PORT OF OAKLAND

February 23, 2009

Mr. Steven Plunkett
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RE: RO#0000010_Second Semi-Annual 2008 Groundwater Monitoring and Remediation System Operation and Maintenance Report - Port of Oakland, 651 Maritime Street, Oakland, CA_2009-02-23

Dear Mr. Plunkett:

Please find enclosed the report entitled *Second Semi-Annual 2008 Groundwater Monitoring and Remediation System Operation and Maintenance Report - Port of Oakland, 651 Maritime Street, Oakland, CA ("Report")* dated February 2009, prepared by Micro Search Environmental Corporation ("MSE Group") on behalf of the Port of Oakland ("Port")[1]. This Report is being submitted in accordance with Alameda County Health Care Services Agency ("County") requirements, as specified in County letters dated March 23, 2006[2], January 19, 2007[3], and September 30, 2008.[4]

The Port has retained the MSE Group to perform groundwater monitoring and maintenance of the remediation system. Results of the second 2008 semi-annual sampling event are contained in the enclosed report. In addition, this report documents installation and development of four new monitoring wells, including soil sampling

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[1] The Site has been referred to historically as the "Shippers" and "Ringsby" sites, based on the Port tenants that occupied the site at the time of release discoveries. Prior to site redevelopment in 2004, the site was also referred to as 2277 and 2225 Seventh Street. After redevelopment, the Site address became 651 and 555 Maritime Street, although referenced hereafter (including within this Report) as only **651 Maritime Street *(Fuel Leak Case RO0000010).***

[2] Letter from Mr. Barney Chan (County) to Mr. Jeff Rubin (Port), regarding *Fuel Leak Cases RO0000010 and RO0000185, 2277 and 2225 7th St., Oakland, CA 94607*, dated March 23, 2006.

[3] Letter from Mr. Barney Chan (County) to Mr. Jeff Rubin (Port), regarding *Fuel Leak Cases RO0000010 and RO0000185, 2277 and 2225 7th St., Oakland, CA 94607*, dated January 19, 2007.

[4] Letter from Mr. Steven Plunkett (County) to Mr. Jeffrey Rubin (Port) regarding *Fuel Leak Case RO0000187 (Global ID# T0600100892), Port of Oakland, 651 Maritime Street, Oakland, CA*, dated September 30, 2008.

during drilling, and groundwater sampling after completion. These requirements were specified in the first three "Technical Comments" of the September 30, 2008 County letter referenced above. The next semi-annual monitoring event will be performed during the June/July 2009 time frame. If you have any questions or comments regarding the results, please contact Jeff Rubin at (510) 627-1134.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report prepared by the MSE Group are true and correct to the best of my knowledge. Please note that the report is stamped by a Registered Professional Engineer in the State of California.

Sincerely,

Jeffrey R. Jones
Supervisor
Environmental Programs and Planning

Jeffrey L. Rubin, CPSS, REA
Port Associate Environmental Scientist
Environmental Programs and Planning

Enclosure: noted

Cc (w encl.): Michele Heffes
James McCarty (Baseline Environmental)

Cc (w/o encl.): John Turney (MSE Group)
Yane Nordhav (Baseline Environmental)

Second Semi-Annual 2008 Groundwater Monitoring and Remediation System Operation and Maintenance Report

651 Maritime Street Oakland, California

February 2009

Prepared on behalf of:

Port of Oakland
530 Water Street
Oakland, California 94607

Prepared by:

302 Pendleton Way
Oakland, CA 94621
Phone: 510.383.9600
Fax: 510.383.9300

February 12, 2009

Mr. Jeffrey L. Rubin, CPSS REA
Associate Environmental Scientist
Port of Oakland
530 Water Street
Oakland, California 94607

Subject: Second Semi-Annual 2008 Groundwater Monitoring and Remediation System Operation and Maintenance Report, Port of Oakland, 651 Maritime Street, Oakland, California

Dear Mr. Rubin:

Enclosed please find the Second Semi-Annual 2008 Groundwater Monitoring and Remediation System Operation and Maintenance Report for 651 Maritime Street (formerly 2277 and 2225 Seventh Street), Alameda County Local Oversight Program case number RO0000010. This report has been prepared for submittal to Alameda County Health Care Services, Department of Environmental Health (ACHCS) on behalf of the Port of Oakland (the Port) as required in ACHCS' letter to the Port dated March 23, 2006. The ACHCS requires semi-annual groundwater monitoring and reporting at the Site.

This report also documents installation and development of four new monitoring wells, including soil sampling during drilling and groundwater sampling after completion. These additional requirements were specified by the first three "Technical Comments" in another ACHCS letter dated September 30, 2008.

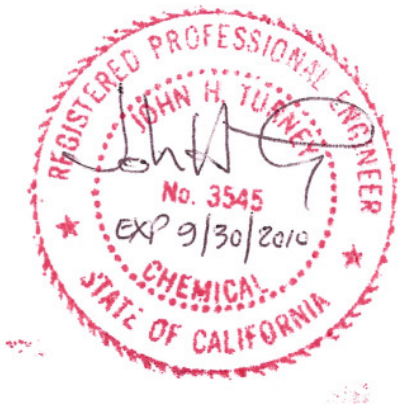
Since assuming operations of the product recovery system on January 1, 2008, the MSE Group (MSE) has continued to operate the product recovery system at the sites during this reporting period. The remediation system recovered approximately 123 gallons of free-phase product during the six month period from July 2008 through December 2008, and approximately 584 gallons since beginning operation on December 14, 2004.

If you have any questions or comments, please contact John Turney of MSE at (925) 787-8304.

Sincerely,

John H. Turney, P.E.
Project Manager

Enclosure



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1.0 INTRODUCTION

This February 2009 Semi-Annual Groundwater Monitoring and Remediation System Operation and Maintenance Report for 651 Maritime Street (formerly 2277 and 2225 Seventh Street) in Oakland, California (Site)[1] (Figure 1) has been prepared by the MSE Group (MSE) on behalf of the Port of Oakland (Port). This is the second semi-annual report for 2008, and includes the period from July through December of 2008. The Site has been impacted by petroleum releases from past operations of underground storage tanks (USTs) and the Alameda County Health Care Services (ACHCS) is providing regulatory oversight under the Local Oversight Program (LOP). The ACHCS LOP case number the Site is RO0000010.

The Site encompasses approximately 13 acres. The Port developed the eight acres of the eastern portion of the Site in 2004 into the Harbor Facilities Complex with an address of 651 Maritime Street. The remaining five acres of the Site were redeveloped by the Port in 2006 into the Maritime Support Center with an address of 555 Maritime Street and is currently leased to Shippers Transport Express (STE) (Figure 2).

In 1993, Uribe and Associates (Uribe) removed four Port-owned USTs from 2277 Seventh Street. Uribe collected soil samples from beneath the tanks at the time of UST removal and submitted them for laboratory analyses. The laboratory reported that the soil contained petroleum hydrocarbons in the diesel and gasoline range, as well as benzene, toluene, ethylbenzene, and total xylenes (BTEX) compounds. Uribe also observed free-phase product on the groundwater within the excavation. In 1994, Uribe installed three groundwater monitoring wells at 2277 Seventh Street (MW-1 through MW-3) and in 1995 Alisto Engineering Group (Alisto) installed five additional wells (MW-4 through MW-8). Quarterly groundwater monitoring was initiated in 1996 in accordance with a workplan (Uribe, 1994) approved by ACHCS, dated 18 April 1995.

Former Port tenant Ringsby Terminals (formerly Dongary Investments) and/or its tenant owned and operated nine USTs at 2225 Seventh Street. One of the tanks in the cluster failed a tank integrity test in 1989 and National Environmental Service Company (NESCO) removed the UST in March 1990. During the UST removal, NESCO collected soil and groundwater samples from the excavation. Analytical results indicated the presence of diesel and BTEX. Ramcon Engineering and Environmental Contracting (RAMCON) removed seven of the USTs (six diesel and one bulk fuel oil) in 1992. RAMCON observed a hole in the bulk fuel tank and an unspecified petroleum product created a sheen on the groundwater in the excavation. During a separate event in 1992, RAMCON removed the remaining UST (a waste oil tank). Soil samples collected from that excavation indicated the presence of diesel, motor oil, benzene, xylenes, and polynuclear aromatic compounds (PAHs). A liquid sample collected from the excavation contained diesel product. In 1993, RAMCON installed three groundwater monitoring wells

[1] The Site has been referred to in the past as the "Shippers" and "Ringsby" sites, based on the Port tenants occupying the site at the time of release discoveries. In addition, prior to site redevelopment in 2004, the site was referred to as 2277 and 2225 Seventh Street; the Site addresses after redevelopment are 651 and 555 Maritime Street, although referenced in this report as only 651 Maritime Street.

(MW-1 through MW-3) at the 2225 Seventh Street site and in 1994 quarterly groundwater monitoring began, as required by ACHCS.[2]

The impacted groundwater area consists of a co-mingled plume containing dissolved and free-phase hydrocarbons in the diesel range (Figure 2). In addition, MW-4 on the 2277 Seventh Street parcel has historically contained dissolved hydrocarbons in the gasoline range.

In 1996, the Port installed a remediation system at 2277 Seventh Street to recover the free-phase product. The free product recovery system was operated until it was removed in 2003. Removal of this product recovery system was approved by the ACHCS on 27 March 2003, with the stipulation that a new free product recovery system should be installed. In 1998, Harding Lawson Associates abandoned MW-8 to make possible the expansion of the railroad tracks north of 2277 Seventh Street and a replacement well, MW-8A, was installed in 2001. To facilitate the construction of the new Harbor Facilities Complex, groundwater monitoring wells MW-6 and MW-7 at 2277 Seventh Street and MW-1, MW-2, and MW-3 at 2225 Seventh Street were abandoned in 2002.

The Port has monitored groundwater quality at the Site since 1994. The ACHCS approved a modification of the groundwater monitoring frequency from quarterly to semi-annually in a letter to the Port dated 23 March 2006. The first semi-annual monitoring event occurred on 28 July 2006. The ACHCS also approved the use of Oxygen Releasing Compound™ (ORC) socks in MW-4 in that same letter. The ORC increases the dissolved oxygen (DO) concentration in groundwater and stimulates aerobic bio-degradation of the petroleum hydrocarbons reported in the groundwater at that location.

On September 30, 2008, ACHCS approved a plan to install four additional groundwater monitoring wells, labeled MW-9 through MW-12 on Figure 2, to enhance the existing monitoring well network and to replace four wells removed during site redevelopment.[3]

2.0 FIELD ACTIVITIES

On December 1 and 2, 2008, four soil borings were drilled, soil samples were collected and monitoring wells completed by Gregg Drilling and Testing, Inc. (Gregg), a C-57-licensed contractor. Prior to drilling, well permits were obtained from Alameda County Public Works Agency (ACPWA), who inspected and labeled the wells upon completion. The drilling locations were cleared by Underground Service Alert and a private utility locating service, Subtronic Corp.

Each boring was drilled to a depth of 25 feet below ground surface (bgs). Soil cuttings were continuously monitored with a photoionization detector (PID). In accordance with the work plan dated October 17, 2008, soil samples were taken every 5 feet, using California split spoon sampling methodology. The sample data were entered onto a chain of custody form and the samples were kept on ice until retrieved by a courier for delivery to TestAmerica Laboratories, Inc., a California ELAP-certified laboratory. MSE requested the following analyses:

[2] Letter from ACHCS to Dongary Investments dated 26 July 1994.
[3] Letter from Mr. Steven Plunkett (ACHCS) to Mr. Jeffrey Rubin (Port of Oakland) dated September 30, 2008.

- Total purgeable petroleum hydrocarbons in the gasoline range (TPHg), benzene, toluene, ethylbenzene and total xylenes (BTEX) and methyl tertiary-butyl ether (MTBE) in accordance with United States Environmental Protection Agency (EPA) Method 8260B;

- Total petroleum hydrocarbons in the diesel (TPHd) and motor oil (TPHmo) range in accordance with EPA Method 8015M with silica gel cleanup; and

- California Code of Regulations Title 22 (CAM 17) metals in accordance with EPA Method 6010.

The wells were constructed using 10 feet of 2" diameter, 0.010" machine slotted screen from 25 to 15 ft. bgs, followed by 2" diameter blank casing to the ground surface. The annular material is #2/16 Cemex Lapis Lustre filter pack sand from 25 to 13 ft., followed by 2 ft. of 3/8" uncoated bentonite chip hole-plug, followed by Basalite type II/V neat cement grout from 11 ft. bgs to the ground surface. The wells were finished with traffic-rated EMCO Wheaton flush-mounted well boxes. A complete well installation report by the geologist overseeing the soil boring and well installation is contained in Appendix A.

The new monitoring wells were developed on December 4, 2008, by Gregg using a well development rig to surge, bail, and pump each monitoring well to remove fine-grained material.

On December 12, 2008, approximately one week prior to conducting semi-annual groundwater monitoring, MSE removed the ORC socks from MW-4 that had been placed in MW-4 following the November 2007 semi-annual groundwater monitoring event.

On December 18, 2008, MSE measured the depth to groundwater (and product, if present) from the top of the well casing (TOC) to the nearest one-hundredth of a foot in the monitoring wells using a dual-phase interface probe. MSE decontaminated the dual-phase interface probe after each use by washing with an Alconox™ and water solution and then triple rinsing with deionized water.

MSE detected measurable free-phase product in monitoring wells MW-1 and MW-3; therefore, groundwater samples were not collected from these wells.

Prior to sampling, MSE purged monitoring wells MW-2, MW-4, MW-5, MW-8A, and MW-9 through MW-12 of at least three well casing volumes of groundwater using a peristaltic pump equipped with new disposable polyethylene and silicone tubing. Purging continued until the electrical conductivity, pH, DO, oxidation and reduction potential, and temperature of the groundwater had stabilized. The monitoring details for each well are provided on the groundwater sampling forms in Appendix B.

MSE collected groundwater samples from MW-2, MW-4, MW-5, MW-8A, and MW-9 through MW-12 using a peristaltic pump with the intake of the tubing placed a foot from the bottom of the well. A duplicate sample was collected from MW-4. MSE decanted the groundwater samples directly into certified-clean containers from the discharge end of the tubing. MSE labeled the sample containers with sample location, date, and time and then stored the samples in

a cooler containing ice. The water samples were submitted to Curtis and Tompkins, Ltd. (C&T) – a California certified analytical laboratory – under chain-of-custody protocol and requested the following analyses:

- Total purgeable petroleum hydrocarbons in the gasoline range (TPHg) in accordance with United States Environmental Protection Agency (EPA) Method 8015M;
- Total petroleum hydrocarbons in the diesel (TPHd) and motor oil (TPHmo) range in accordance with EPA Method 8015M with silica gel cleanup; and
- BTEX and methyl tertiary-butyl ether (MTBE) in accordance with EPA Method 8260B.

MSE generated approximately 50 gallons of purge water and decontamination water during the monitoring event. MSE placed the purge water into a 55-gallon drum, which was labeled with the Port's contact information and stored in a hazardous material storage locker located within Harbor Facilities Complex. The Port's environmental services contractor will arrange for proper purge water disposal.

3.0 ANALYTICAL RESULTS

3.1 Soil

Analytical results for the soil samples collected in December 2008 are summarized below and in Appendix A. The laboratory analytical reports are provided in Appendix A. Diesel, motor oil, and gasoline range organics were detected in soil samples from all the wells, although not from every sample in each well.

3.1.1 TPHg

Gasoline range organics were detected ranging from 1.1 milligram per kilogram (mg/kg) in soil from MW-11 at 6 ft bgs to 590 mg/kg in MW-9 at 11 ft bgs.

3.1.2 BTEX and MTBE

Analysis of the soil samples from the monitoring well borings detected no BTEX constituents above the environmental screening levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB) for shallow and deep soil for commercial/industrial land where the potentially contaminated groundwater is not a current or potential drinking water source. No BTEX constituents were detected in the majority of the samples collected. However, 15 mg/kg of total xylenes and 5 mg/kg of ethylbenzene were detected in the sample from MW-9 at 11 ft bgs and 0.074 mg/kg of total xylenes and 0.058 mg/kg of ethylbenzene were detected in the sample from MW-9 at 16 ft bgs. MTBE was not detected in any sample.

3.1.3 TPHd and TPHmo

Concentrations of diesel range organics ranged from 1.1 mg/kg in MW-9 at 16 ft bgs, to 3,800 mg/kg in MW-12 at 11 ft bgs. Motor oil range organics were detected ranging from 68 mg/kg in MW-10 at 16 ft bgs to 1,800 mg/kg in MW-12 at 11 ft bgs.

3.1.4 Title 22 (CAM-17) Metals

Arsenic was detected above its ESL for shallow and deep soil for commercial or industrial land where the potentially contaminated groundwater is not a current or potential drinking water source.

From shallow soil samples (above 11 ft bgs), the highest concentration of arsenic was 69 mg/kg, detected in the sample from MW-10 at 6 ft bgs, exceeding the ESL for arsenic of 1.6 mg/kg.

From soil samples below ~10 ft. bgs, the highest detected concentration of arsenic was 31 mg/kg in the sample from MW-10 at 11 feet bgs. The lowest concentration detected above the ESL was 14 mg/kg in the sample from MW-10 at 21 feet bgs. No other chemical constituent concentrations were detected that exceed the soil ESLs.

3.2 Groundwater

Analytical results for the groundwater samples collected in December 2008 are summarized on Figure 3 and Table 1. The laboratory analytical reports are provided in Appendix C. Historical analytical results for the Site, including samples collected by others, are summarized in Appendix D, Table D-2.

3.2.1 TPHg

The laboratory reported TPHg in all groundwater samples, ranging from 52 micrograms per liter (µg/L) in monitoring well MW-9 to 25,000 µg/L in monitoring well MW-12. The laboratory report indicated that all samples exhibited a chromatographic pattern that does not match the gasoline standard. Chromatographs for all samples are included in Appendix C.

3.2.2 BTEX and MTBE

The laboratory reported benzene in the groundwater sample from MW-2 at a concentration of 1.1 µg/L, and from MW-4 at a concentration of 0.5 µg/L (0.7 µg/L was reported in the duplicate sample). Ethylbenzene was reported in the groundwater sample from MW-2 and the duplicate sample from MW-4 at concentrations of 0.9 µg/L and 0.6 µg/L, respectively. The laboratory did not report any toluene or xylenes above the reporting limits in any of the samples. MTBE was detected in groundwater samples from wells MW-5, MW-8A, MW-10, MW-11 and MW-12 at concentrations ranging from 1.0 µg/L (MW-10) to 5.1 µg/L (MW-12).

3.2.3 TPHd and TPHmo

The laboratory reported TPHd in all groundwater samples, ranging from 72 µg/L in monitoring well MW-9 to 19,000 µg/L in monitoring well MW-12. The laboratory also reported TPHmo in groundwater samples from monitoring wells MW-8A and MW-10 through MW-12 at concentrations ranging from 430 µg/L (MW-10) to 2,200 µg/L (MW-8A). The laboratory report indicated that these samples exhibited a chromatographic pattern that does not match the motor oil standard. Chromatographs for all samples are included in Appendix C.

4.0 GROUNDWATER FLOW DIRECTION

MSE used the new surveyed elevations of the top of each groundwater monitoring well casing and the measured depth to groundwater to calculate the groundwater elevation and flow direction. Groundwater elevations ranged from 1.31 ft relative to the North American Vertical Datum of 1988 (NAVD88) in monitoring well MW-10 to 5.59 ft in monitoring well MW-5.

The groundwater elevation and product thickness data are summarized in Table 2. Product thickness is discussed in more detail below. Groundwater contours for December 2008 are presented on Figure 4 using elevation data from the wells used in previous reports. The groundwater flow direction at the time of measurement was toward the northeast at a gradient of 0.006 foot/foot. Historical groundwater and product levels for the Site are included in Appendix D, Table D-1.

5.0 QUALITY ANALYSIS AND QUALITY CONTROL

MSE collected a field duplicate sample from monitoring well MW-4 (MW-4Dup) to check sample collection procedures. Groundwater samples were stored with a trip blank prepared by C&T until delivered to the laboratory to check for cross-contamination; however the trip blank sample was not labeled or included in the chain of custody. MW-4Dup and a blank were analyzed for TPHd, TPHg, BTEX and MTBE.

The analytical laboratory reported concentrations of TPHg and benzene in groundwater samples from both MW-4 and MW-4Dup. The relative percent differences (RPD) between the original and the duplicate sample were twelve and thirty-three percent for TPHg and benzene, respectively:

$$\text{TPHg RPD } |99-88|/\ [(99+88)/2] = 12\%$$

$$\text{Benzene RPD } |0.7-0.5|/\ [(0.7+0.5)/2] = 33\%$$

The RPD for TPHg is less than the analytical laboratory's allowable RPD for matrix spike duplicates (20%), while the RPD for benzene is greater than the analytical laboratory's maximum allowable RPD for matrix spike duplicates (20%); however, the difference in concentrations between the sample and the duplicate was equal to, or less than the laboratory reporting limit.

C&T prepared a trip blank as a quality control water sample prepared by an analytical laboratory using deionized water. The trip blank was stored in a cooler to accompany groundwater samples from collection to transport to the laboratory. The laboratory did not report any TPHg, TPHd, TPHmo, BTEX, or MTBE in the blank, indicating that the groundwater samples were not compromised from sample preservation, storage, and analysis.

MSE also reviewed the laboratory data for completeness and accuracy (see Quality Control Checklist in Appendix C). All of the laboratory QA/QC goals were met, with the exception of high TPHg recoveries observed for the matrix spike (MS) and matrix spike duplicate (MSD) of groundwater sample from MW-12.

Based on the above QA/QC evaluation, MSE considers the data collected during the second semiannual 2008 groundwater monitoring event valid to provide a representation of Site conditions.

6.0 PRODUCT THICKNESS

MSE measured product thickness in monitoring wells MW-1 and MW-3 during the groundwater monitoring event on December 18, 2008. Product thickness in MW-1 was measured at 0.07 feet and in MW-3 at 1.22 feet (Table 2). Product has been removed from MW-3 in July and December 2008 using a peristaltic pump and polyethylene tubing as part of O&M activities. The product thickness in MW-3 has ranged from approximately 0.55 to 1.20 feet from July to December 2008 (Table 3). MSE placed product recovered from MW-3 in a 500-gallon concrete encased aboveground storage tank (Convault).

Product has also been observed in product recovery wells RW-1, RW-3, RW-4, RW-5, RW-6, RW-7, RW-8, and RW-9. RW-1 typically only contains a sheen. No product has been observed in RW-2. The observed area of free-phase product is shown on Figure 2.

7.0 PRODUCT RECOVERY SYSTEM SUMMARY

The Port installed the Free Product Recovery (FPR) system at the Harbor Facilities Complex in 2004 as required by the ACHCS in a letter dated 27 March 2003. The FPR system includes nine recovery wells, RW-1 through RW-9 (Figure 2). The Port installed a utility box around each recovery well wellhead, which includes plumbing for the airline, product discharge line, and a vacuum line. The Port operates six air-actuated skimmer pumps manufactured by Xitech Instruments, Inc. in the nine recovery wells. The placement of skimmer pumps depends on where free-phase product is detected. A programmable controller is used to set the frequency and duration that each skimmer pump runs. The skimmers discharge recovered product into a 500-gallon Convault equipped with primary and secondary containment. The Convault is also equipped with a sensor that activates a warning light and shuts off air supply to the skimmers if the tank is full.

MSE measured the product level in the recovery wells and checked the position of the pumps in the wells during the second six months of 2008. MSE adjusted the skimmer pumps depth, changed filters, and cleaned the skimmer pumps as necessary. Adjustments were made to the frequency and duration of operation for each skimmer pump. A summary of the operations and maintenance activities are included in Table 3.

In early June 2007, the product recovery system was upgraded to include application of low vacuum on the wellheads to improve product recovery. Inducing a vacuum on the wellhead results in an air discharge containing petroleum vapors, which are treated by two vessels arranged in series containing 1,000 pounds of vapor-phase granular activated carbon (GAC), each. Treatment and discharge conditions are provided in a Permit-to-Operate from the Bay Area Air Quality Management District (BAAQMD).

Prior to enhancement of the product recovery system with the installation of the low-vacuum blower, approximately 178 gallons of product were removed in 32 months (December 2004 through July 2007). After installation of the blower, an additional 406 gallons of product were recovered in seventeen months (August 2007 through December 2008). A total of 584 gallons of product have been recovered since operation of the new product recovery system began.

8.0 ORC TREATMENT – MW-4

On December 12, 2008, six days before groundwater monitoring was performed at the site, MSE removed the ORC sock from MW-4. Following sampling on December 18, 2008, a new ORC sock was placed in MW-4.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The results from the second semi-annual 2008 groundwater monitoring event indicated that the free-phase product plume is stable; free-phase product was confined to the monitoring wells that historically contained free product; MW-1 and MW-3.

The analytical results from the December 2008 semi-annual monitoring event indicated elevated concentrations of petroleum hydrocarbons in MW-2, MW-5, and MW-8A. The concentrations were one to two orders of magnitude greater than historical results from those wells. Based on this single event, it is not known whether the recent results constitute an anomaly. It is therefore recommended that the December 2008 monitoring event be repeated in February/March 2009, prior to the regularly scheduled semi-annual event. It is also recommended that free-phase product recovery continue in the recovery wells.

10.0 REFERENCES

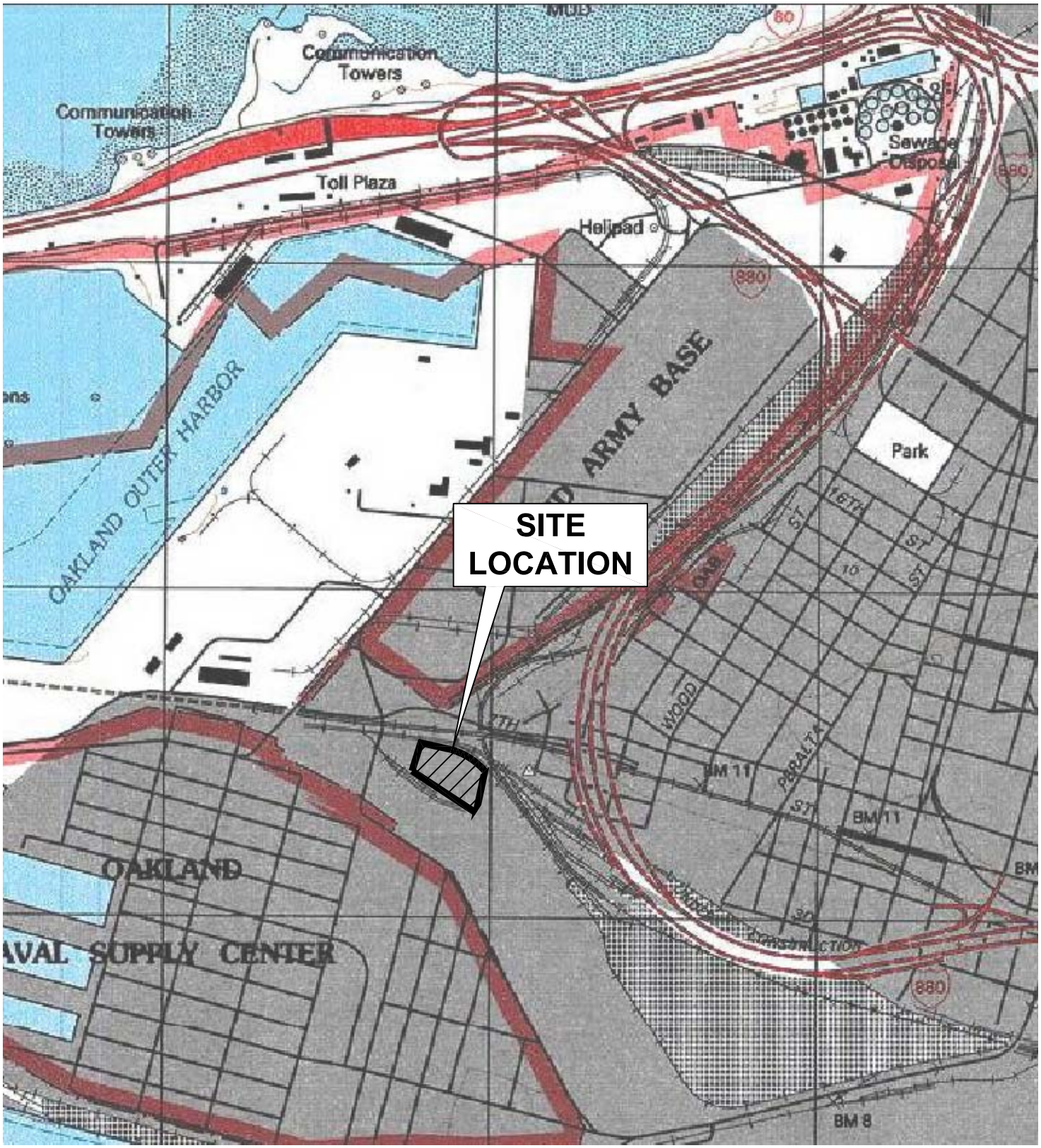
RWQCB, 2007; California Regional Water Quality Control Board, San Francisco Bay Region; 2007; *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final*, November.

Uribe, 1994; Uribe and Associates, 1994, Port of Oakland Building C-401, 2277 7th Street, Oakland, Report of Underground Storage Tank Removals, Appendix G – Workplan for Additional Site Characterization Activities, 23 February.

11.0 LIMITATIONS

The conclusions presented in this report are professional opinions based on the indicated data described in this report. They are intended only for the purpose, site, and project indicated. Opinions and recommendations presented herein apply to site conditions existing at the time of our study. Changes in the conditions of the subject property can occur with time, because of natural processes or the works of man, on the subject sites or on adjacent properties. Changes in applicable standards can also occur as the result of legislation or from the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control.

FIGURES



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SITE LOCATION MAP

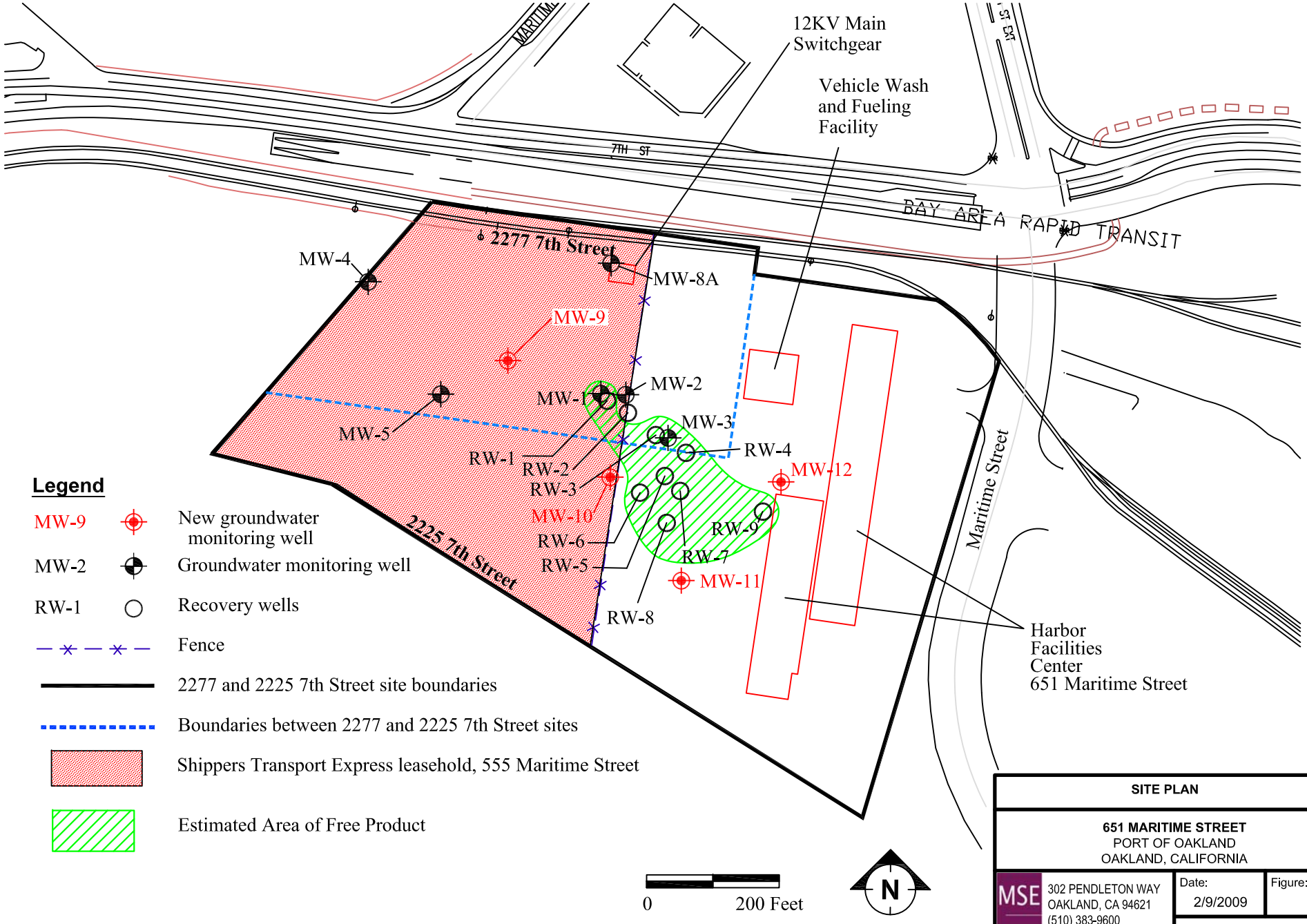
651 MARITIME STREET
PORT OF OAKLAND
OAKLAND, CALIFORNIA

MSE GROUP
302 PENDLETON WAY
OAKLAND, CA 94621
(510) 383-9600

Date: 02/09/2009

Figure: 1

SAmr_0902.dwg



SITE PLAN

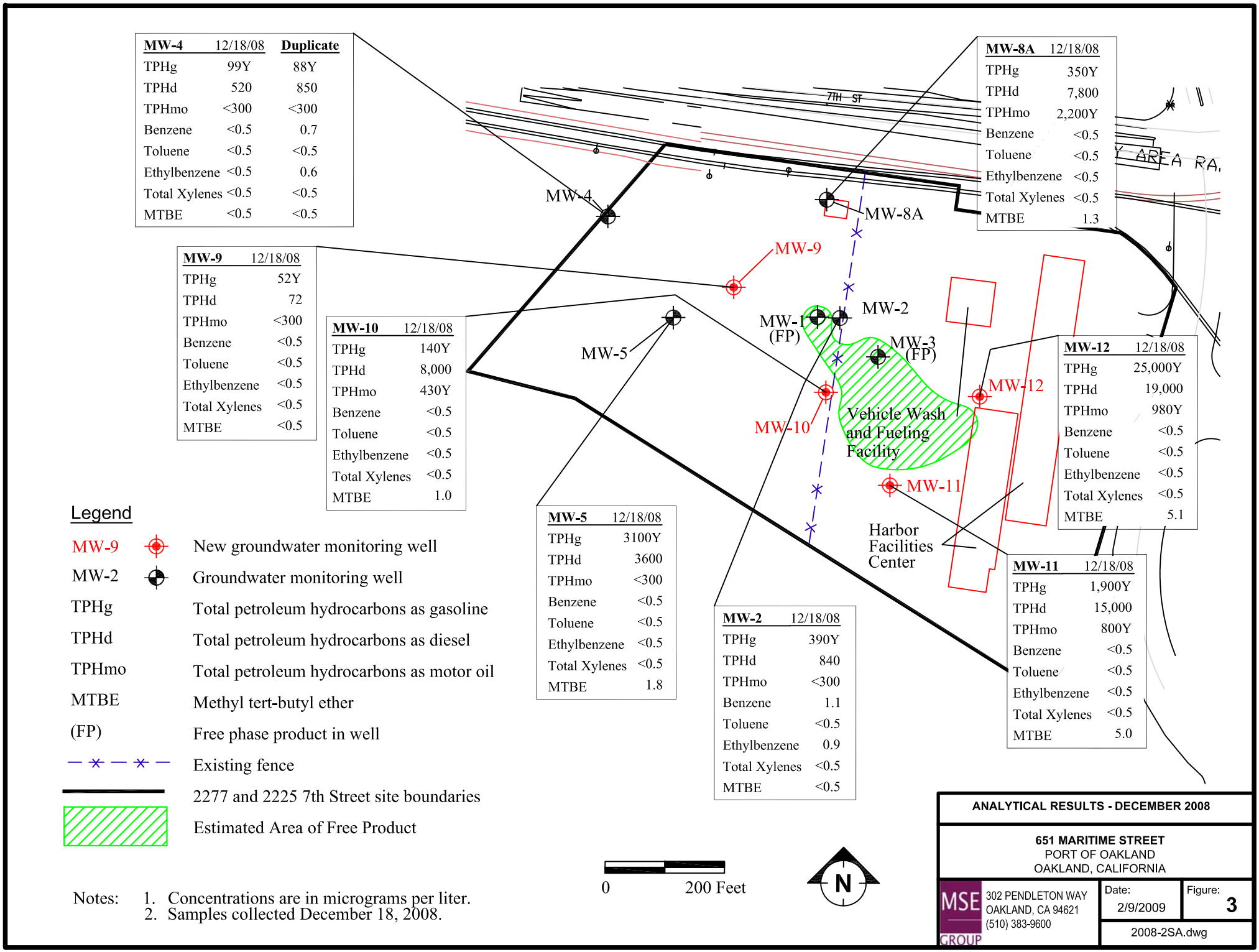
651 MARITIME STREET
PORT OF OAKLAND
OAKLAND, CALIFORNIA

MSE GROUP
302 PENDLETON WAY
OAKLAND, CA 94621
(510) 383-9600

Date: 2/9/2009

Figure: 2

2008-2SA.dwg



Notes:
1. Concentrations are in micrograms per liter.
2. Samples collected December 18, 2008.

ANALYTICAL RESULTS - DECEMBER 2008

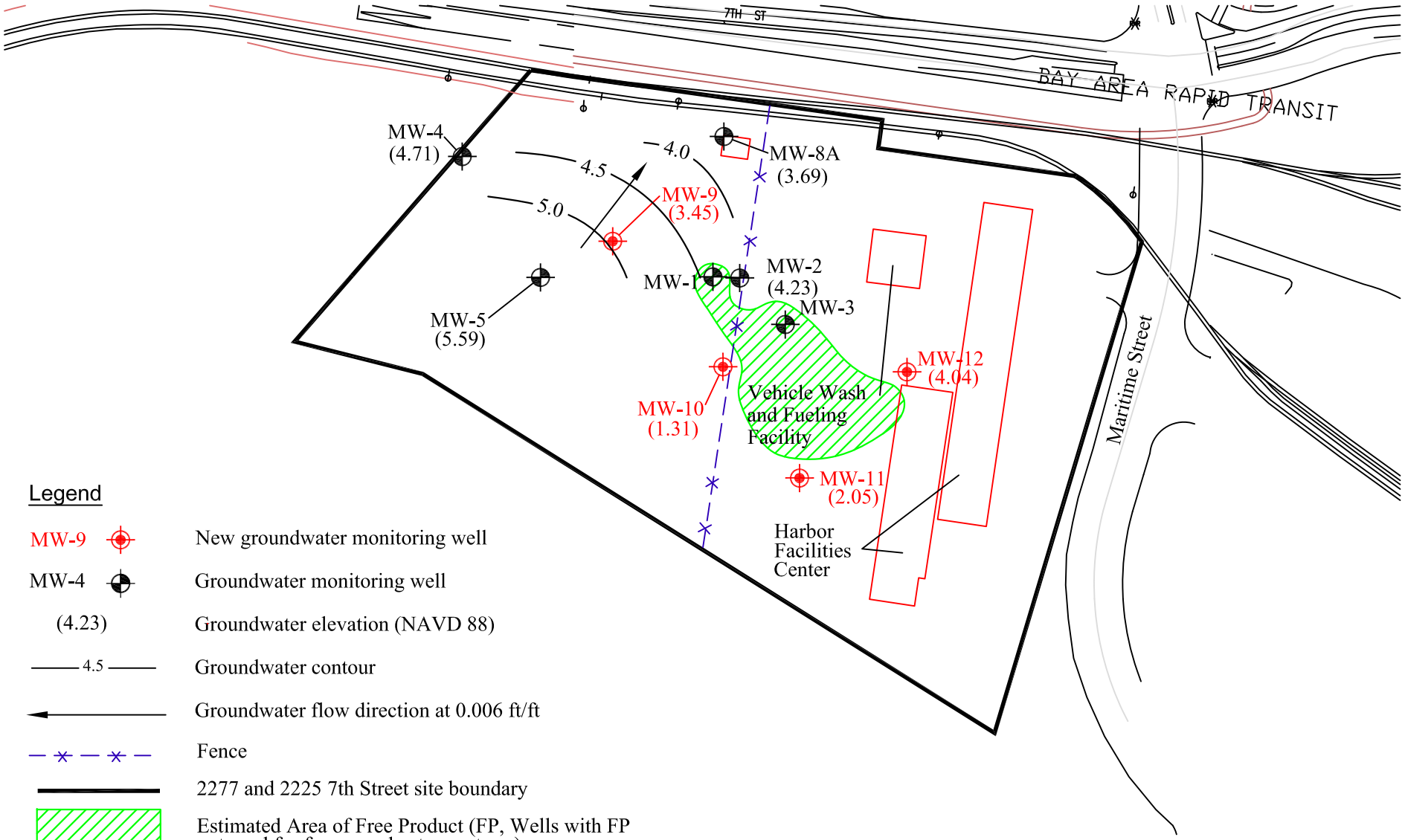
651 MARITIME STREET
PORT OF OAKLAND
OAKLAND, CALIFORNIA

MSE GROUP
302 PENDLETON WAY
OAKLAND, CA 94621
(510) 383-9600

Date: 2/9/2009

Figure: 3

2008-2SA.dwg



Legend

- MW-9 — New groundwater monitoring well
- MW-4 — Groundwater monitoring well
- (4.23) — Groundwater elevation (NAVD 88)
- 4.5 — Groundwater contour
- Groundwater flow direction at 0.006 ft/ft
- Fence
- 2277 and 2225 7th Street site boundary
- Estimated Area of Free Product (FP, Wells with FP not used for for groundwater contour.)

Notes:
1. North American Vertical Datum of 1988.
2. Only groundwater elevations from monitoring wells MW-2, -4, -5 and -8A were used to estimate contours.

0 200 Feet

N

GROUNDWATER ELEVATION - DECEMBER 2008

651 MARITIME STREET
PORT OF OAKLAND
OAKLAND, CALIFORNIA

MSE GROUP
302 PENDLETON WAY
OAKLAND, CA 94621
(510) 383-9600

Date: 2/9/2009

Figure: 4

2008-2SA.dwg

TABLES

Table 1: Groundwater Analytical Results - December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Monitoring Well	Date	TPHg µg/L	TPHd µg/L	TPHmo µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	MTBE µg/L
MW-2	12/18/2008	**390 Y**	**840**	<300	**1.1**	<0.5	**0.9**	<0.5	<0.5
MW-4	12/18/2008	**99 Y**	**520**	<300	0.5	<0.5	<0.5	<0.5	<0.5
MW-4 dup	12/18/2008	**88 Y**	**850**	<300	**0.7**	<0.5	**0.6**	<0.5	<0.5
MW-5	12/18/2008	**3,100 Y**	**3,600**	<300	0.5	<0.5	<0.5	<0.5	**1.8**
MW-8A	12/18/2008	**350 Y**	**7,800**	**2,200 Y**	<0.5	<0.5	<0.5	<0.5	**1.3**
MW-9	12/18/2008	**52 Y**	**72**	<300	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	12/18/2008	**140 Y**	**8,000**	**430 Y**	<0.5	<0.5	<0.5	<0.5	**1.0**
MW-11	12/18/2008	**1,900 Y**	**15,000**	**800 Y**	<0.5	<0.5	<0.5	<0.5	**5.0**
MW-12	12/18/2008	**25,000 Y**	**19,000**	**980 Y**	<0.5	<0.5	<0.5	<0.5	**5.1**
Blank	12/18/2008	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

See Figure 3 for monitoring well locations and concentrations.
µg/L = micrograms per liter.
TPHg = total petroleum hydrocarbons in gasoline range.
TPHd = total petroleum hydrocarbons in diesel range.
TPHmo = total petroleum hydrocarbons in motor oil range.
MTBE = methyl tert-butyl ether.
Blank = blank quality control sample.
<xx = not detected by the laboratory above the reporting limit, the value following the less than sign.
Bold indicates the analyte was reported above the laboratory reporting limit.
NA = not analyzed.
Y = sample exhibits a chromatographic pattern that does not resemble the standard.

Table 2: Groundwater Elevation - December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Monitoring Well	Date Measured	Top of Casing Elevation[1] (feet)	Depth to Product (feet btc)	Depth to Water (feet btc)	Product Thickness (feet)	Groundwater Elevation[1] (feet)
MW-1	12/18/2008	15.80	10.82	10.89	0.07	4.91
MW-2	12/18/2008	16.43	NP	12.20	--	4.23
MW-3	12/18/2008	15.66	10.78	12.00	1.22	3.66
MW-4	12/18/2008	15.91	NP	11.20	--	4.71
MW-5	12/18/2008	15.39	NP	9.80	--	5.59
MW-8A	12/18/2008	14.99	NP	11.30	--	3.69
MW-9	12/18/2008	16.33	NP	12.88	--	3.45
MW-10	12/18/2008	15.65	NP	14.34	--	1.31
MW-11	12/18/2008	15.47	NP	13.42	--	2.05
MW-12	12/18/2008	16.79	NP	12.75	--	4.04

Notes:
See Figure 4 for monitoring well locations and groundwater contour.
NP = no product detected with the interface probe.
-- = no measurable product in the well.
btc = below top of the well casing.
NAVD 88 = North American Vertical Datum of 1988.

[1] Elevation data relative to NAVD 88 datum. Wells surveyed January 24, 2009.

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 7/3/2008

Recovery Well	Depth to Product (feet)	Depth to Water (feet)	Product Thickness (feet)	Cycles/Period and Duration	Vacuum (in. H_2O)	Comments
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.90	10.95	0.05	P=7, D=10	10	
RW-4	10.70	11.22	0.52	P=2, D=10	11	
RW-5	--	--	--	--	--	Unable to check - truck parked on top.
RW-6	8.67	10.25	1.58	P=2, D=10	11	
RW-7	8.07	9.30	1.23	P=1, D=10	11	
RW-8	9.24	10.50	1.26	P=1, D=10	12	
RW-9	9.85	11.12	1.27	P=5, D=10	10	
MW-3	10.80	11.72	0.92		--	Removed approx 2 gallons.

Depth to product in Convault 2.35 feet Depth to water in Convault 2.37 feet Volume of Product in Convault 5 gallons
Approximate total volume recovered 32 gallons
PID Readings on vapor: Inlet: 69 ppmv Midpoint: 0.2 ppmv Final: 0 ppmv Flowrate: 45 CFM

Site Visit Date: 7/11/2008

Recovery Well	Depth to Product (feet)	Depth to Water (feet)	Product Thickness (feet)	Cycles/Period and Duration	Vacuum (in. H_2O)	Comments
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.87	10.91	0.04	P=7, D=10	12	
RW-4	10.65	11.10	0.45	P=2, D=10	12	
RW-5	--	--	--	--	--	Unable to check - truck parked on top.
RW-6	8.68	10.30	1.62	C=2, D=10	11	
RW-7	8.25	9.45	1.20	P=1, D=10	11	
RW-8	9.30	10.53	1.23	P=1, D=10	12	
RW-9	9.80	11.05	1.25	P=5, D=10	12	
MW-3	--	--	--		--	Street sweeper parked on top.

Depth to product in Convault 2.10 feet Depth to water in Convault 2.15 feet Volume of Product in Convault 13 gallons
Approximate total volume recovered 97 gallons
PID Readings on vapor: Inlet: 65 ppmv Midpoint: 0.3 ppmv Final: 0 ppmv

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 7/18/2008

Recovery Well	Depth to Product (feet)	Depth to Water (feet)	Product Thickness (feet)	Cycles/Period and Duration	Vacuum (in. H_2O)	Comments
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.90	11.17	0.27	P=7, D=10	12	
RW-4	10.60	10.85	0.25	P=2, D=10	11	
RW-5	--	--	--	--	--	Unable to check - truck parked on top.
RW-6	8.47	10.17	1.70	C=2, D=10	12	
RW-7	8.10	9.31	1.21	C=3, D=10	13	
RW-8	9.25	10.77	1.52	P=1, D=10	12	
RW-9	9.85	11.05	1.20	P=5, D=10	12	
MW-3	10.70	11.55	0.85		--	Removed aproximately 1 gallon.

Depth to product in Convault 2.27 feet Depth to water in Convault 2.30 feet Volume of Product in Convault 8 gallons
Approximate total volume recovered 52 gallons
PID Readings on vapor: Inlet: 66 ppmv Midpoint: 0.2 ppmv Final: 0 ppmv Flowrate: 44 CFM

Site Visit Date: 7/25/2008

Recovery Well	Depth to Product (feet)	Depth to Water (feet)	Product Thickness (feet)	Cycles/Period and Duration	Vacuum (in. H_2O)	Comments
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.87	11.08	0.21	P=7, D=10	12	
RW-4	10.65	10.95	0.30	P=2, D=10	11	
RW-5	--	--	--	--	--	Unable to check - truck parked on top.
RW-6	8.50	10.20	1.70	C=2, D=10	12	
RW-7	8.30	9.51	1.21	C=3, D=10	13	
RW-8	9.30	10.80	1.50	P=1, D=10	12	
RW-9	9.90	11.10	1.20	P=5, D=10	12	
MW-3	--	--	--	--	--	Street sweeper parked on top.

Depth to product in Convault 2.30 feet Depth to water in Convault 2.32 feet Volume of Product in Convault 5 gallons
Approximate total volume recovered 45 gallons
PID Readings on vapor: Inlet: 68 ppmv Midpoint: 0.4 ppmv Final: 0 ppmv Flowrate: 44 CFM

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 8/1/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.75	11.05	0.30	P=7, D=10	10	
RW-4	10.80	11.30	0.50	P=2, D=10	12	
RW-5	9.05	9.30	0.25	--	--	
RW-6	8.75	10.30	1.55	C=2, D=10	11	
RW-7	8.17	9.40	1.23	C=3, D=10	13	
RW-8	9.35	10.85	1.50	P=1, D=10	12	
RW-9	10.05	11.25	1.20	P=5, D=10	12	
MW-3	11.05	11.90	0.85	--	--	

Depth to product in Convault 2.50 feet Depth to water in Convault 2.55 feet Volume of Product in Convault -- gallons
Approximate total volume recovered -- gallons
PID Readings on vapor: Inlet: 72 ppmv Midpoint: 0.3 ppmv Final: 0 ppmv Flowrate: 45 CFM

Site Visit Date: 8/8/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.60	10.90	0.30	P=7, D=10	10	
RW-4	10.75	11.25	0.50	P=2, D=10	12	
RW-5	8.90	9.20	0.30	--	--	
RW-6	8.70	10.25	1.55	C=2, D=10	11	
RW-7	8.11	9.32	1.21	C=3, D=10	13	
RW-8	9.22	10.73	1.51	P=7, D=10	12	
RW-9	9.90	11.10	1.20	P=5, D=10	12	
MW-3	10.95	11.80	0.85	--	--	

Depth to product in Convault 2.20 feet Depth to water in Convault 2.50 feet Volume of Product in Convault 71 gallons
Approximate total volume recovered 71 gallons
PID Readings on vapor: Inlet: 68 ppmv Midpoint: 0.2 ppmv Final: 0 ppmv Flowrate: 44 CFM

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 8/15/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.20	10.50	0.30	P=7, D=10	10	
RW-4	10.35	10.85	0.50	P=2, D=10	12	
RW-5	8.50	8.80	0.30	--	--	
RW-6	8.30	9.85	1.55	C=2, D=10	11	
RW-7	7.70	8.92	1.22	C=3, D=10	13	
RW-8	8.82	10.33	1.51	P=7, D=10	12	
RW-9	9.50	10.70	1.20	P=5, D=10	12	
MW-3	--	--	--	--	--	Street sweeper parked on top.

Depth to product in Convault		2.15	feet	Depth to water in Convault	2.45	feet		Volume of Product in Convault		78	gallons		
Approximate total volume recovered		84	gallons										
PID Readings on vapor:	Inlet:	74	ppmv	Midpoint:	0.4	ppmv	Final:	0	ppmv	Flowrate:	45	CFM	

Site Visit Date: 8/22/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.50	10.80	0.30	P=7, D=10	10	
RW-4	10.60	11.20	0.60	P=2, D=10	12	
RW-5	--	--	--	--	--	Unable to check - truck parked on top.
RW-6	8.65	10.20	1.55	C=2, D=10	11	
RW-7	8.15	9.34	1.19	C=3, D=10	13	
RW-8	9.25	10.75	1.50	P=7, D=10	12	
RW-9	9.95	11.15	1.20	P=5, D=10	12	
MW-3	--	--	--		--	Street sweeper parked on top.

Depth to product in Convault		2.17	feet	Depth to water in Convault	2.51	feet		Volume of Product in Convault		79	gallons		
Approximate total volume recovered		79	gallons										
PID Readings on vapor:	Inlet:	71	ppmv	Midpoint:	0.4	ppmv	Final:	0	ppmv	Flowrate:	44	CFM	

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 8/29/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.35	10.65	0.30	P=7, D=10	9	
RW-4	10.50	11.10	0.60	P=2, D=10	10	
RW-5	--	--	--	--	--	Truck parked on top.
RW-6	8.57	10.12	1.55	C=2, D=10	10	
RW-7	8.10	9.29	1.19	C=3, D=10	12	
RW-8	9.20	10.70	1.50	P=7, D=10	12	
RW-9	9.89	11.09	1.20	P=5, D=10	11	
MW-3	--	--	--	--	--	Street sweeper parked on top.

Depth to product in Convault		2.15	feet	Depth to water in Convault	2.50	feet		Volume of Product in Convault		84	gallons		
Approximate total volume recovered		84	gallons										
PID Readings on vapor:	Inlet:	73	ppmv	Midpoint:	0.4	ppmv	Final:	0	ppmv	Flowrate:	45	CFM	

Site Visit Date: 9/5/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.30	10.60	0.30	P=7, D=10	9	
RW-4	10.45	11.00	0.55	P=2, D=10	10	
RW-5	--	--	--	--	--	Truck parked on top.
RW-6	8.50	10.05	1.55	C=2, D=10	10	
RW-7	8.05	9.24	1.19	C=3, D=10	12	
RW-8	9.10	10.60	1.50	P=7, D=10	12	
RW-9	9.80	11.00	1.20	P=5, D=10	11	
MW-3	--	--	--	--	--	Street sweeper parked on top.

Depth to product in Convault		2.13	feet	Depth to water in Convault	2.47	feet		Volume of Product in Convault		89	gallons		
Approximate total volume recovered		89	gallons										
PID Readings on vapor:	Inlet:	70	ppmv	Midpoint:	0.4	ppmv	Final:	0	ppmv	Flowrate:	44	CFM	

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 9/12/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.35	10.65	0.30	P=7, D=10	9	
RW-4	10.47	11.05	0.58	P=2, D=10	10	
RW-5	8.80	9.00	0.20	--	--	
RW-6	8.55	10.10	1.55	C=2, D=10	10	
RW-7	8.10	9.29	1.19	C=3, D=10	12	
RW-8	9.15	10.65	1.50	P=7, D=10	12	
RW-9	9.85	11.05	1.20	P=5, D=10	11	
MW-3	10.90	11.75	0.85	--	--	

Depth to product in Convault			2.17	feet	Depth to water in Convault		2.45	feet		Volume of Product in Convault		73	gallons
Approximate total volume recovered			79	gallons									
PID Readings on vapor:	Inlet:	71	ppmv		Midpoint:	0.4	ppmv		Final:	0	ppmv	Flowrate:	44	CFM

Site Visit Date: 9/19/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.30	10.60	0.30	P=7, D=10	9	
RW-4	10.45	11.00	0.55	P=2, D=10	10	
RW-5	8.85	9.10	0.25	--	--	
RW-6	8.50	10.05	1.55	C=2, D=10	10	
RW-7	8.08	9.27	1.19	C=3, D=10	12	
RW-8	9.10	10.60	1.50	P=7, D=10	12	
RW-9	9.80	11.00	1.20	P=5, D=10	11	
MW-3	10.85	11.70	0.85	--	--	

Depth to product in Convault			2.19	feet	Depth to water in Convault		2.46	feet		Volume of Product in Convault		71	gallons
Approximate total volume recovered			73	gallons									
PID Readings on vapor:	Inlet:	70	ppmv		Midpoint:	0.3	ppmv		Final:	0	ppmv	Flowrate:	44	CFM

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 9/26/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.50	11.07	0.57	P=7, D=10	9	
RW-4	10.40	11.05	0.65	P=7, D=10	10	
RW-5	8.90	9.15	0.25	--	--	
RW-6	8.60	10.15	1.55	C=2, D=10	10	
RW-7	8.10	9.30	1.20	C=3, D=10	12	
RW-8	9.20	10.70	1.50	P=5, D=10	12	
RW-9	9.90	11.10	1.20	P=5, D=10	11	
MW-3	10.92	11.83	0.91	--	--	

Depth to product in Convault 2.10 feet Depth to water in Convault 2.39 feet Volume of Product in Convault 76 gallons
Approximate total volume recovered 97 gallons
PID Readings on vapor: Inlet: 72 ppmv Midpoint: 0.4 ppmv Final: 0 ppmv Flowrate: 45 CFM

Site Visit Date: 10/3/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.55	11.15	0.60	P=7, D=10	9	
RW-4	10.50	11.20	0.70	P=7, D=10	10	
RW-5	8.95	9.20	0.25	--	--	
RW-6	8.65	10.20	1.55	C=2, D=10	10	
RW-7	8.20	9.40	1.20	C=3, D=10	12	
RW-8	9.25	10.75	1.50	P=7, D=10	12	
RW-9	9.85	11.05	1.20	P=5, D=10	11	
MW-3	10.95	11.85	0.90	--	--	

Depth to product in Convault 2.07 feet Depth to water in Convault 2.39 feet Volume of Product in Convault 84 gallons
Approximate total volume recovered 105 gallons
PID Readings on vapor: Inlet: 72 ppmv Midpoint: 0.4 ppmv Final: 0 ppmv Flowrate: 45 CFM

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 10/10/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.40	11.00	0.60	P=7, D=10	9	
RW-4	10.45	11.15	0.70	P=7, D=10	10	
RW-5	8.90	9.10	0.20	--	--	
RW-6	8.60	10.10	1.50	C=2, D=10	10	
RW-7	8.10	9.30	1.20	C=3, D=10	12	
RW-8	9.10	10.50	1.40	P=5, D=10	11	
RW-9	9.80	11.00	1.20	P=5, D=10	11	
MW-3	10.90	11.80	0.90	--	--	

Depth to product in Convault -- feet Depth to water in Convault -- feet Volume of Product in Convault -- gallons
Approximate total volume recovered -- gallons
PID Readings on vapor: Inlet: -- ppmv Midpoint: -- ppmv Final: -- ppmv Flowrate: -- CFM

Site Visit Date: 10/17/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.60	11.20	0.60	P=7, D=10	9	
RW-4	10.55	11.25	0.70	P=7, D=10	10	
RW-5	9.00	9.30	0.30	--	--	
RW-6	8.70	10.25	1.55	C=2, D=10	10	
RW-7	8.25	9.45	1.20	C=3, D=10	12	
RW-8	9.30	10.80	1.50	P=7, D=10	11	
RW-9	9.90	10.10	0.20	P=5, D=10	11	
MW-3	11.00	11.90	0.90	--	--	

Depth to product in Convault -- feet Depth to water in Convault -- feet Volume of Product in Convault -- gallons
Approximate total volume recovered -- gallons
PID Readings on vapor: Inlet: -- ppmv Midpoint: -- ppmv Final: -- ppmv Flowrate: -- CFM

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 10/24/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.30	11.00	0.70	P=7, D=10	9	
RW-4	10.55	11.25	0.70	P=7, D=10	10	
RW-5	--	--	--	--	--	Truck parked on top.
RW-6	8.50	10.05	1.55	C=2, D=10	10	
RW-7	8.05	9.25	1.20	C=3, D=10	12	
RW-8	9.10	10.60	1.50	P=7, D=10	11	
RW-9	9.70	10.90	1.20	P=5, D=10	11	
MW-3	--	--	--	--	--	Street cleaner parked on top.

Depth to product in Convault -- feet Depth to water in Convault -- feet Volume of Product in Convault -- gallons
Approximate total volume recovered -- gallons
PID Readings on vapor: Inlet: -- ppmv Midpoint: -- ppmv Final: -- ppmv Flowrate: -- CFM

Site Visit Date: 10/31/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	11.10	11.40	0.30	P=7, D=10	9	
RW-4	11.25	11.57	0.32	P=7, D=10	10	
RW-5	--	--	--	--	--	Truck parked on top.
RW-6	9.00	10.10	1.10	C=2, D=10	10	
RW-7	8.55	9.70	1.15	C=3, D=10	12	
RW-8	9.10	10.20	1.10	P=7, D=10	11	
RW-9	10.10	11.00	0.90	P=5, D=10	11	
MW-3	--	--	--	--	--	Street sweeper paprked on top.

Depth to product in Convault 2.30 feet Depth to water in Convault 2.50 feet Volume of Product in Convault 45 gallons
Approximate total volume recovered 45 gallons
PID Readings on vapor: Inlet: 69.5 ppmv Midpoint: 0.3 ppmv Final: 0 ppmv Flowrate: 44 CFM

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 11/7/2008

Recovery Well	Depth to Product (feet)	Depth to Water (feet)	Product Thickness (feet)	Cycles/Period and Duration	Vacuum (in. H_2O)	Comments
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.22	10.90	0.68	P=7, D=10	9	
RW-4	10.50	11.20	0.70	P=7, D=10	10	
RW-5	--	--	--	--	--	Truck parked on top.
RW-6	9.00	10.50	1.50	P=7, D=10	10	
RW-7	8.45	9.20	0.75	C=3, D=10	12	
RW-8	9.30	10.80	1.50	P=7, D=10	11	
RW-9	9.90	11.10	1.20	P=5, D=10	11	
MW-3	--	--	--	--	--	Street sweeper parked on top.

Depth to product in Convault 2.40 feet Depth to water in Convault 2.50 feet Volume of Product in Convault 18 gallons
Approximate total volume recovered 18 gallons
PID Readings on vapor: Inlet: 70 ppmv Midpoint: 0.3 ppmv Final: 0 ppmv Flowrate: 45 CFM

Site Visit Date: 11/14/2008

Recovery Well	Depth to Product (feet)	Depth to Water (feet)	Product Thickness (feet)	Cycles/Period and Duration	Vacuum (in. H_2O)	Comments
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.05	10.55	0.50	P=7, D=10	9	
RW-4	10.10	11.00	0.90	P=7, D=10	10	
RW-5	9.25	9.50	0.25	--	--	
RW-6	8.45	9.55	1.10	C=2, D=10	10	
RW-7	9.10	9.40	0.30	C=3, D=10	12	
RW-8	9.20	10.70	1.50	P=7, D=10	11	
RW-9	9.75	11.00	1.25	P=5, D=10	11	
MW-3	10.75	11.30	0.55	--	--	

Depth to product in Convault 2.25 feet Depth to water in Convault 2.45 feet Volume of Product in Convault 52 gallons
Approximate total volume recovered 58 gallons
PID Readings on vapor: Inlet: 68 ppmv Midpoint: 0.3 ppmv Final: 0 ppmv Flowrate: 44 CFM

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 11/21/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.55	11.40	0.85	P=7, D=10	9	
RW-4	10.40	11.10	0.70	P=7, D=10	10	
RW-5	9.30	9.55	0.25	--	--	
RW-6	9.10	9.50	0.40	C=2, D=10	10	
RW-7	8.50	9.75	1.25	C=3, D=10	12	
RW-8	9.65	11.00	1.35	P=7, D=10	11	
RW-9	10.25	11.50	1.25	P=5, D=10	11	
MW-3	11.30	12.45	1.15	--	--	

Depth to product in Convault			2.25	feet	Depth to water in Convault		2.55	feet		Volume of Product in Convault			58	gallons
Approximate total volume recovered			58	gallons										
PID Readings on vapor:	Inlet:	66	ppmv		Midpoint:	0.3	ppmv		Final:	0	ppmv	Flowrate:	44	CFM

Site Visit Date: 11/28/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	11.20	12.00	0.80	P=7, D=10	9	
RW-4	11.05	11.70	0.65	P=7, D=10	10	
RW-5	10.65	11.20	0.55	--	--	
RW-6	10.10	11.00	0.90	C=2, D=10	10	
RW-7	10.25	11.30	1.05	C=3, D=10	12	
RW-8	10.15	10.45	0.30	P=7, D=10	11	
RW-9	9.75	10.50	0.75	P=5, D=10	11	
MW-3	10.65	11.30	0.65	--	--	

Depth to product in Convault			2.25	feet	Depth to water in Convault		2.40	feet		Volume of Product in Convault			39	gallons
Approximate total volume recovered			58	gallons										
PID Readings on vapor:	Inlet:	72	ppmv		Midpoint:	0.3	ppmv		Final:	0	ppmv	Flowrate:	45	CFM

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 12/5/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.91	11.06	0.15	P=7, D=10	9	
RW-4	10.15	10.46	0.31	P=1, D=10	10	
RW-5	8.65	8.76	0.11	--	--	
RW-6	9.25	9.39	0.14	C=2, D=10	10	
RW-7	8.40	8.70	0.30	C=3, D=10	12	
RW-8	9.90	10.10	0.20	P=1, D=10	11	
RW-9	10.70	10.80	0.10	P=5, D=10	11	
MW-3	10.75	11.80	1.05	--	--	

Depth to product in Convault	2.20	feet	Depth to water in Convault	2.35	feet	Volume of Product in Convault	39	gallons				
Approximate total volume recovered	71	gallons										
PID Readings on vapor: Inlet:	70	ppmv	Midpoint:	0.3	ppmv	Final:	0	ppmv	Flowrate:	44	CFM	

Site Visit Date: 12/12/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	11.29	11.45	0.16	P=7, D=10	9	
RW-4	10.30	10.60	0.30	P=1, D=10	10	
RW-5	8.90	9.10	0.20	--	--	
RW-6	9.25	9.40	0.15	C=2, D=10	10	
RW-7	8.70	8.85	0.15	C=3, D=10	12	
RW-8	9.75	10.20	0.45	P=1, D=10	11	
RW-9	10.60	10.80	0.20	P=5, D=10	11	
MW-3	11.00	12.20	1.20	--	--	

Depth to product in Convault	2.10	feet	Depth to water in Convault	2.30	feet	Volume of Product in Convault	52	gallons				
Approximate total volume recovered	97	gallons										
PID Readings on vapor: Inlet:	69	ppmv	Midpoint:	0.3	ppmv	Final:	0	ppmv	Flowrate:	45	CFM	

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Site Visit Date: 12/19/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.90	11.20	0.30	P=7, D=10	9	
RW-4	10.10	10.20	0.10	P=1, D=10	10	
RW-5	8.60	8.90	0.30	--	--	
RW-6	9.20	9.40	0.20	C=2, D=10	10	
RW-7	8.50	8.70	0.20	C=3, D=10	12	
RW-8	9.65	10.00	0.35	P=1, D=10	11	
RW-9	10.50	10.85	0.35	P=5, D=10	11	
MW-3	10.70	11.65	0.95	--	--	

Depth to product in Convault		2.12	feet	Depth to water in Convault	2.27	feet	Volume of Product in Convault	39	gallons			
Approximate total volume recovered		92	gallons									
PID Readings on vapor:	Inlet:	72	ppmv	Midpoint:	0.4	ppmv	Final:	0	ppmv	Flowrate:	45	CFM

Site Visit Date: 12/26/2008						
Recovery Well	**Depth to Product** (feet)	**Depth to Water** (feet)	**Product Thickness** (feet)	**Cycles/Period and Duration**	**Vacuum** (in. H_2O)	**Comments**
RW-1	--	--	--		Off	
RW-2	--	--	--		Off	
RW-3	10.90	11.20	0.30	P=7, D=10	9	
RW-4	10.10	10.15	0.05	P=1, D=10	10	
RW-5	8.60	8.77	0.17	--	--	
RW-6	9.25	9.32	0.07	C=2, D=10	10	
RW-7	8.50	9.00	0.50	C=3, D=10	12	
RW-8	9.60	9.83	0.23	P=1, D=10	11	
RW-9	10.35	11.15	0.80	P=5, D=10	11	
MW-3	10.80	11.70	0.90	--	--	

Depth to product in Convault		2.10	feet	Depth to water in Convault	2.20	feet	Volume of Product in Convault	26	gallons			
Approximate total volume recovered		97	gallons									
PID Readings on vapor:	Inlet:	70	ppmv	Midpoint:	0.3	ppmv	Final:	0	ppmv	Flowrate:	44	CFM

TABLE 3: Product Thickness Measurements and
Operations and Maintenance Activities - July through December 2008
Port of Oakland
651 Maritime Street
Oakland, California

Notes:

See Figure 2 for recovery well locations.
D = Duration (length of time in minutes the skimmer will run upon activation)
P = Period (P=1 would indicate skimmer activated every day; P=4 would be skimmer activated every fourth day)
C = Cycles (C=2 would indicate skimmer activated twice per day; C=4 would indicate skimmer activated four times per day)
CFM = cubic feet per minute
gal .= gallons
H_2O = water
lbs = pounds
PID = Photo-ionization detector (hydrocarbons in gas measurement)
ppmv = parts per million by volume
-- = not measured.
Sheen = less than 0.01 foot thickness of product.
Product purging in is conducted using a peristaltic pump.

APPENDIX A
WELL INSTALLATION REPORT

WELL INSTALLATION REPORT
651 MARITIME STREET
PORT OF OAKLAND
OAKLAND, CA 94607

PREPARED FOR:

MSE GROUP
302 PENDLETON WAY
OAKLAND, CA 94621

PREPARED BY:

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ENV America Project No. MSE-08-02

February 9, 2009

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WELL INSTALLATION REPORT
651 MARITIME STREET
PORT OF OAKLAND
OAKLAND, CA 94607

SIGNATURE PAGE

This Well Installation Report for MSE was prepared by ENV America Incorporated.

Alice J. Letcher — 2/9/09

Alice J. Letcher
ENV America Incorporated
Date

Allan Atkinson — 2/9/09

Allan Atkinson, PG
ENV America Incorporated
Date

DISCLAIMER

ENV America makes no warranty as to the accuracy of statements made by others which are contained in this report, nor are any other warranties or guarantees, express or implied, included or intended in the report with respect to information supplied by outside sources or conclusions or recommendations substantially based on information supplied by outside sources. This report has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professional consultants or firms performing the same or similar services.

None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature, but shall be a representation of findings of fact from records examined.

1.0 Introduction and Project Background

ENV America Incorporated (ENV America) subcontracted with MSE Group to oversee soil sampling and the installation of four new groundwater monitoring wells at the Port of Oakland Harbor Facilities Complex (Site). The Site is located at approximately 651 Maritime Street, Oakland, CA. Semi-annual groundwater monitoring and remediation activities are currently being conducted at the Site due to petroleum hydrocarbons contamination in soil and groundwater from past operations of underground storage tanks. The Site has recently been redeveloped with new facilities. During redevelopment activities at the Port, several groundwater monitoring wells were abandoned to facilitate construction. This report details the drilling, soil sampling and installation of four new groundwater monitoring wells to replace the abandoned monitoring wells at the Site, as well as analytical results from the soil sampling.

2.0 Soil Sampling and Well Installation

On December 1 and 2, 2008, an ENV America, Inc. (ENV America) geologist observed the collection of soil samples from four borings and the installation of groundwater monitoring wells in those borings at the Site (see Figure 1 for well locations) by Gregg Drilling and Testing, Inc., a C-57-liscensed contractor. Each boring was drilled to a depth of 25 feet below ground surface (bgs). Soil cuttings were continuously monitored with a PID. In accordance with the work plan dated October 17, 2008, soil samples were taken every 5 feet, using California split spoon sampling methodology. The sample from MW-9@21 was not recovered, due to the frangible nature of the material. Samples from MW-9, MW-11 and MW-12 had a distinct hydrocarbon odor, while free product was visible in samples from MW-12. The sample data were entered onto a chain of custody form and the samples were kept on ice until retrieved by a courier for delivery to Test America Laboratories, Inc., a California ELAP-certified laboratory.

The well design includes 10 feet of 2” diameter, 0.010” machine slotted screen from 25 to 15 ft. bgs, followed by 2” diameter blank casing to the ground surface. The annular material is #2/16 Cemex Lapis Lustre filter pack sand from 25 to 13 ft., followed by 2 ft. of 3/8” uncoated bentonite chip hole-plug, followed by Basalite type II/V neat cement grout from 11 ft. bgs to the ground surface. The wells were finished with traffic-rated EMCO Wheaton flush-mounted well boxes. On December 2, Vicki Hamlin of the Alameda Public Works Agency inspected and

labeled the wells.

3.0 Well Development and Groundwater Sampling

ENV America was not involved in the well development or groundwater sampling at the Site; these activities were performed by others.

4.0 Analytical Results

Laboratory analyses consisted of TPH-diesel and TPH-motor oil by EPA test method 8015M with silica gel cleanup, TPH-gasoline with BTEX and MTBE by EPA method 8260B, and CCR Title 22 metals by EPA method 6010.

Diesel, motor oil, and gasoline range organics were detected in soil samples from all the wells, although not from every sample in each well. Concentrations of diesel range organics ranged from 1.1 mg/kg in MW-9 at 16 ft. bgs, to 3800 mg/kg in MW-12 at 11 ft. bgs. Motor oil range organics were detected ranging from 68 mg/kg in MW-10 at 16 ft. bgs to 1800 mg/kg in MW-12 at 11 ft. bgs. Gasoline range organics were detected ranging from 1.1 mg/kg in MW-11 at 6 ft. bgs to 590 mg/kg in MW-9 at 11 ft. bgs. All TPH analytical results are provided in Table 1.

Analysis of the soil samples from the monitoring well borings detected no BTEX constituents above the environmental screening levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB) for shallow and deep soil for commercial/industrial land where the potentially contaminated groundwater is not a current or potential drinking water source. Indeed, no BTEX constituents were detected in the majority of the samples collected. However, fifteen mg/kg of total xylenes and 5 mg/kg of ethylbenzene were detected in the sample from MW-9 at 11 ft. bgs and 0.074 mg/kg of total xylenes and 0.058 mg/kg of ethylbenzene were detected in the sample from MW-9 at 16 ft. bgs. All BTEX analytical results are given in Table 2.

In the Title 22 Metals analysis, arsenic was detected above the ESLs for shallow and deep soil for commercial/industrial land where the potentially contaminated groundwater is not a current or potential drinking water source. From shallow soil samples (above ~10 ft bgs), the highest

concentration of arsenic was 69 mg/kg, detected in the sample from MW-10 at 6 feet bgs, exceeding the ESL for arsenic of 1.6 mg/kg.

The ESL for total chromium in shallow soil for commercial/industrial use where groundwater is not a current or potential source of drinking water is not listed in the May 2008 compilation of the RWQCB. Therefore, the ESL for chromium-III (750 mg/kg) is used to screen for total chromium, as is shown in Table 3. None of the shallow soil samples exceed this ESL. The highest concentration was detected in the sample from MW-10 at 6 ft. bgs, at 45 mg/kg, while the lowest concentration was detected in the sample from MW-11 at 6 ft. bgs, at a concentration of 22 mg/kg. None of the deep soil samples exceed the ESL of 5,000 mg/kg for total chromium and chromium-III.

From soil samples below ~10 ft. bgs, the highest detected concentration of arsenic was 31 mg/kg in the sample from MW-10 at 11 feet bgs. The lowest concentration detected above the ESL was 14 mg/kg in the sample from MW-10 at 21 feet bgs. No other contaminant concentrations were detected that exceed the soil ESLs.

5.0 Summary

On December 1 and 2, 2008, ENV America personnel oversaw soil sampling and the installation of 4 new monitor wells at Port of Oakland Site at 651 Maritime Street, Oakland. The samples were logged into chain of custody forms and transferred by a courier to Test America, in Pleasanton, where they were analyzed for TPH-diesel and TPH-motor oil by EPA test method 8015M with silica gel cleanup, TPH-gasoline with BTEX and MTBE by EPA method 8260B, and CCR Title 22 metals by EPA method 6010. Analytical results are discussed above and full laboratory analyses are included in Exhibit A.

In addition to preparing this report, ENV America has prepared gINT well logs (included in Exhibit B) and well completion reports for the project. ENV America will file the well completion reports with the California Department of Water Resources.

TABLE 1
TPH ANALYTICAL RESULTS

Port of Oakland
651 Maritime Street
Oakland, CA

Sample ID	Diesel range organics[1]	Gasoline range organics[3]	Motor oil range organics[2]
MW-9@6	ND (RL>1.0)	ND (RL.>0.24)	ND (RL>50)
MW-9@11	**1100**	**590**	ND (RL>250)
MW-9@16	1.1	6	ND (RL>49)
MW-9@21	NA	NA	NA
MW-9@25	1.2	ND (RL.>0.23)	ND (RL>50)
MW-10@6	11	ND (RL.>0.23)	ND (RL>50)
MW-10@11	ND (RL>1.0)	ND (RL.>0.25)	ND (RL>50)
MW-10@16	48	ND (RL.>0.23)	68
MW-10@21	ND (RL>0.99)	ND (RL.>0.25)	ND (RL>50)
MW-10@25	ND (RL>1.0)	ND (RL.>0.24)	ND (RL>50)
MW-11@6	1.4	1.1	ND (RL>50)
MW-11@11	2.8	0.89	ND (RL>49)
MW-11@16	47	ND (RL.>0.24)	70
MW-11@21	ND (RL>0.99)	ND (RL.>0.24)	ND (RL>49)
MW-11@25	ND (RL>0.99)	ND (RL.>0.25)	ND (RL>50)
MW-12@6	**190**	1.4	430
MW-12@11	**3800**	6.8	1800
MW-12@16	**170**	7	ND (RL>50)
MW-12@21	14	ND (RL.>0.25)	ND (RL>50)
MW-12@25	12	1.6	ND (RL>50)
ESLs shallow soil [7]	***180***	***180***	***2,500***
ESLs deep soil [8]	***180***	***180***	***5,000***

NOTES:

1 - Diesel Range Organics in accordance with EPA Test Method 8015B Modified.

2 - Motor Oil Range Organics in accordance with EPA Test Method 8015B Modified.

3 - Gasoline Range Organics in accordance with EPA Test Method 8260B/CA LUFTMS

4 - **BOLD** Type indicates constituent result exceeds ESL.

5 - NA: Not Analyzed

6 - All results and ESLs given in mg/kg.

7 - ESLs = San Francisco Bay Region Regional Water Quality Control Board Environmental Screening Levels for shallow soil under commercial/industrial land use where groundwater is NOT a current or potential drinking water resource (May 2008).

8 - ESLs = San Francisco Bay Region Regional Water Quality Control Board Environmental Screening Levels for deep soil under commercial/industrial land use where groundwater is NOT a current or potential drinking water resource (May 2008).

TABLE 2
BTEX ANALYTICAL RESULTS

Port of Oakland
651Maritime Street
Oakland, CA

Sample ID	Benzene	Toluene	Total Xylenes	MTBE	Ethylbenzene
MW-9@6	ND (RL>0.0048)	ND (RL>0.0048)	ND (RL>0.0095)	ND (RL>0.0048)	ND (RL>0.0048)
MW-9@11	ND (RL>2.5)	ND (RL>2.5)	15	ND (RL>2.5)	5
MW-9@16	0.0097	ND (RL>0.0048)	0.074	ND (RL>0.0048)	0.058
MW-9@21	NA	NA	NA	NA	NA
MW-9@25	ND (RL>0.0046)	ND (RL>0.0046)	ND (RL>0.0092)	ND (RL>0.0046)	ND (RL>0.0046)
MW-10@6	ND (RL0.0047)	ND (RL.>0.0047)	ND (RL>0.0093)	ND (RL>0.0047)	ND (RL>0.0047)
MW-10@11	ND (RL>0.0049)	ND (RL>0.0049)	ND (RL>0.0098)	ND (RL>0.0049)	ND (RL>0.0049)
MW-10@16	ND (RL>0.0047)	ND (RL>0.0047)	ND (RL>0.0094)	ND (RL>0.0047)	ND (RL>0.0047)
MW-10@21	ND (RL>0.0049)	ND (RL>0.0049)	ND (RL>0.0098)	ND (RL>0.0049)	ND (RL>0.0049)
MW-10@25	ND (RL>0.0048)	ND (RL>0.0048)	ND (RL>0.0095)	ND (RL>0.0048)	ND (RL>0.0048)
MW-11@6	ND (RL>0.0050)	ND (RL>0.0050)	ND (RL>0.0099)	ND (RL>0.0050)	ND (RL>0.0050)
MW-11@11	ND (RL>0.0047)	ND (RL>0.0047)	ND (RL>0.0093)	ND (RL>0.0047)	ND (RL>0.0047)
MW-11@16	ND (RL>0.0048)	ND (RL>0.0048)	ND (RL>0.0097)	ND (RL>0.0048)	ND (RL>0.0048)
MW-11@21	ND (RL>0.0048)	ND (RL>0.0048)	ND (RL>0.0097)	ND (RL>0.0048)	ND (RL>0.0048)
MW-11@25	ND (RL>0.0049)	ND (RL>0.0049)	ND (RL>0.0099)	ND (RL>0.0049)	ND (RL>0.0049)
MW-12@6	ND (RL>0.0050)	ND (RL>0.0050)	ND (RL>0.0099)	ND (RL>0.0050)	ND (RL>0.0050)
MW-12@11	ND (RL>0.0048)	0.0064	ND (RL>0.0097)	ND (RL>0.0048)	ND (RL>0.0048)
MW-12@16	ND (RL>0.023)	ND (RL>0.0045)	ND (RL>0.0045)	ND (RL>0.023)	ND (RL>0.023)
MW-12@21	ND (RL>0.0050)	ND (RL>0.0050)	ND (RL>0.010)	ND (RL>0.0050)	ND (RL>0.0050)
MW-12@25	ND (RL>0.0048)	ND (RL>0.0048)	ND (RL>0.0096)	ND (RL>0.0048)	ND (RL>0.0048)
ESLs shallow soil [3]	***0.27***	***9***	***11***	***8***	***5***
ESLs deep soil [4]	***2***	***9***	***11***	***8***	***5***

TABLE 2
BTEX ANALYTICAL RESULTS

Port of Oakland
651Maritime Street
Oakland, CA

NOTES:

1 - BTEX analyzed by US EPA method 8260B/CA LUFTMS

2 - NA: Not Analyzed

3 - ESLs = San Francisco Bay Region Regional Water Quality Control Board Environmental Screening Levels for shallow soil under commercial/industrial land use where groundwater is NOT a current or potential drinking water resource (May 2008).

4 - ESLs = San Francisco Bay Region Regional Water Quality Control Board Environmental Screening Levels for deep soil under commercial/industrial land use where groundwater is NOT a current or potential drinking water resource (May 2008).

5 - Results and ESLs given in mg/kg

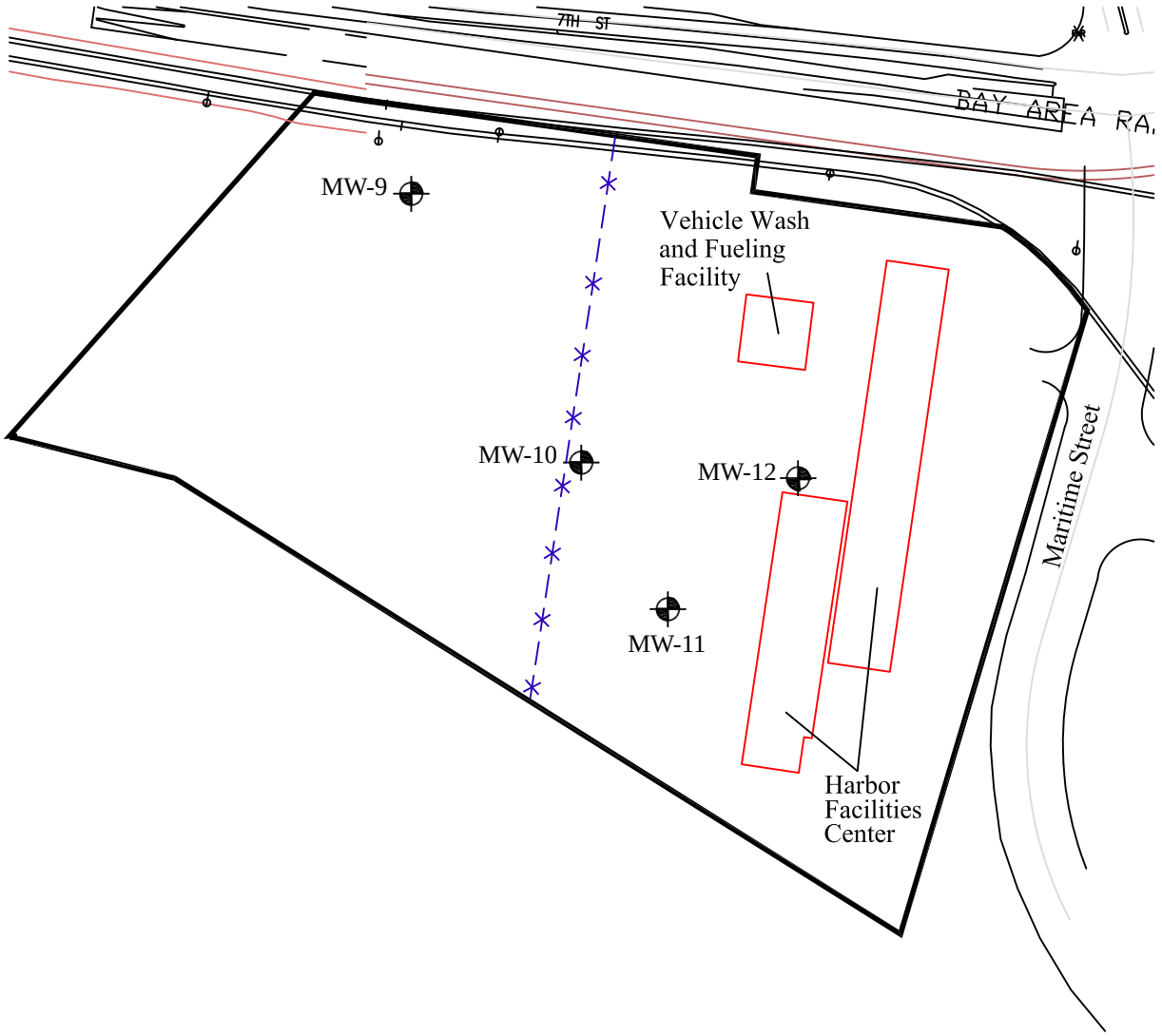
TABLE 3
TITLE 22 METALS RESULTS

Port of Oakland
651 Maritime Street
Oakland, California

Sample ID	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury
MW-9@6	ND (RL>2.0)	**20**	100	ND (RL>0.49)	ND (RL>0.49)	**43**	**9.1**	13	4.5	ND (RL>0.98)	48	ND (RL>0.98)	ND (RL>0.98)	ND (RL>0.98)	30	30	0.07
MW-9@11	ND (RL>2.0)	**31**	140	ND (RL>50)	ND (RL>50)	47	8.4	22	4.1	ND (RL>0.99)	53	ND (RL>0.99)	ND (RL>0.99)	ND (RL>0.99)	32	38	0.077
MW-9@16	ND (RL>1.9)	4.2	200	ND (RL>0.49)	ND (RL>0.49)	43	7.4	25	4	ND (RL>0.97)	41	ND (RL>1.9)	ND (RL>0.97)	ND (RL>0.97)	37	36	0.06
MW-9@21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-9@25	ND (RL>1.9)	9.4	42	ND (RL>0.48)	ND (RL>0.48)	30	4.9	9.7	1.7	ND (RL>0.96)	29	ND (RL>1.9)	ND (RL>0.96)	ND (RL>0.96)	21	18	ND (RL>0.048)
MW-10@6	ND (RL>2.0)	**69**	40	ND (RL>0.49)	ND (RL>0.49)	**45**	4.6	12	10	ND (RL>0.98)	25	ND (RL>2.0)	ND (RL>0.98)	ND (RL>0.98)	20	25	ND (RL>0.050)
MW-10@11	ND (RL>2.0)	1.5	18	ND (RL>0.49)	ND (RL>0.49)	22	2.9	3.4	1.2	ND (RL>0.98)	19	ND (RL>2.0)	ND (RL>0.98)	ND (RL>0.98)	14	10	ND (RL>0.053)
MW-10@16	ND (RL>2.0)	5.9	33	ND (RL>0.49)	ND (RL>0.49)	51	8.8	36	9.1	ND (RL>0.98)	49	ND (RL>2.0)	ND (RL>0.98)	ND (RL>0.98)	43	53	0.16
MW-10@21	ND (RL>1.9)	**14**	27	ND (RL>0.48)	ND (RL>0.48)	32	6.2	15	4.5	ND (RL>0.96)	29	ND (RL>1.9)	ND (RL>0.96)	ND (RL>0.96)	30	27	0.11
MW-10@25	ND (RL>1.9)	2.2	60	ND (RL>0.48)	ND (RL>0.48)	36	6	15	2.3	ND (RL>0.95)	34	ND (RL>1.9)	ND (RL>0.95)	ND (RL>0.95)	23	25	ND (RL>0.051)
MW-11@6	ND (RL>2.0)	**1.8**	21	ND (RL>0.50)	ND (RL>0.50)	**22**	3.6	8.3	1.9	ND (RL>1.0)	20	ND (RL>2.0)	ND (RL>1.0)	ND (RL>1.0)	16	18	0.12
MW-11@11	ND (RL>2.0)	4.7	42	ND (RL>0.51)	ND (RL>0.51)	47	8.9	35	6.2	ND (RL>1.0)	46	ND (RL>2.0)	ND (RL>1.0)	ND (RL>1.0)	35	46	ND (RL>0.049)
MW-11@16	ND (RL>2.1)	5.7	34	ND (RL>0.52)	ND (RL>0.52)	55	9.3	28	13	ND (RL>1.0)	50	ND (RL>2.1)	ND (RL>1.0)	ND (RL>1.0)	48	53	0.27
MW-11@21	ND (RL>2.1)	2.8	48	ND (RL>0.52)	ND (RL>0.52)	34	6.3	12	2.1	ND (RL>1.0)	36	ND (RL>2.1)	ND (RL>1.0)	ND (RL>1.0)	23	24	ND (RL>0.048)
MW-11@25	ND (RL>2.0)	2.1	45	ND (RL>0.51)	ND (RL>0.51)	35	5.6	9.9	1.9	ND (RL>1.0)	31	ND (RL>2.0)	ND (RL>1.0)	ND (RL>1.0)	21	21	ND (RL>0.053)
MW-12@6	ND (RL>2.0)	**30**	72	ND (RL>0.49)	ND (RL>0.49)	**31**	7	120	180	ND (RL>0.98)	38	ND (RL>2.0)	ND (RL>0.98)	ND (RL>0.98)	27	97	0.27
MW-12@11	ND (RL>2.0)	7.1	150	ND (RL>0.49)	ND (RL>0.49)	43	18	52	18	ND (RL>0.98)	39	ND (RL>2.0)	ND (RL>0.98)	ND (RL>0.98)	63	79	0.082
MW-12@16	ND (RL>1.9)	**26**	53	ND (RL>0.48)	ND (RL>0.48)	37	7.4	27	35	ND (RL>0.95)	35	ND (RL>1.9)	ND (RL>0.95)	ND (RL>0.95)	33	41	0.18
MW-12@21	ND (RL>2.0)	4.3	40	ND (RL>0.50)	ND (RL>0.50)	38	4.5	11	2.5	ND (RL>1.0)	32	ND (RL>2.0)	ND (RL>1.0)	ND (RL>1.0)	25	21	ND (RL>0.051)
MW-12@25	ND (RL>2.1)	2.9	35	ND (RL>0.52)	ND (RL>0.52)	32	5.4	15	2	ND (RL>1.0)	31	ND (RL>2.1)	ND (RL>1.0)	ND (RL>1.0)	21	22	ND (RL>0.051)
ESLs [6]	***40***	***1.6***	***1,500***	***8***	***7***	***750*** [8]	***80***	***230***	***750***	***40***	***150***	***10***	***40***	***16***	***200***	***600***	***10***
ESLs [7]	***310***	***15***	***2,600***	***98***	***39***	***5,000***	***94***	***5,000***	***750***	***3900***	***260***	***3900***	***3900***	***62***	***770***	***5,000***	***58***

NOTES:

1 - Title 22 Metals in accordance with EPA Test Method 6010B
2 - Mercury in accordance with EPA Test Method 7471A
3 - **BOLD** Type indicates constituent result exceeds ESL
4 - NA: Not Analyzed
5 - All results and ESLs given in mg/kg.
6 - ESLs = San Francisco Bay Region Regional Water Quality Control Board Environmental Screening Levels for shallow soil under commercial/industrial land use where groundwater is NOT a current or potential drinking water resource (May 2008).
7 - ESLs = San Francisco Bay Region Regional Water Quality Control Board Environmental Screening Levels for deep soil under commercial/industrial land use where groundwater is NOT a current or potential drinking water resource (May 2008).
8 - ESL is for Chromium-III



N

0 200 Feet

Legend

Groundwater monitoring well

Existing fence

Site boundaries

FIGURE 1

NEW MONITORING WELL LOCATIONS

651 MARITIME STREET
PORT OF OAKLAND
OAKLAND, CALIFORNIA

ENV AMERICA

ENVIRONMENTAL ENGINEERING
CONSULTING AND CONSTRUCTION

ANALYTICAL REPORT

Job Number: 720-17153-1

Job Description: Port of Oakland

For:
ENV America, Incorporated
244 California St., Ste 500
San Francisco, CA 94111

Attention: Ms. Alice Letcher

Approved for release.
Dimple Sharma
Project Manager I
12/9/2008 3:10 PM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com
12/09/2008

Job Narrative
720-J17153-1

Comments
No additional comments.

Receipt
Did not receive samples with IDs MW-10@10 or MW-12@10. Did receive samples with IDs MW-10@11 and MW-12@11 not on COC. Changed IDs in log in to match sample labels per client.

All other samples were received in good condition within temperature requirements.

GC/MS VOA
Method(s) 8260B/CA_LUFTMS: <<The recovery for 1,2-Dichloroethane-d4 Surrogate for the Matrix Spike for batch 44554 is low. The LCS/LCSD passed laboratory criteria; therefore data is considered valid.>>

No other analytical or quality issues were noted.

GC VOA
No analytical or quality issues were noted.

GC Semi VOA
Method(s) 8015B: Capric acid surrogate recovery for the following sample(s) was outside control limits: MW-12 @ 16 (720-17153-17), MW-12 @ 21 (720-17153-18) and MW-12 @ 25 (720-17153-19). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 44580 were outside control limits. The associated laboratory control standard (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: ENV America, Incorporated Job Number: 720-17153-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17153-1	**MW-9 @ 6**				
Arsenic		20	0.98	mg/Kg	6010B
Barium		100	0.98	mg/Kg	6010B
Chromium		43	0.98	mg/Kg	6010B
Cobalt		9.1	0.98	mg/Kg	6010B
Copper		13	0.98	mg/Kg	6010B
Lead		4.5	0.98	mg/Kg	6010B
Nickel		48	0.98	mg/Kg	6010B
Vanadium		30	0.98	mg/Kg	6010B
Zinc		30	0.98	mg/Kg	6010B
Mercury		0.070	0.052	mg/Kg	7471A
720-17153-2	**MW-9 @ 11**				
Gasoline Range Organics (GRO)-C5-C12		590	120	mg/Kg	8260B/CA_LUFTMS
Xylenes, Total		15	4.9	mg/Kg	8260B/CA_LUFTMS
Ethylbenzene		5.0	2.5	mg/Kg	8260B/CA_LUFTMS
Arsenic		31	0.99	mg/Kg	6010B
Barium		140	0.99	mg/Kg	6010B
Chromium		47	0.99	mg/Kg	6010B
Cobalt		8.4	0.99	mg/Kg	6010B
Copper		22	0.99	mg/Kg	6010B
Lead		4.1	0.99	mg/Kg	6010B
Nickel		53	0.99	mg/Kg	6010B
Vanadium		32	0.99	mg/Kg	6010B
Zinc		38	0.99	mg/Kg	6010B
Mercury		0.077	0.051	mg/Kg	7471A
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		1100	5.0	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: ENV America, Incorporated Job Number: 720-17153-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17153-3	**MW-9 @ 16**				
Benzene		0.0097	0.0048	mg/Kg	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		5.9	0.24	mg/Kg	8260B/CA_LUFTMS
Xylenes, Total		0.074	0.0097	mg/Kg	8260B/CA_LUFTMS
Ethylbenzene		0.058	0.0048	mg/Kg	8260B/CA_LUFTMS
Arsenic		4.2	0.97	mg/Kg	6010B
Barium		200	0.97	mg/Kg	6010B
Chromium		43	0.97	mg/Kg	6010B
Cobalt		7.4	0.97	mg/Kg	6010B
Copper		25	0.97	mg/Kg	6010B
Lead		4.0	0.97	mg/Kg	6010B
Nickel		41	0.97	mg/Kg	6010B
Vanadium		37	0.97	mg/Kg	6010B
Zinc		36	0.97	mg/Kg	6010B
Mercury		0.060	0.051	mg/Kg	7471A
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		1.1	0.99	mg/Kg	8015B
720-17153-4	**MW-9 @ 25**				
Arsenic		9.4	0.96	mg/Kg	6010B
Barium		42	0.96	mg/Kg	6010B
Chromium		30	0.96	mg/Kg	6010B
Cobalt		4.9	0.96	mg/Kg	6010B
Copper		9.7	0.96	mg/Kg	6010B
Lead		1.7	0.96	mg/Kg	6010B
Nickel		29	0.96	mg/Kg	6010B
Vanadium		21	0.96	mg/Kg	6010B
Zinc		18	0.96	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		1.2	1.0	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: ENV America, Incorporated Job Number: 720-17153-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17153-5	**MW-10 @ 6**				
Arsenic		69	0.98	mg/Kg	6010B
Barium		40	0.98	mg/Kg	6010B
Chromium		45	0.98	mg/Kg	6010B
Cobalt		4.6	0.98	mg/Kg	6010B
Copper		12	0.98	mg/Kg	6010B
Lead		10	0.98	mg/Kg	6010B
Nickel		25	0.98	mg/Kg	6010B
Vanadium		20	0.98	mg/Kg	6010B
Zinc		25	0.98	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		11	0.99	mg/Kg	8015B
720-17153-6	**MW-10 @ 11**				
Arsenic		1.5	0.98	mg/Kg	6010B
Barium		18	0.98	mg/Kg	6010B
Chromium		22	0.98	mg/Kg	6010B
Cobalt		2.9	0.98	mg/Kg	6010B
Copper		3.4	0.98	mg/Kg	6010B
Lead		1.2	0.98	mg/Kg	6010B
Nickel		19	0.98	mg/Kg	6010B
Vanadium		14	0.98	mg/Kg	6010B
Zinc		10	0.98	mg/Kg	6010B
720-17153-7	**MW-10 @ 16**				
Arsenic		5.9	0.98	mg/Kg	6010B
Barium		33	0.98	mg/Kg	6010B
Chromium		51	0.98	mg/Kg	6010B
Cobalt		8.8	0.98	mg/Kg	6010B
Copper		36	0.98	mg/Kg	6010B
Lead		9.1	0.98	mg/Kg	6010B
Nickel		49	0.98	mg/Kg	6010B
Vanadium		43	0.98	mg/Kg	6010B
Zinc		53	0.98	mg/Kg	6010B
Mercury		0.16	0.053	mg/Kg	7471A
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		48	1.0	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		68	50	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: ENV America, Incorporated Job Number: 720-17153-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17153-8	**MW-10 @ 21**				
Arsenic		14	0.96	mg/Kg	6010B
Barium		27	0.96	mg/Kg	6010B
Chromium		32	0.96	mg/Kg	6010B
Cobalt		6.2	0.96	mg/Kg	6010B
Copper		15	0.96	mg/Kg	6010B
Lead		4.5	0.96	mg/Kg	6010B
Nickel		29	0.96	mg/Kg	6010B
Vanadium		30	0.96	mg/Kg	6010B
Zinc		27	0.96	mg/Kg	6010B
Mercury		0.11	0.048	mg/Kg	7471A
720-17153-9	**MW-10 @ 25**				
Arsenic		2.2	0.95	mg/Kg	6010B
Barium		60	0.95	mg/Kg	6010B
Chromium		36	0.95	mg/Kg	6010B
Cobalt		6.0	0.95	mg/Kg	6010B
Copper		15	0.95	mg/Kg	6010B
Lead		2.3	0.95	mg/Kg	6010B
Nickel		34	0.95	mg/Kg	6010B
Vanadium		23	0.95	mg/Kg	6010B
Zinc		25	0.95	mg/Kg	6010B
720-17153-10	**MW-11 @ 6**				
Gasoline Range Organics (GRO)-C5-C12		1.1	0.25	mg/Kg	8260B/CA_LUFTMS
Arsenic		1.8	1.0	mg/Kg	6010B
Barium		21	1.0	mg/Kg	6010B
Chromium		22	1.0	mg/Kg	6010B
Cobalt		3.6	1.0	mg/Kg	6010B
Copper		8.3	1.0	mg/Kg	6010B
Lead		1.9	1.0	mg/Kg	6010B
Nickel		20	1.0	mg/Kg	6010B
Vanadium		16	1.0	mg/Kg	6010B
Zinc		18	1.0	mg/Kg	6010B
Mercury		0.12	0.051	mg/Kg	7471A
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		1.4	1.0	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: ENV America, Incorporated Job Number: 720-17153-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17153-11	**MW-11 @ 11**				
Gasoline Range Organics (GRO)-C5-C12		0.89	0.23	mg/Kg	8260B/CA_LUFTMS
Arsenic		4.7	1.0	mg/Kg	6010B
Barium		42	1.0	mg/Kg	6010B
Chromium		47	1.0	mg/Kg	6010B
Cobalt		8.9	1.0	mg/Kg	6010B
Copper		35	1.0	mg/Kg	6010B
Lead		6.2	1.0	mg/Kg	6010B
Nickel		46	1.0	mg/Kg	6010B
Vanadium		35	1.0	mg/Kg	6010B
Zinc		46	1.0	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		2.8	0.99	mg/Kg	8015B
720-17153-12	**MW-11 @ 16**				
Arsenic		5.7	1.0	mg/Kg	6010B
Barium		34	1.0	mg/Kg	6010B
Chromium		55	1.0	mg/Kg	6010B
Cobalt		9.3	1.0	mg/Kg	6010B
Copper		28	1.0	mg/Kg	6010B
Lead		13	1.0	mg/Kg	6010B
Nickel		50	1.0	mg/Kg	6010B
Vanadium		48	1.0	mg/Kg	6010B
Zinc		53	1.0	mg/Kg	6010B
Mercury		0.27	0.049	mg/Kg	7471A
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		47	0.99	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		70	50	mg/Kg	8015B
720-17153-13	**MW-11 @ 21**				
Arsenic		2.8	1.0	mg/Kg	6010B
Barium		48	1.0	mg/Kg	6010B
Chromium		34	1.0	mg/Kg	6010B
Cobalt		6.3	1.0	mg/Kg	6010B
Copper		12	1.0	mg/Kg	6010B
Lead		2.1	1.0	mg/Kg	6010B
Nickel		36	1.0	mg/Kg	6010B
Vanadium		23	1.0	mg/Kg	6010B
Zinc		24	1.0	mg/Kg	6010B

EXECUTIVE SUMMARY - Detections

Client: ENV America, Incorporated Job Number: 720-17153-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17153-14	**MW-11 @ 25**				
Arsenic		2.1	1.0	mg/Kg	6010B
Barium		45	1.0	mg/Kg	6010B
Chromium		35	1.0	mg/Kg	6010B
Cobalt		5.6	1.0	mg/Kg	6010B
Copper		9.9	1.0	mg/Kg	6010B
Lead		1.9	1.0	mg/Kg	6010B
Nickel		31	1.0	mg/Kg	6010B
Vanadium		21	1.0	mg/Kg	6010B
Zinc		21	1.0	mg/Kg	6010B
720-17153-15	**MW-12 @ 6**				
Gasoline Range Organics (GRO)-C5-C12		1.4	0.25	mg/Kg	8260B/CA_LUFTMS
Arsenic		30	0.98	mg/Kg	6010B
Barium		72	0.98	mg/Kg	6010B
Chromium		31	0.98	mg/Kg	6010B
Cobalt		7.0	0.98	mg/Kg	6010B
Copper		120	0.98	mg/Kg	6010B
Lead		180	0.98	mg/Kg	6010B
Nickel		38	0.98	mg/Kg	6010B
Vanadium		27	0.98	mg/Kg	6010B
Zinc		97	0.98	mg/Kg	6010B
Mercury		0.27	0.048	mg/Kg	7471A
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		190	5.0	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		430	250	mg/Kg	8015B
720-17153-16	**MW-12 @ 11**				
Gasoline Range Organics (GRO)-C5-C12		6.8	0.24	mg/Kg	8260B/CA_LUFTMS
Toluene		0.0064	0.0048	mg/Kg	8260B/CA_LUFTMS
Arsenic		7.1	0.98	mg/Kg	6010B
Barium		150	0.98	mg/Kg	6010B
Chromium		43	0.98	mg/Kg	6010B
Cobalt		18	0.98	mg/Kg	6010B
Copper		52	0.98	mg/Kg	6010B
Lead		18	0.98	mg/Kg	6010B
Nickel		39	0.98	mg/Kg	6010B
Vanadium		63	0.98	mg/Kg	6010B
Zinc		76	0.98	mg/Kg	6010B
Mercury		0.082	0.052	mg/Kg	7471A
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		3800	20	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		1800	1000	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: ENV America, Incorporated Job Number: 720-17153-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17153-17	**MW-12 @ 16**				
Gasoline Range Organics (GRO)-C5-C12		7.0	1.1	mg/Kg	8260B/CA_LUFTMS
Arsenic		26	0.95	mg/Kg	6010B
Barium		53	0.95	mg/Kg	6010B
Chromium		37	0.95	mg/Kg	6010B
Cobalt		7.4	0.95	mg/Kg	6010B
Copper		27	0.95	mg/Kg	6010B
Lead		35	0.95	mg/Kg	6010B
Nickel		35	0.95	mg/Kg	6010B
Vanadium		33	0.95	mg/Kg	6010B
Zinc		41	0.95	mg/Kg	6010B
Mercury		0.18	0.048	mg/Kg	7471A
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		170	0.99	mg/Kg	8015B
720-17153-18	**MW-12 @ 21**				
Arsenic		4.3	1.0	mg/Kg	6010B
Barium		40	1.0	mg/Kg	6010B
Chromium		38	1.0	mg/Kg	6010B
Cobalt		4.5	1.0	mg/Kg	6010B
Copper		11	1.0	mg/Kg	6010B
Lead		2.5	1.0	mg/Kg	6010B
Nickel		32	1.0	mg/Kg	6010B
Vanadium		25	1.0	mg/Kg	6010B
Zinc		21	1.0	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		14	0.99	mg/Kg	8015B
720-17153-19	**MW-12 @ 25**				
Gasoline Range Organics (GRO)-C5-C12		1.6	0.24	mg/Kg	8260B/CA_LUFTMS
Arsenic		2.9	1.0	mg/Kg	6010B
Barium		35	1.0	mg/Kg	6010B
Chromium		32	1.0	mg/Kg	6010B
Cobalt		5.4	1.0	mg/Kg	6010B
Copper		15	1.0	mg/Kg	6010B
Lead		2.0	1.0	mg/Kg	6010B
Nickel		31	1.0	mg/Kg	6010B
Vanadium		21	1.0	mg/Kg	6010B
Zinc		22	1.0	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		12	0.99	mg/Kg	8015B

METHOD SUMMARY

Client: ENV America, Incorporated

Job Number: 720-17153-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds by GC/MS	TAL SF	SW846 8260B/CA_LUFTMS	
Purge and Trap	TAL SF		SW846 5030B
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Ultrasonic Extraction	TAL SF		SW846 3550B
Metals (ICP)	TAL SF	SW846 6010B	
Preparation, Metals	TAL SF		SW846 3050B
Mercury (CVAA)	TAL SF	SW846 7471A	
Preparation, Mercury	TAL SF		SW846 7471A

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: ENV America, Incorporated

Job Number: 720-17153-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-17153-1	MW-9 @ 6	Solid	12/01/2008 0910	12/02/2008 1830
720-17153-2	MW-9 @ 11	Solid	12/01/2008 0920	12/02/2008 1830
720-17153-3	MW-9 @ 16	Solid	12/01/2008 0935	12/02/2008 1830
720-17153-4	MW-9 @ 25	Solid	12/01/2008 1000	12/02/2008 1830
720-17153-5	MW-10 @ 6	Solid	12/01/2008 0844	12/02/2008 1830
720-17153-6	MW-10 @ 11	Solid	12/01/2008 0855	12/02/2008 1830
720-17153-7	MW-10 @ 16	Solid	12/01/2008 0900	12/02/2008 1830
720-17153-8	MW-10 @ 21	Solid	12/01/2008 0905	12/02/2008 1830
720-17153-9	MW-10 @ 25	Solid	12/01/2008 0910	12/02/2008 1830
720-17153-10	MW-11 @ 6	Solid	12/01/2008 1420	12/02/2008 1830
720-17153-11	MW-11 @ 11	Solid	12/01/2008 1430	12/02/2008 1830
720-17153-12	MW-11 @ 16	Solid	12/01/2008 1440	12/02/2008 1830
720-17153-13	MW-11 @ 21	Solid	12/01/2008 1450	12/02/2008 1830
720-17153-14	MW-11 @ 25	Solid	12/01/2008 1455	12/02/2008 1830
720-17153-15	MW-12 @ 6	Solid	12/01/2008 0844	12/02/2008 1830
720-17153-16	MW-12 @ 11	Solid	12/01/2008 0855	12/02/2008 1830
720-17153-17	MW-12 @ 16	Solid	12/01/2008 0900	12/02/2008 1830
720-17153-18	MW-12 @ 21	Solid	12/01/2008 0905	12/02/2008 1830
720-17153-19	MW-12 @ 25	Solid	12/01/2008 0910	12/02/2008 1830

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-9 @ 6**

Lab Sample ID: 720-17153-1
Client Matrix: Solid

Date Sampled: 12/01/2008 0910
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1604
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120308\sa-s
Initial Weight/Volume: 5.24 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0048
Gasoline Range Organics (GRO)-C5-C12		ND		0.24
Toluene		ND		0.0048
Xylenes, Total		ND		0.0095
MTBE		ND		0.0048
Ethylbenzene		ND		0.0048

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	88	74 - 118
1,2-Dichloroethane-d4 (Surr)	99	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-9 @ 11**

Lab Sample ID: 720-17153-2
Client Matrix: Solid

Date Sampled: 12/01/2008 0920
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B-Medium
Dilution: 500
Date Analyzed: 12/05/2008 1950
Date Prepared: 12/05/2008 1300

Analysis Batch: 720-44737
Prep Batch: 720-44738

Instrument ID: Saturn 2100
Lab File ID: d:\data\200812\120508\sa-s
Initial Weight/Volume: 5.09 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		2.5
Gasoline Range Organics (GRO)-C5-C12		590		120
Toluene		ND		2.5
Xylenes, Total		15		4.9
MTBE		ND		2.5
Ethylbenzene		5.0		2.5

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	95	70 - 130
1,2-Dichloroethane-d4 (Surr)	111	70 - 130

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-9 @ 16**

Lab Sample ID: 720-17153-3
Client Matrix: Solid

Date Sampled: 12/01/2008 0935
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1952
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606

Instrument ID: Varian 3900E
Lab File ID: E:\DATA\200812\120308\sa
Initial Weight/Volume: 5.17 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		0.0097		0.0048
Gasoline Range Organics (GRO)-C5-C12		5.9		0.24
Toluene		ND		0.0048
Xylenes, Total		0.074		0.0097
MTBE		ND		0.0048
Ethylbenzene		0.058		0.0048

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	90	74 - 118
1,2-Dichloroethane-d4 (Surr)	100	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-9 @ 25**

Lab Sample ID: 720-17153-4
Client Matrix: Solid

Date Sampled: 12/01/2008 1000
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1627
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120308\sa-s
Initial Weight/Volume: 5.45 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0046
Gasoline Range Organics (GRO)-C5-C12		ND		0.23
Toluene		ND		0.0046
Xylenes, Total		ND		0.0092
MTBE		ND		0.0046
Ethylbenzene		ND		0.0046

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	84	74 - 118
1,2-Dichloroethane-d4 (Surr)	93	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-10 @ 6**

Lab Sample ID: 720-17153-5
Client Matrix: Solid

Date Sampled: 12/01/2008 0844
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1650
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120308\sa-s
Initial Weight/Volume: 5.35 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0047
Gasoline Range Organics (GRO)-C5-C12		ND		0.23
Toluene		ND		0.0047
Xylenes, Total		ND		0.0093
MTBE		ND		0.0047
Ethylbenzene		ND		0.0047

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	83	74 - 118
1,2-Dichloroethane-d4 (Surr)	97	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-10 @ 11**

Lab Sample ID: 720-17153-6
Client Matrix: Solid

Date Sampled: 12/01/2008 0855
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1712
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120308\sa-s
Initial Weight/Volume: 5.10 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0049
Gasoline Range Organics (GRO)-C5-C12		ND		0.25
Toluene		ND		0.0049
Xylenes, Total		ND		0.0098
MTBE		ND		0.0049
Ethylbenzene		ND		0.0049

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	85	74 - 118
1,2-Dichloroethane-d4 (Surr)	99	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-10 @ 16**

Lab Sample ID: 720-17153-7
Client Matrix: Solid

Date Sampled: 12/01/2008 0900
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1906
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120308\sa-s
Initial Weight/Volume: 5.32 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0047
Gasoline Range Organics (GRO)-C5-C12		ND		0.23
Toluene		ND		0.0047
Xylenes, Total		ND		0.0094
MTBE		ND		0.0047
Ethylbenzene		ND		0.0047

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	86	74 - 118
1,2-Dichloroethane-d4 (Surr)	112	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-10 @ 21**

Lab Sample ID: 720-17153-8
Client Matrix: Solid

Date Sampled: 12/01/2008 0905
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1844
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120308\sa-s
Initial Weight/Volume: 5.08 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0049
Gasoline Range Organics (GRO)-C5-C12		ND		0.25
Toluene		ND		0.0049
Xylenes, Total		ND		0.0098
MTBE		ND		0.0049
Ethylbenzene		ND		0.0049

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	91	74 - 118
1,2-Dichloroethane-d4 (Surr)	104	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-10 @ 25**

Lab Sample ID: 720-17153-9
Client Matrix: Solid

Date Sampled: 12/01/2008 0910
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1821
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120308\sa-s
Initial Weight/Volume: 5.25 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0048
Gasoline Range Organics (GRO)-C5-C12		ND		0.24
Toluene		ND		0.0048
Xylenes, Total		ND		0.0095
MTBE		ND		0.0048
Ethylbenzene		ND		0.0048

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	84	74 - 118
1,2-Dichloroethane-d4 (Surr)	98	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-11 @ 6**

Lab Sample ID: 720-17153-10
Client Matrix: Solid

Date Sampled: 12/01/2008 1420
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1616
Date Prepared: 12/03/2008 0930

Analysis Batch: 720-44637
Prep Batch: 720-44638

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\12030
Initial Weight/Volume: 5.03 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0050
Gasoline Range Organics (GRO)-C5-C12		1.1		0.25
Toluene		ND		0.0050
Xylenes, Total		ND		0.0099
MTBE		ND		0.0050
Ethylbenzene		ND		0.0050

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	91	74 - 118
1,2-Dichloroethane-d4 (Surr)	89	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-11 @ 11**

Lab Sample ID: 720-17153-11
Client Matrix: Solid

Date Sampled: 12/01/2008 1430
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1724
Date Prepared: 12/03/2008 0930

Analysis Batch: 720-44637
Prep Batch: 720-44638

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\12030
Initial Weight/Volume: 5.37 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0047
Gasoline Range Organics (GRO)-C5-C12		0.89		0.23
Toluene		ND		0.0047
Xylenes, Total		ND		0.0093
MTBE		ND		0.0047
Ethylbenzene		ND		0.0047

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	92	74 - 118
1,2-Dichloroethane-d4 (Surr)	96	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-11 @ 16**

Lab Sample ID: 720-17153-12
Client Matrix: Solid

Date Sampled: 12/01/2008 1440
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1746
Date Prepared: 12/03/2008 0930

Analysis Batch: 720-44637
Prep Batch: 720-44638

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\12030
Initial Weight/Volume: 5.17 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0048
Gasoline Range Organics (GRO)-C5-C12		ND		0.24
Toluene		ND		0.0048
Xylenes, Total		ND		0.0097
MTBE		ND		0.0048
Ethylbenzene		ND		0.0048

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	87	74 - 118
1,2-Dichloroethane-d4 (Surr)	97	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-11 @ 21**

Lab Sample ID: 720-17153-13
Client Matrix: Solid

Date Sampled: 12/01/2008 1450
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/08/2008 1243
Date Prepared: 12/08/2008 1000

Analysis Batch: 720-44753
Prep Batch: 720-44754

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\12080
Initial Weight/Volume: 5.16 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0048
Gasoline Range Organics (GRO)-C5-C12		ND		0.24
Toluene		ND		0.0048
Xylenes, Total		ND		0.0097
MTBE		ND		0.0048
Ethylbenzene		ND		0.0048

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	92	74 - 118
1,2-Dichloroethane-d4 (Surr)	93	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-11 @ 25**

Lab Sample ID: 720-17153-14
Client Matrix: Solid

Date Sampled: 12/01/2008 1455
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/08/2008 1545
Date Prepared: 12/08/2008 1000

Analysis Batch: 720-44753
Prep Batch: 720-44754

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\12080
Initial Weight/Volume: 5.06 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0049
Gasoline Range Organics (GRO)-C5-C12		ND		0.25
Toluene		ND		0.0049
Xylenes, Total		ND		0.0099
MTBE		ND		0.0049
Ethylbenzene		ND		0.0049

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	94	74 - 118
1,2-Dichloroethane-d4 (Surr)	93	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-12 @ 6**

Lab Sample ID: 720-17153-15
Client Matrix: Solid

Date Sampled: 12/01/2008 0844
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/04/2008 1437
Date Prepared: 12/04/2008 0800

Analysis Batch: 720-44700
Prep Batch: 720-44703

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\12040
Initial Weight/Volume: 5.03 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0050
Gasoline Range Organics (GRO)-C5-C12		1.4		0.25
Toluene		ND		0.0050
Xylenes, Total		ND		0.0099
MTBE		ND		0.0050
Ethylbenzene		ND		0.0050

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	85	74 - 118
1,2-Dichloroethane-d4 (Surr)	116	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-12 @ 11**

Lab Sample ID: 720-17153-16
Client Matrix: Solid

Date Sampled: 12/01/2008 0855
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/03/2008 1929
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606

Instrument ID: Varian 3900E
Lab File ID: E:\DATA\200812\120308\sa
Initial Weight/Volume: 5.17 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0048
Gasoline Range Organics (GRO)-C5-C12		6.8		0.24
Toluene		0.0064		0.0048
Xylenes, Total		ND		0.0097
MTBE		ND		0.0048
Ethylbenzene		ND		0.0048

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	84	74 - 118
1,2-Dichloroethane-d4 (Surr)	128	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-12 @ 16**

Lab Sample ID: 720-17153-17
Client Matrix: Solid

Date Sampled: 12/01/2008 0900
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/05/2008 1502
Date Prepared: 12/05/2008 0800

Analysis Batch: 720-44685
Prep Batch: 720-44684

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120508\sa-s
Initial Weight/Volume: 1.11 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.023
Gasoline Range Organics (GRO)-C5-C12		7.0		1.1
Toluene		ND		0.023
Xylenes, Total		ND		0.045
MTBE		ND		0.023
Ethylbenzene		ND		0.023

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	91	74 - 118
1,2-Dichloroethane-d4 (Surr)	102	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-12 @ 21**

Lab Sample ID: 720-17153-18
Client Matrix: Solid

Date Sampled: 12/01/2008 0905
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/04/2008 1500
Date Prepared: 12/04/2008 0800

Analysis Batch: 720-44700
Prep Batch: 720-44703

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\12040
Initial Weight/Volume: 5.01 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0050
Gasoline Range Organics (GRO)-C5-C12		ND		0.25
Toluene		ND		0.0050
Xylenes, Total		ND		0.010
MTBE		ND		0.0050
Ethylbenzene		ND		0.0050

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	93	74 - 118
1,2-Dichloroethane-d4 (Surr)	104	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-12 @ 25**

Lab Sample ID: 720-17153-19
Client Matrix: Solid

Date Sampled: 12/01/2008 0910
Date Received: 12/02/2008 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/04/2008 1522
Date Prepared: 12/04/2008 0800

Analysis Batch: 720-44700
Prep Batch: 720-44703

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\12040
Initial Weight/Volume: 5.20 g
Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0048
Gasoline Range Organics (GRO)-C5-C12		1.6		0.24
Toluene		ND		0.0048
Xylenes, Total		ND		0.0096
MTBE		ND		0.0048
Ethylbenzene		ND		0.0048

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	90	74 - 118
1,2-Dichloroethane-d4 (Surr)	103	54 - 134

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-9 @ 6**

Lab Sample ID: 720-17153-1
Client Matrix: Solid

Date Sampled: 12/01/2008 0910
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 1021
Date Prepared: 12/03/2008 1232

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.12 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	81	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-9 @ 11**

Lab Sample ID: 720-17153-2
Client Matrix: Solid

Date Sampled: 12/01/2008 0920
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 5.0
Date Analyzed: 12/08/2008 1543
Date Prepared: 12/03/2008 1232

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.14 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		1100		5.0
Motor Oil Range Organics [C24-C36]		ND		250

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	0	D	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-9 @ 16**

Lab Sample ID: 720-17153-3
Client Matrix: Solid

Date Sampled: 12/01/2008 0935
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0928
Date Prepared: 12/03/2008 1232

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.43 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		1.1		0.99
Motor Oil Range Organics [C24-C36]		ND		49

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	1	0 - 5
p-Terphenyl	89	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-9 @ 25**

Lab Sample ID: 720-17153-4
Client Matrix: Solid

Date Sampled: 12/01/2008 1000
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0901
Date Prepared: 12/03/2008 1232

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.06 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		1.2		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	1	0 - 5
p-Terphenyl	90	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-10 @ 6**

Lab Sample ID: 720-17153-5
Client Matrix: Solid

Date Sampled: 12/01/2008 0844
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0834
Date Prepared: 12/03/2008 1232

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.22 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		11		0.99
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	86	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-10 @ 11**

Lab Sample ID: 720-17153-6
Client Matrix: Solid

Date Sampled: 12/01/2008 0855
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0808
Date Prepared: 12/03/2008 1232

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.05 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	96	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-10 @ 16**

Lab Sample ID: 720-17153-7
Client Matrix: Solid

Date Sampled: 12/01/2008 0900
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0741
Date Prepared: 12/03/2008 1232

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.10 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		48		1.0
Motor Oil Range Organics [C24-C36]		68		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	66	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-10 @ 21**

Lab Sample ID: 720-17153-8
Client Matrix: Solid

Date Sampled: 12/01/2008 0905
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0715
Date Prepared: 12/03/2008 1418

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.22 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		0.99
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	77	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-10 @ 25**

Lab Sample ID: 720-17153-9
Client Matrix: Solid

Date Sampled: 12/01/2008 0910
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0648
Date Prepared: 12/03/2008 1418

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.11 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	86	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-11 @ 6**

Lab Sample ID: 720-17153-10
Client Matrix: Solid

Date Sampled: 12/01/2008 1420
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0622
Date Prepared: 12/03/2008 1418

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.06 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		1.4		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	1	0 - 5
p-Terphenyl	81	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-11 @ 11**

Lab Sample ID: 720-17153-11
Client Matrix: Solid

Date Sampled: 12/01/2008 1430
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0437
Date Prepared: 12/03/2008 1418

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.31 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		2.8		0.99
Motor Oil Range Organics [C24-C36]		ND		49

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	74	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-11 @ 16**

Lab Sample ID: 720-17153-12
Client Matrix: Solid

Date Sampled: 12/01/2008 1440
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0503
Date Prepared: 12/03/2008 1418

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.25 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		47		0.99
Motor Oil Range Organics [C24-C36]		70		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	1	0 - 5
p-Terphenyl	69	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-11 @ 21**

Lab Sample ID: 720-17153-13
Client Matrix: Solid

Date Sampled: 12/01/2008 1450
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0530
Date Prepared: 12/03/2008 1418

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.32 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		0.99
Motor Oil Range Organics [C24-C36]		ND		49

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	88	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-11 @ 25**

Lab Sample ID: 720-17153-14
Client Matrix: Solid

Date Sampled: 12/01/2008 1455
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0556
Date Prepared: 12/03/2008 1418

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.21 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		0.99
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	96	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-12 @ 6**

Lab Sample ID: 720-17153-15
Client Matrix: Solid

Date Sampled: 12/01/2008 0844
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 5.0
Date Analyzed: 12/06/2008 0715
Date Prepared: 12/03/2008 1418

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.28 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		190		5.0
Motor Oil Range Organics [C24-C36]		430		250

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	0	D	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-12 @ 11**

Lab Sample ID: 720-17153-16
Client Matrix: Solid

Date Sampled: 12/01/2008 0855
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 20
Date Analyzed: 12/08/2008 1616
Date Prepared: 12/03/2008 1418

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.08 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		3800		20
Motor Oil Range Organics [C24-C36]		1800		1000

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	0	D	41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-12 @ 16**

Lab Sample ID: 720-17153-17
Client Matrix: Solid

Date Sampled: 12/01/2008 0900
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0622
Date Prepared: 12/03/2008 1418

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.21 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		170		0.99
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	74	X	0 - 5
p-Terphenyl	82		41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-12 @ 21**

Lab Sample ID: 720-17153-18
Client Matrix: Solid

Date Sampled: 12/01/2008 0905
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0648
Date Prepared: 12/03/2008 1418

Analysis Batch: 720-44672
Prep Batch: 720-44588

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.29 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		14		0.99
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	7	X	0 - 5
p-Terphenyl	86		41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: **MW-12 @ 25**

Lab Sample ID: 720-17153-19
Client Matrix: Solid

Date Sampled: 12/01/2008 0910
Date Received: 12/02/2008 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 12/06/2008 0159
Date Prepared: 12/04/2008 1717

Analysis Batch: 720-44656
Prep Batch: 720-44626

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.20 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		12		0.99
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	6	X	0 - 5
p-Terphenyl	88		41 - 105

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-9 @ 6

Lab Sample ID: 720-17153-1
Client Matrix: Solid

Date Sampled: 12/01/2008 0910
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1858
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.0
Arsenic		20		0.98
Barium		100		0.98
Beryllium		ND		0.49
Cadmium		ND		0.49
Chromium		43		0.98
Cobalt		9.1		0.98
Copper		13		0.98
Lead		4.5		0.98
Molybdenum		ND		0.98
Nickel		48		0.98
Selenium		ND		2.0
Silver		ND		0.98
Thallium		ND		0.98
Vanadium		30		0.98
Zinc		30		0.98

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1746
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 0.97 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		0.070		0.052

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-9 @ 11

Lab Sample ID: 720-17153-2
Client Matrix: Solid

Date Sampled: 12/01/2008 0920
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1901
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.01 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.0
Arsenic		31		0.99
Barium		140		0.99
Beryllium		ND		0.50
Cadmium		ND		0.50
Chromium		47		0.99
Cobalt		8.4		0.99
Copper		22		0.99
Lead		4.1		0.99
Molybdenum		ND		0.99
Nickel		53		0.99
Selenium		ND		2.0
Silver		ND		0.99
Thallium		ND		0.99
Vanadium		32		0.99
Zinc		38		0.99

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1748
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 0.98 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		0.077		0.051

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-9 @ 16

Lab Sample ID: 720-17153-3
Client Matrix: Solid

Date Sampled: 12/01/2008 0935
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1905
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.03 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		1.9
Arsenic		4.2		0.97
Barium		200		0.97
Beryllium		ND		0.49
Cadmium		ND		0.49
Chromium		43		0.97
Cobalt		7.4		0.97
Copper		25		0.97
Lead		4.0		0.97
Molybdenum		ND		0.97
Nickel		41		0.97
Selenium		ND		1.9
Silver		ND		0.97
Thallium		ND		0.97
Vanadium		37		0.97
Zinc		36		0.97

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1749
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 0.99 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		0.060		0.051

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-9 @ 25

Lab Sample ID: 720-17153-4
Client Matrix: Solid

Date Sampled: 12/01/2008 1000
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1909
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.04 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		1.9
Arsenic		9.4		0.96
Barium		42		0.96
Beryllium		ND		0.48
Cadmium		ND		0.48
Chromium		30		0.96
Cobalt		4.9		0.96
Copper		9.7		0.96
Lead		1.7		0.96
Molybdenum		ND		0.96
Nickel		29		0.96
Selenium		ND		1.9
Silver		ND		0.96
Thallium		ND		0.96
Vanadium		21		0.96
Zinc		18		0.96

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1750
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 1.05 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		ND		0.048

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-10 @ 6

Lab Sample ID: 720-17153-5
Client Matrix: Solid

Date Sampled: 12/01/2008 0844
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1912
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.0
Arsenic		69		0.98
Barium		40		0.98
Beryllium		ND		0.49
Cadmium		ND		0.49
Chromium		45		0.98
Cobalt		4.6		0.98
Copper		12		0.98
Lead		10		0.98
Molybdenum		ND		0.98
Nickel		25		0.98
Selenium		ND		2.0
Silver		ND		0.98
Thallium		ND		0.98
Vanadium		20		0.98
Zinc		25		0.98

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1751
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		ND		0.050

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-10 @ 11

Lab Sample ID: 720-17153-6
Client Matrix: Solid

Date Sampled: 12/01/2008 0855
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1916
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.0
Arsenic		1.5		0.98
Barium		18		0.98
Beryllium		ND		0.49
Cadmium		ND		0.49
Chromium		22		0.98
Cobalt		2.9		0.98
Copper		3.4		0.98
Lead		1.2		0.98
Molybdenum		ND		0.98
Nickel		19		0.98
Selenium		ND		2.0
Silver		ND		0.98
Thallium		ND		0.98
Vanadium		14		0.98
Zinc		10		0.98

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1755
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 0.95 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		ND		0.053

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-10 @ 16

Lab Sample ID: 720-17153-7
Client Matrix: Solid

Date Sampled: 12/01/2008 0900
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1926
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.0
Arsenic		5.9		0.98
Barium		33		0.98
Beryllium		ND		0.49
Cadmium		ND		0.49
Chromium		51		0.98
Cobalt		8.8		0.98
Copper		36		0.98
Lead		9.1		0.98
Molybdenum		ND		0.98
Nickel		49		0.98
Selenium		ND		2.0
Silver		ND		0.98
Thallium		ND		0.98
Vanadium		43		0.98
Zinc		53		0.98

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1756
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 0.95 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		0.16		0.053

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-10 @ 21

Lab Sample ID: 720-17153-8
Client Matrix: Solid

Date Sampled: 12/01/2008 0905
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1930
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.04 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		1.9
Arsenic		14		0.96
Barium		27		0.96
Beryllium		ND		0.48
Cadmium		ND		0.48
Chromium		32		0.96
Cobalt		6.2		0.96
Copper		15		0.96
Lead		4.5		0.96
Molybdenum		ND		0.96
Nickel		29		0.96
Selenium		ND		1.9
Silver		ND		0.96
Thallium		ND		0.96
Vanadium		30		0.96
Zinc		27		0.96

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1758
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 1.04 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		0.11		0.048

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-10 @ 25

Lab Sample ID: 720-17153-9
Client Matrix: Solid

Date Sampled: 12/01/2008 0910
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1933
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.05 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		1.9
Arsenic		2.2		0.95
Barium		60		0.95
Beryllium		ND		0.48
Cadmium		ND		0.48
Chromium		36		0.95
Cobalt		6.0		0.95
Copper		15		0.95
Lead		2.3		0.95
Molybdenum		ND		0.95
Nickel		34		0.95
Selenium		ND		1.9
Silver		ND		0.95
Thallium		ND		0.95
Vanadium		23		0.95
Zinc		25		0.95

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1759
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 0.99 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		ND		0.051

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-11 @ 6

Lab Sample ID: 720-17153-10
Client Matrix: Solid

Date Sampled: 12/01/2008 1420
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1937
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.0
Arsenic		1.8		1.0
Barium		21		1.0
Beryllium		ND		0.50
Cadmium		ND		0.50
Chromium		22		1.0
Cobalt		3.6		1.0
Copper		8.3		1.0
Lead		1.9		1.0
Molybdenum		ND		1.0
Nickel		20		1.0
Selenium		ND		2.0
Silver		ND		1.0
Thallium		ND		1.0
Vanadium		16		1.0
Zinc		18		1.0

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1800
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 0.99 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		0.12		0.051

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-11 @ 11

Lab Sample ID: 720-17153-11
Client Matrix: Solid

Date Sampled: 12/01/2008 1430
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1940
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.98 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.0
Arsenic		4.7		1.0
Barium		42		1.0
Beryllium		ND		0.51
Cadmium		ND		0.51
Chromium		47		1.0
Cobalt		8.9		1.0
Copper		35		1.0
Lead		6.2		1.0
Molybdenum		ND		1.0
Nickel		46		1.0
Selenium		ND		2.0
Silver		ND		1.0
Thallium		ND		1.0
Vanadium		35		1.0
Zinc		46		1.0

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1801
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		ND		0.049

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-11 @ 16

Lab Sample ID: 720-17153-12
Client Matrix: Solid

Date Sampled: 12/01/2008 1440
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1944
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.97 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.1
Arsenic		5.7		1.0
Barium		34		1.0
Beryllium		ND		0.52
Cadmium		ND		0.52
Chromium		55		1.0
Cobalt		9.3		1.0
Copper		28		1.0
Lead		13		1.0
Molybdenum		ND		1.0
Nickel		50		1.0
Selenium		ND		2.1
Silver		ND		1.0
Thallium		ND		1.0
Vanadium		48		1.0
Zinc		53		1.0

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1802
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 1.03 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		0.27		0.049

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-11 @ 21

Lab Sample ID: 720-17153-13
Client Matrix: Solid

Date Sampled: 12/01/2008 1450
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1947
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.96 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.1
Arsenic		2.8		1.0
Barium		48		1.0
Beryllium		ND		0.52
Cadmium		ND		0.52
Chromium		34		1.0
Cobalt		6.3		1.0
Copper		12		1.0
Lead		2.1		1.0
Molybdenum		ND		1.0
Nickel		36		1.0
Selenium		ND		2.1
Silver		ND		1.0
Thallium		ND		1.0
Vanadium		23		1.0
Zinc		24		1.0

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1804
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 1.05 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		ND		0.048

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-11 @ 25

Lab Sample ID: 720-17153-14
Client Matrix: Solid

Date Sampled: 12/01/2008 1455
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1951
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.99 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.0
Arsenic		2.1		1.0
Barium		45		1.0
Beryllium		ND		0.51
Cadmium		ND		0.51
Chromium		35		1.0
Cobalt		5.6		1.0
Copper		9.9		1.0
Lead		1.9		1.0
Molybdenum		ND		1.0
Nickel		31		1.0
Selenium		ND		2.0
Silver		ND		1.0
Thallium		ND		1.0
Vanadium		21		1.0
Zinc		21		1.0

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1805
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 0.95 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		ND		0.053

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-12 @ 6

Lab Sample ID: 720-17153-15
Client Matrix: Solid

Date Sampled: 12/01/2008 0844
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 1954
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.0
Arsenic		30		0.98
Barium		72		0.98
Beryllium		ND		0.49
Cadmium		ND		0.49
Chromium		31		0.98
Cobalt		7.0		0.98
Copper		120		0.98
Lead		180		0.98
Molybdenum		ND		0.98
Nickel		38		0.98
Selenium		ND		2.0
Silver		ND		0.98
Thallium		ND		0.98
Vanadium		27		0.98
Zinc		97		0.98

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1806
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 1.04 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		0.27		0.048

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-12 @ 11

Lab Sample ID: 720-17153-16
Client Matrix: Solid

Date Sampled: 12/01/2008 0855
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44663	Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44580	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	1.02 g
Date Analyzed:	12/04/2008 1958		Final Weight/Volume:	50 mL
Date Prepared:	12/03/2008 1141			

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.0
Arsenic		7.1		0.98
Barium		150		0.98
Beryllium		ND		0.49
Cadmium		ND		0.49
Chromium		43		0.98
Cobalt		18		0.98
Copper		52		0.98
Lead		18		0.98
Molybdenum		ND		0.98
Nickel		39		0.98
Selenium		ND		2.0
Silver		ND		0.98
Thallium		ND		0.98
Vanadium		63		0.98
Zinc		76		0.98

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 720-44653	Instrument ID:	FIMS 100
Preparation:	7471A	Prep Batch: 720-44572	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	0.97 g
Date Analyzed:	12/04/2008 1810		Final Weight/Volume:	50 mL
Date Prepared:	12/03/2008 1123			

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		0.082		0.052

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-12 @ 16

Lab Sample ID: 720-17153-17
Client Matrix: Solid

Date Sampled: 12/01/2008 0900
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 2008
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.05 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		1.9
Arsenic		26		0.95
Barium		53		0.95
Beryllium		ND		0.48
Cadmium		ND		0.48
Chromium		37		0.95
Cobalt		7.4		0.95
Copper		27		0.95
Lead		35		0.95
Molybdenum		ND		0.95
Nickel		35		0.95
Selenium		ND		1.9
Silver		ND		0.95
Thallium		ND		0.95
Vanadium		33		0.95
Zinc		41		0.95

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1811
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 1.05 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		0.18		0.048

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-12 @ 21

Lab Sample ID: 720-17153-18
Client Matrix: Solid

Date Sampled: 12/01/2008 0905
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 2012
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.0
Arsenic		4.3		1.0
Barium		40		1.0
Beryllium		ND		0.50
Cadmium		ND		0.50
Chromium		38		1.0
Cobalt		4.5		1.0
Copper		11		1.0
Lead		2.5		1.0
Molybdenum		ND		1.0
Nickel		32		1.0
Selenium		ND		2.0
Silver		ND		1.0
Thallium		ND		1.0
Vanadium		25		1.0
Zinc		21		1.0

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1812
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 0.99 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		ND		0.051

Client: ENV America, Incorporated

Job Number: 720-17153-1

Client Sample ID: MW-12 @ 25

Lab Sample ID: 720-17153-19
Client Matrix: Solid

Date Sampled: 12/01/2008 0910
Date Received: 12/02/2008 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 12/04/2008 2015
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.97 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Antimony		ND		2.1
Arsenic		2.9		1.0
Barium		35		1.0
Beryllium		ND		0.52
Cadmium		ND		0.52
Chromium		32		1.0
Cobalt		5.4		1.0
Copper		15		1.0
Lead		2.0		1.0
Molybdenum		ND		1.0
Nickel		31		1.0
Selenium		ND		2.1
Silver		ND		1.0
Thallium		ND		1.0
Vanadium		21		1.0
Zinc		22		1.0

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 12/04/2008 1813
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 0.99 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Mercury		ND		0.051

DATA REPORTING QUALIFIERS

Client: ENV America, Incorporated Job Number: 720-17153-1

Lab Section	Qualifier	Description
GC/MS VOA		
	X	Surrogate exceeds the control limits
GC Semi VOA		
	X	Surrogate exceeds the control limits
	D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
Metals		
	F	MS or MSD exceeds the control limits
	F	RPD of the MS and MSD exceeds the control limits

Client: ENV America, Incorporated Job Number: 720-17153-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 720-44606					
LCS 720-44606/2-A	Lab Control Spike	T	Solid	5030B	
LCSD 720-44606/3-A	Lab Control Spike Duplicate	T	Solid	5030B	
MB 720-44606/1-A	Method Blank	T	Solid	5030B	
720-17153-1	MW-9 @ 6	T	Solid	5030B	
720-17153-3	MW-9 @ 16	T	Solid	5030B	
720-17153-4	MW-9 @ 25	T	Solid	5030B	
720-17153-5	MW-10 @ 6	T	Solid	5030B	
720-17153-6	MW-10 @ 11	T	Solid	5030B	
720-17153-6MS	Matrix Spike	T	Solid	5030B	
720-17153-6MSD	Matrix Spike Duplicate	T	Solid	5030B	
720-17153-7	MW-10 @ 16	T	Solid	5030B	
720-17153-8	MW-10 @ 21	T	Solid	5030B	
720-17153-9	MW-10 @ 25	T	Solid	5030B	
720-17153-16	MW-12 @ 11	T	Solid	5030B	
Analysis Batch:720-44607					
LCS 720-44606/2-A	Lab Control Spike	T	Solid	8260B/CA_LUFT	720-44606
LCSD 720-44606/3-A	Lab Control Spike Duplicate	T	Solid	8260B/CA_LUFT	720-44606
MB 720-44606/1-A	Method Blank	T	Solid	8260B/CA_LUFT	720-44606
720-17153-1	MW-9 @ 6	T	Solid	8260B/CA_LUFT	720-44606
720-17153-3	MW-9 @ 16	T	Solid	8260B/CA_LUFT	720-44606
720-17153-4	MW-9 @ 25	T	Solid	8260B/CA_LUFT	720-44606
720-17153-5	MW-10 @ 6	T	Solid	8260B/CA_LUFT	720-44606
720-17153-6	MW-10 @ 11	T	Solid	8260B/CA_LUFT	720-44606
720-17153-6MS	Matrix Spike	T	Solid	8260B/CA_LUFT	720-44606
720-17153-6MSD	Matrix Spike Duplicate	T	Solid	8260B/CA_LUFT	720-44606
720-17153-7	MW-10 @ 16	T	Solid	8260B/CA_LUFT	720-44606
720-17153-8	MW-10 @ 21	T	Solid	8260B/CA_LUFT	720-44606
720-17153-9	MW-10 @ 25	T	Solid	8260B/CA_LUFT	720-44606
720-17153-16	MW-12 @ 11	T	Solid	8260B/CA_LUFT	720-44606
Analysis Batch:720-44637					
LCS 720-44638/2-A	Lab Control Spike	T	Solid	8260B/CA_LUFT	720-44638
LCSD 720-44638/3-A	Lab Control Spike Duplicate	T	Solid	8260B/CA_LUFT	720-44638
MB 720-44638/1-A	Method Blank	T	Solid	8260B/CA_LUFT	720-44638
720-17153-10	MW-11 @ 6	T	Solid	8260B/CA_LUFT	720-44638
720-17153-10MS	Matrix Spike	T	Solid	8260B/CA_LUFT	720-44638
720-17153-10MSD	Matrix Spike Duplicate	T	Solid	8260B/CA_LUFT	720-44638
720-17153-11	MW-11 @ 11	T	Solid	8260B/CA_LUFT	720-44638
720-17153-12	MW-11 @ 16	T	Solid	8260B/CA_LUFT	720-44638

Client: ENV America, Incorporated Job Number: 720-17153-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 720-44638					
LCS 720-44638/2-A	Lab Control Spike	T	Solid	5030B	
LCSD 720-44638/3-A	Lab Control Spike Duplicate	T	Solid	5030B	
MB 720-44638/1-A	Method Blank	T	Solid	5030B	
720-17153-10	MW-11 @ 6	T	Solid	5030B	
720-17153-10MS	Matrix Spike	T	Solid	5030B	
720-17153-10MSD	Matrix Spike Duplicate	T	Solid	5030B	
720-17153-11	MW-11 @ 11	T	Solid	5030B	
720-17153-12	MW-11 @ 16	T	Solid	5030B	
Prep Batch: 720-44684					
LCS 720-44684/2-A	Lab Control Spike	T	Solid	5030B	
LCSD 720-44684/3-A	Lab Control Spike Duplicate	T	Solid	5030B	
MB 720-44684/1-A	Method Blank	T	Solid	5030B	
720-17153-17	MW-12 @ 16	T	Solid	5030B	
720-17187-A-4-D MS	Matrix Spike	T	Solid	5030B	
720-17187-A-4-E MSD	Matrix Spike Duplicate	T	Solid	5030B	
Analysis Batch:720-44685					
LCS 720-44684/2-A	Lab Control Spike	T	Solid	8260B/CA_LUFT	720-44684
LCSD 720-44684/3-A	Lab Control Spike Duplicate	T	Solid	8260B/CA_LUFT	720-44684
MB 720-44684/1-A	Method Blank	T	Solid	8260B/CA_LUFT	720-44684
720-17153-17	MW-12 @ 16	T	Solid	8260B/CA_LUFT	720-44684
720-17187-A-4-D MS	Matrix Spike	T	Solid	8260B/CA_LUFT	720-44684
720-17187-A-4-E MSD	Matrix Spike Duplicate	T	Solid	8260B/CA_LUFT	720-44684
Analysis Batch:720-44700					
LCS 720-44703/2-A	Lab Control Spike	T	Solid	8260B/CA_LUFT	720-44703
LCSD 720-44703/3-A	Lab Control Spike Duplicate	T	Solid	8260B/CA_LUFT	720-44703
MB 720-44703/1-A	Method Blank	T	Solid	8260B/CA_LUFT	720-44703
720-17056-A-37-D MS	Matrix Spike	T	Solid	8260B/CA_LUFT	720-44703
720-17056-A-37-E MSD	Matrix Spike Duplicate	T	Solid	8260B/CA_LUFT	720-44703
720-17153-15	MW-12 @ 6	T	Solid	8260B/CA_LUFT	720-44703
720-17153-18	MW-12 @ 21	T	Solid	8260B/CA_LUFT	720-44703
720-17153-19	MW-12 @ 25	T	Solid	8260B/CA_LUFT	720-44703
Prep Batch: 720-44703					
LCS 720-44703/2-A	Lab Control Spike	T	Solid	5030B	
LCSD 720-44703/3-A	Lab Control Spike Duplicate	T	Solid	5030B	
MB 720-44703/1-A	Method Blank	T	Solid	5030B	
720-17056-A-37-D MS	Matrix Spike	T	Solid	5030B	
720-17056-A-37-E MSD	Matrix Spike Duplicate	T	Solid	5030B	
720-17153-15	MW-12 @ 6	T	Solid	5030B	
720-17153-18	MW-12 @ 21	T	Solid	5030B	
720-17153-19	MW-12 @ 25	T	Solid	5030B	

Client: ENV America, Incorporated Job Number: 720-17153-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-44737					
LCS 720-44738/2-A	Lab Control Spike	T	Solid	8260B/CA_LUFT	720-44738
LCSD 720-44738/3-A	Lab Control Spike Duplicate	T	Solid	8260B/CA_LUFT	720-44738
MB 720-44738/1-A	Method Blank	T	Solid	8260B/CA_LUFT	720-44738
720-17153-2	MW-9 @ 11	T	Solid	8260B/CA_LUFT	720-44738
Prep Batch: 720-44738					
LCS 720-44738/2-A	Lab Control Spike	T	Solid	5030B	
LCSD 720-44738/3-A	Lab Control Spike Duplicate	T	Solid	5030B	
MB 720-44738/1-A	Method Blank	T	Solid	5030B	
720-17153-2	MW-9 @ 11	T	Solid	5030B	
Analysis Batch:720-44753					
LCS 720-44754/2-A	Lab Control Spike	T	Solid	8260B/CA_LUFT	720-44754
LCSD 720-44754/3-A	Lab Control Spike Duplicate	T	Solid	8260B/CA_LUFT	720-44754
MB 720-44754/1-A	Method Blank	T	Solid	8260B/CA_LUFT	720-44754
720-17153-13	MW-11 @ 21	T	Solid	8260B/CA_LUFT	720-44754
720-17153-14	MW-11 @ 25	T	Solid	8260B/CA_LUFT	720-44754
720-17200-A-6-E MS	Matrix Spike	T	Solid	8260B/CA_LUFT	720-44754
720-17200-A-6-F MSD	Matrix Spike Duplicate	T	Solid	8260B/CA_LUFT	720-44754
Prep Batch: 720-44754					
LCS 720-44754/2-A	Lab Control Spike	T	Solid	5030B	
LCSD 720-44754/3-A	Lab Control Spike Duplicate	T	Solid	5030B	
MB 720-44754/1-A	Method Blank	T	Solid	5030B	
720-17153-13	MW-11 @ 21	T	Solid	5030B	
720-17153-14	MW-11 @ 25	T	Solid	5030B	
720-17200-A-6-E MS	Matrix Spike	T	Solid	5030B	
720-17200-A-6-F MSD	Matrix Spike Duplicate	T	Solid	5030B	

Report Basis
T = Total

Client: ENV America, Incorporated Job Number: 720-17153-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-44588					
LCS 720-44588/2-A	Lab Control Spike	A	Solid	3550B	
LCSD 720-44588/3-A	Lab Control Spike Duplicate	A	Solid	3550B	
MB 720-44588/1-A	Method Blank	A	Solid	3550B	
720-17153-1	MW-9 @ 6	A	Solid	3550B	
720-17153-1MS	Matrix Spike	A	Solid	3550B	
720-17153-1MSD	Matrix Spike Duplicate	A	Solid	3550B	
720-17153-2	MW-9 @ 11	A	Solid	3550B	
720-17153-3	MW-9 @ 16	A	Solid	3550B	
720-17153-4	MW-9 @ 25	A	Solid	3550B	
720-17153-5	MW-10 @ 6	A	Solid	3550B	
720-17153-6	MW-10 @ 11	A	Solid	3550B	
720-17153-7	MW-10 @ 16	A	Solid	3550B	
720-17153-8	MW-10 @ 21	A	Solid	3550B	
720-17153-9	MW-10 @ 25	A	Solid	3550B	
720-17153-10	MW-11 @ 6	A	Solid	3550B	
720-17153-11	MW-11 @ 11	A	Solid	3550B	
720-17153-12	MW-11 @ 16	A	Solid	3550B	
720-17153-13	MW-11 @ 21	A	Solid	3550B	
720-17153-14	MW-11 @ 25	A	Solid	3550B	
720-17153-15	MW-12 @ 6	A	Solid	3550B	
720-17153-16	MW-12 @ 11	A	Solid	3550B	
720-17153-17	MW-12 @ 16	A	Solid	3550B	
720-17153-18	MW-12 @ 21	A	Solid	3550B	
Prep Batch: 720-44626					
LCS 720-44626/2-A	Lab Control Spike	A	Solid	3550B	
LCSD 720-44626/3-A	Lab Control Spike Duplicate	A	Solid	3550B	
MB 720-44626/1-A	Method Blank	A	Solid	3550B	
720-17153-19	MW-12 @ 25	A	Solid	3550B	
720-17172-A-5-G MS	Matrix Spike	A	Solid	3550B	
720-17172-A-5-H MSD	Matrix Spike Duplicate	A	Solid	3550B	
Analysis Batch:720-44656					
LCS 720-44626/2-A	Lab Control Spike	A	Solid	8015B	720-44626
LCSD 720-44626/3-A	Lab Control Spike Duplicate	A	Solid	8015B	720-44626
MB 720-44626/1-A	Method Blank	A	Solid	8015B	720-44626
720-17153-19	MW-12 @ 25	A	Solid	8015B	720-44626
720-17172-A-5-G MS	Matrix Spike	A	Solid	8015B	720-44626
720-17172-A-5-H MSD	Matrix Spike Duplicate	A	Solid	8015B	720-44626

Client: ENV America, Incorporated Job Number: 720-17153-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:720-44672					
LCS 720-44588/2-A	Lab Control Spike	A	Solid	8015B	720-44588
LCSD 720-44588/3-A	Lab Control Spike Duplicate	A	Solid	8015B	720-44588
MB 720-44588/1-A	Method Blank	A	Solid	8015B	720-44588
720-17153-1	MW-9 @ 6	A	Solid	8015B	720-44588
720-17153-1MS	Matrix Spike	A	Solid	8015B	720-44588
720-17153-1MSD	Matrix Spike Duplicate	A	Solid	8015B	720-44588
720-17153-2	MW-9 @ 11	A	Solid	8015B	720-44588
720-17153-3	MW-9 @ 16	A	Solid	8015B	720-44588
720-17153-4	MW-9 @ 25	A	Solid	8015B	720-44588
720-17153-5	MW-10 @ 6	A	Solid	8015B	720-44588
720-17153-6	MW-10 @ 11	A	Solid	8015B	720-44588
720-17153-7	MW-10 @ 16	A	Solid	8015B	720-44588
720-17153-8	MW-10 @ 21	A	Solid	8015B	720-44588
720-17153-9	MW-10 @ 25	A	Solid	8015B	720-44588
720-17153-10	MW-11 @ 6	A	Solid	8015B	720-44588
720-17153-11	MW-11 @ 11	A	Solid	8015B	720-44588
720-17153-12	MW-11 @ 16	A	Solid	8015B	720-44588
720-17153-13	MW-11 @ 21	A	Solid	8015B	720-44588
720-17153-14	MW-11 @ 25	A	Solid	8015B	720-44588
720-17153-15	MW-12 @ 6	A	Solid	8015B	720-44588
720-17153-16	MW-12 @ 11	A	Solid	8015B	720-44588
720-17153-17	MW-12 @ 16	A	Solid	8015B	720-44588
720-17153-18	MW-12 @ 21	A	Solid	8015B	720-44588

Report Basis
A = Silica Gel Cleanup

Client: ENV America, Incorporated Job Number: 720-17153-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-44572					
LCS 720-44572/2-A	Lab Control Spike	T	Solid	7471A	
LCSD 720-44572/3-A	Lab Control Spike Duplicate	T	Solid	7471A	
MB 720-44572/1-A	Method Blank	T	Solid	7471A	
720-17153-1	MW-9 @ 6	T	Solid	7471A	
720-17153-1MS	Matrix Spike	T	Solid	7471A	
720-17153-1MSD	Matrix Spike Duplicate	T	Solid	7471A	
720-17153-2	MW-9 @ 11	T	Solid	7471A	
720-17153-3	MW-9 @ 16	T	Solid	7471A	
720-17153-4	MW-9 @ 25	T	Solid	7471A	
720-17153-5	MW-10 @ 6	T	Solid	7471A	
720-17153-6	MW-10 @ 11	T	Solid	7471A	
720-17153-7	MW-10 @ 16	T	Solid	7471A	
720-17153-8	MW-10 @ 21	T	Solid	7471A	
720-17153-9	MW-10 @ 25	T	Solid	7471A	
720-17153-10	MW-11 @ 6	T	Solid	7471A	
720-17153-11	MW-11 @ 11	T	Solid	7471A	
720-17153-12	MW-11 @ 16	T	Solid	7471A	
720-17153-13	MW-11 @ 21	T	Solid	7471A	
720-17153-14	MW-11 @ 25	T	Solid	7471A	
720-17153-15	MW-12 @ 6	T	Solid	7471A	
720-17153-16	MW-12 @ 11	T	Solid	7471A	
720-17153-17	MW-12 @ 16	T	Solid	7471A	
720-17153-18	MW-12 @ 21	T	Solid	7471A	
720-17153-19	MW-12 @ 25	T	Solid	7471A	

Client: ENV America, Incorporated Job Number: 720-17153-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-44580					
LCS 720-44580/2-A	Lab Control Spike	T	Solid	3050B	
LCSD 720-44580/3-A	Lab Control Spike Duplicate	T	Solid	3050B	
LCSSRM 720-44580/25-A	LCS-Standard Reference Material	T	Solid	3050B	
MB 720-44580/1-A	Method Blank	T	Solid	3050B	
720-17153-1	MW-9 @ 6	T	Solid	3050B	
720-17153-1MS	Matrix Spike	T	Solid	3050B	
720-17153-1MSD	Matrix Spike Duplicate	T	Solid	3050B	
720-17153-2	MW-9 @ 11	T	Solid	3050B	
720-17153-3	MW-9 @ 16	T	Solid	3050B	
720-17153-4	MW-9 @ 25	T	Solid	3050B	
720-17153-5	MW-10 @ 6	T	Solid	3050B	
720-17153-6	MW-10 @ 11	T	Solid	3050B	
720-17153-7	MW-10 @ 16	T	Solid	3050B	
720-17153-8	MW-10 @ 21	T	Solid	3050B	
720-17153-9	MW-10 @ 25	T	Solid	3050B	
720-17153-10	MW-11 @ 6	T	Solid	3050B	
720-17153-11	MW-11 @ 11	T	Solid	3050B	
720-17153-12	MW-11 @ 16	T	Solid	3050B	
720-17153-13	MW-11 @ 21	T	Solid	3050B	
720-17153-14	MW-11 @ 25	T	Solid	3050B	
720-17153-15	MW-12 @ 6	T	Solid	3050B	
720-17153-16	MW-12 @ 11	T	Solid	3050B	
720-17153-17	MW-12 @ 16	T	Solid	3050B	
720-17153-18	MW-12 @ 21	T	Solid	3050B	
720-17153-19	MW-12 @ 25	T	Solid	3050B	

Client: ENV America, Incorporated Job Number: 720-17153-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:720-44653					
LCS 720-44572/2-A	Lab Control Spike	T	Solid	7471A	720-44572
LCSD 720-44572/3-A	Lab Control Spike Duplicate	T	Solid	7471A	720-44572
MB 720-44572/1-A	Method Blank	T	Solid	7471A	720-44572
720-17153-1	MW-9 @ 6	T	Solid	7471A	720-44572
720-17153-1MS	Matrix Spike	T	Solid	7471A	720-44572
720-17153-1MSD	Matrix Spike Duplicate	T	Solid	7471A	720-44572
720-17153-2	MW-9 @ 11	T	Solid	7471A	720-44572
720-17153-3	MW-9 @ 16	T	Solid	7471A	720-44572
720-17153-4	MW-9 @ 25	T	Solid	7471A	720-44572
720-17153-5	MW-10 @ 6	T	Solid	7471A	720-44572
720-17153-6	MW-10 @ 11	T	Solid	7471A	720-44572
720-17153-7	MW-10 @ 16	T	Solid	7471A	720-44572
720-17153-8	MW-10 @ 21	T	Solid	7471A	720-44572
720-17153-9	MW-10 @ 25	T	Solid	7471A	720-44572
720-17153-10	MW-11 @ 6	T	Solid	7471A	720-44572
720-17153-11	MW-11 @ 11	T	Solid	7471A	720-44572
720-17153-12	MW-11 @ 16	T	Solid	7471A	720-44572
720-17153-13	MW-11 @ 21	T	Solid	7471A	720-44572
720-17153-14	MW-11 @ 25	T	Solid	7471A	720-44572
720-17153-15	MW-12 @ 6	T	Solid	7471A	720-44572
720-17153-16	MW-12 @ 11	T	Solid	7471A	720-44572
720-17153-17	MW-12 @ 16	T	Solid	7471A	720-44572
720-17153-18	MW-12 @ 21	T	Solid	7471A	720-44572
720-17153-19	MW-12 @ 25	T	Solid	7471A	720-44572

Client: ENV America, Incorporated Job Number: 720-17153-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:720-44663					
LCS 720-44580/2-A	Lab Control Spike	T	Solid	6010B	720-44580
LCSD 720-44580/3-A	Lab Control Spike Duplicate	T	Solid	6010B	720-44580
LCSSRM 720-44580/25-A	LCS-Standard Reference Material	T	Solid	6010B	720-44580
MB 720-44580/1-A	Method Blank	T	Solid	6010B	720-44580
720-17153-1	MW-9 @ 6	T	Solid	6010B	720-44580
720-17153-1MS	Matrix Spike	T	Solid	6010B	720-44580
720-17153-1MSD	Matrix Spike Duplicate	T	Solid	6010B	720-44580
720-17153-2	MW-9 @ 11	T	Solid	6010B	720-44580
720-17153-3	MW-9 @ 16	T	Solid	6010B	720-44580
720-17153-4	MW-9 @ 25	T	Solid	6010B	720-44580
720-17153-5	MW-10 @ 6	T	Solid	6010B	720-44580
720-17153-6	MW-10 @ 11	T	Solid	6010B	720-44580
720-17153-7	MW-10 @ 16	T	Solid	6010B	720-44580
720-17153-8	MW-10 @ 21	T	Solid	6010B	720-44580
720-17153-9	MW-10 @ 25	T	Solid	6010B	720-44580
720-17153-10	MW-11 @ 6	T	Solid	6010B	720-44580
720-17153-11	MW-11 @ 11	T	Solid	6010B	720-44580
720-17153-12	MW-11 @ 16	T	Solid	6010B	720-44580
720-17153-13	MW-11 @ 21	T	Solid	6010B	720-44580
720-17153-14	MW-11 @ 25	T	Solid	6010B	720-44580
720-17153-15	MW-12 @ 6	T	Solid	6010B	720-44580
720-17153-16	MW-12 @ 11	T	Solid	6010B	720-44580
720-17153-17	MW-12 @ 16	T	Solid	6010B	720-44580
720-17153-18	MW-12 @ 21	T	Solid	6010B	720-44580
720-17153-19	MW-12 @ 25	T	Solid	6010B	720-44580

Report Basis
T = Total

Client: ENV America, Incorporated

Job Number: 720-17153-1

Method Blank - Batch: 720-44606

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-44606/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/03/2008 1108
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606
Units: mg/Kg

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120308\mb
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.0050
Gasoline Range Organics (GRO)-C5-C12	ND		0.25
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
MTBE	ND		0.0050
Ethylbenzene	ND		0.0050

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	80	74 - 118
1,2-Dichloroethane-d4 (Surr)	95	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44606

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-44606/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/03/2008 1139
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606
Units: mg/Kg

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120308\ls-s
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-44606/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/03/2008 1202
Date Prepared: 12/03/2008 0800

Analysis Batch: 720-44607
Prep Batch: 720-44606
Units: mg/Kg

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120308\ld-sc
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	78	77	66 - 128	2	20		
Gasoline Range Organics (GRO)-C5-C12	58	64	43 - 95	11	20		
Toluene	80	79	76 - 128	0	20		
MTBE	74	82	59 - 145	10	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	87	84	74 - 118
1,2-Dichloroethane-d4 (Surr)	109	108	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44606

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-17153-6	Analysis Batch: 720-44607	Instrument ID: Varian 3900E
Client Matrix:	Solid	Prep Batch: 720-44606	Lab File ID: e:\data\200812\120308\sa
Dilution:	1.0		Initial Weight/Volume: 5.27 g
Date Analyzed:	12/03/2008 1735		Final Weight/Volume: 10 mL
Date Prepared:	12/03/2008 0800		

MSD Lab Sample ID:	720-17153-6	Analysis Batch: 720-44607	Instrument ID: Varian 3900E
Client Matrix:	Solid	Prep Batch: 720-44606	Lab File ID: e:\data\200812\120308\sa-
Dilution:	1.0		Initial Weight/Volume: 5.13 g
Date Analyzed:	12/03/2008 1758		Final Weight/Volume: 10 mL
Date Prepared:	12/03/2008 0800		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	80	81	55 - 140	3	20		
Gasoline Range Organics (GRO)-C5-C12	53	55	43 - 95	5	20		
Toluene	80	86	61 - 138	10	20		
MTBE	87	78	49 - 161	8	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	83	93	74 - 118
1,2-Dichloroethane-d4 (Surr)	99	103	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Method Blank - Batch: 720-44638

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-44638/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/03/2008 1121
Date Prepared: 12/03/2008 0930

Analysis Batch: 720-44637
Prep Batch: 720-44638
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\12030
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.0050
Gasoline Range Organics (GRO)-C5-C12	ND		0.25
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
MTBE	ND		0.0050
Ethylbenzene	ND		0.0050

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	92	74 - 118
1,2-Dichloroethane-d4 (Surr)	103	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44638

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-44638/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/03/2008 1143
Date Prepared: 12/03/2008 0930

Analysis Batch: 720-44637
Prep Batch: 720-44638
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\1203(
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-44638/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/03/2008 1206
Date Prepared: 12/03/2008 0930

Analysis Batch: 720-44637
Prep Batch: 720-44638
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\120308
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	96	91	66 - 128	5	20		
Gasoline Range Organics (GRO)-C5-C12	88	80	43 - 95	10	20		
Toluene	98	94	76 - 128	4	20		
MTBE	120	101	59 - 145	17	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	90	93	74 - 118
1,2-Dichloroethane-d4 (Surr)	112	102	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44638

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-17153-10	Analysis Batch: 720-44637	Instrument ID: Varian 3900A
Client Matrix:	Solid	Prep Batch: 720-44638	Lab File ID: e:\data\2008\200812\120
Dilution:	1.0		Initial Weight/Volume: 5.09 g
Date Analyzed:	12/03/2008 1638		Final Weight/Volume: 10 mL
Date Prepared:	12/03/2008 0930		

MSD Lab Sample ID:	720-17153-10	Analysis Batch: 720-44637	Instrument ID: Varian 3900A
Client Matrix:	Solid	Prep Batch: 720-44638	Lab File ID: e:\data\2008\200812\12030
Dilution:	1.0		Initial Weight/Volume: 5.22 g
Date Analyzed:	12/03/2008 1701		Final Weight/Volume: 10 mL
Date Prepared:	12/03/2008 0930		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	102	101	55 - 140	4	20		
Gasoline Range Organics (GRO)-C5-C12	74	70	43 - 95	5	20		
Toluene	99	95	61 - 138	6	20		
MTBE	107	103	49 - 161	6	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	92	93	74 - 118
1,2-Dichloroethane-d4 (Surr)	98	88	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Method Blank - Batch: 720-44684

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-44684/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/05/2008 1031
Date Prepared: 12/05/2008 0800

Analysis Batch: 720-44685
Prep Batch: 720-44684
Units: mg/Kg

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120508\mb
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.0050
Gasoline Range Organics (GRO)-C5-C12	ND		0.25
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
MTBE	ND		0.0050
Ethylbenzene	ND		0.0050

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	90	74 - 118
1,2-Dichloroethane-d4 (Surr)	110	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44684

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-44684/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/05/2008 1101
Date Prepared: 12/05/2008 0800

Analysis Batch: 720-44685
Prep Batch: 720-44684
Units: mg/Kg

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120508\ls-s
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-44684/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/05/2008 1124
Date Prepared: 12/05/2008 0800

Analysis Batch: 720-44685
Prep Batch: 720-44684
Units: mg/Kg

Instrument ID: Varian 3900E
Lab File ID: e:\data\200812\120508\ld-sc
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	78	82	66 - 128	4	20		
Gasoline Range Organics (GRO)-C5-C12	64	63	43 - 95	2	20		
Toluene	79	81	76 - 128	3	20		
MTBE	95	90	59 - 145	6	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	86	89	74 - 118
1,2-Dichloroethane-d4 (Surr)	103	102	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44684

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-17187-A-4-D MS	Analysis Batch: 720-44685	Instrument ID: Varian 3900E
Client Matrix:	Solid	Prep Batch: 720-44684	Lab File ID: e:\data\200812\120508\sa
Dilution:	1.0		Initial Weight/Volume: 5.02 g
Date Analyzed:	12/05/2008 1718		Final Weight/Volume: 10 mL
Date Prepared:	12/05/2008 0800		

MSD Lab Sample ID:	720-17187-A-4-E MSD	Analysis Batch: 720-44685	Instrument ID: Varian 3900E
Client Matrix:	Solid	Prep Batch: 720-44684	Lab File ID: e:\data\200812\120508\sa-
Dilution:	1.0		Initial Weight/Volume: 5.05 g
Date Analyzed:	12/05/2008 1741		Final Weight/Volume: 10 mL
Date Prepared:	12/05/2008 0800		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	95	89	55 - 140	7	20		
Gasoline Range Organics (GRO)-C5-C12	54	58	43 - 95	6	20		
Toluene	87	85	61 - 138	2	20		
MTBE	96	105	49 - 161	8	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	89	87	74 - 118
1,2-Dichloroethane-d4 (Surr)	115	111	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Method Blank - Batch: 720-44703

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-44703/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1102
Date Prepared: 12/04/2008 0800

Analysis Batch: 720-44700
Prep Batch: 720-44703
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\12040
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.0050
Gasoline Range Organics (GRO)-C5-C12	ND		0.25
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
MTBE	ND		0.0050
Ethylbenzene	ND		0.0050

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	94	74 - 118
1,2-Dichloroethane-d4 (Surr)	98	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44703

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-44703/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1134
Date Prepared: 12/04/2008 0800

Analysis Batch: 720-44700
Prep Batch: 720-44703
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\1204(
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-44703/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1157
Date Prepared: 12/04/2008 0800

Analysis Batch: 720-44700
Prep Batch: 720-44703
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\120408
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	109	105	66 - 128	4	20		
Gasoline Range Organics (GRO)-C5-C12	85	86	43 - 95	1	20		
Toluene	105	102	76 - 128	3	20		
MTBE	119	105	59 - 145	13	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	94	92	74 - 118
1,2-Dichloroethane-d4 (Surr)	112	107	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44703

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-17056-A-37-D MS	Analysis Batch: 720-44700	Instrument ID: Varian 3900A
Client Matrix:	Solid	Prep Batch: 720-44703	Lab File ID: e:\data\2008\200812\1204
Dilution:	1.0		Initial Weight/Volume: 5.46 g
Date Analyzed:	12/04/2008 1716		Final Weight/Volume: 10 mL
Date Prepared:	12/04/2008 0800		

MSD Lab Sample ID:	720-17056-A-37-E MSD	Analysis Batch: 720-44700	Instrument ID: Varian 3900A
Client Matrix:	Solid	Prep Batch: 720-44703	Lab File ID: e:\data\2008\200812\12040
Dilution:	1.0		Initial Weight/Volume: 5.47 g
Date Analyzed:	12/04/2008 1738		Final Weight/Volume: 10 mL
Date Prepared:	12/04/2008 0800		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	97	97	55 - 140	1	20		
Gasoline Range Organics (GRO)-C5-C12	47	45	43 - 95	4	20		
Toluene	87	87	61 - 138	1	20		
MTBE	102	99	49 - 161	3	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	86	89	74 - 118
1,2-Dichloroethane-d4 (Surr)	102	99	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Method Blank - Batch: 720-44738

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-44738/1-A
Client Matrix: Solid
Dilution: 200
Date Analyzed: 12/05/2008 1643
Date Prepared: 12/05/2008 1300

Analysis Batch: 720-44737
Prep Batch: 720-44738
Units: mg/Kg

Instrument ID: Saturn 2100
Lab File ID: d:\data\200812\120508\mb
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Toluene	ND		1.0
Xylenes, Total	ND		2.0
MTBE	ND		1.0
Ethylbenzene	ND		1.0

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	88	70 - 130
1,2-Dichloroethane-d4 (Surr)	101	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44738

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-44738/2-A
Client Matrix: Solid
Dilution: 200
Date Analyzed: 12/05/2008 1710
Date Prepared: 12/05/2008 1300

Analysis Batch: 720-44737
Prep Batch: 720-44738
Units: mg/Kg

Instrument ID: Saturn 2100
Lab File ID: d:\data\200812\120508\ls-s
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-44738/3-A
Client Matrix: Solid
Dilution: 200
Date Analyzed: 12/05/2008 1736
Date Prepared: 12/05/2008 1300

Analysis Batch: 720-44737
Prep Batch: 720-44738
Units: mg/Kg

Instrument ID: Saturn 2100
Lab File ID: d:\data\200812\120508\ld-sc
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	89	89	74 - 121	0	20		
Toluene	94	95	86 - 121	1	20		
MTBE	92	103	84 - 127	11	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	98	92	70 - 130
1,2-Dichloroethane-d4 (Surr)	105	107	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Method Blank - Batch: 720-44754

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-44754/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/08/2008 1007
Date Prepared: 12/08/2008 1000

Analysis Batch: 720-44753
Prep Batch: 720-44754
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\1208(
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.0050
Gasoline Range Organics (GRO)-C5-C12	ND		0.25
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
MTBE	ND		0.0050
Ethylbenzene	ND		0.0050

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	93	74 - 118
1,2-Dichloroethane-d4 (Surr)	102	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44754

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-44754/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/08/2008 1037
Date Prepared: 12/08/2008 1000

Analysis Batch: 720-44753
Prep Batch: 720-44754
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\1208(
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-44754/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/08/2008 1100
Date Prepared: 12/08/2008 1000

Analysis Batch: 720-44753
Prep Batch: 720-44754
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2008\200812\120808
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	104	105	66 - 128	2	20		
Gasoline Range Organics (GRO)-C5-C12	80	79	43 - 95	1	20		
Toluene	97	97	76 - 128	0	20		
MTBE	110	100	59 - 145	9	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	95	93	74 - 118
1,2-Dichloroethane-d4 (Surr)	104	95	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44754

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-17200-A-6-E MS	Analysis Batch: 720-44753	Instrument ID: Varian 3900A
Client Matrix:	Solid	Prep Batch: 720-44754	Lab File ID: e:\data\2008\200812\1208
Dilution:	1.0		Initial Weight/Volume: 5.25 g
Date Analyzed:	12/08/2008 1459		Final Weight/Volume: 10 mL
Date Prepared:	12/08/2008 1000		

MSD Lab Sample ID:	720-17200-A-6-F MSD	Analysis Batch: 720-44753	Instrument ID: Varian 3900A
Client Matrix:	Solid	Prep Batch: 720-44754	Lab File ID: e:\data\2008\200812\12080
Dilution:	1.0		Initial Weight/Volume: 5.28 g
Date Analyzed:	12/08/2008 1522		Final Weight/Volume: 10 mL
Date Prepared:	12/08/2008 1000		

	% Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual MSD Qual
Benzene	108	108	55 - 140	1	20	
Gasoline Range Organics (GRO)-C5-C12	78	72	43 - 95	9	20	
Toluene	96	95	61 - 138	2	20	
MTBE	116	113	49 - 161	3	20	

Surrogate	MS % Rec		MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	93		92	74 - 118
1,2-Dichloroethane-d4 (Surr)	51	X	104	54 - 134

Calculations are performed before rounding to avoid round-off errors in calculated results.

Method Blank - Batch: 720-44588

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

Lab Sample ID: MB 720-44588/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1807
Date Prepared: 12/03/2008 1232

Analysis Batch: 720-44672
Prep Batch: 720-44588
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.24 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		0.99
Motor Oil Range Organics [C24-C36]	ND		50

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	89	41 - 105

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44588

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

LCS Lab Sample ID: LCS 720-44588/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1713
Date Prepared: 12/03/2008 1232

Analysis Batch: 720-44672
Prep Batch: 720-44588
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.17 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-44588/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1740
Date Prepared: 12/03/2008 1232

Analysis Batch: 720-44672
Prep Batch: 720-44588
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.25 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	69	67	50 - 130	4	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	84	83	41 - 105

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44588

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

MS Lab Sample ID:	720-17153-1	Analysis Batch: 720-44672	Instrument ID: HP DRO5
Client Matrix:	Solid	Prep Batch: 720-44588	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 30.11 g
Date Analyzed:	12/06/2008 0808		Final Weight/Volume: 5 mL
Date Prepared:	12/03/2008 1232		Injection Volume:
			Column ID: PRIMARY
MSD Lab Sample ID:	720-17153-1	Analysis Batch: 720-44672	Instrument ID: HP DRO5
Client Matrix:	Solid	Prep Batch: 720-44588	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 30.22 g
Date Analyzed:	12/06/2008 0834		Final Weight/Volume: 5 mL
Date Prepared:	12/03/2008 1232		Injection Volume:
			Column ID: PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Diesel Range Organics [C10-C28]	63	58	50 - 130	7	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
p-Terphenyl	80	83	41 - 105

Calculations are performed before rounding to avoid round-off errors in calculated results.

Method Blank - Batch: 720-44626

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

Lab Sample ID: MB 720-44626/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1337
Date Prepared: 12/04/2008 0940

Analysis Batch: 720-44656
Prep Batch: 720-44626
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.16 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		0.99
Motor Oil Range Organics [C24-C36]	ND		50

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	81	41 - 105

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44626

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

LCS Lab Sample ID: LCS 720-44626/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1244
Date Prepared: 12/04/2008 0940

Analysis Batch: 720-44656
Prep Batch: 720-44626
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.17 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-44626/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1310
Date Prepared: 12/04/2008 0940

Analysis Batch: 720-44656
Prep Batch: 720-44626
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.07 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	57	66	50 - 130	15	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	82	85	41 - 105

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44626

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

MS Lab Sample ID:	720-17172-A-5-G MS	Analysis Batch: 720-44656	Instrument ID: HP DRO5
Client Matrix:	Solid	Prep Batch: 720-44626	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 30.25 g
Date Analyzed:	12/04/2008 1403		Final Weight/Volume: 5 mL
Date Prepared:	12/04/2008 0940		Injection Volume:
			Column ID: PRIMARY
MSD Lab Sample ID:	720-17172-A-5-H MSD	Analysis Batch: 720-44656	Instrument ID: HP DRO5
Client Matrix:	Solid	Prep Batch: 720-44626	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 30.30 g
Date Analyzed:	12/04/2008 1430		Final Weight/Volume: 5 mL
Date Prepared:	12/04/2008 0940		Injection Volume:
			Column ID: PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Diesel Range Organics [C10-C28]	61	57	50 - 130	5	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
p-Terphenyl	83	89	41 - 105

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Method Blank - Batch: 720-44580

Method: 6010B
Preparation: 3050B

Lab Sample ID: MB 720-44580/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1833
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.99 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Antimony	ND		2.0
Arsenic	ND		1.0
Barium	ND		1.0
Beryllium	ND		0.51
Cadmium	ND		0.51
Chromium	ND		1.0
Cobalt	ND		1.0
Copper	ND		1.0
Lead	ND		1.0
Molybdenum	ND		1.0
Nickel	ND		1.0
Selenium	ND		2.0
Silver	ND		1.0
Thallium	ND		1.0
Vanadium	ND		1.0
Zinc	ND		1.0

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

LCS-Standard Reference Material - Batch: 720-44580

Method: 6010B
Preparation: 3050B

Lab Sample ID: LCSSRM 720-44580/25-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 2019
Date Prepared: 12/03/2008 1148

Analysis Batch: 720-44663
Prep Batch: 720-44580
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.01 g
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	27.4	5.76	21	11 - 101	
Arsenic	22.7	19.2	84	69 - 119	
Barium	145	126	87	61 - 117	
Beryllium	1.09	1.00	92	56 - 102	
Cadmium	42.2	36.7	87	67 - 118	
Chromium	246	223	91	67 - 121	
Cobalt	65.1	65.0	100	64 - 133	
Copper	58.5	52.8	90	68 - 126	
Lead	44.1	37.8	86	62 - 113	
Molybdenum	61.0	51.4	84	62 - 128	
Nickel	96.8	83.8	87	65 - 117	
Selenium	165	141	85	63 - 126	
Silver	79.5	70.1	88	51 - 130	
Thallium	55.9	49.1	88	64 - 124	
Vanadium	56.7	52.5	93	67 - 123	
Zinc	44.0	37.0	84	62 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44580

Method: 6010B
Preparation: 3050B

LCS Lab Sample ID: LCS 720-44580/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1843
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-44580/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1847
Date Prepared: 12/03/2008 1141

Analysis Batch: 720-44663
Prep Batch: 720-44580
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.03 g
Final Weight/Volume: 50 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Antimony	96	94	80 - 120	5	20		
Arsenic	94	92	80 - 120	5	20		
Barium	96	96	80 - 120	4	20		
Beryllium	94	93	80 - 120	4	20		
Cadmium	90	88	80 - 120	5	20		
Chromium	93	91	80 - 120	5	20		
Cobalt	92	90	80 - 120	5	20		
Copper	98	96	80 - 120	5	20		
Lead	90	89	80 - 120	5	20		
Molybdenum	95	93	80 - 120	5	20		
Nickel	91	89	80 - 120	5	20		
Selenium	92	91	80 - 120	5	20		
Silver	95	94	80 - 120	4	20		
Thallium	91	90	80 - 120	5	20		
Vanadium	93	92	80 - 120	5	20		
Zinc	91	89	80 - 120	5	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44580

Method: 6010B
Preparation: 3050B

MS Lab Sample ID:	720-17153-1	Analysis Batch: 720-44663	Instrument ID: Thermo 6500 ICP
Client Matrix:	Solid	Prep Batch: 720-44580	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 0.99 g
Date Analyzed:	12/04/2008 1850		Final Weight/Volume: 50 mL
Date Prepared:	12/03/2008 1141		

MSD Lab Sample ID:	720-17153-1	Analysis Batch: 720-44663	Instrument ID: Thermo 6500 ICP
Client Matrix:	Solid	Prep Batch: 720-44580	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 1.02 g
Date Analyzed:	12/04/2008 1854		Final Weight/Volume: 50 mL
Date Prepared:	12/03/2008 1141		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Antimony	28	23	75 - 125	22	20	F	F
Arsenic	88	92	75 - 125	2	20		
Barium	108	113	75 - 125	1	20		
Beryllium	85	89	75 - 125	1	20		
Cadmium	80	83	75 - 125	1	20		
Chromium	86	91	75 - 125	2	20		
Cobalt	83	87	75 - 125	2	20		
Copper	92	97	75 - 125	2	20		
Lead	80	84	75 - 125	2	20		
Molybdenum	82	85	75 - 125	1	20		
Nickel	81	90	75 - 125	6	20		
Selenium	84	88	75 - 125	1	20		
Silver	90	92	75 - 125	0	20		
Thallium	81	84	75 - 125	0	20		
Vanadium	86	90	75 - 125	2	20		
Zinc	83	89	75 - 125	3	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Method Blank - Batch: 720-44572

Method: 7471A
Preparation: 7471A

Lab Sample ID: MB 720-44572/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1740
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572
Units: mg/Kg

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Mercury	ND		0.049

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44572

Method: 7471A
Preparation: 7471A

LCS Lab Sample ID: LCS 720-44572/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1742
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572
Units: mg/Kg

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 1.03 g
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-44572/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 12/04/2008 1743
Date Prepared: 12/03/2008 1123

Analysis Batch: 720-44653
Prep Batch: 720-44572
Units: mg/Kg

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 1.01 g
Final Weight/Volume: 50 mL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Mercury	108	111	80 - 120	4	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ENV America, Incorporated

Job Number: 720-17153-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44572

Method: 7471A
Preparation: 7471A

MS Lab Sample ID:	720-17153-1	Analysis Batch: 720-44653	Instrument ID: FIMS 100
Client Matrix:	Solid	Prep Batch: 720-44572	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 0.96 g
Date Analyzed:	12/04/2008 1744		Final Weight/Volume: 50 mL
Date Prepared:	12/03/2008 1123		

MSD Lab Sample ID:	720-17153-1	Analysis Batch: 720-44653	Instrument ID: FIMS 100
Client Matrix:	Solid	Prep Batch: 720-44572	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 1.04 g
Date Analyzed:	12/04/2008 1745		Final Weight/Volume: 50 mL
Date Prepared:	12/03/2008 1123		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Mercury	122	110	75 - 125	16	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

720-17153

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody
1220 Quarry Lane • Pleasanton, CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 113630
Date 12/2 Page 1 of 2

Report To

Attn: Alice Letcher
Company: ENV America
Address: 244 California St, Suite 500
Phone: 415 989 9933 Email: aletcher@environmentalamerica.com
Bill To: ENV
Sampled By: LETCHER
Attn: Phone:

Analysis Request

	Sample ID	Date	Time	Matrix	Pres.	TPH EPA - ☐ 8015/8021 ☒ 8260B (☒ Gas w/ ☒ BTEX ☒ MTBE)	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* ☒ Silica Gel (☒ Diesel ☒ Motor Oil ☐ Other ___)	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxygenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	Hexavalent Chromium ☐ pH (24h hold time for H_2O)	Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS ☐	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4				Number of Containers
1.	MW-9@6	12/1	9:10	S		X		X								X										1
2.	MW-9@11	12/1	9:20	S		X		X								X										1
3.	MW-9@16	12/1	9:35	S		X		X								X										1
4.	MW-9@25	12/1	10:00	S		X		X								X										1
5.	MW-10@6	12/1	8:44	S		X		X								X										1
6.	MW-10@10	12/1	8:55	S		X		X								X										1
7.	MW-10@16	12/1	9:00	S		X		X								X										1
8	MW-10@21	12/1	9:05	S		X		X								X										1
9.	MW-10@25	12/1	9:10	S		X		X								X										1
10.	MW-11@10	12/1	2:20	S		X		X								X										1

Project Info.

Project Name: Port of Oakland
Project#: MSE-08-02
PO#:
Credit Card#:

TAT: 5 Day | 72h | 48h | 24h
Other: Standard

Report ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank
Fund EDF
Special Instructions / Comments: ☐ Global ID

Sample Receipt

of Containers:
Head Space:
Temp: 1.5°C
Conforms to record:

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: Alice Letcher Time: 1:40	Signature: Time: 1830	Signature: Time:
Printed Name: Alice Letcher Date: 12/2	Printed Name: T Lewis Date: 12/2	Printed Name: Date:
Company: ENV	Company: TA SF	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: Time: 1340	Signature: Time: 18:30	Signature: Time:
Printed Name: T. Lewis Date: 12/2	Printed Name: T Bulloch Date: 12/2/08	Printed Name: Date:
Company: TA SF	Company: TA-SF	Company:

See Terms and Conditions on reverse
*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{12}-C_{24}

Rev 06/04

TOTAL P.02

DEC-01-2008 11:27 TESTAMERICA SAN FRANCISCO 925 600 3002 P.02/02

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002
Email: sflogin@stl-inc.com

Reference #: 113630
Date 12/2 Page 2 of 2

Report To

Attn: Alice Letcher
Company:
Address:
Phone: Email:
Bill To: Sampled By:
Attn: Phone:

Analysis Request

	Sample ID	Date	Time	Matrix	Pres erv.	TPH EPA [X] Gas w/ 8260B [X] BTEX [X] MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* [X] Silica Gel [X] Diesel [X] Motor Oil ☐ Other ___	Fuel Tests EPA 8260B: ☐ Gas [X] ☐ Five Oxyenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Low Level Metals by EPA 200.8/6020 (ICP-MS): ___	☐ W.E.T (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24h hold time for H_2O)	☐ Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS ☐	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4				N
11	MW-11@11	12/1	2:30	S		X		X								X											
12	MW-11@16	12/1	2:40	S		X		X								X											
13	MW-11@21	12/1	2:50	S		X		X								X											
14	MW-11@25	12/1	2:55	S		X		X								X											
15	MW-12@6	12/2	8:44	S		X		X								X											
16	MW-12@10	12/2	8:55	S		X		X								X											
17	MW-12@16	12/2	9:00	S		X		X								X											
18	MW-12@21	12/2	9:05	S		X		X								X											
19	MW-12@25	12/2	9:10	S		X		X								X											

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Project Info.

Project Name:
Prbject#:
PO#:
Credit Card#:

Sample Receipt

of Containers:
Head Space:
Temp: 1.5 °C
Conforms to record:

TAT: 5 Day | 72h | 48h | 24h | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF
Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse
*TestAmerica SF reports 8015M from C_5-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

1) Relinquished by:
Alice Letcher 1:40
Signature Time
Alice Letcher 12/2
Printed Name Date
Company

2) Relinquished by:
1830
Signature Time
T Lewis 12/2
Printed Name Date
TA SF
Company

3) Relinquished by:
Signature Time
Printed Name Date
Company

1) Received by:
1340
Signature Time
T. Lewis 12/2
Printed Name Date
TA SF
Company

2) Received by:
1830
Signature Time
T Bullock 12/2/08
Printed Name Date
TA-SF
Company

3) Received by:
Signature Time
Printed Name Date
Company

Rev 06/04

Login Sample Receipt Check List

Client: ENV America, Incorporated

Job Number: 720-17153-1

Login Number: 17153
List Source: TestAmerica San Francisco
Creator: Bullock, Tracy
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	False	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

PROJECT: **Port of Oakland**

Log of Well No. MW-9

BORING LOCATION: **651 and 555 Maritime Street, Oakland, CA**

GROUND SURFACE ELEVATION AND DATUM: **not surveyed**

DRILLING CONTRACTOR: **Gregg Drilling and Testing**

DATE STARTED: **12/1/08** | DATE FINISHED: **12/1/08**

DRILLING METHOD: **Hollow stem auger**

TOTAL DEPTH (ft.): **25 ft.** | SCREEN INTERVAL (ft.) 10 ft.

DRILLING EQUIPMENT: **Marl M5T**

DEPTH TO WATER: FIRST **17.0** | COMPL. **---** | CASING: **Schedule 40 PVC**

SAMPLING METHOD: **California split spoon**

LOGGED BY: **A. Letcher**

HAMMER WEIGHT: **---** | DROP:

REVIEWED BY: **A. Atkinson** | REG. NO. 3515

DEPTH (feet)	SAMPLES: SAMPLE NO.	SAMPLES: SAMPLE	SAMPLES: BLOWS/FOOT	OVM READING	DESCRIPTION NAME (USCS): color, moist, % by weight, plast. density, structure, cementation, react., w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					Asphalt	Hand augered to 5 ft Traffic-rated EMCO Wheaton flush-mounted well box
6	MW-9@6			0	SILTY GRAVEL with SAND (GM), reddish black (2.5YR 2.5/1), moist, 50% fine gravel, 25% fine to coarse sand, 25% medium plasticity fines	Basalite type II/V neat cement grout 2" diameter Schedule 40 PVC blank casing
11	MW-9@11			511		3/8" chip Bentonite hole-plug Lapis Lustre #2/16 filter pack sand

LOG OF BORING 2007 PORT OF OAKLAND GINT.GPJ ENV AMERICA 2007.GDT 12/4/08

LOG OF BORING 2007

PROJECT: **Port of Oakland**
651 and 555 Maritime Street, Oakland, CA

Log of Well No. MW-9

DEPTH (feet)	SAMPLES: SAMPLE NO.	SAMPLES: SAMPLE	SAMPLES: BLOWS/ FOOT	OVM READING	DESCRIPTION NAME (USCS): color, moist, % by weight, plast. density, structure, cementation, react., w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16	MW-9@16			0	LEAN CLAY with SAND (CL) (Cont.)	
17						First water at 17"
18						2" diameter Schedule 40 PVC 0.010" machine slotted screen
19						
20						Lapis Lustre #2/16 filter pack sand
21						
22						
23						
24					POORLY GRADED SAND with SILT (SP-SM), dark greenish gray (GLEY 1 4/10Y), moist, 90% fine to medium sand, 10% non-plastic fines	
25				0		

Bottom of boring at 25 ft

LOG OF BORING 2007

PROJECT: **Port of Oakland**

Log of Well No. MW-10

BORING LOCATION: **651 and 555 Maritime Street, Oakland, CA**

GROUND SURFACE ELEVATION AND DATUM: **not measured**

DRILLING CONTRACTOR: **Gregg Drilling and Testing**

DATE STARTED: **12/1/08** | DATE FINISHED: **12/1/08**

DRILLING METHOD: **Hollow stem auger**

TOTAL DEPTH (ft.): **25 ft.** | SCREEN INTERVAL (ft.) **10 ft.**

DRILLING EQUIPMENT: **Marl M5T**

DEPTH TO WATER: FIRST **17.5** | COMPL. **---** | CASING: **Schedule 40 PVC**

SAMPLING METHOD: **California split spoon**

LOGGED BY: **A. Letcher**

HAMMER WEIGHT: **---** | DROP:

REVIEWED BY: **A. Atkinson** | REG. NO. **3515**

DEPTH (feet)	SAMPLES: SAMPLE NO.	SAMPLES: SAMPLE	SAMPLES: BLOWS/FOOT	OVM READING	DESCRIPTION NAME (USCS): color, moist, % by weight, plast. density, structure, cementation, react., w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					Asphalt	Hand augered to 5 ft. Traffic-rated EMCO Wheaton flush-mounted well box
6	MW-10@6			0	POORLY GRADED SAND with SILT and GRAVEL (SP-SM), brown (10YR4/3), moist, 60% fine to coarse sand, 30% fine gravel, 10% non-plastic fines	Basalite type II/V neat cement grout 2" diameter Schedule 40 PVC blank casing
11	MW-10@11			0		3/8" chip Bentonite hole-plug #2/16 Lapis Lustre filter pack sand

LOG OF BORING 2007

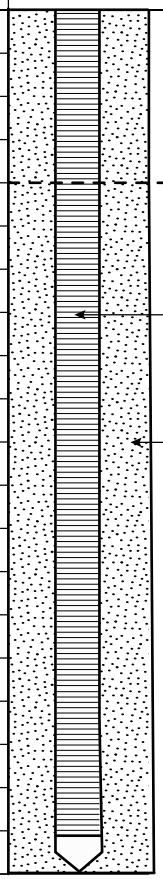
LOG OF BORING 2007 PORT OF OAKLAND GINT.GPJ ENV AMERICA 2007.GDT 12/4/08

PROJECT: **Port of Oakland**
651 and 555 Maritime Street, Oakland, CA

Log of Well No. MW-10

DEPTH (feet)	SAMPLES: SAMPLE NO.	SAMPLES: SAMPLE	SAMPLES: BLOWS/ FOOT	OVM READING	DESCRIPTION NAME (USCS): color, moist, % by weight, plast. density, structure, cementation, react., w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16	MW-10@16				(CL) LEAN CLAY with SAND (CL), black (10YR2/1), moist, 90% clay, 10% fine sand, high plasticity	
17						First water at 17.5 ft
18						2" diameter Schedule 40 PVC 0.010" machine slotted screen
19						
20						Lapis Lustre #2/16 filter pack sand
21	MW-10@21				POORLY GRADED SAND with SILT (SP-SM), black (10YR2/1), wet, 90% fine to medium sand, 10% non-plastic fines	
22						
23						
24						
25	MW-10@25					

Bottom of boring at 25 ft



LOG OF BORING 2007

PROJECT: **Port of Oakland**

Log of Well No. MW-11

BORING LOCATION: **651 and 555 Maritime Street, Oakland, CA**

GROUND SURFACE ELEVATION AND DATUM: **not measured**

DRILLING CONTRACTOR: **Gregg Drilling and Testing**

DATE STARTED: **12/1/08** | DATE FINISHED: **12/1/08**

DRILLING METHOD: **Hollow stem auger**

TOTAL DEPTH (ft.): **25 ft.** | SCREEN INTERVAL (ft.) **10 ft**

DRILLING EQUIPMENT: **Marl M5T**

DEPTH TO WATER: FIRST **17.0** | COMPL. **---** | CASING: **Schedule 40 PVC**

SAMPLING METHOD: **California split spoon**

LOGGED BY: **A. Letcher**

HAMMER WEIGHT: **---** | DROP:

REVIEWED BY: **A. Atkinson** | REG. NO. **3515**

DEPTH (feet)	SAMPLES: SAMPLE NO.	SAMPLES: SAMPLE	SAMPLES: BLOWS/FOOT	OVM READING	DESCRIPTION: NAME (USCS): color, moist, % by weight, plast. density, structure, cementation, react., w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					Asphalt	Hand augered to 5 ft.
1–5					SILTY SAND (SM), dark greyish brown (10YR4/2), moist, 80% fine to medium sand, 20% non-plastic fines	Traffic-rated EMCO Wheaton flush-mounted well box; Basalite type II/V neat cement grout; 2" diameter Schedule 40 PVC blank casing
6	MW-10@6			1.9		
7–10						
11	MW-10@11			0		3/8" chip Bentonite hole-plug
12						
13–15					SANDY LEAN CLAY (CL), dark greenish gray (GLEY1 4/10Y), moist, 90% fine to medium sand, 10% non-plastic fines	#2/16 Lapis Lustre filter pack sand

LOG OF BORING 2007

LOG OF BORING 2007 PORT OF OAKLAND GINT.GPJ ENV AMERICA 2007.GDT 12/4/08

ENV AMERICA

PROJECT: **Port of Oakland**
651 and 555 Maritime Street, Oakland, CA

Log of Well No. MW-11

DEPTH (feet)	SAMPLES: SAMPLE NO.	SAMPLES: SAMPLE	SAMPLES: BLOWS/ FOOT	OVM READING	DESCRIPTION NAME (USCS): color, moist, % by weight, plast. density, structure, cementation, react., w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16	MW-10@16			0	LEAN CLAY (CL), black (10YR2/1), moist, 85% clay, 15% fine to medium sand, high plasticity HYRDOCARBON ODOR	
17					SILTY SAND (SM), black (10YR2/1), moist, 70% fine to medium sand, 30% non-plastic fines	First water at 17.5 ft
18						2" diameter Schedule 40 PVC 0.010" machine slotted screen
19						
20						Lapis Lustre #2/16 filter pack sand
21	MW-10@21			0		
22						
23					▼ (SW)(Cont.) wet	
24						
25	MW-10@25			0		

Bottom of boring at 25 ft

PROJECT: **Port of Oakland**

Log of Well No. MW-12

BORING LOCATION: **651 and 555 Maritime Street, Oakland, CA**

GROUND SURFACE ELEVATION AND DATUM: **not measured**

DRILLING CONTRACTOR: **Gregg Drilling and Testing**

DATE STARTED: **12/2/08** | DATE FINISHED: **12/2/08**

DRILLING METHOD: **Hollow stem auger**

TOTAL DEPTH (ft.): **25 ft.** | SCREEN INTERVAL (ft.) **10 ft**

DRILLING EQUIPMENT: **Marl M5T**

DEPTH TO WATER: FIRST **17.0** | COMPL. **---** | CASING: **Schedule 40 PVC**

SAMPLING METHOD: **California split spoon**

LOGGED BY: **A. Letcher**

HAMMER WEIGHT: **---** | DROP:

REVIEWED BY: **A. Atkinson** | REG. NO. **3515**

DEPTH (feet)	SAMPLES: SAMPLE NO.	SAMPLES: SAMPLE	SAMPLES: BLOWS/FOOT	OVM READING	DESCRIPTION NAME (USCS): color, moist, % by weight, plast. density, structure, cementation, react., w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					Asphalt	Hand augered to 5 ft. Traffic-rated EMCO Wheaton flush-mounted well box
1–5						Basalite type II/V neat cement grout
5						2" diameter Schedule 40 PVC blank casing
6	MW-10@6			0.8	(SW-SM) WELL GRADED SAND with SILT and GRAVEL (SW-SM), (7.5YR3/2), 70% fine to coarse sand, 20% rounded gravel, 10% non-plastic fines	
10	MW-10@11			45		
11–12						3/8" chip Bentonite hole-plug
14					WELL GRADED GRAVEL with CLAY, (GLEY 2 2.5/10BG), wet, 70% coarse gravel, 10% fine sand, 20% low plasticity fines	#2/16 Lapis Lustre filter pack sand

LOG OF BORING 2007 PORT OF OAKLAND GINT.GPJ ENV AMERICA 2007.GDT 12/4/08

LOG OF BORING 2007

ENV AMERICA

Project No. MSE-08-02

PROJECT: **Port of Oakland**
651 and 555 Maritime Street, Oakland, CA

Log of Well No. MW-12

DEPTH (feet)	SAMPLES: SAMPLE NO.	SAMPLES: SAMPLE	SAMPLES: BLOWS/ FOOT	OVM READING	DESCRIPTION NAME (USCS): color, moist, % by weight, plast. density, structure, cementation, react., w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					(GC)(Cont.)	
16	MW-10@16			10	SILT with GRAVEL (GLEY 2 2.5/10BG), wet, 80% fines, 15% fine gravel, 5% fine sand, non-plastic **FREE PRODUCT IN SAMPLE**	
17						First water at 17.5 ft
18						2" diameter Schedule 40 PVC 0.010" machine slotted screen
19						
20				2		
21	MW-10@21			5	(SW-SM) WELL GRADED SAND with SILT and GRAVEL (SW-SM), (2.5YR2.5/2), wet, 75% fine to medium sand, 15% fine gravel, 10% non-plastic fines **FREE PRODUCT IN SAMPLE**	
22						Lapis Lustre #2/16 filter pack sand
23						
24						
25	MW-10@25			0.5	(SP) POORLY GRADED SAND (SP), (GLEY 14/104), moist, 95% fine to medium sand, 5% non-plastic fines	

Bottom of boring at 25 ft

LOG OF BORING 2007

APPENDIX B
GROUNDWATER SAMPLING FORMS

GROUNDWATER SAMPLING

Well No.: **MW-1**

Project No.		Recorded by: EVANS	Date: 12-18-08
Project Name:	Harbor Facilities Center	Depth of well from TOC (feet):	17.65
Location:	Port of Oakland	Well diameter (inches):	2
	651 and 555 Maritime Street, Oakland	Screened interval from TOC (feet):	7.65-17.65
Weather:	Overcast, then SUN	TOC elevation, NAVD88 (feet):	15.79
Precip. in past 5 days (in.)	.5	Groundwater elevation (feet):	
Source:	Oakland Fire Services Agency "ONO"	Water level from TOC (feet): 10.89	Time: 7:37
Water level instrument:	Dual-phase interface probe (Solinst)	Product level from TOC (feet): 10.82	Time: 7:37

CALCULATION OF WELL VOLUME:

(well depth - water level) x (well radius)^2 x π x gal/ft^3

(17.65 ft - ft) x 0.083 ft)^2 x π x 7.48 gal/ft^3 = gallons in one casing volume

total gallons removed

CALIBRATION:

	Time	Temp (°C)	pH	DO (%)	ORP (mV)	EC (µmho/cm)	NTU
Calibration Standard:			7.00	100 %	465	1,000	0/20
Before Purging:	6:58	14.3	7.05	100 %	457	1,000	0/20
After Purging:	1620	22.5	7.15	92.4%	432	1,038	0/18

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	DO (mg/L)	ORP (mV)	EC (µmho/cm)	NTU	Cumulative Gallons Removed

Measured product level only. No groundwater collected due to presence of free phase product

Purge method:		Sample Time:	
Duplicate/blank number:		Duplicate Sample Time:	
Sampling equipment:		VOA attachment:	
Sample containers:	N/A		
Sample analyses:	N/A	Laboratory:	N/A
Decontamination method:		Rinsate disposal:	

Comments:

TOC = top of casing
bgs = below ground surface

GROUNDWATER SAMPLING

Well No.: **MW-2**

Project No.		Recorded by:	Evans
Project Name:	Harbor Facilities Center	Date:	12-18-09
Location:	Port of Oakland	Depth of well from TOC (feet):	18.06
	651 and 555 Maritime Street, Oakland	Well diameter (inches):	2
Weather:	overcast, Sun, Overcast	Screened interval from TOC (feet):	8.06-18.06
Precip. in past 5 days (In.)	.5	TOC elevation, NAVD88 (feet):	16.42
Source:	Oakland Fire Services Agency "ONO"	Groundwater elevation (feet):	
Water level instrument:	Dual-phase interface probe (Solinst)	Water level from TOC (feet): 12.20 Time: 7:50	
		Product level from TOC (feet): ~~3.10~~ Time: 7:50	

None per phone call w/ T. Evans 2/12/2009.

CALCULATION OF WELL VOLUME:

(well depth - water level) x (well radius)^2 x π x gal/ft^3

(18.06 ft - ft) x 0.083 (ft)^2 x π x 7.48 gal/ft^3 =

0.7	gallons in one casing volume
2.5	total gallons removed

CALIBRATION:

	Time	Temp (°C)	pH	DO (%)	ORP (mV)	EC (µmho/cm)	NTU
Calibration Standard:			7.00	100%	465	1,588	0/20
Before Purging:	6:58	14.3	7.05	100%	457	1,080	0/20
After Purging:	16:20	22.5	7.15	92.4%	432	1,038	0/18

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	DO (mg/L)	ORP (mV)	EC (µmho/cm)	NTU	Cumulative Gallons Removed
9:36	19.7	7.42	0.16	-87	1,067	1.1	1.0
9:57	18.5	7.34	0.16	-92	1,226	0.75	2.0
10:12	18.1	7.31	0.13	-116	1,317	0.70	2.5

Purge method:	Peristaltic pump and disposable poly	Sample Time:	10:20
Duplicate/blank number:		Duplicate Sample Time:	
Sampling equipment:		VOA attachment:	
Sample containers:	Three 40-ml VOAs and two 1-L amber glass		
Sample analyses:	TPHg, TPHd, TPHmo, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:	Alconox and water, DI rinse	Rinsate disposal:	stored on site

Comments: Sample was clear Purge cont. to remove

TOC = top of casing
bgs = below ground surface

GROUNDWATER SAMPLING

Well No.: **MW-3**

Project No.		Recorded by: EVANS	Date: 12-18-09
Project Name:	Harbor Facilities Center	Depth of well from TOC (feet):	17.47
Location:	Port of Oakland	Well diameter (inches):	2
	651 and 555 Maritime Street, Oakland	Screened interval from TOC (feet):	7.47-17.47
Weather:	Overcast, Sun, Overcast	TOC elevation, NAVD88 (feet):	15.65
Precip. in past 5 days (in.)	.5	Groundwater elevation (feet):	
Source:	Oakland Fire Services Agency "ONO"	Water level from TOC (feet): 12:00	Time: 8:03
Water level instrument:	Dual-phase interface probe (Solinst)	Product level from TOC (feet): 10.78	Time: 8:03

CALCULATION OF WELL VOLUME:

(well depth - water level) x (well radius)^2 x π x gal/ft^3

(17.47 ft - ft) x 0.083 ft)^2 x π x 7.48 gal/ft^3 = gallons in one casing volume

total gallons removed

CALIBRATION:

	Time	Temp (°C)	pH	DO (%)	ORP (mV)	EC (µmho/cm)	NTU
Calibration Standard:							
Before Purging:							
After Purging:							

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	DO (mg/L)	ORP (mV)	EC (µmho/cm)	NTU	Cumulative Gallons Removed

measured product level only, no groundwater sample collected due to the presence of free-phase product

Purge method:		Sample Time:	
Duplicate/blank number:		Duplicate Sample Time:	
Sampling equipment:		VOA attachment:	
Sample containers:	N/A		
Sample analyses:	N/A	Laboratory:	N/A
Decontamination method:		Rinsate disposal:	

Comments:

TOC = top of casing
bgs = below ground surface

GROUNDWATER SAMPLING

Well No.: **MW-4**

Project No.		Recorded by:	Evans
Project Name:	Harbor Facilities Center	Date:	12-18-09
Location:	Port of Oakland	Depth of well from TOC (feet):	22.05
	651 and 555 Maritime Street, Oakland	Well diameter (inches):	2
Weather:	Overcast, Sun, Overcast	Screened interval from TOC (feet):	11.25-22.05
Precip. in past 5 days (in.)	.5	TOC elevation, NAVD88 (feet):	15.90
Source:	Oakland Fire Services Agency "ONO"	Groundwater elevation (feet):	
Water level instrument:	Dual-phase interface probe (Solinst)	Water level from TOC (feet): 11.20	Time: 8:20
		Product level from TOC (feet): none	Time: 8:20

CALCULATION OF WELL VOLUME:

(well depth - water level) x (well radius)^2 x π x gal/ft^3

(22.05 ft - ft) x 0.083 ft)^2 x π x 7.48 gal/ft^3 = 1.9 gallons in one casing volume

5.8 total gallons removed

CALIBRATION:

	Time	Temp (°C)	pH	DO (%)	ORP (mV)	EC (µmho/cm)	NTU
Calibration Standard:			7.00	100%	465	1,000	0/20
Before Purging:	6:58	14.3	7.05	100%	457	1,000	0/20
After Purging:	16:20	22.5	7.15	92.4%	432	1,038	0/18

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	DO (mg/L)	ORP (mV)	EC (µmho/cm)	NTU	Cumulative Gallons Removed
11:26	22.1	7.27	0.11	-150	1,060	36	2.0
11:42	21.9	7.25	0.14	-149	1,041	2.7	4.0
12:00	21.6	7.26	0.11	-150	1,041	3.1	5.8

Purge method:		Sample Time:	12:03
Duplicate/blank number:	MW-4dup	Duplicate Sample Time:	12:03
Sampling equipment:		VOA attachment:	
Sample containers:	Three 40-ml VOAs and two 1-L amber glass		
Sample analyses:	TPHg, TPHd, TPHmo, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:		Rinsate disposal:	

Comments:

TOC = top of casing
bgs = below ground surface

GROUNDWATER SAMPLING

Well No.: **MW-5**

Project No.		Recorded by: Evans	Date: 12-18-09
Project Name:	Harbor Facilities Center	Depth of well from TOC (feet):	20.8
Location:	Port of Oakland	Well diameter (inches):	2
	651 and 555 Maritime Street, Oakland	Screened interval from TOC (feet):	10.4-20.8
Weather:	Overcast, Sun, Overcast	TOC elevation, NAVD88 (feet):	15.39
Precip. in past 5 days (in.)	0.5	Groundwater elevation (feet):	
Source:	Oakland Fire Services Agency "ONO"	Water level from TOC (feet): 9.80	Time: 8:46
Water level instrument:	Dual-phase interface probe (Solinst)	Product level from TOC (feet): None per phone call w/ T. Evans 2/12/2009.	Time: 8:46

CALCULATION OF WELL VOLUME:

(well depth - water level) x (well radius)^2 x π x gal/ft^3

(20.8 ft - ft) x 0.083 ft)^2 x π x 7.48 gal/ft^3 =

1.6 gallons in one casing volume

3x 4.5 total gallons removed

CALIBRATION:

	Time	Temp (°C)	pH	DO (%)	ORP (mV)	EC (µmho/cm)	NTU
Calibration Standard:			7.00	100%	465	1,000	0/20
Before Purging:	6.58	14.3	7.05	108%	457	1,000	0/20
After Purging:	16.20	22.5	7.15	92.4%	432	1,038	0/18

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	DO (mg/L)	ORP (mV)	EC (µmho/cm)	NTU	Cumulative Gallons Removed
12:27	22.2	6.95	0.10	-95	2,182	15	1.5
12:39	22.0	7.00	0.09	-86	2,359	2.1	3.5
12:48	21.9	6.97	0.11	-85	2,347	1.8	4.5

Purge method:	Peristaltic Pump and disp poly-tubing	Sample Time:	12:50
Duplicate/blank number:		Duplicate Sample Time:	
Sampling equipment:		VOA attachment:	
Sample containers:	Three 40-ml VOAs and two 1-L amber glass		
Sample analyses:	TPHg, TPHd, TPHmo, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:	Alconox and water, DI rinse	Rinsate disposal:	Stored on site

Comments: Sample was clear Purt cont. to remove

TOC = top of casing
bgs = below ground surface

GROUNDWATER SAMPLING

Well No.: **MW-8A**

Project No.		Recorded by:	Evans
Project Name:	Harbor Facilities Center	Date:	12-18-08
Location:	Port of Oakland	Depth of well from TOC (feet):	23.14
	651 and 555 Maritime Street, Oakland	Well diameter (inches):	2
Weather:	Overcast, Sun, Overcast	Screened interval from TOC (feet):	7.54-22.54
Precip. in past 5 days (in.)	0.5 in	TOC elevation, NAVD88 (feet):	14.98
Source:	Oakland Fire Services Agency "ONO"	Groundwater elevation (feet):	
Water level instrument:	Dual-phase interface probe (Solinst)	Water level from TOC (feet): 11.30	Time: 9:03
		Product level from TOC (feet): None	Time: 9:03

CALCULATION OF WELL VOLUME:

(well depth - water level) x (well radius)^2 x π x gal/ft^3

(23.14 ft - ft) x 0.083 ft)^2 x π x 7.48 gal/ft^3 = 1.7 gallons in one casing volume

4.6 total gallons removed

CALIBRATION:

	Time	Temp (°C)	pH	DO (%)	ORP (mV)	EC (µmho/cm)	NTU
Calibration Standard:			7.00	100%	465	1,050	0/20
Before Purging:	6:58	14.3	7.05	100%	457	1,080	0/20
After Purging:	16:30	22.5	7.15	92.4%	482	1,028	0/18

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	DO (mg/L)	ORP (mV)	EC (µmho/cm)	NTU	Cumulative Gallons Removed
1301	19.9	7.34	0.09	-180	2,127	2.3	2
1317	19.9	7.33	0.10	-182	2,113	2.3	3
1326	19.8	7.34	0.19	-171	2,121	1.1	4.6

Purge method:	Peristaltic Pumped disp. poly tubing	Sample Time:	13:30
Duplicate/blank number:		Duplicate Sample Time:	
Sampling equipment:		VOA attachment:	
Sample containers:	Three 40-ml VOAs and two 1-L amber glass		
Sample analyses:	TPHg, TPHd, TPHmo, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:	Alconox and water DI water rinse	Rinsate disposal:	Stored onsite

Comments: Sample was clear Purge cont. to remove

TOC = top of casing
bgs = below ground surface

GROUNDWATER SAMPLING

Well No.: **MW-9**

Project No.		Recorded by: EVANS	Date: 12-18-08
Project Name:	Harbor Facilities Center	Depth of well from TOC (feet):	24.82
Location:	Port of Oakland 651 and 555 Maritime Street, Oakland	Well diameter (inches):	2
		Screened interval from TOC (feet):	
Weather:	Overcast, Sun, Overcast	TOC elevation, NAVD88 (feet):	
Precip. in past 5 days (in.)	0.5 in	Groundwater elevation (feet):	
Source:	Oakland Fire Services Agency "ONO"	Water level from TOC (feet): 12.88	Time: 9:10
Water level instrument:	Dual-phase interface probe (Solinst)	Product level from TOC (feet): none	Time: 9:10

CALCULATION OF WELL VOLUME:

(well depth - water level) x (well radius)^2 x π x gal/ft^3

(23.14 ft - ft) x 0.083 ft^2 x π x 7.48 gal/ft^3 =

2	gallons in one casing volume
3.5	total gallons removed

CALIBRATION:

	Time	Temp (°C)	pH	DO (%)	ORP (mV)	EC (µmho/cm)	NTU
Calibration Standard:			7.00	100%	465	1,000	0/20
Before Purging:	6.58	14.3	7.05	100%	457	1,000	0/20
After Purging:	1620	22.5	7.15	92.4%	432	1,028	0/18

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	DO (mg/L)	ORP (mV)	EC (µmho/cm)	NTU	Cumulative Gallons Removed
13:42	21.9	6.41	0.12	-170	2.03	12	2
13:50	21.9	6.62	0.11	-175	1.95	2.7	2.5
14:03	21.8	6.61	0.09	-167	1.94	1.8	3.5

Purge method:	Peristalic Pump ad disp. poly tubing	Sample Time:	14:06
Duplicate/blank number:		Duplicate Sample Time:	
Sampling equipment:		VOA attachment:	
Sample containers:	Three 40-ml VOAs and two 1-L amber glass		
Sample analyses:	TPHg, TPHd, TPHmo, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:	Alconox and water, DI water rinse	Rinsate disposal:	Stored on site

Comments: Sample was clear Purge cont. to remove

TOC = top of casing
bgs = below ground surface

GROUNDWATER SAMPLING Well No.: **MW-10**

Project No.		Recorded by:	EVANS	Date:	12-18-08
Project Name:	Harbor Facilities Center			Depth of well from TOC (feet):	24.9
Location:	Port of Oakland			Well diameter (inches):	2
	651 and 555 Maritime Street, Oakland			Screened Interval from TOC (feet):	
Weather:	Overcast, Sun, Overcast			TOC elevation, NAVD88 (feet):	
Precip. in past 5 days (in.)	0.5 in			Groundwater elevation (feet):	
Source:	Oakland Fire Services Agency "ONO"	Water level from TOC (feet):	14.34	Time:	9:15
Water level instrument:	Dual-phase interface probe (Sollnst)	Product level from TOC (feet):	None	Time:	9:15

CALCULATION OF WELL VOLUME:

(well depth - water level) x (well radius)^2 x π x gal/ft^3

(23.14 ft - ft) x 0.083 ft)^2 x π x 7.48 gal/ft^3 = 2.4 gallons in one casing volume

3.0 total gallons removed

CALIBRATION:

	Time	Temp (°C)	pH	DO (%)	ORP (mV)	EC (µmho/cm)	NTU
Calibration Standard:			7.00	100%	465	1,000	0/20
Before Purging:	6:58	14.3	7.05	100%	457	1,500	0/20
After Purging:	16:20	22.5	7.15	92.4%	432	1,028	0/18

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	DO (mg/L)	ORP (mV)	EC (µmho/cm)	NTU	Cumulative Gallons Removed
14:15	20.0	6.71	0.20	-92	3.81	1.6	1.2
14:23	21.0	6.58	0.19	-106	3.84	0.93	2
14:30	21.2	6.56	0.16	-113	3.79	0.80	3

Purge method:	Peristaltic pump and disp. polyTubing	Sample Time:	14:31
Duplicate/blank number:		Duplicate Sample Time:	
Sampling equipment:		VOA attachment:	
Sample containers:	Three 40-ml VOAs and two 1-L amber glass		
Sample analyses:	TPHg, TPHd, TPHmo, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:	Alconox and water, DI water rinse	Rinsate disposal:	Stored on site

Comments: Sample was clear Port contractor to remove

TOC = top of casing
bgs = below ground surface

GROUNDWATER SAMPLING

Well No.: **MW-11**

Project No.		Recorded by: Evans	Date: 12-18-08
Project Name:	Harbor Facilities Center	Depth of well from TOC (feet):	24.92
Location:	Port of Oakland	Well diameter (inches):	2
	651 and 555 Maritime Street, Oakland	Screened interval from TOC (feet):	
Weather:	Overcast, Sun, Overcast	TOC elevation, NAVD88 (feet):	
Precip. in past 5 days (in.)	0.5 in	Groundwater elevation (feet):	
Source:	Oakland Fire Services Agency "ONO"	Water level from TOC (feet): 13.42	Time: 9:21
Water level instrument:	Dual-phase interface probe (Solinst)	Product level from TOC (feet): none	Time: 9:21

CALCULATION OF WELL VOLUME:

(well depth - water level) x (well radius)^2 x π x gal/ft^3

(23.14 ft - ft) x 0.083 ft)^2 x π x 7.48 gal/ft^3 =

2.2	gallons in one casing volume
4.0	total gallons removed

CALIBRATION:

	Time	Temp (°C)	pH	DO (%)	ORP (mV)	EC (µmho/cm)	NTU
Calibration Standard:			7.00	100%	465	1,000	0/20
Before Purging:	6:58	14.3	7.05	100%	457	1,000	0/20
After Purging:	16:20	22.5	7.15	92.4%	432	1,028	0/18

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	DO (mg/L)	ORP (mV)	EC (µmho/cm)	NTU	Cumulative Gallons Removed
14:40	22.0	7.18	0.17	-184	2.60	2.3	2.5
14:52	22.1	7.22	0.15	-177	2.63	1.7	3.5
15:03	22.1	7.21	0.13	-167	2.67	0.99	4

Purge method:	Peristalic Pump and disp. Poly Tubing	Sample Time:	15:05
Duplicate/blank number:		Duplicate Sample Time:	
Sampling equipment:		VOA attachment:	
Sample containers:	Three 40-ml VOAs and two 1-L amber glass		
Sample analyses:	TPHg, TPHd, TPHmo, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:	Alconox and water, DI water rinse	Rinsate disposal:	Stored onsite

Comments: Sample clear — Port Contr to remove

TOC = top of casing
bgs = below ground surface

GROUNDWATER SAMPLING

Well No.: **MW-12**

Project No.		Recorded by: EVANS	Date: 12-18-09
Project Name:	Harbor Facilities Center	Depth of well from TOC (feet):	24.91
Location:	Port of Oakland	Well diameter (inches):	2
	651 and 555 Maritime Street, Oakland	Screened interval from TOC (feet):	
Weather:	OVERCAST, SUN, OVERCAST	TOC elevation, NAVD88 (feet):	
Precip. in past 5 days (in.)	0.5, rain	Groundwater elevation (feet):	
Source:	Oakland Fire Services Agency "ONO"	Water level from TOC (feet): 12.75	Time: 9:29
Water level instrument:	Dual-phase interface probe (Solinst)	Product level from TOC (feet): None	Time: 9:29

CALCULATION OF WELL VOLUME:

(well depth - water level) x (well radius)^2 x π x gal/ft^3

(23.14 ft - ft) x (0.083 ft)^2 x π x 7.48 gal/ft^3 = 2.6 gallons in one casing volume

4.0 total gallons removed

CALIBRATION:

	Time	Temp (°C)	pH	DO (%)	ORP (mV)	EC (µmho/cm)	NTU
Calibration Standard:			7.00	100%	465	1,000	0/20
Before Purging:	6:58	14.3	7.05	100%	457	1,000	0/20
After Purging:	16:20	22.5	7.15	92.4%	432	1,028	9/18

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	DO (mg/L)	ORP (mV)	EC (µmho/cm)	NTU	Cumulative Gallons Removed
15:22	19.6	7.11	0.11	-93	2.14	1.6	2
15:36	19.8	6.78	0.09	-101	2.12	0.92	3.5
15:42	19.9	6.77	0.07	-91	2.11	0.87	4

Purge method:	Peristaltic Pump and disp. poly tubing	Sample Time:	15:45
Duplicate/blank number:		Duplicate Sample Time:	
Sampling equipment:		VOA attachment:	
Sample containers:	Three 40-ml VOAs and two 1-L amber glass		
Sample analyses:	TPHg, TPHd, TPHmo, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:	Alconox and water, DI water rinse	Rinsate disposal:	Stored onsite

Comments: Sample was clear Port contr. to remove

TOC = top of casing
bgs = below ground surface

APPENDIX C
LABORATORY ANALYTICAL REPORT

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**208798**
Client:	**Microsearch Environmental Group**
Location:	**Harbor Facilities Complex**
Request Date:	**12/18/08**
Samples Received:	**12/18/08**

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 12/18/08. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):

High recoveries were observed for gasoline C7-C12 in the MS/MSD of MW-12 (lab # 208798-009); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/18/08
Units:	ug/L	Received:	12/18/08
Batch#:	146379		

Field ID: MW-2
Type: SAMPLE
Lab ID: 208798-001

Diln Fac: 1.000
Analyzed: 12/23/08

Analyte	Result	RL
Gasoline C7-C12	390 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	78	61-149
Bromofluorobenzene (FID)	80	65-146

Field ID: MW-4
Type: SAMPLE
Lab ID: 208798-002

Diln Fac: 1.000
Analyzed: 12/23/08

Analyte	Result	RL
Gasoline C7-C12	99 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	78	61-149
Bromofluorobenzene (FID)	77	65-146

Field ID: MW-4DUP
Type: SAMPLE
Lab ID: 208798-003

Diln Fac: 1.000
Analyzed: 12/23/08

Analyte	Result	RL
Gasoline C7-C12	88 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	76	61-149
Bromofluorobenzene (FID)	75	65-146

Field ID: MW-5
Type: SAMPLE
Lab ID: 208798-004

Diln Fac: 1.000
Analyzed: 12/23/08

Analyte	Result	RL
Gasoline C7-C12	3,100 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	74	61-149
Bromofluorobenzene (FID)	100	65-146

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/18/08
Units:	ug/L	Received:	12/18/08
Batch#:	146379		

Field ID: MW-8A
Type: SAMPLE
Lab ID: 208798-005
Diln Fac: 1.000
Analyzed: 12/23/08

Analyte	Result	RL
Gasoline C7-C12	350 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	74	61-149
Bromofluorobenzene (FID)	79	65-146

Field ID: MW-9
Type: SAMPLE
Lab ID: 208798-006
Diln Fac: 1.000
Analyzed: 12/23/08

Analyte	Result	RL
Gasoline C7-C12	52 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	61-149
Bromofluorobenzene (FID)	72	65-146

Field ID: MW-10
Type: SAMPLE
Lab ID: 208798-007
Diln Fac: 1.000
Analyzed: 12/23/08

Analyte	Result	RL
Gasoline C7-C12	140 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	61-149
Bromofluorobenzene (FID)	78	65-146

Field ID: MW-11
Type: SAMPLE
Lab ID: 208798-008
Diln Fac: 1.000
Analyzed: 12/23/08

Analyte	Result	RL
Gasoline C7-C12	1,900 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	79	61-149
Bromofluorobenzene (FID)	93	65-146

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/18/08
Units:	ug/L	Received:	12/18/08
Batch#:	146379		

Field ID:	MW-12	Diln Fac:	20.00
Type:	SAMPLE	Analyzed:	12/24/08
Lab ID:	208798-009		

Analyte	Result	RL
Gasoline C7-C12	25,000 Y	1,000

Surrogate	%REC	Limits
Trifluorotoluene (FID)	76	61-149
Bromofluorobenzene (FID)	83	65-146

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC476998	Analyzed:	12/23/08

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	73	61-149
Bromofluorobenzene (FID)	70	65-146

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC476999	Batch#:	146379
Matrix:	Water	Analyzed:	12/23/08
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	920.5	92	78-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	92	61-149
Bromofluorobenzene (FID)	76	65-146

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	MW-12	Batch#:	146379
MSS Lab ID:	208798-009	Sampled:	12/18/08
Matrix:	Water	Received:	12/18/08
Units:	ug/L	Analyzed:	12/24/08
Diln Fac:	20.00		

Type: MS Lab ID: QC477000

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	24,770	40,000	77,130	131 *	65-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	85	61-149
Bromofluorobenzene (FID)	92	65-146

Type: MSD Lab ID: QC477001

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	40,000	77,370	131 *	65-120	0	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	88	61-149
Bromofluorobenzene (FID)	90	65-146

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/18/08
Units:	ug/L	Received:	12/18/08
Diln Fac:	1.000	Prepared:	12/23/08
Batch#:	146410		

Field ID: MW-2 Analyzed: 01/04/09
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 208798-001

Analyte	Result	RL
Diesel C10-C24	840	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	84	58-127

Field ID: MW-4 Analyzed: 01/05/09
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 208798-002

Analyte	Result	RL
Diesel C10-C24	520	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	80	58-127

Field ID: MW-4DUP Analyzed: 01/05/09
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 208798-003

Analyte	Result	RL
Diesel C10-C24	850	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	81	58-127

Field ID: MW-5 Analyzed: 01/05/09
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 208798-004

Analyte	Result	RL
Diesel C10-C24	3,600	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	94	58-127

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/18/08
Units:	ug/L	Received:	12/18/08
Diln Fac:	1.000	Prepared:	12/23/08
Batch#:	146410		

Field ID: MW-8A
Type: SAMPLE
Lab ID: 208798-005
Analyzed: 01/05/09
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	7,800	50
Motor Oil C24-C36	2,200 Y	300

Surrogate	%REC	Limits
Hexacosane	75	58-127

Field ID: MW-9
Type: SAMPLE
Lab ID: 208798-006
Analyzed: 01/05/09
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	72	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	102	58-127

Field ID: MW-10
Type: SAMPLE
Lab ID: 208798-007
Analyzed: 01/05/09
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	8,000	50
Motor Oil C24-C36	430 Y	300

Surrogate	%REC	Limits
Hexacosane	122	58-127

Field ID: MW-11
Type: SAMPLE
Lab ID: 208798-008
Analyzed: 01/05/09
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	15,000	50
Motor Oil C24-C36	800 Y	300

Surrogate	%REC	Limits
Hexacosane	88	58-127

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/18/08
Units:	ug/L	Received:	12/18/08
Diln Fac:	1.000	Prepared:	12/23/08
Batch#:	146410		

Field ID:	MW-12	Analyzed:	01/05/09
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	208798-009		

Analyte	Result	RL
Diesel C10-C24	19,000	50
Motor Oil C24-C36	980 Y	300

Surrogate	%REC	Limits
Hexacosane	83	58-127

Type:	BLANK	Analyzed:	01/04/09
Lab ID:	QC477133	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	79	58-127

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	146410
Units:	ug/L	Prepared:	12/23/08
Diln Fac:	1.000	Analyzed:	01/04/09

Type: BS
Lab ID: QC477134
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,134	85	52-120

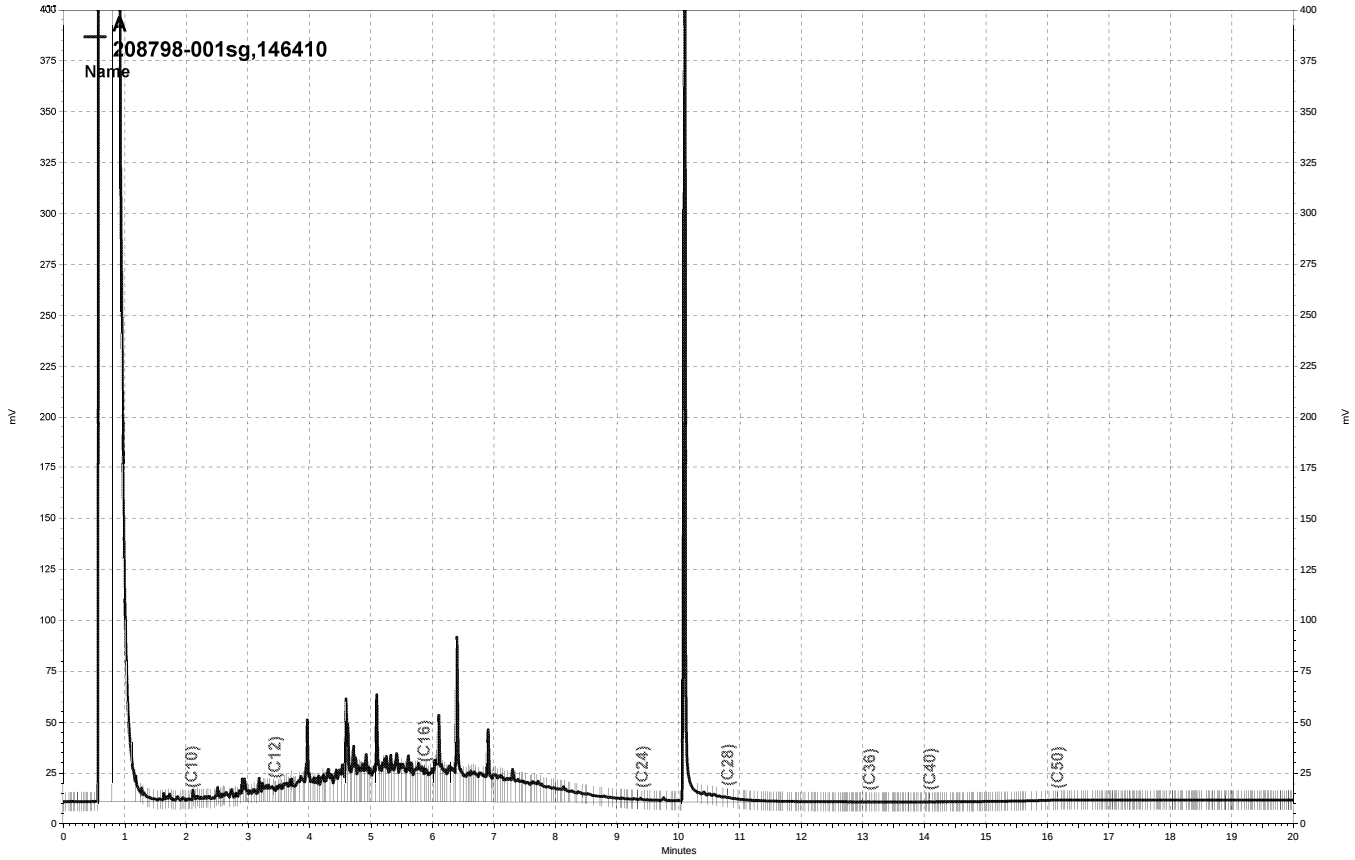
Surrogate	%REC	Limits
Hexacosane	94	58-127

Type: BSD
Lab ID: QC477135
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,081	83	52-120	3	30

Surrogate	%REC	Limits
Hexacosane	84	58-127

RPD= Relative Percent Difference



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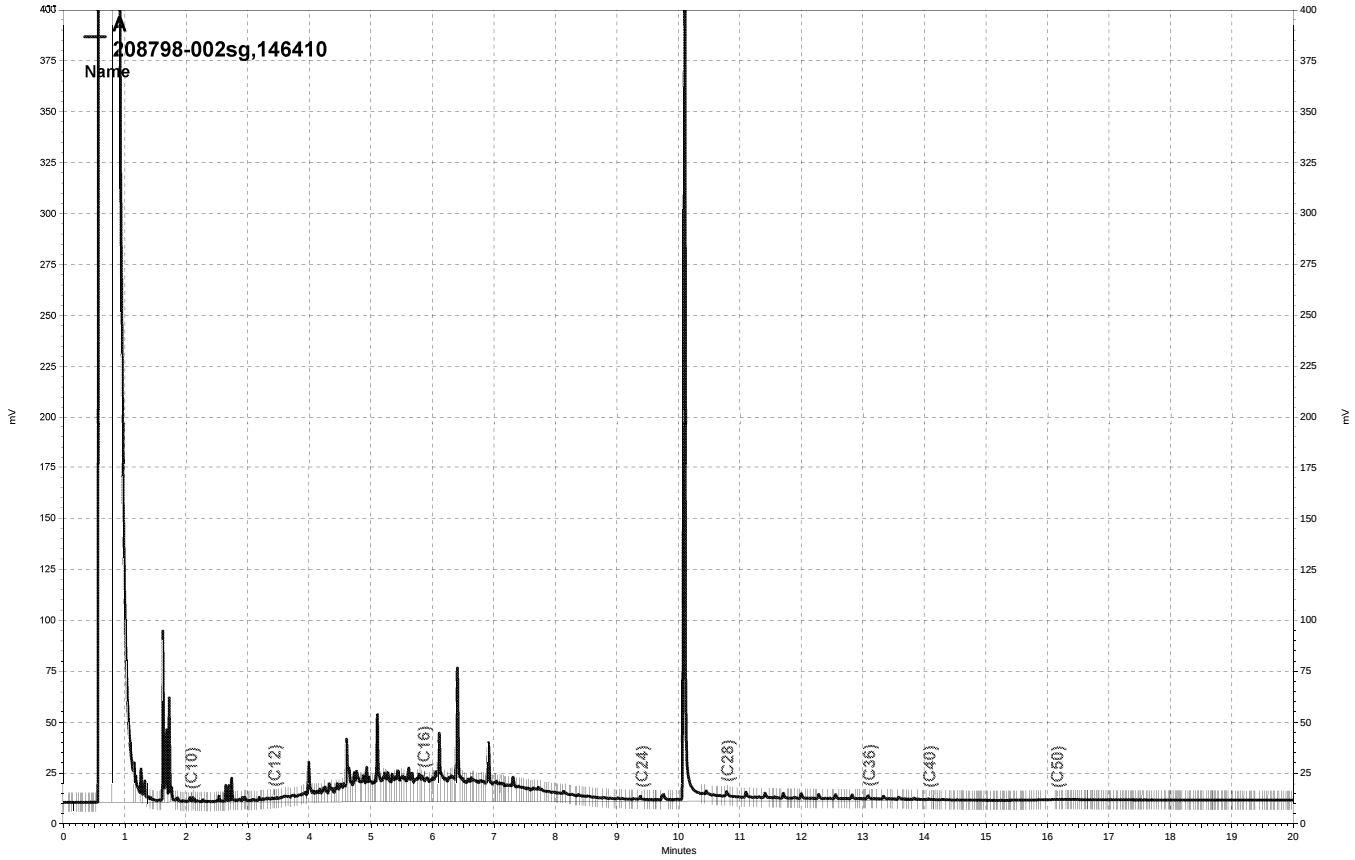

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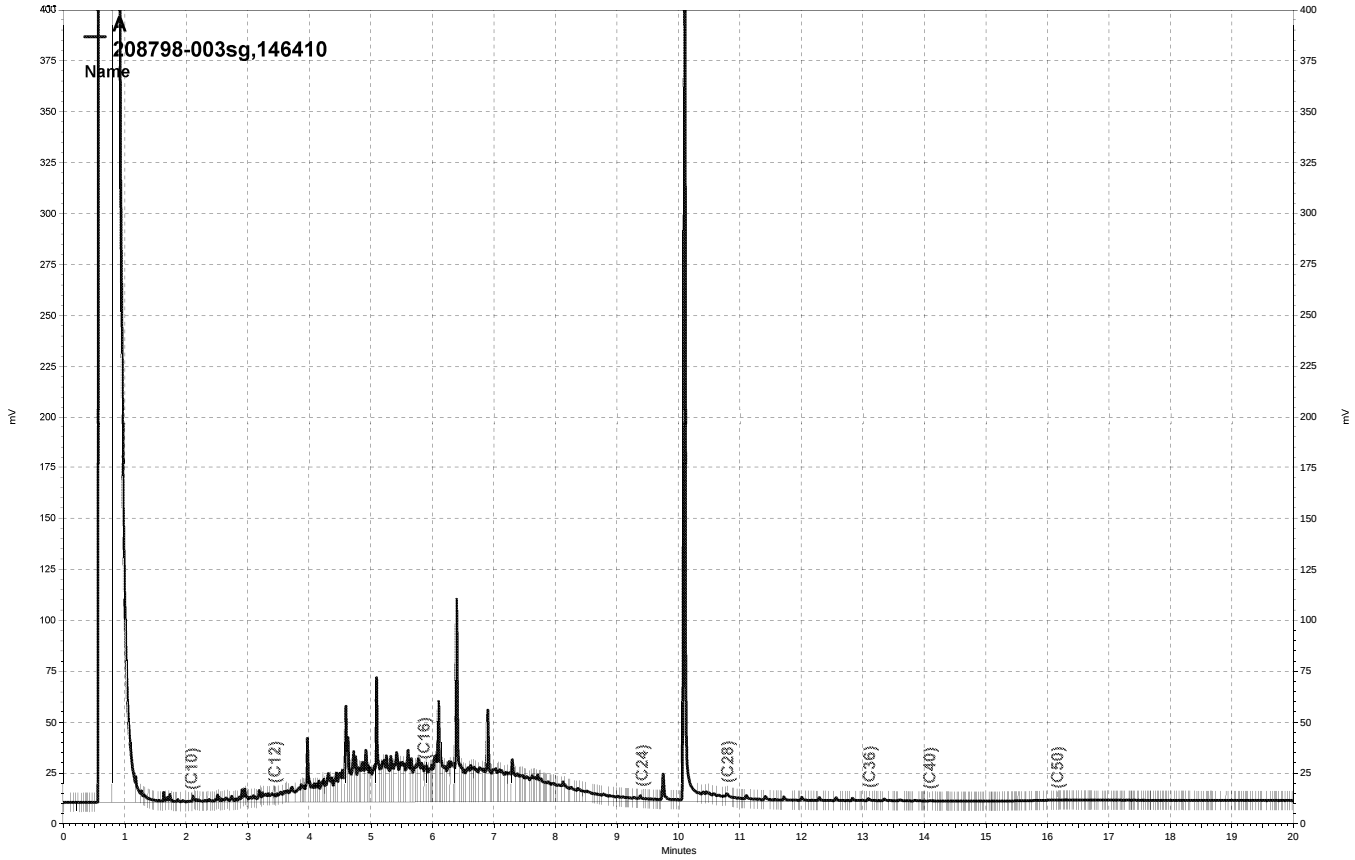

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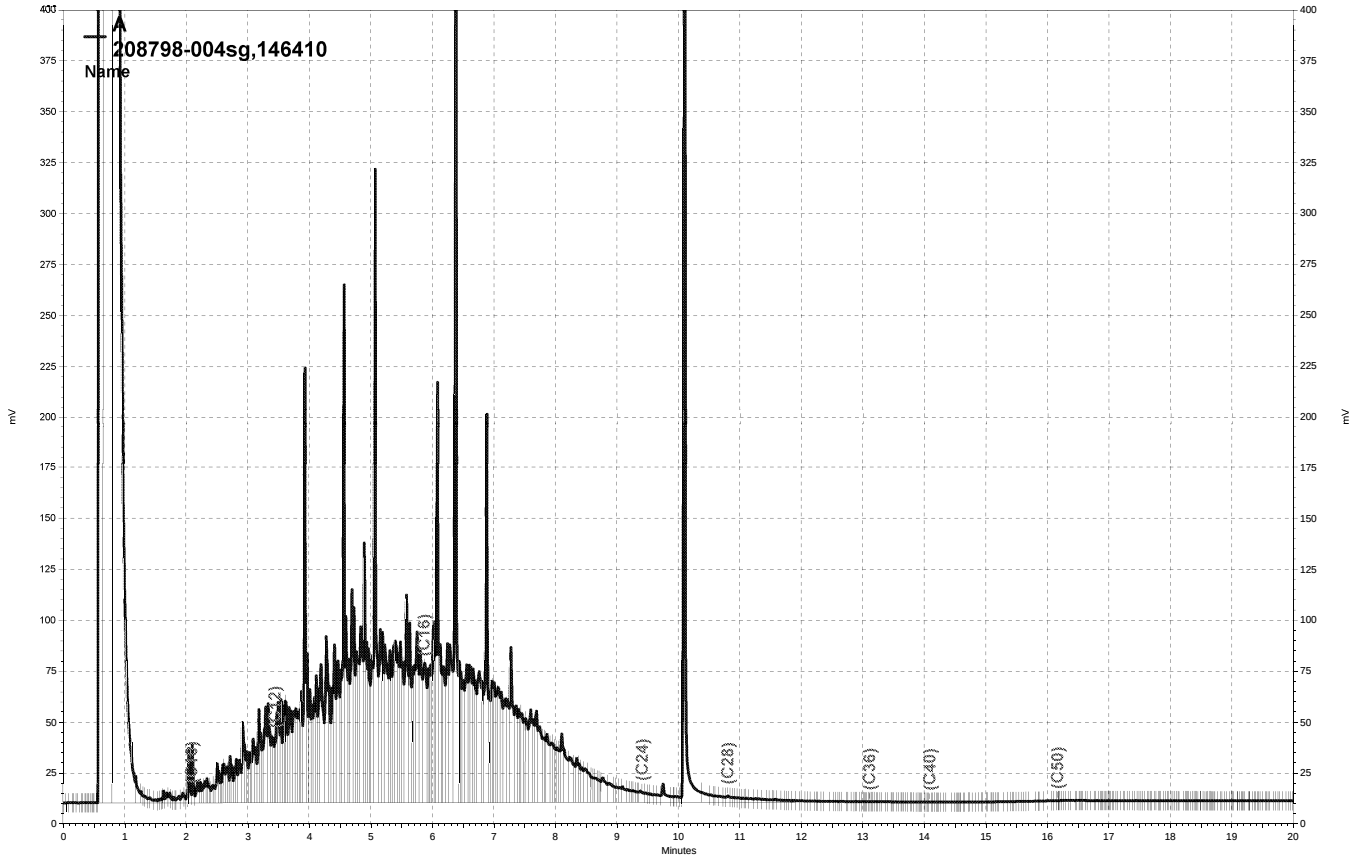

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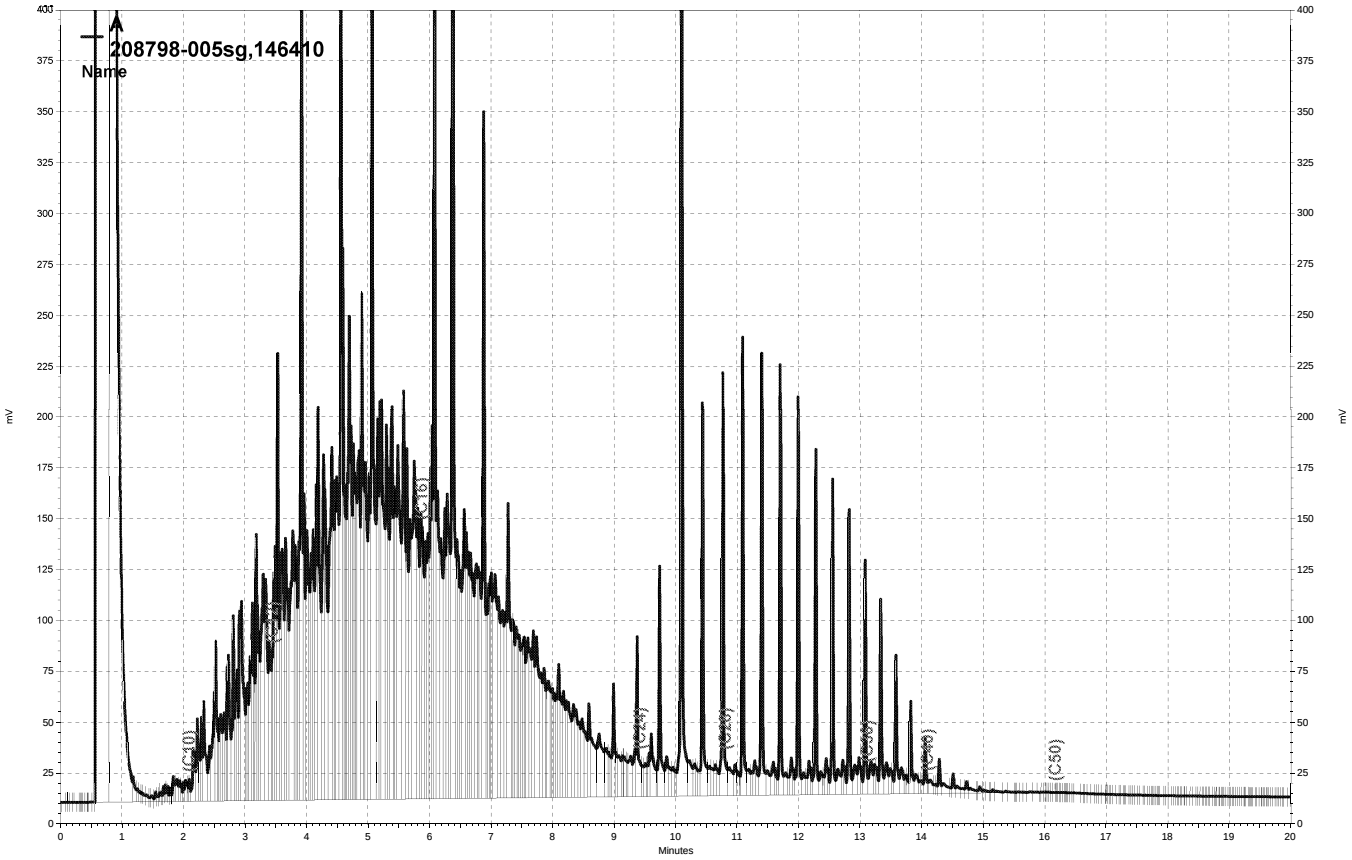

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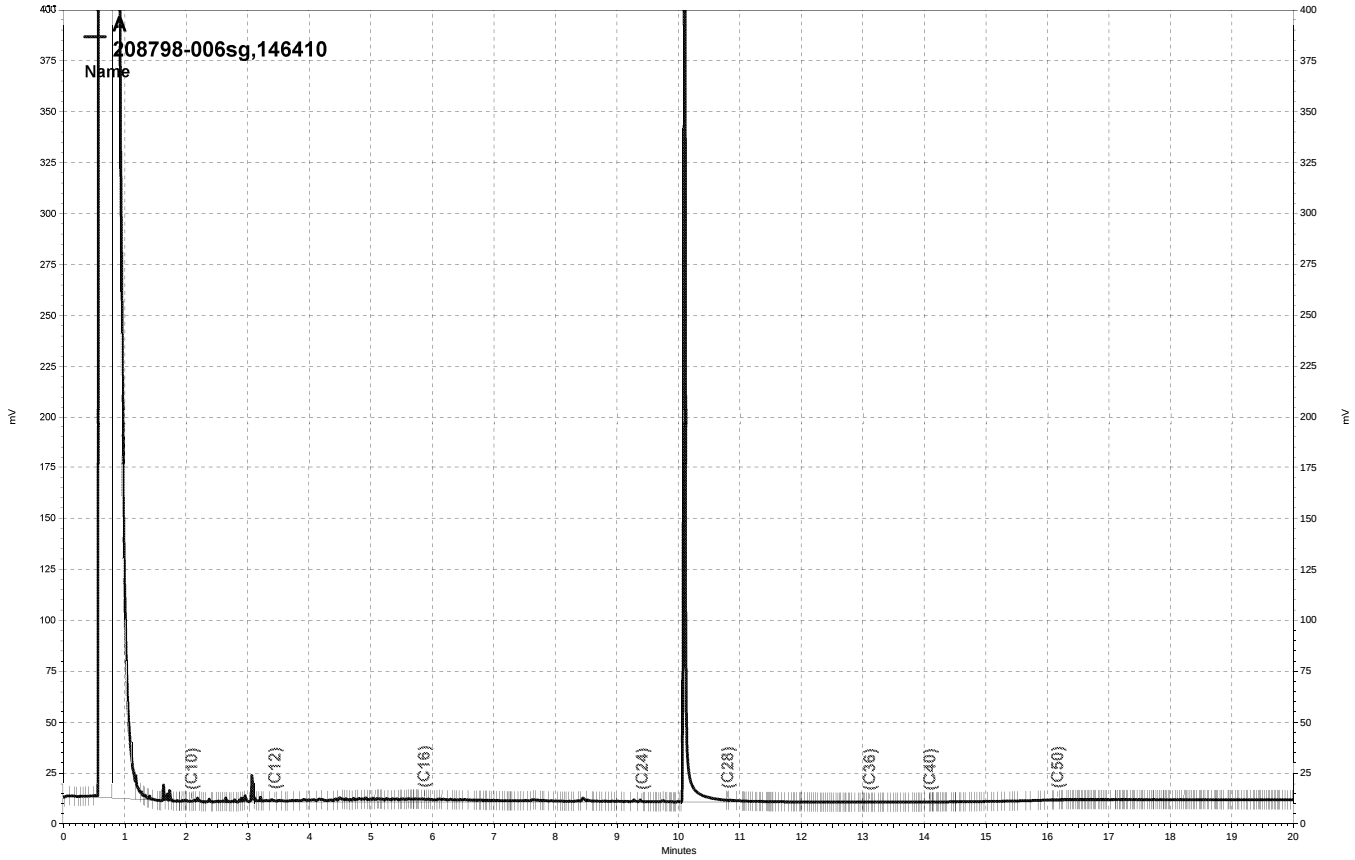

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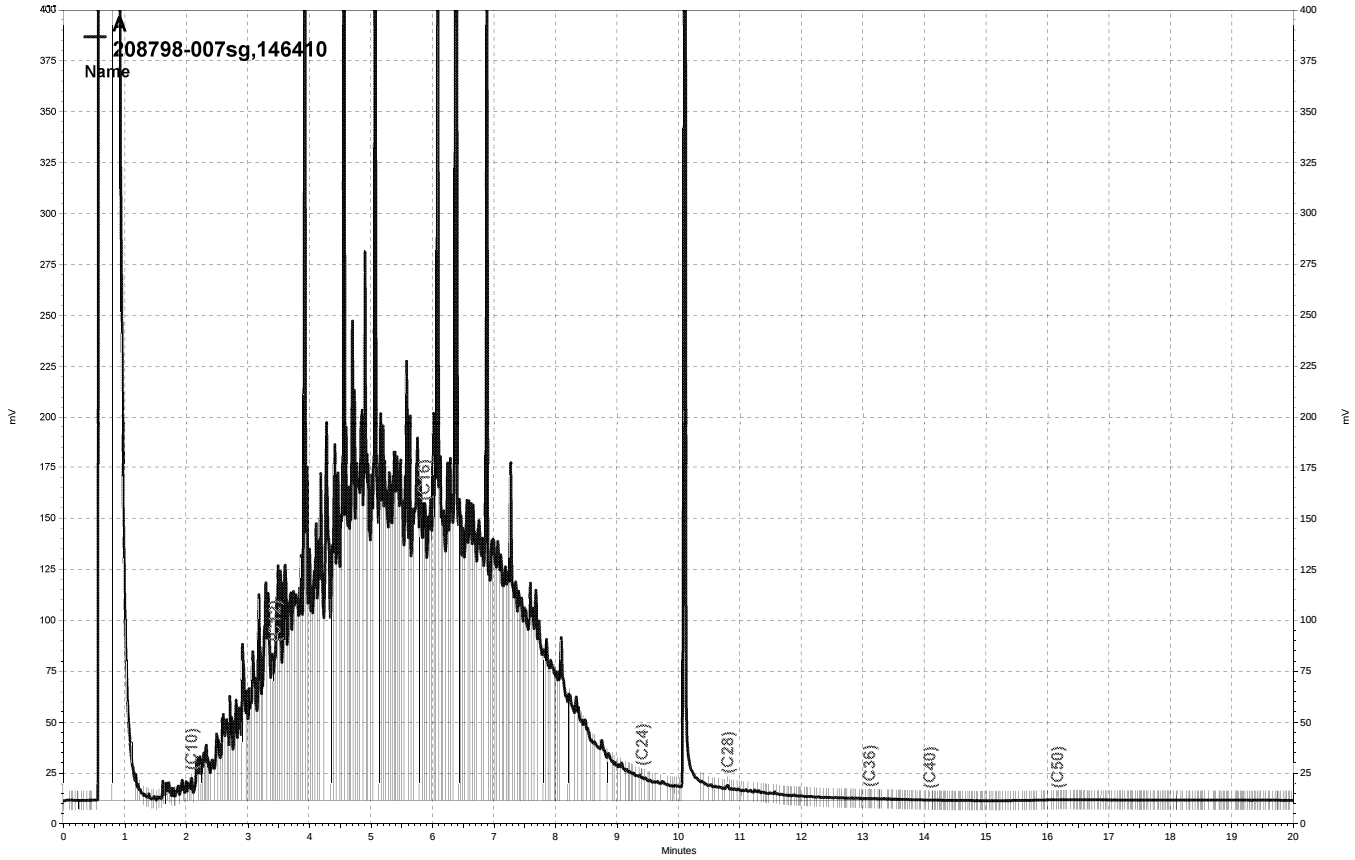

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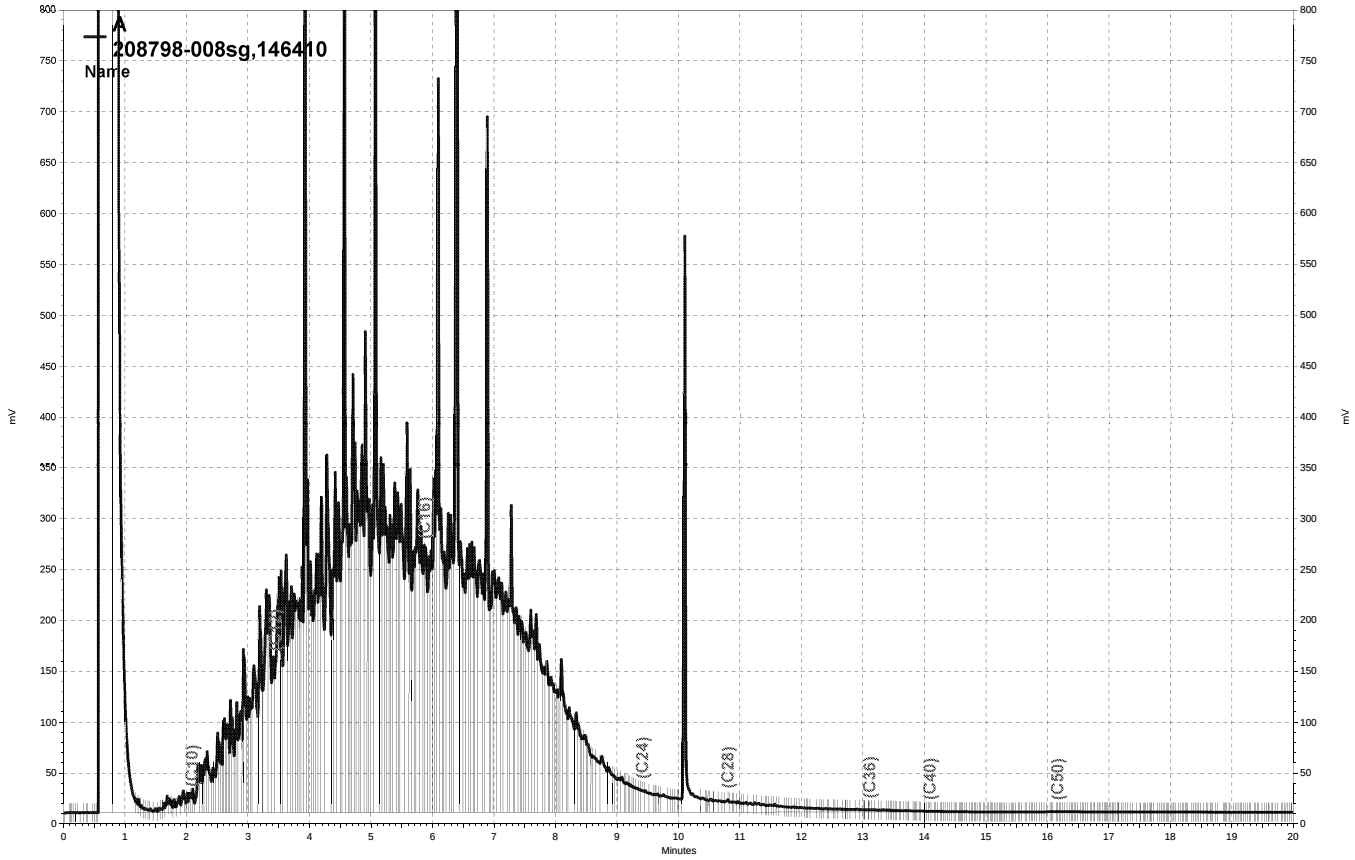

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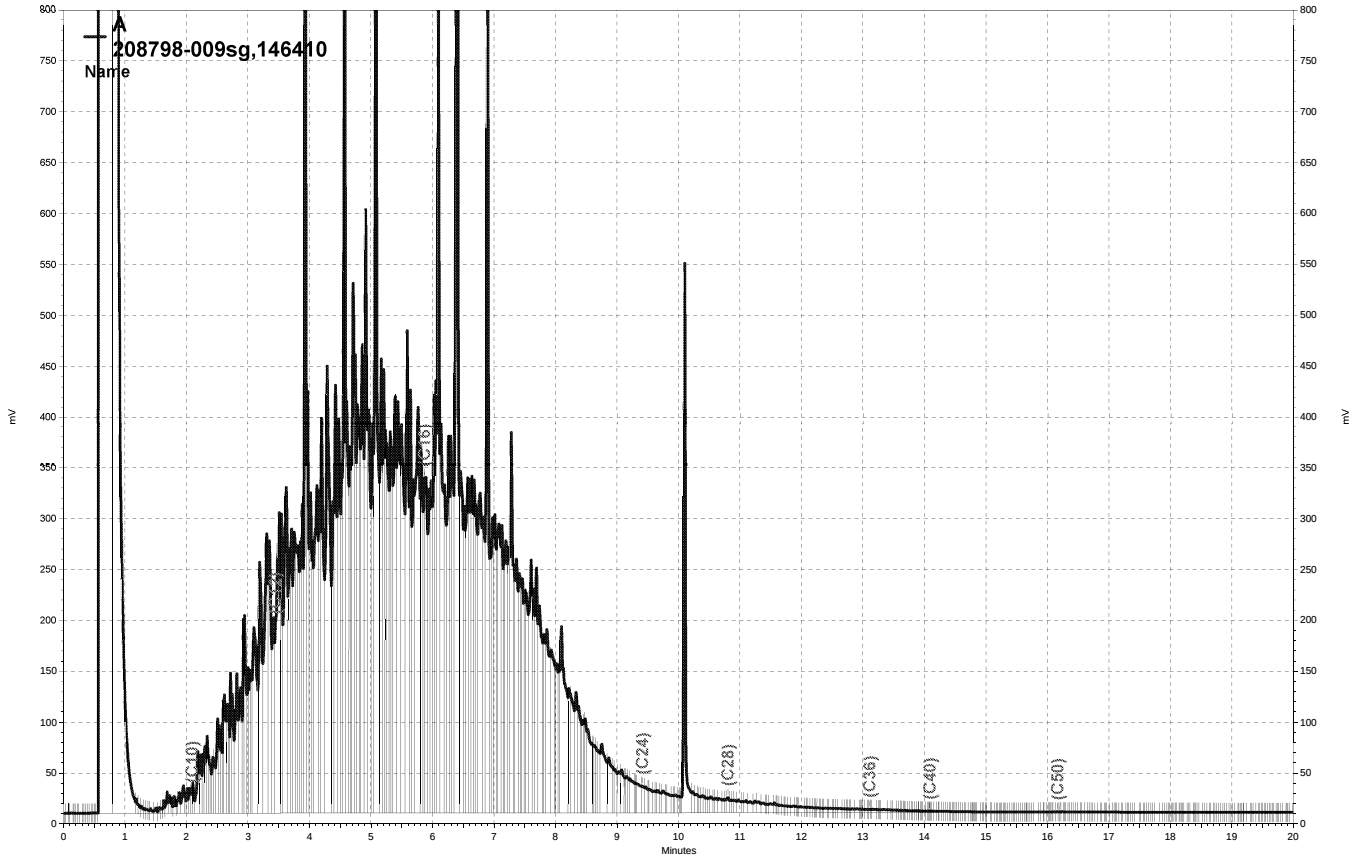

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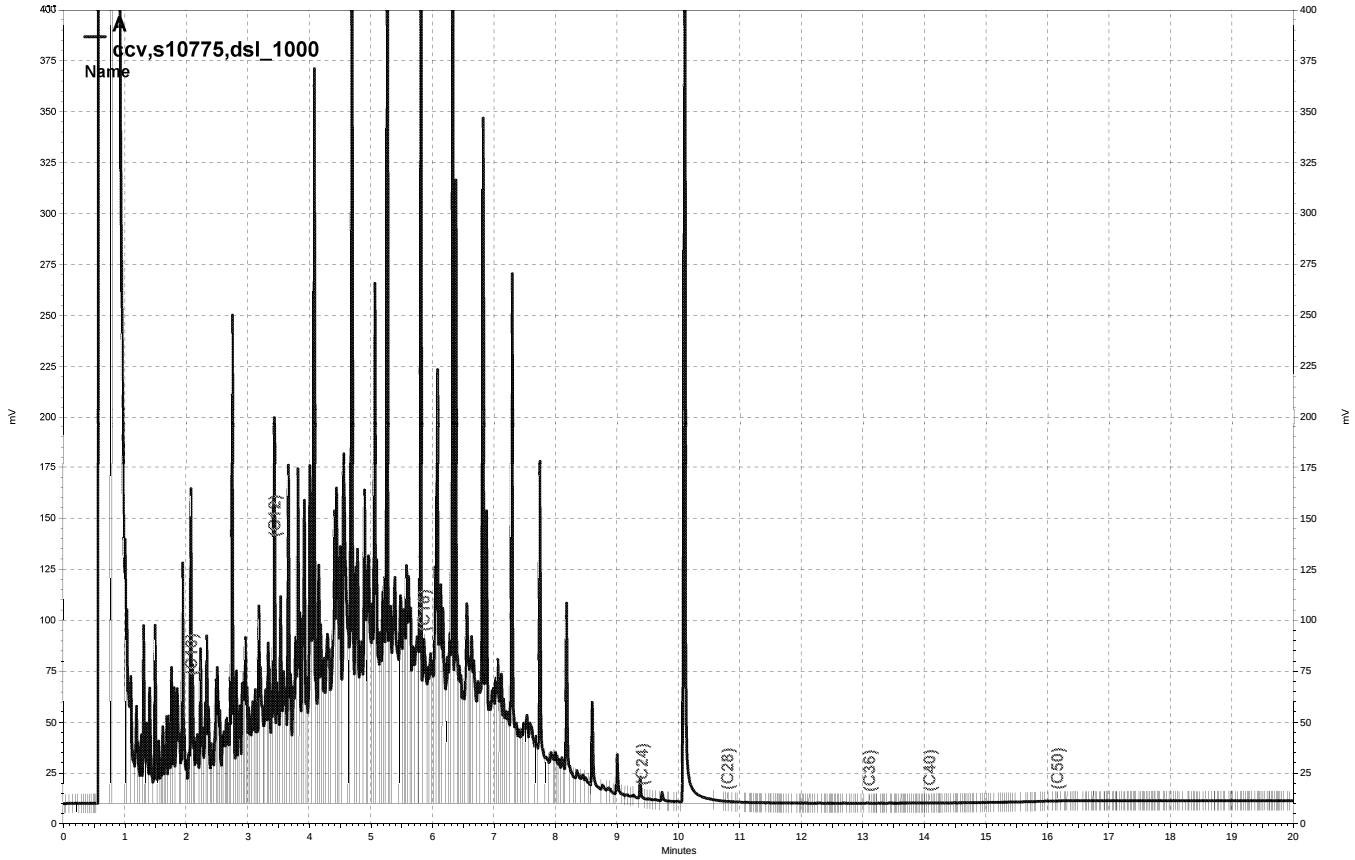

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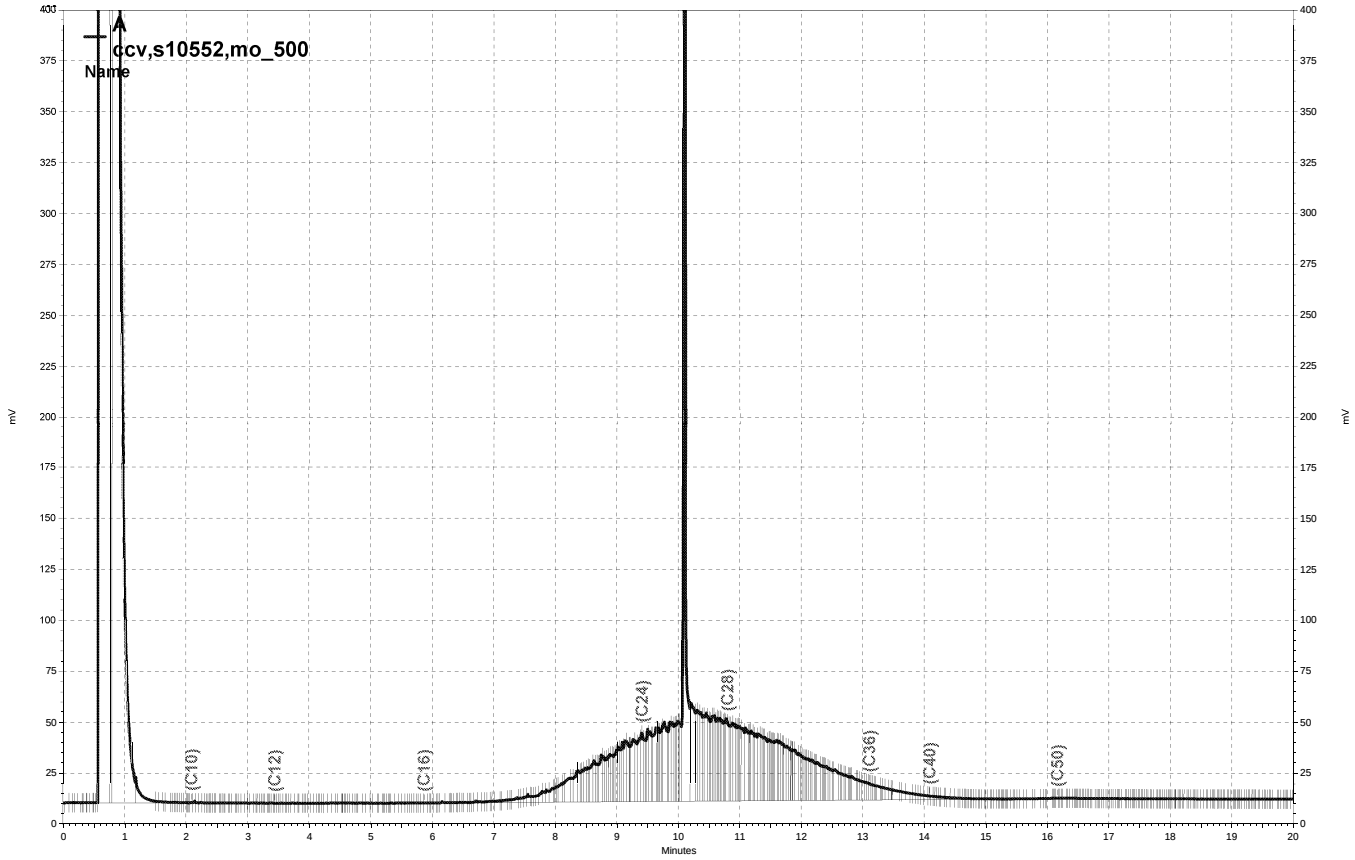

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Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	146471
Lab ID:	208798-001	Sampled:	12/18/08
Matrix:	Water	Received:	12/18/08
Units:	ug/L	Analyzed:	12/29/08
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	1.1	0.5
Toluene	ND	0.5
Ethylbenzene	0.9	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	130	80-137
Toluene-d8	107	80-120
Bromofluorobenzene	111	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	146471
Lab ID:	208798-002	Sampled:	12/18/08
Matrix:	Water	Received:	12/18/08
Units:	ug/L	Analyzed:	12/29/08
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	0.5	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	127	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	108	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-4DUP	Batch#:	146471
Lab ID:	208798-003	Sampled:	12/18/08
Matrix:	Water	Received:	12/18/08
Units:	ug/L	Analyzed:	12/29/08
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	0.7	0.5
Toluene	ND	0.5
Ethylbenzene	0.6	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	127	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-5	Batch#:	146508
Lab ID:	208798-004	Sampled:	12/18/08
Matrix:	Water	Received:	12/18/08
Units:	ug/L	Analyzed:	12/30/08
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	1.8	0.5
Benzene	0.5	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	129	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	109	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-8A	Batch#:	146471
Lab ID:	208798-005	Sampled:	12/18/08
Matrix:	Water	Received:	12/18/08
Units:	ug/L	Analyzed:	12/29/08
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	1.3	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	125	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	108	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-9	Batch#:	146471
Lab ID:	208798-006	Sampled:	12/18/08
Matrix:	Water	Received:	12/18/08
Units:	ug/L	Analyzed:	12/29/08
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	122	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	107	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-10	Batch#:	146471
Lab ID:	208798-007	Sampled:	12/18/08
Matrix:	Water	Received:	12/18/08
Units:	ug/L	Analyzed:	12/29/08
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	1.0	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	109	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	146508
Lab ID:	208798-008	Sampled:	12/18/08
Matrix:	Water	Received:	12/18/08
Units:	ug/L	Analyzed:	12/30/08
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	5.0	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	115	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	107	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-12	Batch#:	146508
Lab ID:	208798-009	Sampled:	12/18/08
Matrix:	Water	Received:	12/18/08
Units:	ug/L	Analyzed:	12/30/08
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	5.1	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	110	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	107	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	146471
Units:	ug/L	Analyzed:	12/29/08
Diln Fac:	1.000		

Type: BS Lab ID: QC477363

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	20.24	101	70-125
Benzene	20.00	20.96	105	80-120
Toluene	20.00	22.08	110	80-120
Ethylbenzene	20.00	22.90	114	80-122
m,p-Xylenes	40.00	42.67	107	80-126
o-Xylene	20.00	20.94	105	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	126	80-137
Toluene-d8	106	80-120
Bromofluorobenzene	110	80-122

Type: BSD Lab ID: QC477364

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	19.31	97	70-125	5	20
Benzene	20.00	20.69	103	80-120	1	20
Toluene	20.00	21.53	108	80-120	3	20
Ethylbenzene	20.00	21.97	110	80-122	4	20
m,p-Xylenes	40.00	42.10	105	80-126	1	20
o-Xylene	20.00	20.58	103	80-120	2	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	122	80-137
Toluene-d8	106	80-120
Bromofluorobenzene	108	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC477365	Batch#:	146471
Matrix:	Water	Analyzed:	12/29/08
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	126	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	108	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	146508
Units:	ug/L	Analyzed:	12/30/08
Diln Fac:	1.000		

Type: BS Lab ID: QC477523

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	20.05	100	70-125
Benzene	20.00	21.09	105	80-120
Toluene	20.00	21.81	109	80-120
Ethylbenzene	20.00	21.63	108	80-122
m,p-Xylenes	40.00	41.26	103	80-126
o-Xylene	20.00	20.60	103	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	112	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	106	80-122

Type: BSD Lab ID: QC477524

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	19.79	99	70-125	1	20
Benzene	20.00	20.34	102	80-120	4	20
Toluene	20.00	21.45	107	80-120	2	20
Ethylbenzene	20.00	22.22	111	80-122	3	20
m,p-Xylenes	40.00	42.35	106	80-126	3	20
o-Xylene	20.00	20.80	104	80-120	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	103	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	208798	Location:	Harbor Facilities Complex
Client:	Microsearch Environmental Group	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC477525	Batch#:	146508
Matrix:	Water	Analyzed:	12/30/08
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900 Phone
(510) 486-0532 Fax

CHAIN OF CUSTODY

C & T LOGIN #: 208799

Project No.:

Project Name: Harbor Facilities Complex 651 Maritime

Project P.O.:

Turnaround Time:

Sampler: Tyrone Evans

Report To: Tyrone Evans

Company: MSE Group

Telephone: 510.383.9600

Fax: 510.383.9300

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste		# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE		Analysis: TPH-diesel, motor oil, silica gel (8015)	TPH-g (8015)	BTEX, MTBE (8260)
1	MW-2	12-18-08/ 10:20		X			7	X					X	X	X
2	MW-4	12-18-08/ 12:03		X			7	X					X	X	X
3	MW-4 dup	12-18-08/ 12:03		X			7	X					X	X	X
4	MW-5	12-18-08/ 12:50		X			7	X					X	X	X
5	MW-8A	12-18-08/ 13:30		X			7	X					X	X	X
6	MW-9	12-18-08/ 14:06		X			7	X					X	X	X
7	MW-10	12-18-08/ 14:31		X			7	X					X	X	X
8	MW-11	12-18-08/ 15:05		X			7	X					X	X	X
9	MW-12	12-18-08/ 15:45		X			7	X					X	X	X

Notes:

SAMPLE RECEIPT
☐ Intact ☐ Cold
☑ On Ice ☐ Ambient

Preservative Correct?
☐ Yes ☐ No ☐ N/A

RELINQUISHED BY:

Tyrone Evans 12-18-08/4:30
DATE / TIME

DATE / TIME

DATE / TIME

SIGNATURE

RECEIVED BY:

Pat Gonzalez 12/18/08 4:30 PM
DATE / TIME

DATE / TIME

DATE / TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 208798 Date Received 12/18/08 Number of coolers 2
Client NISE GROUP Project HARBOR FACILITIES COMPLEX

Date Opened 12/18/08 By (print) M. VILLANUEVA (sign)
Date Logged in 12/19/8 By (print) S. [illegible] (sign)

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☐ (NO)
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) 5.8, 5.9

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
11. Are sample labels present, in good condition and complete? _____ (YES) NO
12. Do the sample labels agree with custody papers? _____ YES (NO)
13. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
14. Are the samples appropriately preserved? _____ (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? _____ YES (NO) N/A
16. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

RECD 6 TRIP BLANKS NOT ON COC, LOGGED ON HOLD FOR SAMPLE # 1 + 5. RECD 7 VOA'S EACH FOR SAMPLE # 2 + 3 ONLY 5 VOA'S RECD

SAMPLE # 1 - BUBBLES 1/7 VOAS

APPENDIX D
HISTORICAL GROUNDWATER ANALYTICAL AND ELEVATION DATA

TABLE D-1 : Historical Groundwater Elevation Data
Port of Oakland, 651 Maritime Street
Oakland, California

Monitoring Well	Date Measured	Elevation[1] - Top of Casing (feet)	Depth to Product (feet btc)	Depth to Water (feet btc)	Product Thickness (feet)	Groundwater Elevation[1] (feet)
MW-1	04/18/2000	14.14	NM	8.21	0	5.93
	05/22/2000	14.14	NM	8.51	0	5.97
	07/10/2001	14.14	8.8	10	1.2	4.14
	12/12/2001	14.14	NA	NA	NA	NC
	03/08/2002	14.14	NM	NA	NA	NC
	06/13/2002	14.14	8.7	10	1.3	NC
	09/26/2002	14.14	8.6	9.5	0.9	NC
	03/17/2003	14.14	7.61	8.88	1.27	NC
	06/18/2003	14.14	8.2	9.44	1.24	NC
	09/03/2003	14.14	8.5	9.4	0.9	NC
	11/26/2003	14.14	8.85	9.25	0.4	NC
	03/05/2004	14.14	6.76	7.07	0.31	NC
	06/02/2004	14.14	8.26	8.71	0.45	NC
	09/03/2004	14.14	8.7	9.11	0.41	NC
	12/16/2004	14.14	7.75	7.92	0.17	NC
	03/29/2005	14.14	6.21	6.38	0.17	NC
	06/14/2005	14.14	7.41	7.61	0.2	NC
	08/10/2005	14.14	8.05	8.55	0.5	NC
	09/29/2005	14.14	8.28	8.95	0.67	NC
	12/21/2005	14.14	5.7	5.9	0.2	NC
	03/24/2006	14.14	5.98	6.27	0.29	NC
	07/28/2006	14.14	7.88	8.35	0.47	NC
	11/29/2006	NA	10.58	10.81	0.23	NA
	06/01/2007	16.29	11.11	11.45	0.34	NC
	11/14/2007	16.29	10.87	10.93	0.06	NC
	6/5/2008	16.29	11.36	11.46	0.10	NC
	12/18/2008	16.30	10.82	10.89	0.07	5.41
MW-2	12/31/1997	14.36	NP	8.73	0	5.63
	04/13/1998	14.36	NP	7.72	0	6.64
	11/06/1998	14.36	NP	9.43	0	4.93
	03/19/1999	14.36	NP	8.21	0	6.15
	06/24/1999	14.36	NP	8.91	0	5.45
	09/28/1999	14.36	NP	9.42	0	4.94
	11/12/1999	14.36	NP	9.63	0	4.73
	02/11/2000	14.36	NP	8.54	0	5.82
	05/22/2000	14.36	NP	8.1	0	6.26
	09/06/2000	14.36	NP	8.79	0	5.57
	12/19/2000	14.36	NP	9.19	0	5.17
	02/21/2001	14.36	NP	7.99	0	6.37
	04/03/2001	14.36	NP	8.23	0	6.13
	07/10/2001	14.36	NP	8.7	0	5.66
	12/12/2001	14.36	NP	8.16	0	6.2
	01/22/2002	14.36	NP	7.64	0	6.72
	03/08/2002	14.36	NP	8.31	0	6.05
	06/13/2002	14.36	NP	8.64	0	5.72
	09/26/2002	14.36	NP	8.95	0	5.41
	12/12/2002	14.36	NP	9.17	0	5.19

TABLE D-1 : Historical Groundwater Elevation Data
Port of Oakland, 651 Maritime Street
Oakland, California

Monitoring Well	Date Measured	Elevation[1] - Top of Casing (feet)	Depth to Product (feet btc)	Depth to Water (feet btc)	Product Thickness (feet)	Groundwater Elevation[1] (feet)
MW-2	03/17/2003	14.36	NP	7.77	0	6.59
	06/18/2003	14.36	NP	8.44	0	5.92
	09/03/2003	14.36	NP	8.98	0	5.38
	11/26/2003	17.21	NP	12.01	0	5.2
	03/05/2004	17.21	NP	9.75	0	7.46
	06/02/2004	17.21	NP	11.22	0	5.99
	09/03/2004	17.21	NP	11.62	0	5.59
	12/16/2004	17.21	NP	10.8	0	6.41
	03/29/2005	17.21	NP	9.67	0	7.54
	06/14/2005	17.21	NP	10.68	0	6.53
	08/10/2005	17.21	NP	11.05	0	6.16
	09/29/2005	17.21	NP	11.32	0	5.89
	12/21/2005	16.96	NP	9.57	0	7.39
	03/24/2006	16.96	NP	9.55	0	7.41
	07/28/2006	16.96	NP	10.85	0	6.11
	11/29/2006	NA	NP	11.69	0	NA
	06/01/2007	16.92	NP	11.72	0	5.2
	11/14/2007	16.92	NP	12.28	0	4.64
	6/5/2008	16.92	NP	12.01	--	4.91
	12/18/2008	16.93	NP	12.20	--	4.73
MW-3	11/06/1998	14.22	8.84	9.94	1.1	NC
	03/19/1999	14.22	7.52	8.05	0.53	NC
	06/24/1999	14.22	8.38	8.56	0.18	NC
	11/12/1999	14.22	9.14	9.23	0.09	NC
	02/11/2000	14.22	7.97	8.37	0.4	NC
	03/01/2000	14.22	6.59	7.24	0.65	NC
	03/21/2000	14.22	6.5	6.56	0.06	NC
	05/22/2000	14.22	7.51	8.05	0.54	NC
	06/26/2000	14.22	7.82	8.2	0.38	NC
	07/25/2000	14.22	7.9	8.92	1.02	NC
	08/31/2000	14.22	8.15	9.5	1.35	NC
	09/06/2000	14.22	8.21	9.42	1.21	NC
	09/21/2000	14.22	8.3	8.88	0.58	NC
	12/19/2000	14.22	8.6	9.65	1.05	NC
	02/22/2001	14.22	6.36	8.15	1.79	NC
	04/03/2001	14.22	7.48	8.88	1.4	NC
	04/23/2001	14.22	7.85	9.1	1.25	NC
	05/30/2001	14.22	7.75	9.1	1.35	NC
	07/10/2001	14.22	8.1	9.6	1.5	NC
	03/08/2002	14.22	7.8	8	0.2	NC
	04/03/2002	14.22	7.6	7.7	0.1	NC
	04/23/2002	14.22	7.9	8.4	0.5	NC
	04/25/2002	14.22	7.9	8.8	0.9	NC
	05/10/2002	14.22	8.1	8.2	0.1	NC
	05/24/2002	14.22	8.05	8.1	0.05	NC
	06/13/2002	14.22	8.1	8.7	0.6	NC
	07/05/2002	14.22	8.1	8.95	0.85	NC

TABLE D-1 : Historical Groundwater Elevation Data
Port of Oakland, 651 Maritime Street
Oakland, California

Monitoring Well	Date Measured	Elevation[1] - Top of Casing (feet)	Depth to Product (feet btc)	Depth to Water (feet btc)	Product Thickness (feet)	Groundwater Elevation[1] (feet)
MW-3	07/19/2002	14.22	8.1	8.9	0.8	NC
	07/30/2002	14.22	8.1	8.9	0.8	NC
	08/14/2002	14.22	8.1	8.9	0.8	NC
	09/13/2002	14.22	8.3	9.3	1	NC
	09/26/2002	14.22	8.3	9	0.7	NC
	10/14/2002	14.22	8.6	9.5	0.9	NC
	11/04/2002	14.22	8.75	9.99	1.24	NC
	11/21/2002	14.22	8.59	11.29	2.7	NC
	12/06/2002	14.22	8.56	9.3	0.74	NC
	12/18/2002	14.22	7.35	8.43	1.08	NC
	12/30/2002	14.22	6.5	7.15	0.65	NC
	01/02/2003	14.22	6.2	6.2	0	8.02
	01/03/2003	14.22	6.21	6.21	0	8.01
	01/14/2003	14.22	6.2	6.21	0.01	8.01
	01/30/2003	14.22	6.81	6.85	0.04	7.37
	02/18/2002	14.22	7.09	7.15	0.06	NC
	02/26/2003	14.22	7.04	7.11	0.07	NC
	03/13/2003	14.22	7.22	8.11	0.89	NC
	03/17/2003	14.22	7.15	7.5	0.35	NC
	04/16/2003	14.22	7.27	8.25	0.98	NC
	06/18/2003	14.22	7.78	9	1.22	NC
	09/03/2003	14.22	8.31	9.96	1.65	NC
	11/26/2003	16.18	10.79	12.85	2.06	NC
	03/05/2004	16.18	8.39	9.85	1.46	NC
	06/02/2004	16.18	10.03	11.35	1.32	NC
	09/03/2004	16.18	10.46	12.06	1.6	NC
	12/16/2004	16.18	9.41	10.38	0.97	NC
	03/29/2005	16.18	8.17	9.01	0.84	NC
	06/14/2005	16.18	9.59	10.55	0.96	NC
	08/10/2005	16.18	9.91	11.15	1.24	NC
	09/29/2005	16.18	10.21	11.61	1.4	NC
	12/21/2005	16.18	8.21	8.28	0.07	NC
	03/24/2006	16.18	8.2	8.82	0.62	NC
	07/28/2006	16.18	9.81	9.83	0.02	NC
	11/29/2006	NA	10.72	11.7	0.98	NA
	06/01/2007	16.15	10.77	11.46	0.69	NC
	11/14/2007	16.15	10.98	12.19	1.21	NC
	6/5/2008	16.15	10.51	11.96	1.45	NC
	12/18/2008	16.16	10.78	12.00	1.22	4.16
MW-4	12/31/1997	13.15	NP	7.09	0	6.06
	04/13/1998	13.15	NP	7.71	0	5.44
	11/06/1998	13.15	NP	8.69	0	4.46
	03/19/1999	13.15	NP	8	0	5.15
	06/24/1999	13.15	NP	8.45	0	4.7
	09/28/1999	13.15	NP	8.73	0	4.42
	11/12/1999	13.15	NP	8.83	0	4.32
	02/11/2000	13.15	NP	7.71	0	5.44

TABLE D-1 : Historical Groundwater Elevation Data
Port of Oakland, 651 Maritime Street
Oakland, California

Monitoring Well	Date Measured	Elevation[1] - Top of Casing (feet)	Depth to Product (feet btc)	Depth to Water (feet btc)	Product Thickness (feet)	Groundwater Elevation[1] (feet)
MW-4	05/22/2000	13.15	NP	8.09	0	5.06
	09/06/2000	13.15	NP	8.32	0	4.83
	12/19/2000	13.15	NP	8.47	0	4.68
	02/21/2001	13.15	NP	7.51	0	5.64
	04/03/2001	13.15	NP	8.13	0	5.02
	07/10/2001	13.15	NP	8.12	0	5.03
	12/12/2001	13.15	NP	7.65	0	5.5
	01/22/2002	13.15	NP	7.6	0	5.55
	03/08/2002	13.15	NP	7.96	0	5.19
	06/13/2002	13.15	NP	8.2	0	4.95
	09/26/2002	13.15	NP	8.21	0	4.94
	12/12/2002	13.15	NP	8.38	0	4.77
	03/17/2003	13.15	NP	7.72	0	5.43
	06/18/2003	13.15	NP	8.02	0	5.13
	09/03/2003	13.15	NP	8.29	0	4.86
	11/26/2003	13.15	NP	8.69	0	4.46
	03/05/2004	13.15	NP	7.45	0	5.7
	06/02/2004	13.15	NP	8.25	0	4.9
	09/03/2004	13.15	NP	8.31	0	4.84
	12/16/2004	13.15	NP	7.96	0	5.19
	03/29/2005	13.15	NP	7.11	0	6.04
	06/14/2005	13.15	NP	7.9	0	5.25
	08/10/2005	13.15	NP	7.86	0	5.29
	09/29/2005	13.15	NP	8	0	5.15
	12/21/2005	13.15	NP	7.3	0	5.85
	03/24/2006	13.15	NP	7.05	0	6.1
	07/28/2006	13.15	NP	7.92	0	5.23
	11/29/2006	NA	NP	11.63	0	NA
	06/01/2007	16.40	NP	11.82	0	4.58
	11/14/2007	16.40	NP	11.88	0	4.52
	6/5/2008	16.40	NP	11.67	--	4.73
	12/18/2008	16.41	NP	11.20	--	5.21
MW-5	12/31/1997	13.49	NP	6.38	0	7.11
	04/13/1998	13.49	NP	5.56	0	7.93
	11/06/1998	13.49	NP	6.59	0	6.9
	03/19/1999	13.49	NP	6.2	0	7.29
	06/24/1999	13.49	NP	6.73	0	6.76
	09/28/1999	13.49	NP	6.91	0	6.58
	11/12/1999	13.49	NP	7.06	0	6.43
	02/11/2000	13.49	NP	7	0	6.49
	05/22/2000	13.49	NP	6.21	0	7.28
	09/06/2000	13.49	NP	6.56	0	6.93
	12/19/2000	13.49	NP	6.68	0	6.81
	02/21/2001	13.49	NP	6.08	0	7.41
	04/03/2001	13.49	NP	6.38	0	7.11
	07/10/2001	13.49	NP	6.58	0	6.91
	12/12/2001	13.49	NP	6.4	0	7.09

TABLE D-1 : Historical Groundwater Elevation Data
Port of Oakland, 651 Maritime Street
Oakland, California

Monitoring Well	Date Measured	Elevation[1] - Top of Casing (feet)	Depth to Product (feet btc)	Depth to Water (feet btc)	Product Thickness (feet)	Groundwater Elevation[1] (feet)
MW-5	01/22/2002	13.49	NP	6.1	0	7.39
	03/08/2002	13.49	NP	6.1	0	7.39
	06/13/2002	13.49	NP	6.31	0	7.18
	09/26/2002	13.49	NP	6.6	0	6.89
	12/12/2002	13.49	NP	6.75	0	6.74
	03/17/2003	13.49	NP	5.73	0	7.76
	06/18/2003	13.49	NP	6.1	0	7.39
	09/03/2003	13.49	NP	6.5	0	6.99
	11/26/2003	13.49	NP	6.7	0	6.79
	03/05/2004	13.49	NP	5.7	0	7.79
	06/02/2004	13.49	NP	6.27	0	7.22
	09/03/2004	13.49	NP	6.61	0	6.88
	12/16/2004	13.49	NP	6.02	0	7.47
	03/29/2005	13.49	NP	5.25	0	8.24
	06/14/2005	13.49	NP	5.82	0	7.67
	08/10/2005	13.49	NP	6	0	7.49
	09/29/2005	13.49	NP	6.26	0	7.23
	12/21/2005	13.49	NP	5.91	0	7.58
	03/24/2006	13.49	NP	NA[2]	NA[2]	NA[2]
	07/28/2006	13.49	NP	6.08	0	7.41
	11/29/2006	NA	NP	9.39	0	NA
	06/01/2007	15.89	NP	10.6	0	5.29
	11/14/2007	15.89	NP	9.77	0	6.12
	6/5/2008	15.89	NP	9.74	--	6.15
	12/18/2008	15.89	NP	9.80	--	6.09
MW-6	06/24/1999	14	NP	8.61	0	5.39
	09/28/1999	14	NP	9.26	0	4.74
	11/12/1999	14	NP	8.01	0	5.99
	02/11/2000	14	NP	7.2	0	6.8
	05/22/2000	14	NP	7.13	0	6.87
	09/06/2000	14	NP	7.12	0	6.88
	12/19/2000	14	NP	7.57	0	6.43
	02/21/2001	14	NP	7.5	0	6.5
	04/03/2001	14	NP	6.88	0	7.12
	07/10/2001	14	NP	7.15	0	6.85
	12/12/2001	14	NP	9.5	0	4.5
	01/22/2002	14	NP	6.69	0	7.31
	03/08/2002	14	NP	6.98	0	7.02
	06/13/2002	14	NP	7.45	0	6.55
	09/26/2002	14	NP	7.95	0	6.05
	12/12/2002	14	NP	7.71	0	6.29
	12/18/2002	Monitoring Well Was Destroyed				
MW-7	12/31/1997	14.35	NP	8.88	0	5.47
	04/13/1998	14.35	NP	7.86	0	6.49
	11/06/1998	14.35	NP	9.55	0	4.8
	03/19/1999	14.35	NP	8.41	0	5.94

TABLE D-1 : Historical Groundwater Elevation Data
Port of Oakland, 651 Maritime Street
Oakland, California

Monitoring Well	Date Measured	Elevation[1] - Top of Casing (feet)	Depth to Product (feet btc)	Depth to Water (feet btc)	Product Thickness (feet)	Groundwater Elevation[1] (feet)
MW-7	06/24/1999	14.35	NP	9.08	0	5.27
	09/28/1999	14.35	NP	9.6	0	4.75
	11/12/1999	14.35	NP	9.77	0	4.58
	02/11/2000	14.35	NP	8.67	0	5.68
	05/22/2000	14.35	NP	8.43	0	5.92
	09/06/2000	14.35	NP	8.88	0	5.47
	12/19/2000	14.35	NP	9.21	0	5.14
	02/21/2001	14.35	NP	8.13	0	6.22
	04/03/2001	14.35	NP	8.45	0	5.9
	07/10/2001	14.35	NP	8.87	0	5.48
	12/12/2001	14.35	NP	8.39	0	5.96
	01/22/2002	14.35	NP	7.99	0	6.36
	03/08/2002	14.35	NP	8.51	0	5.84
	06/13/2002	14.35	NP	8.9	0	5.45
	09/26/2002	14.35	NP	9	0	5.35
	12/12/2002	14.35	NP	9.28	0	5.07
	12/18/2002	Monitoring Well Was Destroyed				
MW-8	12/31/1997	12.94	8.49	8.82	0.33	NC
	11/06/1998	12.94	9.25	10.3	1.05	NC
	11/21/1998	Monitoring Well Was Destroyed				
MW-8A	12/12/2001	12.94	NP	7.2	0	NA
	01/22/2002	12.94	NP	7.2	0	5.74
	03/08/2002	12.94	NP	7.7	0	5.24
	06/13/2002	12.94	NP	7.72	0	5.22
	09/26/2002	12.94	NP	7.91	0	5.03
	12/12/2002	12.94	NP	8.15	0	4.79
	03/17/2003	12.94	NP	7.28	0	5.66
	06/18/2003	12.94	NP	7.72	0	5.22
	09/03/2003	12.94	NP	8.18	0	4.76
	11/26/2003	12.94	NP	8.55	0	4.39
	03/05/2004	12.94	NP	6.92	0	6.02
	06/02/2004	12.94	NP	7.92	0	5.02
	09/03/2004	12.94	NP	8.16	0	4.78
	12/16/2004	12.94	NP	7.62	0	5.32
	03/29/2005	12.94	NP	6.63	0	6.31
	06/14/2005	12.94	NP	7.6	0	5.34
	08/10/2005	12.94	NP	7.5	0	5.44
	09/29/2005	12.94	NP	7.76	0	5.18
	12/21/2005	12.94	NP	6.9	0	6.04
	03/24/2006	12.94	NP	6.65	0	6.29
	07/28/2006	12.94	NP	7.34	0	6.65
	11/29/2006	NA	NP	11.41	0	NA
	06/01/2007	15.48	NP	11.26	0	4.22
	11/14/2007	15.48	NP	11.4	0	4.08
	6/5/2008	15.48	NP	11.45	--	4.03
	12/18/2008	15.49	NP	11.30	--	4.19

TABLE D-1 : Historical Groundwater Elevation Data
Port of Oakland, 651 Maritime Street
Oakland, California

Monitoring Well	Date Measured	Elevation[1] - Top of Casing (feet)	Depth to Product (feet btc)	Depth to Water (feet btc)	Product Thickness (feet)	Groundwater Elevation[1] (feet)
MW-9	12/18/2008	16.33	NP	12.88	--	3.45
MW-10	12/18/2008	15.65	NP	14.34	--	1.31
MW-11	12/18/2008	15.47	NP	13.42	--	2.05
MW-12	12/18/2008	16.79	NP	12.75	--	4.04

Notes:

Source of data prior to December 2005: Innovative Technical Solutions, Inc. Third Quarter of 2005 Groundwter Monitoring and Product Monitoring Report , 8 November 2005.

NP = no product detected with the interface probe

NC = not calculated due to the presence of free-phase product in the well

btc = below top of the well casing

NA = not available

NM = not measured

1 Elevation data relative to Port of Oakland datum. Well elevations resurveyed January 24, 2009.

2 Well could not be measured due to abundant surface water covering well head.

3 Viscous product not related to the lighter product identified in other wells.

TABLE D-2 : Historical Groundwater Analytical Data
Port of Oakland, 651 Maritime Street
Oakland, California

Well ID	Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-1	05/22/2000	3,600	41,000	<3,000	100	13 [8]	2.9	2.05	3.2 [8]
	Not sampled further due to the presence of free-phase product.								
MW-2	05/27/1994	87	470	NA	<0.5	<0.5	<0.5	<0.5	NA
	03/29/1995	<50	110	1,400	<0.4	<0.3	<0.3	<0.4	NA
	09/06/1995	<50	NA	NA	<0.4	<0.3	<0.3	<0.4	NA
	01/08/1996	<50	<50	1200	<0.4	<0.3	<0.3	<0.4	NA
	04/04/1996	<50	160	320	<0.5	<0.5	<0.5	<1.0	NA
	07/10/1996	<50	120	1400	<0.4	<0.3	<0.3	<0.4	NA
	12/03/1996	<50	230 [1,2]	<250	<0.5	<0.5	<0.5	<1.0	NA
	03/28/1997	<50	714	<250	<0.5	<0.5	<0.5	<1.0	NA
	06/13/1997	51	<50	<250	<0.5	<0.5	<0.5	<1.0	NA
	09/18/1997	82	<50	<250	0.56	<0.5	<0.5	<1.0	NA
	12/31/1997	<50	<47	<280	1.4	<0.5	<0.5	<1.0	NA
	04/13/1998	<50	<50	<300	<0.5	<0.5	<0.5	<1.0	NA
	11/06/1998	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	03/19/1999	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	06/24/1999	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	09/28/1999	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	11/12/1999	<50	120 [2,6]	<300	<0.5	<0.5	<0.5	<0.5	6.3 [8,9]
	02/11/2000	<50	<50	<300	5.4	<0.5	<0.5	<0.5	<2
	05/22/2000	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2
	09/06/2000	<50	<50	<300	0.76 [8]	<0.5	<0.5	<0.5	<0.5 [10]
	12/19/2000	200 [3,11]	<50	<300	39	1.8	<0.5	2.6	<0.5 [10,12]
	02/21/2001	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	07/10/2001	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	12/05/2001	<50	<50	<300	4.4	<0.5	<0.5	<0.5	5.0 [14]
	03/08/2002	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	<5.0
	06/13/2002	62 [15]	<57	<570	<0.5	<0.5	<0.5	<0.5	<5.0
	09/26/2002	69 [2]	<50	<500	1.8	<0.5	<0.5	<0.5	<5.0
	12/12/2002	<50	<50	<300	0.98	<0.5	<0.5	<0.5	<2.0
	03/17/2003	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	06/18/2003	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	09/03/2003	<50	<50	<300	3.2	<0.5	<0.5	<0.5	<2.0
	11/26/2003	<50	<50	<300	3	<0.5	<0.5	<0.5	<2.0
	03/05/2004	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	06/02/2004	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	09/03/2004	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	12/16/2004	<50	96 [6,15]	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	03/29/2005	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	08/10/2005	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5
	09/29/2005	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5
	12/21/2005	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	03/24/2006	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	07/28/2006	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	11/29/2006	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	06/01/2007	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	11/14/2007	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	6/5/2008	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	12/18/2008	390 [2]	840	<300	1.1	<0.5	0.9	<0.5	<0.5
MW-3	Not sampled due to the presence of free-phase product.								

TABLE D-2 : Historical Groundwater Analytical Data
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Well ID	Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-4	09/11/1995	150	<200	500	23	<0.3	<0.3	<0.4	NA
	01/08/1996	790	90	400	170	1.2	0.6	0.6	NA
	04/04/1996	1,100	180	300	320	1.6	1.1	1.2	NA
	07/10/1996	1,200	120	300	470	1.5	0.8	0.8	NA
	12/03/1996	990	220 [1,2]	<250	350	3.3	1.3	1.3	NA
	03/28/1997	440 [2]	<50	<250	190	1.2	0.64	<1.0	NA
	06/13/1997	1,300	92 [5]	<250	500	5.5	3.4	2.8	NA
	09/18/1997	1,300	150	<250	550	4.9	2.1	2	NA
	12/31/1997	73 [1,2,3]	<47	<280	110 [1]	1.0 [1]	<0.5	<1.0	NA
	04/13/1998	150 [2,3]	<50	<300	520	2.9	<2.5	<5.0	NA
	11/06/1998	<50	<50	<300	250	1.7	<1.0	<1.0	<4
	03/19/1999	81	<50	<300	250	<1	1.2	<1.0	<4
Dup.	06/24/1999	190	<50	<300	360	1.4	2.2	1	24
	09/28/1999	750 [3,5]	63 [3,5]	<300	280	1.5	<1.0	<1.0	<4
	11/12/1999	330 [3]	840 [2]	<300	740	<2.5	<2.5	<2.5	42 [9]
	02/11/2000	200 [2]	<50	<300	58	0.73	<0.5	<0.5	4.4 [8]
	05/22/2000	240	<50	<300	500	<2.5	<2.5	<2.5	17
	09/06/2000	530 [2,3]	<50	<300	190	0.93	0.6	0.57	<0.5 [10]
	12/19/2000	960 [3,11]	70 [5]	<300	420	<2.5	<2.5	<2.5	<0.5 [10,12]
	12/19/2000	1,200 [3,11]	<50	<300	440	<2.5	<2.5	<2.5	<0.5 [10,12]
	02/21/2001	450 [13]	<50	<300	120	<0.5	<0.5	<0.5	<0.5 [10]
	07/10/2001	<250	110 [2,13]	<300	620	2.6	2.9	<2.5	<0.5 [8,10]
	12/05/2001	180	<50	<300	61	<0.5	<0.5	<0.5	3.8 [14]
	03/08/2002	490 [2]	54 [2]	<500	180	<2.5	<2.5	<2.5	<25
	06/13/2002	830 [2]	<50	<500	250	<5.0	<5.0	<5.0	<50
Dup.	06/13/2002	820 [2]	<56	<560	240	<5.0	<5.0	<5.0	<50
	09/26/2002	390 [2]	57	<500	150	2.1	<1.0	<1.0	<10
Dup.	09/26/2002	500 [2]	<50 [16]	<500 [16]	200	1.5	<1.0	<1.0	<10
	12/12/2002	580	<50	<300	240	1.4	0.56	<0.5	<2.0
Dup.	12/12/2002	2,400	<50	<300	680	5	2.3	1.4	<2.0
	03/17/2003	130 [15]	<50	<300	320 [17]	<0.5	<0.5	<0.5	<0.5 [10]
Dup.	03/17/2003	82 [15]	<50	<300	190	0.64 [17]	0.56	0.53	<0.5 [10]
	06/18/2003	360 [11,15]	<50	<300	150	<0.5	<0.5	<0.5	<2.0
Dup.	06/18/2003	330 [11,15]	<50	<300	140	<0.5	<0.5	<0.5	<2.0
	09/03/2003	140 [11,15]	<50	<300	240	1.3	<0.5	<0.5	<2.0
Dup.	09/03/2003	83 [11,15]	<50	<300	130	0.58 [17]	<0.5	<0.5	<2.0
	11/26/2003	160 [15]	68 [15]	<300	320	0.91 [17]	<0.5	0.53	<2.0
Dup.	11/26/2003	120 [15]	<50	<300	210	0.66 [17]	<0.5	<0.5	<2.0
	03/05/2004	90 [11]	<50	<300	190	1.1	0.55	0.50 [17]	23 [14,17] <0.5 [10]
Dup.	03/05/2004	84 [11]	<50	<300	180	0.81	<0.5	<0.5	21 [14,17] <0.5 [10]
	06/02/2004	620 [13]	<50	<300	210	0.5517	<0.5	<0.5	<2.0
Dup.	06/02/2004	400 [13]	<50	<300	130	<0.5	<0.5	<0.5	<2.0
	09/03/2004	780 [13,15]	<50	<300	<0.5	1.0 [17]	<0.5	0.57	<2.0
Dup.	09/03/2004	370 [13,15]	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	12/16/2004	840	<50	<300	290	1.3 [17]	0.69	0.75	<2.0
Dup.	12/16/2004	670	<50	<300	230	1.3 [17]	<0.5	<0.5	<2.0
	03/29/2005	440 [13]	<50	<300	140	0.57	<0.5	<0.5	<2.0
Dup.	03/29/2005	540 [13]	<50	<300	170	0.72	<0.5	<0.5	<2.0

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Well ID	Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-4	08/10/2005	500 [18]	<50	<250	180	<2.5	<2.5	<2.5	<2.5
	09/29/2005	360 [18]	59 [20]	<250	160	<5.0	<5.0	<5.0	<5.0
Dup.	09/29/2005	420 [18]	<50	<250	150	<5.0	<5.0	<5.0	<5.0
	12/21/2005	110	<50	<300	76	<0.5	<0.5	<0.5	<0.5
Dup.	12/21/2005	160	<50	<300	76	<0.5	<0.5	<0.5	<0.5
	03/24/2006	420	51	<300	120	0.8	<0.7	<0.7	<0.7
Dup.	03/24/2006	440	<50	<300	130	<0.7	<0.7	<0.7	<0.7
	08/04/2006	560	92 [2]	<300	160	<1.3	4.3	<1.3	<1.3
Dup.	08/04/2006	590	100 [2]	<300	150	<1.3	4.5	<1.3	<1.3
	11/29/2006	300	<50	<300	42	<0.7	1	<0.7	<0.7
Dup.	11/29/2006	300	<50	<300	60	<0.7	<0.7	<0.7	<0.7
	06/01/2007	100 [13,15]	<50	<300	10	<0.5	<0.5	<0.5	<0.5
Dup.	06/01/2007	100 [13,15]	<50	<300	11	<0.5	<0.5	<0.5	<0.5
	11/14/2007	54 [15]	<50	<300	2.1	<0.5	<0.5	<0.5	<0.5
Dup.	11/14/2007	51 [15]	<50	<300	2.1	<0.5	<0.5	<0.5	<0.5
	6/5/2008	67 [15]	<50	<300	14	<0.5	<0.5	<0.5	<0.5
Dup.	6/5/2008	91 [15]	<50	<300	15	<0.5	<0.5	<0.5	<0.5
	12/18/2008	99 [2]	520	<300	0.5	<0.5	<0.5	<0.5	<0.5
Dup.	12/18/2008	88 [2]	850	<300	0.7	<0.5	0.6	<0.5	<0.5
MW-5	09/11/1995	90	<300	2,500	3.3	<0.3	<0.3	<0.4	NA
	04/04/1996	<50	180	520	<0.5	<0.5	<0.5	<1.0	NA
	07/10/1996	<50	120	1,500	<0.4	<0.3	<0.3	<0.4	NA
	12/03/1996	<50	200 [1,2]	<250	<0.5	<0.5	<0.5	<1.0	NA
	03/28/1997	<50	<50	<250	<0.5	<0.5	<0.5	<1.0	NA
	06/13/1997	<50	<50	<250	<0.5	<0.5	<0.5	<1.0	NA
	09/18/1997	<50	<50	<250	<0.5	<0.5	<0.5	<1.0	NA
	12/31/1997	<50	<47	<280	<0.5	<0.5	<0.5	<1.0	NA
	04/13/1998	<50	<47	<280	<0.5	<0.5	<0.5	<1.0	NA
	11/06/1998	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	03/19/1999	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	06/24/1999	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	3.1
	09/28/1999	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	11/12/1999	<50	110 [2,6]	<300	<0.5	<0.5	<0.5	<0.5	5.5 [9]
	02/11/2000	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	05/22/2000	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	09/06/2000	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	12/19/2000	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	02/21/2001	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	07/10/2001	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	12/05/2001	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	03/08/2002	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	<5.0
	06/13/2002	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	<5.0
	09/26/2002	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	<5.0
	12/12/2002	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	03/17/2003	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5 [10]
	06/18/2003	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	09/03/2003	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	11/26/2003	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	4.1 [14], <0.5 [10]
	03/05/2004	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	06/02/2004	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0

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Well ID	Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-5	09/03/2004	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	12/16/2004	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	2.2 [14], <0.5 [10]
	03/29/2005	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	08/10/2005	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5
Dup.	08/10/2005	<50 [19]	<50 [19]	<250	<0.5	<0.5	<0.5	<0.5	<0.5
	09/29/2005	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5
	12/21/2005	<50	180 [15,22]	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	07/28/2006	<50	180	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	11/29/2006	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	06/01/2007	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	11/14/2007	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	6/5/2008	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	12/18/2008	3,100 [2]	3,600	<300	0.5	<0.5	<0.5	<0.5	1.8
MW-6	11/06/1998	120	12,000	1,200	19	0.65	1.8	<0.5	<2
	03/19/1999	170	3,800	580	21	0.86	1.5	2.9	<2
	06/24/1999	120	1700 [7]	<300 [7]	18	<0.5	1	<0.5	54
	09/28/1999	130 [3,5]	820	<300	20	0.51	2.2	<0.5	<2
	11/12/1999	150	11,000 [2,6]	3,000 [3,6]	27	<0.5	2.2	<0.5	13 [9]
	02/11/2000	270 [2]	2,300	<300	23	0.51	2.7	<0.5	5.8
	05/22/2000	350	3,000	<300	18	0.51	<0.5	<0.5	7.7
	09/06/2000	190	610	<300	26	<0.5	1.7	<0.5	<0.5 [10]
	12/19/2000	130 [3,11]	620	<300	24	<0.5	1.6	<0.5	<2
	02/21/2001	120 [13]	440	<300	21	<0.5	0.96	<0.5	<2
	07/10/2001	120	560	<300	29	<0.5	0.99	<0.5	<2
	12/12/2001	53	550	<300	27	<0.5	1.3	<0.5	<2.0
	03/08/2002	160 [2]	640 [2]	<500	30	<0.5	<0.5	<0.5	5.0 [14]
	06/13/2002	160 [2]	670 [2]	<500	34	<0.5	<0.5	<0.5	<5.0
	09/26/2002	230 [2]	1,400 [2]	<500	40	0.64	0.8	<0.5	<5.0
	12/12/2002	53	110	<300	43	<0.5	<0.5	<0.5	<2.0
	12/18/2002	Monitoring Well was destroyed.							
MW-7	09/06/1995	<50	<300	800	<0.4	<0.3	<0.3	<0.4	NA
	01/08/1996	<50	410	110	<0.4	<0.3	<0.3	<0.4	NA
	04/04/1996	<50	530	340	<0.5	<0.5	<0.5	<1.0	NA
	07/10/1996	80	840	1,700	<0.4	<0.3	<0.3	<0.4	NA
	12/03/1996	<50	280 [1,2]	<250	<0.5	<0.5	<0.5	<1.0	NA
	03/28/1997	65 [6]	94 [2]	<250	<0.5	<0.5	<0.5	<1.0	NA
	06/13/1997	<50	100	<250	<0.5	<0.5	<0.5	<1.0	NA
	09/18/1997	<50	240	<250	<0.5	<0.5	<0.5	<1.0	NA
	12/31/1997	<50	53 [2,3]	<280	<0.5	<0.5	<0.5	<1.0	NA
	04/13/1998	<50	<48	<290	<0.5	<0.5	<0.5	<1.0	NA
	11/06/1998	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2
	03/19/1999	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	5.3
	06/24/1999	73	<50	<300	<0.5	<0.5	<0.5	<0.5	12
	09/28/1999	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	14
	11/12/1999	<50	600 [2,6]	420 [3]	<0.5	<0.5	<0.5	<0.5	15 [9]
	02/11/2000	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	51
	05/22/2000	110	53 [2]	<300	<0.5	<0.5	<0.5	<0.5	75
	09/06/2000	50 [6]	<50	<300	<0.5	<0.5	<0.5	<0.5	40 [10]
	12/19/2000	54 [11]	51 [5]	<300	<0.5	<0.5	<0.5	<0.5	47 [10,12]

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Well ID	Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-7	02/21/2001	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	66 [10]
Dup.	02/21/2001	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	60 [10]
	07/10/2001	<50	51 [2]	<300	<0.5	<0.5	<0.5	<0.5	76 [10]
Dup.	07/10/2001	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	75 [10]
	12/12/2001	51	<50	<300	<0.5	<0.5	<0.5	<0.5	98 [14]
Dup.	12/12/2001	64	52 [13,15]	<300	<0.5	<0.5	<0.5	<0.5	96 [14]
	03/08/2002	52 [2]	<50	<500	<0.5	<0.5	<0.5	<0.5	24 [14]
	06/13/2002	87 [2]	54 [2]	<500	<0.5	<0.5	<0.5	<0.5	51
	09/26/2002	83 [2]	84 [2]	<500	<0.5	<0.5	<0.5	<0.5	75 [10]
	12/12/2002	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	58 [14]
	12/18/2002	Monitoring Well Was Destroyed							
MW-8A	12/12/2001	68	720 [11,15]	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	03/08/2002	<50	760 [2]	<570	<0.5	<0.5	<0.5	<0.5	<5.0
Dup.	03/08/2002	<50	350 [2]	<580	<0.5	<0.5	<0.5	<0.5	<5.0
	06/13/2002	<50	570 [2]	<570	<0.5	<0.5	<0.5	<0.5	<5.0
	09/26/2002	<50	410 [2]	<500	<0.5	<0.5	<0.5	<0.5	<5.0
	12/12/2002	<50	160 [15]	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	03/17/2003	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5 [10]
	06/18/2003	<50	74 [15]	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	09/03/2003	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	3.0 [14] /<0.5 [10]
	11/26/2003	<50	94 [15]	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	03/05/2004	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	06/02/2004	<50	67 [15]	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	09/03/2004	<50	86 [15]	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	12/16/2004	<50	160 [6,15]	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	03/29/2005	<50	53	<300	<0.5	<0.5	<0.5	<0.5	<2.0
	08/10/2005	<50 [19]	150 [15,19]	<250	<0.5	<0.5	<0.5	<0.5	<0.5
	09/29/2005	<50	66 [21]	<250	<0.5	<0.5	<0.5	<0.5	<0.5
	12/21/2005	<50	63 [15,22]	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	03/24/2006	<50	71	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	07/28/2006	<50	70 [15]	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	11/29/2006	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	06/01/2007	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	11/14/2007	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	6/5/2008	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	12/18/2008	350 [2]	7,800	2,200 [2]	<0.5	<0.5	<0.5	<0.5	1.3

TABLE D-2 : Historical Groundwater Analytical Data
Port of Oakland, 651 Maritime Street
Oakland, California

Well ID	Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-9	12/18/2008	52 [2]	72	<300	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	12/18/2008	140 [2]	8,000	430 [2]	<0.5	<0.5	<0.5	<0.5	1.0
MW-11	12/18/2008	1,900 [2]	15,000	800 [2]	<0.5	<0.5	<0.5	<0.5	5.0
MW-12	12/18/2008	25,000 [2]	19,000	980 [2]	<0.5	<0.5	<0.5	<0.5	5.1

Notes:

Data prior to December 2005 from 3rd Quarterly Groundwater Monitoring, and Product Recovery Report dated 8 November 2005, by Innovative Technical Solutions, Inc.
µg/L = micrograms per liter
Dup. = duplicate sample
NA = not analyzed
TPHg = total petroleum hydrocarbons in gasoline range.
TPHd = total petroleum hydrocarbons in diesel range.
TPHmo = total petroleum hydrocarbons in motor oil range.
MTBE = methyl tert-butyl ether
1 Analyte found in the associated blank as well as in the sample.
2 Hydrocarbons present do not match profile of laboratory standard.
3 Low boiling point/lighter hydrocarbons are present in the sample.
4 Chromatographic pattern matches known laboratory contaminant.
5 Hydrocarbons are present in the requested fuel quantification range, but do not resemble pattern of available fuel standard.
6 High boiling point/heavier hydrocarbons are present in sample.
7 Sample did not pass laboratory QA/QC and may be biased low.
8 Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two.
9 Trip blank contained MTBE at a concentration of 4.2 µg/L.
10 MTBE detections confirmed by EPA Test Method 8260; 8260 results displayed.
11 Sample exhibits unknown single peak or peaks.
12 EPA Method 8260 confirmation analyzed past holding time.
13 Lighter hydrocarbons contributed to the quantitation.
14 MTBE results from EPA Test Method 8021B.
15 Sample exhibits fuel pattern that does not resemble standard.
16 Sample extracted out of hold time.
17 Presence confirmed, but Relative Percent Difference (RPD) between columns exceeds 40%.
18 Unmodified or weakly modified gasoline is significant.
19 Liquid sample contains greater than ~1 vol. % sediment.
20 Gasoline compounds are significant.
21 Diesel range compounds are significant; no recognizable pattern.
22 Heavier hydrocarbons contributed to the quantitation.