J.W. SILVEIRA CO.

499 Embarcadoro Oakland, CA 94606 Tel: (510) 834-9810 Fax: (510) 763-9996 jw\_silveira@hotmail.com **Real Estate** 

April 15, 2011

Mr. Mark Detterman Alameda County Environmental Health Department 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502 10:24 am, Jun 09, 2011 Alameda County

RECEIVED

Environmental Health

SUBJECT: GROUNDWATER MONITORING AND SAMPLING REPORT CERTIFICATION County File # RO 387 Mcl Senna Brake Service 2301 East 12<sup>th</sup> Street Oakland, CA

Dear Mr. Detterman:

P&D Environmental, Inc. has prepared the following document:

• Groundwater Monitoring and Sampling Report (February 17, 2011 Sampling Event) dated April 15, 2011 (document 0404.R7).

I declare under penalty of perjury that the contents and conclusions in the document are true and correct to the best of my knowledge.

Should you have any questions, please do not hesitate to contact me at (510) 834-9811.

Sincerely,

J.W. Silveira Realty

0404.L15

## P&D ENVIRONMENTAL, INC.

55 Santa Clara Ave, Suite 240 Oakland, CA 94610 (510) 658-6916

April 15, 2011 Report 0404.R7

Mr. J.W. Silveira J.W. Silveria Realty 499 Embarcadero Oakland, CA 94606

## SUBJECT: GROUNDWATER MONITORING AND SAMPLING REPORT (FEBRUARY 17, 2011 SAMPLING EVENT) County File # RO 387 Mel Senna Brake Service 2301 East 12<sup>th</sup> Street Oakland, CA

Dear Mr. Silveira:

P&D Environmental, Inc. (P&D) is pleased to present this report documenting the results of monitoring and sampling of the groundwater monitoring wells at the subject site. Field activities were performed on February 17, 2011. The well monitoring and sampling was performed in response to a request in a letter from the Alameda County Environmental Health Department (ACDEH), dated December 23, 2010. The letter referenced previous correspondence that requested that semi-annual monitoring and sampling be performed during the first and third quarters of each year. A Site Location Map (Figure 1) and Site Vicinity Map showing groundwater monitoring well locations (Figure 2) are attached with this report.

### BACKGROUND

The subject site was previously a gas station and vehicle repair facility, and is currently a tire and brake repair facility. The subject site is located in an industrially zoned area and bordered to the northeast by East 12<sup>th</sup> Street, to the southeast by railroad property, to the northwest by 23<sup>rd</sup> Avenue and a public park, and to the southwest by a furniture restoration facility.

Review of available reports prepared by others has identified the following historical activities and investigations at the subject site.

- Removal of one gasoline UST, one diesel UST, and two waste oil USTs from December 1990 through March 1991, and excavation of contaminated soil to a depth of approximately 17 to 18 feet below the ground surface. A total of 16 soil samples were collected from beneath USTs, a total of 6 UST pit sidewall samples were collected, and 2 UST pit water samples were collected. Some of the soil excavated during UST removal was reportedly used to backfill the UST pit.
- Installation of wells MW-1, MW-2, and MW-3 in June, 1991.

- Installation of wells MW-4, MW-5, MW-6, and EW-1, and drilling of two soil borings (B-1 and B-2), and the quarterly monitoring and sampling of wells MW-1, MW-2, and MW-3 from July 1992 through December 1993.
- Weekly and other periodic bailing of wells MW1, MW2 and MW3 at the site during April, May, October and November 1993 as an interim remedial measure to remove separate phase petroleum hydrocarbons from well MW-2 and reduce petroleum hydrocarbon concentrations in the groundwater monitoring wells.
- Collection of groundwater grab samples from boreholes SB-1 through SB-6 on March 31 and April 1, 1999 and quarterly groundwater monitoring well monitoring and sampling from June 1994 through April 1999. Although petroleum hydrocarbons and HVOCs were reported as detected at offsite location SB-6 to the northeast on the opposite side of East 12<sup>th</sup> Street from the subject site, review of the laboratory report shows that none of the analytes were detected.

The highest concentrations of petroleum hydrocarbons in soil at the site have been detected at depths ranging from 8 to 12 feet below the ground surface. The highest concentrations of petroleum hydrocarbons in groundwater at the site have been detected in well MW-2 (the well where separate phase petroleum hydrocarbons were detected in 1993), MW-3 (located near well MW-2), and in well MW-1 (located at one end of the former UST pit). The highest concentrations of HVOCs detected in groundwater have been at well MW-6, with trichloroethene, cis-1,2-dichloroethene and vinyl chloride detected in groundwater.

The measured depth to groundwater at the site has typically ranged from approximately 5 to 9 feet. The calculated groundwater flow direction at the site has historically been reported to be predominantly northwesterly. Separate phase hydrocarbons were historically reported to be present in well MW2, and groundwater sample results have consistently shown the presence of Total Petroleum Hydrocarbons as Gasoline (TPH-G), Total Petroleum Hydrocarbons as Diesel (TPH-D), and benzene, toluene, ethylbenzene, and total xylenes (BTEX) in all of the wells at the site. TPH-G and TPH-D concentrations for all of the wells have almost invariably exceeded 1,000 ug/L during all sampling events, and have shown little evidence of decline since the beginning of monitoring. Groundwater benzene concentrations have ranged up to 5,200 ug/L in well MW-2, and have shown a decline with time for all of the wells. Halogenated Volatile Organic Compounds (HVOCs) have also been historically intermittently detected in groundwater samples at the site, with TCE ranging up to 160 ug/L, and vinyl chloride up to 230 ug/L. MTBE was not detected in any of the groundwater samples.

A review of the laboratory reports for the historical groundwater monitoring well sampling events shows that three of the last four sampling events performed by others where laboratory reports were available for review and the laboratory reported the presence of sheen on the laboratory report identified sheen as present in almost all of the samples.

Recent activities performed by P&D have included the following.

• Preparation of a review of historical investigation documents for the site that included summaries of historical groundwater level measurements, historical groundwater organic compound and metals concentrations, and historical laboratory report identification of sheen

on groundwater (Subsurface Investigation Work Plan (SB-7 Through SB-13 and SG-1 Through SG-5) dated December 16, 2008, document 0404.W1),

- Monitoring and sampling of all of the wells on June 4, 2007.
- Preparation of a Sensitive Receptor Survey Report dated December 8, 2008 (document 0404.R2) for wells located within a 1/2 mile radius of the subject site.
- Preparation of a Preferential Pathway Survey Report dated December 15, 2008 (document 0404.R3) to identify buried utilities in the vicinity of the subject site that included cross sections showing utility trench and seasonal groundwater depths.
- Subsurface investigation in March 2009 that included collecting groundwater grab samples from seven borings with two of the groundwater grab samples collected at a depth of approximately 50 feet bgs; continuous coring for logging purposes at four of the borings; collection of soil samples from three of the borings; soil conductivity logging at two locations to a depth of 60 feet bgs; and collection of soil gas samples from five locations adjacent to the subject site building at a depth of 3 feet bgs except for SG6 that was collected at a depth of 5 feet bgs (Subsurface Investigation Report (SB7 Through SB13 and SG1 Through SG6) dated July 7, 2009, document 0404.R4).

## FIELD ACTIVITIES

On February 17, 2011 P&D personnel monitored wells MW1, MW2, MW3, MW4, MW5, MW6, and EW1 for depth to water to the nearest 0.01 foot using an electric water level indicator, and sampled all seven wells. The wells were first evaluated for the presence of free product or sheen by using a transparent bailer. No free product was detected in any of the wells. Petroleum hydrocarbon sheen and strong or strong to moderate petroleum hydrocarbon odors were detected on the purge water from all seven wells with the exception of well MW4, where moderate odors were detected.

Prior to sampling, all of the wells were purged of a minimum of three casing volumes of water. During purging operations, the field parameters of pH, electrical conductivity and temperature were monitored. Once a minimum of three casing volumes had been purged, water samples were collected using a clean Teflon bailer. The water samples were transferred to 40-milliliter glass Volatile Organic Analysis (VOA) vials containing hydrochloric acid preservative and to one-liter amber glass bottles that were sealed with Teflon-lined screw caps. The VOA vials were overturned and tapped to ensure that no air bubbles were present.

The sample containers were then transferred to a cooler with ice, and later were transported to the laboratory. Chain of custody documentation accompanied the samples to the laboratory. Records of the field parameters measured during well purging are attached with this report.

### DRUM DISPOSAL

On February 22, 2011 two drums of well purge water were removed from the site as non-hazardous waste by Clearwater Environmental, Inc. (Clearwater) of Union City California to the Alviso Independent Oil facility in Alviso, California using non-hazardous waste manifest 09880. A copy of the non-hazardous waste manifest is attached with this report.

### HYDROGEOLOGY

The water levels measured in wells MW1, MW2, MW3, MW4, MW5, MW6, and EW1 on February 17, 2011 are summarized in Table 1. Review of the water levels shown on Figure 2 shows that the water levels in the former fuel UST pit (see EW1) and adjacent to the former waste oil UST pit (see MW6) are elevated relative to the water levels in the surrounding wells. Review of historical water levels for the wells in Appendix A of P&D's December 16, 2008 Subsurface Investigation Work Plan (document 0404.W1) shows that the water level in well MW6 has historically been anomalously high relative to the water levels in the adjacent wells. Based on the groundwater levels in wells MW1 through MW6, the groundwater flow direction on February 17, 2011 appeared to be west-northwesterly with a gradient of approximately 0.035 in the vicinity of the monitoring wells located in 23<sup>rd</sup> Avenue. The groundwater surface contours and associated groundwater flow direction at the site on February 17, 2011 is shown on Figure 2.

Review of groundwater flow direction information for nearby sites that have groundwater monitoring wells shows that the groundwater flow direction at 2200 East 12<sup>th</sup> Street (located approximately 800 feet northwest of the subject site) has historically been to the west-southwest, and that the groundwater flow direction at 2345 International Boulevard (located approximately 500 feet northeast of the subject site) has historically been to the southwest. The calculated February 17, 2011 westerly to northwesterly groundwater flow direction for the subject site is approximately consistent with the groundwater flow directions identified for the nearby sites. The historical northnorthwesterly groundwater flow direction reported for the subject site may be associated with elevated water levels in the former UST pits resulting in anomalously elevated water levels in wells located in the immediate vicinity of the former UST pits.

Groundwater surface elevations shown on Figure 2 were calculated by determining top of well casing elevations from historical depth to water measurements and associated reported groundwater surface level elevations.

### LABORATORY RESULTS

The groundwater samples collected from all of the wells were analyzed at McCampbell Analytical, Inc. in Pittsburg, California for Total Petroleum Hydrocarbons as Motor Oil (TPH-MO) and TPH-D using EPA Method 3510C in conjunction with EPA Method 8015B, and for TPH-G using EPA Method 5030B in conjunction with modified EPA Method 8015B. The samples were also analyzed for methyl tertiary-butyl ether (MTBE), BTEX, other Volatile Organic Compounds (VOCs) including Lead Scavengers and Fuel Oxygenates, and for HVOCs using EPA Method 5030B in conjunction with EPA Method 8260B. The laboratory analytical results are summarized in Table 2. Copies of the laboratory analytical reports and chain of custody documentation are attached with this report.

Review of Table 2 and the laboratory analytical report shows that MTBE was not detected in any of the samples; TPH-MO was not detected in MW4 and ranged in concentration from 620 to 2,600 ug/L; TPH-D ranged in concentration from 1,600 to 11,000 ug/L; TPH-G ranged in concentration from 3,600 to 10,000 ug/L; and benzene ranged in concentration from not detected to 350 ug/L. Review of the laboratory report notes shows that all of the TPH-G results were identified as consisting of weakly modified or unmodified gasoline with the exception of the results for MW4,

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which were identified as heavier gasoline-range compounds. Similarly, the laboratory report notes for the Total Extractable Petroleum Hydrocarbons (TPH-D and TPH-MO) results for all of the samples were identified as Stoddard solvent/mineral spirit-range compounds; all of the sample results with the exception of MW1 were identified as consisting of diesel-range compounds with no recognizable pattern; the sample results from MW5, MW6 and EW1 were also identified as possibly consisting of gasoline-range compounds; and the sample results from wells MW1 and MW2 were also identified as consisting of oil-range compounds.

The only HVOCs, fuel oxygenates, or lead scavengers detected in any of the wells consisted of trichloroethene, cis-1,2-dichloroethene, and tert-Butyl alcohol in EW1 which were detected at concentrations of 6.4, 25, and 12 ug/L, respectively.

Since the previous sampling event on June 4, 2007 TPH-G, BTEX and all other VOC concentrations have decreased in all of the wells with the exception of toluene in MW2; TPH-G in MW3; and trichloroethene and cis-1,2-dichloroethene in EW1, which increased. Similarly, TPH-D and TPH-MO concentrations have decreased in wells MW1, MW4 and MW6, with the exception of TPH-D in MW4, which increased. In wells MW2, MW3, MW5 and EW1 TPH-D and TPH-MO concentrations have all increased since the previous sampling event, with separate phase hydrocarbon layer reported by the laboratory for the samples from MW2 and MW3.

## DISCUSSION AND RECOMMENDATIONS

The groundwater flow direction at the site on February 17, 2011 was calculated to be to the westnorthwest, which is consistent with historical groundwater flow directions at the site and which is generally consistent with the groundwater flow direction identified at two nearby sites that have groundwater monitoring wells. Petroleum hydrocarbon sheen and petroleum hydrocarbon odors were detected on the purge water from all seven wells. However, review of the laboratory report shows that the laboratory identified sheen only for the samples from wells MW2 and MW3, located immediately downgradient of the former UST pits.

Groundwater isoconcentration contours for TPH-G, TPH-D, and benzene, that include the April 1999 and March 2009 groundwater grab sample results and the February 2011 well sample results are shown in Figures 3, 4, and 5, respectively. Comparison of the isoconcentration contours for the current sampling event and the previous (June 4, 2007) sampling event shows that the TPH-D and TPH-G 1,000 ug/L isoconcentration contour and the benzene 100 ug/L isoconcentration contour have not changed, indicating that the shape of the groundwater plume is unchanged. Only the presence of 10,000 ug/L isoconcentration contours for TPH-G and TPH-D changed in the vicinity of the former UST pits. The presence and absence of elevated TPH-G and TPH-D groundwater concentrations in the vicinity of the former UST pits is interpreted to be related to seasonal changes in petroleum groundwater concentrations associated with changing water levels and wet season infiltration of rain.

The only HVOCs, fuel oxygenates, or lead scavengers detected in any of the wells consisted of trichloroethene, cis-1,2-dichloroethene, and tert-Butyl alcohol in EW1 which were detected at concentrations of 6.4, 25, and 12 ug/L, respectively. The absence of HVOCs in all of the wells except for EW1 (located near the former waste oil USTs) is consistent with the trend of decreasing HVOC concentrations and detections in all of the wells for the site, and is also

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interpreted to be related to seasonal changes in petroleum groundwater concentrations associated with changing water levels and wet season infiltration of rain.

The isoconcentration contours shown on Figures 3 through 5 were prepared with data that included borehole groundwater grab sample results which could be positively biased due to sorption of petroleum to sediments in the borehole groundwater grab samples. For this reason the isoconcentration contours are assumed to provide a conservative approximation of the extent of impact to groundwater.

Based on the historical water quality data base that is summarized in Appendix A of P&D's December 16, 2008 Subsurface Investigation Work Plan (document 0404.W1), P&D recommends that well sampling be reduced to an annual basis pending implementation of remedial solutions for the site.

### DISTRIBUTION

A copy of this report will be uploaded to the ACDEH website, in accordance with ACDEH requirements. In addition, a copy of this report will be uploaded to the GeoTracker database.

### LIMITATIONS

This report was prepared solely for the use of J.W. Silveira Realty. The content and conclusions provided by P&D in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with the site owner, regulatory agencies and other pertinent individuals; review of available public documents; subsurface exploration and our professional judgment based on said information at the time of preparation of this document. Any subsurface sample results and observations presented herein are considered to be representative of the area of investigation; however, geological conditions may vary between borings and may not necessarily apply to the general site as a whole. If future subsurface or other conditions are revealed which vary from these findings, the newly revealed conditions must be evaluated and may invalidate the findings of this report.

This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner to properly dispose of any hazardous materials or hazardous wastes left onsite, in accordance with existing laws and regulations.

This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. P&D is not responsible for the accuracy or completeness of information provided by other individuals or entities, which are used in this report. This report presents our professional judgment based upon data and findings identified in this report and interpretation of such data based upon our experience and background, and no warranty, either express or implied, is made.

The conclusions presented are based upon the current regulatory climate and may require revision if future regulatory changes occur.

P&D ENVIRONMENTAL, INC.

Should you have any questions or comments, please do not hesitate to contact us at (510) 658-6916.

Sincerely,

P&D Environmental, Inc.

Paul H. King Professional Geologist #5901 Expires: 12/31/11

Attachments:



Table 1 - Well Monitoring DataTable 2 - Summary of Groundwater Sample Laboratory Analytical Results

Figure 1 - Site Location Map

Figure 2 - Site Vicinity Map Showing Groundwater Surface Elevations

Figure 3 - Site Vicinity Map Showing TPH-D Groundwater Isoconcentration Contours

Figure 4 - Site Vicinity Map Showing TPH-G Groundwater Isoconcentration Contours

Figure 5 - Site Vicinity Map Showing Benzene Groundwater Isoconcentration Contours

Groundwater Monitoring/Well Purging Data Sheets Drum Disposal Manifest Laboratory Analytical Reports and Chain of Custody Documentation

PHK/sjc 0404.R7 TABLES

Well Number	Date Monitored	* Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-msl.)
MW1	2/17/2011 6/4/2007	16.21	7.23 8.07	8.98 8.14
MW2	2/17/2011 6/4/2007	14.43	5.78 6.77	8.65 7.66
MW3	2/17/2011 6/4/2007	14.95	5.75 7.04	9.20 7.91
MW4	2/17/2011 6/4/2007	14.66	6.42 7.45	8.24 7.21
MW5	2/17/2011 6/4/2007	14.67	7.09 8.62	7.58 6.05
MW6	2/17/2011 6/4/2007	15.28	5.15 7.88	10.13 7.40
EW1	2/17/2011 6/4/2007	15.36	5.43 7.23	9.93 8.13

ft = feet

\*Elevations were surveyed by Epigene International using a spirit level relative to a City of Oakland benchmark and are reported in feet mean sea level.

Well Number	Sample Date	TPH-MO	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW1	2/17/2011	620, e,d	4,300, e,d	4,800	ND<5.0	(220)	(6.7)	ND<5.0	(5.3)
	6/4/2007	2,100	10,000, a, b,d,e	11,000, a, f	ND< 45	260 (280)	6.9	5.6	9.5
MW2	2/17/2011	2,500, e,b,d	9,000, e,b,d	9,200, a	ND<10	(350)	(33)	ND<10	(24)
	6/4/2007	1,600	8,300, b, e	28,000, f	ND< 160	480 (430)	18 (31)	17	41 (43)
MW3	2/17/2011	1,700, e,b	11,000, e,b	10,000, a	ND<1.0	(26)	(3.7)	ND<1.0	ND<1.0
	6/4/2007	580	4,200, b, e	9,200, f	ND< 60	58 (34)	4.7 (4.8)	5.9 (2.4)	8.1 (2.7)
MW4	2/17/2011	ND<250	1,600, e	2,800, f,g	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	6/4/2007	ND<250	1,200, e	4,900, f	ND< 25	ND< 2.5	ND< 2.5	ND< 2.5	3.0
MW5	2/17/2011	<b>450, e,b</b>	2,800, e,b	5,400	ND<2.5	(24)	ND<2.5	(5.1)	(8.3)
	6/4/2007	ND<250	2,000, b, c	6,200, f	ND< 25	44 (41)	3.7 (4.0)	10 (7.0)	13 (11)
MW6	2/17/2011	880, e,b	2,300, e,b	3,600	ND<5.0	(260)	ND<5.0	ND<5.0	ND<5.0
	6/4/2007	880	2,700, b, c	7,100, f	ND< 90	580 (600)	ND< 5.0	11	ND< 5.0
EW1	2/17/2011	<b>640, e,b</b>	2,500, e,b	4,000	ND<1.7	(61)	(2.0)	ND<1.7	(2.2)
	6/4/2007	ND<500	1,200, b, c	6,400, f	ND< 90	160 (160)	ND< 2.5	6.3	7.7
ESL		100	100	100	5.0	1.0	40	30	20
PH-D = Total PH-G = Total ITBE = Methy D = Not detects = Laboratory = Laboratory	tal Petroleum I Petroleum Hy Petroleum Hy yl tertiary-buty cted Note: lighter tl Note: diesel ra	nan water immiscible s	e heen/ product is present gnificant; no recognizable	pattern					

f = Laboratory Note: no recognizable pattern.

g = Laboratory Note: heavier gasoline range compounds are significant (aged gasoline?)

MBTEX results were analyzed using EPA Method 8021B.

MBTEX compounds detected by EPA Method 8260B are in parentheses.

ESL = Environmental Screening Level, developed by San Francisco Bay - Regional Water Quality Control Board (SF-RWQCB) updated May 2008, from Table A -

Shallow Soil Screening Levels, Groundwater is a current or potential source of drinking water.

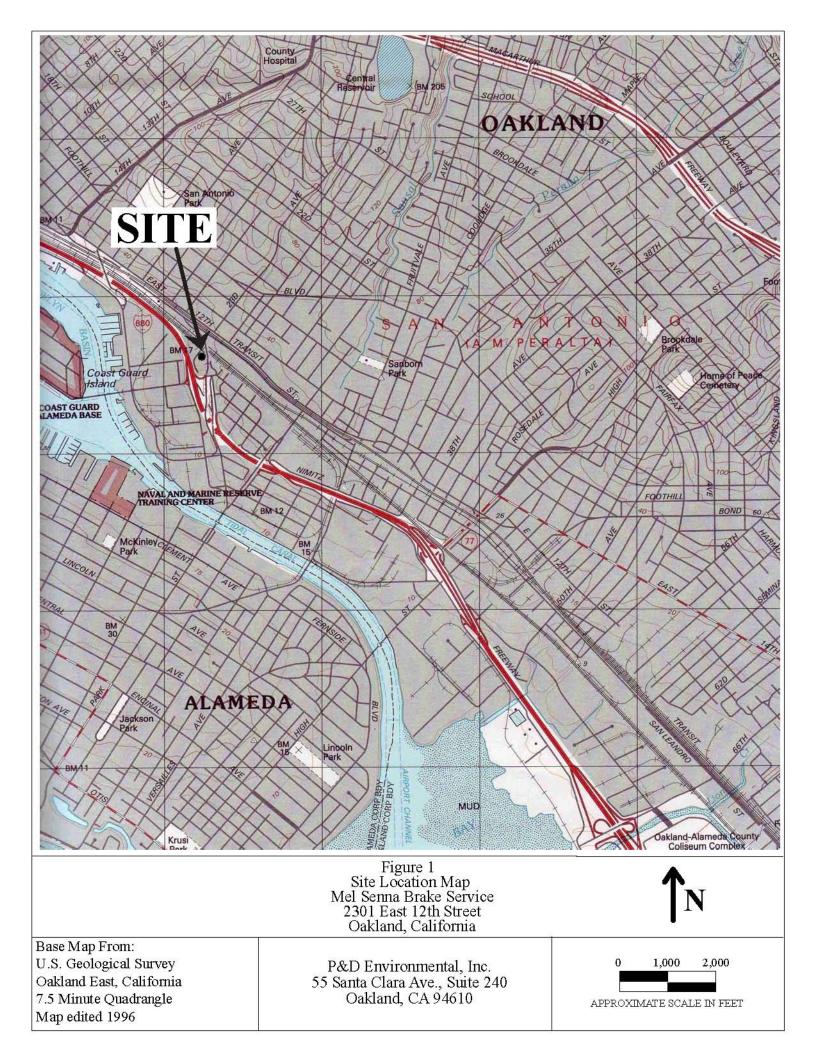
#### Values in bold indicate concentrations that exceed their respective ESL values.

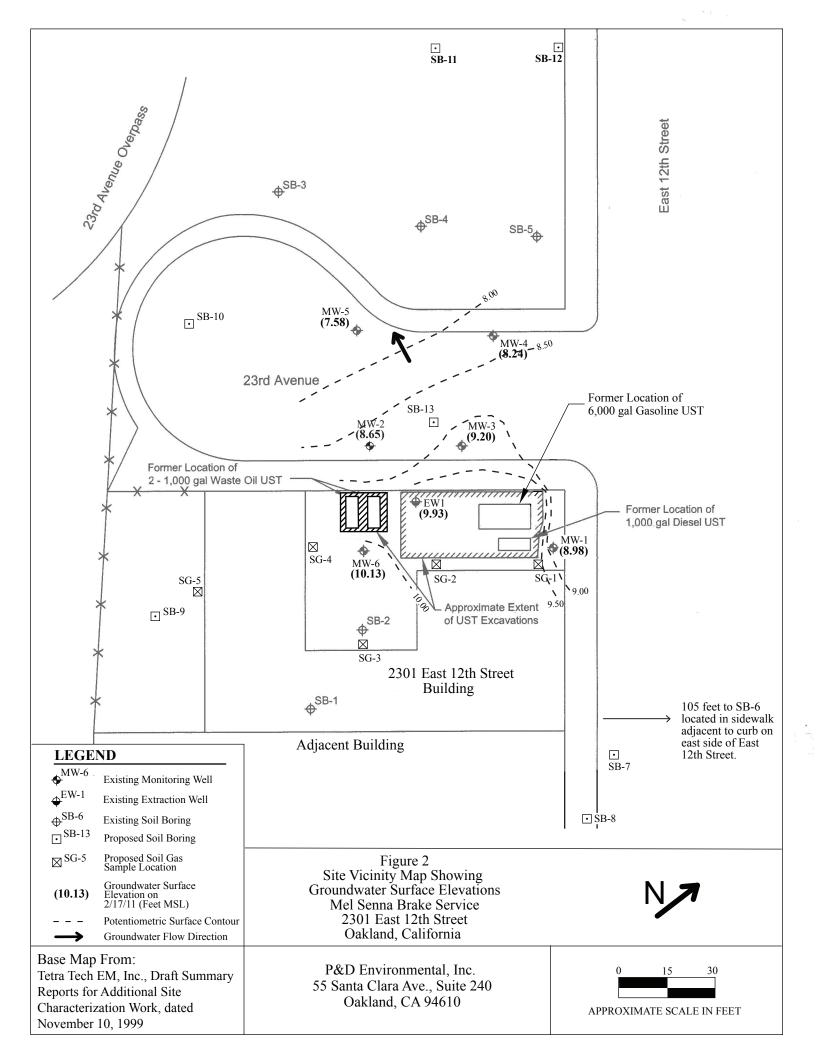
Results in micrograms per liter (µg/L) unless otherwise specified.

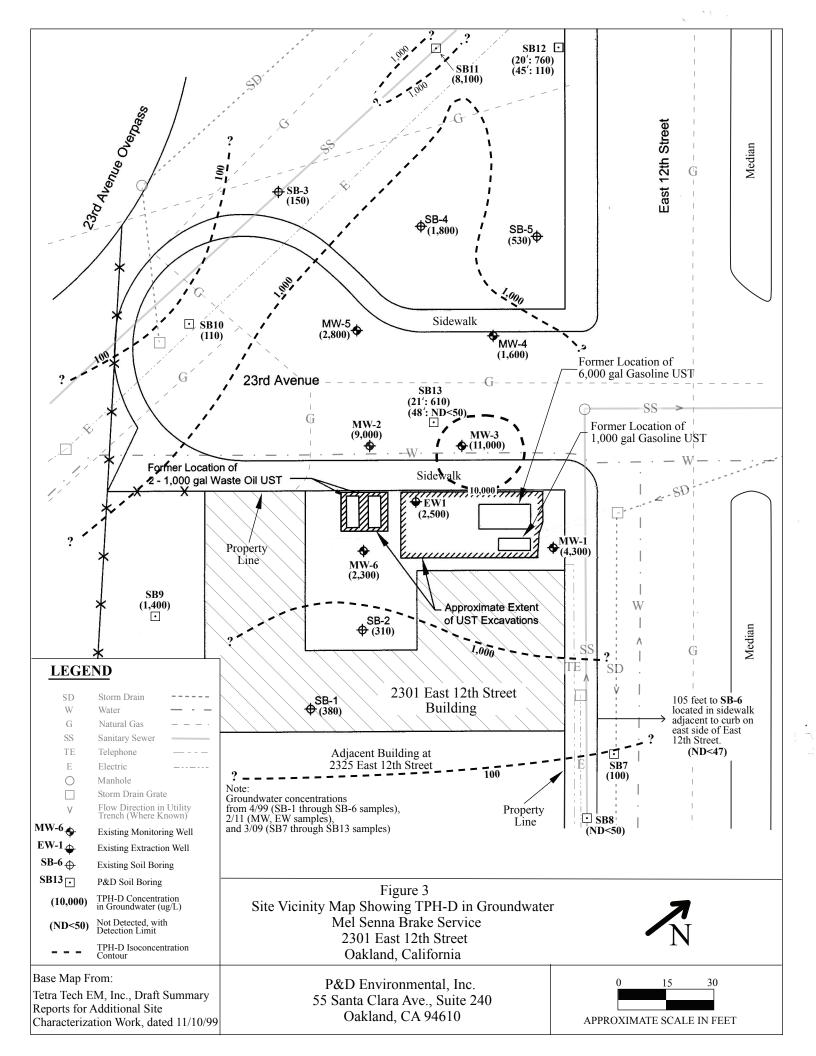
Well Number	sults (Continu Sample Date	VOCs	ESL
MW1	2/17/2011	ND	
	6/4/2007	ND, except	
		Isopropylbenzene = $11$ ,	None
		n-Propylbenzene = 14	None
MW2	2/17/2011	ND, except	
		n-Butylbenzene = 11,	None
		4-Isopropyltoluene = 18,	None
	6/4/2007	ND, except	
		Naphthalene = $260$ ,	17
		1,3,5-Trimethylbenzene = 36	None
MW3	2/17/2011	ND, except	
		n-Butylbenzene = 14,	None
		tert-Butylbenzene = 1.1,	None
		Isopropylbenzene = $22$ ,	None
		sec-Butylbenzene = $8.0$ ,	None
		4-Isopropyltoluene = 16,	None
	<	n-Propylbenzene = 16	None
	6/4/2007	ND, except	
		n-Butylbenzene = 16,	None
		Isopropylbenzene = $34$ ,	None
		sec-Butylbenzene = $13$ ,	None
		4-Isopropyltoluene = 19,	None 17
		Naphthalene = $21$ , n-Propylbenzene = $30$	None
MW4	2/17/2011	ND, except,	
	2,11,2011	n-Butylbenzene = 1.0,	None
		tert-Butylbenzene = $0.74$ ,	None
		Isopropylbenzene $= 3.9$ ,	None
		sec-Butylbenzene = $2.3$ ,	None
		4-Isopropyl toluene = $1.3$ ,	None
		n-Propylbenzene = 2.2	None
	6/4/2007	ND, except,	
		n-Butylbenzene $= 8.7$ ,	None
		tert-Butylbenzene $= 1.0$ ,	None
		Isopropylbenzene = 13,	None
		sec-Butylbenzene = 13,	None
		4-Isopropyl toluene = $5.7$ ,	None
		n-Propylbenzene = 11	None

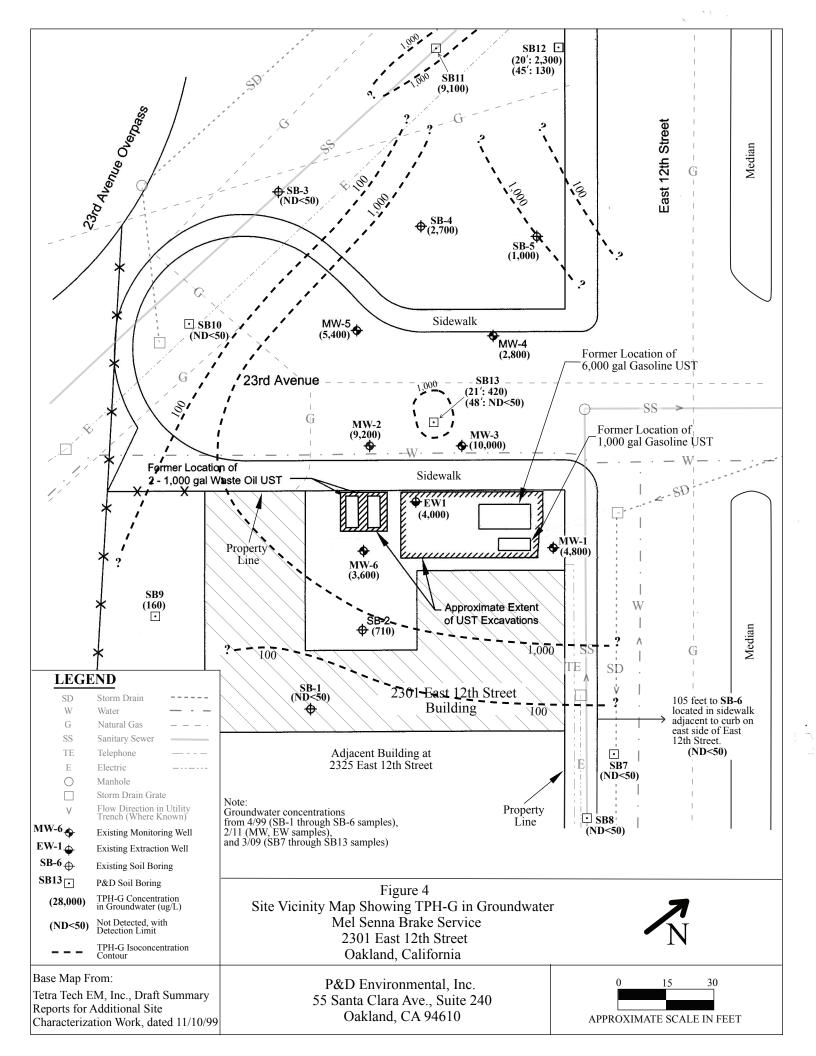
Table 2.Summary of Groundwater SampleLaboratory Analytical Results (Continued)							
Well Number	Sample Date	VOCs	ESL				
MW5	2/17/2011	ND, except n-Butylbenzene = 13, Isopropylbenzene = 52,	None None				
		sec-Butylbenzene = 7.1, 4-Isopropyl toluene = 2.9, n-Propylbenzene = 70	None None None				
	6/4/2007	ND, except n-Butylbenzene = 17, trans-1,2-Dichloroethene = 2.1, Isopropylbenzene = 72,	None 10 None				
		Vinyl Chloride = 1.8, sec-Butylbenzene = 11, Naphthalene = 39, n-Propylbenzene = 100	0.5 None 17 None				
MW6	2/17/2011 6/4/2007	ND Isopropylbenzene = 27, Napthalene = <b>48</b> , n-Propylbenzene = 32	None 17 None				
EW1	2/17/2011	ND, except Trichloroethene = <b>6.4</b> , cis-1,2-dichloroethene = <b>25</b> ,	5 6				
	6/4/2007	trans-1,2,-dichloroethene = <b>12</b> , tert-Butyl alcohol = <b>12</b> ND, except	10 12				
		trans-1,2-Dichloroethene = 5.8, Isopropylbenzene = 21, 4-Isopropyl toluene = 6.2, Naphthalene = 15,	10 None None 17				
		n-Propylbenzene = 13	None				
PCE = Teta $TCE = Tric$ $DCE = Dic$ $DCA = Dic$ $ND = Not$							
Bay - Regio May 2008,	onal Water Q from Table A	creening Level, developed by San F uality Control Board (SF-RWQCB) A – Shallow Soil Screening Levels, source of drinking water.	) updated				
respective	ESL values.	concentrations that exceed their er liter (µg/L) unless otherwise spec	cified.				

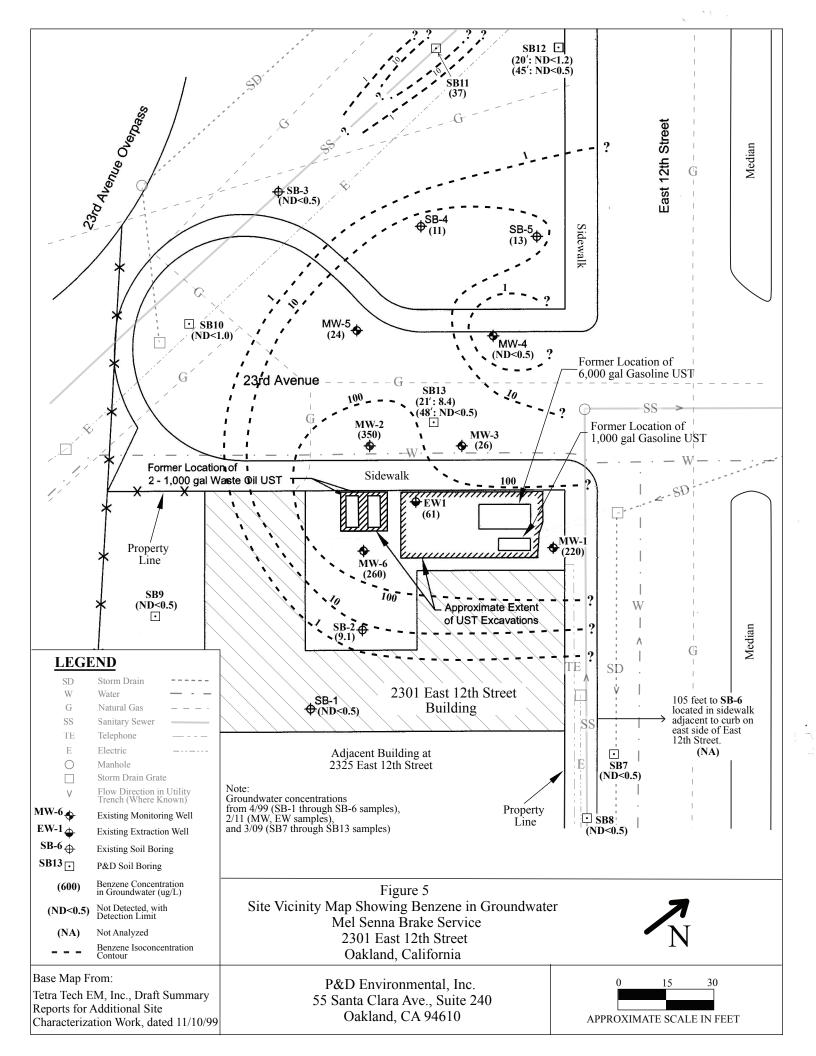
FIGURES











## GROUNDWATER MONITORING/ WELL PURGING DATA SHEETS

	GROUN	P&D ENVIR DWATER MONITO DATA S	RING/WBLL PURGING	(7)
Site Name	Former-Mel Senna B	ale Service, Och	chad well No.	MWI
Job No	0404	/	Date 21	711
TOC to Wate	er (ft.) 7:43		Sheen	VES
Well Depth	0.1 1	Laic .	Pree Produ	ct Thickness Ø
Well Diamet	a 11 a	$\sum$	Sample Col	lection Method
Gal./Casing	g vol. 7.8		Disposabl	le bailer
	300 = 9	6.4	00	CONDUCTIVITY MS/CM
<u>TIME</u> 1572	<u>GAL. PURGED</u> I.U	Ha 6,80	<u>TEMPERATURE</u>	607
1510	1.0	(79	125	603
1521		$\frac{bT}{22}$	$\frac{T}{10}$	605
1538	- 1.1	6.75	$\frac{13}{107}$	608
1540	-3.0	$\frac{b \cdot T}{\sqrt{2}}$	18.6	<u> </u>
1541	$-\frac{7\cdot T}{6}$	$\frac{b \cdot (7)}{(77)}$	18,8	618
1017	<u> </u>	$\frac{0.7}{7}$	18,9	$\frac{0}{2}$
1295	<u> </u>	6.75	19.0	109
1545	<u> </u>	6.72	18.9	$\frac{62}{120}$
1598	<u> </u>	682		<u>_609</u>
				ala da ante alla da alla da ante
<del></del>				
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			Salah ang	
-		<b></b>		
				, and the second se
NOTES:	Sheent A	avil- Story	phioro- He time \$ 1600	
		Sar	He time = 1600	)

P&D ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET site Name Former Mel Senna Brake Service, Oakland MWD Well No. 0404 Job No.\_ Ļ Date TOC to Water (ft.) Sheen Well Depth (ft.) Set3 Pree Product Thickness 711 0.1 Well Diameter Sample Collection Method sposable bailer Gal./Casing Vol. 30.1 BLECTRICAL lim TEMPERATURE GAL. PURGED CONDUCTIVIT TIME рH 5 0.5 ,06 65 Ć A ΰ D lo L ς Û ς Ч 1701 Will denetered 1702 110. 70 NOTES: reproduct in Water Sanlle Ames 1720 stern

				15/
	GROUNDW	P&D ENVIR ATER MONITO DATA S	RING/WELL PURGING	
Site Name F	rmer Mel Senna I		Ockland Well No.	MW3
Job No(			Date_7[]	7/11
TOC to Water			Sheen	Yës
Well Depth (f	10			ict Thickness Ø
Well Diameter	2"(0.16)		Sample Col	lection Method
Gal./Casing V	<b>4</b> ~		Pisros	able bailen
	310=5.1			BLECTRICAL
TIME <u>G</u> 1671	AL. PURGED	<u>рн</u> 6.52	TEMPERATURE C	CONDUCTIVITY CO/CA
$\frac{1631}{1(2)}$	0.5	·	$\frac{5.5}{1/2}$	1770
1675 -	17	<u> </u>	16.5	772
$\frac{1077}{1006}$	$\frac{1}{2}$	$\frac{6\cdot70}{1\cdot21}$		177
1678 -	28	1.74	11.2	724
1629	3 4	1.77	120	783
1121	29	671	17.0	791
16.20		1 19	<u> </u>	803
16.74		6.64	<u> </u>	821
	<u> </u>	0.01		
		i		anala da Children a Chi
	********		<u> </u>	
		in an		
	<del>, , , , , , , , , , , , , , , , , , , </del>			<u></u>
·······			and the state of the	
		<del>(m</del>		
			<del>4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - </del>	
<u></u>			<u> </u>	and an
		- <del>Lagrand Lin, Miles Birt</del>		<b></b>
NOTES :	c)		le hme=> 1645	
<del>a a na Thanka a ta an ang a sa ka ang a ta ka Ta</del> ng	.) helpt .)Th	m pri ou	h. Aller	
		Simi	11 TIME 7 1645	

·····

P&D ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET MW4 sice Name Former MelSenna Brake Service, alland Well No. JOD NO. 0404 11 Date r 6.42 VPC TOC to Water (ft.) Sheen 3 0.0 Well Depth (ft.) Pree Product Thickness 11 0.16 Д Sample Collection Method Well Diameter Isposible bailer Gal./Casing Vol. 3001=6.6 BLECTRICAL CONDUCTIVITY GAL. PURGED TEMPERATURE Mis/cm TIME рН 107 26 0.7 2 h. ょ 27 .98 5 2.2 9 20 71 22 1 <u>\_</u>د 8 35 3. U C 7 .7 1 .7 734 2 7 L 6.79 5 34 6.51 SC 4 7 8 4 Faci 24 .6\$ 8.0 50 Shien + mod phe odo-NOTES: 210 Sample time hrs

F 8

## P&D ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET

sice Name Former Mel Sena Brake Service, Oakland
JOB NO. 0404
TOC to Water (ft.) 7.09
Well Depth (ft.) 19.5
Well Diameter $2^{ll}(0.6)$
Gal./Casing Vol. 2.0
3001=6.0

.

BT		
and	Well No.	MWS
	Date 9	-/17/11
	Sheen	Yes
	Free Proc	luct Thickness Ø
	Sample Co	ollection Method
		oosable bailer
		BLECTRICAL
TEMPI	ERATURE	CONDUCTIVITY
11	(.7	403
	7 11	1197

Sac

time=> 1210

2

9

ัว

507

9

51 2

TIME	GAL. PURGED	DH	TEMPERATURE
1137	0.6	6.67	_16.7
1139	1.3	6.34	17.4
114 (	20	6.84	17.2
1142	2.6	6.78	17.3
1143	3.3	6.72	17.5
1145	4.0	6.70	17.5
1147	4.6	6.68	17.5
1149	5.3	6.65	17.7
1151	6.0	6.65	17.7
	<u></u>		
	a <mark>n mangan dan diku karangan diku karang</mark>		
		<del>مين جين بين</del> ه	<del>مى يەركە يەر يەركە يە</del>
NOTES :	Sheend	Mod-Stron	g phe odor.

PURGE10.92

Raining

				(4)
	GROUN	P&D ENVIR DWATER MONITC DATA (	RING/WELL PURGING	
Site Name	Former Mel Senna	Bake Servige	Dekland Well No.	MWG
Job No	0404	(	Date	7/11
TOC to Wat	er (ft.) 5.15		Sheen	VES
Well Depth	in al		Free Produ	ict Thickness 🦉
Well Diame	ter_ <u>}"(0.10</u>	2	Sample Col	lection Method
Gal./Casin	<u>ວ</u> ປ		Pisjo	able bailer
TIME	GAL. PURGED	DH	TEMPERATURE	BLECTRICAL CONDUCTIVITY MS/CM
1412	0.8	703	14.7	525
1414	1.6	6.67	16.0	852
<u>j416</u>	2.4	6.55	[6. []	929
1417	3.2	6.53	_16.8	- 942
1918	4.0	6.51	(1.)	<u> 957</u>
1421	4.8	6.53	17.2	952
1435	5.6	6-54		995
1435	64	6.51		J. C. 95 (
1427	7.2	6.48	_17_	960
		en e		
. <u></u>	6-70-00-00-00-00-00-00-00-00-00-00-00-00-			
		terretari in the Co-City		
·			<u></u>	
		· <u>·····</u>		<u></u>
<del></del>			<u></u>	
				4 - <mark>1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19</mark> 97 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997
			and the second	
NOTES :	Sheenthod	- strong - thr	-odor	·····
	<u> </u>	······································	scaplitime 71	t40

ap-diagonal mark

PLD ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET site Name Former Mel Senna Brukes 11 ernice, Oakland Well No 0404 JOD NO. Date 5.4 TOC to Water (ft.) 3 Sheen 29 4 Pree Product Thickness Well Depth (ft.) 44 3sic(0.646) Well Diameter\_\_\_ Sample Collection Method 0 С Gal./Casing Vol. Pusable bailer 31.1= .7 47 BLECTRICAL lcr GAL. PURGED TIME TEMPERATURE CONDUCTIVIT DH 20 ŧ 7 0 10.6 d Z 4 2 2 9 Õ Э Э g 0 D 8 6 8 D 8 C Ş V 0 9.0 NOTES: horn 2 stors phi  $\neg pq_{\cdot} \land$ 355 Sample tra

**DRUM DISPOSAL MANIFEST** 

	NON-HAZARDOUS	1. Generator's US EPA II	D No.	2. Pa of	ge 1 t		ent Number		
	WASTE MANIFEST				1	Ę	08880		
	4. Generator's Name and Mailing Address								
		Silveira Co	_		Site:				
$\left  \right $		Embarcadero #1-1 and, CA 94606	.3		2301 E	ast 12 <sup>t</sup>	<sup>h</sup> St		
	Generator's Phone	anu, CA 94000		Oakland, Ca					
	5. Transporter Company Name	6.	US EPA ID Number	7. Tra	nsporter Pl	10ne			
	CLEARWATER ENVIRONMENTAL		CAR000007013		(510	) 476-1	740		
	8. Designated Facility Name and Site Address	9.	US EPA ID Number	10. Fa	acility's Pho	ne			
	Alviso Independent Oil								
	5002 Archer Street								
   G	Alviso, CA 95002		CAL 000 161 743		5:	10-476	-1740		
E N	11. Waste Shipping Name and Description			·	12. Conta	1	13. Total Quantity	- 14, Unit Wt/Vol	
E R	8.	~1			No.	Туре	Quantity	Wt/Vol	
A T O	Non-Hazardous waste - Liqu	ord and			002	dm	75	G	
R	b.								
	15. Special Handling Instructions and Additional Inf	ormation		Handli		or Wastes	Listed Above		
	Wear PPE				<u>11a.</u>		11b.		
	Emergency Contact (510) 476-1740								
	Attn: Charles Seaton								
	16 GENERATOR'S CERTIFICATION Lasting the	atariala described above on th	in manifest and subject to stat		·····				
<b> </b> ♥	16. GENERATOR'S CERTIFICATION: I certify the n Printed/Typed Name	laterials described above on tr	Signature	te or tegeral regulat	tions for repo	orting prop	er disposal of Hazar	dous Waste.	
T R A		01	1 1	$\mathcal{D}$	/		Month	Day Year	
ANSPORTER	Signed on behalf of	Generator	1 Well	Tlan	$\underline{\mathcal{A}}_{\underline{}}$	_	020	22 11	
P O	17. Transporter Acknowledgement of Receipt of Ma Printed/Typed Name	terials	Signature				<u> </u>		
R T	A 20 DIL	-		1	1			Davis Maria	
E R	Willion Clark		Will	Plo	7X		Month 023	Day Year 221)	
	18. Discrepancy Indication Space				~~~		<b>~</b>		
F									
C									
L									
 T									
Y	19. Facility Owner or Operator: Certification of recei	ot of waste materials cover		noted in Item 18.					
	Printed/Typed Name		Signature						
	Charles Scaton			$\mathbb{Z}_{-}$	-		1 .	Day Year	
	Numies oculor	the second s					02 2	311	

GOLDENROD-GENERATOR'S COPY

## LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

	<b>l Analytical, Inc.</b> Ouality Counts"	Web: www.mccampbe	s Road, Pittsburg, CA 9 ll.com E-mail: main@ 7-252-9262 Fax: 925-2	mccampbell.com
P & D Environmental	Client Project ID: #0404; Fo	ormer Mel Senna Brake	Date Sampled:	02/17/11
55 Santa Clara, Ste.240	Service	Service		02/18/11
55 Sulla Child, 510.240	Client Contact: Paul King		Date Reported:	02/28/11
Oakland, CA 94610	Client P.O.:		Date Completed:	02/28/11

### WorkOrder: 1102631

February 28, 2011

Dear Paul:

Enclosed within are:

- 1) The results of the 7 analyzed samples from your project: **#0404; Former Mel Senna Brake Service,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

ENVIRONMENTAL, 5 Santa Clara Ave, Suite 240 Oakland, CA 94610 (510) 658-6916	INC.			С	HAIN OF		16' TOD				RD		PAG	те <u></u> ог .			
PROJECT NUMBER:	PROJECT NUMBER:								ke vice CA		izi					. /	/ ~
SAMPLED BY: (PRI Steve Carn SAMPLE NUMBER		TIME	TYPE	h	SAMPLE LOCATION		NUMBER OF CONTAINERS	TPH MAN TOSES.	A A		//	PRESERVATIVE	/	REMARKS			
MWI MWZ MWZ MWZ MWG EWI		1600					7-777777						Voqual				
RELINQUISHED BY:	(SICHATURE	27	2/18/11 DATE 18/11 DATE	TIME 1845 TIME 1785 TIME	RECEIVED BY: (SI RECEIVED BY: (SI RECEIVED FOR LA (SIGNATURE)	GNATURE)		TOTAL	ORATO THE	RY CON RY CON Ryde	HACT:	LABOR (87-	ATORY	PHONE NUM PHONE NUM 2-9262 HEET			

1

## McCampbell Analytical, Inc.



1534 Willow Pass Rd Pittsburg CA 94565 1701

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

	52-9262					Work	Order:	1102	631	Client	Code: PDE	0				
		WaterTrax	WriteOn	EDF		Excel	[	Fax		Email	HardCop	зу	ThirdF	Party	□ J-1	flag
Report to:							Bill to:				F	Requ	lested T	AT:	5 c	lays
Paul King P & D Envir 55 Santa Cl Oakland, C. (510) 658-69	ara, Ste.240 A 94610	CC: PO:	lab@pdenvirc #0404; Forme	o.com er Mel Senna Brał	ke Serv	/ice	P 8 55	& D Env Santa (	Payable vironmenta Clara, Ste CA 94610	.240			e Receiv Printe		02/18/2 02/18/2	
									Reque	sted Tests	(See legen	d be	elow)			
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4	5 6	7	8	9	10	11	12
1102631-001	MW1		Water	2/17/2011 16:00		В	А									
1102631-002	MW2		Water	2/17/2011 17:20		В	А									
1102631-003	MW3		Water	2/17/2011 16:45		В	А									

В

В

В

В

А

А

А

А

2/17/2011 15:10

2/17/2011 12:10

2/17/2011 14:40

2/17/2011 13:55

#### Test Legend:

1102631-004

1102631-005

1102631-006

1102631-007

1	8260B_W	2	G-M
6		7	
11		12	2

2	G-MBTEX_W
7	
12	

Water

Water

Water

Water

3	4
8	9

4	
9	

5				
10				

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A contain testgroup.

MW4

MW5

MW6

EW1

#### **Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.

Prepared by: Ana Venegas



# McCampbell Analytical, Inc. "When Ouality Counts"

## Sample Receipt Checklist

Client Name:	P & D Environme	ntal			Date a	nd Time Received:	2/18/2011	7:08:08 PM
Project Name:	#0404; Former M	el Senna Brake	Service	е	Check	list completed and r	eviewed by:	Ana Venegas
WorkOrder N°:	1102631	Matrix <u>Water</u>			Carrier	r: <u>Rob Pringle (N</u>	IAI Courier)	
		<u>Cha</u>	in of Cu	stody (C	COC) Informa	tion		
Chain of custody	present?		Yes	✓	No 🗆			
Chain of custody	signed when relinqui	shed and received?	Yes	✓	No 🗆			
Chain of custody	agrees with sample la	abels?	Yes	✓	No 🗌			
Sample IDs noted	by Client on COC?		Yes	✓	No 🗆			
Date and Time of	collection noted by Cli	ent on COC?	Yes	✓	No 🗆			
Sampler's name r	noted on COC?		Yes	✓	No 🗆			
			Sample	Receipt	Information			
Custody seals int	tact on shipping contai	iner/cooler?	Yes		No 🗆		NA 🔽	
Shipping containe	er/cooler in good cond	ition?	Yes	✓	No 🗆			
Samples in prope	er containers/bottles?		Yes	✓	No 🗆			
Sample containe	rs intact?		Yes	✓	No 🗆			
Sufficient sample	volume for indicated	test?	Yes		No 🗌			
		Sample Pres	ervatio	n and Ho	old Time (HT)	Information		
All samples recei	ved within holding time	e?	Yes	✓	No 🗌			
Container/Temp E	Blank temperature		Coole	er Temp:	4.6°C		NA 🗆	
Water - VOA vial	ls have zero headspac	ce / no bubbles?	Yes	✓	No 🗆	No VOA vials subm	itted	
Sample labels ch	necked for correct pres	servation?	Yes	✓	No 🗌			
Metal - pH accept	table upon receipt (pH	<2)?	Yes		No 🗆		NA 🗹	
Samples Receive	ed on Ice?		Yes	✓	No 🗆			
		(Ice Ty	vpe: WE	TICE	)			
* NOTE: If the "N	lo" box is checked, se	e comments below						

Client contacted:

Date contacted:

Contacted by:

Comments:

When Out	Analytical, I ality Counts"	<u>nc.</u>		Web: www.mccam	Pass Road, Pittsburg, C. pbell.com E-mail: mai 877-252-9262 Fax: 92	n@mccampbell.com				
P & D Environmental		•		404; Former Mel Date Sampled: 02/17/11						
55 Gauta Clause Sta 240	Senna	Brake Se	ervice	Date Received: 02/18/11						
55 Santa Clara, Ste.240	Client	Contact:	Contact: Paul King Date Extracted: 02/26/11							
Oakland, CA 94610	Client 1			0	Date Analyzed:	02/26/11				
	Volatile Orga	nics by F	P&T an	d GC/MS (Basic T	'arget List)*					
Extraction Method: SW5030B	, on or or ge	•		od: SW8260B		Work Order: 1102	631			
Lab ID				110263	1-001B					
Client ID				M						
Matrix					iter					
Compound	Concentration *	DF	Reporting Limit	Compou		Concentration *	DF	Reporting Limit		
Acetone	ND<100	10	10	tert-Amyl methyl	ether (TAME)	ND<5.0	10	0.5		
Benzene	220	10	0.5	Bromobenzene	· · ·	ND<5.0	10	0.5		
Bromochloromethane	ND<5.0	10	0.5	Bromodichloromet	hane	ND<5.0	10	0.5		
Bromoform	ND<5.0	10	0.5	Bromomethane		ND<5.0	10	0.5		
2-Butanone (MEK)	ND<20	10	2.0	t-Butyl alcohol (TI	BA)	ND<20	10	2.0		
n-Butyl benzene	ND<5.0	10	0.5	sec-Butyl benzene		ND<5.0	10	0.5		
tert-Butyl benzene	ND<5.0	10	0.5	Carbon Disulfide		ND<5.0	10	0.5		
Carbon Tetrachloride	ND<5.0	10	0.5	Chlorobenzene			10	0.5		
Chloroethane	ND<5.0	10	0.5		Chloroform		10	0.5		
Chloromethane	ND<5.0	10	0.5		-Chlorotoluene		10	0.5		
4-Chlorotoluene	ND<5.0	10	0.5	Dibromochloromethane		ND<5.0 ND<5.0	10	0.5		
1,2-Dibromo-3-chloropropane	ND<2.0	10	0.2	1,2-Dibromoethane (EDB)		ND<5.0	10	0.5		
Dibromomethane	ND<5.0	10	0.5		1,2-Dichlorobenzene		10	0.5		
1,3-Dichlorobenzene	ND<5.0	10	0.5	1,4-Dichlorobenze		ND<5.0 ND<5.0	10	0.5		
Dichlorodifluoromethane	ND<5.0	10	0.5	1,1-Dichloroethan		ND<5.0	10	0.5		
1,2-Dichloroethane (1,2-DCA)	ND<5.0	10	0.5	1,1-Dichloroethen		ND<5.0	10	0.5		
cis-1,2-Dichloroethene	ND<5.0	10	0.5	trans-1,2-Dichloro		ND<5.0	10	0.5		
1,2-Dichloropropane	ND<5.0	10	0.5	1,3-Dichloropropa		ND<5.0	10	0.5		
2,2-Dichloropropane	ND<5.0	10	0.5	1,1-Dichloroprope		ND<5.0	10	0.5		
cis-1,3-Dichloropropene	ND<5.0	10	0.5	trans-1,3-Dichloro		ND<5.0	10	0.5		
Diisopropyl ether (DIPE)	ND<5.0	10	0.5	Ethylbenzene	propene	ND<5.0	10	0.5		
Ethyl tert-butyl ether (ETBE)	ND<5.0	10	0.5	Freon 113		ND<100	10	10		
Hexachlorobutadiene	ND<5.0	10	0.5	Hexachloroethane		ND<5.0	10	0.5		
2-Hexanone	ND<5.0	10	0.5	Isopropylbenzene		ND<5.0	10	0.5		
4-Isopropyl toluene	ND<5.0	10	0.5	Methyl-t-butyl eth	er (MTBE)	ND<5.0	10	0.5		
Methylene chloride	ND<5.0	10	0.5	4-Methyl-2-pentan		ND<5.0	10	0.5		
Naphthalene	ND<5.0	10	0.5	n-Propyl benzene	ione (inibit)	ND<5.0	10	0.5		
Styrene	ND<5.0	10	0.5	1,1,1,2-Tetrachlor	oethane	ND<5.0	10	0.5		
1.1.2.2-Tetrachloroethane	ND<5.0	10	0.5	Tetrachloroethene		ND<5.0	10	0.5		
Toluene	6.7	10	0.5	1,2,3-Trichloroben		ND<5.0	10	0.5		
1,2,4-Trichlorobenzene	ND<5.0	10	0.5	1,1,1-Trichloroeth	ane	ND<5.0	10	0.5		
1,1,2-Trichloroethane	ND<5.0	10	0.5	Trichloroethene		ND<5.0	10	0.5		
Trichlorofluoromethane	ND<5.0	10	0.5	1,2,3-Trichloropro	pane	ND<5.0	10	0.5		
1,2,4-Trimethylbenzene	ND<5.0	10	0.5	1,3,5-Trimethylber		ND<5.0	10	0.5		
Vinvl Chloride	ND<5.0	10	0.5	Xvlenes		5.3	10	0.5		
		Surr	ogate Re	ecoveries (%)						
%SS1:	C	9		%SS2:		10	)2			
%SS3:		04								
Comments:										

\* water and vapor samples are reported in  $\mu g/L$ , soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in  $\mu g/wipe$ .

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b6) lighter than water immiscible sheen/product is present

When Out	Analytical, In ality Counts"	<u>nc.</u>		Web: www.mccam	Pass Road, Pittsburg, C. pbell.com E-mail: mai 877-252-9262 Fax: 92	n@mccampbell.com				
P & D Environmental				404; Former Mel Date Sampled: 02/17/11						
55 Gauta Clause Gta 240	Senna	Brake Se	rvice	Date Received: 02/18/11						
55 Santa Clara, Ste.240	Client	Client Contact: Paul King Date Extracted: 02/26/11								
Oakland, CA 94610	Client I	P.O.:			Date Analyzed:	02/26/11				
	Volatile Orga	nics by F	P&T an	d GC/MS (Basic T	`arget List)*					
Extraction Method: SW5030B		•		od: SW8260B		Work Order: 1102	631			
Lab ID				110263	1-002B					
Client ID				M	W2					
Matrix				Wa	iter					
Compound	Concentration *	DF	Reporting Limit	Compou	ınd	Concentration *	DF	Reporting Limit		
Acetone	ND<200	20	10	tert-Amyl methyl o	ether (TAME)	ND<10	20	0.5		
Benzene	350	20	0.5	Bromobenzene		ND<10	20	0.5		
Bromochloromethane	ND<10	20	0.5	Bromodichloromet	hane	ND<10	20	0.5		
Bromoform	ND<10	20	0.5	Bromomethane		ND<10	20	0.5		
2-Butanone (MEK)	ND<40	20	2.0	t-Butyl alcohol (TH	BA)	ND<40	20	2.0		
n-Butyl benzene	11	20	0.5	sec-Butyl benzene		ND<10	20	0.5		
tert-Butyl benzene	ND<10	20	0.5	Carbon Disulfide		ND<10	20	0.5		
Carbon Tetrachloride	ND<10	20	0.5	Chlorobenzene			20	0.5		
Chloroethane	ND<10	20	0.5	Chloroform		ND<10 ND<10	20	0.5		
Chloromethane	ND<10	20	0.5	2-Chlorotoluene		ND<10	20	0.5		
4-Chlorotoluene	ND<10	20	0.5	Dibromochloromethane		ND<10	20	0.5		
1,2-Dibromo-3-chloropropane	ND<4.0	20	0.2	1,2-Dibromoethane (EDB)		ND<10	20	0.5		
Dibromomethane	ND<10	20	0.5	1,2-Dichlorobenzene		ND<10	20	0.5		
1.3-Dichlorobenzene	ND<10	20	0.5	1,4-Dichlorobenzer		ND<10	20	0.5		
Dichlorodifluoromethane	ND<10	20	0.5	1,1-Dichloroethane		ND<10	20	0.5		
1,2-Dichloroethane (1,2-DCA)	ND<10	20	0.5	1,1-Dichloroethene		ND<10	20	0.5		
cis-1,2-Dichloroethene	ND<10	20	0.5	trans-1,2-Dichloro		ND<10	20	0.5		
1,2-Dichloropropane	ND<10	20	0.5	1,3-Dichloropropa		ND<10	20	0.5		
2,2-Dichloropropane	ND<10	20	0.5	1,1-Dichloroprope	ne	ND<10	20	0.5		
cis-1,3-Dichloropropene	ND<10	20	0.5	trans-1,3-Dichloro		ND<10	20	0.5		
Diisopropyl ether (DIPE)	ND<10	20	0.5	Ethylbenzene	• •	ND<10	20	0.5		
Ethyl tert-butyl ether (ETBE)	ND<10	20	0.5	Freon 113		ND<200	20	10		
Hexachlorobutadiene	ND<10	20	0.5	Hexachloroethane		ND<10	20	0.5		
2-Hexanone	ND<10	20	0.5	Isopropylbenzene		ND<10	20	0.5		
4-Isopropyl toluene	18	20	0.5	Methyl-t-butyl eth	er (MTBE)	ND<10	20	0.5		
Methylene chloride	ND<10	20	0.5	4-Methyl-2-pentan	one (MIBK)	ND<10	20	0.5		
Naphthalene	ND<10	20	0.5	n-Propyl benzene		ND<10	20	0.5		
Styrene	ND<10	20	0.5	1,1,1,2-Tetrachlor	oethane	ND<10	20	0.5		
1,1,2,2-Tetrachloroethane	ND<10	20	0.5	Tetrachloroethene		ND<10	20	0.5		
Toluene	33	20	0.5	1,2,3-Trichloroben		ND<10	20	0.5		
1,2,4-Trichlorobenzene	ND<10	20	0.5	1,1,1-Trichloroeth	ane	ND<10	20	0.5		
1,1,2-Trichloroethane	ND<10	20	0.5	Trichloroethene		ND<10	20	0.5		
Trichlorofluoromethane	ND<10	20	0.5	1,2,3-Trichloropro	pane	ND<10	20	0.5		
1,2,4-Trimethylbenzene	ND<10	20	0.5	1,3,5-Trimethylber	nzene	ND<10	20	0.5		
Vinvl Chloride	ND<10	20	0.5	Xvlenes		24	20	0.5		
		Surr	ogate Re	ecoveries (%)						
%SS1:	9	8		%SS2:		10	)2			
%SS3:		04					·	·		
Comments: b6										

\* water and vapor samples are reported in  $\mu g/L$ , soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in  $\mu g/wipe$ .

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b6) lighter than water immiscible sheen/product is present

When Oual		<u>ıc.</u>		1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269					
P & D Environmental				404; Former Mel Date Sampled: 02/17/11					
55 Gauta Classe Gta 240	Senna I	Brake Se	rvice	e Date Received: 02/18/11					
55 Santa Clara, Ste.240	Client C	Contact:	Paul K	ing	Date Extracted:	02/26/11			
Oakland, CA 94610	Client P.O.: Date Analyzed: 02/26/11								
	Volatile Organ	nics by P	&T 910	d GC/MS (Basic T					
Extraction Method: SW5030B	volatile Organ	-		od: SW8260B	anger List)	Work Order: 1102	631		
Lab ID					1-003B				
Client ID				110203					
Matrix					iter				
Compound	Concentration *	DF	Reporting Limit	Compou		Concentration *	DF	Reporting Limit	
Acetone	ND<20	2.0	10	tert-Amyl methyl	ether (TAME)	ND<1.0	2.0	0.5	
Benzene	26	2.0	0.5	Bromobenzene		ND<1.0	2.0	0.5	
Bromochloromethane	ND<1.0	2.0	0.5	Bromodichloromet	hane	ND<1.0	2.0	0.5	
Bromoform	ND<1.0	2.0	0.5	Bromomethane		ND<1.0	2.0	0.5	
2-Butanone (MEK)	ND<4.0	2.0	2.0	t-Butyl alcohol (TI	BA)	ND<4.0	2.0	2.0	
n-Butyl benzene	14	2.0	0.5	sec-Butyl benzene		8.0	2.0	0.5	
tert-Butyl benzene	1.1	2.0	0.5	Carbon Disulfide		ND<1.0	2.0	0.5	
Carbon Tetrachloride	ND<1.0	2.0	0.5	Chlorobenzene		ND<1.0	2.0	0.5	
Chloroethane	ND<1.0	2.0	0.5	Chloroform		ND<1.0	2.0	0.5	
Chloromethane	ND<1.0	2.0	0.5	2-Chlorotoluene		ND<1.0	2.0	0.5	
4-Chlorotoluene	ND<1.0	2.0	0.5	Dibromochloromet	hane	ND<1.0	2.0	0.5	
1,2-Dibromo-3-chloropropane	ND<0.40	2.0	0.2	1,2-Dibromoethane	e (EDB)	ND<1.0	2.0	0.5	
Dibromomethane	ND<1.0	2.0	0.5	1,2-Dichlorobenzer	ne	ND<1.0	2.0	0.5	
1,3-Dichlorobenzene	ND<1.0	2.0	0.5	1,4-Dichlorobenzer		ND<1.0	2.0	0.5	
Dichlorodifluoromethane	ND<1.0	2.0	0.5	1,1-Dichloroethan	e	ND<1.0	2.0	0.5	
1,2-Dichloroethane (1,2-DCA)	ND<1.0	2.0	0.5	1,1-Dichloroethen		ND<1.0	2.0	0.5	
cis-1,2-Dichloroethene	ND<1.0	2.0	0.5	trans-1,2-Dichloro		ND<1.0	2.0	0.5	
1,2-Dichloropropane	ND<1.0	2.0	0.5	1,3-Dichloropropa		ND<1.0	2.0	0.5	
2,2-Dichloropropane	ND<1.0	2.0	0.5	1,1-Dichloroprope		ND<1.0	2.0	0.5	
cis-1,3-Dichloropropene	ND<1.0	2.0	0.5	trans-1,3-Dichloro	propene	ND<1.0	2.0	0.5	
Diisopropyl ether (DIPE)	ND<1.0	2.0	0.5	Ethylbenzene		ND<1.0	2.0	0.5	
Ethyl tert-butyl ether (ETBE)	ND<1.0	2.0	0.5	Freon 113		ND<20	2.0	10	
Hexachlorobutadiene	ND<1.0	2.0	0.5	Hexachloroethane		ND<1.0	2.0	0.5	
2-Hexanone	ND<1.0	2.0	0.5	Isopropylbenzene	(2	22	2.0	0.5	
4-Isopropyl toluene	16	2.0	0.5	Methyl-t-butyl eth		ND<1.0	2.0	0.5	
Methylene chloride	ND<1.0	2.0	0.5	4-Methyl-2-pentan	one (MIBK)	ND<1.0	2.0	0.5	
Naphthalene	ND<1.0	2.0	0.5	n-Propyl benzene		16	2.0	0.5	
Styrene	ND<1.0	2.0	0.5	1,1,1,2-Tetrachlor		ND<1.0	2.0	0.5	
1,1,2,2-Tetrachloroethane Toluene	ND<1.0 3.7	2.0	0.5	Tetrachloroethene 1,2,3-Trichloroben		ND<1.0 ND<1.0	2.0 2.0	0.5	
1,2,4-Trichlorobenzene	ND<1.0	2.0	0.5	1,1,1-Trichloroeth		ND<1.0	2.0	0.5	
1,1,2-Trichloroethane	ND<1.0	2.0	0.5	Trichloroethene		ND<1.0	2.0	0.5	
Trichlorofluoromethane	ND<1.0	2.0	0.5	1,2,3-Trichloropro	pane	ND<1.0	2.0	0.5	
1,2,4-Trimethylbenzene	ND<1.0	2.0	0.5	1,3,5-Trimethylber		ND<1.0	2.0	0.5	
Vinvl Chloride	ND<1.0	2.0	0.5	Xvlenes		ND<1.0	2.0	0.5	
		Surr	ogate Re	ecoveries (%)					
%SS1:	92			%SS2:		10	4		
%SS1: 92 %SS3: 111									

\* water and vapor samples are reported in  $\mu g/L$ , soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in  $\mu g/wipe$ .

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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P & D Environmental	Client F	Project II	D: #040	)4; Former Mel	Date Sampled:	02/17/11			
	Senna I	Brake Se	rvice	Date Received: 02/18/11					
55 Santa Clara, Ste.240	Client (	Contact:	Paul K	ing	Date Extracted:	02/26/11			
Oakland, CA 94610	Client F		I dui II		Date Analyzed:				
					•	02/20/11			
	Volatile Organ	nics by P	P&T and	d GC/MS (Basic T	arget List)*				
Extraction Method: SW5030B		Analyt	ical Metho	od: SW8260B		Work Order: 1102	631		
Lab ID				110263	1-004B				
Client ID				M	W4				
Matrix			-	Wa	iter	-		_	
Compound	Concentration *	DF	Reporting Limit	Compou	ınd	Concentration *	DF	Reporting Limit	
Acetone	ND	1.0	10	tert-Amyl methyl	ether (TAME)	ND	1.0	0.5	
Benzene	ND	1.0	0.5	Bromobenzene		ND	1.0	0.5	
Bromochloromethane	ND	1.0	0.5	Bromodichloromet	hane	ND	1.0	0.5	
Bromoform	ND	1.0	0.5	Bromomethane		ND	1.0	0.5	
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)		ND	1.0	2.0	
n-Butyl benzene	1.0	1.0	0.5	sec-Butyl benzene		2.3	1.0	0.5	
tert-Butyl benzene	0.74	1.0	0.5	Carbon Disulfide		ND	1.0	0.5	
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene		ND	1.0	0.5	
Chloroethane	ND	1.0	0.5	Chloroform		ND	1.0	0.5	
Chloromethane	ND	1.0	0.5	2-Chlorotoluene		ND	1.0	0.5	
4-Chlorotoluene	ND	1.0	0.5	Dibromochloromet		ND	1.0	0.5	
1,2-Dibromo-3-chloropropane	ND	1.0	0.2	1,2-Dibromoethane		ND	1.0	0.5	
Dibromomethane	ND	1.0	0.5	1,2-Dichlorobenzer		ND	1.0	0.5	
1,3-Dichlorobenzene	ND	<u>1.0</u> 1.0	0.5	1,4-Dichlorobenzer		ND ND	<u>1.0</u> 1.0	0.5	
Dichlorodifluoromethane	ND	1.0	0.5	1,1-Dichloroethane				0.5	
1,2-Dichloroethane (1,2-DCA) cis-1,2-Dichloroethene	ND ND	1.0	0.5	1,1-Dichloroethene trans-1,2-Dichloro		ND ND	<u>1.0</u> 1.0	0.5	
1,2-Dichloropropane	ND	1.0	0.5	1,3-Dichloropropa		ND	1.0	0.5	
2,2-Dichloropropane	ND	1.0	0.5	1,1-Dichloroprope		ND	1.0	0.5	
cis-1,3-Dichloropropene	ND	1.0	0.5	trans-1,3-Dichloro		ND	1.0	0.5	
Diisopropyl ether (DIPE)	ND	1.0	0.5	Ethylbenzene	propene	ND	1.0	0.5	
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5	Freon 113		ND	1.0	10	
Hexachlorobutadiene	ND	1.0	0.5	Hexachloroethane		ND	1.0	0.5	
2-Hexanone	ND	1.0	0.5	Isopropylbenzene		3.9	1.0	0.5	
4-Isopropyl toluene	1.3	1.0	0.5	Methyl-t-butyl eth	er (MTBE)	ND	1.0	0.5	
Methylene chloride	ND	1.0	0.5	4-Methyl-2-pentan		ND	1.0	0.5	
Naphthalene	ND	1.0	0.5	n-Propyl benzene		2.2	1.0	0.5	
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachlor	oethane	ND	1.0	0.5	
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene		ND	1.0	0.5	
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene		ND	1.0	0.5	
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane		ND	1.0	0.5	
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene		ND	1.0	0.5	
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropro		ND	1.0	0.5	
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylber	nzene	ND	1.0	0.5	
Vinvl Chloride	ND	1.0	0.5	Xvlenes		ND	1.0	0.5	
			ogate Re	coveries (%)					
%SS1:	9			%SS2:		10	1		
%SS3: 98									

\* water and vapor samples are reported in  $\mu g/L$ , soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in  $\mu g/wipe$ .

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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P & D Environmental		•		)4; Former Mel	Date Sampled:	02/17/11			
55 Santa Classe Sta 240	Senna I	Brake Se	rvice	Date Received: 02/18/11					
55 Santa Clara, Ste.240	Client (	Contact:	Paul K	ing	Date Extracted:	02/26/11			
Oakland, CA 94610		Client P.O.: Date Analyzed: 02/26/11							
	Volatile Orga	nics by P	- &Т эп	d GC/MS (Basic T					
Extraction Method: SW5030B	volatile Organ	-		od: SW8260B	arget List)	Work Order: 1102	631		
Lab ID				110263	1-005B				
Client ID				110205					
Matrix					iter				
Compound	Concentration *	DF	Reporting Limit	Compou		Concentration *	DF	Reporting Limit	
Acetone	ND<50	5.0	10	tert-Amyl methyl e	ether (TAME)	ND<2.5	5.0	0.5	
Benzene	24	5.0	0.5	Bromobenzene	,,	ND<2.5	5.0	0.5	
Bromochloromethane	ND<2.5	5.0	0.5	Bromodichloromet	hane	ND<2.5	5.0	0.5	
Bromoform	ND<2.5	5.0	0.5	Bromomethane		ND<2.5	5.0	0.5	
2-Butanone (MEK)	ND<10	5.0	2.0	t-Butyl alcohol (TE	utyl alcohol (TBA)		5.0	2.0	
n-Butyl benzene	13	5.0	0.5	sec-Butyl benzene		7.1	5.0	0.5	
tert-Butyl benzene	ND<2.5	5.0	0.5	Carbon Disulfide		ND<2.5	5.0	0.5	
Carbon Tetrachloride	ND<2.5	5.0	0.5	Chlorobenzene		ND<2.5	5.0	0.5	
Chloroethane	ND<2.5	5.0	0.5	Chloroform		ND<2.5	5.0	0.5	
Chloromethane	ND<2.5	5.0	0.5	2-Chlorotoluene		ND<2.5	5.0	0.5	
4-Chlorotoluene	ND<2.5	5.0	0.5	Dibromochloromet	hane	ND<2.5	5.0	0.5	
1,2-Dibromo-3-chloropropane	ND<1.0	5.0	0.2	1,2-Dibromoethane		ND<2.5	5.0	0.5	
Dibromomethane	ND<2.5	5.0	0.5	1,2-Dichlorobenzer	ne	ND<2.5	5.0	0.5	
1,3-Dichlorobenzene	ND<2.5	5.0	0.5	1,4-Dichlorobenzer		ND<2.5	5.0	0.5	
Dichlorodifluoromethane	ND<2.5	5.0	0.5	1,1-Dichloroethane		ND<2.5	5.0	0.5	
1,2-Dichloroethane (1,2-DCA)	ND<2.5	5.0	0.5	1,1-Dichloroethene		ND<2.5	5.0	0.5	
cis-1,2-Dichloroethene	ND<2.5	5.0	0.5	trans-1,2-Dichloro		ND<2.5	5.0	0.5	
1,2-Dichloropropane	ND<2.5	5.0	0.5	1,3-Dichloropropa		ND<2.5	5.0	0.5	
2,2-Dichloropropane	ND<2.5	5.0	0.5	1,1-Dichloroproper		ND<2.5	5.0	0.5	
cis-1,3-Dichloropropene	ND<2.5	5.0	0.5	trans-1,3-Dichloro	propene	ND<2.5	5.0	0.5	
Diisopropyl ether (DIPE)	ND<2.5	5.0	0.5	Ethylbenzene		5.1	5.0	0.5	
Ethyl tert-butyl ether (ETBE)	ND<2.5	5.0	0.5	Freon 113		ND<50	5.0	10	
Hexachlorobutadiene	ND<2.5	5.0	0.5	Hexachloroethane		ND<2.5	5.0	0.5	
2-Hexanone	ND<2.5	5.0	0.5	Isopropylbenzene		52	5.0	0.5	
4-Isopropyl toluene	2.9	5.0	0.5	Methyl-t-butyl ethe		ND<2.5	5.0	0.5	
Methylene chloride	ND<2.5	5.0	0.5	4-Methyl-2-pentan	one (MIBK)	ND<2.5	5.0	0.5	
Naphthalene Sturana	ND<2.5	5.0	0.5	n-Propyl benzene 1,1,1,2-Tetrachlore	oothana	70 ND <2.5	5.0	0.5	
Styrene	ND<2.5	5.0	0.5			ND<2.5	5.0	0.5	
1,1,2,2-Tetrachloroethane Toluene	ND<2.5 ND<2.5	<u>5.0</u> 5.0	0.5	Tetrachloroethene 1,2,3-Trichloroben		ND<2.5 ND<2.5	<u>5.0</u> 5.0	0.5	
1,2,4-Trichlorobenzene	ND<2.5	5.0	0.5	1,1,1-Trichloroeth	ane	ND<2.5	5.0	0.5	
1,1,2-Trichloroethane	ND<2.5	5.0	0.5	Trichloroethene		ND<2.5	5.0	0.5	
Trichlorofluoromethane	ND<2.5	5.0	0.5	1,2,3-Trichloropro	pane	ND<2.5	5.0	0.5	
1,2,4-Trimethylbenzene	ND<2.5	5.0	0.5	1,3,5-Trimethylber		ND<2.5	5.0	0.5	
Vinvl Chloride	ND<2.5	5.0	0.5	Xvlenes		8.3	5.0	0.5	
		Surro	ogate Re	ecoveries (%)					
%SS1:	9			%SS2:		10	1		
%SS3:		7							
Comments:									

\* water and vapor samples are reported in  $\mu g/L$ , soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in  $\mu g/wipe$ .

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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P & D Environmental		•		)4; Former Mel	Date Sampled:	02/17/11		
55 Gauta Clause Sta 240	Senna	Brake Se	rvice	e Date Received: 02/18/11				
55 Santa Clara, Ste.240	Client	Contact:	Paul K	ing	Date Extracted:	02/25/11		
Oakland, CA 94610	10 Client P.O.: Date Analyzed: 02/25/11							
	Volatile Orga	nics by F	P&T an	d GC/MS (Basic T	`arget List)*			
Extraction Method: SW5030B		•		od: SW8260B		Work Order: 1102	631	
Lab ID				110263	1-006B			
Client ID				M	W6			
Matrix				Wa	iter			
Compound	Concentration *	DF	Reporting Limit	Compou	ınd	Concentration *	DF	Reporting Limit
Acetone	ND<100	10	10	tert-Amyl methyl	ether (TAME)	ND<5.0	10	0.5
Benzene	260	10	0.5	Bromobenzene		ND<5.0	10	0.5
Bromochloromethane	ND<5.0	10	0.5	Bromodichloromet	hane	ND<5.0	10	0.5
Bromoform	ND<5.0	10	0.5	Bromomethane		ND<5.0	10	0.5
2-Butanone (MEK)	ND<20	10	2.0	t-Butyl alcohol (TI	BA)	ND<20	10	2.0
n-Butyl benzene	ND<5.0	10	0.5	sec-Butyl benzene		ND<5.0	10	0.5
tert-Butyl benzene	ND<5.0	10	0.5	Carbon Disulfide		ND<5.0	10	0.5
Carbon Tetrachloride	ND<5.0	10	0.5	Chlorobenzene		ND<5.0	10	0.5
Chloroethane	ND<5.0	10	0.5	Chloroform		ND<5.0	10	0.5
Chloromethane	ND<5.0	10	0.5	2-Chlorotoluene		ND<5.0	10	0.5
4-Chlorotoluene	ND<5.0	10	0.5	Dibromochloromet	hane	ND<5.0	10	0.5
1,2-Dibromo-3-chloropropane	ND<2.0	10	0.2	1,2-Dibromoethane		ND<5.0	10	0.5
Dibromomethane	ND<5.0	10	0.5	1,2-Dichlorobenze		ND<5.0	10	0.5
1.3-Dichlorobenzene	ND<5.0	10	0.5	1,4-Dichlorobenze		ND<5.0	10	0.5
Dichlorodifluoromethane	ND<5.0	10	0.5	1,1-Dichloroethan		ND<5.0	10	0.5
1,2-Dichloroethane (1,2-DCA)	ND<5.0	10	0.5	1,1-Dichloroethen		ND<5.0	10	0.5
cis-1,2-Dichloroethene	ND<5.0	10	0.5	trans-1,2-Dichloro		ND<5.0	10	0.5
1,2-Dichloropropane	ND<5.0	10	0.5	1,3-Dichloropropa		ND<5.0	10	0.5
2,2-Dichloropropane	ND<5.0	10	0.5	1,1-Dichloroprope		ND<5.0	10	0.5
cis-1,3-Dichloropropene	ND<5.0	10	0.5	trans-1,3-Dichloro		ND<5.0	10	0.5
Diisopropyl ether (DIPE)	ND<5.0	10	0.5	Ethylbenzene		ND<5.0	10	0.5
Ethyl tert-butyl ether (ETBE)	ND<5.0	10	0.5	Freon 113		ND<100	10	10
Hexachlorobutadiene	ND<5.0	10	0.5	Hexachloroethane		ND<5.0	10	0.5
2-Hexanone	ND<5.0	10	0.5	Isopropylbenzene		ND<5.0	10	0.5
4-Isopropyl toluene	ND<5.0	10	0.5	Methyl-t-butyl eth	er (MTBE)	ND<5.0	10	0.5
Methylene chloride	ND<5.0	10	0.5	4-Methyl-2-pentan		ND<5.0	10	0.5
Naphthalene	ND<5.0	10	0.5	n-Propyl benzene	()	ND<5.0	10	0.5
Styrene	ND<5.0	10	0.5	1.1.1.2-Tetrachlor	oethane	ND<5.0	10	0.5
1.1.2.2-Tetrachloroethane	ND<5.0	10	0.5	Tetrachloroethene		ND<5.0	10	0.5
Toluene	ND<5.0	10	0.5	1,2,3-Trichloroben		ND<5.0	10	0.5
1,2,4-Trichlorobenzene	ND<5.0	10	0.5	1,1,1-Trichloroeth	ane	ND<5.0	10	0.5
1,1,2-Trichloroethane	ND<5.0	10	0.5	Trichloroethene		ND<5.0	10	0.5
Trichlorofluoromethane	ND<5.0	10	0.5	1,2,3-Trichloropro	pane	ND<5.0	10	0.5
1,2,4-Trimethylbenzene	ND<5.0	10	0.5	1,3,5-Trimethylber	nzene	ND<5.0	10	0.5
Vinvl Chloride	ND<5.0	10	0.5	Xvlenes		ND<5.0	10	0.5
		Surr	ogate Re	ecoveries (%)				
%SS1:	8	39		%SS2:		9	9	
%SS3:		33						
Comments:								

\* water and vapor samples are reported in  $\mu g/L$ , soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in  $\mu g/wipe$ .

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

When Out	Analytical, I ality Counts"	<u>nc.</u>		1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269					
P & D Environmental	Client	Project II	D: #040	)4; Former Mel	Date Sampled:	02/17/11			
55 G ( G) G( 040	Senna	Brake Se	rvice	Date Received: 02/18/11					
55 Santa Clara, Ste.240	Client	Contact:	Paul K	ing	Date Extracted:	02/26/11			
Oakland, CA 94610	Client 1			0	Date Analyzed:	02/26/11			
	Volatile Orga	nics by F	&T an	d GC/MS (Basic T	'arget List)*				
Extraction Method: SW5030B	, on or or ge	-		od: SW8260B		Work Order: 1102	631		
Lab ID				110263	1-007B				
Client ID				EV					
Matrix					iter				
Compound	Concentration *	DF	Reporting Limit	Compou		Concentration *	DF	Reporting Limit	
Acetone	ND<33	3.3	10	tert-Amyl methyl e	ether (TAME)	ND<1.7	3.3	0.5	
Benzene	61	3.3	0.5	Bromobenzene		ND<1.7	3.3	0.5	
Bromochloromethane	ND<1.7	3.3	0.5	Bromodichloromet	hane	ND<1.7	3.3	0.5	
Bromoform	ND<1.7	3.3	0.5	Bromomethane		ND<1.7	3.3	0.5	
2-Butanone (MEK)	ND<6.7	3.3	2.0	t-Butyl alcohol (TH	BA)	12	3.3	2.0	
n-Butyl benzene	ND<1.7	3.3	0.5	sec-Butyl benzene		ND<1.7	3.3	0.5	
tert-Butyl benzene	ND<1.7	3.3	0.5	Carbon Disulfide		ND<1.7	3.3	0.5	
Carbon Tetrachloride	ND<1.7	3.3	0.5	Chlorobenzene		ND<1.7	3.3	0.5	
Chloroethane	ND<1.7	3.3	0.5	Chloroform		ND<1.7	3.3	0.5	
Chloromethane	ND<1.7	3.3	0.5	2-Chlorotoluene		ND<1.7	3.3	0.5	
4-Chlorotoluene	ND<1.7	3.3	0.5	Dibromochloromet	hane	ND<1.7	3.3	0.5	
1,2-Dibromo-3-chloropropane	ND<0.67	3.3	0.2	1,2-Dibromoethane		ND<1.7	3.3	0.5	
Dibromomethane	ND<1.7	3.3	0.5	1,2-Dichlorobenzei		ND<1.7	3.3	0.5	
1,3-Dichlorobenzene	ND<1.7	3.3	0.5	1,4-Dichlorobenzei		ND<1.7	3.3	0.5	
Dichlorodifluoromethane	ND<1.7	3.3	0.5	1,1-Dichloroethane		ND<1.7	3.3	0.5	
1,2-Dichloroethane (1,2-DCA)	ND<1.7	3.3	0.5	1,1-Dichloroethene		ND<1.7	3.3	0.5	
cis-1,2-Dichloroethene	25	3.3	0.5	trans-1,2-Dichloro		12	3.3	0.5	
1,2-Dichloropropane	ND<1.7	3.3	0.5	1,3-Dichloropropa		ND<1.7	3.3	0.5	
2,2-Dichloropropane	ND<1.7	3.3	0.5	1,1-Dichloroproper		ND<1.7	3.3	0.5	
cis-1,3-Dichloropropene	ND<1.7	3.3	0.5	trans-1,3-Dichloro		ND<1.7	3.3	0.5	
Diisopropyl ether (DIPE)	ND<1.7	3.3	0.5	Ethylbenzene		ND<1.7	3.3	0.5	
Ethyl tert-butyl ether (ETBE)	ND<1.7	3.3	0.5	Freon 113		ND<33	3.3	10	
Hexachlorobutadiene	ND<1.7	3.3	0.5	Hexachloroethane		ND<1.7	3.3	0.5	
2-Hexanone	ND<1.7	3.3	0.5	Isopropylbenzene		ND<1.7	3.3	0.5	
4-Isopropyl toluene	ND<1.7	3.3	0.5	Methyl-t-butyl eth	er (MTBE)	ND<1.7	3.3	0.5	
Methylene chloride	ND<1.7	3.3	0.5	4-Methyl-2-pentan		ND<1.7	3.3	0.5	
Naphthalene	ND<1.7	3.3	0.5	n-Propyl benzene	()	ND<1.7	3.3	0.5	
Styrene	ND<1.7	3.3	0.5	1,1,1,2-Tetrachlor	oethane	ND<1.7	3.3	0.5	
1.1.2.2-Tetrachloroethane	ND<1.7	3.3	0.5	Tetrachloroethene		ND<1.7	3.3	0.5	
Toluene	2.0	3.3	0.5	1,2,3-Trichloroben		ND<1.7	3.3	0.5	
1,2,4-Trichlorobenzene	ND<1.7	3.3	0.5	1,1,1-Trichloroeth	ane	ND<1.7	3.3	0.5	
1,1,2-Trichloroethane	ND<1.7	3.3	0.5	Trichloroethene		6.4	3.3	0.5	
Trichlorofluoromethane	ND<1.7	3.3	0.5	1,2,3-Trichloropro	pane	ND<1.7	3.3	0.5	
1,2,4-Trimethylbenzene	ND<1.7	3.3	0.5	1,3,5-Trimethylber	nzene	ND<1.7	3.3	0.5	
Vinvl Chloride	ND<1.7	3.3	0.5	Xvlenes		2.2	3.3	0.5	
		Surr	ogate Re	ecoveries (%)					
%SS1:	9	2		%SS2:		10	00		
%SS3:	ç	2							
Comments:									

\* water and vapor samples are reported in  $\mu g/L$ , soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in  $\mu g/wipe$ .

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

	Campbell Analyti	cal, Inc.	Web: www.mccamp			ccampbell.	com	
P & D Environ	mental		#0404; Former Mel	Date Sample	ed: 02	/17/11		
55 Santa Clara,	Ste 240	Senna Brake Serv	ice	Date Received: 02/18/11				
55 Sunta Chara,	510.240	Client Contact: P	Paul King	Date Extract	ed: 02	/24/11-0	2/26/11	
Oakland, CA 94	4610	Client P.O.:		Date Analyz	xed 02	/24/11-0	2/26/11	
Extraction method S			atile Hydrocarbons as G methods SW8015Bm	asoline*	Wo	rk Order:	1102631	
Lab ID	Client ID	Matrix	TPH(g)		DF	% SS	Comments	
001A	MW1	W	4800		2	118	d1	
002A	MW2	W	9200		10	93	d1,b6	
003A	MW3	W	10,000		20	113	d1,b6	
004A	MW4	W	2800		2	101	d2,d9	
005A	MW5	W	5400		5	117	d1	
006A	MW6	W	3600		5	104	d1	
007A	EW1	W	4000		2.5	115	d1	
-	orting Limit for DF =1; neans not detected at or	W	50			μg/L		
	ove the reporting limit	S	NA			NA		

\* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

# cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

b6) lighter than water immiscible sheen/product is present

d1) weakly modified or unmodified gasoline is significant

d2) heavier gasoline range compounds are significant (aged gasoline?)

d9) no recognizable pattern

	Campbell Analy "When Ouality Count		Inc.		Web: www.	mccamp	Pass Road, Pittsburg, CA bell.com E-mail: main 377-252-9262 Fax: 925			
P & D Environ	nental				#0404; Former Mel Date Sampled: 02/17/11					
55 Santa Clara,	Ste.240	Senna	Brake S	Date Received:			02/18/	11		
,		Client	Contact	: Paul	King		Date Extracted:	02/18/	11	
Oakland, CA 94	d, CA 94610 Client P.O.: Date Analyzed:					02/20/	11			
		Tota	al Extrac	table P	etroleum Hydro	carbo	ns*			
Extraction method:	SW3510C		Analytica	l methods	: SW8015B			We	ork Order:	1102631
Lab ID				T	PH-Diesel (C10-C23)	1	CPH-Motor Oil (C18-C36)	DF	% SS	Comments
1102631-001A	MW1		W		4300		620	1	101	e11,e7
1102631-002A	MW2		W		9000		2500	1	104	e11,e2,e7,b6
1102631-003A	MW3		W		11,000		1700	1	109	e11,e2,b6
1102631-004A	MW4		W		1600		ND	1	106	e11
1102631-005A	MW5		W		2800		450	1	98	e4/e11,e2
1102631-006A	MW6		W		2300		880	1	97	e11/e4,e2
1102631-007A	EW1		w		2500		640	1	96	e11/e4,e2
						<u> </u>				

Reporting Limit for DF =1;	W	50	250	μg/L
ND means not detected at or above the reporting limit	S	NA	NA	mg/Kg

\* water samples are reported in  $\mu g/L$ , wipe samples in  $\mu g/$ wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / STLC / TCLP extracts are reported in  $\mu g/L$ .

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

b6) lighter than water immiscible sheen/product is present

e2) diesel range compounds are significant; no recognizable pattern

e4) gasoline range compounds are significant.; and/or e11) stoddard solvent/mineral spirit (?)

e7) oil range compounds are significant

e11) stoddard solvent/mineral spirit (?); and/or e4) gasoline range compounds are significant.





"When Ouality Counts"

# QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water			QC Matrix	k: Water			Batch	ID: 56403		WorkOrder 1102631		
EPA Method SW8260B	Extra	ction SW	5030B					5	Spiked Sar	nple ID	: 1102630-0	)02B
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	Criteria (%)	1
, individ	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	83.8	86.2	2.74	82	85	3.66	70 - 130	30	70 - 130	30
Benzene	ND	10	106	107	0.448	97.9	102	4.05	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	79.4	89.3	11.8	77.4	76.4	1.31	70 - 130	30	70 - 130	30
Chlorobenzene	ND	10	112	111	0.758	98.8	103	4.57	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	113	115	1.91	92.2	95.4	3.43	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	84.4	85.6	1.39	97.9	100	2.15	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	117	116	0.150	119	126	5.37	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	90.8	92.8	2.23	106	110	3.52	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	87.7	89.8	2.33	98.4	101	2.20	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	5.7	10	81.6	87.2	3.95	107	110	3.03	70 - 130	30	70 - 130	30
Toluene	ND	10	108	106	1.54	93.9	99.2	5.48	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	115	114	0.795	103	109	5.79	70 - 130	30	70 - 130	30
%SS1:	94	25	86	87	1.42	89	88	0.570	70 - 130	30	70 - 130	30
%SS2:	99	25	103	102	0.486	100	102	1.53	70 - 130	30	70 - 130	30
%SS3:	86	2.5	94	93	0.855	76	73	3.99	70 - 130	30	70 - 130	30

#### BATCH 56403 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1102631-001B	02/17/11 4:00 PM	02/26/11	02/26/11 3:47 AM	1102631-002B	02/17/11 5:20 PM	02/26/11	02/26/11 4:26 AM
1102631-003B	02/17/11 4:45 PM	02/26/11	02/26/11 5:14 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

A QA/QC Officer



"When Ouality Counts"

# QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water			QC Matrix	x: water			Batch	ID: 56421		WorkOrder 1102631		
EPA Method SW8260B	Extra	ction SW	5030B	1		r		S	Spiked San	nple ID:	: 1102662-0	01A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
, individ	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	77.7	81.7	4.94	77.8	82.3	5.73	70 - 130	30	70 - 130	30
Benzene	ND	10	98.1	99.9	1.81	96.5	102	5.59	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	73.6	73	0.828	71.5	72.5	1.44	70 - 130	30	70 - 130	30
Chlorobenzene	ND	10	102	102	0	103	108	4.55	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	90.6	90.5	0.133	102	107	4.51	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	96.8	99.3	2.57	77.5	82.4	6.04	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	119	125	5.29	105	112	6.74	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	103	105	1.66	85	90.8	6.63	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	96.7	98.2	1.53	82.2	86.9	5.52	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	104	106	1.70	90.5	96.2	6.20	70 - 130	30	70 - 130	30
Toluene	ND	10	99	101	2.31	97.3	102	4.91	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	103	105	1.86	104	110	5.86	70 - 130	30	70 - 130	30
%SS1:	92	25	89	92	3.69	85	85	0	70 - 130	30	70 - 130	30
%SS2:	102	25	96	97	0.989	103	103	0	70 - 130	30	70 - 130	30
%SS3:	83	2.5	76	75	1.57	89	89	0	70 - 130	30	70 - 130	30

#### BATCH 56421 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1102631-004B	02/17/11 3:10 PM	02/26/11	02/26/11 5:56 PM	1102631-005B	02/17/11 12:10 PM	02/26/11	02/26/11 4:33 PM
1102631-006B	02/17/11 2:40 PM	02/25/11	02/25/11 11:58 PM	1102631-007B	02/17/11 1:55 PM	02/26/11	02/26/11 10:11 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

A QA/QC Officer



"When Ouality Counts"

# QC SUMMARY REPORT FOR SW8021B/8015Bm

traction SV	/5030B					-					
Extraction SW5030B						Spiked Sample ID: 1101733-013C					
le Spiked	MS	MSD	MS-MSD	LCS	LCSD LC	LCS-LCSD	Acceptance Criteria (%)				
. μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
60	97.8	100	2.51	97.7	97	0.700	70 - 130	20	70 - 130	20	
10	113	119	5.45	117	112	4.14	70 - 130	20	70 - 130	20	
10	113	116	2.49	115	113	1.31	70 - 130	20	70 - 130	20	
10	101	103	2.16	102	98.9	3.17	70 - 130	20	70 - 130	20	
10	101	103	1.85	102	99.9	2.27	70 - 130	20	70 - 130	20	
30	114	117	2.05	116	113	2.20	70 - 130	20	70 - 130	20	
10	101	99	2.19	100	100	0	70 - 130	20	70 - 130	20	
	60 10 10 10 10 10 30	μg/L         % Rec.           60         97.8           10         113           10         113           10         101           10         101           30         114	μg/L         % Rec.         % Rec.           60         97.8         100           10         113         119           10         113         116           10         101         103           10         101         103           30         114         117	μg/L         % Rec.         % Rec.         % RPD           60         97.8         100         2.51           10         113         119         5.45           10         113         116         2.49           10         101         103         2.16           10         101         103         1.85           30         114         117         2.05	μg/L         % Rec.         % Rec.         % RPD         % Rec.           60         97.8         100         2.51         97.7           10         113         119         5.45         117           10         113         116         2.49         115           10         101         103         2.16         102           10         101         103         1.85         102           30         114         117         2.05         116	μg/L         % Rec.         % Rec.         % RPD         % Rec.         % Rec.           60         97.8         100         2.51         97.7         97           10         113         119         5.45         117         112           10         113         116         2.49         115         113           10         101         103         2.16         102         98.9           10         101         103         1.85         102         99.9           30         114         117         2.05         116         113	μg/L         % Rec.         % Rec.         % RPD         % Rec.         % Rec.         % RPD           60         97.8         100         2.51         97.7         97         0.700           10         113         119         5.45         117         112         4.14           10         113         116         2.49         115         113         1.31           10         101         103         2.16         102         98.9         3.17           10         101         103         1.85         102         99.9         2.27           30         114         117         2.05         116         113         2.20	μg/L         % Rec.         % Rec.         % RPD         % Rec.         % Rec.         % RPD         MS / MSD           60         97.8         100         2.51         97.7         97         0.700         70 - 130           10         113         119         5.45         117         112         4.14         70 - 130           10         113         116         2.49         115         113         1.31         70 - 130           10         101         103         2.16         102         98.9         3.17         70 - 130           10         101         103         1.85         102         99.9         2.27         70 - 130           30         114         117         2.05         116         113         2.20         70 - 130	μg/L         % Rec.         % Rec.         % RPD         % Rec.         % Rec. <td>μg/L         % Rec.         % Rec.<!--</td--></td>	μg/L         % Rec.         % Rec. </td	

BATCH 56396 SUMMARY										
Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed			
1102631-001A	02/17/11 4:00 PM	02/25/11	02/25/11 8:28 PM	1102631-002A	02/17/11 5:20 PM	02/25/11	02/25/11 4:29 PM			
1102631-003A	02/17/11 4:45 PM	02/25/11	02/25/11 4:59 PM	1102631-004A	02/17/11 3:10 PM	02/25/11	02/25/11 5:20 AM			
1102631-005A	02/17/11 12:10 PM	02/25/11	02/25/11 5:52 AM	1102631-006A	02/17/11 2:40 PM	02/26/11	02/26/11 1:13 AM			
1102631-007A	02/17/11 1:55 PM	02/24/11	02/24/11 8:15 PM							

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

A QA/QC Officer



"When Ouality Counts"

## QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water		QC Matrix: Water					Batch	ID: 56362	WorkOrder 1102631			31	
EPA Method SW8015B	Extra	Extraction SW3510C					Spiked Sample ID: N/A						
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	SD Acceptance Criteri			(%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	116	120	4.14	N/A	N/A	70 - 130	30	
%SS:	N/A	625	N/A	N/A	N/A	94	97	3.38	N/A	N/A	70 - 130	30	
%SS: All target compounds in the Methor NONE										N/A	70 - 130		

### BATCH 56362 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1102631-001A	02/17/11 4:00 PM	A 02/18/11	02/20/11 7:17 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

QA/QC Officer



"When Ouality Counts"

## QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water QC Matrix: Water							Batch	ID: 56420	WorkOrder 110263			31	
EPA Method SW8015B	Extra	Extraction SW3510C					Spiked Sample ID: N/A						
Analyte	Sample	Sample Spiked MS MSD			MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
	µg/L	μg/L μg/L % Rec. % Rec. % RPD				% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	118	115	2.48	N/A	N/A	70 - 130	30	
%SS:	N/A	625	N/A	N/A	N/A	106	104	2.07	N/A	N/A	70 - 130	30	
All target compounds in the Metho NONE										10/21	70 150	50	

#### BATCH 56420 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1102631-002A	02/17/11 5:20 PM	I 02/18/11	02/20/11 6:06 PM	1102631-003A	02/17/11 4:45 PM	02/18/11	02/20/11 4:54 PM
1102631-004A	02/17/11 3:10 PM	I 02/18/11	02/20/11 3:42 PM	1102631-005A	02/17/11 12:10 PM	02/18/11	02/20/11 2:30 PM
1102631-006A	02/17/11 2:40 PM	I 02/18/11	02/20/11 1:18 PM	1102631-007A	02/17/11 1:55 PM	02/18/11	02/20/11 12:07 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

A QA/QC Officer