

Andrew E. Cullen

Vice President
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1:30 pm, Jul 11, 2012

Alameda County
Environmental Health

June 19, 2012

Ms. Carol Dutterman Hazardous Materials Specialist Alameda County Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

Re: 2012 Semi-Annual Groundwater Monitoring Report Former Penske Truck Leasing Facility 725 Julie Ann Way, Oakland, California Alameda County Site ID RO0000354 Stantec PN: 185702473.200.0001

Dear Ms. Dutterman:

Subsequent to this cover letter is the 1<sup>st</sup> quarter groundwater monitoring report for the former Penske Truck Leasing site location at 725 Julie Ann Way, Oakland, CA.

As an authorized representative of our company, the following statement is listed below:

I, Andrew Cullen declare under penalty of perjury that the information and/or recommendations contained in the attached document or report are true and correct to the best of my knowledge.

Please let me know if you have any questions or concerns.

Sincerely,

Andrew E. Cullen

Vice President, Energy and Telecommunication Services



Stantec Consulting Services Inc.

57 Lafayette Circle 2nd Floor Lafayette CA 94549 Tel: (925) 299-9300 Fax: (925) 299-9302

June 18, 2012

Ms. Carol Dutterman Hazardous Materials Specialist Alameda County Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

### (To Be Sent Via Electronic Upload to Alameda County ftp)

Re: 2012 Semi-Annual Groundwater Monitoring Report

Former Penske Truck Leasing Facility 725 Julie Ann Way, Oakland, California Alameda County Site ID RO0000354 Stantec PN: 185702473.200.0001

Dear Ms. Dutterman:

Stantec Consulting Services Inc. (Stantec), on behalf of Penske Truck Leasing Company (Penske), has prepared this 2012 Semi-Annual Groundwater Monitoring Report for the Former Penske Truck Leasing Facility (the Site) located at 725 Julie Ann Way in Oakland, California (see Figure 1). There are ten on-Site groundwater monitoring wells associated with the Site (see Figure 2). Well construction details are presented on Table 1. This report documents the procedures and results of the monitoring and sampling events conducted in the Fourth Quarter 2011 and First Quarter 2012.

### QUARTERLY GROUNDWATER MONITORING

Groundwater levels were measured by Blaine Tech Services, Inc. (Blaine Tech) in all ten wells in the fourth quarter 2011 (December 6, 2011) and the first quarter 2012 (March 22, 2012). An oil/water interface probe graduated to 0.01 foot was used to evaluate the presence of free-phase product. No free-phase fuel product was measured in any of the wells in December 2011 or March 2012. Copies of the field data sheets are included in Appendix A.

Depth-to-groundwater measurements and surveyed wellhead top-of-casing elevations were used to calculate groundwater surface elevations. Water level measurements and groundwater elevations are presented in Table 2.

### SEMI-ANNUAL GROUNDWATER MONITORING AND SAMPLING PROCEDURES

On March 22, 2012, wells MW-1R, MW-2, MW-4, MW-7R, MW-8, OW-1, and OW-2 were sampled by Blaine Tech. Prior to sampling, wells were purged of approximately three well casing volumes using a diaphragm pump fitted with new, disposable tubing for each well. Well MW-4 dewatered following removal of approximately two well volumes. During purging, groundwater was periodically measured for pH, electrical conductivity, turbidity, and temperature, and visually inspected for color and the presence of free product.

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### 2012 Semi-Annual Monitoring and Sampling Report

Downhole dissolved oxygen (DO) measurements and oxidation reduction potential (ORP) measurements were recorded pre- and post-purging at each well. Physical parameters, purge volumes for each well, visual observations, and sampling notes were recorded on field data sheets and are included in Appendix A.

Upon removal of the appropriate purge volume and stabilization of the measured field parameters, samples were collected from each well using a new, disposable bailer. Samples were collected into laboratory-supplied containers and stored cold during delivery to Curtis and Tompkins Ltd, a state-certified analytical laboratory in Berkeley, California.

### **ANALYTICAL PROGRAM**

All of the groundwater samples were analyzed for the following constituents:

- □ Total petroleum hydrocarbons as gasoline (TPHg) and total petroleum hydrocarbons as diesel (TPHd) by U.S. Environmental Protection Agency (EPA) Method 8015B (samples for TPHd analysis were subjected to silica gel treatment); and,
- ☐ Benzene, toluene, ethylbenzene and xylenes (BTEX), methyl tertiary-butyl ether (MTBE), ethylene dichloride (EDC), ethylene dibromide (EDB), and naphthalene by EPA Method 8260B.

The chain of custody and the laboratory analytical report are included in Appendix B.

#### WASTE MANAGEMENT AND DISPOSAL

Purge/rinsate water generated during groundwater sampling activities was stored in California Department of Transportation (DOT)-approved 55-gallon steel drums and left on-Site pending characterization and disposal.

#### **RESULTS**

#### **Groundwater Elevation Monitoring Results**

Groundwater elevation data from December 6, 2011 and March 22, 2012 is presented in Table 2. The potentiometric surface maps generated from the data are included as Figures 3 and 4.

December 2011 depth-to-groundwater measurements ranged from 4.55 to 6.17 feet below the top of casing, corresponding to a range of groundwater elevations of 5.43 to 6.20 feet relative to the NAVD 88 datum. No sheen or measurable free-phase product was observed during the December 2011 monitoring event. Groundwater flow direction was toward the southwest (see Figure 3).

March 2012 depth-to-groundwater measurements ranged from 4.18 to 5.40 feet below the top of casing, corresponding to a range of groundwater elevations of 6.20 to 6.67 feet relative to the NAVD 88 datum. No sheen or measurable free-phase product was observed during the March 2012 monitoring event. Groundwater flow direction was toward the west-southwest (see Figure 4).

### **Groundwater Sample Analytical Results**

Field measurements of pH, DO, and ORP are presented in Table 3 and groundwater sample analytical results are presented in Table 4. March 2012 results for TPHd, TPHg, BTEX, and MTBE are shown on Figure 5. The laboratory analytical report and chain-of-custody record are attached as Appendix A. The following sections summarize groundwater analytical results.

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### 2012 Semi-Annual Monitoring and Sampling Report

### **TPHd**

TPHd was reported in five of the seven wells at concentrations ranging from 680 micrograms per liter ( $\mu$ g/L; well OW-2) to 2,800  $\mu$ g/L (well MW-7R).

### **TPHg**

TPHg was reported in four of seven groundwater samples at concentrations ranging from 56  $\mu$ g/L (well OW-2) to 320  $\mu$ g/L (well MW-7R).

### **MTBE**

MTBE was reported in four of the seven groundwater samples at concentrations ranging from 0.9  $\mu$ g/L (well MW-4) to 6  $\mu$ g/L (well OW-2).

### BTEX, EDC, EDB, and Naphthalene

BTEX, EDC, EDB, and naphthalene were not detected at or above laboratory reporting limits in any of the groundwater samples analyzed.

#### **CONCENTRATION TRENDS**

The following is a summary of concentration trends for each of the chemical constituents. Plots depicting concentrations trends since 2009 (when groundwater monitoring at the Site was resumed following Fentons reagent treatment in 2000 and cessation of post-treatment monitoring in 2002) are included as Figures 6 through 9. Historical concentration plots depicting data from February 1997 through March 2012 are included in Appendix C.

**TPHd** – A plot depicting TPHd concentrations since 2009 is included as Figure 6.

Concentrations of TPHd in well MW-1R continue a generally decreasing trend. The reported concentrations of 810/1,300 $\mu$ g/L in duplicate samples collected in March 2012 is consistent with the concentration of 1,000 $\mu$ g/L reported in July 2011, and concentrations during the last two events are lower than concentrations reported following well installation in 2010 (up to 5,800 $\mu$ g/L TPHD in duplicate samples collected in February 2010).
TPHd has not been detected above laboratory reporting limits in wells MW-2 and MW-8 for the second consecutive sampling event. Concentrations of TPHd in these wells have generally remained low (below 200 $\mu$ g/L) since Fentons treatment in 2000, except for 870 $\mu$ g/L and 360 $\mu$ g/L reported in wells MW-2 and MW-8, respectively, in February 2010.
The TPHd concentration of 2,500 $\mu$ g/L reported in well MW-4 represents an increase from the concentration of 720 $\mu$ g/L reported during the July 2011 sampling event. Overall, TPHd concentrations in this well have decreased since post-treatment monitoring resumed in April 2009, except for an anomalously high concentration of TPHd (26,000 $\mu$ g/L) reported in February 2011.
The concentration of 2,800 µg/L TPHd reported in well MW-7R has increased since the July 2011 sampling event (when TPHd was not reported above the laboratory reporting limit), and represents the highest value reported in this well since July 2010.

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### 2012 Semi-Annual Monitoring and Sampling Report

	Concentrations of TPHd in wells OW-1 and OW-2 continue to fluctuate. Concentrations reported in March 2012 are slightly higher than those reported during the last sampling event in July 2011, but are significantly lower than the highest concentrations reported since groundwater monitoring resumed in 2009.
TPH	ŋ − A plot depicting TPHg concentrations since 2009 is included as Figure 7.
	Concentrations of TPHg in wells MW-1R and OW-1 are low and have generally remained stable during the post-treatment period.
	TPHg concentrations continue to be below laboratory reporting limits in wells MW-2 and MW-8, and TPHg has not been detected in well MW-4 for two consecutive sampling events.
	The concentration of TPHg reported in well MW-7R (320 $\mu$ g/L) represents an increase from the July 2011 sampling event, but is lower than the historical high concentration of 4,000 $\mu$ g/L reported in July 2010.
	The concentration of TPHg (56 $\mu$ g/L) reported in well OW-2 is the lowest reported to date, and is generally consistent with recent historical data.
BTE	C – A plot depicting benzene concentrations since 2009 is included as Figure 8.
	Benzene continues to be below laboratory reporting limits in all wells, representing sustained, significant decreasing trends in wells MW-1/1R and MW-7/7R.
	Toluene, ethylbenzene, and xylenes have not been detected since 2001.
MTB	E – A plot depicting MTBE concentrations since 2009 is included as Figure 9.
	MTBE is typically detected in wells MW-4, MW-7R, MW-8, OW-1, and OW-2, and has been detected one or more times in wells MW-1/1R and MW-2. Concentrations are typically low, with concentrations below 10 μg/L since groundwater monitoring resumed at the Site in 2009. The March 2012 analytical results are consistent with historical data, with wells OW-1 and OW-2 decreasing since a recent maximum concentration reported in July 2011.
EDC/	EDB and Naphthalene
	EDC and EDB have not been detected in groundwater since first analyzed in April 2009.
	DISCUSSION AND CONCLUSIONS
Proje	ect Status
Our u	inderstanding of work completed to date is summarized as follows:
	Groundwater chemical data from Site wells accurately represent Site conditions;
	Post-remediation confirmation sampling completed in 2009 suggests that shallow soils remain impacted by weathered and/or degraded petroleum hydrocarbons; and,

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### 2012 Semi-Annual Monitoring and Sampling Report

- Chemical impacts to groundwater are limited to the western portion of the Site adjacent to the former underground storage tanks (USTs), and are limited to low concentrations TPHd, TPHg and MTBE.
- Concentrations of petroleum hydrocarbons in groundwater have generally decreased since treatment with Fenton's reagent in 2000, and no longer warrant ongoing groundwater monitoring.

Penske has completed site characterization activities from 2008 until present as requested by Health Department staff, and Stantec considers chemical impacts at the Site to be well-defined. Penske and Stantec respectfully request a meeting to discuss the regulatory status of the Site and identify the risk-driving aspects precluding the Site from case closure.

Sincerely,

### STANTEC CONSULTING CORPORATION

Eva Hey Project Manager

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Mark Doro

Mr. Andrew Cullen, Penske Truck Leasing, Reading PA

Concentration Plots - 1997 to 2012

### **List of Attachments**

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Table 1 Table 2 Table 3 Table 4	Well Construction Details Groundwater Elevation Data Field Parameter Data Groundwater Analytical Results
Figure 1 Figure 2 Figure 3 Figure 4 Figure 5 Figure 6 Figure 7 Figure 8 Figure 9	Site Location Map Site Plan Groundwater Elevation Surface Contour Map – December 2011 Groundwater Elevation Surface Contour Map – March 2012 Fuel Hydrocarbon Constituents in Groundwater – March 2012 TPHd versus Time, April 2009 to March 2012 TPHg versus Time, April 2009 to March 2012 Benzene versus Time, April 2009 to March 2012 MTBE versus Time, April 2009 to March 2012
Appendix A Appendix B	Groundwater Sample Collection Logs Water Sample Laboratory Reports and Chain-of-Custody Forms

Appendix C

### **TABLES**

2012 Semi-Annual Groundwater Monitoring Report Former Penske Truck Leasing Facility 725 Julie Ann Way Oakland, California Alameda County Site ID RO0000354 Stantec PN: 185702473.200.0001 June 18, 2012

### TABLE 1

### **WELL CONSTRUCTION DETAILS**

Former Penske Facility - 725 Julie Ann Way, Oakland, CA

Well	Latitude	Longitude	Total Depth (feet bgs)	Casing Diameter (inches)	Screen Slot Size (inches)	Screen Length (feet)	Screen Interval (feet bgs)	Top of Casing Elevation
MW-1R	37.7597443	-122.20913	20	2	0.02	16.5	3.5 - 20.0	11.02
MW-2	37.7599047	-122.20890	30	2	0.02	20	10.0 - 30.0	11.87
MW-3	37.7599598	-122.20902	35	2	0.02	25	10.0 - 35.0	11.79
MW-4	37.7598508	-122.20922	33.5	2	0.02	27	6.5 - 33.5	10.88
MW-5	37.7600163	-122.20942	35	2	0.02	25	6.0 - 31.0	10.41
MW-6	37.7601553	-122.20923	25	2	0.02	10	15.0 - 25.0	11.05
MW-7R	37.7597618	-122.2092	20	2	0.02	16.5	3.5 - 20.0	10.84
MW-8	37.7598006	-122.20932	28	2	0.02	18	10.0 - 28.0	10.75
OW-1	37.7598218	-122.20913	13.5	2	0.02	unk	unk unk	10.75
OW-2	37.7598650	-122.20911	14.0	2	0.02	unk	unk unk	11.03

California State Plane Coordinates, NAVD88; survey conducted by Mid Coast Engineers, Watsonville, California, April 26, 2011.

unk = well screen details unknown

ft. bgs = feet below ground surface

Well		Elevation	Depth to Water	Groundwater Elevation
No.	Date	(Feet) <sup>(a)</sup>	(Feet)	(Feet)
MW-1	02/20/97	11.02	5.41	5.61
IVIVV-I	05/28/97	11.02	5.98	5.04
	09/19/97		6.45	4.57
	11/17/97		6.14	4.88
	02/27/98		4.83	6.19
	05/27/98		6.42	4.60
	10/01/98		6.49	4.53
	12/22/98		6.35	4.67
	03/14/00		4.95	6.07
	06/28/00		5.54	5.48
	09/14/00		6.41	4.61
	12/11/00		6.08	4.94
	03/14/01		6.11	4.91
	06/13/01		5.68	5.34
	08/29/01		6.13	4.89
	12/12/01		5.31	5.71
	04/11/02		5.21	5.81
	12/05/02		5.85	5.17
	04/22/09		5.03	5.99
		ned on January 11, 2010 and	replaced with well MW-1R on Ja	anuary 12, 2010.
MW-1R	02/08/10	11.02	4.41	6.61
	05/10/10		4.58	6.44
	07/16/10		4.98	6.04
	10/04/10		5.57	5.45
	02/03/11		4.92	6.10
	04/11/11		4.40	6.62
	07/25/11		4.84	6.18
	12/06/11		5.29	5.73
	03/22/12		4.35	6.67
MW-2	02/20/97	11.87	6.26	5.61
	05/28/97		6.65	5.22
	09/19/97		6.90	4.97
	11/17/97		6.75	5.12
	02/27/98		5.31	6.56
	05/27/98		5.87	6.00
	10/01/98 12/22/98		6.95 6.70	4.92 5.17
	22/12/22		_ /_	
	03/15/00 06/28/00		5.45 6.37	6.42 5.50
	09/14/00		6.86	5.01
	12/11/00		7.33	4.54
	03/14/01		5.75	6.12
	06/13/01		6.33	5.54
	08/29/01		6.71	5.16
	12/12/01		5.92	5.95
	04/11/02		5.88	5.99
	12/05/02		6.56	5.31
	04/22/09		5.52	6.35
	02/08/10		5.28	6.59
	05/10/10		5.46	6.41
	07/16/10		5.80	6.07
	10/04/10		5.32	6.55
	02/03/11		5.83	6.04
	04/11/11		5.35	6.52
	07/25/11		5.76	6.11
	12/06/11		6.16	5.71
	03/22/12		5.40	6.47

Well		Elevation	Depth to Water	Groundwater Elevation
No.	Date	(Feet) <sup>(a)</sup>	(Feet)	(Feet)
MW-3	02/20/97	11.79	6.36	5.43
	05/28/97		6.62	5.17
l	09/19/97		6.83	4.96
	11/17/97		6.77	5.02
	02/27/98		5.38	6.41
	05/27/98		6.05	5.74
	10/01/98		6.95	4.84
	12/22/98		6.73	5.06
	03/14/00		NM	NM
	06/28/00		6.37	5.42
-	09/14/00		7.06	4.73
<b> </b>	12/11/00 03/14/01		6.68 5.85	5.11 5.94
-	06/13/01		6.34	5.45
-	08/29/01		6.70	5.09
<b> </b>	12/12/01		5.95	5.84
<b> </b>	04/11/02		5.86	5.93
<b> </b>	12/05/02		6.55	5.24
	04/22/09		NM	NM
	02/08/10		5.31	6.48
	05/10/10		5.52	6.27
	07/16/10		5.90	5.89
	10/04/10		6.28	5.51
l .	02/03/11		5.33	6.46
	04/11/11		5.37	6.42
	07/25/11		5.71	6.08
	12/06/11		6.17	5.62
D 4) 0 / 4	03/22/12	40.00	5.36	6.43
MW-4	02/20/97	10.88	5.29	5.59
l -	05/28/97 09/19/97		5.66 6.00	5.22 4.88
-	11/17/97		6.06	4.82
l l	02/27/98		4.66	6.22
	05/27/98		5.98	4.90
l	10/01/98		5.23	5.65
	12/22/98		6.57	4.31
	03/14/00		4.86	6.02
[	06/28/00		5.55	5.33
	09/14/00		6.05	4.83
	12/11/00		5.93	4.95
]	03/14/01		5.04	5.84
]	06/13/01		5.25	5.63
	08/29/01		5.89	4.99
	12/12/01		5.14	5.74 5.92
<b> </b>	04/11/02 12/05/02		4.96 5.68	5.92
	04/22/09		4.67	6.21
	02/08/10		4.71	6.17
	05/10/10		4.55	6.33
	07/16/10		5.12	5.76
	10/04/10		5.49	5.39
	02/03/11		5.13	5.75
	04/11/11		4.29	6.59
	07/25/11		4.04	6.84
	12/06/11		5.34	5.54
	03/22/12		4.67	6.21

Well		Elevation	Depth to Water	Groundwater Elevation
No.	Date	(Feet) <sup>(a)</sup>	(Feet)	(Feet)
MW-5	02/20/97	10.41	4.68	5.73
WW 5	05/28/97	10.41	5.21	5.20
	09/19/97		5.43	4.98
	11/17/97		5.28	5.13
	02/27/98		4.10	6.31
	05/27/98		5.40	5.01
	10/01/98		5.42	4.99
	12/22/98		5.40	5.01
	03/14/00		NM	NM
	06/28/00		5.11	5.30
	09/14/00		NM 5.49	NM 4.02
	12/11/00 03/14/01		5.48 4.57	4.93 5.84
	06/13/01		5.05	5.36
	08/29/01		5.34	5.07
	12/12/01		4.79	5.62
	04/11/02		4.66	5.75
	12/05/02		5.32	5.09
	04/22/09		NM	NM
	02/08/10		4.13	6.28
	05/10/10		4.20	6.21
	07/16/10		4.44	5.97
	10/04/10		4.97	5.44
	02/03/11		4.51	5.90
	04/11/11		4.00	6.41
	07/25/11 12/06/11		4.44 4.82	5.97 5.59
	03/22/12		4.02	6.23
MW-6	02/20/97	11.05	5.38	5.67
	05/28/97	11.00	5.93	5.12
	09/19/97		6.15	4.90
	11/17/97		6.06	4.99
	02/27/98		4.74	6.31
	05/27/98		5.40	5.65
	10/01/98		6.37	4.68
	12/22/98		6.06	4.99
	03/14/00		NM	NM
	06/28/00		6.71	4.34
	09/14/00 12/11/00		6.17 NM	4.88 NM
	03/14/01		5.11	5.94
	06/13/01		6.65	4.40
	08/29/01		6.00	5.05
	12/12/01		5.33	5.72
	04/11/02		5.15	5.90
	12/05/02		5.90	5.15
	04/22/09		NM	NM
	02/08/10		4.56	6.49
	05/10/10		4.79	6.26
	07/16/10		5.03	6.02
	10/04/10		5.57	5.48
	02/03/11 04/11/11		5.24 4.71	5.81 6.34
	07/25/11		5.05	6.00
	12/06/11		5.49	5.56
	03/22/12		4.74	6.31
	JUILLIIL			0.01

Well		Elevation	Depth to Water	Groundwater Elevation
No.	Date	(Feet) <sup>(a)</sup>	(Feet)	(Feet)
MW-7				·
IVIVV-7	02/20/97	10.84	5.70	5.14
	05/28/97 09/19/97		5.46 5.91	5.38 4.93
	11/17/97		5.59	5.25
	02/27/98		4.68	6.16
	05/27/98		5.17	5.67
	10/01/98		5.80	5.04
	12/22/98		5.78	5.06
	03/14/00		4.50	6.34
	06/28/00		5.51	5.33
	09/14/00		5.93	4.91
	12/11/00		5.72	5.12
	03/14/01		4.58	6.26
	06/13/01		5.18	5.66
	08/29/01		5.53	5.31
	12/12/01		4.73	6.11
	04/11/02		4.68	6.16
	12/05/02		5.25	5.59
	04/22/09		4.58	6.26
		I 7 abandoned on January 11-2	010 and replaced with well MW-	
MW-7R	02/08/10	10.84	4.28	6.56
10100 710	05/10/10	10.04	4.55	6.29
	07/16/10		4.82	6.02
	10/04/10		5.42	5.42
	02/03/11		4.98	5.86
	04/11/11		4.63	6.21
	07/25/11		4.78	6.06
	12/06/11		5.28	5.56
	03/22/12		4.32	6.52
MW-8	02/20/97	10.75	5.10	5.65
	05/28/97		5.68	5.07
	09/19/97		5.95	4.80
	11/17/97		5.91	4.84
	02/27/98		4.50	6.25
	05/27/98		6.10	4.65
	10/01/98		6.13	4.62
	12/22/98		6.10	4.65
	03/14/00		5.01	5.74
	06/28/00		5.47	5.28
	09/14/00		5.99	4.76
	12/11/00		5.84	4.91
	03/14/01		4.90	5.85
	06/13/01		5.40	5.35
	08/29/01		5.80	4.95
	12/12/01		5.05	5.70
	04/11/02		4.95	5.80
	12/05/02		5.42	5.33
	04/22/09		4.94	5.81
	02/08/10		4.31	6.44
	05/10/10		4.54	6.21
	07/16/10		4.80	5.95
	10/04/10		5.38	5.37
	02/03/11		5.93	4.82
	04/11/11		4.45	6.30
	07/25/11		4.81	5.94
	12/06/11		5.32	5.43
	03/22/12		4.46	6.29

Well		Elevation	Depth to Water	Groundwater Elevation
No.	Date	(Feet) <sup>(a)</sup>	(Feet)	(Feet)
OW-1	03/15/00	10.75	4.47	6.28
	06/29/00		4.95	5.80
	08/29/01		5.01	5.74
	09/14/00		5.31	5.44
	12/11/00		5.17	5.58
	03/14/01		4.54	6.21
	06/13/01		4.75	6.00
	12/12/01		4.80	5.95
	04/11/02		4.52	6.23
	12/05/02		5.13	5.62
	04/22/09		4.19	6.56
	02/08/10		4.20	6.55
	05/10/10		4.13	6.62
	07/16/10		4.31	6.44
	10/04/10		4.64	6.11
	02/03/11		4.45	6.30
	04/11/11		4.01	6.74
	07/25/11		4.21	6.54
	12/06/11		4.55	6.20
	03/22/12		4.55	6.20
OW-2	03/15/00	11.03	4.76	6.27
	06/29/00		5.15	5.88
	09/14/00		5.60	5.43
	12/11/00		5.45	5.58
	03/14/01		4.77	6.26
	06/13/01		5.01	6.02
	08/29/01		5.31	5.72
	12/12/01		5.10	5.93
	04/11/02		4.83	6.20
	12/05/02		5.42	5.61
	04/22/09		4.52	6.51
	02/08/10		4.41	6.62
	05/10/10		4.49	6.54
	07/16/10		4.47	6.56
	10/04/10		4.93	6.10
	02/03/11		4.65	6.38
	04/11/11		4.28	6.75
	07/25/11		4.51	6.52
	12/06/11		4.85	6.18
	03/22/12		4.58	6.45

### Notes:

Destroyed wells MW-1 and MW-7 were assumed to have the same elevation as the replacement wells.

NM - Not Measured

<sup>(</sup>a) - All well elevations surveyed to the NAV 88 datum on April 26, 2011.

Well		рН	D.O.	ORP
No.	Date	(units)	(mg/L)	(millivolts)
MW-1	12/28/99	7.92	0.87	-211
	03/14/00	7.29	1.12	-23
	06/28/00	8.26	0.55	-248
	09/14/00	6.92	0.36	-316
	12/11/00	7.05	1.34	-55
	03/14/01	7.07	1.24	-66
	06/13/01	7.05	1.20	-109
	08/29/01	7.78	NM	-63
	12/12/01	6.93	1.28	-4
	04/12/02	6.72	0.37	-56
	12/05/02	7.01	NM	-79
	04/22/09	6.94	0.08	-57/102
			andoned on January 11, 2010	
		· · · · · · · · · · · · · · · · · · ·	vell MW-1R on January 12, 2	
MW-1R	02/08/10	7.27	1.07	NM
	07/16/10	7.14	0.15	-139/-152
	02/03/11	6.92	0.59	-225/-234
	07/25/11	7.32	0.20	-155/-139
	03/22/12	6.84	0.83/0.50	-4/-58
MW-2	12/28/99	7.94	0.96	-38
	03/15/00	7.28	1.43	-255
	06/28/00	7.52	0.89	-221
	09/14/00	7.44	0.61	-310
	12/11/00	7.28	1.96	24
	03/14/01	7.34	1.46	11
	06/13/01	7.07	0.95	-12
	08/29/01	7.24	NM	70
	12/12/01	7.13	0.88	13
	04/11/02	7.25	0.66	126
	12/05/02	7.01	0.14	-32
	04/22/09	6.91	0.17	143/-12
	02/08/10	6.91	3.56	NM
	07/16/10	7.19	0.40	104/72
	02/04/11	7.36	1.03	174/196
	07/25/11	6.97	0.29	132/-8
	03/22/12	7.36	0.48/0.79	215/227

Well		рН	D.O.	ORP
No.	Date	(units)	(mg/L)	(millivolts)
MW-4	12/28/99	7.38	0.80	-201
	03/14/00	6.97	2.11	35
	06/28/00	6.87	3.57	-34
	09/14/00	7.23	1.06	16
	12/11/00	6.99	2.27	74
	03/14/01	6.81	1.28	-91
	06/13/01	6.97	0.97	-30
	08/29/01	7.45	NM	104
	12/13/01	6.88	0.34	199
	04/12/02	6.77	0.95	12
	12/05/02	6.81	0.56	-13
	04/22/09	6.71	0.16	-67/-68
	02/08/10	6.92	2.38	NM
	02/04/11	7.68	0.77	-7/80
	07/25/11	7.41	0.51	-118/-123
	03/22/12	7.81	1.01/0.29	119/171
MW-5	12/28/99	7.55	1.14	-118
	06/28/00	7.57	1.79	-103
	12/11/00	7.28	4.14	-11
	06/13/01	7.04	3.61	-44
	12/13/01	7.05	3.26	52
	04/11/02	7.04	2.28	-524
MW-6	07/16/10	6.99	0.47	-107/-124
MW-7	12/28/99	7.94	1.30	-58
	03/14/00	7.23	1.05	-260
	06/28/00	7.18	5.76	-164
	09/14/00	7.06	0.65	-306
	12/12/00	7.02	1.25	-70
	03/14/01	7.10	0.94	-6
	06/13/01	7.03	1.77	-94
	08/29/01	7.34	NM	58
	12/12/01	7.09	0.98	47
	04/12/02	6.60	0.71	0
	12/05/02	6.96	0.14	10
	04/22/09	7.09	0.17	-37/-98
			pandoned on January 11, 2010 well MW-7R on January 12, 20	010.
MW-7R	02/08/10	7.43	2.32	NM
	07/16/10	7.28	0.12	-148/-105
	02/04/11	7.47	1.03	56/50
	07/25/11	7.74	0.27	-109/-99
	03/22/12	7.32	0.48/0.57	119/43

Well		рН	D.O.	ORP
No.	Date	(units)	(mg/L)	(millivolts)
MW-8	12/28/99	7.79	0.42	-136
	03/14/00	7.05	1.53	-27
	06/28/00	8.86	1.87	-77
	09/14/00	7.32	1.07	-166
	12/12/00	7.05	1.16	-61
	03/14/01	7.21	2.55	16
	06/13/01	7.10	2.43	-21
	08/29/01	7.52	NM	9
	12/13/01	7.15	1.55	12
	04/12/02	6.58	1.83	-10
	12/05/02	6.91	0.07	-88
	04/22/09	7.13	2.72	98/30
	02/08/10	7.09	3.58	NM
	07/16/10	7.26	0.29	68/0
	02/04/11	7.47	1.88	151/123
	07/25/11	7.38	0.36	-44/-59
	03/22/12	7.02	0.63/0.40	248/236
OW-1	12/28/99	7.67	0.99	-89
	03/15/00	7.31	1.16	-55
	06/29/00	6.34	3.29	-48
	09/14/00	7.02	0.98	-115
	12/12/00	6.94	1.98	-5
	03/14/01	7.04	2.89	-5
	06/13/01	6.76	1.11	-58
	08/29/01	7.04	NM	-39
	12/12/01	6.83	1.17	-46
	04/11/02	7.19	0.75	-31
	12/05/02	6.88	0.03	-79
	04/22/09	6.80	0.29	-77/-88
	02/08/10	6.98	2.91	NM
	07/16/10	7.03	0.41	-81/-118
	02/04/11	7.10	1.10	-42/-89
	07/25/11	7.06	0.37	-108/-121
	03/22/12	6.71	0.03/1.00	52/18

Well No.	Date	pH (units)	D.O. (mg/L)	ORP (millivolts)
OW-2	12/28/99	7.69	1.79	-58
Ovv-2				
	03/15/00	7.25	0.99	-35
	06/29/00	6.44	2.39	-66
	09/14/00	7.21	1.33	-89
	12/12/00	6.90	1.44	-76
	03/14/01	7.16	2.68	-54
	06/13/01	6.97	1.15	-92
	08/29/01	7.16	NM	-93
	12/12/01	6.81	1.36	-61
	04/11/02	7.08	0.89	-44
	12/05/02	6.85	0.01	-95
	04/22/09	6.89	0.35	-103/-90
	02/08/10	7.10	2.12	NM
	07/16/10	7.11	0.38	-107/-13
	02/04/11	7.24	1.06	13/-89
	07/25/11	7.17	0.42	-144/-121
	03/22/12	6.81	0.71/0.58	102/-6

### Notes:

D.O. - Dissolved Oxygen

mg/L - milligrams per liter

**ORP** - Oxidation Reduction Potential

NM - Not Measured

Multiple values represent pre- and post-purge measurements.

144 11						Ethyl	v 1		Ethylene	Ethylene	
Well	Doto	TPHd	TPHg	Benzene	Toluene	Benzene	Xylenes	MTBE	Dichloride	Dibromide	Naphthalene
No. MW-1	<b>Date</b> 02/20/97	200,000	2,900	260	61	(μ <u>ς</u> 42	96	NS	NA	NA	NA
10100-1	05/28/97	28,000	2,100	230	42	55	110	NS	NA NA	NA NA	NA NA
	09/19/97	2.700.000	110,000	230	140	250	700	ND	NA NA	NA NA	NA NA
	11/17/97	950,000	40,000	240	190 <sup>(c)</sup>	270 <sup>(c)</sup>	880 <sup>(c)</sup>	ND <sup>(c)</sup>	NA	NA	NA NA
	02/27/98	1,200,000	380,000	50	50	200	800	ND	NA NA	NA NA	NA NA
	05/27/98	280,000	13,000	110	13	66	390	ND	NA	NA	NA
	10/01/98	63,000	1,300	43	1.2	15	84	ND	NA	NA	NA
	12/22/98	79,000	2,000	32	ND <sup>(e)</sup>	23 <sup>(e)</sup>	130 <sup>(e)</sup>	ND	NA	NA	NA
	12/28/99	43,000	1,700	49	1.3	11	24	ND	NA	NA	NA
	03/14/00	4,300	540	59	1.3	12	23	NA	NA	NA	NA
	06/28/00	290,000	1,300	26	ND	ND	23	ND	NA	NA	NA
	09/14/00	770,000	1,100	34	ND	3.9	17	ND	NA	NA	NA
	12/11/00	28,000	2,000	10	ND	ND	9.3	ND	NA	NA	NA
	03/14/01	8,400	350	12	ND	ND	ND	ND	NA	NA	NA
	06/13/01	13,000	340	6.4	ND	ND	1.6	ND	NA	NA	NA
	08/29/01	26,000	140	0.5	ND	ND	ND	ND	NA	NA	NA
	12/12/01	5,600	160	0.65	ND	ND ND	ND	ND	NA NA	NA	NA NA
	04/12/02 12/05/02	23,000 17,000	260 340	3.4 2.2	ND ND	ND ND	ND ND	NA 6.0	NA NA	NA NA	NA NA
	04/22/09	3,200	240	<0.50	<0.50	<0.50	<1.0	2.6	<0.50	<0.50	<0.50
	DUP	12,000	310	<0.50	<0.50	<0.50	<1.0	2.8	<0.50	<0.50	<0.50
	D01		Well MW-1 aba								\0.00
MW-1R	02/08/10	5,600	120 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dup	02/08/10	5,800	110 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Бир	02/06/10	770	110 <sup>(k)</sup>						<0.50	<0.50	<0.50
				<0.50	<0.50	<0.50	<0.50	<0.50			
Dup	07/16/10	960	120 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
9 feet	02/03/11	420	97 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
18 feet	02/03/11	860	98 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
std	02/03/11	910	110 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	07/25/11	500	83 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dup	07/25/11	1,000	88 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	03/22/12	810	120 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
Dup	03/22/12	1,300	94 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	< 0.50	<0.50	<0.50	<2.0
MW-2	02/20/97	1,000 <sup>(h)</sup>	ND	ND	ND	ND	ND	NS	NA	NA	NA
	05/28/97	3,700 <sup>(b,h)</sup>	ND	ND	ND	ND	ND	NS	NA	NA	NA
	09/19/97	4100	ND	ND	ND	ND	ND	ND	NA	NA	NA
	11/17/97	1300	ND	ND	ND	ND	ND	ND	NA	NA	NA
	02/27/98	340	ND	ND	0.9	ND	ND	ND	NA	NA	NA
	05/27/98	1300	ND	ND	ND	ND	ND	ND	NA	NA	NA
	10/01/98	3,500 <sup>(i)</sup>	3,200	ND	ND	ND	ND	ND	NA	NA	NA
	12/22/98	1,200 <sup>(j,k)</sup>	67 <sup>(d)</sup>	ND	ND	ND	ND	ND	NA	NA	NA
	12/28/99	750	ND	ND	ND	ND	ND	ND	NA NA	NA	NA
	03/15/00	92 ND	ND	ND	ND	ND	ND	ND	NA NA	NA	NA NA
	06/28/00 09/14/00	ND 120	ND ND	ND	ND	ND ND	ND	ND	NA NA	NA NA	NA NA
	12/11/00	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	NA NA	NA NA	NA NA
	03/14/01	75	ND ND	ND	ND	ND	ND	ND	NA NA	NA NA	NA NA
	06/13/01	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA NA
	08/29/01	ND	ND	ND	ND	ND	ND	ND	NA NA	NA NA	NA NA
	12/12/01	150 <sup>(j)</sup>	ND	ND	ND	ND	ND	ND	NA NA	NA NA	NA NA
	04/12/02	ND	ND	ND	ND	ND	ND	NA	NA NA	NA NA	NA NA
	12/05/02	57 <sup>(j)</sup>	ND	ND	ND	ND	ND	ND	NA NA	NA	NA NA
	04/22/09	140	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
	02/08/10	870 <sup>(k)</sup>	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
	07/16/10	<50	<50	<0.50	<0.50	<0.50	<1.0	1.5	<0.50	<0.50	<0.50
	02/04/11	90 <sup>(k)</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	07/25/11	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	03/22/12	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
E	SLs	100	100	1.0	40	30	20	5.0	5.0	0.05	17

Well No.	Date	TPHd	TPHg	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	Ethylene Dichloride	Ethylene Dibromide	Naphthalene
		140 <sup>(h)</sup>	ND	ND	ND			NC	NIA	N/A	NIA
MW-3	02/20/97 05/28/97	240 <sup>(b,h)</sup>	ND ND	ND ND	ND ND	ND ND	ND ND	NS NS	NA NA	NA NA	NA NA
	09/19/97	ND	ND ND	0.7	ND ND	ND ND	ND ND	ND	NA NA	NA NA	NA NA
	11/17/97	ND	ND	ND	ND	ND	ND	ND	NA NA	NA NA	NA NA
	02/27/98	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
	05/27/98	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
	10/01/98	56 <sup>(l)</sup>	ND	ND	ND	ND	ND	ND	NA	NA	NA
	12/22/98	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA
	12/28/99	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA
	03/14/00	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA
	06/28/00 09/14/00	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NA NA	NA NA	NA NA
	12/11/00	NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS	NA NA	NA NA	NA NA
	03/14/01	NS	NS	NS	NS	NS	NS	NS	NA NA	NA NA	NA NA
	06/13/01	NS	NS	NS	NS	NS	NS	NS	NA	NA NA	NA NA
	08/29/01	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA
	12/13/01	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA
	04/11/02	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA
	12/05/02	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA
						er included ir					
MW-4	02/20/97	470,000	64,000	ND	ND	ND	ND	NS	NA	NA	NA
	05/28/97	1,000,000	11,000	ND	ND	ND	ND	NS	NA	NA	NA
	09/19/97	2,600,000	37,000	260	ND ND(c)	ND ND(c)	ND ND(c)	ND ND(c)	NA	NA	NA
	11/17/97	57,000	4,400	25 2.7	ND <sup>(c)</sup>	ND <sup>(c)</sup>	ND <sup>(c)</sup>	ND <sup>(c)</sup>	NA NA	NA	NA NA
	02/27/98 05/27/98	9,300 11,000	580 3,900	1.4	0.8 0.6	0.8 ND	3 ND	ND ND	NA NA	NA NA	NA NA
	10/01/98	670,000	2,400	5.7	ND	ND	4.6	ND	NA NA	NA NA	NA NA
	12/22/98	3,700	200	ND <sup>(p)</sup>	NA NA	NA NA	NA NA				
	12/28/99	5,800	1,000	ND	ND	ND	ND	ND	NA NA	NA NA	NA NA
	03/14/00	4,800	350	ND	ND	ND	ND	NA	NA	NA	NA
	06/28/00	8,400	120	ND	ND	ND	ND	ND	NA	NA	NA
	09/14/00	19,000	130	ND	ND	ND	ND	ND	NA	NA	NA
	12/11/00	730	120	ND	ND	ND	ND	ND	NA	NA	NA
	03/14/01	580	50	ND	ND	ND	ND	ND	NA	NA	NA
	06/13/01 08/29/01	260 30,000	54 940	ND ND	ND ND	ND ND	ND ND	ND ND	NA NA	NA NA	NA NA
	12/13/01	260	50	ND	ND	ND	ND	ND	NA NA	NA NA	NA NA
	04/12/02	230	50	ND	ND	ND	ND	NA	NA	NA NA	NA NA
	12/05/02	1,500	50	ND	ND	ND	ND	ND	NA	NA	NA
	04/22/09	13,000	480	<0.50	< 0.50	<0.50	< 0.50	3.0	<0.50	< 0.50	<0.50
	02/08/10	12,000	120 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	1.6	<0.50	< 0.50	<0.50
	07/16/10	2,700	210 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	4.2	<0.50	< 0.50	< 0.50
	02/04/11	26,000	1600 <sup>(k)</sup>	<0.50	<0.50	<0.50	< 0.50	1.4	<0.50	< 0.50	<0.50
	07/25/11	720	<50	<0.50	<0.50	<0.50	<0.50	1.7	<0.50	<0.50	<0.50
	03/22/12	2,500	<50	<0.50	<0.50	<0.50	< 0.50	0.9	<0.50	<0.50	<2.0
MW-5	02/20/97	1,100 <sup>(n)</sup>	ND	ND	ND	ND	ND	NS	NA	NA	NA
	05/28/97	560 <sup>(b,q)</sup>	60 <sup>(m)</sup>	ND	ND	ND	ND	NS	NA NA	NA NA	NA NA
	09/19/97 11/17/97	1,000 1,100	70 70	ND 0.6	ND 0.7	ND 0.5	ND ND	ND 5	NA NA	NA NA	NA NA
	02/27/98	1,100 ND	ND	ND	ND	ND	ND ND	5	NA NA	NA NA	NA NA
	05/27/98	770	ND	ND	ND	ND	ND	ND	NA NA	NA NA	NA NA
	10/01/98	630	ND	ND	ND	ND	ND	ND	NA NA	NA NA	NA NA
	12/22/98	890 <sup>(i)</sup>	ND	ND	ND	ND	ND	ND	NA	NA	NA
	12/28/99	440	ND	ND	ND	ND	ND	ND	NA	NA	NA
	03/15/00	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA
	06/28/00	110 <sup>(1)</sup>	ND	ND	ND	ND	ND	ND	NA	NA	NA
	09/14/00	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA
	12/11/00	130	ND	ND	ND	ND	ND NO	ND	NA	NA	NA
	03/14/01	NS 400	NS	NS	NS	NS	NS	NS	NA NA	NA	NA NA
	06/13/01 08/29/01	120 NS	ND NS	ND NS	ND NS	ND NS	ND NS	ND NS	NA NA	NA NA	NA NA
	12/13/01	530 <sup>(i)</sup>	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	NA NA	NA NA	NA NA
	04/11/02	230 <sup>(i)</sup>	ND ND	ND ND	ND ND	ND ND	ND ND	NA NA	NA NA	NA NA	NA NA
	U-7/11/UZ	200	IND			er included in			INA	I IVA	I IVA
F	21.0	100	100		•				<b>5</b> 0	0.05	17
E	SLs	100	100	1.0	40	30	20	5.0	5.0	0.05	17

Well		TPHd	TPHq	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	Ethylene Dichloride	Ethylene Dibromide	Naphthalene
No.	Date					(µg					
MW-7	02/20/97	1,500,000	15,000	81	51	ND	ND	NS	NA	NA	NA
	05/28/97	440,000	390,000	ND	ND	ND	ND	NS	NA	NA	NA
	09/19/97	910,000	3,600	110	64	37	ND	ND	NA	NA	NA
	11/17/97	18,000,000	15,000	110	41 <sup>(c)</sup>	12 <sup>(c)</sup>	110 <sup>(c)</sup>	ND <sup>(c)</sup>	NA	NA	NA
	02/27/98	290,000	45,000	80	60	ND	ND	ND	NA NA	NA.	NA NA
	05/27/98	1,600	140	2.3	0.9	0.9	3	ND	NA	NA	NA
	10/01/98	89,000	710	39	2.4	11	31	ND	NA	NA	NA
	12/22/98	240,000	3,900	51	ND	ND	ND	ND	NA	NA	NA
	12/28/99	300,000	2,300	51	5.3	13	27	ND	NA	NA	NA
	03/14/00	640,000	620	31	5.3	9.9	31	NA	NA	NA	NA
	06/28/00	2,900,000	3,200(k)	15	ND	3.2	30	ND	NA	NA	NA
	09/14/00	15,000,000	1,900	11	ND	10	39	ND	NA	NA	NA
	12/12/00	340,000	4,500	5	ND	ND	17	ND	NA	NA	NA
	03/14/01	170,000	8,000	5	ND	ND	ND	ND	NA	NA	NA
	06/13/01	19,000	100	0.99	ND	ND	ND	6.2	NA	NA	NA
	08/29/01	27,000	120	3.9	ND	ND	ND	5	NA	NA	NA
	12/12/01	6,900	610	0.5	ND	ND	ND	ND	NA	NA	NA
	04/12/02	2,600	110	0.5	ND	ND	ND	NA	NA	NA	NA
	12/05/02	9,100	290	0.5	ND	ND	ND	5.7	NA	NA	NA
	04/22/09	1,900	56	<0.50	< 0.50	< 0.50	<1.0	3.4	<0.50	< 0.50	< 0.50
			Well MW-7 aba	andoned on J	anuary 11, 20	10 and replace	ed with well	MW-7R or	n January 12, 2	2010.	
MW-7R	02/08/10	560	52 <sup>(k)</sup>	0.63	< 0.50	<0.50	< 0.50	2.4	<0.50	< 0.50	< 0.50
	07/16/10	12,000	4.000 <sup>(k)</sup>	2.6	<50	0.8	6.9	2.5	<50	<50	<50
9 feet	02/03/11	690	60 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	1.9	<0.50	<0.50	<0.50
	02/03/11	430	59 <sup>(k)</sup>								
18 feet				<0.50	<0.50	<0.50	<0.50	2.0	<0.50	<0.50	<0.50
std	02/03/11	1,200	120 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50
	07/25/11	<50	<50	<0.50	<0.50	<0.50	<0.50	1.9	<0.50	<0.50	<0.50
	03/22/12	2,800	320 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
MW-8	02/20/97	2,500	340 <sup>(a)</sup>	2.1	53	7.1	94	NS	NA	NA	NA
	05/28/97	200 <sup>(b,s)</sup>	480 <sup>(a)</sup>	2.5	12	ND	76	NS	NA	NA	NA
	09/19/97	7,000	1,000	0.8	5	0.5	130	ND	NA	NA	NA
	11/17/97	520	250	1.4	2.1	0.7	3	ND	NA	NA	NA
	02/27/98	150	ND	ND	ND	ND	ND	ND	NA	NA	NA
	05/27/98	70	ND	ND	ND	ND	ND	ND	NA	NA	NA
	10/01/98	440 <sup>(i)</sup>	ND	ND	ND	ND	ND	ND	NA	NA	NA
	12/22/98	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA
	12/28/99	130	ND	ND	ND	ND	ND	ND	NA	NA	NA
	03/14/00	170	ND	ND	ND	ND	ND	NA	NA	NA	NA
	06/28/00	300 <sup>(i)</sup>	ND	ND	ND	ND	ND	ND	NA	NA	NA
	09/14/00	310	ND	ND	ND	ND	ND	ND	NA	NA	NA
	12/11/00	15,000	ND	ND	ND	ND	ND	ND	NA	NA	NA
	03/14/01	130	ND	ND	ND	ND	ND	ND	NA	NA	NA
	06/13/01	100	ND	ND	ND	ND	ND	ND	NA	NA	NA
	08/29/01	160 <sup>(i)</sup>	ND	ND	ND	ND	ND	ND	NA	NA	NA
	12/13/01	97 <sup>(i)</sup>	ND	ND	ND	ND	ND	ND	NA	NA	NA
	04/12/02	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
	12/05/02	97	ND	ND	ND	ND	ND	ND	NA	NA	NA
	04/22/09	<50	<50	<0.50	<0.50	<0.50	<1.0	2.9	<0.50	<0.50	< 0.50
	02/08/10	360 <sup>(k)</sup>	<50	<0.50	<0.50	< 0.50	<0.50	1.7	<0.50	< 0.50	< 0.50
	07/16/10	<50	<50	<0.50	<0.50	<0.50	<0.50	1.6	<0.50	<0.50	<0.50
	02/04/11	62 <sup>(k)</sup>	<50	<0.50	<0.50	<0.50	<0.50	0.8	<0.50	<0.50	<0.50
	07/25/11	<50	<50	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<0.50	<0.50
	03/22/12	<50	<50	<0.50	<0.50	<0.50	<0.50	1.3	<0.50	<0.50	<2.0
ES	SLs	100	100	1.0	40	30	20	5.0	5.0	0.05	17

						Ethyl			Ethylene	Ethylene	
Well		TPHd	TPHg	Benzene	Toluene	Benzene	Xylenes	MTBE	Dichloride	Dibromide	Naphthalene
No.	Date			•		(μς	/L)				
OW-1	12/28/99	7,700	3,400	11	ND	ND	2.6	ND	NA	NA	NA
	03/15/00	5,300	700	1.7	ND	ND	ND	ND	NA	NA	NA
	06/29/00	1,300 <sup>(k)</sup>	140 <sup>(k)</sup>	4	ND	ND	2.2	6.6	NA	NA	NA
	09/14/00	5800 <sup>(k)</sup>	180	ND	ND	ND	ND	ND	NA	NA	NA
	12/12/00	230	110	3.4	ND	ND	ND	ND	NA	NA	NA
	03/14/01	2200 <sup>(k)</sup>	110	4	ND	ND	0.5	ND	NA	NA	NA
	06/13/01	1500 <sup>(k)</sup>	120	2.5	ND	ND	ND	ND	NA	NA	NA
	08/29/01	1.200 <sup>(k)</sup>	130 <sup>(k)</sup>	ND	ND	ND	ND	ND	NA	NA	NA
	12/12/01	3,100 <sup>(k)</sup>	76 <sup>(k)</sup>	ND	ND	ND	ND	ND	NA	NA	NA
	04/11/02	3.600 <sup>(k)</sup>	300 <sup>(k)</sup>	ND	ND	ND	ND	NA	NA NA	NA NA	NA NA
	12/05/02	490 <sup>(k)</sup>	78 <sup>(k)</sup>	ND ND	ND	ND ND	ND	ND	NA NA	NA NA	NA NA
	04/22/09	1,600	130	<0.50	<0.50	<0.50	<1.0	8.9	<0.50	<0.50	<0.50
	02/08/10	11,000	<50	<0.50	<0.50	<0.50	<0.50	5.1	<0.50	<0.50	<0.50
	07/16/10	85	57 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	4.3	<0.50	<0.50	<0.50
	02/04/11	17,000	140 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	5.9	<0.50	<0.50	<0.50
	07/25/11	210	70 <sup>(k)</sup>	<0.50	<0.50	<0.50	<0.50	10	<0.50	<0.50	<0.50
			81 <sup>(k)</sup>								
0147.0	03/22/12	710		<0.50	<0.50	<0.50 ND	<0.50	4.3	<0.50	<0.50	<2.0
OW-2	12/28/99 03/15/00	3,300 1,100	770 350	36 24	ND ND	ND ND	1.7 ND	16 9.3	NA NA	NA NA	NA NA
	06/29/00	850	160	7.4	ND ND	ND ND	ND ND	9.3	NA NA	NA NA	NA NA
	06/29/00	6,300	590	26	0.79	ND ND	1.7	17	NA NA	NA NA	NA NA
	12/12/00	320	210	6.6	ND	ND	ND	7.4	NA NA	NA NA	NA NA
	03/14/01	960	320	5.6	ND	ND	ND	ND	NA NA	NA NA	NA NA
	06/13/01	900	250	2.9	ND	ND ND	ND	10	NA NA	NA NA	NA NA
	08/29/01	1.400	270	5.3	ND	ND	ND	ND	NA.	NA NA	NA NA
	12/12/01	4,100	280	14	ND	ND	ND	11	NA.	NA	NA
	04/11/02	4,100	820	6.4	ND	ND	ND	NA	NA	NA	NA
	12/05/02	500	230	0.5	ND	ND	ND	5.6	NA	NA	NA
	04/22/09	2,100	210	< 0.50	< 0.50	< 0.50	<1.0	6.8	<0.50	<0.50	<0.50
	02/08/10	10,000	140 <sup>(k)</sup>	< 0.50	< 0.50	< 0.50	< 0.50	4.9	<0.50	<0.50	< 0.50
	07/16/10	2,000	210 <sup>(k)</sup>	< 0.50	< 0.50	< 0.50	< 0.50	5.7	<0.50	<0.50	< 0.50
	02/04/11	2,200	260 <sup>(k)</sup>	< 0.50	< 0.50	< 0.50	< 0.50	6.2	<0.50	<0.50	< 0.50
	07/25/11	250	170 <sup>(k)</sup>	<0.50	< 0.50	<0.50	<0.50	9.9	<0.50	<0.50	<0.50
	03/22/12	680	56 <sup>(k)</sup>	<0.50	<0.50	<0.50	< 0.50	6.0	<0.50	<0.50	<2.0
TB	02/08/10	NA	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	07/16/10	NA	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	02/03/11	NA	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	07/25/11	NA	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	03/22/12	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA
EB	02/08/10	<50	<50	<0.50	<0.50	<0.50	< 0.50	< 0.50	<0.50	<0.50	<0.50
	07/16/10	<50	<50	<0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	07/25/11	<50	<50	<0.50	<0.50	<0.50	<0.50	< 0.50	<0.50	<0.50	<0.50
	03/22/12	<50	<50	<0.50	<0.50	<0.50	<0.50	< 0.50	<0.50	<0.50	<2.0
ES	SLs	100	100	1.0	40	30	20	5.0	5.0	0.05	17

#### Notes:

μg/L - micrograms per liter NS - Well not sampled

TPHd - Total Petroleum Hydrocarbons as diesel ND - Not detected at or above the laboratory detection limit

TPHg - Total Petroleum Hydrocarbons as gasoline NA - Not analyzed MTBE - Methyl tert butyl ether EB - Equipment blank

Indicates constituent not detected at or above specified reporting limit

ESLs Regional Water Quality Control Board, San Francisco Bay Region, Environmental Screening Levels, presented in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (Interim Final - May 2008). for Commercial/Industrial Sites, Shallow Soil, and Drinking Water Resource

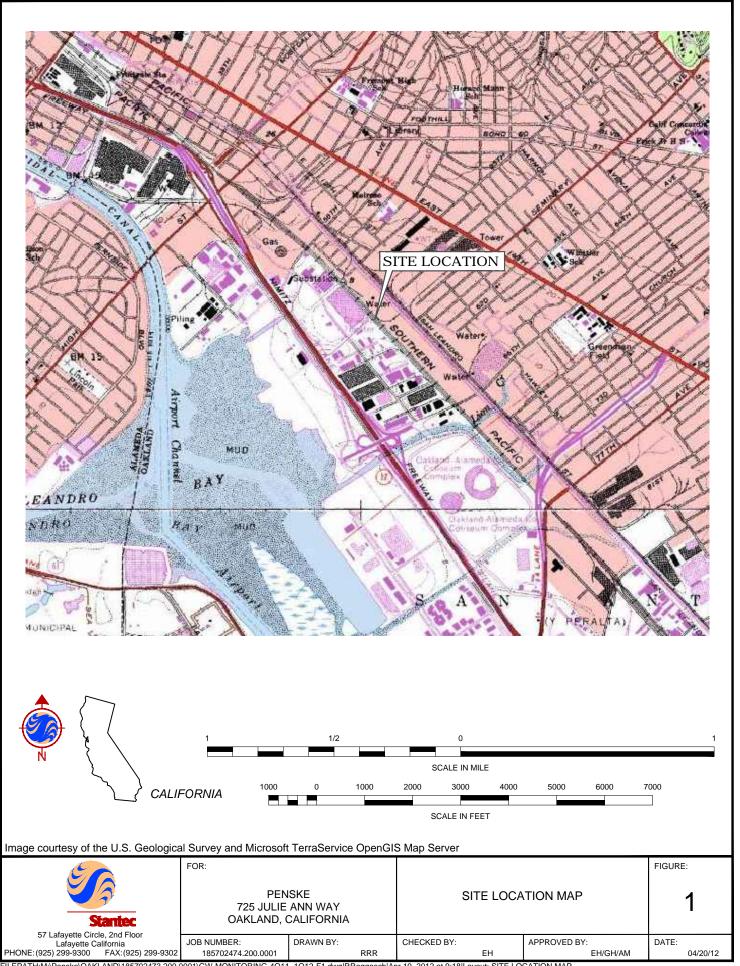
- (a) Laboratory reports that chromatogram indicates gasoline and unidentified hydrocarbons >C8.
- (b) Laboratory reports that the laboratory control sample failed for this batch, as well as when it was initially analyzed on 6/3/97. All results should be considered as estimated values. No additional sample was available for re-extraction.
- (c) Laboratory reports reporting limits for diesel and gas/BTEX elevated due to high levels of target compound. Samples run at dilution.
- (d) Laboratory reports the peak pattern present in this sample represents an unknown mixture atypical of gasoline in the range of n-C09 to greater than n-C12. Quantitation is based on a gasoline reference in the range of n-C07 to n-C12 only.
- (e) Laboratory reports reporting limit(s) raised due to high level of analyte present in sample.
- (f) Laboratory reports the hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C09 to n-C36. Quantitation is based on a diesel reference between n-C10 and n-C24 only.
- (g) Laboratory reports that chromatogram indicates diesel and unidentified hydrocarbons >C20.
- (h) Analyzed by USEPA Method 8015, modified.
- (i) Analyzed by USEPA Method 8020.
- (j) Diesel range concentration reported. A nonstandard diesel pattern was observed in the chromatogram.
- $(\mbox{\bf k})$  Sample exhibits chromatographic pattern that does not resemble standard.

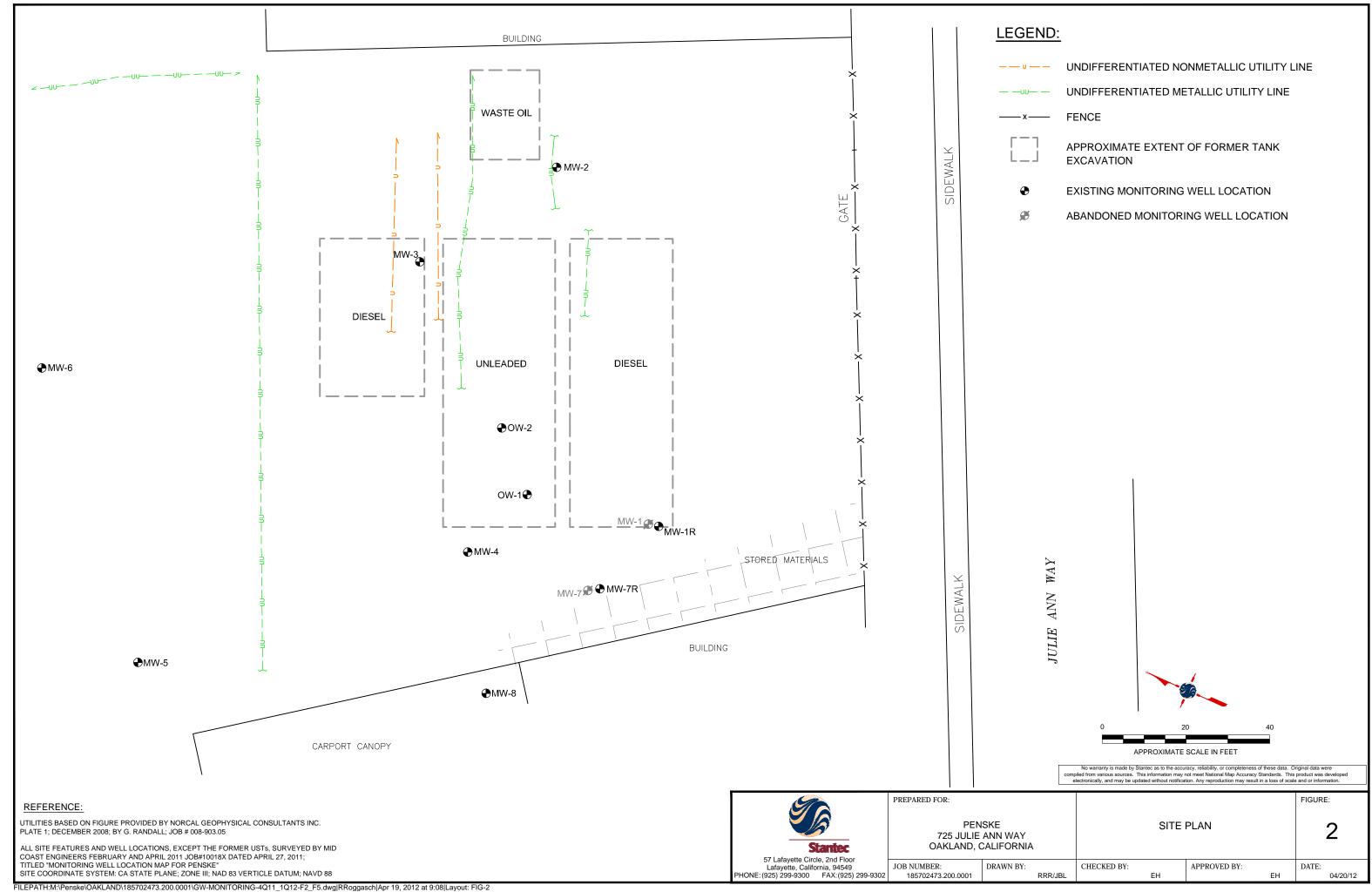
Ethylene dichloride reported as 1,2-Dichloroethane

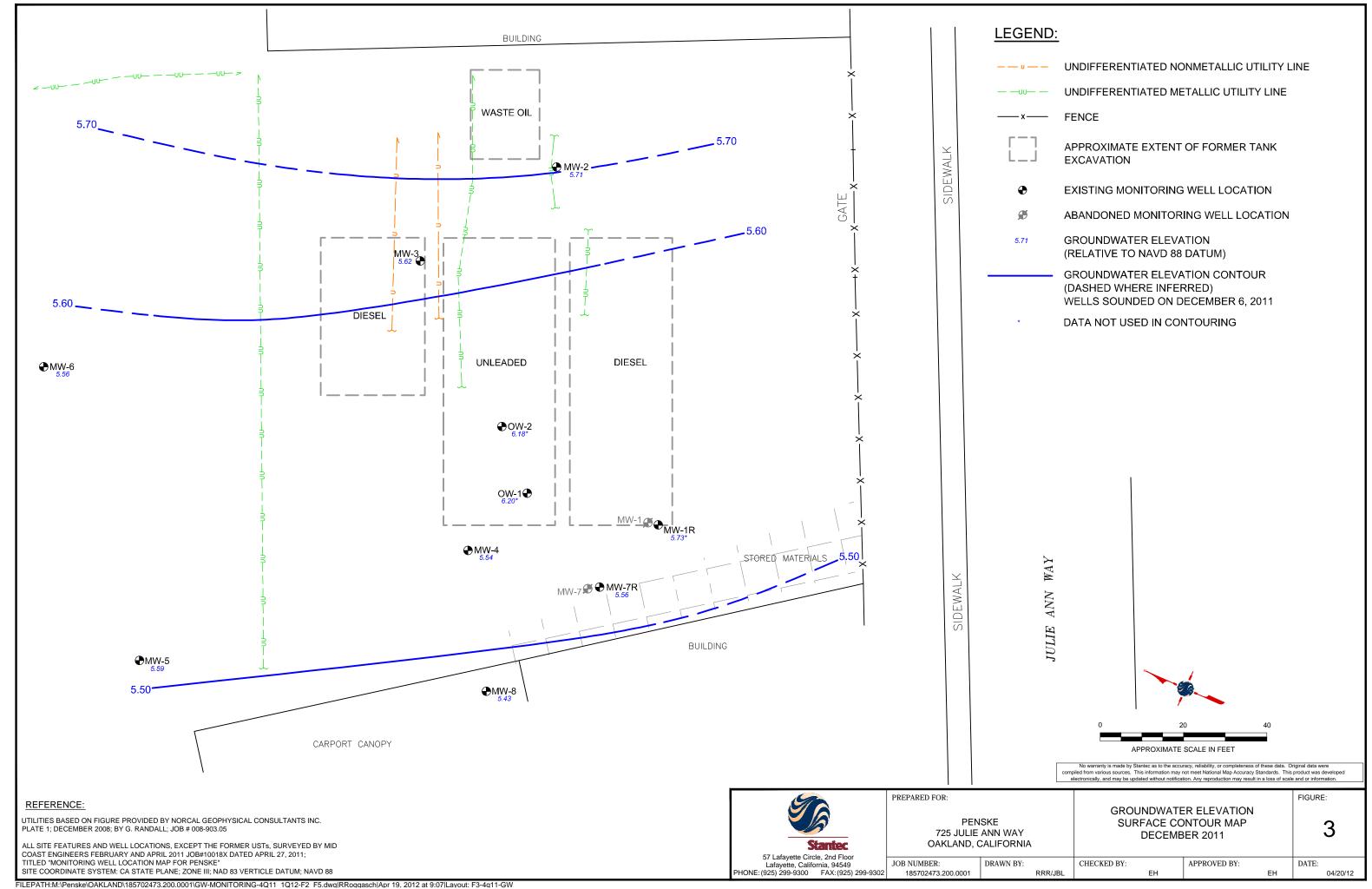
Ethylene dibromide reported as 1,2-Dibromoethane

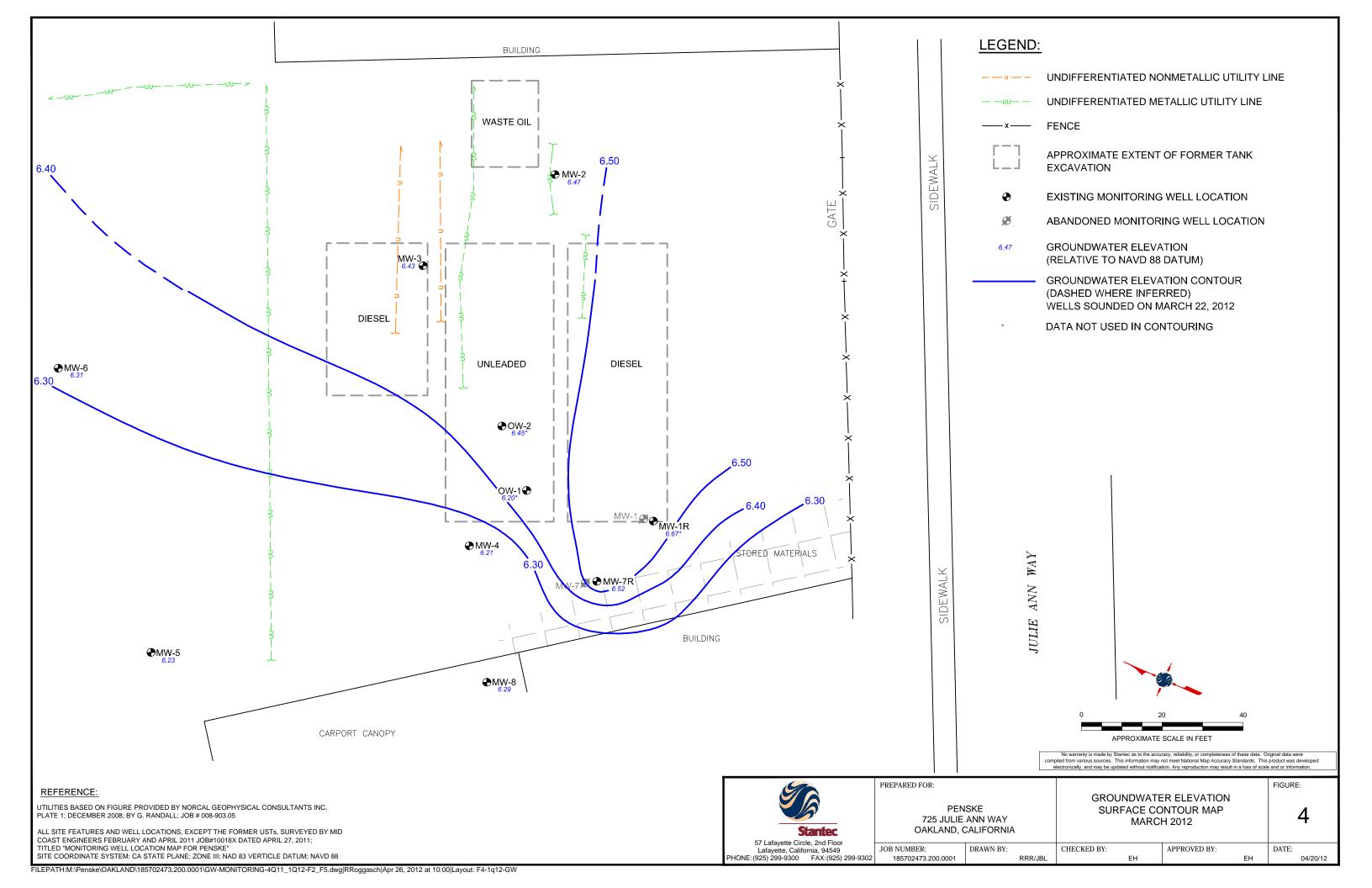
### **FIGURES**

2012 Semi-Annual Groundwater Monitoring Report Former Penske Truck Leasing Facility 725 Julie Ann Way Oakland, California Alameda County Site ID RO0000354 Stantec PN: 185702473.200.0001 June 18, 2012









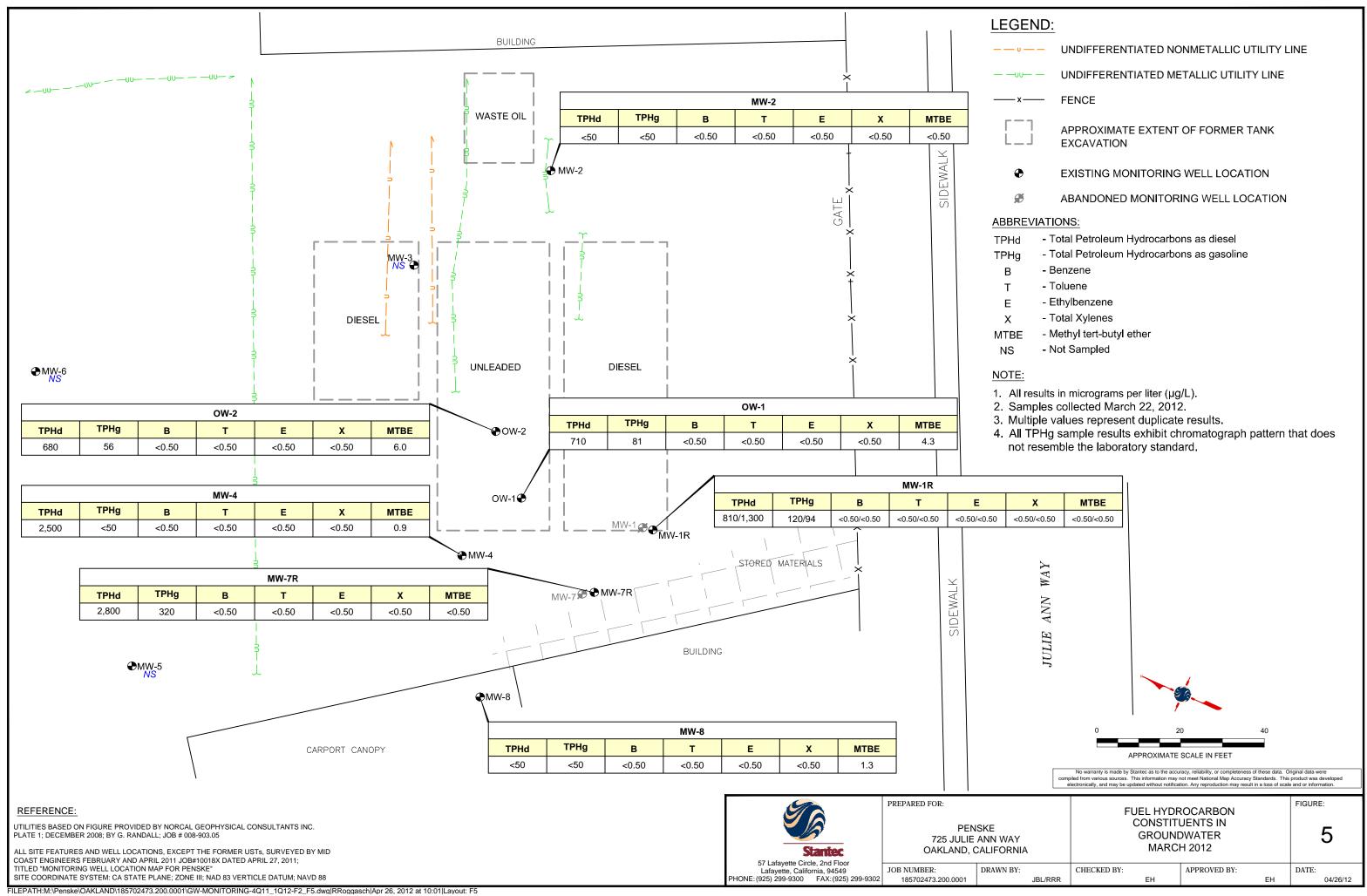


FIGURE 6 TPHd versus Time 725 Julie Ann Way, Oakland, CA

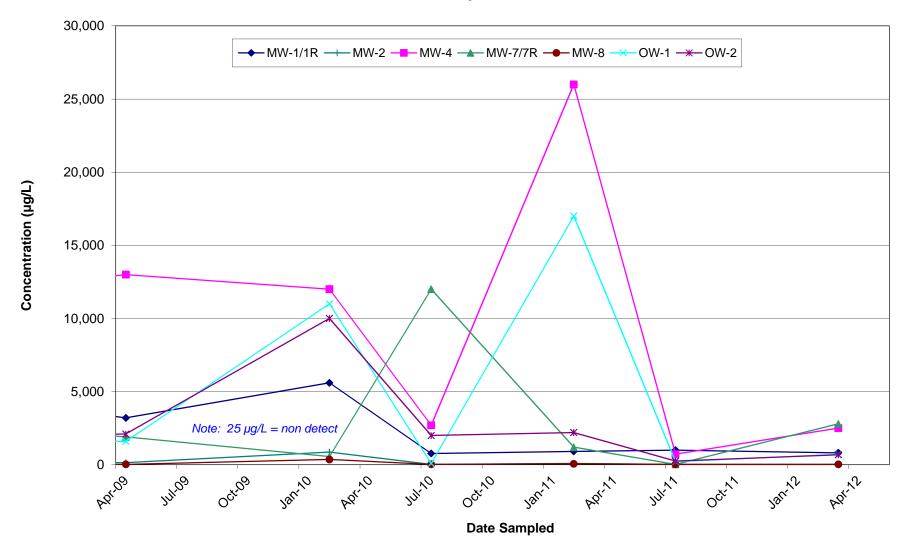


FIGURE 7 TPHg versus Time 725 Julie Ann Way, Oakland, CA

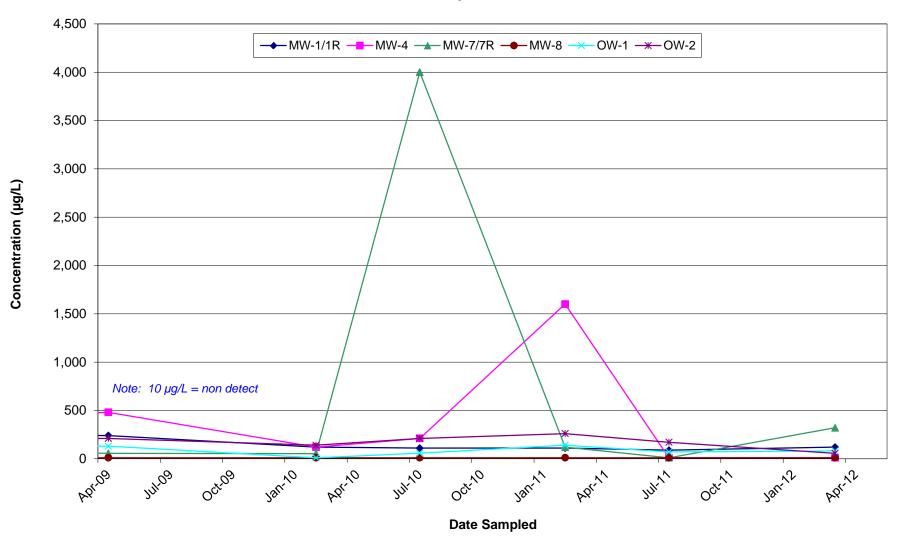


FIGURE 8
Benzene versus Time
725 Julie Ann Way, Oakland, CA

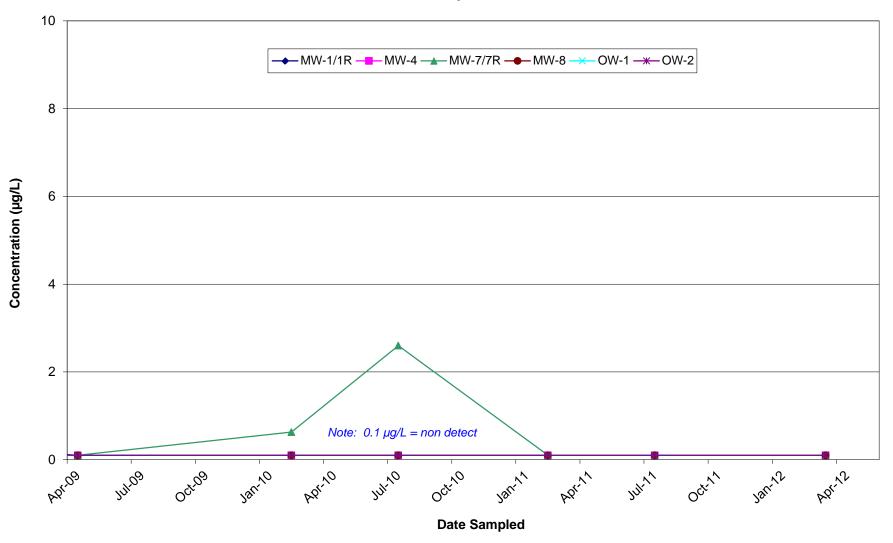
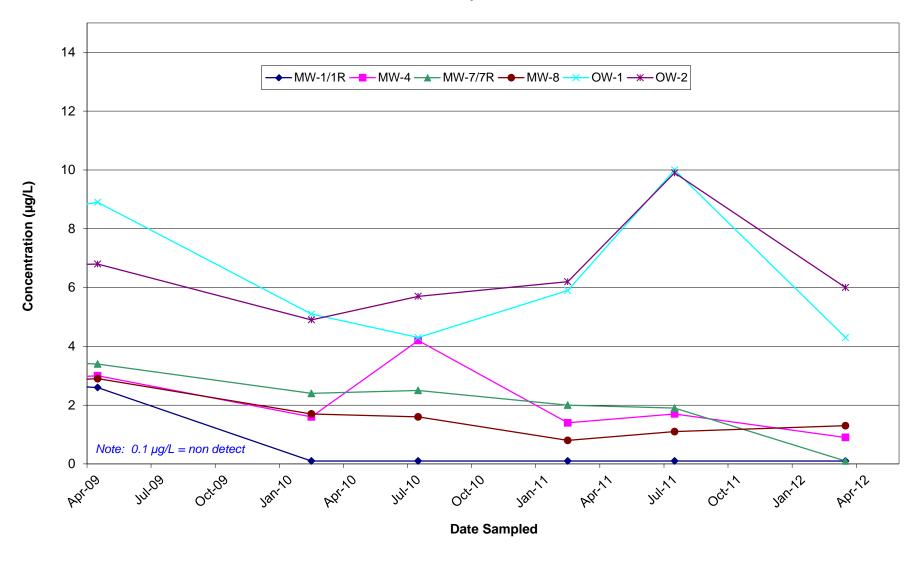


FIGURE 9 MTBE versus Time 725 Julie Ann Way, Oakland, CA





### **APPENDIX A**

### **Groundwater Sample Collection Logs**

2012 Semi-Annual Groundwater Monitoring Report Former Penske Truck Leasing Facility 725 Julie Ann Way Oakland, California Alameda County Site ID RO0000354

Stantec PN: 185702473.200.0001 June 18, 2012

### WELL GAUGING DATA

Project # 11/206-807	Date 12 6/11	Client	Stautec
•			
Site 725 Julie Aun	way, Oakland		

	4	-	·	17/2/17	<del></del>		7			
•					Thickness	Volume of			Survey	
		Well		Depth to	of	Immiscibles			Point:	
	- Programme - Prog	Size	Sheen /	Immiscible	Immiscible	Removed	Depth to water	Depth to well	TOB or	
Well ID	Time	(in.)	Odor	Liquid (ft.)			(ft.)	bottom (ft.)	(O)	Notes
	1	<del></del>		- <del> </del>	1 ( )	\ <i>y</i>	(/	00000111 (2017)	41-200	
		-							77,110	
MW-	100	2					5.29	The second secon	Î	
		1.1				1.		·	State burner	
MV-Z	1012	14					616	or the same of the	and the second	
	<del> </del>				:		V-142			
2		L				:	پ مس	~ TO \$20000	***************************************	
MW-3	1016						6.17			
									Anni Caranti	
MW-4	1055	LF					5.34	Charleston Co.		
1101-0							<i></i>	* .		
		4			. 5.	4.		- Calca		14.5
WV-5	1048	I,					4.82			:
					-				- T	
mul-6	1020	4		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			5.49	Market Company		
IN W W	1060							***************************************	-	
		<i>a</i>					800 m C	, proposition of	- I potential	
MW-7A	1028	2					5-28	,	d .	
WW B	lous	4					5-32	- Marian Const.	T. See See See See See See See See See Se	
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<u>nu-l</u>	1034	4					4.55			
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### WELL GAUGING DATA

Drainat 4 10 0 777 - 1414 1		
Project # 120322-WW1	Doto Sind I o	Client Colland 15
	Date 7/26/11	CHEIL J WAY J (D)
	3 2 4	

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)		Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or	Notes
MW-1R	0919	4-2		and the second second second second			4.35	19.59	**************************************	
Mvv-2	o833 <sub>5</sub>	4			and the processing and the first processing the second processing	purposition (Charles) (Approximately	5°.40°	2936		
MW-3	0200	4		The state of the s			<b>5</b> .36	33.43		
hw-4	والكال	4	2000	gy-parameter and an analysis of the same and an			4.67	33,22		
yw-5	08230	4			and the state of t	Managada (greened)	4,13	3130		
MW-6	0827	4				and Command and American	4.74	24.57		
~w-74	ONIO	学业				Medical	4.32	14.30		
4W-D	0834	4			and a first state of the state	A CONTRACTOR OF THE PARTY OF TH		26.35		
1-WC	UBAS	Eventur.	700K-	The state of the s		ng manifestation (magnetistic)	1	19.47		
w-2-	13853	4		And the state of t	And the second state of the second beautiful to the second	Abdiceso interestation		14.66		
		777	i i i							
		***								
	***									

### WELL MONITORING DATA SHEET

Project #:	120322	-WW		Client	:54A	STEC		
Sampler:	W			Date:	3/22	(12		
Well I.D.:	Mw-	A		Well	Diameter	: (2) 3 4	6 8 _	
Total Well			3.54	Depth	to Wate	r (DTW):	(35	
Depth to Fr	ee Produc	t:		Thick	ness of F	ree Product (fe	eet):	
Referenced	to:	PVC	Grade	D.O. ]	Meter (if	req'd):	(YSI) H	IACH
DTW with	80% Rech	arge [(F	leight of Water	Colum	n x 0.20	) + DTW]: 7	.36	
Purge Method:	Bailer Disposable F Positive Air Electric Subi	Displaceme	ent Extrac Other	Waterr Peristalti- tion Pump	C M	Sampling Method Other	Disposal Extract Dedicate	
2 4 (0 1 Case Volume	Gals.) X	fied Volun	nes Calculated Vo	_ Gals. lume	2" 3"	0.04 4" 0.16 6" 0.37 Otho	0.65 1.47	* 0.163
Time	Temp	pH	Cond. (mS or (18)	ł	bidity TUs)	Gals. Removed	Observ	vations
K(C)	17.0	6.89	2098	70	ودن	2,4	gray	
1400	17.4	6.29	3004	E .	000	4.8	***	***************************************
1413	176	6.84	2775	51	OVO	7.1	. (. 5	- AAA
						**************************************		
							÷	
Did well dev	water?	Yes /	No)	Gallon	s actually	y evacuated:	7.2	
Sampling Da	ate: 3/2	2/12	Sampling Time	: /(	470	Depth to Wate	r: 6 /	e transfer
Sample I.D.:	Mi		MW-15	Labora	tory:	Kiff CalScienc	e Other	247
Analyzed for	r: CPH-G	BTEX	MTBE TPH-D	Oxygen	ates (5)	Other: EOC,		THENENE
EB I.D. (if a	44	E. S. 123 P.S.	Make the second		1947 C. 1944	if applicable):	-:	
Analyzed for		150/20		Oxygen:		Other:	<u>vur eler</u>	
D.O. (if req'o	i):	e-purge:	0.33	mg/ <sub>L</sub>		st-purge:		S Cy mg/L
D.R.P. (if red	q'd)/ Pr	e-purge:	47.83	mV	<del>/-</del>	ost-purge:		mV
	- Commence	- Carlotte			- A 100 A	The second of th		

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

### WELL MONITORING DATA

			·						
Project #: 1	203/2	-WW	\	Client: STA	JTEC				
Sampler: \	NW			Date: 3/22	12				
Well I.D.:	Nw-2	and and		Well Diameter: 2 3 4 6 8					
Total Well	Depth (TI	D): 24	1.76.	Depth to Water (DTW): 5 40					
Depth to Fr	ee Produc	t:		Thickness of I	Free Product (fe	et):			
Referenced	to:	(PVC	) Grade	D.O. Meter (if	req'd):	YSI HACH			
DTW with	80% Rech	arge [(I	Ieight of Water	Column x 0.20	) + DTW]: /	0.19			
Purge Method:	Bailer Disposable I Positive Air Electric Sub	Displacem		Waterra Peristaltic ction Pump  Well Diamet		Disposable Bailer Extraction Port Dedicated Tubing :  Diameter Multiplier			
15-6 (Case Volume	Gals.) X Spec	ified Volun	$\frac{1}{10000000000000000000000000000000000$	Gals. 2" 3"	0.04 4" 0.16 6" 0.37 Other	0.65 1.47 r radius <sup>2</sup> * 0.163			
Time	Temp (°F or C	pH	Cond. (mS or as)	Turbidity (NTUs)	Gals. Removed	Observations			
1120	16.5	3.06	4409	71000	156	cloudy grey			
124	17.4	7.3V	4405	71000	31.2	cc '' ()			
1129	17.6	7.36	4493	159	46.3	chuch, gren			
			- Anna Maria Cara Cara Cara Cara Cara Cara Cara		÷	* * * * * * * * * * * * * * * * * * *			
					4.				
Did well dev	vater?	Yes /	No	Gallons actuall	y evacuated:	46.8			
Sampling Da	ite: 3/22	112	Sampling Time	: 1135	Depth to Water	: 5.50			
Sample I.D.:	Mw-	2		Laboratory:	Kiff CalScience	Other CAT			
Analyzed for	TPH-G	BTEX (	MTBE (TPH-D)	Oxygenates (5)	Other: EDC	EDB, NAPHTHALEN			
EB I.D. (if a <sub>l</sub>	oplicable):	* AAAA	@ Time	Duplicate I.D. (	- 1 T				
Analyzed for	: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:				
D.O. (if req'o	l): Pro	e-purge:	0,48	mg/L	ost-purge:	0.79 mg/L			
O.R.P. (if red	ı'd): ( Pro	e-purgez	2/5	mV Po	ost-purge:	227 mV			

Post-purge:

•											
Project #: 1	20322-	-WWI			Client: STANTEC						
Sampler: V	VW				Date: 3/22/12						
Well I.D.: MW - 4						Well Diameter: 2 3 (4) 6 8					
Total Well			77		Depth	to Wate	r (DTW)	: 4.	67		
Depth to Fr	ee Product				Thickr	ness of F	ree Prod	uct (fee	et):		
Referenced	to:	(PVC	) Gra	ade	D.O. N	Aeter (if	req'd):		AST HACH		
DTW with 8	80% Rech	arge [(E	leight of	Water	Colum	n x 0.20)	+DTW	]: " °	.38		
Purge Method:		Displaceme	= 5	ther	0	:	Sampling  or Multiplier  0.04  0.16  0.37	Other:	Disposable Bailer Extraction Port Dedicated Tubing  Diameter Multiplier 0.65 1.47		
T Case volume	Speci	lied volum	nes Care	Julated VC	Juine j		······				
Time	Temp (°F or C)	pН	Con (mS)	nd (3)	1	bidity TUs)	Gals. Re	moved	Observations		
1319	192	7.35	11.0	7	4	9	13.	6	yellow		
WELL	DEW	ATE	re Fido	e	32	GAC	\$		· ·		
1445	13.5	7.81	15.5	32	31		- Charles of the Char	<b>Q</b> .	clear		
			,			·					
			-5								
Did well dev	water?	Yes)	No		Gallon	s actually	y evacua	ted:	32		
Sampling Da	ate: 3/22	12	Samplin	ng Time	e: [4	45	Depth to	Water	: 6.41		
Sample I.D.:	: Mw -	U			Labora	tory:	Kiff Ca	.lScience	Other CAT		
Analyzed fo	r: (TPH-G	BTEX	MTBE (	ГРН-D	Oxygen	ates (5)	Other:	ED C	EDB, NAPHTHALE		
EB I.D. (if a	pplicable)	4	@ Tin	ne	Duplic	ate I.D. (	if applic	•			
Analyzed for	r: TPH-G	BTEX	MTBE 7	ГРН-D	Oxygena	ates (5)	Other:				
D.O. (if req'o	d): /Pr	e-purge:	\ \	,01	$^{ m mg}/_{ m L}$	A.	ost-purge:		0.29 mg/1		
ODD Gfra	a'd). D		1 , 1		m77	( 7)			1 - X 7		

					and the same of th				
Project #: 1;	20322-	-WWI		Client: STANTEC					
Sampler: v				Date: 3/22/12					
Well I.D.: /	4w-7	12		Well Diameter; (2) 3—4—6—8					
Total Well			30	Depth to Water	r (DTW): 4.	32 .			
Depth to Fr	73.	.,,	, <u>, , , , , , , , , , , , , , , , , , </u>	Thickness of F	ree Product (fe	et):			
Referenced	to:	(PVC)	Grade	D.O. Meter (if	req'd): <	YSI HACH			
DTW with	80% Rech	arge [(H	eight of Water	Column x 0.20)	1 + DTW]: 6.	32			
	Bailer Disposable B Positive Air I Electric Subr	Displaceme	other	Waterra Peristaltic tion Pump  Well Diamete  1" 2" 3"	Other    Other	Disposable Bailer Extraction Port Dedicated Tubing  Diameter Multiplier 0.65 1.47			
Time (341	Temp (°F or C)	рН 7-66	Cond. (mS or as)	Turbidity (NTUs)	Gals. Removed	Observations gray, choose			
1344	18.9	7.32	3099	72	4.8	Cloudy			
	* *	With the second				:			
Did well de	water?	Yes 《	No)	Gallons actuall	y evacuated:	8,73			
Sampling D	ate: 3/22	*2	Sampling Time	=: 1350	Depth to Wate	r: 453			
Sample I.D.			76G ·	Laboratory:	Kiff CalScienc	e Other CAT			
Analyzed fo			MIBE (TPH-D)	Oxygenates (5)	Other: EDC	EDB, NAPHTHALE			
EB I.D. (if a	ipplicable)		@ Time	Duplicate I.D. (	· ·				
Analyzed fo			MTBE TPH-D	Oxygenates (5)	Other:				
D.O. (if req'	d): Pr	e-purge:	6720	mg/L P	ost-purge:	0.57 mg/1			
			-			(10)			

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

Project #: 1	20322-	-WWI		Client: STA	-JTEC					
Sampler: \(\text{\chi}\)		-		Date: 3/22						
Well I.D.:	MW-8			Well Diameter: 2 3 (4) 6 8						
Total Well	Depth (TD	)): 26	.35	Depth to Water (DTW): 446						
Depth to Fr		•••		Thickness of	Free Product (fe	et):				
Referenced	to:	(PVC)	) Grade	D.O. Meter (i	f req'd):	ÝŠÍ HACH				
DTW with	80% Rech	arge [(H	eight of Water	Column x 0.20	)) + DTW]: 🖇	78.				
Purge Method:	Bailer Disposable E Positive Air Electric Subr	Displaceme	ent Extrac	Well Diame		Disposable Bailer Extraction Port Dedicated Tubing  Diameter Multiplier				
14.2_(( 1 Case Volume		fied Volun		Gals.	0.04 4" 0.16 6" 0.37 Other	0.65 1.47 radius <sup>2</sup> * 0.163				
Time	Temp	pН	Cond. (mS or AS)	Turbidity (NTUs)	Gals. Removed	Observations				
1150	155	743	6219	48	W. 2	Cloudy				
	16.3	642	7057	121	28.4	÷ (*				
1158	16.6	7.02	6774	105	42.6	(/				
						· · ·				
Did well de	water?	Yes /	(No)	Gallons actual	ly evacuated:	42.6				
Sampling D	ate: 3 22	12	Sampling Time	: 1205	Depth to Water	r: 7.88				
Sample I.D.	: Mw -	9		Laboratory:	Kiff CalScience	e Other CAT				
Analyzed fo	r: (TPH-G	BTEX (	MIBE (TPH-D)	Oxygenates (5)	Other: EDC	EDB, NAPHTHALEN				
EB I.D. (if a	pplicable)	E .	@ Time	Duplicate I.D.	(if applicable):					
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:	genum encass accessoration in the contract of				
D.O. (if req	d): Pr	e-purge:	0.63	mg/L	Post-purge:	0.40 mg/L				
O.R.P. (if re	q'd): ( Pr	e-purge	248	mV (	Post-purge:	2 3 <b>6</b> mV				

*****						
Project #: 12 03 22 - WW1	Client: STANTEC					
Sampler: ww	Date: 3/22/12					
Well I.D.: OW -	Well Diameter: 4 6 8					
Total Well Depth (TD): (9.47	Depth to Water (DTW): 4.55					
Depth to Free Product:	Thickness of Free Product (feet):					
Referenced to: (PVC) Grade	D.O. Meter (if req'd): ASI HACH					
DTW with 80% Recharge [(Height of Water	Column x 0.20) + DTW]: 7.53					
(Gals.) X = Other	Waterra         Sampling Method:         Bailer           Peristaltic         Disposable Bailer           ction Pump         Extraction Port           Dedicated Tubing           Other:           Well Diameter         Multiplier         Well Diameter         Multiplier           1"         0.04         4"         0.65           2"         0.16         6"         1.47           3"         0.37         Other         radius² * 0.163					
1 Case Volume Specified Volumes Calculated Vo	olume   State   Tadius 0.103					
Temp Cond. Time (°F or C) pH (mS or uS)	Turbidity (NTUs) Gals. Removed Observations					
124 166 674 3063	149 97 yellow					
1227 163 671 3025	77 194 11					
1229 16-6 6.71 3008	14 29.1					
Did well dewater? Yes 66	Gallons actually evacuated: 29.1					
Sampling Date: 3/22/12 Sampling Time	e: 1235 Depth to Water: 4.55					
Sample I.D.: OW_ (	Laboratory: Kiff CalScience Other CaT					
Analyzed for: (TPH-G) (BTEX (MTBE) (TPH-D)	Oxygenates (5) Other: EDC, EDB, NAPH7MLE					
	Duplicate I.D. (if applicable):					
	Oxygenates (5) Other:					
O.O. (if req'd): Pre-purge: O. 3	mg/L Post-purge: mg/L					

mV

Post-purge:

mV

O.R.P. (if req'd):

Pre-purge:

			~~	1	. 261	- COURTON CONTRACTOR OF THE COURT OF THE COU
Project #:	20322	-WW	American T	Client: STAL	JTEC	
Sampler:	WW			Date: 3/22/		
Well I.D.:	2W-2		2.	Well Diameter	: 2 3 <b>4</b> 7	6 8
Total Well	Depth (TI	)): 14.	66	Depth to Wate	r'(DTW): 4.	2.8
Depth to Fi				Thickness of F	Free Product (fee	et):
Referenced	to:	(PVC)	) Grade	D.O. Meter (if	req'd):	YSV HACH
DTW with	80% Rech	arge [(H	leight of Water	Column x 0.20)	) + DTW]:	6.60
Purge Method:	Bailer Disposable E Positive Air Electrie Subr	Displaceme	ent Extrac	Waterra Peristaltic tion Pump	Sampling Method: Other:	Disposable Bailer Extraction Port Dedicated Tubing
6.6 1 Case Volume	Gals.) X <u>3</u> Speci	fied Volun	$\frac{19.8}{\text{Calculated Vo}}$		0.04 4" 0.16 6" 0.37 Other	0.65 1.47
Time	Temp	рН 6.83	Cond. (mS or \$\vec{\pi}S)	Turbidity (NTUs)	Gals. Removed	Observations
17.46	16.9		2969	07	6.6	Yellow
1250	17.5	6.80	- 37G	23	13,2 163	<i>i</i> t
	17-3	651	4357		14.0	88 (
						7.5
Did well de		Yes		Gallons actuall		14.6
Sampling D		12	Sampling Time	: 1500	Depth to Water	: 4.58
Sample I.D.	: OW-	2	**************************************	Laboratory:	Kiff CalScience	Other C4T
Analyzed fo	r: (TPH-G	BTEX (	MTBE) (TPH-D)	Oxygenates (5)	Other: EDC	EDB, NAPHTHALE
EB I.D. (if a	pplicable)		@ Time	Duplicate I.D. (	if applicable):	
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:	
D.O. (if req'	d): Pr	e-purge:	0.71	mg/L	ost-purge:	6-58 mg/L
O.R.P. (if re	q'd): ( Pr	e-purge	102	mV Po	ost-purge:	-6 mV

## TEST EQUIPMENT CALIBRATION LOG

PROJECT NAM	1E STAUTEC	e 725 JULIS BARAND	annum,	PROJECT NUM	1BER 120372-141	j 22,	
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
MYRONE	6200577	3/2/12	pH=47.10 bond: 9900,000	PH: 7.00;1000 und: 3000,00	Yes	165 8	in
(.	( f	t c	ope: 243 av	URP 247MV	( c	16.50	/ /
		4					
YSI STOA	OFFMURS	3/23/N 0815	10mg/C	10.08 mg/		58.3°F	WAN
-Andrews - Annotation - Annotat							
				·			
	***************************************						



# APPENDIX B Water Sample Laboratory Reports and Chain-of-Custody Forms

2012 Semi-Annual Groundwater Monitoring Report Former Penske Truck Leasing Facility 725 Julie Ann Way Oakland, California Alameda County Site ID RO0000354 Stantec PN: 185702473.200.0001 June 18, 2012





# Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

# Laboratory Job Number 235149 ANALYTICAL REPORT

Stantec Project : STANDARD

57 Lafayette Circle Location : 725 Julie Ann Way Oakland CA

Lafayette, CA 94549-4321 Level : II

<u>Sample ID</u>	<u>Lab ID</u>
MW-1R	235149-001
MW-2	235149-002
MW-4	235149-003
MW-7R	235149-004
MW-8	235149-005
OW-1	235149-006
OW-2	235149-007
TB	235149-008
DUPLICATE	235149-009
EQUIPMENT BLANK	235149-010

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:

Project Manager

Date: <u>03/30/2012</u>

NELAP # 01107CA



#### CASE NARRATIVE

Laboratory number: 235149
Client: Stantec

Location: 725 Julie Ann Way Oakland CA

Request Date: 03/23/12 Samples Received: 03/23/12

This data package contains sample and QC results for ten water samples, requested for the above referenced project on 03/23/12. The samples were received cold and intact.

#### TPH-Purgeables and/or BTXE by GC (EPA 8015B):

No analytical problems were encountered.

#### TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

#### Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

BLA	NE	-	SAN.	JOSE	1680 I	ROGER	S AVEN 95112-11	UE IOS		CON	DUCT	ANAI	YSIS	TO DE	TECT		]LAB 23514°	C&T Berkel	ey	DHS#
TECH SER		_		· · · · · · · · · · · · · · · · · · ·	F	AX (408	3) 573-77 3) 573-05	71				6					ALL ANALYSES MUST LIMITS SET BY CALIF	ORNIA DHS AN	FICATIONS AND ND RWQCB RE	
CHAIN OF CUS	TODY	BTS	3 # <b>[</b>	203	322-	w	ان	ွှ				(8260)					LIA OTHER			51011
CLIENT	Stante	ec			-		-	CONTAINERS			(1	EDB					SPECIAL INSTRUCTION	ONS		
SITE	725 J	ulie Anr	ı Wa	ıv				1 K			(8015M)	C, I		ł			Installation of December 1			
		nd CA		<u> </u>					j		(80	EDC,	(8260B)				Invoice and Repor			
	Ouna	<u> </u>						H		SM	GC	BE,					Attn: Eva Hey		300 Ext. 237	
	<del></del>		М	ATRIX	( C	ONTAIN	ERS			801	w/SGC	MT	ene				eva.hey@stantec.co	m		
}	1	ı	;	0 20 L	]	, 6 Hc	luas	COMPOSITE ALL		TPH-g (8015M)	P-F	X,	thal							4
SAMPLE I.D.	DATE	TIME		S= SOIL W=H <sub>2</sub> 0	TOTAL	2-1L	-1 - NP-A6			TPF	TPH-d	BTEX, MTBE,	Napthalene				ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE#
MW-1R	3/22	12 14	201	W	8		1		\	0	Ø	×	2					0171100	JOONDITION	EAD SAIVII CE #
mw - 2	- 1	113		1	8					P	P	10	صر						1	
mw-4		 1५८			J					<b>\o</b>	Q	X								
mw-7R		135	2		8					0	Q	D	صر			$\dashv$			+	
MW-8		120)			8					-+	Ø		×			$\dashv$	:			
011-1		123			8		,			-+	Ø	<u> </u>	×			1				
ow-2		130			8	<b>-</b>				-	٦	2				+		·	+	
TB		075			2	HCI	voas			Ø	/-	(-	۵						+	
DUPLICATE		147			8	Mix			-	-+	×		٥			$\dashv$				
FRUIPMENT	0, 4, 4				3	mixe				-+	-	& &				$\dashv$			+ +	
SAMPLING	DATE	TIME	SΔ	MPLIN	JG.			1	'			,-	ح				RESULTS NEEDED	· · · · · · · · · · · · · · · · · · ·		3/-
COMPLETED RELEASED BY	3/22/1	2 144	5 PE	RFOR	RMED B	Y	work	_					٠		_		NO LATER THAN	Standard TA	4 <i>T</i>	
NCLEASED BY								DATE 3/2		ļΤ	IME	31		RECE	D BY		STANPIA CUSTODIA	1.	DATE 2/22/	TIME 2
RELEASED BY	1	/		,	0			DAŢ	2/12	Ţ	IME	> _		RECE	ED BY	,		~	3/22/1	163 TIME
RELEASED	- C S	ingle		.3 .40 2	il in	<u> </u>		3/	23/12		1 4	253	<u>ר כ</u>		wr	2.			3/23/12	_ 1253
Ill I	4	1					I	DATE	<u>.</u> 1531/	T -7	IME /	630		P/EČE	IVED BY	Λ,	X V		DATE 323/12	TIME
SHIPPED VIA	<i>j - 0</i>							- 71	SEMT	<u>C</u>	IME S	SENT	<del>7 ر</del> ا	COOL	ER#	4	,	······································	21:0114	1070

what wold RC

## **COOLER RECEIPT CHECKLIST**



Login # 235   49 Date Received 3   3   Number of coolers 2   Client   STANTEC   Project   725 ULIE ANN WAY
Troject 729 Odde AINN WAY
Date Opened 3/23/12 By (print) (sign)
Date Opened 3/23/2 By (print) (sign)  Date Logged in   By (print) (sign)
1. Did cooler come with a shipping slip (airbill, etc) YES YO
2A. Were custody seals present? TYES (circle) on cooler on samples
How many Name Date
2B. Were custody seals intact upon arrival?  YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)?
5. Is the project identifiable from custody papers? (If so fill out top of form) NO
6. Indicate the packing in cooler: (if other, describe)
☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation: * Notify PM if temperature exceeds 6°C
Type of ice used:   Wet □ Blue/Gel □ None Temp(°C) 11, 0.5°C
☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun
☐ Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? YES
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened?  YES NO
10 4 41
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
10 A 1 1 1 1
10 D d 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
14 117 (60 )
14. Was sufficient amount of sample sent for tests requested?  NO  15. Are the samples appropriately prospered?
15. Are the samples appropriately preserved?
17. Did you document your preservative check?  YES NO N/A  YES NO N/A
17. Did you document your preservative check? YES NO NA
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO WA
19. Did you change the hold time in LIMS for preserved terracores?YES NO NA
20. Are bubbles > 6mm absent in VOA samples?
21. Was the client contacted concerning this sample delivery? YES
If YES, Who was called?ByDate:
COMMENTS



Total Volatile Hydrocarbons Lab #: 235149 Location: 725 Julie Ann Way Oakland CA Client: EPA 5030B Prep: Stantec Project#: STANDARD Analysis: EPA 8015B 03/22/12 03/23/12 Matrix: Water Sampled: Units: ug/L Received: Diln Fac: 1.000

Field ID: MW-1R Batch#: 184955 Type: SAMPLE Analyzed: 03/27/12

Lab ID: 235149-001

Analyte Result RL
Gasoline C7-C12 120 Y 50

Surrogate %REC Limits
Bromofluorobenzene (FID) 94 76-121

Field ID: MW-2 Batch#: 184955
Type: SAMPLE Analyzed: 03/27/12

Lab ID: 235149-002

Analyte Result RL
Gasoline C7-C12 ND 50

Surrogate %REC Limits
Bromofluorobenzene (FID) 96 76-121

Field ID: MW-4 Batch#: 184955 Type: SAMPLE Analyzed: 03/27/12

Lab ID: 235149-003

AnalyteResultRLGasoline C7-C12ND50

Surrogate %REC Limits
Bromofluorobenzene (FID) 92 76-121

Field ID: MW-7R Batch#: 184912
Type: SAMPLE Analyzed: 03/24/12
Lab ID: 235149-004

Analyte Result RL
Gasoline C7-C12 320 Y 50

Surrogate %REC Limits
Bromofluorobenzene (FID) 93 76-121

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Page 1 of 3



Total Volatile Hydrocarbons Lab #: 235149 Location: 725 Julie Ann Way Oakland CA EPA 5030B Client: Stantec Prep: Analysis: Sampled: EPA 8015B 03/22/12 Project#: STANDARD Matrix: Water Units: ug/L Received: 03/23/12 Diln Fac: 1.000

Batch#:

Field ID: 8-WMType: SAMPLE Lab ID:

235149-005

Batch#: 184912 Analyzed: 03/24/12

184912

184912

Result Analyte Gasoline C7-C12 ND 50

Limits Surrogate %REC Bromofluorobenzene (FID) 103 76-121

Field ID: OW-1SAMPLE Type:

Lab ID:

03/24/12 Analyzed: 235149-006

Result Analyte RLGasoline C7-C12 81 Y 50

%REC Limits Surrogate 76-121 Bromofluorobenzene (FID)

Field ID: OW-2Batch#: SAMPLE Analyzed: Type:

03/24/12 Lab ID: 235149-007 Analyte Result RL

Gasoline C7-C12 56 Y 50

Limits %REC Surrogate Bromofluorobenzene (FID)

Field ID: 184912 TB Batch#: SAMPLE Analyzed: 03/24/12 Type:

Lab ID: 235149-008

Result Analyte RLGasoline C7-C12 ND 50

%REC Limits Surrogate Bromofluorobenzene (FID)

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Page 2 of 3

3.0



Total Volatile Hydrocarbons Lab #: 235149 Location: 725 Julie Ann Way Oakland CA EPA 5030B Client: Stantec Prep: Analysis: Sampled: EPA 8015B 03/22/12 Project#: STANDARD Matrix: Water Units: ug/L Received: 03/23/12 Diln Fac: 1.000

Field ID: DUPLICATE
Type: SAMPLE

Lab ID: 235149-009

Batch#: 184912 Analyzed: 03/24/12

Analyte Result RL
Gasoline C7-C12 94 Y 50

Surrogate %REC Limits
Bromofluorobenzene (FID) 91 76-121

Field ID: EQUIPMENT BLANK Batch#: 184912 Type: SAMPLE Analyzed: 03/24/12

Lab ID: 235149-010

C7-C12

Gasoline

Analyte Result RL
Gasoline C7-C12 ND 50

Surrogate %REC Limits
Bromofluorobenzene (FID) 93 76-121

Type: BLANK Batch#: 184912 Lab ID: QC633188 Batch#: 03/23/12

Analyte Result RL

Surrogate %REC Limits

Bromofluorobenzene (FID) 87 76-121

Type: BLANK Batch#: 184955 Lab ID: QC633338 Analyzed: 03/26/12

Analyte Result RL
Gasoline C7-C12 ND 50

Surrogate %REC Limits
Bromofluorobenzene (FID) 101 76-121

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

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3.0



	Tota	l Volatile Hydrocarbo	ons
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA
Client:	Stantec	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC633187	Batch#:	184912
Matrix:	Water	Analyzed:	03/23/12
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,047	105	79-120

Surrogate	%REC	Limits	
Bromofluorobenzene (FID)	88	76-121	

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		Total Volatile Hydrocarbons	
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA
Client:	Stantec	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	MW-1R	Batch#:	184912
MSS Lab ID:	235149-001	Sampled:	03/22/12
Matrix:	Water	Received:	03/23/12
Units:	ug/L	Analyzed:	03/24/12
Diln Fac:	1.000		

Type: MS

Lab ID: QC633189

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	102.4	2,000	1,927	91	68-120

Surrogate	%REC	Limits	
Bromofluorobenzene (FID)	91	76-121	

Type: MSD Lab ID: QC633190

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,959	93	68-120	2	21



	Tota	l Volatile Hydrocarbo	ons
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA
Client:	Stantec	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC633337	Batch#:	184955
Matrix:	Water	Analyzed:	03/26/12
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,019	102	79-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	76-121

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	Total Volatil	e Hydrocarbons	
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA
Client:	Stantec	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	MW-1R	Batch#:	184955
MSS Lab ID:	235149-001	Sampled:	03/22/12
Matrix:	Water	Received:	03/23/12
Units:	ug/L	Analyzed:	03/27/12
Diln Fac:	1.000		

Type: MS

Lab ID: QC633339

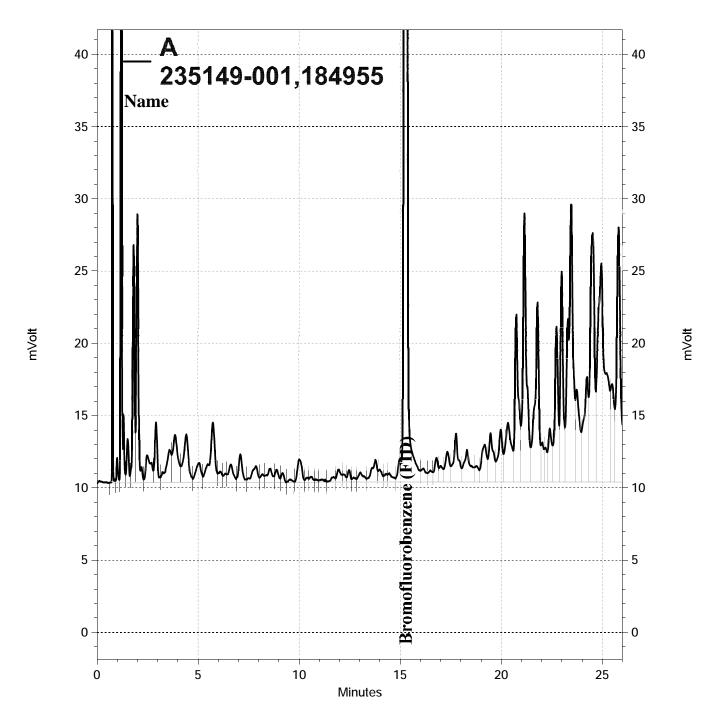
Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	118.3	2,000	1,820	85	68-120

Type: MSD

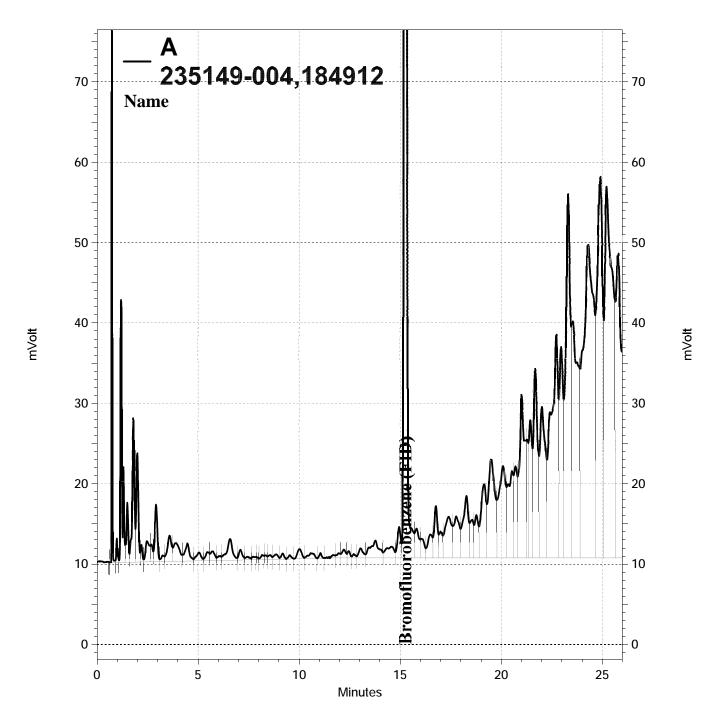
Lab ID: QC633340

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,939	91	68-120	6	21

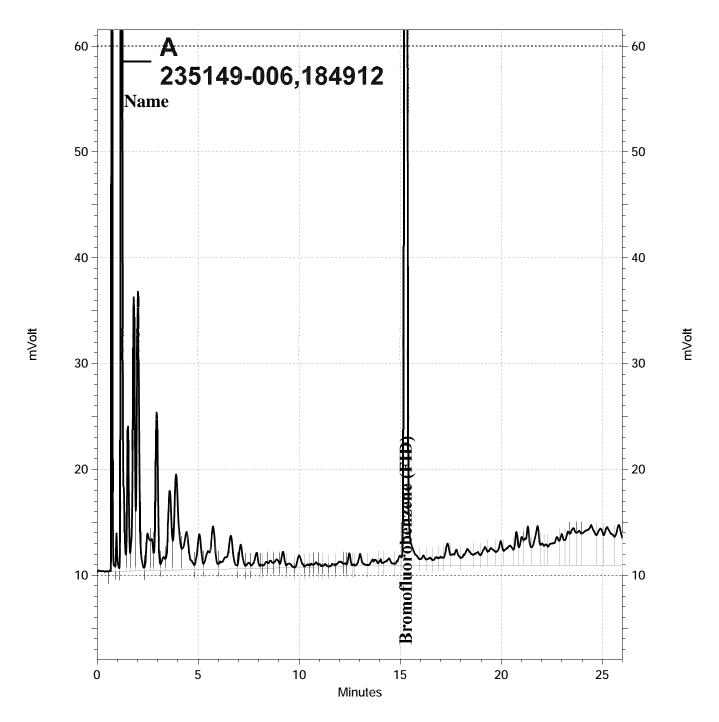
Surrogate	%REC	Limits	
Bromofluorobenzene (FID)	99	76-121	



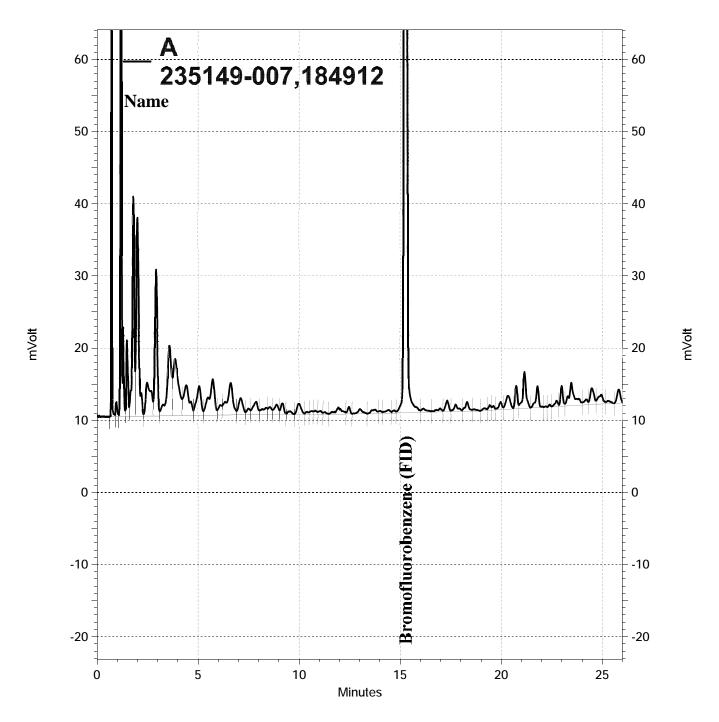
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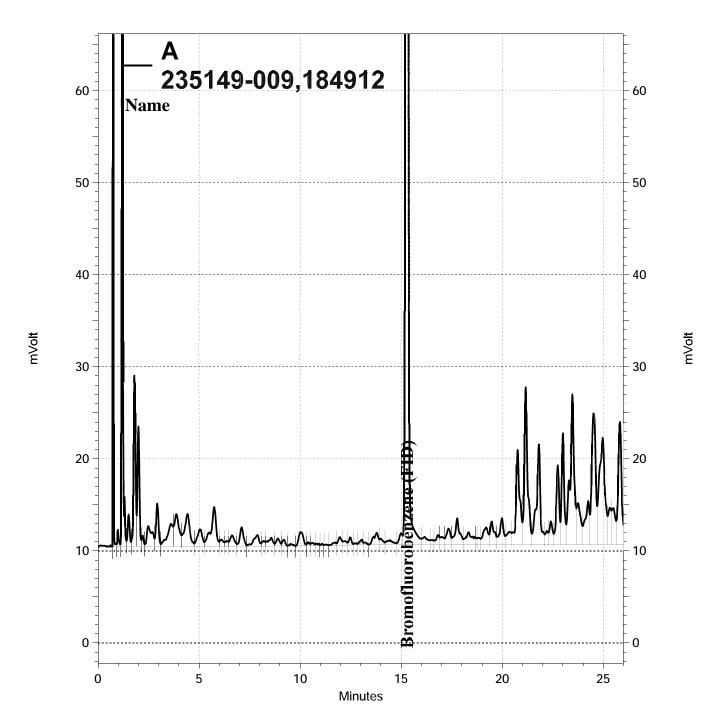
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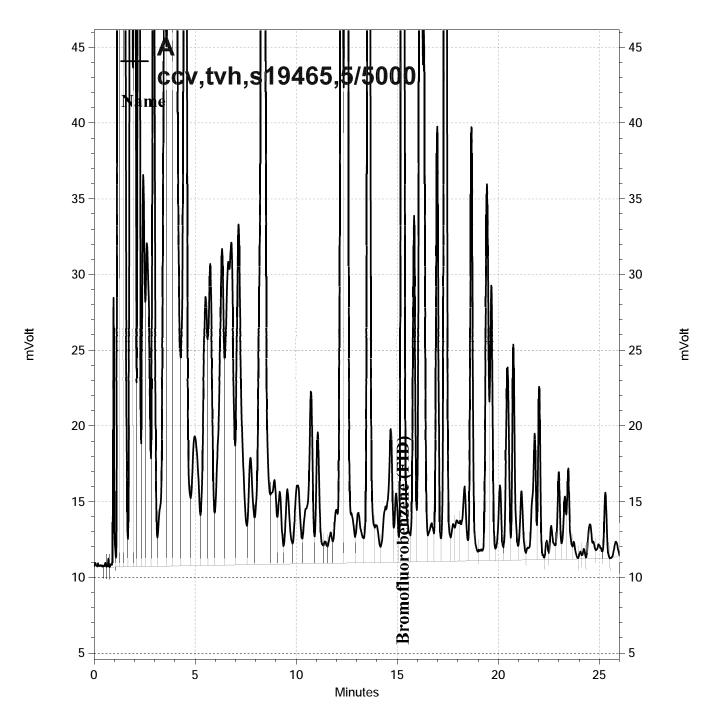
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Total Extractable Hydrocarbons Lab #: 235149 Location: 725 Julie Ann Way Oakland CA EPA 3520C Client: Prep: Stanted Project#: STANDARD Analysis: EPA 8015B Matrix: Water Sampled: 03/22/12 03/23/12 Units: ug/L Received: Diln Fac: 1.000 03/26/12 Prepared: Batch#: 184941 03/27/12 Analyzed:

Field ID: MW-1R Lab ID: 235149-001 Type: SAMPLE Cleanup Method: EPA 3630C

 Analyte
 Result
 RL

 Diesel C10-C24
 810
 50

Surrogate %REC Limits
o-Terphenyl 100 61-129

Field ID: MW-2 Lab ID: 235149-002 Type: SAMPLE Cleanup Method: EPA 3630C

Analyte Result RL
Diesel C10-C24 ND 50

Surrogate %REC Limits o-Terphenyl 82 61-129

Field ID: MW-4 Lab ID: 235149-003 Type: SAMPLE Cleanup Method: EPA 3630C

 Analyte
 Result
 RL

 Diesel C10-C24
 2,500
 50

Surrogate %REC Limits

Field ID: MW-7R Lab ID: 235149-004 Type: SAMPLE Cleanup Method: EPA 3630C

Type: SAMPLE Cleanup Method: EPA 3630C

Analyte Result RL

Diesel C10-C24 2,800 50

Surrogate %REC Limits o-Terphenyl 88 61-129

Field ID: MW-8 Lab ID: 235149-005 Type: SAMPLE Cleanup Method: EPA 3630C

AnalyteResultRLDiesel C10-C24ND50

Surrogate %REC Limits
o-Terphenyl 110 61-129

ND= Not Detected RL= Reporting Limit

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Total Extractable Hydrocarbons 725 Julie Ann Way Oakland CA 235149 Lab #: Location: Client: EPA 3520C Stantec Prep: Project#: STANDARD Analysis: EPA 8015B 03/22/12 Matrix: Water Sampled: Units: ug/L Received: 03/23/12 Diln Fac: 1.000 Prepared: 03/26/12 Batch#: 184941 03/27/12 Analyzed:

Field ID: OW-1 Lab ID: 235149-006 Type: SAMPLE Cleanup Method: EPA 3630C

 Analyte
 Result
 RL

 Diesel C10-C24
 710
 50

Surrogate %REC Limits
o-Terphenyl 111 61-129

Field ID: OW-2 Lab ID: 235149-007 Type: SAMPLE Cleanup Method: EPA 3630C

 Analyte
 Result
 RL

 Diesel C10-C24
 680
 50

Surrogate %REC Limits
o-Terphenyl 105 61-129

Field ID: DUPLICATE Lab ID: 235149-009

Type: SAMPLE Cleanup Method: EPA 3630C

 Analyte
 Result
 RL

 Diesel C10-C24
 1,300
 50

Surrogate %REC Limits
o-Terphenyl 105 61-129

Field ID: EQUIPMENT BLANK Lab ID: 235149-010 Type: SAMPLE Cleanup Method: EPA 3630C

Type: SAMPLE Cleanup Method: EPA 3630C

 Analyte
 Result
 RL

 Diesel C10-C24
 ND
 50

Surrogate %REC Limits
o-Terphenyl 113 61-129

Type: BLANK Cleanup Method: EPA 3630C

Lab ID: QC633287

AnalyteResultRLDiesel C10-C24ND50

Surrogate %REC Limits
o-Terphenyl 107 61-129

ND= Not Detected RL= Reporting Limit

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	Total Extracta	ble Hydrocarbo	ns
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA
Client:	Stantec	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	184941
Units:	ug/L	Prepared:	03/26/12
Diln Fac:	1.000	Analyzed:	03/27/12

Type: BS Cleanup Method: EPA 3630C

Lab ID: QC633288

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,063	83	59-120

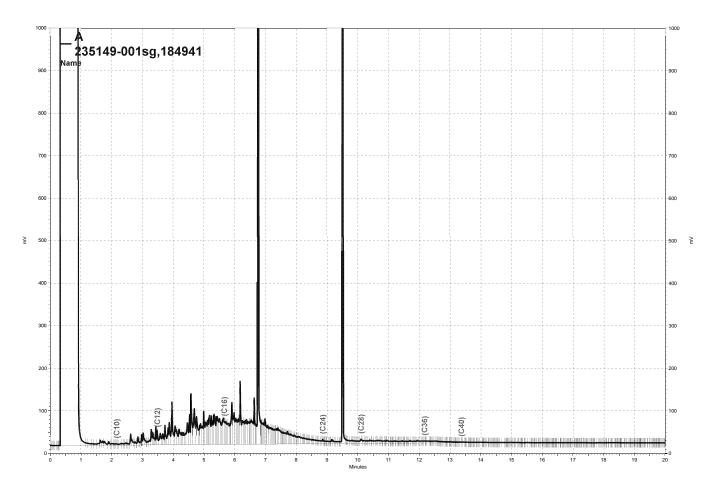
Surrogate	%REC	Limits
o-Terphenvl	97	61-129

Type: BSD Cleanup Method: EPA 3630C

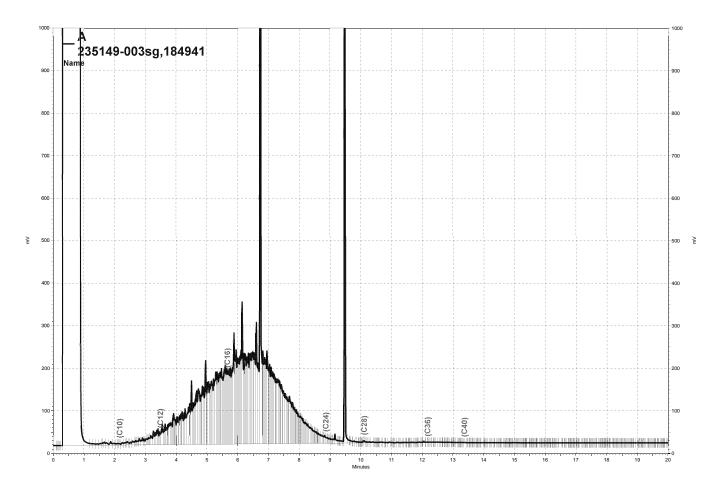
Lab ID: QC633289

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,747	70	59-120	17	52

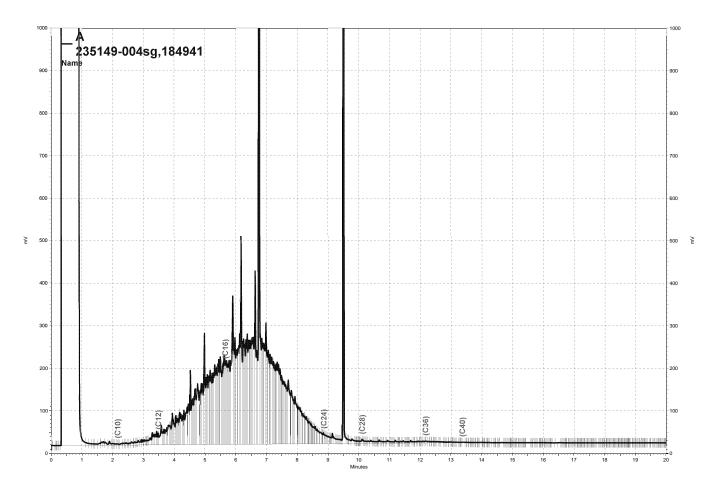
Surrogate	%REC	Limits	
o-Terphenyl	89	61-129	



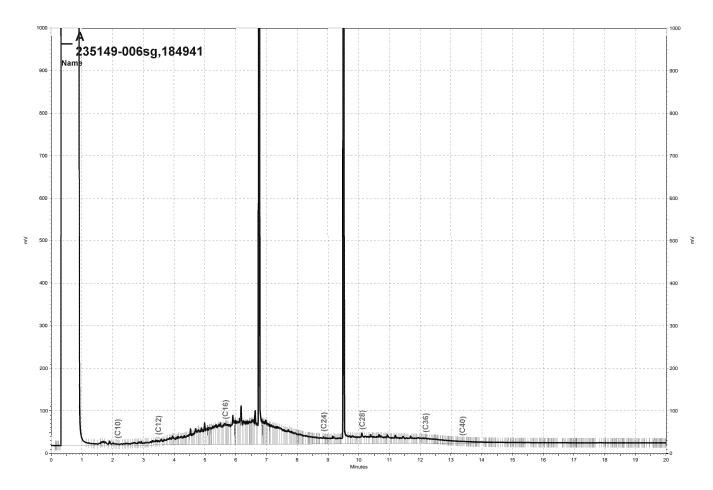
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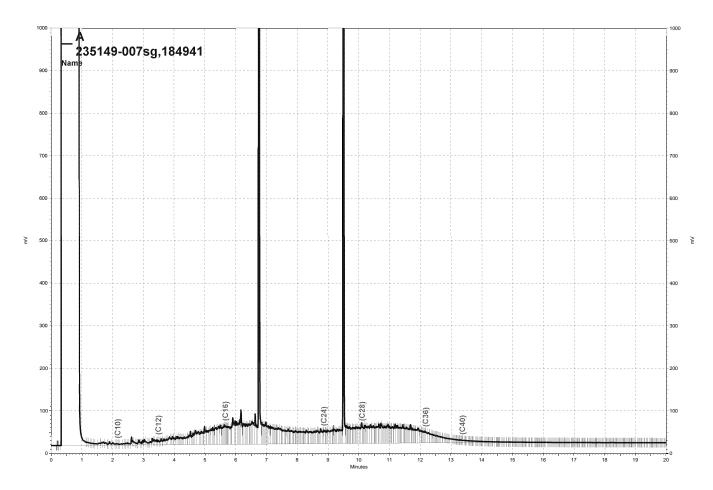
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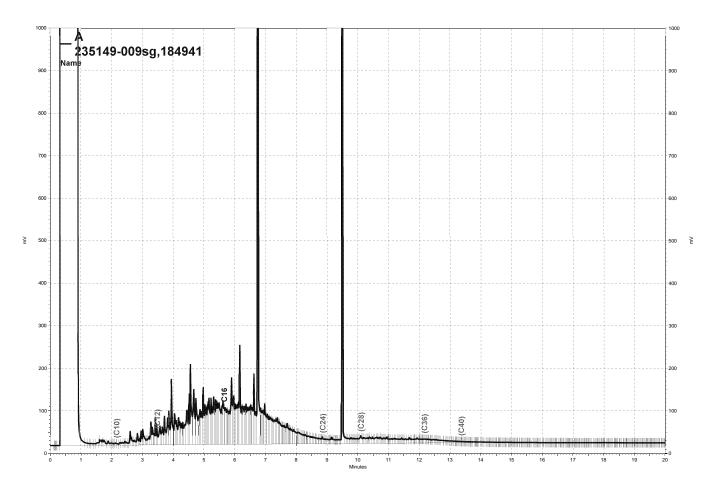
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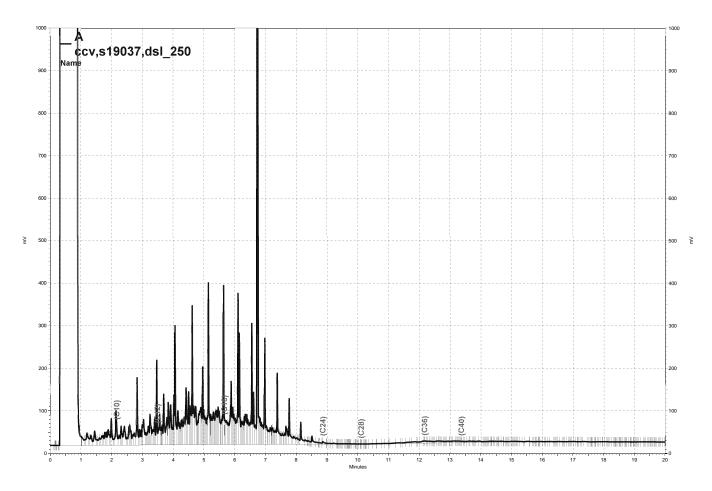
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BTXE & Oxygenates					
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA		
Client:	Stantec	Prep:	EPA 5030B		
Project#:	STANDARD	Analysis:	EPA 8260B		
Field ID:	MW-1R	Batch#:	184934		
Lab ID:	235149-001	Sampled:	03/22/12		
Matrix:	Water	Received:	03/23/12		
Units:	ug/L	Analyzed:	03/26/12		
Diln Fac:	1.000				

Analyte	Result	RL	
MTBE	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Naphthalene	ND	2.0	

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-125
1,2-Dichloroethane-d4	71	69-145
Toluene-d8	107	80-120
Bromofluorobenzene	108	80-120

ND= Not Detected RL= Reporting Limit Page 1 of 1

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		BTXE & Oxygenates	
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA
Client:	Stantec	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	184934
Lab ID:	235149-002	Sampled:	03/22/12
Matrix:	Water	Received:	03/23/12
Units:	ug/L	Analyzed:	03/26/12
Diln Fac:	1.000		

Analyte	Result	RL	
MTBE	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Naphthalene	ND	2.0	

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-125
1,2-Dichloroethane-d4	70	69-145
Toluene-d8	107	80-120
Bromofluorobenzene	100	80-120

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		BTXE & Oxygenates	
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA
Client:	Stantec	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	184934
Lab ID:	235149-003	Sampled:	03/22/12
Matrix:	Water	Received:	03/23/12
Units:	ug/L	Analyzed:	03/26/12
Diln Fac:	1.000		

Analyte	Result	RL	
MTBE	0.9	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Naphthalene	ND	2.0	

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-125
1,2-Dichloroethane-d4	80	69-145
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-120

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		BTXE & Oxygenates	
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA
Client:	Stantec	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-7R	Batch#:	184930
Lab ID:	235149-004	Sampled:	03/22/12
Matrix:	Water	Received:	03/23/12
Units:	ug/L	Analyzed:	03/26/12
Diln Fac:	1.000		

Analyte	Result	RL	
MTBE	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Naphthalene	ND	2.0	

Surrogate	%REC	Limits	
Dibromofluoromethane	102	80-125	
1,2-Dichloroethane-d4	100	69-145	
Toluene-d8	96	80-120	
Bromofluorobenzene	98	80-120	

ND= Not Detected
RL= Reporting Limit

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		BTXE & Oxygenates	
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA
Client:	Stantec	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-8	Batch#:	184930
Lab ID:	235149-005	Sampled:	03/22/12
Matrix:	Water	Received:	03/23/12
Units:	ug/L	Analyzed:	03/26/12
Diln Fac:	1.000		

Analyte	Result	RL	
MTBE	1.3	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Naphthalene	ND	2.0	

Surrogate	%REC	Limits	
Dibromofluoromethane	101	80-125	
1,2-Dichloroethane-d4	98	69-145	
Toluene-d8	95	80-120	
Bromofluorobenzene	100	80-120	

ND= Not Detected
RL= Reporting Limit

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BTXE & Oxygenates			
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA
Client:	Stantec	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	OW-1	Batch#:	184930
Lab ID:	235149-006	Sampled:	03/22/12
Matrix:	Water	Received:	03/23/12
Units:	ug/L	Analyzed:	03/26/12
Diln Fac:	1.000		

Analyte	Result	RL	
MTBE	4.3	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Naphthalene	ND	2.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	98	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-120



	BTXE & Oxygenates			
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA	
Client:	Stantec	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Field ID:	OW-2	Batch#:	184930	
Lab ID:	235149-007	Sampled:	03/22/12	
Matrix:	Water	Received:	03/23/12	
Units:	ug/L	Analyzed:	03/26/12	
Diln Fac:	1.000			

Analyte	Result	RL	
MTBE	6.0	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Naphthalene	ND	2.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	96	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-120

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	BTXE & Oxygenates			
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA	
Client:	Stantec	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Field ID:	DUPLICATE	Batch#:	184930	
Lab ID:	235149-009	Sampled:	03/22/12	
Matrix:	Water	Received:	03/23/12	
Units:	ug/L	Analyzed:	03/26/12	
Diln Fac:	1.000	_		

Analyte	Result	RL	
MTBE	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Naphthalene	ND	2.0	

Surrogate	%REC	Limits	
Dibromofluoromethane	98	80-125	
1,2-Dichloroethane-d4	96	69-145	
Toluene-d8	95	80-120	
Bromofluorobenzene	99	80-120	

ND= Not Detected
RL= Reporting Limit

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BTXE & Oxygenates				
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA	
Client:	Stantec	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Field ID:	EQUIPMENT BLANK	Batch#:	184930	
Lab ID:	235149-010	Sampled:	03/22/12	
Matrix:	Water	Received:	03/23/12	
Units:	ug/L	Analyzed:	03/26/12	
Diln Fac:	1.000			

Analyte	Result	RL	
MTBE	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Naphthalene	ND	2.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	99	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	100	80-120

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		BTXE & Oxygenates	
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA
Client:	Stantec	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC633248	Batch#:	184930
Matrix:	Water	Analyzed:	03/26/12
Units:	ug/L		

Analyte	Result	RL	
MTBE	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Naphthalene	ND	2.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	99	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected RL= Reporting Limit Page 1 of 1



		BTXE & Oxygenates	
Lab #: Client: Project#:	235149 Stantec STANDARD	Location: Prep: Analysis:	725 Julie Ann Way Oakland CA EPA 5030B EPA 8260B
Matrix: Units: Diln Fac:	Water ug/L 1.000	Batch#: Analyzed:	184930 03/26/12

Type: BS Lab ID: QC633249

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	17.77	89	61-121
1,2-Dichloroethane	20.00	21.10	105	70-136
Benzene	20.00	21.22	106	80-121
Toluene	20.00	20.67	103	80-120
1,2-Dibromoethane	20.00	19.89	99	80-120
Ethylbenzene	20.00	21.56	108	80-120
m,p-Xylenes	40.00	39.60	99	80-121
o-Xylene	20.00	20.18	101	80-121
Napĥthalene	20.00	20.10	101	62-132

Surrogate	%REC	Limits	
Dibromofluoromethane	97	80-125	
1,2-Dichloroethane-d4	99	69-145	
Toluene-d8	96	80-120	
Bromofluorobenzene	98	80-120	

Type: BSD Lab ID: QC633250

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	18.23	91	61-121	3	20
1,2-Dichloroethane	20.00	21.11	106	70-136	0	20
Benzene	20.00	21.08	105	80-121	1	20
Toluene	20.00	20.38	102	80-120	1	20
1,2-Dibromoethane	20.00	20.54	103	80-120	3	20
Ethylbenzene	20.00	21.36	107	80-120	1	20
m,p-Xylenes	40.00	39.78	99	80-121	0	20
o-Xylene	20.00	20.29	101	80-121	1	20
Naphthalene	20.00	20.72	104	62-132	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	99	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	97	80-120



		BTXE & Oxygenates	
Lab #: Client: Project#:	235149 Stantec STANDARD	Location: Prep: Analysis:	725 Julie Ann Way Oakland CA EPA 5030B EPA 8260B
Matrix: Units: Diln Fac:	Water ug/L 1.000	Batch#: Analyzed:	184934 03/26/12

Type: BS Lab ID: QC633262

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	17.43	70	61-121
1,2-Dichloroethane	25.00	20.13	81	70-136
Benzene	25.00	23.43	94	80-121
Toluene	25.00	26.54	106	80-120
1,2-Dibromoethane	25.00	24.43	98	80-120
Ethylbenzene	25.00	25.96	104	80-120
m,p-Xylenes	50.00	53.52	107	80-121
o-Xylene	25.00	26.32	105	80-121
Napĥthalene	25.00	22.69	91	62-132

Surrogate	%REC	Limits	
Dibromofluoromethane	92	80-125	
1,2-Dichloroethane-d4	82	69-145	
Toluene-d8	109	80-120	
Bromofluorobenzene	102	80-120	

Type: BSD Lab ID: QC633263

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	18.16	73	61-121	4	20
1,2-Dichloroethane	25.00	18.68	75	70-136	7	20
Benzene	25.00	22.57	90	80-121	4	20
Toluene	25.00	25.03	100	80-120	6	20
1,2-Dibromoethane	25.00	22.43	90	80-120	9	20
Ethylbenzene	25.00	25.74	103	80-120	1	20
m,p-Xylenes	50.00	51.34	103	80-121	4	20
o-Xylene	25.00	21.88	88	80-121	18	20
Naphthalene	25.00	23.35	93	62-132	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	81	69-145
Toluene-d8	105	80-120
Bromofluorobenzene	105	80-120



BTXE & Oxygenates									
Lab #:	235149	Location:	725 Julie Ann Way Oakland CA						
Client:	Stantec	Prep:	EPA 5030B						
Project#:	STANDARD	Analysis:	EPA 8260B						
Type:	BLANK	Diln Fac:	1.000						
Lab ID:	QC633264	Batch#:	184934						
Matrix:	Water	Analyzed:	03/26/12						
Units:	ug/L								

Analyte	Result	RL	
MTBE	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Naphthalene	ND	2.0	

Surrogate	%REC	Limits	
Dibromofluoromethane	86	80-125	
1,2-Dichloroethane-d4	75	69-145	
Toluene-d8	103	80-120	
Bromofluorobenzene	108	80-120	

ND= Not Detected RL= Reporting Limit Page 1 of 1



## APPENDIX C Concentration Plots – 1997 - 2011

2012 Semi-Annual Groundwater Monitoring Report Former Penske Truck Leasing Facility 725 Julie Ann Way Oakland, California Alameda County Site ID RO0000354 Stantec PN: 185702473.200.0001 June 18, 2012

FIGURE C-1 TPHd versus Time February 1997 to March 2012

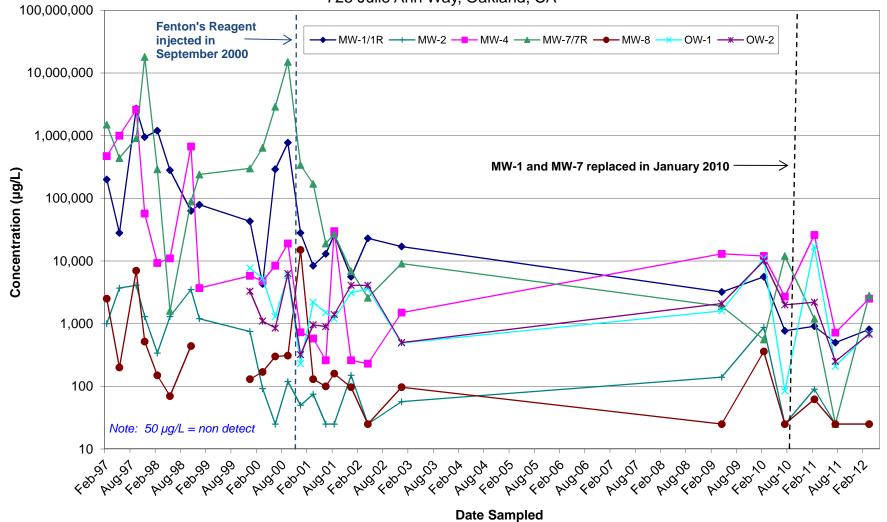


FIGURE C-2 TPHg versus Time February 1997 to March 2012

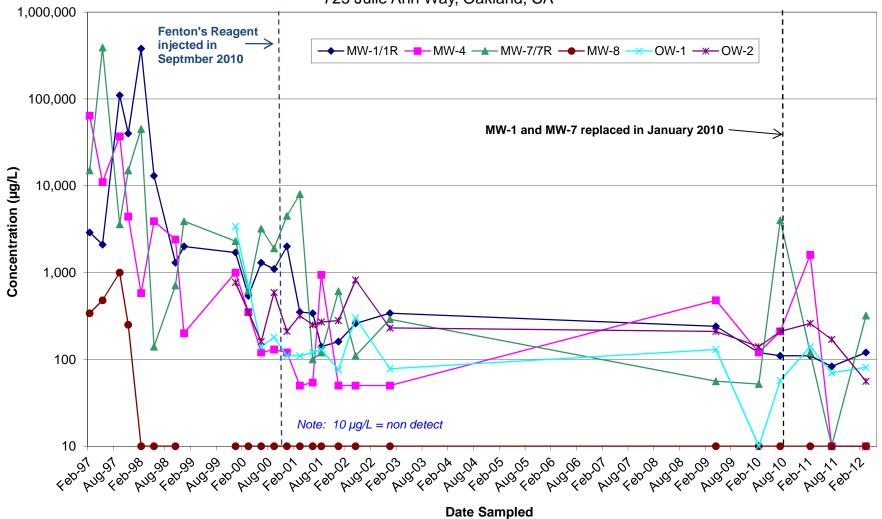


FIGURE C-3 **Benzene versus Time** February 1997 to March 2012

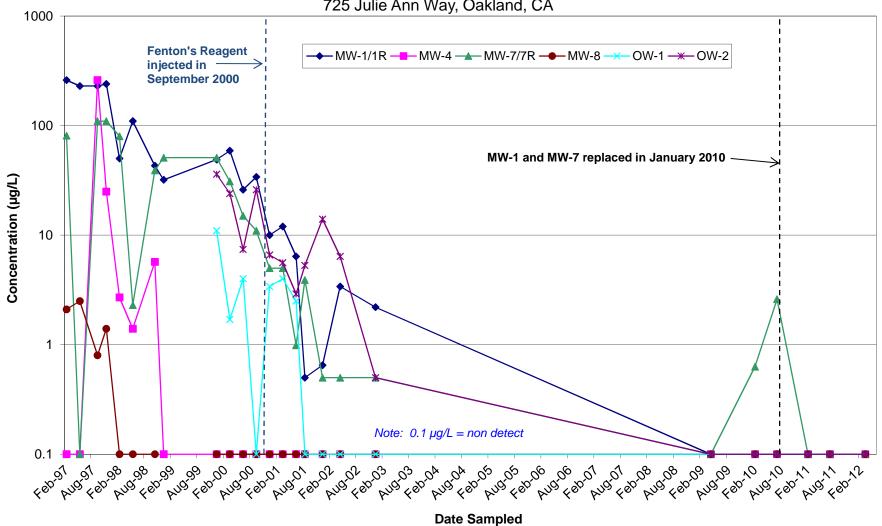


FIGURE C-4 **MTBE versus Time** February 1997 to March 2012

