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Alameda County  
Environmental Health

March 22, 2011

Ms. Barbara Jakub,  
Hazardous Materials Specialist  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502

Re: USPS Oakland Vehicle Maintenance Facility  
Perjury Statement

Dear Ms. Jakub:

I declare, under the penalty of perjury, that to the best of my knowledge the information and recommendations as represented to me in the attached Q4 2010 Groundwater Monitoring Report are true and correct.

Sincerely:

A handwritten signature in blue ink, appearing to read "Emmy Andrews".

Emmy Andrews  
Project Manager

Attachments

Cc: James P Schwartz, TRC



**Fourth Quarter 2010  
Groundwater Monitoring Report**  
USPS Oakland Vehicle Maintenance Facility  
1675 7<sup>th</sup> Street  
Oakland, California

This report has been prepared for:

**United States Postal Service**  
395 Oyster Point Boulevard, Suite 225  
South San Francisco, California 94080-1930

March 18, 2011  
Project No. 180497

A handwritten signature in blue ink, appearing to read "Jacob P. Zepeda".

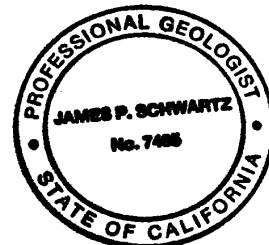
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Jacob P. Zepeda  
Senior Staff Environmental  
Scientist

A handwritten signature in blue ink, appearing to read "James P. Schwartz".

---

James P. Schwartz, P.G.  
Principal Geologist



*Expiration Date 4/30/12*



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March 18, 2011  
180497

Ms. Emmy Andrews  
**UNITED STATES POSTAL SERVICE**  
Pacific Facilities Service Office  
395 Oyster Point Boulevard, Suite 225  
South San Francisco, California 94080-1930

**RE: FOURTH QUARTER 2010  
GROUNDWATER MONITORING  
REPORT  
USPS OAKLAND VMF  
1675 7<sup>TH</sup> STREET  
OAKLAND, CALIFORNIA**

Dear Ms. Andrews:

The attached report summarizes the results of the fourth quarter 2010 groundwater monitoring event performed at the United States Postal Service's Oakland Vehicle Maintenance Facility, located at 1675 7<sup>th</sup> Street in Oakland, California.

We refer you to the text of the report for details regarding this study. If you have any questions, please call and we will be glad to discuss them with you.

Very truly yours,

**TRC**

James Schwartz, P.G.  
Principal Geologist

JPS:JPZ:jcm

Copies: Addressee (3 and email)  
*Alameda County Department of Environmental Health (1)*  
Attn: Ms. Barbara Jakub  
*USPS Oakland VMF/GMF (1)*  
Attn: Mr. Steven M. Quan

**TABLE OF CONTENTS**

1.0 INTRODUCTION ..... 1

    1.1 Purpose ..... 1

    1.2 Site Background ..... 1

    1.3 Scope of Work..... 4

2.0 GROUNDWATER QUALITY EVALUATION..... 5

    2.1 Groundwater Flow Evaluation..... 5

        Table 1. Groundwater Elevations in Site Wells ..... 5

    2.2 Groundwater Quality..... 5

        Table 2a. Analytical Results of Selected Groundwater Samples..... 6

        Table 2b. Analytical Results of Selected Groundwater Samples ..... 6

        Table 3. Analytical Field Data of Selected Groundwater Samples ..... 7

    2.3 Hydrocarbon Absorbent Socks ..... 7

3.0 CONCLUSIONS ..... 7

4.0 LIMITATIONS..... 8

5.0 REFERENCES ..... 9

FIGURE 1 VICINITY MAP

FIGURE 2 GROUNDWATER ELEVATION CONTOUR MAP

FIGURE 3 DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS

FIGURE 4 DISSOLVED-PHASE TPH DIESEL ISOCONCENTRATION CONTOUR MAP

APPENDIX A HISTORICAL DATA

    Table A. Historical Analytical Results of Monitoring Well Groundwater Samples

    Table B. Historical Groundwater Elevations in Site Monitoring Wells

APPENDIX B GROUNDWATER SAMPLING PROTOCOL AND RECORDS

APPENDIX C ANALYTICAL RESULTS

**FOURTH QUARTER 2010  
GROUNDWATER MONITORING REPORT  
USPS OAKLAND VMF  
1675 7<sup>TH</sup> STREET  
OAKLAND, CALIFORNIA**

## **1.0 INTRODUCTION**

### **1.1 Purpose**

In this report, we present the results of the 4<sup>th</sup>-quarter 2010 groundwater monitoring event performed at the United States Postal Service's (USPS's) Oakland Vehicle Maintenance Facility (VMF) located at 1675 7<sup>th</sup> Street in Oakland, California (Figure 1).

This work was performed under the direction of the USPS, in accordance with the November 17, 2010 Agreement for Environmental Services Contract# 052571-09-J-0041, at the request of the Alameda County Department of Environmental Health (ACDEH) to monitor the presence of petroleum fuel hydrocarbons in the on-site groundwater.

### **1.2 Site Background**

In November 1991, one 750-gallon waste-oil underground storage tank (UST), one 5,000-gallon gasoline UST, and two 10,000-gallon diesel USTs were removed from the Oakland VMF (site); an additional 10,000-gallon diesel UST was removed from the site in June 1992. Strong hydrocarbon odors and visible contamination were present within the UST pit excavations, and a small hole in the bottom of the gasoline UST was identified during removal. Sampling and analysis of the soil and groundwater from below the USTs and product piping was performed concurrently with excavation activities. Soil analytical results from these areas indicated the presence of elevated concentrations of total petroleum hydrocarbons as diesel (TPH-d), gasoline (TPH-g), benzene, toluene, ethylbenzene, and xylenes (collectively known as BTEX compounds) (Professional Service Industries, Inc. [PSI] 2002). Metals (cadmium, chromium, lead, nickel, and zinc) were also detected in soil samples collected from the former 750-gallon UST excavation, but odors and discoloration of soil were not present. Groundwater was not encountered from the base of the 1991 UST excavations (at 16 feet below ground surface [bgs]), but was encountered at the base of the 1992 UST excavation (at 12 feet bgs). Groundwater collected from the 1992 UST excavation contained elevated concentrations of TPH-d (72,000 micrograms per liter [ug/L]), benzene (3.8 ug/L), and xylenes (12 ug/L). Following the UST removals, GeoResource Consultants oversaw the installation of three new 12,000-gallon USTs (one gasoline and two diesel USTs) near the southwest corner of the USPS parking garage, and one new 1,000-gallon waste-oil aboveground storage tank (AST).

Based on the elevated concentrations of TPH-d, benzene, and xylenes detected in soil and groundwater sampled during the 1992 UST removal activities, the ACDEH requested a groundwater investigation and further evaluation of soil contamination. Later in 1992, following the June excavation activities, additional hydrocarbon-impacted soil was removed from the site near the location of two former diesel USTs (PSI, 2002).

In September 1993, Harding Lawson Associates performed a subsurface investigation in which nine borings were drilled, and 25 soil samples were collected and analyzed for TPH-d, TPH-g, and BTEX compounds. Five of the drilled borings were converted to monitoring wells (MW-1 through MW-5) which were completed to a depth of 20 feet bgs. Elevated concentrations of TPH-d (2,400 milligrams per kilogram [mg/kg]), TPH-g (53 mg/kg), and xylenes (0.087 mg/kg) were detected in soil at 3 feet beneath the fuel dispenser island at MW-4 (boring B-4 location); elevated concentrations of TPH-d

(84 mg/kg), TPH-g (180 mg/kg), benzene (0.15 mg/kg), toluene (0.35 mg/kg), ethylbenzene (2.1 mg/kg), and xylenes (13 mg/kg) were detected in soil at 6 feet beneath the fuel dispenser island near well MW-3 (boring B-8); and benzene (0.04 mg/kg) was detected in soil at 2.5 feet deep near well MW-2 (boring B-2). TPH-d was detected in a groundwater sample collected from monitoring well MW-4 at a concentration of 580 ug/L. No other petroleum hydrocarbons were detected in any of the other groundwater samples collected during the investigation.

Quarterly groundwater monitoring was initiated at the site in January 1994. In December 1994, in response to the construction of Interstate 880 in the vicinity of the site (Cypress Freeway Reconstruction Project), the ACDEH approved the abandonment of well MW-5, which was located up-gradient of the UST removal areas and had been non-detect for petroleum hydrocarbons since being installed in 1993. By June 1995, free product was discovered in well MW-4 and removed with absorbent socks and bailers. TPH-d concentrations increased from June 1994 to June 1995 in wells MW-1, MW-2, MW-3 and MW-4. During our review, there was no indication that groundwater was monitored at the site from 1998 to 2002.

In accordance with a request from the ACDEH, by June 1997, Harding Lawson Associates (HLA) performed a well search, chemical data compilation of groundwater and soil contamination, and a screening human health risk assessment (Tier I) to evaluate and assess whether site closure was justifiable. Mr. Kayode Kadara (USPS) presented the HLA report to Ms. Jennifer Eberle (ACDEH) in June 1997 and to Mr. Larry Seto (ACDEH) by February 1998. In the report, HLA concluded that "no risk-based remediation is necessary and case closure is recommended". The request for site closure was reviewed and denied by Mr. Seto and Madhulla Logan (ACDEH) in May 1998. ACDEH indicated that the maximum concentrations of benzene detected in shallow soils at the site exceeded Tier I cleanup levels, and that a Tier II ASTM Risk Based Corrective Action (RBCA) or Human Health Risk Assessment (HHRA) should be done for the site using a construction worker scenario (due to the presence of impacted soil within 5 feet of the ground surface).

Additionally, in 1997, Herbst Engineering removed three hydraulic lifts within the VMF building. During the removal, Herbst Engineering contracted JB Environmental to characterize and dispose of the observed soil contamination in these hydraulic lift areas. For disposal, the stockpiled and drummed soil and sludge was analyzed for metals (CAM 17), TPH-g, TPH-d, BTEX compounds, TPH as motor oil (TPH-mo), and chlorinated volatile organic compounds (VOCs). Analytical results indicated the impacted soil and sludge contained high concentrations of TPH-mo (up to 12,000 mg/kg), and traces of chlorinated hydrocarbons. An initial investigation of the soil and groundwater impacted by leaking hydraulic lifts was conducted by Lowney Associates (now known as TRC) in August 1999. The investigation identified high concentrations of total recoverable petroleum hydrocarbons (TRPH) in soil (up to 48,000 mg/kg), and in groundwater (TRPH up to 61 mg/kg); benzene in groundwater was detected at 0.0065 (mg/L). The follow up soil and groundwater investigation, conducted by Lowney Associates in March 2000, consisted of seven borings in the vicinity of the former-leaking hydraulic lifts where soil and groundwater was previously tested for TRPH and BTEX compounds. The investigation revealed that the impacts from the leaking hydraulic lifts were limited to the area immediately surrounding the lifts, with no significant migration of contaminants.

In February 2000, Mr. Thomas Peacock, manager of the ACDEH local oversight program (LOP), submitted a letter to Mr. Sean McFadden of the USPS entitled "Intent to Make a Determination That No Further Action Is Required", indicating that the LOP intended to make a determination that no further action is required or to issue a closure letter. An additional letter sent to Mr. Sean McFadden (USPS) from Mr. Larry Seto (ACDEH) indicated that groundwater had not been tested for methyl-tert butyl ether (MTBE). The letter indicated that in addition to a Tier II RBCA, before site closure could be issued, another groundwater sample must be taken from well MW-4 and analyzed for TPH-g, TPH-d, BTEX, and MTBE. In another letter dated November 8, 2000, Mr. Larry Seto (ACDEH) indicated receipt of the Tier II HHRA dated October 11, 1999 by Lowney Associates. The

letter also indicated that the ACDEH had not received the laboratory analysis for the groundwater sample from MW-4, and that a groundwater sample must be taken from MW-4 before case closure could be issued and that Mr. Tom Peacock would be the new case officer for the site at ACDEH. On November 1, 2000, Lowney Associates collected a groundwater sample from well MW-4, at which time the well contained 1 to 2 inches of free product. The subsequent Groundwater Quality Evaluation report (January 2001), recommended quarterly groundwater monitoring at the site.

Mr. Barney Chan (ACDEH) responded in a letter on April 9, 2001, directing Mr. Sean McFadden (USPS) to resume quarterly groundwater monitoring, with an addition of polyaromatic hydrocarbons (PAHs) to the list of contaminants to be analyzed (in addition to TPH-g, TPH-d, BTEX, MTBE). Mr. Chan (ACDEH) also requested clarification of the case by indicating that the USPS provide: 1) a map indicating the location of the soil samples from past tank removals, 2) a tabulation of the initial and confirmation soil sample results, 3) a map indicating the location of hydraulic lifts and samples relative to the former and existing USTs, 4) an analysis of residual concentrations of hydraulic fluid in soil and groundwater, and 5) an analysis of the need for further site characterization.

Quarterly groundwater monitoring was initiated by the USPS in March 2002 by Professional Service Industries (PSI), which included sampling of groundwater from wells MW-1 through MW-4. Wells MW-1 through MW-3 were analyzed for TPH-g, TPH-d, and VOCs (including BTEX and MTBE); because of the presence of free product, well MW-4 was analyzed for semi-volatile organic compounds (SVOCs) and PAHs. TPH-d was detected in MW-3 (0.54 mg/L). MTBE was also detected in MW-3 (3.8 ug/L) and MW-4 (8.5 ug/L). Additional VOCs and SVOCs were detected in groundwater from MW-4 (sec-butylbenzene, naphthalene, n-propylbenzene, anthracene, di-n-octylphthalate, flourene, 2-methylnaphthalene, naphthalene, phenanthrene, and pyrene), but only naphthalene was above the EPA Region IX Preliminary Remediation Goals (PRG) at 46 ug/L.

As a result of subsequent correspondence between Mr. Chan (ACDEH), Mr. Roland Queyquep (USPS) and Mr. Ross and Mr. Burfield of PSI (consultant for the USPS) during May through August 2002, the ACDEH made the following requests:

- Clarification of data presented in the Tier II HHRA and an assessment of the continued validity of the HHRA conclusions;
- Sampling and analysis of the free product in MW-4;
- Removal of free product from MW-4; and
- Delineation of the free product plume.

PSI addressed Mr. Chan's (ACDEH) requests in the submitted "Workplan: Site Investigation & Free-Product Removal" dated July 17, 2002. The ACDEH approved the Workplan in their letter dated July 19, 2002. Modifications to the Workplan, including screening and analysis of soil samples from the proposed boring and clarification of the groundwater sampling method and installation of a permanent well, was sent by PSI on August 19, 2002 and approved by the ACDEH in their letter dated August 23, 2002.

Groundwater samples collected by PSI in 2002 indicated 4.32 inches of free product observed in MW-4. The free product itself was fingerprinted as degraded diesel. PSI removed the free product (approximately 1 to 2 gallons) from well MW-4 from August through October 2002, until the free product was no longer apparent within the well. In September 2002, PSI installed well MW-6 was installed approximately 60 feet down-gradient of wells MW-3 and MW-4 per the ACDEH request for delineation of the plume down-gradient of the fuel island. In general, the analytical results for the 2002 groundwater sampling program indicated no TPH-g in any of the wells except MW-4; TPH-d was detected in wells MW-1, MW-3, and MW-4 but decreased rapidly from the first to the fourth

quarter; BTEX was not detected in any wells except for toluene at low concentrations in MW-6; and MTBE was detected in wells MW-1 through MW-4, ranging from 4 ug/L to 7 ug/L.

By December 30, 2002, PSI submitted their "Historic Summary Report and Closure Request, USPS GMF/VMF" to Mr. Barney Chan (ACDEH). In their report, PSI reviewed the Tier II HHRA and indicated that the conclusions of the HHRA with respect to estimated health risk "are not only valid, but are conservative for current site conditions." PSI also concluded that there had been no significant leak of gasoline fuel, supported by the general absence of TPH-g and BTEX constituents and the low levels of MTBE in groundwater; they also concluded that additional remedial efforts to address residual concentrations of hydraulic fluid in soil and groundwater should not be required. PSI's efforts to remove TPH-d free product from MW-4 appeared successful, and that based on the volume of the free product, the amount of discharge of TPH-d to the groundwater was on the order of 1 to 2 gallons, and occurred suddenly during a short duration or single event release of diesel fuel centered around or within MW-4. On February 24, 2003, PSI submitted the Fourth Quarter 2002 Groundwater Monitoring Report to Mr. Barney Chan (ACDEH) and requested closure for the site.

Based on our review of the ACDEH LOP case files for the site, no further correspondence occurred regarding site closure, and no site characterization or monitoring activities have occurred since 2002.

ACDEH sent a letter to the USPS dated July 3, 2008, identifying the site as unclaimed in GeoTracker. A subsequent Notice of Violation (NOV) sent by the ACDEH dated July 24, 2009, was received by Mr. Roland Queyquep (USPS); the NOV was issued for failing to claim the site in a timely fashion. Currently, the Site has been claimed by the USPS.

On March 11, 2010, Barbara Jakub of the ACDEH performed a site Closure Review that was posted to GeoTracker. In the Closure Review letter, she identifies potential vapor intrusion as one of the main impediments to obtaining case closure, although, she notes, "However, the impediments to closure identified above do not comprehensively describe the full scope of work that may be necessary to achieve case closure nor do they necessarily represent the full range of conditions to be evaluated on a site-specific basis during case closure review. In addition, as more information becomes available during progress of the case, additional impediments to closure may become known."

### 1.3 Scope of Work

The scope of work for this investigation was outlined in our agreement with the USPS dated November 17, 2010 (Contract No. 052571-09-J-0041), and included the following tasks:

- Redevelopment of wells MW-1, MW-2, MW-3, MW-4, MW-6, and TP-1;
- Measurement of the shallow groundwater flow direction beneath the site;
- Purge groundwater and record field parameters of pH, dissolved oxygen, and redox potential;
- Collection of groundwater samples from site monitoring wells MW-1, MW-2, MW-3, MW-4, MW-6, and TP-1;
- Laboratory analysis of the groundwater samples for TPHg, TPHd, TPHmo, VOCs (including BTEX), PAHs, MTBE, DIPE, ETBE, TAME, and TBA by EPA Test Methods 8015M, 8260B and 8270C; and
- Analysis of groundwater samples for sulfate, nitrate, and ferrous iron.



## 2.0 GROUNDWATER QUALITY EVALUATION

### 2.1 Groundwater Flow Evaluation

Following surging and development of wells MW-1, 2, 3, 4, 6 and TP-1 on December 27, 2010, groundwater elevation data was collected during well sampling on January 3, 2011. The general flow direction in the shallow water-bearing zone is towards the south-southwest (S16°W) at an approximate gradient of 0.009 feet/feet. This is generally consistent with the flow direction measured during past sampling events. The groundwater elevation data and flow direction are presented in Table 1 and shown on Figure 2. For comparison, the results from previous monitoring events also are presented in Appendix A - Table B.

**Table 1. Groundwater Elevations in Site Wells**

Monitoring Well	Latitude <sup>+</sup>	Longitude <sup>+</sup>	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater ** (ft bgs)	Groundwater Elevation (feet msl)	Groundwater Flow Direction
MW-1	37°48'19.16"N	122°18'6.01"W	1/3/2011	11.44	5.98	5.46	S16°W
MW-2	37°48'18.84"N	122°18'5.74"W	1/3/2011	12.06	6.75	5.31	S16°W
MW-3	37°48'18.64"N	122°18'6.54"W	1/3/2011	12.48	7.68	4.80	S16°W
MW-4	37°48'18.50"N	122°18'6.15"W	1/3/2011	12.83	8.12	4.71	S16°W
MW-6	37°48'18.08"N	122°18'6.73"W	1/3/2011	11.93	7.61	4.32	S16°W
TP-1	37°48'20.20"N	122°18'5.75"W	1/3/2011	--	4.21	--	S16°W

-- Measured from the top of the casing.

+ Monitoring wells were resurveyed on January 10, 2011 in accordance to the State of California Geotracker requirements using the North American Datum 1983.

TOC = top of casing (from PSI 2002)

ft bgs = feet below ground surface

feet msl = feet mean sea level

### 2.2 Groundwater Quality

On January 3, 2010, groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-6 and TP-1. (Please note that well TP-1 is a 6-inch diameter well and appears as a tank-pit well adjacent to the new USTs at the USPS Oakland VMF). Copies of the well sampling logs and a discussion of sampling protocol are included in Appendix B.

The groundwater samples were analyzed for TPHd, TPHmo, VOCs (including BTEX), PAHs, MTBE, DIPE, ETBE, TAME, and TBA by EPA Test Methods 8015M, 8260B and 8270C. Groundwater samples were also analyzed for sulfate, nitrate, and ferrous iron. Analytical results are presented in Tables 2a, 2b, and 3 and shown on Figure 3. For comparison, the analytical results and depth to groundwater from historical sampling events are presented in Appendix A. Copies of the laboratory reports are attached in Appendix C.

**Table 2a. Analytical Results of Selected Groundwater Samples**  
(concentrations in micrograms per liter (ug/l))

Well No.	Date	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
MW-1	1/3/2011	<50	<b>161</b>	<190	<1.0	<1.0	<1.0	<2.0	<1.0
MW-2	1/3/2011	<50	<94	<b>380</b>	<1.0	<1.0	<1.0	<2.0	<1.0
MW-3	1/3/2011	<50	<b>209</b>	<190	<1.0	<1.0	<1.0	<2.0	2.4
MW-4	1/3/2011	<50	<b>6,620</b>	<b>&lt;940</b>	<1.0	<1.0	<1.0	<2.0	3.3
MW-6	1/3/2011	<50	<94	<190	<1.0	<1.0	<1.0	<2.0	0.54
TP-1	1/3/2011	<50	<94	<190	<1.0	<1.0	<1.0	<2.0	<1.0
Groundwater ESL <sup>(1)</sup>		100	100	100	1	40	30	20	5
MCL <sup>(2)</sup>		NE	NE	NE	1	150	300	1,750	13

**Notes**

<sup>(1)</sup> Environmental Screening Level-Table A, CRWQCB, SF Bay Region, rev. May 2008.

<sup>(2)</sup> Drinking water Maximum Contaminant Levels–California DHS, June 26, 2009

**Bold** Compound was detected above one or more of the action levels

µg/L = Micrograms per liter

TPHg = Total petroleum hydrocarbons as gasoline

TPHd = Total petroleum hydrocarbons as diesel

TPHmo = Total petroleum hydrocarbons as motor oil

MTBE = Methyl tert-butyl ether

< = Indicates that the compound was not detected at or above the stated laboratory reporting limit

NE = Not established

**Table 2b. Analytical Results of Selected Groundwater Samples**  
(concentrations in micrograms per liter (ug/l))

Well No.	Date	TBA	DIPE	ETBE	TAME	1,2-DCA	Naphthalene	Other PAHs
MW-1	1/3/2011	<10	<5.0	<5.0	<5.0	<1.0	<5.0	ND
MW-2	1/3/2011	<10	<5.0	<5.0	<5.0	<1.0	<5.0	ND
MW-3	1/3/2011	<10	<5.0	<5.0	<5.0	0.65	<5.0	ND
MW-4	1/3/2011	< 5.0	<5.0	<5.0	<5.0	<1.0	2.3	ND
MW-6	1/3/2011	<10	<5.0	<5.0	<5.0	<1.0	<5.0	ND
TP-1	1/3/2011	<10	<5.0	<5.0	<5.0	<1.0	<5.0	ND
Groundwater ESL <sup>(1)</sup>		12	NE	NE	NE	200	24	NE
MCL <sup>(2)</sup>		NE	NE	NE	NE	0.5	NE	NE

**Notes**

<sup>(1)</sup> Environmental Screening Level-Table A, CRWQCB, SF Bay Region, rev. May 2008.

<sup>(2)</sup> Drinking water Maximum Contaminant Levels–California DHS, June 26, 2009

**Bold** Compound was detected above one or more of the action levels

µg/L = Micrograms per liter

NE = Not established

ND = Not detected above laboratory reporting limit

< = Indicates that the compound was not detected at or above the stated laboratory reporting limit

TBA = Tert-butanol

DIPE = Di-isopropyl ether

ETBE = Ethyl tert-butyl ether

TAME = Tert-amyl methyl ether

1,2-DCA = 1,2-dichloroethane

**Table 3. Analytical Field Data of Selected Groundwater Samples**

Well No.	Date	pH	Specific Conductivity	Temperature	Dissolved Oxygen	Oxidation Reduction Potential	Ferrous Iron	Nitrate	Sulfate
			( $\mu\text{S}/\text{cm}$ )	( $^{\circ}\text{C}$ )	( $\text{mg}/\text{L}$ )	( $\text{mV}$ )	( $\text{mg}/\text{L}$ )	( $\text{mg}/\text{L}$ )	( $\text{mg}/\text{L}$ )
MW-1	1/3/2011	6.58	3848	19.47	2.32	194.4	<0.10	3.5	404
MW-2	1/3/2011	6.47	1547	19.22	1.38	205.9	<0.10	4.1	330
MW-3	1/3/2011	9.38	2230	18.41	3.34	576.6	<0.10	6.8	191
MW-4	1/3/2011	6.68	1587	18.62	0.22	-98.2	1.2	0.24	207
MW-6	1/3/2011	7.61	1110	20.87	2.19	597.7	<0.10	15.0	137
TP-1	1/3/2011	7.95	178	16.89	4.19	176	<0.10	1.2	18.6

**Notes**

- < = Indicates that the compound was not detected at or above the stated laboratory reporting limit  
 mg/L = milligrams per liter  
 mV = millivolts  
 $\mu\text{S}/\text{cm}$  = microSiemens per centimeter  
 $^{\circ}\text{C}$  = degree Celsius

**2.3 Hydrocarbon Absorbent Socks**

Based on our research and review of the site, no site characterization or monitoring activities have occurred since a site closure request was submitted to ACDEH in December 2002. Based on our observation of free product in well MW-4 during our monitoring event and to continue with the petroleum hydrocarbon recovery effort, hydrocarbon absorbent socks were removed and replaced in well MW-4. Free product up to 1/8-inch thick was observed during our fourth quarter 2010 monitoring event, appearing as immiscible brown droplets coalescing into a thin layer atop the clear groundwater. Approximately 3 gallons of free product and groundwater were extracted from well MW-4 using bailers and absorbent socks prior to re-development and subsequent sampling of groundwater from the well.

**3.0 CONCLUSIONS****3.1 Discussion of General Groundwater Quality**

During the fourth quarter 2010 monitoring event, following the development of the five site-monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-6), a tank pit well (TP-1), and the removal of free product from well MW-4, groundwater samples were collected for this monitoring event. Based on the groundwater elevation data collected, the general flow direction of the shallow water-bearing zone is towards the south-southwest and appears generally consistent with prior measurements.

Approximately 3 gallons of groundwater and free product (TPHd) were removed from well MW-4 using bailers and absorbent socks prior to development of the wells.

Laboratory analyses of groundwater from monitoring wells MW-1, MW-3, and MW-4 detected TPHd as dissolved phase hydrocarbons above the laboratory reporting limits and environmental screening levels (ESLs) ranging from 161 to 6,620  $\mu\text{g}/\text{L}$ . TPHmo was detected in wells MW-2 and MW-4 above the laboratory reporting limits and ESLs. (Please note that the laboratory reporting limit for TPHmo was listed at <190  $\mu\text{g}/\text{L}$ , above the groundwater ESL of 100  $\mu\text{g}/\text{L}$ .) TPHg and BTEX compounds were not detected above the laboratory reporting limits or ESLs. MTBE was detected in groundwater from

wells MW-3, MW-4, and MW-6, but was well below the groundwater ESL of 5 ug/L. Other fuel oxygenates, including TBA, DIPE, ETBE, TAME, and semi-volatiles 1,2-DCA, naphthalene, or other PAHs were not detected above groundwater ESLs.

### 3.2 Intrinsic Biodegradation Evaluation

Anaerobic microbial processes can include the reduction of ferric iron, nitrate, and sulfate. Low oxygen content and a carbon source (in this case petroleum hydrocarbons) are generally required for these reactions to take place. The highest concentration of ferrous iron (1.2 mg/L) was detected in the central portion of the plume at MW-4, indicating that reduction of ferric iron (Fe<sup>3+</sup>) to ferrous iron (Fe<sup>2+</sup>) is occurring in areas with higher petroleum hydrocarbon concentrations.

Denitrification involves the reduction of nitrate (NO<sub>3</sub>) to nitrite (NO<sub>2</sub>) and also occurs in reduced groundwater conditions with dissolved oxygen (DO) concentrations of approximately 0.5 mg/L. As groundwater appears to be anaerobic in the central portion of the plume and aerobic in the peripheral portions, higher NO<sub>3</sub> concentrations are expected on the peripheral portions if denitrifying bacteria are present. During the fourth quarter 2010 monitoring event, concentrations of NO<sub>3</sub> were lower in monitoring well MW-4 (0.24 mg/L) than monitoring wells located in periphery (concentrations ranging from 1.2 to 15 mg/L), indicating that denitrifying bacteria are actively reducing NO<sub>3</sub>.

The sulfate concentrations varied inconsistently throughout the contaminant plume during the fourth quarter 2010 monitoring event, ranging from 18.6 mg/L in TP-1 to 404 mg/L in MW-1. Anaerobic microbial reactions appear to favor the reduction of ferric iron and nitrate over sulfate.

Conductivity, pH, and temperature measurements were also used to evaluate if the subsurface environment is generally suitable for biological growth; extremes (high or low) are considered unfavorable. These three parameters were within ranges typically favorable for biological activity.

### 3.3 Recommendations

Based on the results obtained during this fourth quarter 2010 monitoring event, we recommend the use of absorbent socks for implementation of a passive hydrocarbon collection system to remove free product (TPHd) from well MW-4.

Additional semi-annual groundwater monitoring is also recommended at the site. This monitoring will help identify whether the presence of free product in well MW-4 is an ongoing issue, or if the origin is residual contamination existing under the VMF refueling canopy area where the former USTs were removed.

### 4.0 LIMITATIONS

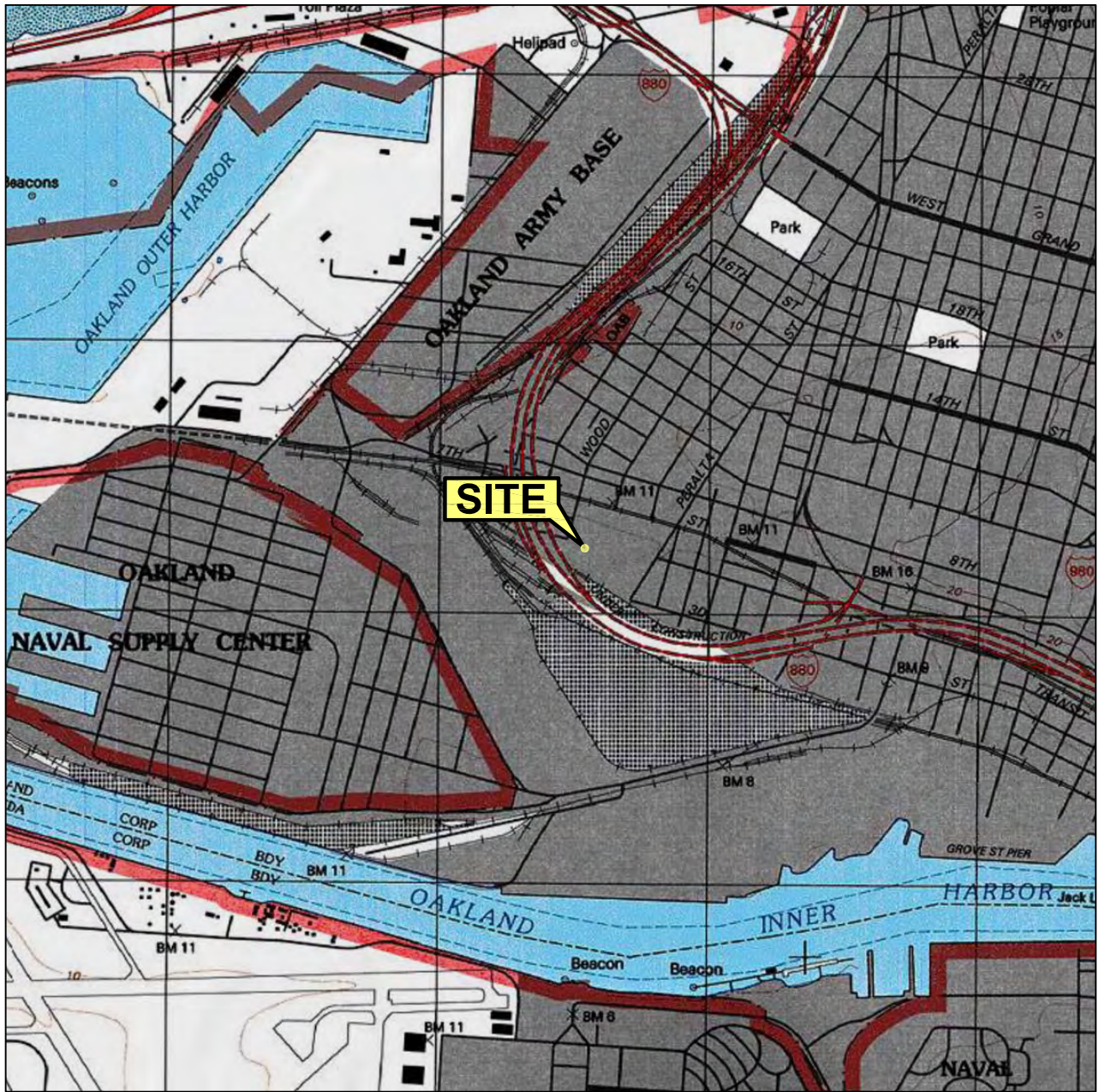
This report was prepared for the use of the United States Postal Service in evaluating groundwater quality at selected on-site locations at the time of this study. We make no warranty, expressed or implied, except that our services have been performed in accordance with environmental principles generally accepted at this time and location. The chemical and other data presented in this report can change over time and are applicable only to the time this study was performed. We are not responsible for the data presented by others.

## 5.0 REFERENCES

Professional Service Industries. February 17, 2003. *Fourth Quarter 2002 Groundwater Monitoring Report, USPS GMF/VMF 1675 7<sup>th</sup> Street, Oakland, California.*

Professional Service Industries, December 30, 2002. *Historic Summary Report and Closure Request, United States Postal Service Vehicle Maintenance Facility, 1675 7<sup>th</sup> Street, Oakland, California.*

Geo/Resource Consultants, Inc, September 17, 1992. *Supplemental Observation Letter, Underground Storage Tank (USTO Program, U.S. Postal Service Vehicle Maintenance Facility, 1675 7<sup>th</sup> Street, Oakland, California.*



1 MILE      3/4      1/2      1/4      0      1 MILE



SCALE 1 : 24,000



SOURCE:  
 United States Geological Survey  
 7.5 Minute Topographic Maps:  
 Oakland West Quadrangle

**VICINITY MAP**

United States Postal Service  
 Vehicle Maintenance Facility  
 1675 7th Street  
 Oakland, California






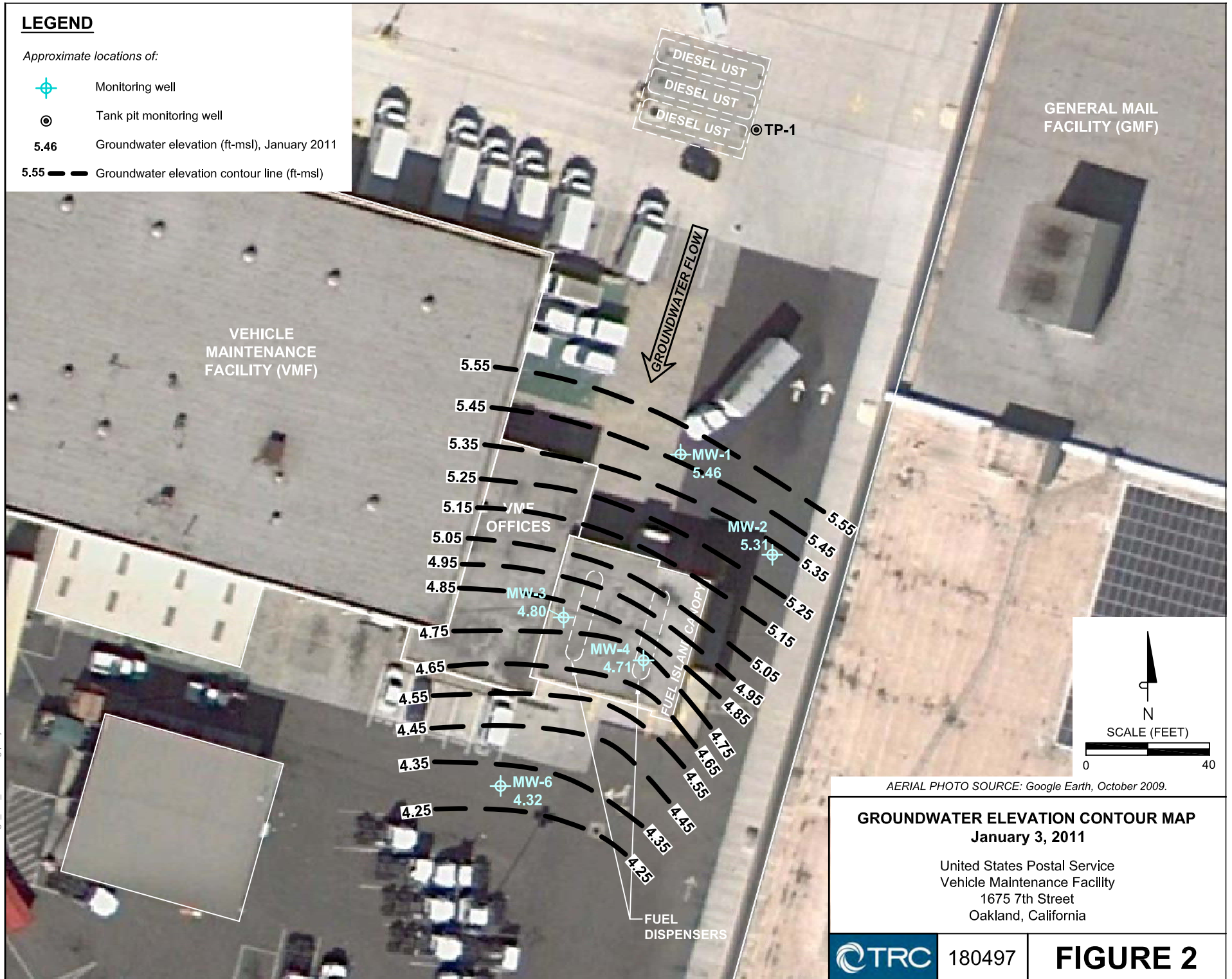
180497

**FIGURE 1**

**LEGEND**



Approximate locations of:

-  Monitoring well
-  Tank pit monitoring well
- 5.46 Groundwater elevation (ft-msl), January 2011
- 5.55  Groundwater elevation contour line (ft-msl)



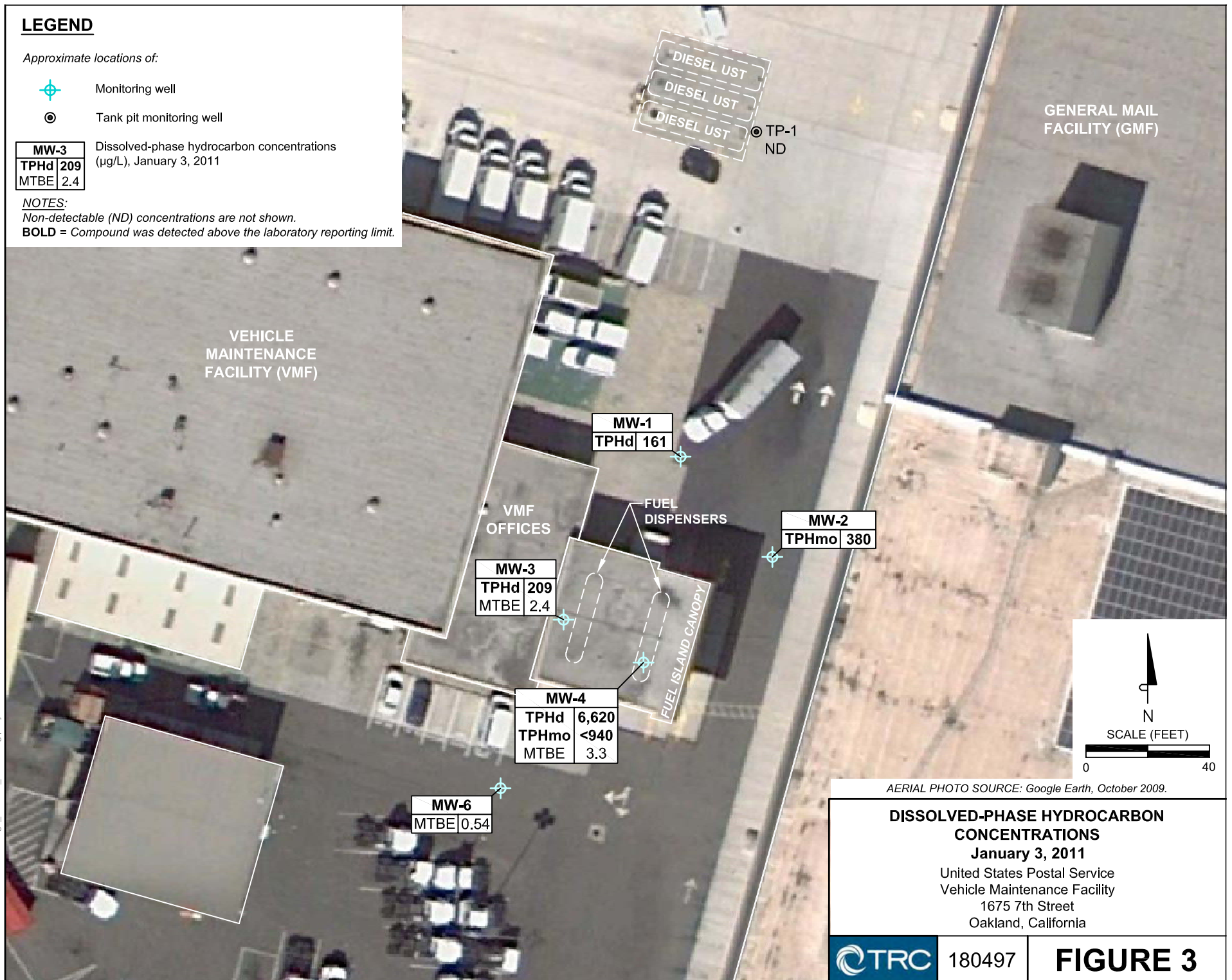
**LEGEND**

Approximate locations of:

-  Monitoring well
-  Tank pit monitoring well

<b>MW-3</b>	Dissolved-phase hydrocarbon concentrations (µg/L), January 3, 2011
<b>TPHd</b>	<b>209</b>
<b>MTBE</b>	<b>2.4</b>

**NOTES:**  
 Non-detectable (ND) concentrations are not shown.  
**BOLD** = Compound was detected above the laboratory reporting limit.



**DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS**

**January 3, 2011**

United States Postal Service  
 Vehicle Maintenance Facility  
 1675 7th Street  
 Oakland, California






180497

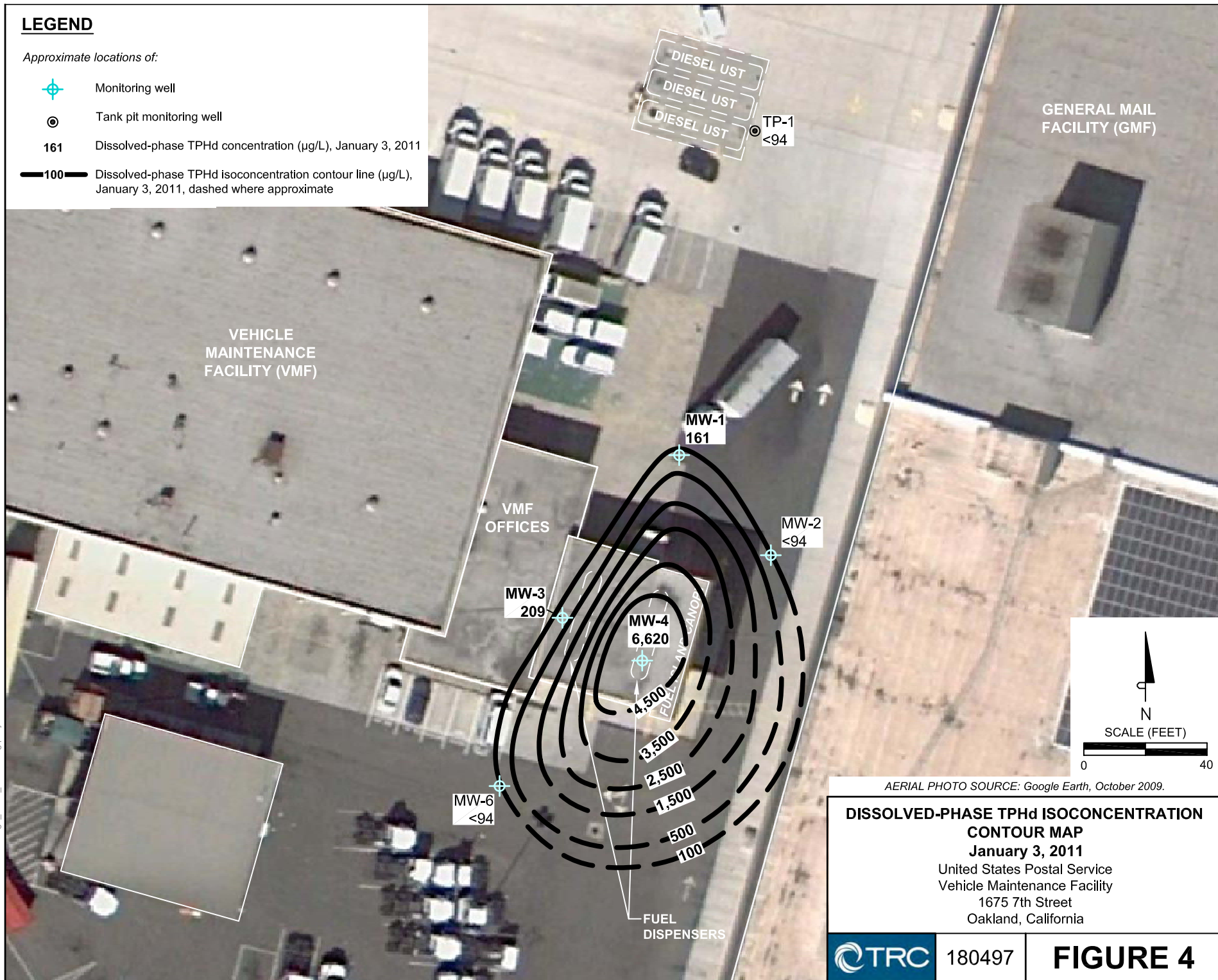
**FIGURE 3**



# LEGEND

Approximate locations of:

-  Monitoring well
-  Tank pit monitoring well
- 161** Dissolved-phase TPHd concentration ( $\mu\text{g/L}$ ), January 3, 2011
-  Dissolved-phase TPHd isoconcentration contour line ( $\mu\text{g/L}$ ), January 3, 2011, dashed where approximate



**DISSOLVED-PHASE TPHd ISOCONCENTRATION  
CONTOUR MAP**  
January 3, 2011  
United States Postal Service  
Vehicle Maintenance Facility  
1675 7th Street  
Oakland, California

FILE NAME: N:\CAD\USPS Oakland\Fig4\_TPHd\_Jan11.dwg | Layout Tab: 8x11

**APPENDIX A**  
**HISTORICAL DATA**

**Table A. Historical Analytical Results of Monitoring Well Groundwater Samples**  
(concentrations in parts per billion)

Monitoring Well	Date	TPHg	TPHd	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-1	9/1/1993	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	1/26/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	3/1/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	6/1/1994	<50	73	<0.5	<0.5	<0.5	<0.5	NA
MW-1	2/22/1995	<50	600	<0.5	<0.5	<0.5	<0.5	NA
MW-1	6/6/1995	<50	900	<0.5	<0.5	<0.5	<0.5	NA
MW-1	8/16/1995	<50	810	<0.5	<0.5	<0.5	<0.5	NA
MW-1	11/14/1995	<50	590	<0.5	<0.5	<0.5	<0.5	NA
MW-1	5/16/1996	NA	900	NA	NA	NA	NA	NA
MW-1	11/15/1996	NA	330	NA	NA	NA	NA	NA
MW-1	3/11/2002	<500	<400	<0.5	<0.5	<0.5	<1.0	<1.0
MW-1	6/19/2002	<50	222	<0.5	<0.5	<0.5	<1.0	1.2
MW-1	9/26/2002	<50	519	<0.5	<0.5	<0.5	<1.0	<0.5
MW-1	12/5/2002	<50	261	<0.5	<0.5	<0.5	<1.0	1.2
<b>MW-1</b>	<b>1/3/2011</b>	<b>&lt;50</b>	<b>161</b>	<b>&lt;190</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;2.0</b>
MW-2	9/1/1993	<50	<50	<0.5	<0.5	<0.5	<1.0	NA
MW-2	1/26/1994	<50	<50	<0.5	<0.5	<0.5	<1.0	NA
MW-2	3/1/1994	<50	<50	<0.5	<0.5	<0.5	<1.0	NA
MW-2	6/1/1994	<50	<50	<0.5	<0.5	<0.5	<1.0	NA
MW-2	2/22/1995	<50	280	<0.5	<0.5	<0.5	<1.0	NA
MW-2	6/6/1995	<50	570	<0.5	<0.5	<0.5	<1.0	NA
MW-2	8/16/1995	<50	150	<0.5	<0.5	<0.5	<1.0	NA
MW-2	11/14/1995	<50	<50	<0.5	<0.5	<0.5	<1.0	NA
MW-2	5/16/1996	NA	320	NA	NA	NA	NA	NA
MW-2	11/15/1996	NA	<50	NA	NA	NA	NA	NA
MW-2	3/11/2002	<50	<400	<0.5	<0.5	<0.5	<1.0	<1.0
MW-2	6/19/2002	<50	<50	<0.5	<0.5	<0.5	<1.0	0.9
MW-2	9/26/2002	<50	<50	<0.5	<0.5	<0.5	<1.0	4.2
MW-2	12/5/2002	<50	80.9	<0.5	<0.5	<0.5	<1.0	1.4
<b>MW-2</b>	<b>1/3/2011</b>	<b>&lt;50</b>	<b>&lt;94</b>	<b>380</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;2.0</b>
MW-3	9/1/1993	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-3	1/26/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-3	3/1/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-3	6/1/1994	NS	NS	NS	NS	NS	NS	NS
MW-3	2/22/1995	50	350	<0.5	<0.5	<0.5	<0.5	NA
MW-3	6/6/1995	<50	380	<0.5	<0.5	<0.5	<0.5	NA
MW-3	8/16/1995	<50	440	<0.5	<0.5	<0.5	<0.5	NA
MW-3	11/14/1995	<50	200	0.8	<0.5	<0.5	<0.5	NA
MW-3	5/16/1996	NA	1,100	NA	NA	NA	NA	NA
MW-3	11/15/1996	NA	470	NA	NA	NA	NA	NA
MW-3	3/11/2002	<500	540	<0.5	<0.5	<0.5	<1.0	3.8
MW-3	6/19/2002	<50	407	<0.5	<0.5	<0.5	<1.0	4.9
MW-3	9/26/2002	<50	741	<0.5	<0.5	<0.5	<1.0	4.4
MW-3	12/5/2002	<50	397	<0.5	<0.5	<0.5	<1.0	5.4
<b>MW-3</b>	<b>1/3/2011</b>	<b>&lt;50</b>	<b>209</b>	<b>&lt;190</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;2.0</b>
MW-4	9/1/1993	<50	580	<0.5	<0.5	<0.5	<0.5	NA
MW-4	1/26/1994	<50	850	0.8	<0.5	<0.5	<0.5	NA
MW-4	3/1/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	6/1/1994	<50	260	1.7	<0.5	<0.5	<0.5	NA
MW-4	2/22/1995	140	1,100	1.4	<0.5	<0.5	<0.5	NA
MW-4	6/6/1995	24,000	23,000	<0.5	<0.5	0.5	<0.5	NA
MW-4	8/16/1995	2,000	3,400	1.2	<0.5	1.0	0.8	NA
MW-4	11/14/1995	950	7,400	<0.5	<0.5	<0.5	<0.5	NA
MW-4	5/16/1996	<50	2,000	<0.5	<0.5	<0.5	<1.0	NA
MW-4	11/15/1996	600	13,000	0.78	<0.5	0.94	<1.0	NA

Monitoring Well	Date	TPHg	TPHd	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-4	3/11/2002	NS	NS	<0.5	<0.5	<0.5	<1.0	8.5
MW-4	6/19/2002	228	235,000	<2.5	<2.5	<2.5	<5.0	14.1
MW-4	9/26/2002	<50	16,400	<0.5	<0.5	<0.5	<1.0	6.5
MW-4	12/5/2002	<50	513	<0.5	<0.5	<0.5	<1.0	9.3
<b>MW-4</b>	<b>1/3/2011</b>	<b>&lt;50</b>	<b>6,620</b>	<b>&lt;940</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;2.0</b>
MW-5	9/1/1993	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-5	1/26/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-5	3/1/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-5	6/1/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
<b>MW-5</b>	<b>Well MW-5 abandoned in January 1995 (PSI 2003)</b>							
MW-6	9/26/2002	<50	<50	<0.5	3.8	<0.5	<1.0	<0.5
MW-6	12/5/2002	<50	<50	<0.5	<0.5	<0.5	<1.0	0.6
<b>MW-6</b>	<b>1/3/2011</b>	<b>&lt;50</b>	<b>&lt;94</b>	<b>&lt;190</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;2.0</b>
<b>TP-1</b>	<b>1/3/2011</b>	<b>&lt;50</b>	<b>&lt;94</b>	<b>&lt;190</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;2.0</b>

< Indicates that the compound was not detected at or above the stated laboratory reporting limit  
 NA Not analyzed  
 NS Not sampled

**Table B. Historical Groundwater Elevations in Site Monitoring Wells**

Monitoring Well	Date Measured	Historical Top of Casing Elevation (feet msl)	Depth to Product (Feet Below TOC)	Depth to Groundwater ** (Feet Below TOC)	Groundwater Elevation (feet msl)
MW-1	9/93	8.30	No product	3.90	4.40
MW-1	1/26/94		No product	3.64	4.66
MW-1	2/94		No product	3.37	4.93
MW-1	3/94		No product	7.51	0.79
MW-1	4/94		No product	10.74	-2.44
MW-1	5/94		No product	12.98	-4.68
MW-1	6/94		No product	15.55	-7.25
MW-1	2/22/95		No product	6.98	1.32
MW-1	6/6/95		No product	7.51	0.79
MW-1	8/16/95		No product	8.11	0.19
MW-1	11/14/95		No product	9.04	-0.74
MW-1	5/16/96		No product	7.00	1.30
MW-1	3/11/02		No product	6.82	1.48
MW-1	6/18/02		No product	7.16	1.14
MW-1	9/26/02	11.44**	No product	8.07	3.37
MW-1	12/5/02	11.44**	No product	8.32	3.12
MW-2	9/93	8.86	No product	4.55	4.31
MW-2	1/26/94		No product	4.69	4.17
MW-2	2/94		No product	3.98	4.88
MW-2	3/94		No product	8.14	0.72
MW-2	4/94		No product	10.60	-1.74
MW-2	5/94		No product	13.47	-4.61
MW-2	6/94		No product	15.50	-6.64
MW-2	2/22/95		No product	7.66	1.20
MW-2	6/6/95		No product	8.06	0.80
MW-2	8/16/95		No product	8.77	0.09
MW-2	11/14/95		No product	9.66	-0.80
MW-2	5/16/96		No product	7.58	1.28
MW-2	3/11/02		No product	7.45	1.41
MW-2	6/18/02		No product	7.73	1.13
MW-2	9/26/02	12.06**	No product	8.64	3.42
MW-2	12/5/02	12.06**	No product	9.04	3.02
MW-3	9/93	9.28	No product	5.00	4.28
MW-3	1/26/94		No product	5.04	4.24
MW-3	2/94		No product	4.62	4.66
MW-3	3/94		No product	9.54	-0.26
MW-3	4/94		No product	11.69	-2.41
MW-3	5/94		No product	14.85	-5.57
MW-3	6/94		No product	17.30	-8.02
MW-3	2/22/95		No product	8.64	0.64
MW-3	6/6/95		No product	9.07	0.21
MW-3	8/16/95		No product	9.66	-0.38
MW-3	11/14/95		No product	10.46	-1.18
MW-3	5/16/96		No product	8.61	0.67
MW-3	3/11/02		No product	8.43	0.85
MW-3	6/18/02		No product	8.64	0.64
MW-3	9/26/02	12.48**	No product	9.51	2.97
MW-3	12/5/02	12.48**	No product	9.91	2.57
MW-4	9/93	8.73	No product	4.55	4.18
MW-4	1/26/94		No product	4.60	4.13
MW-4	2/94		No product	3.95	4.78
MW-4	3/94		No product	8.96	-0.23
MW-4	4/94		No product	8.96	-0.23
MW-4	5/94		No product	14.24	-5.51
MW-4	6/94		No product	17.28	-8.55
MW-4	2/22/95		No product	7.93	0.80
MW-4	6/6/95		No product	8.48	0.25
MW-4	8/16/95		8.92	9.08	-0.20*

Monitoring Well	Date Measured	Historical Top of Casing Elevation (feet msl)	Depth to Product (Feet Below TOC)	Depth to Groundwater ** (Feet Below TOC)	Groundwater Elevation (feet msl)
MW-4	11/14/95		9.82	9.92	-1.0*
MW-4	5/16/96		No product	7.88	0.85
MW-4	3/11/02		Product	--	--
MW-4	6/18/02		Product	--	--
MW-4	9/26/02	12.83**	No product	9.74	3.09
MW-4	12/5/02	12.83**	No product	10.23	2.60
MW-5	9/93	8.23	No product	3.63	4.60
MW-5	1/26/94		No product	3.70	4.53
MW-5	2/94		No product	3.23	5.00
MW-5	3/94		No product	7.76	0.47
MW-5	4/94		No product	10.19	-1.96
MW-5	5/94		No product	11.46	-3.23
MW-5	6/94		No product	14.25	-6.02
Well MW-5 Abandoned January 1995					
MW-6	9/26/02	11.93**	No product	9.33	2.60
MW-6	12/5/02	11.93**	No product	9.73	2.20

\* Groundwater elevation corrected for free product.

\*\* Top Of Casing appears to have been re-surveyed by PSI, 2002.

**APPENDIX B****GROUNDWATER SAMPLING PROTOCOL AND RECORDS**

Groundwater Sampling: The static water levels in all of the site wells were initially measured to the nearest 0.01 foot using an electronic depth sounder. A Teflon™ bailer or submersible pump was then placed in the middle of the water column and used to purge a minimum of three well-casing volumes of water from each well. After purging each well volume, pH, temperature, and conductivity measurements were recorded. In general, these measurements stabilize (consecutive readings within 10 percent) after three to four well volumes. If, after the third well volume, the pH and conductivity did not stabilize, additional well volumes were removed until these measurements did stabilize. If the yield was low and the well was pumped dry, the well was allowed to recharge to the 80 percent level before sampling. Samples were collected in appropriate sample bottles, labeled, and immediately placed in an ice-chilled chest for delivery to a state-certified analytical laboratory for analysis.

All well development and sampling equipment was cleaned in a solution of laboratory grade detergent and distilled water, or steam cleaned, before use at each sampling point. Well sampling records are attached as part of this Appendix.

# GROUNDWATER SAMPLING RECORD

Project No.: 180497  
 Project Name: USPS Oakland VMF  
 Weather: \_\_\_\_\_

Date: 1-3-11  
 Measured By: JPZ  
 Page 1 of 1

Well Name: MW-1  
 Sample Number: MW-1; 1120  
 Chain-of-Custody No.: \_\_\_\_\_  
 Measuring Point: 18 ftgs  
 Screened Interval (ft): unk

	DEVELOPMENT	SAMPLING
(a) Initial Water Level (ft)	6.57	5.98
(b) Measured Total Depth (ft)	20.09	20.09
(c) Height of Water Column (ft) = b - a		14.11
(d) Casing Diameter (in)		4
(e) Casing Volume (gal) = 0.041 × c × d <sup>2</sup>		9.25

Development Date/Method/Volume: 12-27-10; Sub; 30gal; TD 20.09; DTW: 6.57

### WELLHEAD CONDITIONS

Casing: 4"  
 Lock: none  
 Standing Water: yes  
 Comments/Required Maintenance: possible new well lid - bolts do not appear on well (missing)

INSTRUMENTS	CALIBRATION NOTES
Water Level: <u>YSI 556 MPS</u>	
Temperature:	
pH:	
Specific Conductance:	
Dissolved Oxygen:	
Redox Potential:	
Turbidity:	
Salinity:	

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	ORP Redox (mV)	Color	Turbidity	Salinity	Comments
10:41	~18	5.98	~3	19.06	6.68	3104	4.88	201.9	lt brown			pen/bail
11:00	~18	7.38	~15	18.73	6.64	2743	4.61	197.3	lt brown			pen/bail
11:10	~18	5.98	~23	19.46	6.57	3841	2.78	196.2	lt brown			pen/bail
11:20	~18	9.04	~28	19.47	6.58	3848	2.32	194.4	clear			pen/bail





# GROUNDWATER SAMPLING RECORD

Project No.: 180497  
 Project Name: USPS Oakland VMF  
 Weather: \_\_\_\_\_

Date: 1-3-10  
 Measured By: JPE  
 Page 1 of 1

Well Name: <u>MW-2</u>	(a) Initial Water Level (ft)	<u>7.31</u>	<u>6.75</u>
Sample Number: <u>MW-2; 12:40</u>	(b) Measured Total Depth (ft)	<u>18.62</u>	<u>18.62</u>
Chain-of-Custody No.: _____	(c) Height of Water Column (ft) = b - a	<u>11.31</u>	<u>11.87</u>
Measuring Point: <u>~14 fgs</u>	(d) Casing Diameter (in)	<u>4</u>	<u>4</u>
Screened Interval (ft): <u>unknown</u>	(e) Casing Volume (gal) = 0.041 × c × d <sup>2</sup>	<u>7.8</u>	

DEVELOPMENT: DATE: 12-27-10; SUB: 55gal; TD = 18.62; DTW = 7.31

WELLHEAD CONDITIONS
Casing: <u>4"</u>
Lock: <u>none</u>
Standing Water: <u>Yes</u>
Comments/Required Maintenance: <u>possible new well lid - no belts.</u>

INSTRUMENTS	CALIBRATION NOTES
Water Level: <u>YSI 556 MPS</u>	
Temperature:	
pH:	
Specific Conductance:	
Dissolved Oxygen:	
Redox Potential:	
Turbidity:	
Salinity:	

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Salinity	Comments
12:09	14	6.75	7	18.74	6.49	1565	1.35	215.7	clear			psi
12:23	14	7.83	14	19.30	6.47	1533	1.09	208.8	clear			psi/bail
12:55	14	9.08	23	19.22	6.47	1547	1.38	205.9	clear			psi/bail



# GROUNDWATER SAMPLING RECORD

Project No.: 180497  
 Project Name: USPS Oakland VMF  
 Weather: \_\_\_\_\_

Date: 1-3-18  
 Measured By: JPF  
 Page 1 of 1

Well Name: MW-3  
 Sample Number: MW-3; 14:30  
 Chain-of-Custody No.: \_\_\_\_\_  
 Measuring Point: 18  
 Screened Interval (ft): \_\_\_\_\_

	DEVELOPMENT	SAMPLING
(a) Initial Water Level (ft)	8.26	7.68
(b) Measured Total Depth (ft)	20.00	20.00
(c) Height of Water Column (ft) = b - a		12.32
(d) Casing Diameter (in)		4
(e) Casing Volume (gal) = 0.041 × c × d <sup>2</sup>		8.0

DEVELOPMENT: DATE 12-27-10; SUB; 35 gal; TD = 20.00; DTW = 8.26

### WELLHEAD CONDITIONS

Casing: 4"  
 Lock: none  
 Standing Water: no  
 Comments/Required Maintenance: none / possible new well lock; remove concrete around seal (wall had been paved over w/ concrete).

INSTRUMENTS		CALIBRATION NOTES
Water Level:	<u>YSI 556 MPS</u>	
Temperature:		
pH:		
Specific Conductance:		
Dissolved Oxygen:		
Redox Potential:		
Turbidity:		
Salinity:		

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Salinity	Comments
<u>14:04</u>	<u>18</u>	<u>7.68</u>	<u>8</u>	<u>18.48</u>	<u>6.79</u>	<u>2254</u>	<u>2.59</u>	<u>512.9</u>	<u>clean</u>			<u>12m/bq!</u>
<u>14:14</u>	<u>18</u>	<u>9.38</u>	<u>16</u>	<u>18.43</u>	<u>6.81</u>	<u>2226</u>	<u>3.15</u>	<u>571.9</u>	<u>clean</u>			
<u>14:24</u>	<u>18</u>	<u>9.38</u>	<u>24</u>	<u>18.41</u>	<u>6.81</u>	<u>2230</u>	<u>3.34</u>	<u>576.6</u>	<u>clean</u>			



# GROUNDWATER SAMPLING RECORD

Project No.: 180497  
 Project Name: USPS Oakland VMF  
 Weather: \_\_\_\_\_

Date: 1/3/10  
 Measured By: JPZ  
 Page 1 of 1

Well Name: MW-4  
 Sample Number: MW-4  
 Chain-of-Custody No.: \_\_\_\_\_  
 Measuring Point: 1st  
 Screened Interval (ft): 4-6

(a) Initial Water Level (ft)	8.84 / 8.12
(b) Measured Total Depth (ft)	20.84 / 20.84
(c) Height of Water Column (ft) = b - a	12.72
(d) Casing Diameter (in)	4
(e) Casing Volume (gal) = 0.041 × c × d <sup>2</sup>	8.34

**DEVELOPMENT SAMPLING**  
 11 Free product

**DEVELOPMENT: DATE: 12-24-10; 80% Dev. Bailers; 30 gal; TD = 20.84; DTW = 8.84**

WELLHEAD CONDITIONS
Casing: <u>4"</u>
Lock: <u>none</u>
Standing Water: <u>no</u>
Comments/Required Maintenance: <u>Well has cage for absorbent socks; needs lock, possible new well log.</u>

INSTRUMENTS	CALIBRATION NOTES
Water Level: <u>YSI 556 MPS</u>	
Temperature:	
pH:	
Specific Conductance:	
Dissolved Oxygen:	
Redox Potential:	
Turbidity:	
Salinity:	

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Salinity	Comments
15:18	<u>14</u>	8.12	2	18.50	6.65	1582	0.44	-73.1	Clear	Whitish yellow		Sheen + Free product
	14	8.12	5	18.51	6.66	1582	0.30	-81.9	clear	Yellowish		Sheen + Free Product
	14	8.12	8	18.56	6.67	1586	0.28	-77.2	clear	Yellowish		Sheen
	14	8.12	12	18.61	6.68	1585	0.24	-97.8	clear	Yellowish		Sheen
	14	8.12	16	18.62	6.68	1587	0.22	-98.2	clear	Yellowish		Sheen



# GROUNDWATER SAMPLING RECORD

Project No.: 180497 Date: 1-3-10  
 Project Name: USPS Oakland VMF Measured By: JPZ  
 Weather: \_\_\_\_\_ Page 1 of 1

Well Name: <u>MW-6</u>	(a) Initial Water Level (ft)	<u>8.19</u>	<u>DEV</u> SAMPLING
Sample Number: <u>MW-6, 13:30</u>	(b) Measured Total Depth (ft)	<u>19.47</u>	<u>7.61</u>
Chain-of-Custody No.: _____	(c) Height of Water Column (ft) = b - a		<u>11.87</u>
Measuring Point: _____	(d) Casing Diameter (in)		<u>2</u>
Screened Interval (ft): _____	(e) Casing Volume (gal) = 0.041 × c × d <sup>2</sup>		<u>1.94</u>

**DEVELOPMENT: DATE: 12-27-10; Sub; 25 gal; TD = 19.47; DTW = 8.19**

WELLHEAD CONDITIONS
Casing: <u>2"</u>
Lock: <u>none</u>
Standing Water: <u>none</u>
Comments/Required Maintenance: <u>Deteriorated well cap - replaced; need well lock.</u>

INSTRUMENTS	CALIBRATION NOTES
Water Level: <u>YS1556 MPS</u>	
Temperature: _____	
pH: _____	
Specific Conductance: _____	
Dissolved Oxygen: _____	
Redox Potential: _____	
Turbidity: _____	
Salinity: _____	

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Salinity	Comments
13:12	18.00	7.61	2	20.55	6.60	1111	2.48	562.8	Clean			
13:19	18	7.61	4	20.84	6.60	1111	2.54	593.0	Clean			
13:26	18	7.61	6	20.87	6.60	1110	2.19	597.7	Clean			



# GROUNDWATER SAMPLING RECORD

Project No.: 180497  
 Project Name: USPS Oakland VMP  
 Weather: Clean, cool ~50F

Date: 1/3/14  
 Measured By: JPE  
 Page 1 of 1

Well Name: <u>TP-1</u>	(a) Initial Water Level (ft)	<u>4.76</u>	<u>4.21</u>
Sample Number/Time: <u>TP-1; 10:00</u>	(b) Measured Total Depth (ft)	<u>10.31</u>	<u>10.41</u>
Chain-of-Custody No.:	(c) Height of Water Column (ft) = b - a		<u>6.20</u>
Measuring Point: <u>~ 9 fbg's</u>	(d) Casing Diameter (in)		<u>6</u>
Screened Interval (ft): <u>(0-10.41)</u>	(e) Casing Volume (gal) = 0.041 × c × d <sup>2</sup>		<u>9.85</u>

DEVELOPMENT: DATE: 12-27-10; Sub: 25 gal; TD = 10.31; DTW = 4.76

### WELLHEAD CONDITIONS

Casing: <u>6"</u>
Lock: <u>none</u>
Standing Water: <u>none</u>
Comments/Required Maintenance: <u>(checked w/ on North side of Well casing)</u>

INSTRUMENTS	CALIBRATION NOTES
Water Level: <u>YSI 556 MPS</u>	
Temperature:	
pH:	
Specific Conductance:	
Dissolved Oxygen:	
Redox Potential:	
Turbidity:	
Salinity:	

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV) (ORP)	Color	Turbidity	Salinity	Comments
<u>0925</u>	<u>~9</u>	<u>4.21</u>	<u>~3</u>	<u>16.86</u>	<u>7.97</u>	<u>178</u>	<u>4.52</u>	<u>179.7</u>	<u>Clean</u>			
<u>0938</u>	<u>~9</u>	<u>4.21</u>	<u>~6</u>	<u>16.85</u>	<u>7.97</u>	<u>178</u>	<u>4.34</u>	<u>177.2</u>	<u>Clean</u>			
<u>0949</u>	<u>~9</u>	<u>4.21</u>	<u>~9</u>	<u>16.89</u>	<u>7.95</u>	<u>178</u>	<u>4.19</u>	<u>176.0</u>	<u>Clean</u>			

\* Note: TP-1 refers to "Tank Pit Well 1", as the 6"φ well appeared to be related to the new tank areas.



# DRUM INVENTORY FIELD SHEET

PROJECT  
NUMBER:

180497

DATE:

1/3/10

SITE NAME:

USPS Oakland VMF

ADDRESS:

1675 7<sup>th</sup> Street, Oakland, CA

CROSS STREET:

Wood Street

ACTIVE STATION

Y

N

# DRUMS EMPTY:

5

# DRUMS FULL:

5 + 1

Free  
product  
bucket

DRUMS LABELED:

Y

N

TOTAL GALLONS  
GENERATED:

~ 250 gallons

COMMENTS:

Additional bucket contains PPE w/ free product  
absorbents from well MW-2

SAMPLER:

JPC

## Calibration & Components Checklist

YSI Model 556

Instrument ID # 686 pH, conductivity, D.O., ORP, Temperature

### Components

Date Out: 12/29/10

Date In: \_\_\_\_\_

Meter: /

\_\_\_\_\_ Meter

Probe: /

\_\_\_\_\_ Probe

Batteries: \_\_\_\_\_

\_\_\_\_\_ Batteries

Carrying strap: /

\_\_\_\_\_ Carrying strap

Manual: /

\_\_\_\_\_ Manual

Case: /

\_\_\_\_\_ Case

Calibration beaker: /

\_\_\_\_\_ Calibration beaker

Flow thru cell: /

\_\_\_\_\_ Flow thru cell

Terms & Conditions: /

\_\_\_\_\_ Terms & Conditions

### Calibration Solution Used

4.01 Buffer pH: /

4.0 Meter Response

7.01 Buffer pH: /

7.0 Meter Response

10.01 Buffer pH: /

9.98 Meter Response

1413 mS/cm cond. /

1413 Meter Response

Temp. /

16 Meter Response

D.O. /

9.8 Meter Response

ORP /

280 Meter Response

Barometer pressure /

760 Meter Response

Inspected & Tested By: [Signature]

Date: 12/29/10

**Note:** This unit has been tested and is in proper working condition. This unit has been cleaned and should be returned in the same condition. Any components missing upon return of this instrument shall be billed at the current price. If the unit is returned overly dirty or damaged a service order will be issued and your account will be billed. Should the unit malfunction you must notify EILCO within 24 hours or you will be billed for the time the unit was in your possession.

**APPENDIX C**

**ANALYTICAL RESULTS**

The chilled samples were delivered to a state-certified analytical laboratory. Chain of custody documentation was maintained for all samples. Attached are copies of the analytical results and the chain of custody forms.



**Technical Report for**

**TRC - SF**

**T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA**

**180497 (PO#:29728)**

**Accutest Job Number: C14015**

**Sampling Dates: 12/28/10 - 01/03/11**

**Report to:**

**TRC - SF  
101 2nd Street, Suite 300  
San Francisco, CA 94105  
jzepeda@trcsolutions.com**

**ATTN: Jacob Zepeda**

**Total number of pages in report: 88**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

**Laurie Glantz-Murphy  
Laboratory Director**

**Client Service contact: Simon Hague 408-588-0200**

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

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Test results relate only to samples analyzed.

# Table of Contents

-1-

<b>Section 1: Sample Summary .....</b>	<b>3</b>
<b>Section 2: Sample Results .....</b>	<b>4</b>
<b>2.1: C14015-1: TP-1 .....</b>	5
<b>2.2: C14015-2: MW-1 .....</b>	13
<b>2.3: C14015-3: MW-2 .....</b>	21
<b>2.4: C14015-4: MW-6 .....</b>	29
<b>2.5: C14015-5: MW-3 .....</b>	37
<b>2.6: C14015-6: MW-4 .....</b>	45
<b>2.7: C14015-7: TRIP BLANKS .....</b>	53
<b>Section 3: Misc. Forms .....</b>	<b>56</b>
<b>3.1: Chain of Custody .....</b>	57
<b>Section 4: GC/MS Volatiles - QC Data Summaries .....</b>	<b>59</b>
<b>4.1: Method Blank Summary .....</b>	60
<b>4.2: Blank Spike Summary .....</b>	63
<b>4.3: Blank Spike/Blank Spike Duplicate Summary .....</b>	64
<b>4.4: Matrix Spike/Matrix Spike Duplicate Summary .....</b>	67
<b>Section 5: GC/MS Semi-volatiles - QC Data Summaries .....</b>	<b>70</b>
<b>5.1: Method Blank Summary .....</b>	71
<b>5.2: Blank Spike/Blank Spike Duplicate Summary .....</b>	74
<b>5.3: Matrix Spike/Matrix Spike Duplicate Summary .....</b>	77
<b>Section 6: GC Semi-volatiles - QC Data Summaries .....</b>	<b>80</b>
<b>6.1: Method Blank Summary .....</b>	81
<b>6.2: Blank Spike/Blank Spike Duplicate Summary .....</b>	82
<b>6.3: Matrix Spike/Matrix Spike Duplicate Summary .....</b>	83
<b>Section 7: General Chemistry - QC Data Summaries .....</b>	<b>84</b>
<b>7.1: Method Blank and Spike Results Summary .....</b>	85
<b>7.2: Blank Spike Duplicate Results Summary .....</b>	86
<b>7.3: Matrix Spike Results Summary .....</b>	87
<b>7.4: Matrix Spike Duplicate Results Summary .....</b>	88



## Sample Summary

TRC - SF

**Job No:** C14015

T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA  
 Project No: 180497 (PO#:29728)

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C14015-1	01/03/11	10:00 JZ	01/03/11	AQ	Ground Water	TP-1
C14015-2	01/03/11	11:20 JZ	01/03/11	AQ	Ground Water	MW-1
C14015-3	01/03/11	12:40 JZ	01/03/11	AQ	Ground Water	MW-2
C14015-4	01/03/11	13:30 JZ	01/03/11	AQ	Ground Water	MW-6
C14015-5	01/03/11	14:30 JZ	01/03/11	AQ	Ground Water	MW-3
C14015-6	01/03/11	16:00 JZ	01/03/11	AQ	Ground Water	MW-4
C14015-7	12/28/10	10:56 JZ	01/03/11	AQ	Trip Blank Water	TRIP BLANKS

Sample Results

---

Report of Analysis

---

## Report of Analysis

<b>Client Sample ID:</b> TP-1		<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-1		<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L4146.D	1	01/05/11	TF	n/a	n/a	VL139
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	TP-1	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-1	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		60-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	TP-1	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-1	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		60-130%
460-00-4	4-Bromofluorobenzene	103%		60-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	TP-1	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-1	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y5811.D	1	01/05/11	MT	01/04/11	OP3277	EY300
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	19	4.7	ug/l	
95-57-8	2-Chlorophenol	ND	9.4	4.7	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	14	5.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	14	4.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	9.4	4.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	19	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	19	1.9	ug/l	
95-48-7	2-Methylphenol	ND	9.4	4.7	ug/l	
	3&4-Methylphenol	ND	9.4	3.8	ug/l	
88-75-5	2-Nitrophenol	ND	14	4.7	ug/l	
100-02-7	4-Nitrophenol	ND	9.4	0.94	ug/l	
87-86-5	Pentachlorophenol	ND	9.4	2.8	ug/l	
108-95-2	Phenol	ND	9.4	2.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	14	5.7	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	14	5.7	ug/l	
83-32-9	Acenaphthene	ND	9.4	4.7	ug/l	
208-96-8	Acenaphthylene	ND	14	4.7	ug/l	
62-53-3	Aniline	ND	9.4	4.7	ug/l	
120-12-7	Anthracene	ND	9.4	3.8	ug/l	
103-33-3	Azobenzene	ND	9.4	4.7	ug/l	
92-87-5	Benzidine	ND	19	5.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	9.4	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	9.4	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	9.4	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	9.4	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	9.4	1.9	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	14	5.7	ug/l	
85-68-7	Butyl benzyl phthalate	ND	9.4	2.8	ug/l	
100-51-6	Benzyl Alcohol	ND	9.4	4.7	ug/l	
91-58-7	2-Chloronaphthalene	ND	9.4	4.7	ug/l	
106-47-8	4-Chloroaniline	ND	9.4	4.7	ug/l	
86-74-8	Carbazole	ND	9.4	2.8	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	TP-1	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-1	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	9.4	1.9	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	14	4.7	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	9.4	3.8	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	9.4	3.8	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	14	5.7	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	9.4	3.8	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	9.4	3.8	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	9.4	3.8	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	9.4	4.7	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	14	5.7	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	9.4	4.7	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	9.4	1.9	ug/l	
132-64-9	Dibenzofuran	ND	14	4.7	ug/l	
122-39-4	Diphenylamine	ND	14	4.7	ug/l	
84-74-2	Di-n-butyl phthalate	ND	9.4	2.8	ug/l	
117-84-0	Di-n-octyl phthalate	ND	9.4	2.8	ug/l	
84-66-2	Diethyl phthalate	ND	9.4	4.7	ug/l	
131-11-3	Dimethyl phthalate	ND	9.4	3.8	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	9.4	2.8	ug/l	
206-44-0	Fluoranthene	ND	9.4	2.8	ug/l	
86-73-7	Fluorene	ND	14	5.7	ug/l	
118-74-1	Hexachlorobenzene	ND	14	4.7	ug/l	
87-68-3	Hexachlorobutadiene	ND	19	3.8	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.4	2.8	ug/l	
67-72-1	Hexachloroethane	ND	9.4	3.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	9.4	1.9	ug/l	
78-59-1	Isophorone	ND	14	4.7	ug/l	
90-12-0	1-Methylnaphthalene	ND	9.4	4.7	ug/l	
91-57-6	2-Methylnaphthalene	ND	9.4	4.7	ug/l	
88-74-4	2-Nitroaniline	ND	14	5.7	ug/l	
99-09-2	3-Nitroaniline	ND	9.4	4.7	ug/l	
100-01-6	4-Nitroaniline	ND	9.4	3.8	ug/l	
91-20-3	Naphthalene	ND	9.4	4.7	ug/l	
98-95-3	Nitrobenzene	ND	9.4	4.7	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	19	2.8	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	9.4	4.7	ug/l	
85-01-8	Phenanthrene	ND	9.4	4.7	ug/l	
129-00-0	Pyrene	ND	9.4	2.8	ug/l	
110-86-1	Pyridine	ND	19	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	9.4	3.8	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	TP-1	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-1	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		10-100%
4165-62-2	Phenol-d5	28%		7-100%
118-79-6	2,4,6-Tribromophenol	89%		25-115%
4165-60-0	Nitrobenzene-d5	73%		25-100%
321-60-8	2-Fluorobiphenyl	76%		25-106%
1718-51-0	Terphenyl-d14	123%		35-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> TP-1		
<b>Lab Sample ID:</b> C14015-1		<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8015B M SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG20699.D	1	01/05/11	JH	01/05/11	OP3281	GGG589
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

### TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel)	ND	0.094	0.047	mg/l	
	TPH (Motor Oil)	ND	0.19	0.094	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	87%		45-140%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> TP-1		<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-1		<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous	< 0.10	0.10	mg/l	1	01/03/11 21:17	EB	SM18 3500FED
Nitrogen, Nitrate	1.2	0.10	mg/l	1	01/04/11 14:49	MF	EPA 300/SW846 9056A
Sulfate	18.6	0.50	mg/l	1	01/04/11 14:49	MF	EPA 300/SW846 9056A

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b>	MW-1	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-2	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L4147.D	1	01/05/11	TF	n/a	n/a	VL139
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	MW-1	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-2	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		60-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-1		
<b>Lab Sample ID:</b> C14015-2		<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		60-130%
460-00-4	4-Bromofluorobenzene	105%		60-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-1		<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-2		<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8270C SW846 3510C		
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y5812.D	1	01/05/11	MT	01/04/11	OP3277	EY300
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

**ABN Full List**

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	19	4.7	ug/l	
95-57-8	2-Chlorophenol	ND	9.4	4.7	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	14	5.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	14	4.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	9.4	4.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	19	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	19	1.9	ug/l	
95-48-7	2-Methylphenol	ND	9.4	4.7	ug/l	
	3&4-Methylphenol	ND	9.4	3.8	ug/l	
88-75-5	2-Nitrophenol	ND	14	4.7	ug/l	
100-02-7	4-Nitrophenol	ND	9.4	0.94	ug/l	
87-86-5	Pentachlorophenol	ND	9.4	2.8	ug/l	
108-95-2	Phenol	ND	9.4	2.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	14	5.7	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	14	5.7	ug/l	
83-32-9	Acenaphthene	ND	9.4	4.7	ug/l	
208-96-8	Acenaphthylene	ND	14	4.7	ug/l	
62-53-3	Aniline	ND	9.4	4.7	ug/l	
120-12-7	Anthracene	ND	9.4	3.8	ug/l	
103-33-3	Azobenzene	ND	9.4	4.7	ug/l	
92-87-5	Benzidine	ND	19	5.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	9.4	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	9.4	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	9.4	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	9.4	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	9.4	1.9	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	14	5.7	ug/l	
85-68-7	Butyl benzyl phthalate	ND	9.4	2.8	ug/l	
100-51-6	Benzyl Alcohol	ND	9.4	4.7	ug/l	
91-58-7	2-Chloronaphthalene	ND	9.4	4.7	ug/l	
106-47-8	4-Chloroaniline	ND	9.4	4.7	ug/l	
86-74-8	Carbazole	ND	9.4	2.8	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	MW-1	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-2	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	9.4	1.9	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	14	4.7	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	9.4	3.8	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	9.4	3.8	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	14	5.7	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	9.4	3.8	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	9.4	3.8	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	9.4	3.8	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	9.4	4.7	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	14	5.7	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	9.4	4.7	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	9.4	1.9	ug/l	
132-64-9	Dibenzofuran	ND	14	4.7	ug/l	
122-39-4	Diphenylamine	ND	14	4.7	ug/l	
84-74-2	Di-n-butyl phthalate	ND	9.4	2.8	ug/l	
117-84-0	Di-n-octyl phthalate	ND	9.4	2.8	ug/l	
84-66-2	Diethyl phthalate	ND	9.4	4.7	ug/l	
131-11-3	Dimethyl phthalate	ND	9.4	3.8	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	9.4	2.8	ug/l	
206-44-0	Fluoranthene	ND	9.4	2.8	ug/l	
86-73-7	Fluorene	ND	14	5.7	ug/l	
118-74-1	Hexachlorobenzene	ND	14	4.7	ug/l	
87-68-3	Hexachlorobutadiene	ND	19	3.8	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.4	2.8	ug/l	
67-72-1	Hexachloroethane	ND	9.4	3.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	9.4	1.9	ug/l	
78-59-1	Isophorone	ND	14	4.7	ug/l	
90-12-0	1-Methylnaphthalene	ND	9.4	4.7	ug/l	
91-57-6	2-Methylnaphthalene	ND	9.4	4.7	ug/l	
88-74-4	2-Nitroaniline	ND	14	5.7	ug/l	
99-09-2	3-Nitroaniline	ND	9.4	4.7	ug/l	
100-01-6	4-Nitroaniline	ND	9.4	3.8	ug/l	
91-20-3	Naphthalene	ND	9.4	4.7	ug/l	
98-95-3	Nitrobenzene	ND	9.4	4.7	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	19	2.8	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	9.4	4.7	ug/l	
85-01-8	Phenanthrene	ND	9.4	4.7	ug/l	
129-00-0	Pyrene	ND	9.4	2.8	ug/l	
110-86-1	Pyridine	ND	19	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	9.4	3.8	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-1		
<b>Lab Sample ID:</b> C14015-2		<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8270C SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

### ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		10-100%
4165-62-2	Phenol-d5	34%		7-100%
118-79-6	2,4,6-Tribromophenol	90%		25-115%
4165-60-0	Nitrobenzene-d5	97%		25-100%
321-60-8	2-Fluorobiphenyl	100%		25-106%
1718-51-0	Terphenyl-d14	123%		35-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-1		<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-2		<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C		
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG20700.D	1	01/05/11	JH	01/05/11	OP3281	GGG589
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel) <sup>a</sup>	0.161	0.094	0.047	mg/l	
	TPH (Motor Oil)	ND	0.19	0.094	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	86%		45-140%

(a) Atypical Diesel pattern (C14-C36).

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-1	<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-2	<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous	< 0.10	0.10	mg/l	1	01/03/11 21:20	EB	SM18 3500FED
Nitrogen, Nitrate	3.5	0.10	mg/l	1	01/04/11 15:07	MF	EPA 300/SW846 9056A
Sulfate	404	13	mg/l	25	01/05/11 18:35	MF	EPA 300/SW846 9056A

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b>	MW-2	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-3	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L4148.D	1	01/05/11	TF	n/a	n/a	VL139
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	MW-2	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-3	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		60-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-2		
<b>Lab Sample ID:</b> C14015-3		<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		60-130%
460-00-4	4-Bromofluorobenzene	104%		60-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	MW-2	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-3	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	Y5845.D	2	01/06/11	MT	01/04/11	OP3277	EY301
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	40	10	ug/l	
95-57-8	2-Chlorophenol	ND	20	10	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	30	12	ug/l	
120-83-2	2,4-Dichlorophenol	ND	30	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	20	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	40	6.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	40	4.0	ug/l	
95-48-7	2-Methylphenol	ND	20	10	ug/l	
	3&4-Methylphenol	ND	20	8.0	ug/l	
88-75-5	2-Nitrophenol	ND	30	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.0	ug/l	
87-86-5	Pentachlorophenol	ND	20	6.0	ug/l	
108-95-2	Phenol	ND	20	6.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	30	12	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	30	12	ug/l	
83-32-9	Acenaphthene	ND	20	10	ug/l	
208-96-8	Acenaphthylene	ND	30	10	ug/l	
62-53-3	Aniline	ND	20	10	ug/l	
120-12-7	Anthracene	ND	20	8.0	ug/l	
103-33-3	Azobenzene	ND	20	10	ug/l	
92-87-5	Benzidine	ND	40	12	ug/l	
56-55-3	Benzo(a)anthracene	ND	20	4.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	20	4.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	20	4.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	20	4.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	20	4.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	30	12	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	6.0	ug/l	
100-51-6	Benzyl Alcohol	ND	20	10	ug/l	
91-58-7	2-Chloronaphthalene	ND	20	10	ug/l	
106-47-8	4-Chloroaniline	ND	20	10	ug/l	
86-74-8	Carbazole	ND	20	6.0	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	MW-2	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-3	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	20	4.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	30	10	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	8.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	20	8.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	30	12	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	8.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	8.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	8.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	10	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	30	12	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	20	10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	20	4.0	ug/l	
132-64-9	Dibenzofuran	ND	30	10	ug/l	
122-39-4	Diphenylamine	ND	30	10	ug/l	
84-74-2	Di-n-butyl phthalate	ND	20	6.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	20	6.0	ug/l	
84-66-2	Diethyl phthalate	ND	20	10	ug/l	
131-11-3	Dimethyl phthalate	ND	20	8.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	6.0	ug/l	
206-44-0	Fluoranthene	ND	20	6.0	ug/l	
86-73-7	Fluorene	ND	30	12	ug/l	
118-74-1	Hexachlorobenzene	ND	30	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	40	8.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	6.0	ug/l	
67-72-1	Hexachloroethane	ND	20	8.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	20	4.0	ug/l	
78-59-1	Isophorone	ND	30	10	ug/l	
90-12-0	1-Methylnaphthalene	ND	20	10	ug/l	
91-57-6	2-Methylnaphthalene	ND	20	10	ug/l	
88-74-4	2-Nitroaniline	ND	30	12	ug/l	
99-09-2	3-Nitroaniline	ND	20	10	ug/l	
100-01-6	4-Nitroaniline	ND	20	8.0	ug/l	
91-20-3	Naphthalene	ND	20	10	ug/l	
98-95-3	Nitrobenzene	ND	20	10	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	40	6.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	10	ug/l	
85-01-8	Phenanthrene	ND	20	10	ug/l	
129-00-0	Pyrene	ND	20	6.0	ug/l	
110-86-1	Pyridine	ND	40	4.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	8.0	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-2	
<b>Lab Sample ID:</b> C14015-3	<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8270C SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA	

### ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		10-100%
4165-62-2	Phenol-d5	30%		7-100%
118-79-6	2,4,6-Tribromophenol	85%		25-115%
4165-60-0	Nitrobenzene-d5	83%		25-100%
321-60-8	2-Fluorobiphenyl	88%		25-106%
1718-51-0	Terphenyl-d14	109%		35-130%

(a) Dilution required due to matrix interference.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-2		<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-3		<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C		
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG20705.D	1	01/05/11	JH	01/05/11	OP3281	GGG589
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel)	ND	0.094	0.047	mg/l	
	TPH (Motor Oil)	0.380	0.19	0.094	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	71%		45-140%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-2	<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-3	<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous	< 0.10	0.10	mg/l	1	01/03/11 21:23	EB	SM18 3500FED
Nitrogen, Nitrate	4.1	0.10	mg/l	1	01/04/11 15:24	MF	EPA 300/SW846 9056A
Sulfate	330	13	mg/l	25	01/05/11 14:48	MF	EPA 300/SW846 9056A

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b>	MW-6	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-4	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L4149.D	1	01/05/11	TF	n/a	n/a	VL139
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-6		<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-4		<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.54	1.0	0.50	ug/l	J
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		60-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-6		
<b>Lab Sample ID:</b> C14015-4		<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		60-130%
460-00-4	4-Bromofluorobenzene	103%		60-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	MW-6	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-4	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y5820.D	1	01/06/11	MT	01/04/11	OP3277	EY300
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	19	4.7	ug/l	
95-57-8	2-Chlorophenol	ND	9.4	4.7	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	14	5.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	14	4.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	9.4	4.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	19	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	19	1.9	ug/l	
95-48-7	2-Methylphenol	ND	9.4	4.7	ug/l	
	3&4-Methylphenol	ND	9.4	3.8	ug/l	
88-75-5	2-Nitrophenol	ND	14	4.7	ug/l	
100-02-7	4-Nitrophenol	ND	9.4	0.94	ug/l	
87-86-5	Pentachlorophenol	ND	9.4	2.8	ug/l	
108-95-2	Phenol	ND	9.4	2.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	14	5.7	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	14	5.7	ug/l	
83-32-9	Acenaphthene	ND	9.4	4.7	ug/l	
208-96-8	Acenaphthylene	ND	14	4.7	ug/l	
62-53-3	Aniline	ND	9.4	4.7	ug/l	
120-12-7	Anthracene	ND	9.4	3.8	ug/l	
103-33-3	Azobenzene	ND	9.4	4.7	ug/l	
92-87-5	Benzidine	ND	19	5.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	9.4	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	9.4	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	9.4	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	9.4	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	9.4	1.9	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	14	5.7	ug/l	
85-68-7	Butyl benzyl phthalate	ND	9.4	2.8	ug/l	
100-51-6	Benzyl Alcohol	ND	9.4	4.7	ug/l	
91-58-7	2-Chloronaphthalene	ND	9.4	4.7	ug/l	
106-47-8	4-Chloroaniline	ND	9.4	4.7	ug/l	
86-74-8	Carbazole	ND	9.4	2.8	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	MW-6	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-4	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	9.4	1.9	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	14	4.7	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	9.4	3.8	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	9.4	3.8	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	14	5.7	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	9.4	3.8	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	9.4	3.8	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	9.4	3.8	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	9.4	4.7	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	14	5.7	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	9.4	4.7	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	9.4	1.9	ug/l	
132-64-9	Dibenzofuran	ND	14	4.7	ug/l	
122-39-4	Diphenylamine	ND	14	4.7	ug/l	
84-74-2	Di-n-butyl phthalate	ND	9.4	2.8	ug/l	
117-84-0	Di-n-octyl phthalate	ND	9.4	2.8	ug/l	
84-66-2	Diethyl phthalate	ND	9.4	4.7	ug/l	
131-11-3	Dimethyl phthalate	ND	9.4	3.8	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	9.4	2.8	ug/l	
206-44-0	Fluoranthene	ND	9.4	2.8	ug/l	
86-73-7	Fluorene	ND	14	5.7	ug/l	
118-74-1	Hexachlorobenzene	ND	14	4.7	ug/l	
87-68-3	Hexachlorobutadiene	ND	19	3.8	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.4	2.8	ug/l	
67-72-1	Hexachloroethane	ND	9.4	3.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	9.4	1.9	ug/l	
78-59-1	Isophorone	ND	14	4.7	ug/l	
90-12-0	1-Methylnaphthalene	ND	9.4	4.7	ug/l	
91-57-6	2-Methylnaphthalene	ND	9.4	4.7	ug/l	
88-74-4	2-Nitroaniline	ND	14	5.7	ug/l	
99-09-2	3-Nitroaniline	ND	9.4	4.7	ug/l	
100-01-6	4-Nitroaniline	ND	9.4	3.8	ug/l	
91-20-3	Naphthalene	ND	9.4	4.7	ug/l	
98-95-3	Nitrobenzene	ND	9.4	4.7	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	19	2.8	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	9.4	4.7	ug/l	
85-01-8	Phenanthrene	ND	9.4	4.7	ug/l	
129-00-0	Pyrene	ND	9.4	2.8	ug/l	
110-86-1	Pyridine	ND	19	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	9.4	3.8	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-6		
<b>Lab Sample ID:</b> C14015-4		<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8270C SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

### ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	16%		10-100%
4165-62-2	Phenol-d5	19%		7-100%
118-79-6	2,4,6-Tribromophenol	108%		25-115%
4165-60-0	Nitrobenzene-d5	98%		25-100%
321-60-8	2-Fluorobiphenyl	101%		25-106%
1718-51-0	Terphenyl-d14	127%		35-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-6		
<b>Lab Sample ID:</b> C14015-4		<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8015B M SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG20704.D	1	01/05/11	JH	01/05/11	OP3281	GGG589
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

### TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel)	ND	0.094	0.047	mg/l	
	TPH (Motor Oil)	ND	0.19	0.094	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	77%		45-140%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-6	<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-4	<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous	< 0.10	0.10	mg/l	1	01/03/11 21:26	EB	SM18 3500FED
Nitrogen, Nitrate	15.0	0.20	mg/l	2	01/05/11 14:13	MF	EPA 300/SW846 9056A
Sulfate	137	5.0	mg/l	10	01/05/11 15:05	MF	EPA 300/SW846 9056A

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b>	MW-3	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-5	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L4150.D	1	01/05/11	TF	n/a	n/a	VL139
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	0.65	1.0	0.30	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-3		<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-5		<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.4	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		60-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-3		
<b>Lab Sample ID:</b> C14015-5		<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		60-130%
460-00-4	4-Bromofluorobenzene	104%		60-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	MW-3	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-5	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y5821.D	1	01/06/11	MT	01/04/11	OP3277	EY300
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	19	4.7	ug/l	
95-57-8	2-Chlorophenol	ND	9.4	4.7	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	14	5.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	14	4.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	9.4	4.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	19	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	19	1.9	ug/l	
95-48-7	2-Methylphenol	ND	9.4	4.7	ug/l	
	3&4-Methylphenol	ND	9.4	3.8	ug/l	
88-75-5	2-Nitrophenol	ND	14	4.7	ug/l	
100-02-7	4-Nitrophenol	ND	9.4	0.94	ug/l	
87-86-5	Pentachlorophenol	ND	9.4	2.8	ug/l	
108-95-2	Phenol	ND	9.4	2.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	14	5.7	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	14	5.7	ug/l	
83-32-9	Acenaphthene	ND	9.4	4.7	ug/l	
208-96-8	Acenaphthylene	ND	14	4.7	ug/l	
62-53-3	Aniline	ND	9.4	4.7	ug/l	
120-12-7	Anthracene	ND	9.4	3.8	ug/l	
103-33-3	Azobenzene	ND	9.4	4.7	ug/l	
92-87-5	Benzidine	ND	19	5.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	9.4	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	9.4	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	9.4	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	9.4	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	9.4	1.9	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	14	5.7	ug/l	
85-68-7	Butyl benzyl phthalate	ND	9.4	2.8	ug/l	
100-51-6	Benzyl Alcohol	ND	9.4	4.7	ug/l	
91-58-7	2-Chloronaphthalene	ND	9.4	4.7	ug/l	
106-47-8	4-Chloroaniline	ND	9.4	4.7	ug/l	
86-74-8	Carbazole	ND	9.4	2.8	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	MW-3	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-5	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	9.4	1.9	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	14	4.7	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	9.4	3.8	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	9.4	3.8	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	14	5.7	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	9.4	3.8	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	9.4	3.8	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	9.4	3.8	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	9.4	4.7	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	14	5.7	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	9.4	4.7	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	9.4	1.9	ug/l	
132-64-9	Dibenzofuran	ND	14	4.7	ug/l	
122-39-4	Diphenylamine	ND	14	4.7	ug/l	
84-74-2	Di-n-butyl phthalate	ND	9.4	2.8	ug/l	
117-84-0	Di-n-octyl phthalate	ND	9.4	2.8	ug/l	
84-66-2	Diethyl phthalate	ND	9.4	4.7	ug/l	
131-11-3	Dimethyl phthalate	ND	9.4	3.8	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	9.4	2.8	ug/l	
206-44-0	Fluoranthene	ND	9.4	2.8	ug/l	
86-73-7	Fluorene	ND	14	5.7	ug/l	
118-74-1	Hexachlorobenzene	ND	14	4.7	ug/l	
87-68-3	Hexachlorobutadiene	ND	19	3.8	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.4	2.8	ug/l	
67-72-1	Hexachloroethane	ND	9.4	3.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	9.4	1.9	ug/l	
78-59-1	Isophorone	ND	14	4.7	ug/l	
90-12-0	1-Methylnaphthalene	ND	9.4	4.7	ug/l	
91-57-6	2-Methylnaphthalene	ND	9.4	4.7	ug/l	
88-74-4	2-Nitroaniline	ND	14	5.7	ug/l	
99-09-2	3-Nitroaniline	ND	9.4	4.7	ug/l	
100-01-6	4-Nitroaniline	ND	9.4	3.8	ug/l	
91-20-3	Naphthalene	ND	9.4	4.7	ug/l	
98-95-3	Nitrobenzene	ND	9.4	4.7	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	19	2.8	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	9.4	4.7	ug/l	
85-01-8	Phenanthrene	ND	9.4	4.7	ug/l	
129-00-0	Pyrene	ND	9.4	2.8	ug/l	
110-86-1	Pyridine	ND	19	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	9.4	3.8	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	MW-3	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-5	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		10-100%
4165-62-2	Phenol-d5	32%		7-100%
118-79-6	2,4,6-Tribromophenol	99%		25-115%
4165-60-0	Nitrobenzene-d5	92%		25-100%
321-60-8	2-Fluorobiphenyl	97%		25-106%
1718-51-0	Terphenyl-d14	131% <sup>a</sup>		35-130%

(a) Outside laboratory control limits (high bias).

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 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-3		
<b>Lab Sample ID:</b> C14015-5		<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8015B M SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG20701.D	1	01/05/11	JH	01/05/11	OP3281	GGG589
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

### TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel) <sup>a</sup>	0.209	0.094	0.047	mg/l	
	TPH (Motor Oil)	ND	0.19	0.094	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	89%		45-140%

(a) Atypical Diesel pattern (C14-C36).

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-3	<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-5	<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous	< 0.10	0.10	mg/l	1	01/03/11 21:29	EB	SM18 3500FED
Nitrogen, Nitrate	6.8	0.10	mg/l	1	01/04/11 15:59	MF	EPA 300/SW846 9056A
Sulfate	191	13	mg/l	25	01/05/11 15:23	MF	EPA 300/SW846 9056A

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b>	MW-4	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-6	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	L4157.D	1	01/05/11	TF	n/a	n/a	VL139
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> MW-4	
<b>Lab Sample ID:</b> C14015-6	<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA	

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	3.3	1.0	0.50	ug/l	
91-20-3	Naphthalene	2.3	5.0	0.50	ug/l	J
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		60-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-4		
<b>Lab Sample ID:</b> C14015-6		<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		60-130%
460-00-4	4-Bromofluorobenzene	105%		60-130%

(a) Sample was not preserved to a pH < 2.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	MW-4	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-6	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	Y5823.D	10	01/06/11	MT	01/04/11	OP3277	EY300
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	190	47	ug/l	
95-57-8	2-Chlorophenol	ND	94	47	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	140	57	ug/l	
120-83-2	2,4-Dichlorophenol	ND	140	47	ug/l	
105-67-9	2,4-Dimethylphenol	ND	94	47	ug/l	
51-28-5	2,4-Dinitrophenol	ND	190	28	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	190	19	ug/l	
95-48-7	2-Methylphenol	ND	94	47	ug/l	
	3&4-Methylphenol	ND	94	38	ug/l	
88-75-5	2-Nitrophenol	ND	140	47	ug/l	
100-02-7	4-Nitrophenol	ND	94	9.4	ug/l	
87-86-5	Pentachlorophenol	ND	94	28	ug/l	
108-95-2	Phenol	ND	94	28	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	140	57	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	140	57	ug/l	
83-32-9	Acenaphthene	ND	94	47	ug/l	
208-96-8	Acenaphthylene	ND	140	47	ug/l	
62-53-3	Aniline	ND	94	47	ug/l	
120-12-7	Anthracene	ND	94	38	ug/l	
103-33-3	Azobenzene	ND	94	47	ug/l	
92-87-5	Benzidine	ND	190	57	ug/l	
56-55-3	Benzo(a)anthracene	ND	94	19	ug/l	
50-32-8	Benzo(a)pyrene	ND	94	19	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	94	19	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	94	19	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	94	19	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	140	57	ug/l	
85-68-7	Butyl benzyl phthalate	ND	94	28	ug/l	
100-51-6	Benzyl Alcohol	ND	94	47	ug/l	
91-58-7	2-Chloronaphthalene	ND	94	47	ug/l	
106-47-8	4-Chloroaniline	ND	94	47	ug/l	
86-74-8	Carbazole	ND	94	28	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	MW-4	<b>Date Sampled:</b>	01/03/11
<b>Lab Sample ID:</b>	C14015-6	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270C SW846 3510C		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	94	19	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	140	47	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	94	38	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	94	38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	140	57	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	94	38	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	94	38	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	94	38	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	94	47	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	140	57	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	94	47	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	94	19	ug/l	
132-64-9	Dibenzofuran	ND	140	47	ug/l	
122-39-4	Diphenylamine	ND	140	47	ug/l	
84-74-2	Di-n-butyl phthalate	ND	94	28	ug/l	
117-84-0	Di-n-octyl phthalate	ND	94	28	ug/l	
84-66-2	Diethyl phthalate	ND	94	47	ug/l	
131-11-3	Dimethyl phthalate	ND	94	38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	94	28	ug/l	
206-44-0	Fluoranthene	ND	94	28	ug/l	
86-73-7	Fluorene	ND	140	57	ug/l	
118-74-1	Hexachlorobenzene	ND	140	47	ug/l	
87-68-3	Hexachlorobutadiene	ND	190	38	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	94	28	ug/l	
67-72-1	Hexachloroethane	ND	94	38	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	94	19	ug/l	
78-59-1	Isophorone	ND	140	47	ug/l	
90-12-0	1-Methylnaphthalene	ND	94	47	ug/l	
91-57-6	2-Methylnaphthalene	ND	94	47	ug/l	
88-74-4	2-Nitroaniline	ND	140	57	ug/l	
99-09-2	3-Nitroaniline	ND	94	47	ug/l	
100-01-6	4-Nitroaniline	ND	94	38	ug/l	
91-20-3	Naphthalene	ND	94	47	ug/l	
98-95-3	Nitrobenzene	ND	94	47	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	190	28	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	94	47	ug/l	
85-01-8	Phenanthrene	ND	94	47	ug/l	
129-00-0	Pyrene	ND	94	28	ug/l	
110-86-1	Pyridine	ND	190	19	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	94	38	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-4	
<b>Lab Sample ID:</b> C14015-6	<b>Date Sampled:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 01/03/11
<b>Method:</b> SW846 8270C SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA	

## ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		10-100%
4165-62-2	Phenol-d5	34%		7-100%
118-79-6	2,4,6-Tribromophenol	33%		25-115%
4165-60-0	Nitrobenzene-d5	150% <sup>b</sup>		25-100%
321-60-8	2-Fluorobiphenyl	157% <sup>b</sup>		25-106%
1718-51-0	Terphenyl-d14	210% <sup>b</sup>		35-130%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

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 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-4		<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-6		<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C		
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG20702.D	5	01/05/11	JH	01/05/11	OP3281	GGG589
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel)	6.62	0.47	0.24	mg/l	
	TPH (Motor Oil)	ND	0.94	0.47	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	85%		45-140%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-4	<b>Date Sampled:</b> 01/03/11
<b>Lab Sample ID:</b> C14015-6	<b>Date Received:</b> 01/03/11
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous	1.2	0.50	mg/l	5	01/03/11 21:39	EB	SM18 3500FED
Nitrogen, Nitrate	0.24	0.10	mg/l	1	01/04/11 16:17	MF	EPA 300/SW846 9056A
Sulfate	207	13	mg/l	25	01/05/11 18:53	MF	EPA 300/SW846 9056A

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b>	TRIP BLANKS		
<b>Lab Sample ID:</b>	C14015-7	<b>Date Sampled:</b>	12/28/10
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Date Received:</b>	01/03/11
<b>Method:</b>	SW846 8260B	<b>Percent Solids:</b>	n/a
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L4145.D	1	01/05/11	TF	n/a	n/a	VL139
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	TRIP BLANKS	<b>Date Sampled:</b>	12/28/10
<b>Lab Sample ID:</b>	C14015-7	<b>Date Received:</b>	01/03/11
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		60-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	TRIP BLANKS		
<b>Lab Sample ID:</b>	C14015-7	<b>Date Sampled:</b>	12/28/10
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Date Received:</b>	01/03/11
<b>Method:</b>	SW846 8260B	<b>Percent Solids:</b>	n/a
<b>Project:</b>	T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		60-130%
460-00-4	4-Bromofluorobenzene	104%		60-130%

ND = Not detected      MDL - Method Detection Limit  
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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## Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody





- Review Chain of Custody: The Chain of Custody is to be completely and legibly filed out by Client.
- Are these regulatory (NPDES) samples? Yes / No circle one  Is pH requested? Yes / No circle one
  - Was Client informed that the hold time is 15mins Yes / No circle one If yes, did they consent to continue? N/A
  - Are sample within one-half hold-time? Yes / No circle one If no, was the lab informed? N/A
  - Report to info is complete and legible, including;
    - Type of Deliverable needed  name  address  phone  email
  - Bill to info is complete and legible, including:  PO#  Credit card  contact  address  phone  email
  - Contact and/or Project Mgr identified, including;  phone  email
  - Project name / number  Special requirements? Yes / No circle one
  - Sample IDs / date & time of collection provided? Yes / No circle one
  - Matrix listed and correct? Yes / No circle one
  - Analyses listed are those we do or client has authorized a subcontract? Yes / No circle one
  - Chain is signed / dated by both client and sample custodian? Yes / No circle one
  - TAT requested available? Approved by PM

- Review Coolers: 3 coolers rec'd
- Samples / Coolers are at 0-6°C? If sampled within 4hrs, then "on ice" is acceptable.
- If a cooler is outside the 0-6°C range; note below the bottles in that cooler below.  
Note that ANC does NOT accept evidentiary samples. (We do not lock refrigerators)  
Shipment Method: AC  
Custody Seals Present: Yes / No circle one Un-broken: Yes / No circle one

- Review of Sample Bottles: If you answer no, explain below
- IDs / bottle number / Date / Time of bottle labels match CoC?
  - Sample bottle intact? Yes / No circle one
  - Proper containers and volumes? Yes / No circle one
  - Proper preservatives? Check pH on preserved samples except 1664, 625, 8270, and VOAs and list below.
  - VOAs received without headspace? Yes / No circle one

Lab #	Client Sample ID	pH Check:	Other Comments / Issues
			3 vials each (white) <u>(XB)</u>
			125ml Amber w/septa N/P each
			250ml poly each N/P
			4 x 1L Amber each N/P
			* TBs added as per Jacob -2. @ TRC <u>(EP)</u>
			mw-4 (Strong Chem noticed) <u>(EK)</u> 01/03/11
			cooler #1 5.2 - 0.2 = 5.0°C
			#2 1.4 + 0.4 = 1.8°C
			#3 2.7 + 0.4 = 3.1°C

- Client informed of irregularities at receiving
  - Project Mgr needs to contact Client for issues
- Comments:

## GC/MS Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

**Job Number:** C14015**Account:** TRCCAO TRC - SF**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL139-MB	L4139.D	1	01/05/11	TF	n/a	n/a	VL139

**The QC reported here applies to the following samples:****Method:** SW846 8260B

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6, C14015-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	

## Method Blank Summary

**Job Number:** C14015**Account:** TRCCAO TRC - SF**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL139-MB	L4139.D	1	01/05/11	TF	n/a	n/a	VL139

**The QC reported here applies to the following samples:****Method:** SW846 8260B

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6, C14015-7

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

## Method Blank Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL139-MB	L4139.D	1	01/05/11	TF	n/a	n/a	VL139

The QC reported here applies to the following samples:

Method: SW846 8260B

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6, C14015-7

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	102% 60-130%
2037-26-5	Toluene-D8	103% 60-130%
460-00-4	4-Bromofluorobenzene	104% 60-130%

4.1.1  
4

# Blank Spike Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL139-BS1	L4144.D	1	01/05/11	TF	n/a	n/a	VL139

The QC reported here applies to the following samples:

Method: SW846 8260B

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6, C14015-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
	TPH-GRO (C6-C10)	125	126	101	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	60-130%
2037-26-5	Toluene-D8	101%	60-130%
460-00-4	4-Bromofluorobenzene	103%	60-130%

4.2.1  
4

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL139-BS	L4142.D	1	01/05/11	TF	n/a	n/a	VL139
VL139-BSD	L4143.D	1	01/05/11	TF	n/a	n/a	VL139

The QC reported here applies to the following samples:

Method: SW846 8260B

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6, C14015-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	89.6	112	81.4	102	10	60-130/30
71-43-2	Benzene	20	20.4	102	20.6	103	1	60-130/30
108-86-1	Bromobenzene	20	20.0	100	20.1	101	0	60-130/30
74-97-5	Bromochloromethane	20	21.7	109	21.3	107	2	60-130/30
75-27-4	Bromodichloromethane	20	21.6	108	21.4	107	1	60-130/30
75-25-2	Bromoform	20	20.8	104	20.1	101	3	60-130/30
104-51-8	n-Butylbenzene	20	19.6	98	20.0	100	2	60-130/30
135-98-8	sec-Butylbenzene	20	20.4	102	20.6	103	1	60-130/30
98-06-6	tert-Butylbenzene	20	20.2	101	20.7	104	2	60-130/30
108-90-7	Chlorobenzene	20	21.5	108	21.3	107	1	60-130/30
75-00-3	Chloroethane	20	22.8	114	21.5	108	6	60-130/30
67-66-3	Chloroform	20	20.8	104	20.7	104	0	60-130/30
95-49-8	o-Chlorotoluene	20	20.9	105	20.8	104	0	60-130/30
106-43-4	p-Chlorotoluene	20	19.8	99	20.2	101	2	60-130/30
56-23-5	Carbon tetrachloride	20	20.5	103	20.7	104	1	60-130/30
75-34-3	1,1-Dichloroethane	20	21.4	107	21.4	107	0	60-130/30
75-35-4	1,1-Dichloroethylene	20	20.6	103	20.7	104	0	60-130/30
563-58-6	1,1-Dichloropropene	20	20.2	101	20.5	103	1	60-130/30
96-12-8	1,2-Dibromo-3-chloropropane	20	19.3	97	18.6	93	4	60-130/30
106-93-4	1,2-Dibromoethane	20	21.8	109	21.0	105	4	60-130/30
107-06-2	1,2-Dichloroethane	20	20.2	101	19.9	100	1	60-130/30
78-87-5	1,2-Dichloropropane	20	22.0	110	21.9	110	0	60-130/30
142-28-9	1,3-Dichloropropane	20	20.9	105	20.4	102	2	60-130/30
108-20-3	Di-Isopropyl ether	20	20.0	100	19.8	99	1	60-130/30
594-20-7	2,2-Dichloropropane	20	20.1	101	19.6	98	3	60-130/30
124-48-1	Dibromochloromethane	20	22.5	113	21.9	110	3	60-130/30
75-71-8	Dichlorodifluoromethane	20	17.3	87	15.7	79	10	60-130/30
156-59-2	cis-1,2-Dichloroethylene	20	21.1	106	21.0	105	0	60-130/30
10061-01-5	cis-1,3-Dichloropropene	20	22.2	111	21.8	109	2	60-130/30
541-73-1	m-Dichlorobenzene	20	20.5	103	20.6	103	0	60-130/30
95-50-1	o-Dichlorobenzene	20	20.8	104	21.0	105	1	60-130/30
106-46-7	p-Dichlorobenzene	20	19.9	100	20.1	101	1	60-130/30
156-60-5	trans-1,2-Dichloroethylene	20	19.7	99	19.5	98	1	60-130/30
10061-02-6	trans-1,3-Dichloropropene	20	21.7	109	21.0	105	3	60-130/30
100-41-4	Ethylbenzene	20	20.4	102	20.5	103	0	60-130/30
637-92-3	Ethyl Tert Butyl Ether	20	20.9	105	20.6	103	1	60-130/30

4.3.1  
4



# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL139-BS	L4142.D	1	01/05/11	TF	n/a	n/a	VL139
VL139-BSD	L4143.D	1	01/05/11	TF	n/a	n/a	VL139

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6, C14015-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	81.8	102	77.9	97	5	60-130/30
87-68-3	Hexachlorobutadiene	20	21.3	107	21.5	108	1	60-130/30
98-82-8	Isopropylbenzene	20	20.1	101	20.2	101	0	60-130/30
99-87-6	p-Isopropyltoluene	20	19.7	99	20.1	101	2	60-130/30
108-10-1	4-Methyl-2-pentanone	80	85.9	107	82.3	103	4	60-130/30
74-83-9	Methyl bromide	20	20.9	105	20.2	101	3	60-130/30
74-87-3	Methyl chloride	20	19.2	96	20.2	101	5	60-130/30
74-95-3	Methylene bromide	20	21.9	110	21.5	108	2	60-130/30
75-09-2	Methylene chloride	20	19.3	97	19.1	96	1	60-130/30
78-93-3	Methyl ethyl ketone	80	76.8	96	73.1	91	5	60-130/30
1634-04-4	Methyl Tert Butyl Ether	20	20.3	102	19.8	99	2	60-130/30
91-20-3	Naphthalene	20	21.0	105	20.6	103	2	60-130/30
103-65-1	n-Propylbenzene	20	20.1	101	20.4	102	1	60-130/30
100-42-5	Styrene	20	21.2	106	21.0	105	1	60-130/30
994-05-8	Tert-Amyl Methyl Ether	20	21.0	105	20.6	103	2	60-130/30
75-65-0	Tert-Butyl Alcohol	100	117	117	107	107	9	60-130/30
630-20-6	1,1,1,2-Tetrachloroethane	20	20.9	105	20.6	103	1	60-130/30
71-55-6	1,1,1-Trichloroethane	20	20.2	101	20.1	101	0	60-130/30
79-34-5	1,1,2,2-Tetrachloroethane	20	21.8	109	21.0	105	4	60-130/30
79-00-5	1,1,2-Trichloroethane	20	21.3	107	20.6	103	3	60-130/30
87-61-6	1,2,3-Trichlorobenzene	20	20.5	103	20.4	102	0	60-130/30
96-18-4	1,2,3-Trichloropropane	20	20.2	101	19.2	96	5	60-130/30
120-82-1	1,2,4-Trichlorobenzene	20	19.7	99	19.6	98	1	60-130/30
95-63-6	1,2,4-Trimethylbenzene	20	19.4	97	19.7	99	2	60-130/30
108-67-8	1,3,5-Trimethylbenzene	20	20.0	100	20.4	102	2	60-130/30
127-18-4	Tetrachloroethylene	20	18.1	91	20.8	104	14	60-130/30
108-88-3	Toluene	20	20.4	102	20.3	102	0	60-130/30
79-01-6	Trichloroethylene	20	20.9	105	21.2	106	1	60-130/30
75-69-4	Trichlorofluoromethane	20	21.9	110	20.4	102	7	60-130/30
75-01-4	Vinyl chloride	20	18.9	95	17.8	89	6	60-130/30
1330-20-7	Xylene (total)	60	61.3	102	61.2	102	0	60-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	104%	101%	60-130%

4.3.1  
4

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL139-BS	L4142.D	1	01/05/11	TF	n/a	n/a	VL139
VL139-BSD	L4143.D	1	01/05/11	TF	n/a	n/a	VL139

The QC reported here applies to the following samples:

Method: SW846 8260B

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6, C14015-7

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	102%	100%	60-130%
460-00-4	4-Bromofluorobenzene	105%	104%	60-130%

4.3.1  
4

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C14015-5MS	L4158.D	1	01/05/11	TF	n/a	n/a	VL139
C14015-5MSD	L4159.D	1	01/05/11	TF	n/a	n/a	VL139
C14015-5	L4150.D	1	01/05/11	TF	n/a	n/a	VL139

The QC reported here applies to the following samples:

Method: SW846 8260B

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6, C14015-7

CAS No.	Compound	C14015-5 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		80	74.8	94	72.2	90	4	60-130/25
71-43-2	Benzene	ND		20	20.5	103	20.5	103	0	60-130/25
108-86-1	Bromobenzene	ND		20	20.3	102	20.1	101	1	60-130/25
74-97-5	Bromochloromethane	ND		20	22.9	115	22.4	112	2	60-130/25
75-27-4	Bromodichloromethane	ND		20	22.0	110	21.8	109	1	60-130/25
75-25-2	Bromoform	ND		20	20.4	102	20.0	100	2	60-130/25
104-51-8	n-Butylbenzene	ND		20	19.1	96	19.1	96	0	60-130/25
135-98-8	sec-Butylbenzene	ND		20	20.0	100	20.0	100	0	60-130/25
98-06-6	tert-Butylbenzene	ND		20	20.0	100	20.0	100	0	60-130/25
108-90-7	Chlorobenzene	ND		20	20.9	105	21.1	106	1	60-130/25
75-00-3	Chloroethane	ND		20	20.0	100	21.1	106	5	60-130/25
67-66-3	Chloroform	ND		20	21.3	107	21.0	105	1	60-130/25
95-49-8	o-Chlorotoluene	ND		20	21.1	106	20.7	104	2	60-130/25
106-43-4	p-Chlorotoluene	ND		20	19.3	97	19.3	97	0	60-130/25
56-23-5	Carbon tetrachloride	ND		20	20.3	102	20.2	101	0	60-130/25
75-34-3	1,1-Dichloroethane	ND		20	21.7	109	21.5	108	1	60-130/25
75-35-4	1,1-Dichloroethylene	ND		20	20.3	102	20.2	101	0	60-130/25
563-58-6	1,1-Dichloropropene	ND		20	19.7	99	19.7	99	0	60-130/25
96-12-8	1,2-Dibromo-3-chloropropane	ND		20	20.0	100	18.4	92	8	60-130/25
106-93-4	1,2-Dibromoethane	ND		20	21.2	106	21.2	106	0	60-130/25
107-06-2	1,2-Dichloroethane	0.65	J	20	21.1	102	20.9	101	1	60-130/25
78-87-5	1,2-Dichloropropane	ND		20	22.3	112	22.2	111	0	60-130/25
142-28-9	1,3-Dichloropropane	ND		20	20.6	103	20.3	102	1	60-130/25
108-20-3	Di-Isopropyl ether	ND		20	20.9	105	20.6	103	1	60-130/25
594-20-7	2,2-Dichloropropane	ND		20	18.8	94	18.3	92	3	60-130/25
124-48-1	Dibromochloromethane	ND		20	22.6	113	22.0	110	3	60-130/25
75-71-8	Dichlorodifluoromethane	ND		20	14.3	72	14.6	73	2	60-130/25
156-59-2	cis-1,2-Dichloroethylene	ND		20	21.6	108	21.4	107	1	60-130/25
10061-01-5	cis-1,3-Dichloropropene	ND		20	22.2	111	21.8	109	2	60-130/25
541-73-1	m-Dichlorobenzene	ND		20	20.6	103	20.5	103	0	60-130/25
95-50-1	o-Dichlorobenzene	ND		20	21.2	106	21.0	105	1	60-130/25
106-46-7	p-Dichlorobenzene	ND		20	20.0	100	19.9	100	1	60-130/25
156-60-5	trans-1,2-Dichloroethylene	ND		20	19.8	99	19.6	98	1	60-130/25
10061-02-6	trans-1,3-Dichloropropene	ND		20	20.6	103	20.4	102	1	60-130/25
100-41-4	Ethylbenzene	ND		20	19.7	99	19.9	100	1	60-130/25
637-92-3	Ethyl Tert Butyl Ether	ND		20	21.9	110	21.4	107	2	60-130/25

4.4.1  
4

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C14015-5MS	L4158.D	1	01/05/11	TF	n/a	n/a	VL139
C14015-5MSD	L4159.D	1	01/05/11	TF	n/a	n/a	VL139
C14015-5	L4150.D	1	01/05/11	TF	n/a	n/a	VL139

The QC reported here applies to the following samples:

Method: SW846 8260B

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6, C14015-7

CAS No.	Compound	C14015-5 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	80	78.1	98	74.2	93	5	60-130/25
87-68-3	Hexachlorobutadiene	ND	20	20.9	105	20.3	102	3	60-130/25
98-82-8	Isopropylbenzene	ND	20	19.4	97	19.7	99	2	60-130/25
99-87-6	p-Isopropyltoluene	ND	20	19.4	97	19.4	97	0	60-130/25
108-10-1	4-Methyl-2-pentanone	ND	80	86.8	109	83.5	104	4	60-130/25
74-83-9	Methyl bromide	ND	20	18.5	93	19.4	97	5	60-130/25
74-87-3	Methyl chloride	ND	20	19.1	96	18.9	95	1	60-130/25
74-95-3	Methylene bromide	ND	20	22.0	110	21.9	110	0	60-130/25
75-09-2	Methylene chloride	ND	20	20.0	100	19.6	98	2	60-130/25
78-93-3	Methyl ethyl ketone	ND	80	74.3	93	71.8	90	3	60-130/25
1634-04-4	Methyl Tert Butyl Ether	2.4	20	23.6	106	23.0	103	3	60-130/25
91-20-3	Naphthalene	ND	20	22.1	111	20.4	102	8	60-130/25
103-65-1	n-Propylbenzene	ND	20	19.5	98	19.7	99	1	60-130/25
100-42-5	Styrene	ND	20	20.5	103	20.1	101	2	60-130/25
994-05-8	Tert-Amyl Methyl Ether	ND	20	21.8	109	21.4	107	2	60-130/25
75-65-0	Tert-Butyl Alcohol	ND	100	114	114	108	108	5	60-130/25
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	21.8	109	20.8	104	5	60-130/25
71-55-6	1,1,1-Trichloroethane	ND	20	20.2	101	20.0	100	1	60-130/25
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	22.3	112	21.2	106	5	60-130/25
79-00-5	1,1,2-Trichloroethane	ND	20	20.9	105	20.6	103	1	60-130/25
87-61-6	1,2,3-Trichlorobenzene	ND	20	21.2	106	19.8	99	7	60-130/25
96-18-4	1,2,3-Trichloropropane	ND	20	20.4	102	19.0	95	7	60-130/25
120-82-1	1,2,4-Trichlorobenzene	ND	20	19.9	100	18.9	95	5	60-130/25
95-63-6	1,2,4-Trimethylbenzene	ND	20	19.3	97	19.3	97	0	60-130/25
108-67-8	1,3,5-Trimethylbenzene	ND	20	19.9	100	19.9	100	0	60-130/25
127-18-4	Tetrachloroethylene	ND	20	16.4	82	16.7	84	2	60-130/25
108-88-3	Toluene	ND	20	19.7	99	19.9	100	1	60-130/25
79-01-6	Trichloroethylene	ND	20	20.5	103	20.5	103	0	60-130/25
75-69-4	Trichlorofluoromethane	ND	20	18.8	94	19.4	97	3	60-130/25
75-01-4	Vinyl chloride	ND	20	16.3	82	16.9	85	4	60-130/25
1330-20-7	Xylene (total)	ND	60	60.0	100	60.1	100	0	60-130/25

CAS No.	Surrogate Recoveries	MS	MSD	C14015-5	Limits
1868-53-7	Dibromofluoromethane	105%	104%	105%	60-130%

4.4.1  
 4

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C14015-5MS	L4158.D	1	01/05/11	TF	n/a	n/a	VL139
C14015-5MSD	L4159.D	1	01/05/11	TF	n/a	n/a	VL139
C14015-5	L4150.D	1	01/05/11	TF	n/a	n/a	VL139

The QC reported here applies to the following samples:

Method: SW846 8260B

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6, C14015-7

CAS No.	Surrogate Recoveries	MS	MSD	C14015-5	Limits
2037-26-5	Toluene-D8	99%	99%	103%	60-130%
460-00-4	4-Bromofluorobenzene	105%	103%	104%	60-130%

4.4.1  
4

## GC/MS Semi-volatiles

5

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

**Job Number:** C14015**Account:** TRCCAO TRC - SF**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3277-MB	Y5795.D	1	01/05/11	MT	01/04/11	OP3277	EY300

**The QC reported here applies to the following samples:****Method:** SW846 8270C

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	20	5.0	ug/l	
95-57-8	2-Chlorophenol	ND	10	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	15	6.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	15	5.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	5.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	3.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	2.0	ug/l	
95-48-7	2-Methylphenol	ND	10	5.0	ug/l	
	3&4-Methylphenol	ND	10	4.0	ug/l	
88-75-5	2-Nitrophenol	ND	15	5.0	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.0	ug/l	
87-86-5	Pentachlorophenol	ND	10	3.0	ug/l	
108-95-2	Phenol	ND	10	3.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	15	6.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	15	6.0	ug/l	
83-32-9	Acenaphthene	ND	10	5.0	ug/l	
208-96-8	Acenaphthylene	ND	15	5.0	ug/l	
62-53-3	Aniline	ND	10	5.0	ug/l	
120-12-7	Anthracene	ND	10	4.0	ug/l	
103-33-3	Azobenzene	ND	10	5.0	ug/l	
92-87-5	Benzidine	ND	20	6.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	10	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	10	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	10	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	10	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	10	2.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	15	6.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	10	3.0	ug/l	
100-51-6	Benzyl Alcohol	ND	10	5.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	10	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	5.0	ug/l	
86-74-8	Carbazole	ND	10	3.0	ug/l	
218-01-9	Chrysene	ND	10	2.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	15	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	10	4.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	10	4.0	ug/l	

## Method Blank Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3277-MB	Y5795.D	1	01/05/11	MT	01/04/11	OP3277	EY300

The QC reported here applies to the following samples:

Method: SW846 8270C

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	15	6.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	4.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	4.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	4.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	5.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	15	6.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	10	2.0	ug/l	
132-64-9	Dibenzofuran	ND	15	5.0	ug/l	
122-39-4	Diphenylamine	ND	15	5.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	10	3.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	10	3.0	ug/l	
84-66-2	Diethyl phthalate	ND	10	5.0	ug/l	
131-11-3	Dimethyl phthalate	ND	10	4.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10	3.0	ug/l	
206-44-0	Fluoranthene	ND	10	3.0	ug/l	
86-73-7	Fluorene	ND	15	6.0	ug/l	
118-74-1	Hexachlorobenzene	ND	15	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	4.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	3.0	ug/l	
67-72-1	Hexachloroethane	ND	10	4.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10	2.0	ug/l	
78-59-1	Isophorone	ND	15	5.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	10	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	10	5.0	ug/l	
88-74-4	2-Nitroaniline	ND	15	6.0	ug/l	
99-09-2	3-Nitroaniline	ND	10	5.0	ug/l	
100-01-6	4-Nitroaniline	ND	10	4.0	ug/l	
91-20-3	Naphthalene	ND	10	5.0	ug/l	
98-95-3	Nitrobenzene	ND	10	5.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	20	3.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	10	5.0	ug/l	
85-01-8	Phenanthrene	ND	10	5.0	ug/l	
129-00-0	Pyrene	ND	10	3.0	ug/l	
110-86-1	Pyridine	ND	20	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	4.0	ug/l	



## Method Blank Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3277-MB	Y5795.D	1	01/05/11	MT	01/04/11	OP3277	EY300

The QC reported here applies to the following samples:

Method: SW846 8270C

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	52%	10-100%
4165-62-2	Phenol-d5	36%	7-100%
118-79-6	2,4,6-Tribromophenol	99%	25-115%
4165-60-0	Nitrobenzene-d5	102%* a	25-100%
321-60-8	2-Fluorobiphenyl	100%	25-106%
1718-51-0	Terphenyl-d14	137%* a	35-130%

(a) Outside laboratory control limits (high bias).

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3277-BS	Y5796.D	1	01/05/11	MT	01/04/11	OP3277	EY300
OP3277-BSD	Y5797.D	1	01/05/11	MT	01/04/11	OP3277	EY300

The QC reported here applies to the following samples:

Method: SW846 8270C

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	50	12.2	24	9.9	20	21	10-100/30
95-57-8	2-Chlorophenol	25	14.8	59	14.2	57	4	23-103/30
59-50-7	4-Chloro-3-methyl phenol	25	16.9	68	15.3	61	10	17-130/30
120-83-2	2,4-Dichlorophenol	25	17.8	71	16.9	68	5	23-108/30
105-67-9	2,4-Dimethylphenol	25	17.5	70	15.3	61	13	17-91/30
51-28-5	2,4-Dinitrophenol	25	20.7	83	19.5	78	6	17-111/30
534-52-1	4,6-Dinitro-o-cresol	25	18.6	74	19.5	78	5	22-115/30
95-48-7	2-Methylphenol	25	13.7	55	12.9	52	6	25-101/30
	3&4-Methylphenol	25	12.5	50	12.0	48	4	22-105/30
88-75-5	2-Nitrophenol	25	19.0	76	18.7	75	2	19-111/30
100-02-7	4-Nitrophenol	25	7.3	29	6.8	27	7	13-130/30
87-86-5	Pentachlorophenol	25	25.2	101	24.5	98	3	24-130/30
108-95-2	Phenol	25	7.3	29	7.0	28	4	5-130/30
95-95-4	2,4,5-Trichlorophenol	25	20.6	82	18.8	75	9	19-106/30
88-06-2	2,4,6-Trichlorophenol	25	19.5	78	18.3	73	6	18-107/30
83-32-9	Acenaphthene	25	17.4	70	16.4	66	6	25-130/30
208-96-8	Acenaphthylene	25	18.2	73	17.3	69	5	28-105/30
62-53-3	Aniline	25	11.0	44	12.4	50	12	23-98/30
120-12-7	Anthracene	25	19.9	80	20.0	80	1	35-108/30
103-33-3	Azobenzene	25	15.7	63	16.0	64	2	31-110/30
92-87-5	Benzidine	50	32.8	66	40.5	81* a	21	15-73/30
56-55-3	Benzo(a)anthracene	25	23.9	96	24.0	96	0	33-111/30
50-32-8	Benzo(a)pyrene	25	23.7	95	23.9	96	1	32-106/30
205-99-2	Benzo(b)fluoranthene	25	23.9	96	23.5	94	2	33-109/30
191-24-2	Benzo(g,h,i)perylene	25	23.0	92	23.2	93	1	31-111/30
207-08-9	Benzo(k)fluoranthene	25	25.6	102	25.6	102	0	34-111/30
101-55-3	4-Bromophenyl phenyl ether	25	16.7	67	16.1	64	4	34-107/30
85-68-7	Butyl benzyl phthalate	25	23.1	92	24.8	99	7	29-114/30
100-51-6	Benzyl Alcohol	25	11.5	46	11.3	45	2	24-108/30
91-58-7	2-Chloronaphthalene	25	17.1	68	16.4	66	4	23-130/30
106-47-8	4-Chloroaniline	25	14.5	58	16.0	64	10	23-103/30
86-74-8	Carbazole	25	20.5	82	21.1	84	3	36-109/30
218-01-9	Chrysene	25	23.8	95	23.7	95	0	34-111/30
111-91-1	bis(2-Chloroethoxy)methane	25	17.8	71	16.9	68	5	28-101/30
111-44-4	bis(2-Chloroethyl)ether	25	16.4	66	15.6	62	5	31-108/30
108-60-1	bis(2-Chloroisopropyl)ether	25	16.9	68	16.5	66	2	33-106/30

5.2.1  
5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3277-BS	Y5796.D	1	01/05/11	MT	01/04/11	OP3277	EY300
OP3277-BSD	Y5797.D	1	01/05/11	MT	01/04/11	OP3277	EY300

The QC reported here applies to the following samples:

Method: SW846 8270C

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	25	16.8	67	16.8	67	0	31-107/30
95-50-1	1,2-Dichlorobenzene	25	16.2	65	15.7	63	3	21-102/30
541-73-1	1,3-Dichlorobenzene	25	15.2	61	15.1	60	1	28-100/30
106-46-7	1,4-Dichlorobenzene	25	15.5	62	15.0	60	3	24-130/30
121-14-2	2,4-Dinitrotoluene	25	19.0	76	19.2	77	1	26-130/30
606-20-2	2,6-Dinitrotoluene	25	18.7	75	18.1	72	3	28-104/30
91-94-1	3,3'-Dichlorobenzidine	50	51.0	102	50.9	102	0	27-105/30
53-70-3	Dibenzo(a,h)anthracene	25	22.9	92	23.1	92	1	32-112/30
132-64-9	Dibenzofuran	25	17.2	69	16.4	66	5	31-108/30
122-39-4	Diphenylamine	25	16.8	67	17.6	70	5	27-110/30
84-74-2	Di-n-butyl phthalate	25	23.6	94	23.3	93	1	32-109/30
117-84-0	Di-n-octyl phthalate	25	24.1	96	24.4	98	1	30-120/30
84-66-2	Diethyl phthalate	25	14.6	58	16.0	64	9	32-109/30
131-11-3	Dimethyl phthalate	25	11.3	45	11.5	46	2	33-106/30
117-81-7	bis(2-Ethylhexyl)phthalate	25	23.5	94	23.7	95	1	29-116/30
206-44-0	Fluoranthene	25	22.0	88	22.7	91	3	35-114/30
86-73-7	Fluorene	25	17.4	70	17.5	70	1	31-106/30
118-74-1	Hexachlorobenzene	25	18.7	75	18.1	72	3	32-107/30
87-68-3	Hexachlorobutadiene	25	16.5	66	16.5	66	0	28-107/30
77-47-4	Hexachlorocyclopentadiene	25	13.6	54	13.4	54	1	19-94/30
67-72-1	Hexachloroethane	25	15.0	60	14.7	59	2	25-101/30
193-39-5	Indeno(1,2,3-cd)pyrene	25	22.5	90	22.6	90	0	31-113/30
78-59-1	Isophorone	25	16.9	68	15.8	63	7	26-111/30
90-12-0	1-Methylnaphthalene	25	16.4	66	15.6	62	5	22-102/30
91-57-6	2-Methylnaphthalene	25	17.0	68	16.6	66	2	26-112/30
88-74-4	2-Nitroaniline	25	18.0	72	17.3	69	4	30-109/30
99-09-2	3-Nitroaniline	25	16.8	67	17.5	70	4	22-107/30
100-01-6	4-Nitroaniline	25	18.5	74	21.0	84	13	29-111/30
91-20-3	Naphthalene	25	17.4	70	17.1	68	2	20-104/30
98-95-3	Nitrobenzene	25	17.1	68	16.7	67	2	22-105/30
62-75-9	N-Nitrosodimethylamine	25	10.4	42	10.4	42	0	20-71/30
621-64-7	N-Nitroso-di-n-propylamine	25	17.1	68	16.4	66	4	16-130/30
85-01-8	Phenanthrene	25	18.5	74	18.6	74	1	35-108/30
129-00-0	Pyrene	25	22.0	88	21.7	87	1	35-130/30
110-86-1	Pyridine	25	6.5	26	7.2	29	10	15-77/30
120-82-1	1,2,4-Trichlorobenzene	25	15.4	62	14.8	59	4	15-130/30

5.2.1  
5

## Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3277-BS	Y5796.D	1	01/05/11	MT	01/04/11	OP3277	EY300
OP3277-BSD	Y5797.D	1	01/05/11	MT	01/04/11	OP3277	EY300

The QC reported here applies to the following samples:

Method: SW846 8270C

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	42%	40%	10-100%
4165-62-2	Phenol-d5	30%	29%	7-100%
118-79-6	2,4,6-Tribromophenol	97%	96%	25-115%
4165-60-0	Nitrobenzene-d5	79%	75%	25-100%
321-60-8	2-Fluorobiphenyl	81%	77%	25-106%
1718-51-0	Terphenyl-d14	122%	119%	35-130%

(a) Outside laboratory control limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3277-MS	Y5818.D	1	01/05/11	MT	01/04/11	OP3277	EY300
OP3277-MSD	Y5819.D	1	01/05/11	MT	01/04/11	OP3277	EY300
C14015-2	Y5812.D	1	01/05/11	MT	01/04/11	OP3277	EY300

The QC reported here applies to the following samples:

Method: SW846 8270C

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Compound	C14015-2 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		86.2	ND	0* a	ND	0* a	nc	10-100/40
95-57-8	2-Chlorophenol	ND		43.1	34.5	80	35.2	82	2	23-103/29
59-50-7	4-Chloro-3-methyl phenol	ND		43.1	34.8	81	35.3	82	1	17-130/36
120-83-2	2,4-Dichlorophenol	ND		43.1	34.8	81	35.0	81	1	23-108/26
105-67-9	2,4-Dimethylphenol	ND		43.1	17.0	39	14.1	33	19	17-91/28
51-28-5	2,4-Dinitrophenol	ND		43.1	9.4	22	9.3	22	1	17-111/30
534-52-1	4,6-Dinitro-o-cresol	ND		43.1	28.6	66	31.5	73	10	22-115/26
95-48-7	2-Methylphenol	ND		43.1	30.9	72	29.8	69	4	25-101/30
	3&4-Methylphenol	ND		43.1	29.8	69	28.6	66	4	22-105/29
88-75-5	2-Nitrophenol	ND		43.1	38.6	90	39.6	92	3	19-111/30
100-02-7	4-Nitrophenol	ND		43.1	15.2	35	15.8	37	4	13-130/34
87-86-5	Pentachlorophenol	ND		43.1	29.9	69	25.5	59	16	24-130/36
108-95-2	Phenol	ND		43.1	23.2	54	21.4	50	8	5-130/47
95-95-4	2,4,5-Trichlorophenol	ND		43.1	35.5	82	36.8	85	4	19-106/23
88-06-2	2,4,6-Trichlorophenol	ND		43.1	34.1	79	35.1	81	3	18-107/24
83-32-9	Acenaphthene	ND		43.1	35.0	81	33.9	79	3	25-130/32
208-96-8	Acenaphthylene	ND		43.1	36.8	85	35.7	83	3	28-105/21
62-53-3	Aniline	ND		43.1	32.0	74	31.3	73	2	23-98/28
120-12-7	Anthracene	ND		43.1	37.7	87	38.3	89	2	35-108/19
103-33-3	Azobenzene	ND		43.1	32.6	76	31.4	73	4	31-110/20
92-87-5	Benzidine	ND		86.2	53.2	62	58.3	68	9	15-73/23
56-55-3	Benzo(a)anthracene	ND		43.1	43.1	100	43.4	101	1	33-111/19
50-32-8	Benzo(a)pyrene	ND		43.1	42.4	98	43.0	100	1	32-106/20
205-99-2	Benzo(b)fluoranthene	ND		43.1	40.4	94	41.0	95	1	33-109/20
191-24-2	Benzo(g,h,i)perylene	ND		43.1	42.1	98	40.5	94	4	31-111/21
207-08-9	Benzo(k)fluoranthene	ND		43.1	44.5	103	45.1	105	1	34-111/20
101-55-3	4-Bromophenyl phenyl ether	ND		43.1	33.0	77	33.1	77	0	34-107/20
85-68-7	Butyl benzyl phthalate	ND		43.1	45.3	105	46.6	108	3	29-114/20
100-51-6	Benzyl Alcohol	ND		43.1	32.4	75	31.2	72	4	24-108/27
91-58-7	2-Chloronaphthalene	ND		43.1	34.9	81	33.7	78	3	23-130/29
106-47-8	4-Chloroaniline	ND		43.1	34.4	80	33.6	78	2	23-103/22
86-74-8	Carbazole	ND		43.1	39.7	92	40.7	94	2	36-109/20
218-01-9	Chrysene	ND		43.1	41.4	96	41.6	97	0	34-111/19
111-91-1	bis(2-Chloroethoxy)methane	ND		43.1	34.9	81	34.5	80	1	28-101/28
111-44-4	bis(2-Chloroethyl)ether	ND		43.1	34.4	80	33.2	77	4	31-108/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		43.1	35.0	81	34.1	79	3	33-106/27

5.3.1  
5

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3277-MS	Y5818.D	1	01/05/11	MT	01/04/11	OP3277	EY300
OP3277-MSD	Y5819.D	1	01/05/11	MT	01/04/11	OP3277	EY300
C14015-2	Y5812.D	1	01/05/11	MT	01/04/11	OP3277	EY300

The QC reported here applies to the following samples:

Method: SW846 8270C

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Compound	C14015-2 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	ND		43.1	34.9	81	34.5	80	1	31-107/20
95-50-1	1,2-Dichlorobenzene	ND		43.1	28.8	67	25.1	58	14	21-102/28
541-73-1	1,3-Dichlorobenzene	ND		43.1	26.8	62	22.9	53	16	28-100/28
106-46-7	1,4-Dichlorobenzene	ND		43.1	27.3	63	23.5	55	15	24-130/38
121-14-2	2,4-Dinitrotoluene	ND		43.1	36.0	84	36.3	84	1	26-130/37
606-20-2	2,6-Dinitrotoluene	ND		43.1	36.6	85	36.6	85	0	28-104/21
91-94-1	3,3'-Dichlorobenzidine	ND		86.2	93.4	108* b	90.8	105	3	27-105/25
53-70-3	Dibenzo(a,h)anthracene	ND		43.1	42.5	99	41.2	96	3	32-112/20
132-64-9	Dibenzofuran	ND		43.1	35.0	81	33.8	78	3	31-108/20
122-39-4	Diphenylamine	ND		43.1	35.4	82	35.3	82	0	27-110/29
84-74-2	Di-n-butyl phthalate	ND		43.1	43.9	102	44.1	102	0	32-109/20
117-84-0	Di-n-octyl phthalate	ND		43.1	42.8	99	43.7	101	2	30-120/24
84-66-2	Diethyl phthalate	ND		43.1	35.8	83	35.9	83	0	32-109/19
131-11-3	Dimethyl phthalate	ND		43.1	32.6	76	32.1	74	2	33-106/19
117-81-7	bis(2-Ethylhexyl)phthalate	ND		43.1	41.8	97	42.6	99	2	29-116/21
206-44-0	Fluoranthene	ND		43.1	39.9	93	41.1	95	3	35-114/21
86-73-7	Fluorene	ND		43.1	36.3	84	35.7	83	2	31-106/19
118-74-1	Hexachlorobenzene	ND		43.1	35.4	82	35.1	81	1	32-107/20
87-68-3	Hexachlorobutadiene	ND		43.1	31.2	72	28.0	65	11	28-107/30
77-47-4	Hexachlorocyclopentadiene	ND		43.1	32.2	75	30.2	70	6	19-94/35
67-72-1	Hexachloroethane	ND		43.1	26.8	62	22.2	52	19	25-101/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND		43.1	41.9	97	40.7	94	3	31-113/20
78-59-1	Isophorone	ND		43.1	32.8	76	31.9	74	3	26-111/26
90-12-0	1-Methylnaphthalene	ND		43.1	33.0	77	31.4	73	5	22-102/25
91-57-6	2-Methylnaphthalene	ND		43.1	34.2	79	32.9	76	4	26-112/26
88-74-4	2-Nitroaniline	ND		43.1	37.4	87	36.1	84	4	30-109/20
99-09-2	3-Nitroaniline	ND		43.1	35.0	81	35.3	82	1	22-107/21
100-01-6	4-Nitroaniline	ND		43.1	39.4	91	40.0	93	2	29-111/21
91-20-3	Naphthalene	ND		43.1	34.0	79	31.7	74	7	20-104/28
98-95-3	Nitrobenzene	ND		43.1	34.9	81	33.8	78	3	22-105/28
62-75-9	N-Nitrosodimethylamine	ND		43.1	31.1	72* b	29.7	69	5	20-71/32
621-64-7	N-Nitroso-di-n-propylamine	ND		43.1	34.7	81	33.9	79	2	16-130/38
85-01-8	Phenanthrene	ND		43.1	37.1	86	37.2	86	0	35-108/20
129-00-0	Pyrene	ND		43.1	40.1	93	41.7	97	4	35-130/29
110-86-1	Pyridine	ND		43.1	22.9	53	20.6	48	11	15-77/40
120-82-1	1,2,4-Trichlorobenzene	ND		43.1	29.7	69	27.1	63	9	15-130/29

5.3.1  
5

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3277-MS	Y5818.D	1	01/05/11	MT	01/04/11	OP3277	EY300
OP3277-MSD	Y5819.D	1	01/05/11	MT	01/04/11	OP3277	EY300
C14015-2	Y5812.D	1	01/05/11	MT	01/04/11	OP3277	EY300

The QC reported here applies to the following samples:

Method: SW846 8270C

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Surrogate Recoveries	MS	MSD	C14015-2	Limits
367-12-4	2-Fluorophenol	72%	70%	52%	10-100%
4165-62-2	Phenol-d5	58%	54%	34%	7-100%
118-79-6	2,4,6-Tribromophenol	94%	98%	90%	25-115%
4165-60-0	Nitrobenzene-d5	95%	93%	97%	25-100%
321-60-8	2-Fluorobiphenyl	93%	88%	100%	25-106%
1718-51-0	Terphenyl-d14	125%	123%	123%	35-130%

(a) Outside control limits due to matrix interference.

(b) Outside laboratory control limits.

5.3.1  
5

## GC Semi-volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



## Method Blank Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3281-MB	GG20696.D	1	01/05/11	JH	01/05/11	OP3281	GGG589

The QC reported here applies to the following samples:

Method: SW846 8015B M

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel)	ND	0.10	0.050	mg/l	
	TPH (Motor Oil)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	84% 45-140%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3281-BS	GG20697.D	1	01/05/11	JH	01/05/11	OP3281	GGG589
OP3281-BSD	GG20698.D	1	01/05/11	JH	01/05/11	OP3281	GGG589

The QC reported here applies to the following samples: Method: SW846 8015B M

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (Diesel)	1	0.829	83	0.844	84	2	45-140/30
	TPH (Motor Oil)	1	0.782	78	0.824	82	5	45-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	81%	88%	45-140%

6.2.1  
6

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C14015  
**Account:** TRCCAO TRC - SF  
**Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP3281-MS	GG20706.D	1	01/05/11	JH	01/05/11	OP3281	GGG589
OP3281-MSD	GG20707.D	1	01/05/11	JH	01/05/11	OP3281	GGG589
C14015-1	GG20699.D	1	01/05/11	JH	01/05/11	OP3281	GGG589

The QC reported here applies to the following samples:

Method: SW846 8015B M

C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

CAS No.	Compound	C14015-1 mg/l	Spike Q	mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (Diesel)	ND	1.89	1.64	87	1.65	87	1	45-140/25	
	TPH (Motor Oil)	ND	1.89	1.53	81	1.59	84	4	45-140/25	

CAS No.	Surrogate Recoveries	MS	MSD	C14015-1	Limits
630-01-3	Hexacosane	87%	90%	87%	45-140%

6.3.1  
6

## General Chemistry

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: C14015  
Account: TRCCAO - TRC - SF  
Project: T0600100443-USPS Oakland VMF-1675 7th Street,Oakland,CA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP2281/GN5050	0.50	0.0	mg/l	5	4.93	98.6	90-110%
Iron, Ferrous	GN5056	0.10	0.0	mg/l	0.5	0.48	95.1	75-125%
Nitrogen, Nitrate	GP2281/GN5050	0.10	0.0	mg/l	5	4.62	92.4	90-110%
Sulfate	GP2281/GN5050	0.50	0.0	mg/l	5	4.57	91.4	90-110%

Associated Samples:

Batch GN5056: C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

Batch GP2281: C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

(\*) Outside of QC limits

7.1  
7

BLANK SPIKE DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: C14015  
Account: TRCCAO - TRC - SF  
Project: T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Analyte	Batch ID	Units	Spike Amount	BSD Result	RPD	QC Limit
Iron, Ferrous	GN5056	mg/l	0.5	0.48	1.2	25%

Associated Samples:

Batch GN5056: C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

(\*) Outside of QC limits

7.2  
7

MATRIX SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: C14015  
Account: TRCCAO - TRC - SF  
Project: T0600100443-USPS Oakland VMF-1675 7th Street,Oakland,CA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP2281/GN5050	C14011-1	mg/l	32.2	8	40.9	108.8	80-120%
Iron, Ferrous	GN5056	C14015-5	mg/l	0.0	0.5	0.49	96.2	75-125%
Nitrogen, Nitrate	GP2281/GN5050	C14011-1	mg/l	8.9	8	17.4	106.3	80-120%
Sulfate	GP2281/GN5050	C14011-1	mg/l	36.5	8	44.0	93.8	80-120%

Associated Samples:

Batch GN5056: C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

Batch GP2281: C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

7.3

7

MATRIX SPIKE DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: C14015  
Account: TRCCAO - TRC - SF  
Project: T0600100443-USPS Oakland VMF-1675 7th Street,Oakland,CA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP2281/GN5050	C14011-1	mg/l	32.2	8	40.9	0.0	
Iron, Ferrous	GN5056	C14015-5	mg/l	0.0	0.5	0.500	2.8	25%
Nitrogen, Nitrate	GP2281/GN5050	C14011-1	mg/l	8.9	8	17.4	0.0	
Sulfate	GP2281/GN5050	C14011-1	mg/l	36.5	8	43.9	0.2	

Associated Samples:

Batch GN5056: C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

Batch GP2281: C14015-1, C14015-2, C14015-3, C14015-4, C14015-5, C14015-6

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

7.4

7