

BUTTNER PROPERTIES, INC.

PROPERTY DEVELOPMENT • REAL ESTATE INVESTMENT • PROPERTY MANAGEMENT

600 West Grand Avenue, Oakland, California 94612

Telephone (510) 832-3456 • Facsimile (510) 465-4670

Email: Buttner@value.net

February 15, 2012

Alameda County Environmental Health Services
Local Oversight Program
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RECEIVED

11:23 am, Feb 16, 2012

Alameda County
Environmental Health

Attention: Ms. Barbara Jakub, Hazardous Materials Specialist

RE: Dave's Station
2250 Telegraph Avenue
Oakland, California

Dear Ms. Jakub:

The "Fourth Quarter 2011 Groundwater Monitoring Report, 2250 Telegraph Avenue, Oakland, California dated February 15, 2012" ("Report") was prepared by our consultant, Fugro West, Inc. ("Fugro"), who we believe to be experienced and qualified to advise us in a technical area that requires a high degree of professional expertise. Therefore we have relied upon Fugro's assistance, knowledge and expertise in their preparation of the Report. I am unaware of any material inaccuracy in the information in the Report or of any violation of government guidelines that are applicable to the Report. Accordingly, I am not aware of any reason to question the conclusions and recommendations contained in the Report.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1).

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

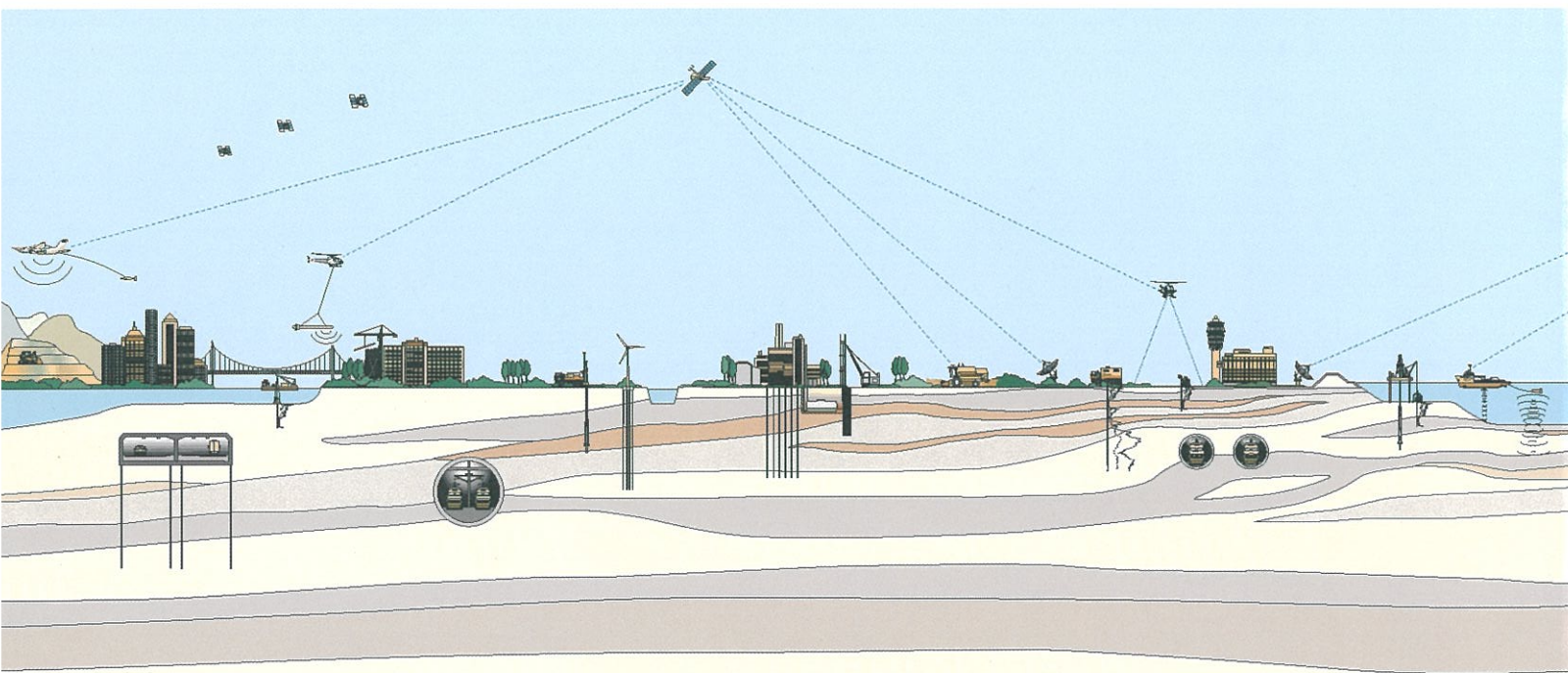


Marianne Robison
President

**FOURTH QUARTER 2011 GROUNDWATER
MONITORING REPORT
2250 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA**

Prepared for:
BUTTNER PROPERTIES

February 2012
Fugro Project No. 04.B0609004





February 15, 2012
Project No. 04.B0609004

Buttner Properties
600 West Grand Avenue
Oakland, California 94612

Attention: Ms. Marianne Robison

Subject: Fourth Quarter 2011 Groundwater Monitoring Report,
Fuel Leak Case No. RO0000359, GeoTracker Global ID T0600100431,
Dave's Station, 2250 Telegraph Avenue, Oakland, California

Dear Ms. Robison:

Fugro Consultants, Inc., (Fugro) is pleased to present this report, which records the results of the Fourth Quarter 2011 groundwater monitoring event for the 2250 Telegraph Avenue property (Site). The groundwater monitoring program is currently being implemented in general accordance with Fugro's Technical Comments and Work Plan response letter dated October 12, 2010. During this monitoring event, Fugro conducted a quarterly event comprised of gauging accessible wells and sampling wells MW-7 and MW-8. The Site location is shown on the Vicinity Map - Plate 1, and the Site Plan is presented on Plate 2.

BACKGROUND

Three USTs associated with the former service station were removed in 1990 under the observation of Fugro staff. Source removal activities conducted in 1990 removed about 500 cubic yards of gasoline impacted soil, and source removal activities conducted in 1994 removed about 70 cubic yards of waste-oil and gasoline impacted soils. Four monitoring wells (MW-1 through MW-4), located onsite, have been monitored since 1994. Two wells (MW-5 and MW-6) located in areas along West Grand Avenue, down and cross-gradient of the former UST improvements, have been monitored since 1997. In 2011, two additional wells (MW-7 and MW-8) were installed and sampled.

A review of soil and groundwater data collected during source removal activities, site characterization and monitoring well installation studies, and groundwater monitoring events conducted onsite since March 1994, indicates that the Site is impacted by petroleum hydrocarbon releases that occurred onsite and possibly some releases which have occurred from offsite sources. The plumes become commingled onsite. Data further suggests that the characteristics of the plumes have not changed significantly during the last seventeen years. Well MW-5 has consistently returned non-detectable results since it was installed in the parking lane along West Grand Avenue in the late 1990's. Additionally, Fugro has maintained that well MW-6 doesn't reflect groundwater contamination originating from the Site. As a result it has been Fugro's professional opinion that these two monitoring wells are situated beyond the distal limit of the onsite plume.





GROUNDWATER MONITORING – FOURTH QUARTER 2011

Due to restrictions imposed on work being conducted within a public right-of-way during the City of Oakland's designated "Holiday Restricted Streets" period (October 31st to January 2nd), we were unable to obtain an encroachment permit and approval to temporarily block the east bound lane of West Grand Avenue. Consequently we were unable to sample monitoring well MW-6 as requested by ACEH in their email dated December 12, 2011.

Fugro conducted this monitoring event on December 29, 2011. Prior to sampling, the presence of free product was checked and the depth to groundwater was measured in all onsite and offsite wells with the exception of well MW-6 due to the access constraints. Fugro's field personnel purged wells MW-7 and MW-8 of approximately three casing volumes of water while monitoring for changes in pH, conductivity, and temperature. Wells MW-7 and MW-8 were sampled with clean disposable bailers once water levels stabilized to within 80 percent of the initial measurement. Fugro also obtained a duplicate groundwater sample from well MW-8 to provide an estimate of the total sampling and laboratory analytical precision.

During this groundwater monitoring event, Fugro's field personnel noticed petroleum hydrocarbon odor during purging and sampling of well MW-8; however, no free product was observed. No odors were observed during purging and sampling activities conducted for well MW-7.

All groundwater 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 chain-of-custody documentation to Curtis & Tompkins, Ltd., a laboratory certified by the State of California Department of Health Services for hazardous waste and water testing in accordance with the approved monitoring program. A sample from each well and the duplicate sample were analyzed for some or all of the following constituents:

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

Well gauging and sampling forms, and the laboratory analytical report (including chain-of-custody documentation) is presented in Appendices A and B, respectively. Groundwater elevation data is summarized in Table 1. Analytical test results are summarized in Table 2; Relative Percent Difference (RPD) calculations for assessing field collection and laboratory testing quality parameters are presented in Table 3.

The historic groundwater flow directions for this Site are presented in the Rose Diagram on Plate 2. The gradient for this event was 0.01 feet/feet¹ directed towards the south-southeast. Based on the groundwater data presented in Table 1, the groundwater gradient remains generally consistent with previous seasonal measurements. Groundwater was generally encountered at higher elevations compared to the Third Quarter 2011 monitoring event.

QUALITY CONTROL AND DATA VALIDATION

The objectives of Fugro's QA/QC and data validation program are to obtain and present accurate, precise, and complete data. The QA/QC and data validation program for this groundwater monitoring event are documented below.

To assess the completeness of the data reported by the laboratory, Fugro checked 100 percent of the laboratory report and found that all requested tests were completed. Therefore, the chemical report is considered to be complete.

To assess the accuracy of the laboratory data, Fugro reviewed the laboratory reports to confirm compliance with the laboratory's own QA/QC limits. For this sampling event Curtis and Tompkins, Ltd, QA/QC reporting indicated no exceptions to compliance with their own QA/QC limits. In general, Curtis and Tompkins, Ltd. noted no QA/QC problems for EPA Methods and their internal reporting of surrogate recovery was within their noted acceptable ranges.

To assess field procedures and laboratory testing quality, Fugro collected one duplicate groundwater sample from well MW-8 and compared the data obtained with the data obtained from the initial sample collected from well MW-8 during this event. The comparison is evaluated using the RPD. While we do expect variation to occur, our goal is to document that the RPD is less than 20%. Analysis of the duplicate groundwater sample (Duplicate) detected TVHg and TEHd concentrations with a RPD of 6 and 4 percent, respectively. Concentrations of BTEX were detected with a RPD ranging from 0 to 12 percent. Therefore, duplicate groundwater results for TPH and VOCs were within Fugro's acceptable RPD criteria of 20 percent.

Based on our review of the overall field and laboratory QA/QC protocols, data validation and findings; Fugro judges that the samples and resulting chemical analyses are representative of site conditions.

¹ Data based on current measurements in wells MW-3 through MW-8. Wells MW-1 and MW-2 are not used in gradient determination as its conditions are not representative of onsite conditions.



DISCUSSION OF RESULTS

No odors were observed during sampling of well MW-7 and analyses did not detect any of the constituents analyzed in the groundwater samples obtained from the well. Based on these results, it does not appear the plume extends to the location of well MW-7.

Petroleum hydrocarbon odors were observed during sampling of well MW-8. Analyses detected TVHg and TEHd during this event at concentrations of 1,600 micrograms per liter ($\mu\text{g/L}$) and 530 $\mu\text{g/L}$, respectively. TEHmo was not detected in the samples analyzed from well MW-8. Analysis detected benzene, toluene, ethylbenzene, and total xylenes in well MW-8 at concentrations of 1.0 $\mu\text{g/L}$, 1.2 $\mu\text{g/L}$, 31 $\mu\text{g/L}$, and 15.69 $\mu\text{g/L}$, respectively. No MTBE concentrations or any other of the fuel oxygenates were detected. Of the two lead scavengers, only 1,2-dichloroethane was detected at a concentration of 1.3 $\mu\text{g/L}$. In general, concentrations of the analytes detected during this sampling event are similar to previous groundwater samples obtained from this well.

REPORTING REQUIREMENTS

In accordance with reporting requirements, Fugro has uploaded a PDF copy of this Fourth Quarter 2011 Groundwater Monitoring Report to the ACEH ftp website. We have also sent electronic copies of all attached tables in a Microsoft excel format to ACEH. Copies of required reports, tables, and site plans have also been uploaded to the Regional Water Quality Control Board's (RWQCB) GeoTracker database.

FUTURE SITE WORK

Fugro submitted a Corrective Action Plan (CAP) to ACEH on November 20, 2011. The purpose of the CAP is to provide a framework for remediation considering all pertinent regulatory guidance, site conditions, and probable future use of the Site.

Fugro requested to discontinue groundwater monitoring of wells MW-1 through MW-8 until after the completion of remediation at the site since significant data of ongoing water conditions exist for the Site. As of the date of this report, Fugro has not received a response from ACEH on approval of the CAP or the discontinuance of the monitoring program.



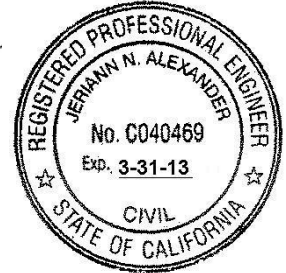
If you have any questions, please call either of the undersigned at (510) 268-0461.

Sincerely,
FUGRO CONSULTANTS, INC.

Karen A. Emery, P.G.
Senior Project Geologist



Jeriann Alexander, P.E., R.E.A.
Principal Engineer



KAE/JNA:ke

Attachments: Table 1 - Groundwater Elevation Data
Table 2 – Summary of Chemical Concentrations – Groundwater Monitoring Wells
Table 3 – Summary of Quality Control Sample Results

Plate 1 - Vicinity Map
Plate 2 - Site Plan

Appendix A – Well Sampling Forms
Appendix B – Analytical Report and Chain-of-Custody Form

Copies Submitted: (1) Addressee
(PDF) Mr. Tim Robison, Ph.D.
(PDF) Alameda County Environmental Health FTP website
(PDF) Regional Water Quality Control Board GeoTracker database

TABLES

Table 1
Summary of Groundwater Elevation Data
2250 Telegraph Avenue
Oakland, California



Monitoring Well	Date	TOC Elevation (Feet MSL)	DTW (feet)	Elevation (Feet MSL)
MW-1	3/3/1994	20.55	10.39	10.16
	3/10/1994		10.54	10.01
	6/6/1994		11.36	9.19
	9/7/1994		11.92	8.63
	12/22/1994		10.83	9.72
	3/17/1995		9.73	10.82
	6/27/1995		10.51	10.04
	9/18/1995		11.12	9.43
	5/30/1996		10.49	10.06
	7/9/1997		11.79	8.76
	8/21/1998		11.00	9.55
	10/6/1998		11.84	8.71
	2/24/1999		9.74	10.81
	6/30/2000		11.28	9.27
	4/27/2001		10.56	9.99
	4/14/2005		10.12	10.43
	8/1/2005		10.56	9.99
	11/9/2005		12.53	8.02
	3/21/2006		9.71	10.84
	8/7/2006		11.40	9.15
	10/27/2006		11.39	9.16
	3/20/2007		10.94	9.61
	8/8/2007		11.21	9.34
	2/5/2008		9.52	11.03
	8/14/2008		11.00	9.55
	3/3/2009	9.69	10.86	
7/30/2009	11.10	9.45		
9/8/2009	11.77	8.78		
3/23/2010	10.15	10.40		
10/5/2010	10.98	9.57		
5/9/2011	21.03	10.17	10.86	
9/9/2011	11.11	9.92		
	12/29/2011		11.21	9.82
MW-2	3/3/1994	20.03	10.37	9.66
	3/10/1994		10.53	9.50
	6/6/1994		11.15	8.88
	9/7/1994		11.72	8.31
	12/22/1994		11.27	8.76
	3/17/1995		9.85	10.18
	6/27/1995		10.70	9.33
	9/18/1995		11.67	8.36
	5/30/1996		11.56	8.47
	7/9/1997		11.52	8.51
	8/21/1998		11.91	8.12
	10/6/1998		11.57	8.46
	2/24/1999		9.91	10.12
	6/30/2000		11.16	8.87
	4/27/2001		11.32	8.71
	4/14/2005		11.00	9.03
	8/1/2005		11.67	8.36
	11/9/2005		11.54	8.49
	3/21/2006		11.02	9.01
	8/7/2006		11.84	8.19
	10/27/2006		11.92	8.11
	3/20/2007		12.52	7.51
	8/8/2007		12.82	7.21
	2/5/2008		10.39	9.64
	8/14/2008		9.10	10.93
	3/3/2009	12.31	7.72	
7/30/2009	11.41	8.62		
3/23/2010	Not Sampled			
10/5/2010		12.32	7.71	
5/9/2011	20.53	10.53	10.00	
9/9/2011		10.96	9.57	
	12/29/2011		11.22	9.31

Table 1
Summary of Groundwater Elevation Data
2250 Telegraph Avenue
Oakland, California



Monitoring Well	Date	TOC Elevation (Feet MSL)	DTW (feet)	Elevation (Feet MSL)
MW-3	3/3/1994	18.97	9.50	9.47
	3/10/1994		9.51	9.46
	6/6/1994		10.28	8.69
	9/7/1994		10.75	8.22
	12/22/1994		9.74	9.23
	3/17/1995		8.85	10.12
	6/27/1995		9.94	9.03
	9/18/1995		10.54	8.43
	5/30/1996		9.69	9.28
	7/9/1997		10.60	8.37
	8/21/1998		10.36	8.61
	10/6/1998		10.64	8.33
	2/24/1999		8.58	10.39
	6/30/2000		10.21	8.76
	4/27/2001		9.85	9.12
	4/14/2005		9.58	9.39
	8/1/2005		10.24	8.73
	11/9/2005		10.45	8.52
	3/21/2006		8.77	10.20
	8/7/2006		10.30	8.67
	10/27/2006		10.63	8.34
	3/20/2007		9.72	9.25
	8/8/2007		10.48	8.49
	2/5/2008		8.61	10.36
	8/14/2008		10.53	8.44
	3/2/2009	8.11	10.86	
7/30/2009	10.41	8.56		
9/8/2009	10.60	8.37		
3/23/2010	8.87	10.10		
10/5/2010	10.51	8.46		
5/9/2011	19.44	9.34	10.10	
9/9/2011		10.03	9.41	
	12/29/2011		10.21	9.23
MW-4	3/3/1994	19.88	10.89	8.99
	3/10/1994		11.19	8.69
	6/6/1994		11.85	8.03
	9/7/1994		12.86	7.02
	12/22/1994		12.26	7.62
	3/17/1995		10.10	9.78
	6/27/1995		11.05	8.83
	9/18/1995		11.84	8.04
	5/30/1996		10.97	8.91
	7/9/1997		12.08	7.80
	8/21/1998		11.86	8.02
	10/6/1998		12.84	7.04
	2/24/1999		10.79	9.09
	6/30/2000		12.39	7.49
	4/27/2001		11.26	8.62
	4/14/2005		12.01	7.87
	8/1/2005		11.78	8.10
	11/9/2005		12.42	7.46
	3/21/2006		10.00	9.88
	8/7/2006		11.90	7.98
	10/27/2006		12.75	7.13
	3/20/2007		11.20	8.68
	8/8/2007		12.00	7.88
	2/5/2008		10.40	9.48
	8/14/2008		11.47	8.41
	3/2/2009	11.13	8.75	
7/30/2009	11.81	8.07		
9/8/2009	12.11	7.77		
3/23/2010	9.95	9.93		
10/5/2010	11.38	8.50		
5/9/2011	20.35	10.93	9.42	
9/9/2011		11.42	8.93	
	12/29/2011		11.50	8.85

Table 1
Summary of Groundwater Elevation Data
2250 Telegraph Avenue
Oakland, California



Monitoring Well	Date	TOC Elevation (Feet MSL)	DTW (feet)	Elevation (Feet MSL)	
MW-5	6/26/1997	16.02	8.44	7.58	
	7/9/1997		8.48	7.54	
	8/21/1998		8.32	7.70	
	10/6/1998		8.51	7.51	
	2/24/1999		6.86	9.16	
	6/30/2000		7.63	8.39	
	4/27/2001		7.60	8.42	
	4/15/2005		7.20	8.82	
	8/1/2005		8.16	7.86	
	11/9/2005		7.92	8.10	
	3/21/2006		6.58	9.44	
	8/7/2006		8.27	7.75	
	10/27/2006		8.48	7.54	
	3/20/2007		7.67	8.35	
	8/8/2007		8.43	7.59	
	2/5/2008		6.76	9.26	
	8/14/2008		8.31	7.71	
	3/2/2009	6.20	9.82		
	7/30/2009	8.13	7.89		
	3/23/2010		Not Sampled		
10/5/2010		8.18	7.84		
5/9/2011	16.49	7.44	9.05		
9/9/2011		7.85	8.64		
12/29/2011		7.98	8.51		
MW-6	6/26/1997	18.36	10.89	7.47	
	7/9/1997		10.98	7.38	
	8/21/1998		11.00	7.36	
	10/6/1998		10.79	7.57	
	2/24/1999		9.32	9.04	
	6/30/2000		10.37	7.99	
	4/27/2001		10.10	8.26	
	4/15/2005		9.55	8.81	
	8/1/2005		10.54	7.82	
	11/9/2005			No Access	
	3/21/2006		9.11	9.25	
	8/7/2006		10.59	7.77	
	10/27/2006			No Access	
	3/20/2007		10.10	8.26	
	8/8/2007		10.85	7.51	
	2/5/2008		9.27	9.09	
	8/14/2008		10.71	7.65	
	3/3/2009	8.60	9.76		
	7/30/2009		No Access		
	3/23/2010		Not Sampled		
10/5/2010		10.62	7.74		
5/9/2011	18.81		No Access		
9/9/2011			No Access		
12/29/2011			No Access		
MW-7	5/9/2011	18.67	9.42	9.25	
	9/9/2011		9.88	8.79	
	12/29/2011		10.00	8.67	
MW-8	8/4/2011	18.95	9.70	9.25	
	9/9/2011		9.99	8.96	
	12/29/2011		10.11	8.84	

Notes:

TOC = Top of Casing

DTW = Depth to Water

MW-1 through MW-8: Elevation Reference: City of Oakland Benchmark, well monument at approximate centerline of Telegraph Avenue and 26th Street.

Benchmark Elevation = 27.54 feet (NGVD29)

*MW-1 through MW-6: Monitoring wells re-surveyed on May 7, 2011



Table 3
Summary of Quality Control Sample Results
2250 Telegraph Avenue
Oakland, California

Duplicate Groundwater Samples

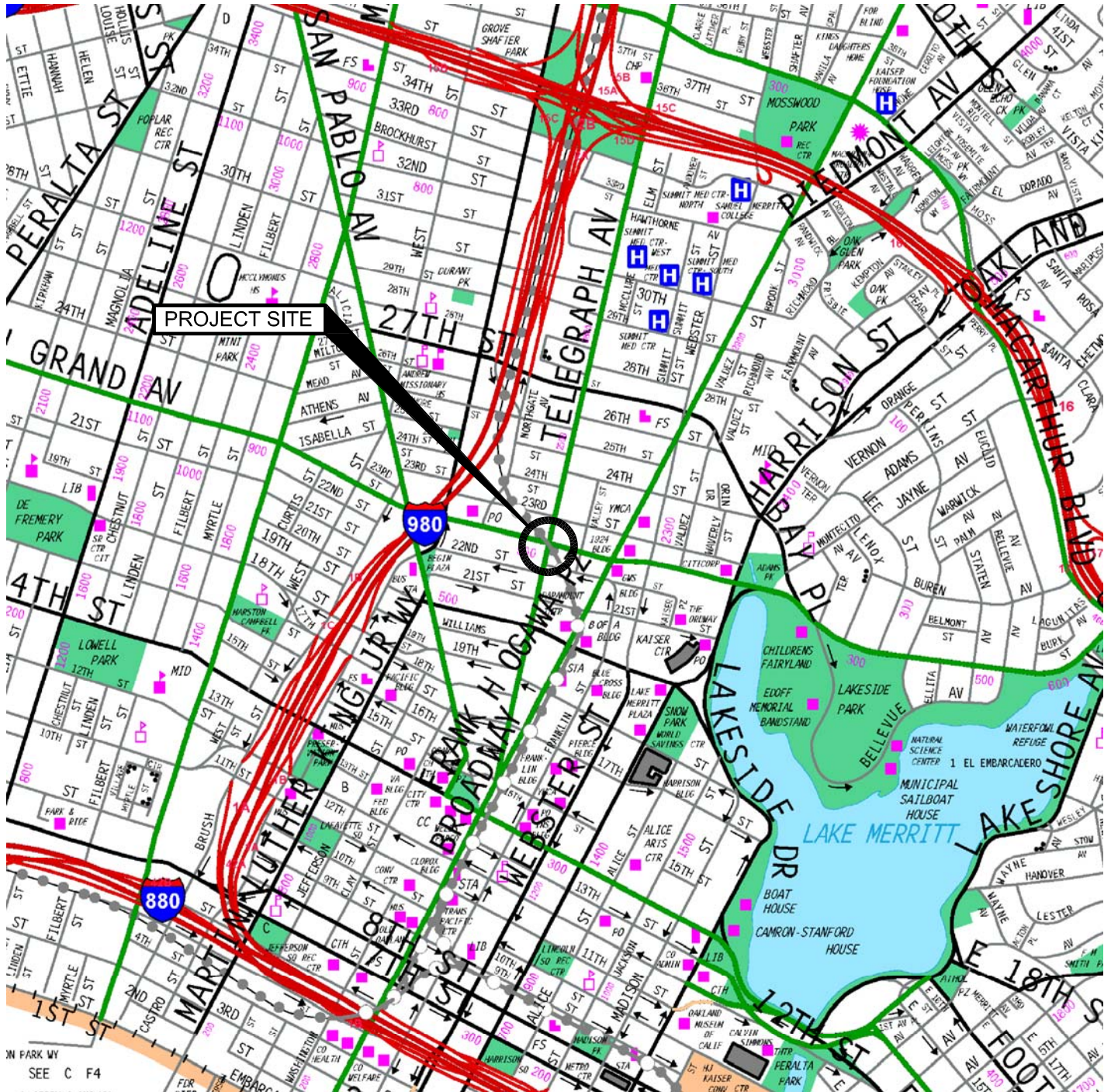
Analyte	Units	Sample ID		RPD (%)
		MW-8	Duplicate	
TVHg	µg/L	1,600	1,700	6
TEHd	µg/L	530	550	4
TEHmo	µg/L	ND	ND	0
Benzene	µg/L	1.0	1.0	0
Toluene	µg/L	1.2	1.2	0
Ethylbenzene	µg/L	31	32	3
Xylenes	µg/L	15.69	17.72	12
MTBE	µg/L	ND	ND	0

Notes

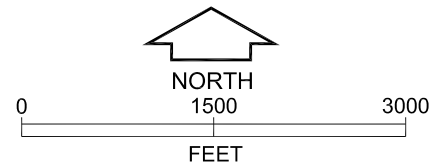
TVHg = Total Volatile Hydrocarbons as gasoline
 TEHd = Total Extractable Hydrocarbons as diesel
 TEHmo = Total Extractable Hydrocarbons as motor oil
 MTBE = Tert- Butyl methyl ether
 µg/L = micrograms per liter
 ND = Not detected
 RPD = Relative percentage difference
 RPD Percentage Goal = 20%

PLATES

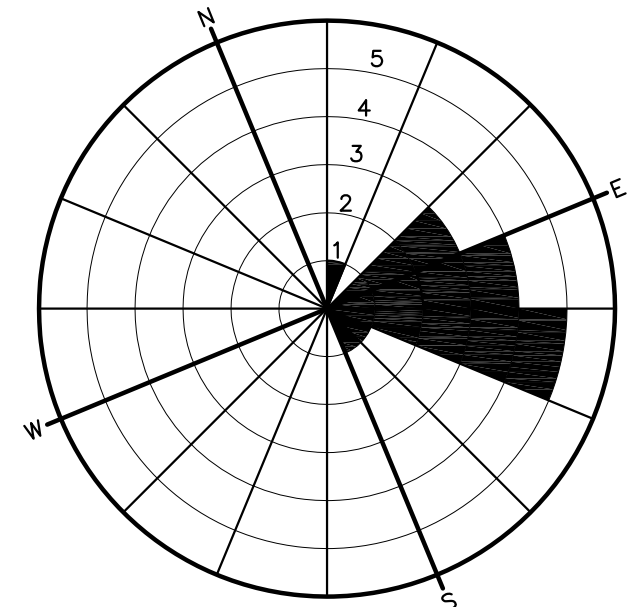
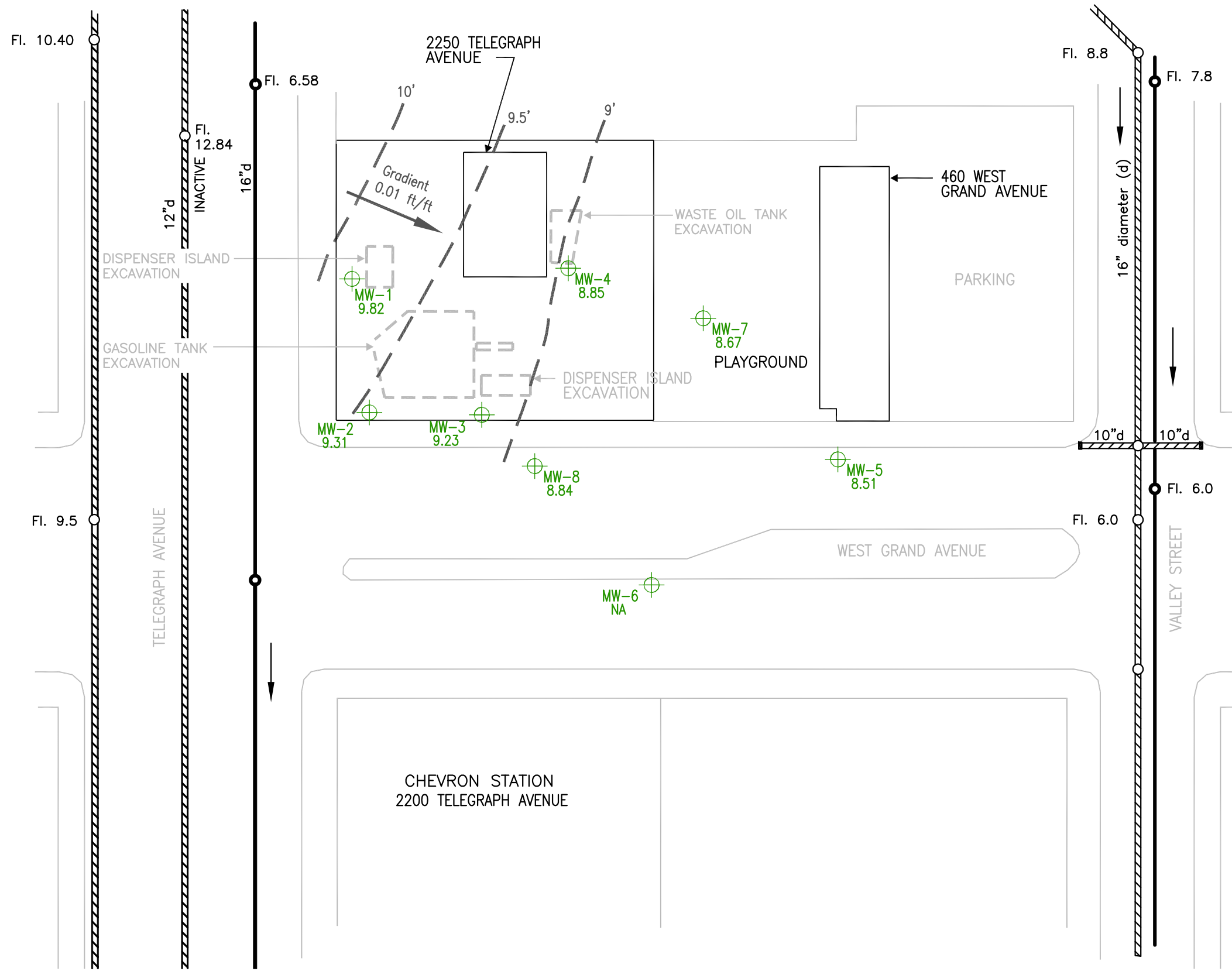
M:\Drafting\JOBFILES\2012\04.B0609004\Drawings\A04.B0609004-01 vicn.dwg 1-09-12 11:16:24 AM began



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.



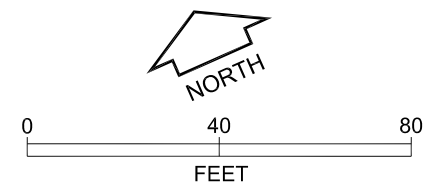
VICINITY MAP
2250 Telegraph Avenue
Oakland, California



ROSE DIAGRAM SHOWING GROUNDWATER FLOW DIRECTION (2004-2011)

LEGEND

- STRUCTURE
- LIMITS OF EXCAVATION
- MONITORING WELL LOCATION
- NOT ACCESSIBLE



SITE PLAN
 2250 Telegraph Avenue
 Oakland, California

M:\Drafting\JOBFILES\2012\04.B0609004\Drawings\B04.B0609004-02 site.dwg 01-12-2012 - 12:17pm

**APPENDIX A
WELL SAMPLING FORMS**



Job No.: 609.004	Project: Buttner
------------------	------------------

Date: 12/29/11	Location: 2250 Telegraph Avenue, Oakland, CA
----------------	--

Equipment In Use: YSI 600 Calibrated by EquipCo, General Sampling Supplies See Sampling Forms for Serial Numbers and Calibration Information	Contractor: NA
--	----------------

This report was prepared in the office following field observations made on the date noted above. No copies of this report were given to on site personnel.

Arrival Time: 1 st 0745 – 2 nd 1309	Departure Time: 1 st 1040 – 2 nd 1350
---	---

- 0750 talk to Ms. Cotton about availability to enter the day premises to purge and sample, was told now

Is a good time. Purged and Sampled 0800 to 0900 samples collected at 0847

- cleaned up area around MW-7 and called Ms. Cotton to let her know that I was finished in her area.

- unbolted and removed well cap on MW-1 through MW-4 to allow for equilibration of water level 0910, left well box cover over each well while equilibrating.

- mobed to MW-8 0920

Started purging 0925 finished at 0950 DTW was 14.28 (80%= 12.18) cleaned up area around MW-8

-Collected Ground water measurements for MW-1 through MW-5

Well	DTW	Time
MW-1	11.21	1018
MW-2	11.22	1022
MW-3	10.21	1025
MW-4	11.50	1029
MW-5	7.98	1014

MW-6 Not Accessible

- arrived at 1309

- Check water level in MW-8 =11.44 (> 80%), sampled at 1320, collected a duplicate sample at MW-8

- cleaned up around MW-8

- Left site at 1350

Time Summary: 0.5 hours travel 4 hours on site

Weather Conditions: cloudy and cool

Copies To:

Name: Mike D'Anna	Title: Staff Geologist
-------------------	------------------------



ES-F50 WELL SAMPLING FORM

PROJECT NAME: Budmer
 PROJECT NO.: 609.004
 SAMPLED BY: M.D.D.
 DATE: 12-29-11
 WEATHER: _____

WELL NO.: MW-7
 WELL CASING DIAMETER: 2"
 TOC ELEVATION: 18.67

TOTAL DEPTH OF CASING (BTOC): 19.87 FEET
 DEPTH TO GROUNDWATER (BTOC): 10.0 FEET
 FEET OF WATER IN WELL: 9.87 FEET

CALCULATED PURGE VOLUME: 9.8 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

FREE PRODUCT: NO
 PURGE METHOD: Disposable Bailen

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)	0819	20.99	6.29	475	---	37.8	1.37	
1.6	0820	20.21	6.29	493	---	42.3	3.17	No odor, Brown, low pH
3.2	0824	20.25	6.29	498	---	46.3	3.31	"
4.8	0830	20.25	6.33	497	---	46.6	3.33	"

CALCULATED DEPTH TO WATER @ 80% RECHARGE _____
 (Total depth of casing - (feet of water in well * 0.80))

DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 10.02

DTW GREATER THAN 80%? (circle) YES NO OKAY TO SAMPLE? (circle) YES NO

SAMPLING METHOD: disposable Bailen TIME SAMPLED: 0847

CONTAINERS / PRESERVATIVE: 3 / HCL 2 / HCL
40 ML 1 LITER Nona
 Poly OTHER

ANALYSES: (Note if any samples are field filtered)

_____ TPHd, TPHmo (8015 w/ Silica gel)	_____ Pesticides (8080)	_____
_____ TPHg, BTEX, MTBE (8015/8020)	_____ PCBs (8080)	_____
_____ VOCs (8260)	_____ Sulfate (300.0)	_____
_____ HVOCs (8260)	_____ Nitrate (300.0)	_____
_____ Title 22/CAM 17 Metals (6010/7000)	_____ Fe ²⁺ - Field Filtered	_____

MISC FIELD OBSERVATION: _____

Equipment	Serial No.	Calibration
Conductivity		<u>YSI 600</u>
pH		<u>Cal. by</u>
Turbidity		<u>Equip Co.</u>
Temperature		



ES-F50 WELL SAMPLING FORM

PROJECT NAME: Bullman
 PROJECT NO.: 609004
 SAMPLED BY: MDV
 DATE: 12/29/11
 WEATHER: _____

WELL NO.: MW-8
 WELL CASING DIAMETER: 2"
 TOC ELEVATION: 15.95

TOTAL DEPTH OF CASING (BTOC): 20.27 FEET
 DEPTH TO GROUNDWATER (BTOC): 10.11 FEET
 FEET OF WATER IN WELL: 10.16 FEET

CALCULATED PURGE VOLUME: 4.9 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

FREE PRODUCT: _____
 PURGE METHOD: Disposable Bailer

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)	0930	20.94	6.43	1113	---	-69.0	1.9	
<u>1.6</u>	0936	20.76	6.75	1110	---	-68.8	2.15	clear, Hydrocarbon odor
<u>3.2</u>	0943	20.55	6.73	1104	---	-69.0	3.43	" "
<u>5.0</u>	0949	20.94	6.70	1100	---	-69.0	4.62	" "

CALCULATED DEPTH TO WATER @ 80% RECHARGE: 12.18
 (Total depth of casing - (feet of water in well * 0.80))

DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 11.44

DTW GREATER THAN 80%? (circle) YES NO OKAY TO SAMPLE? (circle) YES NO

SAMPLING METHOD: Disposable Bailer TIME SAMPLED: 1320

CONTAINERS / PRESERVATIVE: 3 / HCL 2 / HCL
 40 ML LITER None

ANALYSES: (Note if any samples are field filtered)

- | | |
|---|--|
| <input type="checkbox"/> TPHd, TPHmo (8015 w/ Silica gel) | <input type="checkbox"/> Pesticides (8080) |
| <input type="checkbox"/> TPHg, BTEX, MTBE (8015/8020) | <input type="checkbox"/> PCBs (8080) |
| <input type="checkbox"/> VOCs (8260) | <input type="checkbox"/> Sulfate (300.0) |
| <input type="checkbox"/> HVOCs (8260) | <input type="checkbox"/> Nitrate (300.0) |
| <input type="checkbox"/> Title 22/CAM 17 Metals (6010/7000) | <input type="checkbox"/> Fe ²⁺ - Field Filtered |

MISC FIELD OBSERVATION: Duplicate Sample taken

Equipment	Serial No.	Calibration
Conductivity		<u>YSI 600</u>
pH		<u>Cal. by</u>
Turbidity		<u>Equip Co.</u>
Temperatures		

APPENDIX B
ANALYTICAL REPORT AND CHAIN OF CUSTODY FORM



Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878





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

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

**Laboratory Job Number 233532
ANALYTICAL REPORT**

Fugro West Inc.
1000 Broadway
Oakland, CA 94607

Project : 609.004
Location : Buttner Prop.
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
MW-7	233532-001
MW-8	233532-002
DUPLICATE	233532-003

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

Signature: 
Project Manager

Date: 01/06/2012

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 233532
Client: Fugro West Inc.
Project: 609.004
Location: Buttner Prop.
Request Date: 12/29/11
Samples Received: 12/29/11

This data package contains sample and QC results for three water samples, requested for the above referenced project on 12/29/11. 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):

Low recoveries were observed for MTBE and methyl tert-amyl ether (TAME) in the MS/MSD for batch 182557; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPDs were within limits. No other analytical problems were encountered.

233532

ES-F10 CHAIN OF CUSTODY


PROJECT NAME: Buttner Prop.
 PROJECT NO.: 609.004 LAB: C & T
 PROJECT CONTACT: Karen Emery / Mike D'Anna TURNAROUND:
 SAMPLED BY: Mike D'Anna

ANALYSIS REQUESTED									
TVHg	TEHD and TEHmo	Lead Scavengers	Five Fuel Oxygenates	BTEX	MTBE	EDF Reporting			
x	x	x	x	x	x	x			
x	x	x	x	x	x	x			
x				x	x	x			

LABORATORY I.D. NUMBER	FIELD SAMPLE I.D.	MATRIX			CONTAINERS				PRESERVATIVE					SAMPLING DATE				NOTES				
		WATER	SOIL	AIR	VOA	LITER	PINT	TUBE	HCL	H ₂ SO ₄	HNO ₃	ICE	OTHER	NONE	MONTH	DAY	YEAR		TIME			
1	MW-7	X			X	X			X			X		X	1	2	2	9	1	1	0847	
2	MW-8	X			X	X			X			X		X	1	2	2	9	1	1	1320	
3	Duplicate	X			X	X			X			X		X	1	2	2	9	1	1		

CHAIN OF CUSTODY RECORD			
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
<i>[Signature]</i>	12/29/11 1500	<i>[Signature]</i>	12/29/11 1500
<i>[Signature]</i>	12/29/11 1600	<i>[Signature]</i>	12/29/11 1600
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME

COMMENTS & NOTES:



FUGRO WEST, INC.
 1000 Broadway, Suite 440
 Oakland, California 94607
 Tel: 510.268.0461 Fax: 510.268.0545

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/15/07.
 Note: If this is a printed copy, please check the online QMS to ensure that it is the latest version.

contact 1010 RC

3 of 23

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 233532 Date Received 12/29/11 Number of coolers 1
Client Fugro Project 609.004

Date Opened 12/29/11 By (print) C. Morrow (sign) [Signature]
Date Logged in [Arrow] By (print) [Arrow] (sign) [Arrow]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
Shipping info

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many Name Date

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)

- Bubble Wrap, Cloth material, Foam blocks, Cardboard, Bags, Styrofoam, None, Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: Wet Blue/Gel None Temp(°C) 1.7

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES NO

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? YES NO
If YES, Who was called? By Date:

COMMENTS

Total Extractable Hydrocarbons

Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 3520C
Project#:	609.004	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/29/11
Units:	ug/L	Received:	12/29/11
Diln Fac:	1.000	Prepared:	12/29/11
Batch#:	182510	Analyzed:	01/03/12

Field ID: MW-7 Lab ID: 233532-001
 Type: SAMPLE

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

Surrogate	%REC	Limits
o-Terphenyl	102	68-120

Field ID: MW-8 Lab ID: 233532-002
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	530	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	102	68-120

Field ID: DUPLICATE Lab ID: 233532-003
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	550	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	90	68-120

Type: BLANK Lab ID: QC623676

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

Surrogate	%REC	Limits
o-Terphenyl	109	68-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 3520C
Project#:	609.004	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	182510
Units:	ug/L	Prepared:	12/29/11
Diln Fac:	1.000	Analyzed:	01/03/12

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC623677

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,845	74	61-120

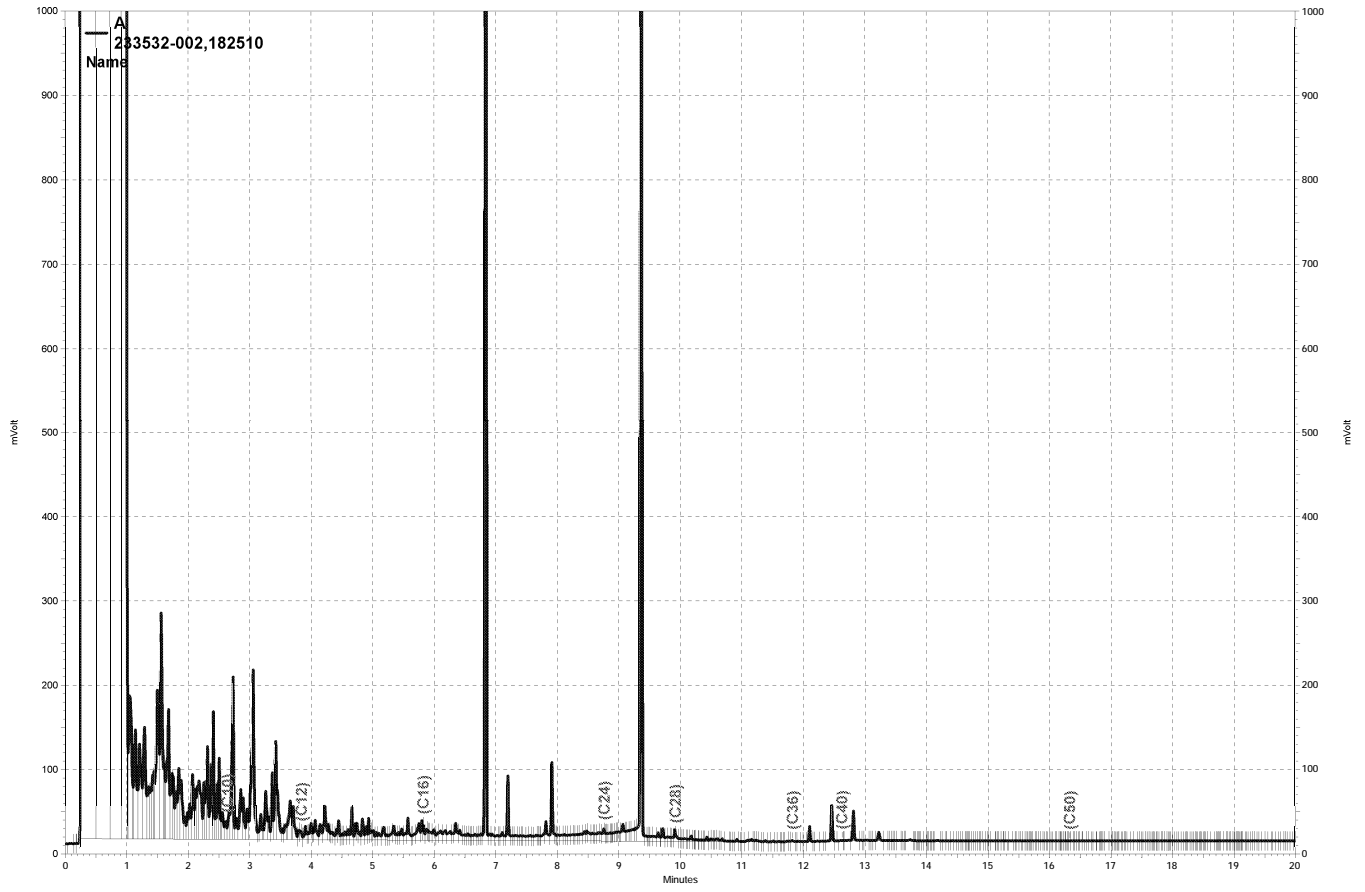
Surrogate	%REC	Limits
o-Terphenyl	89	68-120

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC623678

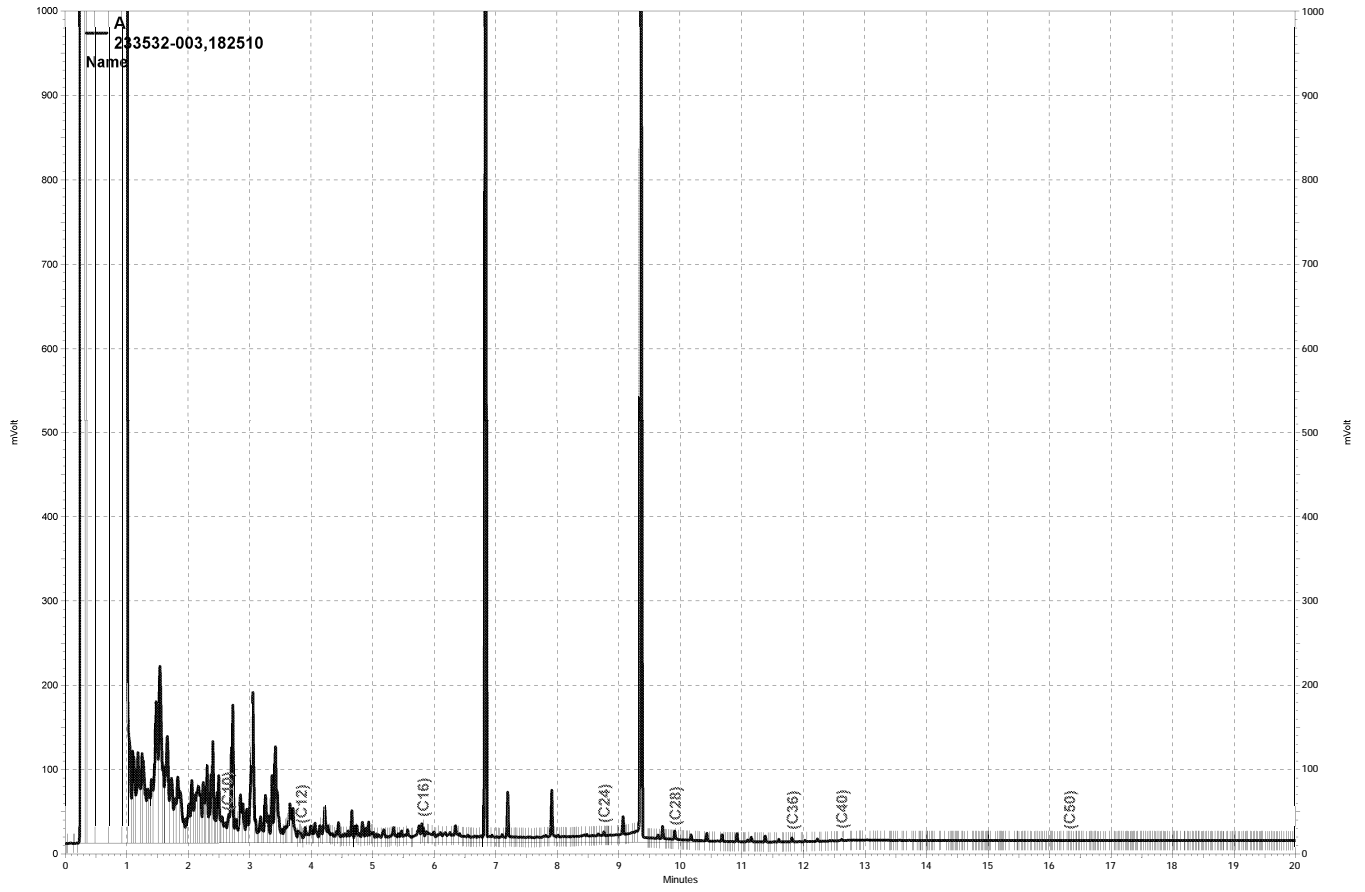
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,034	81	61-120	10	20

Surrogate	%REC	Limits
o-Terphenyl	97	68-120

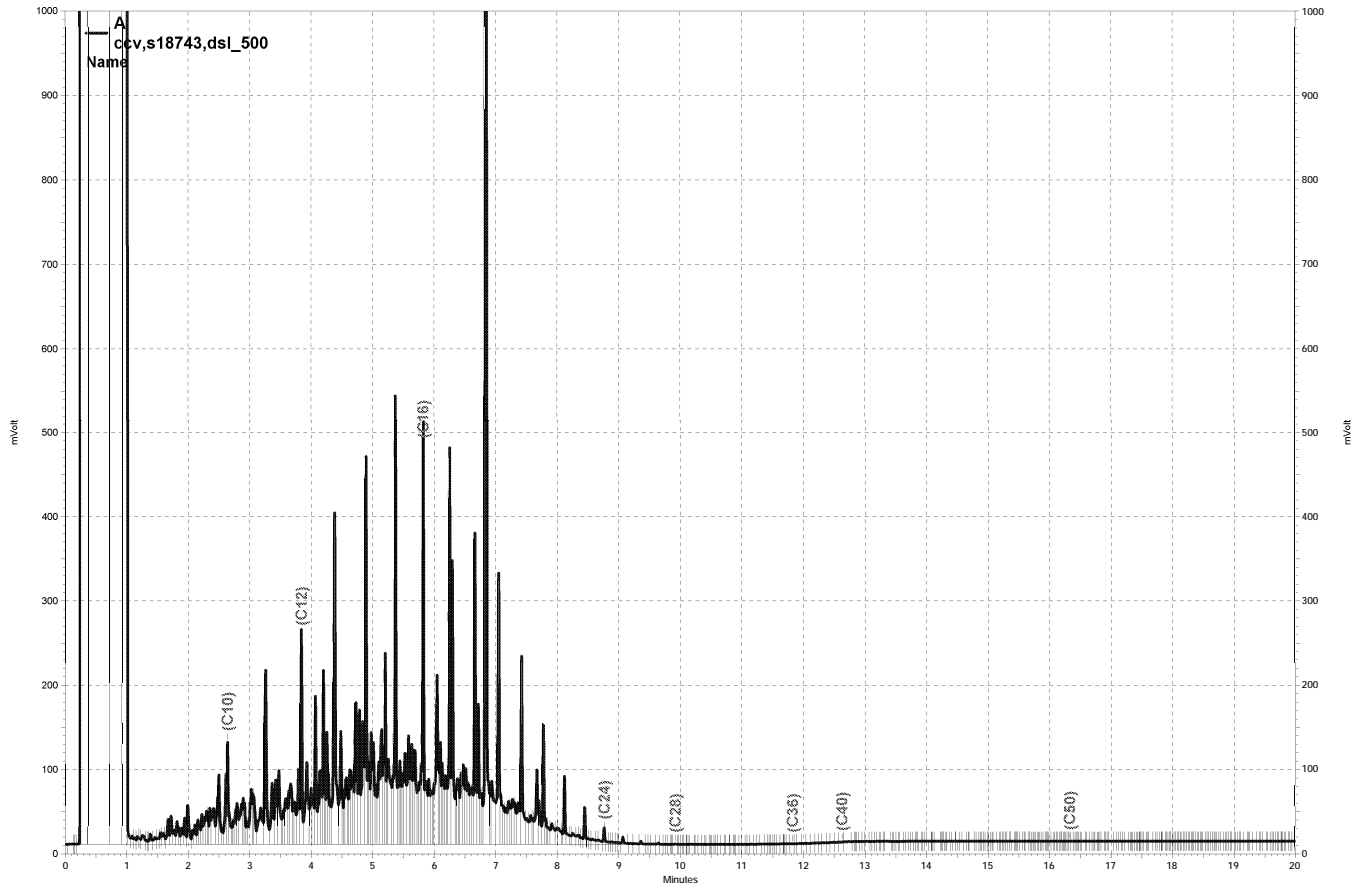
RPD= Relative Percent Difference



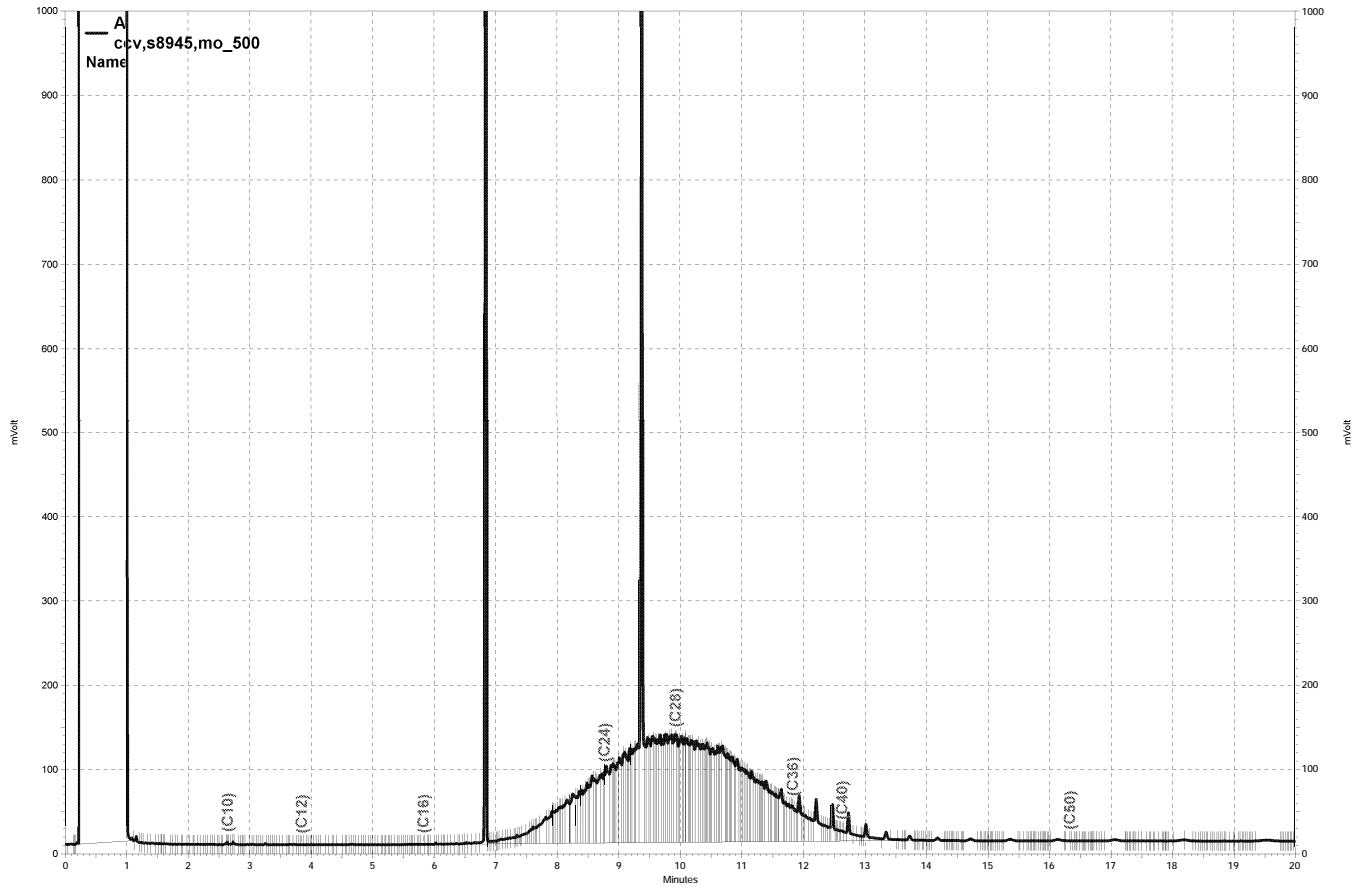
— \\Lims\gdrive\ezchrom\Projects\GC26\Data\001a017, A



— \\Lims\gdrive\ezchrom\Projects\GC26\Data\001a018, A



— \\Lims\gdrive\ezchrom\Projects\GC26\Data\001a004, A



— \\Lims\gdrive\ezchrom\Projects\GC26\Data\001a005, A

Gasoline by GC/MS			
Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-7	Batch#:	182522
Lab ID:	233532-001	Sampled:	12/29/11
Matrix:	Water	Received:	12/29/11
Units:	ug/L	Analyzed:	12/30/11
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	98	80-127
1,2-Dichloroethane-d4	99	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
 RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-8	Batch#:	182557
Lab ID:	233532-002	Sampled:	12/29/11
Matrix:	Water	Received:	12/29/11
Units:	ug/L	Analyzed:	01/03/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	1,600	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	1.3	0.50
Benzene	1.0	0.50
Toluene	1.2	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	31	0.50
m,p-Xylenes	15	0.50
o-Xylene	0.69	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-127
1,2-Dichloroethane-d4	117	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	107	80-120

ND= Not Detected
 RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	DUPLICATE	Batch#:	182557
Lab ID:	233532-003	Sampled:	12/29/11
Matrix:	Water	Received:	12/29/11
Units:	ug/L	Analyzed:	01/03/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	1,700	50
MTBE	ND	0.50
Benzene	1.0	0.50
Toluene	1.2	0.50
Ethylbenzene	32	0.50
m,p-Xylenes	17	0.50
o-Xylene	0.72	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-127
1,2-Dichloroethane-d4	101	73-145
Toluene-d8	102	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	182522
Units:	ug/L	Analyzed:	12/30/11
Diln Fac:	1.000		

Type: BS Lab ID: QC623723

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	89.09	71	46-141
Isopropyl Ether (DIPE)	25.00	21.87	87	52-139
Ethyl tert-Butyl Ether (ETBE)	25.00	20.97	84	56-131
Methyl tert-Amyl Ether (TAME)	25.00	18.80	75	65-120
MTBE	25.00	19.02	76	59-123
1,2-Dichloroethane	25.00	26.96	108	71-135
Benzene	25.00	23.44	94	80-122
Toluene	25.00	21.77	87	80-120
1,2-Dibromoethane	25.00	21.32	85	79-120
Ethylbenzene	25.00	23.45	94	80-120
m,p-Xylenes	50.00	45.50	91	80-120
o-Xylene	25.00	23.26	93	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-127
1,2-Dichloroethane-d4	121	73-145
Toluene-d8	104	80-120
Bromofluorobenzene	106	80-120

Type: BSD Lab ID: QC623724

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	93.93	75	46-141	5	31
Isopropyl Ether (DIPE)	25.00	22.16	89	52-139	1	20
Ethyl tert-Butyl Ether (ETBE)	25.00	22.94	92	56-131	9	20
Methyl tert-Amyl Ether (TAME)	25.00	19.92	80	65-120	6	20
MTBE	25.00	18.94	76	59-123	0	20
1,2-Dichloroethane	25.00	27.39	110	71-135	2	20
Benzene	25.00	23.61	94	80-122	1	20
Toluene	25.00	22.61	90	80-120	4	20
1,2-Dibromoethane	25.00	21.74	87	79-120	2	20
Ethylbenzene	25.00	24.16	97	80-120	3	20
m,p-Xylenes	50.00	44.05	88	80-120	3	20
o-Xylene	25.00	23.06	92	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-127
1,2-Dichloroethane-d4	124	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	103	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC623725	Batch#:	182522
Matrix:	Water	Analyzed:	12/30/11
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	80-127
1,2-Dichloroethane-d4	117	73-145
Toluene-d8	107	80-120
Bromofluorobenzene	110	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	182522
Units:	ug/L	Analyzed:	12/30/11
Diln Fac:	1.000		

Type: BS Lab ID: QC623744

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	984.1	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	120	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	103	80-120

Type: BSD Lab ID: QC623745

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,017	102	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	112	73-145
Toluene-d8	103	80-120
Bromofluorobenzene	112	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	182557
Units:	ug/L	Analyzed:	01/03/12
Diln Fac:	1.000		

Type: BS Lab ID: QC623866

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	85.79	69	46-141
Isopropyl Ether (DIPE)	25.00	20.87	83	52-139
Ethyl tert-Butyl Ether (ETBE)	25.00	21.60	86	56-131
Methyl tert-Amyl Ether (TAME)	25.00	19.12	76	65-120
MTBE	25.00	18.50	74	59-123
1,2-Dichloroethane	25.00	25.31	101	71-135
Benzene	25.00	22.19	89	80-122
Toluene	25.00	21.21	85	80-120
1,2-Dibromoethane	25.00	21.36	85	79-120
Ethylbenzene	25.00	22.51	90	80-120
m,p-Xylenes	50.00	43.46	87	80-120
o-Xylene	25.00	21.58	86	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	121	73-145
Toluene-d8	103	80-120
Bromofluorobenzene	112	80-120

Type: BSD Lab ID: QC623867

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	91.71	73	46-141	7	31
Isopropyl Ether (DIPE)	25.00	20.43	82	52-139	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	21.98	88	56-131	2	20
Methyl tert-Amyl Ether (TAME)	25.00	19.68	79	65-120	3	20
MTBE	25.00	19.03	76	59-123	3	20
1,2-Dichloroethane	25.00	26.78	107	71-135	6	20
Benzene	25.00	22.55	90	80-122	2	20
Toluene	25.00	20.94	84	80-120	1	20
1,2-Dibromoethane	25.00	22.37	89	79-120	5	20
Ethylbenzene	25.00	24.51	98	80-120	8	20
m,p-Xylenes	50.00	45.34	91	80-120	4	20
o-Xylene	25.00	22.61	90	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	123	73-145
Toluene-d8	103	80-120
Bromofluorobenzene	107	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC623868	Batch#:	182557
Matrix:	Water	Analyzed:	01/03/12
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	106	80-127
1,2-Dichloroethane-d4	119	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	182557
Units:	ug/L	Analyzed:	01/03/12
Diln Fac:	1.000		

Type: BS Lab ID: QC623874

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	988.8	99	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	120	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC623875

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,048	105	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	116	73-145
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	233532	Location:	Buttner Prop.
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	182557
MSS Lab ID:	233523-001	Sampled:	12/28/11
Matrix:	Water	Received:	12/29/11
Units:	ug/L	Analyzed:	01/03/12
Diln Fac:	1.000		

Type: MS Lab ID: QC623925

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<2.239	125.0	89.79	72	62-143
Isopropyl Ether (DIPE)	<0.1000	25.00	20.64	83	69-126
Ethyl tert-Butyl Ether (ETBE)	<0.1000	25.00	21.21	85	72-121
Methyl tert-Amyl Ether (TAME)	<0.1002	25.00	19.60	78	75-120
MTBE	<0.1119	25.00	17.24	69 *	73-120
1,2-Dichloroethane	<0.1071	25.00	27.07	108	80-127
Benzene	<0.1000	25.00	23.09	92	80-120
Toluene	<0.1000	25.00	22.09	88	80-120
1,2-Dibromoethane	<0.1341	25.00	20.72	83	80-120
Ethylbenzene	<0.1000	25.00	23.60	94	80-120
m,p-Xylenes	<0.1454	50.00	45.35	91	80-120
o-Xylene	<0.1000	25.00	22.50	90	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-127
1,2-Dichloroethane-d4	127	73-145
Toluene-d8	105	80-120
Bromofluorobenzene	108	80-120

Type: MSD Lab ID: QC623926

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	90.57	72	62-143	1	30
Isopropyl Ether (DIPE)	25.00	20.86	83	69-126	1	20
Ethyl tert-Butyl Ether (ETBE)	25.00	21.92	88	72-121	3	20
Methyl tert-Amyl Ether (TAME)	25.00	18.20	73 *	75-120	7	20
MTBE	25.00	18.09	72 *	73-120	5	20
1,2-Dichloroethane	25.00	25.75	103	80-127	5	20
Benzene	25.00	21.34	85	80-120	8	20
Toluene	25.00	22.15	89	80-120	0	20
1,2-Dibromoethane	25.00	21.22	85	80-120	2	20
Ethylbenzene	25.00	23.03	92	80-120	2	20
m,p-Xylenes	50.00	44.16	88	80-120	3	20
o-Xylene	25.00	21.59	86	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	120	73-145
Toluene-d8	101	80-120
Bromofluorobenzene	107	80-120

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Date : 03-JAN-2012 17:14

Client ID: DYNA P&T

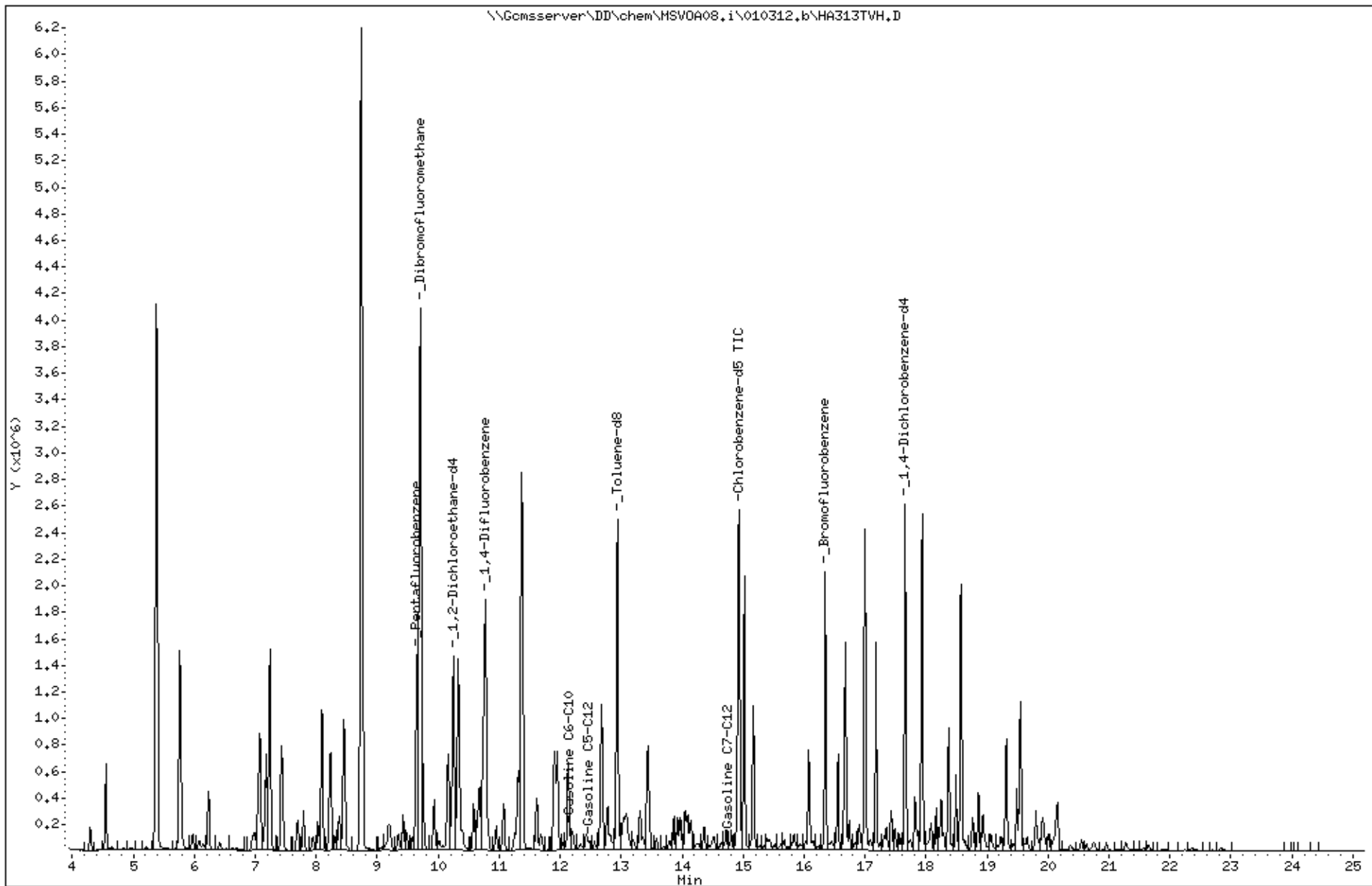
Sample Info: S,233532-002

Instrument: MSV0A08.i

Operator: VOC

Column diameter: 2.00

Column phase:



Date : 03-JAN-2012 17:51

Client ID: DYNA P&T

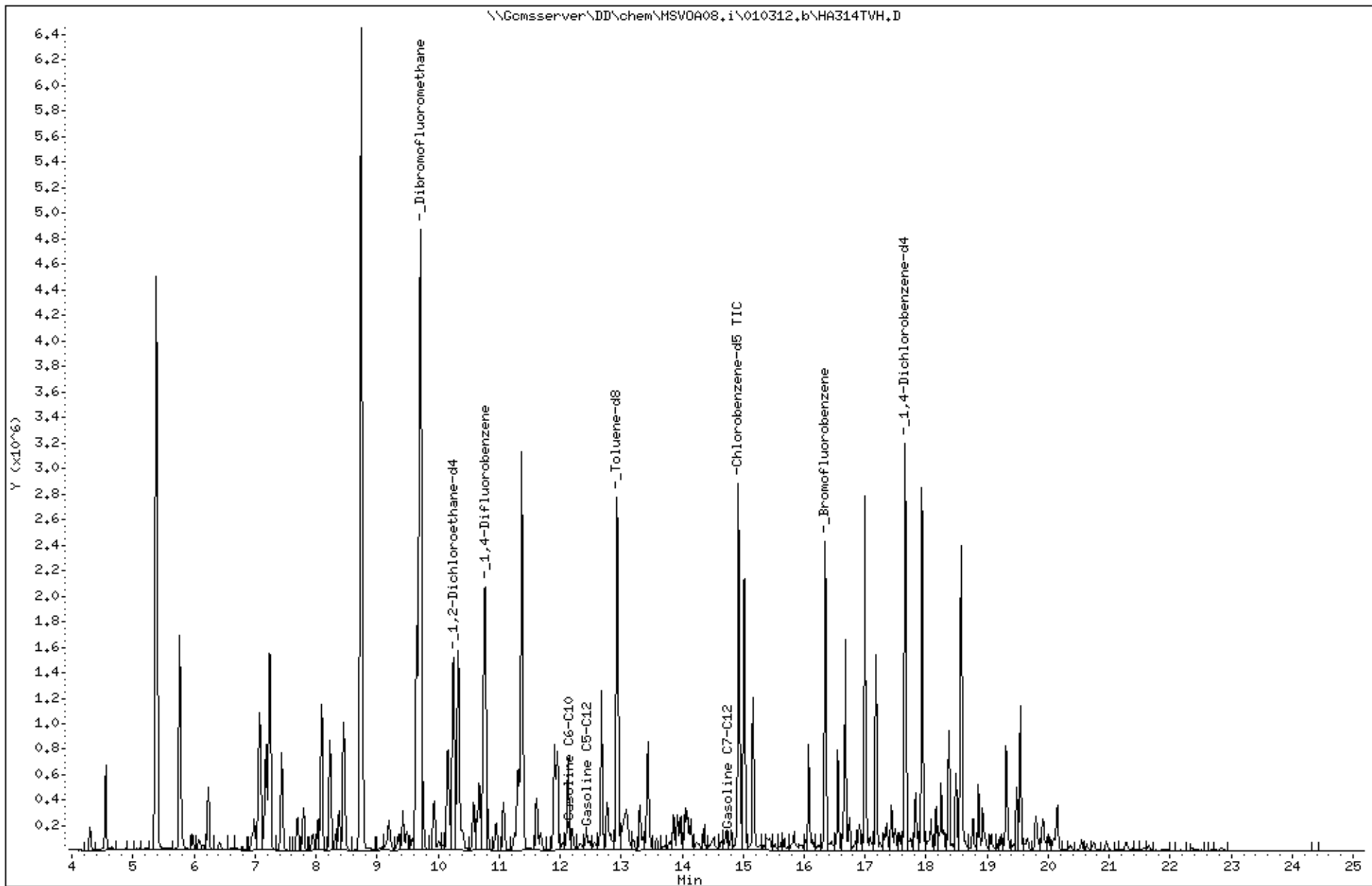
Sample Info: S,233532-003

Instrument: MSV0A08.i

Operator: VOC

Column diameter: 2.00

Column phase:



Date : 30-DEC-2011 11:15

Client ID: DYNA P&T

Sample Info: ccv/bs,qc623744,182522,s18583,,01/100

Instrument: MSV0A08.i

Operator: VOC

Column diameter: 2.00

Column phase:

