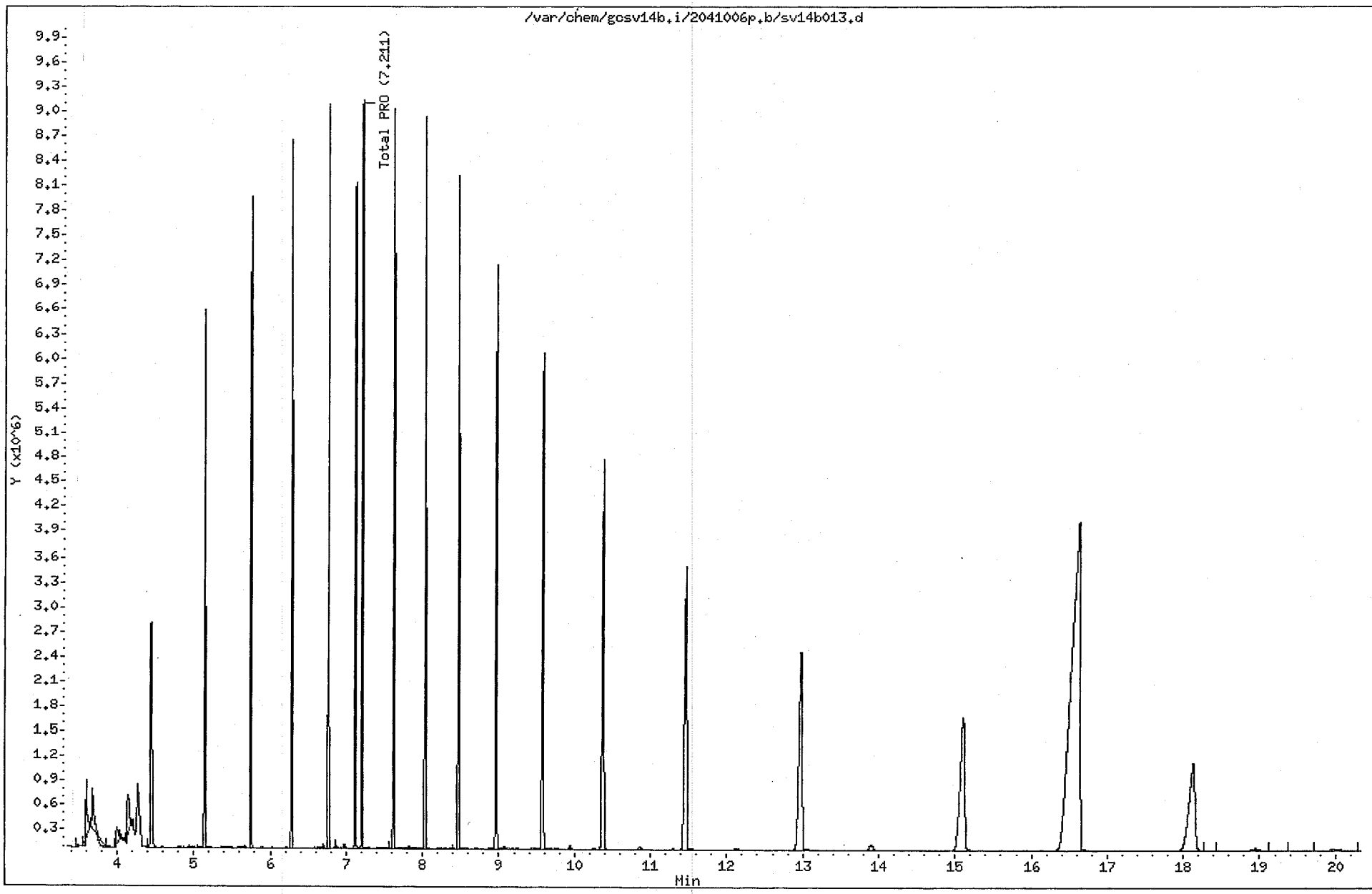
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	FINAL (ug/L)
$ 7 O-TERPHENYL	7.120	7.128	-0.008	125448507	40.5856	81.1712
$ 18 Nonatriacontane	16.627	16.660	-0.033	634934729	277.787	555.5744

760383236

000438

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b013.d
Date : 06-OCT-2004 20:34
Client ID:
Sample Info: 195303 lcs
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i
Operator: dlb
Column diameter: 0.53



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b013s.d

Date : 06-OCT-2004 20:34

Client ID:

Instrument: gcsv14b.i

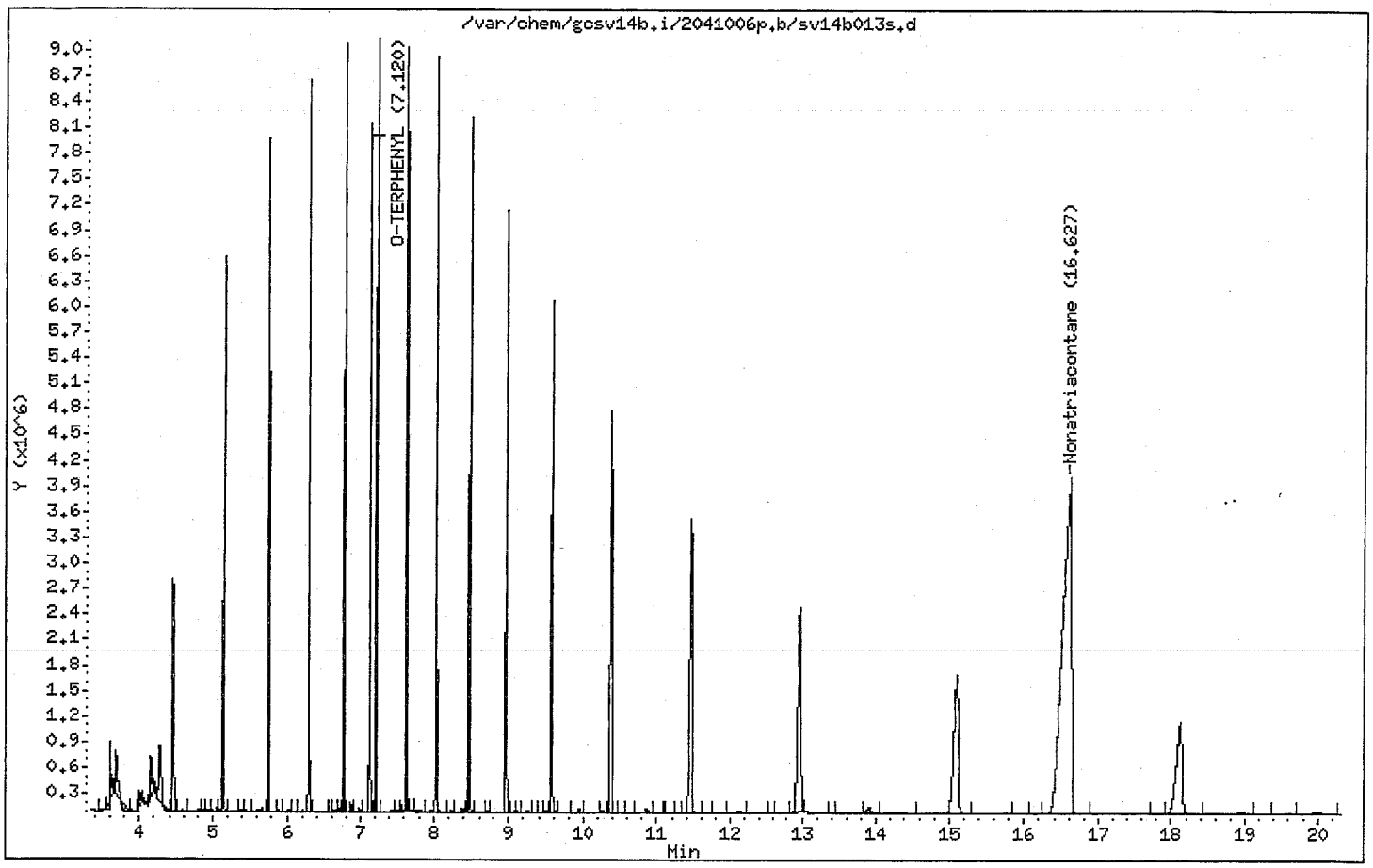
Sample Info: 195303 lcs

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 280790 Analytical Batch: 281106

Sample ID LCSD195304

Contract:

SAS No.: SDG No.: 204100106

Lab Sample ID: 195304

Date Collected Time:

Date Received:

Date Extracted: 10/04/04

Date Analyzed: 10/06/04 Time: 2103

Dilution Factor: 1 Analyst: DLB

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS14A

Lab File ID: 2041006P/SV14B014S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT		MDL	RL
FLPRO-01	Petroleum Hydrocarbons	1690		40.7	100

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b014.d
Lab Smp Id: 195304
Inj Date : 06-OCT-2004 21:03
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 195304 lcsd
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flpro.m
Meth Date : 07-Oct-2004 06:52 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009.d
Als bottle: 64
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: PRO.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
20 Total PRO	7.213	7.125	0.088	3080072753	1127.38	2254.7613(M)

QC Flag Legend

M - Compound response manually integrated.

$$\frac{3080072753 - 773150942}{2732061} \cdot \frac{2}{1000} \cdot 1000 = 1689 \text{ ug/L}$$

$$\%R = \frac{1689}{1700} \cdot 100 = 99.4\%$$

GCAL, Inc.

Data file : /var/chem/gcsv14b.i/2041006p.b/sv14b014s.d
Lab Smp Id: 195304
Inj Date : 06-OCT-2004 21:03
Operator : dlb Inst ID: gcsv14b.i
Smp Info : 195304 lcsd
Misc Info :
Comment :
Method : /var/chem/gcsv14b.i/2041006p.b/flsur.m
Meth Date : 07-Oct-2004 06:55 dlb Quant Type: ESTD
Cal Date : 06-OCT-2004 18:37 Cal File: sv14b009s.d
Als bottle: 64
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: flsurr.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf * Vt)/(Vo * Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 7 O-TERPHENYL	7.122	7.128	-0.006	140222476	45.3654	90.7307
$ 18 Nonatriacontane	16.631	16.660	-0.029	632928466	276.909	553.8189

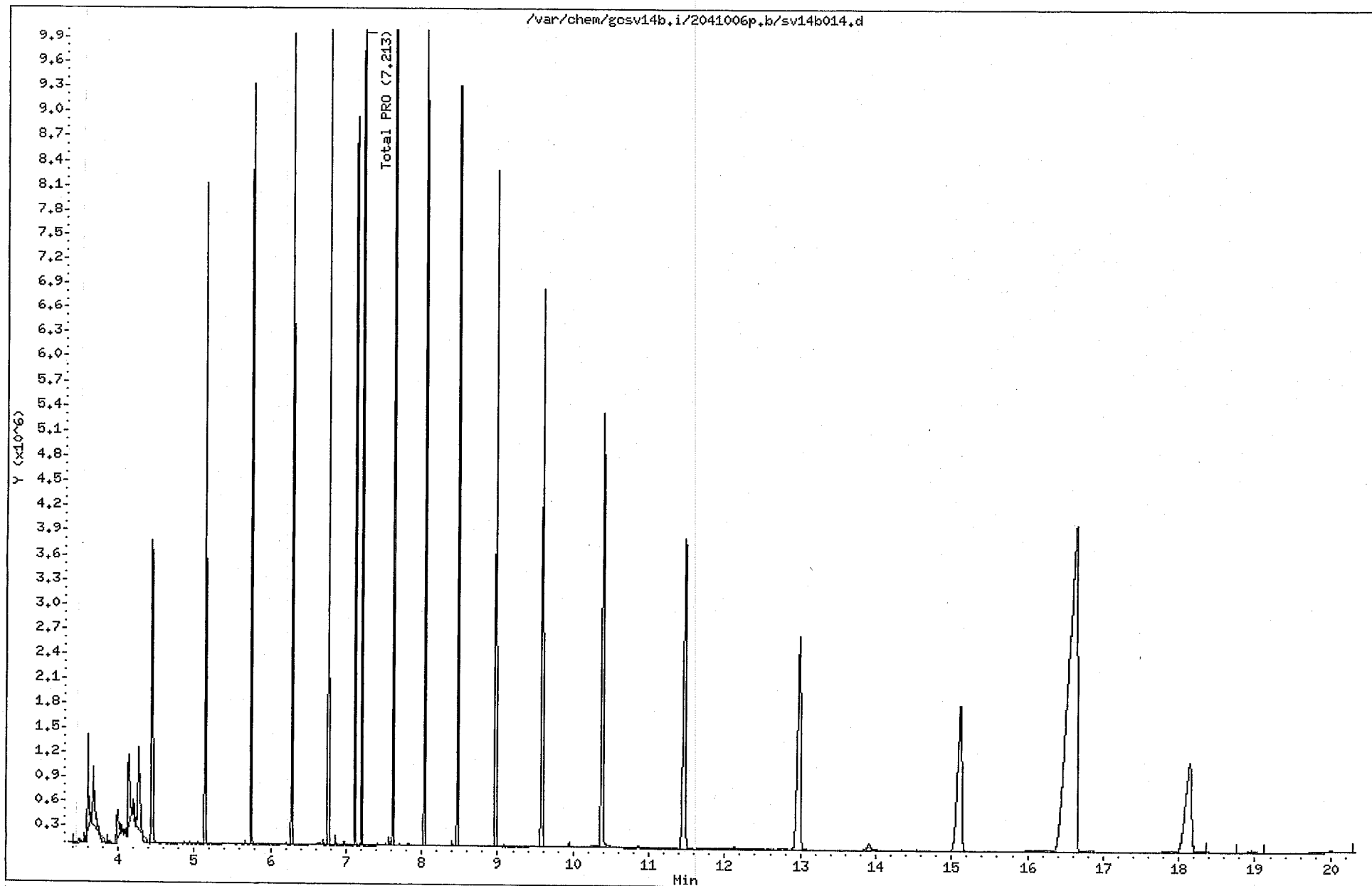
773150942

Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b014.d
Date : 06-OCT-2004 21:03
Client ID:
Sample Info: 195304 lcsd
Volume Injected (uL): 1.0
Column phase: DB-5ms

Instrument: gcsv14b.i

Operator: dlb
Column diameter: 0.53

000443



Data File: /var/chem/gcsv14b.i/2041006p.b/sv14b014s.d

Date : 06-OCT-2004 21:03

Client ID:

Instrument: gcsv14b.i

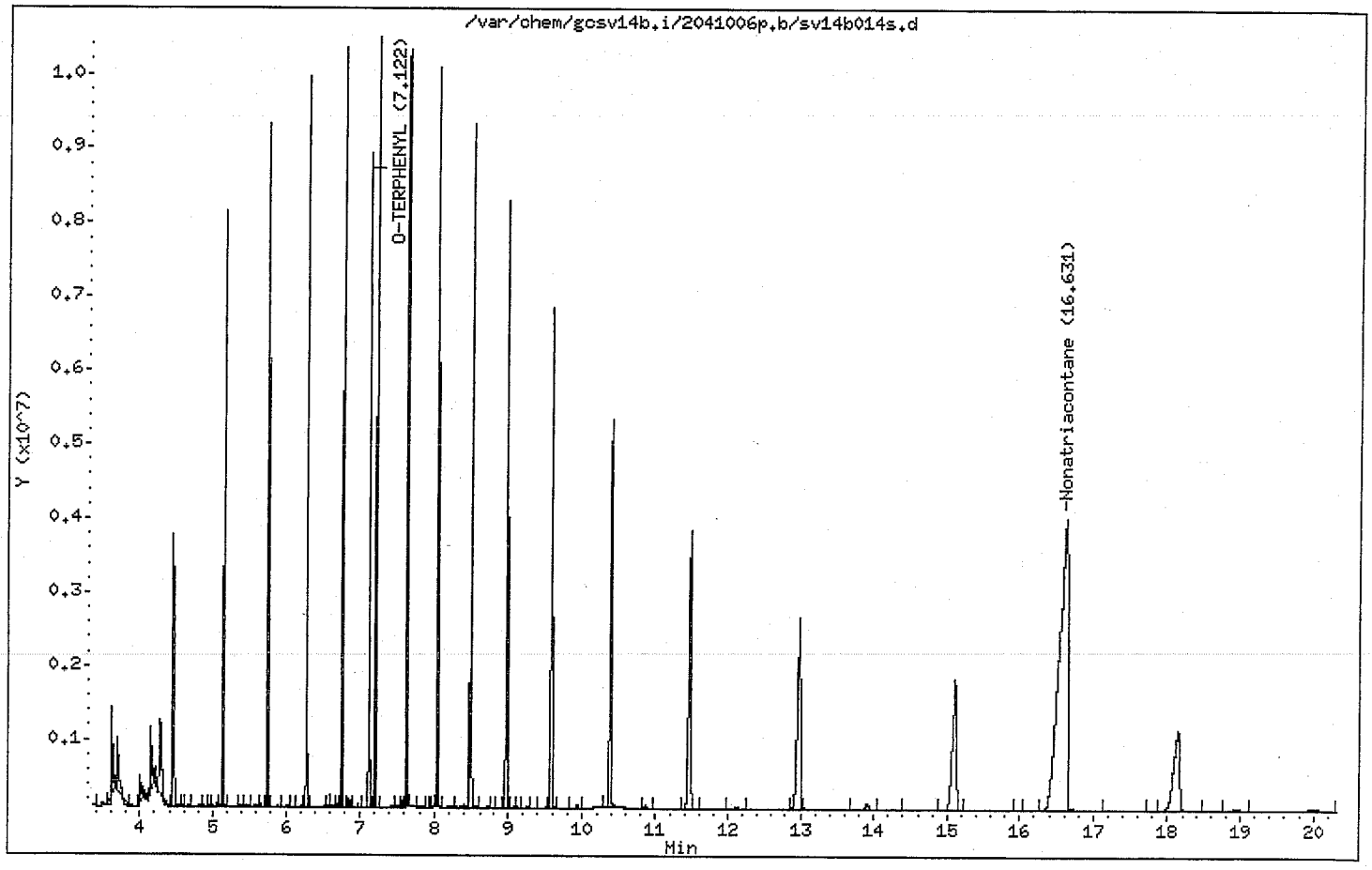
Sample Info: 195304 lcsd

Volume Injected (uL): 1.0

Operator: dlb

Column phase: DB-1

Column diameter: 0.53



FLPRO SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	10/4/04 1300	BATCH NO:	280790
MATRIX:	WATER ☑ SOIL ☐ OTHER ☐	LEVEL:	LOW ☑ MEDIUM ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT (mL) g	FINAL VOLUME (mL)	Init pH	COMMENTS	METHOD
1	QC ACCOUNT	MB for HBN 280790 [EXTO/6309]	195302	1000	2.0	<2		
2	QC ACCOUNT	LCS for HBN 280790 [EXTO/6309]	195303	1000	2.0	<2		
3	QC ACCOUNT	LCSD for HBN 280790 [EXTO/6309	195304	1000	2.0	<2		SEPARATORY FUNNEL/3510
4	4380	86-334-2SA-Q3-04	20410010601	1000	2.0	<2	*	
5	4380	86-334-32S-Q3-04	20410010602	1000	2.0	<2		
6	4380	86-334-33S-Q3-04	20410010603	1000	2.0	<2		
7	4380	86-334-34S-Q3-04	20410010604	1000	2.0	<2		SONICATOR/3550
8	4380	86-339-28S-Q3-04	20410010605	1000	2.0	<2		
9	4380	86-339-29S-Q3-04	20410010606	1000	2.0	<2		
10	4380	86-811-16SR-Q3-04	20410010607	1000	2.0	<2	*	
11	4380	86-811-17S-Q3-04	20410010608	1000	2.0	<2	*	SILICA GEL CLEANUP
12	4380	86-811-18S-Q3-04	20410010609	1000	2.0	<2		
13	4380	86-NG-24S-Q3-04	20410010610	1000	2.0	<2		
14	4380	86-JETC-MS-Q3-04	20410010611	1000	2.0	<2		
15	4380	86-JETC-MSD-Q3-04	20410010612	1000	2.0	<2		
16	4380	86-JETC-DUP-Q3-04	20410010613	1000	2.0	<2		
17	4380	86-JETC-EB-Q3-04	20410010614	1000	2.0	<2		
18								
20								
21								
22								
23								MeCL2 Lot No:
24								041595
25								
26								
27								Sodium Sulfate Lot No:
28								040858

SKB 10/05/04

COMMENTS: SAMPLE PREPARATION INCLUDE DETERMINATION OF SAMPLE VOLUME/WEIGHT, SOLVENT EXTRACTION AND EVAPORATION OF SOLVENT TO FINAL VOLUME

*- Heavy Emulsion

SURROGATE ID	8-302-1	FLPRO SPIKE ID	8-282-2			TECHNICIAN	DATE
VOLUME	1.0 ml	VOLUME	200 ul			[illegible]	10/4/04
CONCENTRATION	100/1000 ug/ml	CONCENTRATION	500 ug/ml				
ACID	307-10-3					SUPERVISOR	DATE
[illegible]E WITNESS	(GL)					John Bailey	10/05/04

LABORATORY CHRONICLE: GCSV DEPARTMENT

Date: 10/11/2004
Instrument: gcsv14b.i
Method File: /var/chem/gcsv14b.i/2041006.b/TX1005.m
Batch: /var/chem/gcsv14b.i/2041006p.b
Column-Detector: DB-5MS-30M

Sample ID	ClientName	DataFile	Injection Time	DilFactor	Anal	Comments
		sv14b001cm.d	06-OCT-2004 14:06	1.000	dlb	
DCM		sv14b002.d	06-OCT-2004 14:47	1.000	dlb	
DCM		sv14b003.d	06-OCT-2004 15:16	1.000	dlb	
1201 6ppm		sv14b004.d	06-OCT-2004 16:09	1.000	dlb	
1201 6ppm		sv14b004s.d	06-OCT-2004 16:09	1.000	dlb	
1202 50ppm		sv14b005.d	06-OCT-2004 16:39	1.000	dlb	
1202 50ppm		sv14b005s.d	06-OCT-2004 16:39	1.000	dlb	
1203 150ppm		sv14b006.d	06-OCT-2004 17:08	1.000	dlb	
1203 150ppm		sv14b006s.d	06-OCT-2004 17:08	1.000	dlb	
1204 250ppm		sv14b007.d	06-OCT-2004 17:38	1.000	dlb	
1204 250ppm		sv14b007s.d	06-OCT-2004 17:38	1.000	dlb	
1205 350ppm		sv14b008.d	06-OCT-2004 18:07	1.000	dlb	
1205 350ppm		sv14b008s.d	06-OCT-2004 18:07	1.000	dlb	
1206 500ppm		sv14b009.d	06-OCT-2004 18:37	1.000	dlb	
1206 500ppm		sv14b009s.d	06-OCT-2004 18:37	1.000	dlb	
ICV 50ppm		sv14b010.d	06-OCT-2004 19:06	1.000	dlb	
dcm		sv14b011.d	06-OCT-2004 19:35	1.000	dlb	
195302		sv14b012.d	06-OCT-2004 20:05	1.000	dlb	
195302		sv14b012s.d	06-OCT-2004 20:05	1.000	dlb	
195303		sv14b013.d	06-OCT-2004 20:34	1.000	dlb	
195303		sv14b013s.d	06-OCT-2004 20:34	1.000	dlb	
195304		sv14b014.d	06-OCT-2004 21:03	1.000	dlb	
195304		sv14b014s.d	06-OCT-2004 21:03	1.000	dlb	
20410010601		sv14b015.d	06-OCT-2004 21:32	1.000	dlb	
20410010601		sv14b015s.d	06-OCT-2004 21:32	1.000	dlb	
20410010602		sv14b016.d	06-OCT-2004 22:01	1.000	dlb	
20410010602		sv14b016s.d	06-OCT-2004 22:01	1.000	dlb	
20410010603		sv14b017.d	06-OCT-2004 22:31	1.000	dlb	
20410010603		sv14b017s.d	06-OCT-2004 22:31	1.000	dlb	
20410010604		sv14b018.d	06-OCT-2004 23:00	1.000	dlb	
20410010604		sv14b018s.d	06-OCT-2004 23:00	1.000	dlb	
20410010605		sv14b019.d	06-OCT-2004 23:29	1.000	dlb	
20410010605		sv14b019s.d	06-OCT-2004 23:29	1.000	dlb	
20410010606		sv14b020.d	06-OCT-2004 23:58	1.000	dlb	
20410010606		sv14b020s.d	06-OCT-2004 23:58	1.000	dlb	
20410010607		sv14b021.d	07-OCT-2004 00:27	1.000	dlb	

REVISED 6-1-95 Supervisor Review: QA Review:

LABORATORY CHRONICLE: GCSV DEPARTMENT

Date: 10/11/2004
Instrument: gcsv14b.i
Method File: /var/chem/gcsv14b.i/2041006.b/TX1005.m
Batch: /var/chem/gcsv14b.i/2041006p.b
Column-Detector: DB-5MS-30M

Sample ID	ClientName	DataFile	Injection Time	DilFactor	Anal	Comments
20410010607		sv14b021s.d	07-OCT-2004 00:27	1.000	dlb	
1400 50ppm		sv14b022.d	07-OCT-2004 00:56	1.000	dlb	
1400 50ppm		sv14b022s.d	07-OCT-2004 00:56	1.000	dlb	
20410010608		sv14b023.d	07-OCT-2004 01:25	1.000	dlb	
20410010608		sv14b023s.d	07-OCT-2004 01:25	1.000	dlb	
20410010609		sv14b024.d	07-OCT-2004 01:54	1.000	dlb	
20410010609		sv14b024s.d	07-OCT-2004 01:54	1.000	dlb	
20410010610		sv14b025.d	07-OCT-2004 02:23	1.000	dlb	
20410010610		sv14b025s.d	07-OCT-2004 02:23	1.000	dlb	
20410010611		sv14b026.d	07-OCT-2004 02:52	1.000	dlb	
20410010611		sv14b026s.d	07-OCT-2004 02:52	1.000	dlb	
20410010612		sv14b027.d	07-OCT-2004 03:21	1.000	dlb	
20410010612		sv14b027s.d	07-OCT-2004 03:21	1.000	dlb	
20410010613		sv14b028.d	07-OCT-2004 03:50	1.000	dlb	
20410010613		sv14b028s.d	07-OCT-2004 03:50	1.000	dlb	
20410010614		sv14b029.d	07-OCT-2004 04:19	1.000	dlb	
20410010614		sv14b029s.d	07-OCT-2004 04:19	1.000	dlb	
1400 6ppm		sv14b030.d	07-OCT-2004 04:48	1.000	dlb	
1400 6ppm		sv14b030s.d	07-OCT-2004 04:48	1.000	dlb	

REVISED 6-1-95 Supervisor Review: QA Review:

STANDARD PREPARATION LOGBOOK

STANDARD NAME	STD#	STOCK STD	SUPPLIER	LOT#/ EXP DATE	WT/VOL g/ml	FINAL VOL(ml)	FINAL CONC	SOLVENT/ LOT#	INITIAL	DATE PREPARED	EXP DATE
AR-1254 III	63-2-1	pcb 1254	NSI	135m-11-02 09/04	20 ul	50 ml	400 ppb	Hexane 028648	HJL	5-4-04	9-01-04
Acetone	63-2-2	Neat	Fisher	032590	0.1g	10ml	10,000 ppm	CS2	CAL	5-4-04	5-4-05
AR-1254 III	63-2-3	pcb 1254	Ultra 100 ug/ml	S-1209 Exp. 11/05	200 ul	50 ml	400 ppb	Hexane 028648	HJL	5-4-04	10-3-04
FL Pro 6ppm	63-2-4	C-443-10 2000ug/ml DRH-FL-SS-3X Lot 680 13414-02-05 OTCRP	NSI Accu NSI	C-443-10 1/05 B3650147 4/07 13414-02-05	3ul 100ul 5ul	1mL	6ppm 300ppm 50ppm	DCM 031150	TLS	5-7-04	10-7-04
FL Pro 50 ppm	63-2-5				25ul 100ul 5ul	1mL	50ppm 300ppm 50ppm				
FL Pro 150ppm	63-2-6				75ul 100ul 5ul	1mL	150ppm 300ppm 50ppm				
L Pro 250ppm	63-2-7				125ul 100ul 5ul	1mL	250ppm 300ppm 50ppm				
L Pro 350ppm	63-2-8				175ul 100ul 5ul	1mL	350ppm 300ppm 50ppm				
L Pro 500 ppm	63-2-9				250ul 100ul 5ul	1mL	500ppm 300ppm 50ppm				
L Pro CU	63-2-10	DRH-FTRH 5000ug/ml	Accu	B3630135 11-11-06	100ul	1mL	50ppm	DCM 031150	TLS	5-7-04	10-7-04

STANDARD PREPARATION LOGBOOK

STANDARD NAME	STD#	STOCK STD	SUPPLIER	LOT#/ EXP DATE	WT/VOL g/ml	FINAL VOL(ml)	FINAL CONC	SOLVENT/ LOT#	INITIAL	DATE PREPARED	EXP DATE
~~8081 MVC · ICV~~	~~63-17-1~~	~~63-16-10~~ 60ug/mL	~~mHouse~~	~~mHouse~~ exp 3-26-05	~~50ul~~	~~50mL~~	~~60 ppb~~ 600 ppb	~~hexane 038647~~	~~SJT~~	~~9-27-04~~	~~3-26-05~~
CLP-Inst blank	63-17-2	CLP Pest Surr C-194-05 200ug/mL	NSI	C-194-05 Exp. 10/06	5 uL	50 mL	20 ppb	hexane 028648	dlb	9-27-04	03-26-05
8081 Mix ICV	63-17-3	63-16-10 600ug/mL	mHouse	mHouse exp 3-26-05	50uL ~~5uL~~ ST 9/30	50mL	60ppb	hexane 038647	SJT	9-30-04	3-26-05 ~~3-29-05~~ ST 9/30
O Terphenyl Stock	63-17-4	1341H-02-05 10,000 ug/mL	NSI	1341H-02-05 08-2005	200 uL	1mL	2000 ug/mL	DCM 036929	dlb	10-06-04	04-05-04
FLPRO 6	63-17-5	C-443-10 2000 ug/mL NSI DRH-FL-SS-3x 3000ug/mL Accust 63-17-4	in house	C-443-10 ~~ds #1105~~ B3050147 6/3/07 in house 04/05/04	3 uL 100 uL 25 uL	1mL	6 ppm/ 300/50 ppm	DCM 036929	dlb	10-06-04	
FLPRO 50	63-17-6				25 uL 100 uL 25 uL	1mL	50 ppm 300 ppm 50 ppm				
FLPRO 150	63-17-7				75 uL 100 uL 25 uL	1mL	150 ppm 300 ppm 50 ppm				
FLPRO 250	63-17-8				125 uL 100 uL 25 uL	1mL	250 ppm 300 ppm 50 ppm				
FLPRO 350	63-17-9				175 uL 100 uL 25 uL	1mL	350 ppm 300 ppm 50 ppm				
FLPRO 500	63-17-10				250 uL 100 uL 25 uL	1mL	500 ppm 300 ppm 50 ppm				

CH2MHILL Constructors, Inc.

115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278

Tel No: (770) 604-9182
Fax No: (770) 604-9282

CH2M Hill / 4380 / 20410 01026 / Due 10/8/04

CHAIN-OF-CUSTODY RECORD

COC NUMBER: 171591-034

ECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
mer N.A.S. Cecil Field TC	271591	Gulf Coast Labs. Dano Merril	Jeff Marks / CH2M Hill Constuctors, Inc.	6219 Authority Ave. Jacksonville, FL 32221 (904) 7774812,FAX: (904) 7774262
ECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
TC arterly GW Sampling Event	0086	6421	Bonnie Hogue / CH2M Hill Constuctors, Inc.	115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 (770)604-9182 Ext.561 FAX:604-9282
ECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Marks 2M Hill Constuctors, Inc.	Ph:(904)777-4812 Fax:(904) 777-4262	Ph:(225) 769-4900		20410 01026

ANALYSES REQUIRED (Include Method Numbers)

M	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on SOP)	TAT (calendar days)	BTEX & MTBE by 8260B.	16 listed PAHs (incl 1- & 2-Methylnaphthalene) by 8310	TRPH bt FLO-PRO								SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)
	86-334-2SA-Q3-04	CEF-334-02SA	W	09/28/04	1415	III/C	14	3	2	2								Grab		-1
	86-334-32S-Q3-04	CEF-334-32S	W	09/28/04	1125	III/C	14	3	2	2								Grab		2
	86-334-33S-Q3-04	CEF-334-33S	W	09/28/04	1035	III/C	14	3	2	2								Grab		3
	86-334-34S-Q3-04	CEF-334-34S	W	09/29/04	1320	III/C	14	3	2	2								Grab		4
	86-339-28S-Q3-04	CEF-339-28S	W	09/29/04	1520	III/C	14	3	1	2								Grab		5
	86-339-29S-Q3-04	CEF-339-29S	W	09/29/04	1415	III/C	14	3	2	2								Grab		6
	86-811-16SR-Q3-04	CEF-811-16SR	W	09/28/04	1610	III/C	14	3	2	2								Grab		7
	86-811-17S-Q3-04	CEF-811-17S	W	09/29/04	1125	III/C	14	3	2	2								Grab		8
	86-811-18S-Q3-04	CEF-811-18S	W	09/28/04	1515	III/C	14	3	2	2								Grab		9
	86-NG-24S-Q3-04	NG-24S	W	09/28/04	1320	III/C	14	3	2	2								Grab	MS/MSD	10

PLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use):
ndy Dumaop VIQ Environmental Services	UPS Tracking Numbers: 1Z2AE0480194592086, 1Z2AE0480190098298, 1Z2AE0480192776104, 1Z2AE0480193961518, 1Z2AE0480193550524, 1Z2AE0480192599136, 1Z2AE0480191923349. (7 Coolers)	30

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
ed Name and Signature:			Printed Name and Signature:		
umaop	9/30/2004	12:00	UPS Tracking Numbers: 1Z2AE0480194592086, 1Z2AE0480190098298, 1Z2AE0480192776104, 1Z2AE0480193961518, 1Z2AE0480193550524, 1Z2AE0480192599136, 1Z2AE0480191923349. (7 Coolers)	9/30/2004	12:00
ed Name and Signature:			Printed Name and Signature:		
S# 1Z2AE0480190098298	10-1-04	1030	Richard W McIntosh	10-1-04	1030
ed Name and Signature:			Printed Name and Signature:		

CH2M Hill / 4380 / 204 100 1 06 / Due 10/8/04

CH2MHILL Constructors, Inc.

115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278

Tel No: (770) 604-9182
Fax No: (770) 604-9282

CHAIN-OF-CUSTODY RECORD

COC NUMBER: 171591-0304

OJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
rmer N.A.S. Cecil Field TC	271591	Gulf Coast Labs. Dano Merril	Jeff Marks / CH2M Hill Constuctors, Inc.	6219 Authority Ave. Jacksonville, FL 32221 (904) 7774812,FAX: (904) 7774262
OJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
TC arterly GW Sampling Event	0086	6421	Bonnie Hogue / CH2M Hill Constuctors, Inc.	115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 (770)604-9182 Ext.561 FAX:604-9282
OJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
f Marks 2M Hill Constuctors, Inc.	Ph:(904)777-4812 Fax:(904) 777-4262	Ph:(225) 769-4900		204100106

ANALYSES REQUIRED (Include Method Numbers)

EM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on SOP)	TAT (calendar days)	BTEX & MTBE by 8260B.	16 listed PAHs (incl 1- & 2-Methylnaphthalene) by 8310	TRPH bt FLO-PRO								SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)
1	86-JETC-MS-Q3-04	Matrix Spike	W	09/28/04	1320	III/C	14	3	2	2								Grab	NG-24S	11
2	86-JETC-MSD-Q3-04	Matrix Spike Duplicate	W	09/28/04	1320	III/C	14	3	2	2								Grab	NG-24S	12
2	86-JETC-DUP-Q3-04	Duplicate	W	NA	NA	III/C	14	3	2	2								Grab		13
4	86-JETC-EB-Q3-04	Equipment Blank	W	09/29/04	1545	III/C	14	3	2	2								Grab		14
5	86-JETC-TB-Q3-04	Trip Blank	W	NA	NA	III/C	14	3										Grab	Prepared by Lab	15
5																				
7																				
8																				
9																				
0																				

MPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use):
andy Dumaop VIQ Environmental Services	UPS Tracking Numbers: 1Z2AE0480194592086, 1Z2AE0480190098298, 1Z2AE0480192776104, 1Z2AE0480193961518, 1Z2AE0480193550524, 1Z2AE0480192599136, 1Z2AE0480191923349. (7 Coolers)	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
ted Name and Signature:			Printed Name and Signature:		
Dumaop	9/30/2004	12:00	UPS Tracking Numbers: 1Z2AE0480194592086, 1Z2AE0480190098298, 1Z2AE0480192776104, 1Z2AE0480193961518, 1Z2AE0480193550524, 1Z2AE0480192599136, 1Z2AE0480191923349. (7 Coolers)	9/30/2004	12:00
ted Name and Signature:			Printed Name and Signature:		
ted Name and Signature:			Printed Name and Signature:		

PRESERVATION CHECKLIST / COOLER RECEIPT

Gulf Coast Analytical Laboratories, Inc.

WO:	204100106	**Type:**	D
Desc:		**Report:**	REVIEW_RPT
Work ID:	CTO 86 Cecil Field - South Fue	**Status:**	WP
Project Seq:	24118	**Created:**	10/1/04 11:53
Client:	4380 - CH2M Hill Constructors	**QA:**	
Profile:	42891 - CTO 0086 - CTO 86 Cecil Field - South Fuel Farm	**PO:**	6421

WORKORDER SAMPLES

Container ID	Type	Preservative	pH PRESERVATIVE A	pH PRESERVATIVE U	pH PRESERVATIVE N\A	VOA HEADSPACE A	VOA HEADSPACE U	VOA HEADSPACE N\A	CONTAINER CONDITION
20410010601-1	40	HCL+SS			✓	✓			OK
20410010601-2	40	HCL+SS			✓	✓			OK
20410010601-3	LA	NONE			X			X	OK
20410010601-4	LA	NONE			X			X	OK
20410010601-5	LA	H2SO4	✓					X	OK
20410010601-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	A	U	N\A	A	U	N\A	CONTAINER CONDITION
20410010602-1	40	HCL+SS			✓	✓			OK
20410010602-2	40	HCL+SS			✓	✓			OK
20410010602-3	LA	NONE			X			X	OK
20410010602-4	LA	NONE			X			X	OK
20410010602-5	LA	H2SO4	✓					X	OK
20410010602-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	A	U	N\A	A	U	N\A	CONTAINER CONDITION
20410010603-1	40	HCL+SS			✓	✓			OK
20410010603-2	40	HCL+SS			✓	✓			OK
20410010603-3	LA	NONE			X			X	OK
20410010603-4	LA	NONE			X			X	OK
20410010603-5	LA	H2SO4	✓					X	OK
20410010603-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	pH PRESERVATIVE A	pH PRESERVATIVE U	pH PRESERVATIVE N\A	VOA HEADSPACE A	VOA HEADSPACE U	VOA HEADSPACE N\A	CONTAINER CONDITION
20410010604-1	40	HCL+SS			✓	✓			OK
20410010604-2	40	HCL+SS			✓	✓			OK
20410010604-3	LA	NONE			X			X	OK
20410010604-4	LA	NONE			X			X	OK
20410010604-5	LA	H2SO4	✓					X	OK
20410010604-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	A	U	N\A	A	U	N\A	CONTAINER CONDITION
20410010605-1	40	HCL+SS			✓	✓			OK
20410010605-2	40	HCL+SS			✓	✓			OK
20410010605-3	LA	NONE			X			X	OK
20410010605-4	LA	NONE			X			X	OK
20410010605-5	LA	H2SO4	✓					X	OK
20410010605-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	A	U	N\A	A	U	N\A	CONTAINER CONDITION
20410010606-1	40	HCL+SS			✓	✓			OK
20410010606-2	40	HCL+SS			✓	✓			OK
20410010606-3	LA	NONE			X			X	OK
20410010606-4	LA	NONE			X			X	OK
20410010606-5	LA	H2SO4	✓					X	OK
20410010606-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	A	U	N\A	A	U	N\A	CONTAINER CONDITION
20410010607-1	40	HCL+SS			✓	✓			OK
20410010607-2	40	HCL+SS			✓	✓			OK
20410010607-3	LA	NONE			X			X	OK
20410010607-4	LA	NONE			X			X	OK
20410010607-5	LA	H2SO4	✓					X	OK
20410010607-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	A	U	N\A	A	U	N\A	CONTAINER CONDITION
20410010608-1	40	HCL+SS			✓	✓			OK
20410010608-2	40	HCL+SS			✓	✓			OK
20410010608-3	LA	NONE			X			X	OK
20410010608-4	LA	NONE			X			X	OK
20410010608-5	LA	H2SO4	✓					X	OK
20410010608-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	pH PRESERVATIVE A	pH PRESERVATIVE U	pH PRESERVATIVE N\A	VOA HEADSPACE A	VOA HEADSPACE U	VOA HEADSPACE N\A	CONTAINER CONDITION
20410010609-1	40	HCL+SS			✓	✓			OK
20410010609-2	40	HCL+SS			✓	✓			OK
20410010609-3	LA	NONE			X			X	OK
20410010609-4	LA	NONE			X			X	OK
20410010609-5	LA	H2SO4	✓					X	OK
20410010609-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	A	U	N\A	A	U	N\A	CONTAINER CONDITION
20410010610-1	40	HCL+SS			✓	✓			OK
20410010610-2	40	HCL+SS			✓	✓			OK
20410010610-3	LA	NONE			X			X	OK
20410010610-4	LA	NONE			X			X	OK
20410010610-5	LA	H2SO4	✓					X	OK
20410010610-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	A	U	N\A	A	U	N\A	CONTAINER CONDITION
20410010611-1	40	HCL+SS			✓	✓			OK
20410010611-2	40	HCL+SS			✓	✓			OK
20410010611-3	LA	NONE			X			X	OK
20410010611-4	LA	NONE			X			X	OK
20410010611-5	LA	H2SO4	✓					X	OK
20410010611-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	A	U	N\A	A	U	N\A	CONTAINER CONDITION
20410010612-1	40	HCL+SS			✓	✓			OK
20410010612-2	40	HCL+SS			✓	✓			OK
20410010612-3	LA	NONE			X			X	OK
20410010612-4	LA	NONE			X			X	OK
20410010612-5	LA	H2SO4	✓					X	OK
20410010612-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	A	U	N\A	A	U	N\A	CONTAINER CONDITION
20410010613-1	40	HCL+SS			✓	✓			OK
20410010613-2	40	HCL+SS			✓	✓			OK
20410010613-3	LA	NONE			X			X	OK
20410010613-4	LA	NONE			X			X	OK
20410010613-5	LA	H2SO4	✓					X	OK
20410010613-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	pH PRESERVATIVE A	pH PRESERVATIVE U	pH PRESERVATIVE N\A	VOA HEADSPACE A	VOA HEADSPACE U	VOA HEADSPACE N\A	CONTAINER CONDITION
20410010614-1	40	HCL+SS			✓	✓			OK
20410010614-2	40	HCL+SS			✓	✓			OK
20410010614-3	LA	NONE			X			X	OK
20410010614-4	LA	NONE			X			X	OK
20410010614-5	LA	H2SO4	✓					X	OK
20410010614-6	LA	H2SO4	✓					X	OK

Container ID	Type	Preservative	A	U	N\A	A	U	N\A	CONTAINER CONDITION
20410010615-1	40	HCL+SS			✓	✓			OK
20410010615-2	40	HCL+SS			✓	✓			OK

A = ACCEPTABLE
U = UNACCEPTABLE
N\A = NOT APPLICABLE

COOLER (S) TEMPERATURE (A) U LIMIT = 4C + \ - 2C

MAXIMUM VOLATILE HEADSPACE BUBBLE 6MM

Custody Seal
used [✓] Yes [ ] No
in tact [✓] Yes [ ] No

LABEL(S) VERIFIED MR CUSTODIAN ALK