

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:

Emmy Andrews Project Manager

Attachments

Cc: James P Schwartz, TRC

11:28 am, Jul 21, 2011
Alameda County
Environmental Health



## Fourth Quarter 2010 Groundwater Monitoring Report

USPS Oakland Vehicle Maintenance Facility 1675 7th 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

Jacob P. Zepeda Senior Staff Environmental Scientist 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 7TH 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  $7^{th}$  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	INTRO	ODUCTION	1
	1.1	Purpose	1
	1.2	Site Background	1
	1.3	Scope of Work	4
2.0	GROU	NDWATER 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 and Field Observations	7
		Table 4. Field Observations of Sheen and Free Product	7
3.0	CONC	LUSIONS	8
4.0	LIMIT	TATIONS	9
5.0	REFE	RENCES	9
FIGUI	RE 1	VICINITY MAP	
FIGUI	RE 2	GROUNDWATER ELEVATION CONTOUR MAP	
FIGUI	RE 3	DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS	
FIGUI	RE 4	DISSOLVED-PHASE TPH DIESEL ISOCONCENTRATION CONTOUR MAP	
APPE	NDIX A	HISTORICAL DATA	
		Table A. Historical Analytical Results of Monitoring Well Groundwater Samples	
		Table B. Historical Groundwater Elevations in Site Monitoring Wells	
APPE	NDIX B	GROUNDWATER SAMPLING PROTOCOL AND RECORDS	
APPE	NDIX C	ANALYTICAL RESULTS	



# FOURTH QUARTER 2010 GROUNDWATER MONITORING REPORT USPS OAKLAND VMF 1675 7TH 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 methyltert 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, napthalene, n-propylbenzene, anthracene, di-noctylphalate, flourene, 2-methylnapthalene, 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.

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

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

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.



<sup>\*\*</sup> Measured from the top of the casing.

<sup>\*</sup> Monitoring wells were resurveyed on January 10, 2011 in accordance to the State of California Geotracker requirements using the North American Datum 1983.

#### **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	МТВЕ
MW-1	1/3/2011	< 50	161	<190	<1.0	<1.0	<1.0	<2.0	<1.0
MW-2	1/3/2011	< 50	<94	380	<1.0	<1.0	<1.0	<2.0	<1.0
MW-3	1/3/2011	< 50	209	<190	<1.0	<1.0	<1.0	<2.0	2.4
MW-4	1/3/2011	< 50	6,620	<940	<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 (1)		100	100	100	1	40	30	20	5
MCL <sup>(2)</sup>		NE	NE	NE	1	150	300	1,750	13

#### Notes

(i) Environmental Screening Level-Table A, CRWQCB, SF Bay Region, rev. May 2008.

(2) Drinking water Maximum Contaminant Levels-California DHS, June 26, 2009

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

 $\mu g/L$  = 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	ТВА	DIPE	ЕТВЕ	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 (1)		12	NE	NE	NE	200	24	NE
MCL <sup>(2)</sup>		NE	NE	NE	NE	0.5	NE	NE

#### Notes

(i) Environmental Screening Level-Table A, CRWQCB, SF Bay Region, rev. May 2008.

 $^{(2)}$   $\,$  Drinking water Maximum Contaminant Levels—California DHS, June 26, 2009

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

 $\mu g/L \qquad = Micrograms \; per \; liter$ 

NE = Not established

 $ND \hspace{0.5cm} = Not \ detected \ above \ laboratory \ reporting \ limit$ 

< = 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		рН	Specific Conductivity	Temperature	Dissolved Oxygen	Oxidation Reduction Potential	Ferrous Iron	Nitrate	Sulfate
			(µS/cm)	(°C)	(mg/L)	(mV)	(mg/L)	(mg/L)	(mg/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

 $mV \hspace{1.5cm} = millivolts \\$ 

 $\mu$ S/cm = microSiemens per centimeter

°C = degree Celsius

#### 2.3 Hydrocarbon Absorbent Socks and Field Observations

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. Field observations are presented in Table 4 below.

Table 4. Field Observations of Sheen and Free Product within Groundwater

Monitoring Well	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater ·· (ft bgs)	Sheen Observed	Observed Product Thickness (inches)
MW-1	1/3/2011	11.44	5.98	Y	
MW-2	1/3/2011	12.06	6.75	Y	
MW-3	1/3/2011	12.48	7.68	Y	
MW-4	1/3/2011	12.83	8.12	Y	1/8
MW-6	1/3/2011	11.93	7.61	N	
TP-1	1/3/2011		4.21	N	

<sup>\*\*</sup> Measured from the top of the casing.

TOC = top of casing (from PSI 2002)

ft bgs = feet below ground surface

feet msl = feet mean sea level



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

#### 3.0 CONCLUSIONS

#### 3.1 Discussion of General Groundwater Quality

During the fourth quarter 2010 monitoring event, following the development of the five sitemonitoring 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 ug/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 ug/l, above the groundwater ESL of 100 ug/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 (Fe3+) to ferrous iron (Fe2+) is occurring in areas with higher petroleum hydrocarbon concentrations.

Denitrification involves the reduction of nitrate (NO3) to nitrite (NO2) and also occurs in reduced groundwater conditions with dissolved oxygen 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 NO3 concentrations are expected on the peripheral portions if denitrifying bacteria are present. During the fourth quarter 2010 monitoring event, concentrations of NO3 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 NO3.

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



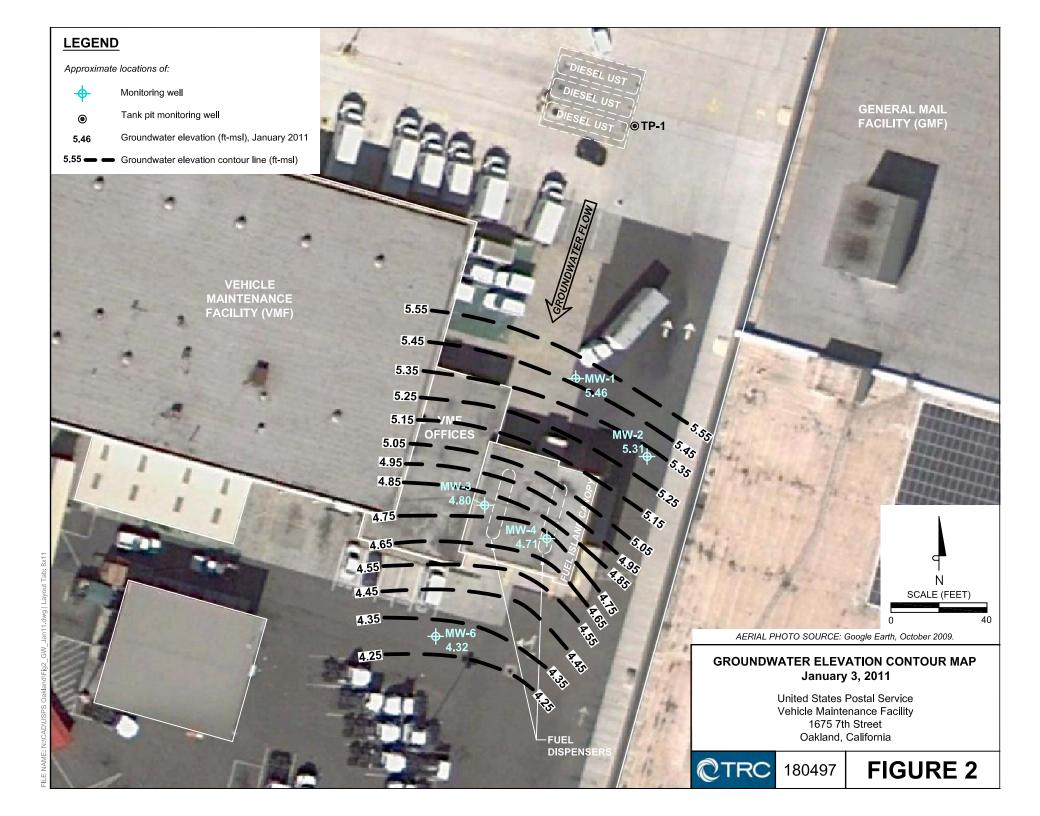
## **VICINITY MAP**

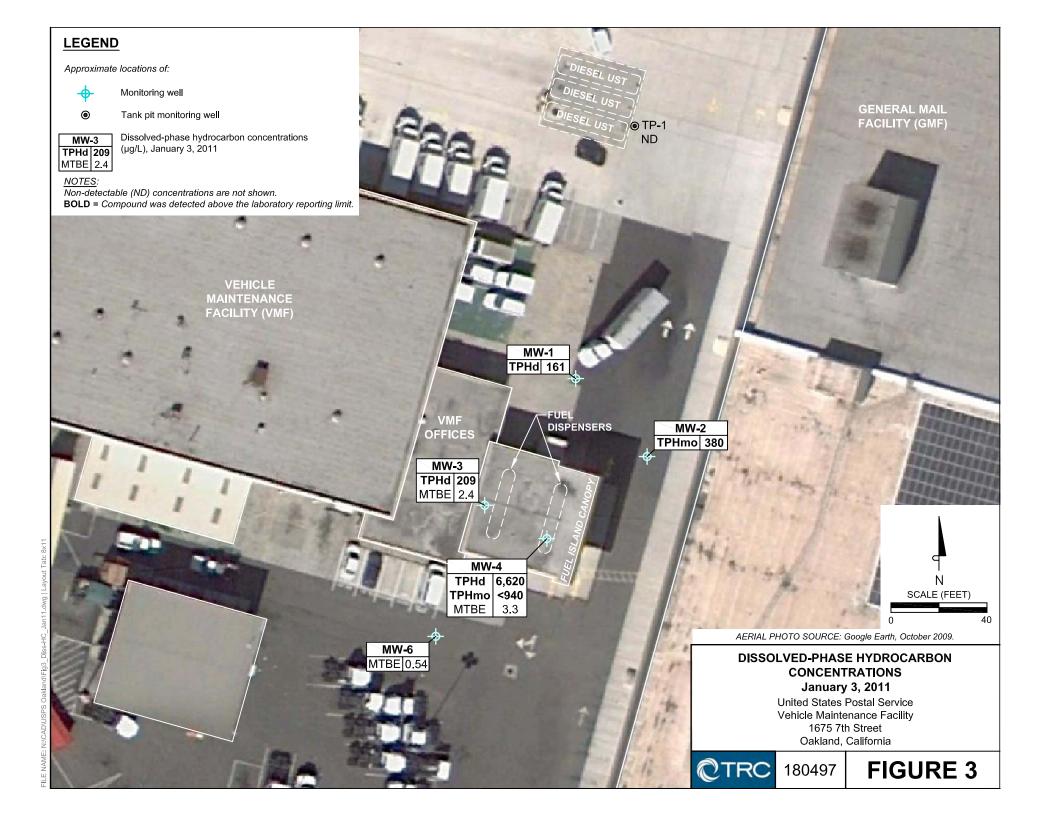
United States Postal Service Vehicle Maintenance Facility 1675 7th Street Oakland, California

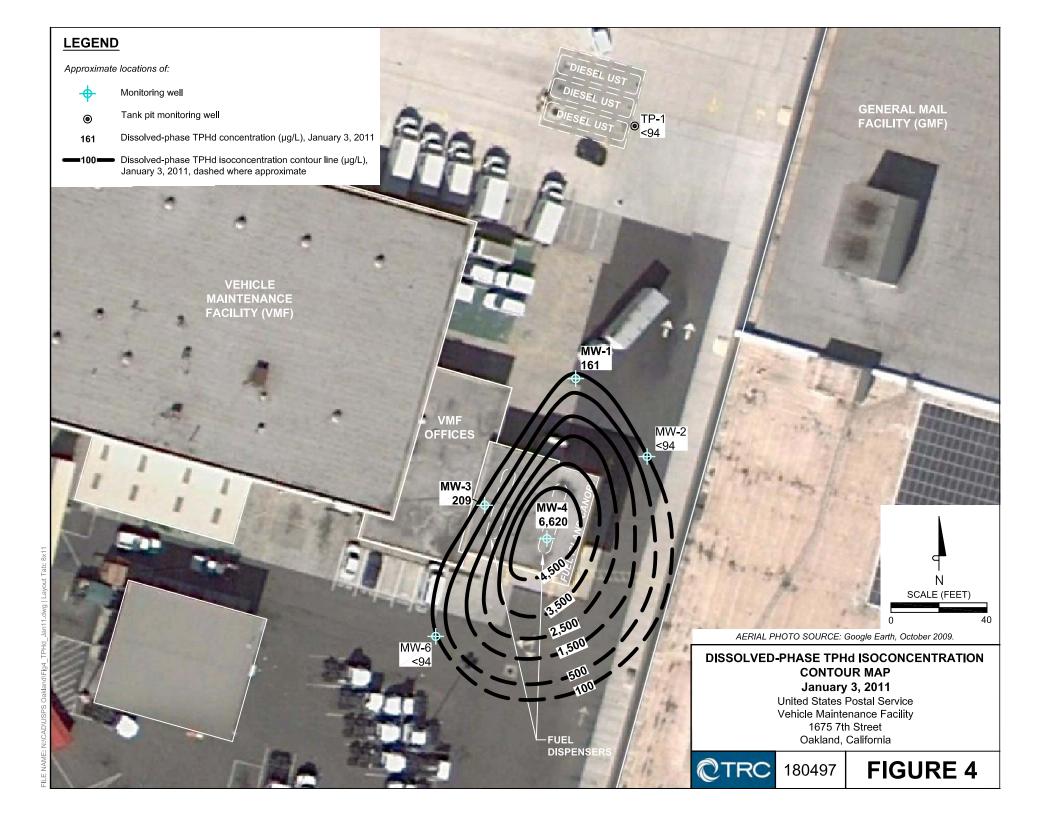


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FIGURE 1







#### APPENDIX A

### HISTORICAL DATA



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

MW-1         9/1/1993         <50	Monitoring Well	Date	TPHg	TPHd	Benzene	Toluene	Ethylbenzene	Xylenes	МТВЕ
MW-1         31/1994         <50         <50         <0.5         <0.5         <0.5         <0.5         NA           MW-1         6/1995         <50	MW-1	9/1/1993	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA
MW-1         61/1994         <50         73         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         NA           MW-1         8/16/1995         <50	MW-1	1/26/1994	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA
MW-1	MW-1	3/1/1994		< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA
MW-1				73				< 0.5	
MW-1         8/16/1995         <50         810         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         NA           MW-1         1/14/1995         <50	MW-1		< 50	600	< 0.5	< 0.5	< 0.5	< 0.5	NA
MW-1         8/16/1995         <50         810         <0.5         <0.5         <0.5         <0.5         <0.5         <0.5         NA           MW-1         1/14/1995         <50	MW-1							< 0.5	
MW-1	MW-1	8/16/1995		810	< 0.5	< 0.5		< 0.5	NA
MW-1				590				< 0.5	NA
MW-1		5/16/1996						NA	
MW-1         6/19/2002         <50         222         <0.5         <0.5         <0.5         <1.0         1.2           MW-1         19/26/2002         <50									NA
MW-1         6/19/2002         <50         222         <0.5         <0.5         <0.5         <1.0         1.2           MW-1         19/26/2002         <50	MW-1		< 500		< 0.5	< 0.5	< 0.5	<1.0	<1.0
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         <1.0         <1.0           MW-1         17/3/2011         <50         161         <190         <1.0         <1.0         <1.0         <2.0           MW-2         9/1/1994         <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         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         3/1/1995         <50         <570         <0.5         <0.5         <0.5         <1.0         NA           MW-2         1/1/1995         <50         <50         <0.5         <0.5         <0.5         <1.0         NA           MW-2         1/1/1999         NA         <50									
MW-1         12/5/2002         <50         261         <0.5         <0.5         <1.0         <1.0         <2.0           MW-1         1/3/2011         <50         161         <190         <1.0         <1.0         <2.0         <2.0           MW-2         1/26/1994         <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         6/1/1994         <50         <50         <0.5         <0.5         <0.5         <1.0         NA           MW-2         6/1/1995         <50         <280         <0.5         <0.5         <0.5         <1.0         NA           MW-2         8/16/1995         <50         <50         <0.5         <0.5         <0.5         <1.0         NA           MW-2         8/16/1995         <50         <50         <0.5         <0.5         <0.5         <1.0         NA           MW-2         11/14/1995         <0.5         <0.5         <0.5         <0.5         <1.0         NA           MW-2         11/15/1996         NA         <50					< 0.5		< 0.5	<1.0	
MW-1         1/3/2011         <50         161         <190         <1.0         <1.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <2.0         <								<1.0	
MW-2         9/1/1993         <50         <50         <0.5         <0.5         <0.5         <1.0         NA           MW-2         1/26/1994         <50	MW-1			161	<190				<2.0
MW-2         1/26/1994         <50         <50         <0.5         <0.5         <0.5         <1.0         NA           MW-2         3/1/1994         <50									
MW-2         3/1/1994         <50         <50         <0.5         <0.5         <0.5         <1.0         NA           MW-2         6/1/1994         <50									
MW-2         6/1/1994         <50         <50         <0.5         <0.5         <0.5         <1.0         NA           MW-2         2/22/1995         <50									
MW-2         2/22/1995         <50         280         <0.5         <0.5         <0.5         <1.0         NA           MW-2         8/16/1995         <50									
MW-2         6/6/1995         <50         570         <0.5         <0.5         <0.5         <1.0         NA           MW-2         8/16/1995         <50									
MW-2         8/16/1995         <50         150         <0.5         <0.5         <0.5         <1.0         NA           MW-2         11/14/1995         <50									
MW-2         11/14/1995         <50         <50         <0.5         <0.5         <1.0         NA           MW-2         5/16/1996         NA         320         NA									
MW-2         5/16/1996         NA         320         NA         NA         NA         NA         NA           MW-2         11/15/1996         NA         <50									
MW-2         11/15/1996         NA         < 50         NA         NA         NA         NA         NA           MW-2         3/11/2002         < 50									
MW-2         3/11/2002         <50         <400         <0.5         <0.5         <0.5         <1.0         <1.0           MW-2         6/19/2002         <50									
MW-2         6/19/2002         <50         <50         <0.5         <0.5         <0.5         <1.0         0.9           MW-2         9/26/2002         <50									
MW-2         9/26/2002         <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         <1.0         <1.0         <1.0         <1.0         <2.0           MW-3         1/3/2011         <50         <94         380         <1.0         <1.0         <1.0         <2.0           MW-3         9/1/1993         <50         <50         <0.5         <0.5         <0.5         <0.5         <0.5         NA           MW-3         1/26/1994         <50         <50         <0.5         <0.5         <0.5         <0.5         <0.5         NA           MW-3         3/1/1994         NS									
MW-2         12/5/2002         <50         80.9         <0.5         <0.5         <1.0         1.4           MW-2         1/3/2011         <50         <94         380         <1.0         <1.0         <2.0           MW-3         9/1/1993         <50									
MW-2         1/3/2011         <50         < 94         380         < 1.0         < 1.0         < 2.0           MW-3         9/1/1993         < 50									
MW-3         9/1/1993         <50         <50         <0.5         <0.5         <0.5         NA           MW-3         1/26/1994         <50									
MW-3         1/26/1994         <50         <50         <0.5         <0.5         <0.5         <0.5         NA           MW-3         3/1/1994         <50									
MW-3         3/1/1994         <50         <50         <0.5         <0.5         <0.5         NA           MW-3         6/1/1994         NS         NS         NS         NS         NS         NS         NS           MW-3         6/6/1995         50         350         <0.5									
MW-3         6/1/1994         NS         NA									
MW-3         2/22/1995         50         350         <0.5         <0.5         <0.5         NA           MW-3         6/6/1995         <50									
MW-3         6/6/1995         <50         380         <0.5         <0.5         <0.5         <0.5         NA           MW-3         8/16/1995         <50									
MW-3         8/16/1995         <50         440         <0.5         <0.5         <0.5         <0.5         NA           MW-3         11/14/1995         <50									
MW-3         11/14/1995         <50         200         0.8         <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									
MW-3         5/16/1996         NA         1,100         NA									
MW-3         11/15/1996         NA         470         NA         MA         MA         NA									
MW-3         3/11/2002         <500         540         <0.5         <0.5         <0.5         <1.0         3.8           MW-3         6/19/2002         <50				,					
MW-3         6/19/2002         <50         407         <0.5         <0.5         <0.5         <1.0         4.9           MW-3         9/26/2002         <50									
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           MW-3         1/3/2011         <50         209         <190         <1.0         <1.0         <2.0           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         NA           MW-4         6/1/1994         <50         260         1.7         <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         6/6/1995         24,000         23,000         <0.5         <0.5         <0.5         NA           MW-4         8/16/1995         2,000         3,400         1.2         <0.5					0.5				
MW-3         12/5/2002         <50         397         <0.5         <0.5         <0.5         <1.0         5.4           MW-3         1/3/2011         <50         209         <190         <1.0         <1.0         <2.0           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         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 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
MW-3         1/3/2011         <50         209         <190         <1.0         <1.0         <2.0           MW-4         9/1/1993         <50									
MW-4         9/1/1993         <50         580         <0.5         <0.5         <0.5         NA           MW-4         1/26/1994         <50									
MW-4         1/26/1994         <50         850         0.8         <0.5         <0.5         <0.5         NA           MW-4         3/1/1994         <50									
MW-4         3/1/1994         <50         <50         <0.5         <0.5         <0.5         NA           MW-4         6/1/1994         <50									
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									
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									
MW-4         6/6/1995         24,000         23,000         <0.5         <0.5         <0.5         NA           MW-4         8/16/1995         2,000         3,400         1.2         <0.5									
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									
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 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	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	МТВЕ
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
MW-4	1/3/2011	< 50	6,620	<940	<1.0	<1.0	<1.0	<2.0
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
MW-5	Well MW-5	abando	ned in Jan	uary 1995	(PSI 2003)	)		
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
MW-6	1/3/2011	< 50	<94	<190	<1.0	<1.0	<1.0	<2.0
TP-1	1/3/2011	< 50	<94	<190	<1.0	<1.0	<1.0	<2.0

< 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** 

Monitorin g 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	6.30	No product	3.64	4.40
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	5.55	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	1	8.92	9.08	-0.20*



Monitorin g 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	(leet msi)	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 Aban	doned Januar	y 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

 $<sup>^{\</sup>ast}\,$  Groundwater elevation corrected for free product.



 $<sup>\</sup>ensuremath{^{**}}$  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<sup>TM</sup> 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.



Project No.:	30497	Date:	1-3-14	
Project Name: US	PS Cakland	Measured By:	UPZ	•
Weather:		Page _		<u>-1</u> 1 a
·				SAMPLIA
	MW-I	(a) Initial Water Level (ft)	33	6.57 598
	MW-1/11/20	(b) Measured Total Depth (t		20.09 20 09
Chain-of-Custody No.:		(c) Height of Water Column	$(\pi) = b - a$	14.11
Measuring Point:		(d) Casing Diameter (in)		10:
Screened Interval (ft):		(e) Casing Volume (gal) = 0		19,25
Development Date/M	lethod/Volume: 12-2	7-10; Sub; 30gal; TD 20	09; DTW: 65	5 <del>7</del>
	WE	LLHEAD CONDITIONS		
Casing: 4"				
Lock: None				
Standing Water:	· · · · · · · · · · · · · · · · · · ·			
Comments/Required Mai	ntenance:	ble new well lid-b	ults do not appe	en on wellaissing)
	1		***:	
INSTRU	MENTS	CALI	BRATION NOTES	3
Water Level:	YS1 556 MPS			
Temperature:	ĺ			
pH:				
Specific Conductance:				
Dissolved Oxygen:				
Redox Potential:	4	<u> </u>		
Turbidity:			<del> </del>	
Salinity:	l .	Į.		

					4400							
Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp.	рН	Specific Cond. (µmhos/ cm)	DO (mg/L)	ORP Redox (mV)	Color	Turbidity	Salinity	Comments
10:41	~18	5.9%	~3	19.06	6.68	3104	4.88	201.9	Itbreu	n		SLL
11:00	218	7.38 5.78	215	18.73	664	2743	4.61	197.3	It brown	n		7505/bail
11:10	-18	3.90	~23_	19.46	6.57	3841	2.13	196.2	Itbreus	ı		P501/1-1
11:20	~18	9.04	~28	19.47	6.58	3848	2.32	194.4	tkar			per/bail
											·	



Project No.: ?	30497		Date:	(-3	-10	
Project Name:	SPS Ogicland VI	MF	Measured By: _	JPZ		
Weather:			Page _	of	*	
Sample Number: Chain-of-Custody No.:	MW-2;12:40	(b) M (c) H	nitial Water Level (ft) Ieasured Total Depth (ft Ieight of Water Column (	) ft) = b – a	18.62/	SAMPU 6.75 /8.62_ 
Measuring Point:	~14 fb55	(d) C	Casing Diameter (in) Casing Volume (gal) = 0.0	141 × c × d²		<del>-</del> 4
	TE:12-27-10; S WEL	LHÉA	55gal; TD=18.6: AD CONDITIONS  ew well lid - no	2; bTW=	7:31	
INSTRU	MENTS		CALIB	RATION NO	TES	
Water Level:	YS1 556 N	1P5				
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.	рН	Specific Cond. (µmhos/ cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Salinity	Comments
1209	14	6.75	7	18.74	6.49	1565	1.35	215.7	Clean			ph.
12:23	14	7.83	14	19.30	6.47	1533	1.09	2088	Clean			per. / bout
1205	14	9.08	23	19.22	647	1547	1.38	205.9	Clean			per /ba)
	. , •											/ /
			•									
		_										



Project No.:	180497	Date:	1-3-14	<i></i>	
Project Name:	SPS Cakland VMF	Measured By:	JPZ		
Weather:		Page	of	1	
	4. 0		1	evelopment	<u> </u>
		tial Water Level (ft)		8.26	7.68
	MW-3:14:30 (b) Me			20.00	20.00
Chain-of-Custody No.:		ight of Water Column (t	(t) = b - a	<u></u>	12.32
Measuring Point:		sing Diameter (in)			4
Screened Interval (ft):	(e) Cas	sing Volume (gal) = 0.0	$41 \times c \times d^2$		8.0
De Ve WPMENT: D	Ate. 12-25-10: SUB:	35 and: TD = 20.0	OC : DTUI= &	:26	
	ATC 12-24-10; SJb; WELLHEAT	CONDITIONS	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Casing: 4"			Take or with the		
Lock: none					
Standing Water: no					
Comments/Required Main	tenance: nal poss	ble new well lock	; remove conc	rete a rouno	Seal
	7	(us	11 had been	paved or	er whole.
INSTRUM	MENTS	CALIB	RATION NOTE:	S	
Water Level:	YS1 556 MPS				
Temperature:	İ				
pH:					
Specific Conductance:					
Dissolved Oxygen:					
Redox Potential:	1				:
Turbidity:					
Salinity:					

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp.	pН	Specific Cond. (µmhos/ cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Salinity	Comments
14:04	18	7.68	8	18.48	6.79	2254	2.59	512.9	Clean			124 i/ba
14:14	18	9.38	16	18.47	6.81	2226	3.15	571.9	Clean			/ /
14:24	18	9.38	24	18,41	6,81	2230	3.34		Clear			
			,									
						1						
									*			
										-		



Project Name: USPS Ockson VMF Measured By:	Project No.:	180497		Date:( /	3/10
Weather:	Project Name: US	PS Oakland	VMF	Measured By:	JPZ
Well Name:  Sample Number:  AW-4  (a) Initial Water Level (ft)  Sample Number:  AW-4  (b) Measured Total Depth (ft)  Chain-of-Custody No.:  Measuring Point:  Screened Interval (ft):  Under (e) Casing Diameter (in)  Casing Volume (gal) = 0.041×c×d²  WELLHEAD CONDITIONS  Casing: 4"  Lock:  Lock:  Aure  Standing Water: no  Comments/Required Maintenance: Well has case for absorbent socks; reads lock possible  Temperature:  pH:  Specific Conductance:  Dissolved Oxygen:  Redox Potential:  Turbidity:		•	<del></del>	Page/	of
Sample Number: Chain-of-Custody No.: Measuring Point: Screened Interval (ft):  We Little AD CONDITIONS  Casing: 4"  Lock:  Comments/Required Maintenance: Well has cage for absorbent scales; reads lock, gostible  Nature Water Level:  Ph: Specific Conductance: Dissolved Oxygen: Redox Potential: Turbidity:  (b) Measured Total Depth (ft)  (c) Height of Water Column (ft) = b - a  (d) Casing Diameter (in)  (e) Casing Volume (gal) = 0.041×c×d²  (ft)  (e) Casing Volume (gal) = 0.041×c×d²  (ft)  (ft)  (ii) Measured Total Depth (ft)  (iii) Height of Water Column (ft) = b - a  (iii) A casing Diameter (in)  (iii) Ca					
Chain-of-Custody No.:  Measuring Point:  Screened Interval (ft):  White (e) Casing Diameter (in)  Well Development:  Casing: 4"  Lock:  None  Standing Water:  Standing Water:  Well has case for absorbent socks; reads lock possible  Natural Indian  Water Level:  PH:  Specific Conductance:  Dissolved Oxygen:  Redox Potential:  Turbidity:					
Measuring Point:  Screened Interval (ft):  Un L (e) Casing Volume (gal) = 0.041×c×d²    Casing: Volume (gal) = 0.041×c×d²   S34   Development: DATE: 12-24-10: Size Dev. Bailen: 30gal; TD = 20.84: DT w = 8.84   WELLHEAD CONDITIONS   Casing: Y"   Lock: New Standing Water: no   Comments/Required Maintenance: Well has case for absorbent scoles; reads lock, possible new well ind.    INSTRUMENTS   CALIBRATION NOTES	Sample Number:	11W-4			
Screened Interval (ft): Unk (e) Casing Volume (gal) = 0.041×c×d²   834  Development: Date: 12-74-10; Star Dev. Bailer; 30gal; TD = 20.84; DTW = 8.84  WELLHEAD CONDITIONS  Casing: U"  Lock: Agree  Standing Water: no  Comments/Required Maintenance: Well has cage for absorbent socks; reads lock gostible  Natural Instruments  Water Level: YS 1 556 MPS  Temperature:  pH:  Specific Conductance:  Dissolved Oxygen:  Redox Potential:  Turbidity:					12.72 & Fr
Development: DATE: 12-24-10: State: 30ga; T0 = 20.84; DTW = 8.84  WELLHEAD CONDITIONS  Casing: 4"  Lock: none Standing Water: no Comments/Required Maintenance: Well has cage for absorbent socks; reads lock, gostible  Note: 100					14
Casing: 4" Lock: None Standing Water: no Comments/Required Maintenance: Well has cage for absorbent socks; reads lock, possible  New well lib.  INSTRUMENTS  Water Level: \( \frac{5}{5} \) \( \frac{6}{5} \) \( \frac{6} \) \( \frac{6}{5} \) \( \frac{6}{5} \) \( \frac{6}{5} \) \( \frac{6}{5} \) \( \fra					
Casing: 4" Lock: None Standing Water: no Comments/Required Maintenance: Well has cage for absorbent socks; reads lock, possible  New well lib.  INSTRUMENTS  Water Level: \( \frac{5}{5} \) \( \frac{6}{5} \) \( \frac{6} \) \( \frac{6}{5} \) \( \frac{6}{5} \) \( \frac{6}{5} \) \( \frac{6}{5} \) \( \fra	Develorment: D.	ATE: 12-24-10	Sobje	Dev. Bailer; 30gal; TD= 2	20.84; DTW=8.84
Lock: none Standing Water: no Comments/Required Maintenance: Well has case for absorbent socks; reads lock possible  INSTRUMENTS  Water Level: \( \frac{1}{2} \) \( \frac{1}{2		WE	LLHEAL	CONDITIONS	
Standing Water: no Comments/Required Maintenance: Well has case for absorbent socks; reads lock possible  INSTRUMENTS  Water Level: YS   556 MPS  Temperature:  pH:  Specific Conductance:  Dissolved Oxygen:  Redox Potential:  Turbidity:	7 7		"-"		
Comments/Required Maintenance: Well has cage for absorbent socks; reads lock possible new well lib.  INSTRUMENTS CALIBRATION NOTES  Water Level: \( \frac{1}{5} \) \( \frac{5}{5} \) \( \frac{6}{5} \) \( \frac{1}{5} \) \( \frac{1}					
INSTRUMENTS  Water Level: \( \frac{\fir}{\frac{\fir}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\	Comments / Degrined Mai	ntananası ///a//	6	a Garage + sales.	needs lock on wible
INSTRUMENTS  Water Level: \( \frac{\fir}{\frac{\fir}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\	Comments/Required Man	menance: vveij i	11 150	1)	- Cos 1002/1905/11/06
Water Level: YS 1 556 MPS  Temperature: pH: Specific Conductance: Dissolved Oxygen: Redox Potential: Turbidity:			211 112		
Temperature:  pH: Specific Conductance: Dissolved Oxygen: Redox Potential: Turbidity:	INSTRU.			CALIBRATION N	OTES
pH: Specific Conductance: Dissolved Oxygen: Redox Potential: Turbidity:	Water Level:	YS1 556	MPS		
Specific Conductance:  Dissolved Oxygen:  Redox Potential:  Turbidity:					
Dissolved Oxygen:  Redox Potential:  Turbidity:	pH:				
Redox Potential: Turbidity:	Specific Conductance:				
Turbidity:					
		<u> </u>			
Salinity	Turbidity:				
Danney	Salinity:				

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp.	рН	Specific Cond. (µmhos/ cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Salinity	Comments
15:18	1124	8.12	2	18.50	6.65	1582	0.44	-73.1	Clear	Whitesky	bllar -	Shewit F.
	14	8,12	5	18.51			0.30	-81.9	1	- Yellowi	L-SL	een +Fr
	14	8.12	8	18.56	t .	1586	0,28	-97.2	dear	Yellow's	4-82	en
	14	8.12	- 12	18.61	6.68	1585	0.24	-978	Clean	Yelkuis	1-52	en
	14	8.12	16			1587	0.22	-98.2	Clean	Yellew	34-5	Leen
	,		•									
												,
	<del></del>											



	Project No.:	180497		Date:		3-16	
		SPS Ogkland VI	NF	Measured By:		JPZ	_
	Weather:		<u> </u>	Page	\	of	
		_				DEV	SAMPLIN
	Well Name:	<u> 11W-6</u>	(a) Init	ial Water Level (ft)_		8.19	17.6/
	Sample Number:	MW-61330	(b) Mea	asured Total Depth (1	ft)	19.47	12.45
	Chain-of-Custody No.:		(c) Heig	ght of Water Column	(ft) = b - a		(1.57
	Measuring Point:			ing Diameter (in)			2
	Screened Interval (ft):			ing Volume (gal) = o			194
	Deveropment:	DATE: 12-27-16	SI	6;25aal; TD:	= 19.47; D	TW= 8.19	
		WELL	HEAD	CONDITIONS			
	Casing: 2"						
	Lock: none						
	Standing Water: None						
	Comments/Required Mai	ntenance: Deteriore	ted 1	vell cap-repla	ced; need	well lock	
				• •	·		
1	INSTRU	MENTS		CALI	BRATION N	OTES	
	Water Level:	451556 Mi	25				
	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.	pН	Specific Cond. (µmhos/ cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Salinity	Comments
13:12	18.00	7.61	2	20,55	6.60	((1)	2.48	562.8	Clean			
13:19	18	7.61	4	20.84		•	2.54	593.0	Clea	`		
13:16	(8	7.61	6	20.87	6.60	1110	2.19	597.7	Clean			
		-										
										·		
										and the		



Project No.: 180497		Date:	1/3/	14	_
Project Name: USPS Oakland	VMP	Measured By:	<u>JŶ</u>	₹	
Weather: Clean, Cool vs		Page	<u> </u>	De V	T SAMPLIN
Well Name: TP-1 Sample Number TP-1:10 Chain-of-Custody No.: Measuring Point: -9 fbg s Screened Interval (ft): (0-10-41)	(b) Measured (c) Height of (d) Casing D (e) Casing Vo	olume (gal) = 0.04	$41 \times c \times d^2$	4.76	10,41 6,20 6,20 9,95
Devenopment: DATE: 12-27	1-10; Sub; 25 ELLHEAD CON	gal; TD= 10 DITIONS	1.31/ DTW	1= 4.76	
Lock: none					
Standing Water: hove	1				
Comments/Required Maintenance: (	leckeding on i	North Sine of	F WellCasi	<u>~g)</u>	
INSTRUMENTS		CALIBI	RATION NO	TES	
Water Level: YSI 556 MP	5				
Temperature:				···········	
pH:					
Specific Conductance:					
Dissolved Oxygen:				<del> </del>	
Redox Potential:				o mercija.	
Turbidity: Salinity:					
Sammy,					

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp.	pН	Specific Cond. (µmhos/ cm)	DO (mg/L)	Redox (mV) (ORF)	Color	Turbidity	Salinity	Comments
0925	~ 9	4.21	~3	16.86	797	178	4.52	179.7	Clean	,		
0938	29	4.21	~6	16.85	7.47	178	4.34	177.2	Clean			
0949	29	4.21	29	16.89	7.95	178	4.19	176.0	clean			
	(1)						۰۰					
							-					
						,						
									3			

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



# **DRUM INVENTORY FIELD SHEET**

PROJECT NUMBER:	180497	DATE:	1/3/14
SITE NAME:	USPS Oakle	and UMF	
ADDRESS:	1675 7th St.	reet, Oakla	and, CA
CROSS STREET:	Wood Sta	eet	1
ACTIVE STATION		N	
# DRUMS EMPTY:	5	# DRUMS FUL	L: <u>5</u> +
DRUMS LABELED:	(Y)	N	
TOTAL GALLONS GENERATED:	a 250 gallons		
	bucket contain from well MW		fre product
	SAMPLER:	JP2	



Environmental Instruments Leasing Company

## Calibration & Components Checklist YSI Model 556

Instrument ID,# 686	pH, conductivity, D.O., ORP, Temperature
	Components
Date Out: 12 29 10	Date In:
Meter: Probe: Batteries: Carrying strap:	Meter Probe Batterie Carrying strap
Manual:	Manual Case
Calibration beaker: Flow thru cell: Terms & Conditions:	Calibration beakerFlow thru cellTerms & Conditions
Cali	bration Solution Used
4.01 Buffer pH: 7.01 Buffer pH: 10.01 Buffer pH: 1413 mS/cm cond.	Meter Response   Mete
Temp. D.O. ORP Barometer pressure	6   Meter Response   98   Meter Response   280   Meter Response   760   Meter Response
Inspected & Tested By:	1911/10 Date: 12(29)10
Note: This unit has been tested	and is in proper working condition. This unit has been

**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.





01/11/11



## **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

nelac 1

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.

Client Service contact: Simon Hague 408-588-0200

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

 $This \ report \ shall \ not \ be \ reproduced, \ except \ in \ its \ entirety, \ without \ the \ written \ approval \ of \ Accutest \ Laboratories.$ 

Test results relate only to samples analyzed.



Laurie Glantz-Murphy

**Laboratory Director** 

## **Sections:**

# **Table of Contents**

-1-

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



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# **Sample Summary**

TRC - SF

Job No: C14015

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

Sample Number	Collected Date	Time By	Received	Matr Code		Client Sample ID
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	



Page 1 of 3

Client Sample ID: TP-1

 Lab Sample ID:
 C14015-1
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8260B
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

	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
D 1/2							

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



Page 2 of 3

Client Sample ID: TP-1 Lab Sample ID: C14015-1 **Date Sampled:** 01/03/11 Matrix: AQ - Ground Water **Date Received:** 01/03/11 Method: Percent Solids: n/a SW846 8260B **Project:** 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.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	Lim	its	
1060 52 7	D'1 (1 .1	1000/		c0 1	200/	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value

102%

RL = Reporting Limit

1868-53-7

E = Indicates value exceeds calibration range

Dibromofluoromethane

60-130%



Page 3 of 3

 Client Sample ID:
 TP-1

 Lab Sample ID:
 C14015-1
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8260B
 Percent Solids:
 n/a

 Project:
 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 J = Indicates an estimated value

RL = Reporting Limit B = Indicates analyte found in associated method blank



Page 1 of 3

Client Sample ID: TP-1 Lab Sample ID: C1401

 Lab Sample ID:
 C14015-1
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

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

Run #2

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



Page 2 of 3

 Client Sample ID:
 TP-1

 Lab Sample ID:
 C14015-1
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 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



Page 3 of 3

 Client Sample ID:
 TP-1

 Lab Sample ID:
 C14015-1
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

### **ABN Full List**

CAS No.	<b>Surrogate Recoveries</b>	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 J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 1 of 1

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

	File ID	DF	Analyzed	$\mathbf{B}\mathbf{y}$	<b>Prep Date</b>	Prep Batch	<b>Analytical Batch</b>
Run #1	GG20699.D	1	01/05/11	JH	01/05/11	OP3281	GGG589
Run #2							

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

Run #2

#### **TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel) TPH (Motor Oil)	ND ND	0.094 0.19	0.047 0.094	mg/l mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
630-01-3	Hexacosane	87%		45-1	40%	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range



Page 1 of 1

Client Sample ID: TP-1

Lab Sample ID:C14015-1Date Sampled:01/03/11Matrix:AQ - Ground WaterDate Received:01/03/11Percent Solids:n/a

**Project:** 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

Page 1 of 3

Client Sample ID: MW-1

 Lab Sample ID:
 C14015-2
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8260B
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	<b>Analytical Batch</b>
Run #1	L4147.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



Client Sample ID: MW-1 Lab Sample ID: C14015-2 **Date Sampled:** 01/03/11 **Date Received:** 01/03/11 Matrix: AQ - Ground Water Method: Percent Solids: n/a SW846 8260B **Project:** 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.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	103%		60-13	30%	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 3 of 3

## **Report of Analysis**

Client Sample ID: MW-1

Lab Sample ID: C14015-2 **Date Sampled:** 01/03/11 Matrix: **Date Received:** 01/03/11 AQ - Ground Water Method: SW846 8260B Percent Solids: n/a **Project:** 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



Page 1 of 3

Client Sample ID: MW-1

 Lab Sample ID:
 C14015-2
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

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

Run #2

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



Page 2 of 3

 Client Sample ID:
 MW-1

 Lab Sample ID:
 C14015-2
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 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



Page 3 of 3

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

### **ABN Full List**

CAS No.	<b>Surrogate Recoveries</b>	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 J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range



# N

## **Report of Analysis**

Page 1 of 1

Client Sample ID: MW-1 Lab Sample ID: C14015-

 Lab Sample ID:
 C14015-2
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8015B M SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

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

Run #2

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> TPH (Motor Oil)	0.161 ND	0.094 0.19	0.047 0.094	mg/l mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
630-01-3	Hexacosane	86%		45-1	40%	

(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



Page 1 of 1

Client Sample ID: MW-1

Lab Sample ID:C14015-2Date Sampled:01/03/11Matrix:AQ - Ground WaterDate Received:01/03/11Percent Solids:n/a

**Project:** 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

Page 1 of 3

Client Sample ID: MW-2

 Lab Sample ID:
 C14015-3
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8260B
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

	File ID	DF	Analyzed	$\mathbf{B}\mathbf{y}$	Prep Date	Prep Batch	<b>Analytical Batch</b>
Run #1	L4148.D	1	01/05/11	TF	n/a	n/a	VL139
D 42							

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



Client Sample ID: MW-2 Lab Sample ID:

C14015-3 **Date Sampled:** 01/03/11 Matrix: AQ - Ground Water **Date Received:** 01/03/11 Method: Percent Solids: n/a SW846 8260B **Project:** 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.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	Lim	Limits	
1060 52 7	D'1 d 4	1020/		c0 1	200/	

ND = Not detected MDL - Method Detection Limit

103%

RL = Reporting Limit

1868-53-7

E = Indicates value exceeds calibration range

Dibromofluoromethane

J = Indicates an estimated value

60-130%



Page 3 of 3

Client Sample ID: MW-2 Lab Sample ID: C14015-3 **Date Sampled:** 01/03/11 Matrix: **Date Received:** 01/03/11 AQ - Ground Water Method: SW846 8260B Percent Solids: n/a **Project:** 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



Page 1 of 3

Client Sample ID: MW-2

 Lab Sample ID:
 C14015-3
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

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

Run #2

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



 Client Sample ID:
 MW-2

 Lab Sample ID:
 C14015-3
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 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



Page 3 of 3

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

### **ABN Full List**

CAS No.	<b>Surrogate Recoveries</b>	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 J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range



Page 1 of 1

Client Sample ID: MW-2

 Lab Sample ID:
 C14015-3
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8015B M SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

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

Run #2

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) TPH (Motor Oil)	ND 0.380	0.094 0.19	0.047 0.094	mg/l mg/l	
CAS No.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	Lim	its	
630-01-3	Hexacosane	71%		45-1	40%	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 1 of 1

Client Sample ID: MW-2

Lab Sample ID:C14015-3Date Sampled:01/03/11Matrix:AQ - Ground WaterDate Received:01/03/11Percent Solids:n/a

**Project:** 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

Page 1 of 3

Client Sample ID: MW-6

 Lab Sample ID:
 C14015-4
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8260B
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

	File ID	DF	Analyzed	By	Prep Date	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	L4149.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 J = Indicates and MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 2 of 3

**Client Sample ID:** MW-6

Lab Sample ID: C14015-4 **Date Sampled:** 01/03/11 Matrix: AQ - Ground Water **Date Received:** 01/03/11 Method: Percent Solids: n/a SW846 8260B **Project:** 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.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	Limits		
1060 52 7	D'1 (1 4	1020/		c0 1/	200/	

ND = Not detected MDL - Method Detection Limit

103%

RL = Reporting Limit

1868-53-7

E = Indicates value exceeds calibration range

Dibromofluoromethane

J = Indicates an estimated value

60-130%



Page 3 of 3

**Client Sample ID:** MW-6 Lab Sample ID: C14015-4 **Date Sampled:** 01/03/11 Matrix: **Date Received:** 01/03/11 AQ - Ground Water Method: SW846 8260B Percent Solids: n/a **Project:** 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 J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range



Page 1 of 3

Client Sample ID: MW-6

 Lab Sample ID:
 C14015-4
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

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

Run #2

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



Page 2 of 3

 Client Sample ID:
 MW-6

 Lab Sample ID:
 C14015-4
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 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



Page 3 of 3

**Client Sample ID:** MW-6 Lab Sample ID: C14015-4 **Date Sampled:** 01/03/11 Matrix: **Date Received:** 01/03/11 AQ - Ground Water SW846 8270C SW846 3510C Method: Percent Solids: n/a **Project:** 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 J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range



# N

## **Report of Analysis**

Page 1 of 1

 Client Sample ID:
 MW-6

 Lab Sample ID:
 C14015-4
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8015B M
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

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

Run #1 1060 ml Final Volume
1.0 ml

Run #2

#### **TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel) TPH (Motor Oil)	ND ND	0.094 0.19	0.047 0.094	mg/l mg/l	
CAS No.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	£ 2 Limits		
630-01-3	Hexacosane	77%		45-1	40%	

ND = Not detected MDL - Method Detection Limit J = Indicat

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 1 of 1

Client Sample ID: MW-6

Lab Sample ID:C14015-4Date Sampled:01/03/11Matrix:AQ - Ground WaterDate Received:01/03/11Percent Solids:n/a

**Project:** 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

Page 1 of 3

VL139

n/a

Client Sample ID: MW-3

 Lab Sample ID:
 C14015-5
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8260B
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

01/05/11

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch

TF

n/a

Run #1 Run #2

**Purge Volume** 

1

L4150.D

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 - M

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 2 of 3

**Client Sample ID:** MW-3

Lab Sample ID: C14015-5 **Date Sampled:** 01/03/11 Matrix: AQ - Ground Water **Date Received:** 01/03/11 Method: Percent Solids: n/a SW846 8260B **Project:** 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.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	Limi	Limits	
1060 52 7	D'1 (1 4	1050/		co 1/	200/	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value

105%

RL = Reporting Limit

1868-53-7

E = Indicates value exceeds calibration range

Dibromofluoromethane

60-130%



Page 3 of 3

**Client Sample ID:** MW-3 Lab Sample ID: C14015-5 **Date Sampled:** 01/03/11 Matrix: **Date Received:** 01/03/11 AQ - Ground Water Method: SW846 8260B Percent Solids: n/a

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

### **VOA 8260 List**

**Project:** 

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 J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range



Page 1 of 3

Client Sample ID: MW-3

 Lab Sample ID:
 C14015-5
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

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

Run #2

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



Page 2 of 3

 Client Sample ID:
 MW-3

 Lab Sample ID:
 C14015-5
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 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



Page 3 of 3

 Client Sample ID:
 MW-3

 Lab Sample ID:
 C14015-5
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

### **ABN Full List**

CAS No.	<b>Surrogate Recoveries</b>	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).

ND = Not detected MDL - Method Detection Limit J =

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



# 2

# **Report of Analysis**

Page 1 of 1

Client Sample ID: MW-3

 Lab Sample ID:
 C14015-5
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8015B M SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

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

**Initial Volume** Final Volume 1060 ml 1.0 ml

Run #1 Run #2

#### **TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel) <sup>a</sup> TPH (Motor Oil)	0.209 ND	0.094 0.19	0.047 0.094	mg/l mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	its	
630-01-3	Hexacosane	89%		45-14	40%	

(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



# Page 1 of 1

# Report of Analysis

Client Sample ID: MW-3

Lab Sample ID:C14015-5Date Sampled:01/03/11Matrix:AQ - Ground WaterDate Received:01/03/11Percent Solids:n/a

**Project:** 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

Page 1 of 3

Client Sample ID: MW-4

 Lab Sample ID:
 C14015-6
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8260B
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

	File ID	DF	Analyzed	By	Prep Date	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 a	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



Page 2 of 3

Client Sample ID: MW-4

Lab Sample ID: C14015-6 **Date Sampled:** 01/03/11 Matrix: AQ - Ground Water **Date Received:** 01/03/11 Method: Percent Solids: n/a SW846 8260B **Project:** 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.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	Limits		

ND = Not detected MDL - Method Detection Limit

104%

RL = Reporting Limit

1868-53-7

E = Indicates value exceeds calibration range

Dibromofluoromethane

J = Indicates an estimated value

60-130%



Page 3 of 3

Client Sample ID: MW-4 Lab Sample ID: C14015-6 **Date Sampled:** 01/03/11 **Date Received:** 01/03/11 Matrix: AQ - Ground Water Method: SW846 8260B Percent Solids: n/a **Project:** 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



Page 1 of 3

Client Sample ID: MW-4

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

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

Run #2

**Final Volume Initial 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 J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range



Page 2 of 3

 Client Sample ID:
 MW-4

 Lab Sample ID:
 C14015-6
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 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



 Client Sample ID:
 MW-4

 Lab Sample ID:
 C14015-6
 Date Sampled:
 01/03/11

 Matrix:
 AQ - Ground Water
 Date Received:
 01/03/11

 Method:
 SW846 8270C
 SW846 3510C
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

### **ABN Full List**

CAS No.	<b>Surrogate Recoveries</b>	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% b		25-100%
321-60-8	2-Fluorobiphenyl	157% b		25-106%
1718-51-0	Terphenyl-d14	210% b		35-130%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit J

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 1 of 1

Client Sample ID: MW-4 Lab Sample ID: C14015-6

**Date Sampled:** 01/03/11 **Date Received:** 01/03/11 Matrix: AQ - Ground Water Method: SW846 8015B M SW846 3510C Percent Solids: n/a **Project:** T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

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

Run #2

**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) TPH (Motor Oil)	6.62 ND	0.47 0.94	0.24 0.47	mg/l mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
630-01-3	Hexacosane	85%		45-1	40%	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 1 of 1

Client Sample ID: MW-4

Lab Sample ID:C14015-6Date Sampled:01/03/11Matrix:AQ - Ground WaterDate Received:01/03/11Percent Solids:n/a

**Project:** 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

Page 1 of 3

**Client Sample ID:** TRIP BLANKS

 Lab Sample ID:
 C14015-7
 Date Sampled:
 12/28/10

 Matrix:
 AQ - Trip Blank Water
 Date Received:
 01/03/11

 Method:
 SW846 8260B
 Percent Solids:
 n/a

 Project:
 T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	<b>Analytical Batch</b>
Run #1	L4145.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



Page 2 of 3

Client Sample ID: TRIP BLANKS

Lab Sample ID: C14015-7 **Date Sampled:** 12/28/10 Matrix: AQ - Trip Blank Water **Date Received:** 01/03/11 Method: Percent Solids: n/a SW846 8260B **Project:** 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.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	Limi	Limits				
1868-53-7	Dibromofluoromethane	101%	60-130%						

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range



Page 3 of 3

Client Sample ID: TRIP BLANKS

Lab Sample ID: C14015-7 **Date Sampled:** 12/28/10 Matrix: **Date Received:** 01/03/11 AQ - Trip Blank Water Method: Percent Solids: n/a SW846 8260B **Project:** 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 J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range





Misc. Forms
Custody Documents and Other Forms
Includes the following where applicable:

• Chain of Custody



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[	Client / Reporting Information			Proj	ect Info		200	NU:	017	U		1	3	_			41946	Reque	sted An	nalysis	1.75 (1.5	6 % N. (18)		Matrix Codes
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Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	Đ 3	HNO3	H2SO4	NONE	MEOH	NCORE /		7	100	7	3	17						LAB USE ONLY
-1	T6-1	1-3-10		JPZ	GW	9	3	1		-	2	$\top$	1	7	7	X	X	X						
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C14015: Chain of Custody Page 1 of 2





4015:
Chain
of
Custody

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# Sample Receiving Checklist

Job# C14015

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
AWas 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
ø Bill to info is complete and legible, including: ▼PO# □ Credit card □ contact □ address □ phone □ email
✓ Contact and/or Project Mgr identified, including;
☐ Project name / number □ Special requirements? (es) / 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? Tes/ No circle one
p/ TAT requested available? Approved by PM
Review Coolers: 3 coolers Recvid.
☑ Samples / Coolers are at 0-6°C? If sampled within 4hrs, then "on ice" is acceptable.
If a cooler is outside the $0-6^{\circ}$ 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, 6270) and (OA) and list below.
VOAs received without headspace? (Yes) / No circle one
<del>-</del>

	•	_	
Lab#	Client Sample ID	pH Check:	Other Comments / Issues
			3 vials each (olter) (xb)
			125ml Amber wsepta NIP each
			250ml pay each NP
			4 y luit Amber each NP V
			* TBs added as per Jacob. Z. @TRC (FP)
			mw-4 (Shong Cheen noticed (F) 0/03/11
			conter (41) 5.2 - 0.2 = 5.0°C
			#2 1.4+0.4 =1.8°C #3 2.7+0.4 =3.1°C
			#3) 2.7+0.4 = 3.1°C
			V .
			· · · · · · · · · · · · · · · · · · ·

<sup>□</sup> Client informed of irregularities at receiving Comments:

<sup>□</sup> Project Mgr needs to contact Client for issues

<sup>:</sup>T:\Laboratory\Forms\SampleControl\Form\_SampleReceiving\_2008-04-12.doc



# GC/MS Volatiles

QC Data Summaries

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:

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

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

Sample VL139-MB	<b>File ID</b> L4139.D	<b>DF</b> 1	<b>Analyzed</b> 01/05/11	<b>By</b> TF	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VL139	
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### The QC reported here applies to the following samples:

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:

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



# Blank Spike Summary Job Number: C14015

TRCCAO TRC - SF Account:

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

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

### The QC reported here applies to the following samples:

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
	TPH-GRO (C6-C10)	125	126	101	60-130
CAS No.	<b>Surrogate Recoveries</b>	BSP	Lim	its	
1868-53-7	Dibromofluoromethane	101%	60-1	30%	
2037-26-5	Toluene-D8	101%		30%	
460-00-4	4-Bromofluorobenzene	103%	60-1	30%	



# 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	<b>Analytical Batch</b>
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:

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

# Blank Spike/Blank Spike Duplicate Summary

Job Number: C14015

TRCCAO TRC - SF Account:

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

File ID	DF	Analyzed	By	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
L4142.D	1	01/05/11	TF	n/a	n/a	VL139
L4143.D	1	01/05/11	TF	n/a	n/a	VL139
	L4142.D	L4142.D 1	L4142.D 1 01/05/11	L4142.D 1 01/05/11 TF	L4142.D 1 01/05/11 TF n/a	L4142.D 1 01/05/11 TF n/a n/a

The QC reported here applies to the following samples:

		Spike	BSP	BSP	BSD	BSD		Limits
CAS No.	Compound	ug/l	ug/l	%	ug/l	<b>%</b>	RPD	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%



# Blank Spike/Blank Spike Duplicate Summary Job Number: C14015

TRCCAO TRC - SF Account:

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

Sample	File ID	DF	Analyzed	Ву	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:

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

# 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	Ву	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:

ND	CAS No.	Compound	C14015- ug/l	.5 Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
T1-43-2   Benzene   ND   20   20.5   103   20.5   103   0   60-130/25	67-64-1	Acetone	ND		80	74.8	94	722	90	4	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   75-27-2   Bromoform   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   75-25-2   Bromoform   ND   20   20.4   102   20.0   100   2   60-130/25   104-51-8   n-Butylbenzene   ND   20   20.0   100   20.0   100   0   60-130/25   88-8-8   sec-Butylbenzene   ND   20   20.0   100   20.0   100   0   60-130/25   88-06-6   tert-Butylbenzene   ND   20   20.0   100   20.0   100   0   60-130/25   88-06-3   Chlorobenzene   ND   20   20.0   100   20.0   100   0   60-130/25   75-00-3   Chlorobenzene   ND   20   20.0   100   21.1   106   5   60-130/25   75-60-3   Chlorotoluene   ND   20   21.3   107   21.0   105   1   60-130/25   106-43-4   p-Chlorotoluene   ND   20   21.1   106   20.7   104   2   60-130/25   75-34-3   1,1-Dichlorobentane   ND   20   20.3   102   20.2   101   0   60-130/25   75-34-3   1,1-Dichlorobentane   ND   20   21.7   109   21.5   108   1   60-130/25   75-35-4   1,1-Dichloroptopene   ND   20   20.3   102   20.2   101   0   60-130/25   75-35-4   1,1-Dichloroptopene   ND   20   20.7   100   20.0   100   60-130/25   75-35-4   1,1-Dichloroptopene   ND   20   20.7   100   20.0   100   60-130/25   75-36-3   1,1-Dichloroptopene   ND   20   20.7   100   20.0   100   60-130/25   75-36-3   1,1-Dichloroptopene   ND   20   20.7   100   20.2   101   0   60-130/25   78-87-5   1,2-Dichlorobentane   ND   20   20.0   100   18.4   92   8   60-130/25   78-87-5   1,2-Dichloroptopane   ND   20   20.0   100   18.4   92   8   60-130/25   78-87-5   1,2-Dichloroptopane   ND   20   20.0   100   18.4   92   8   60-130/25   78-87-5   1,2-Dichloroptopane   ND   20   20.0   100   18.4   92   8   60-130/25   78-87-5   1,2-Dichloroptopane   ND   20   20.0   100   18.4   92   8   60-130/25   78-87-5   1,2-Dichloroptopane   ND   20   20.0   100   100   100   100   100   100   100   100/25   100-101-5   c											
74-97-5         Bromochloromethane         ND         20         22.9         115         22.4         112         2         60-130/25           75-27-4         Bromoform         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           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         Chlorotoluene         ND         20         20.0         100         21.1         106         1         60-130/25           56-46-3         Chlorotoluene         ND         20         21.3         107         21.0         105         1         60-130/25           56-35-5         Carbon tetrachlo											
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           75-03-3         Chlorotehane         ND         20         20.0         105         21.1         106         5         60-130/25           75-03-3         Chlorotoluene         ND         20         21.3         107         21.0         105         1         60-130/25           95-49-8         o-Chlorotoluene         ND         20         21.3         107         21.0         105         1         60-130/25           56-23-5         Carbon tet											
T5-25-2   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   108-90-7   Chlorobenzene   ND   20   20.0   100   21.1   106   5   60-130/25   106-63   Chloroform   ND   20   21.3   107   21.0   105   1   60-130/25   106-43-4   p-Chlorotoluene   ND   20   21.1   106   20.7   104   2   60-130/25   106-43-4   p-Chlorotoluene   ND   20   20.3   102   20.2   101   0   60-130/25   106-43-4   1,1-Dichloroethane   ND   20   20.3   102   20.2   101   0   60-130/25   105-35-4   1,1-Dichloroethylene   ND   20   21.7   109   21.5   108   1   60-130/25   106-38-6   1,1-Dichloroethylene   ND   20   20.3   102   20.2   101   0   60-130/25   106-93-4   1,2-Dibromo-3-chloropropane   ND   20   20.0   100   18.4   92   8   60-130/25   107-06-2   1,2-Dichloroethane   ND   20   21.2   106   21.2   106   0   60-130/25   107-06-2   1,2-Dichloropropane   ND   20   22.3   112   22.2   111   0   60-130/25   108-20-3   Di-Isopropyl ether   ND   20   20.6   103   20.3   102   1   60-130/25   108-20-3   Di-Isopropyl ether   ND   20   20.6   103   20.3   102   1   60-130/25   124-48-1   Dibromochloromethane   ND   20   22.6   113   22.0   110   3   60-130/25   124-48-1   Dibromochloromethane   ND   20   20.6   103   20.5   103   1   60-130/25   156-59-2   cis-1,2-Dichloropropane   ND   20   21.6   108   21.4   107   1   60-130/25   156-60-5   trans-1,3-Dichloropropene   ND   20   20.6   103   20.5   103   0   60-130/25   156-60-5   trans-1,3-Dichloropropene   ND   20   20.6   103   20.5   103   0   60-130/25   156-60-5   trans-1,3-Dichloropropene   ND   20   20.6   103   20.4   102   1   60-130/25   106-01-5   trans-1,3-Dichloropropene   ND   20   20.6   103   20.4   102   1   60-130/25   106-01-5   trans-1,3-Dichloropropene   ND   20   20.6   103   20.4   102   1   60-130/25   106-10-											
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   20.0   100   21.1   106   1   60-130/25   575-00-3   Chloroform   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   21.7   109   21.5   108   1   60-130/25   75-34-3   1,1-Dichloroethane   ND   20   20.3   102   20.2   101   0   60-130/25   563-58-6   1,1-Dichloropropene   ND   20   20.3   102   20.2   101   0   60-130/25   563-58-6   1,2-Dibromo-3-chloropropane   ND   20   20.0   100   18.4   92   8   60-130/25   106-93-4   1,2-Dibromo-3-chloropropane   ND   20   21.1   102   20.9   101   0   60-130/25   107-06-2   1,2-Dichloroethane   ND   20   21.1   102   20.9   101   1   60-130/25   108-20-3   Di-Isopropyl ether   ND   20   22.3   112   22.2   111   0   60-130/25   108-20-3   Di-Isopropyl ether   ND   20   20.6   103   20.3   102   1   60-130/25   108-20-3   Di-Isopropyl ether   ND   20   20.6   103   20.3   102   1   60-130/25   124-48-1   Dibromochloromethane   ND   20   22.6   113   22.0   110   3   60-130/25   156-59-2   cis-1,2-Dichloropropane   ND   20   22.6   113   22.0   110   3   60-130/25   156-60-5   trans-1,3-Dichloropropene   ND   20   21.2   106   21.0   105   1   60-130/25   156-60-5   trans-1,3-Dichloropropene   ND   20   20.6   103   20.5   103   0   60-130/25   156-60-5   trans-1,3-Dichloropropene   ND   20   20.6   103   20.5   103   0   60-130/25   156-60-5   trans-1,3-Dichloropropene   ND   20   20.6   103   20.5   103   0   60-130/25   156-60-5   trans-1,3-Dichloropropene   ND   20   20.6   103   20.5   103   0   60-130/25   156-60-5   trans-1,3-Dichloropropene   ND   20   20.6   103   20.4   102   1   60-130/2											
98-06-6         tert-Burylbenzene         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         Chloroform         ND         20         20.0         100         21.1         106         5         60-130/25           67-66-3         Chlorotoluene         ND         20         21.1         106         20.7         104         2         60-130/25           95-49-8         o-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           75-35-4         1,1-Dichloroethylene         ND         20         21.7         109         21.5         108         1         60-130/25           563-58-6         1,1-Dichloroethylene         ND         20         20.3         102         20.2         101         0         60-130/25           106-93-4         <											
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   106-43-4   p-Chlorotoluene   ND   20   21.1   106   20.7   104   2   60-130/25   106-43-4   p-Chlorotoluene   ND   20   20.3   102   20.2   101   0   60-130/25   56-23-5   Carbon tetrachloride   ND   20   21.7   109   21.5   108   1   60-130/25   75-34-3   1,1-Dichloroethane   ND   20   20.3   102   20.2   101   0   60-130/25   75-35-4   1,1-Dichloropropene   ND   20   20.3   102   20.2   101   0   60-130/25   75-35-4   1,1-Dichloropropene   ND   20   20.3   102   20.2   101   0   60-130/25   66-128-8   1,2-Dibromo-3-chloropropane   ND   20   20.3   102   20.2   101   0   60-130/25   66-128   1,2-Dibromo-3-chloropropane   ND   20   20.0   100   18.4   92   8   60-130/25   106-93-4   1,2-Dichloropropane   ND   20   21.2   106   21.2   106   0   60-130/25   107-06-2   1,2-Dichloropropane   ND   20   21.1   102   20.9   101   1   60-130/25   142-28-9   1,3-Dichloropropane   ND   20   22.3   112   22.2   111   0   60-130/25   108-20-3   Di-Isopropyl ether   ND   20   20.6   103   20.3   102   1   60-130/25   124-48-1   Dibromochloromethane   ND   20   20.9   105   20.6   103   1   60-130/25   124-48-1   Dibromochloromethane   ND   20   21.6   108   21.4   107   1   60-130/25   156-59-2   cis-1,2-Dichloropropene   ND   20   21.6   108   21.4   107   1   60-130/25   541-73-1   m-Dichlorobenzene   ND   20   21.2   106   21.0   105   1   60-130/25   541-73-1   m-Dichlorobenzene   ND   20   21.2   106   21.0   105   1   60-130/25   106-46-7   p-Dichlorobenzene   ND   20   20.6   103   20.4   105   1   60-130/25   106-46-7   p-Dichlorobenzene   ND   20   20.6   103   20.4   105   1   60-130/25   106-46-7   p-Dichlorobenzene   ND   20   20.6   103   20.4   105   1   60-130/25   106-46-7   p-Dichlorobenzene   ND   20   20.6   103   20.4   102   1   60-130/25   106-41-4   Ethylbenzene   ND   20									100		
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           56-23-5         Carbon tetrachloride         ND         20         20.3         102         20.2         101         0         60-130/25           75-34-3         1,1-Dichloroethylene         ND         20         21.7         109         21.5         108         1         60-130/25           75-35-4-4         1,1-Dichloroethylene         ND         20         20.3         102         20.2         101         0         60-130/25           76-35-8-6         1,2-Dibromo-3-chloropropane         ND         20         19.7         99         19.7         99         0         60-130/25           106-93-4         1,2-Dibromochane         ND         20         21.2         106         21.2         106         0         60-130/25           107-60-2	108-90-7	•	ND		20	20.9			106	1	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-Dichloroethylene         ND         20         21.7         109         21.5         108         1         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-Dichloropropane         ND         20         20.0         100         18.4         92         8         60-130/25           96-12-8         1,2-Dichloropethane         ND         20         21.2         106         21.2         106         0         60-130/25           107-06-2											
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-Dichloroethylene         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-Dichloropethane         ND         20         21.2         106         21.2         106         0         60-130/25 <t< td=""><td></td><td>Chloroform</td><td>ND</td><td></td><td></td><td></td><td></td><td></td><td>105</td><td>1</td><td></td></t<>		Chloroform	ND						105	1	
106-43-4   p-Chlorotoluene   ND   20   19.3   97   19.3   97   0   60-130/25	95-49-8	o-Chlorotoluene	ND		20	21.1		20.7	104	2	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           78-87-5         1,2-Dichloropropane         ND         20         21.1         102         20.9         101         1         60-130/25           142-28-9         1,3-Dichloropropane         ND         20         22.3         112         22.2         111         0         60-130/25		p-Chlorotoluene							97	0	
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-Dichloroethane         0.65         J         20         21.2         106         21.2         106         0         60-130/25           107-06-2         1,2-Dichloroptopane         ND         20         22.3         112         22.2         111         0         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           594-20-3         Di-Isopropyl ether         ND         20         20.9         105         20.6         103         1         60-130/25	56-23-5	•	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-Dichloroptopane         ND         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-Dichloropethane         ND         20         18.8         94         18.3         92         3         60-130/25	75-34-3	1,1-Dichloroethane	ND		20	21.7	109	21.5	108	1	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           75-71-8         Dichlorodifluoromethane         ND         20         14.3         72         14.6         73         2         60-130/25	75-35-4	1,1-Dichloroethylene	ND		20	20.3	102	20.2	101	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           75-71-8         Dichlorodifluoromethane         ND         20         14.3         72         14.6         73         2         60-130/25	563-58-6	1,1-Dichloropropene	ND		20	19.7	99	19.7	99	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           594-20-7         2,2-Dichloropropane         ND         20         22.6         113         22.0         110         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         21.6         108         21.4         107         1         60-130/25	96-12-8	1,2-Dibromo-3-chloropropane	ND		20	20.0	100	18.4	92	8	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           541-73-1         m-Dichlorobenzene         ND         20         22.2         111         21.8         109         2         60-130/25	106-93-4	1,2-Dibromoethane	ND		20	21.2	106	21.2	106	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           1061-01-5         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      <	107-06-2	1,2-Dichloroethane	0.65	J	20	21.1	102	20.9	101	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           1061-01-5         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	78-87-5	1,2-Dichloropropane	ND		20	22.3	112	22.2	111	0	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	142-28-9	1,3-Dichloropropane	ND		20	20.6	103	20.3	102	1	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	108-20-3	Di-Isopropyl ether	ND		20	20.9	105	20.6	103	1	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           100-41-4         Ethylbenzene         ND         20         19.7         99         19.9         100         1         60-130/25	594-20-7	2,2-Dichloropropane	ND		20	18.8	94	18.3	92	3	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 <td>124-48-1</td> <td>Dibromochloromethane</td> <td>ND</td> <td></td> <td>20</td> <td>22.6</td> <td>113</td> <td>22.0</td> <td>110</td> <td>3</td> <td>60-130/25</td>	124-48-1	Dibromochloromethane	ND		20	22.6	113	22.0	110	3	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	75-71-8	Dichlorodifluoromethane	ND		20	14.3	72	14.6	73	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	156-59-2	cis-1,2-Dichloroethylene	ND		20	21.6	108	21.4	107	1	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	10061-01-5	cis-1,3-Dichloropropene	ND		20	22.2	111	21.8	109	2	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	541-73-1	m-Dichlorobenzene	ND		20	20.6	103	20.5	103	0	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	95-50-1	o-Dichlorobenzene	ND		20	21.2	106	21.0	105	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	106-46-7	p-Dichlorobenzene	ND		20	20.0	100			1	60-130/25
100-41-4 Ethylbenzene ND 20 19.7 99 19.9 100 1 60-130/25	156-60-5	trans-1,2-Dichloroethylene	ND		20	19.8	99	19.6		1	60-130/25
•		trans-1,3-Dichloropropene	ND		20	20.6	103	20.4	102	1	60-130/25
637-92-3 Ethyl Tert Butyl Ether ND 20 21.9 110 21.4 107 2 60-130/25	100-41-4	Ethylbenzene	ND		20	19.7	99	19.9		1	60-130/25
	637-92-3	Ethyl Tert Butyl Ether	ND		20	21.9	110	21.4	107	2	60-130/25

# 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	Ву	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:

CAS No.	Compound	C14015 ug/l	5-5 Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
C/15 110.	Compound	ug/1	V	ug/1	ug/1	70	ug/1	70	KI D	Rec/RID
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%



# 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	Ву	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:

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

CAS No.	<b>Surrogate Recoveries</b>	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%



Page 3 of 3

**Method:** SW846 8260B



# GC/MS Semi-volatiles

QC Data Summaries

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

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

Sample	File ID	DF	Analyzed	By	<b>Prep Date</b>	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:

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

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

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

### The QC reported here applies to the following samples:

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 OP3277-MB	<b>File ID</b> Y5795.D	<b>DF</b> 1	<b>Analyzed</b> 01/05/11	<b>By</b> MT	<b>Prep Date</b> 01/04/11	Prep Batch OP3277	Analytical Batch EY300
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### The QC reported here applies to the following samples:

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

CAS No.	<b>Surrogate Recoveries</b>		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).

Page 1 of 3

**Method:** SW846 8270C

# Blank Spike/Blank Spike Duplicate Summary Job Number: C14015

Account: TRCCAO TRC - SF

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

File ID	DF	Analyzed	$\mathbf{B}\mathbf{y}$	Prep Date	Prep Batch	<b>Analytical Batch</b>
Y5796.D	1	01/05/11	MT	01/04/11	OP3277	EY300
Y5797.D	1	01/05/11	MT	01/04/11	OP3277	EY300
	Y5796.D	Y5796.D 1	Y5796.D 1 01/05/11	Y5796.D 1 01/05/11 MT	Y5796.D 1 01/05/11 MT 01/04/11	Y5796.D 1 01/05/11 MT 01/04/11 OP3277

The QC reported here applies to the following samples:

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-Dinchlorophenol   25   17.5   70   15.3   61   13   17-91/30   15-8-5   2,4-Dinitrophenol   25   20.7   83   19.5   78   6   17-111/30   153-45-2-1   4,6-Dinitro-o-cresol   25   18.6   74   19.5   78   5   22-115/30   3&4-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   12.5   50   12.0   48   4   22-105/30   88-75-5   2-Nitrophenol   25   25.2   101   24.5   98   3   24-130/30   108-95-2   Phenol   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   19.5   78   18.3   73   6   8-107/30   83-32-9   Acenaphthene   25   17.4   70   16.4   66   6   25-130/30   208-96-8   Acenaphthylene   25   17.4   70   16.4   66   6   25-130/30   208-96-8   Acenaphthylene   25   17.4   70   16.4   66   6   25-130/30   208-96-8   Acenaphthylene   25   17.4   70   16.4   66   6   25-130/30   208-96-8   Acenaphthylene   25   17.4   70   16.4   66   6   25-130/30   208-96-8   Acenaphthylene   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   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   103-33-3   Azobenzene   25   23.7   95   23.9   96   1   32-106/30   205-99-2   Benzo(b)fluoranthene   25   23.7   95   23.9   96   1   32-106/30   205-99-2   Benzo(b)fluoranthene   25   23.7   95   23.9   96   1   32-106/30   205-99-2   Benzo(b)fluoranthene   25   25.6   102   25.6   102   0   34-111/30   101-55-3   4-Bromophenyl phenyl ether   25   25.6   102   25.6   102   0   34-111/30	CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	65-85-0	Benzoic Acid	50	12.2	24	9 9	20	2.1	10-100/30
59-50-7									
120-83-2   2,4-Dichlorophenol   25   17.8   71   16.9   68   5   23-108/30   105-67-9   2,4-Dimitrylphenol   25   17.5   70   15.3   61   13   17-91/30		*							
105-67-9									
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         7.3         29         7.0         28         4         5-130/30           95-95-4         2,4,5-Trichlorophenol         25         7.3         29         7.0         28         4         5-130/30           88-06-2         2,4,6-Trichlorophenol         25         19.5         78         18.3         73         6         18-107/30		, <u>r</u>							
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           88-75-5         2-Nitrophenol         25         12.5         50         12.0         48         4         22-105/30           100-02-7         4-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         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									
95-48-7         2-Methylphenol         25         13.7         55         12.9         52         6         25-101/30           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           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         Acenaphthylene         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           120-12-7         Anthracene         25         19.9         80         20.0         80         1         35-108/30 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
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         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         Acenaphtylene         25         18.2         73         17.3         69         5         28-105/30           120-12-7         Anthracene         25         19.9         80         20.0         80         1         35-108/30           103-33-3		· ·							
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           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           103-33-3         Azobenzene         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	, , ,	• •		12.5					
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           95-95-2         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           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         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           56-5	88-75-5								
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         Acenaphthylene         25         17.4         70         16.4         66         6         25-130/30           208-96-8         Acenaphthylene         25         11.0         44         12.4         50         12         23-98/30           120-12-7         Anthracene         25         11.0         44         12.4         50         12         23-98/30           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		*		7.3	29				
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   Buryl benzyl phthalate   25   23.1   92   24.8   99   7   29-114/30     106-47-8   4-Chloroaniline   25   11.5   46   11.3   45   2   24-108/30     91-58-7   2-Chloronaphthalene   25   25.8   16.0   64   10   23-103/30     106-47-8   4-Chloroaniline   25   25.8   25.7   95   0   34-111/30     111-91-1   bis(2-Chloroethoxy)methane   25   23.8   95   23.7   95   0   34-111/30     111-91-1   bis(2-Chloroethoxy)methane   25   16.4   66   15.6   62   5   31-108/30     111-44-4   bis(2-Chloroethyl)ether   25   16.4   66   15.6   62   5   31-108/30     111-44-4   bis(2-Chloroethyl)ether   25   16.4   66   15.6   62   5   31-108/30     111-44-4   bis(2-Chloroethyl)ether   25   16.4   66   15.6   62   5   31-108/30     25   25   25   25   25   25   25									
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)pyrene         25         23.9         96         24.0         96         0         33-111/30		*				7.0			
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)pyrene         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           <	95-95-4	2.4.5-Trichlorophenol							19-106/30
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(g,h,i)perylene         25         23.9         96         23.5         94         2         33-109/30									
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(k)fluoranthene         25         25.6         102         23.2         93         1         31-111/30      <	83-32-9		25	17.4		16.4	66	6	25-130/30
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(b)fluoranthene         25         23.7         95         23.9         96         1         32-106/30           205-99-2         Benzo(g,h,i)perylene         25         23.9         96         23.5         94         2         33-109/30           191-24-2         Benzo(k)fluoranthene         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	208-96-8		25	18.2	73	17.3	69	5	28-105/30
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(k)fluoranthene         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	62-53-3		25	11.0	44	12.4	50	12	23-98/30
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	120-12-7	Anthracene	25	19.9	80	20.0	80	1	35-108/30
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-Chloroaphthalene         25         17.1         68         16.4         66         4	103-33-3	Azobenzene	25	15.7	63	16.0	64	2	31-110/30
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-Chloroaphthalene         25         17.1         68         16.4         66         4         23-130/30           86-74-8         Carbazole         25         20.5         82         21.1         84         3	92-87-5	Benzidine	50	32.8	66	40.5	81* a	21	15-73/30
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-Chloroaphthalene         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	56-55-3	Benzo(a)anthracene	25	23.9	96	24.0	96	0	33-111/30
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-Chloroaphthalene     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	50-32-8	Benzo(a)pyrene	25	23.7	95	23.9	96	1	32-106/30
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-Chloroaphthalene         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	205-99-2	Benzo(b)fluoranthene	25	23.9	96	23.5	94	2	33-109/30
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-Chloroaphthalene     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	191-24-2	Benzo(g,h,i)perylene	25	23.0	92	23.2	93	1	31-111/30
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	207-08-9	Benzo(k)fluoranthene	25	25.6	102	25.6	102	0	34-111/30
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	101-55-3	4-Bromophenyl phenyl ether	25	16.7	67	16.1	64	4	34-107/30
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	85-68-7	Butyl benzyl phthalate	25	23.1	92	24.8	99	7	29-114/30
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	100-51-6	Benzyl Alcohol		11.5	46	11.3	45		24-108/30
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	91-58-7	2-Chloronaphthalene	25	17.1	68	16.4	66	4	23-130/30
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	106-47-8	4-Chloroaniline	25	14.5	58	16.0	64	10	23-103/30
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	86-74-8	Carbazole		20.5	82	21.1	84	3	36-109/30
111-44-4 bis(2-Chloroethyl)ether 25 16.4 66 15.6 62 5 31-108/30	218-01-9	Chrysene		23.8	95	23.7	95	0	34-111/30
`	111-91-1			17.8	71	16.9	68		28-101/30
108-60-1 bis(2-Chloroisopropyl)ether 25 16.9 68 16.5 66 2 33-106/30	111-44-4	• •		16.4	66	15.6	62		31-108/30
200 100,000	108-60-1	bis(2-Chloroisopropyl)ether	25	16.9	68	16.5	66	2	33-106/30

# Blank Spike/Blank Spike Duplicate Summary Job Number: C14015

TRCCAO TRC - SF Account:

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

Sample	File ID	DF	Analyzed	Ву	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:

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

# Page 3 of 3

**Method:** SW846 8270C

### 4

### C

# 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	<b>Analytical Batch</b>
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:

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

CAS No.	<b>Surrogate Recoveries</b>	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.

**Method:** SW846 8270C

## 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:

September   Sept	CAS No.	Compound	C14015- ug/l	-2 Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8   2-Chlorophenol   ND   43.1   34.5   80   35.2   82   2   23-103/29	65-85-0	Benzoic Acid	ND		86.2	ND	0* a	ND	0* a	nc	10-100/40
Section   Sect											
120-83-2   2,4-Dichlorophenol   ND											
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         30.9         72         29.8         69         4         25-101/30           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         15.2         35         15.8         37         4         13-130/34           87-86-5         Pentachlorophenol         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-Trichlorop											
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         25.9         69         25.5         59         16         24-130/36           108-95-2         Phenol         ND         43.1         23.5         42         1.4         50         8         5-130/47           88-06-2         2,4,6-Trichlorophenol         ND         43.1         35.5         82         36.8         85         4         19-106/23           88-06-2         2,4,6-Trichlorophenol											
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           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         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         2.4,6-Trichlorophenol         ND         43.1         35.5         82         36.8         85         4         19-106/23           88-06-2         2.4,6-Trichlorophenol         ND         43.1         35.0         81         33.9         79         3         25-130/32           208-96-8         Acenaphthylene		•									
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         2.4,6-Trichlorophenol         ND         43.1         35.5         82         36.8         85         4         19-106/23           88-06-2         2.4,6-Trichlorophenol         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	95-48-7	*									
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         35.0         81         33.9         79         3         25-130/32           208-96-8         Acenaphthene         ND         43.1         36.8         85         35.7         83         3         28-105/21           103-33-3         Aniline         ND         43.1         32.0         74         31.3         73         2         23-98/28           103-33-3         Azobenzene </td <td></td> <td>• 1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		• 1									
100-02-7	88-75-5	• •							92	3	
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         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         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           103-29-28-7         Benzid	100-02-7		ND						37		
108-95-2   Phenol									59	16	
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         32.6         76         31.4         73         4         31-10/20           92-87-5         Benzidine         ND         43.1         32.6         76         31.4         73         4         31-11/20           92-87-5         Benzidine         ND         43.1         43.1         100         43.4         101         1         33-111/19           50-32-8         Benzidine		-									
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         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)fluoranth	95-95-4	2,4,5-Trichlorophenol	ND		43.1	35.5	82	36.8	85	4	19-106/23
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         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         42.4         98         43.0         100         1         33-109/20           191-24-2         Benzo(k)fluor	88-06-2		ND		43.1	34.1	79	35.1	81	3	18-107/24
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(s), h)peryle	83-32-9		ND		43.1	35.0	81	33.9	79	3	25-130/32
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         Benzdiine         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)fluo	208-96-8		ND		43.1	36.8	85	35.7	83	3	28-105/21
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	62-53-3		ND		43.1	32.0	74	31.3	73	2	23-98/28
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         35.3         105         46.6         108         3         29-114/20	120-12-7	Anthracene	ND		43.1		87	38.3	89		35-108/19
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 <t< td=""><td>103-33-3</td><td>Azobenzene</td><td>ND</td><td></td><td>43.1</td><td>32.6</td><td>76</td><td>31.4</td><td>73</td><td>4</td><td>31-110/20</td></t<>	103-33-3	Azobenzene	ND		43.1	32.6	76	31.4	73	4	31-110/20
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-Chloroaphthalene         ND         43.1         34.9         81         33.7         78         3         23-130/29	92-87-5	Benzidine	ND		86.2	53.2	62	58.3	68	9	15-73/23
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-Chloroaphthalene         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 <tr< td=""><td>56-55-3</td><td>Benzo(a)anthracene</td><td>ND</td><td></td><td>43.1</td><td>43.1</td><td>100</td><td>43.4</td><td>101</td><td>1</td><td>33-111/19</td></tr<>	56-55-3	Benzo(a)anthracene	ND		43.1	43.1	100	43.4	101	1	33-111/19
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-Chloroaphthalene         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 <t< td=""><td>50-32-8</td><td>Benzo(a)pyrene</td><td>ND</td><td></td><td>43.1</td><td>42.4</td><td>98</td><td>43.0</td><td>100</td><td>1</td><td>32-106/20</td></t<>	50-32-8	Benzo(a)pyrene	ND		43.1	42.4	98	43.0	100	1	32-106/20
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<	205-99-2	Benzo(b)fluoranthene	ND		43.1	40.4	94	41.0	95	1	33-109/20
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-Chloroaphthalene         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	191-24-2	Benzo(g,h,i)perylene	ND		43.1	42.1	98	40.5	94	4	31-111/21
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	207-08-9	Benzo(k)fluoranthene	ND		43.1	44.5	103	45.1	105	1	34-111/20
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	101-55-3	4-Bromophenyl phenyl ether	ND		43.1	33.0	77	33.1	77	0	34-107/20
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	85-68-7	Butyl benzyl phthalate	ND		43.1	45.3	105	46.6	108	3	29-114/20
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	100-51-6	Benzyl Alcohol	ND		43.1	32.4				4	24-108/27
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	91-58-7	2-Chloronaphthalene	ND		43.1	34.9					23-130/29
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	106-47-8	4-Chloroaniline	ND		43.1	34.4	80	33.6	78	2	23-103/22
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	86-74-8	Carbazole	ND		43.1	39.7	92	40.7	94	2	36-109/20
111-44-4 bis(2-Chloroethyl)ether ND 43.1 34.4 80 33.2 77 4 31-108/27	218-01-9		ND		43.1				97	0	34-111/19
	111-91-1				43.1	34.9			80	1	28-101/28
108-60-1 bis(2-Chloroisopropyl)ether ND 43.1 35.0 81 34.1 79 3 33-106/27	111-44-4	` ,	ND		43.1	34.4					31-108/27
	108-60-1	bis(2-Chloroisopropyl)ether	ND		43.1	35.0	81	34.1	79	3	33-106/27

Page 2 of 3

**Method:** SW846 8270C

## 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	<b>Analytical Batch</b>
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
			0 2. 00, 2 2		0 - 7 0 11		

The QC reported here applies to the following samples:

CAS No.	Compound	C14015- ug/l	-2 Q	Spike 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

Page 3 of 3

**Method:** SW846 8270C

## 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:

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%

<sup>(</sup>a) Outside control limits due to matrix interference.

<sup>(</sup>b) Outside laboratory control limits.



## GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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



**Method:** SW846 8015B M

## **Method Blank Summary**

Job Number: C14015

**Account:** TRCCAO TRC - SF

Project: T0600100443-USPS Oakland VMF-1675 7th Street, Oakland, CA

Sample OP3281-MB	<b>File ID</b> GG20696.D	<b>DF</b> 1	<b>Analyzed</b> 01/05/11	<b>Ву</b> ЈН	<b>Prep Date</b> 01/05/11	Prep Batch OP3281	Analytical Batch GGG589

The QC reported here applies to the following samples:

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

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

630-01-3 Hexacosane 84% 45-140%



**Method:** SW846 8015B M

## Blank Spike/Blank Spike Duplicate Summary

Job Number: C14015

630-01-3

**Account:** TRCCAO TRC - SF

Hexacosane

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

Sample OP3281-BS OP3281-BSD	File ID GG20697.D GG20698.D		<b>Analyzed</b> 01/05/11 01/05/11	By JH JH	Prep Date 01/05/11 01/05/11	Prep Batch OP3281 OP3281	Analytical Batch GGG589 GGG589
013201 BSD	GG20070.D	•	01/03/11	311	01/03/11	01 3201	000307

The QC reported here applies to the following samples:

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) TPH (Motor Oil)	1 1	0.829 0.782	83 78	0.844 0.824	84 82	2 5	45-140/30 45-140/30
CAS No.	Surrogate Recoveries	BSP	BS	D	Limits			

88%

45-140%

81%



**Method:** SW846 8015B M

## 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:

CAS No.	Compound	C14015-1 mg/l Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (Diesel) TPH (Motor Oil)	ND ND	1.89 1.89	1.64 1.53	87 81	1.65 1.59	87 84	1 4	45-140/25 45-140/25
CAS No.	Surrogate Recoveries	MS	MSD	C14	4015-1	Limits			
630-01-3	Hexacosane	87%	90%	87%	6	45-140%	6		





# General Chemistry

QC Data Summaries

Includes the following where applicable:

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



### 

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



#### 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



### 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:

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

#### 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:

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

