# **RECEIVED**

10:10 am, May 01, 2008

Alameda County Environmental Health

Perjury Statement

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

1/12/06 Date

April 15, 2008 Project: CA1264-6

Global ID: T0600102124

Mr. Jerry Wickham Alameda County Environmental Health Department 1131 Harbor Bay Parkway Alameda, California 94502-6577

Quarterly Groundwater Monitoring Report Fourth Quarter 2007

Former Gas Station 2547 East 27th Street Oakland, California

Dear Mr. Wickham:

Ceres Associates is pleased to present this Fourth Quarter 2007, Quarterly Groundwater Monitoring Report, on behalf of Tomorrow Development for the former gas station at 2547 East 27th Street, Oakland, California (Property; refer to Figure 1 - Property Location Map).

#### Background

The Property is currently undeveloped with a chain-link fence along the perimeter. Some concrete pieces, remnants of the former foundation that were observed on the Property, have been removed during excavation of the site in November and December, 2006. The Property is located amongst single and multiple family residences.

The Property was formerly developed with a fuel and service station between 1927 and 1994. In 1994, one 100-gallon waste oil underground storage tank (UST) and four 500-gallon gasoline USTs were removed from the Property. After the tanks were removed, the excavation pits were lined with visqueen plastic and backfilled with the excavated material.

Assessment of the Property began in 2002 by Kleinfelder followed by additional sampling events both on and off-site by Ceres Associates in 2005 and 2006. Contaminated backfill material was identified as a potential source of subsurface contamination. A total of approximately 200 cubic yards of contaminated soil was excavated and removed from the Property in late 2006 and early 2007. Copies of previous assessments can be found by contacting the Alameda County Environmental Health Department (EHD).

The regulatory risk criteria utilized in this report are Environmental Screening Levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB) for residential sites where groundwater IS a potential or current drinking water source.

# **Geology and Hydrogeology**

The soils on the Property consist of generally sandy gravel fill from the surface to four (4) feet below ground surface (bgs). From four (4) to twelve (12) feet bgs the soil appears to be fat and lean silty clays. Below twelve (12) feet the soil is generally gravel and sand with some clay. Off-site soils are generally consistent with on-site soils.

Groundwater has been encountered on the Property between approximately three and fourteen (14) feet bgs. Once encountered, groundwater appears to rise to within approximately three to five feet of the ground surface. The variable groundwater elevations across the Property suggest the possibility of a perched groundwater lense. Groundwater flow gradients have historically been to the east-southeast.

#### **Scope of Sampling**

Ceres Associates conducted quarterly groundwater sampling activities of six monitoring wells on October 1, 2007: MW-1, MW-2, MW-3, MW-4, MW-5, and EX-1 (refer to Figure 2 – Fourth Quarter 2007 Quarterly Monitoring Results).

#### **Sampling Process**

Ceres Associates measured the depth to water from the top of each well casing (refer to Appendix for a copy of the Monitoring Well Data Forms).

As per the approved work plan, Ceres Associates employed a "low flow technique" to monitor the groundwater at the site. Polyethylene tubing was extended from the surface to the approximate midpoint of the screened interval of the well. The tubing was connected to a peristaltic pump, which pumped the groundwater to a flow-through multi-parameter cell devise. The water then flowed into additional tubing into a collection bucket to be transferred to the above mentioned 55-gallon drum for future disposal.

The wells were purged for at least five minutes at a rate of less than 1 liter per minute until the readings on the flow-through devise showed less than a 10% change for three consecutive minutes, for the following parameters: pH, conductivity, dissolved oxygen, and temperature. A sounding probe was used during the collection so that the pumping rate could be adjusted to assure that the well water depth remained stable. All of the water samples were then collected in laboratory-cleaned 40-milliliter glass vials and one-liter amber bottles with Teflon-lined caps. The samples were then placed into an ice-cooled chest for delivery to a State of California-certified analytical laboratory.

Decontamination was accomplished by discarding all the tubing and then washing the flow-through cell and sounding probe using a non-phosphate detergent followed by two freshwater rinses.

Groundwater generated during the sampling and decontamination processes was placed into an on-site 55-gallon drum, pending laboratory analysis for proper disposal.

Ceres Associates requested that the laboratory analyze the sample for total petroleum hydrocarbons (TPH) as gasoline (TPHg), as diesel (TPHd), and as motor oil (TPHmo) using US EPA method 8015C; for benzene, toluene, ethylbenzene, and xylenes (BTEX) using US EPA Method 8021B; and for volatile organic compounds (VOCs) using US EPA Method 8260B. The sampling schematic changed since the 2nd quarterly monitoring event of 2007 in compliance with a request made by the EHD in a letter dated April 26, 2007 (refer to Appendix – Regulatory Correspondence). Where analytes overlapped in methods, the higher result was reported herein.

#### Results

During October 2007, the groundwater gradient ranged from east to south-southeast, with an overall trend toward the southeast (refer to Figure 3 - Groundwater Contour Map).

The following table details the concentrations reported by the laboratory for samples submitted from this sampling event as well as historic values (no isoconcentration maps were generated for this data because there are insufficient data points for contouring).

drinking water ESL (Table E-1a	a): Groundwater I	(ft) S a current or poten	(ft amsl)			TPHmo			Ethylbenzene*	Xylenes*	
drinking water ESL (Table E-1a	a): Groundwater I	S a current or poten			Cor	ncentrations repo	orted as microgr	ams per Liter (	/μg/L)		
ESL (Table E-1a			tial source of	100	100	100	1	40	30	20	5
,				100	100	100	·	40	30	20	
Residential Use	,	or Intrusion; High Pe	rmeability Soils,	use soil gas	use soil gas	use soil gas	540	380,000	170,000	160,000	24,000
MW-1	8/24/06	4.63	104.12	ND	ND	NA	ND	ND	ND	ND	ND
108.75	11/17/06	4.50	104.25	ND	ND	ND	ND	ND	ND	ND	ND
100.75	1/30/07	4.14	104.61	ND	78	280	ND	ND	ND	ND	ND
	4/30/07	4.04	104.71	ND	ND	ND	ND	ND	ND	ND	ND
	7/24/07	4.16	104.59	ND	ND	ND	ND	0.5	ND	ND	ND
	10/1/07	4.19	104.56	ND	ND	ND	ND	ND	ND	ND	ND
MW-2	8/24/06	4.26	105.29	ND	78	NA	ND	ND	0.65	1.5	ND
109.55	11/17/06	4.16	105.39	ND	ND	ND	ND	ND	8.0	1.8	ND
	1/30/07	4.29	105.26	ND	ND	ND	ND	ND	1	2	ND
	4/30/07	4.53	105.02	ND	60	ND	ND	ND	ND	ND	ND
	7/24/07	4.50	105.05	NS	NS	NS	NS	NS	NS	NS	NS
	10/1/07	4.37	105.18	ND	ND	ND	ND	ND	ND	ND	ND
MW-3	8/24/06	4.40	104.00	ND	ND	NA	ND	ND	ND	ND	ND
108.4	11/17/06	3.92	104.48	ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND
100.4	1/30/07	4.30	104.10	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND
	4/30/07	4.22	104.18	ND	ND	ND	ND	ND	ND	ND	ND
	7/24/07	4.40	104.00	ND	ND	ND	ND	0.67	ND	ND	ND
	10/1/07	4.50	103.90	ND	ND	ND	ND	ND	ND	ND	ND
MW-4	8/24/06	4.87	103.02	ND	ND	NA	ND	ND	ND	ND	ND
107.89	11/17/06	3.75	104.14	ND	ND	ND	ND	ND	ND	ND	ND
	1/30/07	3.82	104.07	ND	ND	ND	ND	ND	ND	ND	ND
	4/30/07	4.50	103.39	ND	ND	ND	ND	ND	ND	ND	ND
	7/24/07	4.27	103.62	ND	ND	ND	ND	0.66	ND	ND	ND
	10/1/07	3.92	103.97	ND	ND	ND	ND	ND	ND	ND	ND
MW-5	8/24/06	5.00	103.65	ND	ND	NA	ND	ND	ND	ND	ND
108.65	11/17/06	3.30	105.35	ND	ND	ND	ND	ND	ND	ND	ND
, 00.00	1/30/07	3.22	105.43	ND	ND	ND	ND	ND	ND	ND	ND
	4/30/07	3.20	105.45	ND	ND	ND	ND	ND	ND	ND	ND
	7/24/07	3.37	105.45	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND
	10/1/07	3.27	105.38	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND
	10/1/07	5.21	100.50	ND	ND	ND	ND	ND	ND	IND	
EX-1	8/24/06	4.84	104.62	460	220	NA	ND	ND	ND	ND	ND
109.46	11/17/06	4.38	105.08	270	130	ND	ND	ND	ND	1.9	ND
	1/30/07	4.00	105.46	2,200	800	270	1	ND	3.9	3.2	ND<10
	4/30/07	4.20	105.26	1,000	740	ND	ND	ND	1.7	2.4	ND
	7/24/07	4.41	105.05	210	170	ND	ND	ND	ND	ND	ND
	10/1/07	4.69	104.77	290	230	ND	ND	ND	ND	0.7	ND

#### **Abbreviations and Notes**

 $\begin{array}{ll} \mu g/L & \text{micrograms per Liter} \\ \text{TOC} & \text{elevation of well at th} \end{array}$ 

FOC elevation of well at the top of the casing, in feet above mean sea level

TPHg total petroleum hydrocarbons as gasoline using US EPA method 8015C
TPHd total petroleum hydrocarbons as diesel using US EPA method 8015C
TPHmo total petroleum hydrocarbons as motor oil using US EPA method 8015C
MTBE methyl tertiary butyl ether using US EPA method 8260B and/or 8021B

benzene, toluene, ethylbenzene, and xylenes were analyzed by US EPA method 8021B and 8260B (only the highest concentration was reported here)

ESL Environmental Screening Limit, published by San Francisco Bay Regional Water Quality Control Board

NA not analyzed

ND not detected below the method reporting limit

ND < X not detected below an increased method reporting limit (see lab sheets for further details)

NE not yet an established value

NS not sampled

#### Discussion

#### Petroleum Hydrocarbons

TPHg, TPHd, and TPHmo were not detected above laboratory detection limits in samples collected from MW-01, MW-02, MW-03, MW-04, or MW-05. These results are consistent with historical monitoring events.

In groundwater monitoring well EX-1 concentrations of TPHg and TPHd have fluctuated over time, while concentrations of TPHmo have been reported above the method detection limit during only one quarter monitoring event, First Quarter 2007, which coincides with the only one other TPHmo concentration above the method detection limit (in MW-1 during the same quarter). The concentrations of TPHg and TPHd in groundwater monitoring well EX-1 have exceeded the Residential ESL since August 2006. The concentrations of these analytes peaked during First Quarter 2007 Monitoring, reporting 2,200 micrograms per liter ( $\mu$ g /L) of TPHg and 800  $\mu$ g/L of TPHd. The Fourth Quarter 2007 results for TPHg and TPHd reported 290  $\mu$ g/L and 230  $\mu$ g/L, respectively. As expected, after the recent remedial efforts on-site, the concentrations of these analytes have dropped for three consecutive quarters and the Fourth Quarter concentrations were generally the same as the Third Quarter 2007 results.

#### Volatile Organic Compounds (VOCs)

At the request of the EHD Ceres Associates requested VOC analysis using US EPA method 8260. VOC analytes were not detected in those samples collected from MW-01, MW-02, MW-03, MW-04, or MW-05. This is consistent with historical monitoring events, except that during the last quarter ( $3^{rd}$  Quarter Monitoring, July 2007, MW-04 and MW-05 reported concentrations of toluene at 0.67  $\mu$ g /L and 0.66  $\mu$ g/L, respectively.

Further, EDB, EDC, MTBE, TAME, ETBE, and DIPE, were not detected above the method detection levels in each well sampled. The chlorinated hydrocarbons chloroform and bromodichloromethane were detected in MW-02 at concentrations of 27  $\mu$ g/L and 1.3  $\mu$ g/L, respectively. Carbon tetrachloride, ethylene dichloride, methylene chloride, tetrachloroethane, and trichloroethylene were also not detected above method detection levels in each of the wells sampled.

Benzene has only been reported in one well (EX-1) and in only one quarter (First Quarter 2007). Concentrations of benzene were not reported during the current Fourth Quarter 2007 event above the method reporting limit of 0.5  $\mu$ g/L. During the current sampling, sec-butyl benzene (refer to full laboratory reports in the appendix) was reported at 1.4  $\mu$ g/L, isopropylbenzene at 3.0  $\mu$ g/L, and n-propyl benzene at 2.2  $\mu$ g/L. The reported level of sec-butyl benzene is below the reported level for the Third Quarter 2007 of 1.6  $\mu$ g/L. However, the reported levels of isopropylbenzene and n-propyl benzene are above the Third Quarter concentrations of 2.1  $\mu$ g/L and 1.4  $\mu$ g/L, respectively. According to the laboratory these compounds are benzene rings with additional organic constituents, and are common components of gasoline fuel. The laboratory further noted that these constituents are not usually significant components of diesel or kerosene.

#### **Conclusions and Recommendations**

Concentrations of TPHg and TPHd were detected in groundwater monitoring well EX-1 at concentrations above the residential ESL for these compounds, (100  $\mu$ g/L). Concentrations of these analytes were not reported in the other monitoring wells. These results indicated that the affected groundwater is localized in the area of well EX-1. Minor concentrations of one type of VOC, xylenes, have been associated with higher concentrations of TPH compounds detected in well EX-1. The concentration had continued to decrease along with the concentrations of TPHg and TPHd, until last quarter (3<sup>rd</sup> Quarter 2007) when it was not detected above the reporting limit. During this quarter; however, xylenes were detected at a concentration of 0.7  $\mu$ g/L., which is below the Residential ESL of 13  $\mu$ g/L for this compound.

The ACEHD informed Ceres Associates that further monitoring would not be required for the present time.

#### Limitations

This report was prepared according to accepted industry standards and guidelines for similar activities conducted in this geographic region at this time. Any data supplied by others is not the responsibility of Ceres Associates.

If you have questions regarding this project please contact Will Kleiner at (707) 748-3170 or via email at <a href="willkleiner@ceresassociates.com">willkleiner@ceresassociates.com</a>.

Prepared by:

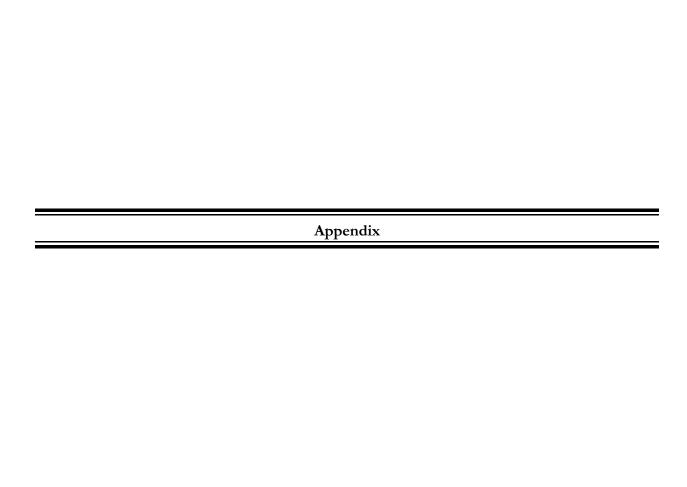
Will Kleiner

**Environmental Specialist** 

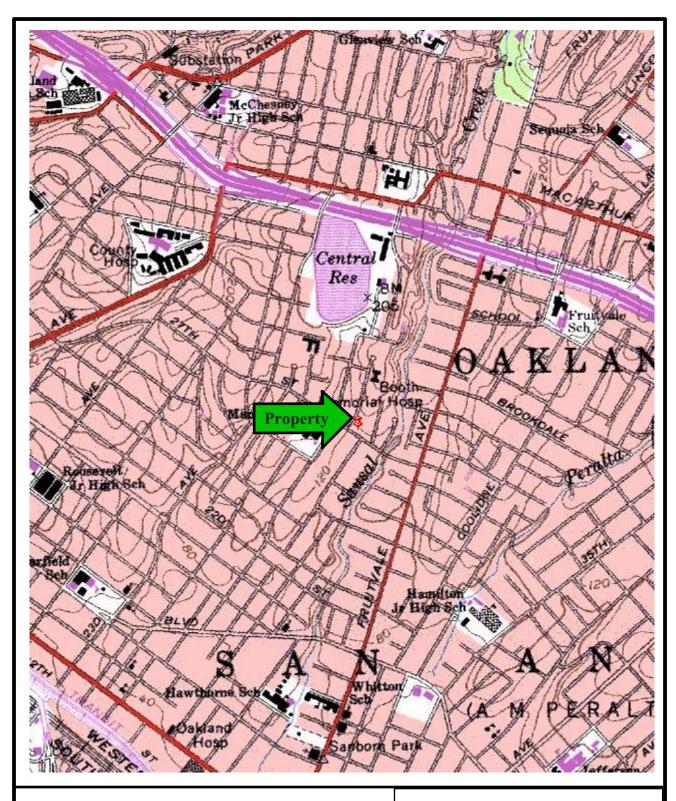
Reviewed by:

Kimberly Brandt, PG CHG

Senior Project Geologist, Senior Project Manager



Figures





1 inch equals 2000 feet

Map Taken From:

United States Geological Survey 7.5 Minute Topographic Series Oakland East, California Quadrangle

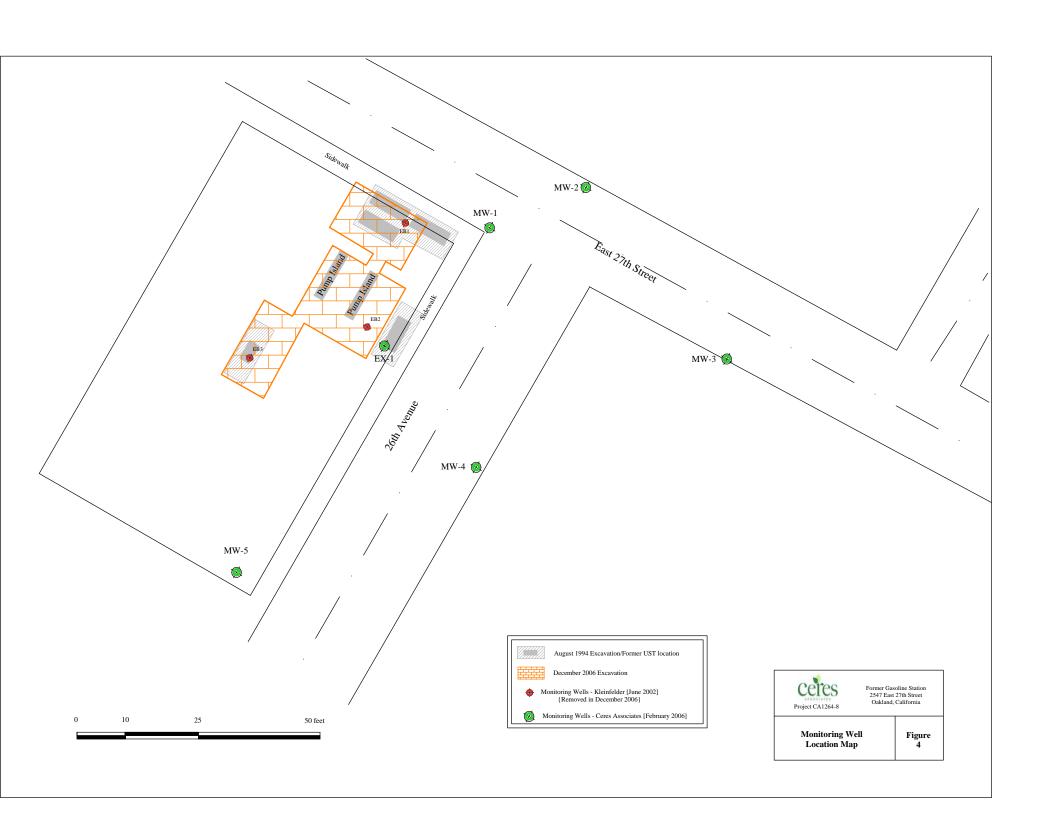


Former Gasoline Station 2547 East 27th Street Oakland, California

TOPOGRAPHIC MAP

**FIGURE** 

1





Ceres Associates	Client Project ID: # CA1264-6; Oakland	Date Sampled: 10/01/07
424 First Street		Date Received: 10/01/07
Benicia, CA 94510	Client Contact: Ryan Meyer	Date Reported: 10/08/07
Bellieta, Cri 71310	Client P.O.:	Date Completed: 10/08/07

WorkOrder: 0710026

October 08, 2007

Dear Ryan:

Enclosed are:

- 1). the results of 6 analyzed samples from your #CA1264-6; Oakland project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill 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 please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

																_				02	6					N
ce	res	F	1534 Pittsbu	willow Pass I	Road 94565			ınd tir	ne:		5-day	y std			Chain	of C	usto	EDF	Req	uired			(send	to en	nail n	oted)
	CIATES		,	9262/ fax (925	) 252-9269	Note	es:			-				1	-1	D	t	Page	1	of	1			_		Comments
Report to: Ryan Meyer Bill To:  Company: Ceres Associates 424 First Street Benicia, CA 94510 E-Mail: ryannmeyer@gmail.com  Phone: (707) 748-3170 Fax: (707) 748-3171  Project#: CA1264-6 Project Name: Oakland  Location: East 27th Street and 26th Avenue  Sampler Signature:				(602 / 8021 + 8015) / MTBE	ONLY (602/8021)	motor oil (8015)	D&G (1664/ 5220)	Total Petroleum Hydrocarbons (418.1)	5 OXYs (MTBE/TBA/DIPE/EBE/TAME)	CBs ONLY	/ 8260 (VOCs)	502.2/ 601/ 8010/ 8021 (HVOCs)	sis (CL Pesticides)		uest				linity	uvalent)	olids		ide	Comments		
Sample ID	Date	Time	# Containers	Matrix	Preservation Method	BTEX & TPHgas (602	MTBE/BIEX O	TPHdiesel / mo	Total Petroleum O&G	Total Petroleum F	5 OXYs (MTBE/	EPA 608/ 8082 PCBs ONLY	EPA 524.4 / 624 / 8260 (VOCs)	EPA 502.2/ 601/	EPA 505/ 608/ 8	EPA 07/8141 (NP Pesticides)	CAM 17 Metals	LUFT 5 Metals	Nitrate & Nitrite	Sulfate & Sulfide	Bicarbonate Alkalinity	Ferrous Iron (equivalent)	Total Dissolved Solids	General Minerals	Bromate & Bromide	
MW-01	10/1/2007		1	groundwater	ice	Х		X					Х													
MW-02	10/1/2007		1	groundwater	ice	X		X					Х						-	_		_			_	
MW-03	10/1/2007		1.	groundwater	ice	X	_	Х	_		_		Х		- 7	_	_	_	_	_	_	├		_	-	
MW-04	10/1/2007		1	groundwater	ice	Х	_	Х	_	_	_		Х	_			-	-		_	_	-	-		-	
MW-05	10/1/2007.		1	groundwater	ice	Х		X	_	₩		_	X		_	-	-	_	_	-	-	-	-	-	-	- '
EX-01	10/1/2007		1	groundwater	ice	X		X					A													→
						F										No	thing	 g Fur 	ther							
						F																				1
Relinquished by: John Welch Recevied by: Five TECH & Date/Time 10/10/10/16-05  Relinquished by: Five Tech Recevied by: Mate/Time 10/10/07  Date/Time 10/10/07  Relinquished by: Recevied by: Five But Recevied by: Mate/Time 10/1/09  Relinquished by: Recevied by: Five But Recevied by: Five But Recevied by: Five But Received by: Five				193	7 III	7.	Hea Dec App	od Co d Spa hloria propri	onditionated	osent in La ontair			D	EAD S	COND SPACE ORINA	TION ABS	N LA	AF	CON_PRE	PRIAT ITAINE SERV	RS_	LAB	,			
	Recevied by: Recevied by: Recevied by: Date/Time 10 1 07				110	80	2				ate Co red in		iers				-									-:

# McCampbell Analytical, Inc.

1534 Willow Pass Rd (925) 252-9262

Report to:

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

5 days

Requested TAT:

Date Received 10/01/2007

Pittsburg, CA 94565-1701 WorkOrder: 0710026 ClientID: CAB

✓ EDF Excel Fax ✓ Email HardCopy ThirdParty Bill t

Email: Ryan Meyer ryanmeyer@ceresassociates.com

Ceres Associates TEL: (707) 748-317 FAX: (707) 748-317

ProjectNo: # CA126-6; Oakland 424 First Street

Benicia, CA 94510 PO: Chwania Mejia Ceres Associates 424 First Street

Benicia, CA 94510 Date Printed: 10/01/2007

cmejia@ceresassociates.com

					Requested Tests (See legend below)											
Sample ID	ClientSampID	Matrix	<b>Collection Date</b>	Hold	1	2	3	4	5	6	7	8	9	10	11	12
0710026-001	MW-01	Water	10/1/2007		С	Α	Α	В								
0710026-002	MW-02	Water	10/1/2007		С	Α		В								
0710026-003	MW-03	Water	10/1/2007		С	Α		В								
0710026-004	MW-04	Water	10/1/2007		С	Α		В								
0710026-005	MW-05	Water	10/1/2007		С	Α		В								
0710026-006	EX-01	Water	10/1/2007		С	Α		В								

#### Test Legend:

1	8260B_W	2	G-MBTEX_W	3	PREDF REPORT	4	TPH(DMO)_W	5
6		7		8		9		10
11		12						

Prepared by: Kimberly Burks

#### **Comments:**

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

# **Sample Receipt Checklist**

Client Name:	Ceres Associate	es			Date a	and Time Received:	10/1/2007	8:07:29 PM
Project Name:	# CA126-6; Oakl	and			Check	klist completed and r	eviewed by:	Kimberly Burks
WorkOrder N°:	0710026	Matrix Water			Carrie	er: <u>Michael Herna</u>	ndez (MAI Cou	<u>ırier)</u>
		Chain	of Cu	stody (C	OC) Informa	ation		
Chain of custody	present?		Yes	V	No 🗆			
Chain of custody	signed when relinqu	ished and received?	Yes	<b>V</b>	No $\square$			
Chain of custody	agrees with sample	labels?	Yes	<b>✓</b>	No 🗌			
Sample IDs noted	by Client on COC?		Yes	<b>V</b>	No $\square$			
Date and Time of	collection noted by C	lient on COC?	Yes	✓	No 🗆			
Sampler's name r	noted on COC?		Yes	✓	No 🗆			
		<u>S:</u>	ample	Receipt	Information	<u>1</u>		
Custody seals in	tact on shipping cont	ainer/cooler?	Yes		No 🗆		NA 🗹	
Shipping containe	er/cooler in good con	dition?	Yes	<b>V</b>	No 🗆			
Samples in prope	er containers/bottles?	•	Yes	<b>~</b>	No 🗆			
Sample containe	rs intact?		Yes	✓	No $\square$			
Sufficient sample	volume for indicated	I test?	Yes	<b>✓</b>	No 🗌			
		Sample Prese	vatio	n and Ho	old Time (HT	) Information		
All samples recei	ved within holding tin	ne?	Yes	<b>✓</b>	No 🗌			
Container/Temp B	Blank temperature		Coole	er Temp:	8.4°C		NA $\square$	
Water - VOA vial	s have zero headspa	ace / no bubbles?	Yes	<b>✓</b>	No 🗆	No VOA vials subm	itted 🗆	
Sample labels ch	necked for correct pre	eservation?	Yes	<b>✓</b>	No 🗌			
TTLC Metal - pH	acceptable upon rece	eipt (pH<2)?	Yes		No 🗆		NA 🗹	
				===:	:			======
Client contacted:		Date contact	ed:			Contacted	by:	
Comments:								

Ceres Associates	Client Project ID: # CA1264-6; Oakland	Date Sampled: 10/01/07
424 First Street		Date Received: 10/01/07
424 I list Succi	Client Contact: Ryan Meyer	Date Extracted: 10/06/07
Benicia, CA 94510	Client P.O.:	Date Analyzed 10/06/07

# Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0710026

Lab ID	0710026-001C
Client ID	MW-01
Matrix	Water
	Reporting Reporting Reporting

Matrix							
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	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	Bromodichloromethane	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	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	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	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
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
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	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	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	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-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinvl Chloride	ND	1.0	0.5	Xvlenes	ND	1.0	0.5
		Surre	ogate Re	ecoveries (%)			
1	1			1	1		

 %SS1:
 110
 %SS2:
 98

 %SS3:
 107

#### Comments

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

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

<sup>\*</sup> 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  $\mu g/wipe$ .

Ceres Associates	Client Project ID: #CA1264-6; Oakland	Date Sampled: 10/01/07
424 First Street		Date Received: 10/01/07
424 I list Succi	Client Contact: Ryan Meyer	Date Extracted: 10/06/07
Benicia, CA 94510	Client P.O.:	Date Analyzed 10/06/07

# Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0710026

Lab ID	0710026-002C											
Client ID		N	MW-02									
Matrix	Water											
	 Reporting	_							Reportin			

Matrix		Water					
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	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	Bromodichloromethane	1.3	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	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	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	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	27	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	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	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	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-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinvl Chloride	ND	1.0	0.5	Xvlenes	ND	1.0	0.5
		Surr	ogate Re	ecoveries (%)			

%SS1: 110 %SS2: 98 %SS3: 109

Comments

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

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

<sup>\*</sup> 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  $\mu g/wipe$ .

Ceres Associates	Client Project ID: #CA1264-6; Oakland	Date Sampled: 10/01/07
424 First Street		Date Received: 10/01/07
424 I list Succi	Client Contact: Ryan Meyer	Date Extracted: 10/06/07
Benicia, CA 94510	Client P.O.:	Date Analyzed 10/06/07

# Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0710026

Lab ID	0710026-003C						
Client ID		MW-03					
Matrix		Water					
Compound	Concentration *	DE	Reporting	Compound	Concentration *	DE	Reporting

Matrix		Water					
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	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	Bromodichloromethane	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	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	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	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
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
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	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	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	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-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinvl Chloride	ND	1.0	0.5	Xvlenes	ND	1.0	0.5
		Surr	ogate Re	ecoveries (%)			
I					1		

%SS1: 109 %SS2: 98 %SS3: 108

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

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

<sup>\*</sup> 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  $\mu g/wipe$ .

Ceres Associates	Client Project ID: #CA1264-6; Oakland	Date Sampled: 10/01/07
424 First Street		Date Received: 10/01/07
424 Phat Succi	Client Contact: Ryan Meyer	Date Extracted: 10/06/07
Benicia, CA 94510	Client P.O.:	Date Analyzed 10/06/07

# Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0710026

Lab ID	0710026-004C				
Client ID	MW-04				
Matrix	Water				
	Penorting	Penortin			

IVIALITA				water			
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	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	Bromodichloromethane	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	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	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	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
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
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	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	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	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-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinvl Chloride	ND	1.0	0.5	Xvlenes	ND	1.0	0.5
		Surr	ogate Re	ecoveries (%)			

 Surrogate Recoveries (%)

 %SS1:
 110
 %SS2:
 99

 %SS3:
 110
 99

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

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

<sup>\*</sup> water and vapor samples are reported in µg/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 µg/wipe.

Ceres Associates	Client Project ID: # CA1264-6; Oakland	Date Sampled: 10/01/07
424 First Street		Date Received: 10/01/07
424 I list Succi	Client Contact: Ryan Meyer	Date Extracted: 10/06/07
Benicia, CA 94510	Client P.O.:	Date Analyzed 10/06/07

# Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0710026

Lab ID	0710026-005C				
Client ID	MW-05				
Matrix	Water				
	Penorting	Penorti			

Matrix		Water					
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	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	Bromodichloromethane	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	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	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	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
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
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	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	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	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-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinvl Chloride	ND	1.0	0.5	Xvlenes	ND	1.0	0.5
		Surr	ogate Re	ecoveries (%)			

 Surrogate Recoveries (%)

 %SS1:
 110
 %SS2:
 98

 %SS3:
 110

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

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

Comments

<sup>\*</sup> 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  $\mu g/wipe$ .

Ceres Associates	Client Project ID: #CA1264-6; Oakland	Date Sampled: 10/01/07
424 First Street		Date Received: 10/01/07
424 Phat Succi	Client Contact: Ryan Meyer	Date Extracted: 10/06/07
Benicia, CA 94510	Client P.O.:	Date Analyzed 10/06/07

# Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0710026

Lab ID	0710026-006C			
Client ID	EX-01			
Matrix	Water			
	Reporting	Reporting		

Matrix				Water			
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	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	Bromodichloromethane	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	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	1.4	1.0	0.5
tert-Butyl benzene	ND	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	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
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
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	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	3.0	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	2.2	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	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-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinvl Chloride	ND	1.0	0.5	Xvlenes	ND	1.0	0.5
		Surr	ogate Re	ecoveries (%)			
						_	

%SS1: 110 %SS2: 98 %SS3: 111

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

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

Comments

<sup>\*</sup> 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  $\mu g/wipe$ .

Ceres Associates	Client Project ID: # CA1264-6; Oakland	Date Sampled:	10/01/07
424 First Street		Date Received:	10/01/07
Benicia, CA 94510	Client Contact: Ryan Meyer	Date Extracted:	10/03/07-10/04/07
20110111, 0117, 1010	Client P.O.:	Date Analyzed	10/03/07-10/04/07

# Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

	Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*												
Extraction	on method SW5030B		Analy	ytical methods SV	V8021B/8015Cm			Work Order	: 0710	026			
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS			
001A	MW-01	W	ND	ND	ND	ND	ND	ND	1	96			
002A	MW-02	W	ND	ND	ND	ND	ND	ND	1	93			
003A	MW-03	W	ND	ND	ND	ND	ND	ND	1	92			
004A	MW-04	W	ND	ND	ND	ND	ND	ND	1	93			
005A	MW-05	W	ND	ND	ND	ND	ND	ND	1	90			
006A	EX-01	W	290,g,m	ND	ND	ND	ND	0.70	1	103			
Rep	orting Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5	1	μg/L			
	means not detected at or ove the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/Kg			

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

<sup>+</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.



<sup>#</sup> cluttered chromatogram; sample peak coelutes with surrogate peak.

Ceres Associate	es	Client Project	ID: # CA1264-6; Oakland	d Date Sampled: 10/	/01/07						
424 First Street				Date Received: 10/	Date Received: 10/01/07						
Benicia, CA 945	10	Client Contac	ct: Ryan Meyer	Date Extracted: 10/	Date Extracted: 10/01/07						
Bellield, C/1 743	10	Client P.O.:	Client P.O.: Date Analyzed 10/04/07-10/05/0								
	Diesel (C10-23) and Oil (	(C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*  Analytical methods: SW8015C Work Order: 0710026									
Extraction method: SV	W3510C	Analytica	al methods: SW8015C	Wor	rk Order: 0'	710026					
Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS					
0710026-001B	MW-01	W	ND	ND	1	115					
0710026-002B	MW-02	W	ND	ND	1	117					
0710026-003B	MW-03	W	ND	ND	1	114					
0710026-004B	MW-04	W	ND	ND	1	91					
0710026-005B	MW-05	W	ND	ND	1	115					
0710026-006B	EX-01	W	230,d,b	ND	1	114					

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

<sup>\*</sup> 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 / SPLP / TCLP extracts are reported in  $\mu g/L$ .

<sup>#</sup> 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.

<sup>+</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant (cooking oil?); h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil range (?); no recognizable pattern; m) fuel oil; n) stoddard solvent/mineral spirits; p) see attached narrative.

# QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0710026

EPA Method SW8260B	Extrac	Extraction SW5030B				tchID: 31	004	Sp	iked Samp	ole ID:	0710026-00	2C
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	)
, analyto	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	92.7	91.7	1.09	99.4	100	0.863	70 - 130	30	70 - 130	30
Benzene	ND	10	96.2	92.4	4.07	100	99.2	0.785	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	83.5	85.3	2.10	88.5	93.8	5.89	70 - 130	30	70 - 130	30
Chlorobenzene	ND	10	110	108	1.54	113	114	0.859	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	115	113	1.04	125	123	1.49	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	93.7	88.2	6.08	102	102	0	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	116	114	1.59	126	124	0.944	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	102	99.8	2.19	109	109	0	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	92	89.7	2.58	100	99.9	0.376	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	99.5	96.1	3.52	113	111	1.63	70 - 130	30	70 - 130	30
Toluene	ND	10	95.6	92.9	2.90	99.4	98.4	0.990	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	82.9	79.2	4.54	89	88.3	0.701	70 - 130	30	70 - 130	30
%SS1:	110	10	101	97	4.22	106	104	2.12	70 - 130	30	70 - 130	30
%SS2:	98	10	101	100	0.292	101	101	0	70 - 130	30	70 - 130	30
% SS3:	109	10	100	100	0	100	101	0.835	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

# BATCH 31004 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710026-001C	10/01/07	10/06/07	10/06/07 4:38 PM	0710026-002C	10/01/07	10/06/07	10/06/07 5:23 PM
0710026-003C	10/01/07	10/06/07	10/06/07 6:10 PM	0710026-004C	10/01/07	10/06/07	10/06/07 6:55 PM
0710026-005C	10/01/07	10/06/07	10/06/07 7:41 PM	0710026-006C	10/01/07	10/06/07	10/06/07 8:31 PM

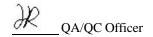
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% 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.



# QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0710026

EPA Method SW8021B/8015Cm Extraction SW5030B					Bat	tchID: 30	985	Sp	iked Sam	ole ID:	0710026-00	eria (%)  LCSD RPD  - 130 30  - 130 30  - 130 30		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	ce Criteria (%)			
7 illuly to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD		
TPH(btex <sup>f</sup> )	ND	60	102	99.8	2.02	99.2	98.1	1.21	70 - 130	30	70 - 130	30		
MTBE	ND	10	80.6	78.9	2.10	110	110	0	70 - 130	30	70 - 130	30		
Benzene	ND	10	98.7	97	1.77	97.2	98.4	1.23	70 - 130	30	70 - 130	30		
Toluene	ND	10	98.4	96.7	1.68	88.5	89.2	0.699	70 - 130	30	70 - 130	30		
Ethylbenzene	ND	10	102	101	1.57	97.8	98.8	1.03	70 - 130	30	70 - 130	30		
Xylenes	ND	30	113	113	0	96.7	96.7	0	70 - 130	30	70 - 130	30		
%SS:	96	10	94	93	0.957	98	97	0.387	70 - 130	30	70 - 130	30		

 $All \ target \ compounds \ in \ the \ Method \ Blank \ of \ this \ extraction \ batch \ were \ ND \ less \ than \ the \ method \ RL \ with \ the \ following \ exceptions:$ 

NONE

#### BATCH 30985 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710026-001A	10/01/07	10/03/07	10/03/07 8:56 AM	0710026-002A	10/01/07	10/03/07	10/03/07 9:29 AM
0710026-003A	10/01/07	10/03/07	10/03/07 10:02 AM	0710026-004A	10/01/07	10/03/07	10/03/07 10:35 AM
0710026-005A	10/01/07	10/03/07	10/03/07 11:09 AM	0710026-006A	10/01/07	10/04/07	10/04/07 11:43 PM

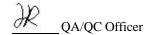
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% 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.



# QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0710026

EPA Method SW8015C Extraction SW3510C					Bat	chID: 30	957	Sp	iked Samp	ole ID:	N/A	
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	Acceptance Criteria (%)		١
Analyte	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	117	117	0	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	104	105	1.01	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

#### BATCH 30957 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710026-001B	10/01/07	10/01/07	10/04/07 9:18 PM	0710026-002B	10/01/07	10/01/07	10/04/07 10:25 PM
0710026-003B	10/01/07	10/01/07	10/04/07 11:32 PM	0710026-004B	10/01/07	10/01/07	10/05/07 9:55 PM
0710026-005B	10/01/07	10/01/07	10/05/07 1:48 AM	0710026-006B	10/01/07	10/01/07	10/05/07 2:56 AM

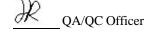
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

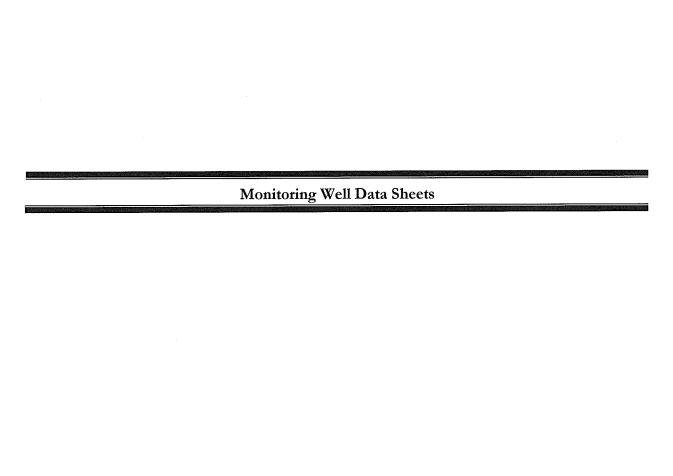
% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

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.







ID#: EX - 01

Quarter: 34th Date: 10/01/07 Sampler: Welsh Sampling Details **Well Details** Depth to Water (initial) 4.69 Start Time Well Diameter Stop Time 4 inches Well Depth 14 feet Pump Rate Screened Interval 5 - 15 feet Notes Pumping Point 9.5 feet

Analysis

			Water Quality	/ Data			
<u>Time</u>	<u>Depth</u>	<u>Temp</u>	Cond	DO	pН	<u>ORP</u>	<u>Turb</u>
		(C)	(mS/cm)	(mg/L)	(units)		
	Ţ						
XXXXX	4.61						
0	4.79	22	70.8	2.93	5.8	-42	1.5
5	4.86	21.9	70.8	1.09	5.66	-62	0.1
6	4.88	21.9	70.3	1.02	5.64	-63	0.1
7	4.9	21.9	70.2	0.94	5.66	-66	1
8	4.92	21.9	70	0.92	5.67	-66	0.8



Quarter: 34th Date: 10/01/07 Sampler: Welsh

Sampling Details **Well Details** Depth to Water (initial) 4.19 Start Time Well Diameter 2 inches Stop Time Well Depth 12 feet Pump Rate Screened Interval 5-15 feet Notes Pumping Point 8.5 feet Analysis

Water Quality Data							
<u>Time</u>	<u>Depth</u>	<u>Temp</u>	<u>Cond</u>	<u>DO</u>	pН	<u>ORP</u>	<u>Turb</u>
		(C)	(mS/cm)	(mg/L)	(units)		
XXXXX	4.28						
0	4.49	24.3	90.6	2.35	7.84	33	14.6
5	4.56	24.4	86.5	0.43	8.97	11	6.2
6	4.56	24.4	84.8	0.41	9	10	6,9
7	4.58	24.4	82.3	0.38	8.94	10	5.6
8	4.58	24.5	81.4	0.38	8.95	11	6.1
	_					_	
	_						



Quarter: 34th Date: 10/01/07 Sampler: Welsh

Sampling Details **Well Details** Depth to Water (initial) 4.37 Start Time Well Diameter 2 inches Stop Time Well Depth 6 feet Pump Rate Screened Interval 3 - 8 feet Notes Pumping Point 5.0 feet Analysis

Water Quality Data								
<u>Time</u>	<u>Depth</u>	<u>Temp</u>	<u>Cond</u>	DO	pН	<u>ORP</u>	<u>Turb</u>	
		(C)	(mS/cm)	(mg/L)	(units)			
XXXX	4.36							
0	4.59	20.9	13.6	7.09	7.92	110	28.8	
5	4.7	21	13.5	6.22	8.26	111	27.6	
6	4.74	21	13.4	6.18	8.28	111	26.1	
7	4.76	21	13.4	6.11	8.3	111	29.6	



Quarter: 34th Date: 10/01/07 Sampler: Welsh

Well D	etails	Sampling Details			
Depth to Water (initial)	4.50 feet	Start Time			
Well Diameter	2 inches	Stop Time			
Well Depth	14 feet	Pump Rate			
Screened Interval	5 - 15 feet	Notes			
Pumping Point 9.5 feet					
		Analysis			

Water Quality Data							
<u>Time</u>	<u>Depth</u>	<u>Temp</u>	<u>Cond</u>	DO	pН	<u>ORP</u>	<u>Turb</u>
		(C)	(mS/cm)	(mg/L)	(units)		
XXXX	4.48						
0	4.49	22	0.131	2.5	7.23	127	37.4
5	4.49	21.7	0.132	0.82	6.47	139	27.1
6	4.49	21.7	0.132	0.78	6.39	141	28.1
7	4.49	21.7	0.132	0.79	6.31	142	27.7



Pumping Point

ID#: MW-04

Date: 10/01/07 Quarter: 34th Sampler: Welsh Sampling Details **Well Details** Depth to Water (initial) Start Time 3.92 feet Well Diameter 2 inches Stop Time Well Depth 14 feet Pump Rate Screened Interval 5-15 feet Notes

Analysis

Water Quality Data							
<u>Time</u>	<u>Depth</u>	<u>Temp</u>	<u>Cond</u>	DO	pН	<u>ORP</u>	<u>Turb</u>
		(C)	(mS/cm)	(mg/L)	(units)		
XXXX	3.93						
0	4.28	21.4	87.1	2.33	5.84	113	-0.06
5	4.47	21.2	87.3	0.63	5.8	109	2
6	4.5	21.2	87.4	0.57	5.78	108	2.9
7	4.51	21.2	87.4	0.52	5.78	108	4.1
8	4.53	21.2	87.5	0.51	5.77	107	5,8
9	4.55	21.2	87.5	0.51	5.77	106	6.8

Notes: [(well depth) - (depth to water)] X (3) X (0.1336) = gallons to bale

9.5 feet



Quarter: 34th Date: 10/01/07 Sampler: Welsh

Sampling Details **Well Details** Depth to Water (initial) Start Time 3.27 feet Well Diameter 2 inches Stop Time Well Depth 14 feet Pump Rate Screened Interval 5 - 15 feet Notes Pumping Point 9.5 feet Analysis

Water Quality Data							
<u>Time</u>	<u>Depth</u>	<u>Temp</u>	<u>Cond</u>	<u>DO</u>	pН	<u>ORP</u>	<u>Turb</u>
		(C)	(mS/cm)	(mg/L)	(units)		
XXXX	3.24						
0	3.6	21	82.2	2.67	5.86	66	0.4
5	3.82	20.9	82.2	0.93	5.74	62	3.4
6	3.85	20.9	82.1	0.83	5.74	62	0.6
7	3.87	20.9	82.1	0.78	5.74	62	3.6
8	3.9	21	82.1	0.67	5.74	62	-0.3
9	3.92	21	82.2	0.77	5.73	62	3.1
10	3.95	21	82.1	0.82	5.74	63	1
11	3.97	21	82.2	0.81	5.73	63	1.3