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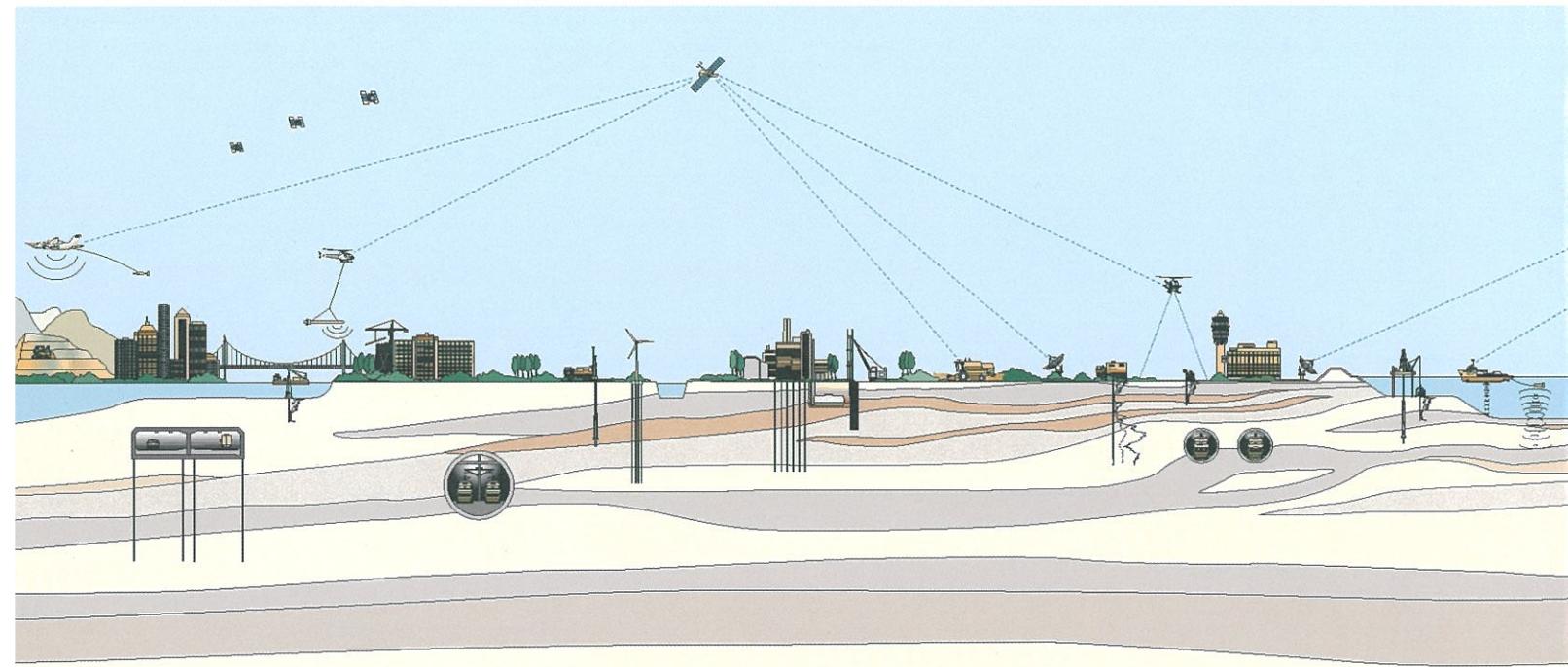


FUGRO WEST, INC.

**SPRING 2007 GROUNDWATER  
MONITORING REPORT  
2250 TELEGRAPH AVENUE  
OAKLAND, CALIFORNIA**

Prepared for:  
**BUTTNER PROPERTIES**

April 2007  
Fugro Project No. 609.004





## FUGRO WEST, INC.

1000 Broadway, Suite 200  
Oakland, California 94607  
Tel: (510) 268-0461  
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April 25, 2007  
Project No. 609.004

Buttner Properties  
600 West Grand Avenue  
Oakland, California 94612

Attention: Ms. Marianne Robison

Subject: Spring 2007 Groundwater Monitoring Report, 2250 Telegraph Avenue,  
Oakland, California

Dear Ms. Robison:

Fugro West, Inc., (Fugro) is pleased to present this report, which records the results of the Spring 2007 groundwater monitoring event conducted in March 2007, for the 2250 Telegraph Avenue Property (Site). The groundwater monitoring program has been implemented in accordance with our February 2004 Work Plan and the Addendum to our Work Plan dated August 5, 2004. The Site location is shown on the Vicinity Map - Plate 1 and the Site Plan is presented on Plate 2.

During this monitoring event, Fugro sampled the four wells located onsite (MW-1, MW-2, MW-3, and MW-4) as well as two wells located offsite: MW-5 located to the south, within the parking lane and MW-6 located to the south, in the eastbound lanes of the heavily traveled West Grand Avenue.

### BACKGROUND

In August 1990, a 10,000-gallon gasoline underground gasoline storage tank (UST) and one 280-gallon waste oil UST were removed from the Site. Approximately 500 cubic yards of gasoline-impacted soil were excavated from the former UST and pump island areas, and with concurrence from the Alameda County Environmental Health (ACEH) the contaminated soils were aerated onsite in 1990 and 1991 and disposed at a Class III sanitary landfill. The excavations were backfilled with clean imported materials, placed and compacted under engineering supervision, and the area was resurfaced with asphalt pavement.

In February 1994, contaminated soils near the former waste oil tank were over-excavated and removed from the Site. Four groundwater monitoring wells (MW-1 through MW-4) were installed onsite and a groundwater monitoring program was implemented. In May 1996, five temporary well points were installed and grab groundwater samples were obtained as part of a supplemental investigation to assist in determining locations for the installation of offsite monitoring wells. Two monitoring wells (MW-5 and MW-6) were installed at offsite locations, downgradient from the former UST excavations in June 1997. In response to



ACEH letters dated June 16, 1998, and November 8, 1999, all groundwater monitoring wells (MW-1 through MW-6) were monitored and sampled on a semi-annual basis through 2001.

In their letter dated January 16, 2002, the ACEH recommended a risk assessment and sensitive receptor survey be conducted to determine whether the Site may be considered a "low risk site." While in the process of conducting these activities, a subsequent letter from the ACEH dated April 4, 2003, was received by the property owner. The April 2003 letter requested that additional source and site characterization studies, a preferential pathway study, and a well survey be conducted. In response to these requests, Fugro prepared a Preferential Pathway and Preliminary Risk Evaluation report dated February 19, 2004. Fugro conducted research at the City offices to identify the location of preferential pathways in the immediate vicinity and evaluated the presence of sensitive receptors in the area. Fugro also compared detected concentrations to the Environmental Screening Levels established by the Regional Water Quality Control Board (RWQCB) for classification of impacted sites. Results of these studies indicated the following:

- Source material has been removed from the Site and the Site has been restored to allow continued use of the Site;
- Residual concentrations of Total Petroleum Hydrocarbons (TPH) in soil beneath the onsite structure and concentrations in groundwater do not pose an immediate or significant risk to human health or the environment, considering the current commercial use of the Site;
- Groundwater below West Grand Avenue is impacted by commingled petroleum hydrocarbon releases;
- No drinking water wells exist within a half-mile radius of the Site;
- No utility corridors were located on or offsite, which would create a preferential migration pathway for contaminants of concern. City infrastructure maps indicate that storm and sanitary sewer mainlines do not extend below West Grand Avenue, they extend below Telegraph Avenue, situated along the upgradient side of the Site, and below Valley Street further to the east. Only one shallow storm drain connector extends from the southeast corner of the Site to Valley Street, and the connector is located above the groundwater surface;
- Shallow groundwater in the downtown Oakland area is not considered nor currently used as a potable water source; and
- With the exception of possible upward migration of soil gas vapors, no exposure pathways currently exist. Given the current commercial use of the Site, as well as the fact that the Site is completely paved and/or covered by concrete slabs, this is not a completed exposure pathway.

Fugro developed a scope of work (Work Plan, February 2004, and Work Plan Addendum, August 2004) to define the lateral extent of onsite soil and groundwater impacts, and to evaluate the potential for soil gas vapors to impact current and future occupants considering that the Site would be redeveloped in the future. In their letter dated August 19,

2005, ACEH requested further clarification for the proposed scope of services. Fugro provided responses to ACEH comments in the Groundwater Monitoring Report and Supplemental Work Plan Addendum dated October 15, 2005. To date, no further written comments or acknowledgement has been received from ACEH.

Fugro has uploaded PDF copies of our Winter 2005, Spring 2006, Summer 2006, and Fall 2006 Groundwater Monitoring Report to the ACEH ftp website. We also sent electronic copies of all attached tables in a Microsoft excel format, to ACEH.

### **GROUNDWATER MONITORING – SPRING 2007**

Fugro conducted this monitoring event on March 20, 2007. Prior to sampling, the presence of free product was checked and the depth to groundwater was measured in all six wells. No free product was observed in any of the wells. Each well was then purged of approximately three casing volumes of water while monitoring for changes in pH, conductivity, and temperature. Once the water levels stabilized, the wells were sampled with clean disposable bailers. Samples were retained in glass containers pre-cleaned by the laboratory in accordance with Environmental Protection Agency (EPA) protocols. The containers were placed in an ice-filled cooler and kept chilled, pending delivery to the laboratory.

The samples for this event were submitted under appropriate chain-of-custody documents to Curtis & Tompkins, Ltd., a laboratory certified by the State of California Department of Health Services for hazardous waste and water testing. A sample from each well was analyzed for the following constituents:

- Total volatile hydrocarbons as gasoline (TVHg), EPA Methods 5030/8015;
- Total extractable hydrocarbons as diesel and motor oil (TEHd and mo), EPA Methods 8015m, using silica gel cleanup;
- Lead scavengers including: dichloroethane and dibromoethane;
- Five fuel oxygenates by EPA Methods 8260 including; Methyl tert butyl ether (MTBE), TBA, DIPE, ETBE, and TAME; and
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX).

Well sampling forms, chain-of-custody documents, and the analytical test reports are attached in Appendix A. Groundwater elevation data are summarized in Table 1. Analytical test results are summarized in Table 2.

The groundwater flow direction for this event is presented in the Rose Diagram on Plate 2. The gradient for this event was 0.012 feet/foot directed towards the southeast. Based on the groundwater elevation data presented in Table 1, the groundwater gradient remains generally consistent with previous measurements. Groundwater was encountered at elevations higher in five wells, and lower in one well (MW-2) compared to the Fall 2006 event.

Fugro's field staff noticed hydrocarbon odor during purging and sampling of monitoring wells MW-3, and MW-4; however, no free product was observed. Contaminants of concern were

detected in wells at concentrations similar to previous events. TVHg was detected during this event in the samples from wells MW-1 (290 µg/l), MW-3 (1,000 µg/l), MW-4 (2,700 µg/l) and MW-6 (2,000 µg/l). TEHd was detected in samples from wells MW-1 (74 µg/l), MW-3 (180 µg/l), MW-4 (2,900 µg/l) and MW-6 (670 µg/l). TEHmo was detected in the sample from well MW-4 (3,500 µg/l).

Analysis detected benzene concentrations in wells MW-3 (100 µg/l) and MW-4 (0.77 µg/l). Analysis also detected 0.58 µg/l of ethylbenzene in well MW-1, as well as toluene (1.5 µg/l), ethylbenzene (2.1 µg/l), and xylene (3.3 µg/l) in well MW-3. Analysis also detected 0.67 µg/l of total xylenes in well MW-4. No concentrations of benzene, toluene, ethylbenzene, or total xylenes were detected in any of the remaining samples tested.

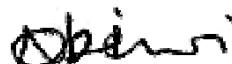
No MTBE concentrations were detected in any of the samples tested during this event. None of the lead scavengers or fuel oxygenates were detected in any of the samples analyzed.

### NEXT GROUNDWATER MONITORING EVENT

The next scheduled event will be conducted during the Summer of 2007. If you have any questions, please call either of the undersigned at (510) 268-0461.

Sincerely,

FUGRO WEST, INC.



Obi Nzewi, REA  
Project Geologist  
REA 08285 (exp. 6/07)



Jeriann N. Alexander, P.E., R.E.A.  
Project Manager  
Civil Engineer 40469 (exp. 3/31/09)  
REA 03130 (exp. 7/07)



ON/JNA:rh

Attachments: Table 1 - Groundwater Elevation Data  
Table 2 - Chemical Concentrations in Groundwater  
Plate 1 - Vicinity Map  
Plate 2 - Site Plan with Groundwater Rose Diagram  
Appendix A - Well Sampling Forms and Analytical Test Report  
and Chain of Custody Form

Copies Submitted: (3) Addressee, (1) Mr. Tim Robison, Ph.D.



## **TABLES**

**Table 1**  
**Groundwater Elevation Data**  
**2250 Telegraph Avenue**  
**Oakland, California**

<b>Monitoring</b>		<b>TOC Elevation</b>	<b>DTW</b>	<b>Elevation</b>
	<b>Well</b>	<b>Date</b>	<b>(feet) MSL</b>	<b>(feet) MSL</b>
MW-1		3/3/1994	20.55	10.39
		3/10/1994		10.54
		6/6/1994		11.36
		9/7/1994		11.92
		12/22/1994		10.83
		3/17/1995		9.73
		6/27/1995		10.51
		9/18/1995		11.12
		5/30/1996		10.49
		7/9/1997		11.79
		8/21/1998		11.00
		10/6/1998		11.84
		2/24/1999		9.74
		6/30/2000		11.28
		4/27/2001		10.56
		4/14/2005		10.12
		8/1/2005		10.56
		11/9/2005		12.53
		3/21/2006		9.71
		8/7/2006		11.40
		10/27/2006		11.39
		3/20/2007		10.94
				9.61
MW-2		3/3/1994	20.03	10.37
		3/10/1994		10.53
		6/6/1994		11.15
		9/7/1994		11.72
		12/22/1994		11.27
		3/17/1995		9.85
		6/27/1995		10.70
		9/18/1995		11.67
		5/30/1996		11.56
		7/9/1997		11.52
		8/21/1998		11.91
		10/6/1998		11.57
		2/24/1999		9.91
		6/30/2000		11.16
		4/27/2001		11.32
		4/14/2005		11.00
		8/1/2005		11.67
		11/9/2005		11.54
		3/21/2006		11.02
		8/7/2006		11.84
		10/27/2006		11.92
		3/20/2007		12.52
				7.51



**Table 1**  
**Groundwater Elevation Data**  
**2250 Telegraph Avenue**  
**Oakland, California**

<b>Monitoring</b>		<b>TOC Elevation</b>	<b>DTW</b>	<b>Elevation</b>
	<b>Well</b>	<b>Date</b>	<b>(feet) MSL</b>	<b>(feet) MSL</b>
	MW-3	3/3/1994	18.97	9.50
		3/10/1994		9.51
		6/6/1994		10.28
		9/7/1994		10.75
		12/22/1994		9.74
		3/17/1995		8.85
		6/27/1995		9.94
		9/18/1995		10.54
		5/30/1996		9.69
		7/9/1997		10.60
		8/21/1998		10.36
		10/6/1998		10.64
		2/24/1999		8.58
		6/30/2000		10.21
		4/27/2001		9.85
		4/14/2005		9.58
		8/1/2005		10.24
		11/9/2005		10.45
		3/21/2006		8.77
		8/7/2006		10.30
		10/27/2006		10.63
		3/20/2007		9.72
				9.25
	MW-4	3/3/1994	19.88	10.89
		3/10/1994		11.19
		6/6/1994		11.85
		9/7/1994		12.86
		12/22/1994		12.26
		3/17/1995		10.10
		6/27/1995		11.05
		9/18/1995		11.84
		5/30/1996		10.97
		7/9/1997		12.08
		8/21/1998		11.86
		10/6/1998		12.84
		2/24/1999		10.79
		6/30/2000		12.39
		4/27/2001		11.26
		4/14/2005		12.01
		8/1/2005		11.78
		11/9/2005		12.42
		3/21/2006		10.00
		8/7/2006		11.90
		10/27/2006		12.75
		3/20/2007		11.20
				8.68



**Table 1**  
**Groundwater Elevation Data**  
**2250 Telegraph Avenue**  
**Oakland, California**

<b>Monitoring</b>		<b>TOC Elevation</b>	<b>DTW</b>	<b>Elevation</b>
	<b>Well</b>	<b>Date</b>	<b>(feet) MSL</b>	<b>(feet) MSL</b>
	MW-5	6/26/1997	16.02	8.44
		7/9/1997		7.58
		8/21/1998		7.54
		10/6/1998		7.70
		2/24/1999		7.51
		6/30/2000		9.16
		4/27/2001		8.39
		4/15/2005		8.42
		8/1/2005		8.82
		11/9/2005		7.86
		3/21/2006		9.44
		8/7/2006		7.75
		10/27/2006		7.54
		3/20/2007		8.35
	MW-6	6/26/1997	18.36	10.89
		7/9/1997		7.47
		8/21/1998		7.38
		10/6/1998		7.36
		2/24/1999		7.57
		6/30/2000		9.04
		4/27/2001		7.99
		4/15/2005		8.26
		8/1/2005		8.81
		11/9/2005		7.82
		3/21/2006		9.25
		8/7/2006		7.77
		NA		NA
		3/20/2007		8.26

TOC = Top of Casing

DTW = Depth to Water

Elevation Reference: USGS benchmark W1197, 1969 with a reported

elevation of +21.06 feet MSL datum.

NA = Not Accessible During This Sampling Event

**Table 2**  
**Chemical Concentrations in Groundwater**  
**2250 Telegraph Avenue, Oakland, California**



Well	Date	Groundwater Elevation MSL (feet)	Petroleum Hydrocarbons				Volatile Organics														
			TVH as Gasoline µg/l	TEH as Kerosene µg/l	TEH as Diesel µg/l	TEH as Motor Oil µg/l	Benzene µg/l	Toluene µg/l	Ethyl-benzene µg/l	Xylenes µg/l	MTBE -8020 µg/l	MTBE -8260 µg/l	TBA µg/l	DIPE µg/l	ETBE µg/l	TAME µg/l	1,1,1-TCA µg/l	1,2-DCA µg/l	1,2-DBA µg/l		
<b>Soil Gas ESL*</b>			NV	NV	NV	NV	540	380,000	170,000	160,000	24,000										
<b>Groundwater ESL**</b>			100	100	100	100	1	40	30	20	5										
Temp. Well 1	5/31/96	--	13,000	--	37,000	--	<50	<50	<50	380	--	--	--	--	--	<1	<1	--	<1	<1	
Temp. Well 2	5/30/96	--	250	--	<50	--	<0.5	<0.5	13	3.4	--	--	--	--	--	<1	<1	--	<1	<1	
Temp. Well 3	5/30/96	--	<50	--	83	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	<1	20	--	<1	<1	
Temp. Well 4	5/31/96	--	11,000	--	1,900	--	130	66	340	260	--	--	--	--	--	<1	<1	--	<1	<1	
Temp. Well 5	5/30/96	--	70	--	180	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	<1	<1	--	<1	<1	
MW-1	3/3/94	10.16	300	<50	<50	<500	1.3	<0.5	2.7	3.1	--	--	--	--	--	<0.5	5.5	--	<0.5	<0.5	
	6/6/94	9.19	430	180+	<50	<500	10	2.2	6.1	7.6	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	9/7/94	8.63	410	<50	<50	<500	6.4	0.8	2.6	3.8	--	--	--	--	--	<0.5	3.8	--	<0.5	<0.5	
	12/22/94	9.72	130	<50	<50	<500	0.7	<0.5	0.6	0.8	--	--	--	--	--	<0.5	3.4	--	<0.5	<0.5	
	3/17/95	10.82	1,600	170	<50	<500	29	<0.5	9.1	6.9	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	6/27/95	10.04	1,100	<50	<50	<500	14	<0.5	7.1	5	--	--	--	--	--	<0.5	3.3	--	<0.5	<0.5	
	9/18/95	9.43	370	--	110+	--	4.4	0.6	2	1.4	--	--	--	--	--	<0.5	2.4	--	<0.5	<0.5	
	8/21/98	9.55	170	--	62+	--	<0.5	0.76	0.79	<0.5	<2.0	--	--	--	--	--	--	--	--	--	
	2/24/99	10.81	20	--	280+	--	<0.5	<0.5	<0.5	<0.5	--	<2.0	--	--	--	--	--	--	--	--	
	6/30/00	13.47	240	--	<50	--	0.7	0.8	<0.5	0.74	4.0	--	--	--	--	--	--	--	--	--	
	4/27/01	9.99	160	--	<50	--	3.3	<0.5	0.86	<0.50	<2.0	--	--	--	--	--	--	--	--	--	
	4/15/05	10.43	520	--	99 <sup>LY</sup>	<300	3.3 <sup>c</sup>	1.8	<0.5	4.6	--	<0.5	<10	<0.5	<0.5	<0.5	--	0.6	<0.5	--	
	8/1/05	9.99	480	--	62 <sup>LY</sup>	<300	<0.5	<0.5	<0.5	2.3	--	<0.5	18	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
	11/9/05	8.02	290 <sup>Y</sup>	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	14	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
	3/21/06	10.84	390	--	97 <sup>LY</sup>	<300	1	<0.5	0.6	<0.5	--	<0.5	16	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
	8/7/06	9.15	720	--	130 <sup>LY</sup>	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	18	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
	10/27/06	9.16	250	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	12	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
	3/20/07	9.61	290 <sup>Y</sup>	--	74 <sup>LY</sup>	<300	<0.5	<0.5	0.58	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
MW-2	3/3/94	9.66	110	<50	<50	<500	<0.5	1.7	0.58	2.7	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	6/6/94	8.88	100	<50	<50	<500	11	<0.5	0.7	1.1	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	9/7/94	8.31	<50	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	12/22/94	8.76	<50	<50	<50	<500	0.8	<0.5	<0.5	0.8	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	3/17/95	10.18	180	100	<50	<500	31	<0.5	1	1.8	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	6/27/95	9.33	80	<50	<50	<500	6	<0.5	<0.5	<0.5	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	9/18/95	8.36	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	8/21/98	8.12	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	--	
	2/24/99	10.12	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	--	
	6/30/00	14.24	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	2.0	--	--	--	--	--	--	--	--	--	
	4/27/01	8.71	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	--	
	4/15/05	9.03	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
	8/1/05	8.36	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
	11/9/05	8.49	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
	3/21/06	9.01	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
	8/7/06	8.19	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
	10/27/06	8.11	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
	3/20/07	7.51	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	
MW-3	3/3/94	9.47	85	<50	<50	<500	<0.5	0.77	<0.5	3.7	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	6/6/94	8.69	100	110+	<50	<500	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	2.5	0.8	--	2.1	<0.5	
	9/7/94	8.22	220	<50	<50	<500	11	1.8	2.6	3.5	--	--	--	--	--	<0.5	<0.5	--	0.6	<0.5	



**Table 2**  
**Chemical Concentrations in Groundwater**  
**2250 Telegraph Avenue, Oakland, California**



Well	Date	Groundwater Elevation MSL (feet)	Petroleum Hydrocarbons				Volatile Organics														
			TVH as Gasoline µg/l	TEH as Kerosene µg/l	TEH as Diesel µg/l	TEH as Motor Oil µg/l	Benzene µg/l	Toluene µg/l	Ethyl-benzene µg/l	Xylenes µg/l	MTBE -8020 µg/l	MTBE -8260 µg/l	TBA µg/l	DIPE µg/l	ETBE µg/l	TAME µg/l	1,1,1-TCA µg/l	1,2-DCA µg/l	1,2-DBA µg/l		
<b>Soil Gas ESL*</b>																					
<b>Groundwater ESL**</b>			NV	NV	NV	NV	540	380,000	170,000	160,000	24,000										
MW-3 Contd	12/22/94	9.23	130	95+	<50	<500	3.8	0.5	0.6	1.2	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	3/17/95	10.12	1,500	270	<50	<500	83	6	10	15	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	6/27/95	9.03	2,500	<50	<50	<500	330	8.9	8.1	20	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	9/18/95	8.43	1,500	--	770+	--	400	11	2.2	3.3	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	8/21/98	8.61	2,300	--	600+	--	410	9.3	36	25	<10	--	--	--	--	--	--	--	--	--	
	2/24/99	10.39	55	--	110+	--	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	
	6/30/00	10.83	110	--	83+	--	<0.5	<0.5	0.51	<0.5	<2.0	--	--	--	--	--	--	--	--	--	
	4/27/01	8.67	<50	--	690+	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	--	
	4/14/05	9.12	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	8/1/05	9.39	410	--	150 <sup>HY</sup>	750	17	<0.5	0.87c	1.4	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	11/9/05	8.73	1,100 <sup>Y</sup>	--	110 <sup>LY</sup>	<300	150	3.4	6.1	3.8	--	<0.5	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	3/21/06	10.20	100	--	61 <sup>Y</sup>	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	8/7/06	8.67	4,000 <sup>Y</sup>	--	280 <sup>LY</sup>	<300	630	9	31	12	--	<0.5	18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	10/27/06	8.34	5,300	--	240 <sup>LY</sup>	<300	950	13	17	11	--	<10	<200	<10	<10	<10	<10	<10	<10	--	
	3/20/07	9.25	1,000 <sup>LY</sup>	--	180 <sup>LY</sup>	<300	100	1.5	2.1	3.3	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
MW-4	3/3/94	8.99	4,300	<50	240	<500	220	20	7.5	17	--	--	--	--	--	<0.5	5.9	--	<0.5	4.4	
	6/6/94	8.03	4,400	<50	800+	<500	140	<0.5	<0.5	<0.5	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5	
	9/7/94	7.02	10,000	490+	280+	<500	84	<0.5	42	69	--	--	--	--	--	<0.5	4.4	--	0.5	4.3	
	12/22/94	7.62	2,400	450+	54+	<500	11	<0.5	7.1	11	--	--	--	--	--	<0.5	3.6	--	3.6	<0.5	
	3/17/95	9.78	2,200	380	160+	<500	<0.5	<0.5	7.9	10	--	--	--	--	--	<0.5	1.7	--	<0.5	4.5	
	6/27/95	8.83	3,100	<50	82	<500	<0.5	<0.5	13	19	--	--	--	--	--	<0.5	2.3	--	<0.5	4.8	
	9/18/95	8.04	3,000	--	1,231+	--	12	<0.7	6.9	8.3	--	--	--	--	--	<0.5	1.9	--	<0.5	4.0	
	8/21/98	8.02	1,700	--	600+	--	8.2	12	13	5.2	<2.0	-	--	--	--	--	--	--	--	--	
	2/24/99	9.09	2,700	--	2,100+	--	4.3	0.64	<0.5	0.54	--	<2.0	--	--	--	--	--	--	--	--	
	6/30/00	11.74	6,700	--	3,200+	--	3.1	1.7	11	16.7	27	--	--	--	--	--	--	--	--	--	
	4/27/01	8.62	1,900	--	710	--	<0.5	<0.5	<0.5	<0.5	14	--	--	--	--	--	--	--	--	--	
	4/14/05	7.87	2,900	--	2,200 <sup>HY</sup>	2,500	<0.5	<0.5	<0.5	5.1	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	8/1/05	8.10	2,000	--	2,100 <sup>HY</sup>	3400 <sup>L</sup>	<0.5	<0.5	<0.5	5.8c	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	11/9/05	7.46	2,000 <sup>Y</sup>	--	1,900 <sup>HY</sup>	2,300 <sup>L</sup>	1.2	<0.5	<0.5	0.8	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	3/21/06	9.88	2,200	--	2,800 <sup>HY</sup>	4,000 <sup>L</sup>	1.2	<0.5	<0.5	0.7	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	8/7/06	7.98	2,500 <sup>Y</sup>	--	4,700 <sup>HY</sup>	7,200 <sup>L</sup>	0.6	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	10/27/06	7.13	2,200 <sup>Y</sup>	--	2,500 <sup>HY</sup>	3,200 <sup>L</sup>	0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	3/20/07	8.68	2,700	--	2,900 <sup>HY</sup>	3,500 <sup>L</sup>	0.77	<0.5	<0.5	0.67	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
MW-5	6/26/97	7.58	120	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	<0.5	<0.5	--	1.6	<0.5	
	8/21/98	7.70	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	--	
	2/24/99	9.16	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	<2.0	--	--	--	--	--	--	--	--	
	6/30/00	8.39	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	5.1	--	--	--	--	--	--	--	--	--	
	4/27/01	8.42	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	--	
	4/14/05	8.82	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	8/1/05	7.86	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	11/9/05	8.10	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	3/21/06	9.44	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	8/7/06	7.75	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	10/27/06	7.54	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	
	3/20/07	8.35	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	



**Table 2**  
**Chemical Concentrations in Groundwater**  
**2250 Telegraph Avenue, Oakland, California**



Well	Date	Groundwater Elevation MSL (feet)	Petroleum Hydrocarbons				Volatile Organics														
			TVH as Gasoline µg/l	TEH as Kerosene µg/l	TEH as Diesel µg/l	TEH as Motor Oil µg/l	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE -8020 µg/l	MTBE -8260 µg/l	TBA	DIPE	ETBE	TAME	1,1,1-TCA µg/l	1,2-DCA µg/l	1,2-DBA µg/l	PCE	Chloro-Benzene µg/l
			NV	NV	NV	NV	540	380,000	170,000	160,000	24,000										
		Soil Gas ESL*	NV	NV	NV	NV	1	40	30	20	5										
		Groundwater ESL**	100	100	100	100															
MW-6	6/26/97	7.47	1,500+	--	450+	--	<0.5	<0.5	11	<0.5	-	-	--	--	--	<0.5	<0.5	--	<0.5	1.7	
	8/21/98	7.36	1,400	--	540+	--	<0.5	3.6	5.6	0.4	5.7	3.2	--	--	--	--	--	--	--	--	
	2/24/99	9.04	1,600	--	600+	--	<0.5	<0.5	0.56	<0.5	--	2.3	--	--	--	--	--	--	--	--	
	6/30/00	8.04	1,900	--	360+	--	0.56	3	5.4	3.5	30	--	--	--	--	--	--	--	--	--	
	4/27/01	8.26	1,600	--	440	--	<0.5	<0.5	<0.5	<0.5	3.3	--	--	--	--	--	--	--	--	--	
	4/14/05	8.81	2,100	--	890 <sup>LY</sup>	<300	<0.5	<0.5	<0.5	5.9	--	0.7	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	8/1/05	7.82	2,100	--	670 <sup>LY</sup>	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	11/9/05	NA	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/21/06	9.25	1,900	--	850 <sup>LY</sup>	<300	<0.5	<0.5	<0.5	<0.5	--	0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	8/7/06	7.77	2,200 <sup>Y</sup>	--	940 <sup>LY</sup>	<300	<0.5	<0.5	<0.5	<0.5	--	0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	10/27/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/20/07	8.26	2,000 <sup>Y</sup>	--	670 <sup>LY</sup>	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--

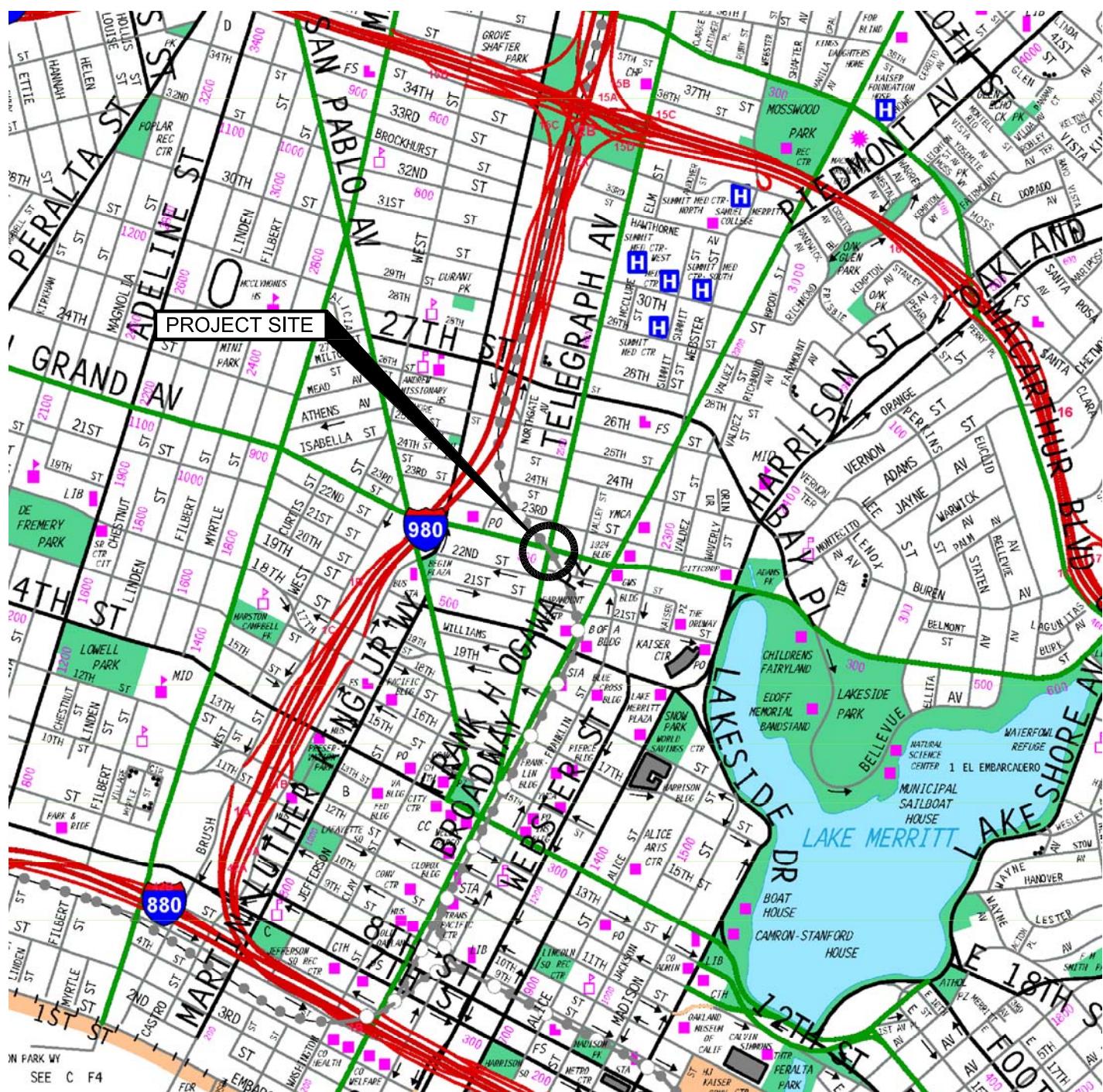
Notes:

DCA = Dichloroethane  
 DBA = Dibromoethane  
 TCA = Trichloroethane  
 PCE = Tetrachloroethene  
 MTBE = Methyl tert butyl ether  
 TBA = Tert butyl alcohol  
 DIPE = Isopropyl alcohol  
 ETBE = Ethyl tert butyl ether  
 TAME = Methyl tert amyl ether  
 -- = Chemical not tested for  
 NR = Hydrocarbon range not reported by laboratory  
 + = Uncategorized hydrocarbons quantified in ranges specified  
 mg/l = milligrams per liter = parts per million

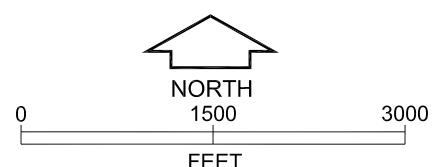
µg/l = micrograms per liter = parts per billion  
 <1 = Chemical not present at a concentration greater than the laboratory detection limit shown or stated on test reports  
 C = Presence Confirmed, but RPD between columns exceeds 40%  
 Y = Sample exhibits chromatographic pattern which does not resemble standard  
 H = Heavier hydrocarbon contributed to the quantitation  
 L = Lighter hydrocarbon contributed to the quantitation  
 \* = Environmental Screening Levels established by the San Francisco Bay Regional Water Quality Control Board Table E-1 Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns  
 \*\* = Environmental Screening Levels established by the San Francisco Bay Regional Water Quality Control Board Table F-1a Groundwater Screening Levels (groundwater is a current potential drinking water resource)  
 NA = Not Accessible During This Sampling Event  
 -- = Not Analyzed



## **PLATES**



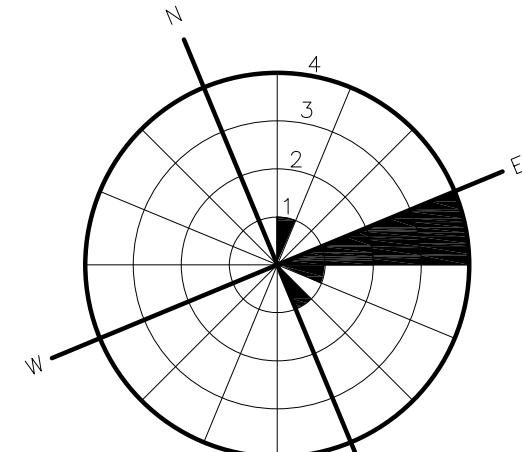
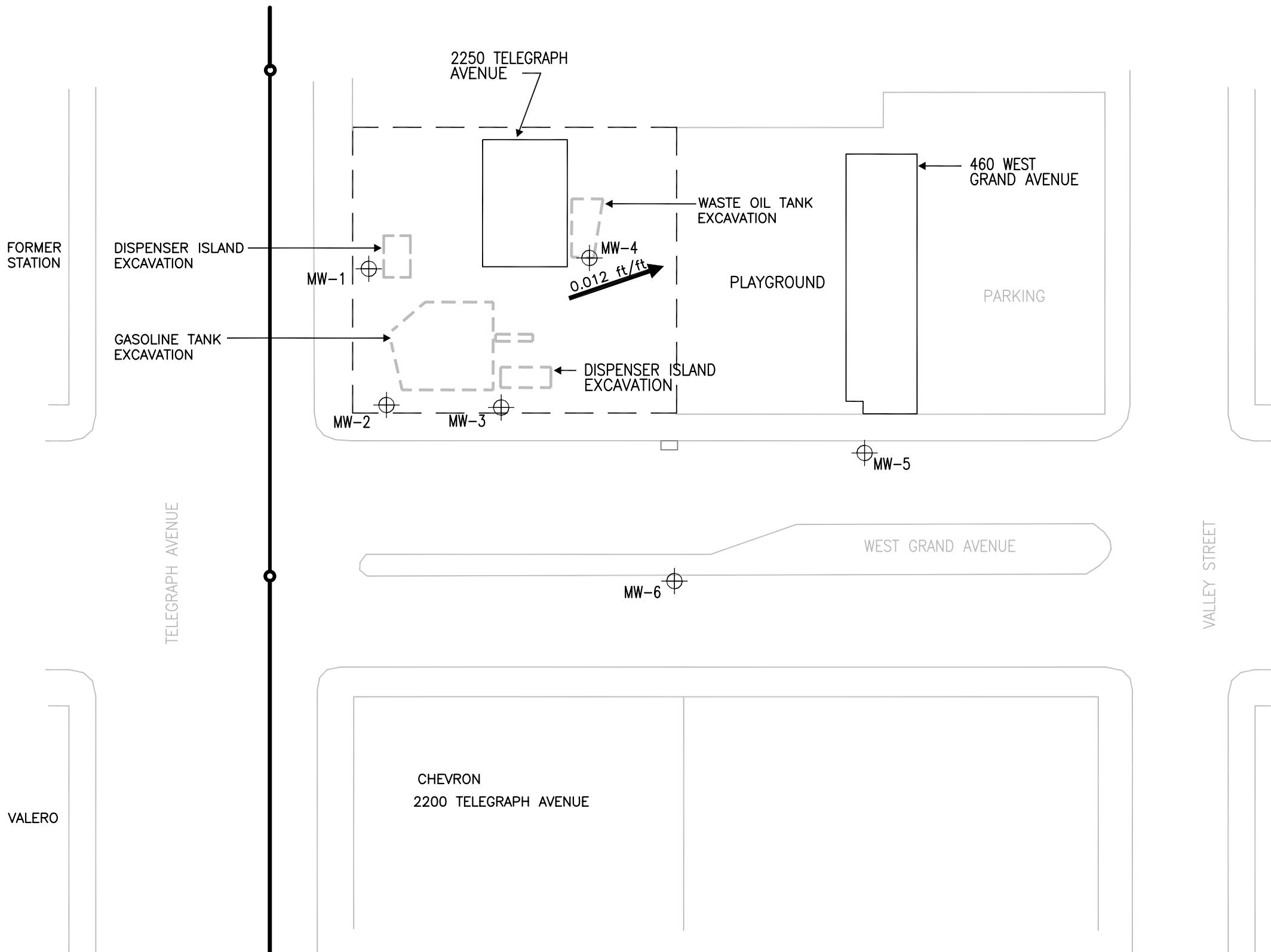
SOURCE: This Site Vicinity Map is based on The Thomas Guide Digital Edition 2003, Bay Area Metro, Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara Counties.



VICINITY MAP  
2250 Telegraph Avenue  
Oakland, California

PLATE 1

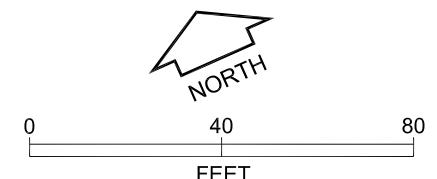




ROSE DIAGRAM SHOWING GROUNDWATER FLOW DIRECTION

EXPLANATION

- EXISTING STRUCTURE
- - - LIMITS OF EXCAVATIONS
- MONITORING WELL LOCATION
- APPROXIMATE GROUNDWATER FLOW DIRECTION



SITE PLAN  
2250 Telegraph Avenue  
Oakland, California



**APPENDIX A**  
**WELL SAMPLING FORMS, ANALYTICAL TEST REPORT**  
**AND CHAIN OF CUSTODY FORM**



## **WELL SAMPLING FORM**

PROJECT NAME: 8750 Telegraph Avenue  
PROJECT NO.: 609.604  
SAMPLED BY: C  
DATE: 3/20/07  
WEATHER: Hana/Nathrin  
rainy

WELL NO.: MW-1  
WELL CASING DIAMETER: 3"

TOTAL DEPTH OF CASING (BTOC): 18.3 FEET  
DEPTH TO GROUNDWATER (BTOC): (A) 94 FEET  
FEET OF WATER IN WELL: 7.57 FEET

CALCULATED PURGE VOLUME: 3.6 gallons  
(feet of water \* casing dia<sup>2</sup> \* .0408 \* # of Volumes)

FREE PRODUCT: None

PURGE METHOD: baster

MEASUREMENT METHOD: ELECTRONIC SOUNDER or OTHER \_\_\_\_\_

## FIELD MEASUREMENTS

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

TIME SAMPLED: 1345

#### SAMPLING METHOD

bailor

CONTAINERS / PRESERVATIVE: \_\_\_\_\_

## LITER

1. *What is the name of the author?*

LITER

Poly

**OTHER**

ANAL YSES: (Note if any samples are field filtered)

- TEHd, TEHmo (8015 w/ Silica gel)       Pesticides (8080)  
 TVHg, BTEX, MTBE (8015/8020)       PCBs (8080)  
 VOCs (8260)       Sulfate (300.0)  
 HVOCs (8260)       Nitrate (300.0)  
 Title 22 Metals (6010/9000)       Fe<sup>2+</sup> - Field Filtered

**MISC FIELD OBSERVATION:**



## WELL SAMPLING FORM

PROJECT NAME:

2250 Telegraph Avenue

PROJECT NO.:

909.004  
Hana/Nathan  
3/26/07  
Sprinkling

SAMPLED BY:

DATE:

WEATHER:

WELL NO.: MW-2

2"

WELL CASING DIAMETER:

TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOP): 16.85 FEET

CALCULATED PURGE VOLUME: 5.1 gallons  
(feet of water \* casing dia<sup>2</sup> \* .0408 \* # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 12.52 FEET

FREE PRODUCT:

FEET OF WATER IN WELL: 4.33 FEET

PURGE METHOD:

MEASUREMENT METHOD: ELECTRONIC SOUNDER or OTHER

## FIELD MEASUREMENTS

GALLONS REMOVED	TIME	Temp	pH	CONDUCTIVITY (µMHOES/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
Downhole (Pre-Purge)	1306	18.76	6.68	52.9	0.391	93.8	1.68	
1	1315	18.20	6.95	534.6	6.365	72.2	5.52	light brown,
2	1315	18.20	6.95	5.9	0.387	30.3	7.4	in sand
2.5	1318	18.23	7.02	22.5	0.787	29.4	7.1	

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP):

TIME SAMPLED: 1320

SAMPLING METHOD

bailer

CONTAINERS / PRESERVATIVE:

/ 40 ML

/ LITER

/ Poly

/ OTHER

ANALYSES: (Note if any samples are field filtered)

- TEHd, TEHmo (8015 w/ Silica gel)
- TVHg, BTEX, MTBE (8015/8020)
- VOCs (8260)
- HVOCS (8260)
- Title 22 Metals (6010/9000)

- Pesticides (8080)
- PCBs (8080)
- Sulfate (300.0)
- Nitrate (300.0)
- Fe<sup>2+</sup> - Field Filtered

MISC FIELD OBSERVATION:

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## **WELL SAMPLING FORM**

PROJECT NAME: 1735  
PROJECT NO.: 508-684  
SAMPLED BY: Papa, No. 2160  
DATE: 5/20/72  
WEATHER: Rainy

WELL NO.: MW-5  
WELL CASING DIAMETER: 2"  
TOC ELEVATION:

TOTAL DEPTH OF CASING (BTDC): 16.30 FEET

CALCULATED PURGE VOLUME: 3.7 gallons  
(feet of water \* casing dia<sup>2</sup> \* .0408 \* # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 9-12 FEET

FREE PRODUCT: [Get a free sample](#)

FEET OF WATER IN WELL:        FEET

PURGE METHOD: 3

**MEASUREMENT METHOD:** ELECTRONIC SOUNDER or OTHER \_\_\_\_\_

## FIELD MEASUREMENTS

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

TIME SAMPLED: 100

SAMPLING METHOD Random

CONTAINERS / PRESERVATIVE: \_\_\_\_\_

Poly                          OTHER

**ANALYSES:** (Note if any samples are field filtered)

TEHd, TEHmo (8015 w/ Silica gel)  
 TVHg, BTEX, MTBE (8015/8020)  
 VOCs (8260)  
 HVOCs (8260)  
 Title 22 Metals (6010/9000)

Pesticides (8080)  
 PCBs (8080)  
 Sulfate (300.0)  
 Nitrate (300.0)  
 Fe<sup>2+</sup> - Field Filtered

MISC FIELD OBSERVATION: 5:00 AM 10/20/2018 21800m 080°



## WELL SAMPLING FORM

PROJECT NAME:

2250 Telegraph Avenue

PROJECT NO.:

609-24

SAMPLED BY:

Hana/Nathan

DATE:

3/20/07

WEATHER:

WELL NO.:

MW-4

2"

WELL CASING DIAMETER:

TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC): 18.30 FEETCALCULATED PURGE VOLUME: 348 gallons  
(feet of water \* casing dia<sup>2</sup> \* .0408 \* # of Volumes)DEPTH TO GROUNDWATER (BTOC): 11.20 FEETFREE PRODUCT: 1.10FEET OF WATER IN WELL: 7.10 FEETPURGE METHOD: 1000 L/S

MEASUREMENT METHOD: ELECTRONIC SOUNDER or OTHER \_\_\_\_\_

## FIELD MEASUREMENTS

GALLONS REMOVED	TIME	Temp	pH	CONDUCTIVITY (µMHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
Downhole (Pre-Purge)	17:56	18.52	6.62	660	0.487	-63.2	2.79	
	17:57	18.57	6.77	682	0.480	-79.1	5.80	clear, blue
	17:58	18.53	6.77	662	0.481	-94.3	3.7	
2.5	17:59	18.63	6.78	269	0.454	-92.3	3.7	

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): \_\_\_\_\_ TIME SAMPLED: 13:35SAMPLING METHOD: bakerCONTAINERS / PRESERVATIVE: / 40 ML / LITER/ Poly / OTHER

ANALYSES: (Note if any samples are field filtered)

- TEHd, TEHmo (8015 w/ Silica gel)
- TVHg, BTEX, MTBE (8015/8020)
- VOCs (8260)
- HVOCs (8260)
- Title 22 Metals (6010/9000)

- Pesticides (8080)
- PCBs (8080)
- Sulfate (300.0)
- Nitrate (300.0)
- Fe <sup>2+</sup> - Field Filtered

MISC FIELD OBSERVATION: no filter or doc shell



## WELL SAMPLING FORM

PROJECT NAME: 2850 Telegraph Avenue  
PROJECT NO.: 609.004  
SAMPLED BY: Hana Nathan  
DATE: 3/20/07  
WEATHER: drizzle, overcast

WELL NO.: MND-5  
WELL CASING DIAMETER: 2"  
TOC ELEVATION: \_\_\_\_\_

TOTAL DEPTH OF CASING (TOC): 17.4 FEET

CALCULATED PURGE VOLUME:  
(feet of water \* casing dia<sup>2</sup> \* .0408 \* # of Volumes) 4.76 gallons

DEPTH TO GROUNDWATER (TOC): 7.67 FEET

FREE PRODUCT:

FEET OF WATER IN WELL: 9.73 FEET

PURGE METHOD:

MEASUREMENT METHOD: ELECTRONIC SOUNDER or OTHER \_\_\_\_\_

## FIELD MEASUREMENTS

GALLONS REMOVED	TIME	Temp	pH	CONDUCTIVITY ( $\mu$ MHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
Downhole (Pre-Purge)	<u>925</u>	<u>17.64</u>	<u>7.22</u>	<u>419</u>	<u>0.313</u>	<u>108.9</u>	<u>4.50</u>	
2	<u>951</u>	<u>18.22</u>	<u>6.38</u>	<u>421</u>	<u>0.314</u>	<u>132.5</u>	<u>2.96</u>	turbid, hgh brown
4	<u>953</u>	<u>18.23</u>	<u>6.38</u>	<u>420</u>	<u>0.314</u>	<u>132.6</u>	<u>2.71</u>	no odor
5	<u>955</u>	<u>18.24</u>	<u>6.37</u>	<u>420</u>	<u>0.313</u>	<u>133.9</u>	<u>2.58</u>	

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (TOC): \_\_\_\_\_

TIME SAMPLED: 1000

SAMPLING METHOD

bailer

CONTAINERS / PRESERVATIVE:

/  
40 ML

/  
LITER

/  
Poly

/  
OTHER

ANALYSES: (Note if any samples are field filtered)

TEHd, TEHmo (8015 w/ Silica gel)  
 TVHg, BTEX, MTBE (8015/8020)  
 VOCs (8260)  
 HVOCs (8260)  
 Title 22 Metals (6010/9000)

Pesticides (8080)  
 PCBs (8080)  
 Sulfate (300.0)  
 Nitrate (300.0)  
 Fe<sup>2+</sup> - Field Filtered

MISC FIELD OBSERVATION:

no odor



## WELL SAMPLING FORM

PROJECT NAME:

2250 Telegraph Avenue

PROJECT NO.:

609.vt

SAMPLED BY:

Hana/Nathan

DATE:

3/20/07

WEATHER:

rain (hard)

WELL NO.:

MW-6  
8"

WELL CASING DIAMETER:

TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC): 18.95 FEETCALCULATED PURGE VOLUME:  
(feet of water \* casing dia<sup>2</sup> \* .0408 \* # of Volumes) 4.33 gallonsDEPTH TO GROUNDWATER (BTOC): 10.10 FEET

FREE PRODUCT:

FEET OF WATER IN WELL: 8.85 FEET

PURGE METHOD:

NOM  
bailey

MEASUREMENT METHOD: ELECTRONIC SOUNDER or OTHER \_\_\_\_\_

## FIELD MEASUREMENTS

GALLONS REMOVED	TIME	Temp	pH	CONDUCTIVITY ( $\mu$ MHOES/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
Downhole (Pre-Purge)	1035	19.61	6.68	896	0.643	-33.9	3.53	
1.5	1044	19.33	6.83	894	0.651	-82.0	3.40	odor, clear, some
2.5	1048	19.44	6.82	900	0.654	-86.1	2.76	cloudiness
4.5	1050	19.49	6.82	902	0.655	-86.3	1.59	

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): \_\_\_\_\_

TIME SAMPLED: 1055

SAMPLING METHOD

Bailey

CONTAINERS / PRESERVATIVE:

/ 40 ML

/ LITER

/ Poly

/ OTHER

ANALYSES: (Note if any samples are field filtered)

- TEHd, TEHmo (8015 w/ Silica gel)
- TVHg, BTEX, MTBE (8015/8020)
- VOCs (8260)
- HVOCs (8260)
- Title 22 Metals (6010/9000)

- Pesticides (8080)
- PCBs (8080)
- Sulfate (300.0)
- Nitrate (300.0)
- Fe<sup>2+</sup> - Field Filtered

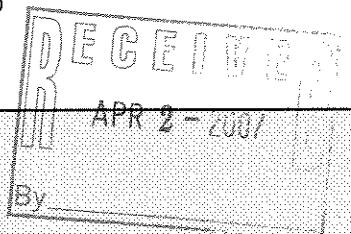
MISC FIELD OBSERVATION:

petroleum odor



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

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



A N A L Y T I C A L   R E P O R T

Prepared for:

Fugro West Inc.  
1000 Broadway  
Suite 440  
Oakland, CA 94607

Date: 29-MAR-07  
Lab Job Number: 193597  
Project ID: 609.004  
Location: 2250 Telegraph Av. Oakland

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

Reviewed by: Robert E. Butler  
Project Manager

Reviewed by: [Signature]  
Operations Manager

This package may be reproduced only in its entirety.

NELAP # 01107CA

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: 66061

## CASE NARRATIVE

Laboratory number: 193597  
Client: Fugro West Inc.  
Project: 609.004  
Location: 2250 Telegraph Av. Oakland  
Request Date: 03/21/07  
Samples Received: 03/21/07

This hardcopy data package contains sample and QC results for six water samples, requested for the above referenced project on 03/21/07. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

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

No analytical problems were encountered.

193597

**ES-F10 CHAIN OF CUSTODY**

**PROJECT NAME:** 2250 Telegraph Avenue

PROJECT NO.: 609.004

LAB: C&T

PROJECT CONTACT: Obi Nzewi

### TURNAROUND: Standard

SAMPLED BY: Hanako Zeidenberg

CHAIN OF CUSTODY RECORD				COMMENTS & NOTES:	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME		
<i>Hanaka Zeiley</i>	3/21/07 1335	<i>Ruth A.</i>	3/21/07 1335		
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME		
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME		
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME		
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME		

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/06

Note: If this is a printed copy, please check the online QMS to ensure that it is the latest version.

**FUGRO WEST, INC.**  
1000 Broadway, Suite 200  
Oakland, California 94607  
Tel: 510.268.0461 Fax: 510.268.0137

intact cold LC

## COOLER RECEIPT CHECKLIST

Login#: 193597 Date Received: 3-21-07 Number of Coolers: 2  
Client: Fugro Project: 609,009 2250 Telegraph Ave

### A. Preliminary Examination Phase

Date Opened: 3-21-07 By (print): Robert Butler (sign) Robert Butler

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES  NO
- If YES, enter carrier name and airbill number: \_\_\_\_\_
2. Were custody seals on outside of cooler? ..... YES  NO
- How many and where? \_\_\_\_\_ Seal date: \_\_\_\_\_ Seal name: \_\_\_\_\_
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES  NO
4. Were custody papers dry and intact when received? ..... YES  NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES  NO
6. Did you sign the custody papers in the appropriate place? ..... YES  NO
7. Was project identifiable from custody papers? ..... YES  NO   
If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES  NO   
Type of ice: ice Temperature: not blk - cold

### B. Login Phase

Date Logged In: 3-21-07 By (print): Robert Butler (sign) Robert Butler

1. Describe type of packing in cooler: ice bags & bubble wrap
2. Did all bottles arrive unbroken? ..... YES  NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES  NO
4. Did bottle labels agree with custody papers? ..... YES  NO
5. Were appropriate containers used for the tests indicated? ..... YES  NO
6. Were correct preservatives added to samples? ..... YES  NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES  NO
8. Were bubbles absent in VOA samples? If NO, list sample IDs below ..... YES  NO
9. Was the client contacted concerning this sample delivery? ..... YES  NO   
If YES, give details below.

Who was called? \_\_\_\_\_ By whom? \_\_\_\_\_ Date: \_\_\_\_\_

Additional Comments:

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**Gasoline by GC/MS**

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	123376
Lab ID:	193597-001	Sampled:	03/20/07
Matrix:	Water	Received:	03/21/07
Units:	ug/L	Analyzed:	03/22/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	290 Y	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	0.58	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	#REC	Limits
Dibromofluoromethane	107	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	104	80-120
Bromofluorobenzene	96	80-122

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Data File: \\GCMSSERVER\DD\chem\MSV0A10.i\032207.b\JCM31TVH.D

Date : 22-MAR-2007 23:38

Client ID: DYNA P&amp;T

Sample Info: S,193597-001

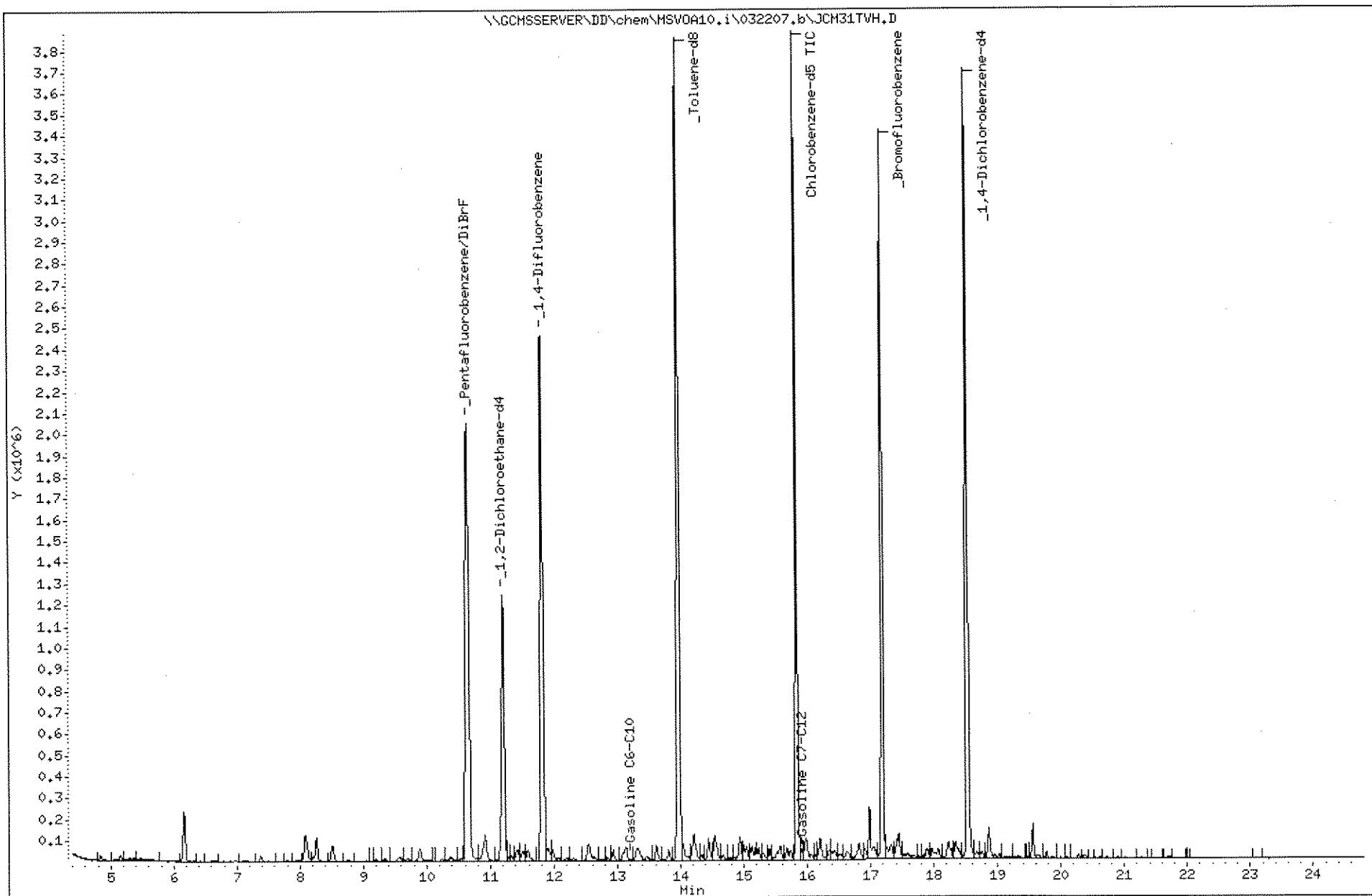
*MW-1*

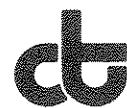
Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:





Curtis &amp; Tompkins, Ltd.

**Gasoline by GC/MS**

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	123376
Lab ID:	193597-002	Sampled:	03/20/07
Matrix:	Water	Received:	03/21/07
Units:	ug/L	Analyzed:	03/23/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	97	79-134
Toluene-d8	105	80-120
Bromofluorobenzene	94	80-122

ND= Not Detected

RL= Reporting Limit



Curtis &amp; Tompkins, Ltd.

**Gasoline by GC/MS**

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-3	Units:	ug/L
Lab ID:	193597-003	Sampled:	03/20/07
Matrix:	Water	Received:	03/21/07

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	1,000 L Y	50	1.000	123481	03/26/07
tert-Butyl Alcohol (TBA)	ND	10	1.000	123481	03/26/07
Isopropyl Ether (DIPE)	ND	0.50	1.000	123481	03/26/07
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	123481	03/26/07
Methyl tert-Amyl Ether (TAME)	ND	0.50	1.000	123481	03/26/07
MTBE	ND	0.50	1.000	123481	03/26/07
1,2-Dichloroethane	ND	0.50	1.000	123481	03/26/07
Benzene	100	1.0	2.000	123512	03/27/07
Toluene	1.5	0.50	1.000	123481	03/26/07
1,2-Dibromoethane	ND	0.50	1.000	123481	03/26/07
Ethylbenzene	2.1	0.50	1.000	123481	03/26/07
m,p-Xylenes	3.3	0.50	1.000	123481	03/26/07
o-Xylene	ND	0.50	1.000	123481	03/26/07

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	105	80-123	1.000	123481	03/26/07
1,2-Dichloroethane-d4	95	79-134	1.000	123481	03/26/07
Toluene-d8	104	80-120	1.000	123481	03/26/07
Bromofluorobenzene	93	80-122	1.000	123481	03/26/07

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Data File: \\GCMSSERVER\DD\chem\MSV0A10.i\032607.b\JCQ20TVH.D

Date : 26-MAR-2007 17:14

Client ID: DYNA P&amp;T

Sample Info: S.193597-003

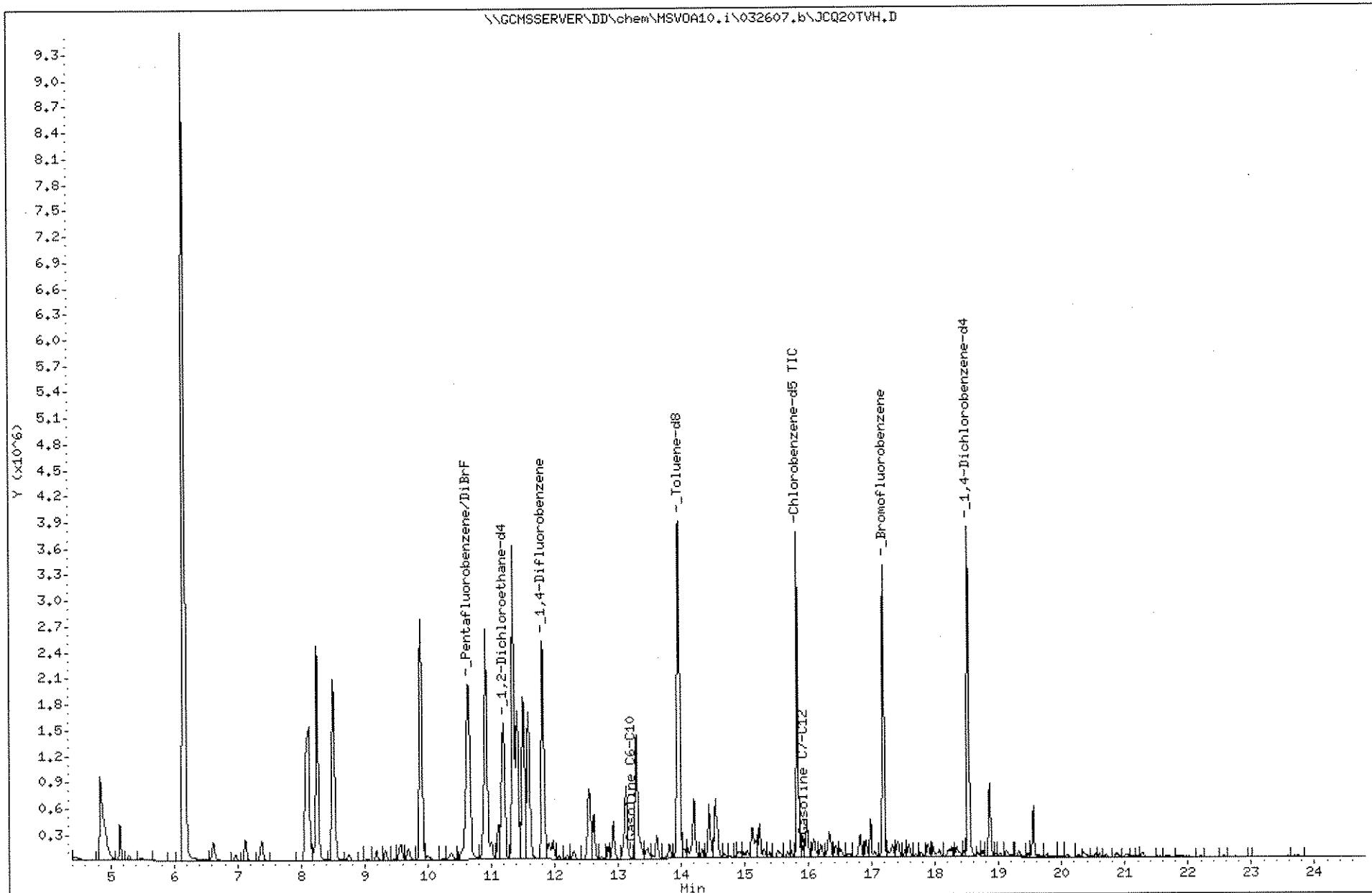
*m w - 3*

Instrument: MSV0A10.i

Column phase:

Operator: WOA

Column diameter: 2.00



**Gasoline by GC/MS**

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	123481
Lab ID:	193597-004	Sampled:	03/20/07
Matrix:	Water	Received:	03/21/07
Units:	ug/L	Analyzed:	03/26/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	2,700 Y	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	0.77	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	0.67	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	94	80-122

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

Data File: \\GCMSSERVER\DD\chem\MSVDA10.i\032607.b\JCQ21TVH.D

Date : 26-MAR-2007 17:46

Client ID: DYNA P&amp;T

Sample Info: S,193597-004

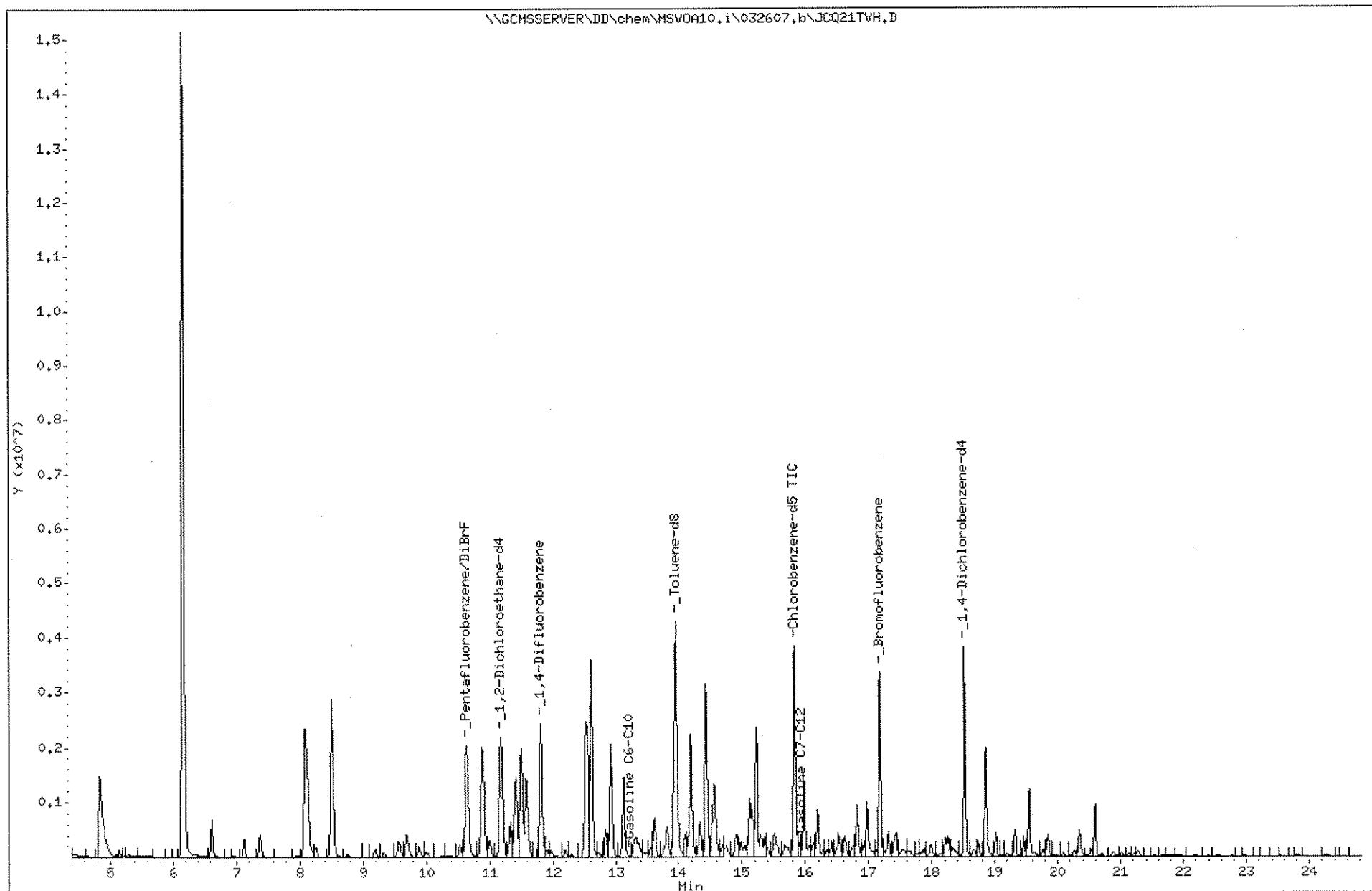
*MW-4*

Instrument: MSVDA10.i

Operator: VOA

Column diameter: 2.00

Column phase:



**Gasoline by GC/MS**

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-5	Batch#:	123481
Lab ID:	193597-005	Sampled:	03/20/07
Matrix:	Water	Received:	03/21/07
Units:	ug/L	Analyzed:	03/26/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	95	79-134
Toluene-d8	103	80-120
Bromofluorobenzene	95	80-122

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

6.0

: GOG12

**Gasoline by GC/MS**

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-6	Batch#:	123481
Lab ID:	193597-006	Sampled:	03/20/07
Matrix:	Water	Received:	03/21/07
Units:	ug/L	Analyzed:	03/26/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	2,000 Y	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	105	80-120
Bromofluorobenzene	91	80-122

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Data File: \\GCMSSERVER\DD\chem\MSVDA10.i\032607.b\JCQ23TVH.D

Date : 26-MAR-2007 18:51

Client ID: DYNAP&amp;T

Sample Info: S,193597-006

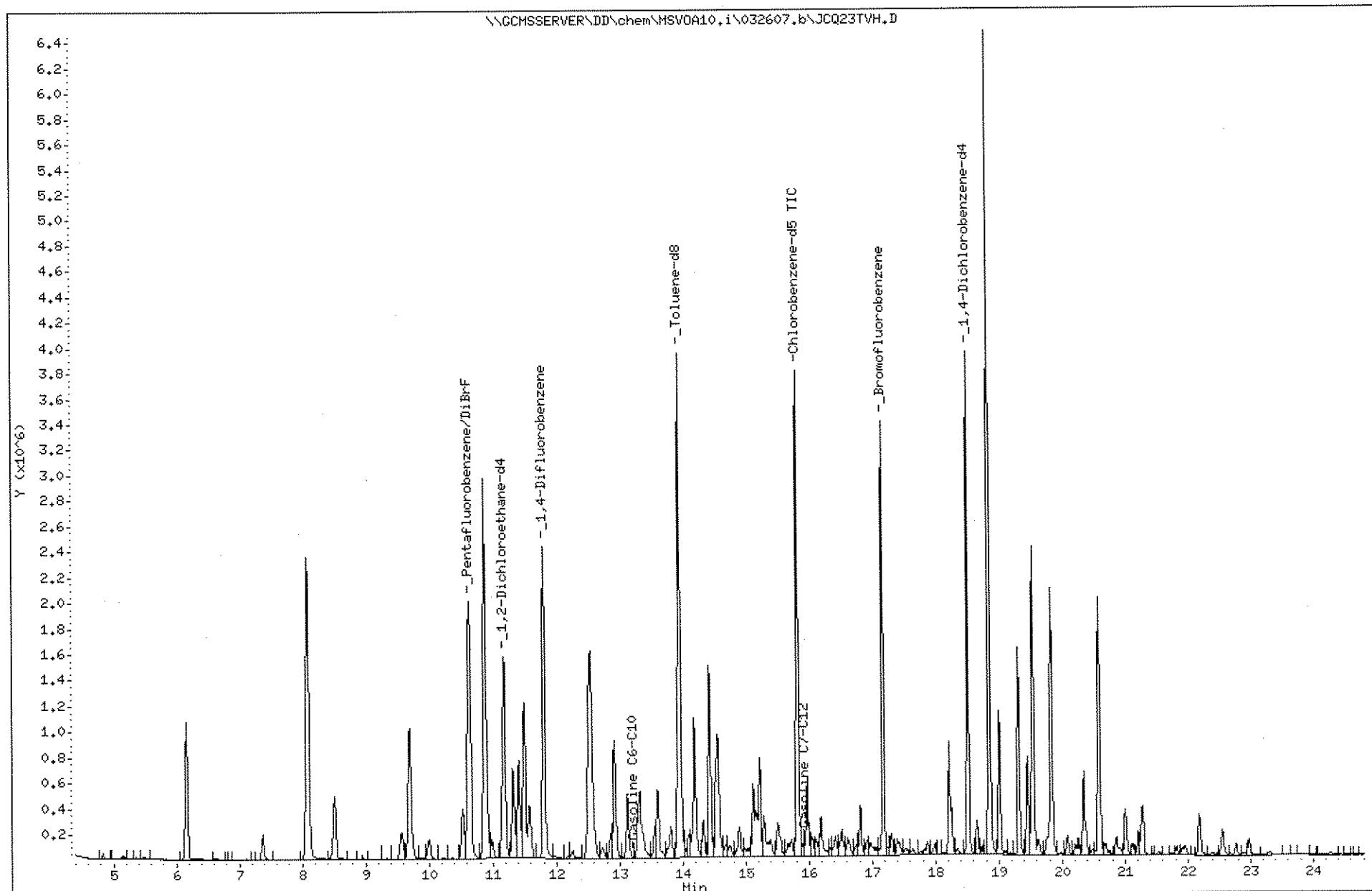
MW - 6

Instrument: MSVDA10.i

Operator: VOA

Column diameter: 2.00

Column phase:



## Batch QC Report

**Gasoline by GC/MS**

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC380356	Batch#:	123376
Matrix:	Water	Analyzed:	03/22/07
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	94	79-134
Toluene-d8	103	80-120
Bromofluorobenzene	93	80-122

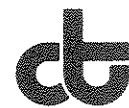
ND= Not Detected

RL= Reporting Limit

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8.0

: 60015



Curtis &amp; Tompkins, Ltd.

## Batch QC Report

## Gasoline by GC/MS

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC380770	Batch#:	123481
Matrix:	Water	Analyzed:	03/26/07
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	95	80-122

ND= Not Detected

RL= Reporting Limit

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11.0

600016



Curtis &amp; Tompkins, Ltd.

## Batch QC Report

## Gasoline by GC/MS

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC380896	Batch#:	123512
Matrix:	Water	Analyzed:	03/27/07
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	NA	
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-123
1,2-Dichloroethane-d4	97	79-134
Toluene-d8	104	80-120
Bromofluorobenzene	97	80-122

NA= Not Analyzed

ND= Not Detected

RL= Reporting Limit

Data File: \\GCHSSERVER\DD\chem\MSV0A10.i\032207.b\JCM10.D

Date : 22-MAR-2007 12:28

Client ID: DYNAP&amp;T

Sample Info: CCV,S5628,0.01/100

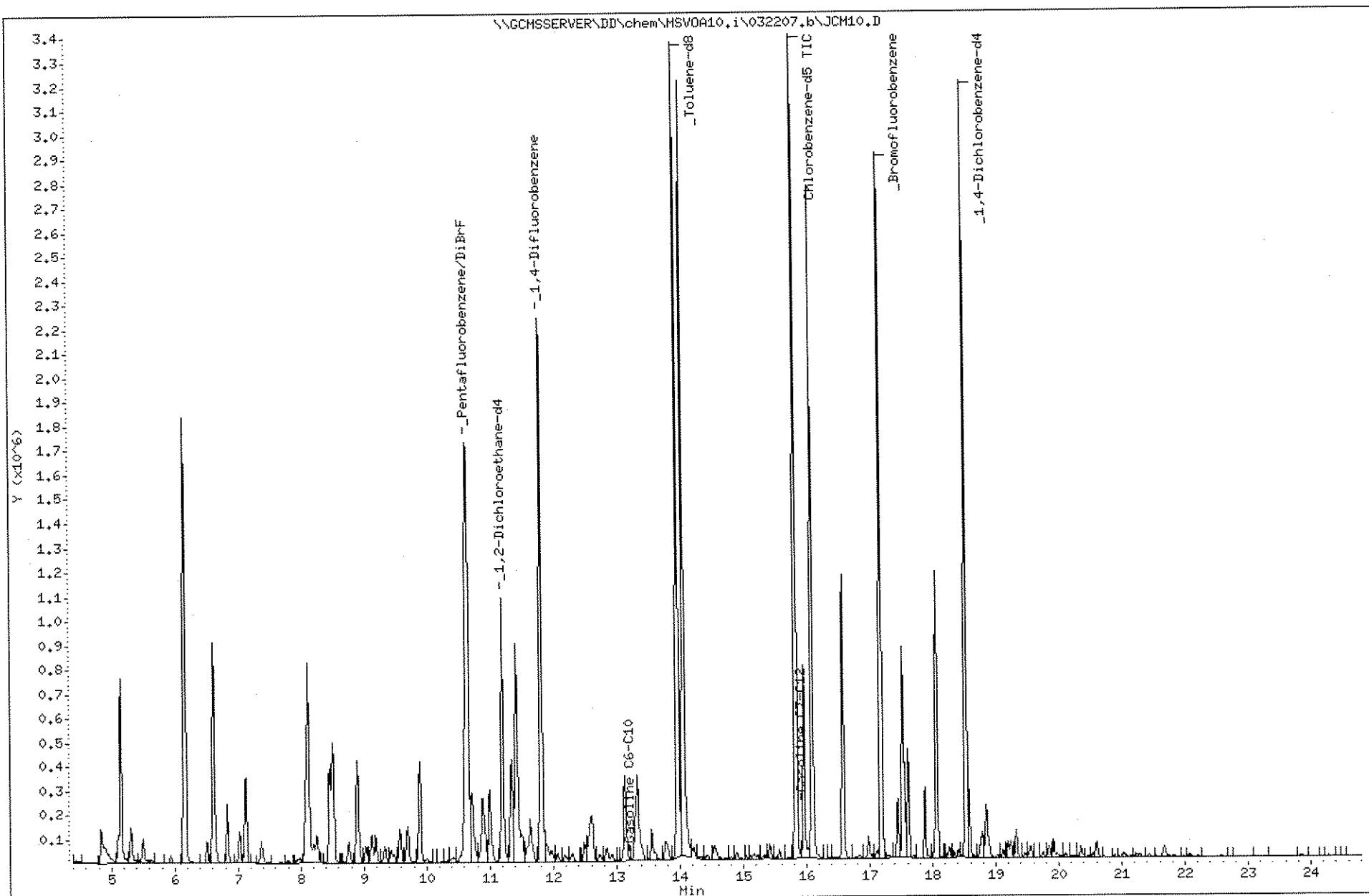
gasoline, DTEx, OxyS

Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:



## Batch QC Report

## Gasoline by GC/MS

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123376
Units:	ug/L	Analyzed:	03/22/07
Diln Fac:	1.000		

Type: BS Lab ID: QC380357

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	155.4	124	68-132
Isopropyl Ether (DIPE)	25.00	26.06	104	65-120
Ethyl tert-Butyl Ether (ETBE)	25.00	23.10	92	75-124
Methyl tert-Amyl Ether (TAME)	25.00	23.40	94	77-120
MTBE	25.00	25.83	103	71-120
1,2-Dichloroethane	25.00	25.97	104	79-121
Benzene	25.00	27.68	111	80-120
Toluene	25.00	29.28	117	80-120
1,2-Dibromoethane	25.00	27.98	112	80-120
Ethylbenzene	25.00	27.37	109	80-124
m,p-Xylenes	50.00	56.99	114	80-127
o-Xylene	25.00	27.59	110	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	94	79-134
Toluene-d8	105	80-120
Bromofluorobenzene	90	80-122

Type: BSD Lab ID: QC380358

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	154.9	124	68-132	0	20
Isopropyl Ether (DIPE)	25.00	27.26	109	65-120	4	20
Ethyl tert-Butyl Ether (ETBE)	25.00	24.52	98	75-124	6	20
Methyl tert-Amyl Ether (TAME)	25.00	23.32	93	77-120	0	20
MTBE	25.00	26.93	108	71-120	4	20
1,2-Dichloroethane	25.00	26.63	107	79-121	2	20
Benzene	25.00	27.72	111	80-120	0	20
Toluene	25.00	28.23	113	80-120	4	20
1,2-Dibromoethane	25.00	28.34	113	80-120	1	20
Ethylbenzene	25.00	26.45	106	80-124	3	20
m,p-Xylenes	50.00	55.01	110	80-127	4	20
o-Xylene	25.00	27.29	109	80-124	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	105	80-120
Bromofluorobenzene	92	80-122

RPD= Relative Percent Difference

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06016

## Batch QC Report

**Gasoline by GC/MS**

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123376
Units:	ug/L	Analyzed:	03/22/07
Diln Fac:	1.000		

Type: BS Lab ID: QC380359

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	891.1	89	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	94	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	92	80-122

Type: BSD Lab ID: QC380360

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	1,000	895.8	90	70-130	1 20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	95	79-134
Toluene-d8	105	80-120
Bromofluorobenzene	92	80-122

RPD= Relative Percent Difference



Curtis &amp; Tompkins, Ltd.

## Batch QC Report

## Gasoline by GC/MS

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123481
Units:	ug/L	Analyzed:	03/26/07
Diln Fac:	1.000		

Type: BS Lab ID: QC380771

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	150.8	121	68-132
Isopropyl Ether (DIPE)	25.00	27.20	109	65-120
Ethyl tert-Butyl Ether (ETBE)	25.00	24.14	97	75-124
Methyl tert-Amyl Ether (TAME)	25.00	24.04	96	77-120
MTBE	25.00	26.88	108	71-120
1,2-Dichloroethane	25.00	25.64	103	79-121
Benzene	25.00	27.20	109	80-120
Toluene	25.00	28.42	114	80-120
1,2-Dibromoethane	25.00	28.34	113	80-120
Ethylbenzene	25.00	27.07	108	80-124
m,p-Xylenes	50.00	56.45	113	80-127
o-Xylene	25.00	27.38	110	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	94	79-134
Toluene-d8	103	80-120
Bromofluorobenzene	91	80-122

Type: BSD Lab ID: QC380772

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	153.2	123	68-132	2	20
Isopropyl Ether (DIPE)	25.00	27.09	108	65-120	0	20
Ethyl tert-Butyl Ether (ETBE)	25.00	23.46	94	75-124	3	20
Methyl tert-Amyl Ether (TAME)	25.00	23.32	93	77-120	3	20
MTBE	25.00	27.18	109	71-120	1	20
1,2-Dichloroethane	25.00	25.28	101	79-121	1	20
Benzene	25.00	26.85	107	80-120	1	20
Toluene	25.00	26.73	107	80-120	6	20
1,2-Dibromoethane	25.00	28.16	113	80-120	1	20
Ethylbenzene	25.00	25.92	104	80-124	4	20
m,p-Xylenes	50.00	53.65	107	80-127	5	20
o-Xylene	25.00	27.11	108	80-124	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	94	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	90	80-122

RPD= Relative Percent Difference

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00021

## Batch QC Report

## Gasoline by GC/MS

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123481
Units:	ug/L	Analyzed:	03/26/07
Diln Fac:	1.000		

Type: BS Lab ID: QC380773

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	959.3	96	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	94	79-134
Toluene-d8	105	80-120
Bromofluorobenzene	90	80-122

Type: BSD Lab ID: QC380774

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	1,000	924.7	92	70-130	4 20

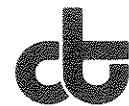
Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	95	79-134
Toluene-d8	104	80-120
Bromofluorobenzene	92	80-122

RPD= Relative Percent Difference

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60022



Curtis &amp; Tompkins, Ltd.

## Batch QC Report

## Gasoline by GC/MS

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123512
Units:	ug/L	Analyzed:	03/27/07
Diln Fac:	1.000		

Type: BS Lab ID: QC380897

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	147.5	118	68-132
Isopropyl Ether (DIPE)	25.00	28.57	114	65-120
Ethyl tert-Butyl Ether (ETBE)	25.00	24.49	98	75-124
Methyl tert-Amyl Ether (TAME)	25.00	23.41	94	77-120
MTBE	25.00	27.62	110	71-120
1,2-Dichloroethane	25.00	26.15	105	79-121
Benzene	25.00	27.21	109	80-120
Toluene	25.00	27.45	110	80-120
1,2-Dibromoethane	25.00	27.48	110	80-120
Ethylbenzene	25.00	25.21	101	80-124
m,p-Xylenes	50.00	52.12	104	80-127
o-Xylene	25.00	26.16	105	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-123
1,2-Dichloroethane-d4	98	79-134
Toluene-d8	104	80-120
Bromofluorobenzene	95	80-122

Type: BSD Lab ID: QC380898

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	143.2	115	68-132	3	20
Isopropyl Ether (DIPE)	25.00	27.64	111	65-120	3	20
Ethyl tert-Butyl Ether (ETBE)	25.00	23.53	94	75-124	4	20
Methyl tert-Amyl Ether (TAME)	25.00	22.82	91	77-120	3	20
MTBE	25.00	26.70	107	71-120	3	20
1,2-Dichloroethane	25.00	26.69	107	79-121	2	20
Benzene	25.00	28.65	115	80-120	5	20
Toluene	25.00	29.51	118	80-120	7	20
1,2-Dibromoethane	25.00	29.28	117	80-120	6	20
Ethylbenzene	25.00	27.11	108	80-124	7	20
m,p-Xylenes	50.00	55.42	111	80-127	6	20
o-Xylene	25.00	27.24	109	80-124	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	99	79-134
Toluene-d8	106	80-120
Bromofluorobenzene	94	80-122

RPD= Relative Percent Difference

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GGBZS



Curtis &amp; Tompkins, Ltd.

**Total Extractable Hydrocarbons**

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 3520C
Project#:	609.004	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/20/07
Units:	ug/L	Received:	03/21/07
Diln Fac:	1.000	Prepared:	03/26/07
Batch#:	123509		

Field ID: MW-1 Analyzed: 03/28/07  
Type: SAMPLE Cleanup Method: EPA 3630C  
Lab ID: 193597-001

Analyte	Result	RL
Diesel C10-C24	74 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	86	61-134

Field ID: MW-2 Analyzed: 03/28/07  
Type: SAMPLE Cleanup Method: EPA 3630C  
Lab ID: 193597-002

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	83	61-134

Field ID: MW-3 Analyzed: 03/28/07  
Type: SAMPLE Cleanup Method: EPA 3630C  
Lab ID: 193597-003

Analyte	Result	RL
Diesel C10-C24	180 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	88	61-134

Field ID: MW-4 Analyzed: 03/28/07  
Type: SAMPLE Cleanup Method: EPA 3630C  
Lab ID: 193597-004

Analyte	Result	RL
Diesel C10-C24	2,900 H L Y	50
Motor Oil C24-C36	3,500 L	300

Surrogate	%REC	Limits
Hexacosane	96	61-134

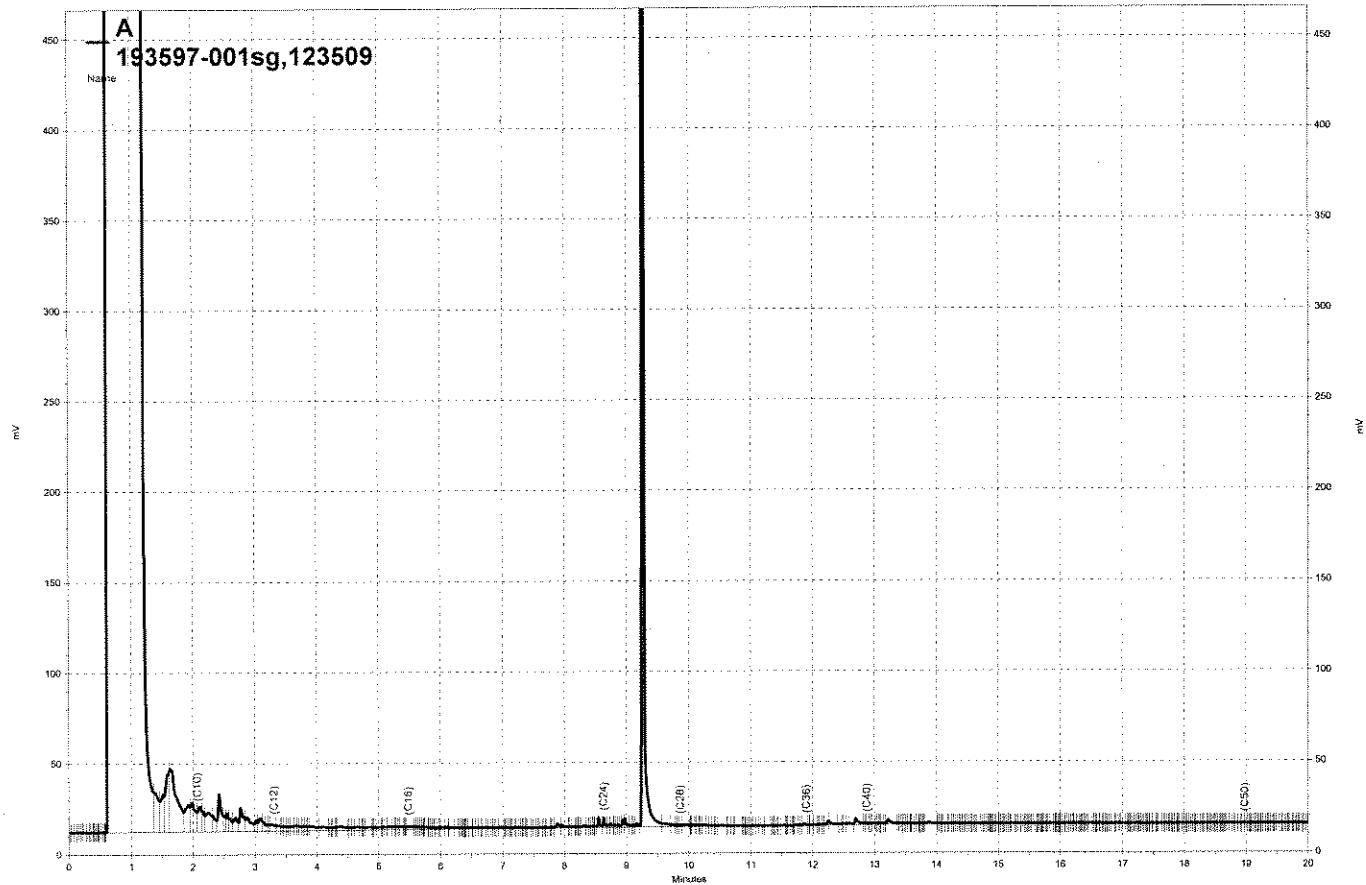
H= Heavier hydrocarbons contributed to the quantitation

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

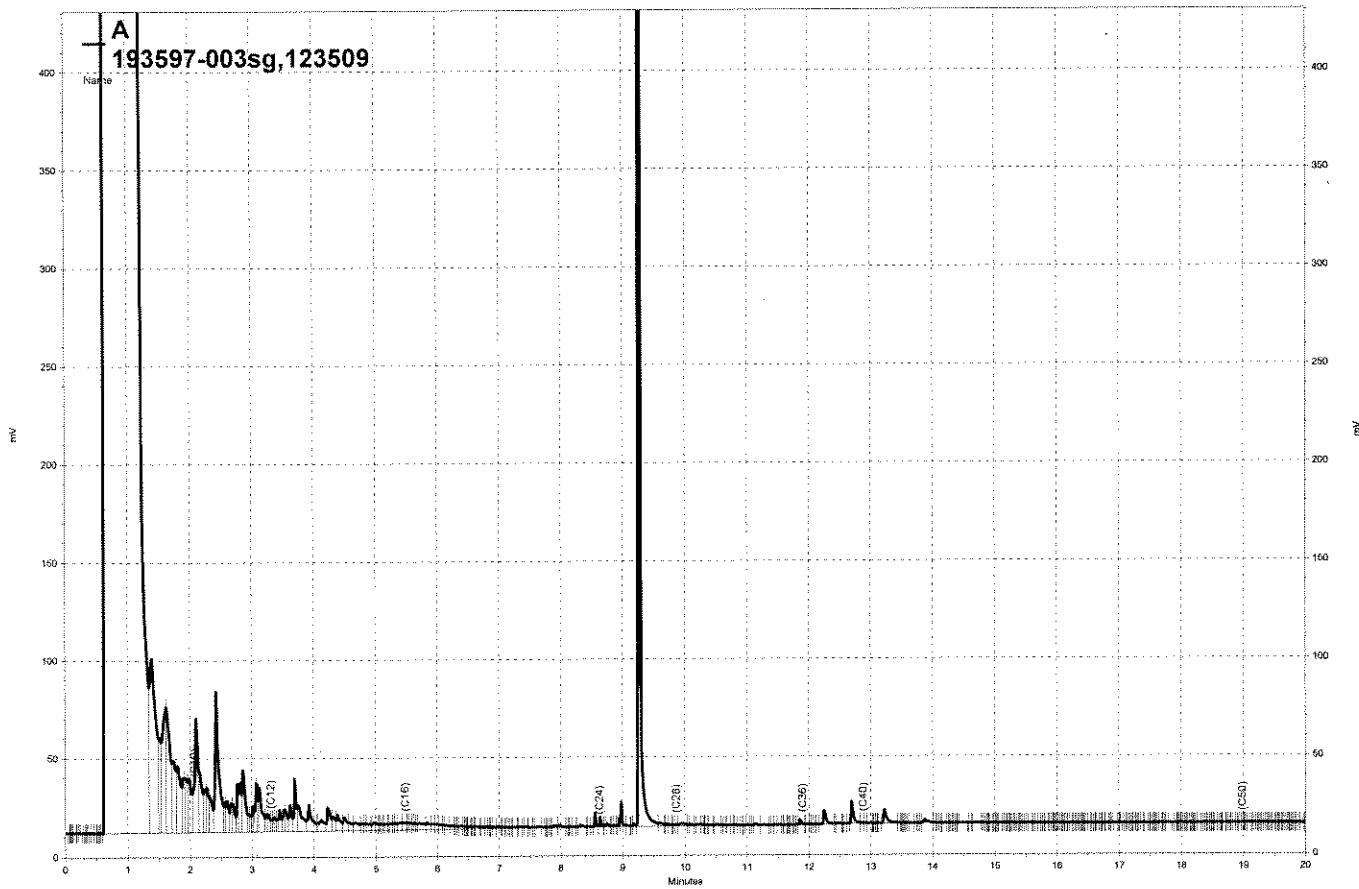
ND= Not Detected

RL= Reporting Limit



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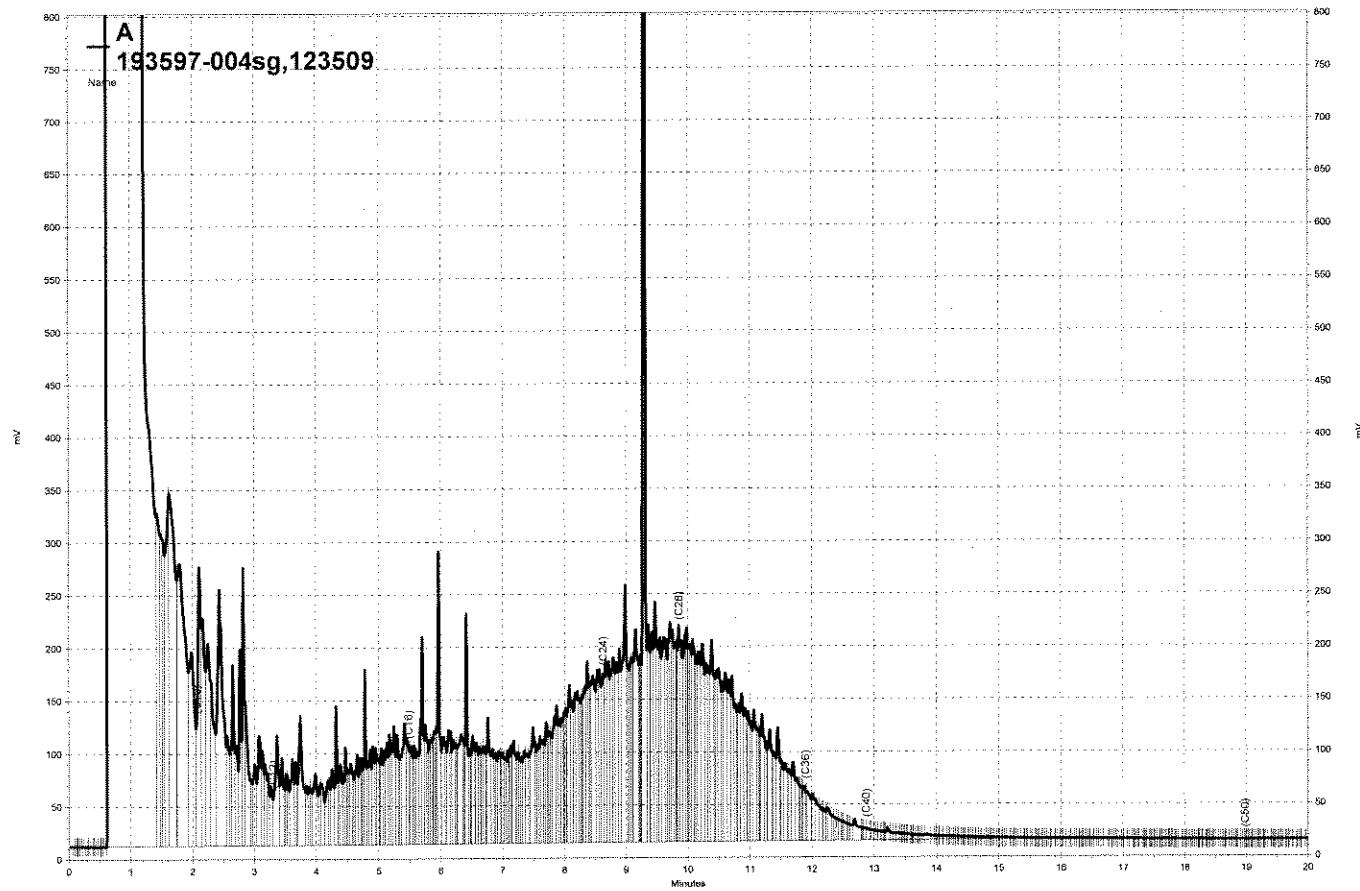
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*m/z - 7*

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**Total Extractable Hydrocarbons**

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 3520C
Project#:	609.004	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/20/07
Units:	ug/L	Received:	03/21/07
Diln Fac:	1.000	Prepared:	03/26/07
Batch#:	123509		

Field ID: MW-5 Analyzed: 03/27/07  
 Type: SAMPLE Cleanup Method: EPA 3630C  
 Lab ID: 193597-005

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	91	61-134

Field ID: MW-6 Analyzed: 03/27/07  
 Type: SAMPLE Cleanup Method: EPA 3630C  
 Lab ID: 193597-006

Analyte	Result	RL
Diesel C10-C24	670 L Y	50
Motor Oil C24-C36	ND	300

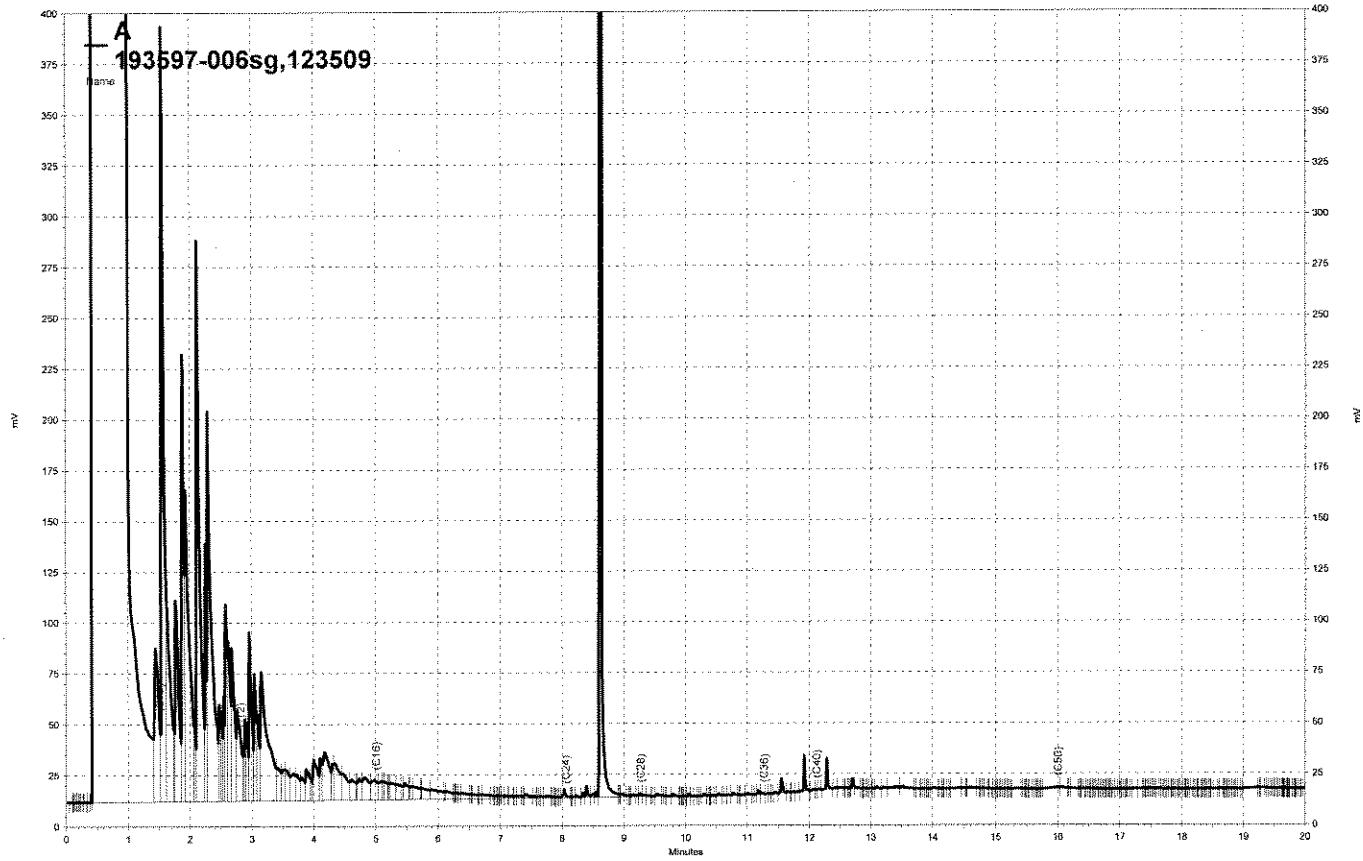
Surrogate	%REC	Limits
Hexacosane	95	61-134

Type: BLANK Analyzed: 03/27/07  
 Lab ID: QC380882 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

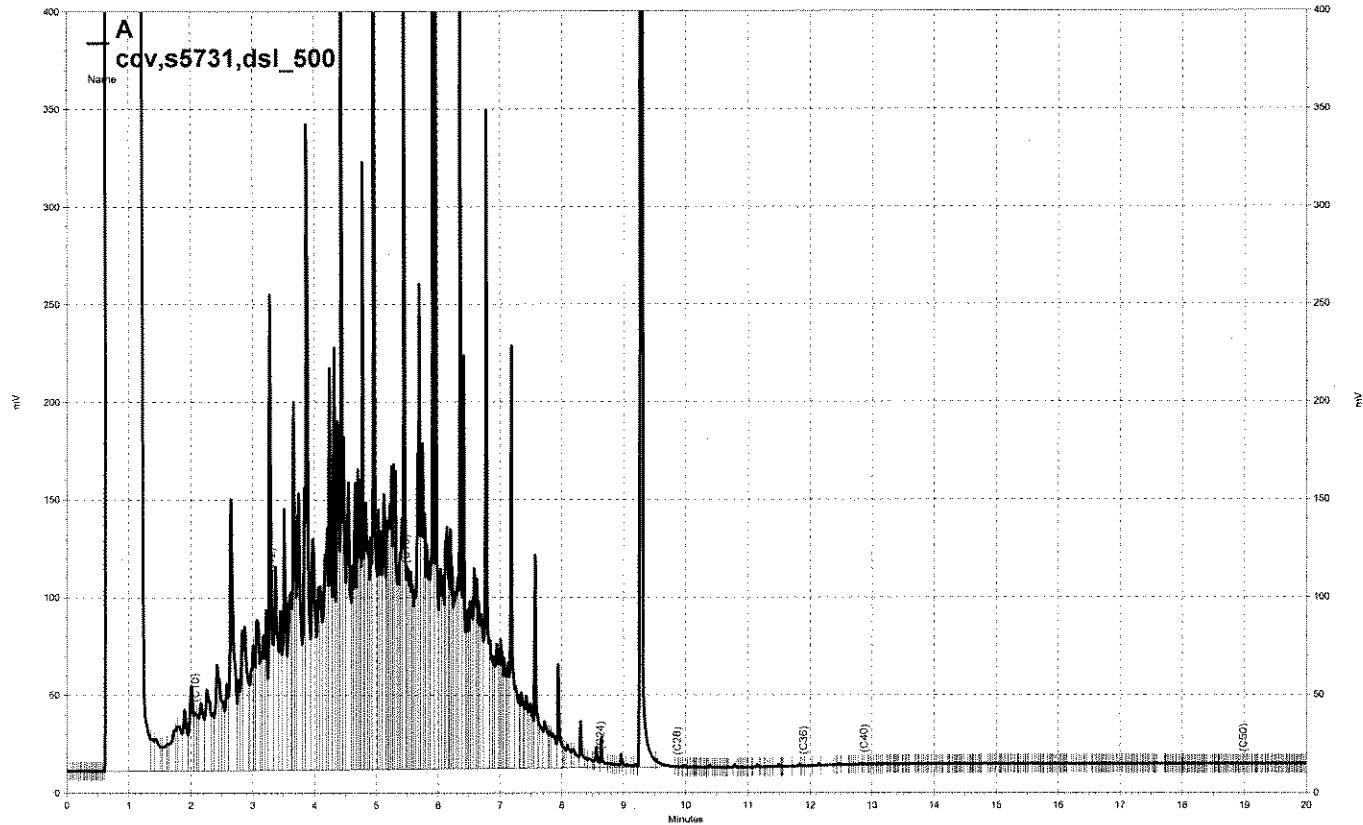
Surrogate	%REC	Limits
Hexacosane	85	61-134

H= Heavier hydrocarbons contributed to the quantitation  
 L= Lighter hydrocarbons contributed to the quantitation  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit



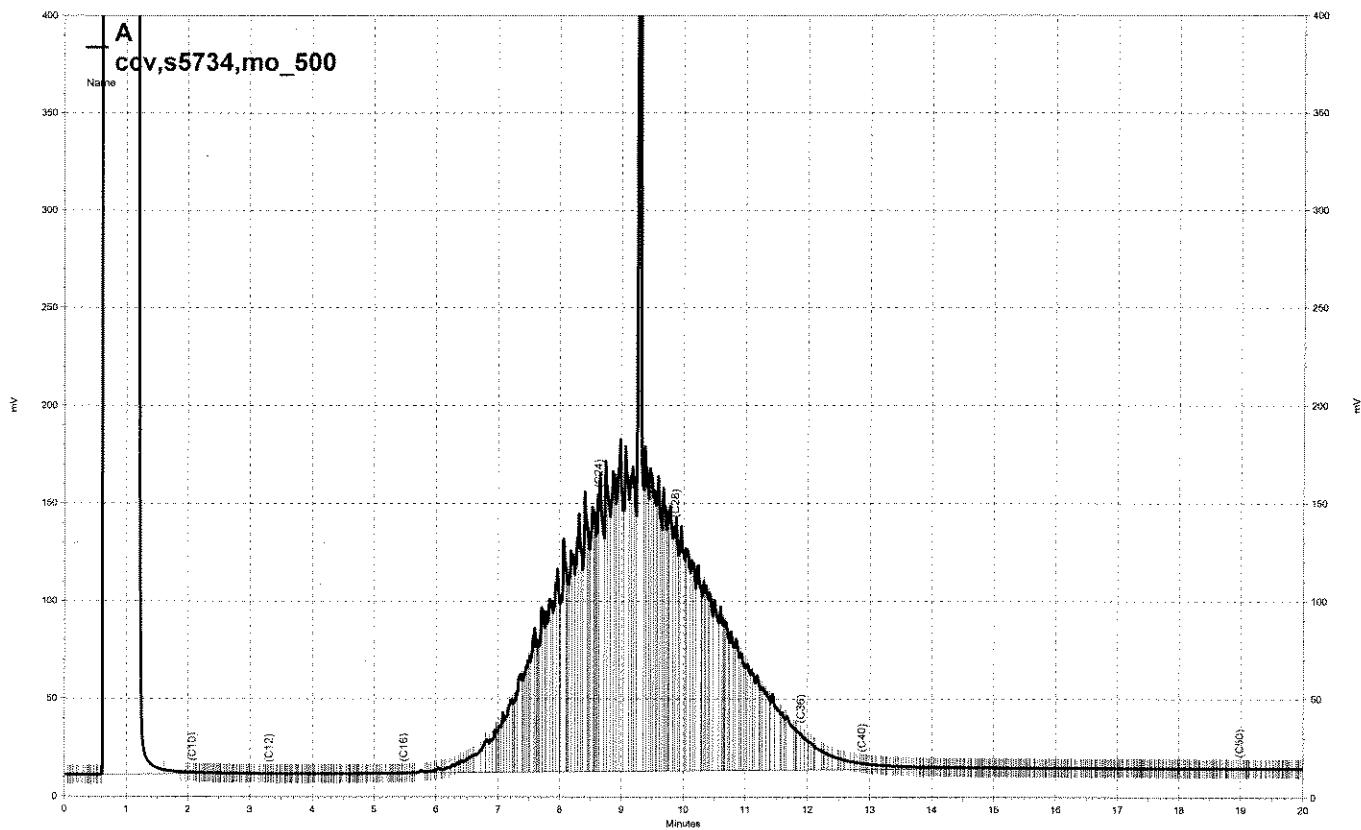
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diese /



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motor oil

## Batch QC Report

## Total Extractable Hydrocarbons

Lab #:	193597	Location:	2250 Telegraph Av. Oakland
Client:	Fugro West Inc.	Prep:	EPA 3520C
Project#:	609.004	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123509
Units:	ug/L	Prepared:	03/26/07
Diln Fac:	1.000	Analyzed:	03/27/07

Type: BS Cleanup Method: EPA 3630C  
 Lab ID: QC380883

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,861	74	58-130

Surrogate	%REC	Limits
Hexacosane	75	61-134

Type: BSD Cleanup Method: EPA 3630C  
 Lab ID: QC380884

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,926	77	58-130	3	27

Surrogate	%REC	Limits
Hexacosane	77	61-134

RPD= Relative Percent Difference

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