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JULY 2012 QUARTERLY GROUNDWATER MONITORING REPORT FOR TRUCK FILL STAND REVISION 1 NAS KEY WEST FL

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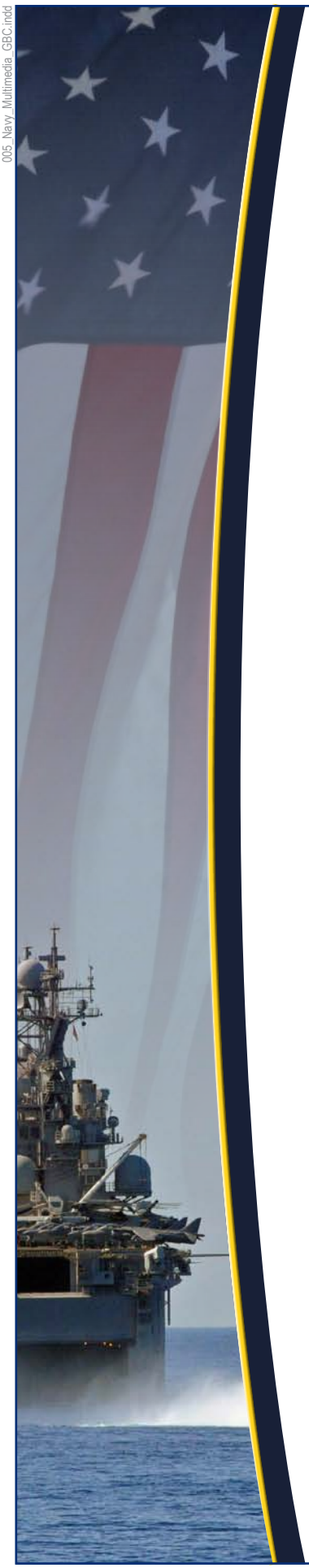

Revision 1

July 2012 Quarterly Groundwater Monitoring Report Truck Fill Stand

Naval Air Station Key West
Boca Chica Key, Florida

Naval Facilities Engineering Command

Prepared for

Department of the Navy
Naval Facilities Engineering Command Southeast

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CTO-JM08

November 2012

Prepared by

CH2MHILL®

PROFESSIONAL CERTIFICATION

This Quarterly Groundwater Monitoring Report for the Truck Fill Stand located at the Naval Air Station Key West, Boca Chica Key, Florida, was prepared under the direction of a Florida-licensed professional geologist in accordance with Florida Rules and Regulations, as authorized by Chapters 492 or 471, Florida Statutes. The undersigned certifies that, to the best of his knowledge and belief, the technical data provided herein are complete and accurate, and comply with all requirements for such assessments.

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Executive Summary

Between July 17 and 19, 2012, CH2M HILL conducted a quarterly groundwater monitoring event at the Truck Fill Stand (TFS) site located at the Naval Air Station (NAS) Key West, Boca Chica Key, Florida. The work was performed under the Naval Facilities Engineering Command Southeast (NAVFAC SE) Multimedia Contract No. N62470-10-D-3009, Task Order JM08. The work consisted of performing a comprehensive round of well gauging and collecting groundwater samples from nine monitoring wells (TFS-MW-01, TFS-MW-04, TFS-MW-05, TFS-MW-8D, TFS-MW-11, TFS-MW-12, TFS-MW-15, TFS-MW-16, and TFS-MW-17) for the analysis of Appendix IX volatile organic compounds (VOCs), Appendix IX semivolatile organic compounds (SVOCs), and total recoverable petroleum hydrocarbons (TRPH).

Gauging data indicate groundwater elevations ranged from 1.77 feet above mean sea level (msl) to 3.33 feet above msl, and the direction of groundwater flow was radial from a groundwater high located at well TFS-MW-06. The average horizontal gradient of the water table aquifer was estimated to be 0.005 foot/foot (ft/ft) and the seepage velocity was calculated to be 0.30 foot per day (ft/day) or 109.5 feet per year (ft/year). Light non-aqueous phase liquid (LNAPL) was not detected in groundwater.

Test results from the nine monitoring wells were as follows:

- The VOCs benzene, ethylbenzene, toluene, and xylenes were detected in monitoring well TFS-MW-15; benzene was the only VOC detected in well TFS-MW-04. Comparison of the compounds detected with the Groundwater Cleanup Target Levels (GCTLs) indicates that only benzene in well TFS-MW-15 exceeded the GCTL of 1 microgram per liter (µg/L). VOCs were not detected in the remaining seven wells.
- Seventeen SVOCs were detected in six wells. The following SVOCs exceeded their respective GCTLs:
  - 1-Methylnaphthalene exceeded the GCTL of 28 µg/L in wells TFS-MW-04 and TFS-MW-15 at concentrations of 38.4 µg/L and 31.2 µg/L, respectively.
  - Benzo(a)anthracene was detected in well TFS-MW-15 at a concentration of 0.2 µg/L, which is above the GCTL of 0.05 µg/L.
  - Benzo(b)fluoranthene was detected in well TFS-MW-04 at a concentration of 0.053 µg/L, which is above the GCTL of 0.05 µg/L.
  - Naphthalene was detected in well TFS-MW-15 at a concentration of 33 µg/L, which is above the GCTL of 14 µg/L.
- SVOCs were not detected in wells TFS-MW-11, TFS-MW-12, or TFS-MW-16.
- TRPH was detected in seven of the nine monitoring wells sampled at concentrations that ranged from 320J µg/L (well TFS-MW-16) to 20,900 µg/L (well TFS-MW-15). The GCTL of 5,000 µg/L for TRPH was exceeded at two wells, TFS-MW-04 and TFS-MW-15.
- Overall, the water quality parameters measured during well purging and sampling indicate that conditions are favorable for the biodegradation of hydrocarbons to occur.

Based on the sampling results, additional quarterly groundwater monitoring is recommended to evaluate fluctuations in petroleum hydrocarbon concentrations over time. During each event, samples should be analyzed for Appendix IX VOCs, Appendix IX SVOCs, and TRPH. In addition, during the next quarterly sampling event, samples should be collected for the analysis of chloride, manganese, salinity, sulfate, and total dissolved solids (TDS) from monitoring wells TFS-MW-04, TFS-MW-8D, TFS-MW-15, TFS-MW-16, and TFS-MW-17, and from surface water location TFS-SW-03. A sample of seawater should also be collected and analyzed for the same parameters. The water quality data will be used to determine the potability of the aquifer. If groundwater beneath the site is classified as a non-potable water source, higher cleanup values may be used as screening criteria, thereby, reducing the footprint of the dissolved hydrocarbon plume.

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B Data Validation Summary and Laboratory Data

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Acronyms and Abbreviations

°C	degrees Celsius
µg/L	microgram per liter
AFVR	aggressive fluid vapor recovery
AST	aboveground storage tank
BBL	Blasland, Bouck, & Lee, Inc.
BCTF	Boca Chica Tank Farm
bgs	below ground surface
BTOC	below top of casing
CO_2	carbon dioxide
DO	dissolved oxygen
EPA	U.S. Environmental Protection Agency
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FL PRO	Florida Petroleum Residual Organic
ft	foot/feet
ft/day	feet per day
ft/ft	foot per foot
ft/year	feet per year
GCTL	Groundwater Cleanup Target Level
IDW	investigation-derived waste
IRA	interim remedial action
JP-5	jet propulsion fuel no. 5
LNAPL	light non-aqueous phase liquid
mg/L	milligrams per liter
MNA	monitored natural attenuation
msl	mean sea level
mS/cm	milliSiemens per centimeter
mV	millivolts
NA	not available
NAS	Naval Air Station
NAVFAC SE	Naval Facilities Engineering Command Southeast
NFA	no further action
NM	not measured

NTU	nephelometric turbidity unit
OES	Omega Environmental Services, Inc.
ORP	oxidation-reduction potential
OVA	organic vapor analyzer
PAH	polynuclear aromatic hydrocarbon
POL	petroleum, oils, and lubricants
QA	quality assurance
QC	quality control
SAR	Site Assessment Report
SSAR	Supplemental Site Assessment Report
SQAG	Sediment Quality Assessment Guidelines
SVOC	semivolatile organic compound
SWCTL	Surface Water Cleanup Target Level
TDS	total dissolved solids
TFS	Truck Fill Stand
TPH	total petroleum hydrocarbon
TRPH	total recoverable petroleum hydrocarbon
TtNUS	Tetra Tech NUS, Inc.
UST	underground storage tank
V	velocity
VOC	volatile organic compound

SECTION 1

Introduction

CH2M HILL, Inc. has been contracted by Naval Facilities Engineering Command Southeast (NAVFAC SE), to conduct quarterly groundwater monitoring activities and prepare quarterly groundwater monitoring reports under Multimedia Contract No. N62470-10-D-3009, Contract Task Order JM08. The purpose of this quarterly report is to document the field activities, results, conclusions, and recommendations obtained from the sampling event performed in July 2012. Field activities included completion of a site-wide groundwater gauging event, and collection of groundwater samples from nine monitoring wells at the Truck Fill Stand (TFS) site located at the Naval Air Station (NAS) Key West in Boca Chica Key, Florida.

This quarterly report is organized into the following sections:

- Section 1, Introduction
- Section 2, Field Activities
- Section 3, Investigation Findings
- Section 4, Conclusions and Recommendations
- Section 5, References

Tables and figures are presented in each section to support the discussions. Appendixes A and B provide supporting information including sampling logs, data validation, and laboratory reports.

1.1 Site Description

NAS Key West is located in southern Monroe County, Florida, approximately 150 miles southwest of Miami. The TFS is located on Boca Chica Key, Florida (Figure 1-1). The TFS is an active facility used to fill tanker trucks for refueling aircraft. Fuel from the Boca Chica Tank Farm (BCTF) located approximately 4,000 feet southwest of the TFS is pumped to the southwest portion of the TFS through twin 6-inch-diameter steel underground pipelines. Fuel is pumped and transferred at the fueling area to tanker trucks. Trucks routinely leave and return to the site for fueling missions and related airfield operations. The TFS is also referred to as Building A-902 in reference to the former operations building that stood on the southeast side of this facility (Tetra Tech NUS, Inc. [TtNUS], 2011).

The TFS, including former Building A-902, dates back to the 1940s and was part of the original NAS Key West infrastructure. Building A-902 was the original Administration Building for NAS Key West. The layout of the site has changed since it was first used as a fueling point in 1945. Documented environmental management activities began in the mid-1970s with the reporting of tank removals, implementation of numbering systems, and tank replacements. No other documented uses of the site exist (TtNUS, 2011).

Land surface at the TFS is generally flat and is mostly paved with asphalt and concrete. The site is not paved at the northern and western areas. Wetland areas are located immediately east and northeast of the site (TtNUS, 2011).

North

0 25 50 100
Feet

FIGURE 1-1
Site Location Map
NAS Key West
Boca Chica Key, Florida

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1.2 Site History

Several spills and cleanup actions have been documented at the TFS. A 1,000-gallon underground storage tank (UST) designated Tank A-935 (also known as Tank A-902B), used for storing oily wastewater from the jet fuel filter system, was removed from the site in 1995. One 250-gallon aboveground storage tank (AST), Tank A-935-R, used for the same purpose, remains on site (Blasland, Bouck, & Lee, Inc. [BBL], 2001). The UST closure report for Tank A-935 indicated that the tank was in excellent condition; however, light non-aqueous phase liquid (LNAPL) was observed floating on groundwater during the tank excavation (Omega Environmental Services, Inc. [OES], 1995).

In April 1999, NAVFAC SE submitted a Site Assessment Report (SAR) for Building A-902 to the Florida Department of Environmental Protection (FDEP) (TtNUS, 1999). The SAR indicated that site soil and groundwater had been contaminated by petroleum hydrocarbons, presumably from past tanker truck spills. The SAR included recommendations for interim remedial action (IRA) followed by a supplemental assessment. FDEP approved the SAR on May 10, 1999.

In late January 2000, less than 25 gallons of fuel were inadvertently released into a catch basin that was under repair, resulting in the contamination of soil. The Navy excavated the contaminated soil and screened soil samples using an organic vapor analyzer (OVA) to confirm that all affected soil had been removed. In late February/early March 2000, approximately 100 gallons of fuel were released in the same area. However, the catch basin had been repaired and all fuel was reportedly contained within the catch basin and later pumped out (BBL, 2001).

In March 2000, workers constructing the new Petroleum, Oils, and Lubricants (POL) Laboratory building adjacent to the TFS discovered discolored soil with a strong petroleum odor in trenches excavated for the building footers. Based on these findings, the Navy retained BBL to perform an investigation of the area. Two monitoring wells (TFS-MW-09 and TFS-MW-10) were installed on the north and south sides of the building and sampled for petroleum hydrocarbons. Benzene was detected in groundwater samples from both wells at concentrations that exceeded the Groundwater Cleanup Target Level (GCTL) of 1 microgram per liter (µg/L), as specified in Florida Administrative Code (F.A.C.) Chapter 62-777, Table I. BBL concluded that the plume was not adequately defined in the area of the new POL Laboratory building and additional assessment was necessary. In addition, on March 29, 2000 approximately 1.9 inches of LNAPL were measured in monitoring well TFS-MW-01 (BBL, 2001).

On April 27, 2000, approximately 3,200 gallons of jet propulsion fuel no. 5 (JP-5) were released at the TFS when a valve was left open for 3 hours. Upon discovery, LNAPL recovery commenced and soil excavation began on April 28, 2000. In some areas, excavation was limited by cement foundations. The entire footprint of the spill was excavated and stockpiled. Stockpiled soil was later removed from the site and disposed. During the excavation work, dark brown oil was visible near the water table (BBL, 2001).

Because these releases potentially affected the findings of the 1999 SAR, the Navy contracted BBL to conduct a supplemental site assessment to define the extent of petroleum hydrocarbon contamination. The Supplemental Site Assessment Report (SSAR) concluded that dissolved petroleum hydrocarbons above the GCTLs were present in groundwater in the vicinity of the new POL Laboratory building, the TFS, and AST A-935-R. Concentrations of petroleum hydrocarbons in sediments and surface water in the adjacent wetland also exceeded Sediment Quality Assessment Guidelines (SQAGs) and marine Surface Water Cleanup Target Levels (SWCTLs). LNAPL was also detected in several monitoring wells. The SSAR concluded that remedial measures should be initiated (BBL, 2001).

Subsequently, a treatability study was planned for the TFS site, to include aggressive fluid vapor recovery (AFVR). TtNUS was tasked with performing the treatability study, and in May 2003 collected groundwater samples to establish baseline conditions at the TFS. The baseline data were compared with the 1999 SAR and test data showed that volatile organic compound (VOC) and polynuclear aromatic hydrocarbon (PAH) concentrations had decreased in the area west of the TFS, but remained above the GCTLs. In addition, gauging data showed LNAPL thickness had decreased from about 1 foot in monitoring well TFS-

MW-04 (October 2000) to a sheen in May 2003. Due to the decrease in LNAPL thickness, TtNUS determined that an AFVR was no longer an appropriate remedy for monitoring well TFS-MW-04. Instead, TtNUS recommended that quarterly monitoring be implemented to evaluate the extent to which natural attenuation was occurring (TtNUS, 2003). Monitored natural attenuation (MNA) sampling was conducted from May 2003 to June 2009. The results of the MNA sampling indicated that MNA was occurring, but concentrations of benzene, naphthalene, and total petroleum hydrocarbons (TPH) remained above the GCTLs in monitoring well TFS-MW-04, located in the southwest portion of the TFS.

Between June 2009 and March 2010, TtNUS performed an extensive site investigation in the TFS area. The sites investigated included: (1) the perimeter of the POL Laboratory building where LNAPL was observed in the building footing excavations; (2) the northern area adjacent to the POL Laboratory associated with the reported location of a former AST; (3) the area south of the POL Laboratory; (4) the area south of the current TFS fueling and tanker parking area/containment area extending to the edge of the taxiway; and (5) the area west of the pumping area where fuel lines have been known to leak, including the current MNA area and west beyond the edge of the taxiway. Surface water samples were also collected from the wetlands southwest of the POL Laboratory building during the site investigation (Navy, 2011).

Conclusions of the 2009/2010 Site Investigation in the JP-5 spill area were to: (1) revaluate this area since a distinct source area was not detected; and (2) collect sediment and additional surface water samples from the wetlands west of the site, as contamination has migrated to the wetlands (Navy, 2011).

Between April 9 and May 21, 2012, CH2M HILL performed additional site assessment activities at the TFS. The work included monitoring well installation, groundwater sampling, surface water and sediment sampling, aquifer slug testing, and a tidal influence evaluation. Findings from the additional site investigation activities showed petroleum compounds persist in groundwater, surface water, and sediment. Petroleum impacts to groundwater exceeded the FDEP GCTLs in one well while the FDEP SWCTLs were exceeded in the surface water samples. No FDEP regulatory standards were exceeded in the sediment samples.

Recommendations from the 2012 additional site investigation included quarterly groundwater monitoring to further evaluate the petroleum-contaminant trends over time. In addition, CH2M HILL also recommended conducting an ecological risk assessment to evaluate the potential risk to ecological receptors in the wetland area to the west of the TFS. Upon completion of an ecological risk assessment, recommendations for no further action (NFA), additional monitoring, or corrective actions for the surface water and sediment would be determined (CH2M HILL, 2012b).

SECTION 2

Field Activities

This section describes the field activities conducted during the July 2012 quarterly groundwater monitoring event at the TFS. Activities followed the guidelines presented in the *Final Site Assessment Work Plan for the Truck Fill Stand* CH2M HILL, 2012a).

2.1 Field Activity Summary

Fieldwork was conducted between July 17 and 19, 2012 in accordance with the *Final Site Assessment Work Plan for the Truck Fill Stand* (CH2M HILL, 2012a). The work consisted of the following activities:

- **Site-wide Groundwater level Measurements** – Groundwater levels were measured and recorded from 16 side-wide monitoring wells.
- **Groundwater Sampling Event**—Groundwater samples were collected from the nine monitoring wells (TFS-MW-01, TFS-MW-04, TFS-MW-05, TFS-MW-8D, TFS-MW-11, TFS-MW-12, TFS-MW-15, TFS-MW-16, and TFS-MW-17).

A field activity summary is provided in Table 2-1. Figure 2-1 shows the locations of the monitoring wells.

TABLE 2-1
Field Activity Summary
Truck Fill Stand, NAS Key West, Boca Chica Key, Florida

Date	Specific Activity	Comments
July 17, 2012	Collected site-wide water level measurements	Measured groundwater levels in 16 monitoring wells.
July 17-19, 2012	Collected groundwater samples	Purged and sampled nine monitoring wells (TFS-MW-01, TFS-MW-04, TFS-MW-05, TFS-MW-8D, TFS-MW-11, TFS-MW-12, TFS-MW-15, TFS-MW-16, and TFS-MW-17)

The following sections present a summary of the site-specific activities conducted at the truck fill stand.

2.2 Groundwater Level Measurements and Sampling

Static water levels were measured in 16 wells on July 17, 2012 (Table 2-2). Water levels were measured using an interface probe and measurements were made from a survey mark located on the top of the well casing.

Between July 17 and 19, 2012, groundwater samples were collected from monitoring wells TFS-MW-01, TFS-MW-04, TFS-MW-05, TFS-MW-8D, TFS-MW-11, TFS-MW-12, TFS-MW-15, TFS-MW-16, and TFS-MW-17. Prior to sampling, the wells were purged using a peristaltic pump fitted with new disposable polyethylene tubing. The temporary monitoring wells were sampled following the U.S. Environmental Protection Agency (EPA) guidance entitled *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (EPA, 1996).The intake tubing was placed approximately 2 feet below the top of the water column in each well. Pump discharge was monitored for pH, temperature, turbidity, specific conductance, oxidation-reduction potential (ORP), and dissolved oxygen (DO). Groundwater samples were collected after the water levels in the wells had stabilized, a minimum of one well volume per well had been purged, and field parameters were stable. Well purging forms are provided in Appendix A. Groundwater samples were analyzed for Appendix IX VOCs (EPA Method 8260B), Appendix IX semivolatile organic compounds (SVOCs) (EPA Method 8270D/8270SIM), and total recoverable petroleum hydrocarbons (TRPH) (Florida Petroleum Residual Organic [FL PRO]).

North

0 25 50 100
Feet

LEGEND

- Monitoring Well Location
- Abandoned Monitoring Well Location

FIGURE 2-1
Monitoring Well Locations
NAS Key West
Boca Chica Key, Florida

CH2MHILL.

ES082112065335KNV F2-1_MWlocations_r1 9/27 lk

TABLE 2-2
Water Level Elevation Data
Truck Fill Stand, NAS Key West, Boca Chica Key, Florida

Monitoring Well ID	Total Well Depth (ft BTOC)	Screen Interval (ft bgs)	Ground Elevation (ft msl)	Top of Casing Elevation (ft msl)	Depth to Groundwater (ft BTOC)	Groundwater Elevation (ft msl)
					7/17/2012	7/17/2012
TFS-MW-01	11.99	NA	NA	4.44	1.54	2.90
TFS-MW-02	11.97	NA	NA	3.09	0.33	2.76
TFS-MW-03	11.50	NA	NA	4.17	1.49	2.68
TFS-MW-04	11.97	NA	NA	2.63	0.86	1.77
TFS-MW-05	11.95	NA	NA	4.55	1.42	3.13
TFS-MW-06	11.94	NA	NA	4.21	0.88	3.33
TFS-MW-8D	35.00	NA	NA	4.12	1.64	2.48
TFS-MW-09	12.00	NA	NA	3.05	0.45	2.60
TFS-MW-10	NA	NA	NA	2.73	0.27	2.46
TFS-MW-11	11.31	NA	NA	2.62	0.00	2.62
TFS-MW-12	11.28	NA	NA	3.80	0.86	2.94
TFS-MW-13	11.00	NA	NA	2.58	0.14	2.44
TFS-MW-14	11.00	NA	NA	2.49	0.03	2.46
TFS-MW-15	11.00	1.00-11.00	2.4	2.28	0.00	2.28
TFS-MW-16	12.15	2.15-12.15	3.5	3.20	0.88	2.32
TFS-MW-17	11.75	1.75-11.75	2.5	2.26	0.00	2.26

Notes:
ft bgs = feet below ground surface
ft BTOC = feet below top of casing
ft msl = feet mean sea level
NA = not available
NM = not measured
Construction details and survey information for wells TFS-MW-01 through TFS-MW-14 taken from the *Site Assessment for Truck Fill Stand* Report (TtNUS, 2011).

2.3 Investigation-Derived Waste (IDW)

IDW (decontamination water and well purge water) was containerized in a labeled 55-gallon drum and stored at the TFS.

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SECTION 3

Investigation Findings

This section presents the findings from the quarterly groundwater monitoring event.

3.1 Hydrogeology

3.1.1 Groundwater

Groundwater was observed flowing at the ground surface at wells TFS-MW-11, TFS-MW-15, and TFS-MW-17 to a depth of 1.64 feet at well TFS-MW-8D. Water table elevations beneath the site ranged from 1.77 to 3.33 feet msl in July 2012. The groundwater elevations measured on July 17, 2012 were used to develop a potentiometric surface map (Figure 3-1) of the water-table aquifer. The potentiometric surface for July 2012 indicates that the direction of groundwater flow across the site is radial from a groundwater high located at well TFS-MW-06. The radial flow is probably attributable to the fact that well TFS-MW-06 is located in an unpaved grassy area and receives more recharge. The average horizontal gradient of across the site in July 2012 was estimated to be 0.005 foot per foot (ft/ft).

Historical and current vertical gradient calculations are summarized in Table 3-1. Vertical gradients were calculated using well cluster TFS-MW-01/TFS-MW-8D. During July 2012, a downward hydraulic gradient of -0.018 ft/ft was measured.

TABLE 3-1
Historical Calculated Vertical Hydraulic Gradients
Truck Fill Stand, NAS Key West, Boca Chica Key, Florida

Date	Well Cluster	Vertical Gradient (ft/ft)	Gradient Direction
4/20/2012	TFS-MW-01/TFS-MW-8D	0.006	Up
5/21/2012	TFS-MW-01/TFS-MW-8D	-0.017	Down
7/17/2012	TFS-MW-01/TFS-MW-8D	-0.018	Down

The rate of groundwater moving beneath the site was estimated by the average seepage velocity. The following equation was used to calculate the average seepage velocity:

$$V_x = \frac{Ki}{n_e}$$

where:

V_x = average seepage velocity in feet per day (ft/day)

K = hydraulic conductivity (geometric mean hydraulic conductivity of 8.99 ft/day)

i = hydraulic gradient (average horizontal gradient of across the site in July 2012 of 0.005 ft/ft)

n_e = effective porosity (assumed to be 0.15 for weathered limestone)

The horizontal seepage velocity (V) across the site is estimated to be 0.30 ft/day or 109.5 feet per year (ft/year) (V=[8.99 ft/day][0.005 ft/ft]/0.15).

North

0 25 50 100
Feet

LEGEND

- Monitoring Well Location
- Groundwater Flow Direction

NOTES

1. Groundwater elevations were measured on July 17, 2012
2. All elevations in feet
3. Deep well TFS-MW-8D was not used to create this potentiometric surface map
4. Contour interval = 0.03 ft

FIGURE 3-1
Potentiometric Surface Map (July 2012)
NAS Key West
Boca Chica Key, Florida

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ES092412162320KNV F3-1_PotMap_July2012_r2 9/28/12 lk

3.2 Field Parameters

Water quality parameters (temperature, specific conductivity, ORP, DO, and pH) were measured during well purging. The measured water quality parameters convey the groundwater conditions and provide information necessary to evaluate natural attenuation. Table 3-2 presents the water quality parameter results. Results are discussed below as they relate to the suitability of an aquifer as an environment for hydrocarbon degradation to occur.

3.2.1 Temperature

Groundwater temperature directly affects the solubility of oxygen and other geochemical species. The solubility of DO is temperature dependent, being more soluble in cold water than in warm water. Groundwater temperature also affects the metabolic activity of bacteria. The optimum temperature range for microbial activity is between 8 to 30 degrees Celsius (°C) and rates of hydrocarbon biodegradation roughly double for every 10°C increase in temperature over the temperature range between 5 and 25°C. Groundwater temperatures below 5°C tend to inhibit biodegradation and slow rates of biodegradation are generally observed.

During the July 2012 groundwater monitoring event, temperatures varied from 27.3 to 33.2°C and averaged 29.4°C in the monitoring wells. These groundwater temperatures are within the upper range for optimal microbial activity and are extremely favorable for biodegradation of hydrocarbons to occur. Temperature changes in the monitoring wells varied by 5.9°C. The variation of temperatures in the shallow monitoring wells indicates the shallow groundwater reacts readily to ambient temperature changes.

3.2.2 Specific Conductance

Specific conductance measurements indicate whether groundwater extracted from wells is representative of the same water-bearing zone at a site. Specific conductance measurements ranged from 0.324 to 23.6 milliSiemens per centimeter (mS/cm). The specific conductance measurements from the July 2012 monitoring event were similar with the exception of well TFS-MW-8D. The specific conductance measured in well TFS-MW-8D was over an order of magnitude higher than measured in the remaining eight wells. The significant increase in specific conductance in the deep well TFS-MW-8D is likely due to brackish water and possible higher salinity due to salt water intrusion.

3.2.3 Dissolved Oxygen

DO is a measure of oxygen dissolved in a solution. DO is often depleted in groundwater contaminated with hydrocarbons as a result of in-situ biodegradation of hydrocarbons. As oxygen is consumed, carbon dioxide (CO_2) is produced in the biodegradation process. DO concentrations less than 0.5 milligrams per liter (mg/L) typically are indicative of an environment supportive of anaerobic reactions. DO concentrations greater than 2 mg/L reflect well-aerated groundwater.

During the July 2012 monitoring event, DO ranged from 0.46 mg/L (well TFS-MW-16) to 3.52 mg/L (well TFS-MW-11) and averaged 1.17 mg/L across the site. Overall, the DO concentrations are indicative of aerobic conditions at the site.

3.2.4 Oxidation-Reduction Potential

ORP is a measure of electron activity and an indicator of the relative tendency of a solution to accept or transfer electrons. As electron acceptors are utilized, the redox potential of the groundwater decreases. Negative or relatively low redox values can be used to identify areas under anaerobic conditions. The ORP in groundwater samples was negative in each of the nine monitoring wells sampled during July 2012, indicating a reducing groundwater environment. ORP ranged from -355.0 millivolts (mV) at well TFS-MW-8D to -108.0 mV at well TFS-MW-12. The range in ORP values suggests that the aquifer is a reducing environment.

TABLE 3-2
Field Parameters
Truck Fill Stand, NAS Key West, Boca Chica Key, Florida

Location	TFS-MW-01	TFS-MW-03	TFS-MW-04	TFS-MW-05	TFS-MW-06	TFS-MW-8D	TFS-MW-11	TFS-MW-12
Field Parameter Date	**7/17/2012**	**4/19/2012**	**7/19/2012**	**7/18/2012**	**4/19/2012**	**7/17/2012**	**7/18/2012**	**7/19/2012**
Temperature (ºC)	29.33	29.05	27.96	33.15	26.45	27.32	32.22	29.82
Specific Conductance (mS/cm)	0.862	0.868	1.260	0.362	0.827	23.600	0.324	0.536
Dissolved Oxygen (mg/L)	1.11	0.00	0.57	1.44	0.00	0.66	3.52	1.52
Oxidation-Reduction Potential (mV)	-183.0	109.0	-173.0	-111.0	-260.0	-355.0	-230.0	-108.0
pH	6.64	7.19	6.59	7.38	6.80	6.99	7.47	7.27
Turbidity (NTU)	0.0	16.0	0.0	0.0	9.1	0.0	0.0	124.0
Ferrous Iron (mg/L)	NM	0.0	NM	NM	0.0	NM	NM	NM

Location	TFS-MW-15		TFS-MW-16		TFS-MW-17	
Field Parameter Date	**4/19/2012**	**7/18/2012**	**4/19/2012**	**7/19/2012**	**4/19/2012**	**7/18/2012**
Temperature (ºC)	27.66	27.67	29.00	28.62	28.14	28.16
Specific Conductance (mS/cm)	2.110	1.470	3.390	1.520	3.500	1.330
Dissolved Oxygen (mg/L)	0.00	0.59	5.09	0.46	0.00	0.67
Oxidation-Reduction Potential (mV)	-350.0	-296.0	-187.0	-306.0	-364.0	-334.0
pH	6.44	6.62	7.03	7.53	6.77	7.20
Turbidity (NTU)	45.1	17.1	67.9	0.0	18.9	0.0
Ferrous Iron (mg/L)	0.0	NM	0.0	NM	0.0	NM

Notes:
ºC - degrees centigrade
mS/cm - millisiemens per centimeter
mg/L - milligrams per liter
mV - millivolts
NTU - nephelometric turbidity unit
NM - not measured

3.2.5 pH

The pH of groundwater has an effect on the presence and activity of microbial populations in groundwater and the optimum pH range for microbial activity is between 6 and 8 standard units. pH ranged from 6.59 to 7.53 units during the July 2012 monitoring event, indicating the pH of groundwater at the site is within the optimal range for microbial activity to occur.

3.3 Sample Results

The laboratory results were reviewed and validated to assess the accuracy, precision, and completeness based upon procedures described in guidance documents such as the EPA's *National Functional Guidelines for Organic Data Review* (EPA, 2008). Both lab quality assurance/quality control (QA/QC) summary forms and data reports were reviewed. Based on the validation process, the analytical results are usable as qualified in the decision-making process. CH2M HILL's data validation reports and laboratory analytical reports for groundwater samples are provided in Appendix B on CD.

Following the data validation process, the GCTLs, as listed in F.A.C. Chapter 62-777 were used to compare groundwater analytical results. Table 3-3 summarizes the analytical results for compounds detected in the groundwater samples. Sample results are discussed in the text that follows.

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TABLE 3-3

Groundwater Analytical Data Summary

Truck Fill Stand, NAS Key West, Boca Chica Key, Florida

		Groundwater Sample Data										
	Location	TFS-MW-01	TFS-MW-04	TFS-MW-05	TFS-MW-8D	TFS-MW-11	TFS-MW-12	TFS-MW-15		TFS-MW-16	TFS-MW-17	**Groundwater Cleanup Target Levels[1]**
	Sample ID	Q1-TFS-MW-01	Q1-TFS-MW-04	Q1-TFS-MW-05	Q1-TFS-MW-8D	Q1-TFS-MW-11	Q1-TFS-MW-12	Q1-TFS-MW-15	Q1-TFS-MW-15-DUP	Q1-TFS-MW-16	Q1-TFS-MW-17	
	Sample Date	7/17/2012	7/19/2012	7/18/2012	7/17/2012	7/18/2012	7/19/2012	7/18/2012	7/18/2012	7/19/2012	7/18/2012	
Analyte	**Units**											
Appendix IX Volatile Organic Compounds (SW8260B)												
1,1,1,2-Tetrachloroethane	µg/L	0.28 U	0.28 UJ	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	1.3
1,1,1-Trichloroethane	µg/L	0.28 U	0.28 UJ	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	200
1,1,2,2-Tetrachloroethane	µg/L	0.26 U	0.26 UJ	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.2
1,1,2-Trichloroethane	µg/L	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	5
1,1-Dichloroethane	µg/L	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	70
1,1-Dichloroethene	µg/L	0.38 U	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	7
1,2,3-Trichloropropane	µg/L	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.02
1,2-Dibromo-3-chloropropane	µg/L	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2
1,2-Dibromoethane	µg/L	0.22 U	0.22 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.02
1,2-Dichloroethane	µg/L	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3
1,2-Dichloropropane	µg/L	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5
1,4-Dichloro-2-butene	µg/L	4 U	4 UJ	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 UJ	NA
1,4-Dioxane	µg/L	20 UR	20 UR	20 UR	20 U	20 U	20 U	20 UR	20 UR	20 U	20 UR	3.2
2-Butanone	µg/L	4 U	4 UJ	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4200
2-Hexanone	µg/L	0.96 U	0.96 UJ	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	280
4-Methyl-2-pentanone	µg/L	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	560
Acetone	µg/L	2.6 U	10 UJ	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	6300
Acetonitrile	µg/L	20 U	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	42
Acrolein	µg/L	8 UR	8 UJ	8 UR	8 U	8 U	8 U	8 UR	8 UR	8 U	8 UR	3.5
Acrylonitrile	µg/L	4 U	4 UJ	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	0.06
Allyl chloride	µg/L	0.48 U	0.48 UJ	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	35
Benzene	µg/L	0.34 U	**0.62 J**	0.34 U	0.34 U	0.34 U	0.34 U	**4.5**	**4.6**	0.34 U	0.34 U	1
Bromodichloromethane	µg/L	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6
Bromoform	µg/L	0.38 U	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	4.4
Bromomethane	µg/L	0.86 U	0.86 UJ	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	9.8
Carbon disulfide	µg/L	0.38 U	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	1 U	1 U	0.38 U	0.38 U	700
Carbon tetrachloride	µg/L	0.28 U	0.28 UJ	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	3
Chlorobenzene	µg/L	0.32 U	0.32 UJ	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	100
Chloroethane	µg/L	1.4 U	1.4 UJ	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	12
Chloroform	µg/L	0.32 U	0.32 UJ	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	70
Chloromethane	µg/L	0.64 U	0.64 UJ	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	2.7
Chloroprene	µg/L	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	140
cis-1,3-Dichloropropene	µg/L	0.8 U	0.8 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	NA
Dibromochloromethane	µg/L	0.26 U	0.26 UJ	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.4
Dibromomethane	µg/L	0.8 U	0.8 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	70
Dichlorodifluoromethane	µg/L	1.2 U	1.2 UJ	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1400
Ethyl methacrylate	µg/L	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	630
Ethylbenzene	µg/L	0.44 U	0.44 UJ	0.44 U	0.44 U	0.44 U	0.44 U	**0.35 J**	**0.4 J**	0.44 U	0.44 U	30
Isobutyl alcohol	µg/L	40 UR	40 UR	40 UR	40 U	40 U	40 U	40 UR	40 UR	40 U	40 UR	2100
Methacrylonitrile	µg/L	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.7
Methyl iodide	µg/L	1.5 U	1.5 UJ	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	NA
Methyl methacrylate	µg/L	0.36 U	0.36 UJ	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	25
Methylene chloride	µg/L	1.3 U	1.3 UJ	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	5
Propionitrile	µg/L	20 UR	20 UJ	20 UR	20 U	20 U	20 U	20 UR	20 UR	20 U	20 UR	NA
Styrene	µg/L	0.24 U	0.24 UJ	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	100
Tetrachloroethene	µg/L	0.42 U	0.42 UJ	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	3
Toluene	µg/L	0.28 U	0.28 UJ	0.28 U	0.28 U	0.28 U	0.28 U	**0.31 J**	**0.3 J**	0.28 U	0.28 U	40
trans-1,2-Dichloroethene	µg/L	0.66 U	0.66 UJ	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	100
trans-1,3-Dichloropropene	µg/L	0.6 U	0.6 UJ	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	NA
Trichloroethene	µg/L	0.38 U	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	3
Trichlorofluoromethane	µg/L	0.8 U	0.8 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	2100
Vinyl acetate	µg/L	0.36 U	0.36 UJ	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	88
Vinyl chloride	µg/L	0.36 U	0.36 UJ	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1
Xylene (total)	µg/L	1 U	1 UJ	1 U	1 U	1 U	1 U	**0.96 J**	**0.97 J**	1 U	1 U	20
Appendix IX Semivolatile Organic Compounds (SW8270D)												
0,0,0-Triethylphosphorothioate	µg/L	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	NA
1,2,4,5-Tetrachlorobenzene	µg/L	4.4 U	4.4 U	4.4 U	4.5 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	2.1
1,2,4-Trichlorobenzene	µg/L	5.2 U	5.2 U	5.2 U	5.3 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	70
1,2-Dichlorobenzene	µg/L	5.2 U	5.2 U	5.2 U	5.3 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	600
1,3,5-Trinitrobenzene	µg/L	4 U	4 U	4 U	4.1 U	4 U	4 U	4 U	4 U	4 U	4 U	210
1,3-Dichlorobenzene	µg/L	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.4 U	5.5 U	5.5 U	5.5 U	5.4 U	210
1,3-Dinitrobenzene	µg/L	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	0.7
1,4-Dichlorobenzene	µg/L	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.4 U	5.5 U	5.5 U	5.5 U	5.4 U	75
1,4-Naphthoquinone	µg/L	6.3 U	6.3 UJ	6.3 UJ	6.3 U	6.3 U	6.2 U	6.3 UJ	6.3 UJ	6.3 U	6.2 UJ	NA
1-Naphthylamine	µg/L	3.6 U	3.6 U	3.6 U	3.7 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	NA
2,2'-Oxybis(1-chloropropane)	µg/L	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.6 U	6.7 U	6.7 U	6.7 U	6.6 U	NA
2,3,4,6-Tetrachlorophenol	µg/L	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6 U	6.1 U	6.1 U	6.1 U	6 U	210
2,4,5-Trichlorophenol	µg/L	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.8 U	6.9 U	6.9 U	6.9 U	6.8 U	1
2,4,6-Trichlorophenol	µg/L	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	3.2
2,4-Dichlorophenol	µg/L	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	6.2 U	6.3 U	6.3 U	6.3 U	6.2 U	0.3
2,4-Dimethylphenol	µg/L	4.6 U	4.6 U	4.6 U	4.7 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	140
2,4-Dinitrophenol	µg/L	11.3 U	11.3 U	11.3 U	11.4 U	11.3 U	11.2 U	11.3 U	11.3 U	11.3 U	11.2 U	14
2,4-Dinitrotoluene	µg/L	5.6 U	5.6 U	5.6 U	5.7 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	0.05
2,6-Dichlorophenol	µg/L	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	7 U	7.1 U	7.1 U	7.1 U	7 U	0.2
2,6-Dinitrotoluene	µg/L	5.6 U	5.6 U	5.6 U	5.7 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	0.05
2-Acetylaminofluorene	µg/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	NA
2-Chloronaphthalene	µg/L	5.6 U	5.6 U	5.6 U	5.7 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	560
2-Chlorophenol	µg/L	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	35
2-Methylphenol	µg/L	5.2 U	5.2 U	5.2 U	5.3 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	35
2-Naphthylamine	µg/L	5 UJ	5 UJ	5 UJ	5.1 U	5 U	5 U	5 UJ	5 UJ	5 U	5 UJ	0.0003
2-Nitroaniline	µg/L	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6 U	6.1 U	6.1 U	6.1 U	6 U	21
2-Nitrophenol	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.5 U	1.6 U	1.6 U	1.6 U	1.5 U	NA
2-Picoline	µg/L	8.1 U	8.1 U	8.1 U	8.2 U	8.1 U	8 U	8.1 U	8.1 U	8.1 U	8 U	NA
3,3'-Dichlorobenzidine	µg/L	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.4 U	5.5 U	5.5 U	5.5 U	5.4 U	0.08
3-Methylcholanthrene	µg/L	4.4 U	4.4 U	4.4 U	4.5 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	NA
3-Nitroaniline	µg/L	5.6 U	5.6 U	5.6 U	5.7 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	1.7
4,6-Dinitro-2-methylphenol	µg/L	8.1 U	8.1 U	8.1 U	8.2 U	8.1 U	8 U	8.1 U	8.1 U	8.1 U	8 U	NA
4-Aminobiphenyl	µg/L	4 U	4 U	4 U	4.1 U	4 U	4 U	4 U	4 U	4 U	4 U	NA
4-Bromophenyl-phenylether	µg/L	4.6 U	4.6 U	4.6 U	4.7 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	NA
4-Chloro-3-methylphenol	µg/L	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.4 U	5.5 U	5.5 U	5.5 U	5.4 U	63
4-Chloroaniline	µg/L	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6 U	6.1 U	6.1 U	6.1 U	6 U	28
4-Chlorophenyl-phenylether	µg/L	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	NA
4-Methylphenol	µg/L	12.3 U	12.3 U	12.3 U	12.4 U	12.3 U	12.2 U	12.3 U	12.3 U	12.3 U	12.3 U	3.5
4-Nitroaniline	µg/L	3 U	3 U	3 U	3.1 U	3 U	3 U	3 U	3 U	3 U	3 U	1.7
4-Nitrophenol	µg/L	8.1 U	8.1 U	8.1 U	8.2 U	8.1 U	8 U	8.1 U	8.1 U	8.1 U	8 U	56
4-Nitroquinoline-1-oxide	µg/L	7.5 UR	7.5 UR	7.5 UR	7.6 U	7.5 U	7.4 U	7.5 UR	7.5 UR	7.5 U	7.4 UR	NA
5-Nitro-o-toluidine	µg/L	5.2 U	5.2 U	5.2 U	5.3 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	1.1
7,12-Dimethylbenz(a)anthracene	µg/L	1.9 U	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
a,a-Dimethylphenethylamine	µg/L	32.3 UR	32.3 UR	32.3 UR	32.6 U	32.3 U	32 U	32.3 UR	32.3 UR	32.3 U	32.3 UR	NA
Acetophenone	µg/L	8.1 U	8.1 U	8.1 U	8.2 U	8.1 U	8 U	8.1 U	8.1 U	8.1 U	8 U	700
Aniline	µg/L	5.6 U	5.6 U	5.6 U	5.7 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	6.1
Aramite	µg/L	8.1 U	8.1 U	8.1 U	8.2 U	8.1 U	8 U	8.1 U	8.1 U	8.1 U	8 U	1.4
Benzyl alcohol	µg/L	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	6.2 U	6.3 U	6.3 U	6.3 U	6.2 U	2100
Bis(2-chloroethoxy)methane	µg/L	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	7 U	7.1 U	7.1 U	7.1 U	7 U	NA

TABLE 3-3

Groundwater Analytical Data Summary

Truck Fill Stand, NAS Key West, Boca Chica Key, Florida

		Groundwater Sample Data										
	Location	TFS-MW-01	TFS-MW-04	TFS-MW-05	TFS-MW-8D	TFS-MW-11	TFS-MW-12	TFS-MW-15		TFS-MW-16	TFS-MW-17	**Groundwater Cleanup Target Levels[1]**
	Sample ID	Q1-TFS-MW-01	Q1-TFS-MW-04	Q1-TFS-MW-05	Q1-TFS-MW-8D	Q1-TFS-MW-11	Q1-TFS-MW-12	Q1-TFS-MW-15	Q1-TFS-MW-15-DUP	Q1-TFS-MW-16	Q1-TFS-MW-17	
	Sample Date	7/17/2012	7/19/2012	7/18/2012	7/17/2012	7/18/2012	7/19/2012	7/18/2012	7/18/2012	7/19/2012	7/18/2012	
Analyte	**Units**											
Bis(2-chloroethyl)ether	µg/L	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6 U	6.1 U	6.1 U	6.1 U	6 U	0.03
Bis(2-ethylhexyl)phthalate	µg/L	8.9 U	8.9 U	8.9 U	9 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.8 U	6
Butylbenzylphthalate	µg/L	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6 U	6.1 U	6.1 U	6.1 U	6 U	140
Chlorobenzilate	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.1
Diallate (Avadex)	µg/L	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.6
Dibenzofuran	µg/L	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.4 U	5.5 U	5.5 U	5.5 U	5.4 U	28
Diethylphthalate	µg/L	5.6 U	5.6 U	5.6 U	5.7 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5600
Dimethylphthalate	µg/L	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6 U	6.1 U	6.1 U	6.1 U	6 U	70000
Di-n-butylphthalate	µg/L	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	700
Di-n-octylphthalate	µg/L	4 U	4 U	4 U	4.1 U	4 U	4 U	4 U	4 U	4 U	4 U	140
Dinoseb	µg/L	8.1 U	8.1 U	8.1 U	8.2 U	8.1 U	8 U	8.1 U	8.1 U	8.1 U	8 U	7
Ethyl methanesulfonate	µg/L	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	NA
Hexachlorobenzene	µg/L	0.83 U	0.83 U	0.83 U	0.84 U	0.83 U	0.82 U	0.83 U	0.83 U	0.83 U	0.82 U	1
Hexachlorobutadiene	µg/L	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4
Hexachlorocyclopentadiene	µg/L	1.6 U	1.6 U	1.6 U	1.7 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	50
Hexachloroethane	µg/L	5.2 U	5.2 U	5.2 U	5.3 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	2.5
Hexachloropropene	µg/L	4 UJ	4 UJ	4 UJ	4.1 U	4 U	4 U	4 UJ	4 UJ	4 U	4 UJ	NA
Isodrin	µg/L	5.2 U	5.2 U	5.2 U	5.3 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	NA
Isophorone	µg/L	7.7 U	7.7 U	7.7 U	7.8 U	7.7 U	7.6 U	7.7 U	7.7 U	7.7 U	7.6 U	37
Isosafrole	µg/L	5.2 U	5.2 U	5.2 U	5.3 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	NA
Kepone	µg/L	32.3 U	32.3 U	32.3 U	32.6 U	32.3 U	32 U	32.3 U	32.3 U	32.3 U	32.2 U	0.004
Methapyriline	µg/L	4.4 UR	4.4 UR	4.4 UR	4.5 U	4.4 U	4.4 U	4.4 UR	4.4 UR	4.4 U	4.4 UR	NA
Methylmethanesulfonate	µg/L	3.8 U	3.8 U	3.8 U	3.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	NA
Nitrobenzene	µg/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3.5
N-Nitrosodibutylamine	µg/L	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.4 U	5.5 U	5.5 U	5.5 U	5.4 U	0.006
N-Nitrosodiethylamine	µg/L	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	6.2 U	6.3 U	6.3 U	6.3 U	6.2 U	0.0002
N-Nitrosodimethylamine	µg/L	4.4 U	4.4 U	4.4 U	4.5 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	0.0007
N-Nitroso-di-n-propylamine	µg/L	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6 U	6.1 U	6.1 U	6.1 U	6 U	0.005
N-Nitrosodiphenylamine	µg/L	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.8 U	6.9 U	6.9 U	6.9 U	6.8 U	7.1
N-Nitrosomethylethylamine	µg/L	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.4 U	5.5 U	5.5 U	5.5 U	5.4 U	0.002
N-Nitrosomorpholine	µg/L	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6 U	6.1 U	6.1 U	6.1 U	6 U	NA
N-Nitrosopiperidine	µg/L	5.6 U	5.6 U	5.6 U	5.7 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	NA
N-Nitrosopyrrolidine	µg/L	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.4 U	5.5 U	5.5 U	5.5 U	5.4 U	0.02
o-Toluidine	µg/L	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.4 U	5.5 U	5.5 U	5.5 U	5.4 U	0.1
p-Dimethylaminoazobenzene	µg/L	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	NA
Pentachlorobenzene	µg/L	4.4 U	4.4 U	4.4 U	4.5 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	5.6
Pentachloroethane	µg/L	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	NA
Pentachloronitrobenzene(PCNB)	µg/L	4 U	4 U	4 U	4.1 U	4 U	4 U	4 U	4 U	4 U	4 U	0.1
Pentachlorophenol	µg/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	1
Phenacetin	µg/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	NA
Phenol	µg/L	3.4 U	3.4 U	3.4 U	3.5 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	10
p-Phenylenediamine	µg/L	4 U	4 U	4 U	4.1 U	4 U	4 U	4 U	4 U	4 U	4 U	1300
Pronamide	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	53
Pyridine	µg/L	4.2 U	4.2 U	4.2 U	4.3 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	7
Safrole	µg/L	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	NA
Appendix IX Polycyclic Aromatic Hydrocarbons (SW8270D-SIM)												
1-Methylnaphthalene	µg/L	**0.26**	**38.4**	0.04 U	0.04 U	0.041 U	0.04 U	**31.2**	**25.2**	0.041 U	0.04 U	28
2-Methylnaphthalene	µg/L	0.04 U	**6.3**	0.04 U	**0.025 J**	0.041 U	0.04 U	**16.7**	**13.1**	0.041 U	0.04 U	28
Acenaphthene	µg/L	**0.19**	**0.61**	**0.033 J**	0.04 U	0.041 U	0.04 U	**1.9**	**1.8**	0.041 U	**0.83**	20
Acenaphthylene	µg/L	**0.07**	**0.28**	0.04 U	0.04 U	0.041 U	0.04 U	**0.21**	**0.2**	0.041 U	**0.037 J**	210
Anthracene	µg/L	0.04 U	**0.033 J**	0.04 U	**0.027 J**	0.041 U	0.04 U	**1**	**0.81**	0.041 U	**0.029 J**	2100
Benzo(a)anthracene	µg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.041 U	0.04 U	**0.2**	**0.22**	0.041 U	0.04 U	0.05
Benzo(a)pyrene	µg/L	0.04 U	0.04 U	**0.027 J**	0.04 U	0.041 U	0.04 U	0.16 U	0.16 U	0.041 U	0.04 U	0.2
Benzo(b)fluoranthene	µg/L	0.04 U	0.04 U	**0.053**	0.04 U	0.041 U	0.04 U	0.16 U	0.16 U	0.041 U	0.04 U	0.05
Benzo(g,h,i)perylene	µg/L	0.04 U	0.04 U	**0.036 J**	0.04 U	0.041 U	0.04 U	0.16 U	0.16 U	0.041 U	0.04 U	210
Benzo(k)fluoranthene	µg/L	0.04 U	0.04 U	**0.02 J**	0.04 U	0.041 U	0.04 U	0.16 U	0.16 U	0.041 U	0.04 U	0.5
Chrysene	µg/L	0.04 U	0.04 U	**0.027 J**	0.04 U	0.041 U	0.04 U	**0.18 J**	**0.18 J**	0.041 U	0.04 U	4.8
Dibenzo(a,h)anthracene	µg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.041 U	0.04 U	0.16 U	0.16 U	0.041 U	0.04 U	0.005
Fluoranthene	µg/L	**0.03 J**	**0.031 J**	**0.036 J**	0.04 U	0.041 U	0.04 U	**4**	**3.5**	0.041 U	**0.079**	280
Fluorene	µg/L	**0.14**	**0.57**	0.04 U	0.04 U	0.041 U	0.04 U	**2.4**	**2.4**	0.041 U	0.04 U	280
Indeno(1,2,3-cd)pyrene	µg/L	0.04 U	0.04 U	**0.031 J**	0.04 U	0.041 U	0.04 U	0.16 U	0.16 U	0.041 U	0.04 U	0.05
Naphthalene	µg/L	**0.29**	**4.6**	0.04 U	0.04 U	0.041 U	0.04 U	**33**	**26.1**	0.041 U	**0.07**	14
Phenanthrene	µg/L	0.04 U	**0.23**	**0.021 J**	0.04 U	0.041 U	0.04 U	**6.3**	**5.4**	0.041 U	**0.024 J**	210
Pyrene	µg/L	0.04 U	**0.02 J**	**0.035 J**	0.04 U	0.041 U	0.04 U	**2.6**	**2.4**	0.041 U	**0.022 J**	210
Total Recoverable Petroleum Hydrocarbons (FL-PRO)												
TRPH	µg/L	**3100 J**	**9400 J**	510 U	**1700**	510 U	**330 J**	**20900**	**19900**	**320 J**	**1000**	5000

Notes:

NA Not applicable

J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate.

UR The reported value of analyte was rejected due to failed laboratory QC. See data validation report in Appendix B.

µg/L Micrograms per Liter

Bold indicates the analyte was detected

Bold and shaded values indicate the analyte exceeded the GCTL

[1] GCTL's are from Table 1 of the *Final Technical Report: Development of Cleanup Target Levels (CTLs) For Chapter 63-777, F.A.C., Center for Environmental & Human Toxicology. February 2005.*

3.3.1 Groundwater

Groundwater samples were collected from monitoring wellsTFS-MW-01, TFS-MW-04, TFS-MW-05, TFS-MW-8D, TFS-MW-11, TFS-MW-12, TFS-MW-15, TFS-MW-16, and TFS-MW-17 and analyzed for Appendix IX VOCs, Appendix IX SVOCs, and TRPH. Figure 3-2 presents the compounds detected in the groundwater samples, and Table 3-3 presents the analytical results.

3.3.1.1 VOCs

Benzene was detected in monitoring wells TFS-MW-04 and TFS-MW-15. Ethylbenzene, toluene, and xylenes were also detected in monitoring well TFS-MW-15. With the exception of benzene in well TFS-MW-15, all concentrations were below their respective GCTLs. Benzene in well TFS-MW-15 was detected at a concentration of 4.5 µg/L and is above the GCTL of 1 µg/L. No VOCs were detected in the remaining seven monitoring wells.

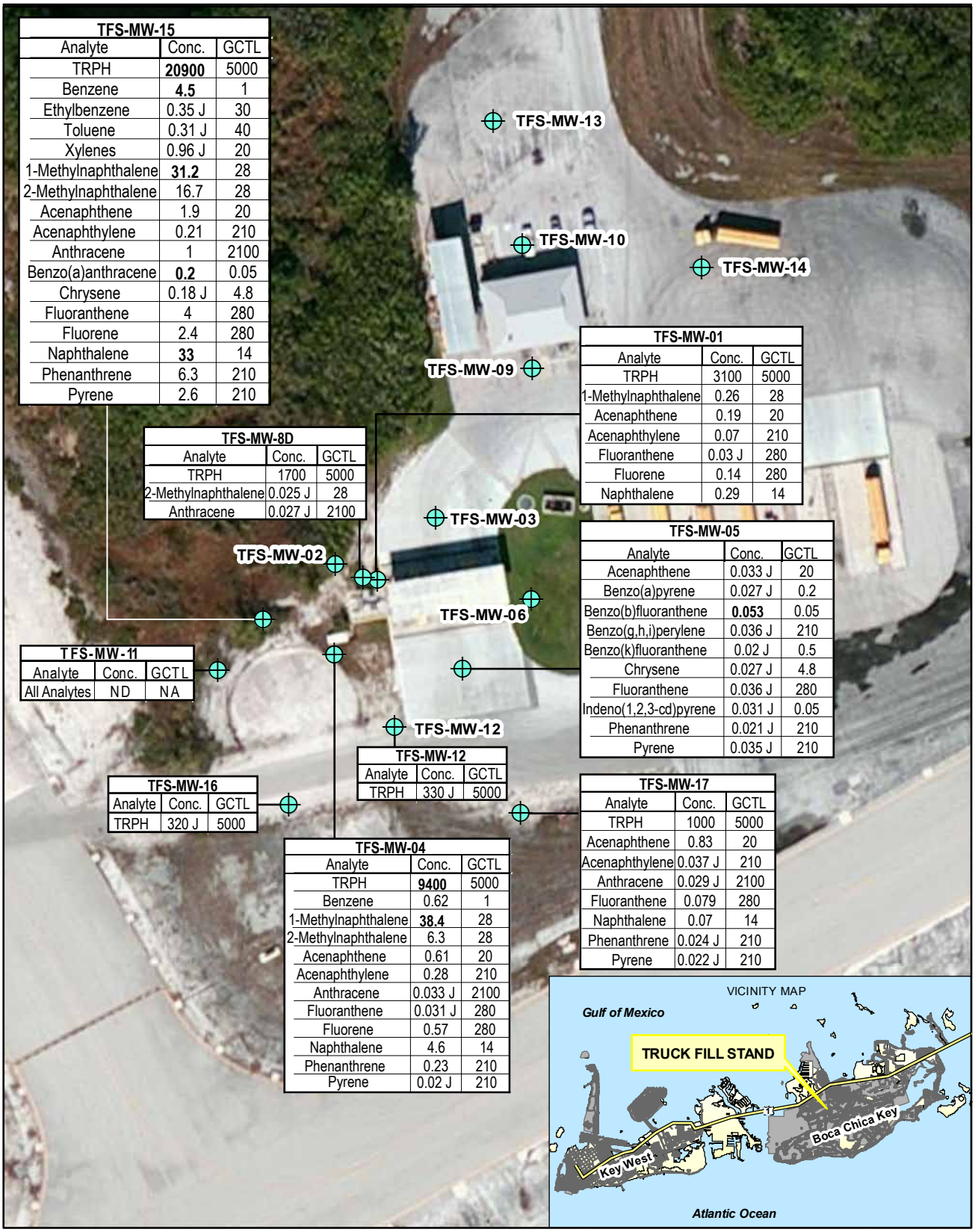
3.3.1.2 SVOCs

Seventeen SVOCs were detected in groundwater. SVOCs were detected in monitoring wells TFS-MW-01, TFS-MW-04, TFS-MW-05, TFS-MW-8D, TFS-MW-15, and TFS-MW-17. Four SVOC compounds (1-methylnaphthalene, benzo(a)anthracene, benzo(b)fluoranthene, and naphthalene) exceeded their respective GCTLs. The exceedences were as follows:

- 1-methylnaphthalene was detected above the GCTL of 28 µg/L in wells TFS-MW-04 (38.4 µg/L) and TFS-MW-15 (31.2 µg/L).
- Benzo(a)anthracene was detected above the GCTL of 0.05 µg/L in well TFS-MW-15 (0.2 µg/L).
- Benzo(b)fluoranthene was detected above the GCTL of 0.05 µg/L. at a concentration of in well TFS-MW-05 (0.053 µg/L).
- Naphthalene exceeded its GCTL of 14 µg/L in well TFS-MW-15 at a concentration of 33 µg/L.

3.3.1.3 TRPH

TRPH was detected seven of the nine monitoring wells sampled in July 2012. TRPH concentrations ranged from 320J µg/L (well TFS-MW-16) to 20,900 µg/L (well TFS-MW-15); however, the GCTL of 5,000 µg/L was only exceeded in two monitoring wells; TFS-MW-04 and TFS-MW-15. TRPH was not detected in wells TFS-MW-05 and TFS-MW-11.



TFS-MW-15

Analyte	Conc.	GCTL
TRPH	**20900**	5000
Benzene	**4.5**	1
Ethylbenzene	0.35 J	30
Toluene	0.31 J	40
Xylenes	0.96 J	20
1-Methylnaphthalene	**31.2**	28
2-Methylnaphthalene	16.7	28
Acenaphthene	1.9	20
Acenaphthylene	0.21	210
Anthracene	1	2100
Benzo(a)anthracene	**0.2**	0.05
Chrysene	0.18 J	4.8
Fluoranthene	4	280
Fluorene	2.4	280
Naphthalene	**33**	14
Phenanthrene	6.3	210
Pyrene	2.6	210

TFS-MW-01

Analyte	Conc.	GCTL
TRPH	3100	5000
1-Methylnaphthalene	0.26	28
Acenaphthene	0.19	20
Acenaphthylene	0.07	210
Fluoranthene	0.03 J	280
Fluorene	0.14	280
Naphthalene	0.29	14

TFS-MW-8D

Analyte	Conc.	GCTL
TRPH	1700	5000
2-Methylnaphthalene	0.025 J	28
Anthracene	0.027 J	2100

TFS-MW-05

Analyte	Conc.	GCTL
Acenaphthene	0.033 J	20
Benzo(a)pyrene	0.027 J	0.2
Benzo(b)fluoranthene	**0.053**	0.05
Benzo(g,h,i)perylene	0.036 J	210
Benzo(k)fluoranthene	0.02 J	0.5
Chrysene	0.027 J	4.8
Fluoranthene	0.036 J	280
Indeno(1,2,3-cd)pyrene	0.031 J	0.05
Phenanthrene	0.021 J	210
Pyrene	0.035 J	210

TFS-MW-11

Analyte	Conc.	GCTL
All Analytes	ND	NA

TFS-MW-12

Analyte	Conc.	GCTL
TRPH	330 J	5000

TFS-MW-16

Analyte	Conc.	GCTL
TRPH	320 J	5000

TFS-MW-17

Analyte	Conc.	GCTL
TRPH	1000	5000
Acenaphthene	0.83	20
Acenaphthylene	0.037 J	210
Anthracene	0.029 J	2100
Fluoranthene	0.079	280
Naphthalene	0.07	14
Phenanthrene	0.024 J	210
Pyrene	0.022 J	210

TFS-MW-04

Analyte	Conc.	GCTL
TRPH	**9400**	5000
Benzene	0.62	1
1-Methylnaphthalene	**38.4**	28
2-Methylnaphthalene	6.3	28
Acenaphthene	0.61	20
Acenaphthylene	0.28	210
Anthracene	0.033 J	2100
Fluoranthene	0.031 J	280
Fluorene	0.57	280
Naphthalene	4.6	14
Phenanthrene	0.23	210
Pyrene	0.02 J	210

LEGEND

Monitoring Well Location

GCTL Groundwater Cleanup Target Level

J Estimated

TRPH Total Recoverable Petroleum Hydrocarbons

Conc. Concentration

NOTES

1. Concentrations reported in micrograms per liter (µg/L)
2. Concentrations in **bold** indicate a GCTL exceedance
3. Sample date: July 17-19, 2012

North

0 25 50 100
Feet

FIGURE 3-2
Compounds Detected in Groundwater
NAS Key West
Boca Chica Key, Florida

CH2MHILL

SECTION 4

Conclusions and Recommendations

The conclusions and recommendations for the site, based on the July 2012 groundwater monitoring event, are presented below.

4.1 Conclusions

4.1.1 Hydrogeology

- LNAPL was not detected in groundwater.
- During July 2012, groundwater was observed to range from flowing at the ground surface at well three wells (TFS-MW-11, TFS-MW -15, and TFS-MW-17) to a depth of 1.64 feet at well TFS-MW-8D.
- Water table elevations beneath the site ranged from 1.77 to 3.33 feet msl in July 2012. In July 2012, the direction of groundwater flow across the site was radial from a groundwater high located at well TFS-MW-06. The radial flow is probably attributable to the fact that well TFS-MW-06 is located in an unpaved grassy area and receives more recharge.
- The average horizontal gradient across the site in July 2012 was estimated to be 0.005 ft/ft.
- Vertical gradients were calculated for July 2012 using well cluster TFS-MW-01/TFS-MW-8D. A downward hydraulic gradient of -0.018 ft/ft was measured in July 2012.
- The seepage velocity of the water table aquifer was calculated to be 0.30 ft/day or 109.5 ft/year.

4.1.2 Groundwater

- Water quality parameters measured during well purging and sampling indicate that conditions are favorable for the biodegradation of hydrocarbons to occur.
- VOCs benzene, ethylbenzene, toluene, and xylenes were detected in monitoring well TFS-MW-15; benzene was the only VOC detected in well TFS-MW-04. However, the benzene concentration in well TFS-MW-15 was the only VOC compound to exceed its respective GCTL of 1 µg/L. No VOCs were detected in the remaining seven wells sampled during the July 2012 monitoring event.
- Seventeen SVOCs were detected in six wells. The following SVOCs exceeded their respective GCTLs:
  - 1-Methylnaphthalene exceeded its GCTL of 28 µg/L in wells TFS-MW-04 and TFS-MW-15 at concentrations of 38.4 µg/L and 31.2 µg/L, respectively.
  - Benzo(a)anthracene was detected in well TFS-MW-15 at a concentration of 0.2 µg/L, which is above the GCTL of 0.05 µg/L.
  - Benzo(b)fluoranthene was detected in well TFS-MW-04 at a concentration of 0.053 µg/L, which is above the GCTL of 0.05 µg/L.
  - Naphthalene was detected in well TFS-MW-15 at a concentration of 33 µg/L, which is above the GCTL of 14 µg/L.
- SVOCs were not detected in wells TFS-MW-11, TFS-MW-12, or TFS-MW-16.
- TRPH was detected in seven of the nine monitoring wells sampled; concentrations ranged from 320J µg/L (well TFS-MW-16) to 20,900 µg/L (well TFS-MW-15). The GCTL of 5,000 µg/L for TRPH was exceeded at two wells, TFS-MW-04 and TFS-MW-15.

4.2 Recommendations

Based on the sampling results, additional quarterly groundwater monitoring is recommended to evaluate fluctuations in petroleum hydrocarbon concentrations over time. During each event, samples should be analyzed for Appendix IX VOCs, Appendix IX SVOCs, and TRPH. In addition, during the next quarterly sampling event, samples for the analysis of chloride, manganese, salinity, sulfate, and total dissolved solids (TDS) should be collected from monitoring wells TFS-MW-04, TFS-MW-8D, TFS-MW-15, TFS-MW-16, and TFS-MW-17, and from surface water location TFS-SW-03. A sample of seawater should also be collected and analyzed for the same parameters. The water quality data will be used to determine the potability of the aquifer. If groundwater beneath the site is classified as a non-potable water source, higher cleanup values may be used as screening criteria; thereby, reducing the footprint of the dissolved hydrocarbon plume.

SECTION 5

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Appendix A
Well Purge and Sample Logs

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Truck Fill Stand	SITE LOCATION: NASKW Boca Chica
WELL NO: TFS-MW-01	SAMPLE ID: Q1-TFS-MW-01	DATE: 7-17-12

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 1.54	PURGE PUMP TYPE OR BAILER: peri

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (12.93 (11.39) feet – 1.54 feet) X 0.16 gallons/foot = 1.82 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.0006 gallons/foot X 11.39 feet) + 0.25 gallons = 0.26 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8	PURGING INITIATED AT: 1230	PURGING ENDED AT: 1254	TOTAL VOLUME PURGED (gallons): 2.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (~~gpm~~ mL)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	ORP (mV)	ODOR (describe)
1233	0.25	0.25	300	1.59	7.01	31.10	0.788	2.99	341	-165	slight sulfur
1236	↓	0.50	300	1.63	6.80	30.04	0.797	1.21	110	-169	"
1239		0.75	300	1.63	6.71	29.76	0.823	1.20	62	-173	"
1242		1.0	300	1.63	6.68	29.51	0.829	1.18	15	-177	"
1245		1.25	300	1.63	6.66	29.44	0.836	1.16	8.02	-177	"
1248		1.5	300	1.63	6.64	29.37	0.842	1.14	0.0	-177	none
1251		1.75	300	1.63	6.64	29.34	0.858	1.12	0.0	-182	none
1254	0.25	2.0	300	1.63	6.64	29.33	0.862	1.11	0.0	-183	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Nikki Monroe / CH2M HILL	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1255	SAMPLING ENDED AT: 1320
PUMP OR TUBING DEPTH IN WELL (feet): 8.0	TUBING MATERIAL CODE: PP	FIELD-FILTERED: Y (N) Filtration Equipment Type: N/A	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N (replaced))	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3	CG	40ml	HCl	120	6.64	VOC/8260B	SM	300
	2	AG	1L	None	2L	6.64	SVOC	APP	300
	2	AG	1L	None	2L	6.64	SVOC SIM	APP	300
	2	AG	1L	H_2SO_4	2L	6.64	FL-PRO	APP	300

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TFS	SITE LOCATION: NASKN
WELL NO: TFS-MW-04	SAMPLE ID: Q1-TFS-MW-04	DATE: 7-19-12

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 0.15	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH 11.85 – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (12.00 feet – 0.15 feet) X 0.16 gallons/foot = 1.90 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.0006 gallons/foot X 11.85 feet) + 0.25 gallons = 0.26 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4	PURGING INITIATED AT: 0810	PURGING ENDED AT: 0835	TOTAL VOLUME PURGED (gallons): 2.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL/gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	ODOR (describe)
0814	0.25	0.25	300	0.51	6.54	27.61	1.24	2.05	0.0	-133	sulfur
0817	↓	0.5	300	0.52	6.56	27.85	1.22	1.33	0.0	-145	"
0820		0.75	300	0.52	6.57	27.90	1.23	1.04	0.0	-153	"
0823		1.0	300	0.52	6.58	27.95	1.23	0.80	0.0	-160	"
0826		1.25	300	0.53	6.59	27.96	1.24	0.68	0.0	-165	"
0829		1.50	300	0.53	6.59	27.96	1.25	0.59	0.0	-169	"
0832		1.75	300	0.53	6.59	27.96	1.25	0.58	0.0	-172	"
0835	0.25	2.0	300	0.53	6.59	27.96	1.26	0.57	0.0	-173	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Nikki Manoor	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0840	SAMPLING ENDED AT:

PUMP OR TUBING DEPTH IN WELL (feet): 4	TUBING MATERIAL CODE: PP	FIELD-FILTERED: Y (N) Filtration Equipment Type: NA	FILTER SIZE: NA µm

FIELD DECONTAMINATION: PUMP (Y) N TUBING Y (N (replaced)) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3	CG	40mL	HCl	120	6.59	8260 VOC	SM	300
	2	AG	1L		2L	6.59	SVOC	APP	300
	2	AG	1L		2L	6.59	SVOC SIM	APP	300
	2	AG	1L	H_2SO_4	2L	6.59	FL-PRO	APP	300

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TFS	SITE LOCATION: NAS KW
WELL NO: TFS-MW-05	SAMPLE ID: Q1-TFS-MW-05	DATE: 7-18-12

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (11.95 feet – 10.45 1.50 feet) X 0.16 gallons/foot = 1.67 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.0006 gallons/foot X 10.45 feet) + 0.25 gallons = 0.26 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4	PURGING INITIATED AT: 1323	PURGING ENDED AT: 1344	TOTAL VOLUME PURGED (gallons): 1.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm) mL	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	ODOR (describe)
1326	0.25	0.25	300	1.55	7.37	32.90	0.398	2.01	19.3	-45	sulfur
1329		0.5	300	1.55	7.36	33.00	0.386	1.78	4.9	-60	"
1332		0.75	300	1.55	7.37	33.06	0.375	1.73	0.0	-72	"
1335		1	300	1.55	7.38	33.12	0.364	1.68	0.0	-84	"
1338		1.25	300	1.55	7.39	33.17	0.360	1.64	0.0	-97	"
1341		1.5	300	1.55	7.38	33.16	0.361	1.54	0.0	-104	"
1344	0.25	1.75	300	1.55	7.38	33.15	0.362	1.44	0.0	-111	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Nikki Monroe / CH2MHILL	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1350	SAMPLING ENDED AT: 1415
PUMP OR TUBING DEPTH IN WELL (feet): 4	TUBING MATERIAL CODE: PP	FIELD-FILTERED: Y (N) Filtration Equipment Type: N/A	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3	CG	40mL	HCl	120	7.38	VOC	SM	300
	2	AG	1L		2L	7.38	SVOC	APP	300
	2	AG	1L		2L	7.38	SVOC SIM	APP	300
	2	AG	1L	H_2SO_4	2L	7.38	FL-PRO	APP	300

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: NASKW	SITE LOCATION: NASKW Boca Chica
WELL NO: TFS-MW-8D	SAMPLE ID: Q1-TFS-MW-8D	DATE: 7-17-12

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 27 feet to 32 feet	STATIC DEPTH TO WATER (feet): 1.87	PURGE PUMP TYPE OR BAILER: perm (PP)

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (33.31 (31.44) feet – 1.87 feet) X 0.16 gallons/foot = 5.03 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.0006 gallons/foot X 31.44 feet) + 0.25 gallons = 0.27 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 28	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 28	PURGING INITIATED AT: 13:45	PURGING ENDED AT: 1454	TOTAL VOLUME PURGED (gallons): 5.25

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL/min)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	ODOR (describe)
1348	0.25	0.25	300	1.92	7.34	29.34	0.579	1.31	0.0	-210	sulfur
1400	1	1.25	300	1.94	6.97	27.17	22.6	0.93	42.1	-339	"
1415	1.25	2.5	300	1.94	6.97	27.15	22.9	0.87	24.6	-342	"
1430	1	3.5	300	1.94	6.98	27.12	23.2	0.81	5.0	-345	"
1445	1	4.50	300	1.94	6.99	27.30	23.6	0.68	0.0	-353	"
1448	0.25	4.75	300	1.94	6.99	27.32	23.6	0.67	0.0	-354	"
1451	0.25	5.0	300	1.94	6.99	27.31	23.6	0.66	0.0	-354	"
1454	0.25	5.25	300	1.94	6.99	27.32	23.6	0.66	0.0	-355	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Nikki Monroe	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1500	SAMPLING ENDED AT: 1525
PUMP OR TUBING DEPTH IN WELL (feet): 28	TUBING MATERIAL CODE: PP	FIELD-FILTERED: Y (N) Filtration Equipment Type: N/A	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N (replaced))	DUPLICATE: Y (O)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3	CG	40 ml	HCl	120	6.99	VOC	SM	300
	2	AG	1 L	None	2 L	6.99	SVOC	APP	300
	2	AG	1 L	None	2 L	6.99	SVOC SIM	APP	300
	2	AG	1 L	H_2SO_4	2 L	6.99	FL-PRO	APP	300

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TFS		SITE LOCATION: NASKW	
WELL NO: TFS-MW-11	SAMPLE ID: Q1-TFS-MW-11		DATE: 7-18-12

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 1 feet to 11 feet	STATIC DEPTH TO WATER (feet): 0.08	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (11.28 feet – 11.2 0.08 feet) X 0.16 gallons/foot = 1.79 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.0006 gallons/foot X 11.20 feet) + 0.25 gallons 0.26 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4	PURGING INITIATED AT: 1430	PURGING ENDED AT: 1456	TOTAL VOLUME PURGED (gallons): 2.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	ODOR (describe)
1434	0.25	0.25	300	0.42	7.62	33.62	0.262	7.08	0.0	-68	sulfur
1437		0.5	300	0.42	7.63	33.13	0.264	6.77	0.0	-84	"
1441		0.75	300	0.45	7.60	32.31	0.274	5.66	0.0	-147	"
1444		1.0	300	0.45	7.59	32.26	0.277	5.55	0.0	-154	"
1447		1.25	300	0.45	7.56	32.13	0.289	5.14	0.0	-179	"
1450		1.5	300	0.45	7.53	31.99	0.309	4.76	0.0	-201	"
1453		1.75	300	0.45	7.47	32.18	0.322	3.65	0.00	-228	"
1456	0.25	2.0	300	0.45	7.47	32.22	0.324	3.52	0.0	-230	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Nikki Monroe	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1500	SAMPLING ENDED AT: 1525
PUMP OR TUBING DEPTH IN WELL (feet): 4	TUBING MATERIAL CODE: PP	FIELD-FILTERED: Y (N) Filtration Equipment Type: N/A	FILTER SIZE: NA µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
3	CG	~~AG~~	40mL	HCl	120	7.47	VOC	SM	300
2	AG	~~H~~	1L		2L	7.47	SVOC	PP	300
2	AG	~~H~~	1L		2L	7.47	SVOC SIM	PP	300
2	AG	~~H~~	1L	H2SO4	2L	7.47	FL-PRO	PP	300

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TFS	SITE LOCATION: NAS KW
WELL NO: TFS-MW-12	SAMPLE ID: Q1-TFS-MW-12 / DATE: 7-19-12

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 1 feet to 11 feet	STATIC DEPTH TO WATER (feet): 1.08	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (11.03 feet – 9.95 1.08 feet) X 0.16 gallons/foot = 1.60 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.0026 gallons/foot X 9.95 feet) + 0.25 gallons = 0.26 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4	PURGING INITIATED AT: 0924	PURGING ENDED AT: 0945	TOTAL VOLUME PURGED (gallons): 1.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL/min)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	ODOR (describe)
0927	0.25	0.25	300	1.16	7.32	29.90	0.545	3.24	55.1	29	sulfur
0930	↓	0.5	300	1.18	7.31	29.95	0.541	2.76	52.4	6	"
0933		0.75	300	1.20	7.29	30.01	0.538	2.22	48.9	-24	"
0936		1.0	300	1.21	7.28	30.05	0.533	1.75	46.4	-51	"
0939		1.25	300	1.22	7.28	29.95	0.534	1.46	133	-86	"
0942	↓	1.5	300	1.22	7.27	29.89	0.535	1.49	127	-97	"
0945	0.25	1.75	300	1.23	7.27	29.82	0.536	1.52	124	-108	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Nikki Monroe	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0950	SAMPLING ENDED AT: 1010
PUMP OR TUBING DEPTH IN WELL (feet): 4	TUBING MATERIAL CODE: PP	FIELD-FILTERED: Y (N) Filtration Equipment Type: N/A	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3	CG	40mL	HCl	120 mL	7.27	VOC	SM	300
	2	AG	1L		2L	7.27	SVOC	APP	300
	2	AG	1L		2L	7.27	SVOC SIM	APP	300
	2	AG	1L	H_2SO_4	2L	7.27	FL-PRO	APP	300

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TFS	SITE LOCATION: NASKW	
WELL NO: TFS-MW-15	SAMPLE ID: Q1-TFS-MW-15	DATE: 7-18-12

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 1 feet to 11 feet	STATIC DEPTH TO WATER (feet): 0.00	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (10.25 feet – 0.0 feet) X 0.16 gallons/foot = 1.64 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.0006 gallons/foot X 10.25 feet) + 0.25 gallons = 0.26 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 3	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 3	PURGING INITIATED AT: 1028	PURGING ENDED AT: 1057	TOTAL VOLUME PURGED (gallons): 1.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (~~gpm~~ mL)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	ODOR (describe)
1033	0.25	0.25	300	0.12	6.66	28.66	1.48	1.66	0.0	-261	sulfur
1036	↓	0.5	300	0.15	6.65	28.55	1.48	1.34	0.0	-271	"
1039		0.75	300	0.16	6.64	28.30	1.48	1.08	28.1	-280	"
1042		1	300	0.16	6.64	28.25	1.48	1.02	27.0	-282	"
1045		1.25	300	0.16	6.63	28.02	1.48	0.88	18.5	-286	"
1048		1.5	300	0.16	6.62	27.85	1.47	0.74	17.7	-291	"
1051	0.25	1.75	300	0.16	6.62	27.67	1.47	0.59	17.1	-296	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Nikki Manoe / CH2M HILL	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1055	SAMPLING ENDED AT: 1135
PUMP OR TUBING DEPTH IN WELL (feet): 3	TUBING MATERIAL CODE: PP	FIELD-FILTERED: Y (N) Filtration Equipment Type: N/A	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y N (replaced)	DUPLICATE: (Y) N	Q2-TFS-MW-15-DUP @ —

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3	CG	40ml	HCl	120	6.62	VOC	SM	300
	2	AG	1L		2L	6.62	SVOC	APP	300
	2	AG	1L		2L	6.62	SVOC SIM	APP	300
	2	AG	1L	H2SO4	2L	6.62	FLPRO	APP	300

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TFS	SITE LOCATION: NASKW
WELL NO: TFS-MW-16	SAMPLE ID: Q1-TFS-MW-16	DATE: 7-19-12

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 1.08	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (12.15 feet – 1.08 feet) X 0.16 gallons/foot = 1.77 gallons
11.07

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.0006 gallons/foot X 11.07 feet) + 0.25 gallons = 0.26 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 6	PURGING INITIATED AT: 1021	PURGING ENDED AT: 1045	TOTAL VOLUME PURGED (gallons): 2.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL/gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY - (NTUs)	ORP (mV)	ODOR (describe)
1024	0.25	0.25	300	1.15	7.60	28.67	1.41	0.0 NTU	1.80	-270	sulfur odor
1027	↓	0.5	↓	1.18	7.59	28.52	1.43	0.0	1.65	-287	"
1030		0.75		1.22	7.58	28.54	1.46	0.0	1.17	-289	"
1033		1.0		1.23	7.56	28.60	1.47	0.0	0.90	-295	"
1036		1.25		1.25	7.54	28.60	1.51	0.0	0.51	-303	"
1039		1.5		1.25	7.53	28.62	1.52	0.0	0.47	-306	"
1042		1.75		1.24	7.53	28.63	1.52	0.0	0.45	-307	"
1045	0.25	2.0	300	1.25	7.53	28.62	1.52	0.0 NTU	0.46	-306	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Nikki Monroe / CH2M HILL	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1050	SAMPLING ENDED AT: 1115
PUMP OR TUBING DEPTH IN WELL (feet): 6	TUBING MATERIAL CODE: PP	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: NA µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N (replaced))	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3	CG	40m	HCl	120	7.53	VOC	SM	300
	2	AG	1L		2L	7.53	SVOC	APP	300
	2	AG	1L		2L	7.53	SVOC SIM	APP	300
	2	AG	1L	H2SO4	2L	7.53	FL-PRO	APP	300

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Truck Fill Stand	SITE LOCATION: NAS KW	
WELL NO: TFS-MW-17	SAMPLE ID: Q1-TFS-MW-17	DATE: 7-18-12

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 0.03	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (11.75 (11.75) feet – 0.03 feet) X 0.16 gallons/foot = 1.88 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.0006 gallons/foot X 11.75 feet) + 0.25 gallons = 0.26 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4	PURGING INITIATED AT: 0845	PURGING ENDED AT: 0910	TOTAL VOLUME PURGED (gallons): 2

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	ODOR (describe)
0848	0.25	0.25	300	0.09	7.13	28.23	1.33	1.49	0.0	-330	sulfur
0851	↓	0.5	300	0.12	7.17	28.22	1.30	1.44	0.0	-332	"
0854		0.75	300	0.13	7.20	28.19	1.30	1.28	0.9	-334	"
0857		1	300	0.13	7.20	28.18	1.30	1.20	0.0	-334	"
0900		1.25	300	0.13	7.20	28.17	1.30	1.18	0.0	-334	"
0903		1.5	300	0.13	7.20	28.15	1.31	0.99	0.0	-334	"
0906		1.75	300	0.13	7.20	28.13	1.32	0.80	0.0	-334	"
0909	0.25	2	300	0.13	7.20	28.16	1.33	0.67	0.0	-334	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Nikki Manor	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0910	SAMPLING ENDED AT: 1015
PUMP OR TUBING DEPTH IN WELL (feet): 4	TUBING MATERIAL CODE: PP	FIELD-FILTERED: Y (N) Filtration Equipment Type: N/A	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N (replaced))	DUPLICATE: (Y) N MS/MSD	@ 0915

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3x3	CG	40	HCl	120x3	7.20	VOC 8260B	SM	300
	2x3	AG	1L	None	2 Lx3	7.20	SVOC 8270D	APP	300
	2x3	AG	1L	None	2 Lx3	7.20	SVOC 8270SIM	APP	300
	2x3	AG	1L	H_2SO_4	2 Lx3	7.20	FL-PRO	APP	300

REMARKS:
Collected Equip. Rinse: Q1-TFS-MW-17-RS @ 0815 Trip Blank: Q1-TFS-TB-2 @ —

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Appendix B
Data Validation Summary and Laboratory Data

MEMORANDUM CH2MHILL

Data Validation Summary – NAS Key West Boca Chica / TFS – Groundwater Sampling 1st Quarter 2012

TO: Greg Rowell/CH2M HILL/ATL

FROM: Camden Robinson/CH2M HILL/ATL

DATE: August 28, 2012

The purpose of this memorandum is to present the results of the data validation process for the samples collected at the Naval Air Station in Key West, Florida. The samples were collected on July 17th, 2012 thru July 19th, 2012.

The specific samples and analytical fractions reviewed are summarized below in Table 1.

The Quality Control areas that were reviewed and the resulting findings are documented within each subsection that follows. This data was validated for compliance with the analytical method requirements. This process also included a review of the data to assess the accuracy, precision, and completeness based upon procedures described in the guidance documents such as the Environmental Protection Agency (EPA *National Functional Guidelines for Organic Data Review (EPA 2008)*. Quality assurance/quality control (QA/QC) summary forms and data reports were reviewed.

Samples were submitted to PEL a division of Spectrum Analytical Inc. of Tampa, Florida, for the following analyses: SW-846 8260B Volatile Organic Compounds (VOC), SW-846 8270D Semi-volatile Organic Compounds (SVOC), SW-846 8270D SIM Polycyclic Aromatic Hydrocarbons, and Total Petroleum Hydrocarbon by method FL-PRO. Please note that only sample Q1-TFS-MW-01 for 3506545, Q1-TFS-MW-17, Q1-TFS-MW-15, Q1-TFS-MW-15-DUP, and Q1-TFS-MW-05 for SDG 3506563, and Q1-TFS-MW-04 for SDG 3506575 required validation per the project manager's request.

Sample results that were not within the acceptance limits were appended with a qualifying flag, which consisted of a single- or double-letter code that indicated a possible problem with the data. The qualifying flags originated during the data review and validation processes. These also include the secondary, or the two/three-digit "sub-qualifier" flags. The secondary qualifiers provide the reasoning behind the assignment of a qualifier flag to the data. The secondary qualifiers are presented and defined below.

Attachment 1 lists the changes in data qualifiers, due to the validation process.

The following primary flags were used to qualify the data:

[=] Detected. The analyte was analyzed for and detected at the concentration shown.

[J] Estimated. The analyte was present but the reported value may not be accurate or precise.

[U] Undetected. The analyte was analyzed for but not detected above the method detection limit.

[UJ] Detection limit estimated. The analyte was analyzed for but qualified as not detected; the result is estimated.

[UR] Rejected. The data is not useable. The absence of the analyte cannot be verified.

[R] Rejected. The data is not useable.

Secondary Qualifier Codes

Code	Definition
2SH	Second Source Accuracy High
2SL	Second Source Accuracy Low
BD	Blank Spike/Blank Spike Duplicate (LCS/LCSD) Precision
BL	Blank
BSH	Blank Spike/LCS Recovery High
BSL	Blank Spike/LCS Recovery Low
CCH	Continuing Calibration Verification Accuracy High
CCL	Continuing Calibration Verification Accuracy Low
DL	Dilution
FD	Field Duplicate
LD	Laboratory Duplicate
HT	Holding Time
ICH	Initial Calibration High
ICL	Initial Calibration Low
ISH	Internal Standard Area Response High
ISL	Internal Standard Area Response Low
LR	Linear Range (Exceeded calibration range)
MD	Matrix Spike/Matrix Spike Duplicate Precision
MSH	Matrix Spike and/or Matrix Spike Duplicate Recovery High
MSL	Matrix Spike and/or Matrix Spike Duplicate Recovery Low
OT	Other
RE	Re-extraction
RF	Response Factor
SSH	Spiked Surrogate Recovery High
SSL	Spiked Surrogate Recovery Low
TN	Tune
EMPC	Estimated Maximum Possible Concentration

Table 1 - Chemical Analytical Methods – Field and Quality Control Samples

SDG	Sample ID	Lab Sample ID	Matrix	Sample Type	Date Collected	Analyses Performed
3506545	Q1-TFS-MW-01	350654501	GW	N	07/17/2012	[1], [2], [3], [4]
3506545	Q1-TFS-TB-1	350654503	WQ	TB	07/17/2012	[1]
3506563	Q1-TFS-MW-17	350656301	GW	N	07/18/2012	[1], [2], [3], [4]
3506563	Q1-TFS-MW-17-MS	350656302	WQ	MS	07/18/2012	[1], [2], [3], [4]
3506563	Q1-TFS-MW-17-MSD	350656303	WQ	SD	07/18/2012	[1], [2], [3], [4]
3506563	Q1-TFS-MW-15	350656304	GW	N	07/18/2012	[1], [2], [3], [4]
3506563	Q1-TFS-MW-15-DUP	350656305	GW	FD	07/18/2012	[1], [2], [3], [4]
3506563	Q1-TFS-MW-05	350656307	GW	N	07/18/2012	[1], [2], [3], [4]
3506563	Q1-TFS-TB-2	350656309	WQ	TB	07/18/2012	[1]
3506575	Q1-TFS-MW-04	350657501	GW	N	07/19/2012	[1], [2], [3], [4]
3506575	Q1-TFS-TB-3	350657504	WQ	TB	07/19/2012	[1]

MATRIX CODE

GW – Groundwater
WQ – Water Quality Control

SAMPLE TYPE CODE

N – Native Sample
FD – Field Duplicate
MS – Matrix Spike
SD – Matrix Spike Duplicate
TB – Trip Blank

ANALYSIS CODE

[1] – VOC –Volatile Organic Compounds by SW-846 method 8260B
[2] – SVOC – Semivolatile Organic Compounds by SW-846 method 8270D
[3] – PAH – Polycyclic Aromatic Hydrocarbons by SW-846 method 8270D SIM
[4] – TPH – Total Petroleum Hydrocarbon by method FL-PRO

Organic Parameters

Quality Control Review

The following list represents the QA/QC measures that were reviewed during the data quality evaluation procedure for organic data.

- **Holding Times** – The holding times are evaluated to verify that samples were extracted and analyzed within holding times.
- **Blank samples** – Method blanks and trip blanks were provided for this project. Blank samples enable the reviewer to determine if an analyte may be attributed to sampling or laboratory procedures, rather than environmental contamination from site activities.
- **Surrogate Recoveries** – Surrogate Compounds are added to each sample and the recoveries are used to monitor lab performance and possible matrix interference.
- **Lab Control Sample (LCS)** – This sample is a "controlled matrix", either laboratory reagent water or Ottawa sand, in which target compounds have been added prior to extraction/analysis. The recoveries serve as a monitor of the overall performance of each step during the analysis, including sample preparation.
- **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples** – Spike recovery is used to evaluate potential matrix interferences, as well as accuracy. Precision information is also determined by calculating the reproducibility between the recoveries of each spiked parameter.
- **Field Duplicate Samples** – These samples are collected to determine precision between a native and it's duplicate. This information can only be determined when target compounds are detected.
- **GC/MS Tuning** – The mass spectrum of the tuning compound is evaluated for method compliance. The criteria are established to verify the proper mass assignment and mass resolution.
- **Initial Calibration** – The initial calibration ensures that the instrument is capable of producing acceptable qualitative and quantitative data for the compounds of interest.
- **Continuing Calibration** – The continuing calibration checks satisfactory performance of the instrument and its predicted response to the target compounds.
- **Internal Standards** – The internal standards (retention time and response) are evaluated for method compliance. The internal standards are used in quantitation of the target parameters and monitor the instrument sensitivity and response for stability during each analysis.

Major Technical Issues

No major technical issues were identified.

Minor Technical Issues for Volatile Organic Compounds (VOCs) Analyses

Holding Time

Sample Q1-TFS-MW-04 was analyzed 1 day outside of hold time; therefore all results for this sample were qualified as estimated UJ/J with a validation note of "HT". The laboratory noted that this sample was initially run within hold time, but due to instrument issues, the data was not usable and could not be reported.

GC/MS Instrument Performance

All GC/MS Instrument Performance criteria were met.

Calibration

The initial calibration (ICAL), second source calibration (2nd Source), and continuing calibration (CCAL) average response factors for the analytes listed below were outside criteria:

TABLE 2
Response Factors Out of QC Limits: Volatile Organic Compounds
NAS Key West Boca Chica / TFS – Groundwater Sampling 1st Quarter 2012

SDG	Calibration	Parameter	Recovery	Recovery Limits	Associated Samples	Flag
3506545 3506563	ICAL	Acrolein	0.04692	0.050	Q1-TFS-MW-01 Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05	UR
3506545 3506563	ICAL	Isobutyl Alcohol	0.00448	0.050	Q1-TFS-MW-01 Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05	UR

TABLE 2

Response Factors Out of QC Limits: Volatile Organic Compounds

NAS Key West Boca Chica / TFS – Groundwater Sampling 1st Quarter 2012

SDG	Calibration	Parameter	Recovery	Recovery Limits	Associated Samples	Flag
3506545 3506563	ICAL	1,4-Dioxane	0.0051	0.050	Q1-TFS-MW-01 Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05	UR
3506545 3506563	ICAL	Propionitrile	0.04992	0.050	Q1-TFS-MW-01 Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05	UR
3506575	ICAL	1,4-Dioxane	0.00464	0.050	Q1-TFS-MW-04	UR
3506575	ICAL	Isobutyl Alcohol	0.01146	0.050	Q1-TFS-MW-04	UR
3506545 3506563	2nd Source	Acrolein	0.04128	0.050	Q1-TFS-MW-01 Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05	UR
3506545 3506563	2nd Source	Propionitrile	0.04837	0.050	Q1-TFS-MW-01 Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05	UR
3506545	CCAL	Acrolein	0.0443	0.050	Q1-TFS-MW-01	UR
3506545	CCAL	Propionitrile	0.03994	0.050	Q1-TFS-MW-01	UR

TABLE 2
Response Factors Out of QC Limits: Volatile Organic Compounds
NAS Key West Boca Chica / TFS – Groundwater Sampling 1st Quarter 2012

SDG	Calibration	Parameter	Recovery	Recovery Limits	Associated Samples	Flag
3506563	CCAL	Acrolein	0.04809	0.050	Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05	UR
3506563	CCAL	Propionitrile	0.0406	0.050	Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05	UR

The analytes listed are considered poor performers. All associated sample results were non-detect, therefore the quantitation limits reported for these compounds should be considered qualitatively invalid. This has been indicated by appending a "UR" qualifier next to the detection limit for these compounds in the associated field samples with a validation note of "RF" indicating that the results are not usable as the presence or absence of these compounds in these samples cannot be verified.

Blanks

The volatile organic compounds detected in the blank samples are listed in Table 3.

TABLE 3
Blank Contamination: Volatile Organic Compounds
NAS Key West Boca Chica / TFS – Groundwater Sampling 1st Quarter 2012

SDG	Sample ID	Sample Type	Parameter	Lab Result	Units	Samples Affected	Flag Concentrations less than the value listed below
3506563	Q1-TFS-TB-2	TB	Carbon Disulfide	1.0	ug/L	Q1-TFS-MW-15 Q1-TFS-MW-15-DUP	5.0 ug/L
3506575	Q1-TFS-TB-3	TB	Acetone	3.2	ug/L	Q1-TFS-MW-04	32 ug/L

Flags were applied to the analytes in the associated samples in the following manner:

When the analytes were detected in the trip blank, the detected compounds, that were less than 5 times the concentration detected for the analytes listed (10 times for common laboratory contaminants), were flagged "U" due to possible laboratory and/or field contamination with a validation note of "BL".

Laboratory Control Sample Recoveries

Laboratory control samples (LCS) were prepared and analyzed with each sample preparation batch and analytical run. Laboratory accuracy objectives were met for all LCS samples.

Matrix Spike and Matrix Spike Duplicate Recoveries

A matrix spike and spike duplicate samples were collected and analyzed using field sample Q1-TFS-MW-17. The matrix spike and matrix spike duplicate recoveries were outside acceptable quality control limit as noted in Table 4 below.

TABLE 4
Matrix Spike and Matrix Spike Duplicate Recovery Out of QC Limits: Volatile Organic Compounds
NAS Key West Boca Chica / TFS –Groundwater Sampling 1st Quarter 2012

SDG	Sample	Parameter	Recovery	Recovery Limits	Associated Samples	Flag
3506563	Matrix Spike Matrix Spike Duplicate	1,4-Dichloro-2-butene	56.8%, 55.5%	68-115	Q1-TFS-MW-17	Non-Detect – UJ

The quantitation limit for the sample noted above was qualified as estimated due to matrix spike and matrix spike duplicate recoveries were outside the acceptable limits that are listed in Table 4 with a validation note of "MSL" for low percent recovery.

Surrogate Recoveries

All surrogate recoveries were within acceptable quality control limits.

Field Duplicates

Field sample Q1-TFS-MW-15 was collected and analyzed in duplicate. Field duplicate precision objectives were met.

Minor Technical Issues for Semi-Volatile Organic Compounds (SVOCs) Analyses

Holding Time

All samples analyses were performed within hold time.

GC/MS Instrument Performance

All GC/MS Instrument Performance criteria were met.

Calibration

The initial calibration (ICAL), second source calibration (2nd Source), and continuing calibration (CCAL) average response factors for the analytes listed below were outside criteria:

TABLE 5
Response Factors Out of QC Limits: Semi-Volatile Organic Compounds
NAS Key West Boca Chica / TFS –Groundwater Sampling 1st Quarter 2012

SDG	Calibration	Parameter	Recovery	Recovery Limits	Associated Samples	Flag
3506545 3506563 3506575	ICAL	4-nitroquinoline-1-oxide	0.02423	0.050	Q1-TFS-MW-01 Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05 Q1-TFS-MW-04	UR
3506545 3506563 3506575	ICAL	Methapyriline	0.01331	0.050	Q1-TFS-MW-01 Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05 Q1-TFS-MW-04	UR

TABLE 5
Response Factors Out of QC Limits: Semi-Volatile Organic Compounds
NAS Key West Boca Chica / TFS –Groundwater Sampling 1st Quarter 2012

SDG	Calibration	Parameter	Recovery	Recovery Limits	Associated Samples	Flag
3506545 3506563 3506575	2nd Source	4-nitroquinoline-1-oxide	0.02246	0.050	Q1-TFS-MW-01 Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05 Q1-TFS-MW-04	UR
3506545 3506563 3506575	CCAL	4-nitroquinoline-1-oxide	0.02155	0.050	Q1-TFS-MW-01 Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05 Q1-TFS-MW-04	UR
3506545 3506563 3506575	CCAL	Methapyriline	0.01158	0.050	Q1-TFS-MW-01 Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05 Q1-TFS-MW-04	UR

All associated sample results were non-detect, therefore the quantitation limits reported for these compounds should be considered qualitatively invalid. This has been indicated by appending a "UR" qualifier next to the detection limit for these compounds in the associated field samples with a validation note of "RF" indicating that the results are not usable as the presence or absence of these compounds in these samples cannot be verified.

Blank Contaminants

There were no detections in the method blank samples.

Laboratory Control Sample Recoveries

The laboratory control sample recoveries were outside acceptable quality control limit as noted in Table 6 below.

TABLE 6

Laboratory Control Sample Recovery Out of QC Limits: Semi-Volatile Organic Compounds

NAS Key West Boca Chica / TFS –Groundwater Sampling 1st Quarter 2012

SDG	Sample	Parameter	Recovery	Recovery Limits	Associated Samples	Flag
3506545	Laboratory Control Sample Laboratory Control Sample Duplicate	a,a-Dimethylphenethylamine	0%, 0%	70-130	Q1-TFS-MW-01	Non-Detects - UR
3506545	Laboratory Control Sample Laboratory Control Sample Duplicate	Hexachloropropene 2-Naphthylamine	16%, 15.5% 52.2%, 55%	21-105 70-130	Q1-TFS-MW-01	Non-Detects - UJ
3506563 3506575	Laboratory Control Sample	a,a-Dimethylphenethylamine	0%	70-130	Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05 Q1-TFS-MW-04	Non-Detect - UR
3506563 3506575	Laboratory Control Sample	Hexachloropropene 1,4-Naphthoquinone 2-Naphthylamine	15.2% 27% 49%	21-105 28-143 70-130	Q1-TFS-MW-17 Q1-TFS-MW-15 Q1-TFS-MW-15-DUP Q1-TFS-MW-05 Q1-TFS-MW-04	Non-Detects - UJ

The quantitation limits for the samples noted above were qualified as indicated above due to laboratory control sample and/or laboratory control sample duplicate recoveries were outside the acceptable limits that are listed in Table 6 with a validation note of "BSL" for low percent recovery. The results for a,a-dimethylphenethylamine were rejected and are

considered not usable as the presence or absence of these compounds in these samples cannot be verified since the LCS and/or LCSD samples were not recovered.

Matrix Spike and Matrix Spike Duplicate Recoveries

A matrix spike and spike duplicate samples were collected and analyzed using field sample Q1-TFS-MW-17. The matrix spike and matrix spike duplicate recoveries were outside acceptable quality control limit as noted in Table 7 below.

TABLE 7
Matrix Spike and Matrix Spike Duplicate Recovery Out of QC Limits: Semi-Volatile Organic Compounds
NAS Key West Boca Chica / TFS – Groundwater Sampling 1st Quarter 2012

SDG	Sample	Parameter	Recovery	Recovery Limits	Associated Samples	Flag
3506563	Matrix Spike Matrix Spike Duplicate	a,a-Dimethylphenethylamine Hexachloropropene 1,4-Naphthoquinone 2-Naphthylamine	0%, 0% 19.2%, 17.4% 0%, 0% 52.2%, 50.2%	70-130 21-105 28-143 70-130	Q1-TFS-MW-17	Non-Detects – UJ or Invalid UR

The quantitation limits for the sample noted above were qualified as estimated or invalid due to matrix spike and matrix spike duplicate recoveries were outside the acceptable limits that are listed in Table 7 with a validation note of "MSL" for low percent recovery.

Surrogate Recoveries

All surrogate recoveries were within acceptable quality control limits.

Field Duplicates

Field sample Q1-TFS-MW-15 was collected and analyzed in duplicate. Field duplicate precision objectives were met.

Minor Technical Issues for Polycyclic Aromatic Hydrocarbons (PAH) Analyses

Holding Time

All samples analyses were performed within hold time.

GC/MS Instrument Performance

All GC/MS Instrument Performance criteria were met.

Calibration

All Initial, 2nd Source, and Continuing Calibration criteria were met.

Blank Contaminants

There were no detections in the equipment and method blank samples.

Laboratory Control Sample Analysis

Laboratory control samples (LCS) were prepared and analyzed with each sample preparation batch and analytical run. Laboratory accuracy objectives were met for all LCS samples.

Matrix Spike and Matrix Spike Duplicate Recoveries

A matrix spike and spike duplicate samples were collected and analyzed using field sample Q1-TFS-MW-17. The matrix spike / matrix spike duplicate (MS/MSD) accuracy and precision objectives were met.

Surrogate Recoveries

All surrogate recoveries were within acceptable quality control limits.

Field Duplicates

Field sample Q1-TFS-MW-15 was collected and analyzed in duplicate. Field duplicate precision objectives were met.

Dilutions

The samples presented below in table 8 were analyzed at dilutions for the analysis indicated. These dilutions were required to prevent saturation of the instrument, to allow quantitation of the compounds within the linear range of the calibration curve, and/or to reduce the effects of the matrix on the target compounds. Positive results for compounds reported above the calibration range in the initial analysis have been reported from the diluted analyses.

TABLE 8
Dilutions: PAH
NAS Key West Boca Chica / TFS –Groundwater Sampling 1st Quarter 2012

Sample ID	Analysis	Dilution Factor
Q1-TFS-MW-15	PAH	4X
Q1-TFS-MW-15-DUP	PAH	4X
Q1-TFS-MW-04	PAH	10X

Rejected Data

No data were rejected based upon the validation process for this sampling event.

Minor Technical Issues for Total Petroleum Hydrocarbon (TPH) Analyses

Holding Time

All samples analyses were performed within hold time.

Instrument Performance

All Instrument Performance criteria were met.

Calibration

All Initial, 2nd Source, and Continuing Calibration criteria were met.

Blank Contaminants

There were no detections in the equipment and method blank samples.

Laboratory Control Sample Analysis

Laboratory control samples (LCS) were prepared and analyzed with each sample preparation batch and analytical run. Laboratory accuracy objectives were met for all LCS samples.

Matrix Spike and Matrix Spike Duplicate Recoveries

A matrix spike and spike duplicate samples were collected and analyzed using field sample Q1-TFS-MW-17. The matrix spike / matrix spike duplicate (MS/MSD) accuracy and precision objectives were met.

Surrogate Recoveries

All surrogate recoveries were within acceptable quality control limits, except as noted in Table 9 below.

TABLE 9
Surrogate Recoveries Out of QC Limits: Total Petroleum Hydrocarbon
NAS Key West Boca Chica / TFS –Groundwater Sampling 1st Quarter 2012

SDG	Sample	Parameter	Recovery	Recovery Limits	Associated Samples	Flag
3506545	Q1-TFS-MW-01	o-terphenyl	66.7%	82-142	Q1-TFS-MW-01	Detects-J
3506575	Q1-TFS-MW-04	o-terphenyl	61%	82-142	Q1-TFS-MW-04	Detects-J

The TPH results for the samples listed above were qualified with a "J" as estimated due to the surrogate recoveries were outside the acceptable limit that are listed in Table 9 with a validation note of "SSL".

Field Duplicates

Field sample Q1-TFS-MW-15 was collected and analyzed in duplicate. Field duplicate precision objectives were met.

Dilutions

The samples presented below in table 10 were analyzed at dilutions for the analysis indicated. These dilutions were required to prevent saturation of the instrument, to allow quantitation of the compounds within the linear range of the calibration curve, and/or to reduce the effects of the matrix on the target compounds. Positive results for compounds reported above the calibration range in the initial analysis have been reported from the diluted analyses.

TABLE 10
Dilutions: TPH
NAS Key West Boca Chica / TFS –Groundwater Sampling 1st Quarter 2012

Sample ID	Analysis	Dilution Factor
Q1-TFS-MW-15	TPH	10X
Q1-TFS-MW-15-DUP	TPH	10X

Rejected Data

No data were rejected based upon the validation process for this sampling event.

Data Usability

A review of the analytical data submitted regarding the investigation of NAS Key West Boca Chica, TFS-Groundwater Sampling 1st quarter 2012, by CH2M HILL has been completed. An overall evaluation of the data indicates that the sample handling, shipment, and analytical procedures have been adequately completed, and that the analytical results should be considered usable as qualified.

The data user can use the data recognizing the potential data biases indicated by the data qualifiers assigned to some results. Data was qualified for a subset of results based on trip blank contamination, low response factors for the initial, second source, and/or continuing calibrations, low surrogate recovery bias, low matrix recovery bias, low laboratory control sample and/or laboratory control sample duplicate recovery bias. The data user should be

cautioned about using results that have been rejected because of very low spike recovery bias since the presence or absence of these compounds cannot be verified

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 654501.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1537

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10 UR-Rf
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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Form I

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 654501.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1537

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1	
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4	
108-88-3	Toluene	0.28	U	0.14	0.28	1	
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1	
97-63-2	Ethyl methacrylate	1	U	0.5	1	1	
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1	
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5	
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4	
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5	
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1	
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5	
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5	
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5	
100-42-5	Styrene	0.24	U	0.12	0.24	1	
75-25-2	Bromoform	0.38	U	0.19	0.38	1	
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26	
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1	
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2	
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4	
75-05-8	Acetonitrile	20	U	10	20	20	
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1	
123-91-1	1,4-Dioxane	20	U	10	20	40	UR-RF
78-83-1	Isobutyl alcohol	40	U	20	40	40	UR-RF
126-98-7	Methacrylonitrile	2	U	1	2	10	
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1	
107-12-0	Propionitrile	20	U	10	20	20	UR-RF

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 654501.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1537

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-1

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654503 Lab File ID: 654503.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1622

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-1

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654503 Lab File ID: 654503.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1622

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-1

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654503 Lab File ID: 654503.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1622

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 545-01.D

Sample wt/vol: 990 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/20/12

Level:(low/med) LOW Date Analyzed: 07/20/12 Time: 1900

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.26		0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.04	U	0.02	0.04	0.05
83-32-9	Acenaphthene	0.19		0.02	0.04	0.05
208-96-8	Acenaphthylene	0.07		0.02	0.04	0.05
120-12-7	Anthracene	0.04	U	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.03	J	0.02	0.04	0.05
86-73-7	Fluorene	0.14		0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	0.29		0.02	0.04	0.05
85-01-8	Phenanthrene	0.04	U	0.02	0.04	0.05
129-00-0	Pyrene	0.04	U	0.02	0.04	0.05

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 545-1.D

Sample wt/vol: 985 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 2 Date Extracted: 07/20/12

Level:(low/med) LOW Date Analyzed: 07/23/12 Time: 1423

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
5289290-40-0	TPH	3100		254	508	508	J-SSL

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 54501.D

Sample wt/vol: 990 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1336

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 54501.D

Sample wt/vol: 990 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1336

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 54501.D

Sample wt/vol: 990 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1336

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3	
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4	
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5	
76-01-7	Pentachloroethane	5	U	2.5	5	20.2	
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5	
98-86-2	Acetophenone	8.1	U	4	8.1	8.1	
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1	
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5	
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3	UR-BSL
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1	
1888-71-7	Hexachloropropene	4	U	2	4	4	UJ-BSL
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5	
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2	
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4	
94-59-7	Safrole	5	U	2.5	5	5	
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3	
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5	
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4	
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4	
91-59-8	2-Naphthylamine	5	U	2.5	5	5	UJ-BSL
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1	
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2	
106-50-3	p-Phenylenediamine	4	U	2	4	4	
62-44-2	Phenacetin	1.8	U	0.9	1.8	4	
92-67-1	4-Aminobiphenyl	4	U	2	4	4	
23950-58-5	Pronamide	1.6	U	0.82	1.6	4	

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 54501.D

Sample wt/vol: 990 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1336

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4	
88-85-7	Dinoseb	8.1	U	4	8.1	8.1	
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1	UR-RF
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4	UR-RF
140-57-8	Aramite	8.1	U	4	8.1	8.1	
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4	
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4	
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4	
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4	
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6	
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4	
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4	
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2	
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4	
143-50-0	Kepone	32.3	U	16.2	32.3	32.3	
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8	

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 6563-01.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2345

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10 UR-RF
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 6563-01.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2345

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1	
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4	
108-88-3	Toluene	0.28	U	0.14	0.28	1	
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1	
97-63-2	Ethyl methacrylate	1	U	0.5	1	1	
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1	
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5	
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4	
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5	
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1	
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5	
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5	
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5	
100-42-5	Styrene	0.24	U	0.12	0.24	1	
75-25-2	Bromoform	0.38	U	0.19	0.38	1	
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26	
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1	
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2	
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4	UJ-MSL
75-05-8	Acetonitrile	20	U	10	20	20	
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1	
123-91-1	1,4-Dioxane	20	U	10	20	40	UR-RF
78-83-1	Isobutyl alcohol	40	U	20	40	40	UR-RF
126-98-7	Methacrylonitrile	2	U	1	2	10	
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1	
107-12-0	Propionitrile	20	U	10	20	20	UR-RF

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 6563-01.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2345

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 6563-04.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0008

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2	
74-87-3	Chloromethane	0.64	U	0.32	0.64	1	
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1	
74-83-9	Bromomethane	0.86	U	0.43	0.86	1	
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4	
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1	
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5	
107-02-8	Acrolein	8	U	4	8	10	UR-RF
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5	
75-15-0	Carbon disulfide	0.77	~~U~~	0.19	0.38	1	U-BL
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5	
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66	
107-13-1	Acrylonitrile	4	U	2	4	4	
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1	
67-64-1	Acetone	2.6	U	1.3	2.6	10	
78-93-3	2-Butanone	4	U	2	4	4	
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5	
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1	
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5	
71-43-2	Benzene	4.5		0.17	0.34	0.5	
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5	
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5	
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1	
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1	
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1	
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5	

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 6563-04.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0008

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1	
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4	
108-88-3	Toluene	0.31	J	0.14	0.28	1	
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1	
97-63-2	Ethyl methacrylate	1	U	0.5	1	1	
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1	
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5	
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4	
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5	
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1	
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5	
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5	
100-41-4	Ethylbenzene	0.35	J	0.22	0.44	0.5	
100-42-5	Styrene	0.24	U	0.12	0.24	1	
75-25-2	Bromoform	0.38	U	0.19	0.38	1	
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26	
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1	
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2	
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4	
75-05-8	Acetonitrile	20	U	10	20	20	
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1	
123-91-1	1,4-Dioxane	20	U	10	20	40	UR-RF
78-83-1	Isobutyl alcohol	40	U	20	40	40	UR-RF
126-98-7	Methacrylonitrile	2	U	1	2	10	
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1	
107-12-0	Propionitrile	20	U	10	20	20	UR-RF

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 6563-04.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0008

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	0.96	J	0.5	1	2

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 6563-05.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0031

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2	
74-87-3	Chloromethane	0.64	U	0.32	0.64	1	
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1	
74-83-9	Bromomethane	0.86	U	0.43	0.86	1	
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4	
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1	
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5	
107-02-8	Acrolein	8	U	4	8	10	UR-RF
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5	
75-15-0	Carbon disulfide	0.95	~~J~~	0.19	0.38	1	U-BL
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5	
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66	
107-13-1	Acrylonitrile	4	U	2	4	4	
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1	
67-64-1	Acetone	2.6	U	1.3	2.6	10	
78-93-3	2-Butanone	4	U	2	4	4	
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5	
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1	
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5	
71-43-2	Benzene	4.6		0.17	0.34	0.5	
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5	
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5	
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1	
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1	
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1	
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5	

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 6563-05.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0031

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1	
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4	
108-88-3	Toluene	0.3	J	0.14	0.28	1	
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1	
97-63-2	Ethyl methacrylate	1	U	0.5	1	1	
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1	
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5	
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4	
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5	
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1	
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5	
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5	
100-41-4	Ethylbenzene	0.4	J	0.22	0.44	0.5	
100-42-5	Styrene	0.24	U	0.12	0.24	1	
75-25-2	Bromoform	0.38	U	0.19	0.38	1	
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26	
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1	
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2	
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4	
75-05-8	Acetonitrile	20	U	10	20	20	
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1	
123-91-1	1,4-Dioxane	20	U	10	20	40	UR-RF
78-83-1	Isobutyl alcohol	40	U	20	40	40	UR-RF
126-98-7	Methacrylonitrile	2	U	1	2	10	
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1	
107-12-0	Propionitrile	20	U	10	20	20	UR-RF

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 6563-05.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0031

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	0.97	J	0.5	1	2

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 6563-07.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0116

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10 UR-RF
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 6563-07.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0116

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1	
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4	
108-88-3	Toluene	0.28	U	0.14	0.28	1	
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1	
97-63-2	Ethyl methacrylate	1	U	0.5	1	1	
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1	
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5	
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4	
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5	
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1	
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5	
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5	
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5	
100-42-5	Styrene	0.24	U	0.12	0.24	1	
75-25-2	Bromoform	0.38	U	0.19	0.38	1	
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26	
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1	
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2	
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4	
75-05-8	Acetonitrile	20	U	10	20	20	
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1	
123-91-1	1,4-Dioxane	20	U	10	20	40	UR-RF
78-83-1	Isobutyl alcohol	40	U	20	40	40	UR-RF
126-98-7	Methacrylonitrile	2	U	1	2	10	
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1	
107-12-0	Propionitrile	20	U	10	20	20	UR-RF

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 6563-07.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0116

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-2

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656309 Lab File ID: 6563-09.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2323

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	1		0.19	0.38	1
75-09-2	Methylene chloride	0.75	J	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	3.2	J	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-2

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656309 Lab File ID: 6563-09.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2323

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-2

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656309 Lab File ID: 6563-09.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2323

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 56301.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 1717

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.04	U	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.04	U	0.02	0.04	0.05
83-32-9	Acenaphthene	0.83		0.02	0.04	0.05
208-96-8	Acenaphthylene	0.037	J	0.02	0.04	0.05
120-12-7	Anthracene	0.029	J	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.079		0.02	0.04	0.05
86-73-7	Fluorene	0.04	U	0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	0.07		0.02	0.04	0.05
85-01-8	Phenanthrene	0.024	J	0.02	0.04	0.05
129-00-0	Pyrene	0.022	J	0.02	0.04	0.05

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 56304D4.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0847

PercentSolids: 0 decanted : Dilution Factor: 4

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	31.2		0.08	0.16	0.2
91-57-6	2-Methylnaphthalene	16.7		0.08	0.16	0.2
83-32-9	Acenaphthene	1.9		0.08	0.16	0.2
208-96-8	Acenaphthylene	0.21		0.08	0.16	0.2
120-12-7	Anthracene	1		0.08	0.16	0.2
56-55-3	Benzo(a)anthracene	0.2		0.08	0.16	0.2
50-32-8	Benzo(a)pyrene	0.16	U	0.08	0.16	0.2
205-99-2	Benzo(b)fluoranthene	0.16	U	0.08	0.16	0.2
191-24-2	Benzo(g,h,i)perylene	0.16	U	0.08	0.16	0.2
207-08-9	Benzo(k)fluoranthene	0.16	U	0.08	0.16	0.2
218-01-9	Chrysene	0.18	J	0.08	0.16	0.2
53-70-3	Dibenzo(a,h)anthracene	0.16	U	0.08	0.16	0.16
206-44-0	Fluoranthene	4		0.08	0.16	0.2
86-73-7	Fluorene	2.4		0.08	0.16	0.2
193-39-5	Indeno(1,2,3-cd)pyrene	0.16	U	0.08	0.16	0.2
91-20-3	Naphthalene	33		0.08	0.16	0.2
85-01-8	Phenanthrene	6.3		0.08	0.16	0.2
129-00-0	Pyrene	2.6		0.08	0.16	0.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 56305D4.D

Sample wt/vol: 980 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0911

PercentSolids: 0 decanted : Dilution Factor: 4

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	25.2		0.082	0.16	0.2
91-57-6	2-Methylnaphthalene	13.1		0.082	0.16	0.2
83-32-9	Acenaphthene	1.8		0.082	0.16	0.2
208-96-8	Acenaphthylene	0.2		0.082	0.16	0.2
120-12-7	Anthracene	0.81		0.082	0.16	0.2
56-55-3	Benzo(a)anthracene	0.22		0.082	0.16	0.2
50-32-8	Benzo(a)pyrene	0.16	U	0.082	0.16	0.2
205-99-2	Benzo(b)fluoranthene	0.16	U	0.082	0.16	0.2
191-24-2	Benzo(g,h,i)perylene	0.16	U	0.082	0.16	0.2
207-08-9	Benzo(k)fluoranthene	0.16	U	0.082	0.16	0.2
218-01-9	Chrysene	0.18	J	0.082	0.16	0.2
53-70-3	Dibenzo(a,h)anthracene	0.16	U	0.082	0.16	0.16
206-44-0	Fluoranthene	3.5		0.082	0.16	0.2
86-73-7	Fluorene	2.4		0.082	0.16	0.2
193-39-5	Indeno(1,2,3-cd)pyrene	0.16	U	0.082	0.16	0.2
91-20-3	Naphthalene	26.1		0.082	0.16	0.2
85-01-8	Phenanthrene	5.4		0.082	0.16	0.2
129-00-0	Pyrene	2.4		0.082	0.16	0.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 56307.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 1852

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.04	U	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.04	U	0.02	0.04	0.05
83-32-9	Acenaphthene	0.033	J	0.02	0.04	0.05
208-96-8	Acenaphthylene	0.04	U	0.02	0.04	0.05
120-12-7	Anthracene	0.04	U	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.027	J	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.053		0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.036	J	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.02	J	0.02	0.04	0.05
218-01-9	Chrysene	0.027	J	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.036	J	0.02	0.04	0.05
86-73-7	Fluorene	0.04	U	0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.031	J	0.02	0.04	0.05
91-20-3	Naphthalene	0.04	U	0.02	0.04	0.05
85-01-8	Phenanthrene	0.021	J	0.02	0.04	0.05
129-00-0	Pyrene	0.035	J	0.02	0.04	0.05

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 56301.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1424

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6	U	3	6	6
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.4	U	2.7	5.4	5.4
106-46-7	1,4-Dichlorobenzene	5.4	U	2.7	5.4	5.4
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.2	U	3.1	6.2	10
108-60-1	2,2'-Oxybis(1-chloropropane)	6.6	U	3.3	6.6	6.6
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6	U	3	6	6
106-44-5	4-Methylphenol	12.3	U	6.1	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.6	U	3.8	7.6	7.6
88-75-5	2-Nitrophenol	1.5	U	0.77	1.5	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7	U	3.5	7	7
120-83-2	2,4-Dichlorophenol	6.2	U	3.1	6.2	6.2
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6	U	3	6	6
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.4	U	2.7	5.4	5.4
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.82	1.6	4

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 56301.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1424

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.84	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.8	U	3.4	6.8	6.8
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6	U	3	6	6
131-11-3	Dimethylphthalate	6	U	3	6	6
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.2	U	5.6	11.2	20.1
132-64-9	Dibenzofuran	5.4	U	2.7	5.4	5.4
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8	U	4	8	8
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8	U	4	8	8
86-30-6	N-Nitrosodiphenylamine	6.8	U	3.4	6.8	6.8
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.82	U	0.41	0.82	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10
84-74-2	Di-n-butylphthalate	1.7	U	0.86	1.7	4
85-68-7	Butylbenzylphthalate	6	U	3	6	6
91-94-1	3,3'-Dichlorobenzidine	5.4	U	2.7	5.4	5.4
117-81-7	Bis(2-ethylhexyl)phthalate	8.8	U	4.4	8.8	8.8
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8	U	4	8	8
10595-95-6	N-Nitrosomethylethylamine	5.4	U	2.7	5.4	5.4

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 56301.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1424

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
55-18-5	N-Nitrosodiethylamine	6.2	U	3.1	6.2	6.2	
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4	
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5	
76-01-7	Pentachloroethane	5	U	2.5	5	20.1	
930-55-2	N-Nitrosopyrrolidine	5.4	U	2.7	5.4	5.4	
98-86-2	Acetophenone	8	U	4	8	8	
59-89-2	N-Nitrosomorpholine	6	U	3	6	6	
95-53-4	o-Toluidine	5.4	U	2.7	5.4	5.4	
122-09-8	a,a-Dimethylphenethylamine	32.2	U	16.1	32.2	32.2	UR-BSL,MSL
87-65-0	2,6-Dichlorophenol	7	U	3.5	7	7	
1888-71-7	Hexachloropropene	4	U	2	4	4	UJ-BSL,MSL
924-16-3	N-Nitrosodibutylamine	5.4	U	2.7	5.4	5.4	
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2	
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4	
94-59-7	Safrole	5	U	2.5	5	5	
130-15-4	1,4-Naphthoquinone	6.2	U	3.1	6.2	6.2	UJ-BSL,MSL
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5	
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4	
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4	
91-59-8	2-Naphthylamine	5	U	2.5	5	5	UJ-BSL,MSL
58-90-2	2,3,4,6-Tetrachlorophenol	6	U	3	6	6	
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2	
106-50-3	p-Phenylenediamine	4	U	2	4	4	
62-44-2	Phenacetin	1.8	U	0.89	1.8	4	
92-67-1	4-Aminobiphenyl	4	U	2	4	4	
23950-58-5	Pronamide	1.6	U	0.81	1.6	4	

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 56301.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1424

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4	
88-85-7	Dinoseb	8	U	4	8	8	
56-57-5	4-Nitroquinoline-1-oxide	7.4	U	3.7	7.4	10	UR-RF
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4	UR-RF
140-57-8	Aramite	8	U	4	8	8	
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.62	1.2	4	
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4	
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.96	1.9	4	
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4	
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6	
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4	
2303-16-4	Diallate (Avadex)	1.7	U	0.84	1.7	4	
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2	
510-15-6	Chlorobenzilate	1.6	U	0.78	1.6	4	
143-50-0	Kepone	32.2	U	16.1	32.2	32.2	
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8	

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 56304.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1735

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 56304.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1735

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 56304.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1735

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3	
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4	
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5	
76-01-7	Pentachloroethane	5	U	2.5	5	20.2	
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5	
98-86-2	Acetophenone	8.1	U	4	8.1	8.1	
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1	
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5	
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3	UR-BSL
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1	
1888-71-7	Hexachloropropene	4	U	2	4	4	UJ-BSL
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5	
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2	
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4	
94-59-7	Safrole	5	U	2.5	5	5	
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3	UJ-BSL
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5	
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4	
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4	
91-59-8	2-Naphthylamine	5	U	2.5	5	5	UJ-BSL
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1	
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2	
106-50-3	p-Phenylenediamine	4	U	2	4	4	
62-44-2	Phenacetin	1.8	U	0.9	1.8	4	
92-67-1	4-Aminobiphenyl	4	U	2	4	4	
23950-58-5	Pronamide	1.6	U	0.82	1.6	4	

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 56304.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1735

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8.1	U	4	8.1	8.1
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1 UR-RF
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4 UR-RF
140-57-8	Aramite	8.1	U	4	8.1	8.1
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4
143-50-0	Kepone	32.3	U	16.2	32.3	32.3
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 56305.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1759

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 56305.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1759

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 56305.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1759

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3	
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4	
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5	
76-01-7	Pentachloroethane	5	U	2.5	5	20.2	
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5	
98-86-2	Acetophenone	8.1	U	4	8.1	8.1	
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1	
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5	
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3	UR-BSL
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1	
1888-71-7	Hexachloropropene	4	U	2	4	4	UJ-BSL
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5	
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2	
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4	
94-59-7	Safrole	5	U	2.5	5	5	
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3	UJ-BSL
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5	
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4	
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4	
91-59-8	2-Naphthylamine	5	U	2.5	5	5	UJ-BSL
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1	
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2	
106-50-3	p-Phenylenediamine	4	U	2	4	4	
62-44-2	Phenacetin	1.8	U	0.9	1.8	4	
92-67-1	4-Aminobiphenyl	4	U	2	4	4	
23950-58-5	Pronamide	1.6	U	0.82	1.6	4	

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 56305.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1759

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4	
88-85-7	Dinoseb	8.1	U	4	8.1	8.1	
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1	UR-RF
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4	UR-RF
140-57-8	Aramite	8.1	U	4	8.1	8.1	
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4	
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4	
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4	
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4	
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6	
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4	
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4	
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2	
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4	
143-50-0	Kepone	32.3	U	16.2	32.3	32.3	
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8	

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 56307.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1600

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 56307.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1600

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 56307.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1600

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3	
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4	
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5	
76-01-7	Pentachloroethane	5	U	2.5	5	20.2	
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5	
98-86-2	Acetophenone	8.1	U	4	8.1	8.1	
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1	
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5	
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3	UR-BSL
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1	
1888-71-7	Hexachloropropene	4	U	2	4	4	UJ-BSL
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5	
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2	
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4	
94-59-7	Safrole	5	U	2.5	5	5	
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3	UJ-BSL
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5	
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4	
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4	
91-59-8	2-Naphthylamine	5	U	2.5	5	5	UJ-BSL
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1	
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2	
106-50-3	p-Phenylenediamine	4	U	2	4	4	
62-44-2	Phenacetin	1.8	U	0.9	1.8	4	
92-67-1	4-Aminobiphenyl	4	U	2	4	4	
23950-58-5	Pronamide	1.6	U	0.82	1.6	4	

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 56307.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1600

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4	
88-85-7	Dinoseb	8.1	U	4	8.1	8.1	
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1	UR-RF
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4	UR-RF
140-57-8	Aramite	8.1	U	4	8.1	8.1	
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4	
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4	
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4	
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4	
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6	
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4	
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4	
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2	
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4	
143-50-0	Kepone	32.3	U	16.2	32.3	32.3	
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8	

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 563-1.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 0942

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	1000		252	505	505

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 563-4D10.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1519

PercentSolids: 0 decanted : Dilution Factor: 10

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	20900		2520	5050	5050

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 563-5D10.D

Sample wt/vol: 985 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1542

PercentSolids: 0 decanted : Dilution Factor: 10

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	19900		2540	5080	5080

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FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 563-7R.D

Sample wt/vol: 980 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1326

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	510	U	255	510	510

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 657501.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 2002

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	ANALYTE	RESULT	Q	MDL	LOD	LOQ	
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2	UJ-HT
74-87-3	Chloromethane	0.64	U	0.32	0.64	1	
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1	
74-83-9	Bromomethane	0.86	U	0.43	0.86	1	
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4	
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1	
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5	
107-02-8	Acrolein	8	U	4	8	10	
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5	
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1	
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5	
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66	
107-13-1	Acrylonitrile	4	U	2	4	4	
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1	
67-64-1	Acetone	1.5	J	1.3	2.6	10	UJ BL, HT
78-93-3	2-Butanone	4	U	2	4	4	UJ-HT
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5	
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1	
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5	
71-43-2	Benzene	0.62		0.17	0.34	0.5	J-HT
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5	UJ-HT
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5	
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1	
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1	
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1	
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5	

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 657501.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 2002

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1	UJ-HT
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4	
108-88-3	Toluene	0.28	U	0.14	0.28	1	
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1	
97-63-2	Ethyl methacrylate	1	U	0.5	1	1	
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1	
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5	
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4	
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5	
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1	
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5	
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5	
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5	
100-42-5	Styrene	0.24	U	0.12	0.24	1	
75-25-2	Bromoform	0.38	U	0.19	0.38	1	
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26	
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1	
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2	
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4	
75-05-8	Acetonitrile	20	U	10	20	20	
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1	
123-91-1	1,4-Dioxane	20	U	10	20	40	UR-RF, HT
78-83-1	Isobutyl alcohol	40	U	20	40	40	UR-RF, HT
126-98-7	Methacrylonitrile	2	U	1	2	10	UJ-HT
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1	
107-12-0	Propionitrile	20	U	10	20	20	

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 657501.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 2002

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
126-99-8	Chloroprene	0.4	U	0.2	0.4	1	UJ-HT
1330-20-7	Xylene (total)	1	U	0.5	1	2	↓

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-3

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657504 Lab File ID 657504.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1846

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	3.2	J	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-3

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657504 Lab File ID 657504.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1846

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-3

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657504 Lab File ID 657504.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1846

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 57501.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2115

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	32.9	~~E~~	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	6.3		0.02	0.04	0.05
83-32-9	Acenaphthene	0.61		0.02	0.04	0.05
208-96-8	Acenaphthylene	0.28		0.02	0.04	0.05
120-12-7	Anthracene	0.033	J	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.031	J	0.02	0.04	0.05
86-73-7	Fluorene	0.57		0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	4.6		0.02	0.04	0.05
85-01-8	Phenanthrene	0.23		0.02	0.04	0.05
129-00-0	Pyrene	0.02	J	0.02	0.04	0.05

R-DL

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04DL1

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501DL1 Lab File ID 57501D10.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0935

PercentSolids: 0 decanted : Dilution Factor: 10

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	38.4		0.2	0.4	0.5
91-57-6	2-Methylnaphthalene	7.5		0.2	0.4	0.5
83-32-9	Acenaphthene	0.55		0.2	0.4	0.5
208-96-8	Acenaphthylene	0.31	J	0.2	0.4	0.5
120-12-7	Anthracene	0.4	U	0.2	0.4	0.5
56-55-3	Benzo(a)anthracene	0.4	U	0.2	0.4	0.5
50-32-8	Benzo(a)pyrene	0.4	U	0.2	0.4	0.5
205-99-2	Benzo(b)fluoranthene	0.4	U	0.2	0.4	0.5
191-24-2	Benzo(g,h,i)perylene	0.4	U	0.2	0.4	0.5
207-08-9	Benzo(k)fluoranthene	0.4	U	0.2	0.4	0.5
218-01-9	Chrysene	0.4	U	0.2	0.4	0.5
53-70-3	Dibenzo(a,h)anthracene	0.4	U	0.2	0.4	0.4
206-44-0	Fluoranthene	0.4	U	0.2	0.4	0.5
86-73-7	Fluorene	0.62		0.2	0.4	0.5
193-39-5	Indeno(1,2,3-cd)pyrene	0.4	U	0.2	0.4	0.5
91-20-3	Naphthalene	5.2		0.2	0.4	0.5
85-01-8	Phenanthrene	0.22	J	0.2	0.4	0.5
129-00-0	Pyrene	0.4	U	0.2	0.4	0.5

R-DL

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 57501.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1823

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 57501.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1823

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 57501.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1823

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3	
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4	
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5	
76-01-7	Pentachloroethane	5	U	2.5	5	20.2	
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5	
98-86-2	Acetophenone	8.1	U	4	8.1	8.1	
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1	
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5	
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3	UR-BSL
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1	
1888-71-7	Hexachloropropene	4	U	2	4	4	UJ-BSL
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5	
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2	
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4	
94-59-7	Safrole	5	U	2.5	5	5	
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3	UJ-BSL
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5	
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4	
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4	
91-59-8	2-Naphthylamine	5	U	2.5	5	5	UJ-BSL
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1	
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2	
106-50-3	p-Phenylenediamine	4	U	2	4	4	
62-44-2	Phenacetin	1.8	U	0.9	1.8	4	
92-67-1	4-Aminobiphenyl	4	U	2	4	4	
23950-58-5	Pronamide	1.6	U	0.82	1.6	4	

110812 1314

Form I

C.L

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 57501.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1823

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4	
88-85-7	Dinoseb	8.1	U	4	8.1	8.1	
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1	UR-RF
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4	UR-RF
140-57-8	Aramite	8.1	U	4	8.1	8.1	
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4	
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4	
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4	
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4	
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6	
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4	
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4	
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2	
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4	
143-50-0	Kepone	32.3	U	16.2	32.3	32.3	
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8	

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 575-1.D

Sample wt/vol: 995 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1412

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*	
5289290-40-0	TPH	9400		251	502	502	J - SSL

PEL

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CHAIN OF CUSTODY RECORD

3506545 MK

Page 1 of ____

Special Instructions:
TAT- Indicate Date Needed: 28 Days
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: Bethany Garvey
CH2M HILL
(on-file)

Project Mgr.: Greg Rowell

Invoice To: Greg Rowell
CH2M HILL
(on-file)

P.O. No.: ____ RQN: ____

Project No.: 426847
Site Name: Truck Fill Stand (TFS)
Location: NAS KW, Key West State: FL
Sampler(s): Nikki Monroe

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9=____ 10=____ 11=____

List preservative code below: 2 | | | 3 | | | | |

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=____ X2=____ X3=____

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other ____

State specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOC 8260B	SVOC 8270 A	SVOC 8260 SIM	FL-PRO	Notes
-01	Q1-TFS-MW-01	7-17-12	1255	G	GW	3	6			3	2	2	2	
-02	Q1-TFS-MW-8D	7-17-12	1500	G	GW	3	6			3	2	2	2	
-03	Q1-TFS-TB-1	7-17-12	—	G	W	2				2				Trip Blank 1

☐ E-mail to greg.rowell@ch2m.com
EDD Format CH2M HILL
pH < 2 8260, FL-Pro

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 5.1

Relinquished by:	Received by:	Date:	Time:
[signature]	Fed Ex	7-17-12	16:15
	[signature]	7/18/12	08:35

3506545

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PEL

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CHAIN OF CUSTODY RECORD

3506563 MK

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 28
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Bethany Garvey
CH2M HILL
(on-file)

Project Mgr.: Greg Rowell

Invoice To: Greg Rowell
CH2M HILL
on file

P.O. No.: _____ RQN: _____

Project No.: 426847
Site Name: Truck Fill Stand (TFS)
Location: NASKW, Key West State: FL
Sampler(s): Nikki Monroe

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9=_____ 10=_____ 11=_____

List preservative code below: 2 | | | 3 | | | | |

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		VOC 8260B	SVOC 8270 D	SVOC 8270 SIM	FL-PRO						Notes:
-01	Q1-TFS-MW-17	7-18-12	0910	G	GW	3	6				3	2	2	2						
-02	Q1-TFS-MW-17-MS	7-18-12	0915	G	GW	3	6				3	2	2	2						
-03	Q1-TFS-MW-17-MSD	7-18-12	0915	G	GW	3	6				3	2	2	2						
-04	Q1-TFS-MW-15	7-18-12	1055	G	GW	3	6				3	2	2	2						
-05	Q1-TFS-MW-15-DUP	7-18-12	—	G	GW	3	6				3	2	2	2						
-06	Q1-TFS-MW-17-RS	7-18-12	0815	G	GW	3	6				3	2	2	2						
-07	Q1-TFS-MW-05	7-18-12	1350	G	GW	3	6				3	2	2	2						
-08	Q1-TFS-MW-11	7-18-12	1500	G	GW	3	6				3	2	2	2						
-09	Q1-TFS-TB-2	7-18-12	—	G	W	2					2									Trip Blank

☐ E-mail to greg.rowell@ch2m.com
EDD Format CH2M HILL
PN<2 8260, FL-Pro

Relinquished by:	Received by:	Date:	Time:
[signature]	Fed Ex	7-18-12	1715
	[signature]	7/19/12	10:50

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 5.1/5.1/5.2/4.1/4.8

3506563

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Page 1 of 1

3506575 MK

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 175 Metro Center Blvd, Warwick, RI 02886, (401) 732-3400

Special Handling:

TAT- Indicate Date Needed: 28 Day
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Bethany Garvey, CH2M HILL

Telephone #:

Project Mgr. Greg Rowell

Invoice To: Greg Rowell, CH2M HILL

P.O. No.: RQN:

Project No.: 426847

Site Name: Truck Fill Stand (TFS)

Location: NASKW, Key West State: FL

Sampler(s): Nikki Monroe

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below: 2 | | | 3 | | | | |

QA/QC Reporting Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		VOC 8260B	SVOC 8270D	SVOC 8270 SIM	FL-PRO					QA/QC Reporting Notes
-01	Q1-TFS-MW-04	7-19-12	0840	G	GW	3	6				3	2	2	2					
-02	Q1-TFS-MW-12	7-19-12	0950	G	GW	3	6				3	2	2	2					
-03	Q1-TFS-MW-16	7-19-12	1050	G	GW	3	6				3	2	2	2					
-04	Q1-TFS-TB-3	7-19-12	—	G	W	2					2								TB 3

Relinquished by:	Received by:	Date:	Time:	Temp°C
[signature]	Fed Ex	7-19-12	1230	4.5
	M.K	7/20/12	09:45	5.1

☐ EDD Format CH2M HILL
☐ E-mail to greg.rowell@ch2m.com

PH < 2 8260, FL-Pro

Condition upon receipt:
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

3506575

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Date Reported:
09-Aug-12

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

CH2M Hill
115 Perimeter Center Place, NE
Suite 700
Atlanta, GA 30346-1278

Attn: Greg Rowell

Project # 3506545
Project: NASKW Truck Fill Stand (TFS) 426847

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
350654501	Q1-TFS-MW-01	W	17-Jul-12 12:55	18-Jul-12 8:35
350654502	Q1-TFS-MW-8D	W	17-Jul-12 15:00	18-Jul-12 8:35
350654503	Q1-TFS-TB-1	W	17-Jul-12 0:00	18-Jul-12 8:35

Soil samples are reported on dry weight basis, unless otherwise noted.

Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis.

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet unless noted in the case narrative.

Please contact the laboratory at 813-888-9507 with any questions regarding the data contained in the laboratory report.

Florida	E84207
Texas	T104704408-12-4
South Carolina	96011001
North Dakota	R-178
California	07253CA
Louisiana	02025
Kansas	E-10385
Arkansas	11-036-1

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2259 Testing

Respectfully Submitted,

Brian Spann
Laboratory Director
Spectrum Analytical, Inc. Florida Division

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8270 Standards Data 101

FL-PRO Organics 118

FL-PRO Sample Data 122

FL-PRO QC Summary 125

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EXECUTIVE SUMMARY - Detection Highlights

3506545

SAMPLE ID: Q1-TFS-MW-01

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	0.260	0.050	UG/L	SW8270D-SIM
Acenaphthene	0.190	0.050	UG/L	SW8270D-SIM
Acenaphthylene	0.0700	0.050	UG/L	SW8270D-SIM
Fluoranthene	0.0300 J	0.050	UG/L	SW8270D-SIM
Fluorene	0.140	0.050	UG/L	SW8270D-SIM
Naphthalene	0.290	0.050	UG/L	SW8270D-SIM
TPH	3100	510	UG/L	FL-PRO

SAMPLE ID: Q1-TFS-MW-8D

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
2-Methylnaphthalene	0.0250 J	0.050	UG/L	SW8270D-SIM
Anthracene	0.0270 J	0.050	UG/L	SW8270D-SIM
TPH	1700	510	UG/L	FL-PRO

070812 1736

Organics

070812 1736

Organic Data Qualifiers

U Indicates the analyte was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the reporting limit for that analyte. The reporting limit can vary from sample to sample depending on dilution factors or the percent moisture adjustment when indicated.

J Indicates estimated value. It is used when the data indicates the presence of an analyte above the method detection limit (MDL) yet lower than the reporting limit.

B Indicates the analyte was found in the associated blank as well as in the sample. The notation indicates possible contamination of the sample.

E Indicates the value reported is above the highest calibration standard for that analyte. The sample should be analyzed at an appropriate dilution. "E" qualified values are estimations and the diluted result may be reported on another Form 1.

D Indicates the analyte has been identified in a dilution reanalysis. "D" qualifiers are used for samples that have been analyzed at a lesser dilution than required for accurate quantitation.

C The "C" qualifier indicates the presence of this analyte has been confirmed by GC/MS analysis.

P This qualifier is used for pesticide / Aroclor target analytes where there is greater than 25% difference for the detected concentration between the two GC columns.

N This qualifier indicates presumptive evidence of an analyte. This qualifier is only used for tentatively identified compounds (TIC), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the "N" qualifier is not used.

A This qualifier indicates that a TIC is a suspected aldol-condensation product.

X Data flagged as rejected by analyst utilizing analytical judgement.

070812 1736

Organic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for organic analysis are defined below:

DL Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.

R Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.

RE Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.

MS Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).

SD Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).

070812 1736

8260 Volatile Organics

070812 1736

CASE NARRATIVE
Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506545

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8260B

IV. PREPARATION

Water samples were prepared by SW846/5030 for EPA8260B volatiles analysis. All aspects of sample preparation proceeded without exception.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met. The low calibration standard is 10 ug/L for the following analyte(s): Acrylonitrile.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met .Please note that:

Spectrum Analytical Inc. Lab Reference No./SDG: 3506545

Client: CH2M Hill

LCS 072812LCS11D was analyzed with the water samples on 07/28/12. The following analyte(s) were recovered above criteria: Acetonitrile at 134 % with criteria of (37-122). No further action was taken, since LCS11 met percent recovery criteria. The following analyte(s) exceeded RPD criteria: Acetone at 20.2 % with criteria of (20), Dichlorodifluoromethane at 22.7 % with criteria of (20), Tetrachloroethene at 20.2 % with criteria of (20).No further action was taken, since percent recovery criteria were met.

Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Signature:
Name: Brian C. Spanh Title: Lab Director

SIGNED: DATE: 08/01/2012

VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Method: 8260

EPA Sample No	Lab Sample ID
Q1-TFS-MW-01	350654501
Q1-TFS-MW-8D	350654502
Q1-TFS-TB-1	350654503

070812 1736

8260 Sample Data

070812 1736

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 654501.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1537

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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Form I

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 654501.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1537

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 654501.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1537

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-8D

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654502 Lab File ID: 654502.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1600

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-8D

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654502 Lab File ID: 654502.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1600

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-8D

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654502 Lab File ID: 654502.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1600

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-1

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654503 Lab File ID: 654503.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1622

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-1

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654503 Lab File ID: 654503.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1622

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-1

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654503 Lab File ID: 654503.D

Sample wt/vol: 5 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1622

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

8260 QC Summary

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42 072812BLK12

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 072812BLK12 Lab File ID: BLK12.D

Sample wt/vol: 5 Units: ML Date Received: 07/28/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1129

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1

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Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42 072812BLK12

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 072812BLK12 Lab File ID: BLK12.D

Sample wt/vol: 5 Units: ML Date Received: 07/28/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/28/12 Time: 1129

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

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Form I

4

VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

072812BLK12

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Lab File ID: BLK12.D Lab Sample ID: 072812BLK12

Instrument ID: VMS01 Date Extracted:

Matrix: WATER Date Analyzed: 07/28/12

Level:(low/med) LOW Time Analyzed: 1129

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	072812LCS11D	072812LCS11D	LCS11D.D	07/28/12	0932
2	072812LCS11	072812LCS11	LCS11R.D	07/28/12	0959
3	Q1-TFS-MW-01	350654501	654501.D	07/28/12	1537
4	Q1-TFS-MW-8D	350654502	654502.D	07/28/12	1600
5	Q1-TFS-TB-1	350654503	654503.D	07/28/12	1622

COMMENTS:

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Form IV

2A

WATER VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG NO.: 3506545

Column(1): DB-624 ID: 0.18 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
072812BLK12	101.0	99.2	106.0	102.0			0
072812LCS11	97.6	99.6	103.0	99.2			0
072812LCS11D	97.2	96.6	102.0	98.0			0
Q1-TFS-MW-01	106.0	100.0	101.0	109.0			0
Q1-TFS-MW-8D	101.0	98.2	103.0	104.0			0
Q1-TFS-TB-1	105.0	98.2	104.0	104.0			0

Control Limits

S1	=	Dibromofluoromethane	85 - 115
S2	=	Toluene-d8	85 - 120
S3	=	4-Bromofluorobenzene	75 - 120
S4	=	1,2-Dichloroethane-d4	70 - 120

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Lab File ID: BFB12.D BFB Injection Date: 07/12/12

Instrument ID: VMS01 BFB Injection Time: 0843

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	17.7	
75	30.0 - 60.0% of mass 95	48.4	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	1.6	(1.78)1
174	50.0 - 100.0% of mass 95	88	
175	5.0 - 9.0% of mass 174	7	(7.95)1
176	95.0 - 101% of mass 174	84.4	(95.87)1
177	5.0 - 9.0% of mass 176	5.8	(6.88)2

1-Value is % of mass 174

2-Value is % of mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD1098678	80PPB	80PPBR.D	07/12/12	1411
2	STD1098677	60PPB	60PPBR.D	07/12/12	1433
3	STD1098675	50PPB	50PPBR.D	07/12/12	1456
4	STD1098672	20PPB	20PPBR.D	07/12/12	1518
5	STD1098669	10PPB	10PPBR.D	07/12/12	1541
6	STD1098676	5PPB	5PPBR.D	07/12/12	1603
7	STD1098673	2PPB	2PPBR.D	07/12/12	1625
8	STD1098670	1PPB	1PPBR.D	07/12/12	1648
9	STD1098674	500PPT	500PPTR.D	07/12/12	1710
10	STD1098671	200PPT	200PPTR.D	07/12/12	1732
11	SSC1098685	SEC12	SEC12.D	07/12/12	1817

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Lab File ID: BFB11.D BFB Injection Date: 07/28/12

Instrument ID: VMS01 BFB Injection Time: 0729

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	19	
75	30.0 - 60.0% of mass 95	49.9	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	7	
173	Less than 2.0% of mass 174	1.3	(1.48)1
174	50.0 - 100.0% of mass 95	86.3	
175	5.0 - 9.0% of mass 174	6	(6.94)1
176	95.0 - 101% of mass 174	85.2	(98.75)1
177	5.0 - 9.0% of mass 176	5.5	(6.5)2

1-Value is % of mass 174

2-Value is % of mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV1101913	072812CCV12	50CCV12.D	07/28/12	0848
2	072812LCS11D	072812LCS11D	LCS11D.D	07/28/12	0932
3	072812LCS11	072812LCS11	LCS11R.D	07/28/12	0959
4	072812BLK12	072812BLK12	BLK12.D	07/28/12	1129
5	Q1-TFS-MW-01	350654501	654501.D	07/28/12	1537
6	Q1-TFS-MW-8D	350654502	654502.D	07/28/12	1600
7	Q1-TFS-TB-1	350654503	654503.D	07/28/12	1622

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Lab File ID (Standard): 50PPBR.D Date Analyzed: 7/12/2012

Instrument ID: VMS01 Time Analyzed: 14:56

GC Column: DB-624 ID: 0.18 (mm)

Matrix: (soil/water) W Heated Purge: (Y/N) No

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	1781998		6.62	1570207		9.15	904686		10.55
	UPPER LIMIT	3563996		7.12	3140414		9.65	1809372		11.05
	LOWER LIMIT	890999		6.12	785103.5		8.65	452343		10.05
	EPA SAMPLE NO.									
1	072812LCS11D	1877346		6.62	1505510		9.15	841048		10.55
2	072812LCS11	2041560		6.62	1713627		9.15	922227		10.54
3	072812BLK12	1719451		6.62	1383409		9.15	690298		10.54
4	Q1-TFS-MW-01	1572661		6.63	1277251		9.15	678731		10.54
5	Q1-TFS-MW-8D	1707850		6.63	1423356		9.15	724779		10.55
6	Q1-TFS-TB-1	1641718		6.63	1328843		9.15	658336		10.55

IS1 = Fluorobenzene

IS2 = Chlorobenzene-d5

IS3 = 1,4-Dichlorobenzene-d4

UPPER LIMIT = +100%
of internal standard area.
LOWER LIMIT = -50%
of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

8

VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

GC Column: DB-624 ID: 0.18 (mm) Init. Calib. Date: 07/12/12

Instrument ID: VMS01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 5.89 S2 : 8.12

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	071212BFB11	071212BFB11	BFB12.D	07/12/12	0843		
2	STD1098678	80PPB	80PPBR.D	07/12/12	1411		
3	STD1098677	60PPB	60PPBR.D	07/12/12	1433	5.88	8.12
4	STD1098675	50PPB	50PPBR.D	07/12/12	1456	5.89	8.12
5	STD1098672	20PPB	20PPBR.D	07/12/12	1518	5.88	8.12
6	STD1098669	10PPB	10PPBR.D	07/12/12	1541	5.88	8.12
7	STD1098676	5PPB	5PPBR.D	07/12/12	1603	5.89	8.12
8	STD1098673	2PPB	2PPBR.D	07/12/12	1625		
9	STD1098670	1PPB	1PPBR.D	07/12/12	1648		
10	STD1098674	500PPT	500PPTR.D	07/12/12	1710		
11	STD1098671	200PPT	200PPTR.D	07/12/12	1732		
12	SSC1098685	SEC12	SEC12.D	07/12/12	1817	5.88	8.12
13	072812BFB11	072812BFB11	BFB11.D	07/28/12	0729		
14	CCV1101913	072812CCV12	50CCV12.D	07/28/12	0848	5.88	8.12
15	072812LCS11D	072812LCS11D	LCS11D.D	07/28/12	0932	5.88	8.12
16	072812LCS11	072812LCS11	LCS11R.D	07/28/12	0959	5.88	8.12
17	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/28/12	1021		
18	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/28/12	1044		
19	072812BLK12	072812BLK12	BLK12.D	07/28/12	1129	5.89	8.12
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/28/12	1151		
21	Q1-TFS-MW-01	350654501	654501.D	07/28/12	1537	5.89	8.12
22	Q1-TFS-MW-8D	350654502	654502.D	07/28/12	1600	5.89	8.12
23	Q1-TFS-TB-1	350654503	654503.D	07/28/12	1622	5.89	8.12

			QC LIMITS
S1	=	Dibromofluoromethane	(+/- 0.4 MINUTES)
S2	=	Toluene-d8	(+/- 0.4 MINUTES)
S3	=	4-Bromofluorobenzene	(+/- 0.63 MINUTES)
S4	=	1,2-Dichloroethane-d4	(+/- 0.4 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

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3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 072812LCS11

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	16.8	84.0			30 - 155
Chloromethane	20	17.4	87.0			40 - 125
Vinyl chloride	20	21.4	107.0			50 - 145
Bromomethane	20	18.4	92.0			30 - 145
Chloroethane	20	21.2	106.0			60 - 135
Trichlorofluoromethane	20	19	95.0			60 - 145
1,1-Dichloroethene	20	21.1	106.0			70 - 130
Acrolein	40	39.4	98.5			31 - 148
Methyl iodide	20	26.1	130.0			75 - 152
Carbon disulfide	20	20.5	102.0			35 - 160
Methylene chloride	20	24.8	124.0			55 - 140
trans-1,2-Dichloroethene	20	23.4	117.0			60 - 140
Acrylonitrile	40	40.2	100.0			55 - 126
1,1-Dichloroethane	20	19.5	97.5			70 - 135
Acetone	40	38.8	97.0			40 - 140
2-Butanone	40	27.2	68.0			30 - 150
Chloroform	20	18.3	91.5			65 - 135
1,1,1-Trichloroethane	20	18.7	93.5			65 - 130
Carbon tetrachloride	20	19.4	97.0			65 - 140
Benzene	20	18	90.0			80 - 120
1,2-Dichloroethane	20	19.1	95.5			70 - 130
Trichloroethene	20	17.5	87.5			70 - 125
Vinyl acetate	20	20	100.0			77 - 150
1,2-Dichloropropane	20	20	100.0			75 - 125
Dibromomethane	20	19.1	95.5			75 - 125
Bromodichloromethane	20	19.6	98.0			75 - 120
cis-1,3-Dichloropropene	20	20.6	103.0			70 - 130
4-Methyl-2-pentanone	40	32.9	82.2			60 - 135
Toluene	20	18.9	94.5			75 - 120
trans-1,3-Dichloropropene	20	18.9	94.5			55 - 140
Ethyl methacrylate	20	17.5	87.5			73 - 121
1,1,2-Trichloroethane	20	18.5	92.5			75 - 125

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 072812LCS11

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Tetrachloroethene	20	17.4	87.0			45 - 150
2-Hexanone	40	32.5	81.2			55 - 130
Dibromochloromethane	20	20	100.0			60 - 135
1,2-Dibromoethane	20	18.4	92.0			80 - 120
Chlorobenzene	20	18.2	91.0			80 - 120
1,1,1,2-Tetrachloroethane	20	19.3	96.5			80 - 130
Ethylbenzene	20	18.4	92.0			75 - 125
Styrene	20	20	100.0			65 - 135
Bromoform	20	19	95.0			70 - 130
1,1,2,2-Tetrachloroethane	20	18.5	92.5			65 - 130
1,2,3-Trichloropropane	20	17.1	85.5			75 - 125
1,2-Dibromo-3-chloropropane	20	17.2	86.0			50 - 130
1,4-Dichloro-2-butene	40	34.7	86.8			68 - 115
Acetonitrile	200	233	116.0			37 - 122
Allyl chloride	20	22.3	112.0			70 - 130
1,4-Dioxane	400	334	83.5			0 - 167
Isobutyl alcohol	400	375	93.8			70 - 130
Methacrylonitrile	200	175	87.5			70 - 130
Methyl methacrylate	20	16.6	83.0			33 - 172
Propionitrile	200	165	82.5			70 - 130
Chloroprene	20	18.9	94.5			70 - 130
Xylene (total)	60	55.6	92.7			82 - 124

Spike Recovery: 0 out of 54 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

072812LCS11D

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	21.1	106.0	22.7 *	20	30 - 155
Chloromethane	20	19	95.0	8.8	20	40 - 125
Vinyl chloride	20	25.3	126.0	16.7	20	50 - 145
Bromomethane	20	20.4	102.0	10.3	20	30 - 145
Chloroethane	20	23.8	119.0	11.6	20	60 - 135
Trichlorofluoromethane	20	21.8	109.0	13.7	20	60 - 145
1,1-Dichloroethene	20	24.1	120.0	13.3	20	70 - 130
Acrolein	40	43.4	108.0	9.7	20	31 - 148
Methyl iodide	20	28.3	142.0	8.1	20	75 - 152
Carbon disulfide	20	23.3	116.0	12.8	20	35 - 160
Methylene chloride	20	27.4	137.0	10.0	20	55 - 140
trans-1,2-Dichloroethene	20	25.5	128.0	8.6	20	60 - 140
Acrylonitrile	40	44.1	110.0	9.3	20	55 - 126
1,1-Dichloroethane	20	21.6	108.0	10.2	20	70 - 135
Acetone	40	47.5	119.0	20.2 *	20	40 - 140
2-Butanone	40	32.2	80.5	16.8	20	30 - 150
Chloroform	20	20.1	100.0	9.4	20	65 - 135
1,1,1-Trichloroethane	20	21.4	107.0	13.5	20	65 - 130
Carbon tetrachloride	20	21.9	110.0	12.1	20	65 - 140
Benzene	20	20.2	101.0	11.5	20	80 - 120
1,2-Dichloroethane	20	21.2	106.0	10.4	20	70 - 130
Trichloroethene	20	20	100.0	13.3	20	70 - 125
Vinyl acetate	20	22.4	112.0	11.3	20	77 - 150
1,2-Dichloropropane	20	22.5	112.0	11.8	20	75 - 125
Dibromomethane	20	20.6	103.0	7.6	20	75 - 125
Bromodichloromethane	20	21.4	107.0	8.8	20	75 - 120
cis-1,3-Dichloropropene	20	22.4	112.0	8.4	20	70 - 130
4-Methyl-2-pentanone	40	36.7	91.8	10.9	20	60 - 135
Toluene	20	21.1	106.0	11.0	20	75 - 120
trans-1,3-Dichloropropene	20	21	105.0	10.5	20	55 - 140
Ethyl methacrylate	20	19.5	97.5	10.8	20	73 - 121
1,1,2-Trichloroethane	20	20.6	103.0	10.7	20	75 - 125

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

070812 1736

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

072812LCS11D

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Tetrachloroethene	20	21.3	106.0	20.2 *	20	45 - 150
2-Hexanone	40	38.3	95.8	16.4	20	55 - 130
Dibromochloromethane	20	22.8	114.0	13.1	20	60 - 135
1,2-Dibromoethane	20	21.4	107.0	15.1	20	80 - 120
Chlorobenzene	20	21	105.0	14.3	20	80 - 120
1,1,1,2-Tetrachloroethane	20	22.8	114.0	16.6	20	80 - 130
Ethylbenzene	20	21.6	108.0	16.0	20	75 - 125
Styrene	20	23	115.0	14.0	20	65 - 135
Bromoform	20	21.5	108.0	12.3	20	70 - 130
1,1,2,2-Tetrachloroethane	20	21	105.0	12.7	20	65 - 130
1,2,3-Trichloropropane	20	20.3	102.0	17.1	20	75 - 125
1,2-Dibromo-3-chloropropane	20	19.6	98.0	13.0	20	50 - 130
1,4-Dichloro-2-butene	40	39.9	99.8	13.9	20	68 - 115
Acetonitrile	200	267	134.0 *	13.6	20	37 - 122
Allyl chloride	20	25.6	128.0	13.8	20	70 - 130
1,4-Dioxane	400	350	87.5	4.7	20	0 - 167
Isobutyl alcohol	400	419	105.0	11.1	20	70 - 130
Methacrylonitrile	200	194	97.0	10.3	20	70 - 130
Methyl methacrylate	20	18.7	93.5	11.9	20	33 - 172
Propionitrile	200	185	92.5	11.4	20	70 - 130
Chloroprene	20	21.8	109.0	14.3	20	70 - 130
Xylene (total)	60	64.1	107.0	14.2	20	82 - 124

Spike Recovery: 1 out of 54 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

8260 Standards Data

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6

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: VMS01 Calibration Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 1411 End: 1732

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF0.2 =200PPTR.D RRF0.5 =500PPTR.D
RRF1 =1PPBR.D RRF2 =2PPBR.D RRF5 =5PPBR.D

COMPOUND	RRF0.2	RRF0.5	RRF1	RRF2	RRF5	$\overline{RRF}$	%RSD OR R^2
Dichlorodifluoromethane			0.244	0.235	0.273		
Chloromethane	#	0.693	0.536	0.410	0.390		#
Vinyl chloride	*	0.314	0.306	0.312	0.300		*
Bromomethane			0.261	0.216	0.224		
Chloroethane			0.173	0.169	0.193		
Trichlorofluoromethane			0.457	0.439	0.459		
1,1-Dichloroethene	*	0.442	0.456	0.368	0.372		*
Acrolein				0.052	0.057		
Methyl iodide			0.205	0.136	0.150		
Carbon disulfide			0.966	0.759	0.683		
Methylene chloride			0.555	0.395	0.317		
trans-1,2-Dichloroethene		0.511	0.495	0.349	0.359		
Acrylonitrile					0.150		
1,1-Dichloroethane	#		0.637	0.490	0.507		#
Acetone				0.232	0.199		
2-Butanone				0.151	0.176		
Chloroform	* 0.580	0.628	0.715	0.503	0.498		*
1,1,1-Trichloroethane			0.454	0.343	0.373		
Carbon tetrachloride		0.294	0.296	0.226	0.273		
Benzene	1.427	1.327	1.340	1.036	1.033		
1,2-Dichloroethane		0.417	0.512	0.383	0.394		
Trichloroethene		0.385	0.406	0.295	0.294		
Vinyl acetate			0.748	0.661	0.669		
1,2-Dichloropropane	*	0.278	0.309	0.261	0.272		*
Dibromomethane			0.246	0.207	0.221		
Bromodichloromethane	0.375	0.402	0.424	0.340	0.343		
cis-1,3-Dichloropropene		0.341	0.386	0.307	0.324		
4-Methyl-2-pentanone				0.114	0.117		
Toluene	*	0.768	0.804	0.635	0.659		*
trans-1,3-Dichloropropene		0.291	0.317	0.269	0.307		
Ethyl methacrylate			0.341	0.269	0.287		
1,1,2-Trichloroethane		0.298	0.393	0.313	0.292		
Tetrachloroethene		0.347	0.334	0.285	0.279		
2-Hexanone				0.249	0.269		

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FORM VI

6

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: VMS01 Calibration Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 1411 End: 1732

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF0.2 =200PPTR.D RRF0.5 =500PPTR.D
RRF1 =1PPBR.D RRF2 =2PPBR.D RRF5 =5PPBR.D

COMPOUND	RRF0.2	RRF0.5	RRF1	RRF2	RRF5	$\overline{RRF}$	%RSD OR R^2
Dibromochloromethane	0.340	0.357	0.349	0.292	0.325		
1,2-Dibromoethane			0.450	0.361	0.393		
Chlorobenzene	#	1.333	1.348	1.043	0.981		#
1,1,1,2-Tetrachloroethane		0.376	0.393	0.327	0.292		
Ethylbenzene	*	0.573	0.622	0.493	0.493		*
Styrene			1.010	0.815	0.853		
Bromoform	#		0.257	0.205	0.214		#
1,1,2,2-Tetrachloroethane	# 1.240	0.982	1.229	1.047	0.965		#
1,2,3-Trichloropropane			0.400	0.311	0.315		
1,2-Dibromo-3-chloropropane				0.173	0.171		
1,4-Dichloro-2-butene			0.149	0.136	0.134		
Acetonitrile				0.074	0.066		
Allyl chloride			0.904	0.743	0.656		
1,4-Dioxane			0.008	0.006	0.005		
Isobutyl alcohol			0.006	0.005	0.004		
Methacrylonitrile			0.147	0.127	0.128		
Methyl methacrylate			0.222	0.187	0.181		
Propionitrile			0.060	0.052	0.050		
Chloroprene			0.331	0.283	0.284		
o-Xylene		1.420	1.548	1.180	1.210		
p,m-Xylene	0.888	0.669	0.770	0.600	0.590		
Dibromofluoromethane(SURR)					0.297		
Toluene-d8(SURR)					1.044		
4-Bromofluorobenzene(SURR)					0.917		
1,2-Dichloroethane-d4(SURR)					0.068		

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FORM VI

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VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: VMS01 Calibration Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 1411 End: 1732

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF10 =10PPBR.D RRF20 =20PPBR.D
RRF50 =50PPBR.D RRF60 =60PPBR.D RRF80 =80PPBR.D

COMPOUND		RRF10	RRF20	RRF50	RRF60	RRF80	$\overline{RRF}$	%RSD OR R^2	
Dichlorodifluoromethane		0.265	0.296	0.284	0.275	0.271	0.26788	7.5	
Chloromethane	#	0.338	0.379	0.360	0.343	0.356	0.42264	0.99913	#
Vinyl chloride	*	0.299	0.302	0.296	0.283	0.301	0.3015	3	*
Bromomethane		0.251	0.332	0.310	0.315	0.330	0.27995	0.99823	
Chloroethane		0.187	0.218	0.214	0.251		0.20072	14.4	
Trichlorofluoromethane		0.435	0.454	0.459	0.455	0.494	0.45634	3.9	
1,1-Dichloroethene	*	0.408	0.382	0.363	0.358	0.393	0.39344	8.9	*
Acrolein		0.048	0.045	0.043	0.041	0.042	0.04692	12.5	
Methyl iodide		0.182	0.181	0.172	0.153	0.172	0.16875	13	
Carbon disulfide		0.761	0.699	0.680	0.658	0.732	0.74232	13.2	
Methylene chloride		0.370	0.321	0.312	0.308	0.341	0.3649	0.99509	
trans-1,2-Dichloroethene		0.416	0.381	0.358	0.347	0.381	0.3995	0.9966	
Acrylonitrile		0.141	0.145	0.134	0.127	0.130	0.13792	6.4	
1,1-Dichloroethane	#	0.543	0.496	0.461	0.441	0.401	0.49694	0.99246	#
Acetone		0.236	0.159	0.151	0.163	0.157	0.18509	0.9956	
2-Butanone		0.227	0.153	0.165	0.164	0.141	0.16815	0.9921	
Chloroform	*	0.566	0.479	0.514	0.493	0.493	0.54682	13.9	*
1,1,1-Trichloroethane		0.426	0.392	0.394	0.389	0.391	0.39526	8.4	
Carbon tetrachloride		0.324	0.317	0.333	0.328	0.326	0.30193	11.5	
Benzene		1.184	1.087	1.058	1.034	1.021	1.15472	13.4	
1,2-Dichloroethane		0.440	0.409	0.397	0.381	0.372	0.41169	10.4	
Trichloroethene		0.332	0.325	0.300	0.300	0.286	0.32454	13.3	
Vinyl acetate		0.677	0.630	0.671	0.652	0.672	0.67249	5	
1,2-Dichloropropane	*	0.314	0.279	0.272	0.261	0.261	0.27839	7.1	*
Dibromomethane		0.242	0.225	0.215	0.204	0.202	0.22023	7.6	
Bromodichloromethane		0.403	0.384	0.379	0.368	0.371	0.37897	6.9	
cis-1,3-Dichloropropene		0.386	0.373	0.384	0.379	0.378	0.36205	8.4	
4-Methyl-2-pentanone		0.143	0.131	0.128	0.122	0.110	0.12366	9.2	
Toluene	*	0.762	0.718	0.706	0.694	0.672	0.7132	7.8	*
trans-1,3-Dichloropropene		0.386	0.387	0.409	0.397	0.401	0.35165	0.99967	
Ethyl methacrylate		0.350	0.341	0.335	0.322	0.307	0.31906	9.1	
1,1,2-Trichloroethane		0.338	0.300	0.296	0.283	0.277	0.30983	11.6	
Tetrachloroethene		0.299	0.294	0.267	0.266	0.251	0.29139	10.9	
2-Hexanone		0.366	0.292	0.282	0.287	0.244	0.28425	14.3	

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FORM VI

6

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: VMS01 Calibration Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 1411 End: 1732

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF10 =10PPBR.D RRF20 =20PPBR.D
RRF50 =50PPBR.D RRF60 =60PPBR.D RRF80 =80PPBR.D

COMPOUND		RRF10	RRF20	RRF50	RRF60	RRF80	$\overline{RRF}$	%RSD OR R^2	
Dibromochloromethane		0.377	0.372	0.362	0.348	0.347	0.34691	7	
1,2-Dibromoethane		0.443	0.407	0.385	0.371	0.357	0.39589	8.9	
Chlorobenzene	#	1.146	1.085	0.999	0.969	0.963	1.09625	13.7	#
1,1,1,2-Tetrachloroethane		0.364	0.354	0.347	0.338	0.331	0.34684	8.6	
Ethylbenzene	*	0.568	0.530	0.501	0.503	0.494	0.53071	8.8	*
Styrene		1.040	1.020	0.991	0.980	0.977	0.96084	8.5	
Bromoform	#	0.268	0.259	0.270	0.268	0.255	0.24963	10.2	#
1,1,2,2-Tetrachloroethane	#	1.165	1.056	0.991	0.947	0.883	1.05052	11.7	#
1,2,3-Trichloropropane		0.353	0.329	0.298	0.288	0.260	0.31932	13.4	
1,2-Dibromo-3-chloropropane		0.200	0.180	0.181	0.174	0.159	0.1768	7	
1,4-Dichloro-2-butene		0.171	0.155	0.154	0.153	0.138	0.14877	8.3	
Acetonitrile		0.072	0.068	0.062	0.060	0.064	0.06658	7.9	
Allyl chloride		0.724	0.676	0.615	0.603	0.644	0.69554	14	
1,4-Dioxane		0.005	0.004	0.004	0.004	0.004	0.0051	0.99296	
Isobutyl alcohol		0.005	0.004	0.004	0.004	0.004	0.00448	0.99885	
Methacrylonitrile		0.146	0.121	0.129	0.123	0.115	0.12939	8.8	
Methyl methacrylate		0.210	0.193	0.185	0.181	0.170	0.19122	8.8	
Propionitrile		0.059	0.046	0.047	0.045	0.041	0.04992	13.5	
Chloroprene		0.309	0.276	0.292	0.288	0.287	0.29375	6.1	
o-Xylene		1.415	1.362	1.305	1.278	1.278	1.33287	8.7	
p,m-Xylene		0.704	0.667	0.641	0.637	0.629	0.67935	13.3	
Dibromofluoromethane(SURR)		0.259	0.289	0.293	0.274		0.28238	5.6	
Toluene-d8(SURR)		0.943	1.032	1.056	0.994		1.01377	4.5	
4-Bromofluorobenzene(SURR)		0.799	0.841	0.854	0.799		0.84168	5.8	
1,2-Dichloroethane-d4(SURR)		0.063	0.068	0.065	0.062		0.06511	4.4	

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FORM VI

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: VMS01 CalibrationDate: 07/12/12 Time: 1817

CCV ID: SSC1098685 Lab File ID: SEC12.D Init. Calib. Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Dichlorodifluoromethane		0.26788	0.25293	5.6	AVRG	
Chloromethane	#	50	47.9	4.2	LINR	#
Vinyl chloride	*	0.3015	0.28215	6.4	AVRG	*
Bromomethane		50	48.6	2.8	LINR	
Chloroethane		0.20072	0.16298	18.8	AVRG	
Trichlorofluoromethane		0.45634	0.45933	0.7	AVRG	
1,1-Dichloroethene	*	0.39344	0.37599	4.4	AVRG	*
Acrolein		0.04692	0.04128	12.0	AVRG	
Methyl iodide		0.16875	0.16505	2.2	AVRG	
Carbon disulfide		0.74232	0.66132	10.9	AVRG	
Methylene chloride		50	50.3	0.6	LINR	
trans-1,2-Dichloroethene		50	48.8	2.4	LINR	
Acrylonitrile		0.13792	0.13422	2.7	AVRG	
1,1-Dichloroethane	#	50	49.2	1.6	LINR	#
Acetone		100	111	11.0	LINR	
2-Butanone		100	108	8.0	2ORD	
Chloroform	*	0.54682	0.52798	3.4	AVRG	*
1,1,1-Trichloroethane		0.39526	0.41029	3.8	AVRG	
Carbon tetrachloride		0.30193	0.34264	13.5	AVRG	
Benzene		1.15472	1.09	5.6	AVRG	
1,2-Dichloroethane		0.41169	0.40289	2.1	AVRG	
Trichloroethene		0.32454	0.31837	1.9	AVRG	
Vinyl acetate		0.67249	0.64006	4.8	AVRG	
1,2-Dichloropropane	*	0.27839	0.26988	3.1	AVRG	*
Dibromomethane		0.22023	0.21761	1.2	AVRG	
Bromodichloromethane		0.37897	0.38529	1.7	AVRG	
cis-1,3-Dichloropropene		0.36205	0.38207	5.5	AVRG	
4-Methyl-2-pentanone		0.12366	0.12636	2.2	AVRG	
Toluene	*	0.7132	0.71421	0.1	AVRG	*
trans-1,3-Dichloropropene		50	51.2	2.4	LINR	
Ethyl methacrylate		0.31906	0.33712	5.7	AVRG	
1,1,2-Trichloroethane		0.30983	0.29832	3.7	AVRG	
Tetrachloroethene		0.29139	0.27328	6.2	AVRG	
2-Hexanone		0.28425	0.2976	4.7	AVRG	
Dibromochloromethane		0.34691	0.36342	4.8	AVRG	
1,2-Dibromoethane		0.39589	0.38913	1.7	AVRG	

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FORM VII

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: VMS01 CalibrationDate: 07/12/12 Time: 1817

CCV ID: SSC1098685 Lab File ID: SEC12.D Init. Calib. Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type
Chlorobenzene	#	1.09625	1.009	8.0	AVRG #
1,1,1,2-Tetrachloroethane		0.34684	0.34682	0.0	AVRG
Ethylbenzene	*	0.53071	0.5161	2.8	AVRG *
Styrene		0.96084	1.004	4.5	AVRG
Bromoform	#	0.24963	0.26237	5.1	AVRG #
1,1,2,2-Tetrachloroethane	#	1.05052	0.94013	10.5	AVRG #
1,2,3-Trichloropropane		0.31932	0.29409	7.9	AVRG
1,2-Dibromo-3-chloropropane		0.1768	0.17573	0.6	AVRG
1,4-Dichloro-2-butene		0.14877	0.15221	2.3	AVRG
Acetonitrile		0.06658	0.06287	5.6	AVRG
Allyl chloride		0.69554	0.62866	9.6	AVRG
1,4-Dioxane		1000	1140	14.0	LINR
Isobutyl alcohol		1000	1060	6.0	LINR
Methacrylonitrile		0.12939	0.1315	1.6	AVRG
Methyl methacrylate		0.19122	0.18946	0.9	AVRG
Propionitrile		0.04992	0.04837	3.1	AVRG
Chloroprene		0.29375	0.30342	3.3	AVRG
o-Xylene		1.33287	1.311	1.6	AVRG
p,m-Xylene		0.67935	0.654	3.7	AVRG
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Dibromofluoromethane(SURR)		0.28238	0.29079	3.0	AVRG
Toluene-d8(SURR)		1.01377	1.032	1.8	AVRG
4-Bromofluorobenzene(SURR)		0.84168	0.81724	2.9	AVRG
1,2-Dichloroethane-d4(SURR)		0.06511	0.06535	0.4	AVRG

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FORM VII

7

VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: VMS01 CalibrationDate: 07/28/12 Time: 0848

CCV ID: CCV1101913 Lab File ID: 50CCV12.D Init. Calib. Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Dichlorodifluoromethane		0.26788	0.25455	5.0	AVRG	
Chloromethane	#	50	44.9	10.2	LINR #	
Vinyl chloride	*	0.3015	0.34993	16.1	AVRG *	
Bromomethane		50	45.6	8.8	LINR	
Chloroethane		0.20072	0.2337	16.4	AVRG	
Trichlorofluoromethane		0.45634	0.47767	4.7	AVRG	
1,1-Dichloroethene	*	0.39344	0.44034	11.9	AVRG *	
Acrolein		0.04692	0.0443	5.6	AVRG	
Methyl iodide		0.16875	0.22889	35.6	AVRG	<-
Carbon disulfide		0.74232	0.82932	11.7	AVRG	
Methylene chloride		50	59.3	18.6	LINR	
trans-1,2-Dichloroethene		50	59.3	18.6	LINR	
Acrylonitrile		0.13792	0.13066	5.3	AVRG	
1,1-Dichloroethane	#	50	52.1	4.2	LINR #	
Acetone		100	114	14.0	LINR	
2-Butanone		100	85.4	14.6	2ORD	
Chloroform	*	0.54682	0.51871	5.1	AVRG *	
1,1,1-Trichloroethane		0.39526	0.4012	1.5	AVRG	
Carbon tetrachloride		0.30193	0.32633	8.1	AVRG	
Benzene		1.15472	1.096	5.1	AVRG	
1,2-Dichloroethane		0.41169	0.39718	3.5	AVRG	
Trichloroethene		0.32454	0.30239	6.8	AVRG	
Vinyl acetate		0.67249	0.70035	4.1	AVRG	
1,2-Dichloropropane	*	0.27839	0.28881	3.7	AVRG *	
Dibromomethane		0.22023	0.20311	7.8	AVRG	
Bromodichloromethane		0.37897	0.38559	1.7	AVRG	
cis-1,3-Dichloropropene		0.36205	0.39976	10.4	AVRG	
4-Methyl-2-pentanone		0.12366	0.10545	14.7	AVRG	
Toluene	*	0.7132	0.72134	1.1	AVRG *	
trans-1,3-Dichloropropene		50	52	4.0	LINR	
Ethyl methacrylate		0.31906	0.2998	6.0	AVRG	
1,1,2-Trichloroethane		0.30983	0.28956	6.5	AVRG	
Tetrachloroethene		0.29139	0.27613	5.2	AVRG	
2-Hexanone		0.28425	0.25537	10.2	AVRG	
Dibromochloromethane		0.34691	0.37283	7.5	AVRG	
1,2-Dibromoethane		0.39589	0.37404	5.5	AVRG	

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FORM VII

7

VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: VMS01 CalibrationDate: 07/28/12 Time: 0848

CCV ID: CCV1101913 Lab File ID: 50CCV12.D Init. Calib. Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Chlorobenzene	#	1.09625	1.047	4.5	AVRG	#
1,1,1,2-Tetrachloroethane		0.34684	0.35561	2.5	AVRG	
Ethylbenzene	*	0.53071	0.53048	0.0	AVRG	*
Styrene		0.96084	1.068	11.2	AVRG	
Bromoform	#	0.24963	0.25612	2.6	AVRG	#
1,1,2,2-Tetrachloroethane	#	1.05052	0.961	8.5	AVRG	#
1,2,3-Trichloropropane		0.31932	0.26873	15.8	AVRG	
1,2-Dibromo-3-chloropropane		0.1768	0.1565	11.5	AVRG	
1,4-Dichloro-2-butene		0.14877	0.14171	4.7	AVRG	
Acetonitrile		0.06658	0.07913	18.8	AVRG	
Allyl chloride		0.69554	0.79125	13.8	AVRG	
1,4-Dioxane		1000	918	8.2	LINR	
Isobutyl alcohol		1000	940	6.0	LINR	
Methacrylonitrile		0.12939	0.11325	12.5	AVRG	
Methyl methacrylate		0.19122	0.16498	13.7	AVRG	
Propionitrile		0.04992	0.03994	20.0	AVRG	
Chloroprene		0.29375	0.31046	5.7	AVRG	
o-Xylene		1.33287	1.36	2.0	AVRG	
p,m-Xylene		0.67935	0.68881	1.4	AVRG	
==========						
Dibromofluoromethane(SURR)		0.28238	0.28221	0.1	AVRG	
Toluene-d8(SURR)		1.01377	1.022	0.8	AVRG	
4-Bromofluorobenzene(SURR)		0.84168	0.85153	1.2	AVRG	
1,2-Dichloroethane-d4(SURR)		0.06511	0.06342	2.6	AVRG	

Average Used: 8.3

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FORM VII

8270 SIM Semi-Volatile Organics

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CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506545

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8270D-SIM.

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:

LCS 138265LCSD was analyzed with the water samples extracted on 07/20/12. The following analyte exceeded RPD criteria: Dibenzo(a,h)anthracene at 28.6

Spectrum Analytical Inc. Lab Reference No./SDG: 3506545

Client: CH2M Hill

% with criteria of (20). No further action was taken since percent recovery limits were met.

Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

SIGNED: DATE: 08/08/2012

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Method: 8270 SIM

EPA Sample No	Lab Sample ID
Q1-TFS-MW-01	350654501
Q1-TFS-MW-8D	350654502

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8270 SIM Sample Data

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 545-01.D

Sample wt/vol: 990 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/20/12

Level:(low/med) LOW Date Analyzed: 07/20/12 Time: 1900

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.26		0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.04	U	0.02	0.04	0.05
83-32-9	Acenaphthene	0.19		0.02	0.04	0.05
208-96-8	Acenaphthylene	0.07		0.02	0.04	0.05
120-12-7	Anthracene	0.04	U	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.03	J	0.02	0.04	0.05
86-73-7	Fluorene	0.14		0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	0.29		0.02	0.04	0.05
85-01-8	Phenanthrene	0.04	U	0.02	0.04	0.05
129-00-0	Pyrene	0.04	U	0.02	0.04	0.05

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-8D

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654502 Lab File ID: 545-02.D

Sample wt/vol: 990 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/20/12

Level:(low/med) LOW Date Analyzed: 07/20/12 Time: 1925

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.04	U	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.025	J	0.02	0.04	0.05
83-32-9	Acenaphthene	0.04	U	0.02	0.04	0.05
208-96-8	Acenaphthylene	0.04	U	0.02	0.04	0.05
120-12-7	Anthracene	0.027	J	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.04	U	0.02	0.04	0.05
86-73-7	Fluorene	0.04	U	0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	0.04	U	0.02	0.04	0.05
85-01-8	Phenanthrene	0.04	U	0.02	0.04	0.05
129-00-0	Pyrene	0.04	U	0.02	0.04	0.05

8270 SIM QC Summary

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138263MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 138263MB Lab File ID: 10176MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/20/12

Level:(low/med) LOW Date Analyzed: 07/20/12 Time: 1747

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.04	U	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.04	U	0.02	0.04	0.05
83-32-9	Acenaphthene	0.04	U	0.02	0.04	0.05
208-96-8	Acenaphthylene	0.04	U	0.02	0.04	0.05
120-12-7	Anthracene	0.04	U	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.04	U	0.02	0.04	0.05
86-73-7	Fluorene	0.04	U	0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	0.04	U	0.02	0.04	0.05
85-01-8	Phenanthrene	0.04	U	0.02	0.04	0.05
129-00-0	Pyrene	0.04	U	0.02	0.04	0.05

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SEMI-VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

138263MB

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Lab File ID: 10176MB.D Lab Sample ID: 138263MB

Instrument ID: SMSD01 Date Extracted: 07/20/12

Matrix: WATER Date Analyzed: 07/20/12

Level:(low/med) LOW Time Analyzed: 1747

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	138264LCS	138264LCS	10176LCS.D	07/20/12	1811
2	138265LCSD	138265LCSD	10176LCSD.D	07/20/12	1836
3	Q1-TFS-MW-01	350654501	545-01.D	07/20/12	1900
4	Q1-TFS-MW-8D	350654502	545-02.D	07/20/12	1925

COMMENTS:

Page 1 of 1

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Form IV

2A

WATER SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG NO.: 3506545

Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
138263MB	76.0	82.0					0
138264LCS	88.0	80.0					0
138265LCSD	78.0	84.0					0
Q1-TFS-MW-01	78.0	76.0					0
Q1-TFS-MW-8D	78.0	72.0					0

Control Limits

S1	=	p-Terphenyl-d14	33 - 141
S2	=	2-Fluorobiphenyl	43 - 116

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

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SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Lab File ID: DFTPP2.D DFTPP Injection Date: 06/12/12

Instrument ID: SMSD01 DFTPP Injection Time: 2028

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	36.4	
68	Less than 2.0% of mass 69	0	(0)1
69	Mass 69 relative abundance	43.4	
70	Less than 2.0% of mass 69	0.3	(0.68)1
127	10.0 - 80.0% of mass 198	51.8	
197	Less than 2.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.7	
275	10.0 - 60.0% of mass 198	27.6	
365	Greater than 1.0% of mass 198	3.2	
441	0.0 - 24.0% of mass 442	15	(15.61)2
442	Greater than 50.0% of mass 198	96.4	
443	15.0 - 24.0% of mass 442	18.3	(18.94)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD1090284	46155	SIMCAL10.D	06/12/12	2048
2	STD1090285	46156	SIMCAL9.D	06/12/12	2113
3	STD1090286	46157	SIMCAL8.D	06/12/12	2137
4	STD1090287	46158	SIMCAL7.D	06/12/12	2200
5	STD1090289	46160	SIMCAL5.D	06/12/12	2248
6	STD1090290	46161	SIMCAL4.D	06/12/12	2312
7	STD1090291	46162	SIMCAL3.D	06/12/12	2336
8	STD1090292	46163	SIMCAL2.D	06/13/12	0000
9	STD1090293	46164	SIMCAL1.D	06/13/12	0023
10	STD1090296	46557	SIMCAL6N.D	06/13/12	0047
11	SSC1090295	46253	SIMSEC.D	06/13/12	0111

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Lab File ID: DFTPP1.D DFTPP Injection Date: 07/20/12

Instrument ID: SMSD01 DFTPP Injection Time: 1645

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	30.7	
68	Less than 2.0% of mass 69	0	(0)1
69	Mass 69 relative abundance	36.5	
70	Less than 2.0% of mass 69	0.2	(0.69)1
127	10.0 - 80.0% of mass 198	46.8	
197	Less than 2.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	7	
275	10.0 - 60.0% of mass 198	26.1	
365	Greater than 1.0% of mass 198	2.5	
441	0.0 - 24.0% of mass 442	12.6	(15.83)2
442	Greater than 50.0% of mass 198	79.8	
443	15.0 - 24.0% of mass 442	15.7	(19.69)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV1099843	46557	SIMCCV1.D	07/20/12	1706
2	138263MB	138263MB	10176MB.D	07/20/12	1747
3	138264LCS	138264LCS	10176LCS.D	07/20/12	1811
4	138265LCSD	138265LCSD	10176LCSD.	07/20/12	1836
5	Q1-TFS-MW-01	350654501	545-01.D	07/20/12	1900
6	Q1-TFS-MW-8D	350654502	545-02.D	07/20/12	1925

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Lab File ID (Standard): SIMCAL6N.D Date Analyzed: 6/13/2012

Instrument ID: SMSD01 Time Analyzed: 0:47

GC Column: HPMS-5 ID: 0.25 (mm)

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	13366		4.19	60482		5.35	33549		7.04
	UPPER LIMIT	26732		4.69	120964		5.85	67098		7.54
	LOWER LIMIT	6683		3.69	30241		4.85	16774.5		6.54
	EPA SAMPLE NO.									
1	138263MB	19429		4.15	77018		5.31	35125		6.99
2	138264LCS	20899		4.15	78895		5.31	39909		6.99
3	138265LCSD	21449		4.15	80116		5.31	38423		6.99
4	Q1-TFS-MW-01	19451		4.15	70158		5.31	40835		6.99
5	Q1-TFS-MW-8D	21473		4.15	80016		5.31	38443		6.99

IS1 = 1,4-Dichlorobenzene-d4

IS2 = Naphthalene-d8

IS3 = Acenaphthene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Lab File ID (Standard): SIMCAL6N.D Date Analyzed: 6/13/2012

Instrument ID: SMSD01 Time Analyzed: 0:47

GC Column: HPMS-5 ID: 0.25 (mm)

		IS4 AREA	#	RT	IS5 AREA	#	RT	IS6 AREA	#	RT
	MID CAL STD	65532		8.49	70001		11.09	79730		12.39
	UPPER LIMIT	131064		8.99	140002		11.59	159460		12.89
	LOWER LIMIT	32766		7.99	35000.5		10.59	39865		11.89
	EPA SAMPLE NO.									
1	138263MB	73293		8.45	76363		11.04	79102		12.33
2	138264LCS	75869		8.44	76063		11.04	74564		12.33
3	138265LCSD	73733		8.45	77786		11.04	82926		12.33
4	Q1-TFS-MW-01	84954		8.44	79889		11.04	86776		12.33
5	Q1-TFS-MW-8D	83604		8.44	83457		11.04	85257		12.33

IS4 = Phenanthrene-d10

IS5 = Chrysene-d12

IS6 = Perylene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 06/13/12

Instrument ID: SMSD01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.06 S2 : 6.38

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	DFTPP2	45777	DFTPP2.D	06/12/12	2028		
2	STD1090284	46155	SIMCAL10.D	06/12/12	2048	10.06	6.38
3	STD1090285	46156	SIMCAL9.D	06/12/12	2113	10.06	6.38
4	STD1090286	46157	SIMCAL8.D	06/12/12	2137	10.06	6.38
5	STD1090287	46158	SIMCAL7.D	06/12/12	2200	10.06	6.38
6	ZZZZZZ	ZZZZZZ	ZZZZZZ	06/12/12	2224		
7	STD1090289	46160	SIMCAL5.D	06/12/12	2248	10.06	6.39
8	STD1090290	46161	SIMCAL4.D	06/12/12	2312	10.06	6.39
9	STD1090291	46162	SIMCAL3.D	06/12/12	2336	10.06	6.39
10	STD1090292	46163	SIMCAL2.D	06/13/12	0000	10.06	6.39
11	STD1090293	46164	SIMCAL1.D	06/13/12	0023	10.07	6.39
12	STD1090296	46557	SIMCAL6N.D	06/13/12	0047	10.06	6.38
13	SSC1090295	46253	SIMSEC.D	06/13/12	0111	10.06	6.38
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	06/13/12	0135		
15	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	1519		
16	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	1539		
17	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	1603		
18	DFTPP1	45777	DFTPP1.D	07/20/12	1645		
19	CCV1099843	46557	SIMCCV1.D	07/20/12	1706	10.01	6.34
20	138263MB	138263MB	10176MB.D	07/20/12	1747	10.01	6.34
21	138264LCS	138264LCS	10176LCS.D	07/20/12	1811	10.01	6.34
22	138265LCSD	138265LCSD	10176LCSD.D	07/20/12	1836	10.01	6.34
23	Q1-TFS-MW-01	350654501	545-01.D	07/20/12	1900	10.01	6.34
24	Q1-TFS-MW-8D	350654502	545-02.D	07/20/12	1925	10.01	6.34
25	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	1949		
26	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	2013		

			QC LIMITS
S1	=	p-Terphenyl-d14	(+/- 0.67 MINUTES)
S2	=	2-Fluorobiphenyl	(+/- 0.42 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

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FORM VIII

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 06/13/12

Instrument ID: SMSD01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.06 S2 : 6.38

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
27	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	2037				
28	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	2102				
29	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	2126				
30	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	2150				
31	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	2214				
32	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	2238				
33	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	2302				
34	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	2326				
35	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/20/12	2350				
36	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/21/12	0014				
37	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/21/12	0037				
38	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/21/12	0101				
39	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/21/12	0125				

			QC LIMITS
S1	=	p-Terphenyl-d14	(+/- 0.67 MINUTES)
S2	=	2-Fluorobiphenyl	(+/- 0.42 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 138264LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
1-Methylnaphthalene	0.5	0.34	68.0			68 - 115
2-Methylnaphthalene	0.5	0.52	104.0			47 - 121
Acenaphthene	0.5	0.42	84.0			64 - 110
Acenaphthylene	0.5	0.39	78.0			45 - 115
Anthracene	0.5	0.35	70.0			61 - 108
Benzo(a)anthracene	0.5	0.39	78.0			53 - 110
Benzo(a)pyrene	0.5	0.4	80.0			55 - 109
Benzo(b)fluoranthene	0.5	0.43	86.0			65 - 110
Benzo(g,h,i)perylene	0.5	0.37	74.0			68 - 115
Benzo(k)fluoranthene	0.5	0.45	90.0			70 - 111
Chrysene	0.5	0.44	88.0			71 - 115
Dibenzo(a,h)anthracene	0.5	0.3	60.0			60 - 104
Fluoranthene	0.5	0.38	76.0			63 - 114
Fluorene	0.5	0.41	82.0			59 - 120
Indeno(1,2,3-cd)pyrene	0.5	0.39	78.0			66 - 110
Naphthalene	0.5	0.42	84.0			68 - 125
Phenanthrene	0.5	0.43	86.0			31 - 147
Pyrene	0.5	0.42	84.0			59 - 120

Spike Recovery: 0 out of 18 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

090812 1534

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

138265LCSD

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
1-Methylnaphthalene	0.5	0.35	70.0	2.9	20	68 - 115
2-Methylnaphthalene	0.5	0.51	102.0	1.9	20	47 - 121
Acenaphthene	0.5	0.43	86.0	2.4	20	64 - 110
Acenaphthylene	0.5	0.42	84.0	7.4	20	45 - 115
Anthracene	0.5	0.4	80.0	13.3	20	61 - 108
Benzo(a)anthracene	0.5	0.38	76.0	2.6	20	53 - 110
Benzo(a)pyrene	0.5	0.41	82.0	2.5	20	55 - 109
Benzo(b)fluoranthene	0.5	0.38	76.0	12.3	20	65 - 110
Benzo(g,h,i)perylene	0.5	0.37	74.0	0.0	20	68 - 115
Benzo(k)fluoranthene	0.5	0.46	92.0	2.2	20	70 - 111
Chrysene	0.5	0.44	88.0	0.0	20	71 - 115
Dibenzo(a,h)anthracene	0.5	0.4	80.0	28.6 *	20	60 - 104
Fluoranthene	0.5	0.41	82.0	7.6	20	63 - 114
Fluorene	0.5	0.44	88.0	7.1	20	59 - 120
Indeno(1,2,3-cd)pyrene	0.5	0.4	80.0	2.5	20	66 - 110
Naphthalene	0.5	0.41	82.0	2.4	20	68 - 125
Phenanthrene	0.5	0.47	94.0	8.9	20	31 - 147
Pyrene	0.5	0.44	88.0	4.7	20	59 - 120

Spike Recovery: 0 out of 18 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

8270 SIM Standards Data

090812 1534

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SMSD01 Calibration Date Begin: 06/12/12 End: 06/13/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2048 End: 047

Min RRF for SPCC(#) = N/A Max %RSD for CCC(*) = 15 %

LAB FILE ID: RRF0.02 =SIMCAL1.D RRF0.05 =SIMCAL2.D
RRF0.07 =SIMCAL3.D RRF0.1 =SIMCAL4.D RRF0.2 =SIMCAL5.D

COMPOUND	RRF0.02	RRF0.05	RRF0.07	RRF0.1	RRF0.2	$\overline{RRF}$	%RSD OR R^2
1-Methylnaphthalene	0.676	0.738	0.853	0.833	0.706		
2-Methylnaphthalene	0.475	0.466	0.533	0.561	0.523		
Acenaphthene	* 1.360	1.255	1.229	1.197	1.253		*
Acenaphthylene	2.007	1.951	2.008	1.982	2.002		
Anthracene	1.408	1.393	1.345	1.321	1.336		
Benzo(a)anthracene	1.260	1.149	1.114	1.169	1.123		
Benzo(a)pyrene	* 1.210	1.153	1.107	1.118	1.055		*
Benzo(b)fluoranthene	0.896	0.801	0.828	0.929	0.960		
Benzo(g,h,i)perylene	1.190	1.072	1.070	1.091	1.045		
Benzo(k)fluoranthene	1.526	1.536	1.473	1.528	1.359		
Chrysene	1.647	1.511	1.481	1.474	1.399		
Dibenzo(a,h)anthracene	0.916	0.915	0.894	0.954	0.938		
Fluoranthene	* 1.902	1.596	1.523	1.551	1.459		*
Fluorene	1.670	1.715	1.739	1.708	1.698		
Indeno(1,2,3-cd)pyrene	1.273	1.200	1.176	1.233	1.204		
Naphthalene	0.928	0.977	1.085	1.138	1.158		
Phenanthrene	1.149	1.076	1.070	1.090	1.078		
Pyrene	2.089	1.654	1.568	1.491	1.402		
==========							
p-Terphenyl-d14(SURR)	1.212	1.193	1.112	1.148	1.121		
2-Fluorobiphenyl(SURR)	1.647	1.726	1.813	1.777	1.758		

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SMSD01 Calibration Date Begin: 06/12/12 End: 06/13/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2048 End: 047

Min RRF for SPCC(#) = N/A Max %RSD for CCC(*) = 15 %

LAB FILE ID: RRF0.5 =SIMCAL6N.D RRF0.7 =SIMCAL7.D
RRF1 =SIMCAL8.D RRF5 =SIMCAL9.D RRF10 =SIMCAL10.D

COMPOUND		RRF0.5	RRF0.7	RRF1	RRF5	RRF10	$\overline{RRF}$	%RSD OR R^2	
1-Methylnaphthalene		0.796	0.763	0.731	0.649	0.654	0.73998	9.7	
2-Methylnaphthalene		0.591	0.630	0.643	0.672	0.684	0.57777	13.6	
Acenaphthene	*	1.274	1.261	1.261	1.291	1.299	1.26801	3.4	*
Acenaphthylene		2.017	2.039	2.043	2.102	2.314	2.04641	5	
Anthracene		1.382	1.356	1.363	1.370	1.350	1.36227	1.9	
Benzo(a)anthracene		1.130	1.196	1.150	1.233	1.229	1.17528	4.4	
Benzo(a)pyrene	*	1.058	1.077	1.089	1.120	1.119	1.11062	4.2	*
Benzo(b)fluoranthene		0.941	0.999	1.048	1.077	1.167	0.96465	11.7	
Benzo(g,h,i)perylene		1.048	1.055	1.089	1.112	1.117	1.08898	4	
Benzo(k)fluoranthene		1.423	1.369	1.336	1.357	1.244	1.41515	7	
Chrysene		1.362	1.263	1.350	1.293	1.263	1.40431	8.8	
Dibenzo(a,h)anthracene		0.963	0.991	1.035	1.067	1.080	0.97512	6.7	
Fluoranthene	*	1.442	1.320	1.332	1.557	1.542	1.52232	10.7	*
Fluorene		1.707	1.708	1.739	1.774	1.764	1.72217	1.8	
Indeno(1,2,3-cd)pyrene		1.229	1.238	1.277	1.313	1.325	1.2468	3.9	
Naphthalene		1.181	1.193	1.227	1.217	1.232	1.13367	9.3	
Phenanthrene		1.098	1.114	1.151	1.283	1.296	1.14061	7.3	
Pyrene		1.426	1.338	1.327	1.311	1.284	1.48893	0.99991	
==========									
p-Terphenyl-d14(SURR)		1.184	1.117	1.105	1.114	1.115	1.14225	3.5	
2-Fluorobiphenyl(SURR)		1.793	1.802	1.817	1.844	2.077	1.80533	6.1	

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FORM VI

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD01 CalibrationDate: 06/13/12 Time: 0111

CCV ID: SSC1090295 Lab File ID: SIMSEC.D Init. Calib. Date Begin: 06/12/12 End: 06/13/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type
1-Methylnaphthalene		0.73998	0.72099	2.6	AVRG
2-Methylnaphthalene		0.57777	0.62569	8.3	AVRG
Acenaphthene	*	1.26801	1.251	1.3	AVRG *
Acenaphthylene		2.04641	2.088	2.0	AVRG
Anthracene		1.36227	1.406	3.2	AVRG
Benzo(a)anthracene		1.17528	1.235	5.1	AVRG
Benzo(a)pyrene	*	1.11062	1.076	3.1	AVRG *
Benzo(b)fluoranthene		0.96465	0.96463	0.0	AVRG
Benzo(g,h,i)perylene		1.08898	1.082	0.6	AVRG
Benzo(k)fluoranthene		1.41515	1.48	4.6	AVRG
Chrysene		1.40431	1.396	0.6	AVRG
Dibenzo(a,h)anthracene		0.97512	0.97555	0.0	AVRG
Fluoranthene	*	1.52232	1.457	4.3	AVRG *
Fluorene		1.72217	1.739	1.0	AVRG
Indeno(1,2,3-cd)pyrene		1.2468	1.249	0.2	AVRG
Naphthalene		1.13367	1.259	11.1	AVRG
Phenanthrene		1.14061	1.143	0.2	AVRG
Pyrene		0.5	0.51	2.0	LINR
==========					
p-Terphenyl-d14(SURR)		1.14225	0.91434	20.0	AVRG
2-Fluorobiphenyl(SURR)		1.80533	1.462	19.0	AVRG

7

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD01 CalibrationDate: 07/20/12 Time: 1706

CCV ID: CCV1099843 Lab File ID: SIMCCV1.D Init. Calib. Date Begin: 06/12/12 End: 06/13/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
1-Methylnaphthalene	0.73998	0.62637	15.4	AVRG
2-Methylnaphthalene	0.57777	0.69281	19.9	AVRG
Acenaphthene *	1.26801	1.279	0.9	AVRG *
Acenaphthylene	2.04641	1.908	6.8	AVRG
Anthracene	1.36227	1.136	16.6	AVRG
Benzo(a)anthracene	1.17528	1.045	11.1	AVRG
Benzo(a)pyrene *	1.11062	1.083	2.5	AVRG *
Benzo(b)fluoranthene	0.96465	0.94456	2.1	AVRG
Benzo(g,h,i)perylene	1.08898	1.036	4.9	AVRG
Benzo(k)fluoranthene	1.41515	1.527	7.9	AVRG
Chrysene	1.40431	1.429	1.8	AVRG
Dibenzo(a,h)anthracene	0.97512	0.99413	1.9	AVRG
Fluoranthene *	1.52232	1.255	17.6	AVRG *
Fluorene	1.72217	1.709	0.8	AVRG
Indeno(1,2,3-cd)pyrene	1.2468	1.203	3.5	AVRG
Naphthalene	1.13367	1.157	2.1	AVRG
Phenanthrene	1.14061	1.147	0.6	AVRG
Pyrene	0.5	0.48	4.0	LINR
==========				
p-Terphenyl-d14(SURR)	1.14225	1.155	1.1	AVRG
2-Fluorobiphenyl(SURR)	1.80533	2.119	17.4	AVRG

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FORM VII

8270 Semi-Volatile Organics

070812 1736

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506545

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8270D.

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met with the exception of:

SSC1103003 was the second source verification standard analyzed with the initial calibration on 08/03/12. The %D was over the 20% limit for the following compounds: Ethyl methanesulfonate (+24.6%), 1-Naphthylamine (+44.9%), 2-Naphthylamine (+34.6%), Methapyriline (+1647%), 3-Methylcholanthrene (-37.4%), 1,3,5-Trinitrobenzene (-43.2%). No further action was taken, since these compounds were not detected in any samples and were a result of a discrepancy between the primary and secondary standards. The secondary standard is also used to spike the LCS. Because of this difference, Methapyriline exceeded the calibration range in the LCS. No further action was taken, since this compound was not detected in any samples.

The Percent RSD was over the 15% limit for 4-Nitroquinoline-1-oxide for the initial calibration at 35.9%. No further action was taken, since this compound was not detected in any samples.

Spectrum Analytical Inc. Lab Reference No./SDG: 3506545

Client: CH2M Hill

Spectrum Analytical Inc. does not analyze a low calibration standard at the requested RL for all analytes. The low calibration standard is 10 ug/L for the following analytes: 4,6-Dinitro-2-methylphenol, Methapyriline.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:

LCS 137974LCS was analyzed with the water samples extracted on 07/19/12. The following analytes were recovered below criteria: 1,4-Naphthoquinone at 27.8 % with criteria of (28-143), 2-Acetylaminofluorene at 61.5 % with criteria of (63-103), Hexachloropropene at 16 % with criteria of (21-105), p-Dimethylaminoazobenzene at 69 % with criteria of (70-130). The following analytes had marginal exceedance limit failures: 2-Naphthylamine at 52.2 % with criteria of (60-140), a,a-Dimethylphenethylamine at 0 % with criteria of (60-140), Methapyriline at 580 % with criteria of (0-105). No further action was taken. None of these compounds were detected in any samples.

LCS 137975LCSD was analyzed with the water samples extracted on 07/19/12. The following analyte was recovered below criteria: Hexachloropropene at 15.5 % with criteria of (21-105). The following analyte(s) were recovered above criteria: Methapyriline at 305 % with criteria of (0-90). The following analytes had marginal exceedance limit failures: 2-Naphthylamine at 55 % with criteria of (60-140), a,a-Dimethylphenethylamine at 0 % with criteria of (60-140), Methapyriline at 305 % with criteria of (0-105). No further action was taken. None of these compounds were detected in any samples.

Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506545

Client: CH2M Hill

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Signature:
Name: Brian C. Spanh Title: Lab Director

SIGNED: DATE: 08/06/2012

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Method: 8270

EPA Sample No	Lab Sample ID
Q1-TFS-MW-01	350654501
Q1-TFS-MW-8D	350654502

070812 1736

8270 Sample Data

070812 1736

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 54501.D

Sample wt/vol: 990 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1336

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 54501.D

Sample wt/vol: 990 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1336

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 54501.D

Sample wt/vol: 990 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1336

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20.2
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5
98-86-2	Acetophenone	8.1	U	4	8.1	8.1
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.9	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.82	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 54501.D

Sample wt/vol: 990 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1336

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8.1	U	4	8.1	8.1
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8.1	U	4	8.1	8.1
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4
143-50-0	Kepone	32.3	U	16.2	32.3	32.3
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-8D

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654502 Lab File ID: 54502.D

Sample wt/vol: 980 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1400

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.3	U	2.1	4.3	4.3
62-75-9	N-Nitrosodimethylamine	4.5	U	2.2	4.5	4.5
62-53-3	Aniline	5.7	U	2.8	5.7	5.7
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3.1	6.1	6.1
108-95-2	Phenol	3.5	U	1.7	3.5	4.1
95-57-8	2-Chlorophenol	5.9	U	3	5.9	5.9
541-73-1	1,3-Dichlorobenzene	5.5	U	2.8	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.8	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.3	U	2.6	5.3	5.3
100-51-6	Benzyl alcohol	6.3	U	3.2	6.3	10.2
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.4	6.7	6.7
95-48-7	2-Methylphenol	5.3	U	2.6	5.3	5.3
67-72-1	Hexachloroethane	5.3	U	2.6	5.3	5.3
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3.1	6.1	6.1
106-44-5	4-Methylphenol	12.4	U	6.2	12.4	12.4
98-95-3	Nitrobenzene	2	U	1	2	4.1
78-59-1	Isophorone	7.8	U	3.9	7.8	7.8
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4.1
105-67-9	2,4-Dimethylphenol	4.7	U	2.3	4.7	4.7
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.6	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.2	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.3	U	2.6	5.3	5.3
106-47-8	4-Chloroaniline	6.1	U	3.1	6.1	6.1
87-68-3	Hexachlorobutadiene	5.1	U	2.6	5.1	5.1
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.8	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.7	U	0.84	1.7	4.1

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-8D

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654502 Lab File ID: 54502.D

Sample wt/vol: 980 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1400

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.86	1.7	4.1
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.5	6.9	6.9
91-58-7	2-Chloronaphthalene	5.7	U	2.8	5.7	5.7
88-74-4	2-Nitroaniline	6.1	U	3.1	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3.1	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.7	U	2.8	5.7	5.7
99-09-2	3-Nitroaniline	5.7	U	2.8	5.7	5.7
51-28-5	2,4-Dinitrophenol	11.4	U	5.7	11.4	20.4
132-64-9	Dibenzofuran	5.5	U	2.8	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.7	U	2.8	5.7	5.7
100-02-7	4-Nitrophenol	8.2	U	4.1	8.2	8.2
7005-72-3	4-Chlorophenyl-phenylether	5.1	U	2.6	5.1	5.1
84-66-2	Diethylphthalate	5.7	U	2.8	5.7	5.7
100-01-6	4-Nitroaniline	3.1	U	1.5	3.1	4.1
534-52-1	4,6-Dinitro-2-methylphenol	8.2	U	4.1	8.2	8.2
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.5	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.7	U	2.3	4.7	4.7
118-74-1	Hexachlorobenzene	0.84	U	0.42	0.84	4.1
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.2
84-74-2	Di-n-butylphthalate	1.8	U	0.88	1.8	4.1
85-68-7	Butylbenzylphthalate	6.1	U	3.1	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.8	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	9	U	4.5	9	9
117-84-0	Di-n-octylphthalate	4.1	U	2	4.1	4.1
109-06-8	2-Picoline	8.2	U	4.1	8.2	8.2
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.8	5.5	5.5

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-8D

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654502 Lab File ID: 54502.D

Sample wt/vol: 980 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1400

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
55-18-5	N-Nitrosodiethylamine	6.3	U	3.2	6.3	6.3
66-27-3	Methylmethanesulfonate	3.9	U	1.9	3.9	4.1
62-50-0	Ethyl methanesulfonate	5.1	U	2.6	5.1	5.1
76-01-7	Pentachloroethane	5.1	U	2.6	5.1	20.4
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.8	5.5	5.5
98-86-2	Acetophenone	8.2	U	4.1	8.2	8.2
59-89-2	N-Nitrosomorpholine	6.1	U	3.1	6.1	6.1
95-53-4	o-Toluidine	5.5	U	2.8	5.5	5.5
122-09-8	a,a-Dimethylphenethylamine	32.6	U	16.3	32.6	32.6
87-65-0	2,6-Dichlorophenol	7.1	U	3.6	7.1	7.1
1888-71-7	Hexachloropropene	4.1	U	2	4.1	4.1
924-16-3	N-Nitrosodibutylamine	5.5	U	2.8	5.5	5.5
120-58-1	Isosafrole	5.3	U	2.6	5.3	5.3
95-94-3	1,2,4,5-Tetrachlorobenzene	4.5	U	2.2	4.5	4.5
94-59-7	Safrole	5.1	U	2.6	5.1	5.1
130-15-4	1,4-Naphthoquinone	6.3	U	3.2	6.3	6.3
99-65-0	1,3-Dinitrobenzene	5.1	U	2.6	5.1	5.1
608-93-5	Pentachlorobenzene	4.5	U	2.2	4.5	4.5
134-32-7	1-Naphthylamine	3.7	U	1.8	3.7	4.1
91-59-8	2-Naphthylamine	5.1	U	2.6	5.1	5.1
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3.1	6.1	6.1
99-55-8	5-Nitro-o-toluidine	5.3	U	2.6	5.3	5.3
106-50-3	p-Phenylenediamine	4.1	U	2	4.1	4.1
62-44-2	Phenacetin	1.8	U	0.91	1.8	4.1
92-67-1	4-Aminobiphenyl	4.1	U	2	4.1	4.1
23950-58-5	Pronamide	1.6	U	0.83	1.6	4.1

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-8D

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654502 Lab File ID: 54502.D

Sample wt/vol: 980 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1400

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4.1	U	2	4.1	4.1
88-85-7	Dinoseb	8.2	U	4.1	8.2	8.2
56-57-5	4-Nitroquinoline-1-oxide	7.6	U	3.8	7.6	10.2
91-80-5	Methapyriline	4.5	U	2.2	4.5	4.5
140-57-8	Aramite	8.2	U	4.1	8.2	8.2
60-11-7	p-Dimethylaminoazobenzene	1.3	U	0.63	1.3	4.1
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4.1
57-97-6	7,12-Dimethylbenz(a)anthracene	2	U	0.98	2	4.1
56-49-5	3-Methylcholanthrene	4.5	U	2.2	4.5	4.5
100-75-4	N-Nitrosopiperidine	5.7	U	2.8	5.7	5.7
99-35-4	1,3,5-Trinitrobenzene	4.1	U	2	4.1	4.1
2303-16-4	Diallate (Avadex)	1.7	U	0.86	1.7	4.1
465-73-6	Isodrin	5.3	U	2.6	5.3	5.3
510-15-6	Chlorobenzilate	1.6	U	0.8	1.6	4.1
143-50-0	Kepone	32.6	U	16.3	32.6	32.6
126-68-1	0,0,0-Triethylphosphorothioate	5.9	U	3	5.9	5.9

8270 QC Summary

070812 1736

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

137973MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 137973MB Lab File ID: 10154MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1137

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6	U	3	6	6
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.4	U	2.7	5.4	5.4
106-46-7	1,4-Dichlorobenzene	5.4	U	2.7	5.4	5.4
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.2	U	3.1	6.2	10
108-60-1	2,2'-Oxybis(1-chloropropane)	6.6	U	3.3	6.6	6.6
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6	U	3	6	6
106-44-5	4-Methylphenol	12.2	U	6.1	12.2	12.2
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.6	U	3.8	7.6	7.6
88-75-5	2-Nitrophenol	1.5	U	0.77	1.5	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7	U	3.5	7	7
120-83-2	2,4-Dichlorophenol	6.2	U	3.1	6.2	6.2
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6	U	3	6	6
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.4	U	2.7	5.4	5.4
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.82	1.6	4
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.84	1.7	4

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

137973MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 137973MB Lab File ID: 10154MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1137

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
95-95-4	2,4,5-Trichlorophenol	6.8	U	3.4	6.8	6.8
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6	U	3	6	6
131-11-3	Dimethylphthalate	6	U	3	6	6
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.2	U	5.6	11.2	20
132-64-9	Dibenzofuran	5.4	U	2.7	5.4	5.4
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8	U	4	8	8
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8	U	4	8	8
86-30-6	N-Nitrosodiphenylamine	6.8	U	3.4	6.8	6.8
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.82	U	0.41	0.82	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10
84-74-2	Di-n-butylphthalate	1.7	U	0.86	1.7	4
85-68-7	Butylbenzylphthalate	6	U	3	6	6
91-94-1	3,3'-Dichlorobenzidine	5.4	U	2.7	5.4	5.4
117-81-7	Bis(2-ethylhexyl)phthalate	8.8	U	4.4	8.8	8.8
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8	U	4	8	8
10595-95-6	N-Nitrosomethylethylamine	5.4	U	2.7	5.4	5.4
55-18-5	N-Nitrosodiethylamine	6.2	U	3.1	6.2	6.2
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

137973MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 137973MB Lab File ID: 10154MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1137

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20
930-55-2	N-Nitrosopyrrolidine	5.4	U	2.7	5.4	5.4
98-86-2	Acetophenone	8	U	4	8	8
59-89-2	N-Nitrosomorpholine	6	U	3	6	6
95-53-4	o-Toluidine	5.4	U	2.7	5.4	5.4
122-09-8	a,a-Dimethylphenethylamine	32	U	16	32	32
87-65-0	2,6-Dichlorophenol	7	U	3.5	7	7
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.4	U	2.7	5.4	5.4
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.2	U	3.1	6.2	6.2
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6	U	3	6	6
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.89	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.81	1.6	4
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8	U	4	8	8
56-57-5	4-Nitroquinoline-1-oxide	7.4	U	3.7	7.4	10

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

137973MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 137973MB Lab File ID: 10154MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/19/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1137

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8	U	4	8	8
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.62	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.96	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.84	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.78	1.6	4
143-50-0	Kepone	32	U	16	32	32
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

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SEMI-VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

137973MB

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Lab File ID: 10154MB.D Lab Sample ID: 137973MB

Instrument ID: SMSD03 Date Extracted: 07/19/12

Matrix: WATER Date Analyzed: 08/03/12

Level:(low/med) LOW Time Analyzed: 1137

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	137974LCS	137974LCS	10154LCS.D	08/03/12	1201
2	137975LCSD	137975LCSD	10154LCD.D	08/03/12	1225
3	Q1-TFS-MW-01	350654501	54501.D	08/03/12	1336
4	Q1-TFS-MW-8D	350654502	54502.D	08/03/12	1400

COMMENTS:

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Form IV

2A

WATER SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG NO.: 3506545

Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
137973MB	42.4	25.2	61.6	58.0	69.8	77.6	0
137974LCS	48.0	28.6	75.4	73.8	85.6	78.0	0
137975LCSD	52.1	32.6	78.4	74.4	94.1	83.2	0
Q1-TFS-MW-01	50.5	30.7	82.2	71.1	96.0	98.4	0
Q1-TFS-MW-8D	55.7	34.2	77.3	70.0	96.9	93.3	0

Control Limits

S1	=	2-Fluorophenol	20 -	110
S2	=	Phenol-d5	10 -	115
S3	=	Nitrobenzene-d5	40 -	110
S4	=	2-Fluorobiphenyl	50 -	110
S5	=	2,4,6-Tribromophenol	40 -	125
S6	=	p-Terphenyl-d14	50 -	135

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Lab File ID: DFTPP1.D DFTPP Injection Date: 08/02/12

Instrument ID: SMSD03 DFTPP Injection Time: 2036

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	20.4	
68	Less than 2.0% of mass 69	0	(0)1
69	Mass 69 relative abundance	46.2	
70	Less than 2.0% of mass 69	0.4	(0.88)1
127	10.0 - 80.0% of mass 198	42.7	
197	Less than 2.0% of mass 198	0.5	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	7	
275	10.0 - 60.0% of mass 198	35.9	
365	Greater than 1.0% of mass 198	6.8	
441	0.0 - 24.0% of mass 442	11.3	(14.49)2
442	Greater than 50.0% of mass 198	78.1	
443	15.0 - 24.0% of mass 442	15.8	(20.26)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD1103017	47072	8270CAL7.D	08/02/12	2058
2	STD1103016	47073	8270CAL6.D	08/02/12	2122
3	STD1103015	47074	8270CAL5.D	08/02/12	2145
4	STD1103014	47075	8270CAL4.D	08/02/12	2209
5	STD1103013	47076	8270CAL3.D	08/02/12	2233
6	STD1103012	47077	8270CAL2.D	08/02/12	2256
7	STD1103011	47078	8270CAL1.D	08/02/12	2320
8	SSC1103021	45872	8270SEC1.D	08/02/12	2343
9	STD1103036	45933	BSCAL7.D	08/03/12	0031
10	STD1103035	45934	BSCAL6.D	08/03/12	0054
11	STD1103034	45935	BSCAL5.D	08/03/12	0118
12	STD1103033	46734	BSCAL4.D	08/03/12	0141
13	STD1103032	45937	BSCAL3.D	08/03/12	0205
14	STD1103031	45938	BSCAL2.D	08/03/12	0228
15	STD1103030	45939	BSCAL1.D	08/03/12	0252
16	SSC1103039	44859	BSSEC.D	08/03/12	0315
17	STD1103028	47140	AP9CAL7.D	08/03/12	0339
18	STD1103027	47141	AP9CAL6.D	08/03/12	0402
19	STD1103026	47142	AP9CAL5.D	08/03/12	0426

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Lab File ID: DFTPP1.D DFTPP Injection Date: 08/02/12

Instrument ID: SMSD03 DFTPP Injection Time: 2036

GC Column: HPMS-5 ID: 0.25 (mm)

20	STD1103025	47143	AP9CAL4.D	08/03/12	0449
21	STD1103024	47144	AP9CAL3.D	08/03/12	0513
22	STD1103023	47145	AP9CAL2.D	08/03/12	0536
23	STD1103022	47146	AP9CAL1.D	08/03/12	0600

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Lab File ID: DFTPP3.D DFTPP Injection Date: 08/03/12

Instrument ID: SMSD03 DFTPP Injection Time: 1004

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	23.5	
68	Less than 2.0% of mass 69	1	(1.92)1
69	Mass 69 relative abundance	52.2	
70	Less than 2.0% of mass 69	0.2	(0.35)1
127	10.0 - 80.0% of mass 198	46.4	
197	Less than 2.0% of mass 198	0.3	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	7.1	
275	10.0 - 60.0% of mass 198	36.4	
365	Greater than 1.0% of mass 198	7.6	
441	0.0 - 24.0% of mass 442	12.8	(16.01)2
442	Greater than 50.0% of mass 198	79.8	
443	15.0 - 24.0% of mass 442	15	(18.73)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV1103019	47075	8270CCV2.D	08/03/12	1024
2	CCV1103038	46734	BSCCV2.D	08/03/12	1048
3	CCV1103029	47143	AP9CCV2.D	08/03/12	1111
4	137973MB	137973MB	10154MB.D	08/03/12	1137
5	137974LCS	137974LCS	10154LCS.D	08/03/12	1201
6	137975LCSD	137975LCSD	10154LCD.D	08/03/12	1225
7	Q1-TFS-MW-01	350654501	54501.D	08/03/12	1336
8	Q1-TFS-MW-8D	350654502	54502.D	08/03/12	1400

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Lab File ID (Standard): 8270CAL4.D Date Analyzed: 8/2/2012

Instrument ID: SMSD03 Time Analyzed: 22:09

GC Column: HPMS-5 ID: 0.25 (mm)

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	348449		4.47	1112381		5.64	802993		7.33
	UPPER LIMIT	696898		4.97	2224762		6.14	1605986		7.83
	LOWER LIMIT	174224.5		3.97	556190.5		5.14	401496.5		6.83
	EPA SAMPLE NO.									
1	137973MB	294026		4.47	941620		5.63	662093		7.33
2	137974LCS	285897		4.47	924399		5.63	653857		7.33
3	137975LCSD	303656		4.47	979750		5.63	701589		7.33
4	Q1-TFS-MW-01	334792		4.47	1068076		5.63	833696		7.33
5	Q1-TFS-MW-8D	317233		4.47	1029465		5.63	750296		7.33

IS1 = 1,4-Dichlorobenzene-d4

IS2 = Naphthalene-d8

IS3 = Acenaphthene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Lab File ID (Standard): 8270CAL4.D Date Analyzed: 8/2/2012

Instrument ID: SMSD03 Time Analyzed: 22:09

GC Column: HPMS-5 ID: 0.25 (mm)

		IS4 AREA	#	RT	IS5 AREA	#	RT	IS6 AREA	#	RT
	MID CAL STD	1539881		8.79	2349372		11.38	2193686		12.71
	UPPER LIMIT	3079762		9.29	4698744		11.88	4387372		13.21
	LOWER LIMIT	769940.5		8.29	1174686		10.88	1096843		12.21
	EPA SAMPLE NO.									
1	137973MB	1305550		8.78	1772482		11.38	1854846		12.71
2	137974LCS	1361012		8.78	2116100		11.38	2000449		12.71
3	137975LCSD	1407074		8.78	2154076		11.38	2038070		12.72
4	Q1-TFS-MW-01	1698357		8.78	2098981		11.38	2200663		12.71
5	Q1-TFS-MW-8D	1527710		8.78	2081594		11.38	2193707		12.71

IS4 = Phenanthrene-d10

IS5 = Chrysene-d12

IS6 = Perylene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

8

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 08/03/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 3.38 S2 : 4.13

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
1	DFTPP1	47137	DFTPP1.D	08/02/12	2036				
2	STD1103017	47072	8270CAL7.D	08/02/12	2058	3.38		4.14	
3	STD1103016	47073	8270CAL6.D	08/02/12	2122	3.38		4.14	
4	STD1103015	47074	8270CAL5.D	08/02/12	2145	3.38		4.13	
5	STD1103014	47075	8270CAL4.D	08/02/12	2209	3.38		4.13	
6	STD1103013	47076	8270CAL3.D	08/02/12	2233	3.37		4.12	
7	STD1103012	47077	8270CAL2.D	08/02/12	2256	3.37		4.12	
8	STD1103011	47078	8270CAL1.D	08/02/12	2320	3.37		4.12	
9	SSC1103021	45872	8270SEC1.D	08/02/12	2343	3.38		4.13	
10	STD1103036	45933	BSCAL7.D	08/03/12	0031				
11	STD1103035	45934	BSCAL6.D	08/03/12	0054				
12	STD1103034	45935	BSCAL5.D	08/03/12	0118				
13	STD1103033	46734	BSCAL4.D	08/03/12	0141				
14	STD1103032	45937	BSCAL3.D	08/03/12	0205				
15	STD1103031	45938	BSCAL2.D	08/03/12	0228				
16	STD1103030	45939	BSCAL1.D	08/03/12	0252				
17	SSC1103039	44859	BSSEC.D	08/03/12	0315				
18	STD1103028	47140	AP9CAL7.D	08/03/12	0339				
19	STD1103027	47141	AP9CAL6.D	08/03/12	0402				
20	STD1103026	47142	AP9CAL5.D	08/03/12	0426				
21	STD1103025	47143	AP9CAL4.D	08/03/12	0449				
22	STD1103024	47144	AP9CAL3.D	08/03/12	0513				
23	STD1103023	47145	AP9CAL2.D	08/03/12	0536				
24	STD1103022	47146	AP9CAL1.D	08/03/12	0600				
25	DFTPP2	47137	DFTPP2.D	08/03/12	0802				
26	SSC1103003	47166	AP9SEC2.D	08/03/12	0936				

			QC LIMITS
S1	=	2-Fluorophenol	(+/- 0.27 MINUTES)
S2	=	Phenol-d5	(+/- 0.27 MINUTES)
S3	=	Nitrobenzene-d5	(+/- 0.34 MINUTES)
S4	=	2-Fluorobiphenyl	(+/- 0.44 MINUTES)
S5	=	2,4,6-Tribromophenol	(+/- 0.44 MINUTES)
S6	=	p-Terphenyl-d14	(+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

8

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 08/03/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 3.38 S2 : 4.13

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
27	DFTPP3	47137	DFTPP3.D	08/03/12	1004				
28	CCV1103019	47075	8270CCV2.D	08/03/12	1024	3.37		4.13	
29	CCV1103038	46734	BSCCV2.D	08/03/12	1048				
30	CCV1103029	47143	AP9CCV2.D	08/03/12	1111				
31	137973MB	137973MB	10154MB.D	08/03/12	1137	3.37		4.12	
32	137974LCS	137974LCS	10154LCS.D	08/03/12	1201	3.38		4.13	
33	137975LCSD	137975LCSD	10154LCD.D	08/03/12	1225	3.38		4.13	
34	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1249				
35	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1312				
36	Q1-TFS-MW-01	350654501	54501.D	08/03/12	1336	3.37		4.12	
37	Q1-TFS-MW-8D	350654502	54502.D	08/03/12	1400	3.38		4.13	
38	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1424				
39	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1448				
40	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1512				
41	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1536				
42	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1600				
43	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1624				
44	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1648				
45	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1712				
46	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1735				
47	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1759				
48	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1823				
49	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1846				
50	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1910				
51	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1934				
52	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1957				

			QC LIMITS
S1	=	2-Fluorophenol	(+/- 0.27 MINUTES)
S2	=	Phenol-d5	(+/- 0.27 MINUTES)
S3	=	Nitrobenzene-d5	(+/- 0.34 MINUTES)
S4	=	2-Fluorobiphenyl	(+/- 0.44 MINUTES)
S5	=	2,4,6-Tribromophenol	(+/- 0.44 MINUTES)
S6	=	p-Terphenyl-d14	(+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 08/03/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 3.38 S2 : 4.13

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
53	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	2020				
54	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	2044				

			QC LIMITS
S1	=	2-Fluorophenol	(+/- 0.27 MINUTES)
S2	=	Phenol-d5	(+/- 0.27 MINUTES)
S3	=	Nitrobenzene-d5	(+/- 0.34 MINUTES)
S4	=	2-Fluorobiphenyl	(+/- 0.44 MINUTES)
S5	=	2,4,6-Tribromophenol	(+/- 0.44 MINUTES)
S6	=	p-Terphenyl-d14	(+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 137974LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Pyridine	40	19.8	49.5			22 - 70
N-Nitrosodimethylamine	40	21.4	53.5			25 - 110
Aniline	40	26.7	66.8			14 - 99
Bis(2-chloroethyl)ether	40	32.9	82.2			35 - 110
Phenol	40	12.4	31.0			0 - 115
2-Chlorophenol	40	27.6	69.0			35 - 105
1,3-Dichlorobenzene	40	21	52.5			30 - 100
1,4-Dichlorobenzene	40	21.4	53.5			30 - 100
1,2-Dichlorobenzene	40	21.7	54.2			35 - 100
Benzyl alcohol	40	25.6	64.0			30 - 110
2,2'-Oxybis(1-chloropropane)	40	33	82.5			25 - 130
2-Methylphenol	40	23	57.5			40 - 110
Hexachloroethane	40	19.8	49.5			30 - 95
N-Nitroso-di-n-propylamine	40	34.1	85.2			35 - 130
4-Methylphenol	40	21.9	54.8			30 - 110
Nitrobenzene	40	30.4	76.0			45 - 110
Isophorone	40	28.5	71.2			50 - 110
2-Nitrophenol	40	28.8	72.0			40 - 115
2,4-Dimethylphenol	40	30.8	77.0			30 - 110
Bis(2-chloroethoxy)methane	40	31.9	79.8			45 - 105
2,4-Dichlorophenol	40	28.4	71.0			50 - 105
1,2,4-Trichlorobenzene	40	21.3	53.2			35 - 105
4-Chloroaniline	40	30.5	76.2			15 - 110
Hexachlorobutadiene	40	22	55.0			25 - 105
4-Chloro-3-methylphenol	40	28.3	70.8			45 - 110
Hexachlorocyclopentadiene	40	18.1	45.2			13 - 80
2,4,6-Trichlorophenol	40	31.2	78.0			50 - 115
2,4,5-Trichlorophenol	40	29.3	73.2			50 - 110
2-Chloronaphthalene	40	28.1	70.2			50 - 105
2-Nitroaniline	40	36.2	90.5			50 - 115
Dimethylphthalate	40	35.1	87.8			25 - 125
2,6-Dinitrotoluene	40	33.9	84.8			50 - 115

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

070812 1737

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 137974LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
3-Nitroaniline	40	31.7	79.2			20 - 125
2,4-Dinitrophenol	80	42.4	53.0			15 - 140
Dibenzofuran	40	30	75.0			55 - 105
2,4-Dinitrotoluene	40	33	82.5			50 - 120
4-Nitrophenol	40	13.3	33.2			0 - 125
4-Chlorophenyl-phenylether	40	30.2	75.5			50 - 110
Diethylphthalate	40	35.4	88.5			40 - 120
4-Nitroaniline	40	40.9	102.0			35 - 120
4,6-Dinitro-2-methylphenol	40	29.4	73.5			40 - 130
N-Nitrosodiphenylamine	40	32.1	80.2			50 - 110
4-Bromophenyl-phenylether	40	30.4	76.0			50 - 115
Hexachlorobenzene	40	29.1	72.8			50 - 110
Pentachlorophenol	40	32.1	80.2			40 - 115
Di-n-butylphthalate	40	33.1	82.8			55 - 115
Butylbenzylphthalate	40	35.9	89.8			45 - 115
3,3'-Dichlorobenzidine	80	60	75.0			20 - 110
Bis(2-ethylhexyl)phthalate	40	36.3	90.8			40 - 125
Di-n-octylphthalate	40	36.3	90.8			35 - 135
2-Picoline	40	19.4	48.5			15 - 110
N-Nitrosomethylethylamine	40	22.7	56.8			25 - 131
N-Nitrosodiethylamine	40	23.8	59.5			46 - 111
Methylmethanesulfonate	40	17.7	44.2			15 - 103
Ethyl methanesulfonate	40	33.2	83.0			46 - 113
Pentachloroethane	40	22.3	55.8			27 - 99
N-Nitrosopyrrolidine	40	25.3	63.2			51 - 112
Acetophenone	80	59.6	74.5			45 - 118
N-Nitrosomorpholine	40	29.1	72.8			51 - 112
o-Toluidine	40	22.2	55.5			49 - 97
a,a-Dimethylphenethylamine	40	0	0.0 *			70 - 130
2,6-Dichlorophenol	40	32.2	80.5			50 - 135
Hexachloropropene	40	6.4	16.0 *			21 - 105
N-Nitrosodibutylamine	40	29.6	74.0			43 - 130

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

070812 1737

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 137974LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Isosafrole	40	29.5	73.8			70 - 130
1,2,4,5-Tetrachlorobenzene	40	24.7	61.8			40 - 100
Safrole	40	30.9	77.2			52 - 100
1,4-Naphthoquinone	40	11.1	27.8 *			28 - 143
1,3-Dinitrobenzene	40	38	95.0			61 - 112
Pentachlorobenzene	40	28.5	71.2			50 - 99
1-Naphthylamine	40	19.6	49.0			38 - 91
2-Naphthylamine	40	20.9	52.2 *			70 - 130
2,3,4,6-Tetrachlorophenol	40	29.8	74.5			55 - 122
5-Nitro-o-toluidine	40	30.1	75.2			70 - 130
p-Phenylenediamine	40	30.6	76.5			58 - 107
Phenacetin	40	29.8	74.5			57 - 114
4-Aminobiphenyl	40	31.3	78.2			49 - 103
Pronamide	40	30.7	76.8			59 - 99
Pentachloronitrobenzene(PCNB)	40	38.5	96.2			60 - 104
Dinoseb	40	33.8	84.5			44 - 142
4-Nitroquinoline-1-oxide	40	30.9	77.2			10 - 125
Methapyriline	40	232	580.0 *			0 - 90
Aramite	40	28	70.0			41 - 127
p-Dimethylaminoazobenzene	40	27.6	69.0 *			70 - 130
2-Acetylaminofluorene	40	24.6	61.5 *			63 - 103
7,12-Dimethylbenz(a)anthracene	40	34.4	86.0			57 - 95
3-Methylcholanthrene	40	28.3	70.8			52 - 105
N-Nitrosopiperidine	40	28.5	71.2			53 - 112
1,3,5-Trinitrobenzene	40	19.3	48.2			29 - 163
Diallate (Avadex)	40	26.8	67.0			56 - 98
Isodrin	40	31.7	79.2			54 - 110
Chlorobenzilate	40	30.3	75.8			58 - 101
Kepone	40	29.6	74.0			0 - 165
0,0,0-Triethylphosphorothioate	40	26.5	66.2			50 - 106

Spike Recovery: 7 out of 94 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

070812 1737

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 137975LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Pyridine	40	19.1	47.8	3.6	20	22 - 70
N-Nitrosodimethylamine	40	23.6	59.0	9.8	20	25 - 110
Aniline	40	27	67.5	1.1	20	14 - 99
Bis(2-chloroethyl)ether	40	35.2	88.0	6.8	20	35 - 110
Phenol	40	13	32.5	4.7	20	0 - 115
2-Chlorophenol	40	29.6	74.0	7.0	20	35 - 105
1,3-Dichlorobenzene	40	21.2	53.0	0.9	20	30 - 100
1,4-Dichlorobenzene	40	22.2	55.5	3.7	20	30 - 100
1,2-Dichlorobenzene	40	22.1	55.2	1.8	20	35 - 100
Benzyl alcohol	40	27.1	67.8	5.7	20	30 - 110
2,2'-Oxybis(1-chloropropane)	40	33.1	82.8	0.3	20	25 - 130
2-Methylphenol	40	24.6	61.5	6.7	20	40 - 110
Hexachloroethane	40	20	50.0	1.0	20	30 - 95
N-Nitroso-di-n-propylamine	40	36.8	92.0	7.6	20	35 - 130
4-Methylphenol	40	24	60.0	9.2	20	30 - 110
Nitrobenzene	40	32.6	81.5	7.0	20	45 - 110
Isophorone	40	30.7	76.8	7.4	20	50 - 110
2-Nitrophenol	40	29.9	74.8	3.7	20	40 - 115
2,4-Dimethylphenol	40	34	85.0	9.9	20	30 - 110
Bis(2-chloroethoxy)methane	40	34	85.0	6.4	20	45 - 105
2,4-Dichlorophenol	40	30.4	76.0	6.8	20	50 - 105
1,2,4-Trichlorobenzene	40	21.8	54.5	2.3	20	35 - 105
4-Chloroaniline	40	32.8	82.0	7.3	20	15 - 110
Hexachlorobutadiene	40	20.5	51.2	7.1	20	25 - 105
4-Chloro-3-methylphenol	40	31.2	78.0	9.7	20	45 - 110
Hexachlorocyclopentadiene	40	17.5	43.8	3.4	20	13 - 80
2,4,6-Trichlorophenol	40	32.8	82.0	5.0	20	50 - 115
2,4,5-Trichlorophenol	40	31.2	78.0	6.3	20	50 - 110
2-Chloronaphthalene	40	28.1	70.2	0.0	20	50 - 105
2-Nitroaniline	40	35.6	89.0	1.7	20	50 - 115
Dimethylphthalate	40	35.8	89.5	2.0	20	25 - 125
2,6-Dinitrotoluene	40	34	85.0	0.3	20	50 - 115

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

070812 1737

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 137975LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
3-Nitroaniline	40	34	85.0	7.0	20	20 - 125
2,4-Dinitrophenol	80	37	46.2	13.6	20	15 - 140
Dibenzofuran	40	31.2	78.0	3.9	20	55 - 105
2,4-Dinitrotoluene	40	35.6	89.0	7.6	20	50 - 120
4-Nitrophenol	40	14	35.0	5.1	20	0 - 125
4-Chlorophenyl-phenylether	40	30.4	76.0	0.7	20	50 - 110
Diethylphthalate	40	36.5	91.2	3.1	20	40 - 120
4-Nitroaniline	40	42	105.0	2.7	20	35 - 120
4,6-Dinitro-2-methylphenol	40	30.3	75.8	3.0	20	40 - 130
N-Nitrosodiphenylamine	40	34.4	86.0	6.9	20	50 - 110
4-Bromophenyl-phenylether	40	32	80.0	5.1	20	50 - 115
Hexachlorobenzene	40	31.3	78.2	7.3	20	50 - 110
Pentachlorophenol	40	27.4	68.5	15.8	20	40 - 115
Di-n-butylphthalate	40	35.1	87.8	5.9	20	55 - 115
Butylbenzylphthalate	40	38	95.0	5.7	20	45 - 115
3,3'-Dichlorobenzidine	80	62.8	78.5	4.6	20	20 - 110
Bis(2-ethylhexyl)phthalate	40	38.4	96.0	5.6	20	40 - 125
Di-n-octylphthalate	40	38	95.0	4.6	20	35 - 135
2-Picoline	40	19.8	49.5	2.0	20	15 - 110
N-Nitrosomethylethylamine	40	23.4	58.5	3.0	20	25 - 131
N-Nitrosodiethylamine	40	26.6	66.5	11.1	20	46 - 111
Methylmethanesulfonate	40	18.8	47.0	6.0	20	15 - 103
Ethyl methanesulfonate	40	33.7	84.2	1.5	20	46 - 113
Pentachloroethane	40	21.5	53.8	3.7	20	27 - 99
N-Nitrosopyrrolidine	40	26.8	67.0	5.8	20	51 - 112
Acetophenone	80	61.8	77.2	3.6	20	45 - 118
N-Nitrosomorpholine	40	30	75.0	3.0	20	51 - 112
o-Toluidine	40	23.1	57.8	4.0	20	49 - 97
a,a-Dimethylphenethylamine	40	0	0.0 *		20	70 - 130
2,6-Dichlorophenol	40	33.4	83.5	3.7	20	50 - 135
Hexachloropropene	40	6.2	15.5 *	3.2	20	21 - 105
N-Nitrosodibutylamine	40	30.9	77.2	4.3	20	43 - 130

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

070812 1737

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 137975LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Isosafrole	40	30.2	75.5	2.3	20	70 - 130
1,2,4,5-Tetrachlorobenzene	40	25.1	62.8	1.6	20	40 - 100
Safrole	40	32.8	82.0	6.0	20	52 - 100
1,4-Naphthoquinone	40	11.7	29.2	5.3	20	28 - 143
1,3-Dinitrobenzene	40	36.8	92.0	3.2	20	61 - 112
Pentachlorobenzene	40	30.3	75.8	6.1	20	50 - 99
1-Naphthylamine	40	20.8	52.0	5.9	20	38 - 91
2-Naphthylamine	40	22	55.0 *	5.1	20	70 - 130
2,3,4,6-Tetrachlorophenol	40	30.4	76.0	2.0	20	55 - 122
5-Nitro-o-toluidine	40	30.3	75.8	0.7	20	70 - 130
p-Phenylenediamine	40	30.9	77.2	1.0	20	58 - 107
Phenacetin	40	31.8	79.5	6.5	20	57 - 114
4-Aminobiphenyl	40	32.8	82.0	4.7	20	49 - 103
Pronamide	40	32.7	81.8	6.3	20	59 - 99
Pentachloronitrobenzene(PCNB)	40	40.4	101.0	4.8	20	60 - 104
Dinoseb	40	35.6	89.0	5.2	20	44 - 142
4-Nitroquinoline-1-oxide	40	32.8	82.0	6.0	20	10 - 125
Methapyriline	40	122	305.0 *	62.1 *	20	0 - 90
Aramite	40	30.2	75.5	7.6	20	41 - 127
p-Dimethylaminoazobenzene	40	28.9	72.2	4.6	20	70 - 130
2-Acetylaminofluorene	40	26.1	65.2	5.9	20	63 - 103
7,12-Dimethylbenz(a)anthracene	40	36.1	90.2	4.8	20	57 - 95
3-Methylcholanthrene	40	30.4	76.0	7.2	20	52 - 105
N-Nitrosopiperidine	40	29	72.5	1.7	20	53 - 112
1,3,5-Trinitrobenzene	40	18.5	46.2	4.2	20	29 - 163
Diallate (Avadex)	40	29	72.5	7.9	20	56 - 98
Isodrin	40	33.4	83.5	5.2	20	54 - 110
Chlorobenzilate	40	31.9	79.8	5.1	20	58 - 101
Kepone	40	33	82.5	10.9	20	0 - 165
0,0,0-Triethylphosphorothioate	40	28	70.0	5.5	20	50 - 106

Spike Recovery: 4 out of 94 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

8270 Standards Data

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SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =8270CAL1.D RRF10 =8270CAL2.D
RRF20 =8270CAL3.D RRF45 =8270CAL4.D RRF60 =8270CAL5.D

COMPOUND		RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
Pyridine		1.311	1.438	1.369	1.308	1.313		
N-Nitrosodimethylamine		0.480	0.579	0.517	0.481	0.476		
Aniline		1.674	1.882	1.673	1.572	1.596		
Bis(2-chloroethyl)ether		1.019	1.172	1.051	1.034	1.021		
Phenol	*	1.304	1.561	1.411	1.427	1.391		*
2-Chlorophenol		1.076	1.205	1.170	1.103	1.089		
1,3-Dichlorobenzene		1.267	1.551	1.358	1.318	1.360		
1,4-Dichlorobenzene	*	1.386	1.549	1.479	1.409	1.380		*
1,2-Dichlorobenzene		1.295	1.492	1.358	1.309	1.322		
Benzyl alcohol		0.773	0.888	0.792	0.751	0.769		
2,2'-Oxybis(1-chloropropane)		0.506	0.575	0.510	0.493	0.469		
2-Methylphenol		0.840	1.025	0.961	0.977	0.936		
Hexachloroethane		0.600	0.694	0.641	0.612	0.596		
N-Nitroso-di-n-propylamine	#	1.070	1.354	1.207	1.151	1.130		#
4-Methylphenol		1.290	1.608	1.427	1.412	1.405		
Nitrobenzene		0.509	0.595	0.541	0.499	0.516		
Isophorone		0.778	0.892	0.842	0.807	0.827		
2-Nitrophenol	*	0.188	0.233	0.207	0.207	0.212		*
2,4-Dimethylphenol		0.247	0.336	0.306	0.292	0.311		
Bis(2-chloroethoxy)methane		0.422	0.470	0.436	0.444	0.452		
2,4-Dichlorophenol	*	0.324	0.401	0.359	0.380	0.383		*
1,2,4-Trichlorobenzene		0.426	0.497	0.455	0.443	0.472		
4-Chloroaniline		0.413	0.491	0.445	0.447	0.446		
Hexachlorobutadiene	*	0.357	0.384	0.359	0.347	0.363		*
4-Chloro-3-methylphenol	*	0.321	0.404	0.348	0.355	0.364		*
Hexachlorocyclopentadiene	#	0.596	0.724	0.666	0.662	0.662		#
2,4,6-Trichlorophenol	*	0.423	0.497	0.465	0.470	0.479		*
2,4,5-Trichlorophenol		0.520	0.577	0.539	0.533	0.539		
2-Chloronaphthalene		1.073	1.224	1.122	1.133	1.129		
2-Nitroaniline		0.354	0.431	0.392	0.391	0.376		
Dimethylphthalate		1.341	1.558	1.463	1.428	1.399		
2,6-Dinitrotoluene		0.287	0.323	0.305	0.316	0.315		
3-Nitroaniline		0.267	0.299	0.298	0.276	0.265		
2,4-Dinitrophenol	#		0.192	0.225	0.244	0.255		#

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =8270CAL1.D RRF10 =8270CAL2.D
RRF20 =8270CAL3.D RRF45 =8270CAL4.D RRF60 =8270CAL5.D

COMPOUND		RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2	
Dibenzofuran		1.648	1.902	1.700	1.706	1.687			
2,4-Dinitrotoluene		0.381	0.457	0.409	0.409	0.410			
4-Nitrophenol	#	0.251	0.329	0.306	0.300	0.312			#
4-Chlorophenyl-phenylether		0.840	0.955	0.874	0.900	0.927			
Diethylphthalate		1.362	1.547	1.327	1.326	1.337			
4-Nitroaniline		0.300	0.271	0.241	0.264	0.256			
4,6-Dinitro-2-methylphenol			0.157	0.150	0.169	0.178			
N-Nitrosodiphenylamine	*	0.463	0.535	0.502	0.480	0.476			*
4-Bromophenyl-phenylether		0.266	0.310	0.291	0.281	0.295			
Hexachlorobenzene		0.305	0.344	0.319	0.323	0.318			
Pentachlorophenol	*	0.176	0.201	0.213	0.223	0.226			*
Di-n-butylphthalate		1.118	1.305	1.257	1.171	1.151			
Butylbenzylphthalate		0.376	0.448	0.399	0.389	0.379			
3,3'-Dichlorobenzidine		0.408	0.430	0.462	0.467	0.491			
Bis(2-ethylhexyl)phthalate		0.584	0.678	0.643	0.629	0.609			
Di-n-octylphthalate	*	0.786	1.017	0.969	0.975	0.948			*
2-Picoline		1.394	1.469	1.417	1.428	1.487			
N-Nitrosomethylethylamine		0.798	0.669	0.635	0.647	0.689			
N-Nitrosodiethylamine		0.544	0.669	0.643	0.646	0.674			
Methylmethanesulfonate		0.979	1.030	1.079	1.049	1.067			
Ethyl methanesulfonate		1.013	1.045	1.034	1.057	1.103			
Pentachloroethane		0.650	0.652	0.638	0.660	0.698			
N-Nitrosopyrrolidine		0.617	0.644	0.650	0.663	0.700			
Acetophenone		0.716	0.628	0.608	0.592	0.624			
N-Nitrosomorpholine		0.550	0.580	0.585	0.590	0.607			
o-Toluidine		1.986	2.105	2.084	2.125	2.181			
a,a-Dimethylphenethylamine		0.463	0.561	0.563	0.548	0.590			
2,6-Dichlorophenol		0.348	0.385	0.360	0.370	0.381			
Hexachloropropene		0.455	0.485	0.473	0.474	0.502			
N-Nitrosodibutylamine		0.291	0.351	0.347	0.333	0.359			
Isosafrole		0.294	0.350	0.319	0.340	0.352			
1,2,4,5-Tetrachlorobenzene		0.726	0.751	0.758	0.763	0.765			
Safrole		0.289	0.326	0.322	0.309	0.333			
1,4-Naphthoquinone		0.417	0.460	0.465	0.494	0.488			

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =8270CAL1.D RRF10 =8270CAL2.D
RRF20 =8270CAL3.D RRF45 =8270CAL4.D RRF60 =8270CAL5.D

COMPOUND	RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
1,3-Dinitrobenzene	0.208	0.195	0.214	0.216	0.221		
Pentachlorobenzene	0.740	0.741	0.749	0.782	0.758		
1-Naphthylamine	0.710	0.747	0.757	0.765	0.744		
2-Naphthylamine	1.010	0.926	0.986	1.002	0.992		
2,3,4,6-Tetrachlorophenol	0.405	0.423	0.438	0.462	0.457		
5-Nitro-o-toluidine	0.371	0.396	0.390	0.412	0.405		
p-Phenylenediamine	0.311	0.333	0.352	0.350	0.361		
Phenacetin	0.316	0.343	0.352	0.342	0.356		
4-Aminobiphenyl	0.700	0.734	0.718	0.691	0.718		
Pronamide	0.359	0.394	0.384	0.387	0.397		
Pentachloronitrobenzene(PCNB)	0.131	0.151	0.151	0.145	0.146		
Dinoseb	0.150	0.196	0.221	0.241	0.252		
4-Nitroquinoline-1-oxide	0.036	0.034	0.028	0.018	0.020		
Methapyriline		0.014	0.011	0.013	0.014		
Aramite	0.091	0.097	0.100	0.107	0.101		
p-Dimethylaminoazobenzene	0.197	0.212	0.234	0.245	0.245		
2-Acetylaminofluorene	0.337	0.417	0.456	0.490	0.493		
7,12-Dimethylbenz(a)anthracene	0.478	0.518	0.525	0.555	0.568		
3-Methylcholanthrene	0.528	0.557	0.574	0.618	0.634		
N-Nitrosopiperidine	0.153	0.180	0.185	0.183	0.189		
1,3,5-Trinitrobenzene	0.826	0.943	1.015	1.102	1.101		
Diallate (Avadex)	0.576	0.576	0.550	0.564	0.556		
Isodrin	0.149	0.153	0.149	0.146	0.153		
Chlorobenzilate	0.293	0.338	0.349	0.370	0.359		
Kepone	0.064	0.069	0.075	0.072	0.068		
0,0,0-Triethylphosphorothioate	0.848	0.866	0.942	1.003	1.015		
==========							
2-Fluorophenol(SURR)	1.008	1.143	1.086	1.055	1.046		
Phenol-d5(SURR)	1.329	1.498	1.388	1.356	1.347		
Nitrobenzene-d5(SURR)	0.576	0.631	0.568	0.555	0.564		
2-Fluorobiphenyl(SURR)	1.441	1.701	1.555	1.535	1.544		
2,4,6-Tribromophenol(SURR)	0.270	0.298	0.280	0.276	0.278		
p-Terphenyl-d14(SURR)	0.808	0.915	0.855	0.780	0.747		

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =8270CAL6.D RRF100 =8270CAL7.D

COMPOUND		RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
Pyridine		1.354	1.380				1.35328	3.5	
N-Nitrosodimethylamine		0.482	0.498				0.50174	7.3	
Aniline		1.642	1.646				1.6693	0.99895	
Bis(2-chloroethyl)ether		1.071	1.060				1.06117	5	
Phenol	*	1.438	1.474				1.42956	5.5	*
2-Chlorophenol		1.142	1.159				1.1349	4.2	
1,3-Dichlorobenzene		1.413	1.383				1.37854	6.5	
1,4-Dichlorobenzene	*	1.433	1.453				1.44124	4.1	*
1,2-Dichlorobenzene		1.344	1.361				1.35447	4.8	
Benzyl alcohol		0.767	0.812				0.79318	5.8	
2,2'-Oxybis(1-chloropropane)		0.474	0.475				0.50009	7.3	
2-Methylphenol		0.987	0.980				0.95793	6.1	
Hexachloroethane		0.611	0.604				0.62267	5.6	
N-Nitroso-di-n-propylamine	#	1.168	1.185				1.18064	7.5	#
4-Methylphenol		1.438	1.444				1.43204	6.5	
Nitrobenzene		0.523	0.525				0.52991	6	
Isophorone		0.832	0.821				0.82837	4.2	
2-Nitrophenol	*	0.217	0.220				0.21209	6.5	*
2,4-Dimethylphenol		0.322	0.318				0.30464	9.5	
Bis(2-chloroethoxy)methane		0.456	0.469				0.44962	3.8	
2,4-Dichlorophenol	*	0.394	0.395				0.37648	7.1	*
1,2,4-Trichlorobenzene		0.469	0.477				0.46267	5.1	
4-Chloroaniline		0.460	0.463				0.45205	5.2	
Hexachlorobutadiene	*	0.368	0.365				0.36345	3.1	*
4-Chloro-3-methylphenol	*	0.361	0.377				0.36133	7.1	*
Hexachlorocyclopentadiene	#	0.690	0.692				0.67016	5.9	#
2,4,6-Trichlorophenol	*	0.497	0.502				0.47633	5.8	*
2,4,5-Trichlorophenol		0.546	0.570				0.54618	3.7	
2-Chloronaphthalene		1.180	1.168				1.14689	4.2	
2-Nitroaniline		0.400	0.402				0.39238	6	
Dimethylphthalate		1.413	1.400				1.42881	4.7	
2,6-Dinitrotoluene		0.323	0.324				0.3132	4.3	
3-Nitroaniline		0.287	0.299				0.28434	5.3	
2,4-Dinitrophenol	#	0.268	0.278				0.2438	12.8	#

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =8270CAL6.D RRF100 =8270CAL7.D

COMPOUND		RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
Dibenzofuran		1.717	1.700				1.72292	4.8	
2,4-Dinitrotoluene		0.440	0.452				0.42279	6.5	
4-Nitrophenol	#	0.313	0.319				0.30432	8.3	#
4-Chlorophenyl-phenylether		0.959	0.967				0.91749	5.2	
Diethylphthalate		1.342	1.334				1.3678	5.9	
4-Nitroaniline		0.280	0.292				0.27192	7.6	
4,6-Dinitro-2-methylphenol		0.185	0.193				0.17194	9.6	
N-Nitrosodiphenylamine	*	0.499	0.510				0.49512	4.9	*
4-Bromophenyl-phenylether		0.299	0.307				0.29281	5.3	
Hexachlorobenzene		0.339	0.344				0.32743	4.6	
Pentachlorophenol	*	0.236	0.241				0.21647	10.3	*
Di-n-butylphthalate		1.155	1.083				1.17702	6.6	
Butylbenzylphthalate		0.387	0.363				0.3915	7	
3,3'-Dichlorobenzidine		0.503	0.489				0.46424	7.5	
Bis(2-ethylhexyl)phthalate		0.603	0.551				0.61388	6.7	
Di-n-octylphthalate	*	0.944	0.884				0.9318	8.1	*
2-Picoline		1.485	1.420				1.44274	2.6	
N-Nitrosomethylethylamine		0.669	0.636				0.67763	8.3	
N-Nitrosodiethylamine		0.676	0.661				0.64479	7.1	
Methylmethanesulfonate		1.044	1.001				1.03546	3.4	
Ethyl methanesulfonate		1.090	1.043				1.05506	3	
Pentachloroethane		0.694	0.678				0.66701	3.5	
N-Nitrosopyrrolidine		0.664	0.654				0.6562	3.8	
Acetophenone		0.619	0.631				0.63127	6.3	
N-Nitrosomorpholine		0.589	0.581				0.58321	2.9	
o-Toluidine		2.193	2.051				2.10355	3.4	
a,a-Dimethylphenethylamine		0.576	0.533				0.54764	7.6	
2,6-Dichlorophenol		0.389	0.376				0.37297	3.9	
Hexachloropropene		0.493	0.485				0.48114	3.2	
N-Nitrosodibutylamine		0.360	0.368				0.34426	7.5	
Isosafrole		0.355	0.356				0.33796	6.8	
1,2,4,5-Tetrachlorobenzene		0.795	0.787				0.76365	3	
Safrole		0.339	0.331				0.3211	5.3	
1,4-Naphthoquinone		0.505	0.496				0.47506	6.4	

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =8270CAL6.D RRF100 =8270CAL7.D

COMPOUND	RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
1,3-Dinitrobenzene	0.229	0.222				0.21503	5	
Pentachlorobenzene	0.796	0.808				0.76779	3.6	
1-Naphthylamine	0.768	0.732				0.74614	2.7	
2-Naphthylamine	0.999	0.944				0.9798	3.3	
2,3,4,6-Tetrachlorophenol	0.468	0.479				0.4475	5.9	
5-Nitro-o-toluidine	0.416	0.410				0.39972	3.9	
p-Phenylenediamine	0.366	0.355				0.34697	5.5	
Phenacetin	0.360	0.353				0.3459	4.3	
4-Aminobiphenyl	0.715	0.678				0.70769	2.7	
Pronamide	0.402	0.390				0.3876	3.6	
Pentachloronitrobenzene(PCNB)	0.153	0.152				0.14689	5.1	
Dinoseb	0.258	0.250				0.22409	0.99912	
4-Nitroquinoline-1-oxide	0.017	0.016				0.02423	35.9	<-
Methapyriline	0.014	0.014				0.01331	10.4	
Aramite	0.109	0.107				0.10177	6.4	
p-Dimethylaminoazobenzene	0.253	0.253				0.23404	9.3	
2-Acetylaminofluorene	0.526	0.515				0.4619	14.3	
7,12-Dimethylbenz(a)anthracene	0.582	0.596				0.54581	7.5	
3-Methylcholanthrene	0.638	0.654				0.60032	7.9	
N-Nitrosopiperidine	0.186	0.186				0.18032	6.8	
1,3,5-Trinitrobenzene	1.107	1.103				1.02808	10.6	
Diallate (Avadex)	0.573	0.579				0.56783	2	
Isodrin	0.149	0.146				0.14929	1.7	
Chlorobenzilate	0.385	0.382				0.35379	8.9	
Kepone	0.068	0.063				0.06852	6.4	
0,0,0-Triethylphosphorothioate	1.045	1.049				0.96686	8.6	
==========								
2-Fluorophenol(SURR)	1.078	1.080				1.07088	3.9	
Phenol-d5(SURR)	1.396	1.401				1.38792	4	
Nitrobenzene-d5(SURR)	0.567	0.573				0.57639	4.4	
2-Fluorobiphenyl(SURR)	1.557	1.546				1.55434	4.9	
2,4,6-Tribromophenol(SURR)	0.294	0.305				0.28588	4.6	
p-Terphenyl-d14(SURR)	0.724	0.655				0.78342	11	

Average Used: 6

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FORM VI

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD03 CalibrationDate: 08/02/12 Time: 2343

CCV ID: SSC1103021 Lab File ID: 8270SEC1.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Pyridine		1.35328	1.24	8.4	AVRG	
N-Nitrosodimethylamine		0.50174	0.47538	5.3	AVRG	
Aniline		45	36	20.0	LINR	
Bis(2-chloroethyl)ether		1.06117	1.096	3.3	AVRG	
Phenol	*	1.42956	1.443	0.9	AVRG	*
2-Chlorophenol		1.1349	1.129	0.5	AVRG	
1,3-Dichlorobenzene		1.37854	1.396	1.3	AVRG	
1,4-Dichlorobenzene	*	1.44124	1.433	0.6	AVRG	*
1,2-Dichlorobenzene		1.35447	1.354	0.0	AVRG	
Benzyl alcohol		0.79318	0.73537	7.3	AVRG	
2,2'-Oxybis(1-chloropropane)		0.50009	0.49821	0.4	AVRG	
2-Methylphenol		0.95793	0.91342	4.6	AVRG	
Hexachloroethane		0.62267	0.61687	0.9	AVRG	
N-Nitroso-di-n-propylamine	#	1.18064	1.202	1.8	AVRG	#
4-Methylphenol		1.43204	1.4	2.2	AVRG	
Nitrobenzene		0.52991	0.52178	1.5	AVRG	
Isophorone		0.82837	0.85385	3.1	AVRG	
2-Nitrophenol	*	0.21209	0.20857	1.7	AVRG	*
2,4-Dimethylphenol		0.30464	0.33877	11.2	AVRG	
Bis(2-chloroethoxy)methane		0.44962	0.49374	9.8	AVRG	
2,4-Dichlorophenol	*	0.37648	0.38312	1.8	AVRG	*
1,2,4-Trichlorobenzene		0.46267	0.48139	4.0	AVRG	
4-Chloroaniline		0.45205	0.46021	1.8	AVRG	
Hexachlorobutadiene	*	0.36345	0.4082	12.3	AVRG	*
4-Chloro-3-methylphenol	*	0.36133	0.38592	6.8	AVRG	*
Hexachlorocyclopentadiene	#	0.67016	0.67523	0.8	AVRG	#
2,4,6-Trichlorophenol	*	0.47633	0.49319	3.5	AVRG	*
2,4,5-Trichlorophenol		0.54618	0.53097	2.8	AVRG	
2-Chloronaphthalene		1.14689	1.206	5.2	AVRG	
2-Nitroaniline		0.39238	0.40631	3.6	AVRG	
Dimethylphthalate		1.42881	1.486	4.0	AVRG	
2,6-Dinitrotoluene		0.3132	0.33516	7.0	AVRG	
3-Nitroaniline		0.28434	0.30287	6.5	AVRG	
2,4-Dinitrophenol	#	0.2438	0.27918	14.5	AVRG	#
Dibenzofuran		1.72292	1.763	2.3	AVRG	
2,4-Dinitrotoluene		0.42279	0.45886	8.5	AVRG	

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FORM VII

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD03 CalibrationDate: 08/02/12 Time: 2343

CCV ID: SSC1103021 Lab File ID: 8270SEC1.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
4-Nitrophenol	#	0.30432	0.31467	3.4	AVRG	#
4-Chlorophenyl-phenylether		0.91749	0.94272	2.7	AVRG	
Diethylphthalate		1.3678	1.422	4.0	AVRG	
4-Nitroaniline		0.27192	0.29804	9.6	AVRG	
4,6-Dinitro-2-methylphenol		0.17194	0.16973	1.3	AVRG	
N-Nitrosodiphenylamine	*	0.49512	0.53277	7.6	AVRG	*
4-Bromophenyl-phenylether		0.29281	0.30236	3.3	AVRG	
Hexachlorobenzene		0.32743	0.33901	3.5	AVRG	
Pentachlorophenol	*	0.21647	0.2419	11.7	AVRG	*
Di-n-butylphthalate		1.17702	1.219	3.6	AVRG	
Butylbenzylphthalate		0.3915	0.4317	10.3	AVRG	
Bis(2-ethylhexyl)phthalate		0.61388	0.68482	11.6	AVRG	
Di-n-octylphthalate	*	0.9318	1.05	12.7	AVRG	*
==========						
2-Fluorophenol(SURR)		1.07088	1.097	2.4	AVRG	
Phenol-d5(SURR)		1.38792	1.329	4.2	AVRG	
Nitrobenzene-d5(SURR)		0.57639	0.52885	8.2	AVRG	
2-Fluorobiphenyl(SURR)		1.55434	1.436	7.6	AVRG	
2,4,6-Tribromophenol(SURR)		0.28588	0.29917	4.6	AVRG	
p-Terphenyl-d14(SURR)		0.78342	0.73621	6.0	AVRG	

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 0315

CCV ID: SSC1103039 Lab File ID: BSSEC.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
3,3'-Dichlorobenzidine	0.46424	0.49281	6.2	AVRG
Acetophenone	0.63127	0.56839	10.0	AVRG

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 0936

CCV ID: SSC1103003 Lab File ID: AP9SEC2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	
2-Picoline	1.44274	1.49	3.3	AVRG	
N-Nitrosomethylethylamine	0.67763	0.63453	6.4	AVRG	
N-Nitrosodiethylamine	0.64479	0.63322	1.8	AVRG	
Methylmethanesulfonate	1.03546	1.133	9.4	AVRG	
Ethyl methanesulfonate	1.05506	1.315	24.6	AVRG	<-
Pentachloroethane	0.66701	0.69254	3.8	AVRG	
N-Nitrosopyrrolidine	0.6562	0.69724	6.3	AVRG	
Acetophenone	0.63127	0.59036	6.5	AVRG	
N-Nitrosomorpholine	0.58321	0.65026	11.5	AVRG	
o-Toluidine	2.10355	2.156	2.5	AVRG	
a,a-Dimethylphenethylamine	0.54764	0.6571	20.0	AVRG	
2,6-Dichlorophenol	0.37297	0.36891	1.1	AVRG	
Hexachloropropene	0.48114	0.47082	2.1	AVRG	
N-Nitrosodibutylamine	0.34426	0.3557	3.3	AVRG	
Isosafrole	0.33796	0.35641	5.5	AVRG	
1,2,4,5-Tetrachlorobenzene	0.76365	0.75603	1.0	AVRG	
Safrole	0.3211	0.30716	4.3	AVRG	
1,4-Naphthoquinone	0.47506	0.50337	6.0	AVRG	
1,3-Dinitrobenzene	0.21503	0.25012	16.3	AVRG	
Pentachlorobenzene	0.76779	0.79842	4.0	AVRG	
1-Naphthylamine	0.74614	1.081	44.9	AVRG	<-
2-Naphthylamine	0.9798	1.318	34.5	AVRG	<-
2,3,4,6-Tetrachlorophenol	0.4475	0.42458	5.1	AVRG	
5-Nitro-o-toluidine	0.39972	0.38686	3.2	AVRG	
p-Phenylenediamine	0.34697	0.36704	5.8	AVRG	
Phenacetin	0.3459	0.36326	5.0	AVRG	
4-Aminobiphenyl	0.70769	0.76585	8.2	AVRG	
Pronamide	0.3876	0.41555	7.2	AVRG	
Pentachloronitrobenzene(PCNB)	0.14689	0.16184	10.2	AVRG	
Dinoseb	45	47.1	4.7	LINR	
4-Nitroquinoline-1-oxide	0.02423	0.02246	7.3	AVRG	
Methapyriline	0.01331	0.23253	1647.0	AVRG	<-
Aramite	0.10177	0.10069	1.1	AVRG	
p-Dimethylaminoazobenzene	0.23404	0.25823	10.3	AVRG	
2-Acetylaminofluorene	0.4619	0.45215	2.1	AVRG	
7,12-Dimethylbenz(a)anthracene	0.54581	0.54796	0.4	AVRG	

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FORM VII

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 0936

CCV ID: SSC1103003 Lab File ID: AP9SEC2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	
3-Methylcholanthrene	0.60032	0.37581	37.4	AVRG	<-
N-Nitrosopiperidine	0.18032	0.18498	2.6	AVRG	
1,3,5-Trinitrobenzene	1.02808	0.58424	43.2	AVRG	<-
Diallate (Avadex)	0.56783	0.5651	0.5	AVRG	
Isodrin	0.14929	0.16718	12.0	AVRG	
Chlorobenzilate	0.35379	0.37015	4.6	AVRG	
Kepone	0.06852	0.08112	18.4	AVRG	
0,0,0-Triethylphosphorothioate	0.96686	1.054	9.0	AVRG	

Average Used: 46.9

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1024

CCV ID: CCV1103019 Lab File ID: 8270CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Pyridine		1.35328	1.401	3.5	AVRG	
N-Nitrosodimethylamine		0.50174	0.55509	10.6	AVRG	
Aniline		45	44.2	1.8	LINR	
Bis(2-chloroethyl)ether		1.06117	1.069	0.7	AVRG	
Phenol	*	1.42956	1.49	4.2	AVRG	*
2-Chlorophenol		1.1349	1.122	1.1	AVRG	
1,3-Dichlorobenzene		1.37854	1.412	2.4	AVRG	
1,4-Dichlorobenzene	*	1.44124	1.472	2.1	AVRG	*
1,2-Dichlorobenzene		1.35447	1.351	0.3	AVRG	
Benzyl alcohol		0.79318	0.79475	0.2	AVRG	
2,2'-Oxybis(1-chloropropane)		0.50009	0.56791	13.6	AVRG	
2-Methylphenol		0.95793	0.98668	3.0	AVRG	
Hexachloroethane		0.62267	0.63854	2.5	AVRG	
N-Nitroso-di-n-propylamine	#	1.18064	1.224	3.7	AVRG	#
4-Methylphenol		1.43204	1.443	0.8	AVRG	
Nitrobenzene		0.52991	0.5213	1.6	AVRG	
Isophorone		0.82837	0.84542	2.1	AVRG	
2-Nitrophenol	*	0.21209	0.19572	7.7	AVRG	*
2,4-Dimethylphenol		0.30464	0.30172	1.0	AVRG	
Bis(2-chloroethoxy)methane		0.44962	0.43794	2.6	AVRG	
2,4-Dichlorophenol	*	0.37648	0.36494	3.1	AVRG	*
1,2,4-Trichlorobenzene		0.46267	0.44973	2.8	AVRG	
4-Chloroaniline		0.45205	0.4358	3.6	AVRG	
Hexachlorobutadiene	*	0.36345	0.36046	0.8	AVRG	*
4-Chloro-3-methylphenol	*	0.36133	0.35966	0.5	AVRG	*
Hexachlorocyclopentadiene	#	0.67016	0.67728	1.1	AVRG	#
2,4,6-Trichlorophenol	*	0.47633	0.47513	0.3	AVRG	*
2,4,5-Trichlorophenol		0.54618	0.52255	4.3	AVRG	
2-Chloronaphthalene		1.14689	1.166	1.7	AVRG	
2-Nitroaniline		0.39238	0.42605	8.6	AVRG	
Dimethylphthalate		1.42881	1.482	3.7	AVRG	
2,6-Dinitrotoluene		0.3132	0.30927	1.3	AVRG	
3-Nitroaniline		0.28434	0.28416	0.1	AVRG	
2,4-Dinitrophenol	#	0.2438	0.22959	5.8	AVRG	#
Dibenzofuran		1.72292	1.753	1.7	AVRG	
2,4-Dinitrotoluene		0.42279	0.40549	4.1	AVRG	

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FORM VII

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1024

CCV ID: CCV1103019 Lab File ID: 8270CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
4-Nitrophenol	#	0.30432	0.33777	11.0	AVRG	#
4-Chlorophenyl-phenylether		0.91749	0.91574	0.2	AVRG	
Diethylphthalate		1.3678	1.374	0.5	AVRG	
4-Nitroaniline		0.27192	0.25615	5.8	AVRG	
4,6-Dinitro-2-methylphenol		0.17194	0.16896	1.7	AVRG	
N-Nitrosodiphenylamine	*	0.49512	0.49308	0.4	AVRG	*
4-Bromophenyl-phenylether		0.29281	0.2894	1.2	AVRG	
Hexachlorobenzene		0.32743	0.32419	1.0	AVRG	
Pentachlorophenol	*	0.21647	0.21587	0.3	AVRG	*
Di-n-butylphthalate		1.17702	1.22	3.7	AVRG	
Butylbenzylphthalate		0.3915	0.37875	3.3	AVRG	
Bis(2-ethylhexyl)phthalate		0.61388	0.63829	4.0	AVRG	
Di-n-octylphthalate	*	0.9318	0.95559	2.6	AVRG	*
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2-Fluorophenol(SURR)		1.07088	1.065	0.5	AVRG	
Phenol-d5(SURR)		1.38792	1.4	0.9	AVRG	
Nitrobenzene-d5(SURR)		0.57639	0.57104	0.9	AVRG	
2-Fluorobiphenyl(SURR)		1.55434	1.578	1.5	AVRG	
2,4,6-Tribromophenol(SURR)		0.28588	0.28966	1.3	AVRG	
p-Terphenyl-d14(SURR)		0.78342	0.76105	2.9	AVRG	

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1048

CCV ID: CCV1103038 Lab File ID: BSCCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
3,3'-Dichlorobenzidine	0.46424	0.46306	0.3	AVRG
Acetophenone	0.63127	0.59437	5.8	AVRG

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FORM VII

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1111

CCV ID: CCV1103029 Lab File ID: AP9CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
2-Picoline	1.44274	1.436	0.5	AVRG
N-Nitrosomethylethylamine	0.67763	0.61955	8.6	AVRG
N-Nitrosodiethylamine	0.64479	0.64169	0.5	AVRG
Methylmethanesulfonate	1.03546	1.043	0.7	AVRG
Ethyl methanesulfonate	1.05506	1.091	3.4	AVRG
Pentachloroethane	0.66701	0.66029	1.0	AVRG
N-Nitrosopyrrolidine	0.6562	0.62854	4.2	AVRG
Acetophenone	0.63127	0.56323	10.8	AVRG
N-Nitrosomorpholine	0.58321	0.61068	4.7	AVRG
o-Toluidine	2.10355	2.155	2.4	AVRG
a,a-Dimethylphenethylamine	0.54764	0.54018	1.4	AVRG
2,6-Dichlorophenol	0.37297	0.35948	3.6	AVRG
Hexachloropropene	0.48114	0.47463	1.4	AVRG
N-Nitrosodibutylamine	0.34426	0.34333	0.3	AVRG
Isosafrole	0.33796	0.33191	1.8	AVRG
1,2,4,5-Tetrachlorobenzene	0.76365	0.74289	2.7	AVRG
Safrole	0.3211	0.31853	0.8	AVRG
1,4-Naphthoquinone	0.47506	0.48493	2.1	AVRG
1,3-Dinitrobenzene	0.21503	0.2155	0.2	AVRG
Pentachlorobenzene	0.76779	0.76575	0.3	AVRG
1-Naphthylamine	0.74614	0.75708	1.5	AVRG
2-Naphthylamine	0.9798	1.025	4.6	AVRG
2,3,4,6-Tetrachlorophenol	0.4475	0.44667	0.2	AVRG
5-Nitro-o-toluidine	0.39972	0.40902	2.3	AVRG
p-Phenylenediamine	0.34697	0.35759	3.1	AVRG
Phenacetin	0.3459	0.35712	3.2	AVRG
4-Aminobiphenyl	0.70769	0.67964	4.0	AVRG
Pronamide	0.3876	0.40306	4.0	AVRG
Pentachloronitrobenzene(PCNB)	0.14689	0.15715	7.0	AVRG
Dinoseb	45	43.5	3.3	LINR
4-Nitroquinoline-1-oxide	0.02423	0.02155	11.1	AVRG
Methapyriline	0.01331	0.01158	13.0	AVRG
Aramite	0.10177	0.10248	0.7	AVRG
p-Dimethylaminoazobenzene	0.23404	0.2355	0.6	AVRG
2-Acetylaminofluorene	0.4619	0.48342	4.7	AVRG
7,12-Dimethylbenz(a)anthracene	0.54581	0.55357	1.4	AVRG

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FORM VII

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1111

CCV ID: CCV1103029 Lab File ID: AP9CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
3-Methylcholanthrene	0.60032	0.59463	0.9	AVRG
N-Nitrosopiperidine	0.18032	0.18228	1.1	AVRG
1,3,5-Trinitrobenzene	1.02808	1.124	9.3	AVRG
Diallate (Avadex)	0.56783	0.56187	1.0	AVRG
Isodrin	0.14929	0.14626	2.0	AVRG
Chlorobenzilate	0.35379	0.36871	4.2	AVRG
Kepone	0.06852	0.07203	5.1	AVRG
0,0,0-Triethylphosphorothioate	0.96686	1.039	7.5	AVRG

FL-PRO Organics

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CASE NARRATIVE
FL-PRO Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506545

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method FL-PRO

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for FL-PRO semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met with the exception of:

Sample 138212MB was recovered below criteria for the following surrogate: o-Terphenyl Surrogate at 81 % with criteria of (82-142). The recovery of Nonatriacontane (C39) surrogate was within criteria, as well as all recoveries for the LCS and LCSD. Since the o-Terphenyl recovery was only slightly below criteria and since all other requirements were met, no further action was taken.

Sample Q1-TFS-MW-01 was recovered below criteria for the following surrogate: o-Terphenyl surrogate at 66.7 % with criteria of (82-142). The most probable cause for this recovery is matrix interference near the elution of the surrogate since there was a positive result for TPH at 3100ug/L. No further action was taken.

Sample Q1-TFS-MW-8D was recovered below criteria for the following surrogate: o-Terphenyl surrogate at 79.4 % with criteria of (82-142). The most probable cause for

Spectrum Analytical Inc. Lab Reference No./SDG: 3506545

Client: CH2M Hill

this recovery is matrix interference near the elution of the surrogate since there was a positive result for TPH at 1700ug/L. No further action was taken.

Samples coded accordingly.

D. Spikes:

1. Laboratory Control Spikes (LCS)

An LCS/LCSD set was analyzed. All percent recovery and relative percent difference (RPD) criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

This method does not require the use of internal standards.

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

SIGNED: DATE: 07/25/2012

FL-PRO ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Method: FL-PRO

EPA Sample No	Lab Sample ID
Q1-TFS-MW-01	350654501
Q1-TFS-MW-8D	350654502

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FL-PRO Sample Data

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1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-01

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654501 Lab File ID: 545-1.D

Sample wt/vol: 985 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 2 Date Extracted: 07/20/12

Level:(low/med) LOW Date Analyzed: 07/23/12 Time: 1423

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	3100		254	508	508

070812 1737

Form I

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-8D

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 350654502 Lab File ID: 545-2.D

Sample wt/vol: 985 Units: ML Date Received: 07/18/12

Concentrated Extract Volume: 2 Date Extracted: 07/20/12

Level:(low/med) LOW Date Analyzed: 07/23/12 Time: 1446

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	1700		254	508	508

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Form I

FL-PRO QC Summary

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1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138212MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Matrix: WATER Lab Sample ID: 138212MB Lab File ID: 10169MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 2 Date Extracted: 07/20/12

Level:(low/med) LOW Date Analyzed: 07/23/12 Time: 0849

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	500	U	250	500	500

FL-PRO ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

138212MB

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Lab File ID: 10169MB.D Lab Sample ID: 138212MB

Instrument ID: SFID01 Date Extracted: 07/20/12

Matrix: WATER Date Analyzed: 07/23/12

Level:(low/med) LOW Time Analyzed: 0849

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	138213LCS	138213LCS	10169LCS.D	07/23/12	0911
2	138214LCSD	138214LCSD	10169LD.D	07/23/12	0933
3	Q1-TFS-MW-01	350654501	545-1.D	07/23/12	1423
4	Q1-TFS-MW-8D	350654502	545-2.D	07/23/12	1446

COMMENTS:

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Form IV

2A

WATER FL-PRO ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG NO.: 3506545

Column(1): RTX-5 ID: 0.53 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
138212MB	81.0 *	86.7					1
138213LCS	90.0	93.3					0
138214LCSD	89.0	86.7					0
Q1-TFS-MW-01	66.7 *	78.9					1
Q1-TFS-MW-8D	79.4 *	85.5					1

Control Limits

S1	=	o-Terphenyl Surrogate	82 -	142
S2	=	Nonatriacontane (C-39)	42 -	193

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

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FL-PRO ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date: 07/09/12

Instrument ID: SFID01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.05 S2 : 10.06

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	STD1097423	45519	PROCAL7.D	07/09/12	1304	4.13	10.35
2	STD1097422	45520	PROCAL6.D	07/09/12	1326	4.06	10.11
3	STD1097421	46244	PROCAL5.D	07/09/12	1349	4.04	10.02
4	STD1097420	46481	PROCAL4.D	07/09/12	1411	4.05	10.06
5	STD1097419	45526	PROCAL3.D	07/09/12	1433	4.04	10.01
6	STD1097418	45524	PROCAL2.D	07/09/12	1455	4.03	9.99
7	STD1097417	45525	PROCAL1.D	07/09/12	1518	4.04	10.03
8	SSC1097426	45526	PROSEC.D	07/09/12	1540	4.07	10.15
9	CCV1100197	46481	PROCCV1.D	07/23/12	0821	4.02	9.95
10	138212MB	138212MB	10169MB.D	07/23/12	0849	4.11	10.19
11	138213LCS	138213LCS	10169LCS.D	07/23/12	0911	4.04	10
12	138214LCSD	138214LCSD	10169LD.D	07/23/12	0933	4.02	9.95
13	CCV1100198	46481	PROCCV2.D	07/23/12	1401	4.04	9.97
14	Q1-TFS-MW-01	350654501	545-1.D	07/23/12	1423	4.01	9.89
15	Q1-TFS-MW-8D	350654502	545-2.D	07/23/12	1446	4.01	9.89
16	CCV1100307	46481	PROCCV3.D	07/23/12	1807	4	9.84

			QC LIMITS
S1	=	o-Terphenyl Surrogate	(+/- 0.2 MINUTES)
S2	=	Nonatriacontane (C-39)	(+/- 0.46 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

Page 1 of 1

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FORM VIII

3

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

138213LCS

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	3400	2800	82.4			55 - 118

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

3

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

138214LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	3400	2800	82.4	0.0	20	55 - 118

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

FL-PRO Standards Data

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FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

LAB FILE ID: RRF0.17 =PROCAL1.D RRF0.34 =PROCAL2.D
RRF0.85 =PROCAL3.D RRF1.7 =PROCAL4.D RRF2.55 =PROCAL5.D

COMPOUND	RRF0.17	RRF0.34	RRF0.85	RRF1.7	RRF2.55
TPH	15029423.53	11486597.06	8479840	7603171.176	7363051.373
==========					
Nonatriacontane (C-39)(SURR)	4344413.333	4886093.333	4848813.333	4905520	5494413.333
o-Terphenyl Surrogate(SURR)	8221600	8892820	8108340	7909660	8265300

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

LAB FILE ID: RRF3.4 =PROCAL6.D RRF5.1 =PROCAL7.D

COMPOUND	RRF3.4	RRF5.1			
TPH	8235711.765	7978104.706			
==========					
Nonatriacontane (C-39)(SURR)	5891386.667	6452733.333			
o-Terphenyl Surrogate(SURR)	7973540	7585720			

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FORM VI

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

COMPOUND	CURVE	COEFFICIENTS AO	A1	%RSD OR R^2
TPH	LINR	-0.072929	1.28183E-07	0.99534
==========				
Nonatriacontane (C-39)(SURR)	AVRG		5260481.9	13.8
o-Terphenyl Surrogate(SURR)	AVRG		8136711.43	5

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FORM VI

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

Min RRF for SPCC(#) = 0 Max %RSD for CCC(*) = 0 %

LAB FILE ID: RT1: PROCAL1.D RT2: PROCAL2.D
RT3: PROCAL3.D RT4: PROCAL4.D RT5: PROCAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	TO
TPH	6.202	6.202	6.202	6.202	6.202			
==========								
Nonatriacontane (C-39)(SURR)	10.027	9.987	10.007	10.063	10.023			
o-Terphenyl Surrogate(SURR)	4.040	4.030	4.043	4.053	4.043			

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506545

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

Min RRF for SPCC(#) = 0 Max %RSD for CCC(*) = 0 %

LAB FILE ID: RT6: PROCAL6.D RT7: PROCAL7.D

COMPOUND	RT6	RT7				MIDCAL RT	RT WINDOW FROM	TO
TPH	6.202	6.202				6.202	0.753	11.650
==========								
Nonatriacontane (C-39)(SURR)	10.110	10.353				10.063	9.603	10.523
o-Terphenyl Surrogate(SURR)	4.063	4.133				4.053	3.853	4.253

7SSC

FL-PRO ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SFID01 CalibrationDate: 07/09/12 Time: 1540

CCV ID: SSC1097426 Lab File ID: PROSEC.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.78	4.7	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	6066840	15.3	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	8466960	4.1	AVRG

7

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SFID01 CalibrationDate: 07/23/12 Time: 0821

CCV ID: CCV1100197 Lab File ID: PROCCV1.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.62	4.7	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	5469906.667	4.0	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	7762220	4.6	AVRG

7

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SFID01 CalibrationDate: 07/23/12 Time: 1401

CCV ID: CCV1100198 Lab File ID: PROCCV2.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.52	10.6	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	5028400	4.4	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	6651960	18.2	AVRG

7

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506545

Instrument ID: SFID01 CalibrationDate: 07/23/12 Time: 1807

CCV ID: CCV1100307 Lab File ID: PROCCV3.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.52	10.6	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	5396960	2.6	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	7468720	8.2	AVRG

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FORM VII

Chain of Custody Documentation

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PEL

A DIVISION OF SPECTRUM ANALYTICAL, INC. featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

3506545 MK

Page 1 of _____

Special Instructions:
TAT- Indicate Date Needed: 28 Days
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: Bethany Garvey
CH2M HILL
(on-file)

Project Mgr.: Greg Rowell

Invoice To: Greg Rowell
CH2M HILL
(on-file)

P.O. No.: _____ RQN: _____

Project No.: 426847
Site Name: Truck Fill Stand (TFS)
Location: NAS KW, Key West State: FL
Sampler(s): Nikki Monroe

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9=_____ 10=_____ 11= _____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

3506545

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		VOC 8260B	SVOC 8270 A	SVOC 8260 SIM	FL-PRO					Notes:
List preservative code below:											2			3					
						Containers:					Analyses:								
-01	Q1-TFS-MW-01	7-17-12	1255	G	GW	3	6				3	2	2	2					
-02	Q1-TFS-MW-8D	7-17-12	1500	G	GW	3	6				3	2	2	2					
-03	Q1-TFS-TB-1	7-17-12	—	G	W	2					2								Trip Blank 1

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State specific reporting standards:

☐ E-mail to greg.rowell@ch2m.com
EDD Format CH2M HILL
PH < 2 8260, FL-Pro

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 5.1

Relinquished by:	Received by:	Date:	Time:
[signature]	Fed Ex	7-17-12	16:15
	[signature]	7/18/12	08:35

143

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number 8993 7172 1175 0200 Form ID No.

FedEx Retrieval Copy

1 From

Date 7-17-12 [redacted]

Sender's Name Nikki Munroe Phone 504 472 1299

Company CLIZM HILL

Address 20419 Seagrape Trail

Dept./Floor/Suite/Room

City Big Pine Key State FL ZIP 33042

2 Your Internal Billing Reference 426847.11.FW-09 / 32870

3 To

Recipient's Name PFL Sample Receiving Phone 813 888-9507

Company PFL

Address 8405 Benjamin Rd Suite A

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Tampa State FL ZIP 33634

01 ☐ HOLD Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

31 ☐ HOLD Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

8993 7172 1175

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. *For packages over 150 lbs., use the new FedEx Express Freight US Airbill.*

Next Business Day

06 ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

01 ☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

05 ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

49 ☐ NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.

03 ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

06 ☐ FedEx Envelope* 02 ☐ FedEx Pak* 03 ☐ FedEx Box 04 ☐ FedEx Tube 01 ☒ Other

6 Special Handling and Delivery Signature Options

03 ☐ **SATURDAY DELIVERY**

☒ No Signature Required — Package may be left without obtaining a signature for delivery.

10 ☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

34 ☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

☒ No 04 ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. 06 ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

1 ☒ Sender — Acct. No. in Section 1 will be billed. 2 ☐ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

[redacted]

Total Packages 1 Total Weight 30 lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

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3506545

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pH LOG SHEET

WO#: 3506545

Client/Project NAS Key West

SampNumber	Method	Matrix		pH	Containers	Temp	Acid	
350654501	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 18-Jul-12
350654501	8260	W	<	2	(3)		HCL	MKeohane 18-Jul-12
350654502	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 18-Jul-12
350654502	8260	W	<	2	(3)		HCL	MKeohane 18-Jul-12
350654503	8260	W	<	2	(3)		HCL	MKeohane 18-Jul-12

Sample Receipt Confirmation Sheet

Client Information

SDG:	3506545	**Level:**	3
Client:	CH2M Hill	**Date Rec'd:**	7/18/2012 8:35:00 AM
Profile:	91013	**Due Date:**	8/1/2012
Project:	Boca Chica Truck Fill Stand - JP-5	**Profile Name:**	NAS Key West

Sample Verification

Samples/Cooler Secure?	Yes	**COC Present?**	Yes
Temperature of Samples:	5.1	**All Samples on COC accounted For?**	Yes
Number of Coolers Received:	1	**All Samples Rec'd Intact?**	Yes
Temp Gun ID:	111533994	**Sample Vol. Sufficient For Analysis**	Yes
pH Verified?	Yes	**Samples Rec'd W/I Hold Time?**	Yes
pH WNL?	Yes	**Are All Samples to be Analyzed?**	Yes
Samples Received By:	Fed-Ex	**Correct Sample Containers?**	Yes
Tracking Number:	899371721175	**COC Comments written on COC?**	Yes
Profile Picked By:	MG	**Samplers Initials on COC?**	Yes
Soil Origin (Domestic/Foreign):		**Sample Date/Time Indicated?**	Yes
Site Location/Project on COC?	Yes	**TAT Requested:**	STD
Client Project # on COC?	Yes	**Client Requests Verbal Results?**	No
Project Mgr. Indicated on COC?	Yes	**Client Requests Faxed Results?**	No
COC relinquished/Dated by Client?	Yes	**Specific Subcontract Indicated?**	No
COC Received/Dated by SA?	Yes	**Written on Outside Lab Board?**	No
Written on Internal COC?	Yes	**Radioactivity Check?**	No
Lab to Conduct ALL Analyses?	Yes		

Comments

Specific tests noted on COC.

LABEL REVIEW CF 7/18/2012

PEER REVIEW CF 7/19/2012

Client: CH2M Hill

WONo: 3506545 Profile Name: NAS Key West Profile #: 91013

MATRIX W

Sample #	Bottle	Parameter		Check	Received	Date
01	001	8260	Volatile Organic Compounds	In	Marianna Keohane	7/18/2012 11:12:40 AM
01	002	8260	Volatile Organic Compounds	In	Marianna Keohane	7/18/2012 11:12:41 AM
01	003	8260	Volatile Organic Compounds	In	Marianna Keohane	7/18/2012 11:12:41 AM
01	003	8260	Volatile Organic Compounds	Consumed	Marcell Stephens	7/28/2012 9:51:55 AM
01	004	8270	GCMS semivolatile	In	Marianna Keohane	7/18/2012 11:12:41 AM
01	005	8270	GCMS semivolatile	In	Marianna Keohane	7/18/2012 11:12:41 AM
01	004	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/19/2012 10:36:46 AM
01	006	8270_SIM	GCMS semivolatile SIM	In	Marianna Keohane	7/18/2012 11:12:41 AM
01	007	8270_SIM	GCMS semivolatile SIM	In	Marianna Keohane	7/18/2012 11:12:41 AM
01	007	8270_SIM	GCMS semivolatile SIM	Consumed	Ryan Bennett	7/20/2012 9:52:26 AM
01	008	FL-PRO	Petroleum Hydrocarbons	In	Marianna Keohane	7/18/2012 11:12:41 AM
01	009	FL-PRO	Petroleum Hydrocarbons	In	Marianna Keohane	7/18/2012 11:12:41 AM
01	009	FL-PRO	Petroleum Hydrocarbons	Consumed	Ryan Bennett	7/20/2012 9:50:05 AM
02	001	8260	Volatile Organic Compounds	In	Marianna Keohane	7/18/2012 11:12:41 AM
02	002	8260	Volatile Organic Compounds	In	Marianna Keohane	7/18/2012 11:12:42 AM
02	003	8260	Volatile Organic Compounds	In	Marianna Keohane	7/18/2012 11:12:42 AM
02	003	8260	Volatile Organic Compounds	Consumed	Marcell Stephens	7/28/2012 9:51:59 AM
02	004	8270	GCMS semivolatile	In	Marianna Keohane	7/18/2012 11:12:42 AM
02	005	8270	GCMS semivolatile	In	Marianna Keohane	7/18/2012 11:12:42 AM
02	004	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/19/2012 10:36:49 AM
02	006	8270_SIM	GCMS semivolatile SIM	In	Marianna Keohane	7/18/2012 11:12:42 AM
02	007	8270_SIM	GCMS semivolatile SIM	In	Marianna Keohane	7/18/2012 11:12:42 AM
02	007	8270_SIM	GCMS semivolatile SIM	Consumed	Ryan Bennett	7/20/2012 9:52:30 AM
02	008	FL-PRO	Petroleum Hydrocarbons	In	Marianna Keohane	7/18/2012 11:12:42 AM
02	009	FL-PRO	Petroleum Hydrocarbons	In	Marianna Keohane	7/18/2012 11:12:42 AM

02	009	FL-PRO	Petroleum Hydrocarbons	Consumed	Ryan Bennett	7/20/2012 9:50:12 AM
03	001	8260	Volatile Organic Compounds	In	Marianna Keohane	7/18/2012 11:12:42 AM
03	002	8260	Volatile Organic Compounds	In	Marianna Keohane	7/18/2012 11:12:42 AM
03	001	8260	Volatile Organic Compounds	Consumed	Marcell Stephens	7/28/2012 9:52:03 AM

Addendum

070812 1737

Letter of Acceptance

Customer Name:	CH2M Hill
Date and Time Received:	7/18/2012 8:35:00 AM
Date to be Reported:	8/8/2012
Laboratory Submission Number/SDG:	3506545

Project: NASKW Truck Fill Stand (TFS) 426847

Samples: The submission consisted of 3 samples, including QC, with sample identification shown in the attached data tables.

Tests: The Samples will be analyzed for EPA methods: 8260, 8270, 8270_SIM, FL-PRO.

Sample Custody/COC discrepancies:

None.

Notes:

Temp 5.1
PH< 2 8260, Fl-Pro

Distribution of Report to:

CH2M Hill
Attn: Greg Rowell

Note: Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis. Spectrum Analytical letters and reports are for the exclusive use of the client to whom they are addressed. Our letters and reports apply to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar materials.

Log-in Report

Level: 3

Total of: 9 analyses on 12 samples (including QC) *24-Jul-12*

Report/SDG #: 3506545

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-01	350654501		W	7/17/2012 12:55:00 PM	7/18/2012 8:35:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-8D	350654502		W	7/17/2012 3:00:00 PM	7/18/2012 8:35:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-TB-1	350654503		W	7/17/2012	7/18/2012 8:35:00 AM

Method		
8260	Volatile Organic Compounds	8260

Mark Gudnason [Tampa]

From: Mark Gudnason [Tampa]
Sent: Wednesday, August 01, 2012 6:05 PM
To: 'Bethany.Garvey@CH2M.com'; Camden.Robinson@CH2M.com; 'Greg.Rowell@CH2M.com'
Subject: FW: 3506545-8260-Key West

Good afternoon.
This will be in the case narrative for the referenced method and SDG.

A. Calibration:

All acceptance criteria were met. The low calibration standard is 10 ug/L for the following analyte(s): Acrylonitrile.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met .Please note that:

LCS 072812LCS11D was analyzed with the water samples on 07/28/12. The following analyte(s) were recovered above criteria: Acetonitrile at 134 % with criteria of (37-122). No further action was taken, since LCS11 met percent recovery criteria. The following analyte(s) exceeded RPD criteria: Acetone at 20.2 % with criteria of (20), Dichlorodifluoromethane at 22.7 % with criteria of (20), Tetrachloroethene at 20.2 % with criteria of (20).No further action was taken, since percent recovery criteria were met.

Samples coded accordingly.

Mark Gudnason [Tampa]

From: Mark Gudnason [Tampa]
Sent: Monday, August 06, 2012 6:09 PM
To: 'Bethany.Garvey@CH2M.com'; Camden.Robinson@CH2M.com; 'Greg.Rowell@CH2M.com'
Subject: FW: 3506545-8270- key west

Good afternoon.
This will be in the case narrative for the referenced method and SDG.

A. Calibration:

All acceptance criteria were met with the exception of:

SSC1103003 was the second source verification standard analyzed with the initial calibration on 08/03/12. The %D was over the 20% limit for the following compounds: Ethyl methanesulfonate (+24.6%), 1-Naphthylamine (+44.9%), 2-Naphthylamine (+34.6%), Methapyriline (+1647%), 3-Methylcholanthrene (-37.4%), 1,3,5-Trinitrobenzene (-43.2%). No further action was taken, since these compounds were not detected in any samples and were a result of a discrepancy between the primary and secondary standards. The secondary standard is also used to spike the LCS. Because of this difference, Methapyriline exceeded the calibration range in the LCS. No further action was taken, since this compound was not detected in any samples.

The Percent RSD was over the 15% limit for 4-Nitroquinoline-1-oxide for the initial calibration at 35.9%. No further action was taken, since this compound was not detected in any samples.

Spectrum Analytical Inc. does not analyze a low calibration standard at the requested RL for all analytes. The low calibration standard is 10 ug/L for the following analytes: 4,6-Dinitro-2-methylphenol, Methapyriline.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:

LCS 137974LCS was analyzed with the water samples extracted on 07/19/12. The following analytes were recovered below criteria: 1,4-Naphthoquinone at 27.8 % with criteria of (28-143), 2-Acetylaminofluorene at 61.5 % with criteria of (63-103), Hexachloropropene at 16 % with criteria of (21-105), p-Dimethylaminoazobenzene at 69 % with criteria of (70-130). The following analytes had marginal exceedance limit failures: 2-Naphthylamine at 52.2 % with criteria of (60-140), a,a-Dimethylphenethylamine at 0 % with criteria of (60-140), Methapyriline at 580 % with criteria of (0-105). No further action

was taken. None of these compounds were detected in any samples.

LCS 137975LCSD was analyzed with the water samples extracted on 07/19/12. The following analyte was recovered below criteria: Hexachloropropene at 15.5 % with criteria of (21-105). The following analyte(s) were recovered above criteria: Methapyriline at 305 % with criteria of (0-90). The following analytes had marginal exceedance limit failures: 2-Naphthylamine at 55 % with criteria of (60-140), a,a-Dimethylphenethylamine at 0 % with criteria of (60-140), Methapyriline at 305 % with criteria of (0-105). No further action was taken. None of these compounds were detected in any samples.

Samples coded accordingly.

End Of Report

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Date Reported:
07-Aug-12

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

CH2M Hill
115 Perimeter Center Place, NE
Suite 700
Atlanta, GA 30346-1278

Attn: Greg Rowell

Project # 3506563
Project: NASKW Truck Fill Stand (TFS) 426847

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
350656301	Q1-TFS-MW-17	W	18-Jul-12 9:10	19-Jul-12 10:50
350656302	Q1-TFS-MW-17MS	W	18-Jul-12 9:15	19-Jul-12 10:50
350656303	Q1-TFS-MW-17MSD	W	18-Jul-12 9:15	19-Jul-12 10:50
350656304	Q1-TFS-MW-15	W	18-Jul-12 10:55	19-Jul-12 10:50
350656305	Q1-TFS-MW-15-DUP	W	18-Jul-12 0:00	19-Jul-12 10:50
350656306	Q1-TFS-MW-17-RS	W	18-Jul-12 8:15	19-Jul-12 10:50
350656307	Q1-TFS-MW-05	W	18-Jul-12 13:50	19-Jul-12 10:50
350656308	Q1-TFS-MW-11	W	18-Jul-12 15:00	19-Jul-12 10:50
350656309	Q1-TFS-TB-2	W	18-Jul-12 0:00	19-Jul-12 10:50

Soil samples are reported on dry weight basis, unless otherwise noted.

Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis.

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet unless noted in the case narrative.

Please contact the laboratory at 813-888-9507 with any questions regarding the data contained in the laboratory report.

Florida	E84207
Texas	T104704408-12-4
South Carolina	96011001
North Dakota	R-178
California	07253CA
Louisiana	02025
Kansas	E-10385
Arkansas	11-036-1

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2259 Testing

Respectfully Submitted,

Brian Spann
Laboratory Director
Spectrum Analytical, Inc. Florida Division

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EXECUTIVE SUMMARY - Detection Highlights

3506563

SAMPLE ID: Q1-TFS-MW-05

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Acenaphthene	0.0330 J	0.050	UG/L	SW8270D-SIM
Benzo(a)pyrene	0.0270 J	0.050	UG/L	SW8270D-SIM
Benzo(b)fluoranthene	0.0530	0.050	UG/L	SW8270D-SIM
Benzo(g,h,i)perylene	0.0360 J	0.050	UG/L	SW8270D-SIM
Benzo(k)fluoranthene	0.0200 J	0.050	UG/L	SW8270D-SIM
Chrysene	0.0270 J	0.050	UG/L	SW8270D-SIM
Fluoranthene	0.0360 J	0.050	UG/L	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	0.0310 J	0.050	UG/L	SW8270D-SIM
Phenanthrene	0.0210 J	0.050	UG/L	SW8270D-SIM
Pyrene	0.0350 J	0.050	UG/L	SW8270D-SIM

SAMPLE ID: Q1-TFS-MW-15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Benzene	4.50	0.50	UG/L	SW8260B
Carbon disulfide	0.770 J	1.0	UG/L	SW8260B
Ethylbenzene	0.350 J	0.50	UG/L	SW8260B
Toluene	0.310 J	1.0	UG/L	SW8260B
Xylene (total)	0.960 J	2.0	UG/L	SW8260B
1-Methylnaphthalene	31.2	0.20	UG/L	SW8270D-SIM
2-Methylnaphthalene	16.7	0.20	UG/L	SW8270D-SIM
Acenaphthene	1.90	0.20	UG/L	SW8270D-SIM
Acenaphthylene	0.210	0.20	UG/L	SW8270D-SIM
Anthracene	1.00	0.20	UG/L	SW8270D-SIM
Benzo(a)anthracene	0.200	0.20	UG/L	SW8270D-SIM
Chrysene	0.180 J	0.20	UG/L	SW8270D-SIM
Fluoranthene	4.00	0.20	UG/L	SW8270D-SIM
Fluorene	2.40	0.20	UG/L	SW8270D-SIM
Naphthalene	33.0	0.20	UG/L	SW8270D-SIM
Phenanthrene	6.30	0.20	UG/L	SW8270D-SIM
Pyrene	2.60	0.20	UG/L	SW8270D-SIM
TPH	20900	5000	UG/L	FL-PRO

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EXECUTIVE SUMMARY - Detection Highlights

3506563

SAMPLE ID: Q1-TFS-MW-15-DUP

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Benzene	4.60	0.50	UG/L	SW8260B
Carbon disulfide	0.950 J	1.0	UG/L	SW8260B
Ethylbenzene	0.400 J	0.50	UG/L	SW8260B
Toluene	0.300 J	1.0	UG/L	SW8260B
Xylene (total)	0.970 J	2.0	UG/L	SW8260B
1-Methylnaphthalene	25.2	0.20	UG/L	SW8270D-SIM
2-Methylnaphthalene	13.1	0.20	UG/L	SW8270D-SIM
Acenaphthene	1.80	0.20	UG/L	SW8270D-SIM
Acenaphthylene	0.200	0.20	UG/L	SW8270D-SIM
Anthracene	0.810	0.20	UG/L	SW8270D-SIM
Benzo(a)anthracene	0.220	0.20	UG/L	SW8270D-SIM
Chrysene	0.180 J	0.20	UG/L	SW8270D-SIM
Fluoranthene	3.50	0.20	UG/L	SW8270D-SIM
Fluorene	2.40	0.20	UG/L	SW8270D-SIM
Naphthalene	26.1	0.20	UG/L	SW8270D-SIM
Phenanthrene	5.40	0.20	UG/L	SW8270D-SIM
Pyrene	2.40	0.20	UG/L	SW8270D-SIM
TPH	19900	5100	UG/L	FL-PRO

SAMPLE ID: Q1-TFS-MW-17

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Acenaphthene	0.830	0.050	UG/L	SW8270D-SIM
Acenaphthylene	0.0370 J	0.050	UG/L	SW8270D-SIM
Anthracene	0.0290 J	0.050	UG/L	SW8270D-SIM
Fluoranthene	0.0790	0.050	UG/L	SW8270D-SIM
Naphthalene	0.0700	0.050	UG/L	SW8270D-SIM
Phenanthrene	0.0240 J	0.050	UG/L	SW8270D-SIM
Pyrene	0.0220 J	0.050	UG/L	SW8270D-SIM
TPH	1000	500	UG/L	FL-PRO

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EXECUTIVE SUMMARY - Detection Highlights

3506563

SAMPLE ID: Q1-TFS-MW-17-RS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Methylene chloride	1.10 J	5.0	UG/L	SW8260B
Toluene	3.00	1.0	UG/L	SW8260B
Naphthalene	0.0210 J	0.050	UG/L	SW8270D-SIM
TPH	300 J	500	UG/L	FL-PRO

SAMPLE ID: Q1-TFS-TB-2

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Acetone	3.20 J	10	UG/L	SW8260B
Carbon disulfide	1.00	1.0	UG/L	SW8260B
Methylene chloride	0.750 J	5.0	UG/L	SW8260B

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Organics

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Organic Data Qualifiers

U Indicates the analyte was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the reporting limit for that analyte. The reporting limit can vary from sample to sample depending on dilution factors or the percent moisture adjustment when indicated.

J Indicates estimated value. It is used when the data indicates the presence of an analyte above the method detection limit (MDL) yet lower than the reporting limit.

B Indicates the analyte was found in the associated blank as well as in the sample. The notation indicates possible contamination of the sample.

E Indicates the value reported is above the highest calibration standard for that analyte. The sample should be analyzed at an appropriate dilution. "E" qualified values are estimations and the diluted result may be reported on another Form 1.

D Indicates the analyte has been identified in a dilution reanalysis. "D" qualifiers are used for samples that have been analyzed at a lesser dilution than required for accurate quantitation.

C The "C" qualifier indicates the presence of this analyte has been confirmed by GC/MS analysis.

P This qualifier is used for pesticide / Aroclor target analytes where there is greater than 25% difference for the detected concentration between the two GC columns.

N This qualifier indicates presumptive evidence of an analyte. This qualifier is only used for tentatively identified compounds (TIC), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the "N" qualifier is not used.

A This qualifier indicates that a TIC is a suspected aldol-condensation product.

X Data flagged as rejected by analyst utilizing analytical judgement.

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Organic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for organic analysis are defined below:

DL Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.

R Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.

RE Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.

MS Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).

SD Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).

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8260 Volatile Organics

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CASE NARRATIVE
Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506563

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8260B

IV. PREPARATION

Water samples were prepared by SW846/5030 for EPA8260B volatiles analysis. All aspects of sample preparation proceeded without exception.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met. The low calibration standard is 10 ug/L for the following analyte(s): Acrylonitrile.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

An LCS/LCSD set was analyzed. All percent recovery and relative percent difference (RPD) criteria were met.

Spectrum Analytical Inc. Lab Reference No./SDG: 3506563

Client: CH2M Hill

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

A client requested MS/SD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met with the exception of:

MS - Q1-TFS-MW-17MS was analyzed with the water samples on 07/30/12. The following analyte(s) were recovered below criteria:1,2,3-Trichloropropane at 72 % with criteria of (75-125), 1,4-Dichloro-2-butene at 56.8 % with criteria of (68-115), Propionitrile at 69 % with criteria of (70-130) and the following analyte(s) were recovered above criteria:Methyl iodide at 228 % with criteria of (75-152).

SD - Q1-TFS-MW-17MSD was analyzed with the water samples on 07/30/12. The following analyte(s) were recovered below criteria:1,4-Dichloro-2-butene at 55.5 % with criteria of (68-115) and the following analyte(s) were recovered above criteria:Methyl iodide at 270 % with criteria of (75-152). The following analyte(s) exceeded RPD criteria:Chloromethane at 42.6 % with criteria of (20), Dichlorodifluoromethane at 24.9 % with criteria of (20).

Samples coded accordingly.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.
Analytes were detected in Trip Blank Q1-TFS-TB-2. The following analyte(s) were detected below RL: Acetone at 3.2 ug/L, Methylene chloride at 0.75 ug/L. The following analyte(s) were detected above RL: Carbon disulfide at 1 ug/L.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Signature:
Name: Brian C. Spanh Title: Lab Director

SIGNED: DATE: 08/01/2012

VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Method: 8260

EPA Sample No	Lab Sample ID
Q1-TFS-MW-17	350656301
Q1-TFS-MW-15	350656304
Q1-TFS-MW-15-DUP	350656305
Q1-TFS-MW-17-RS	350656306
Q1-TFS-MW-05	350656307
Q1-TFS-MW-11	350656308
Q1-TFS-TB-2	350656309

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8260 Sample Data

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1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 6563-01.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2345

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 6563-01.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2345

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 6563-01.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2345

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 6563-04.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0008

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.77	J	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	4.5		0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 6563-04.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0008

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.31	J	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.35	J	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 6563-04.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0008

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	0.96	J	0.5	1	2

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 6563-05.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0031

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.95	J	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	4.6		0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 6563-05.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0031

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.3	J	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.4	J	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 6563-05.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0031

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	0.97	J	0.5	1	2

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17-RS

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656306 Lab File ID: 6563-06.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0053

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.1	J	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17-RS

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656306 Lab File ID: 6563-06.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0053

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	3		0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17-RS

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656306 Lab File ID: 6563-06.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0053

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 6563-07.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0116

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 6563-07.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0116

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 6563-07.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0116

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

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Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-11

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656308 Lab File ID: 6563-08.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0138

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-11

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656308 Lab File ID: 6563-08.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0138

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-11

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656308 Lab File ID: 6563-08.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0138

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-2

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656309 Lab File ID: 6563-09.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2323

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	1		0.19	0.38	1
75-09-2	Methylene chloride	0.75	J	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	3.2	J	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-2

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656309 Lab File ID: 6563-09.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2323

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-2

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656309 Lab File ID: 6563-09.D

Sample wt/vol: 5 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2323

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

8260 QC Summary

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42 073012BLK14

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 073012BLK14 Lab File ID: BLK14.D

Sample wt/vol: 5 Units: ML Date Received: 07/30/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2300

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1

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Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

073012BLK14

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 073012BLK14 Lab File ID: BLK14.D

Sample wt/vol: 5 Units: ML Date Received: 07/30/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2300

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

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Form I

4

VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268 073012BLK14

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Lab File ID: BLK14.D Lab Sample ID: 073012BLK14

Instrument ID: VMS01 Date Extracted:

Matrix: WATER Date Analyzed: 07/30/12

Level:(low/med) LOW Time Analyzed: 2300

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	073012LCS12	073012LCS12	LCS12.D	07/30/12	2022
2	073012LCS12D	073012LCS12D	LCS12D.D	07/30/12	2045
3	Q1-TFS-MW-17MS	350656302	6563-02MS.D	07/30/12	2130
4	Q1-TFS-MW-17MSD	350656303	6563-03SD.D	07/30/12	2153
5	Q1-TFS-TB-2	350656309	6563-09.D	07/30/12	2323
6	Q1-TFS-MW-17	350656301	6563-01.D	07/30/12	2345
7	Q1-TFS-MW-15	350656304	6563-04.D	07/31/12	0008
8	Q1-TFS-MW-15-DUP	350656305	6563-05.D	07/31/12	0031
9	Q1-TFS-MW-17-RS	350656306	6563-06.D	07/31/12	0053
10	Q1-TFS-MW-05	350656307	6563-07.D	07/31/12	0116
11	Q1-TFS-MW-11	350656308	6563-08.D	07/31/12	0138

COMMENTS:

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Form IV

2A

WATER VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG NO.: 3506563

Column(1): DB-624 ID: 0.18 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
073012BLK14	101.0	98.8	101.0	102.0			0
073012LCS12	99.0	98.8	97.2	98.4			0
073012LCS12D	99.4	99.4	99.2	101.0			0
Q1-TFS-MW-05	103.0	99.6	104.0	101.0			0
Q1-TFS-MW-11	105.0	103.0	101.0	105.0			0
Q1-TFS-MW-15	98.0	102.0	99.4	102.0			0
Q1-TFS-MW-15-DUP	97.4	102.0	103.0	103.0			0
Q1-TFS-MW-17	97.6	97.2	100.0	98.6			0
Q1-TFS-MW-17MS	98.2	99.2	98.4	98.6			0
Q1-TFS-MW-17MSD	98.0	100.0	98.6	100.0			0
Q1-TFS-MW-17-RS	99.0	98.4	101.0	102.0			0
Q1-TFS-TB-2	99.8	96.0	97.2	104.0			0

Control Limits

S1	=	Dibromofluoromethane	85 -	115
S2	=	Toluene-d8	85 -	120
S3	=	4-Bromofluorobenzene	75 -	120
S4	=	1,2-Dichloroethane-d4	70 -	120

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Lab File ID: BFB12.D BFB Injection Date: 07/12/12

Instrument ID: VMS01 BFB Injection Time: 0843

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	17.7	
75	30.0 - 60.0% of mass 95	48.4	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	1.6	(1.78)1
174	50.0 - 100.0% of mass 95	88	
175	5.0 - 9.0% of mass 174	7	(7.95)1
176	95.0 - 101% of mass 174	84.4	(95.87)1
177	5.0 - 9.0% of mass 176	5.8	(6.88)2

1-Value is % of mass 174

2-Value is % of mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD1098678	80PPB	80PPBR.D	07/12/12	1411
2	STD1098677	60PPB	60PPBR.D	07/12/12	1433
3	STD1098675	50PPB	50PPBR.D	07/12/12	1456
4	STD1098672	20PPB	20PPBR.D	07/12/12	1518
5	STD1098669	10PPB	10PPBR.D	07/12/12	1541
6	STD1098676	5PPB	5PPBR.D	07/12/12	1603
7	STD1098673	2PPB	2PPBR.D	07/12/12	1625
8	STD1098670	1PPB	1PPBR.D	07/12/12	1648
9	STD1098674	500PPT	500PPTR.D	07/12/12	1710
10	STD1098671	200PPT	200PPTR.D	07/12/12	1732
11	SSC1098685	SEC12	SEC12.D	07/12/12	1817

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Lab File ID: BFB13.D BFB Injection Date: 07/30/12

Instrument ID: VMS01 BFB Injection Time: 1914

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	18.7	
75	30.0 - 60.0% of mass 95	49.6	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	1.1	(1.27)1
174	50.0 - 100.0% of mass 95	89.3	
175	5.0 - 9.0% of mass 174	6.9	(7.77)1
176	95.0 - 101% of mass 174	86.7	(97.12)1
177	5.0 - 9.0% of mass 176	5.1	(5.93)2

1-Value is % of mass 174

2-Value is % of mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV1101747	073012CCV14	50CCV14.D	07/30/12	2000
2	073012LCS12	073012LCS12	LCS12.D	07/30/12	2022
3	073012LCS12D	073012LCS12D	LCS12D.D	07/30/12	2045
4	Q1-TFS-MW-17MS	350656302	6563-02MS.D	07/30/12	2130
5	Q1-TFS-MW-17MSD	350656303	6563-03SD.D	07/30/12	2153
6	073012BLK14	073012BLK14	BLK14.D	07/30/12	2300
7	Q1-TFS-TB-2	350656309	6563-09.D	07/30/12	2323
8	Q1-TFS-MW-17	350656301	6563-01.D	07/30/12	2345
9	Q1-TFS-MW-15	350656304	6563-04.D	07/31/12	0008
10	Q1-TFS-MW-15-DUP	350656305	6563-05.D	07/31/12	0031
11	Q1-TFS-MW-17-RS	350656306	6563-06.D	07/31/12	0053
12	Q1-TFS-MW-05	350656307	6563-07.D	07/31/12	0116
13	Q1-TFS-MW-11	350656308	6563-08.D	07/31/12	0138

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Lab File ID (Standard): 50PPBR.D Date Analyzed: 7/12/2012

Instrument ID: VMS01 Time Analyzed: 14:56

GC Column: DB-624 ID: 0.18 (mm)

Matrix: (soil/water) W Heated Purge: (Y/N) No

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	1781998		6.62	1570207		9.15	904686		10.55
	UPPER LIMIT	3563996		7.12	3140414		9.65	1809372		11.05
	LOWER LIMIT	890999		6.12	785103.5		8.65	452343		10.05
	EPA SAMPLE NO.									
1	073012LCS12	1810034		6.62	1486556		9.15	844079		10.54
2	073012LCS12D	1830619		6.62	1512936		9.15	853680		10.54
3	Q1-TFS-MW-17MS	1920484		6.62	1558529		9.15	892455		10.54
4	Q1-TFS-MW-17MSD	1849197		6.62	1512736		9.15	866870		10.54
5	073012BLK14	1715873		6.62	1377743		9.15	712597		10.54
6	Q1-TFS-TB-2	1655277		6.62	1334246		9.15	685638		10.54
7	Q1-TFS-MW-17	1697616		6.62	1340358		9.15	702472		10.54
8	Q1-TFS-MW-15	1772122		6.62	1490413		9.15	812549		10.54
9	Q1-TFS-MW-15-DUP	1880114		6.62	1587192		9.15	856771		10.54
10	Q1-TFS-MW-17-RS	1934670		6.62	1547650		9.15	799717		10.54
11	Q1-TFS-MW-05	1803645		6.62	1434910		9.15	732624		10.54
12	Q1-TFS-MW-11	1684306		6.62	1367792		9.15	719153		10.54

IS1 = Fluorobenzene

IS2 = Chlorobenzene-d5

IS3 = 1,4-Dichlorobenzene-d4

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

8

VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

GC Column: DB-624 ID: 0.18 (mm) Init. Calib. Date: 07/12/12

Instrument ID: VMS01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 5.89 S2 : 8.12

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	071212BFB11	071212BFB11	BFB12.D	07/12/12	0843		
2	STD1098678	80PPB	80PPBR.D	07/12/12	1411		
3	STD1098677	60PPB	60PPBR.D	07/12/12	1433	5.88	8.12
4	STD1098675	50PPB	50PPBR.D	07/12/12	1456	5.89	8.12
5	STD1098672	20PPB	20PPBR.D	07/12/12	1518	5.88	8.12
6	STD1098669	10PPB	10PPBR.D	07/12/12	1541	5.88	8.12
7	STD1098676	5PPB	5PPBR.D	07/12/12	1603	5.89	8.12
8	STD1098673	2PPB	2PPBR.D	07/12/12	1625		
9	STD1098670	1PPB	1PPBR.D	07/12/12	1648		
10	STD1098674	500PPT	500PPTR.D	07/12/12	1710		
11	STD1098671	200PPT	200PPTR.D	07/12/12	1732		
12	SSC1098685	SEC12	SEC12.D	07/12/12	1817	5.88	8.12
13	073012BFB13	073012BFB13	BFB13.D	07/30/12	1914		
14	CCV1101747	073012CCV14	50CCV14.D	07/30/12	2000	5.88	8.12
15	073012LCS12	073012LCS12	LCS12.D	07/30/12	2022	5.88	8.12
16	073012LCS12D	073012LCS12D	LCS12D.D	07/30/12	2045	5.88	8.12
17	Q1-TFS-MW-17MS	350656302	6563-02MS.D	07/30/12	2130	5.88	8.12
18	Q1-TFS-MW-17MSD	350656303	6563-03SD.D	07/30/12	2153	5.89	8.12
19	073012BLK14	073012BLK14	BLK14.D	07/30/12	2300	5.89	8.12
20	Q1-TFS-TB-2	350656309	6563-09.D	07/30/12	2323	5.88	8.12
21	Q1-TFS-MW-17	350656301	6563-01.D	07/30/12	2345	5.88	8.12
22	Q1-TFS-MW-15	350656304	6563-04.D	07/31/12	0008	5.89	8.12
23	Q1-TFS-MW-15-DUP	350656305	6563-05.D	07/31/12	0031	5.88	8.12
24	Q1-TFS-MW-17-RS	350656306	6563-06.D	07/31/12	0053	5.89	8.12
25	Q1-TFS-MW-05	350656307	6563-07.D	07/31/12	0116	5.89	8.12
26	Q1-TFS-MW-11	350656308	6563-08.D	07/31/12	0138	5.88	8.12

			QC LIMITS
S1	=	Dibromofluoromethane	(+/- 0.4 MINUTES)
S2	=	Toluene-d8	(+/- 0.4 MINUTES)
S3	=	4-Bromofluorobenzene	(+/- 0.63 MINUTES)
S4	=	1,2-Dichloroethane-d4	(+/- 0.4 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

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VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 073012LCS12

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	19.4	97.0			30 - 155
Chloromethane	20	18	90.0			40 - 125
Vinyl chloride	20	23.5	118.0			50 - 145
Bromomethane	20	19.4	97.0			30 - 145
Chloroethane	20	23.8	119.0			60 - 135
Trichlorofluoromethane	20	22.1	110.0			60 - 145
1,1-Dichloroethene	20	22.3	112.0			70 - 130
Acrolein	40	44.4	111.0			31 - 148
Methyl iodide	20	28.7	144.0			75 - 152
Carbon disulfide	20	22.3	112.0			35 - 160
Methylene chloride	20	24.9	124.0			55 - 140
trans-1,2-Dichloroethene	20	22.6	113.0			60 - 140
Acrylonitrile	40	44.1	110.0			55 - 126
1,1-Dichloroethane	20	18.2	91.0			70 - 135
Acetone	40	41.5	104.0			40 - 140
2-Butanone	40	27.1	67.8			30 - 150
Chloroform	20	17.3	86.5			65 - 135
1,1,1-Trichloroethane	20	18.7	93.5			65 - 130
Carbon tetrachloride	20	19.9	99.5			65 - 140
Benzene	20	17	85.0			80 - 120
1,2-Dichloroethane	20	17.4	87.0			70 - 130
Trichloroethene	20	18.1	90.5			70 - 125
Vinyl acetate	20	17	85.0			77 - 150
1,2-Dichloropropane	20	18.6	93.0			75 - 125
Dibromomethane	20	17.7	88.5			75 - 125
Bromodichloromethane	20	18.2	91.0			75 - 120
cis-1,3-Dichloropropene	20	18.4	92.0			70 - 130
4-Methyl-2-pentanone	40	30.5	76.2			60 - 135
Toluene	20	18.4	92.0			75 - 120
trans-1,3-Dichloropropene	20	17.2	86.0			55 - 140
Ethyl methacrylate	20	16.2	81.0			73 - 121
1,1,2-Trichloroethane	20	17.3	86.5			75 - 125

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

073012LCS12

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Tetrachloroethene	20	18.5	92.5			45 - 150
2-Hexanone	40	32.2	80.5			55 - 130
Dibromochloromethane	20	19.5	97.5			60 - 135
1,2-Dibromoethane	20	17.8	89.0			80 - 120
Chlorobenzene	20	18	90.0			80 - 120
1,1,1,2-Tetrachloroethane	20	18.6	93.0			80 - 130
Ethylbenzene	20	18.2	91.0			75 - 125
Styrene	20	19	95.0			65 - 135
Bromoform	20	18.5	92.5			70 - 130
1,1,2,2-Tetrachloroethane	20	16	80.0			65 - 130
1,2,3-Trichloropropane	20	15.9	79.5			75 - 125
1,2-Dibromo-3-chloropropane	20	16.1	80.5			50 - 130
1,4-Dichloro-2-butene	40	30.5	76.2			68 - 115
Acetonitrile	200	225	112.0			37 - 122
Allyl chloride	20	21.5	108.0			70 - 130
1,4-Dioxane	400	323	80.8			0 - 167
Isobutyl alcohol	400	331	82.8			70 - 130
Methacrylonitrile	200	162	81.0			70 - 130
Methyl methacrylate	20	15.3	76.5			33 - 172
Propionitrile	200	158	79.0			70 - 130
Chloroprene	20	18.6	93.0			70 - 130
Xylene (total)	60	53.9	89.8			82 - 124

Spike Recovery: 0 out of 54 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

070812 1738

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

073012LCS12D

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	16.9	84.5	13.8	20	30 - 155
Chloromethane	20	15.3	76.5	16.2	20	40 - 125
Vinyl chloride	20	21.4	107.0	9.4	20	50 - 145
Bromomethane	20	18.5	92.5	4.7	20	30 - 145
Chloroethane	20	22.8	114.0	4.3	20	60 - 135
Trichlorofluoromethane	20	20.6	103.0	7.0	20	60 - 145
1,1-Dichloroethene	20	20.6	103.0	7.9	20	70 - 130
Acrolein	40	39.8	99.5	10.9	20	31 - 148
Methyl iodide	20	26.5	132.0	8.0	20	75 - 152
Carbon disulfide	20	20.1	100.0	10.4	20	35 - 160
Methylene chloride	20	23.4	117.0	6.2	20	55 - 140
trans-1,2-Dichloroethene	20	21.6	108.0	4.5	20	60 - 140
Acrylonitrile	40	41.8	104.0	5.4	20	55 - 126
1,1-Dichloroethane	20	17	85.0	6.8	20	70 - 135
Acetone	40	35.8	89.5	14.7	20	40 - 140
2-Butanone	40	24.6	61.5	9.7	20	30 - 150
Chloroform	20	16.3	81.5	6.0	20	65 - 135
1,1,1-Trichloroethane	20	18.1	90.5	3.3	20	65 - 130
Carbon tetrachloride	20	18.6	93.0	6.8	20	65 - 140
Benzene	20	16.1	80.5	5.4	20	80 - 120
1,2-Dichloroethane	20	17.1	85.5	1.7	20	70 - 130
Trichloroethene	20	17.2	86.0	5.1	20	70 - 125
Vinyl acetate	20	16.9	84.5	0.6	20	77 - 150
1,2-Dichloropropane	20	17.8	89.0	4.4	20	75 - 125
Dibromomethane	20	17.4	87.0	1.7	20	75 - 125
Bromodichloromethane	20	17.6	88.0	3.4	20	75 - 120
cis-1,3-Dichloropropene	20	17.1	85.5	7.3	20	70 - 130
4-Methyl-2-pentanone	40	28.7	71.8	6.1	20	60 - 135
Toluene	20	17.5	87.5	5.0	20	75 - 120
trans-1,3-Dichloropropene	20	16.4	82.0	4.8	20	55 - 140
Ethyl methacrylate	20	15.5	77.5	4.4	20	73 - 121
1,1,2-Trichloroethane	20	16.7	83.5	3.5	20	75 - 125

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

070812 1738

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

073012LCS12D

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Tetrachloroethene	20	17.2	86.0	7.3	20	45 - 150
2-Hexanone	40	29.4	73.5	9.1	20	55 - 130
Dibromochloromethane	20	18.7	93.5	4.2	20	60 - 135
1,2-Dibromoethane	20	17	85.0	4.6	20	80 - 120
Chlorobenzene	20	16.9	84.5	6.3	20	80 - 120
1,1,1,2-Tetrachloroethane	20	17.5	87.5	6.1	20	80 - 130
Ethylbenzene	20	17.3	86.5	5.1	20	75 - 125
Styrene	20	18	90.0	5.4	20	65 - 135
Bromoform	20	17.6	88.0	5.0	20	70 - 130
1,1,2,2-Tetrachloroethane	20	15.3	76.5	4.5	20	65 - 130
1,2,3-Trichloropropane	20	15	75.0	5.8	20	75 - 125
1,2-Dibromo-3-chloropropane	20	15.2	76.0	5.8	20	50 - 130
1,4-Dichloro-2-butene	40	28.9	72.2	5.4	20	68 - 115
Acetonitrile	200	214	107.0	5.0	20	37 - 122
Allyl chloride	20	20.5	102.0	4.8	20	70 - 130
1,4-Dioxane	400	322	80.5	0.3	20	0 - 167
Isobutyl alcohol	400	328	82.0	0.9	20	70 - 130
Methacrylonitrile	200	155	77.5	4.4	20	70 - 130
Methyl methacrylate	20	15.3	76.5	0.0	20	33 - 172
Propionitrile	200	149	74.5	5.9	20	70 - 130
Chloroprene	20	17.6	88.0	5.5	20	70 - 130
Xylene (total)	60	50.8	84.7	5.9	20	82 - 124

Spike Recovery: 0 out of 54 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

3

VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stan

Q1-TFS-MW-17MS

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC #	QC LIMITS REC.
Dichlorodifluoromethane	20	0	13	65.0	30 - 155
Chloromethane	20	0	13	65.5	40 - 125
Vinyl chloride	20	0	20	100.0	50 - 145
Bromomethane	20	0	17	87.0	30 - 145
Chloroethane	20	0	17	85.0	60 - 135
Trichlorofluoromethane	20	0	19	93.0	60 - 145
1,1-Dichloroethene	20	0	20	98.0	70 - 130
Acrolein	40	0	33	81.8	31 - 148
Methyl iodide	20	0	46	228.0*	75 - 152
Carbon disulfide	20	0	22	110.0	35 - 160
Methylene chloride	20	0	22	111.0	55 - 140
trans-1,2-Dichloroethene	20	0	21	104.0	60 - 140
Acrylonitrile	40	0	39	97.8	55 - 126
1,1-Dichloroethane	20	0	16	82.5	70 - 135
Acetone	40	0	21	52.0	40 - 140
2-Butanone	40	0	19	48.0	30 - 150
Chloroform	20	0	16	80.0	65 - 135
1,1,1-Trichloroethane	20	0	17	84.5	65 - 130
Carbon tetrachloride	20	0	16	81.5	65 - 140
Benzene	20	0	16	80.0	80 - 120
1,2-Dichloroethane	20	0	16	80.0	70 - 130
Trichloroethene	20	0	16	80.0	70 - 125
Vinyl acetate	20	0	17	87.0	77 - 150
1,2-Dichloropropane	20	0	18	87.5	75 - 125
Dibromomethane	20	0	16	79.0	75 - 125
Bromodichloromethane	20	0	17	83.0	75 - 120
cis-1,3-Dichloropropene	20	0	17	83.5	70 - 130
4-Methyl-2-pentanone	40	0	28	69.2	60 - 135
Toluene	20	0	17	86.0	75 - 120
trans-1,3-Dichloropropene	20	0	15	76.0	55 - 140

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

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3

VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stan

Q1-TFS-MW-17MS

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC #	QC LIMITS REC.
Ethyl methacrylate	20	0	16	80.5	73 - 121
1,1,2-Trichloroethane	20	0	16	78.5	75 - 125
Tetrachloroethene	20	0	17	85.0	45 - 150
2-Hexanone	40	0	26	64.8	55 - 130
Dibromochloromethane	20	0	18	88.5	60 - 135
1,2-Dibromoethane	20	0	16	81.0	80 - 120
Chlorobenzene	20	0	17	83.0	80 - 120
1,1,1,2-Tetrachloroethane	20	0	17	83.0	80 - 130
Ethylbenzene	20	0	17	85.0	75 - 125
Styrene	20	0	18	90.5	65 - 135
Bromoform	20	0	16	82.0	70 - 130
1,1,2,2-Tetrachloroethane	20	0	16	78.5	65 - 130
1,2,3-Trichloropropane	20	0	14	72.0*	75 - 125
1,2-Dibromo-3-chloropropane	20	0	14	69.5	50 - 130
1,4-Dichloro-2-butene	40	0	23	56.8*	68 - 115
Acetonitrile	200	0	190	93.5	37 - 122
Allyl chloride	20	0	18	89.5	70 - 130
1,4-Dioxane	400	0	310	78.0	0 - 167
Isobutyl alcohol	400	0	320	79.2	70 - 130
Methacrylonitrile	200	0	140	71.5	70 - 130
Methyl methacrylate	20	0	14	69.5	33 - 172
Propionitrile	200	0	140	69.0*	70 - 130
Chloroprene	20	0	16	80.0	70 - 130
Xylene (total)	60	0	50	84.2	82 - 124

Spike Recovery: 4 out of 54 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

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3

VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Q1-TFS-MW-17MSD

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	MSD CONCENTRATION ug/L	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	17	83.5	24.9 *	20	30 - 155
Chloromethane	20	20	101.0	42.6 *	20	40 - 125
Vinyl chloride	20	23	114.0	12.6	20	50 - 145
Bromomethane	20	18	87.5	0.6	20	30 - 145
Chloroethane	20	19	93.0	9.0	20	60 - 135
Trichlorofluoromethane	20	21	106.0	13.1	20	60 - 145
1,1-Dichloroethene	20	23	115.0	16.0	20	70 - 130
Acrolein	40	35	86.5	5.6	20	31 - 148
Methyl iodide	20	54	270.0*	17.1	20	75 - 152
Carbon disulfide	20	25	123.0	11.2	20	35 - 160
Methylene chloride	20	24	120.0	7.8	20	55 - 140
trans-1,2-Dichloroethene	20	23	113.0	8.8	20	60 - 140
Acrylonitrile	40	44	111.0	12.9	20	55 - 126
1,1-Dichloroethane	20	19	94.0	13.0	20	70 - 135
Acetone	40	24	61.2	16.3	20	40 - 140
2-Butanone	40	22	54.2	12.2	20	30 - 150
Chloroform	20	18	90.0	11.8	20	65 - 135
1,1,1-Trichloroethane	20	19	95.0	11.7	20	65 - 130
Carbon tetrachloride	20	18	91.5	11.6	20	65 - 140
Benzene	20	18	89.0	10.7	20	80 - 120
1,2-Dichloroethane	20	18	90.0	11.8	20	70 - 130
Trichloroethene	20	18	88.5	10.1	20	70 - 125
Vinyl acetate	20	19	97.0	10.9	20	77 - 150
1,2-Dichloropropane	20	19	94.0	7.2	20	75 - 125
Dibromomethane	20	18	89.5	12.5	20	75 - 125
Bromodichloromethane	20	18	92.0	10.3	20	75 - 120
cis-1,3-Dichloropropene	20	18	92.5	10.2	20	70 - 130
4-Methyl-2-pentanone	40	31	77.2	10.9	20	60 - 135
Toluene	20	19	95.5	10.5	20	75 - 120
trans-1,3-Dichloropropene	20	17	83.0	8.8	20	55 - 140

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

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3

VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Q1-TFS-MW-17MSD

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	MSD CONCENTRATION ug/L	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Ethyl methacrylate	20	17	85.0	5.4	20	73 - 121
1,1,2-Trichloroethane	20	17	87.0	10.3	20	75 - 125
Tetrachloroethene	20	19	96.0	12.2	20	45 - 150
2-Hexanone	40	26	66.0	1.9	20	55 - 130
Dibromochloromethane	20	20	98.5	10.7	20	60 - 135
1,2-Dibromoethane	20	18	90.5	11.1	20	80 - 120
Chlorobenzene	20	18	90.5	8.6	20	80 - 120
1,1,1,2-Tetrachloroethane	20	18	91.5	9.7	20	80 - 130
Ethylbenzene	20	18	92.5	8.5	20	75 - 125
Styrene	20	20	100.0	10.0	20	65 - 135
Bromoform	20	17	86.0	4.8	20	70 - 130
1,1,2,2-Tetrachloroethane	20	16	82.0	4.4	20	65 - 130
1,2,3-Trichloropropane	20	16	77.5	7.4	20	75 - 125
1,2-Dibromo-3-chloropropane	20	16	79.5	13.4	20	50 - 130
1,4-Dichloro-2-butene	40	22	55.5*	2.2	20	68 - 115
Acetonitrile	200	210	106.0	12.5	20	37 - 122
Allyl chloride	20	20	102.0	12.6	20	70 - 130
1,4-Dioxane	400	320	79.8	2.2	20	0 - 167
Isobutyl alcohol	400	370	93.0	16.0	20	70 - 130
Methacrylonitrile	200	160	80.5	11.8	20	70 - 130
Methyl methacrylate	20	16	79.0	12.8	20	33 - 172
Propionitrile	200	160	77.5	11.6	20	70 - 130
Chloroprene	20	18	91.0	12.9	20	70 - 130
Xylene (total)	60	56	93.0	10.0	20	82 - 124

RPD: 2 out of 54 outside limits

Spike Recovery: 2 out of 54 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

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8260 Standards Data

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VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: VMS01 Calibration Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 1411 End: 1732

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF0.2 =200PPTR.D RRF0.5 =500PPTR.D
RRF1 =1PPBR.D RRF2 =2PPBR.D RRF5 =5PPBR.D

COMPOUND	RRF0.2	RRF0.5	RRF1	RRF2	RRF5	$\overline{RRF}$	%RSD OR R^2
Dichlorodifluoromethane			0.244	0.235	0.273		
Chloromethane	#	0.693	0.536	0.410	0.390		#
Vinyl chloride	*	0.314	0.306	0.312	0.300		*
Bromomethane			0.261	0.216	0.224		
Chloroethane			0.173	0.169	0.193		
Trichlorofluoromethane			0.457	0.439	0.459		
1,1-Dichloroethene	*	0.442	0.456	0.368	0.372		*
Acrolein				0.052	0.057		
Methyl iodide			0.205	0.136	0.150		
Carbon disulfide			0.966	0.759	0.683		
Methylene chloride			0.555	0.395	0.317		
trans-1,2-Dichloroethene		0.511	0.495	0.349	0.359		
Acrylonitrile					0.150		
1,1-Dichloroethane	#		0.637	0.490	0.507		#
Acetone				0.232	0.199		
2-Butanone				0.151	0.176		
Chloroform	* 0.580	0.628	0.715	0.503	0.498		*
1,1,1-Trichloroethane			0.454	0.343	0.373		
Carbon tetrachloride		0.294	0.296	0.226	0.273		
Benzene	1.427	1.327	1.340	1.036	1.033		
1,2-Dichloroethane		0.417	0.512	0.383	0.394		
Trichloroethene		0.385	0.406	0.295	0.294		
Vinyl acetate			0.748	0.661	0.669		
1,2-Dichloropropane	*	0.278	0.309	0.261	0.272		*
Dibromomethane			0.246	0.207	0.221		
Bromodichloromethane	0.375	0.402	0.424	0.340	0.343		
cis-1,3-Dichloropropene		0.341	0.386	0.307	0.324		
4-Methyl-2-pentanone				0.114	0.117		
Toluene	*	0.768	0.804	0.635	0.659		*
trans-1,3-Dichloropropene		0.291	0.317	0.269	0.307		
Ethyl methacrylate			0.341	0.269	0.287		
1,1,2-Trichloroethane		0.298	0.393	0.313	0.292		
Tetrachloroethene		0.347	0.334	0.285	0.279		
2-Hexanone				0.249	0.269		

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FORM VI

6

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: VMS01 Calibration Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 1411 End: 1732

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF0.2 =200PPTR.D RRF0.5 =500PPTR.D
RRF1 =1PPBR.D RRF2 =2PPBR.D RRF5 =5PPBR.D

COMPOUND	RRF0.2	RRF0.5	RRF1	RRF2	RRF5	$\overline{RRF}$	%RSD OR R^2
Dibromochloromethane	0.340	0.357	0.349	0.292	0.325		
1,2-Dibromoethane			0.450	0.361	0.393		
Chlorobenzene	#	1.333	1.348	1.043	0.981		#
1,1,1,2-Tetrachloroethane		0.376	0.393	0.327	0.292		
Ethylbenzene	*	0.573	0.622	0.493	0.493		*
Styrene			1.010	0.815	0.853		
Bromoform	#		0.257	0.205	0.214		#
1,1,2,2-Tetrachloroethane	# 1.240	0.982	1.229	1.047	0.965		#
1,2,3-Trichloropropane			0.400	0.311	0.315		
1,2-Dibromo-3-chloropropane				0.173	0.171		
1,4-Dichloro-2-butene			0.149	0.136	0.134		
Acetonitrile				0.074	0.066		
Allyl chloride			0.904	0.743	0.656		
1,4-Dioxane			0.008	0.006	0.005		
Isobutyl alcohol			0.006	0.005	0.004		
Methacrylonitrile			0.147	0.127	0.128		
Methyl methacrylate			0.222	0.187	0.181		
Propionitrile			0.060	0.052	0.050		
Chloroprene			0.331	0.283	0.284		
o-Xylene		1.420	1.548	1.180	1.210		
p,m-Xylene	0.888	0.669	0.770	0.600	0.590		
Dibromofluoromethane(SURR)					0.297		
Toluene-d8(SURR)					1.044		
4-Bromofluorobenzene(SURR)					0.917		
1,2-Dichloroethane-d4(SURR)					0.068		

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FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: VMS01 Calibration Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 1411 End: 1732

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF10 =10PPBR.D RRF20 =20PPBR.D
RRF50 =50PPBR.D RRF60 =60PPBR.D RRF80 =80PPBR.D

COMPOUND		RRF10	RRF20	RRF50	RRF60	RRF80	$\overline{RRF}$	%RSD OR R^2	
Dichlorodifluoromethane		0.265	0.296	0.284	0.275	0.271	0.26788	7.5	
Chloromethane	#	0.338	0.379	0.360	0.343	0.356	0.42264	0.99913	#
Vinyl chloride	*	0.299	0.302	0.296	0.283	0.301	0.3015	3	*
Bromomethane		0.251	0.332	0.310	0.315	0.330	0.27995	0.99823	
Chloroethane		0.187	0.218	0.214	0.251		0.20072	14.4	
Trichlorofluoromethane		0.435	0.454	0.459	0.455	0.494	0.45634	3.9	
1,1-Dichloroethene	*	0.408	0.382	0.363	0.358	0.393	0.39344	8.9	*
Acrolein		0.048	0.045	0.043	0.041	0.042	0.04692	12.5	
Methyl iodide		0.182	0.181	0.172	0.153	0.172	0.16875	13	
Carbon disulfide		0.761	0.699	0.680	0.658	0.732	0.74232	13.2	
Methylene chloride		0.370	0.321	0.312	0.308	0.341	0.3649	0.99509	
trans-1,2-Dichloroethene		0.416	0.381	0.358	0.347	0.381	0.3995	0.9966	
Acrylonitrile		0.141	0.145	0.134	0.127	0.130	0.13792	6.4	
1,1-Dichloroethane	#	0.543	0.496	0.461	0.441	0.401	0.49694	0.99246	#
Acetone		0.236	0.159	0.151	0.163	0.157	0.18509	0.9956	
2-Butanone		0.227	0.153	0.165	0.164	0.141	0.16815	0.9921	
Chloroform	*	0.566	0.479	0.514	0.493	0.493	0.54682	13.9	*
1,1,1-Trichloroethane		0.426	0.392	0.394	0.389	0.391	0.39526	8.4	
Carbon tetrachloride		0.324	0.317	0.333	0.328	0.326	0.30193	11.5	
Benzene		1.184	1.087	1.058	1.034	1.021	1.15472	13.4	
1,2-Dichloroethane		0.440	0.409	0.397	0.381	0.372	0.41169	10.4	
Trichloroethene		0.332	0.325	0.300	0.300	0.286	0.32454	13.3	
Vinyl acetate		0.677	0.630	0.671	0.652	0.672	0.67249	5	
1,2-Dichloropropane	*	0.314	0.279	0.272	0.261	0.261	0.27839	7.1	*
Dibromomethane		0.242	0.225	0.215	0.204	0.202	0.22023	7.6	
Bromodichloromethane		0.403	0.384	0.379	0.368	0.371	0.37897	6.9	
cis-1,3-Dichloropropene		0.386	0.373	0.384	0.379	0.378	0.36205	8.4	
4-Methyl-2-pentanone		0.143	0.131	0.128	0.122	0.110	0.12366	9.2	
Toluene	*	0.762	0.718	0.706	0.694	0.672	0.7132	7.8	*
trans-1,3-Dichloropropene		0.386	0.387	0.409	0.397	0.401	0.35165	0.99967	
Ethyl methacrylate		0.350	0.341	0.335	0.322	0.307	0.31906	9.1	
1,1,2-Trichloroethane		0.338	0.300	0.296	0.283	0.277	0.30983	11.6	
Tetrachloroethene		0.299	0.294	0.267	0.266	0.251	0.29139	10.9	
2-Hexanone		0.366	0.292	0.282	0.287	0.244	0.28425	14.3	

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FORM VI

6

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: VMS01 Calibration Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 1411 End: 1732

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF10 =10PPBR.D RRF20 =20PPBR.D
RRF50 =50PPBR.D RRF60 =60PPBR.D RRF80 =80PPBR.D

COMPOUND		RRF10	RRF20	RRF50	RRF60	RRF80	$\overline{RRF}$	%RSD OR R^2	
Dibromochloromethane		0.377	0.372	0.362	0.348	0.347	0.34691	7	
1,2-Dibromoethane		0.443	0.407	0.385	0.371	0.357	0.39589	8.9	
Chlorobenzene	#	1.146	1.085	0.999	0.969	0.963	1.09625	13.7	#
1,1,1,2-Tetrachloroethane		0.364	0.354	0.347	0.338	0.331	0.34684	8.6	
Ethylbenzene	*	0.568	0.530	0.501	0.503	0.494	0.53071	8.8	*
Styrene		1.040	1.020	0.991	0.980	0.977	0.96084	8.5	
Bromoform	#	0.268	0.259	0.270	0.268	0.255	0.24963	10.2	#
1,1,2,2-Tetrachloroethane	#	1.165	1.056	0.991	0.947	0.883	1.05052	11.7	#
1,2,3-Trichloropropane		0.353	0.329	0.298	0.288	0.260	0.31932	13.4	
1,2-Dibromo-3-chloropropane		0.200	0.180	0.181	0.174	0.159	0.1768	7	
1,4-Dichloro-2-butene		0.171	0.155	0.154	0.153	0.138	0.14877	8.3	
Acetonitrile		0.072	0.068	0.062	0.060	0.064	0.06658	7.9	
Allyl chloride		0.724	0.676	0.615	0.603	0.644	0.69554	14	
1,4-Dioxane		0.005	0.004	0.004	0.004	0.004	0.0051	0.99296	
Isobutyl alcohol		0.005	0.004	0.004	0.004	0.004	0.00448	0.99885	
Methacrylonitrile		0.146	0.121	0.129	0.123	0.115	0.12939	8.8	
Methyl methacrylate		0.210	0.193	0.185	0.181	0.170	0.19122	8.8	
Propionitrile		0.059	0.046	0.047	0.045	0.041	0.04992	13.5	
Chloroprene		0.309	0.276	0.292	0.288	0.287	0.29375	6.1	
o-Xylene		1.415	1.362	1.305	1.278	1.278	1.33287	8.7	
p,m-Xylene		0.704	0.667	0.641	0.637	0.629	0.67935	13.3	
Dibromofluoromethane(SURR)		0.259	0.289	0.293	0.274		0.28238	5.6	
Toluene-d8(SURR)		0.943	1.032	1.056	0.994		1.01377	4.5	
4-Bromofluorobenzene(SURR)		0.799	0.841	0.854	0.799		0.84168	5.8	
1,2-Dichloroethane-d4(SURR)		0.063	0.068	0.065	0.062		0.06511	4.4	

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FORM VI

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: VMS01 CalibrationDate: 07/12/12 Time: 1817

CCV ID: SSC1098685 Lab File ID: SEC12.D Init. Calib. Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Dichlorodifluoromethane		0.26788	0.25293	5.6	AVRG	
Chloromethane	#	50	47.9	4.2	LINR	#
Vinyl chloride	*	0.3015	0.28215	6.4	AVRG	*
Bromomethane		50	48.6	2.8	LINR	
Chloroethane		0.20072	0.16298	18.8	AVRG	
Trichlorofluoromethane		0.45634	0.45933	0.7	AVRG	
1,1-Dichloroethene	*	0.39344	0.37599	4.4	AVRG	*
Acrolein		0.04692	0.04128	12.0	AVRG	
Methyl iodide		0.16875	0.16505	2.2	AVRG	
Carbon disulfide		0.74232	0.66132	10.9	AVRG	
Methylene chloride		50	50.3	0.6	LINR	
trans-1,2-Dichloroethene		50	48.8	2.4	LINR	
Acrylonitrile		0.13792	0.13422	2.7	AVRG	
1,1-Dichloroethane	#	50	49.2	1.6	LINR	#
Acetone		100	111	11.0	LINR	
2-Butanone		100	108	8.0	2ORD	
Chloroform	*	0.54682	0.52798	3.4	AVRG	*
1,1,1-Trichloroethane		0.39526	0.41029	3.8	AVRG	
Carbon tetrachloride		0.30193	0.34264	13.5	AVRG	
Benzene		1.15472	1.09	5.6	AVRG	
1,2-Dichloroethane		0.41169	0.40289	2.1	AVRG	
Trichloroethene		0.32454	0.31837	1.9	AVRG	
Vinyl acetate		0.67249	0.64006	4.8	AVRG	
1,2-Dichloropropane	*	0.27839	0.26988	3.1	AVRG	*
Dibromomethane		0.22023	0.21761	1.2	AVRG	
Bromodichloromethane		0.37897	0.38529	1.7	AVRG	
cis-1,3-Dichloropropene		0.36205	0.38207	5.5	AVRG	
4-Methyl-2-pentanone		0.12366	0.12636	2.2	AVRG	
Toluene	*	0.7132	0.71421	0.1	AVRG	*
trans-1,3-Dichloropropene		50	51.2	2.4	LINR	
Ethyl methacrylate		0.31906	0.33712	5.7	AVRG	
1,1,2-Trichloroethane		0.30983	0.29832	3.7	AVRG	
Tetrachloroethene		0.29139	0.27328	6.2	AVRG	
2-Hexanone		0.28425	0.2976	4.7	AVRG	
Dibromochloromethane		0.34691	0.36342	4.8	AVRG	
1,2-Dibromoethane		0.39589	0.38913	1.7	AVRG	

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FORM VII

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: VMS01 CalibrationDate: 07/12/12 Time: 1817

CCV ID: SSC1098685 Lab File ID: SEC12.D Init. Calib. Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Chlorobenzene	#	1.09625	1.009	8.0	AVRG	#
1,1,1,2-Tetrachloroethane		0.34684	0.34682	0.0	AVRG	
Ethylbenzene	*	0.53071	0.5161	2.8	AVRG	*
Styrene		0.96084	1.004	4.5	AVRG	
Bromoform	#	0.24963	0.26237	5.1	AVRG	#
1,1,2,2-Tetrachloroethane	#	1.05052	0.94013	10.5	AVRG	#
1,2,3-Trichloropropane		0.31932	0.29409	7.9	AVRG	
1,2-Dibromo-3-chloropropane		0.1768	0.17573	0.6	AVRG	
1,4-Dichloro-2-butene		0.14877	0.15221	2.3	AVRG	
Acetonitrile		0.06658	0.06287	5.6	AVRG	
Allyl chloride		0.69554	0.62866	9.6	AVRG	
1,4-Dioxane		1000	1140	14.0	LINR	
Isobutyl alcohol		1000	1060	6.0	LINR	
Methacrylonitrile		0.12939	0.1315	1.6	AVRG	
Methyl methacrylate		0.19122	0.18946	0.9	AVRG	
Propionitrile		0.04992	0.04837	3.1	AVRG	
Chloroprene		0.29375	0.30342	3.3	AVRG	
o-Xylene		1.33287	1.311	1.6	AVRG	
p,m-Xylene		0.67935	0.654	3.7	AVRG	
==========						
Dibromofluoromethane(SURR)		0.28238	0.29079	3.0	AVRG	
Toluene-d8(SURR)		1.01377	1.032	1.8	AVRG	
4-Bromofluorobenzene(SURR)		0.84168	0.81724	2.9	AVRG	
1,2-Dichloroethane-d4(SURR)		0.06511	0.06535	0.4	AVRG	

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FORM VII

7

VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: VMS01 CalibrationDate: 07/30/12 Time: 2000

CCV ID: CCV1101747 Lab File ID: 50CCV14.D Init. Calib. Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Dichlorodifluoromethane		0.26788	0.23228	13.3	AVRG	
Chloromethane	#	50	41.9	16.2	LINR #	
Vinyl chloride	*	0.3015	0.33082	9.7	AVRG *	
Bromomethane		50	44.1	11.8	LINR	
Chloroethane		0.20072	0.2361	17.6	AVRG	
Trichlorofluoromethane		0.45634	0.4861	6.5	AVRG	
1,1-Dichloroethene	*	0.39344	0.42904	9.0	AVRG *	
Acrolein		0.04692	0.04809	2.5	AVRG	
Methyl iodide		0.16875	0.22421	32.9	AVRG	<-
Carbon disulfide		0.74232	0.81643	10.0	AVRG	
Methylene chloride		50	58	16.0	LINR	
trans-1,2-Dichloroethene		50	56.5	13.0	LINR	
Acrylonitrile		0.13792	0.14371	4.2	AVRG	
1,1-Dichloroethane	#	50	48.1	3.8	LINR #	
Acetone		100	85.5	14.5	LINR	
2-Butanone		100	68.2	31.8	2ORD	<-
Chloroform	*	0.54682	0.49163	10.1	AVRG *	
1,1,1-Trichloroethane		0.39526	0.38642	2.2	AVRG	
Carbon tetrachloride		0.30193	0.31588	4.6	AVRG	
Benzene		1.15472	1.032	10.6	AVRG	
1,2-Dichloroethane		0.41169	0.37814	8.1	AVRG	
Trichloroethene		0.32454	0.28861	11.1	AVRG	
Vinyl acetate		0.67249	0.64452	4.2	AVRG	
1,2-Dichloropropane	*	0.27839	0.26321	5.5	AVRG *	
Dibromomethane		0.22023	0.19844	9.9	AVRG	
Bromodichloromethane		0.37897	0.36361	4.1	AVRG	
cis-1,3-Dichloropropene		0.36205	0.36463	0.7	AVRG	
4-Methyl-2-pentanone		0.12366	0.10497	15.1	AVRG	
Toluene	*	0.7132	0.69068	3.2	AVRG *	
trans-1,3-Dichloropropene		50	47.1	5.8	LINR	
Ethyl methacrylate		0.31906	0.28884	9.5	AVRG	
1,1,2-Trichloroethane		0.30983	0.2777	10.4	AVRG	
Tetrachloroethene		0.29139	0.268	8.0	AVRG	
2-Hexanone		0.28425	0.22305	21.5	AVRG	<-
Dibromochloromethane		0.34691	0.35064	1.1	AVRG	
1,2-Dibromoethane		0.39589	0.35468	10.4	AVRG	

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FORM VII

7

VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: VMS01 CalibrationDate: 07/30/12 Time: 2000

CCV ID: CCV1101747 Lab File ID: 50CCV14.D Init. Calib. Date Begin: 07/12/12 End: 07/12/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Chlorobenzene	#	1.09625	0.98604	10.1	AVRG #	
1,1,1,2-Tetrachloroethane		0.34684	0.33627	3.0	AVRG	
Ethylbenzene	*	0.53071	0.50165	5.5	AVRG *	
Styrene		0.96084	0.98136	2.1	AVRG	
Bromoform	#	0.24963	0.24958	0.0	AVRG #	
1,1,2,2-Tetrachloroethane	#	1.05052	0.8892	15.4	AVRG #	
1,2,3-Trichloropropane		0.31932	0.25745	19.4	AVRG	
1,2-Dibromo-3-chloropropane		0.1768	0.15173	14.2	AVRG	
1,4-Dichloro-2-butene		0.14877	0.11391	23.4	AVRG	<-
Acetonitrile		0.06658	0.07729	16.1	AVRG	
Allyl chloride		0.69554	0.77285	11.1	AVRG	
1,4-Dioxane		1000	980	2.0	LINR	
Isobutyl alcohol		1000	913	8.7	LINR	
Methacrylonitrile		0.12939	0.11256	13.0	AVRG	
Methyl methacrylate		0.19122	0.16261	15.0	AVRG	
Propionitrile		0.04992	0.0406	18.7	AVRG	
Chloroprene		0.29375	0.28773	2.0	AVRG	
o-Xylene		1.33287	1.256	5.8	AVRG	
p,m-Xylene		0.67935	0.63868	6.0	AVRG	
==========						
Dibromofluoromethane(SURR)		0.28238	0.28684	1.6	AVRG	
Toluene-d8(SURR)		1.01377	1.028	1.4	AVRG	
4-Bromofluorobenzene(SURR)		0.84168	0.80671	4.2	AVRG	
1,2-Dichloroethane-d4(SURR)		0.06511	0.06439	1.1	AVRG	

Average Used: 9.6

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FORM VII

8270 SIM Semi-Volatile Organics

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CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506563

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8270D-SIM.

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506563

Client: CH2M Hill

A client requested MS/SD set was analyzed. All percent recovery and relative percent difference (RPD) criteria were met.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

Sample Q1-TFS-MW-15 was analyzed full, but contained large amounts of non-target compounds and did not meet criteria for the internal standard Naphthalene d-8. This run is not reported. The sample was re-analyzed and is reported at a 4X dilution.

Sample Q1-TFS-MW-15-DUP was analyzed full, but contained large amounts of non-target compounds and did not meet criteria for the internal standard Naphthalene d-8. This run is not reported. The sample was re-analyzed and is reported at a 4X dilution.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Signature:
Name: Brian C. Spanh Title: Lab Director

SIGNED: DATE: 08/01/2012

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Method: 8270 SIM

EPA Sample No	Lab Sample ID
Q1-TFS-MW-17	350656301
Q1-TFS-MW-15	350656304
Q1-TFS-MW-15-DUP	350656305
Q1-TFS-MW-17-RS	350656306
Q1-TFS-MW-05	350656307
Q1-TFS-MW-11	350656308

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8270 SIM Sample Data

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 56301.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 1717

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.04	U	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.04	U	0.02	0.04	0.05
83-32-9	Acenaphthene	0.83		0.02	0.04	0.05
208-96-8	Acenaphthylene	0.037	J	0.02	0.04	0.05
120-12-7	Anthracene	0.029	J	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.079		0.02	0.04	0.05
86-73-7	Fluorene	0.04	U	0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	0.07		0.02	0.04	0.05
85-01-8	Phenanthrene	0.024	J	0.02	0.04	0.05
129-00-0	Pyrene	0.022	J	0.02	0.04	0.05

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 56304D4.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0847

PercentSolids: 0 decanted : Dilution Factor: 4

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	31.2		0.08	0.16	0.2
91-57-6	2-Methylnaphthalene	16.7		0.08	0.16	0.2
83-32-9	Acenaphthene	1.9		0.08	0.16	0.2
208-96-8	Acenaphthylene	0.21		0.08	0.16	0.2
120-12-7	Anthracene	1		0.08	0.16	0.2
56-55-3	Benzo(a)anthracene	0.2		0.08	0.16	0.2
50-32-8	Benzo(a)pyrene	0.16	U	0.08	0.16	0.2
205-99-2	Benzo(b)fluoranthene	0.16	U	0.08	0.16	0.2
191-24-2	Benzo(g,h,i)perylene	0.16	U	0.08	0.16	0.2
207-08-9	Benzo(k)fluoranthene	0.16	U	0.08	0.16	0.2
218-01-9	Chrysene	0.18	J	0.08	0.16	0.2
53-70-3	Dibenzo(a,h)anthracene	0.16	U	0.08	0.16	0.16
206-44-0	Fluoranthene	4		0.08	0.16	0.2
86-73-7	Fluorene	2.4		0.08	0.16	0.2
193-39-5	Indeno(1,2,3-cd)pyrene	0.16	U	0.08	0.16	0.2
91-20-3	Naphthalene	33		0.08	0.16	0.2
85-01-8	Phenanthrene	6.3		0.08	0.16	0.2
129-00-0	Pyrene	2.6		0.08	0.16	0.2

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 56305D4.D

Sample wt/vol: 980 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0911

PercentSolids: 0 decanted : Dilution Factor: 4

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	25.2		0.082	0.16	0.2
91-57-6	2-Methylnaphthalene	13.1		0.082	0.16	0.2
83-32-9	Acenaphthene	1.8		0.082	0.16	0.2
208-96-8	Acenaphthylene	0.2		0.082	0.16	0.2
120-12-7	Anthracene	0.81		0.082	0.16	0.2
56-55-3	Benzo(a)anthracene	0.22		0.082	0.16	0.2
50-32-8	Benzo(a)pyrene	0.16	U	0.082	0.16	0.2
205-99-2	Benzo(b)fluoranthene	0.16	U	0.082	0.16	0.2
191-24-2	Benzo(g,h,i)perylene	0.16	U	0.082	0.16	0.2
207-08-9	Benzo(k)fluoranthene	0.16	U	0.082	0.16	0.2
218-01-9	Chrysene	0.18	J	0.082	0.16	0.2
53-70-3	Dibenzo(a,h)anthracene	0.16	U	0.082	0.16	0.16
206-44-0	Fluoranthene	3.5		0.082	0.16	0.2
86-73-7	Fluorene	2.4		0.082	0.16	0.2
193-39-5	Indeno(1,2,3-cd)pyrene	0.16	U	0.082	0.16	0.2
91-20-3	Naphthalene	26.1		0.082	0.16	0.2
85-01-8	Phenanthrene	5.4		0.082	0.16	0.2
129-00-0	Pyrene	2.4		0.082	0.16	0.2

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17-RS

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656306 Lab File ID: 56306.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 1829

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.04	U	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.04	U	0.02	0.04	0.05
83-32-9	Acenaphthene	0.04	U	0.02	0.04	0.05
208-96-8	Acenaphthylene	0.04	U	0.02	0.04	0.05
120-12-7	Anthracene	0.04	U	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.04	U	0.02	0.04	0.05
86-73-7	Fluorene	0.04	U	0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	0.021	J	0.02	0.04	0.05
85-01-8	Phenanthrene	0.04	U	0.02	0.04	0.05
129-00-0	Pyrene	0.04	U	0.02	0.04	0.05

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 56307.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 1852

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.04	U	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.04	U	0.02	0.04	0.05
83-32-9	Acenaphthene	0.033	J	0.02	0.04	0.05
208-96-8	Acenaphthylene	0.04	U	0.02	0.04	0.05
120-12-7	Anthracene	0.04	U	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.027	J	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.053		0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.036	J	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.02	J	0.02	0.04	0.05
218-01-9	Chrysene	0.027	J	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.036	J	0.02	0.04	0.05
86-73-7	Fluorene	0.04	U	0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.031	J	0.02	0.04	0.05
91-20-3	Naphthalene	0.04	U	0.02	0.04	0.05
85-01-8	Phenanthrene	0.021	J	0.02	0.04	0.05
129-00-0	Pyrene	0.035	J	0.02	0.04	0.05

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-11

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656308 Lab File ID: 56308.D

Sample wt/vol: 980 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 1916

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.041	U	0.02	0.041	0.051
91-57-6	2-Methylnaphthalene	0.041	U	0.02	0.041	0.051
83-32-9	Acenaphthene	0.041	U	0.02	0.041	0.051
208-96-8	Acenaphthylene	0.041	U	0.02	0.041	0.051
120-12-7	Anthracene	0.041	U	0.02	0.041	0.051
56-55-3	Benzo(a)anthracene	0.041	U	0.02	0.041	0.051
50-32-8	Benzo(a)pyrene	0.041	U	0.02	0.041	0.051
205-99-2	Benzo(b)fluoranthene	0.041	U	0.02	0.041	0.051
191-24-2	Benzo(g,h,i)perylene	0.041	U	0.02	0.041	0.051
207-08-9	Benzo(k)fluoranthene	0.041	U	0.02	0.041	0.051
218-01-9	Chrysene	0.041	U	0.02	0.041	0.051
53-70-3	Dibenzo(a,h)anthracene	0.041	U	0.02	0.041	0.041
206-44-0	Fluoranthene	0.041	U	0.02	0.041	0.051
86-73-7	Fluorene	0.041	U	0.02	0.041	0.051
193-39-5	Indeno(1,2,3-cd)pyrene	0.041	U	0.02	0.041	0.051
91-20-3	Naphthalene	0.041	U	0.02	0.041	0.051
85-01-8	Phenanthrene	0.041	U	0.02	0.041	0.051
129-00-0	Pyrene	0.041	U	0.02	0.041	0.051

8270 SIM QC Summary

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138549MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 138549MB Lab File ID: 10194MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/24/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 1605

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.04	U	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.04	U	0.02	0.04	0.05
83-32-9	Acenaphthene	0.04	U	0.02	0.04	0.05
208-96-8	Acenaphthylene	0.04	U	0.02	0.04	0.05
120-12-7	Anthracene	0.04	U	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.04	U	0.02	0.04	0.05
86-73-7	Fluorene	0.04	U	0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	0.04	U	0.02	0.04	0.05
85-01-8	Phenanthrene	0.04	U	0.02	0.04	0.05
129-00-0	Pyrene	0.04	U	0.02	0.04	0.05

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SEMI-VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

138549MB

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Lab File ID: 10194MB.D Lab Sample ID: 138549MB

Instrument ID: SMSD03 Date Extracted: 07/24/12

Matrix: WATER Date Analyzed: 07/30/12

Level:(low/med) LOW Time Analyzed: 1605

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	138550LCS	138550LCS	10194LCS.D	07/30/12	1629
2	Q1-TFS-MW-17	350656301	56301.D	07/30/12	1717
3	Q1-TFS-MW-17MS	350656302	56302.D	07/30/12	1741
4	Q1-TFS-MW-17MSD	350656303	56303.D	07/30/12	1805
5	Q1-TFS-MW-17-RS	350656306	56306.D	07/30/12	1829
6	Q1-TFS-MW-05	350656307	56307.D	07/30/12	1852
7	Q1-TFS-MW-11	350656308	56308.D	07/30/12	1916
8	Q1-TFS-MW-15	350656304	56304D4.D	07/31/12	0847
9	Q1-TFS-MW-15-DUP	350656305	56305D4.D	07/31/12	0911

COMMENTS:

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Form IV

2A

WATER SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG NO.: 3506563

Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
138549MB	74.0	80.0					0
138550LCS	72.0	70.0					0
Q1-TFS-MW-05	74.0	86.0					0
Q1-TFS-MW-11	68.6	70.6					0
Q1-TFS-MW-15	72.0	84.0					0
Q1-TFS-MW-15-DUP	64.7	70.6					0
Q1-TFS-MW-17	70.0	74.0					0
Q1-TFS-MW-17MS	68.0	68.0					0
Q1-TFS-MW-17MSD	60.0	64.0					0
Q1-TFS-MW-17-RS	68.0	64.0					0

Control Limits

S1	=	p-Terphenyl-d14	33 - 141
S2	=	2-Fluorobiphenyl	43 - 116

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

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SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Lab File ID: DFTPP1.D DFTPP Injection Date: 07/30/12

Instrument ID: SMSD03 DFTPP Injection Time: 0744

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	23	
68	Less than 2.0% of mass 69	0.4	(1.13)1
69	Mass 69 relative abundance	39	
70	Less than 2.0% of mass 69	0.2	(0.39)1
127	10.0 - 80.0% of mass 198	40.8	
197	Less than 2.0% of mass 198	0.2	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.9	
275	10.0 - 60.0% of mass 198	38.1	
365	Greater than 1.0% of mass 198	8	
441	0.0 - 24.0% of mass 442	19.3	(15.66)2
442	Greater than 50.0% of mass 198	123.3	
443	15.0 - 24.0% of mass 442	23.8	(19.34)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD1101892	46155	SIMCAL10.D	07/30/12	1006
2	STD1101900	46156	SIMCAL9.D	07/30/12	1029
3	STD1101899	46157	SIMCAL8.D	07/30/12	1053
4	STD1101898	46158	SIMCAL7.D	07/30/12	1117
5	STD1101897	47065	SIMCAL6.D	07/30/12	1141
6	STD1101896	46160	SIMCAL5.D	07/30/12	1205
7	STD1101895	46161	SIMCAL4.D	07/30/12	1229
8	STD1101894	46162	SIMCAL3.D	07/30/12	1253
9	STD1101893	46163	SIMCAL2.D	07/30/12	1317
10	STD1101891	46164	SIMCAL1.D	07/30/12	1341
11	SSC1101904	46253	SIMSECA.D	07/30/12	1405

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Lab File ID: DFTPP1.D DFTPP Injection Date: 07/31/12

Instrument ID: SMSD03 DFTPP Injection Time: 0713

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	22	
68	Less than 2.0% of mass 69	0.6	(1.65)1
69	Mass 69 relative abundance	39.6	
70	Less than 2.0% of mass 69	0.2	(0.63)1
127	10.0 - 80.0% of mass 198	42.8	
197	Less than 2.0% of mass 198	0.2	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.9	
275	10.0 - 60.0% of mass 198	40.3	
365	Greater than 1.0% of mass 198	8.5	
441	0.0 - 24.0% of mass 442	20.2	(15.58)2
442	Greater than 50.0% of mass 198	129.8	
443	15.0 - 24.0% of mass 442	25.9	(19.96)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV1101901	47065	SIMCCV2.D	07/31/12	0800
2	Q1-TFS-MW-15	350656304	56304D4.D	07/31/12	0847
3	Q1-TFS-MW-15-DUP	350656305	56305D4.D	07/31/12	0911

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Lab File ID: DFTPP2.D DFTPP Injection Date: 07/30/12

Instrument ID: SMSD03 DFTPP Injection Time: 1457

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	27.3	
68	Less than 2.0% of mass 69	0.4	(0.84)1
69	Mass 69 relative abundance	42.8	
70	Less than 2.0% of mass 69	0.3	(0.75)1
127	10.0 - 80.0% of mass 198	40.7	
197	Less than 2.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.9	
275	10.0 - 60.0% of mass 198	38.5	
365	Greater than 1.0% of mass 198	8.8	
441	0.0 - 24.0% of mass 442	18.9	(15.48)2
442	Greater than 50.0% of mass 198	122.2	
443	15.0 - 24.0% of mass 442	24	(19.67)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV1101903	47065	SIMCCV4.D	07/30/12	1542
2	138549MB	138549MB	10194MB.D	07/30/12	1605
3	138550LCS	138550LCS	10194LCS.D	07/30/12	1629
4	Q1-TFS-MW-17	350656301	56301.D	07/30/12	1717
5	Q1-TFS-MW-17MS	350656302	56302.D	07/30/12	1741
6	Q1-TFS-MW-17MSD	350656303	56303.D	07/30/12	1805
7	Q1-TFS-MW-17-RS	350656306	56306.D	07/30/12	1829
8	Q1-TFS-MW-05	350656307	56307.D	07/30/12	1852
9	Q1-TFS-MW-11	350656308	56308.D	07/30/12	1916

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Lab File ID (Standard): SIMCAL6.D Date Analyzed: 7/30/2012

Instrument ID: SMSD03 Time Analyzed: 11:41

GC Column: HPMS-5 ID: 0.25 (mm)

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	9258		4.09	29580		5.26	22715		6.94
	UPPER LIMIT	18516		4.59	59160		5.76	45430		7.44
	LOWER LIMIT	4629		3.59	14790		4.76	11357.5		6.44
	EPA SAMPLE NO.									
1	138549MB	7771		4.09	26838		5.26	21503		6.94
2	138550LCS	8925		4.09	30078		5.26	23597		6.94
3	Q1-TFS-MW-17	10237		4.09	34727		5.26	27430		6.94
4	Q1-TFS-MW-17MS	11306		4.09	38359		5.25	29924		6.94
5	Q1-TFS-MW-17MSD	11860		4.09	39414		5.26	31082		6.94
6	Q1-TFS-MW-17-RS	11107		4.09	39838		5.26	30739		6.94
7	Q1-TFS-MW-05	11151		4.09	38522		5.26	29992		6.94
8	Q1-TFS-MW-11	12403		4.09	41086		5.26	32070		6.94
9	Q1-TFS-MW-15	12178		4.09	46042		5.25	31520		6.94
10	Q1-TFS-MW-15-DUP	12079		4.09	46001		5.25	31471		6.94

IS1 = 1,4-Dichlorobenzene-d4

IS2 = Naphthalene-d8

IS3 = Acenaphthene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Lab File ID (Standard): SIMCAL6.D Date Analyzed: 7/30/2012

Instrument ID: SMSD03 Time Analyzed: 11:41

GC Column: HPMS-5 ID: 0.25 (mm)

		IS4 AREA	#	RT	IS5 AREA	#	RT	IS6 AREA	#	RT
	MID CAL STD	52916		8.40	76092		11.00	71890		12.30
	UPPER LIMIT	105832		8.90	152184		11.50	143780		12.80
	LOWER LIMIT	26458		7.90	38046		10.50	35945		11.80
	EPA SAMPLE NO.									
1	138549MB	50889		8.40	72045		11.00	66695		12.30
2	138550LCS	53793		8.40	77970		10.99	75545		12.30
3	Q1-TFS-MW-17	62102		8.40	88424		10.99	88629		12.30
4	Q1-TFS-MW-17MS	65738		8.40	92936		10.99	94390		12.30
5	Q1-TFS-MW-17MSD	68235		8.40	97092		10.99	96067		12.30
6	Q1-TFS-MW-17-RS	67515		8.40	92132		11.00	85948		12.30
7	Q1-TFS-MW-05	67574		8.40	93318		10.99	94564		12.30
8	Q1-TFS-MW-11	71988		8.40	95171		10.99	93259		12.30
9	Q1-TFS-MW-15	70255		8.40	91609		11.00	91456		12.31
10	Q1-TFS-MW-15-DUP	68890		8.40	90967		10.99	91472		12.30

IS4 = Phenanthrene-d10

IS5 = Chrysene-d12

IS6 = Perylene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 07/30/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 9.97 S2 : 6.3

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	DFTPP1	46591	DFTPP1.D	07/30/12	0744		
2	STD1101892	46155	SIMCAL10.D	07/30/12	1006	9.97	6.29
3	STD1101900	46156	SIMCAL9.D	07/30/12	1029	9.96	6.29
4	STD1101899	46157	SIMCAL8.D	07/30/12	1053	9.97	6.3
5	STD1101898	46158	SIMCAL7.D	07/30/12	1117	9.97	6.3
6	STD1101897	47065	SIMCAL6.D	07/30/12	1141	9.97	6.3
7	STD1101896	46160	SIMCAL5.D	07/30/12	1205	9.97	6.3
8	STD1101895	46161	SIMCAL4.D	07/30/12	1229	9.97	6.31
9	STD1101894	46162	SIMCAL3.D	07/30/12	1253	9.97	6.31
10	STD1101893	46163	SIMCAL2.D	07/30/12	1317	9.98	6.31
11	STD1101891	46164	SIMCAL1.D	07/30/12	1341	9.98	6.32
12	SSC1101904	46253	SIMSECA.D	07/30/12	1405	9.97	6.3
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1433		
14	DFTPP2	46591	DFTPP2.D	07/30/12	1457		
15	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1518		
16	CCV1101903	47065	SIMCCV4.D	07/30/12	1542	9.97	6.3
17	138549MB	138549MB	10194MB.D	07/30/12	1605	9.97	6.3
18	138550LCS	138550LCS	10194LCS.D	07/30/12	1629	9.97	6.3
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1653		
20	Q1-TFS-MW-17	350656301	56301.D	07/30/12	1717	9.97	6.29
21	Q1-TFS-MW-17MS	350656302	56302.D	07/30/12	1741	9.97	6.29
22	Q1-TFS-MW-17MSD	350656303	56303.D	07/30/12	1805	9.96	6.3
23	Q1-TFS-MW-17-RS	350656306	56306.D	07/30/12	1829	9.97	6.3
24	Q1-TFS-MW-05	350656307	56307.D	07/30/12	1852	9.97	6.3
25	Q1-TFS-MW-11	350656308	56308.D	07/30/12	1916	9.97	6.3
26	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1940		

			QC LIMITS
S1	=	p-Terphenyl-d14	(+/- 0.66 MINUTES)
S2	=	2-Fluorobiphenyl	(+/- 0.42 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

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FORM VIII

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 07/30/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 9.97 S2 : 6.3

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
27	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	2004				
28	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	2027				
29	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	2051				
30	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	2115				
31	DFTPP1	46591	DFTPP1.D	07/31/12	0713				
32	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/31/12	0733				
33	CCV1101901	47065	SIMCCV2.D	07/31/12	0800	9.97		6.3	
34	Q1-TFS-MW-15	350656304	56304D4.D	07/31/12	0847	9.97		6.29	
35	Q1-TFS-MW-15-DUP	350656305	56305D4.D	07/31/12	0911	9.97		6.29	
36	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/31/12	0935				

			QC LIMITS
S1	=	p-Terphenyl-d14	(+/- 0.66 MINUTES)
S2	=	2-Fluorobiphenyl	(+/- 0.42 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

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FORM VIII

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 138550LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
1-Methylnaphthalene	0.5	0.36	72.0			68 - 115
2-Methylnaphthalene	0.5	0.42	84.0			47 - 121
Acenaphthene	0.5	0.4	80.0			64 - 110
Acenaphthylene	0.5	0.42	84.0			45 - 115
Anthracene	0.5	0.41	82.0			61 - 108
Benzo(a)anthracene	0.5	0.45	90.0			53 - 110
Benzo(a)pyrene	0.5	0.4	80.0			55 - 109
Benzo(b)fluoranthene	0.5	0.46	92.0			65 - 110
Benzo(g,h,i)perylene	0.5	0.43	86.0			68 - 115
Benzo(k)fluoranthene	0.5	0.38	76.0			70 - 111
Chrysene	0.5	0.4	80.0			71 - 115
Dibenzo(a,h)anthracene	0.5	0.52	104.0			60 - 104
Fluoranthene	0.5	0.43	86.0			63 - 114
Fluorene	0.5	0.41	82.0			59 - 120
Indeno(1,2,3-cd)pyrene	0.5	0.45	90.0			66 - 110
Naphthalene	0.5	0.39	78.0			68 - 125
Phenanthrene	0.5	0.43	86.0			31 - 147
Pyrene	0.5	0.39	78.0			59 - 120

Spike Recovery: 0 out of 18 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stan

Q1-TFS-MW-17MS

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC #	QC LIMITS REC.
1-Methylnaphthalene	0.50	0	0.32	64.0	36 - 138
2-Methylnaphthalene	0.50	0	0.37	74.0	34 - 141
Acenaphthene	0.50	0.83	1.2	74.0	47 - 128
Acenaphthylene	0.50	0.037	0.41	74.6	32 - 153
Anthracene	0.50	0.029	0.40	74.2	53 - 128
Benzo(a)anthracene	0.50	0	0.41	82.0	59 - 166
Benzo(a)pyrene	0.50	0	0.36	72.0	43 - 146
Benzo(b)fluoranthene	0.50	0	0.44	88.0	56 - 173
Benzo(g,h,i)perylene	0.50	0	0.41	82.0	25 - 174
Benzo(k)fluoranthene	0.50	0	0.32	64.0	56 - 158
Chrysene	0.50	0	0.36	72.0	55 - 128
Dibenzo(a,h)anthracene	0.50	0	0.54	108.0	21 - 207
Fluoranthene	0.50	0.079	0.46	76.2	55 - 155
Fluorene	0.50	0	0.38	76.0	40 - 151
Indeno(1,2,3-cd)pyrene	0.50	0	0.43	86.0	19 - 166
Naphthalene	0.50	0.070	0.32	50.0	38 - 139
Phenanthrene	0.50	0.024	0.43	81.2	65 - 120
Pyrene	0.50	0.022	0.38	71.6	49 - 158

Spike Recovery: 0 out of 18 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

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3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Q1-TFS-MW-17MSD

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	MSD CONCENTRATION ug/L	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1-Methylnaphthalene	0.50	0.33	66.0	3.1	20	36 - 138
2-Methylnaphthalene	0.50	0.39	78.0	5.3	20	34 - 141
Acenaphthene	0.50	1.2	74.0	0.0	20	47 - 128
Acenaphthylene	0.50	0.39	70.6	5.0	20	32 - 153
Anthracene	0.50	0.33	60.2	19.2	20	53 - 128
Benzo(a)anthracene	0.50	0.36	72.0	13.0	20	59 - 166
Benzo(a)pyrene	0.50	0.32	64.0	11.8	20	43 - 146
Benzo(b)fluoranthene	0.50	0.39	78.0	12.0	20	56 - 173
Benzo(g,h,i)perylene	0.50	0.36	72.0	13.0	20	25 - 174
Benzo(k)fluoranthene	0.50	0.29	58.0	9.8	20	56 - 158
Chrysene	0.50	0.33	66.0	8.7	20	55 - 128
Dibenzo(a,h)anthracene	0.50	0.47	94.0	13.9	20	21 - 207
Fluoranthene	0.50	0.42	68.2	9.1	20	55 - 155
Fluorene	0.50	0.36	72.0	5.4	20	40 - 151
Indeno(1,2,3-cd)pyrene	0.50	0.38	76.0	12.3	20	19 - 166
Naphthalene	0.50	0.36	58.0	11.8	20	38 - 139
Phenanthrene	0.50	0.40	75.2	7.2	19	65 - 120
Pyrene	0.50	0.34	63.6	11.1	17	49 - 158

RPD: 0 out of 18 outside limits

Spike Recovery: 0 out of 18 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

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8270 SIM Standards Data

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SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SMSD03 Calibration Date Begin: 07/30/12 End: 07/30/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 1006 End: 1341

Min RRF for SPCC(#) = N/A Max %RSD for CCC(*) = 15 %

LAB FILE ID: RRF0.02 =SIMCAL1.D RRF0.05 =SIMCAL2.D
RRF0.07 =SIMCAL3.D RRF0.1 =SIMCAL4.D RRF0.2 =SIMCAL5.D

COMPOUND	RRF0.02	RRF0.05	RRF0.07	RRF0.1	RRF0.2	$\overline{RRF}$	%RSD OR R^2
1-Methylnaphthalene	0.827	0.828	0.556	0.764	0.645		
2-Methylnaphthalene	0.562	0.607	0.507	0.670	0.597		
Acenaphthene	* 1.096	1.174	1.053	1.156	1.123		*
Acenaphthylene	1.570	1.492	1.566	1.604	1.663		
Anthracene	0.994	1.142	0.953	0.922	0.855		
Benzo(a)anthracene	0.919	0.855	0.868	0.870	0.858		
Benzo(a)pyrene	* 1.145	1.051	1.011	1.100	0.984		*
Benzo(b)fluoranthene	0.857	0.966	0.849	1.025	0.914		
Benzo(g,h,i)perylene	0.823	0.764	0.855	0.839	0.886		
Benzo(k)fluoranthene	1.883	1.565	1.719	1.622	1.652		
Chrysene	1.372	1.297	1.225	1.271	1.236		
Dibenzo(a,h)anthracene	0.609	0.587	0.570	0.657	0.647		
Fluoranthene	* 1.299	1.268	1.341	1.345	1.302		*
Fluorene	1.310	1.275	1.216	1.265	1.318		
Indeno(1,2,3-cd)pyrene	0.837	0.794	0.832	0.923	0.935		
Naphthalene	0.895	0.915	0.931	0.997	0.977		
Phenanthrene	0.865	0.861	0.845	0.885	0.898		
Pyrene	1.247	1.119	1.115	1.095	1.032		
==========							
p-Terphenyl-d14(SURR)	1.286	1.134	1.119	1.151	1.098		
2-Fluorobiphenyl(SURR)	1.546	1.491	1.530	1.870	2.013		

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SMSD03 Calibration Date Begin: 07/30/12 End: 07/30/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 1006 End: 1341

Min RRF for SPCC(#) = N/A Max %RSD for CCC(*) = 15 %

LAB FILE ID: RRF0.5 =SIMCAL6.D RRF0.7 =SIMCAL7.D
RRF1 =SIMCAL8.D RRF5 =SIMCAL9.D RRF10 =SIMCAL10.D

COMPOUND	RRF0.5	RRF0.7	RRF1	RRF5	RRF10	$\overline{RRF}$	%RSD OR R^2
1-Methylnaphthalene	0.757	0.730	0.694	0.710	0.711	0.72215	11.3
2-Methylnaphthalene	0.760	0.728	0.732	0.781	0.778	0.67215	14.6
Acenaphthene	* 1.196	1.119	1.156	1.134	1.122	1.13294	3.6 *
Acenaphthylene	1.805	1.698	1.746	1.777	1.700	1.66207	6.1
Anthracene	1.083	1.056	0.990	1.015	0.908	0.99179	8.7
Benzo(a)anthracene	0.969	0.967	0.999	0.979	0.957	0.92417	6.1
Benzo(a)pyrene	* 1.066	1.020	1.043	1.008	0.996	1.0424	4.8 *
Benzo(b)fluoranthene	1.116	1.081	1.268	1.144	1.102	1.03235	13.1
Benzo(g,h,i)perylene	0.971	0.932	0.963	0.994	0.963	0.89903	8.6
Benzo(k)fluoranthene	1.505	1.412	1.332	1.232	1.192	1.51132	14.6
Chrysene	1.172	1.104	1.103	1.017	0.959	1.17564	11
Dibenzo(a,h)anthracene	0.798	0.809				0.66812	14.6
Fluoranthene	* 1.408	1.418	1.388	1.381	1.307	1.34563	3.8 *
Fluorene	1.510	1.434	1.472	1.467	1.446	1.37124	7.7
Indeno(1,2,3-cd)pyrene	1.074	1.068	1.126	1.162	1.193	0.99436	14.8
Naphthalene	1.041	0.975	0.964	0.986	0.930	0.96118	4.5
Phenanthrene	0.996	1.012	0.987	1.013	0.965	0.93264	7.3
Pyrene	1.029	1.002	1.037	0.979	0.928	1.05826	8.5
p-Terphenyl-d14(SURR)	1.095	1.043	1.054	0.985	0.935	1.09006	8.8
2-Fluorobiphenyl(SURR)	2.258	1.890	2.204	1.932	1.870	1.8603	14.4

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FORM VI

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 07/30/12 Time: 1405

CCV ID: SSC1101904 Lab File ID: SIMSECA.D Init. Calib. Date Begin: 07/30/12 End: 07/30/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type
1-Methylnaphthalene		0.72215	0.62948	12.8	AVRG
2-Methylnaphthalene		0.67215	0.70769	5.3	AVRG
Acenaphthene	*	1.13294	1.133	0.0	AVRG *
Acenaphthylene		1.66207	1.749	5.2	AVRG
Anthracene		0.99179	0.95073	4.1	AVRG
Benzo(a)anthracene		0.92417	1.03	11.5	AVRG
Benzo(a)pyrene	*	1.0424	1.03	1.2	AVRG *
Benzo(b)fluoranthene		1.03235	1.144	10.8	AVRG
Benzo(g,h,i)perylene		0.89903	0.85485	4.9	AVRG
Benzo(k)fluoranthene		1.51132	1.498	0.9	AVRG
Chrysene		1.17564	1.174	0.1	AVRG
Dibenzo(a,h)anthracene		0.66812	0.70688	5.8	AVRG
Fluoranthene	*	1.34563	1.377	2.3	AVRG *
Fluorene		1.37124	1.502	9.5	AVRG
Indeno(1,2,3-cd)pyrene		0.99436	0.95779	3.7	AVRG
Naphthalene		0.96118	0.97745	1.7	AVRG
Phenanthrene		0.93264	1.018	9.2	AVRG
Pyrene		1.05826	1.112	5.1	AVRG
==========					
p-Terphenyl-d14(SURR)		1.09006	0.89508	17.9	AVRG
2-Fluorobiphenyl(SURR)		1.8603	1.516	18.5	AVRG

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FORM VII

7

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 07/30/12 Time: 1542

CCV ID: CCV1101903 Lab File ID: SIMCCV4.D Init. Calib. Date Begin: 07/30/12 End: 07/30/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type
1-Methylnaphthalene		0.72215	0.85778	18.8	AVRG
2-Methylnaphthalene		0.67215	0.76113	13.2	AVRG
Acenaphthene	*	1.13294	1.15	1.5	AVRG *
Acenaphthylene		1.66207	1.678	1.0	AVRG
Anthracene		0.99179	1.059	6.8	AVRG
Benzo(a)anthracene		0.92417	0.95027	2.8	AVRG
Benzo(a)pyrene	*	1.0424	1.038	0.4	AVRG *
Benzo(b)fluoranthene		1.03235	1.121	8.6	AVRG
Benzo(g,h,i)perylene		0.89903	0.8806	2.0	AVRG
Benzo(k)fluoranthene		1.51132	1.511	0.0	AVRG
Chrysene		1.17564	1.208	2.8	AVRG
Dibenzo(a,h)anthracene		0.66812	0.72376	8.3	AVRG
Fluoranthene	*	1.34563	1.423	5.7	AVRG *
Fluorene		1.37124	1.394	1.7	AVRG
Indeno(1,2,3-cd)pyrene		0.99436	0.97097	2.4	AVRG
Naphthalene		0.96118	1.059	10.2	AVRG
Phenanthrene		0.93264	0.98273	5.4	AVRG
Pyrene		1.05826	1.086	2.6	AVRG
==========					
p-Terphenyl-d14(SURR)		1.09006	1.154	5.9	AVRG
2-Fluorobiphenyl(SURR)		1.8603	2.188	17.6	AVRG

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FORM VII

7

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 07/31/12 Time: 0800

CCV ID: CCV1101901 Lab File ID: SIMCCV2.D Init. Calib. Date Begin: 07/30/12 End: 07/30/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type
1-Methylnaphthalene		0.72215	0.77954	7.9	AVRG
2-Methylnaphthalene		0.67215	0.77337	15.1	AVRG
Acenaphthene	*	1.13294	1.227	8.3	AVRG *
Acenaphthylene		1.66207	1.824	9.7	AVRG
Anthracene		0.99179	1.086	9.5	AVRG
Benzo(a)anthracene		0.92417	0.92205	0.2	AVRG
Benzo(a)pyrene	*	1.0424	1.069	2.6	AVRG *
Benzo(b)fluoranthene		1.03235	1.095	6.1	AVRG
Benzo(g,h,i)perylene		0.89903	0.89797	0.1	AVRG
Benzo(k)fluoranthene		1.51132	1.469	2.8	AVRG
Chrysene		1.17564	1.23	4.6	AVRG
Dibenzo(a,h)anthracene		0.66812	0.7781	16.5	AVRG
Fluoranthene	*	1.34563	1.393	3.5	AVRG *
Fluorene		1.37124	1.491	8.7	AVRG
Indeno(1,2,3-cd)pyrene		0.99436	1.006	1.2	AVRG
Naphthalene		0.96118	0.98827	2.8	AVRG
Phenanthrene		0.93264	1.023	9.7	AVRG
Pyrene		1.05826	1.079	2.0	AVRG
==========					
p-Terphenyl-d14(SURR)		1.09006	1.124	3.1	AVRG
2-Fluorobiphenyl(SURR)		1.8603	1.915	2.9	AVRG

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FORM VII

8270 Semi-Volatile Organics

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CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506563

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8270D.

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met with the exception of:

SSC1103003 was the second source verification standard analyzed with the initial calibration on 08/03/12. The %D was over the 20% limit for the following compounds: Ethyl methanesulfonate (+24.6%), 1-Naphthylamine (+44.9%), 2-Naphthylamine (+34.6%), Methapyriline (+1647%), 3-Methylcholanthrene (-37.4%), 1,3,5-Trinitrobenzene (-43.2%). No further action was taken, since these compounds were not detected in any samples and were a result of a discrepancy between the primary and secondary standards. The secondary standard is also used to spike the LCS. Because of this difference, Methapyriline exceeded the calibration range in the LCS, MS and MSD. No further action was taken, since this compound was not detected in any samples.

The Percent RSD was over the 15% limit for 4-Nitroquinoline-1-oxide for the initial calibration at 35.9%. No further action was taken, since this compound was not detected in any samples.

Spectrum Analytical Inc. Lab Reference No./SDG: 3506563

Client: CH2M Hill

Spectrum Analytical Inc. does not analyze a low calibration standard at the requested RL for all analytes. The low calibration standard is 10 ug/L for the following analytes: 4,6-Dinitro-2-methylphenol, Methapyriline.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:

LCS 138488LCS was analyzed with the water samples extracted on 07/23/12. The following analytes were recovered below criteria: 1,4-Naphthoquinone at 27 % with criteria of (28-143), Hexachloropropene at 15.2 % with criteria of (21-105). The following analytes had marginal exceedance limit failures: 2-Naphthylamine at 49 % with criteria of (60-140), a,a-Dimethylphenethylamine at 0 % with criteria of (60-140), Methapyriline at 370 % with criteria of (0-105). No further action was taken. None of these compounds were detected in any samples.

Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

A client requested MS/SD set was analyzed. All percent recovery and relative percent difference (RPD) criteria were met with the exception of:

MS - Q1-TFS-MW-17MS was analyzed with the water samples extracted on 07/23/12. The following analytes were recovered below criteria:1,4-Naphthoquinone at 0 % with criteria of (28-143), 2-Naphthylamine at 52.2 % with criteria of (70-130), a,a-Dimethylphenethylamine at 0 % with criteria of (70-130), Hexachloropropene at 19.2 % with criteria of (21-105) and the following analyte was recovered above criteria: Methapyriline at 699 % with criteria of (0-90).

SD - Q1-TFS-MW-17MSD was analyzed with the water samples extracted on 07/23/12. The following analytes were recovered below criteria:1,4-Naphthoquinone at 0 % with criteria of (28-143), 2-Naphthylamine at 50.2 % with criteria of (70-130), a,a-Dimethylphenethylamine at 0 % with criteria of (70-130), Hexachloropropene at 17.4 % with criteria of (21-105), p-Dimethylaminoazobenzene at 68.4 % with criteria of (70-130) and the

Spectrum Analytical Inc. Lab Reference No./SDG: 3506563

Client: CH2M Hill

following analyte was recovered above criteria: Methapyriline at 776 % with criteria of (0-90). The following analytes exceeded RPD criteria: 4-Nitroquinoline-1-oxide at 20.1 % with criteria of (20), Safrole at 31.5 % with criteria of (20).

Samples coded accordingly.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Signature:

Name: Brian C. Spanh Title: Lab Director

SIGNED: DATE: 08/06/2012

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Method: 8270

EPA Sample No	Lab Sample ID
Q1-TFS-MW-17	350656301
Q1-TFS-MW-15	350656304
Q1-TFS-MW-15-DUP	350656305
Q1-TFS-MW-17-RS	350656306
Q1-TFS-MW-05	350656307
Q1-TFS-MW-11	350656308

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8270 Sample Data

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 56301.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1424

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6	U	3	6	6
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.4	U	2.7	5.4	5.4
106-46-7	1,4-Dichlorobenzene	5.4	U	2.7	5.4	5.4
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.2	U	3.1	6.2	10
108-60-1	2,2'-Oxybis(1-chloropropane)	6.6	U	3.3	6.6	6.6
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6	U	3	6	6
106-44-5	4-Methylphenol	12.3	U	6.1	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.6	U	3.8	7.6	7.6
88-75-5	2-Nitrophenol	1.5	U	0.77	1.5	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7	U	3.5	7	7
120-83-2	2,4-Dichlorophenol	6.2	U	3.1	6.2	6.2
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6	U	3	6	6
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.4	U	2.7	5.4	5.4
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.82	1.6	4

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 56301.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1424

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.84	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.8	U	3.4	6.8	6.8
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6	U	3	6	6
131-11-3	Dimethylphthalate	6	U	3	6	6
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.2	U	5.6	11.2	20.1
132-64-9	Dibenzofuran	5.4	U	2.7	5.4	5.4
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8	U	4	8	8
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8	U	4	8	8
86-30-6	N-Nitrosodiphenylamine	6.8	U	3.4	6.8	6.8
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.82	U	0.41	0.82	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10
84-74-2	Di-n-butylphthalate	1.7	U	0.86	1.7	4
85-68-7	Butylbenzylphthalate	6	U	3	6	6
91-94-1	3,3'-Dichlorobenzidine	5.4	U	2.7	5.4	5.4
117-81-7	Bis(2-ethylhexyl)phthalate	8.8	U	4.4	8.8	8.8
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8	U	4	8	8
10595-95-6	N-Nitrosomethylethylamine	5.4	U	2.7	5.4	5.4

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 56301.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1424

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
55-18-5	N-Nitrosodiethylamine	6.2	U	3.1	6.2	6.2
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20.1
930-55-2	N-Nitrosopyrrolidine	5.4	U	2.7	5.4	5.4
98-86-2	Acetophenone	8	U	4	8	8
59-89-2	N-Nitrosomorpholine	6	U	3	6	6
95-53-4	o-Toluidine	5.4	U	2.7	5.4	5.4
122-09-8	a,a-Dimethylphenethylamine	32.2	U	16.1	32.2	32.2
87-65-0	2,6-Dichlorophenol	7	U	3.5	7	7
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.4	U	2.7	5.4	5.4
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.2	U	3.1	6.2	6.2
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6	U	3	6	6
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.89	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.81	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 56301.D

Sample wt/vol: 995 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1424

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8	U	4	8	8
56-57-5	4-Nitroquinoline-1-oxide	7.4	U	3.7	7.4	10
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8	U	4	8	8
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.62	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.96	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.84	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.78	1.6	4
143-50-0	Kepone	32.2	U	16.1	32.2	32.2
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 56304.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1735

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 56304.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1735

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 56304.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1735

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20.2
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5
98-86-2	Acetophenone	8.1	U	4	8.1	8.1
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.9	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.82	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 56304.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1735

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8.1	U	4	8.1	8.1
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8.1	U	4	8.1	8.1
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4
143-50-0	Kepone	32.3	U	16.2	32.3	32.3
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 56305.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1759

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 56305.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1759

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 56305.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1759

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20.2
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5
98-86-2	Acetophenone	8.1	U	4	8.1	8.1
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.9	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.82	1.6	4

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 56305.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1759

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8.1	U	4	8.1	8.1
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8.1	U	4	8.1	8.1
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4
143-50-0	Kepone	32.3	U	16.2	32.3	32.3
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17-RS

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656306 Lab File ID: 56306.D

Sample wt/vol: 950 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1536

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.4	U	2.2	4.4	4.4
62-75-9	N-Nitrosodimethylamine	4.6	U	2.3	4.6	4.6
62-53-3	Aniline	5.9	U	2.9	5.9	5.9
111-44-4	Bis(2-chloroethyl)ether	6.3	U	3.2	6.3	6.3
108-95-2	Phenol	3.6	U	1.8	3.6	4.2
95-57-8	2-Chlorophenol	6.1	U	3	6.1	6.1
541-73-1	1,3-Dichlorobenzene	5.7	U	2.8	5.7	5.7
106-46-7	1,4-Dichlorobenzene	5.7	U	2.8	5.7	5.7
95-50-1	1,2-Dichlorobenzene	5.5	U	2.7	5.5	5.5
100-51-6	Benzyl alcohol	6.5	U	3.3	6.5	10.5
108-60-1	2,2'-Oxybis(1-chloropropane)	6.9	U	3.5	6.9	6.9
95-48-7	2-Methylphenol	5.5	U	2.7	5.5	5.5
67-72-1	Hexachloroethane	5.5	U	2.7	5.5	5.5
621-64-7	N-Nitroso-di-n-propylamine	6.3	U	3.2	6.3	6.3
106-44-5	4-Methylphenol	12.8	U	6.4	12.8	12.8
98-95-3	Nitrobenzene	2.1	U	1	2.1	4.2
78-59-1	Isophorone	8	U	4	8	8
88-75-5	2-Nitrophenol	1.6	U	0.81	1.6	4.2
105-67-9	2,4-Dimethylphenol	4.8	U	2.4	4.8	4.8
111-91-1	Bis(2-chloroethoxy)methane	7.4	U	3.7	7.4	7.4
120-83-2	2,4-Dichlorophenol	6.5	U	3.3	6.5	6.5
120-82-1	1,2,4-Trichlorobenzene	5.5	U	2.7	5.5	5.5
106-47-8	4-Chloroaniline	6.3	U	3.2	6.3	6.3
87-68-3	Hexachlorobutadiene	5.3	U	2.6	5.3	5.3
59-50-7	4-Chloro-3-methylphenol	5.7	U	2.8	5.7	5.7
77-47-4	Hexachlorocyclopentadiene	1.7	U	0.86	1.7	4.2

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17-RS

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656306 Lab File ID: 56306.D

Sample wt/vol: 950 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1536

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.8	U	0.88	1.8	4.2
95-95-4	2,4,5-Trichlorophenol	7.2	U	3.6	7.2	7.2
91-58-7	2-Chloronaphthalene	5.9	U	2.9	5.9	5.9
88-74-4	2-Nitroaniline	6.3	U	3.2	6.3	6.3
131-11-3	Dimethylphthalate	6.3	U	3.2	6.3	6.3
606-20-2	2,6-Dinitrotoluene	5.9	U	2.9	5.9	5.9
99-09-2	3-Nitroaniline	5.9	U	2.9	5.9	5.9
51-28-5	2,4-Dinitrophenol	11.8	U	5.9	11.8	21
132-64-9	Dibenzofuran	5.7	U	2.8	5.7	5.7
121-14-2	2,4-Dinitrotoluene	5.9	U	2.9	5.9	5.9
100-02-7	4-Nitrophenol	8.4	U	4.2	8.4	8.4
7005-72-3	4-Chlorophenyl-phenylether	5.3	U	2.6	5.3	5.3
84-66-2	Diethylphthalate	5.9	U	2.9	5.9	5.9
100-01-6	4-Nitroaniline	3.2	U	1.6	3.2	4.2
534-52-1	4,6-Dinitro-2-methylphenol	8.4	U	4.2	8.4	8.4
86-30-6	N-Nitrosodiphenylamine	7.2	U	3.6	7.2	7.2
101-55-3	4-Bromophenyl-phenylether	4.8	U	2.4	4.8	4.8
118-74-1	Hexachlorobenzene	0.86	U	0.43	0.86	4.2
87-86-5	Pentachlorophenol	2.9	U	1.5	2.9	10.5
84-74-2	Di-n-butylphthalate	1.8	U	0.9	1.8	4.2
85-68-7	Butylbenzylphthalate	6.3	U	3.2	6.3	6.3
91-94-1	3,3'-Dichlorobenzidine	5.7	U	2.8	5.7	5.7
117-81-7	Bis(2-ethylhexyl)phthalate	9.3	U	4.6	9.3	9.3
117-84-0	Di-n-octylphthalate	4.2	U	2.1	4.2	4.2
109-06-8	2-Picoline	8.4	U	4.2	8.4	8.4
10595-95-6	N-Nitrosomethylethylamine	5.7	U	2.8	5.7	5.7

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17-RS

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656306 Lab File ID: 56306.D

Sample wt/vol: 950 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1536

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
55-18-5	N-Nitrosodiethylamine	6.5	U	3.3	6.5	6.5
66-27-3	Methylmethanesulfonate	4	U	2	4	4.2
62-50-0	Ethyl methanesulfonate	5.3	U	2.6	5.3	5.3
76-01-7	Pentachloroethane	5.3	U	2.6	5.3	21
930-55-2	N-Nitrosopyrrolidine	5.7	U	2.8	5.7	5.7
98-86-2	Acetophenone	8.4	U	4.2	8.4	8.4
59-89-2	N-Nitrosomorpholine	6.3	U	3.2	6.3	6.3
95-53-4	o-Toluidine	5.7	U	2.8	5.7	5.7
122-09-8	a,a-Dimethylphenethylamine	33.7	U	16.8	33.7	33.7
87-65-0	2,6-Dichlorophenol	7.4	U	3.7	7.4	7.4
1888-71-7	Hexachloropropene	4.2	U	2.1	4.2	4.2
924-16-3	N-Nitrosodibutylamine	5.7	U	2.8	5.7	5.7
120-58-1	Isosafrole	5.5	U	2.7	5.5	5.5
95-94-3	1,2,4,5-Tetrachlorobenzene	4.6	U	2.3	4.6	4.6
94-59-7	Safrole	5.3	U	2.6	5.3	5.3
130-15-4	1,4-Naphthoquinone	6.5	U	3.3	6.5	6.5
99-65-0	1,3-Dinitrobenzene	5.3	U	2.6	5.3	5.3
608-93-5	Pentachlorobenzene	4.6	U	2.3	4.6	4.6
134-32-7	1-Naphthylamine	3.8	U	1.9	3.8	4.2
91-59-8	2-Naphthylamine	5.3	U	2.6	5.3	5.3
58-90-2	2,3,4,6-Tetrachlorophenol	6.3	U	3.2	6.3	6.3
99-55-8	5-Nitro-o-toluidine	5.5	U	2.7	5.5	5.5
106-50-3	p-Phenylenediamine	4.2	U	2.1	4.2	4.2
62-44-2	Phenacetin	1.9	U	0.94	1.9	4.2
92-67-1	4-Aminobiphenyl	4.2	U	2.1	4.2	4.2
23950-58-5	Pronamide	1.7	U	0.85	1.7	4.2

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17-RS

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656306 Lab File ID: 56306.D

Sample wt/vol: 950 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1536

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4.2	U	2.1	4.2	4.2
88-85-7	Dinoseb	8.4	U	4.2	8.4	8.4
56-57-5	4-Nitroquinoline-1-oxide	7.8	U	3.9	7.8	10.5
91-80-5	Methapyriline	4.6	U	2.3	4.6	4.6
140-57-8	Aramite	8.4	U	4.2	8.4	8.4
60-11-7	p-Dimethylaminoazobenzene	1.3	U	0.65	1.3	4.2
53-96-3	2-Acetylaminofluorene	2.3	U	1.2	2.3	4.2
57-97-6	7,12-Dimethylbenz(a)anthracene	2	U	1	2	4.2
56-49-5	3-Methylcholanthrene	4.6	U	2.3	4.6	4.6
100-75-4	N-Nitrosopiperidine	5.9	U	2.9	5.9	5.9
99-35-4	1,3,5-Trinitrobenzene	4.2	U	2.1	4.2	4.2
2303-16-4	Diallate (Avadex)	1.8	U	0.88	1.8	4.2
465-73-6	Isodrin	5.5	U	2.7	5.5	5.5
510-15-6	Chlorobenzilate	1.6	U	0.82	1.6	4.2
143-50-0	Kepone	33.7	U	16.8	33.7	33.7
126-68-1	0,0,0-Triethylphosphorothioate	6.1	U	3	6.1	6.1

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 56307.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1600

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 56307.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1600

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 56307.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1600

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20.2
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5
98-86-2	Acetophenone	8.1	U	4	8.1	8.1
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.9	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.82	1.6	4

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 56307.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1600

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8.1	U	4	8.1	8.1
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8.1	U	4	8.1	8.1
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4
143-50-0	Kepone	32.3	U	16.2	32.3	32.3
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-11

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656308 Lab File ID: 56308.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1624

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-11

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656308 Lab File ID: 56308.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1624

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-11

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656308 Lab File ID: 56308.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1624

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20.2
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5
98-86-2	Acetophenone	8.1	U	4	8.1	8.1
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.9	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.82	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-11

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656308 Lab File ID: 56308.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1624

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8.1	U	4	8.1	8.1
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8.1	U	4	8.1	8.1
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4
143-50-0	Kepone	32.3	U	16.2	32.3	32.3
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

8270 QC Summary

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1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138487MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 138487MB Lab File ID: 10188MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/23/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1249

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6	U	3	6	6
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.4	U	2.7	5.4	5.4
106-46-7	1,4-Dichlorobenzene	5.4	U	2.7	5.4	5.4
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.2	U	3.1	6.2	10
108-60-1	2,2'-Oxybis(1-chloropropane)	6.6	U	3.3	6.6	6.6
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6	U	3	6	6
106-44-5	4-Methylphenol	12.2	U	6.1	12.2	12.2
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.6	U	3.8	7.6	7.6
88-75-5	2-Nitrophenol	1.5	U	0.77	1.5	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7	U	3.5	7	7
120-83-2	2,4-Dichlorophenol	6.2	U	3.1	6.2	6.2
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6	U	3	6	6
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.4	U	2.7	5.4	5.4
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.82	1.6	4
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.84	1.7	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138487MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 138487MB Lab File ID: 10188MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/23/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1249

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
95-95-4	2,4,5-Trichlorophenol	6.8	U	3.4	6.8	6.8
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6	U	3	6	6
131-11-3	Dimethylphthalate	6	U	3	6	6
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.2	U	5.6	11.2	20
132-64-9	Dibenzofuran	5.4	U	2.7	5.4	5.4
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8	U	4	8	8
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8	U	4	8	8
86-30-6	N-Nitrosodiphenylamine	6.8	U	3.4	6.8	6.8
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.82	U	0.41	0.82	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10
84-74-2	Di-n-butylphthalate	1.7	U	0.86	1.7	4
85-68-7	Butylbenzylphthalate	6	U	3	6	6
91-94-1	3,3'-Dichlorobenzidine	5.4	U	2.7	5.4	5.4
117-81-7	Bis(2-ethylhexyl)phthalate	8.8	U	4.4	8.8	8.8
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8	U	4	8	8
10595-95-6	N-Nitrosomethylethylamine	5.4	U	2.7	5.4	5.4
55-18-5	N-Nitrosodiethylamine	6.2	U	3.1	6.2	6.2
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138487MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 138487MB Lab File ID: 10188MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/23/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1249

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20
930-55-2	N-Nitrosopyrrolidine	5.4	U	2.7	5.4	5.4
98-86-2	Acetophenone	8	U	4	8	8
59-89-2	N-Nitrosomorpholine	6	U	3	6	6
95-53-4	o-Toluidine	5.4	U	2.7	5.4	5.4
122-09-8	a,a-Dimethylphenethylamine	32	U	16	32	32
87-65-0	2,6-Dichlorophenol	7	U	3.5	7	7
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.4	U	2.7	5.4	5.4
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.2	U	3.1	6.2	6.2
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6	U	3	6	6
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.89	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.81	1.6	4
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8	U	4	8	8
56-57-5	4-Nitroquinoline-1-oxide	7.4	U	3.7	7.4	10

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138487MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 138487MB Lab File ID: 10188MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/23/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1249

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8	U	4	8	8
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.62	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.96	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.84	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.78	1.6	4
143-50-0	Kepone	32	U	16	32	32
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

SEMI-VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

138487MB

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Lab File ID: 10188MB.D Lab Sample ID: 138487MB

Instrument ID: SMSD03 Date Extracted: 07/23/12

Matrix: WATER Date Analyzed: 08/03/12

Level:(low/med) LOW Time Analyzed: 1249

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	138488LCS	138488LCS	10188LCS.D	08/03/12	1312
2	Q1-TFS-MW-17	350656301	56301.D	08/03/12	1424
3	Q1-TFS-MW-17MS	350656302	56302.D	08/03/12	1448
4	Q1-TFS-MW-17MSD	350656303	56303.D	08/03/12	1512
5	Q1-TFS-MW-17-RS	350656306	56306.D	08/03/12	1536
6	Q1-TFS-MW-05	350656307	56307.D	08/03/12	1600
7	Q1-TFS-MW-11	350656308	56308.D	08/03/12	1624
8	Q1-TFS-MW-15	350656304	56304.D	08/03/12	1735
9	Q1-TFS-MW-15-DUP	350656305	56305.D	08/03/12	1759

COMMENTS:

Page 1 of 1

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Form IV

2A

WATER SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG NO.: 3506563

Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
138487MB	42.4	25.5	68.0	63.2	81.2	86.6	0
138488LCS	47.0	29.2	73.8	76.4	94.9	85.6	0
Q1-TFS-MW-05	39.6	25.0	64.2	68.7	88.0	91.5	0
Q1-TFS-MW-11	48.0	29.9	72.5	69.5	93.3	94.3	0
Q1-TFS-MW-15	50.2	33.3	69.3	53.3	81.8	92.3	0
Q1-TFS-MW-15-DUP	50.2	32.8	71.3	53.1	83.0	95.2	0
Q1-TFS-MW-17	47.9	28.7	78.7	69.7	93.3	90.8	0
Q1-TFS-MW-17MS	49.5	29.3	83.3	75.7	93.4	83.9	0
Q1-TFS-MW-17MSD	49.2	29.5	79.7	76.1	92.9	83.3	0
Q1-TFS-MW-17-RS	47.8	28.6	70.3	71.5	87.1	87.5	0

Control Limits

S1	=	2-Fluorophenol	20 -	110
S2	=	Phenol-d5	10 -	115
S3	=	Nitrobenzene-d5	40 -	110
S4	=	2-Fluorobiphenyl	50 -	110
S5	=	2,4,6-Tribromophenol	40 -	125
S6	=	p-Terphenyl-d14	50 -	135

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Lab File ID: DFTPP1.D DFTPP Injection Date: 08/02/12

Instrument ID: SMSD03 DFTPP Injection Time: 2036

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	20.4	
68	Less than 2.0% of mass 69	0	(0)1
69	Mass 69 relative abundance	46.2	
70	Less than 2.0% of mass 69	0.4	(0.88)1
127	10.0 - 80.0% of mass 198	42.7	
197	Less than 2.0% of mass 198	0.5	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	7	
275	10.0 - 60.0% of mass 198	35.9	
365	Greater than 1.0% of mass 198	6.8	
441	0.0 - 24.0% of mass 442	11.3	(14.49)2
442	Greater than 50.0% of mass 198	78.1	
443	15.0 - 24.0% of mass 442	15.8	(20.26)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD1103017	47072	8270CAL7.D	08/02/12	2058
2	STD1103016	47073	8270CAL6.D	08/02/12	2122
3	STD1103015	47074	8270CAL5.D	08/02/12	2145
4	STD1103014	47075	8270CAL4.D	08/02/12	2209
5	STD1103013	47076	8270CAL3.D	08/02/12	2233
6	STD1103012	47077	8270CAL2.D	08/02/12	2256
7	STD1103011	47078	8270CAL1.D	08/02/12	2320
8	SSC1103021	45872	8270SEC1.D	08/02/12	2343
9	STD1103036	45933	BSCAL7.D	08/03/12	0031
10	STD1103035	45934	BSCAL6.D	08/03/12	0054
11	STD1103034	45935	BSCAL5.D	08/03/12	0118
12	STD1103033	46734	BSCAL4.D	08/03/12	0141
13	STD1103032	45937	BSCAL3.D	08/03/12	0205
14	STD1103031	45938	BSCAL2.D	08/03/12	0228
15	STD1103030	45939	BSCAL1.D	08/03/12	0252
16	SSC1103039	44859	BSSEC.D	08/03/12	0315
17	STD1103028	47140	AP9CAL7.D	08/03/12	0339
18	STD1103027	47141	AP9CAL6.D	08/03/12	0402
19	STD1103026	47142	AP9CAL5.D	08/03/12	0426

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Lab File ID: DFTPP1.D DFTPP Injection Date: 08/02/12

Instrument ID: SMSD03 DFTPP Injection Time: 2036

GC Column: HPMS-5 ID: 0.25 (mm)

20	STD1103025	47143	AP9CAL4.D	08/03/12	0449
21	STD1103024	47144	AP9CAL3.D	08/03/12	0513
22	STD1103023	47145	AP9CAL2.D	08/03/12	0536
23	STD1103022	47146	AP9CAL1.D	08/03/12	0600

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Lab File ID: DFTPP3.D DFTPP Injection Date: 08/03/12

Instrument ID: SMSD03 DFTPP Injection Time: 1004

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	23.5	
68	Less than 2.0% of mass 69	1	(1.92)1
69	Mass 69 relative abundance	52.2	
70	Less than 2.0% of mass 69	0.2	(0.35)1
127	10.0 - 80.0% of mass 198	46.4	
197	Less than 2.0% of mass 198	0.3	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	7.1	
275	10.0 - 60.0% of mass 198	36.4	
365	Greater than 1.0% of mass 198	7.6	
441	0.0 - 24.0% of mass 442	12.8	(16.01)2
442	Greater than 50.0% of mass 198	79.8	
443	15.0 - 24.0% of mass 442	15	(18.73)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV1103019	47075	8270CCV2.D	08/03/12	1024
2	CCV1103038	46734	BSCCV2.D	08/03/12	1048
3	CCV1103029	47143	AP9CCV2.D	08/03/12	1111
4	138487MB	138487MB	10188MB.D	08/03/12	1249
5	138488LCS	138488LCS	10188LCS.D	08/03/12	1312
6	Q1-TFS-MW-17	350656301	56301.D	08/03/12	1424
7	Q1-TFS-MW-17MS	350656302	56302.D	08/03/12	1448
8	Q1-TFS-MW-17MSD	350656303	56303.D	08/03/12	1512
9	Q1-TFS-MW-17-RS	350656306	56306.D	08/03/12	1536
10	Q1-TFS-MW-05	350656307	56307.D	08/03/12	1600
11	Q1-TFS-MW-11	350656308	56308.D	08/03/12	1624
12	Q1-TFS-MW-15	350656304	56304.D	08/03/12	1735
13	Q1-TFS-MW-15-DUP	350656305	56305.D	08/03/12	1759

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Lab File ID (Standard): 8270CAL4.D Date Analyzed: 8/2/2012

Instrument ID: SMSD03 Time Analyzed: 22:09

GC Column: HPMS-5 ID: 0.25 (mm)

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	348449		4.47	1112381		5.64	802993		7.33
	UPPER LIMIT	696898		4.97	2224762		6.14	1605986		7.83
	LOWER LIMIT	174224.5		3.97	556190.5		5.14	401496.5		6.83
	EPA SAMPLE NO.									
1	138487MB	303630		4.47	964580		5.63	677239		7.33
2	138488LCS	306024		4.47	967883		5.63	696950		7.33
3	Q1-TFS-MW-17	345937		4.47	1103073		5.63	792430		7.33
4	Q1-TFS-MW-17MS	331281		4.47	1048307		5.63	782081		7.33
5	Q1-TFS-MW-17MSD	331209		4.47	1051246		5.63	782341		7.33
6	Q1-TFS-MW-17-RS	332506		4.47	1048807		5.63	755698		7.33
7	Q1-TFS-MW-05	324644		4.47	1009669		5.63	725803		7.33
8	Q1-TFS-MW-11	365711		4.47	1133530		5.63	832573		7.33
9	Q1-TFS-MW-15	337371		4.47	1234210		5.64	1205646		7.33
10	Q1-TFS-MW-15-DUP	371608		4.47	1268915		5.64	1241640		7.33

IS1 = 1,4-Dichlorobenzene-d4

IS2 = Naphthalene-d8

IS3 = Acenaphthene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

070812 1739

FORM VIII

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Lab File ID (Standard): 8270CAL4.D Date Analyzed: 8/2/2012

Instrument ID: SMSD03 Time Analyzed: 22:09

GC Column: HPMS-5 ID: 0.25 (mm)

		IS4 AREA	#	RT	IS5 AREA	#	RT	IS6 AREA	#	RT
	MID CAL STD	1539881		8.79	2349372		11.38	2193686		12.71
	UPPER LIMIT	3079762		9.29	4698744		11.88	4387372		13.21
	LOWER LIMIT	769940.5		8.29	1174686		10.88	1096843		12.21
	EPA SAMPLE NO.									
1	138487MB	1387896		8.78	1801355		11.37	1887066		12.71
2	138488LCS	1423980		8.78	2123298		11.38	2027102		12.71
3	Q1-TFS-MW-17	1588087		8.78	2121387		11.38	2257569		12.71
4	Q1-TFS-MW-17MS	1576564		8.78	2326997		11.38	2206405		12.71
5	Q1-TFS-MW-17MSD	1581318		8.78	2378329		11.38	2262725		12.71
6	Q1-TFS-MW-17-RS	1499200		8.78	2043205		11.37	2161435		12.70
7	Q1-TFS-MW-05	1478350		8.78	1975943		11.38	2126960		12.71
8	Q1-TFS-MW-11	1627162		8.78	2179806		11.38	2277885		12.71
9	Q1-TFS-MW-15	2060504		8.79	2490857		11.38	2645445		12.71
10	Q1-TFS-MW-15-DUP	2086096		8.79	2444118		11.38	2605451		12.71

IS4 = Phenanthrene-d10

IS5 = Chrysene-d12

IS6 = Perylene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

070812 1739

FORM VIII

8

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 08/03/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 3.38 S2 : 4.13

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
1	DFTPP1	47137	DFTPP1.D	08/02/12	2036				
2	STD1103017	47072	8270CAL7.D	08/02/12	2058	3.38		4.14	
3	STD1103016	47073	8270CAL6.D	08/02/12	2122	3.38		4.14	
4	STD1103015	47074	8270CAL5.D	08/02/12	2145	3.38		4.13	
5	STD1103014	47075	8270CAL4.D	08/02/12	2209	3.38		4.13	
6	STD1103013	47076	8270CAL3.D	08/02/12	2233	3.37		4.12	
7	STD1103012	47077	8270CAL2.D	08/02/12	2256	3.37		4.12	
8	STD1103011	47078	8270CAL1.D	08/02/12	2320	3.37		4.12	
9	SSC1103021	45872	8270SEC1.D	08/02/12	2343	3.38		4.13	
10	STD1103036	45933	BSCAL7.D	08/03/12	0031				
11	STD1103035	45934	BSCAL6.D	08/03/12	0054				
12	STD1103034	45935	BSCAL5.D	08/03/12	0118				
13	STD1103033	46734	BSCAL4.D	08/03/12	0141				
14	STD1103032	45937	BSCAL3.D	08/03/12	0205				
15	STD1103031	45938	BSCAL2.D	08/03/12	0228				
16	STD1103030	45939	BSCAL1.D	08/03/12	0252				
17	SSC1103039	44859	BSSEC.D	08/03/12	0315				
18	STD1103028	47140	AP9CAL7.D	08/03/12	0339				
19	STD1103027	47141	AP9CAL6.D	08/03/12	0402				
20	STD1103026	47142	AP9CAL5.D	08/03/12	0426				
21	STD1103025	47143	AP9CAL4.D	08/03/12	0449				
22	STD1103024	47144	AP9CAL3.D	08/03/12	0513				
23	STD1103023	47145	AP9CAL2.D	08/03/12	0536				
24	STD1103022	47146	AP9CAL1.D	08/03/12	0600				
25	DFTPP2	47137	DFTPP2.D	08/03/12	0802				
26	SSC1103003	47166	AP9SEC2.D	08/03/12	0936				

			QC LIMITS
S1	=	2-Fluorophenol	(+/- 0.27 MINUTES)
S2	=	Phenol-d5	(+/- 0.27 MINUTES)
S3	=	Nitrobenzene-d5	(+/- 0.34 MINUTES)
S4	=	2-Fluorobiphenyl	(+/- 0.44 MINUTES)
S5	=	2,4,6-Tribromophenol	(+/- 0.44 MINUTES)
S6	=	p-Terphenyl-d14	(+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

8

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 08/03/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 3.38 S2 : 4.13

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
27	DFTPP3	47137	DFTPP3.D	08/03/12	1004				
28	CCV1103019	47075	8270CCV2.D	08/03/12	1024	3.37		4.13	
29	CCV1103038	46734	BSCCV2.D	08/03/12	1048				
30	CCV1103029	47143	AP9CCV2.D	08/03/12	1111				
31	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1137				
32	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1201				
33	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1225				
34	138487MB	138487MB	10188MB.D	08/03/12	1249	3.37		4.12	
35	138488LCS	138488LCS	10188LCS.D	08/03/12	1312	3.38		4.13	
36	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1336				
37	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1400				
38	Q1-TFS-MW-17	350656301	56301.D	08/03/12	1424	3.37		4.12	
39	Q1-TFS-MW-17MS	350656302	56302.D	08/03/12	1448	3.38		4.13	
40	Q1-TFS-MW-17MSD	350656303	56303.D	08/03/12	1512	3.38		4.13	
41	Q1-TFS-MW-17-RS	350656306	56306.D	08/03/12	1536	3.37		4.12	
42	Q1-TFS-MW-05	350656307	56307.D	08/03/12	1600	3.38		4.12	
43	Q1-TFS-MW-11	350656308	56308.D	08/03/12	1624	3.38		4.12	
44	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1648				
45	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1712				
46	Q1-TFS-MW-15	350656304	56304.D	08/03/12	1735	3.38		4.13	
47	Q1-TFS-MW-15-DUP	350656305	56305.D	08/03/12	1759	3.38		4.14	
48	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1823				
49	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1846				
50	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1910				
51	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1934				
52	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1957				

			QC LIMITS
S1	=	2-Fluorophenol	(+/- 0.27 MINUTES)
S2	=	Phenol-d5	(+/- 0.27 MINUTES)
S3	=	Nitrobenzene-d5	(+/- 0.34 MINUTES)
S4	=	2-Fluorobiphenyl	(+/- 0.44 MINUTES)
S5	=	2,4,6-Tribromophenol	(+/- 0.44 MINUTES)
S6	=	p-Terphenyl-d14	(+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

8

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 08/03/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 3.38 S2 : 4.13

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
53	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	2020		
54	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	2044		

			QC LIMITS
S1	=	2-Fluorophenol	(+/- 0.27 MINUTES)
S2	=	Phenol-d5	(+/- 0.27 MINUTES)
S3	=	Nitrobenzene-d5	(+/- 0.34 MINUTES)
S4	=	2-Fluorobiphenyl	(+/- 0.44 MINUTES)
S5	=	2,4,6-Tribromophenol	(+/- 0.44 MINUTES)
S6	=	p-Terphenyl-d14	(+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 138488LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Pyridine	40	13	32.5			22 - 70
N-Nitrosodimethylamine	40	21.9	54.8			25 - 110
Aniline	40	25.2	63.0			14 - 99
Bis(2-chloroethyl)ether	40	32.8	82.0			35 - 110
Phenol	40	12.2	30.5			0 - 115
2-Chlorophenol	40	25.7	64.2			35 - 105
1,3-Dichlorobenzene	40	22.8	57.0			30 - 100
1,4-Dichlorobenzene	40	23.1	57.8			30 - 100
1,2-Dichlorobenzene	40	23.1	57.8			35 - 100
Benzyl alcohol	40	24.6	61.5			30 - 110
2,2'-Oxybis(1-chloropropane)	40	31	77.5			25 - 130
2-Methylphenol	40	22.1	55.2			40 - 110
Hexachloroethane	40	21.1	52.8			30 - 95
N-Nitroso-di-n-propylamine	40	34.6	86.5			35 - 130
4-Methylphenol	40	23	57.5			30 - 110
Nitrobenzene	40	31.4	78.5			45 - 110
Isophorone	40	29.8	74.5			50 - 110
2-Nitrophenol	40	29.7	74.2			40 - 115
2,4-Dimethylphenol	40	34	85.0			30 - 110
Bis(2-chloroethoxy)methane	40	34.6	86.5			45 - 105
2,4-Dichlorophenol	40	30.3	75.8			50 - 105
1,2,4-Trichlorobenzene	40	23.9	59.8			35 - 105
4-Chloroaniline	40	32.3	80.8			15 - 110
Hexachlorobutadiene	40	23	57.5			25 - 105
4-Chloro-3-methylphenol	40	30.9	77.2			45 - 110
Hexachlorocyclopentadiene	40	17.2	43.0			13 - 80
2,4,6-Trichlorophenol	40	34.1	85.2			50 - 115
2,4,5-Trichlorophenol	40	31.8	79.5			50 - 110
2-Chloronaphthalene	40	30	75.0			50 - 105
2-Nitroaniline	40	37.1	92.8			50 - 115
Dimethylphthalate	40	36.6	91.5			25 - 125
2,6-Dinitrotoluene	40	34.6	86.5			50 - 115

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

070812 1739

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 138488LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
3-Nitroaniline	40	33.7	84.2			20 - 125
2,4-Dinitrophenol	80	74.3	92.9			15 - 140
Dibenzofuran	40	32.1	80.2			55 - 105
2,4-Dinitrotoluene	40	36	90.0			50 - 120
4-Nitrophenol	40	14.1	35.2			0 - 125
4-Chlorophenyl-phenylether	40	32.4	81.0			50 - 110
Diethylphthalate	40	36.8	92.0			40 - 120
4-Nitroaniline	40	42.4	106.0			35 - 120
4,6-Dinitro-2-methylphenol	40	34.1	85.2			40 - 130
N-Nitrosodiphenylamine	40	33.9	84.8			50 - 110
4-Bromophenyl-phenylether	40	32.4	81.0			50 - 115
Hexachlorobenzene	40	32	80.0			50 - 110
Pentachlorophenol	40	41.7	104.0			40 - 115
Di-n-butylphthalate	40	34.9	87.2			55 - 115
Butylbenzylphthalate	40	38	95.0			45 - 115
3,3'-Dichlorobenzidine	80	62.1	77.6			20 - 110
Bis(2-ethylhexyl)phthalate	40	38.9	97.2			40 - 125
Di-n-octylphthalate	40	38.3	95.8			35 - 135
2-Picoline	40	13.3	33.2			15 - 110
N-Nitrosomethylethylamine	40	22.4	56.0			25 - 131
N-Nitrosodiethylamine	40	26	65.0			46 - 111
Methylmethanesulfonate	40	17.7	44.2			15 - 103
Ethyl methanesulfonate	40	31.7	79.2			46 - 113
Pentachloroethane	40	22.2	55.5			27 - 99
N-Nitrosopyrrolidine	40	26.2	65.5			51 - 112
Acetophenone	80	60.9	76.1			45 - 118
N-Nitrosomorpholine	40	28.4	71.0			51 - 112
o-Toluidine	40	22.4	56.0			49 - 97
a,a-Dimethylphenethylamine	40	0	0.0 *			70 - 130
2,6-Dichlorophenol	40	34.1	85.2			50 - 135
Hexachloropropene	40	6.1	15.2 *			21 - 105
N-Nitrosodibutylamine	40	31.8	79.5			43 - 130

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

070812 1739

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 138488LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Isosafrole	40	31	77.5			70 - 130
1,2,4,5-Tetrachlorobenzene	40	25.2	63.0			40 - 100
Safrole	40	35.2	88.0			52 - 100
1,4-Naphthoquinone	40	10.8	27.0 *			28 - 143
1,3-Dinitrobenzene	40	37.5	93.8			61 - 112
Pentachlorobenzene	40	30.8	77.0			50 - 99
1-Naphthylamine	40	18.8	47.0			38 - 91
2-Naphthylamine	40	19.6	49.0 *			70 - 130
2,3,4,6-Tetrachlorophenol	40	32.7	81.8			55 - 122
5-Nitro-o-toluidine	40	31.4	78.5			70 - 130
p-Phenylenediamine	40	30.6	76.5			58 - 107
Phenacetin	40	31.6	79.0			57 - 114
4-Aminobiphenyl	40	30.8	77.0			49 - 103
Pronamide	40	32.4	81.0			59 - 99
Pentachloronitrobenzene(PCNB)	40	41.6	104.0			60 - 104
Dinoseb	40	37.3	93.2			44 - 142
4-Nitroquinoline-1-oxide	40	28.7	71.8			10 - 125
Methapyriline	40	148	370.0 *			0 - 90
Aramite	40	30.4	76.0			41 - 127
p-Dimethylaminoazobenzene	40	29.2	73.0			70 - 130
2-Acetylaminofluorene	40	27.3	68.2			63 - 103
7,12-Dimethylbenz(a)anthracene	40	36.6	91.5			57 - 95
3-Methylcholanthrene	40	30.1	75.2			52 - 105
N-Nitrosopiperidine	40	29.8	74.5			53 - 112
1,3,5-Trinitrobenzene	40	18.5	46.2			29 - 163
Diallate (Avadex)	40	27.9	69.8			56 - 98
Isodrin	40	33.6	84.0			54 - 110
Chlorobenzilate	40	33	82.5			58 - 101
Kepone	40	33.6	84.0			0 - 165
0,0,0-Triethylphosphorothioate	40	28.3	70.8			50 - 106

Spike Recovery: 5 out of 94 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

070812 1739

Form III

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stan

Q1-TFS-MW-17MS

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC #	QC LIMITS REC.
Pyridine	40	0	19	46.5	22 - 70
N-Nitrosodimethylamine	40	0	22	54.0	25 - 110
Aniline	40	0	28	69.9	14 - 99
Bis(2-chloroethyl)ether	40	0	35	86.6	35 - 110
Phenol	40	0	12	30.1	0 - 115
2-Chlorophenol	40	0	29	72.4	35 - 105
1,3-Dichlorobenzene	40	0	26	65.7	30 - 100
1,4-Dichlorobenzene	40	0	27	66.4	30 - 100
1,2-Dichlorobenzene	40	0	27	66.7	35 - 100
Benzyl alcohol	40	0	26	65.2	30 - 110
2,2'-Oxybis(1-chloropropane)	40	0	32	79.1	25 - 130
2-Methylphenol	40	0	25	61.7	40 - 110
Hexachloroethane	40	0	23	58.2	30 - 95
N-Nitroso-di-n-propylamine	40	0	38	94.0	35 - 130
4-Methylphenol	40	0	24	58.7	30 - 110
Nitrobenzene	40	0	34	83.6	45 - 110
Isophorone	40	0	31	76.1	50 - 110
2-Nitrophenol	40	0	32	79.9	40 - 115
2,4-Dimethylphenol	40	0	35	86.6	30 - 110
Bis(2-chloroethoxy)methane	40	0	36	88.6	45 - 105
2,4-Dichlorophenol	40	0	33	81.6	50 - 105
1,2,4-Trichlorobenzene	40	0	28	69.7	35 - 105
4-Chloroaniline	40	0	34	84.1	15 - 110
Hexachlorobutadiene	40	0	28	69.4	25 - 105
4-Chloro-3-methylphenol	40	0	32	78.9	45 - 110
Hexachlorocyclopentadiene	40	0	20	50.7	13 - 80
2,4,6-Trichlorophenol	40	0	33	82.6	50 - 115
2,4,5-Trichlorophenol	40	0	32	78.4	50 - 110
2-Chloronaphthalene	40	0	31	77.1	50 - 105
2-Nitroaniline	40	0	33	82.8	50 - 115

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

070812 1739

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stan

Q1-TFS-MW-17MS

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC #	QC LIMITS REC.
Dimethylphthalate	40	0	35	86.1	25 - 125
2,6-Dinitrotoluene	40	0	33	82.8	50 - 115
3-Nitroaniline	40	0	34	84.3	20 - 125
2,4-Dinitrophenol	80	0	86	107.0	15 - 140
Dibenzofuran	40	0	33	81.3	55 - 105
2,4-Dinitrotoluene	40	0	36	90.3	50 - 120
4-Nitrophenol	40	0	14	33.8	0 - 125
4-Chlorophenyl-phenylether	40	0	31	78.1	50 - 110
Diethylphthalate	40	0	36	89.1	40 - 120
4-Nitroaniline	40	0	39	97.0	35 - 120
4,6-Dinitro-2-methylphenol	40	0	35	87.6	40 - 130
N-Nitrosodiphenylamine	40	0	34	85.1	50 - 110
4-Bromophenyl-phenylether	40	0	33	81.3	50 - 115
Hexachlorobenzene	40	0	32	78.4	50 - 110
Pentachlorophenol	40	0	42	104.0	40 - 115
Di-n-butylphthalate	40	0	34	84.3	55 - 115
Butylbenzylphthalate	40	0	37	91.8	45 - 115
3,3'-Dichlorobenzidine	80	0	56	69.0	20 - 110
Bis(2-ethylhexyl)phthalate	40	0	38	94.8	40 - 125
Di-n-octylphthalate	40	0	38	93.8	35 - 135
2-Picoline	40	0	21	52.0	15 - 110
N-Nitrosomethylethylamine	40	0	23	57.5	25 - 131
N-Nitrosodiethylamine	40	0	27	67.7	46 - 111
Methylmethanesulfonate	40	0	19	47.3	15 - 103
Ethyl methanesulfonate	40	0	34	84.1	46 - 113
Pentachloroethane	40	0	26	64.2	27 - 99
N-Nitrosopyrrolidine	40	0	28	70.1	51 - 112
Acetophenone	80	0	65	80.5	45 - 118
N-Nitrosomorpholine	40	0	30	75.4	51 - 112
o-Toluidine	40	0	24	59.2	49 - 97

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

070812 1739

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stan

Q1-TFS-MW-17MS

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC #	QC LIMITS REC.
a,a-Dimethylphenethylamine	40	0	0	0.0*	70 - 130
2,6-Dichlorophenol	40	0	36	88.6	50 - 135
Hexachloropropene	40	0	7.7	19.2*	21 - 105
N-Nitrosodibutylamine	40	0	32	80.8	43 - 130
Isosafrole	40	0	34	85.8	70 - 130
1,2,4,5-Tetrachlorobenzene	40	0	28	70.6	40 - 100
Safrole	40	0	38	93.3	52 - 100
1,4-Naphthoquinone	40	0	0	0.0*	28 - 143
1,3-Dinitrobenzene	40	0	38	93.5	61 - 112
Pentachlorobenzene	40	0	32	78.9	50 - 99
1-Naphthylamine	40	0	20	50.2	38 - 91
2-Naphthylamine	40	0	21	52.2*	70 - 130
2,3,4,6-Tetrachlorophenol	40	0	33	82.6	55 - 122
5-Nitro-o-toluidine	40	0	34	85.8	70 - 130
p-Phenylenediamine	40	0	32	80.1	58 - 107
Phenacetin	40	0	32	79.6	57 - 114
4-Aminobiphenyl	40	0	31	77.9	49 - 103
Pronamide	40	0	30	74.6	59 - 99
Pentachloronitrobenzene(PCNB)	40	0	41	101.0	60 - 104
Dinoseb	40	0	36	90.3	44 - 142
4-Nitroquinoline-1-oxide	40	0	20	49.0	10 - 125
Methapyriline	40	0	280	699.0*	0 - 90
Aramite	40	0	31	77.6	41 - 127
p-Dimethylaminoazobenzene	40	0	30	74.4	70 - 130
2-Acetylaminofluorene	40	0	28	70.9	63 - 103
7,12-Dimethylbenz(a)anthracene	40	0	37	92.3	57 - 95
3-Methylcholanthrene	40	0	31	76.4	52 - 105
N-Nitrosopiperidine	40	0	32	79.6	53 - 112
1,3,5-Trinitrobenzene	40	0	18	44.0	29 - 163
Diallate (Avadex)	40	0	28	69.9	56 - 98

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

070812 1739

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stan

Q1-TFS-MW-17MS

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC #	QC LIMITS REC.
Isodrin	40	0	30	75.9	54 - 110
Chlorobenzilate	40	0	34	83.3	58 - 101
Kepone	40	0	0	0.0	0 - 165
0,0,0-Triethylphosphorothioate	40	0	30	75.6	50 - 106

Spike Recovery: 5 out of 94 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

070812 1739

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Q1-TFS-MW-17MSD

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	MSD CONCENTRATION ug/L	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Pyridine	40	19	46.8	0.5	20	22 - 70
N-Nitrosodimethylamine	40	21	52.0	3.8	20	25 - 110
Aniline	40	26	65.9	5.9	20	14 - 99
Bis(2-chloroethyl)ether	40	34	85.1	1.7	20	35 - 110
Phenol	40	11	28.1	6.8	20	0 - 115
2-Chlorophenol	40	28	69.4	4.2	20	35 - 105
1,3-Dichlorobenzene	40	24	60.9	7.5	20	30 - 100
1,4-Dichlorobenzene	40	26	64.2	3.4	20	30 - 100
1,2-Dichlorobenzene	40	25	61.9	7.4	20	35 - 100
Benzyl alcohol	40	25	62.9	3.5	20	30 - 110
2,2'-Oxybis(1-chloropropane)	40	31	77.6	1.9	20	25 - 130
2-Methylphenol	40	23	57.0	8.0	20	40 - 110
Hexachloroethane	40	25	63.2	8.2	20	30 - 95
N-Nitroso-di-n-propylamine	40	35	87.6	7.1	20	35 - 130
4-Methylphenol	40	23	56.2	4.3	20	30 - 110
Nitrobenzene	40	34	84.3	0.9	20	45 - 110
Isophorone	40	31	78.1	2.6	20	50 - 110
2-Nitrophenol	40	30	74.6	6.8	20	40 - 115
2,4-Dimethylphenol	40	33	82.6	4.7	20	30 - 110
Bis(2-chloroethoxy)methane	40	35	86.1	2.8	20	45 - 105
2,4-Dichlorophenol	40	31	76.1	6.9	20	50 - 105
1,2,4-Trichlorobenzene	40	26	65.9	5.5	20	35 - 105
4-Chloroaniline	40	33	81.3	3.3	20	15 - 110
Hexachlorobutadiene	40	26	63.4	9.0	20	25 - 105
4-Chloro-3-methylphenol	40	31	76.6	2.9	20	45 - 110
Hexachlorocyclopentadiene	40	19	46.3	9.2	20	13 - 80
2,4,6-Trichlorophenol	40	33	81.8	0.9	20	50 - 115
2,4,5-Trichlorophenol	40	31	78.1	0.3	20	50 - 110
2-Chloronaphthalene	40	31	76.1	1.3	20	50 - 105
2-Nitroaniline	40	34	84.3	1.8	20	50 - 115

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

070812 1739

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Q1-TFS-MW-17MSD

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	MSD CONCENTRATION ug/L	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dimethylphthalate	40	35	86.3	0.3	20	25 - 125
2,6-Dinitrotoluene	40	34	85.3	3.0	20	50 - 115
3-Nitroaniline	40	32	80.6	4.5	20	20 - 125
2,4-Dinitrophenol	80	89	110.0	3.6	20	15 - 140
Dibenzofuran	40	32	79.6	2.2	20	55 - 105
2,4-Dinitrotoluene	40	35	87.8	2.8	20	50 - 120
4-Nitrophenol	40	14	34.3	1.5	20	0 - 125
4-Chlorophenyl-phenylether	40	31	77.9	0.3	20	50 - 110
Diethylphthalate	40	36	89.1	0.0	20	40 - 120
4-Nitroaniline	40	40	100.0	3.0	20	35 - 120
4,6-Dinitro-2-methylphenol	40	33	83.1	5.2	20	40 - 130
N-Nitrosodiphenylamine	40	35	86.1	1.2	20	50 - 110
4-Bromophenyl-phenylether	40	32	78.4	3.7	20	50 - 115
Hexachlorobenzene	40	31	77.9	0.6	20	50 - 110
Pentachlorophenol	40	41	102.0	1.9	20	40 - 115
Di-n-butylphthalate	40	33	82.8	1.8	20	55 - 115
Butylbenzylphthalate	40	36	90.5	1.4	20	45 - 115
3,3'-Dichlorobenzidine	80	53	66.4	3.9	20	20 - 110
Bis(2-ethylhexyl)phthalate	40	38	94.0	0.8	20	40 - 125
Di-n-octylphthalate	40	38	93.5	0.3	20	35 - 135
2-Picoline	40	20	49.3	5.4	20	15 - 110
N-Nitrosomethylethylamine	40	23	57.5	0.0	20	25 - 131
N-Nitrosodiethylamine	40	26	63.7	6.1	20	46 - 111
Methylmethanesulfonate	40	17	43.0	9.4	20	15 - 103
Ethyl methanesulfonate	40	30	73.4	13.6	20	46 - 113
Pentachloroethane	40	25	61.4	4.4	20	27 - 99
N-Nitrosopyrrolidine	40	27	66.9	4.7	20	51 - 112
Acetophenone	80	62	77.2	4.1	20	45 - 118
N-Nitrosomorpholine	40	29	72.6	3.7	20	51 - 112
o-Toluidine	40	22	55.5	6.5	20	49 - 97

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

070812 1739

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Q1-TFS-MW-17MSD

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	MSD CONCENTRATION ug/L	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
a,a-Dimethylphenethylamine	40	0	0.0*		20	70 - 130
2,6-Dichlorophenol	40	34	83.6	5.8	20	50 - 135
Hexachloropropene	40	7.0	17.4*	9.5	20	21 - 105
N-Nitrosodibutylamine	40	29	71.1	12.8	20	43 - 130
Isosafrole	40	34	85.6	0.3	20	70 - 130
1,2,4,5-Tetrachlorobenzene	40	28	68.4	3.2	20	40 - 100
Safrole	40	27	67.9	31.5 *	20	52 - 100
1,4-Naphthoquinone	40	0	0.0*		20	28 - 143
1,3-Dinitrobenzene	40	38	94.5	1.1	20	61 - 112
Pentachlorobenzene	40	31	77.9	1.3	20	50 - 99
1-Naphthylamine	40	18	46.0	8.8	20	38 - 91
2-Naphthylamine	40	20	50.2*	3.9	20	70 - 130
2,3,4,6-Tetrachlorophenol	40	33	82.3	0.3	20	55 - 122
5-Nitro-o-toluidine	40	30	75.4	13.0	20	70 - 130
p-Phenylenediamine	40	31	78.1	2.5	20	58 - 107
Phenacetin	40	31	77.6	2.5	20	57 - 114
4-Aminobiphenyl	40	30	73.6	5.6	20	49 - 103
Pronamide	40	30	74.9	0.3	20	59 - 99
Pentachloronitrobenzene(PCNB)	40	40	98.3	3.0	20	60 - 104
Dinoseb	40	37	92.3	2.2	20	44 - 142
4-Nitroquinoline-1-oxide	40	16	40.0	20.1 *	20	10 - 125
Methapyriline	40	310	776.0*	10.5	20	0 - 90
Aramite	40	33	81.3	4.7	20	41 - 127
p-Dimethylaminoazobenzene	40	28	68.4*	8.4	20	70 - 130
2-Acetylaminofluorene	40	28	68.7	3.2	20	63 - 103
7,12-Dimethylbenz(a)anthracene	40	36	89.8	2.7	20	57 - 95
3-Methylcholanthrene	40	30	75.6	1.0	20	52 - 105
N-Nitrosopiperidine	40	30	75.4	5.5	20	53 - 112
1,3,5-Trinitrobenzene	40	17	42.3	4.0	20	29 - 163
Diallate (Avadex)	40	29	71.1	1.8	20	56 - 98

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

070812 1739

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Q1-TFS-MW-17MSD

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	MSD CONCENTRATION ug/L	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Isodrin	40	26	64.2	16.7	20	54 - 110
Chlorobenzilate	40	33	81.1	2.7	20	58 - 101
Kepone	40	0	0.0		20	0 - 165
0,0,0-Triethylphosphorothioate	40	30	74.1	2.0	20	50 - 106

RPD: 2 out of 94 outside limits

Spike Recovery: 6 out of 94 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

070812 1739

8270 Standards Data

070812 1739

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =8270CAL1.D RRF10 =8270CAL2.D
RRF20 =8270CAL3.D RRF45 =8270CAL4.D RRF60 =8270CAL5.D

COMPOUND		RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
Pyridine		1.311	1.438	1.369	1.308	1.313		
N-Nitrosodimethylamine		0.480	0.579	0.517	0.481	0.476		
Aniline		1.674	1.882	1.673	1.572	1.596		
Bis(2-chloroethyl)ether		1.019	1.172	1.051	1.034	1.021		
Phenol	*	1.304	1.561	1.411	1.427	1.391		*
2-Chlorophenol		1.076	1.205	1.170	1.103	1.089		
1,3-Dichlorobenzene		1.267	1.551	1.358	1.318	1.360		
1,4-Dichlorobenzene	*	1.386	1.549	1.479	1.409	1.380		*
1,2-Dichlorobenzene		1.295	1.492	1.358	1.309	1.322		
Benzyl alcohol		0.773	0.888	0.792	0.751	0.769		
2,2'-Oxybis(1-chloropropane)		0.506	0.575	0.510	0.493	0.469		
2-Methylphenol		0.840	1.025	0.961	0.977	0.936		
Hexachloroethane		0.600	0.694	0.641	0.612	0.596		
N-Nitroso-di-n-propylamine	#	1.070	1.354	1.207	1.151	1.130		#
4-Methylphenol		1.290	1.608	1.427	1.412	1.405		
Nitrobenzene		0.509	0.595	0.541	0.499	0.516		
Isophorone		0.778	0.892	0.842	0.807	0.827		
2-Nitrophenol	*	0.188	0.233	0.207	0.207	0.212		*
2,4-Dimethylphenol		0.247	0.336	0.306	0.292	0.311		
Bis(2-chloroethoxy)methane		0.422	0.470	0.436	0.444	0.452		
2,4-Dichlorophenol	*	0.324	0.401	0.359	0.380	0.383		*
1,2,4-Trichlorobenzene		0.426	0.497	0.455	0.443	0.472		
4-Chloroaniline		0.413	0.491	0.445	0.447	0.446		
Hexachlorobutadiene	*	0.357	0.384	0.359	0.347	0.363		*
4-Chloro-3-methylphenol	*	0.321	0.404	0.348	0.355	0.364		*
Hexachlorocyclopentadiene	#	0.596	0.724	0.666	0.662	0.662		#
2,4,6-Trichlorophenol	*	0.423	0.497	0.465	0.470	0.479		*
2,4,5-Trichlorophenol		0.520	0.577	0.539	0.533	0.539		
2-Chloronaphthalene		1.073	1.224	1.122	1.133	1.129		
2-Nitroaniline		0.354	0.431	0.392	0.391	0.376		
Dimethylphthalate		1.341	1.558	1.463	1.428	1.399		
2,6-Dinitrotoluene		0.287	0.323	0.305	0.316	0.315		
3-Nitroaniline		0.267	0.299	0.298	0.276	0.265		
2,4-Dinitrophenol	#		0.192	0.225	0.244	0.255		#

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =8270CAL1.D RRF10 =8270CAL2.D
RRF20 =8270CAL3.D RRF45 =8270CAL4.D RRF60 =8270CAL5.D

COMPOUND		RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2	
Dibenzofuran		1.648	1.902	1.700	1.706	1.687			
2,4-Dinitrotoluene		0.381	0.457	0.409	0.409	0.410			
4-Nitrophenol	#	0.251	0.329	0.306	0.300	0.312			#
4-Chlorophenyl-phenylether		0.840	0.955	0.874	0.900	0.927			
Diethylphthalate		1.362	1.547	1.327	1.326	1.337			
4-Nitroaniline		0.300	0.271	0.241	0.264	0.256			
4,6-Dinitro-2-methylphenol			0.157	0.150	0.169	0.178			
N-Nitrosodiphenylamine	*	0.463	0.535	0.502	0.480	0.476			*
4-Bromophenyl-phenylether		0.266	0.310	0.291	0.281	0.295			
Hexachlorobenzene		0.305	0.344	0.319	0.323	0.318			
Pentachlorophenol	*	0.176	0.201	0.213	0.223	0.226			*
Di-n-butylphthalate		1.118	1.305	1.257	1.171	1.151			
Butylbenzylphthalate		0.376	0.448	0.399	0.389	0.379			
3,3'-Dichlorobenzidine		0.408	0.430	0.462	0.467	0.491			
Bis(2-ethylhexyl)phthalate		0.584	0.678	0.643	0.629	0.609			
Di-n-octylphthalate	*	0.786	1.017	0.969	0.975	0.948			*
2-Picoline		1.394	1.469	1.417	1.428	1.487			
N-Nitrosomethylethylamine		0.798	0.669	0.635	0.647	0.689			
N-Nitrosodiethylamine		0.544	0.669	0.643	0.646	0.674			
Methylmethanesulfonate		0.979	1.030	1.079	1.049	1.067			
Ethyl methanesulfonate		1.013	1.045	1.034	1.057	1.103			
Pentachloroethane		0.650	0.652	0.638	0.660	0.698			
N-Nitrosopyrrolidine		0.617	0.644	0.650	0.663	0.700			
Acetophenone		0.716	0.628	0.608	0.592	0.624			
N-Nitrosomorpholine		0.550	0.580	0.585	0.590	0.607			
o-Toluidine		1.986	2.105	2.084	2.125	2.181			
a,a-Dimethylphenethylamine		0.463	0.561	0.563	0.548	0.590			
2,6-Dichlorophenol		0.348	0.385	0.360	0.370	0.381			
Hexachloropropene		0.455	0.485	0.473	0.474	0.502			
N-Nitrosodibutylamine		0.291	0.351	0.347	0.333	0.359			
Isosafrole		0.294	0.350	0.319	0.340	0.352			
1,2,4,5-Tetrachlorobenzene		0.726	0.751	0.758	0.763	0.765			
Safrole		0.289	0.326	0.322	0.309	0.333			
1,4-Naphthoquinone		0.417	0.460	0.465	0.494	0.488			

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =8270CAL1.D RRF10 =8270CAL2.D
RRF20 =8270CAL3.D RRF45 =8270CAL4.D RRF60 =8270CAL5.D

COMPOUND	RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
1,3-Dinitrobenzene	0.208	0.195	0.214	0.216	0.221		
Pentachlorobenzene	0.740	0.741	0.749	0.782	0.758		
1-Naphthylamine	0.710	0.747	0.757	0.765	0.744		
2-Naphthylamine	1.010	0.926	0.986	1.002	0.992		
2,3,4,6-Tetrachlorophenol	0.405	0.423	0.438	0.462	0.457		
5-Nitro-o-toluidine	0.371	0.396	0.390	0.412	0.405		
p-Phenylenediamine	0.311	0.333	0.352	0.350	0.361		
Phenacetin	0.316	0.343	0.352	0.342	0.356		
4-Aminobiphenyl	0.700	0.734	0.718	0.691	0.718		
Pronamide	0.359	0.394	0.384	0.387	0.397		
Pentachloronitrobenzene(PCNB)	0.131	0.151	0.151	0.145	0.146		
Dinoseb	0.150	0.196	0.221	0.241	0.252		
4-Nitroquinoline-1-oxide	0.036	0.034	0.028	0.018	0.020		
Methapyriline		0.014	0.011	0.013	0.014		
Aramite	0.091	0.097	0.100	0.107	0.101		
p-Dimethylaminoazobenzene	0.197	0.212	0.234	0.245	0.245		
2-Acetylaminofluorene	0.337	0.417	0.456	0.490	0.493		
7,12-Dimethylbenz(a)anthracene	0.478	0.518	0.525	0.555	0.568		
3-Methylcholanthrene	0.528	0.557	0.574	0.618	0.634		
N-Nitrosopiperidine	0.153	0.180	0.185	0.183	0.189		
1,3,5-Trinitrobenzene	0.826	0.943	1.015	1.102	1.101		
Diallate (Avadex)	0.576	0.576	0.550	0.564	0.556		
Isodrin	0.149	0.153	0.149	0.146	0.153		
Chlorobenzilate	0.293	0.338	0.349	0.370	0.359		
Kepone	0.064	0.069	0.075	0.072	0.068		
0,0,0-Triethylphosphorothioate	0.848	0.866	0.942	1.003	1.015		
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2-Fluorophenol(SURR)	1.008	1.143	1.086	1.055	1.046		
Phenol-d5(SURR)	1.329	1.498	1.388	1.356	1.347		
Nitrobenzene-d5(SURR)	0.576	0.631	0.568	0.555	0.564		
2-Fluorobiphenyl(SURR)	1.441	1.701	1.555	1.535	1.544		
2,4,6-Tribromophenol(SURR)	0.270	0.298	0.280	0.276	0.278		
p-Terphenyl-d14(SURR)	0.808	0.915	0.855	0.780	0.747		

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =8270CAL6.D RRF100 =8270CAL7.D

COMPOUND		RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
Pyridine		1.354	1.380				1.35328	3.5	
N-Nitrosodimethylamine		0.482	0.498				0.50174	7.3	
Aniline		1.642	1.646				1.6693	0.99895	
Bis(2-chloroethyl)ether		1.071	1.060				1.06117	5	
Phenol	*	1.438	1.474				1.42956	5.5	*
2-Chlorophenol		1.142	1.159				1.1349	4.2	
1,3-Dichlorobenzene		1.413	1.383				1.37854	6.5	
1,4-Dichlorobenzene	*	1.433	1.453				1.44124	4.1	*
1,2-Dichlorobenzene		1.344	1.361				1.35447	4.8	
Benzyl alcohol		0.767	0.812				0.79318	5.8	
2,2'-Oxybis(1-chloropropane)		0.474	0.475				0.50009	7.3	
2-Methylphenol		0.987	0.980				0.95793	6.1	
Hexachloroethane		0.611	0.604				0.62267	5.6	
N-Nitroso-di-n-propylamine	#	1.168	1.185				1.18064	7.5	#
4-Methylphenol		1.438	1.444				1.43204	6.5	
Nitrobenzene		0.523	0.525				0.52991	6	
Isophorone		0.832	0.821				0.82837	4.2	
2-Nitrophenol	*	0.217	0.220				0.21209	6.5	*
2,4-Dimethylphenol		0.322	0.318				0.30464	9.5	
Bis(2-chloroethoxy)methane		0.456	0.469				0.44962	3.8	
2,4-Dichlorophenol	*	0.394	0.395				0.37648	7.1	*
1,2,4-Trichlorobenzene		0.469	0.477				0.46267	5.1	
4-Chloroaniline		0.460	0.463				0.45205	5.2	
Hexachlorobutadiene	*	0.368	0.365				0.36345	3.1	*
4-Chloro-3-methylphenol	*	0.361	0.377				0.36133	7.1	*
Hexachlorocyclopentadiene	#	0.690	0.692				0.67016	5.9	#
2,4,6-Trichlorophenol	*	0.497	0.502				0.47633	5.8	*
2,4,5-Trichlorophenol		0.546	0.570				0.54618	3.7	
2-Chloronaphthalene		1.180	1.168				1.14689	4.2	
2-Nitroaniline		0.400	0.402				0.39238	6	
Dimethylphthalate		1.413	1.400				1.42881	4.7	
2,6-Dinitrotoluene		0.323	0.324				0.3132	4.3	
3-Nitroaniline		0.287	0.299				0.28434	5.3	
2,4-Dinitrophenol	#	0.268	0.278				0.2438	12.8	#

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =8270CAL6.D RRF100 =8270CAL7.D

COMPOUND		RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
Dibenzofuran		1.717	1.700				1.72292	4.8	
2,4-Dinitrotoluene		0.440	0.452				0.42279	6.5	
4-Nitrophenol	#	0.313	0.319				0.30432	8.3	#
4-Chlorophenyl-phenylether		0.959	0.967				0.91749	5.2	
Diethylphthalate		1.342	1.334				1.3678	5.9	
4-Nitroaniline		0.280	0.292				0.27192	7.6	
4,6-Dinitro-2-methylphenol		0.185	0.193				0.17194	9.6	
N-Nitrosodiphenylamine	*	0.499	0.510				0.49512	4.9	*
4-Bromophenyl-phenylether		0.299	0.307				0.29281	5.3	
Hexachlorobenzene		0.339	0.344				0.32743	4.6	
Pentachlorophenol	*	0.236	0.241				0.21647	10.3	*
Di-n-butylphthalate		1.155	1.083				1.17702	6.6	
Butylbenzylphthalate		0.387	0.363				0.3915	7	
3,3'-Dichlorobenzidine		0.503	0.489				0.46424	7.5	
Bis(2-ethylhexyl)phthalate		0.603	0.551				0.61388	6.7	
Di-n-octylphthalate	*	0.944	0.884				0.9318	8.1	*
2-Picoline		1.485	1.420				1.44274	2.6	
N-Nitrosomethylethylamine		0.669	0.636				0.67763	8.3	
N-Nitrosodiethylamine		0.676	0.661				0.64479	7.1	
Methylmethanesulfonate		1.044	1.001				1.03546	3.4	
Ethyl methanesulfonate		1.090	1.043				1.05506	3	
Pentachloroethane		0.694	0.678				0.66701	3.5	
N-Nitrosopyrrolidine		0.664	0.654				0.6562	3.8	
Acetophenone		0.619	0.631				0.63127	6.3	
N-Nitrosomorpholine		0.589	0.581				0.58321	2.9	
o-Toluidine		2.193	2.051				2.10355	3.4	
a,a-Dimethylphenethylamine		0.576	0.533				0.54764	7.6	
2,6-Dichlorophenol		0.389	0.376				0.37297	3.9	
Hexachloropropene		0.493	0.485				0.48114	3.2	
N-Nitrosodibutylamine		0.360	0.368				0.34426	7.5	
Isosafrole		0.355	0.356				0.33796	6.8	
1,2,4,5-Tetrachlorobenzene		0.795	0.787				0.76365	3	
Safrole		0.339	0.331				0.3211	5.3	
1,4-Naphthoquinone		0.505	0.496				0.47506	6.4	

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =8270CAL6.D RRF100 =8270CAL7.D

COMPOUND	RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
1,3-Dinitrobenzene	0.229	0.222				0.21503	5	
Pentachlorobenzene	0.796	0.808				0.76779	3.6	
1-Naphthylamine	0.768	0.732				0.74614	2.7	
2-Naphthylamine	0.999	0.944				0.9798	3.3	
2,3,4,6-Tetrachlorophenol	0.468	0.479				0.4475	5.9	
5-Nitro-o-toluidine	0.416	0.410				0.39972	3.9	
p-Phenylenediamine	0.366	0.355				0.34697	5.5	
Phenacetin	0.360	0.353				0.3459	4.3	
4-Aminobiphenyl	0.715	0.678				0.70769	2.7	
Pronamide	0.402	0.390				0.3876	3.6	
Pentachloronitrobenzene(PCNB)	0.153	0.152				0.14689	5.1	
Dinoseb	0.258	0.250				0.22409	0.99912	
4-Nitroquinoline-1-oxide	0.017	0.016				0.02423	35.9	<-
Methapyriline	0.014	0.014				0.01331	10.4	
Aramite	0.109	0.107				0.10177	6.4	
p-Dimethylaminoazobenzene	0.253	0.253				0.23404	9.3	
2-Acetylaminofluorene	0.526	0.515				0.4619	14.3	
7,12-Dimethylbenz(a)anthracene	0.582	0.596				0.54581	7.5	
3-Methylcholanthrene	0.638	0.654				0.60032	7.9	
N-Nitrosopiperidine	0.186	0.186				0.18032	6.8	
1,3,5-Trinitrobenzene	1.107	1.103				1.02808	10.6	
Diallate (Avadex)	0.573	0.579				0.56783	2	
Isodrin	0.149	0.146				0.14929	1.7	
Chlorobenzilate	0.385	0.382				0.35379	8.9	
Kepone	0.068	0.063				0.06852	6.4	
0,0,0-Triethylphosphorothioate	1.045	1.049				0.96686	8.6	
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2-Fluorophenol(SURR)	1.078	1.080				1.07088	3.9	
Phenol-d5(SURR)	1.396	1.401				1.38792	4	
Nitrobenzene-d5(SURR)	0.567	0.573				0.57639	4.4	
2-Fluorobiphenyl(SURR)	1.557	1.546				1.55434	4.9	
2,4,6-Tribromophenol(SURR)	0.294	0.305				0.28588	4.6	
p-Terphenyl-d14(SURR)	0.724	0.655				0.78342	11	

Average Used: 6

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FORM VI

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 08/02/12 Time: 2343

CCV ID: SSC1103021 Lab File ID: 8270SEC1.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Pyridine		1.35328	1.24	8.4	AVRG	
N-Nitrosodimethylamine		0.50174	0.47538	5.3	AVRG	
Aniline		45	36	20.0	LINR	
Bis(2-chloroethyl)ether		1.06117	1.096	3.3	AVRG	
Phenol	*	1.42956	1.443	0.9	AVRG	*
2-Chlorophenol		1.1349	1.129	0.5	AVRG	
1,3-Dichlorobenzene		1.37854	1.396	1.3	AVRG	
1,4-Dichlorobenzene	*	1.44124	1.433	0.6	AVRG	*
1,2-Dichlorobenzene		1.35447	1.354	0.0	AVRG	
Benzyl alcohol		0.79318	0.73537	7.3	AVRG	
2,2'-Oxybis(1-chloropropane)		0.50009	0.49821	0.4	AVRG	
2-Methylphenol		0.95793	0.91342	4.6	AVRG	
Hexachloroethane		0.62267	0.61687	0.9	AVRG	
N-Nitroso-di-n-propylamine	#	1.18064	1.202	1.8	AVRG	#
4-Methylphenol		1.43204	1.4	2.2	AVRG	
Nitrobenzene		0.52991	0.52178	1.5	AVRG	
Isophorone		0.82837	0.85385	3.1	AVRG	
2-Nitrophenol	*	0.21209	0.20857	1.7	AVRG	*
2,4-Dimethylphenol		0.30464	0.33877	11.2	AVRG	
Bis(2-chloroethoxy)methane		0.44962	0.49374	9.8	AVRG	
2,4-Dichlorophenol	*	0.37648	0.38312	1.8	AVRG	*
1,2,4-Trichlorobenzene		0.46267	0.48139	4.0	AVRG	
4-Chloroaniline		0.45205	0.46021	1.8	AVRG	
Hexachlorobutadiene	*	0.36345	0.4082	12.3	AVRG	*
4-Chloro-3-methylphenol	*	0.36133	0.38592	6.8	AVRG	*
Hexachlorocyclopentadiene	#	0.67016	0.67523	0.8	AVRG	#
2,4,6-Trichlorophenol	*	0.47633	0.49319	3.5	AVRG	*
2,4,5-Trichlorophenol		0.54618	0.53097	2.8	AVRG	
2-Chloronaphthalene		1.14689	1.206	5.2	AVRG	
2-Nitroaniline		0.39238	0.40631	3.6	AVRG	
Dimethylphthalate		1.42881	1.486	4.0	AVRG	
2,6-Dinitrotoluene		0.3132	0.33516	7.0	AVRG	
3-Nitroaniline		0.28434	0.30287	6.5	AVRG	
2,4-Dinitrophenol	#	0.2438	0.27918	14.5	AVRG	#
Dibenzofuran		1.72292	1.763	2.3	AVRG	
2,4-Dinitrotoluene		0.42279	0.45886	8.5	AVRG	

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FORM VII

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 08/02/12 Time: 2343

CCV ID: SSC1103021 Lab File ID: 8270SEC1.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
4-Nitrophenol	#	0.30432	0.31467	3.4	AVRG	#
4-Chlorophenyl-phenylether		0.91749	0.94272	2.7	AVRG	
Diethylphthalate		1.3678	1.422	4.0	AVRG	
4-Nitroaniline		0.27192	0.29804	9.6	AVRG	
4,6-Dinitro-2-methylphenol		0.17194	0.16973	1.3	AVRG	
N-Nitrosodiphenylamine	*	0.49512	0.53277	7.6	AVRG	*
4-Bromophenyl-phenylether		0.29281	0.30236	3.3	AVRG	
Hexachlorobenzene		0.32743	0.33901	3.5	AVRG	
Pentachlorophenol	*	0.21647	0.2419	11.7	AVRG	*
Di-n-butylphthalate		1.17702	1.219	3.6	AVRG	
Butylbenzylphthalate		0.3915	0.4317	10.3	AVRG	
Bis(2-ethylhexyl)phthalate		0.61388	0.68482	11.6	AVRG	
Di-n-octylphthalate	*	0.9318	1.05	12.7	AVRG	*
==========						
2-Fluorophenol(SURR)		1.07088	1.097	2.4	AVRG	
Phenol-d5(SURR)		1.38792	1.329	4.2	AVRG	
Nitrobenzene-d5(SURR)		0.57639	0.52885	8.2	AVRG	
2-Fluorobiphenyl(SURR)		1.55434	1.436	7.6	AVRG	
2,4,6-Tribromophenol(SURR)		0.28588	0.29917	4.6	AVRG	
p-Terphenyl-d14(SURR)		0.78342	0.73621	6.0	AVRG	

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 0315

CCV ID: SSC1103039 Lab File ID: BSSEC.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
3,3'-Dichlorobenzidine	0.46424	0.49281	6.2	AVRG
Acetophenone	0.63127	0.56839	10.0	AVRG

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 0936

CCV ID: SSC1103003 Lab File ID: AP9SEC2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	
2-Picoline	1.44274	1.49	3.3	AVRG	
N-Nitrosomethylethylamine	0.67763	0.63453	6.4	AVRG	
N-Nitrosodiethylamine	0.64479	0.63322	1.8	AVRG	
Methylmethanesulfonate	1.03546	1.133	9.4	AVRG	
Ethyl methanesulfonate	1.05506	1.315	24.6	AVRG	<-
Pentachloroethane	0.66701	0.69254	3.8	AVRG	
N-Nitrosopyrrolidine	0.6562	0.69724	6.3	AVRG	
Acetophenone	0.63127	0.59036	6.5	AVRG	
N-Nitrosomorpholine	0.58321	0.65026	11.5	AVRG	
o-Toluidine	2.10355	2.156	2.5	AVRG	
a,a-Dimethylphenethylamine	0.54764	0.6571	20.0	AVRG	
2,6-Dichlorophenol	0.37297	0.36891	1.1	AVRG	
Hexachloropropene	0.48114	0.47082	2.1	AVRG	
N-Nitrosodibutylamine	0.34426	0.3557	3.3	AVRG	
Isosafrole	0.33796	0.35641	5.5	AVRG	
1,2,4,5-Tetrachlorobenzene	0.76365	0.75603	1.0	AVRG	
Safrole	0.3211	0.30716	4.3	AVRG	
1,4-Naphthoquinone	0.47506	0.50337	6.0	AVRG	
1,3-Dinitrobenzene	0.21503	0.25012	16.3	AVRG	
Pentachlorobenzene	0.76779	0.79842	4.0	AVRG	
1-Naphthylamine	0.74614	1.081	44.9	AVRG	<-
2-Naphthylamine	0.9798	1.318	34.5	AVRG	<-
2,3,4,6-Tetrachlorophenol	0.4475	0.42458	5.1	AVRG	
5-Nitro-o-toluidine	0.39972	0.38686	3.2	AVRG	
p-Phenylenediamine	0.34697	0.36704	5.8	AVRG	
Phenacetin	0.3459	0.36326	5.0	AVRG	
4-Aminobiphenyl	0.70769	0.76585	8.2	AVRG	
Pronamide	0.3876	0.41555	7.2	AVRG	
Pentachloronitrobenzene(PCNB)	0.14689	0.16184	10.2	AVRG	
Dinoseb	45	47.1	4.7	LINR	
4-Nitroquinoline-1-oxide	0.02423	0.02246	7.3	AVRG	
Methapyriline	0.01331	0.23253	1647.0	AVRG	<-
Aramite	0.10177	0.10069	1.1	AVRG	
p-Dimethylaminoazobenzene	0.23404	0.25823	10.3	AVRG	
2-Acetylaminofluorene	0.4619	0.45215	2.1	AVRG	
7,12-Dimethylbenz(a)anthracene	0.54581	0.54796	0.4	AVRG	

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FORM VII

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 0936

CCV ID: SSC1103003 Lab File ID: AP9SEC2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	
3-Methylcholanthrene	0.60032	0.37581	37.4	AVRG	<-
N-Nitrosopiperidine	0.18032	0.18498	2.6	AVRG	
1,3,5-Trinitrobenzene	1.02808	0.58424	43.2	AVRG	<-
Diallate (Avadex)	0.56783	0.5651	0.5	AVRG	
Isodrin	0.14929	0.16718	12.0	AVRG	
Chlorobenzilate	0.35379	0.37015	4.6	AVRG	
Kepone	0.06852	0.08112	18.4	AVRG	
0,0,0-Triethylphosphorothioate	0.96686	1.054	9.0	AVRG	

Average Used: 46.9

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FORM VII

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1024

CCV ID: CCV1103019 Lab File ID: 8270CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Pyridine		1.35328	1.401	3.5	AVRG	
N-Nitrosodimethylamine		0.50174	0.55509	10.6	AVRG	
Aniline		45	44.2	1.8	LINR	
Bis(2-chloroethyl)ether		1.06117	1.069	0.7	AVRG	
Phenol	*	1.42956	1.49	4.2	AVRG	*
2-Chlorophenol		1.1349	1.122	1.1	AVRG	
1,3-Dichlorobenzene		1.37854	1.412	2.4	AVRG	
1,4-Dichlorobenzene	*	1.44124	1.472	2.1	AVRG	*
1,2-Dichlorobenzene		1.35447	1.351	0.3	AVRG	
Benzyl alcohol		0.79318	0.79475	0.2	AVRG	
2,2'-Oxybis(1-chloropropane)		0.50009	0.56791	13.6	AVRG	
2-Methylphenol		0.95793	0.98668	3.0	AVRG	
Hexachloroethane		0.62267	0.63854	2.5	AVRG	
N-Nitroso-di-n-propylamine	#	1.18064	1.224	3.7	AVRG	#
4-Methylphenol		1.43204	1.443	0.8	AVRG	
Nitrobenzene		0.52991	0.5213	1.6	AVRG	
Isophorone		0.82837	0.84542	2.1	AVRG	
2-Nitrophenol	*	0.21209	0.19572	7.7	AVRG	*
2,4-Dimethylphenol		0.30464	0.30172	1.0	AVRG	
Bis(2-chloroethoxy)methane		0.44962	0.43794	2.6	AVRG	
2,4-Dichlorophenol	*	0.37648	0.36494	3.1	AVRG	*
1,2,4-Trichlorobenzene		0.46267	0.44973	2.8	AVRG	
4-Chloroaniline		0.45205	0.4358	3.6	AVRG	
Hexachlorobutadiene	*	0.36345	0.36046	0.8	AVRG	*
4-Chloro-3-methylphenol	*	0.36133	0.35966	0.5	AVRG	*
Hexachlorocyclopentadiene	#	0.67016	0.67728	1.1	AVRG	#
2,4,6-Trichlorophenol	*	0.47633	0.47513	0.3	AVRG	*
2,4,5-Trichlorophenol		0.54618	0.52255	4.3	AVRG	
2-Chloronaphthalene		1.14689	1.166	1.7	AVRG	
2-Nitroaniline		0.39238	0.42605	8.6	AVRG	
Dimethylphthalate		1.42881	1.482	3.7	AVRG	
2,6-Dinitrotoluene		0.3132	0.30927	1.3	AVRG	
3-Nitroaniline		0.28434	0.28416	0.1	AVRG	
2,4-Dinitrophenol	#	0.2438	0.22959	5.8	AVRG	#
Dibenzofuran		1.72292	1.753	1.7	AVRG	
2,4-Dinitrotoluene		0.42279	0.40549	4.1	AVRG	

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FORM VII

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1024

CCV ID: CCV1103019 Lab File ID: 8270CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
4-Nitrophenol	#	0.30432	0.33777	11.0	AVRG	#
4-Chlorophenyl-phenylether		0.91749	0.91574	0.2	AVRG	
Diethylphthalate		1.3678	1.374	0.5	AVRG	
4-Nitroaniline		0.27192	0.25615	5.8	AVRG	
4,6-Dinitro-2-methylphenol		0.17194	0.16896	1.7	AVRG	
N-Nitrosodiphenylamine	*	0.49512	0.49308	0.4	AVRG	*
4-Bromophenyl-phenylether		0.29281	0.2894	1.2	AVRG	
Hexachlorobenzene		0.32743	0.32419	1.0	AVRG	
Pentachlorophenol	*	0.21647	0.21587	0.3	AVRG	*
Di-n-butylphthalate		1.17702	1.22	3.7	AVRG	
Butylbenzylphthalate		0.3915	0.37875	3.3	AVRG	
Bis(2-ethylhexyl)phthalate		0.61388	0.63829	4.0	AVRG	
Di-n-octylphthalate	*	0.9318	0.95559	2.6	AVRG	*
==========						
2-Fluorophenol(SURR)		1.07088	1.065	0.5	AVRG	
Phenol-d5(SURR)		1.38792	1.4	0.9	AVRG	
Nitrobenzene-d5(SURR)		0.57639	0.57104	0.9	AVRG	
2-Fluorobiphenyl(SURR)		1.55434	1.578	1.5	AVRG	
2,4,6-Tribromophenol(SURR)		0.28588	0.28966	1.3	AVRG	
p-Terphenyl-d14(SURR)		0.78342	0.76105	2.9	AVRG	

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1048

CCV ID: CCV1103038 Lab File ID: BSCCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
3,3'-Dichlorobenzidine	0.46424	0.46306	0.3	AVRG
Acetophenone	0.63127	0.59437	5.8	AVRG

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FORM VII

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1111

CCV ID: CCV1103029 Lab File ID: AP9CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
2-Picoline	1.44274	1.436	0.5	AVRG
N-Nitrosomethylethylamine	0.67763	0.61955	8.6	AVRG
N-Nitrosodiethylamine	0.64479	0.64169	0.5	AVRG
Methylmethanesulfonate	1.03546	1.043	0.7	AVRG
Ethyl methanesulfonate	1.05506	1.091	3.4	AVRG
Pentachloroethane	0.66701	0.66029	1.0	AVRG
N-Nitrosopyrrolidine	0.6562	0.62854	4.2	AVRG
Acetophenone	0.63127	0.56323	10.8	AVRG
N-Nitrosomorpholine	0.58321	0.61068	4.7	AVRG
o-Toluidine	2.10355	2.155	2.4	AVRG
a,a-Dimethylphenethylamine	0.54764	0.54018	1.4	AVRG
2,6-Dichlorophenol	0.37297	0.35948	3.6	AVRG
Hexachloropropene	0.48114	0.47463	1.4	AVRG
N-Nitrosodibutylamine	0.34426	0.34333	0.3	AVRG
Isosafrole	0.33796	0.33191	1.8	AVRG
1,2,4,5-Tetrachlorobenzene	0.76365	0.74289	2.7	AVRG
Safrole	0.3211	0.31853	0.8	AVRG
1,4-Naphthoquinone	0.47506	0.48493	2.1	AVRG
1,3-Dinitrobenzene	0.21503	0.2155	0.2	AVRG
Pentachlorobenzene	0.76779	0.76575	0.3	AVRG
1-Naphthylamine	0.74614	0.75708	1.5	AVRG
2-Naphthylamine	0.9798	1.025	4.6	AVRG
2,3,4,6-Tetrachlorophenol	0.4475	0.44667	0.2	AVRG
5-Nitro-o-toluidine	0.39972	0.40902	2.3	AVRG
p-Phenylenediamine	0.34697	0.35759	3.1	AVRG
Phenacetin	0.3459	0.35712	3.2	AVRG
4-Aminobiphenyl	0.70769	0.67964	4.0	AVRG
Pronamide	0.3876	0.40306	4.0	AVRG
Pentachloronitrobenzene(PCNB)	0.14689	0.15715	7.0	AVRG
Dinoseb	45	43.5	3.3	LINR
4-Nitroquinoline-1-oxide	0.02423	0.02155	11.1	AVRG
Methapyriline	0.01331	0.01158	13.0	AVRG
Aramite	0.10177	0.10248	0.7	AVRG
p-Dimethylaminoazobenzene	0.23404	0.2355	0.6	AVRG
2-Acetylaminofluorene	0.4619	0.48342	4.7	AVRG
7,12-Dimethylbenz(a)anthracene	0.54581	0.55357	1.4	AVRG

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FORM VII

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1111

CCV ID: CCV1103029 Lab File ID: AP9CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
3-Methylcholanthrene	0.60032	0.59463	0.9	AVRG
N-Nitrosopiperidine	0.18032	0.18228	1.1	AVRG
1,3,5-Trinitrobenzene	1.02808	1.124	9.3	AVRG
Diallate (Avadex)	0.56783	0.56187	1.0	AVRG
Isodrin	0.14929	0.14626	2.0	AVRG
Chlorobenzilate	0.35379	0.36871	4.2	AVRG
Kepone	0.06852	0.07203	5.1	AVRG
0,0,0-Triethylphosphorothioate	0.96686	1.039	7.5	AVRG

FL-PRO Organics

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CASE NARRATIVE
FL-PRO Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506563

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method FL-PRO

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for FL-PRO semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met with the exception of:

Sample Q1-TFS-MW-17MS was recovered below criteria for the following surrogate: o-Terphenyl surrogate at 73.3 % with criteria of (82-142). The most probable cause for this recovery is matrix interference near the elution of the surrogate since there was a positive result for TPH in the parent sample at 1000ug/L.

Samples coded accordingly.

D. Spikes:

CASE NARRATIVE
FL-PRO Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506563

Client: CH2M Hill

1. Laboratory Control Spikes (LCS)

   All acceptance criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

   A client requested MS/SD set was analyzed.
   All percent recovery and relative percent difference (RPD) criteria were met.

E. Internal Standards:

This method does not require the use of internal standards.

F. Samples:

Sample analysis proceeded normally.
Sample Q1-TFS-MW-15 required a 10X dilution due to high concentration of the following analyte: TPH.

Sample Q1-TFS-MW-15-DUP required a 10X dilution due to high concentration of the following analyte: TPH.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

SIGNED: DATE: 07/26/2012

FL-PRO ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Method: FL-PRO

EPA Sample No	Lab Sample ID
Q1-TFS-MW-17	350656301
Q1-TFS-MW-15	350656304
Q1-TFS-MW-15-DUP	350656305
Q1-TFS-MW-17-RS	350656306
Q1-TFS-MW-05	350656307
Q1-TFS-MW-11	350656308

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FL-PRO Sample Data

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1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656301 Lab File ID: 563-1.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 0942

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	1000		252	505	505

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Form I

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656304 Lab File ID: 563-4D10.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1519

PercentSolids: 0 decanted : Dilution Factor: 10

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	20900		2520	5050	5050

070812 1739

Form I

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-15-DUP

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656305 Lab File ID: 563-5D10.D

Sample wt/vol: 985 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1542

PercentSolids: 0 decanted : Dilution Factor: 10

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	19900		2540	5080	5080

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Form I

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-17-RS

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656306 Lab File ID: 563-6.D

Sample wt/vol: 990 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1134

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	300	J	252	505	505

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Form I

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-05

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656307 Lab File ID: 563-7R.D

Sample wt/vol: 980 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1326

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	510	U	255	510	510

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Form I

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-11

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 350656308 Lab File ID: 563-8R.D

Sample wt/vol: 980 Units: ML Date Received: 07/19/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1349

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	510	U	255	510	510

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Form I

FL-PRO QC Summary

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1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138543MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Matrix: WATER Lab Sample ID: 138543MB Lab File ID: 10192MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/24/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 0813

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	500	U	250	500	500

FL-PRO ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

138543MB

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Lab File ID: 10192MB.D Lab Sample ID: 138543MB

Instrument ID: SFID01 Date Extracted: 07/24/12

Matrix: WATER Date Analyzed: 07/25/12

Level:(low/med) LOW Time Analyzed: 0813

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	138544LCS	138544LCS	10192LCS.D	07/25/12	0835
2	Q1-TFS-MW-17	350656301	563-1.D	07/25/12	0942
3	Q1-TFS-MW-17MS	350656302	563-2.D	07/25/12	1004
4	Q1-TFS-MW-17MSD	350656303	563-3.D	07/25/12	1027
5	Q1-TFS-MW-17-RS	350656306	563-6.D	07/25/12	1134
6	Q1-TFS-MW-05	350656307	563-7R.D	07/25/12	1326
7	Q1-TFS-MW-11	350656308	563-8R.D	07/25/12	1349
8	Q1-TFS-MW-15	350656304	563-4D10.D	07/25/12	1519
9	Q1-TFS-MW-15-DUP	350656305	563-5D10.D	07/25/12	1542

COMMENTS:

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Form IV

2A

WATER FL-PRO ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG NO.: 3506563

Column(1): RTX-5 ID: 0.53 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
138543MB	86.0	63.3					0
138544LCS	87.0	80.0					0
Q1-TFS-MW-05	84.3	91.5					0
Q1-TFS-MW-11	88.2	98.0					0
Q1-TFS-MW-15	90.1	105.0					0
Q1-TFS-MW-15-DUP	83.3	98.7					0
Q1-TFS-MW-17	88.1	92.1					0
Q1-TFS-MW-17MS	73.3 *	85.5					1
Q1-TFS-MW-17MSD	84.2	92.1					0
Q1-TFS-MW-17-RS	93.1	105.0					0

Control Limits

S1	=	o-Terphenyl Surrogate	82 - 142
S2	=	Nonatriacontane (C-39)	42 - 193

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

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FL-PRO ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date: 07/09/12

Instrument ID: SFID01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.05 S2 : 10.06

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	STD1097423	45519	PROCAL7.D	07/09/12	1304	4.13	10.35
2	STD1097422	45520	PROCAL6.D	07/09/12	1326	4.06	10.11
3	STD1097421	46244	PROCAL5.D	07/09/12	1349	4.04	10.02
4	STD1097420	46481	PROCAL4.D	07/09/12	1411	4.05	10.06
5	STD1097419	45526	PROCAL3.D	07/09/12	1433	4.04	10.01
6	STD1097418	45524	PROCAL2.D	07/09/12	1455	4.03	9.99
7	STD1097417	45525	PROCAL1.D	07/09/12	1518	4.04	10.03
8	SSC1097426	45526	PROSEC.D	07/09/12	1540	4.07	10.15
9	CCV1100838	46481	PROCCV1.D	07/25/12	0745	4.04	9.98
10	138543MB	138543MB	10192MB.D	07/25/12	0813	4.14	10.3
11	138544LCS	138544LCS	10192LCS.D	07/25/12	0835	4.07	10.09
12	Q1-TFS-MW-17	350656301	563-1.D	07/25/12	0942	4.08	10.12
13	Q1-TFS-MW-17MS	350656302	563-2.D	07/25/12	1004	4.05	10.03
14	Q1-TFS-MW-17MSD	350656303	563-3.D	07/25/12	1027	4.07	10.1
15	Q1-TFS-MW-17-RS	350656306	563-6.D	07/25/12	1134	4.06	10.08
16	CCV1100839	46481	PROCCV2.D	07/25/12	1304	4.05	10.05
17	Q1-TFS-MW-05	350656307	563-7R.D	07/25/12	1326	4.06	10.09
18	Q1-TFS-MW-11	350656308	563-8R.D	07/25/12	1349	4.07	10.07
19	Q1-TFS-MW-15	350656304	563-4D10.D	07/25/12	1519	4.05	10.01
20	Q1-TFS-MW-15-DUP	350656305	563-5D10.D	07/25/12	1542	4.04	9.98
21	CCV1100915	46481	PROCCV3.D	07/25/12	1627	4.04	9.99

			QC LIMITS
S1	=	o-Terphenyl Surrogate	(+/- 0.2 MINUTES)
S2	=	Nonatriacontane (C-39)	(+/- 0.46 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

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FORM VIII

3

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

138544LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	3400	2600	76.5			55 - 118

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

3

FL-PRO ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stan

Q1-TFS-MW-17MS

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC #	QC LIMITS REC.
TPH	3400	1000	3400	70.0	41 - 101

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

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3

FL-PRO ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Q1-TFS-MW-17MSD

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

COMPOUND	SPIKE ADDED ug/L	MSD CONCENTRATION ug/L	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
TPH	3400	3900	84.5	13.7	20	41 - 101

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

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FL-PRO Standards Data

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FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

LAB FILE ID: RRF0.17 =PROCAL1.D RRF0.34 =PROCAL2.D
RRF0.85 =PROCAL3.D RRF1.7 =PROCAL4.D RRF2.55 =PROCAL5.D

COMPOUND	RRF0.17	RRF0.34	RRF0.85	RRF1.7	RRF2.55
TPH	15029423.53	11486597.06	8479840	7603171.176	7363051.373
==========					
Nonatriacontane (C-39)(SURR)	4344413.333	4886093.333	4848813.333	4905520	5494413.333
o-Terphenyl Surrogate(SURR)	8221600	8892820	8108340	7909660	8265300

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

LAB FILE ID: RRF3.4 =PROCAL6.D RRF5.1 =PROCAL7.D

COMPOUND	RRF3.4	RRF5.1			
TPH	8235711.765	7978104.706			
==========					
Nonatriacontane (C-39)(SURR)	5891386.667	6452733.333			
o-Terphenyl Surrogate(SURR)	7973540	7585720			

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FORM VI

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

COMPOUND	CURVE	COEFFICIENTS AO	A1	%RSD OR R^2
TPH	LINR	-0.072929	1.28183E-07	0.99534
==========				
Nonatriacontane (C-39)(SURR)	AVRG		5260481.9	13.8
o-Terphenyl Surrogate(SURR)	AVRG		8136711.43	5

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

Min RRF for SPCC(#) = 0 Max %RSD for CCC(*) = 0 %

LAB FILE ID: RT1: PROCAL1.D RT2: PROCAL2.D
RT3: PROCAL3.D RT4: PROCAL4.D RT5: PROCAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	TO
TPH	6.202	6.202	6.202	6.202	6.202			
==========								
Nonatriacontane (C-39)(SURR)	10.027	9.987	10.007	10.063	10.023			
o-Terphenyl Surrogate(SURR)	4.040	4.030	4.043	4.053	4.043			

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506563

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

Min RRF for SPCC(#) = 0 Max %RSD for CCC(*) = 0 %

LAB FILE ID: RT6: PROCAL6.D RT7: PROCAL7.D

COMPOUND	RT6	RT7				MIDCAL RT	RT WINDOW FROM	TO
TPH	6.202	6.202				6.202	0.753	11.650
==========								
Nonatriacontane (C-39)(SURR)	10.110	10.353				10.063	9.603	10.523
o-Terphenyl Surrogate(SURR)	4.063	4.133				4.053	3.853	4.253

7SSC

FL-PRO ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SFID01 CalibrationDate: 07/09/12 Time: 1540

CCV ID: SSC1097426 Lab File ID: PROSEC.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.78	4.7	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	6066840	15.3	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	8466960	4.1	AVRG

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FORM VII

7

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SFID01 CalibrationDate: 07/25/12 Time: 0745

CCV ID: CCV1100838 Lab File ID: PROCCV1.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.76	3.5	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	6299653.333	19.8	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	8837460	8.6	AVRG

7

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SFID01 CalibrationDate: 07/25/12 Time: 1304

CCV ID: CCV1100839 Lab File ID: PROCCV2.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.83	7.6	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	6463813.333	22.9	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	8831740	8.5	AVRG

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FORM VII

7

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506563

Instrument ID: SFID01 CalibrationDate: 07/25/12 Time: 1627

CCV ID: CCV1100915 Lab File ID: PROCCV3.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.96	15.3	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	6539826.667	24.3	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	9551700	17.4	AVRG

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FORM VII

Chain of Custody Documentation

070812 1739

PEL

A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

3506563 MK

Page 1 of 1

Special Handling:

TAT- Indicate Date Needed: 28

- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Bethany Garvey
CH2M HILL
(on-file)

Project Mgr.: Greg Rowell

Invoice To: Greg Rowell
CH2M HILL
on file

P.O. No.: _____ RQN: _____

Project No.: 426847
Site Name: Truck Fill Stand (TFS)
Location: NASKW, Key West State: FL
Sampler(s): Nikki Monroe

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9=_____ 10=_____ 11=_____

List preservative code below: 2 | | | 3 | | | | |

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____
State specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOC 8260B	SVOC 8270 D	SVOC 8270 SIM	FL-PRO	Notes:
-01	Q1-TFS-MW-17	7-18-12	0910	G	GW	3	6			3	2	2	2	
-02	Q1-TFS-MW-17-MS	7-18-12	0915	G	GW	3	6			3	2	2	2	
-03	Q1-TFS-MW-17-MSD	7-18-12	0915	G	GW	3	6			3	2	2	2	
-04	Q1-TFS-MW-15	7-18-12	1055	G	GW	3	6			3	2	2	2	
-05	Q1-TFS-MW-15-DUP	7-18-12	—	G	GW	3	6			3	2	2	2	
-06	Q1-TFS-MW-17-RS	7-18-12	0815	G	GW	3	6			3	2	2	2	
-07	Q1-TFS-MW-05	7-18-12	1350	G	GW	3	6			3	2	2	2	
-08	Q1-TFS-MW-11	7-18-12	1500	G	GW	3	6			3	2	2	2	
-09	Q1-TFS-TB-2	7-18-12	—	G	W	2				2				Trip Blank

☐ E-mail to greg.rowell@ch2m.com
EDD Format CH2M HILL
PN<2 8260, FL-Pro

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[signature]	Fed Ex	7-18-12	1715
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3506563

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3506563

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Company CH2M HILL

Address 5014 Sawgrass Trail

Dept./Floor/Suite/Room

City Fort Myers Beach State FL ZIP 33043

2 Your Internal Billing Reference 412642.FP.FW.09/22070

3 To

Recipient's Name Sample Receiving Phone 813 888 7527

Company PEL

Address 9415 Longwin Rd Ste A

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

HOLD Weekday — FedEx location address REQUIRED. **NOT available for** FedEx First Overnight.

HOLD Saturday — FedEx location address REQUIRED. **Available ONLY for** FedEx Priority Overnight and FedEx 2Day to select locations.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Tampa State FL ZIP 33634

8993 7172 1245

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. *For packages over 150 lbs., use the new FedEx Express Freight US Airbill.*

Next Business Day

- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] **NEW** FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — **NOT available for** FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- [x] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. ***Fee applies.***
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. ***Fee applies.***

Does this shipment contain dangerous goods?

One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

Obtain recip. Acct. No. [ ]

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted]

Total Packages	Total Weight	Total Declared Value†	Credit Card Auth.
5	____ lbs.	$ ____ .00	

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

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fedex.com 1.800.GoFedEx 1.800.463.3339

ALIGN FEDEX AIRBILL POUCH HERE

ORIGIN ID: EYWA (504) 593-9421
CH2M HILL

3900 N CAUSEWAY BLVD STE 1250

METAIRIE, LA 700027272
UNITED STATES US

SHIP DATE: 18JUL12
ACTWGT: 65.0 LB MAN
CAD: /POS1302
DIMS: 23x13x10 IN

BILL SENDER

TO SAMPLE RECIVING
PEL
8405 BENJAMIN RD
STE A
TAMPA FL 33634
(813) 888-9507
INV:
PO: REF:
DEPT:

Part # 156297-4637-1 Rev A

8109415 07/18 5/5G1/FDXG/PDX

FedEx Express

J12101112190125

4 of 5

MPS# 0681 7955 4612 8802
Mstr# 8993 7172 1245

0200

THU - 19 JUL A1
PRIORITY OVERNIGHT

34 TPFA

33634
FL-US TPA

RT 163 1 A
8802
FZ 07.19

ALIGN OPEN END OF FEDEX AIRBILL POUCH HERE

ALIGN FEDEX AIRBILL POUCH HERE

ORIGIN ID: EYWA (504) 593-9421
CH2M HILL

3900 N CAUSEWAY BLVD STE 1250

METAIRIE, LA 700027272
UNITED STATES US

SHIP DATE: 18JUL12
ACTWGT: 65.0 LB MAN
CAD: /POS1302
DIMS: 23x13x10 IN

BILL SENDER

TO SAMPLE RECIVING
PEL
8405 BENJAMIN RD
STE A
TAMPA FL 33634
(813) 888-9507 REF:
INV:
PO: DEPT:

Part # 15625 -3B

FedEx Express

J12101112190125

3 of 5

MPS# 0681 7955 4612 8798

Mstr# 8993 7172 1245

0200

THU - 19 JUL A1
PRIORITY OVERNIGHT

34 TPFA

33634
FL-US TPA

RT 163 1 A

8798
07.19

FZ

3506563

197

METAIRIE, LA 700027272
UNITED STATES US

DIMS: 23x13x10 IN
BILL SENDER

TO SAMPLE RECIVING
PEL
8405 BENJAMIN RD
STE A
TAMPA FL 33634
(813) 888-9507
INV:
PO:
REF:
DEPT:

FedEx
Express

2 of 5
MPS# 0681 7955 4612 8787
Mstr# 8993 7172 1245
0200

THU - 19 JUL A1
PRIORITY OVERNIGHT

34 TPFA

33634
FL-US TPA

3506563

198

ALIGN OPEN END OF FEDEX AIRBILL POUCH HERE

DO NOT LIFT USING THIS TAG

ALIGN FEDEX AIRBILL POUCH HERE

DO NOT LIFT USING THIS TAG

FedEx

Inst

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2. Ren
3. Rem
4. Adhe

THU - 19 JUL A
PRIORITY OVERNIGH
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MPS# 7955 4613 4201
0681
XJ TPFA

702329 19Jul 01:18 MEMH 508C1/8C50/9A24

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away from fold

ORIGIN ID: EYWA (504)
CH2M HILL
3900 N CAUSEWAY BLVD S
METAIRIE, LA 700027272
UNITED STATES US

TO SAMPLE RECIVIN
PEL
8405 BENJAMIN R
STE A
TAMPA FL 33634
(813) 888-9507
INV:
PO:

1 of 5
TRK# 0200 8993 7172 1245
MASTER
34 TPFA

11 FedEx 15839b nEV 1/11

R1 163 7 A 1245 07.19

FZ

pH LOG SHEET

WO#: 3506563

Client/Project NAS Key West

SampNumber	Method	Matrix		pH	Containers	Temp	Acid	
350656301	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 19-Jul-12
350656301	8260	W	<	2	(3)		HCL	MKeohane 19-Jul-12
350656302	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 19-Jul-12
350656302	8260	W	<	2	(3)		HCL	MKeohane 19-Jul-12
350656303	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 19-Jul-12
350656303	8260	W	<	2	(3)		HCL	MKeohane 19-Jul-12
350656304	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 19-Jul-12
350656304	8260	W	<	2	(3)		HCL	MKeohane 19-Jul-12
350656305	8260	W	<	2	(3)		HCL	MKeohane 19-Jul-12
350656305	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 19-Jul-12

SampNumber	Method	Matrix		pH	Containers	Temp	Acid	
350656306	8260	W	<	2	(3)		HCL	MKeohane 19-Jul-12
350656306	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 19-Jul-12
350656307	8260	W	<	2	(3)		HCL	MKeohane 19-Jul-12
350656307	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 19-Jul-12
350656308	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 19-Jul-12
350656308	8260	W	<	2	(3)		HCL	MKeohane 19-Jul-12
350656309	8260	W	<	2	(3)		HCL	MKeohane 19-Jul-12

Sample Receipt Confirmation Sheet

Client Information

SDG:	3506563	**Level:**	3
Client:	CH2M Hill	**Date Rec'd:**	7/19/2012 10:50:00 AM
Profile:	91013	**Due Date:**	8/2/2012
Project:	Boca Chica Truck Fill Stand - JP-5	**Profile Name:**	NAS Key West

Sample Verification

Samples/Cooler Secure?	Yes	**COC Present?**	Yes
Temperature of Samples:	4.1 5.2	**All Samples on COC accounted For?**	Yes
Number of Coolers Received:	5	**All Samples Rec'd Intact?**	Yes
Temp Gun ID:	111533994	**Sample Vol. Sufficient For Analysis**	Yes
pH Verified?	Yes	**Samples Rec'd W/I Hold Time?**	Yes
pH WNL?	Yes	**Are All Samples to be Analyzed?**	Yes
Samples Received By:	Fed-Ex	**Correct Sample Containers?**	Yes
Tracking Number:	21245m 79554	**COC Comments written on COC?**	Yes
Profile Picked By:	MG	**Samplers Initials on COC?**	Yes
Soil Origin (Domestic/Foreign):		**Sample Date/Time Indicated?**	Yes
Site Location/Project on COC?	Yes	**TAT Requested:**	STD
Client Project # on COC?	Yes	**Client Requests Verbal Results?**	No
Project Mgr. Indicated on COC?	Yes	**Client Requests Faxed Results?**	No
COC relinquished/Dated by Client?	Yes	**Specific Subcontract Indicated?**	No
COC Received/Dated by SA?	Yes	**Written on Outside Lab Board?**	No
Written on Internal COC?	Yes	**Radioactivity Check?**	No
Lab to Conduct ALL Analyses?	Yes		

Comments

Specific tests noted on COC.

LABEL REVIEW 7/19/12

PEER REVIEW 7/19/2012

Client: CH2M Hill

WONo: 3506563 Profile Name: NAS Key West Profile #: 91013

MATRIX W

Sample #	Bottle	Parameter		Check	Received	Date
01	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:50 PM
01	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:50 PM
01	003	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:50 PM
01	003	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	7/30/2012 3:40:09 PM
01	004	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:23:50 PM
01	005	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:23:50 PM
01	004	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/23/2012 11:11:12 AM
01	006	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:23:50 PM
01	007	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:23:50 PM
01	006	8270_SIM	GCMS semivolatile SIM	Consumed	Tammy Reuter	7/24/2012 10:09:58 AM
01	008	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:23:51 PM
01	009	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:23:51 PM
01	008	FL-PRO	Petroleum Hydrocarbons	Consumed	Tammy Reuter	7/24/2012 10:07:48 AM
01	009	FL-PRO	Petroleum Hydrocarbons	Consumed	Tammy Reuter	7/24/2012 10:07:53 AM
02	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:51 PM
02	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:51 PM
02	003	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:51 PM
02	003	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	7/30/2012 3:37:33 PM
02	004	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:23:51 PM
02	005	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:23:51 PM
02	004	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/23/2012 11:11:18 AM
02	006	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:23:52 PM
02	007	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:23:52 PM
02	006	8270_SIM	GCMS semivolatile SIM	Consumed	Tammy Reuter	7/24/2012 10:09:57 AM

02	008	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:23:52 PM
02	009	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:23:52 PM
02	009	FL-PRO	Petroleum Hydrocarbons	Consumed	Tammy Reuter	7/24/2012 10:07:55 AM
03	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:52 PM
03	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:52 PM
03	003	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:52 PM
03	003	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	7/30/2012 3:37:27 PM
03	004	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:23:53 PM
03	005	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:23:53 PM
03	004	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/23/2012 11:11:23 AM
03	006	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:23:53 PM
03	007	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:23:53 PM
03	006	8270_SIM	GCMS semivolatile SIM	Consumed	Tammy Reuter	7/24/2012 10:09:55 AM
03	008	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:23:54 PM
03	009	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:23:54 PM
03	008	FL-PRO	Petroleum Hydrocarbons	Consumed	Tammy Reuter	7/24/2012 10:08:33 AM
04	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:54 PM
04	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:55 PM
04	003	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:55 PM
04	003	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	7/30/2012 3:40:13 PM
04	004	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:23:55 PM
04	005	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:23:56 PM
04	004	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/23/2012 11:11:27 AM
04	006	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:23:56 PM
04	007	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:23:57 PM
04	006	8270_SIM	GCMS semivolatile SIM	Consumed	Tammy Reuter	7/24/2012 10:09:53 AM
04	008	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:23:57 PM

04	009	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:23:57 PM
04	008	FL-PRO	Petroleum Hydrocarbons	Consumed	Tammy Reuter	7/24/2012 10:08:42 AM
05	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:58 PM
05	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:58 PM
05	003	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:23:58 PM
05	003	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	7/30/2012 3:40:16 PM
05	004	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:23:59 PM
05	005	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:23:59 PM
05	004	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/23/2012 11:11:33 AM
05	006	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:23:59 PM
05	007	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:24:00 PM
05	006	8270_SIM	GCMS semivolatile SIM	Consumed	Tammy Reuter	7/24/2012 10:09:51 AM
05	008	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:24:01 PM
05	009	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:24:01 PM
05	009	FL-PRO	Petroleum Hydrocarbons	Consumed	Tammy Reuter	7/24/2012 10:08:50 AM
06	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:24:02 PM
06	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:24:02 PM
06	003	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:24:02 PM
06	003	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	7/30/2012 3:40:19 PM
06	004	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:24:03 PM
06	005	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:24:03 PM
06	004	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/23/2012 11:11:38 AM
06	006	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:24:03 PM
06	007	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:24:03 PM
06	006	8270_SIM	GCMS semivolatile SIM	Consumed	Tammy Reuter	7/24/2012 10:09:50 AM
06	008	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:24:04 PM
06	009	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:24:04 PM

06	009	FL-PRO	Petroleum Hydrocarbons	Consumed	Tammy Reuter	7/24/2012 10:09:01 AM
07	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:24:04 PM
07	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:24:04 PM
07	003	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:24:05 PM
07	003	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	7/30/2012 3:40:23 PM
07	004	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:24:05 PM
07	005	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:24:06 PM
07	004	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/23/2012 11:11:43 AM
07	006	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:24:06 PM
07	007	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:24:06 PM
07	007	8270_SIM	GCMS semivolatile SIM	Consumed	Tammy Reuter	7/24/2012 10:09:49 AM
07	008	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:24:07 PM
07	009	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:24:07 PM
07	009	FL-PRO	Petroleum Hydrocarbons	Consumed	Tammy Reuter	7/24/2012 10:09:14 AM
08	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:24:07 PM
08	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:24:07 PM
08	003	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:24:08 PM
08	002	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	7/30/2012 3:40:27 PM
08	004	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:24:08 PM
08	005	8270	GCMS semivolatile	In	Christopher Fryman	7/19/2012 4:24:08 PM
08	004	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/23/2012 11:11:47 AM
08	006	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:24:09 PM
08	007	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/19/2012 4:24:09 PM
08	007	8270_SIM	GCMS semivolatile SIM	Consumed	Tammy Reuter	7/24/2012 10:09:47 AM
08	008	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:24:09 PM
08	009	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/19/2012 4:24:10 PM
08	008	FL-PRO	Petroleum Hydrocarbons	Consumed	Tammy Reuter	7/24/2012 10:06:55 AM

09	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:24:10 PM
09	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/19/2012 4:24:10 PM
09	002	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	7/30/2012 3:40:07 PM

Addendum

070812 1739

Letter of Acceptance

Customer Name:	CH2M Hill
Date and Time Received:	7/19/2012 10:50:00 AM
Date to be Reported:	8/9/2012
Laboratory Submission Number/SDG:	3506563

Project: NASKW Truck Fill Stand (TFS) 426847

Samples: The submission consisted of 9 samples, including QC, with sample identification shown in the attached data tables.

Tests: The Samples will be analyzed for EPA methods: 8260, 8270, 8270_SIM, FL-PRO.

Sample Custody/COC discrepancies:

None.

Notes:

Temp 5.1, 5.1, 5.2, 4.1, 4.8
PH< 2 8260, Fl-PRO
Sample 01 parent, 02MS, 03MSD

Distribution of Report to:

CH2M Hill
Attn: Greg Rowell

Note: Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis. Spectrum Analytical letters and reports are for the exclusive use of the client to whom they are addressed. Our letters and reports apply to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar materials.

Log-in Report

Level: 3

Total of: 33 analyses on 11 samples (including QC) *24-Jul-12*

Report/SDG #: 3506563

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-17	350656301		W	7/18/2012 9:10:00 AM	7/19/2012 10:50:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-17MS	350656302		W	7/18/2012 9:15:00 AM	7/19/2012 10:50:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-17MSD	350656303		W	7/18/2012 9:15:00 AM	7/19/2012 10:50:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

Report/SDG #: 3506563

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-15	350656304		W	7/18/2012 10:55:00 AM	7/19/2012 10:50:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-15-DUP	350656305		W	7/18/2012	7/19/2012 10:50:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-17-RS	350656306		W	7/18/2012 8:15:00 AM	7/19/2012 10:50:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-05	350656307		W	7/18/2012 1:50:00 PM	7/19/2012 10:50:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

Report/SDG #: 3506563

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-11	350656308		W	7/18/2012 3:00:00 PM	7/19/2012 10:50:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-TB-2	350656309		W	7/18/2012	7/19/2012 10:50:00 AM

Method		
8260	Volatile Organic Compounds	8260

Mark Gudnason [Tampa]

From: Mark Gudnason [Tampa]
Sent: Wednesday, August 01, 2012 6:06 PM
To: 'Bethany.Garvey@CH2M.com'; Camden.Robinson@CH2M.com; 'Greg.Rowell@CH2M.com'
Subject: FW: 3506563-8260-key west

Good afternoon.
This will be in the case narrative for the referenced method and SDG.

A. Calibration:

All acceptance criteria were met. The low calibration standard is 10 ug/L for the following analyte(s): Acrylonitrile.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

An LCS/LCSD set was analyzed. All percent recovery and relative percent difference (RPD) criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

A client requested MS/SD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met with the exception of:

MS - Q1-TFS-MW-17MS was analyzed with the water samples on 07/30/12. The following analyte(s) were recovered below criteria:1,2,3-Trichloropropane at 72 % with criteria of (75-125), 1,4-Dichloro-2-butene at 56.8 % with criteria of (68-115), Propionitrile at 69 % with criteria of (70-130) and the following analyte(s) were recovered above criteria:Methyl iodide at 228 % with criteria of (75-152).

SD - Q1-TFS-MW-17MSD was analyzed with the water samples on 07/30/12. The following analyte(s) were recovered below criteria:1,4-Dichloro-2-butene at 55.5 % with criteria of (68-115) and the following analyte(s) were recovered above criteria:Methyl iodide at 270 % with criteria of (75-152). The following analyte(s) exceeded RPD criteria:Chloromethane at 42.6 % with criteria of (20), Dichlorodifluoromethane at 24.9 % with criteria of (20).

Samples coded accordingly.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.
Analytes were detected in Trip Blank Q1-TFS-TB-2. The following analyte(s) were detected below RL: Acetone at 3.2 ug/L, Methylene chloride at 0.75 ug/L. The following analyte(s) were detected above RL: Carbon disulfide at 1 ug/L.

Mark Gudnason [Tampa]

From: Mark Gudnason [Tampa]
Sent: Monday, August 06, 2012 6:09 PM
To: 'Bethany.Garvey@CH2M.com'; Camden.Robinson@CH2M.com; 'Greg.Rowell@CH2M.com'
Subject: FW: 3506563-8270-key west

Good afternoon.
This will be in the case narrative for the referenced method and SDG.

A. Calibration:

All acceptance criteria were met with the exception of:

SSC1103003 was the second source verification standard analyzed with the initial calibration on 08/03/12. The %D was over the 20% limit for the following compounds: Ethyl methanesulfonate (+24.6%), 1-Naphthylamine (+44.9%), 2-Naphthylamine (+34.6%), Methapyriline (+1647%), 3-Methylcholanthrene (-37.4%), 1,3,5-Trinitrobenzene (-43.2%). No further action was taken, since these compounds were not detected in any samples and were a result of a discrepancy between the primary and secondary standards. The secondary standard is also used to spike the LCS. Because of this difference, Methapyriline exceeded the calibration range in the LCS, MS and MSD. No further action was taken, since this compound was not detected in any samples.

The Percent RSD was over the 15% limit for 4-Nitroquinoline-1-oxide for the initial calibration at 35.9%. No further action was taken, since this compound was not detected in any samples.

Spectrum Analytical Inc. does not analyze a low calibration standard at the requested RL for all analytes. The low calibration standard is 10 ug/L for the following analytes: 4,6-Dinitro-2-methylphenol, Methapyriline.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:

LCS 138488LCS was analyzed with the water samples extracted on 07/23/12. The following analytes were recovered below criteria: 1,4-Naphthoquinone at 27 % with criteria of (28-143), Hexachloropropene at 15.2 % with criteria of (21-105). The following analytes had marginal exceedance limit failures: 2-Naphthylamine at 49 % with criteria of (60-140), a,a-Dimethylphenethylamine at 0 % with criteria of (60-140), Methapyriline at 370 % with criteria of (0-105). No further action was taken. None of these compounds were detected in any samples.

Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

A client requested MS/SD set was analyzed. All percent recovery and relative percent difference (RPD) criteria were met with the exception of:

MS - Q1-TFS-MW-17MS was analyzed with the water samples extracted on 07/23/12. The following analytes were recovered below criteria:1,4-Naphthoquinone at 0 % with criteria of (28-143), 2-Naphthylamine at 52.2 % with criteria of (70-130), a,a-Dimethylphenethylamine at 0 % with criteria of (70-130), Hexachloropropene at 19.2 % with criteria of (21-105) and the following analyte was recovered above criteria: Methapyriline at 699 % with criteria of (0-90).

SD - Q1-TFS-MW-17MSD was analyzed with the water samples extracted on 07/23/12. The following analytes were recovered below criteria:1,4-Naphthoquinone at 0 % with criteria of (28-143), 2-Naphthylamine at 50.2 % with criteria of (70-130), a,a-Dimethylphenethylamine at 0 % with criteria of (70-130), Hexachloropropene at 17.4 % with criteria of (21-105), p-Dimethylaminoazobenzene at 68.4 % with criteria of (70-130) and the following analyte was recovered above criteria: Methapyriline at 776 % with criteria of (0-90). The following analytes exceeded RPD criteria: 4-Nitroquinoline-1-oxide at 20.1 % with criteria of (20), Safrole at 31.5 % with criteria of (20).

Samples coded accordingly.

End Of Report

070812 1740

Date Reported:
13-Aug-12

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

CH2M Hill
115 Perimeter Center Place, NE
Suite 700
Atlanta, GA 30346-1278

Attn: Greg Rowell

Project # 3506575
Project: NASKW Truck Fill Stand (TFS) 426847

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
350657501	Q1-TFS-MW-04	W	19-Jul-12 8:40	20-Jul-12 9:45
350657502	Q1-TFS-MW-12	W	19-Jul-12 9:50	20-Jul-12 9:45
350657503	Q1-TFS-MW-16	W	19-Jul-12 10:50	20-Jul-12 9:45
350657504	Q1-TFS-TB-3	W	19-Jul-12 0:00	20-Jul-12 9:45

Soil samples are reported on dry weight basis, unless otherwise noted.

Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis.

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet unless noted in the case narrative.

Please contact the laboratory at 813-888-9507 with any questions regarding the data contained in the laboratory report.

Florida	E84207
Texas	T104704408-12-4
South Carolina	96011001
North Dakota	R-178
California	07253CA
Louisiana	02025
Kansas	E-10385
Arkansas	11-036-1

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2259 Testing

Respectfully Submitted,

Brian Spann
Laboratory Director
Spectrum Analytical, Inc. Florida Division

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EXECUTIVE SUMMARY - Detection Highlights

3506575

SAMPLE ID: Q1-TFS-MW-04

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Acetone	1.50 J	10	UG/L	SW8260B
Benzene	0.620	0.50	UG/L	SW8260B
2-Methylnaphthalene	6.30	0.050	UG/L	SW8270D-SIM
Acenaphthene	0.610	0.050	UG/L	SW8270D-SIM
Acenaphthylene	0.280	0.050	UG/L	SW8270D-SIM
Anthracene	0.0330 J	0.050	UG/L	SW8270D-SIM
Fluoranthene	0.0310 J	0.050	UG/L	SW8270D-SIM
Fluorene	0.570	0.050	UG/L	SW8270D-SIM
Naphthalene	4.60	0.050	UG/L	SW8270D-SIM
Phenanthrene	0.230	0.050	UG/L	SW8270D-SIM
Pyrene	0.0200 J	0.050	UG/L	SW8270D-SIM
TPH	9400	500	UG/L	FL-PRO

SAMPLE ID: Q1-TFS-MW-04DL1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	38.4	0.50	UG/L	SW8270D-SIM

SAMPLE ID: Q1-TFS-MW-12

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
TPH	330 J	500	UG/L	FL-PRO

SAMPLE ID: Q1-TFS-MW-16

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
TPH	320 J	510	UG/L	FL-PRO

110812 1310

EXECUTIVE SUMMARY - Detection Highlights

3506575

SAMPLE ID: Q1-TFS-TB-3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Acetone	3.20 J	10	UG/L	SW8260B

110812 1310

Organics

110812 1311

Organic Data Qualifiers

U Indicates the analyte was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the reporting limit for that analyte. The reporting limit can vary from sample to sample depending on dilution factors or the percent moisture adjustment when indicated.

J Indicates estimated value. It is used when the data indicates the presence of an analyte above the method detection limit (MDL) yet lower than the reporting limit.

B Indicates the analyte was found in the associated blank as well as in the sample. The notation indicates possible contamination of the sample.

E Indicates the value reported is above the highest calibration standard for that analyte. The sample should be analyzed at an appropriate dilution. "E" qualified values are estimations and the diluted result may be reported on another Form 1.

D Indicates the analyte has been identified in a dilution reanalysis. "D" qualifiers are used for samples that have been analyzed at a lesser dilution than required for accurate quantitation.

C The "C" qualifier indicates the presence of this analyte has been confirmed by GC/MS analysis.

P This qualifier is used for pesticide / Aroclor target analytes where there is greater than 25% difference for the detected concentration between the two GC columns.

N This qualifier indicates presumptive evidence of an analyte. This qualifier is only used for tentatively identified compounds (TIC), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the "N" qualifier is not used.

A This qualifier indicates that a TIC is a suspected aldol-condensation product.

X Data flagged as rejected by analyst utilizing analytical judgement.

110812 1311

Organic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for organic analysis are defined below:

DL Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.

R Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.

RE Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.

MS Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).

SD Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).

110812 1311

8260 Volatile Organics

110812 1311

Spectrum Analytical Inc. Lab Reference No./SDG: 3506575

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Analysis:

The following samples were analyzed one day out of hold: Q1-TFS-MW-04, Q1-TFS-MW-12, Q1-TFS-MW-16, Q1-TFS-TB-3. The samples were originally analyzed in hold but due to instrument issues the data was not usable. The client was notified.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8260B

IV. PREPARATION

Water samples were prepared by SW846/5030 for EPA8260B volatiles analysis. All aspects of sample preparation proceeded without exception.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met with the exception of analytes listed in the table below. Attempts were made to bring the CCV within full compliance but due to holding time issues analysis proceeded. The CCV did meet average percent recovery.

CCV1102988					
Instrument	**VMS06**	**GC**	**Column**	**DB-624**	
Analyte	**AvgStd RRF**	**Avg RRF**	**Conc found**	**Conc Expected**	**% D**
Dichlorodifluoromethane	1.047125731	1.43425	36.5	50	27
Acrylonitrile	0.273943272	0.20695	125	100	25
trans-1,3-Dichloropropene	1.274734018	1.01994	62.5	50	25
Acetonitrile	0.079841926	0.06595	620	500	24
1,4-Dioxane	0.006989406	0.00464	1320	1000	32
Methacrylonitrile	0.311654996	0.24117	646	500	29.2
Propionitrile	0.11180481	0.07735	628	500	25.6
Average	used:	9.7			

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

Spectrum Analytical Inc. Lab Reference No./SDG: 3506575

Client: CH2M Hill

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met .Please note that:

LCS 080312LCS61 was analyzed with the water samples on 08/03/12. The following analyte(s) had marginal exceedance limit failures: Acetonitrile at 157 % with criteria of (22.8-136.2). The high range was exceeded and not hit was detected on the sample.

LCS 080312LCS61D was analyzed with the water samples on 08/03/12. The following analyte(s) had marginal exceedance limit failures: Acetonitrile at 139 % with criteria of (22.8-136.2). The high range was exceeded and not hit was detected on the samples. Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.
Analytes were detected in Trip Blank Q1-TFS-TB-3. The following analyte(s) were detected below RL: Acetone at 3.2 ug/L.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Signature:

Name: Brian C. Spanh Title: Lab Director

SIGNED: DATE: 08/06/2012

VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Method: 8260

EPA Sample No	Lab Sample ID
Q1-TFS-MW-04	350657501
Q1-TFS-MW-12	350657502
Q1-TFS-MW-16	350657503
Q1-TFS-TB-3	350657504

110812 1311

8260 Sample Data

110812 1311

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 657501.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 2002

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	1.5	J	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.62		0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 657501.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 2002

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 657501.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 2002

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

110812 1311

Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-12

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657502 Lab File ID 657502.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1937

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-12

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657502 Lab File ID 657502.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1937

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-12

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657502 Lab File ID 657502.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1937

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-16

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657503 Lab File ID 657503.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1911

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-16

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657503 Lab File ID 657503.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1911

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-16

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657503 Lab File ID 657503.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1911

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-3

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657504 Lab File ID 657504.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1846

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	3.2	J	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-3

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657504 Lab File ID 657504.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1846

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-TB-3

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657504 Lab File ID 657504.D

Sample wt/vol: 5 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1846

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

8260 QC Summary

110812 1311

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

080412BLK62

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 080412BLK62 Lab File ID: BLK62.D

Sample wt/vol: 5 Units: ML Date Received: 08/03/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1820

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
75-71-8	Dichlorodifluoromethane	1.2	U	0.6	1.2	1.2
74-87-3	Chloromethane	0.64	U	0.32	0.64	1
75-01-4	Vinyl chloride	0.36	U	0.18	0.36	1
74-83-9	Bromomethane	0.86	U	0.43	0.86	1
75-00-3	Chloroethane	1.4	U	0.72	1.4	1.4
75-69-4	Trichlorofluoromethane	0.8	U	0.4	0.8	1
75-35-4	1,1-Dichloroethene	0.38	U	0.19	0.38	0.5
107-02-8	Acrolein	8	U	4	8	10
74-88-4	Methyl iodide	1.5	U	0.74	1.5	1.5
75-15-0	Carbon disulfide	0.38	U	0.19	0.38	1
75-09-2	Methylene chloride	1.3	U	0.66	1.3	5
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.33	0.66	0.66
107-13-1	Acrylonitrile	4	U	2	4	4
75-34-3	1,1-Dichloroethane	1	U	0.5	1	1
67-64-1	Acetone	2.6	U	1.3	2.6	10
78-93-3	2-Butanone	4	U	2	4	4
67-66-3	Chloroform	0.32	U	0.16	0.32	0.5
71-55-6	1,1,1-Trichloroethane	0.28	U	0.14	0.28	1
56-23-5	Carbon tetrachloride	0.28	U	0.14	0.28	0.5
71-43-2	Benzene	0.34	U	0.17	0.34	0.5
107-06-2	1,2-Dichloroethane	0.3	U	0.15	0.3	0.5
79-01-6	Trichloroethene	0.38	U	0.19	0.38	0.5
108-05-4	Vinyl acetate	0.36	U	0.18	0.36	1
78-87-5	1,2-Dichloropropane	0.3	U	0.15	0.3	1
74-95-3	Dibromomethane	0.8	U	0.4	0.8	1
75-27-4	Bromodichloromethane	0.3	U	0.15	0.3	0.5
10061-01-5	cis-1,3-Dichloropropene	0.8	U	0.4	0.8	1

110812 1311

Form I

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42 080412BLK62

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 080412BLK62 Lab File ID: BLK62.D

Sample wt/vol: 5 Units: ML Date Received: 08/03/12

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1820

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
108-10-1	4-Methyl-2-pentanone	2	U	1	2	4
108-88-3	Toluene	0.28	U	0.14	0.28	1
10061-02-6	trans-1,3-Dichloropropene	0.6	U	0.3	0.6	1
97-63-2	Ethyl methacrylate	1	U	0.5	1	1
79-00-5	1,1,2-Trichloroethane	0.4	U	0.2	0.4	1
127-18-4	Tetrachloroethene	0.42	U	0.21	0.42	0.5
591-78-6	2-Hexanone	0.96	U	0.48	0.96	4
124-48-1	Dibromochloromethane	0.26	U	0.13	0.26	0.5
106-93-4	1,2-Dibromoethane	0.22	U	0.11	0.22	1
108-90-7	Chlorobenzene	0.32	U	0.16	0.32	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.28	U	0.14	0.28	0.5
100-41-4	Ethylbenzene	0.44	U	0.22	0.44	0.5
100-42-5	Styrene	0.24	U	0.12	0.24	1
75-25-2	Bromoform	0.38	U	0.19	0.38	1
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.13	0.26	0.26
96-18-4	1,2,3-Trichloropropane	0.7	U	0.35	0.7	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2	2
110-57-6	1,4-Dichloro-2-butene	4	U	2	4	4
75-05-8	Acetonitrile	20	U	10	20	20
107-05-1	Allyl chloride	0.48	U	0.24	0.48	1
123-91-1	1,4-Dioxane	20	U	10	20	40
78-83-1	Isobutyl alcohol	40	U	20	40	40
126-98-7	Methacrylonitrile	2	U	1	2	10
80-62-6	Methyl methacrylate	0.36	U	0.18	0.36	1
107-12-0	Propionitrile	20	U	10	20	20
126-99-8	Chloroprene	0.4	U	0.2	0.4	1
1330-20-7	Xylene (total)	1	U	0.5	1	2

4

VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268 080412BLK62

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Lab File ID: BLK62.D Lab Sample ID: 080412BLK62

Instrument ID: VMS06 Date Extracted:

Matrix: WATER Date Analyzed: 08/03/12

Level:(low/med) LOW Time Analyzed: 1820

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	080312LCS61	080312LCS61	LCS61.D	08/03/12	1704
2	080312LCS61D	080312LCS61D	LCS61D.D	08/03/12	1730
3	Q1-TFS-TB-3	350657504	657504.D	08/03/12	1846
4	Q1-TFS-MW-16	350657503	657503.D	08/03/12	1911
5	Q1-TFS-MW-12	350657502	657502.D	08/03/12	1937
6	Q1-TFS-MW-04	350657501	657501.D	08/03/12	2002

COMMENTS:

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Form IV

2A

WATER VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 3506575

Column(1): DB-624 ID: 0.18 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
080312LCS61	98.6	98.6	91.4	102.0			0
080312LCS61D	108.0	108.0	100.0	108.0			0
080412BLK62	104.0	102.0	98.8	108.0			0
Q1-TFS-MW-04	110.0	113.0	100.0	116.0			0
Q1-TFS-MW-12	114.0	115.0	113.0	119.0			0
Q1-TFS-MW-16	113.0	115.0	119.0	117.0			0
Q1-TFS-TB-3	114.0	113.0	113.0	117.0			0

Control Limits

S1	=	Dibromofluoromethane	85 - 115
S2	=	Toluene-d8	85 - 120
S3	=	4-Bromofluorobenzene	75 - 120
S4	=	1,2-Dichloroethane-d4	70 - 120

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Lab File ID: BFB61.D BFB Injection Date: 07/19/12

Instrument ID: VMS06 BFB Injection Time: 0557

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	21.3	
75	30.0 - 60.0% of mass 95	53.1	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	5.9	
173	Less than 2.0% of mass 174	0.9	(0.93)1
174	50.0 - 100.0% of mass 95	94.6	
175	5.0 - 9.0% of mass 174	6.3	(6.63)1
176	95.0 - 101% of mass 174	92	(97.27)1
177	5.0 - 9.0% of mass 176	5.8	(6.35)2

1-Value is % of mass 174

2-Value is % of mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD1099449	200PPT	200PPT.D	07/19/12	0712
2	STD1099472	500PPT	500PPT.D	07/19/12	0738
3	STD1099448	1PPB	1PPB.D	07/19/12	0803
4	STD1099451	2PPB	2PPB.D	07/19/12	0829
5	STD1099474	5PPB	5PPB.D	07/19/12	0854
6	STD1099447	10PPB	10PPB.D	07/19/12	0919
7	STD1099450	20PPB	20PPB.D	07/19/12	0945
8	STD1099473	50PPB	50PPB.D	07/19/12	1010
9	STD1099475	60PPB	60PPB.D	07/19/12	1036
10	STD1099476	80PPB	80PPB.D	07/19/12	1101
11	SSC1099477	SEC61	SEC61.D	07/19/12	1134

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Lab File ID: BFB61.D BFB Injection Date: 08/03/12

Instrument ID: VMS06 BFB Injection Time: 1447

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	16.3	
75	30.0 - 60.0% of mass 95	47.7	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	7.5	
173	Less than 2.0% of mass 174	1.1	(1.31)1
174	50.0 - 100.0% of mass 95	85.3	
175	5.0 - 9.0% of mass 174	7.2	(8.45)1
176	95.0 - 101% of mass 174	81.1	(95.06)1
177	5.0 - 9.0% of mass 176	4.1	(5.04)2

1-Value is % of mass 174

2-Value is % of mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV1102988	080312CCV61	50CCV61.D	08/03/12	1523
2	080312LCS61	080312LCS61	LCS61.D	08/03/12	1704
3	080312LCS61D	080312LCS61D	LCS61D.D	08/03/12	1730
4	080412BLK62	080412BLK62	BLK62.D	08/03/12	1820
5	Q1-TFS-TB-3	350657504	657504.D	08/03/12	1846
6	Q1-TFS-MW-16	350657503	657503.D	08/03/12	1911
7	Q1-TFS-MW-12	350657502	657502.D	08/03/12	1937
8	Q1-TFS-MW-04	350657501	657501.D	08/03/12	2002

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Lab File ID (Standard): 50PPB.D Date Analyzed: 7/19/2012

Instrument ID: VMS06 Time Analyzed: 10:10

GC Column: DB-624 ID: 0.18 (mm)

Matrix: (soil/water) W Heated Purge: (Y/N) No

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	1581666		6.75	1411382		9.98	815897		12.32
	UPPER LIMIT	3163332		7.25	2822764		10.48	1631794		12.82
	LOWER LIMIT	790833		6.25	705691		9.48	407948.5		11.82
	EPA SAMPLE NO.									
1	080312LCS61	1504230		6.75	1353942		9.98	805597		12.32
2	080312LCS61D	1527163		6.75	1382021		9.98	830191		12.32
3	080412BLK62	1277172		6.75	1050754		9.98	551489		12.32
4	Q1-TFS-TB-3	1280392		6.75	1056840		9.98	547741		12.32
5	Q1-TFS-MW-16	1297294		6.75	1065469		9.98	535975		12.32
6	Q1-TFS-MW-12	1238542		6.75	1042892		9.98	543824		12.32
7	Q1-TFS-MW-04	1334508		6.75	1187572		9.98	717372		12.32

IS1 = Fluorobenzene

IS2 = Chlorobenzene-d5

IS3 = 1,4-Dichlorobenzene-d4

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

8

VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

GC Column: DB-624 ID: 0.18 (mm) Init. Calib. Date: 07/19/12

Instrument ID: VMS06

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 5.92 S2 : 8.51

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
1	071912BFB61	071912BFB61	BFB61.D	07/19/12	0557				
2	STD1099449	200PPT	200PPT.D	07/19/12	0712				
3	STD1099472	500PPT	500PPT.D	07/19/12	0738				
4	STD1099448	1PPB	1PPB.D	07/19/12	0803				
5	STD1099451	2PPB	2PPB.D	07/19/12	0829				
6	STD1099474	5PPB	5PPB.D	07/19/12	0854	5.92		8.51	
7	STD1099447	10PPB	10PPB.D	07/19/12	0919	5.92		8.51	
8	STD1099450	20PPB	20PPB.D	07/19/12	0945	5.92		8.51	
9	STD1099473	50PPB	50PPB.D	07/19/12	1010	5.92		8.51	
10	STD1099475	60PPB	60PPB.D	07/19/12	1036	5.92		8.51	
11	STD1099476	80PPB	80PPB.D	07/19/12	1101	5.92		8.51	
12	SSC1099477	SEC61	SEC61.D	07/19/12	1134	5.92		8.51	
13	080312BFB61	080312BFB61	BFB61.D	08/03/12	1447				
14	CCV1102988	080312CCV61	50CCV61.D	08/03/12	1523	5.92		8.51	
15	080312LCS61	080312LCS61	LCS61.D	08/03/12	1704	5.92		8.51	
16	080312LCS61D	080312LCS61D	LCS61D.D	08/03/12	1730	5.92		8.51	
17	080412BLK62	080412BLK62	BLK62.D	08/03/12	1820	5.92		8.51	
18	Q1-TFS-TB-3	350657504	657504.D	08/03/12	1846	5.92		8.51	
19	Q1-TFS-MW-16	350657503	657503.D	08/03/12	1911	5.92		8.51	
20	Q1-TFS-MW-12	350657502	657502.D	08/03/12	1937	5.92		8.51	
21	Q1-TFS-MW-04	350657501	657501.D	08/03/12	2002	5.92		8.51	
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	2118				
23	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/04/12	0223				
24	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/04/12	0248				

			QC LIMITS
S1	=	Dibromofluoromethane	(+/- 0.41 MINUTES)
S2	=	Toluene-d8	(+/- 0.41 MINUTES)
S3	=	4-Bromofluorobenzene	(+/- 0.74 MINUTES)
S4	=	1,2-Dichloroethane-d4	(+/- 0.41 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

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3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 080312LCS61

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	13.8	69.0			30 - 155
Chloromethane	20	16	80.0			40 - 125
Vinyl chloride	20	15.5	77.5			50 - 145
Bromomethane	20	15.6	78.0			30 - 145
Chloroethane	20	17.3	86.5			60 - 135
Trichlorofluoromethane	20	18.8	94.0			60 - 145
1,1-Dichloroethene	20	21.5	108.0			70 - 130
Acrolein	40	48.7	122.0			31 - 148
Methyl iodide	20	20	100.0			75 - 152
Carbon disulfide	20	19.6	98.0			35 - 160
Methylene chloride	20	20.3	102.0			55 - 140
trans-1,2-Dichloroethene	20	18.2	91.0			60 - 140
Acrylonitrile	40	44.9	112.0			55 - 126
1,1-Dichloroethane	20	18.8	94.0			70 - 135
Acetone	40	49.2	123.0			40 - 140
2-Butanone	40	36.4	91.0			30 - 150
Chloroform	20	17.2	86.0			65 - 135
1,1,1-Trichloroethane	20	18.1	90.5			65 - 130
Carbon tetrachloride	20	18.6	93.0			65 - 140
Benzene	20	18.2	91.0			80 - 120
1,2-Dichloroethane	20	18.6	93.0			70 - 130
Trichloroethene	20	18.3	91.5			70 - 125
Vinyl acetate	20	16.5	82.5			77 - 150
1,2-Dichloropropane	20	17.5	87.5			75 - 125
Dibromomethane	20	20.5	102.0			75 - 125
Bromodichloromethane	20	18.7	93.5			75 - 120
cis-1,3-Dichloropropene	20	20.5	102.0			70 - 130
4-Methyl-2-pentanone	40	41.2	103.0			60 - 135
Toluene	20	20.4	102.0			75 - 120
trans-1,3-Dichloropropene	20	21.4	107.0			55 - 140
Ethyl methacrylate	20	19.1	95.5			73 - 121
1,1,2-Trichloroethane	20	19.4	97.0			75 - 125

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

080312LCS61

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Tetrachloroethene	20	16.2	81.0			45 - 150
2-Hexanone	40	32.7	81.8			55 - 130
Dibromochloromethane	20	18.3	91.5			60 - 135
1,2-Dibromoethane	20	18.9	94.5			80 - 120
Chlorobenzene	20	16.9	84.5			80 - 120
1,1,1,2-Tetrachloroethane	20	17.7	88.5			80 - 130
Ethylbenzene	20	17.6	88.0			75 - 125
Styrene	20	19.3	96.5			65 - 135
Bromoform	20	20.4	102.0			70 - 130
1,1,2,2-Tetrachloroethane	20	19.6	98.0			65 - 130
1,2,3-Trichloropropane	20	20	100.0			75 - 125
1,2-Dibromo-3-chloropropane	20	22	110.0			50 - 130
1,4-Dichloro-2-butene	40	40.4	101.0			68 - 115
Acetonitrile	200	314	157.0 *			37 - 122
Allyl chloride	20	20.5	102.0			70 - 130
1,4-Dioxane	400	633	158.0			0 - 167
Isobutyl alcohol	400	420	105.0			70 - 130
Methacrylonitrile	200	227	114.0			70 - 130
Methyl methacrylate	20	18.4	92.0			33 - 172
Propionitrile	200	218	109.0			70 - 130
Chloroprene	20	18.1	90.5			70 - 130
Xylene (total)	60	57.9	96.5			82 - 124

Spike Recovery: 1 out of 54 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 080312LCS61D

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	14	70.0	1.4	20	30 - 155
Chloromethane	20	16	80.0	0.0	20	40 - 125
Vinyl chloride	20	15.9	79.5	2.5	20	50 - 145
Bromomethane	20	15.2	76.0	2.6	20	30 - 145
Chloroethane	20	18.2	91.0	5.1	20	60 - 135
Trichlorofluoromethane	20	19.4	97.0	3.1	20	60 - 145
1,1-Dichloroethene	20	22.3	112.0	3.7	20	70 - 130
Acrolein	40	50.5	126.0	3.6	20	31 - 148
Methyl iodide	20	23.6	118.0	16.5	20	75 - 152
Carbon disulfide	20	20.2	101.0	3.0	20	35 - 160
Methylene chloride	20	20.4	102.0	0.5	20	55 - 140
trans-1,2-Dichloroethene	20	19	95.0	4.3	20	60 - 140
Acrylonitrile	40	45.4	114.0	1.1	20	55 - 126
1,1-Dichloroethane	20	19.1	95.5	1.6	20	70 - 135
Acetone	40	43.4	108.0	12.5	20	40 - 140
2-Butanone	40	34.9	87.2	4.2	20	30 - 150
Chloroform	20	17.3	86.5	0.6	20	65 - 135
1,1,1-Trichloroethane	20	19.4	97.0	6.9	20	65 - 130
Carbon tetrachloride	20	19.5	97.5	4.7	20	65 - 140
Benzene	20	18.8	94.0	3.2	20	80 - 120
1,2-Dichloroethane	20	18.7	93.5	0.5	20	70 - 130
Trichloroethene	20	19.1	95.5	4.3	20	70 - 125
Vinyl acetate	20	16.8	84.0	1.8	20	77 - 150
1,2-Dichloropropane	20	18.8	94.0	7.2	20	75 - 125
Dibromomethane	20	20.3	102.0	1.0	20	75 - 125
Bromodichloromethane	20	19.1	95.5	2.1	20	75 - 120
cis-1,3-Dichloropropene	20	21	105.0	2.4	20	70 - 130
4-Methyl-2-pentanone	40	41.5	104.0	0.7	20	60 - 135
Toluene	20	21.2	106.0	3.8	20	75 - 120
trans-1,3-Dichloropropene	20	21.6	108.0	0.9	20	55 - 140
Ethyl methacrylate	20	19.1	95.5	0.0	20	73 - 121
1,1,2-Trichloroethane	20	19.8	99.0	2.0	20	75 - 125

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

080312LCS61D

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Tetrachloroethene	20	17.2	86.0	6.0	20	45 - 150
2-Hexanone	40	32.1	80.2	1.9	20	55 - 130
Dibromochloromethane	20	18.2	91.0	0.5	20	60 - 135
1,2-Dibromoethane	20	19.1	95.5	1.1	20	80 - 120
Chlorobenzene	20	17.7	88.5	4.6	20	80 - 120
1,1,1,2-Tetrachloroethane	20	18.2	91.0	2.8	20	80 - 130
Ethylbenzene	20	18.3	91.5	3.9	20	75 - 125
Styrene	20	19.6	98.0	1.5	20	65 - 135
Bromoform	20	20.6	103.0	1.0	20	70 - 130
1,1,2,2-Tetrachloroethane	20	19.4	97.0	1.0	20	65 - 130
1,2,3-Trichloropropane	20	20	100.0	0.0	20	75 - 125
1,2-Dibromo-3-chloropropane	20	21.7	108.0	1.4	20	50 - 130
1,4-Dichloro-2-butene	40	39.1	97.8	3.3	20	68 - 115
Acetonitrile	200	278	139.0 *	12.2	20	37 - 122
Allyl chloride	20	19.3	96.5	6.0	20	70 - 130
1,4-Dioxane	400	600	150.0	5.4	20	0 - 167
Isobutyl alcohol	400	424	106.0	0.9	20	70 - 130
Methacrylonitrile	200	234	117.0	3.0	20	70 - 130
Methyl methacrylate	20	19.1	95.5	3.7	20	33 - 172
Propionitrile	200	227	114.0	4.0	20	70 - 130
Chloroprene	20	19	95.0	4.9	20	70 - 130
Xylene (total)	60	60	100.0	3.6	20	82 - 124

Spike Recovery: 1 out of 54 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

8260 Standards Data

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VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: VMS06 Calibration Date Begin: 07/19/12 End: 07/19/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 712 End: 1101

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF0.2 =200PPT.D RRF0.5 =500PPT.D
RRF1 =1PPB.D RRF2 =2PPB.D RRF5 =5PPB.D

COMPOUND	RRF0.2	RRF0.5	RRF1	RRF2	RRF5	$\overline{RRF}$	%RSD OR R^2
Dichlorodifluoromethane			1.371	1.726	1.366		
Chloromethane	#	2.749	1.931	2.102	1.678		#
Vinyl chloride	*	2.026	1.641	1.834	1.558		*
Bromomethane			0.826	0.750	0.676		
Chloroethane			1.176	1.153	0.966		
Trichlorofluoromethane			2.267	2.458	2.241		
1,1-Dichloroethene	*	2.627	1.205	1.851	1.804		*
Acrolein				0.128	0.125		
Methyl iodide			0.250	0.206	0.314		
Carbon disulfide			2.941	3.184	2.495		
Methylene chloride			2.403	1.994	1.438		
trans-1,2-Dichloroethene		1.458	1.487	1.495	1.320		
Acrylonitrile			0.212	0.117	0.252		
1,1-Dichloroethane	#		1.828	2.039	1.613		#
Acetone					0.375		
2-Butanone				0.365	0.320		
Chloroform	* 2.568	2.192	1.930	2.116	1.707		*
1,1,1-Trichloroethane			1.427	1.727	1.340		
Carbon tetrachloride		1.484	1.038	1.471	1.153		
Benzene	4.922	4.803	4.420	4.664	4.085		
1,2-Dichloroethane		1.450	1.299	1.415	1.098		
Trichloroethene		1.123	1.148	1.173	0.930		
Vinyl acetate			0.767	0.950	0.868		
1,2-Dichloropropane	*	1.307	1.065	1.274	0.999		*
Dibromomethane			0.558	0.640	0.452		
Bromodichloromethane	1.283	1.555	1.176	1.335	1.205		
cis-1,3-Dichloropropene		1.064	1.009	1.175	0.934		
4-Methyl-2-pentanone				0.178	0.159		
Toluene	*	2.331	2.222	2.419	2.285		*
trans-1,3-Dichloropropene		0.987	0.915	0.908	0.802		
Ethyl methacrylate			0.408	0.494	0.430		
1,1,2-Trichloroethane			0.856	0.899	0.727		
Tetrachloroethene		1.402	1.162	1.258	1.023		
2-Hexanone				0.684	0.495		

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VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: VMS06 Calibration Date Begin: 07/19/12 End: 07/19/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 712 End: 1101

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF0.2 =200PPT.D RRF0.5 =500PPT.D
RRF1 =1PPB.D RRF2 =2PPB.D RRF5 =5PPB.D

COMPOUND	RRF0.2	RRF0.5	RRF1	RRF2	RRF5	$\overline{RRF}$	%RSD OR R^2
Dibromochloromethane	1.194	1.058	0.866	0.990	0.901		
1,2-Dibromoethane			0.984	0.998	0.810		
Chlorobenzene #		4.691	4.237	4.277	3.501		#
1,1,1,2-Tetrachloroethane		1.426	1.162	1.214	1.078		
Ethylbenzene *		2.112	1.896	2.062	1.849		*
Styrene			2.818	3.233	2.914		
Bromoform #			0.457	0.541	0.430		#
1,1,2,2-Tetrachloroethane #	2.656	2.282	1.997	2.568	1.783		#
1,2,3-Trichloropropane			0.728	0.790	0.534		
1,2-Dibromo-3-chloropropane			0.405	0.265	0.187		
1,4-Dichloro-2-butene			0.251	0.321	0.257		
Acetonitrile				0.102	0.063		
Allyl chloride			1.257	1.850	0.960		
1,4-Dioxane				0.005	0.004		
Isobutyl alcohol			0.006	0.017	0.013		
Methacrylonitrile			0.187	0.239	0.214		
Methyl methacrylate			0.465	0.283	0.239		
Propionitrile			0.062	0.063	0.068		
Chloroprene			1.244	1.368	1.066		
o-Xylene		4.169	3.748	4.278	3.921		
p,m-Xylene	1.771	2.111	1.985	2.464	2.239		
Dibromofluoromethane(SURR)					0.818		
Toluene-d8(SURR)					3.207		
4-Bromofluorobenzene(SURR)					2.246		
1,2-Dichloroethane-d4(SURR)					0.215		

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FORM VI

6

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: VMS06 Calibration Date Begin: 07/19/12 End: 07/19/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 712 End: 1101

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF10 =10PPB.D RRF20 =20PPB.D
RRF50 =50PPB.D RRF60 =60PPB.D RRF80 =80PPB.D

COMPOUND		RRF10	RRF20	RRF50	RRF60	RRF80	$\overline{RRF}$	%RSD OR R^2	
Dichlorodifluoromethane		1.385	1.480	1.435	1.411	1.300	1.43425	9	
Chloromethane	#	1.670	1.610	1.513	1.529	1.408	1.79879	0.99722	#
Vinyl chloride	*	1.514	1.616	1.529	1.531	1.430	1.63115	11.4	*
Bromomethane		0.681	0.732	0.943	0.948	0.887	0.80546	13.8	
Chloroethane		0.948	0.942	0.934	0.931	0.895	0.99318	10.9	
Trichlorofluoromethane		2.118	2.227	2.137	2.159	2.053	2.20746	5.6	
1,1-Dichloroethene	*	1.984	1.607	1.472	1.561	1.519	1.73658	0.99823	*
Acrolein		0.104	0.078	0.080	0.086	0.088	0.09844	0.99532	
Methyl iodide		0.367	0.685	0.722	0.791	0.787	0.51528	0.99726	
Carbon disulfide		2.783	2.980	2.733	2.907	2.801	2.85301	7.1	
Methylene chloride		1.361	1.284	1.197	1.241	1.175	1.51142	0.99901	
trans-1,2-Dichloroethene		1.446	1.438	1.374	1.456	1.418	1.43234	3.9	
Acrylonitrile		0.220	0.197	0.221	0.216	0.221	0.20695	0.99909	
1,1-Dichloroethane	#	1.749	1.800	1.697	1.792	1.726	1.78047	7	#
Acetone		0.343	0.354	0.294	0.392	0.330	0.34811	9.9	
2-Butanone		0.335	0.365	0.334	0.425	0.383	0.36098	10	
Chloroform	*	1.786	1.851	1.760	1.828	1.719	1.94558	14	*
1,1,1-Trichloroethane		1.544	1.607	1.527	1.639	1.586	1.54949	7.9	
Carbon tetrachloride		1.325	1.422	1.355	1.439	1.381	1.34079	11.3	
Benzene		4.478	4.722	4.418	4.561	4.273	4.53464	5.6	
1,2-Dichloroethane		1.153	1.185	1.124	1.178	1.110	1.22355	10.8	
Trichloroethene		1.097	1.124	1.091	1.173	1.146	1.11147	6.7	
Vinyl acetate		0.725	0.916	1.020	1.013	1.140	0.9248	14.9	
1,2-Dichloropropane	*	1.060	1.095	1.057	1.101	1.057	1.1128	9.4	*
Dibromomethane		0.500	0.506	0.485	0.500	0.475	0.51461	11.5	
Bromodichloromethane		1.217	1.272	1.244	1.320	1.240	1.28464	8.3	
cis-1,3-Dichloropropene		1.104	1.197	1.273	1.368	1.286	1.15674	12.2	
4-Methyl-2-pentanone		0.169	0.227	0.224	0.252	0.238	0.20674	0.99631	
Toluene	*	2.639	2.944	2.863	2.951	2.843	2.61069	11.5	*
trans-1,3-Dichloropropene		0.950	1.088	1.141	1.217	1.172	1.01994	13.8	
Ethyl methacrylate		0.539	0.682	0.753	0.814	0.809	0.61617	0.99769	
1,1,2-Trichloroethane		0.749	0.798	0.761	0.789	0.746	0.79055	7.5	
Tetrachloroethene		1.109	1.194	1.037	1.086	1.086	1.15088	10.5	
2-Hexanone		0.538	0.637	0.542	0.744	0.629	0.60987	14.6	

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FORM VI

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VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: VMS06 Calibration Date Begin: 07/19/12 End: 07/19/12

GC Column: DB-624 ID: 0.18 (mm) Calibration Time Begin: 712 End: 1101

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF10 =10PPB.D RRF20 =20PPB.D
RRF50 =50PPB.D RRF60 =60PPB.D RRF80 =80PPB.D

COMPOUND		RRF10	RRF20	RRF50	RRF60	RRF80	$\overline{RRF}$	%RSD OR R^2	
Dibromochloromethane		0.912	0.997	0.914	0.990	0.949	0.97715	9.7	
1,2-Dibromoethane		0.806	0.884	0.777	0.814	0.800	0.85892	10.1	
Chlorobenzene	#	3.893	3.939	3.477	3.592	3.467	3.897	11.1	#
1,1,1,2-Tetrachloroethane		1.084	1.185	1.079	1.152	1.127	1.16756	9.3	
Ethylbenzene	*	2.055	2.266	2.062	2.136	2.083	2.05779	6	*
Styrene		3.351	3.864	3.545	3.695	3.590	3.37638	11	
Bromoform	#	0.466	0.533	0.513	0.567	0.553	0.50743	9.9	#
1,1,2,2-Tetrachloroethane	#	1.764	2.051	1.825	1.865	1.849	2.06394	0.99927	#
1,2,3-Trichloropropane		0.553	0.633	0.531	0.560	0.557	0.61071	0.99802	
1,2-Dibromo-3-chloropropane		0.220	0.231	0.229	0.251	0.247	0.25419	0.99767	
1,4-Dichloro-2-butene		0.285	0.320	0.281	0.319	0.304	0.29237	9.6	
Acetonitrile		0.050	0.055	0.059	0.067	0.065	0.06595	0.99479	
Allyl chloride		1.283	1.452	1.420	1.499	1.523	1.40561	0.99842	
1,4-Dioxane		0.004	0.004	0.004	0.006	0.006	0.00464	0.99213	
Isobutyl alcohol		0.011	0.012	0.011	0.011	0.010	0.01146	0.99829	
Methacrylonitrile		0.237	0.267	0.258	0.268	0.260	0.24117	11.8	
Methyl methacrylate		0.301	0.367	0.380	0.420	0.408	0.35782	0.99722	
Propionitrile		0.076	0.085	0.085	0.090	0.090	0.07735	0.99894	
Chloroprene		1.369	1.533	1.514	1.604	1.545	1.40534	12.9	
o-Xylene		4.432	5.149	4.681	4.898	4.676	4.43909	10.3	
p,m-Xylene		2.632	2.818	2.477	2.568	2.439	2.35054	13.6	
Dibromofluoromethane(SURR)		0.845	0.830	0.877	0.765	0.807	0.82365	4.6	
Toluene-d8(SURR)		3.749	3.868	3.969	3.454	3.507	3.6257	7.9	
4-Bromofluorobenzene(SURR)		2.415	2.530	2.533	2.233	2.432	2.39831	5.5	
1,2-Dichloroethane-d4(SURR)		0.193	0.202	0.200	0.171	0.176	0.19286	8.6	

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FORM VI

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: VMS06 CalibrationDate: 07/19/12 Time: 1134

CCV ID: SSC1099477 Lab File ID: SEC61.D Init. Calib. Date Begin: 07/19/12 End: 07/19/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Dichlorodifluoromethane		1.43425	1.182	17.6	AVRG	
Chloromethane	#	50	45.9	8.2	LINR	#
Vinyl chloride	*	1.63115	1.34	17.8	AVRG	*
Bromomethane		0.80546	0.75739	6.0	AVRG	
Chloroethane		0.99318	0.84341	15.1	AVRG	
Trichlorofluoromethane		2.20746	1.963	11.1	AVRG	
1,1-Dichloroethene	*	50	45.8	8.4	LINR	*
Acrolein		100	98.2	1.8	LINR	
Methyl iodide		50	51	2.0	2ORD	
Carbon disulfide		2.85301	2.652	7.0	AVRG	
Methylene chloride		50	46.5	7.0	LINR	
trans-1,2-Dichloroethene		1.43234	1.297	9.4	AVRG	
Acrylonitrile		100	95.6	4.4	LINR	
1,1-Dichloroethane	#	1.78047	1.607	9.7	AVRG	#
Acetone		0.34811	0.32199	7.5	AVRG	
2-Butanone		0.36098	0.34103	5.5	AVRG	
Chloroform	*	1.94558	1.588	18.4	AVRG	*
1,1,1-Trichloroethane		1.54949	1.43	7.7	AVRG	
Carbon tetrachloride		1.34079	1.262	5.9	AVRG	
Benzene		4.53464	3.97	12.5	AVRG	
1,2-Dichloroethane		1.22355	1.02	16.6	AVRG	
Trichloroethene		1.11147	1.026	7.7	AVRG	
Vinyl acetate		0.9248	0.95502	3.3	AVRG	
1,2-Dichloropropane	*	1.1128	0.95634	14.1	AVRG	*
Dibromomethane		0.51461	0.42537	17.3	AVRG	
Bromodichloromethane		1.28464	1.128	12.2	AVRG	
cis-1,3-Dichloropropene		1.15674	1.161	0.4	AVRG	
4-Methyl-2-pentanone		100	88.3	11.7	LINR	
Toluene	*	2.61069	2.497	4.4	AVRG	*
trans-1,3-Dichloropropene		1.01994	1.044	2.4	AVRG	
Ethyl methacrylate		50	42.9	14.2	LINR	
1,1,2-Trichloroethane		0.79055	0.65102	17.6	AVRG	
Tetrachloroethene		1.15088	0.99666	13.4	AVRG	
2-Hexanone		0.60987	0.58101	4.7	AVRG	
Dibromochloromethane		0.97715	0.90793	7.1	AVRG	
1,2-Dibromoethane		0.85892	0.74756	13.0	AVRG	

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FORM VII

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: VMS06 CalibrationDate: 07/19/12 Time: 1134

CCV ID: SSC1099477 Lab File ID: SEC61.D Init. Calib. Date Begin: 07/19/12 End: 07/19/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Chlorobenzene	#	3.897	3.311	15.0	AVRG	#
1,1,1,2-Tetrachloroethane		1.16756	1.052	9.9	AVRG	
Ethylbenzene	*	2.05779	1.92	6.7	AVRG	*
Styrene		3.37638	3.335	1.2	AVRG	
Bromoform	#	0.50743	0.50899	0.3	AVRG	#
1,1,2,2-Tetrachloroethane	#	50	45.8	8.4	LINR	#
1,2,3-Trichloropropane		50	45.7	8.6	LINR	
1,2-Dibromo-3-chloropropane		50	48.8	2.4	LINR	
1,4-Dichloro-2-butene		0.29237	0.2901	0.8	AVRG	
Acetonitrile		500	429	14.2	LINR	
Allyl chloride		50	50.5	1.0	LINR	
1,4-Dioxane		1000	1180	18.0	2ORD	
Isobutyl alcohol		1000	936	6.4	LINR	
Methacrylonitrile		0.24117	0.23943	0.7	AVRG	
Methyl methacrylate		50	44.3	11.4	LINR	
Propionitrile		500	473	5.4	LINR	
Chloroprene		1.40534	1.41	0.3	AVRG	
o-Xylene		4.43909	4.397	0.9	AVRG	
p,m-Xylene		2.35054	2.364	0.6	AVRG	
==========						
Dibromofluoromethane(SURR)		0.82365	0.7791	5.4	AVRG	
Toluene-d8(SURR)		3.6257	3.422	5.6	AVRG	
4-Bromofluorobenzene(SURR)		2.39831	2.294	4.3	AVRG	
1,2-Dichloroethane-d4(SURR)		0.19286	0.17295	10.3	AVRG	

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FORM VII

7

VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: VMS06 CalibrationDate: 08/03/12 Time: 1523

CCV ID: CCV1102988 Lab File ID: 50CCV61.D Init. Calib. Date Begin: 07/19/12 End: 07/19/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Dichlorodifluoromethane		1.43425	1.047	27.0	AVRG	<-
Chloromethane	#	50	42.5	15.0	LINR	#
Vinyl chloride	*	1.63115	1.32	19.1	AVRG	*
Bromomethane		0.80546	0.76309	5.3	AVRG	
Chloroethane		0.99318	0.97264	2.1	AVRG	
Trichlorofluoromethane		2.20746	2.382	7.9	AVRG	
1,1-Dichloroethene	*	50	59.5	19.0	LINR	*
Acrolein		100	119	19.0	LINR	
Methyl iodide		50	47.8	4.4	2ORD	
Carbon disulfide		2.85301	3.177	11.4	AVRG	
Methylene chloride		50	52.6	5.2	LINR	
trans-1,2-Dichloroethene		1.43234	1.424	0.6	AVRG	
Acrylonitrile		100	125	25.0	LINR	<-
1,1-Dichloroethane	#	1.78047	1.785	0.3	AVRG	#
Acetone		0.34811	0.33497	3.8	AVRG	
2-Butanone		0.36098	0.33894	6.1	AVRG	
Chloroform	*	1.94558	1.83	5.9	AVRG	*
1,1,1-Trichloroethane		1.54949	1.612	4.0	AVRG	
Carbon tetrachloride		1.34079	1.467	9.4	AVRG	
Benzene		4.53464	4.567	0.7	AVRG	
1,2-Dichloroethane		1.22355	1.236	1.0	AVRG	
Trichloroethene		1.11147	1.147	3.2	AVRG	
Vinyl acetate		0.9248	1.001	8.2	AVRG	
1,2-Dichloropropane	*	1.1128	1.096	1.5	AVRG	*
Dibromomethane		0.51461	0.56668	10.1	AVRG	
Bromodichloromethane		1.28464	1.35	5.1	AVRG	
cis-1,3-Dichloropropene		1.15674	1.342	16.0	AVRG	
4-Methyl-2-pentanone		100	113	13.0	LINR	
Toluene	*	2.61069	3.017	15.6	AVRG	*
trans-1,3-Dichloropropene		1.01994	1.275	25.0	AVRG	<-
Ethyl methacrylate		50	52.4	4.8	LINR	
1,1,2-Trichloroethane		0.79055	0.86593	9.5	AVRG	
Tetrachloroethene		1.15088	0.99048	13.9	AVRG	
2-Hexanone		0.60987	0.50323	17.5	AVRG	
Dibromochloromethane		0.97715	0.94998	2.8	AVRG	
1,2-Dibromoethane		0.85892	0.84541	1.6	AVRG	

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FORM VII

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VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: VMS06 CalibrationDate: 08/03/12 Time: 1523

CCV ID: CCV1102988 Lab File ID: 50CCV61.D Init. Calib. Date Begin: 07/19/12 End: 07/19/12

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Chlorobenzene	#	3.897	3.395	12.9	AVRG	#
1,1,1,2-Tetrachloroethane		1.16756	1.081	7.4	AVRG	
Ethylbenzene	*	2.05779	1.966	4.5	AVRG	*
Styrene		3.37638	3.507	3.9	AVRG	
Bromoform	#	0.50743	0.56247	10.8	AVRG	#
1,1,2,2-Tetrachloroethane	#	50	48.8	2.4	LINR	#
1,2,3-Trichloropropane		50	50	0.0	LINR	
1,2-Dibromo-3-chloropropane		50	54.3	8.6	LINR	
1,4-Dichloro-2-butene		0.29237	0.29315	0.3	AVRG	
Acetonitrile		500	620	24.0	LINR	<-
Allyl chloride		50	55	10.0	LINR	
1,4-Dioxane		1000	1320	32.0	2ORD	<-
Isobutyl alcohol		1000	1080	8.0	LINR	
Methacrylonitrile		0.24117	0.31165	29.2	AVRG	<-
Methyl methacrylate		50	53.4	6.8	LINR	
Propionitrile		500	628	25.6	LINR	<-
Chloroprene		1.40534	1.462	4.0	AVRG	
o-Xylene		4.43909	4.541	2.3	AVRG	
p,m-Xylene		2.35054	2.418	2.9	AVRG	
==========						
Dibromofluoromethane(SURR)		0.82365	0.89985	9.3	AVRG	
Toluene-d8(SURR)		3.6257	3.971	9.5	AVRG	
4-Bromofluorobenzene(SURR)		2.39831	2.163	9.8	AVRG	
1,2-Dichloroethane-d4(SURR)		0.19286	0.2124	10.1	AVRG	

Average Used: 9.7

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FORM VII

8270 SIM Semi-Volatile Organics

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CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506575

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8270D-SIM.

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

Spectrum Analytical Inc. Lab Reference No./SDG: 3506575

Client: CH2M Hill

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

Sample Q1-TFS-MW-04 required a 10X dilution due to high concentration of the following analyte: 1-Methylnaphthalene. Both full and diluted runs are reported.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Signature:
Name: Brian C. Spanh Title: Lab Director

SIGNED: DATE: 08/01/2012

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Method: 8270 SIM

EPA Sample No	Lab Sample ID
Q1-TFS-MW-04	350657501
Q1-TFS-MW-04DL1	350657501DL1
Q1-TFS-MW-12	350657502
Q1-TFS-MW-16	350657503

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8270 SIM Sample Data

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 57501.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2115

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	32.9	E	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	6.3		0.02	0.04	0.05
83-32-9	Acenaphthene	0.61		0.02	0.04	0.05
208-96-8	Acenaphthylene	0.28		0.02	0.04	0.05
120-12-7	Anthracene	0.033	J	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.031	J	0.02	0.04	0.05
86-73-7	Fluorene	0.57		0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	4.6		0.02	0.04	0.05
85-01-8	Phenanthrene	0.23		0.02	0.04	0.05
129-00-0	Pyrene	0.02	J	0.02	0.04	0.05

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04DL1

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501DL1 Lab File ID 57501D10.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/31/12 Time: 0935

PercentSolids: 0 decanted : Dilution Factor: 10

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	38.4		0.2	0.4	0.5
91-57-6	2-Methylnaphthalene	7.5		0.2	0.4	0.5
83-32-9	Acenaphthene	0.55		0.2	0.4	0.5
208-96-8	Acenaphthylene	0.31	J	0.2	0.4	0.5
120-12-7	Anthracene	0.4	U	0.2	0.4	0.5
56-55-3	Benzo(a)anthracene	0.4	U	0.2	0.4	0.5
50-32-8	Benzo(a)pyrene	0.4	U	0.2	0.4	0.5
205-99-2	Benzo(b)fluoranthene	0.4	U	0.2	0.4	0.5
191-24-2	Benzo(g,h,i)perylene	0.4	U	0.2	0.4	0.5
207-08-9	Benzo(k)fluoranthene	0.4	U	0.2	0.4	0.5
218-01-9	Chrysene	0.4	U	0.2	0.4	0.5
53-70-3	Dibenzo(a,h)anthracene	0.4	U	0.2	0.4	0.4
206-44-0	Fluoranthene	0.4	U	0.2	0.4	0.5
86-73-7	Fluorene	0.62		0.2	0.4	0.5
193-39-5	Indeno(1,2,3-cd)pyrene	0.4	U	0.2	0.4	0.5
91-20-3	Naphthalene	5.2		0.2	0.4	0.5
85-01-8	Phenanthrene	0.22	J	0.2	0.4	0.5
129-00-0	Pyrene	0.4	U	0.2	0.4	0.5

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-12

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657502 Lab File ID 57502.D

Sample wt/vol: 1000 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 1940

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.04	U	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.04	U	0.02	0.04	0.05
83-32-9	Acenaphthene	0.04	U	0.02	0.04	0.05
208-96-8	Acenaphthylene	0.04	U	0.02	0.04	0.05
120-12-7	Anthracene	0.04	U	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.04	U	0.02	0.04	0.05
86-73-7	Fluorene	0.04	U	0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	0.04	U	0.02	0.04	0.05
85-01-8	Phenanthrene	0.04	U	0.02	0.04	0.05
129-00-0	Pyrene	0.04	U	0.02	0.04	0.05

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-16

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657503 Lab File ID 57503.D

Sample wt/vol: 980 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 2004

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.041	U	0.02	0.041	0.051
91-57-6	2-Methylnaphthalene	0.041	U	0.02	0.041	0.051
83-32-9	Acenaphthene	0.041	U	0.02	0.041	0.051
208-96-8	Acenaphthylene	0.041	U	0.02	0.041	0.051
120-12-7	Anthracene	0.041	U	0.02	0.041	0.051
56-55-3	Benzo(a)anthracene	0.041	U	0.02	0.041	0.051
50-32-8	Benzo(a)pyrene	0.041	U	0.02	0.041	0.051
205-99-2	Benzo(b)fluoranthene	0.041	U	0.02	0.041	0.051
191-24-2	Benzo(g,h,i)perylene	0.041	U	0.02	0.041	0.051
207-08-9	Benzo(k)fluoranthene	0.041	U	0.02	0.041	0.051
218-01-9	Chrysene	0.041	U	0.02	0.041	0.051
53-70-3	Dibenzo(a,h)anthracene	0.041	U	0.02	0.041	0.041
206-44-0	Fluoranthene	0.041	U	0.02	0.041	0.051
86-73-7	Fluorene	0.041	U	0.02	0.041	0.051
193-39-5	Indeno(1,2,3-cd)pyrene	0.041	U	0.02	0.041	0.051
91-20-3	Naphthalene	0.041	U	0.02	0.041	0.051
85-01-8	Phenanthrene	0.041	U	0.02	0.041	0.051
129-00-0	Pyrene	0.041	U	0.02	0.041	0.051

8270 SIM QC Summary

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138549MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 138549MB Lab File ID: 10194MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/24/12

Concentrated Extract Volume: 1 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/30/12 Time: 1605

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
90-12-0	1-Methylnaphthalene	0.04	U	0.02	0.04	0.05
91-57-6	2-Methylnaphthalene	0.04	U	0.02	0.04	0.05
83-32-9	Acenaphthene	0.04	U	0.02	0.04	0.05
208-96-8	Acenaphthylene	0.04	U	0.02	0.04	0.05
120-12-7	Anthracene	0.04	U	0.02	0.04	0.05
56-55-3	Benzo(a)anthracene	0.04	U	0.02	0.04	0.05
50-32-8	Benzo(a)pyrene	0.04	U	0.02	0.04	0.05
205-99-2	Benzo(b)fluoranthene	0.04	U	0.02	0.04	0.05
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.02	0.04	0.05
207-08-9	Benzo(k)fluoranthene	0.04	U	0.02	0.04	0.05
218-01-9	Chrysene	0.04	U	0.02	0.04	0.05
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.02	0.04	0.04
206-44-0	Fluoranthene	0.04	U	0.02	0.04	0.05
86-73-7	Fluorene	0.04	U	0.02	0.04	0.05
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.02	0.04	0.05
91-20-3	Naphthalene	0.04	U	0.02	0.04	0.05
85-01-8	Phenanthrene	0.04	U	0.02	0.04	0.05
129-00-0	Pyrene	0.04	U	0.02	0.04	0.05

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SEMI-VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

138549MB

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Lab File ID: 10194MB.D Lab Sample ID: 138549MB

Instrument ID: SMSD03 Date Extracted: 07/24/12

Matrix: WATER Date Analyzed: 07/30/12

Level:(low/med) LOW Time Analyzed: 1605

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	138550LCS	138550LCS	10194LCS.D	07/30/12	1629
2	Q1-TFS-MW-12	350657502	57502.D	07/30/12	1940
3	Q1-TFS-MW-16	350657503	57503.D	07/30/12	2004
4	Q1-TFS-MW-04	350657501	57501.D	07/30/12	2115
5	Q1-TFS-MW-04DL1	350657501DL1	57501D10.D	07/31/12	0935

COMMENTS:

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Form IV

2A

WATER SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG NO.: 3506575

Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
138549MB	74.0	80.0					0
138550LCS	72.0	70.0					0
Q1-TFS-MW-04	70.0	72.0					0
Q1-TFS-MW-04DL1	76.0	78.0					0
Q1-TFS-MW-12	74.0	68.0					0
Q1-TFS-MW-16	76.5	78.4					0

Control Limits

S1	=	p-Terphenyl-d14	33 -	141
S2	=	2-Fluorobiphenyl	43 -	116

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

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SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Lab File ID: DFTPP1.D DFTPP Injection Date: 07/30/12

Instrument ID: SMSD03 DFTPP Injection Time: 0744

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	23	
68	Less than 2.0% of mass 69	0.4	(1.13)1
69	Mass 69 relative abundance	39	
70	Less than 2.0% of mass 69	0.2	(0.39)1
127	10.0 - 80.0% of mass 198	40.8	
197	Less than 2.0% of mass 198	0.2	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.9	
275	10.0 - 60.0% of mass 198	38.1	
365	Greater than 1.0% of mass 198	8	
441	0.0 - 24.0% of mass 442	19.3	(15.66)2
442	Greater than 50.0% of mass 198	123.3	
443	15.0 - 24.0% of mass 442	23.8	(19.34)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD1101892	46155	SIMCAL10.D	07/30/12	1006
2	STD1101900	46156	SIMCAL9.D	07/30/12	1029
3	STD1101899	46157	SIMCAL8.D	07/30/12	1053
4	STD1101898	46158	SIMCAL7.D	07/30/12	1117
5	STD1101897	47065	SIMCAL6.D	07/30/12	1141
6	STD1101896	46160	SIMCAL5.D	07/30/12	1205
7	STD1101895	46161	SIMCAL4.D	07/30/12	1229
8	STD1101894	46162	SIMCAL3.D	07/30/12	1253
9	STD1101893	46163	SIMCAL2.D	07/30/12	1317
10	STD1101891	46164	SIMCAL1.D	07/30/12	1341
11	SSC1101904	46253	SIMSECA.D	07/30/12	1405

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Lab File ID: DFTPP1.D DFTPP Injection Date: 07/31/12

Instrument ID: SMSD03 DFTPP Injection Time: 0713

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	22	
68	Less than 2.0% of mass 69	0.6	(1.65)1
69	Mass 69 relative abundance	39.6	
70	Less than 2.0% of mass 69	0.2	(0.63)1
127	10.0 - 80.0% of mass 198	42.8	
197	Less than 2.0% of mass 198	0.2	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.9	
275	10.0 - 60.0% of mass 198	40.3	
365	Greater than 1.0% of mass 198	8.5	
441	0.0 - 24.0% of mass 442	20.2	(15.58)2
442	Greater than 50.0% of mass 198	129.8	
443	15.0 - 24.0% of mass 442	25.9	(19.96)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV1101901	47065	SIMCCV2.D	07/31/12	0800
2	Q1-TFS-MW-04DL1	350657501DL1	57501D10.D	07/31/12	0935

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Lab File ID: DFTPP2.D DFTPP Injection Date: 07/30/12

Instrument ID: SMSD03 DFTPP Injection Time: 1457

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	27.3	
68	Less than 2.0% of mass 69	0.4	(0.84)1
69	Mass 69 relative abundance	42.8	
70	Less than 2.0% of mass 69	0.3	(0.75)1
127	10.0 - 80.0% of mass 198	40.7	
197	Less than 2.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.9	
275	10.0 - 60.0% of mass 198	38.5	
365	Greater than 1.0% of mass 198	8.8	
441	0.0 - 24.0% of mass 442	18.9	(15.48)2
442	Greater than 50.0% of mass 198	122.2	
443	15.0 - 24.0% of mass 442	24	(19.67)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV1101903	47065	SIMCCV4.D	07/30/12	1542
2	138549MB	138549MB	10194MB.D	07/30/12	1605
3	138550LCS	138550LCS	10194LCS.D	07/30/12	1629
4	Q1-TFS-MW-12	350657502	57502.D	07/30/12	1940
5	Q1-TFS-MW-16	350657503	57503.D	07/30/12	2004
6	Q1-TFS-MW-04	350657501	57501.D	07/30/12	2115

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Lab File ID (Standard): SIMCAL6.D Date Analyzed: 7/30/2012

Instrument ID: SMSD03 Time Analyzed: 11:41

GC Column: HPMS-5 ID: 0.25 (mm)

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	9258		4.09	29580		5.26	22715		6.94
	UPPER LIMIT	18516		4.59	59160		5.76	45430		7.44
	LOWER LIMIT	4629		3.59	14790		4.76	11357.5		6.44
	EPA SAMPLE NO.									
1	138549MB	7771		4.09	26838		5.26	21503		6.94
2	138550LCS	8925		4.09	30078		5.26	23597		6.94
3	Q1-TFS-MW-12	11391		4.09	39654		5.26	30274		6.94
4	Q1-TFS-MW-16	11636		4.09	40548		5.26	31899		6.94
5	Q1-TFS-MW-04	12396		4.09	48415		5.25	34078		6.94
6	Q1-TFS-MW-04DL1	10499		4.09	37842		5.25	28483		6.94

IS1 = 1,4-Dichlorobenzene-d4

IS2 = Naphthalene-d8

IS3 = Acenaphthene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Lab File ID (Standard): SIMCAL6.D Date Analyzed: 7/30/2012

Instrument ID: SMSD03 Time Analyzed: 11:41

GC Column: HPMS-5 ID: 0.25 (mm)

		IS4 AREA	#	RT	IS5 AREA	#	RT	IS6 AREA	#	RT
	MID CAL STD	52916		8.40	76092		11.00	71890		12.30
	UPPER LIMIT	105832		8.90	152184		11.50	143780		12.80
	LOWER LIMIT	26458		7.90	38046		10.50	35945		11.80
	EPA SAMPLE NO.									
1	138549MB	50889		8.40	72045		11.00	66695		12.30
2	138550LCS	53793		8.40	77970		10.99	75545		12.30
3	Q1-TFS-MW-12	69208		8.40	93232		10.99	87357		12.30
4	Q1-TFS-MW-16	71749		8.40	95506		11.00	92653		12.29
5	Q1-TFS-MW-04	74755		8.40	95825		10.99	96212		12.29
6	Q1-TFS-MW-04DL1	62380		8.40	82945		11.00	77197		12.30

IS4 = Phenanthrene-d10

IS5 = Chrysene-d12

IS6 = Perylene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 07/30/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 9.97 S2 : 6.3

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	DFTPP1	46591	DFTPP1.D	07/30/12	0744		
2	STD1101892	46155	SIMCAL10.D	07/30/12	1006	9.97	6.29
3	STD1101900	46156	SIMCAL9.D	07/30/12	1029	9.96	6.29
4	STD1101899	46157	SIMCAL8.D	07/30/12	1053	9.97	6.3
5	STD1101898	46158	SIMCAL7.D	07/30/12	1117	9.97	6.3
6	STD1101897	47065	SIMCAL6.D	07/30/12	1141	9.97	6.3
7	STD1101896	46160	SIMCAL5.D	07/30/12	1205	9.97	6.3
8	STD1101895	46161	SIMCAL4.D	07/30/12	1229	9.97	6.31
9	STD1101894	46162	SIMCAL3.D	07/30/12	1253	9.97	6.31
10	STD1101893	46163	SIMCAL2.D	07/30/12	1317	9.98	6.31
11	STD1101891	46164	SIMCAL1.D	07/30/12	1341	9.98	6.32
12	SSC1101904	46253	SIMSECA.D	07/30/12	1405	9.97	6.3
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1433		
14	DFTPP2	46591	DFTPP2.D	07/30/12	1457		
15	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1518		
16	CCV1101903	47065	SIMCCV4.D	07/30/12	1542	9.97	6.3
17	138549MB	138549MB	10194MB.D	07/30/12	1605	9.97	6.3
18	138550LCS	138550LCS	10194LCS.D	07/30/12	1629	9.97	6.3
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1653		
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1717		
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1741		
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1805		
23	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1829		
24	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1852		
25	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	1916		
26	Q1-TFS-MW-12	350657502	57502.D	07/30/12	1940	9.97	6.3

			QC LIMITS
S1	=	p-Terphenyl-d14	(+/- 0.66 MINUTES)
S2	=	2-Fluorobiphenyl	(+/- 0.42 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

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FORM VIII

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 07/30/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 9.97 S2 : 6.3

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
27	Q1-TFS-MW-16	350657503	57503.D	07/30/12	2004	9.97		6.3	
28	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	2027				
29	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/30/12	2051				
30	Q1-TFS-MW-04	350657501	57501.D	07/30/12	2115	9.97		6.29	
31	DFTPP1	46591	DFTPP1.D	07/31/12	0713				
32	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/31/12	0733				
33	CCV1101901	47065	SIMCCV2.D	07/31/12	0800	9.97		6.3	
34	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/31/12	0847				
35	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/31/12	0911				
36	Q1-TFS-MW-04DL1	350657501DL1	57501D10.D	07/31/12	0935	9.97		6.29	

			QC LIMITS
S1	=	p-Terphenyl-d14	(+/- 0.66 MINUTES)
S2	=	2-Fluorobiphenyl	(+/- 0.42 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 138550LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
1-Methylnaphthalene	0.5	0.36	72.0			68 - 115
2-Methylnaphthalene	0.5	0.42	84.0			47 - 121
Acenaphthene	0.5	0.4	80.0			64 - 110
Acenaphthylene	0.5	0.42	84.0			45 - 115
Anthracene	0.5	0.41	82.0			61 - 108
Benzo(a)anthracene	0.5	0.45	90.0			53 - 110
Benzo(a)pyrene	0.5	0.4	80.0			55 - 109
Benzo(b)fluoranthene	0.5	0.46	92.0			65 - 110
Benzo(g,h,i)perylene	0.5	0.43	86.0			68 - 115
Benzo(k)fluoranthene	0.5	0.38	76.0			70 - 111
Chrysene	0.5	0.4	80.0			71 - 115
Dibenzo(a,h)anthracene	0.5	0.52	104.0			60 - 104
Fluoranthene	0.5	0.43	86.0			63 - 114
Fluorene	0.5	0.41	82.0			59 - 120
Indeno(1,2,3-cd)pyrene	0.5	0.45	90.0			66 - 110
Naphthalene	0.5	0.39	78.0			68 - 125
Phenanthrene	0.5	0.43	86.0			31 - 147
Pyrene	0.5	0.39	78.0			59 - 120

Spike Recovery: 0 out of 18 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

8270 SIM Standards Data

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SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SMSD03 Calibration Date Begin: 07/30/12 End: 07/30/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 1006 End: 1341

Min RRF for SPCC(#) = N/A Max %RSD for CCC(*) = 15 %

LAB FILE ID: RRF0.02 =SIMCAL1.D RRF0.05 =SIMCAL2.D
RRF0.07 =SIMCAL3.D RRF0.1 =SIMCAL4.D RRF0.2 =SIMCAL5.D

COMPOUND	RRF0.02	RRF0.05	RRF0.07	RRF0.1	RRF0.2	$\overline{RRF}$	%RSD OR R^2
1-Methylnaphthalene	0.827	0.828	0.556	0.764	0.645		
2-Methylnaphthalene	0.562	0.607	0.507	0.670	0.597		
Acenaphthene	* 1.096	1.174	1.053	1.156	1.123		*
Acenaphthylene	1.570	1.492	1.566	1.604	1.663		
Anthracene	0.994	1.142	0.953	0.922	0.855		
Benzo(a)anthracene	0.919	0.855	0.868	0.870	0.858		
Benzo(a)pyrene	* 1.145	1.051	1.011	1.100	0.984		*
Benzo(b)fluoranthene	0.857	0.966	0.849	1.025	0.914		
Benzo(g,h,i)perylene	0.823	0.764	0.855	0.839	0.886		
Benzo(k)fluoranthene	1.883	1.565	1.719	1.622	1.652		
Chrysene	1.372	1.297	1.225	1.271	1.236		
Dibenzo(a,h)anthracene	0.609	0.587	0.570	0.657	0.647		
Fluoranthene	* 1.299	1.268	1.341	1.345	1.302		*
Fluorene	1.310	1.275	1.216	1.265	1.318		
Indeno(1,2,3-cd)pyrene	0.837	0.794	0.832	0.923	0.935		
Naphthalene	0.895	0.915	0.931	0.997	0.977		
Phenanthrene	0.865	0.861	0.845	0.885	0.898		
Pyrene	1.247	1.119	1.115	1.095	1.032		
==========							
p-Terphenyl-d14(SURR)	1.286	1.134	1.119	1.151	1.098		
2-Fluorobiphenyl(SURR)	1.546	1.491	1.530	1.870	2.013		

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SMSD03 Calibration Date Begin: 07/30/12 End: 07/30/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 1006 End: 1341

Min RRF for SPCC(#) = N/A Max %RSD for CCC(*) = 15 %

LAB FILE ID: RRF0.5 =SIMCAL6.D RRF0.7 =SIMCAL7.D
RRF1 =SIMCAL8.D RRF5 =SIMCAL9.D RRF10 =SIMCAL10.D

COMPOUND	RRF0.5	RRF0.7	RRF1	RRF5	RRF10	$\overline{RRF}$	%RSD OR R^2
1-Methylnaphthalene	0.757	0.730	0.694	0.710	0.711	0.72215	11.3
2-Methylnaphthalene	0.760	0.728	0.732	0.781	0.778	0.67215	14.6
Acenaphthene	* 1.196	1.119	1.156	1.134	1.122	1.13294	3.6 *
Acenaphthylene	1.805	1.698	1.746	1.777	1.700	1.66207	6.1
Anthracene	1.083	1.056	0.990	1.015	0.908	0.99179	8.7
Benzo(a)anthracene	0.969	0.967	0.999	0.979	0.957	0.92417	6.1
Benzo(a)pyrene	* 1.066	1.020	1.043	1.008	0.996	1.0424	4.8 *
Benzo(b)fluoranthene	1.116	1.081	1.268	1.144	1.102	1.03235	13.1
Benzo(g,h,i)perylene	0.971	0.932	0.963	0.994	0.963	0.89903	8.6
Benzo(k)fluoranthene	1.505	1.412	1.332	1.232	1.192	1.51132	14.6
Chrysene	1.172	1.104	1.103	1.017	0.959	1.17564	11
Dibenzo(a,h)anthracene	0.798	0.809				0.66812	14.6
Fluoranthene	* 1.408	1.418	1.388	1.381	1.307	1.34563	3.8 *
Fluorene	1.510	1.434	1.472	1.467	1.446	1.37124	7.7
Indeno(1,2,3-cd)pyrene	1.074	1.068	1.126	1.162	1.193	0.99436	14.8
Naphthalene	1.041	0.975	0.964	0.986	0.930	0.96118	4.5
Phenanthrene	0.996	1.012	0.987	1.013	0.965	0.93264	7.3
Pyrene	1.029	1.002	1.037	0.979	0.928	1.05826	8.5
p-Terphenyl-d14(SURR)	1.095	1.043	1.054	0.985	0.935	1.09006	8.8
2-Fluorobiphenyl(SURR)	2.258	1.890	2.204	1.932	1.870	1.8603	14.4

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FORM VI

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 07/30/12 Time: 1405

CCV ID: SSC1101904 Lab File ID: SIMSECA.D Init. Calib. Date Begin: 07/30/12 End: 07/30/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
1-Methylnaphthalene		0.72215	0.62948	12.8	AVRG	
2-Methylnaphthalene		0.67215	0.70769	5.3	AVRG	
Acenaphthene	*	1.13294	1.133	0.0	AVRG	*
Acenaphthylene		1.66207	1.749	5.2	AVRG	
Anthracene		0.99179	0.95073	4.1	AVRG	
Benzo(a)anthracene		0.92417	1.03	11.5	AVRG	
Benzo(a)pyrene	*	1.0424	1.03	1.2	AVRG	*
Benzo(b)fluoranthene		1.03235	1.144	10.8	AVRG	
Benzo(g,h,i)perylene		0.89903	0.85485	4.9	AVRG	
Benzo(k)fluoranthene		1.51132	1.498	0.9	AVRG	
Chrysene		1.17564	1.174	0.1	AVRG	
Dibenzo(a,h)anthracene		0.66812	0.70688	5.8	AVRG	
Fluoranthene	*	1.34563	1.377	2.3	AVRG	*
Fluorene		1.37124	1.502	9.5	AVRG	
Indeno(1,2,3-cd)pyrene		0.99436	0.95779	3.7	AVRG	
Naphthalene		0.96118	0.97745	1.7	AVRG	
Phenanthrene		0.93264	1.018	9.2	AVRG	
Pyrene		1.05826	1.112	5.1	AVRG	
==========						
p-Terphenyl-d14(SURR)		1.09006	0.89508	17.9	AVRG	
2-Fluorobiphenyl(SURR)		1.8603	1.516	18.5	AVRG	

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FORM VII

7

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 07/30/12 Time: 1542

CCV ID: CCV1101903 Lab File ID: SIMCCV4.D Init. Calib. Date Begin: 07/30/12 End: 07/30/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type
1-Methylnaphthalene		0.72215	0.85778	18.8	AVRG
2-Methylnaphthalene		0.67215	0.76113	13.2	AVRG
Acenaphthene	*	1.13294	1.15	1.5	AVRG *
Acenaphthylene		1.66207	1.678	1.0	AVRG
Anthracene		0.99179	1.059	6.8	AVRG
Benzo(a)anthracene		0.92417	0.95027	2.8	AVRG
Benzo(a)pyrene	*	1.0424	1.038	0.4	AVRG *
Benzo(b)fluoranthene		1.03235	1.121	8.6	AVRG
Benzo(g,h,i)perylene		0.89903	0.8806	2.0	AVRG
Benzo(k)fluoranthene		1.51132	1.511	0.0	AVRG
Chrysene		1.17564	1.208	2.8	AVRG
Dibenzo(a,h)anthracene		0.66812	0.72376	8.3	AVRG
Fluoranthene	*	1.34563	1.423	5.7	AVRG *
Fluorene		1.37124	1.394	1.7	AVRG
Indeno(1,2,3-cd)pyrene		0.99436	0.97097	2.4	AVRG
Naphthalene		0.96118	1.059	10.2	AVRG
Phenanthrene		0.93264	0.98273	5.4	AVRG
Pyrene		1.05826	1.086	2.6	AVRG
==========					
p-Terphenyl-d14(SURR)		1.09006	1.154	5.9	AVRG
2-Fluorobiphenyl(SURR)		1.8603	2.188	17.6	AVRG

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FORM VII

7

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 07/31/12 Time: 0800

CCV ID: CCV1101901 Lab File ID: SIMCCV2.D Init. Calib. Date Begin: 07/30/12 End: 07/30/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
1-Methylnaphthalene		0.72215	0.77954	7.9	AVRG	
2-Methylnaphthalene		0.67215	0.77337	15.1	AVRG	
Acenaphthene	*	1.13294	1.227	8.3	AVRG	*
Acenaphthylene		1.66207	1.824	9.7	AVRG	
Anthracene		0.99179	1.086	9.5	AVRG	
Benzo(a)anthracene		0.92417	0.92205	0.2	AVRG	
Benzo(a)pyrene	*	1.0424	1.069	2.6	AVRG	*
Benzo(b)fluoranthene		1.03235	1.095	6.1	AVRG	
Benzo(g,h,i)perylene		0.89903	0.89797	0.1	AVRG	
Benzo(k)fluoranthene		1.51132	1.469	2.8	AVRG	
Chrysene		1.17564	1.23	4.6	AVRG	
Dibenzo(a,h)anthracene		0.66812	0.7781	16.5	AVRG	
Fluoranthene	*	1.34563	1.393	3.5	AVRG	*
Fluorene		1.37124	1.491	8.7	AVRG	
Indeno(1,2,3-cd)pyrene		0.99436	1.006	1.2	AVRG	
Naphthalene		0.96118	0.98827	2.8	AVRG	
Phenanthrene		0.93264	1.023	9.7	AVRG	
Pyrene		1.05826	1.079	2.0	AVRG	
==========						
p-Terphenyl-d14(SURR)		1.09006	1.124	3.1	AVRG	
2-Fluorobiphenyl(SURR)		1.8603	1.915	2.9	AVRG	

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FORM VII

8270 Semi-Volatile Organics

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CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506575

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8270D.

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

SSC1103003 was the second source verification standard analyzed with the initial calibration on 08/03/12. The %D was over the 20% limit for the following compounds: Ethyl methanesulfonate (+24.6%), 1-Naphthylamine (+44.9%), 2-Naphthylamine (+34.6%), Methapyriline (+1647%), 3-Methylcholanthrene (-37.4%), 1,3,5-Trinitrobenzene (-43.2%). No further action was taken, since these compounds were not detected in any samples and were a result of a discrepancy between the primary and secondary standards. The secondary standard is also used to spike the LCS. Because of this difference, Methapyriline exceeded the calibration range in the LCS. No further action was taken, since this compound was not detected in any samples.

The Percent RSD was over the 15% limit for 4-Nitroquinoline-1-oxide for the initial calibration at 35.9%. No further action was taken, since this compound was not detected in any samples.

Spectrum Analytical Inc. does not analyze a low calibration standard at the requested RL for all analytes. The low calibration standard is 10 ug/L for the following analytes: 4,6-Dinitro-2-methylphenol, Methapyriline.

Spectrum Analytical Inc. Lab Reference No./SDG: 3506575

Client: CH2M Hill

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:

LCS 138488LCS was analyzed with the water samples extracted on 07/23/12. The following analytes were recovered below criteria: 1,4-Naphthoquinone at 27 % with criteria of (28-143), Hexachloropropene at 15.2 % with criteria of (21-105). The following analytes had marginal exceedance limit failures: 2-Naphthylamine at 49 % with criteria of (60-140), a,a-Dimethylphenethylamine at 0 % with criteria of (60-140), Methapyriline at 370 % with criteria of (0-105). No further action was taken. None of these compounds were detected in any samples.

Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506575

Client: CH2M Hill

Signature:
Name: Brian C. Spanh Title: Lab Director

SIGNED: DATE: 08/06/2012

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Method: 8270

EPA Sample No	Lab Sample ID
Q1-TFS-MW-04	350657501
Q1-TFS-MW-12	350657502
Q1-TFS-MW-16	350657503

110812 1314

8270 Sample Data

110812 1314

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 57501.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1823

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 57501.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1823

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 57501.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1823

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20.2
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5
98-86-2	Acetophenone	8.1	U	4	8.1	8.1
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.9	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.82	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 57501.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1823

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8.1	U	4	8.1	8.1
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8.1	U	4	8.1	8.1
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4
143-50-0	Kepone	32.3	U	16.2	32.3	32.3
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-12

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657502 Lab File ID 57502.D

Sample wt/vol: 1000 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1648

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6	U	3	6	6
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.4	U	2.7	5.4	5.4
106-46-7	1,4-Dichlorobenzene	5.4	U	2.7	5.4	5.4
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.2	U	3.1	6.2	10
108-60-1	2,2'-Oxybis(1-chloropropane)	6.6	U	3.3	6.6	6.6
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6	U	3	6	6
106-44-5	4-Methylphenol	12.2	U	6.1	12.2	12.2
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.6	U	3.8	7.6	7.6
88-75-5	2-Nitrophenol	1.5	U	0.77	1.5	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7	U	3.5	7	7
120-83-2	2,4-Dichlorophenol	6.2	U	3.1	6.2	6.2
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6	U	3	6	6
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.4	U	2.7	5.4	5.4
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.82	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-12

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657502 Lab File ID 57502.D

Sample wt/vol: 1000 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1648

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.84	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.8	U	3.4	6.8	6.8
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6	U	3	6	6
131-11-3	Dimethylphthalate	6	U	3	6	6
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.2	U	5.6	11.2	20
132-64-9	Dibenzofuran	5.4	U	2.7	5.4	5.4
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8	U	4	8	8
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8	U	4	8	8
86-30-6	N-Nitrosodiphenylamine	6.8	U	3.4	6.8	6.8
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.82	U	0.41	0.82	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10
84-74-2	Di-n-butylphthalate	1.7	U	0.86	1.7	4
85-68-7	Butylbenzylphthalate	6	U	3	6	6
91-94-1	3,3'-Dichlorobenzidine	5.4	U	2.7	5.4	5.4
117-81-7	Bis(2-ethylhexyl)phthalate	8.8	U	4.4	8.8	8.8
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8	U	4	8	8
10595-95-6	N-Nitrosomethylethylamine	5.4	U	2.7	5.4	5.4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-12

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657502 Lab File ID 57502.D

Sample wt/vol: 1000 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1648

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
55-18-5	N-Nitrosodiethylamine	6.2	U	3.1	6.2	6.2
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20
930-55-2	N-Nitrosopyrrolidine	5.4	U	2.7	5.4	5.4
98-86-2	Acetophenone	8	U	4	8	8
59-89-2	N-Nitrosomorpholine	6	U	3	6	6
95-53-4	o-Toluidine	5.4	U	2.7	5.4	5.4
122-09-8	a,a-Dimethylphenethylamine	32	U	16	32	32
87-65-0	2,6-Dichlorophenol	7	U	3.5	7	7
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.4	U	2.7	5.4	5.4
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.2	U	3.1	6.2	6.2
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6	U	3	6	6
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.89	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.81	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-12

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657502 Lab File ID 57502.D

Sample wt/vol: 1000 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1648

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8	U	4	8	8
56-57-5	4-Nitroquinoline-1-oxide	7.4	U	3.7	7.4	10
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8	U	4	8	8
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.62	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.96	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.84	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.78	1.6	4
143-50-0	Kepone	32	U	16	32	32
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-16

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657503 Lab File ID 57503.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1712

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6.1	U	3	6.1	6.1
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.5	U	2.7	5.5	5.5
106-46-7	1,4-Dichlorobenzene	5.5	U	2.7	5.5	5.5
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.3	U	3.1	6.3	10.1
108-60-1	2,2'-Oxybis(1-chloropropane)	6.7	U	3.3	6.7	6.7
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6.1	U	3	6.1	6.1
106-44-5	4-Methylphenol	12.3	U	6.2	12.3	12.3
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.7	U	3.8	7.7	7.7
88-75-5	2-Nitrophenol	1.6	U	0.78	1.6	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7.1	U	3.5	7.1	7.1
120-83-2	2,4-Dichlorophenol	6.3	U	3.1	6.3	6.3
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6.1	U	3	6.1	6.1
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.5	U	2.7	5.5	5.5
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.83	1.6	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-16

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657503 Lab File ID 57503.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1712

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.85	1.7	4
95-95-4	2,4,5-Trichlorophenol	6.9	U	3.4	6.9	6.9
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6.1	U	3	6.1	6.1
131-11-3	Dimethylphthalate	6.1	U	3	6.1	6.1
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.3	U	5.6	11.3	20.2
132-64-9	Dibenzofuran	5.5	U	2.7	5.5	5.5
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8.1	U	4	8.1	8.1
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8.1	U	4	8.1	8.1
86-30-6	N-Nitrosodiphenylamine	6.9	U	3.4	6.9	6.9
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.83	U	0.41	0.83	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10.1
84-74-2	Di-n-butylphthalate	1.7	U	0.87	1.7	4
85-68-7	Butylbenzylphthalate	6.1	U	3	6.1	6.1
91-94-1	3,3'-Dichlorobenzidine	5.5	U	2.7	5.5	5.5
117-81-7	Bis(2-ethylhexyl)phthalate	8.9	U	4.4	8.9	8.9
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8.1	U	4	8.1	8.1
10595-95-6	N-Nitrosomethylethylamine	5.5	U	2.7	5.5	5.5

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-16

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657503 Lab File ID 57503.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1712

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
55-18-5	N-Nitrosodiethylamine	6.3	U	3.1	6.3	6.3
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20.2
930-55-2	N-Nitrosopyrrolidine	5.5	U	2.7	5.5	5.5
98-86-2	Acetophenone	8.1	U	4	8.1	8.1
59-89-2	N-Nitrosomorpholine	6.1	U	3	6.1	6.1
95-53-4	o-Toluidine	5.5	U	2.7	5.5	5.5
122-09-8	a,a-Dimethylphenethylamine	32.3	U	16.2	32.3	32.3
87-65-0	2,6-Dichlorophenol	7.1	U	3.5	7.1	7.1
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.5	U	2.7	5.5	5.5
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.3	U	3.1	6.3	6.3
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6.1	U	3	6.1	6.1
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.9	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.82	1.6	4

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-16

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657503 Lab File ID 57503.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1712

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8.1	U	4	8.1	8.1
56-57-5	4-Nitroquinoline-1-oxide	7.5	U	3.7	7.5	10.1
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8.1	U	4	8.1	8.1
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.63	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.97	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.85	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.79	1.6	4
143-50-0	Kepone	32.3	U	16.2	32.3	32.3
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

8270 QC Summary

110812 1314

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138487MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 138487MB Lab File ID: 10188MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/23/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1249

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
110-86-1	Pyridine	4.2	U	2.1	4.2	4.2
62-75-9	N-Nitrosodimethylamine	4.4	U	2.2	4.4	4.4
62-53-3	Aniline	5.6	U	2.8	5.6	5.6
111-44-4	Bis(2-chloroethyl)ether	6	U	3	6	6
108-95-2	Phenol	3.4	U	1.7	3.4	4
95-57-8	2-Chlorophenol	5.8	U	2.9	5.8	5.8
541-73-1	1,3-Dichlorobenzene	5.4	U	2.7	5.4	5.4
106-46-7	1,4-Dichlorobenzene	5.4	U	2.7	5.4	5.4
95-50-1	1,2-Dichlorobenzene	5.2	U	2.6	5.2	5.2
100-51-6	Benzyl alcohol	6.2	U	3.1	6.2	10
108-60-1	2,2'-Oxybis(1-chloropropane)	6.6	U	3.3	6.6	6.6
95-48-7	2-Methylphenol	5.2	U	2.6	5.2	5.2
67-72-1	Hexachloroethane	5.2	U	2.6	5.2	5.2
621-64-7	N-Nitroso-di-n-propylamine	6	U	3	6	6
106-44-5	4-Methylphenol	12.2	U	6.1	12.2	12.2
98-95-3	Nitrobenzene	2	U	1	2	4
78-59-1	Isophorone	7.6	U	3.8	7.6	7.6
88-75-5	2-Nitrophenol	1.5	U	0.77	1.5	4
105-67-9	2,4-Dimethylphenol	4.6	U	2.3	4.6	4.6
111-91-1	Bis(2-chloroethoxy)methane	7	U	3.5	7	7
120-83-2	2,4-Dichlorophenol	6.2	U	3.1	6.2	6.2
120-82-1	1,2,4-Trichlorobenzene	5.2	U	2.6	5.2	5.2
106-47-8	4-Chloroaniline	6	U	3	6	6
87-68-3	Hexachlorobutadiene	5	U	2.5	5	5
59-50-7	4-Chloro-3-methylphenol	5.4	U	2.7	5.4	5.4
77-47-4	Hexachlorocyclopentadiene	1.6	U	0.82	1.6	4
88-06-2	2,4,6-Trichlorophenol	1.7	U	0.84	1.7	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138487MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 138487MB Lab File ID: 10188MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/23/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1249

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
95-95-4	2,4,5-Trichlorophenol	6.8	U	3.4	6.8	6.8
91-58-7	2-Chloronaphthalene	5.6	U	2.8	5.6	5.6
88-74-4	2-Nitroaniline	6	U	3	6	6
131-11-3	Dimethylphthalate	6	U	3	6	6
606-20-2	2,6-Dinitrotoluene	5.6	U	2.8	5.6	5.6
99-09-2	3-Nitroaniline	5.6	U	2.8	5.6	5.6
51-28-5	2,4-Dinitrophenol	11.2	U	5.6	11.2	20
132-64-9	Dibenzofuran	5.4	U	2.7	5.4	5.4
121-14-2	2,4-Dinitrotoluene	5.6	U	2.8	5.6	5.6
100-02-7	4-Nitrophenol	8	U	4	8	8
7005-72-3	4-Chlorophenyl-phenylether	5	U	2.5	5	5
84-66-2	Diethylphthalate	5.6	U	2.8	5.6	5.6
100-01-6	4-Nitroaniline	3	U	1.5	3	4
534-52-1	4,6-Dinitro-2-methylphenol	8	U	4	8	8
86-30-6	N-Nitrosodiphenylamine	6.8	U	3.4	6.8	6.8
101-55-3	4-Bromophenyl-phenylether	4.6	U	2.3	4.6	4.6
118-74-1	Hexachlorobenzene	0.82	U	0.41	0.82	4
87-86-5	Pentachlorophenol	2.8	U	1.4	2.8	10
84-74-2	Di-n-butylphthalate	1.7	U	0.86	1.7	4
85-68-7	Butylbenzylphthalate	6	U	3	6	6
91-94-1	3,3'-Dichlorobenzidine	5.4	U	2.7	5.4	5.4
117-81-7	Bis(2-ethylhexyl)phthalate	8.8	U	4.4	8.8	8.8
117-84-0	Di-n-octylphthalate	4	U	2	4	4
109-06-8	2-Picoline	8	U	4	8	8
10595-95-6	N-Nitrosomethylethylamine	5.4	U	2.7	5.4	5.4
55-18-5	N-Nitrosodiethylamine	6.2	U	3.1	6.2	6.2
66-27-3	Methylmethanesulfonate	3.8	U	1.9	3.8	4

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138487MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 138487MB Lab File ID: 10188MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/23/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1249

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
62-50-0	Ethyl methanesulfonate	5	U	2.5	5	5
76-01-7	Pentachloroethane	5	U	2.5	5	20
930-55-2	N-Nitrosopyrrolidine	5.4	U	2.7	5.4	5.4
98-86-2	Acetophenone	8	U	4	8	8
59-89-2	N-Nitrosomorpholine	6	U	3	6	6
95-53-4	o-Toluidine	5.4	U	2.7	5.4	5.4
122-09-8	a,a-Dimethylphenethylamine	32	U	16	32	32
87-65-0	2,6-Dichlorophenol	7	U	3.5	7	7
1888-71-7	Hexachloropropene	4	U	2	4	4
924-16-3	N-Nitrosodibutylamine	5.4	U	2.7	5.4	5.4
120-58-1	Isosafrole	5.2	U	2.6	5.2	5.2
95-94-3	1,2,4,5-Tetrachlorobenzene	4.4	U	2.2	4.4	4.4
94-59-7	Safrole	5	U	2.5	5	5
130-15-4	1,4-Naphthoquinone	6.2	U	3.1	6.2	6.2
99-65-0	1,3-Dinitrobenzene	5	U	2.5	5	5
608-93-5	Pentachlorobenzene	4.4	U	2.2	4.4	4.4
134-32-7	1-Naphthylamine	3.6	U	1.8	3.6	4
91-59-8	2-Naphthylamine	5	U	2.5	5	5
58-90-2	2,3,4,6-Tetrachlorophenol	6	U	3	6	6
99-55-8	5-Nitro-o-toluidine	5.2	U	2.6	5.2	5.2
106-50-3	p-Phenylenediamine	4	U	2	4	4
62-44-2	Phenacetin	1.8	U	0.89	1.8	4
92-67-1	4-Aminobiphenyl	4	U	2	4	4
23950-58-5	Pronamide	1.6	U	0.81	1.6	4
82-68-8	Pentachloronitrobenzene(PCNB)	4	U	2	4	4
88-85-7	Dinoseb	8	U	4	8	8
56-57-5	4-Nitroquinoline-1-oxide	7.4	U	3.7	7.4	10

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138487MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 138487MB Lab File ID: 10188MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/23/12

Concentrated Extract Volume: 1 Date Extracted: 07/23/12

Level:(low/med) LOW Date Analyzed: 08/03/12 Time: 1249

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
91-80-5	Methapyriline	4.4	U	2.2	4.4	4.4
140-57-8	Aramite	8	U	4	8	8
60-11-7	p-Dimethylaminoazobenzene	1.2	U	0.62	1.2	4
53-96-3	2-Acetylaminofluorene	2.2	U	1.1	2.2	4
57-97-6	7,12-Dimethylbenz(a)anthracene	1.9	U	0.96	1.9	4
56-49-5	3-Methylcholanthrene	4.4	U	2.2	4.4	4.4
100-75-4	N-Nitrosopiperidine	5.6	U	2.8	5.6	5.6
99-35-4	1,3,5-Trinitrobenzene	4	U	2	4	4
2303-16-4	Diallate (Avadex)	1.7	U	0.84	1.7	4
465-73-6	Isodrin	5.2	U	2.6	5.2	5.2
510-15-6	Chlorobenzilate	1.6	U	0.78	1.6	4
143-50-0	Kepone	32	U	16	32	32
126-68-1	0,0,0-Triethylphosphorothioate	5.8	U	2.9	5.8	5.8

SEMI-VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

138487MB

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Lab File ID: 10188MB.D Lab Sample ID: 138487MB

Instrument ID: SMSD03 Date Extracted: 07/23/12

Matrix: WATER Date Analyzed: 08/03/12

Level:(low/med) LOW Time Analyzed: 1249

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	138488LCS	138488LCS	10188LCS.D	08/03/12	1312
2	Q1-TFS-MW-12	350657502	57502.D	08/03/12	1648
3	Q1-TFS-MW-16	350657503	57503.D	08/03/12	1712
4	Q1-TFS-MW-04	350657501	57501.D	08/03/12	1823

COMMENTS:

Page 1 of 1

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Form IV

2A

WATER SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. SAS No: SDG NO.: 3506575

Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
138487MB	42.4	25.5	68.0	63.2	81.2	86.6	0
138488LCS	47.0	29.2	73.8	76.4	94.9	85.6	0
Q1-TFS-MW-04	48.2	29.4	73.7	69.9	94.8	96.2	0
Q1-TFS-MW-12	41.2	24.7	65.0	62.6	80.4	81.0	0
Q1-TFS-MW-16	46.2	26.0	70.9	67.3	82.4	84.8	0

Control Limits

S1	=	2-Fluorophenol	20 -	110
S2	=	Phenol-d5	10 -	115
S3	=	Nitrobenzene-d5	40 -	110
S4	=	2-Fluorobiphenyl	50 -	110
S5	=	2,4,6-Tribromophenol	40 -	125
S6	=	p-Terphenyl-d14	50 -	135

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Lab File ID: DFTPP1.D DFTPP Injection Date: 08/02/12

Instrument ID: SMSD03 DFTPP Injection Time: 2036

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	20.4	
68	Less than 2.0% of mass 69	0	(0)1
69	Mass 69 relative abundance	46.2	
70	Less than 2.0% of mass 69	0.4	(0.88)1
127	10.0 - 80.0% of mass 198	42.7	
197	Less than 2.0% of mass 198	0.5	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	7	
275	10.0 - 60.0% of mass 198	35.9	
365	Greater than 1.0% of mass 198	6.8	
441	0.0 - 24.0% of mass 442	11.3	(14.49)2
442	Greater than 50.0% of mass 198	78.1	
443	15.0 - 24.0% of mass 442	15.8	(20.26)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD1103017	47072	8270CAL7.D	08/02/12	2058
2	STD1103016	47073	8270CAL6.D	08/02/12	2122
3	STD1103015	47074	8270CAL5.D	08/02/12	2145
4	STD1103014	47075	8270CAL4.D	08/02/12	2209
5	STD1103013	47076	8270CAL3.D	08/02/12	2233
6	STD1103012	47077	8270CAL2.D	08/02/12	2256
7	STD1103011	47078	8270CAL1.D	08/02/12	2320
8	SSC1103021	45872	8270SEC1.D	08/02/12	2343
9	STD1103036	45933	BSCAL7.D	08/03/12	0031
10	STD1103035	45934	BSCAL6.D	08/03/12	0054
11	STD1103034	45935	BSCAL5.D	08/03/12	0118
12	STD1103033	46734	BSCAL4.D	08/03/12	0141
13	STD1103032	45937	BSCAL3.D	08/03/12	0205
14	STD1103031	45938	BSCAL2.D	08/03/12	0228
15	STD1103030	45939	BSCAL1.D	08/03/12	0252
16	SSC1103039	44859	BSSEC.D	08/03/12	0315
17	STD1103028	47140	AP9CAL7.D	08/03/12	0339
18	STD1103027	47141	AP9CAL6.D	08/03/12	0402
19	STD1103026	47142	AP9CAL5.D	08/03/12	0426

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Lab File ID: DFTPP1.D DFTPP Injection Date: 08/02/12

Instrument ID: SMSD03 DFTPP Injection Time: 2036

GC Column: HPMS-5 ID: 0.25 (mm)

20	STD1103025	47143	AP9CAL4.D	08/03/12	0449
21	STD1103024	47144	AP9CAL3.D	08/03/12	0513
22	STD1103023	47145	AP9CAL2.D	08/03/12	0536
23	STD1103022	47146	AP9CAL1.D	08/03/12	0600

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Lab File ID: DFTPP2.D DFTPP Injection Date: 08/03/12

Instrument ID: SMSD03 DFTPP Injection Time: 0802

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	24.7	
68	Less than 2.0% of mass 69	0	(0)1
69	Mass 69 relative abundance	52.7	
70	Less than 2.0% of mass 69	0.4	(0.84)1
127	10.0 - 80.0% of mass 198	45.7	
197	Less than 2.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.8	
275	10.0 - 60.0% of mass 198	39.7	
365	Greater than 1.0% of mass 198	7.7	
441	0.0 - 24.0% of mass 442	13.2	(16.45)2
442	Greater than 50.0% of mass 198	80	
443	15.0 - 24.0% of mass 442	16.4	(20.53)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSC1103003	47166	AP9SEC2.D	08/03/12	0936

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Lab File ID: DFTPP3.D DFTPP Injection Date: 08/03/12

Instrument ID: SMSD03 DFTPP Injection Time: 1004

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	23.5	
68	Less than 2.0% of mass 69	1	(1.92)1
69	Mass 69 relative abundance	52.2	
70	Less than 2.0% of mass 69	0.2	(0.35)1
127	10.0 - 80.0% of mass 198	46.4	
197	Less than 2.0% of mass 198	0.3	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	7.1	
275	10.0 - 60.0% of mass 198	36.4	
365	Greater than 1.0% of mass 198	7.6	
441	0.0 - 24.0% of mass 442	12.8	(16.01)2
442	Greater than 50.0% of mass 198	79.8	
443	15.0 - 24.0% of mass 442	15	(18.73)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV1103019	47075	8270CCV2.D	08/03/12	1024
2	CCV1103038	46734	BSCCV2.D	08/03/12	1048
3	CCV1103029	47143	AP9CCV2.D	08/03/12	1111
4	138487MB	138487MB	10188MB.D	08/03/12	1249
5	138488LCS	138488LCS	10188LCS.D	08/03/12	1312
6	Q1-TFS-MW-12	350657502	57502.D	08/03/12	1648
7	Q1-TFS-MW-16	350657503	57503.D	08/03/12	1712
8	Q1-TFS-MW-04	350657501	57501.D	08/03/12	1823

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Lab File ID (Standard): 8270CAL4.D Date Analyzed: 8/2/2012

Instrument ID: SMSD03 Time Analyzed: 22:09

GC Column: HPMS-5 ID: 0.25 (mm)

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	348449		4.47	1112381		5.64	802993		7.33
	UPPER LIMIT	696898		4.97	2224762		6.14	1605986		7.83
	LOWER LIMIT	174224.5		3.97	556190.5		5.14	401496.5		6.83
	EPA SAMPLE NO.									
1	138487MB	303630		4.47	964580		5.63	677239		7.33
2	138488LCS	306024		4.47	967883		5.63	696950		7.33
3	Q1-TFS-MW-12	334523		4.47	1061560		5.63	785420		7.33
4	Q1-TFS-MW-16	311389		4.47	967079		5.63	727089		7.33
5	Q1-TFS-MW-04	397815		4.47	1318686		5.63	1039180		7.33

IS1 = 1,4-Dichlorobenzene-d4

IS2 = Naphthalene-d8

IS3 = Acenaphthene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Lab File ID (Standard): 8270CAL4.D Date Analyzed: 8/2/2012

Instrument ID: SMSD03 Time Analyzed: 22:09

GC Column: HPMS-5 ID: 0.25 (mm)

		IS4 AREA	#	RT	IS5 AREA	#	RT	IS6 AREA	#	RT
	MID CAL STD	1539881		8.79	2349372		11.38	2193686		12.71
	UPPER LIMIT	3079762		9.29	4698744		11.88	4387372		13.21
	LOWER LIMIT	769940.5		8.29	1174686		10.88	1096843		12.21
	EPA SAMPLE NO.									
1	138487MB	1387896		8.78	1801355		11.37	1887066		12.71
2	138488LCS	1423980		8.78	2123298		11.38	2027102		12.71
3	Q1-TFS-MW-12	1570634		8.78	2116474		11.38	2236678		12.71
4	Q1-TFS-MW-16	1453235		8.78	1962407		11.37	2083250		12.70
5	Q1-TFS-MW-04	1985261		8.79	2498618		11.38	2618713		12.70

IS4 = Phenanthrene-d10

IS5 = Chrysene-d12

IS6 = Perylene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

8

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 08/03/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 3.38 S2 : 4.13

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
1	DFTPP1	47137	DFTPP1.D	08/02/12	2036				
2	STD1103017	47072	8270CAL7.D	08/02/12	2058	3.38		4.14	
3	STD1103016	47073	8270CAL6.D	08/02/12	2122	3.38		4.14	
4	STD1103015	47074	8270CAL5.D	08/02/12	2145	3.38		4.13	
5	STD1103014	47075	8270CAL4.D	08/02/12	2209	3.38		4.13	
6	STD1103013	47076	8270CAL3.D	08/02/12	2233	3.37		4.12	
7	STD1103012	47077	8270CAL2.D	08/02/12	2256	3.37		4.12	
8	STD1103011	47078	8270CAL1.D	08/02/12	2320	3.37		4.12	
9	SSC1103021	45872	8270SEC1.D	08/02/12	2343	3.38		4.13	
10	STD1103036	45933	BSCAL7.D	08/03/12	0031				
11	STD1103035	45934	BSCAL6.D	08/03/12	0054				
12	STD1103034	45935	BSCAL5.D	08/03/12	0118				
13	STD1103033	46734	BSCAL4.D	08/03/12	0141				
14	STD1103032	45937	BSCAL3.D	08/03/12	0205				
15	STD1103031	45938	BSCAL2.D	08/03/12	0228				
16	STD1103030	45939	BSCAL1.D	08/03/12	0252				
17	SSC1103039	44859	BSSEC.D	08/03/12	0315				
18	STD1103028	47140	AP9CAL7.D	08/03/12	0339				
19	STD1103027	47141	AP9CAL6.D	08/03/12	0402				
20	STD1103026	47142	AP9CAL5.D	08/03/12	0426				
21	STD1103025	47143	AP9CAL4.D	08/03/12	0449				
22	STD1103024	47144	AP9CAL3.D	08/03/12	0513				
23	STD1103023	47145	AP9CAL2.D	08/03/12	0536				
24	STD1103022	47146	AP9CAL1.D	08/03/12	0600				
25	DFTPP2	47137	DFTPP2.D	08/03/12	0802				
26	SSC1103003	47166	AP9SEC2.D	08/03/12	0936				

			QC LIMITS
S1	=	2-Fluorophenol	(+/- 0.27 MINUTES)
S2	=	Phenol-d5	(+/- 0.27 MINUTES)
S3	=	Nitrobenzene-d5	(+/- 0.34 MINUTES)
S4	=	2-Fluorobiphenyl	(+/- 0.44 MINUTES)
S5	=	2,4,6-Tribromophenol	(+/- 0.44 MINUTES)
S6	=	p-Terphenyl-d14	(+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 08/03/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 3.38 S2 : 4.13

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
27	DFTPP3	47137	DFTPP3.D	08/03/12	1004				
28	CCV1103019	47075	8270CCV2.D	08/03/12	1024	3.37		4.13	
29	CCV1103038	46734	BSCCV2.D	08/03/12	1048				
30	CCV1103029	47143	AP9CCV2.D	08/03/12	1111				
31	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1137				
32	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1201				
33	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1225				
34	138487MB	138487MB	10188MB.D	08/03/12	1249	3.37		4.12	
35	138488LCS	138488LCS	10188LCS.D	08/03/12	1312	3.38		4.13	
36	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1336				
37	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1400				
38	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1424				
39	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1448				
40	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1512				
41	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1536				
42	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1600				
43	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1624				
44	Q1-TFS-MW-12	350657502	57502.D	08/03/12	1648	3.37		4.12	
45	Q1-TFS-MW-16	350657503	57503.D	08/03/12	1712	3.37		4.12	
46	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1735				
47	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1759				
48	Q1-TFS-MW-04	350657501	57501.D	08/03/12	1823	3.38		4.13	
49	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1846				
50	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1910				
51	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1934				
52	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	1957				

			QC LIMITS
S1	=	2-Fluorophenol	(+/- 0.27 MINUTES)
S2	=	Phenol-d5	(+/- 0.27 MINUTES)
S3	=	Nitrobenzene-d5	(+/- 0.34 MINUTES)
S4	=	2-Fluorobiphenyl	(+/- 0.44 MINUTES)
S5	=	2,4,6-Tribromophenol	(+/- 0.44 MINUTES)
S6	=	p-Terphenyl-d14	(+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 08/03/12

Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 3.38 S2 : 4.13

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
53	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	2020				
54	ZZZZZZ	ZZZZZZ	ZZZZZZ	08/03/12	2044				

			QC LIMITS
S1	=	2-Fluorophenol	(+/- 0.27 MINUTES)
S2	=	Phenol-d5	(+/- 0.27 MINUTES)
S3	=	Nitrobenzene-d5	(+/- 0.34 MINUTES)
S4	=	2-Fluorobiphenyl	(+/- 0.44 MINUTES)
S5	=	2,4,6-Tribromophenol	(+/- 0.44 MINUTES)
S6	=	p-Terphenyl-d14	(+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 138488LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Pyridine	40	13	32.5			22 - 70
N-Nitrosodimethylamine	40	21.9	54.8			25 - 110
Aniline	40	25.2	63.0			14 - 99
Bis(2-chloroethyl)ether	40	32.8	82.0			35 - 110
Phenol	40	12.2	30.5			0 - 115
2-Chlorophenol	40	25.7	64.2			35 - 105
1,3-Dichlorobenzene	40	22.8	57.0			30 - 100
1,4-Dichlorobenzene	40	23.1	57.8			30 - 100
1,2-Dichlorobenzene	40	23.1	57.8			35 - 100
Benzyl alcohol	40	24.6	61.5			30 - 110
2,2'-Oxybis(1-chloropropane)	40	31	77.5			25 - 130
2-Methylphenol	40	22.1	55.2			40 - 110
Hexachloroethane	40	21.1	52.8			30 - 95
N-Nitroso-di-n-propylamine	40	34.6	86.5			35 - 130
4-Methylphenol	40	23	57.5			30 - 110
Nitrobenzene	40	31.4	78.5			45 - 110
Isophorone	40	29.8	74.5			50 - 110
2-Nitrophenol	40	29.7	74.2			40 - 115
2,4-Dimethylphenol	40	34	85.0			30 - 110
Bis(2-chloroethoxy)methane	40	34.6	86.5			45 - 105
2,4-Dichlorophenol	40	30.3	75.8			50 - 105
1,2,4-Trichlorobenzene	40	23.9	59.8			35 - 105
4-Chloroaniline	40	32.3	80.8			15 - 110
Hexachlorobutadiene	40	23	57.5			25 - 105
4-Chloro-3-methylphenol	40	30.9	77.2			45 - 110
Hexachlorocyclopentadiene	40	17.2	43.0			13 - 80
2,4,6-Trichlorophenol	40	34.1	85.2			50 - 115
2,4,5-Trichlorophenol	40	31.8	79.5			50 - 110
2-Chloronaphthalene	40	30	75.0			50 - 105
2-Nitroaniline	40	37.1	92.8			50 - 115
Dimethylphthalate	40	36.6	91.5			25 - 125
2,6-Dinitrotoluene	40	34.6	86.5			50 - 115

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

110812 1314

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 138488LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
3-Nitroaniline	40	33.7	84.2			20 - 125
2,4-Dinitrophenol	80	74.3	92.9			15 - 140
Dibenzofuran	40	32.1	80.2			55 - 105
2,4-Dinitrotoluene	40	36	90.0			50 - 120
4-Nitrophenol	40	14.1	35.2			0 - 125
4-Chlorophenyl-phenylether	40	32.4	81.0			50 - 110
Diethylphthalate	40	36.8	92.0			40 - 120
4-Nitroaniline	40	42.4	106.0			35 - 120
4,6-Dinitro-2-methylphenol	40	34.1	85.2			40 - 130
N-Nitrosodiphenylamine	40	33.9	84.8			50 - 110
4-Bromophenyl-phenylether	40	32.4	81.0			50 - 115
Hexachlorobenzene	40	32	80.0			50 - 110
Pentachlorophenol	40	41.7	104.0			40 - 115
Di-n-butylphthalate	40	34.9	87.2			55 - 115
Butylbenzylphthalate	40	38	95.0			45 - 115
3,3'-Dichlorobenzidine	80	62.1	77.6			20 - 110
Bis(2-ethylhexyl)phthalate	40	38.9	97.2			40 - 125
Di-n-octylphthalate	40	38.3	95.8			35 - 135
2-Picoline	40	13.3	33.2			15 - 110
N-Nitrosomethylethylamine	40	22.4	56.0			25 - 131
N-Nitrosodiethylamine	40	26	65.0			46 - 111
Methylmethanesulfonate	40	17.7	44.2			15 - 103
Ethyl methanesulfonate	40	31.7	79.2			46 - 113
Pentachloroethane	40	22.2	55.5			27 - 99
N-Nitrosopyrrolidine	40	26.2	65.5			51 - 112
Acetophenone	80	60.9	76.1			45 - 118
N-Nitrosomorpholine	40	28.4	71.0			51 - 112
o-Toluidine	40	22.4	56.0			49 - 97
a,a-Dimethylphenethylamine	40	0	0.0 *			70 - 130
2,6-Dichlorophenol	40	34.1	85.2			50 - 135
Hexachloropropene	40	6.1	15.2 *			21 - 105
N-Nitrosodibutylamine	40	31.8	79.5			43 - 130

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

110812 1314

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS 138488LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Isosafrole	40	31	77.5			70 - 130
1,2,4,5-Tetrachlorobenzene	40	25.2	63.0			40 - 100
Safrole	40	35.2	88.0			52 - 100
1,4-Naphthoquinone	40	10.8	27.0 *			28 - 143
1,3-Dinitrobenzene	40	37.5	93.8			61 - 112
Pentachlorobenzene	40	30.8	77.0			50 - 99
1-Naphthylamine	40	18.8	47.0			38 - 91
2-Naphthylamine	40	19.6	49.0 *			70 - 130
2,3,4,6-Tetrachlorophenol	40	32.7	81.8			55 - 122
5-Nitro-o-toluidine	40	31.4	78.5			70 - 130
p-Phenylenediamine	40	30.6	76.5			58 - 107
Phenacetin	40	31.6	79.0			57 - 114
4-Aminobiphenyl	40	30.8	77.0			49 - 103
Pronamide	40	32.4	81.0			59 - 99
Pentachloronitrobenzene(PCNB)	40	41.6	104.0			60 - 104
Dinoseb	40	37.3	93.2			44 - 142
4-Nitroquinoline-1-oxide	40	28.7	71.8			10 - 125
Methapyriline	40	148	370.0 *			0 - 90
Aramite	40	30.4	76.0			41 - 127
p-Dimethylaminoazobenzene	40	29.2	73.0			70 - 130
2-Acetylaminofluorene	40	27.3	68.2			63 - 103
7,12-Dimethylbenz(a)anthracene	40	36.6	91.5			57 - 95
3-Methylcholanthrene	40	30.1	75.2			52 - 105
N-Nitrosopiperidine	40	29.8	74.5			53 - 112
1,3,5-Trinitrobenzene	40	18.5	46.2			29 - 163
Diallate (Avadex)	40	27.9	69.8			56 - 98
Isodrin	40	33.6	84.0			54 - 110
Chlorobenzilate	40	33	82.5			58 - 101
Kepone	40	33.6	84.0			0 - 165
0,0,0-Triethylphosphorothioate	40	28.3	70.8			50 - 106

Spike Recovery: 5 out of 94 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

110812 1314

Form III

8270 Standards Data

110812 1314

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =8270CAL1.D RRF10 =8270CAL2.D
RRF20 =8270CAL3.D RRF45 =8270CAL4.D RRF60 =8270CAL5.D

COMPOUND		RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
Pyridine		1.311	1.438	1.369	1.308	1.313		
N-Nitrosodimethylamine		0.480	0.579	0.517	0.481	0.476		
Aniline		1.674	1.882	1.673	1.572	1.596		
Bis(2-chloroethyl)ether		1.019	1.172	1.051	1.034	1.021		
Phenol	*	1.304	1.561	1.411	1.427	1.391		*
2-Chlorophenol		1.076	1.205	1.170	1.103	1.089		
1,3-Dichlorobenzene		1.267	1.551	1.358	1.318	1.360		
1,4-Dichlorobenzene	*	1.386	1.549	1.479	1.409	1.380		*
1,2-Dichlorobenzene		1.295	1.492	1.358	1.309	1.322		
Benzyl alcohol		0.773	0.888	0.792	0.751	0.769		
2,2'-Oxybis(1-chloropropane)		0.506	0.575	0.510	0.493	0.469		
2-Methylphenol		0.840	1.025	0.961	0.977	0.936		
Hexachloroethane		0.600	0.694	0.641	0.612	0.596		
N-Nitroso-di-n-propylamine	#	1.070	1.354	1.207	1.151	1.130		#
4-Methylphenol		1.290	1.608	1.427	1.412	1.405		
Nitrobenzene		0.509	0.595	0.541	0.499	0.516		
Isophorone		0.778	0.892	0.842	0.807	0.827		
2-Nitrophenol	*	0.188	0.233	0.207	0.207	0.212		*
2,4-Dimethylphenol		0.247	0.336	0.306	0.292	0.311		
Bis(2-chloroethoxy)methane		0.422	0.470	0.436	0.444	0.452		
2,4-Dichlorophenol	*	0.324	0.401	0.359	0.380	0.383		*
1,2,4-Trichlorobenzene		0.426	0.497	0.455	0.443	0.472		
4-Chloroaniline		0.413	0.491	0.445	0.447	0.446		
Hexachlorobutadiene	*	0.357	0.384	0.359	0.347	0.363		*
4-Chloro-3-methylphenol	*	0.321	0.404	0.348	0.355	0.364		*
Hexachlorocyclopentadiene	#	0.596	0.724	0.666	0.662	0.662		#
2,4,6-Trichlorophenol	*	0.423	0.497	0.465	0.470	0.479		*
2,4,5-Trichlorophenol		0.520	0.577	0.539	0.533	0.539		
2-Chloronaphthalene		1.073	1.224	1.122	1.133	1.129		
2-Nitroaniline		0.354	0.431	0.392	0.391	0.376		
Dimethylphthalate		1.341	1.558	1.463	1.428	1.399		
2,6-Dinitrotoluene		0.287	0.323	0.305	0.316	0.315		
3-Nitroaniline		0.267	0.299	0.298	0.276	0.265		
2,4-Dinitrophenol	#		0.192	0.225	0.244	0.255		#

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =8270CAL1.D RRF10 =8270CAL2.D
RRF20 =8270CAL3.D RRF45 =8270CAL4.D RRF60 =8270CAL5.D

COMPOUND		RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2	
Dibenzofuran		1.648	1.902	1.700	1.706	1.687			
2,4-Dinitrotoluene		0.381	0.457	0.409	0.409	0.410			
4-Nitrophenol	#	0.251	0.329	0.306	0.300	0.312			#
4-Chlorophenyl-phenylether		0.840	0.955	0.874	0.900	0.927			
Diethylphthalate		1.362	1.547	1.327	1.326	1.337			
4-Nitroaniline		0.300	0.271	0.241	0.264	0.256			
4,6-Dinitro-2-methylphenol			0.157	0.150	0.169	0.178			
N-Nitrosodiphenylamine	*	0.463	0.535	0.502	0.480	0.476			*
4-Bromophenyl-phenylether		0.266	0.310	0.291	0.281	0.295			
Hexachlorobenzene		0.305	0.344	0.319	0.323	0.318			
Pentachlorophenol	*	0.176	0.201	0.213	0.223	0.226			*
Di-n-butylphthalate		1.118	1.305	1.257	1.171	1.151			
Butylbenzylphthalate		0.376	0.448	0.399	0.389	0.379			
3,3'-Dichlorobenzidine		0.408	0.430	0.462	0.467	0.491			
Bis(2-ethylhexyl)phthalate		0.584	0.678	0.643	0.629	0.609			
Di-n-octylphthalate	*	0.786	1.017	0.969	0.975	0.948			*
2-Picoline		1.394	1.469	1.417	1.428	1.487			
N-Nitrosomethylethylamine		0.798	0.669	0.635	0.647	0.689			
N-Nitrosodiethylamine		0.544	0.669	0.643	0.646	0.674			
Methylmethanesulfonate		0.979	1.030	1.079	1.049	1.067			
Ethyl methanesulfonate		1.013	1.045	1.034	1.057	1.103			
Pentachloroethane		0.650	0.652	0.638	0.660	0.698			
N-Nitrosopyrrolidine		0.617	0.644	0.650	0.663	0.700			
Acetophenone		0.716	0.628	0.608	0.592	0.624			
N-Nitrosomorpholine		0.550	0.580	0.585	0.590	0.607			
o-Toluidine		1.986	2.105	2.084	2.125	2.181			
a,a-Dimethylphenethylamine		0.463	0.561	0.563	0.548	0.590			
2,6-Dichlorophenol		0.348	0.385	0.360	0.370	0.381			
Hexachloropropene		0.455	0.485	0.473	0.474	0.502			
N-Nitrosodibutylamine		0.291	0.351	0.347	0.333	0.359			
Isosafrole		0.294	0.350	0.319	0.340	0.352			
1,2,4,5-Tetrachlorobenzene		0.726	0.751	0.758	0.763	0.765			
Safrole		0.289	0.326	0.322	0.309	0.333			
1,4-Naphthoquinone		0.417	0.460	0.465	0.494	0.488			

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =8270CAL1.D RRF10 =8270CAL2.D
RRF20 =8270CAL3.D RRF45 =8270CAL4.D RRF60 =8270CAL5.D

COMPOUND	RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
1,3-Dinitrobenzene	0.208	0.195	0.214	0.216	0.221		
Pentachlorobenzene	0.740	0.741	0.749	0.782	0.758		
1-Naphthylamine	0.710	0.747	0.757	0.765	0.744		
2-Naphthylamine	1.010	0.926	0.986	1.002	0.992		
2,3,4,6-Tetrachlorophenol	0.405	0.423	0.438	0.462	0.457		
5-Nitro-o-toluidine	0.371	0.396	0.390	0.412	0.405		
p-Phenylenediamine	0.311	0.333	0.352	0.350	0.361		
Phenacetin	0.316	0.343	0.352	0.342	0.356		
4-Aminobiphenyl	0.700	0.734	0.718	0.691	0.718		
Pronamide	0.359	0.394	0.384	0.387	0.397		
Pentachloronitrobenzene(PCNB)	0.131	0.151	0.151	0.145	0.146		
Dinoseb	0.150	0.196	0.221	0.241	0.252		
4-Nitroquinoline-1-oxide	0.036	0.034	0.028	0.018	0.020		
Methapyriline		0.014	0.011	0.013	0.014		
Aramite	0.091	0.097	0.100	0.107	0.101		
p-Dimethylaminoazobenzene	0.197	0.212	0.234	0.245	0.245		
2-Acetylaminofluorene	0.337	0.417	0.456	0.490	0.493		
7,12-Dimethylbenz(a)anthracene	0.478	0.518	0.525	0.555	0.568		
3-Methylcholanthrene	0.528	0.557	0.574	0.618	0.634		
N-Nitrosopiperidine	0.153	0.180	0.185	0.183	0.189		
1,3,5-Trinitrobenzene	0.826	0.943	1.015	1.102	1.101		
Diallate (Avadex)	0.576	0.576	0.550	0.564	0.556		
Isodrin	0.149	0.153	0.149	0.146	0.153		
Chlorobenzilate	0.293	0.338	0.349	0.370	0.359		
Kepone	0.064	0.069	0.075	0.072	0.068		
0,0,0-Triethylphosphorothioate	0.848	0.866	0.942	1.003	1.015		
==========							
2-Fluorophenol(SURR)	1.008	1.143	1.086	1.055	1.046		
Phenol-d5(SURR)	1.329	1.498	1.388	1.356	1.347		
Nitrobenzene-d5(SURR)	0.576	0.631	0.568	0.555	0.564		
2-Fluorobiphenyl(SURR)	1.441	1.701	1.555	1.535	1.544		
2,4,6-Tribromophenol(SURR)	0.270	0.298	0.280	0.276	0.278		
p-Terphenyl-d14(SURR)	0.808	0.915	0.855	0.780	0.747		

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =8270CAL6.D RRF100 =8270CAL7.D

COMPOUND		RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
Pyridine		1.354	1.380				1.35328	3.5	
N-Nitrosodimethylamine		0.482	0.498				0.50174	7.3	
Aniline		1.642	1.646				1.6693	0.99895	
Bis(2-chloroethyl)ether		1.071	1.060				1.06117	5	
Phenol	*	1.438	1.474				1.42956	5.5	*
2-Chlorophenol		1.142	1.159				1.1349	4.2	
1,3-Dichlorobenzene		1.413	1.383				1.37854	6.5	
1,4-Dichlorobenzene	*	1.433	1.453				1.44124	4.1	*
1,2-Dichlorobenzene		1.344	1.361				1.35447	4.8	
Benzyl alcohol		0.767	0.812				0.79318	5.8	
2,2'-Oxybis(1-chloropropane)		0.474	0.475				0.50009	7.3	
2-Methylphenol		0.987	0.980				0.95793	6.1	
Hexachloroethane		0.611	0.604				0.62267	5.6	
N-Nitroso-di-n-propylamine	#	1.168	1.185				1.18064	7.5	#
4-Methylphenol		1.438	1.444				1.43204	6.5	
Nitrobenzene		0.523	0.525				0.52991	6	
Isophorone		0.832	0.821				0.82837	4.2	
2-Nitrophenol	*	0.217	0.220				0.21209	6.5	*
2,4-Dimethylphenol		0.322	0.318				0.30464	9.5	
Bis(2-chloroethoxy)methane		0.456	0.469				0.44962	3.8	
2,4-Dichlorophenol	*	0.394	0.395				0.37648	7.1	*
1,2,4-Trichlorobenzene		0.469	0.477				0.46267	5.1	
4-Chloroaniline		0.460	0.463				0.45205	5.2	
Hexachlorobutadiene	*	0.368	0.365				0.36345	3.1	*
4-Chloro-3-methylphenol	*	0.361	0.377				0.36133	7.1	*
Hexachlorocyclopentadiene	#	0.690	0.692				0.67016	5.9	#
2,4,6-Trichlorophenol	*	0.497	0.502				0.47633	5.8	*
2,4,5-Trichlorophenol		0.546	0.570				0.54618	3.7	
2-Chloronaphthalene		1.180	1.168				1.14689	4.2	
2-Nitroaniline		0.400	0.402				0.39238	6	
Dimethylphthalate		1.413	1.400				1.42881	4.7	
2,6-Dinitrotoluene		0.323	0.324				0.3132	4.3	
3-Nitroaniline		0.287	0.299				0.28434	5.3	
2,4-Dinitrophenol	#	0.268	0.278				0.2438	12.8	#

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =8270CAL6.D RRF100 =8270CAL7.D

COMPOUND		RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
Dibenzofuran		1.717	1.700				1.72292	4.8	
2,4-Dinitrotoluene		0.440	0.452				0.42279	6.5	
4-Nitrophenol	#	0.313	0.319				0.30432	8.3	#
4-Chlorophenyl-phenylether		0.959	0.967				0.91749	5.2	
Diethylphthalate		1.342	1.334				1.3678	5.9	
4-Nitroaniline		0.280	0.292				0.27192	7.6	
4,6-Dinitro-2-methylphenol		0.185	0.193				0.17194	9.6	
N-Nitrosodiphenylamine	*	0.499	0.510				0.49512	4.9	*
4-Bromophenyl-phenylether		0.299	0.307				0.29281	5.3	
Hexachlorobenzene		0.339	0.344				0.32743	4.6	
Pentachlorophenol	*	0.236	0.241				0.21647	10.3	*
Di-n-butylphthalate		1.155	1.083				1.17702	6.6	
Butylbenzylphthalate		0.387	0.363				0.3915	7	
3,3'-Dichlorobenzidine		0.503	0.489				0.46424	7.5	
Bis(2-ethylhexyl)phthalate		0.603	0.551				0.61388	6.7	
Di-n-octylphthalate	*	0.944	0.884				0.9318	8.1	*
2-Picoline		1.485	1.420				1.44274	2.6	
N-Nitrosomethylethylamine		0.669	0.636				0.67763	8.3	
N-Nitrosodiethylamine		0.676	0.661				0.64479	7.1	
Methylmethanesulfonate		1.044	1.001				1.03546	3.4	
Ethyl methanesulfonate		1.090	1.043				1.05506	3	
Pentachloroethane		0.694	0.678				0.66701	3.5	
N-Nitrosopyrrolidine		0.664	0.654				0.6562	3.8	
Acetophenone		0.619	0.631				0.63127	6.3	
N-Nitrosomorpholine		0.589	0.581				0.58321	2.9	
o-Toluidine		2.193	2.051				2.10355	3.4	
a,a-Dimethylphenethylamine		0.576	0.533				0.54764	7.6	
2,6-Dichlorophenol		0.389	0.376				0.37297	3.9	
Hexachloropropene		0.493	0.485				0.48114	3.2	
N-Nitrosodibutylamine		0.360	0.368				0.34426	7.5	
Isosafrole		0.355	0.356				0.33796	6.8	
1,2,4,5-Tetrachlorobenzene		0.795	0.787				0.76365	3	
Safrole		0.339	0.331				0.3211	5.3	
1,4-Naphthoquinone		0.505	0.496				0.47506	6.4	

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SMSD03 Calibration Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2058 End: 600

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =8270CAL6.D RRF100 =8270CAL7.D

COMPOUND	RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
1,3-Dinitrobenzene	0.229	0.222				0.21503	5	
Pentachlorobenzene	0.796	0.808				0.76779	3.6	
1-Naphthylamine	0.768	0.732				0.74614	2.7	
2-Naphthylamine	0.999	0.944				0.9798	3.3	
2,3,4,6-Tetrachlorophenol	0.468	0.479				0.4475	5.9	
5-Nitro-o-toluidine	0.416	0.410				0.39972	3.9	
p-Phenylenediamine	0.366	0.355				0.34697	5.5	
Phenacetin	0.360	0.353				0.3459	4.3	
4-Aminobiphenyl	0.715	0.678				0.70769	2.7	
Pronamide	0.402	0.390				0.3876	3.6	
Pentachloronitrobenzene(PCNB)	0.153	0.152				0.14689	5.1	
Dinoseb	0.258	0.250				0.22409	0.99912	
4-Nitroquinoline-1-oxide	0.017	0.016				0.02423	35.9	<-
Methapyriline	0.014	0.014				0.01331	10.4	
Aramite	0.109	0.107				0.10177	6.4	
p-Dimethylaminoazobenzene	0.253	0.253				0.23404	9.3	
2-Acetylaminofluorene	0.526	0.515				0.4619	14.3	
7,12-Dimethylbenz(a)anthracene	0.582	0.596				0.54581	7.5	
3-Methylcholanthrene	0.638	0.654				0.60032	7.9	
N-Nitrosopiperidine	0.186	0.186				0.18032	6.8	
1,3,5-Trinitrobenzene	1.107	1.103				1.02808	10.6	
Diallate (Avadex)	0.573	0.579				0.56783	2	
Isodrin	0.149	0.146				0.14929	1.7	
Chlorobenzilate	0.385	0.382				0.35379	8.9	
Kepone	0.068	0.063				0.06852	6.4	
0,0,0-Triethylphosphorothioate	1.045	1.049				0.96686	8.6	
==========								
2-Fluorophenol(SURR)	1.078	1.080				1.07088	3.9	
Phenol-d5(SURR)	1.396	1.401				1.38792	4	
Nitrobenzene-d5(SURR)	0.567	0.573				0.57639	4.4	
2-Fluorobiphenyl(SURR)	1.557	1.546				1.55434	4.9	
2,4,6-Tribromophenol(SURR)	0.294	0.305				0.28588	4.6	
p-Terphenyl-d14(SURR)	0.724	0.655				0.78342	11	

Average Used: 6

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SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 08/02/12 Time: 2343

CCV ID: SSC1103021 Lab File ID: 8270SEC1.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Pyridine		1.35328	1.24	8.4	AVRG	
N-Nitrosodimethylamine		0.50174	0.47538	5.3	AVRG	
Aniline		45	36	20.0	LINR	
Bis(2-chloroethyl)ether		1.06117	1.096	3.3	AVRG	
Phenol	*	1.42956	1.443	0.9	AVRG	*
2-Chlorophenol		1.1349	1.129	0.5	AVRG	
1,3-Dichlorobenzene		1.37854	1.396	1.3	AVRG	
1,4-Dichlorobenzene	*	1.44124	1.433	0.6	AVRG	*
1,2-Dichlorobenzene		1.35447	1.354	0.0	AVRG	
Benzyl alcohol		0.79318	0.73537	7.3	AVRG	
2,2'-Oxybis(1-chloropropane)		0.50009	0.49821	0.4	AVRG	
2-Methylphenol		0.95793	0.91342	4.6	AVRG	
Hexachloroethane		0.62267	0.61687	0.9	AVRG	
N-Nitroso-di-n-propylamine	#	1.18064	1.202	1.8	AVRG	#
4-Methylphenol		1.43204	1.4	2.2	AVRG	
Nitrobenzene		0.52991	0.52178	1.5	AVRG	
Isophorone		0.82837	0.85385	3.1	AVRG	
2-Nitrophenol	*	0.21209	0.20857	1.7	AVRG	*
2,4-Dimethylphenol		0.30464	0.33877	11.2	AVRG	
Bis(2-chloroethoxy)methane		0.44962	0.49374	9.8	AVRG	
2,4-Dichlorophenol	*	0.37648	0.38312	1.8	AVRG	*
1,2,4-Trichlorobenzene		0.46267	0.48139	4.0	AVRG	
4-Chloroaniline		0.45205	0.46021	1.8	AVRG	
Hexachlorobutadiene	*	0.36345	0.4082	12.3	AVRG	*
4-Chloro-3-methylphenol	*	0.36133	0.38592	6.8	AVRG	*
Hexachlorocyclopentadiene	#	0.67016	0.67523	0.8	AVRG	#
2,4,6-Trichlorophenol	*	0.47633	0.49319	3.5	AVRG	*
2,4,5-Trichlorophenol		0.54618	0.53097	2.8	AVRG	
2-Chloronaphthalene		1.14689	1.206	5.2	AVRG	
2-Nitroaniline		0.39238	0.40631	3.6	AVRG	
Dimethylphthalate		1.42881	1.486	4.0	AVRG	
2,6-Dinitrotoluene		0.3132	0.33516	7.0	AVRG	
3-Nitroaniline		0.28434	0.30287	6.5	AVRG	
2,4-Dinitrophenol	#	0.2438	0.27918	14.5	AVRG	#
Dibenzofuran		1.72292	1.763	2.3	AVRG	
2,4-Dinitrotoluene		0.42279	0.45886	8.5	AVRG	

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FORM VII

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SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 08/02/12 Time: 2343

CCV ID: SSC1103021 Lab File ID: 8270SEC1.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
4-Nitrophenol	#	0.30432	0.31467	3.4	AVRG	#
4-Chlorophenyl-phenylether		0.91749	0.94272	2.7	AVRG	
Diethylphthalate		1.3678	1.422	4.0	AVRG	
4-Nitroaniline		0.27192	0.29804	9.6	AVRG	
4,6-Dinitro-2-methylphenol		0.17194	0.16973	1.3	AVRG	
N-Nitrosodiphenylamine	*	0.49512	0.53277	7.6	AVRG	*
4-Bromophenyl-phenylether		0.29281	0.30236	3.3	AVRG	
Hexachlorobenzene		0.32743	0.33901	3.5	AVRG	
Pentachlorophenol	*	0.21647	0.2419	11.7	AVRG	*
Di-n-butylphthalate		1.17702	1.219	3.6	AVRG	
Butylbenzylphthalate		0.3915	0.4317	10.3	AVRG	
Bis(2-ethylhexyl)phthalate		0.61388	0.68482	11.6	AVRG	
Di-n-octylphthalate	*	0.9318	1.05	12.7	AVRG	*
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2-Fluorophenol(SURR)		1.07088	1.097	2.4	AVRG	
Phenol-d5(SURR)		1.38792	1.329	4.2	AVRG	
Nitrobenzene-d5(SURR)		0.57639	0.52885	8.2	AVRG	
2-Fluorobiphenyl(SURR)		1.55434	1.436	7.6	AVRG	
2,4,6-Tribromophenol(SURR)		0.28588	0.29917	4.6	AVRG	
p-Terphenyl-d14(SURR)		0.78342	0.73621	6.0	AVRG	

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SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 0315

CCV ID: SSC1103039 Lab File ID: BSSEC.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
3,3'-Dichlorobenzidine	0.46424	0.49281	6.2	AVRG
Acetophenone	0.63127	0.56839	10.0	AVRG

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SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 0936

CCV ID: SSC1103003 Lab File ID: AP9SEC2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	
2-Picoline	1.44274	1.49	3.3	AVRG	
N-Nitrosomethylethylamine	0.67763	0.63453	6.4	AVRG	
N-Nitrosodiethylamine	0.64479	0.63322	1.8	AVRG	
Methylmethanesulfonate	1.03546	1.133	9.4	AVRG	
Ethyl methanesulfonate	1.05506	1.315	24.6	AVRG	<-
Pentachloroethane	0.66701	0.69254	3.8	AVRG	
N-Nitrosopyrrolidine	0.6562	0.69724	6.3	AVRG	
Acetophenone	0.63127	0.59036	6.5	AVRG	
N-Nitrosomorpholine	0.58321	0.65026	11.5	AVRG	
o-Toluidine	2.10355	2.156	2.5	AVRG	
a,a-Dimethylphenethylamine	0.54764	0.6571	20.0	AVRG	
2,6-Dichlorophenol	0.37297	0.36891	1.1	AVRG	
Hexachloropropene	0.48114	0.47082	2.1	AVRG	
N-Nitrosodibutylamine	0.34426	0.3557	3.3	AVRG	
Isosafrole	0.33796	0.35641	5.5	AVRG	
1,2,4,5-Tetrachlorobenzene	0.76365	0.75603	1.0	AVRG	
Safrole	0.3211	0.30716	4.3	AVRG	
1,4-Naphthoquinone	0.47506	0.50337	6.0	AVRG	
1,3-Dinitrobenzene	0.21503	0.25012	16.3	AVRG	
Pentachlorobenzene	0.76779	0.79842	4.0	AVRG	
1-Naphthylamine	0.74614	1.081	44.9	AVRG	<-
2-Naphthylamine	0.9798	1.318	34.5	AVRG	<-
2,3,4,6-Tetrachlorophenol	0.4475	0.42458	5.1	AVRG	
5-Nitro-o-toluidine	0.39972	0.38686	3.2	AVRG	
p-Phenylenediamine	0.34697	0.36704	5.8	AVRG	
Phenacetin	0.3459	0.36326	5.0	AVRG	
4-Aminobiphenyl	0.70769	0.76585	8.2	AVRG	
Pronamide	0.3876	0.41555	7.2	AVRG	
Pentachloronitrobenzene(PCNB)	0.14689	0.16184	10.2	AVRG	
Dinoseb	45	47.1	4.7	LINR	
4-Nitroquinoline-1-oxide	0.02423	0.02246	7.3	AVRG	
Methapyriline	0.01331	0.23253	1647.0	AVRG	<-
Aramite	0.10177	0.10069	1.1	AVRG	
p-Dimethylaminoazobenzene	0.23404	0.25823	10.3	AVRG	
2-Acetylaminofluorene	0.4619	0.45215	2.1	AVRG	
7,12-Dimethylbenz(a)anthracene	0.54581	0.54796	0.4	AVRG	

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FORM VII

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SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 0936

CCV ID: SSC1103003 Lab File ID: AP9SEC2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	
3-Methylcholanthrene	0.60032	0.37581	37.4	AVRG	<-
N-Nitrosopiperidine	0.18032	0.18498	2.6	AVRG	
1,3,5-Trinitrobenzene	1.02808	0.58424	43.2	AVRG	<-
Diallate (Avadex)	0.56783	0.5651	0.5	AVRG	
Isodrin	0.14929	0.16718	12.0	AVRG	
Chlorobenzilate	0.35379	0.37015	4.6	AVRG	
Kepone	0.06852	0.08112	18.4	AVRG	
0,0,0-Triethylphosphorothioate	0.96686	1.054	9.0	AVRG	

Average Used: 46.9

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1024

CCV ID: CCV1103019 Lab File ID: 8270CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
Pyridine		1.35328	1.401	3.5	AVRG	
N-Nitrosodimethylamine		0.50174	0.55509	10.6	AVRG	
Aniline		45	44.2	1.8	LINR	
Bis(2-chloroethyl)ether		1.06117	1.069	0.7	AVRG	
Phenol	*	1.42956	1.49	4.2	AVRG	*
2-Chlorophenol		1.1349	1.122	1.1	AVRG	
1,3-Dichlorobenzene		1.37854	1.412	2.4	AVRG	
1,4-Dichlorobenzene	*	1.44124	1.472	2.1	AVRG	*
1,2-Dichlorobenzene		1.35447	1.351	0.3	AVRG	
Benzyl alcohol		0.79318	0.79475	0.2	AVRG	
2,2'-Oxybis(1-chloropropane)		0.50009	0.56791	13.6	AVRG	
2-Methylphenol		0.95793	0.98668	3.0	AVRG	
Hexachloroethane		0.62267	0.63854	2.5	AVRG	
N-Nitroso-di-n-propylamine	#	1.18064	1.224	3.7	AVRG	#
4-Methylphenol		1.43204	1.443	0.8	AVRG	
Nitrobenzene		0.52991	0.5213	1.6	AVRG	
Isophorone		0.82837	0.84542	2.1	AVRG	
2-Nitrophenol	*	0.21209	0.19572	7.7	AVRG	*
2,4-Dimethylphenol		0.30464	0.30172	1.0	AVRG	
Bis(2-chloroethoxy)methane		0.44962	0.43794	2.6	AVRG	
2,4-Dichlorophenol	*	0.37648	0.36494	3.1	AVRG	*
1,2,4-Trichlorobenzene		0.46267	0.44973	2.8	AVRG	
4-Chloroaniline		0.45205	0.4358	3.6	AVRG	
Hexachlorobutadiene	*	0.36345	0.36046	0.8	AVRG	*
4-Chloro-3-methylphenol	*	0.36133	0.35966	0.5	AVRG	*
Hexachlorocyclopentadiene	#	0.67016	0.67728	1.1	AVRG	#
2,4,6-Trichlorophenol	*	0.47633	0.47513	0.3	AVRG	*
2,4,5-Trichlorophenol		0.54618	0.52255	4.3	AVRG	
2-Chloronaphthalene		1.14689	1.166	1.7	AVRG	
2-Nitroaniline		0.39238	0.42605	8.6	AVRG	
Dimethylphthalate		1.42881	1.482	3.7	AVRG	
2,6-Dinitrotoluene		0.3132	0.30927	1.3	AVRG	
3-Nitroaniline		0.28434	0.28416	0.1	AVRG	
2,4-Dinitrophenol	#	0.2438	0.22959	5.8	AVRG	#
Dibenzofuran		1.72292	1.753	1.7	AVRG	
2,4-Dinitrotoluene		0.42279	0.40549	4.1	AVRG	

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FORM VII

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1024

CCV ID: CCV1103019 Lab File ID: 8270CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		Expected	Found	%D / %Drift	Curve Type	
4-Nitrophenol	#	0.30432	0.33777	11.0	AVRG	#
4-Chlorophenyl-phenylether		0.91749	0.91574	0.2	AVRG	
Diethylphthalate		1.3678	1.374	0.5	AVRG	
4-Nitroaniline		0.27192	0.25615	5.8	AVRG	
4,6-Dinitro-2-methylphenol		0.17194	0.16896	1.7	AVRG	
N-Nitrosodiphenylamine	*	0.49512	0.49308	0.4	AVRG	*
4-Bromophenyl-phenylether		0.29281	0.2894	1.2	AVRG	
Hexachlorobenzene		0.32743	0.32419	1.0	AVRG	
Pentachlorophenol	*	0.21647	0.21587	0.3	AVRG	*
Di-n-butylphthalate		1.17702	1.22	3.7	AVRG	
Butylbenzylphthalate		0.3915	0.37875	3.3	AVRG	
Bis(2-ethylhexyl)phthalate		0.61388	0.63829	4.0	AVRG	
Di-n-octylphthalate	*	0.9318	0.95559	2.6	AVRG	*
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2-Fluorophenol(SURR)		1.07088	1.065	0.5	AVRG	
Phenol-d5(SURR)		1.38792	1.4	0.9	AVRG	
Nitrobenzene-d5(SURR)		0.57639	0.57104	0.9	AVRG	
2-Fluorobiphenyl(SURR)		1.55434	1.578	1.5	AVRG	
2,4,6-Tribromophenol(SURR)		0.28588	0.28966	1.3	AVRG	
p-Terphenyl-d14(SURR)		0.78342	0.76105	2.9	AVRG	

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1048

CCV ID: CCV1103038 Lab File ID: BSCCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
3,3'-Dichlorobenzidine	0.46424	0.46306	0.3	AVRG
Acetophenone	0.63127	0.59437	5.8	AVRG

7

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1111

CCV ID: CCV1103029 Lab File ID: AP9CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
2-Picoline	1.44274	1.436	0.5	AVRG
N-Nitrosomethylethylamine	0.67763	0.61955	8.6	AVRG
N-Nitrosodiethylamine	0.64479	0.64169	0.5	AVRG
Methylmethanesulfonate	1.03546	1.043	0.7	AVRG
Ethyl methanesulfonate	1.05506	1.091	3.4	AVRG
Pentachloroethane	0.66701	0.66029	1.0	AVRG
N-Nitrosopyrrolidine	0.6562	0.62854	4.2	AVRG
Acetophenone	0.63127	0.56323	10.8	AVRG
N-Nitrosomorpholine	0.58321	0.61068	4.7	AVRG
o-Toluidine	2.10355	2.155	2.4	AVRG
a,a-Dimethylphenethylamine	0.54764	0.54018	1.4	AVRG
2,6-Dichlorophenol	0.37297	0.35948	3.6	AVRG
Hexachloropropene	0.48114	0.47463	1.4	AVRG
N-Nitrosodibutylamine	0.34426	0.34333	0.3	AVRG
Isosafrole	0.33796	0.33191	1.8	AVRG
1,2,4,5-Tetrachlorobenzene	0.76365	0.74289	2.7	AVRG
Safrole	0.3211	0.31853	0.8	AVRG
1,4-Naphthoquinone	0.47506	0.48493	2.1	AVRG
1,3-Dinitrobenzene	0.21503	0.2155	0.2	AVRG
Pentachlorobenzene	0.76779	0.76575	0.3	AVRG
1-Naphthylamine	0.74614	0.75708	1.5	AVRG
2-Naphthylamine	0.9798	1.025	4.6	AVRG
2,3,4,6-Tetrachlorophenol	0.4475	0.44667	0.2	AVRG
5-Nitro-o-toluidine	0.39972	0.40902	2.3	AVRG
p-Phenylenediamine	0.34697	0.35759	3.1	AVRG
Phenacetin	0.3459	0.35712	3.2	AVRG
4-Aminobiphenyl	0.70769	0.67964	4.0	AVRG
Pronamide	0.3876	0.40306	4.0	AVRG
Pentachloronitrobenzene(PCNB)	0.14689	0.15715	7.0	AVRG
Dinoseb	45	43.5	3.3	LINR
4-Nitroquinoline-1-oxide	0.02423	0.02155	11.1	AVRG
Methapyriline	0.01331	0.01158	13.0	AVRG
Aramite	0.10177	0.10248	0.7	AVRG
p-Dimethylaminoazobenzene	0.23404	0.2355	0.6	AVRG
2-Acetylaminofluorene	0.4619	0.48342	4.7	AVRG
7,12-Dimethylbenz(a)anthracene	0.54581	0.55357	1.4	AVRG

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FORM VII

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SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SMSD03 CalibrationDate: 08/03/12 Time: 1111

CCV ID: CCV1103029 Lab File ID: AP9CCV2.D Init. Calib. Date Begin: 08/02/12 End: 08/03/12

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type
3-Methylcholanthrene	0.60032	0.59463	0.9	AVRG
N-Nitrosopiperidine	0.18032	0.18228	1.1	AVRG
1,3,5-Trinitrobenzene	1.02808	1.124	9.3	AVRG
Diallate (Avadex)	0.56783	0.56187	1.0	AVRG
Isodrin	0.14929	0.14626	2.0	AVRG
Chlorobenzilate	0.35379	0.36871	4.2	AVRG
Kepone	0.06852	0.07203	5.1	AVRG
0,0,0-Triethylphosphorothioate	0.96686	1.039	7.5	AVRG

FL-PRO Organics

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CASE NARRATIVE
FL-PRO Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506575

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method FL-PRO

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for FL-PRO semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met with the exception of:

Sample Q1-TFS-MW-04 was recovered below criteria for the following surrogate: o-Terphenyl surrogate at 61 % with criteria of (82-142). The most probable cause for this recovery is matrix interference near the elution of the surrogate since there was a positive result for TPH at 9400ug/L. No further action was taken.

Samples coded accordingly.

D. Spikes:

CASE NARRATIVE
FL-PRO Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3506575

Client: CH2M Hill

1. Laboratory Control Spikes (LCS)

   All acceptance criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

   No spikes requested by client.

E. Internal Standards:

This method does not require the use of internal standards.

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

SIGNED: DATE: 07/26/2012

FL-PRO ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Method: FL-PRO

EPA Sample No	Lab Sample ID
Q1-TFS-MW-04	350657501
Q1-TFS-MW-12	350657502
Q1-TFS-MW-16	350657503

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FL-PRO Sample Data

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FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-04

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657501 Lab File ID 575-1.D

Sample wt/vol: 995 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1412

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	9400		251	502	502

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-12

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657502 Lab File ID 575-2.D

Sample wt/vol: 990 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1434

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	330	J	252	505	505

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Q1-TFS-MW-16

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS)

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 350657503 Lab File ID 575-3.D

Sample wt/vol: 985 Units: ML Date Received: 07/20/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 1457

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	320	J	254	508	508

FL-PRO QC Summary

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FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

138543MB

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Matrix: WATER Lab Sample ID: 138543MB Lab File ID: 10192MB.D

Sample wt/vol: 1000 Units: ML Date Received: 07/24/12

Concentrated Extract Volume: 2 Date Extracted: 07/24/12

Level:(low/med) LOW Date Analyzed: 07/25/12 Time: 0813

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*LOD*	*LOQ*
5289290-40-0	TPH	500	U	250	500	500

FL-PRO ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

138543MB

Lab Name: Spectrum Analytical, Inc Contract: NASKW Truck Fill Stand (TFS) 4268

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Lab File ID: 10192MB.D Lab Sample ID: 138543MB

Instrument ID: SFID01 Date Extracted: 07/24/12

Matrix: WATER Date Analyzed: 07/25/12

Level:(low/med) LOW Time Analyzed: 0813

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	138544LCS	138544LCS	10192LCS.D	07/25/12	0835
2	Q1-TFS-MW-04	350657501	575-1.D	07/25/12	1412
3	Q1-TFS-MW-12	350657502	575-2.D	07/25/12	1434
4	Q1-TFS-MW-16	350657503	575-3.D	07/25/12	1457

COMMENTS:

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Form IV

2A

WATER FL-PRO ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 3506575

Column(1): RTX-5 ID: 0.53 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
138543MB	86.0	63.3					0
138544LCS	87.0	80.0					0
Q1-TFS-MW-04	61.0 *	99.3					1
Q1-TFS-MW-12	86.1	85.5					0
Q1-TFS-MW-16	95.1	105.0					0

Control Limits

S1	=	o-Terphenyl Surrogate	82 -	142
S2	=	Nonatriacontane (C-39)	42 -	193

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

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FL-PRO ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date: 07/09/12

Instrument ID: SFID01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.05 S2 : 10.06

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	STD1097423	45519	PROCAL7.D	07/09/12	1304	4.13	10.35
2	STD1097422	45520	PROCAL6.D	07/09/12	1326	4.06	10.11
3	STD1097421	46244	PROCAL5.D	07/09/12	1349	4.04	10.02
4	STD1097420	46481	PROCAL4.D	07/09/12	1411	4.05	10.06
5	STD1097419	45526	PROCAL3.D	07/09/12	1433	4.04	10.01
6	STD1097418	45524	PROCAL2.D	07/09/12	1455	4.03	9.99
7	STD1097417	45525	PROCAL1.D	07/09/12	1518	4.04	10.03
8	SSC1097426	45526	PROSEC.D	07/09/12	1540	4.07	10.15
9	CCV1100838	46481	PROCCV1.D	07/25/12	0745	4.04	9.98
10	138543MB	138543MB	10192MB.D	07/25/12	0813	4.14	10.3
11	138544LCS	138544LCS	10192LCS.D	07/25/12	0835	4.07	10.09
12	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/25/12	0942		
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/25/12	1004		
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	07/25/12	1027		
15	CCV1100839	46481	PROCCV2.D	07/25/12	1304	4.05	10.05
16	Q1-TFS-MW-04	350657501	575-1.D	07/25/12	1412	4.07	10.1
17	Q1-TFS-MW-12	350657502	575-2.D	07/25/12	1434	4.06	10.07
18	Q1-TFS-MW-16	350657503	575-3.D	07/25/12	1457	4.06	10.07
19	CCV1100915	46481	PROCCV3.D	07/25/12	1627	4.04	9.99

			QC LIMITS
S1	=	o-Terphenyl Surrogate	(+/- 0.2 MINUTES)
S2	=	Nonatriacontane (C-39)	(+/- 0.46 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

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FORM VIII

3

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS

138544LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

COMPOUND	SPIKE ADDED ug/L	LCS CONCENTRATION ug/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	3400	2600	76.5			55 - 118

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

FL-PRO Standards Data

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FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

LAB FILE ID: RRF0.17 =PROCAL1.D RRF0.34 =PROCAL2.D
RRF0.85 =PROCAL3.D RRF1.7 =PROCAL4.D RRF2.55 =PROCAL5.D

COMPOUND	RRF0.17	RRF0.34	RRF0.85	RRF1.7	RRF2.55
TPH	15029423.53	11486597.06	8479840	7603171.176	7363051.373
==========					
Nonatriacontane (C-39)(SURR)	4344413.333	4886093.333	4848813.333	4905520	5494413.333
o-Terphenyl Surrogate(SURR)	8221600	8892820	8108340	7909660	8265300

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

LAB FILE ID: RRF3.4 =PROCAL6.D RRF5.1 =PROCAL7.D

COMPOUND	RRF3.4	RRF5.1			
TPH	8235711.765	7978104.706			
==========					
Nonatriacontane (C-39)(SURR)	5891386.667	6452733.333			
o-Terphenyl Surrogate(SURR)	7973540	7585720			

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FORM VI

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

COMPOUND	CURVE	COEFFICIENTS AO	A1	%RSD OR R^2
TPH	LINR	-0.072929	1.28183E-07	0.99534
==========				
Nonatriacontane (C-39)(SURR)	AVRG		5260481.9	13.8
o-Terphenyl Surrogate(SURR)	AVRG		8136711.43	5

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

Min RRF for SPCC(#) = 0 Max %RSD for CCC(*) = 0 %

LAB FILE ID: RT1: PROCAL1.D RT2: PROCAL2.D
RT3: PROCAL3.D RT4: PROCAL4.D RT5: PROCAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	TO
TPH	6.202	6.202	6.202	6.202	6.202			
==========								
Nonatriacontane (C-39)(SURR)	10.027	9.987	10.007	10.063	10.023			
o-Terphenyl Surrogate(SURR)	4.040	4.030	4.043	4.053	4.043			

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 42684

Lab Code : PEL Case No. SAS No: SDG No.: 3506575

Instrument ID: SFID01 Calibration Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time Begin: 1304 End: 1518

Min RRF for SPCC(#) = 0 Max %RSD for CCC(*) = 0 %

LAB FILE ID: RT6: PROCAL6.D RT7: PROCAL7.D

COMPOUND	RT6	RT7				MIDCAL RT	RT WINDOW FROM	TO
TPH	6.202	6.202				6.202	0.753	11.650
==========								
Nonatriacontane (C-39)(SURR)	10.110	10.353				10.063	9.603	10.523
o-Terphenyl Surrogate(SURR)	4.063	4.133				4.053	3.853	4.253

7SSC

FL-PRO ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SFID01 CalibrationDate: 07/09/12 Time: 1540

CCV ID: SSC1097426 Lab File ID: PROSEC.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.78	4.7	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	6066840	15.3	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	8466960	4.1	AVRG

7

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SFID01 CalibrationDate: 07/25/12 Time: 0745

CCV ID: CCV1100838 Lab File ID: PROCCV1.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.76	3.5	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	6299653.333	19.8	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	8837460	8.6	AVRG

7

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SFID01 CalibrationDate: 07/25/12 Time: 1304

CCV ID: CCV1100839 Lab File ID: PROCCV2.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.83	7.6	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	6463813.333	22.9	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	8831740	8.5	AVRG

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FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: NASKW Truck Fill Stand (TFS) 426847

Lab Code : PEL Case No.: SAS No: SDG No.: 3506575

Instrument ID: SFID01 CalibrationDate: 07/25/12 Time: 1627

CCV ID: CCV1100915 Lab File ID: PROCCV3.D Init. Calib. Date Begin: 07/09/12 End: 07/09/12

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	Expected	Found	%D / %Drift	Curve Type
TPH	1.7	1.96	15.3	LINR
==========				
Nonatriacontane (C-39)(SURR)	5260481.9	6539826.667	24.3	AVRG
o-Terphenyl Surrogate(SURR)	8136711.4	9551700	17.4	AVRG

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FORM VII

Chain of Custody Documentation

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SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

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3506575 MK

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 175 Metro Center Blvd, Warwick, RI 02886, (401) 732-3400

Special Handling:

TAT- Indicate Date Needed: 28 Day
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Bethany Garvey, CH2M HILL
Telephone #:
Project Mgr. Greg Rowell

Invoice To: Greg Rowell, CH2M HILL
P.O. No.: RQN:

Project No.: 426847
Site Name: Truck Fill Stand (TFS)
Location: NASKW, Key West State: FL
Sampler(s): Nikki Monroe

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below: 2 | 3

QA/QC Reporting Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		VOC 8260B	SVOC 8270D	SVOC 8270 SIM	FL-PRO					
-01	Q1-TFS-MW-04	7-19-12	0840	G	GW	3	6				3	2	2	2					
-02	Q1-TFS-MW-12	7-19-12	0950	G	GW	3	6				3	2	2	2					
-03	Q1-TFS-MW-16	7-19-12	1050	G	GW	3	6				3	2	2	2					
-04	Q1-TFS-TB-3	7-19-12	—	G	W	2					2								TB 3

Relinquished by:	Received by:	Date:	Time:	Temp°C
[signature]	Fed Ex	7-19-12	1230	4.5
	MK	7/20/12	09:45	5.1

☐ EDD Format CH2M HILL
☐ E-mail to greg.rowell@ch2m.com
PH < 2 8260, FL-Pro

Condition upon receipt:
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

3506575

152

ORIGIN ID: EYWA (504) 593-9421
CH2M HILL

3900 N CAUSEWAY BLVD STE 1250

METAIRIE, LA 700027272
UNITED STATES US

SHIP DATE: 19JUL12
ACTWGT: 59.9 LB
CAD: /POS1302
DIMS: 26x15x13 IN

BILL SENDER

TO **PEL**
SAMPLE CONTROL
8405 BENJAMIN RD
STE A
TAMPA FL 33634
(888) 811-1888 REF:
INV:
PO: DEPT:

FedEx Express

J1210111219012 5

1 of 2

TRK# 0200 **8993 7172 1256**

MASTER

34 TPFA

FRI - 20 JUL A1
PRIORITY OVERNIGHT

33634
FL-US **TPA**

Do Not Lift Using This Tag

Recipient's Name *Please print.*

Phone Number

ORIGIN ID: EYWA (504) 593-9421
CH2M HILL
3900 N CAUSEWAY BLVD STE 1250
METAIRIE, LA 700027272
UNITED STATES US

SHIP DATE: 19JUL12
ACTWGT: 56.0 LB
CAD: /POS1302
DIMS: 26x15x13 IN
BILL SENDER

TO PEL
SAMPLE CONTROL
8405 BENJAMIN RD
STE A
TAMPA FL 33634
(888) 811-1888
INV:
PO:
REF:

RT 163 1 A
1188
07.20
FZ

FedEx Express

J12011112190125

2 of 2
MPS# 0681 7955 4614 1188
Mstr# 8993 7172 1266

FRI - 20 JUL A1
PRIORITY OVERNIGHT

34 TPFA

33634
FL-US TPA

RT 163 1 A
1188
07.20
FZ

pH LOG SHEET

WO#: 3506575

Client/Project NAS Key West

SampNumber	Method	Matrix		pH	Containers	Temp	Acid	
350657501	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 20-Jul-12
350657501	8260	W	<	2	(3)		HCL	MKeohane 20-Jul-12
350657502	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 20-Jul-12
350657502	8260	W	<	2	(3)		HCL	MKeohane 20-Jul-12
350657503	FL-PRO	W	<	2	(2)		H2SO4	MKeohane 20-Jul-12
350657503	8260	W	<	2	(3)		HCL	MKeohane 20-Jul-12
350657504	8260	W	<	2	(2)		HCL	MKeohane 20-Jul-12

Sample Receipt Confirmation Sheet

Client Information

SDG:	3506575	**Level:**	3
Client:	CH2M Hill	**Date Rec'd:**	7/20/2012 9:45:00 AM
Profile:	91013	**Due Date:**	8/3/2012
Project:	Boca Chica Truck Fill Stand - JP-5	**Profile Name:**	NAS Key West

Sample Verification

Samples/Cooler Secure?	Yes	**COC Present?**	Yes
Temperature of Samples:	4.5 5.1	**All Samples on COC accounted For?**	Yes
Number of Coolers Received:	2	**All Samples Rec'd Intact?**	Yes
Temp Gun ID:	111533994	**Sample Vol. Sufficient For Analysis**	Yes
pH Verified?	Yes	**Samples Rec'd W/I Hold Time?**	Yes
pH WNL?	Yes	**Are All Samples to be Analyzed?**	Yes
Samples Received By:	Fed-Ex	**Correct Sample Containers?**	Yes
Tracking Number:	721256 795564	**COC Comments written on COC?**	Yes
Profile Picked By:	MG	**Samplers Initials on COC?**	Yes
Soil Origin (Domestic/Foreign):		**Sample Date/Time Indicated?**	Yes
Site Location/Project on COC?	Yes	**TAT Requested:**	STD
Client Project # on COC?	Yes	**Client Requests Verbal Results?**	No
Project Mgr. Indicated on COC?	Yes	**Client Requests Faxed Results?**	No
COC relinquished/Dated by Client?	Yes	**Specific Subcontract Indicated?**	No
COC Received/Dated by SA?	Yes	**Written on Outside Lab Board?**	No
Written on Internal COC?	Yes	**Radioactivity Check?**	No
Lab to Conduct ALL Analyses?	Yes		

Comments

Specific tests noted on COC.

Initial Layout Mark B.

LABEL REVIEW M. K

PEER REVIEW CF July 21, 2012

Client: CH2M Hill

WONo: 3506575 Profile Name: NAS Key West Profile #: 91013

MATRIX W

Sample #	Bottle	Parameter		Check	Received	Date
01	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/20/2012 11:54:58 AM
01	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/20/2012 11:54:58 AM
01	003	8260	Volatile Organic Compounds	In	Christopher Fryman	7/20/2012 11:54:58 AM
01	001	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	8/6/2012 9:15:04 AM
01	004	8270	GCMS semivolatile	In	Christopher Fryman	7/20/2012 11:54:58 AM
01	005	8270	GCMS semivolatile	In	Christopher Fryman	7/20/2012 11:54:58 AM
01	005	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/23/2012 11:11:55 AM
01	006	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/20/2012 11:54:59 AM
01	007	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/20/2012 11:54:59 AM
01	006	8270_SIM	GCMS semivolatile SIM	Consumed	Tammy Reuter	7/24/2012 10:10:11 AM
01	008	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/20/2012 11:54:59 AM
01	009	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/20/2012 11:54:59 AM
01	008	FL-PRO	Petroleum Hydrocarbons	Consumed	Ryan Bennett	7/26/2012 5:21:12 PM
02	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/20/2012 11:54:59 AM
02	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/20/2012 11:54:59 AM
02	003	8260	Volatile Organic Compounds	In	Christopher Fryman	7/20/2012 11:54:59 AM
02	002	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	8/6/2012 9:15:07 AM
02	004	8270	GCMS semivolatile	In	Christopher Fryman	7/20/2012 11:54:59 AM
02	005	8270	GCMS semivolatile	In	Christopher Fryman	7/20/2012 11:54:59 AM
02	005	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/23/2012 11:12:01 AM
02	006	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/20/2012 11:55:00 AM
02	007	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/20/2012 11:55:00 AM
02	007	8270_SIM	GCMS semivolatile SIM	Consumed	Tammy Reuter	7/24/2012 10:10:13 AM
02	008	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/20/2012 11:55:00 AM

02	009	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/20/2012 11:55:00 AM
02	009	FL-PRO	Petroleum Hydrocarbons	Consumed	Tammy Reuter	7/24/2012 10:07:02 AM
03	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/20/2012 11:55:00 AM
03	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/20/2012 11:55:00 AM
03	003	8260	Volatile Organic Compounds	In	Christopher Fryman	7/20/2012 11:55:00 AM
03	002	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	8/6/2012 9:14:59 AM
03	004	8270	GCMS semivolatile	In	Christopher Fryman	7/20/2012 11:55:00 AM
03	005	8270	GCMS semivolatile	In	Christopher Fryman	7/20/2012 11:55:00 AM
03	005	8270	GCMS semivolatile	Consumed	Ryan Bennett	7/23/2012 11:12:05 AM
03	006	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/20/2012 11:55:01 AM
03	007	8270_SIM	GCMS semivolatile SIM	In	Christopher Fryman	7/20/2012 11:55:01 AM
03	007	8270_SIM	GCMS semivolatile SIM	Consumed	Tammy Reuter	7/24/2012 10:10:15 AM
03	008	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/20/2012 11:55:01 AM
03	009	FL-PRO	Petroleum Hydrocarbons	In	Christopher Fryman	7/20/2012 11:55:01 AM
03	009	FL-PRO	Petroleum Hydrocarbons	Consumed	Tammy Reuter	7/24/2012 10:07:20 AM
04	001	8260	Volatile Organic Compounds	In	Christopher Fryman	7/20/2012 11:55:01 AM
04	002	8260	Volatile Organic Compounds	In	Christopher Fryman	7/20/2012 11:55:01 AM
04	001	8260	Volatile Organic Compounds	Consumed	Viviane Wenzel	8/6/2012 9:14:53 AM

Addendum

110812 1315

Letter of Acceptance

Customer Name:	CH2M Hill
Date and Time Received:	7/20/2012 9:45:00 AM
Date to be Reported:	8/10/2012
Laboratory Submission Number/SDG:	3506575

Project: NASKW Truck Fill Stand (TFS) 426847

Samples: The submission consisted of 4 samples, including QC, with sample identification shown in the attached data tables.

Tests: The Samples will be analyzed for EPA methods: 8260, 8270, 8270_SIM, FL-PRO.

Sample Custody/COC discrepancies:

None.

Notes:

Temp 4.5, 5.1
PH< 2 8260, FL-PRO

Distribution of Report to:

CH2M Hill
Attn: Greg Rowell

Note: Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis. Spectrum Analytical letters and reports are for the exclusive use of the client to whom they are addressed. Our letters and reports apply to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar materials.

Log-in Report

Level: 3

Total of: 13 analyses on 6 samples (including QC) *24-Jul-12*

Report/SDG #: 3506575

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-04	350657501		W	7/19/2012 8:40:00 AM	7/20/2012 9:45:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-12	350657502		W	7/19/2012 9:50:00 AM	7/20/2012 9:45:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-MW-16	350657503		W	7/19/2012 10:50:00 AM	7/20/2012 9:45:00 AM

Method		
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
Q1-TFS-TB-3	350657504		W	7/19/2012	7/20/2012 9:45:00 AM

Method		
8260	Volatile Organic Compounds	8260

Mark Gudnason [Tampa]

From: Mark Gudnason [Tampa]
Sent: Friday, August 03, 2012 4:01 PM
To: 'Bethany.Garvey@CH2M.com'; Camden.Robinson@CH2M.com; 'Greg.Rowell@CH2M.com'
Cc: Kevin Dunham [Tampa]; Brian Spann [Tampa]
Subject: FW: 3506575-8260- CH2Mill NASKW Truck Fill stand
Importance: High
Attachments: COC3506575.pdf

Good afternoon.

These samples were analyzed within hold for 8260 but due to instrument malfunction the data is not usable. The instrument is fixed and the 3 samples and Trip Blank are being run today, one day past the holding time. See the attached COC for your reference.

I apologize for any inconvenience this may cause.

Mark Gudnason
Senior Project Manager
Spectrum Analytical, Inc. Featuring Hanibal Technology, Florida Division
8405-A Benjamin Road
Tampa FL 33634
phone: 813-888-9507 ext. 242
fax: 813-889-7128
email: mgudnason@spectrum-analytical.com
Visit our website at www.spectrum-analytical.com

Mark Gudnason [Tampa]

From: Mark Gudnason [Tampa]
Sent: Monday, August 06, 2012 6:07 PM
To: 'Bethany.Garvey@CH2M.com'; Camden.Robinson@CH2M.com; 'Greg.Rowell@CH2M.com'
Subject: FW: 3506575-8260-Key West

Good afternoon.
This will be in the case narrative for the referenced method and SDG.

A. Sample Analysis:

The following samples were analyzed one day out of hold: Q1-TFS-MW-04, Q1-TFS-MW-12, Q1-TFS-MW-16, Q1-TFS-TB-3. The samples were originally analyzed in hold but due to instrument issues the data was not usable. The client was notified.

II. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8260B

III. PREPARATION

Water samples were prepared by SW846/5030 for EPA8260B volatiles analysis. All aspects of sample preparation proceeded without exception.

IV. ANALYSIS

A. Calibration:

All acceptance criteria were met with the exception of analytes listed in the table below. Attempts were made to bring the CCV within full compliance but due to holding time issues analysis proceeded. The CCV did meet average percent recovery.

CCV1102988					
Instrument	**VMS06**	**GC**	**Column**	**DB-624**	
Analyte	**AvgStd RRF**	**Avg RRF**	**Conc found**	**Conc Expected**	**% D**
Dichlorodifluoromethane	1.047125731	1.43425	36.5	50	27
Acrylonitrile	0.273943272	0.20695	125	100	25
trans-1,3-Dichloropropene	1.274734018	1.01994	62.5	50	25
Acetonitrile	0.079841926	0.06595	620	500	24
1,4-Dioxane	0.006989406	0.00464	1320	1000	32
Methacrylonitrile	0.311654996	0.24117	646	500	29.2
Propionitrile	0.11180481	0.07735	628	500	25.6
Average	used:	9.7			

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met .Please note that:

LCS 080312LCS61 was analyzed with the water samples on 08/03/12. The following

analyte(s) had marginal exceedance limit failures: Acetonitrile at 157 % with criteria of (22.8-136.2). The high range was exceeded and not hit was detected on the sample.

LCS 080312LCS61D was analyzed with the water samples on 08/03/12. The following analyte (s) had marginal exceedance limit failures: Acetonitrile at 139 % with criteria of (22.8-136.2). The high range was exceeded and not hit was detected on the samples.
Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.
Analytes were detected in Trip Blank Q1-TFS-TB-3. The following analyte(s) were detected below RL: Acetone at 3.2 ug/L.

Mark Gudnason [Tampa]

From: Mark Gudnason [Tampa]
Sent: Monday, August 06, 2012 6:08 PM
To: 'Bethany.Garvey@CH2M.com'; Camden.Robinson@CH2M.com; 'Greg.Rowell@CH2M.com'
Subject: FW: 3506575-8270-Key West

Good afternoon.
This will be in the case narrative for the referenced method and SDG.

A. Calibration:

SSC1103003 was the second source verification standard analyzed with the initial calibration on 08/03/12. The %D was over the 20% limit for the following compounds: Ethyl methanesulfonate (+24.6%), 1-Naphthylamine (+44.9%), 2-Naphthylamine (+34.6%), Methapyriline (+1647%), 3-Methylcholanthrene (-37.4%), 1,3,5-Trinitrobenzene (-43.2%). No further action was taken, since these compounds were not detected in any samples and were a result of a discrepancy between the primary and secondary standards. The secondary standard is also used to spike the LCS. Because of this difference, Methapyriline exceeded the calibration range in the LCS. No further action was taken, since this compound was not detected in any samples.

The Percent RSD was over the 15% limit for 4-Nitroquinoline-1-oxide for the initial calibration at 35.9%. No further action was taken, since this compound was not detected in any samples.

Spectrum Analytical Inc. does not analyze a low calibration standard at the requested RL for all analytes. The low calibration standard is 10 ug/L for the following analytes: 4,6-Dinitro-2-methylphenol, Methapyriline.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:

LCS 138488LCS was analyzed with the water samples extracted on 07/23/12. The following analytes were recovered below criteria: 1,4-Naphthoquinone at 27 % with criteria of (28-143), Hexachloropropene at 15.2 % with criteria of (21-105). The following analytes had marginal exceedance limit failures: 2-Naphthylamine at 49 % with criteria of (60-140), a,a-Dimethylphenethylamine at 0 % with criteria of (60-140), Methapyriline at 370 % with criteria of (0-105). No further action was taken. None of these compounds were detected in any samples.

Samples coded accordingly.

End Of Report

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