BUTTNER PROPERTIES, INC.

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September 30, 2011

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

Attention: Ms. Barbara Jakub, Hazardous Materials Specialist

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

Dear Ms. Jakub:

The "Well Installation Completion Report and Second Quarter 2011 Groundwater Monitoring Report " ("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 B. Robison

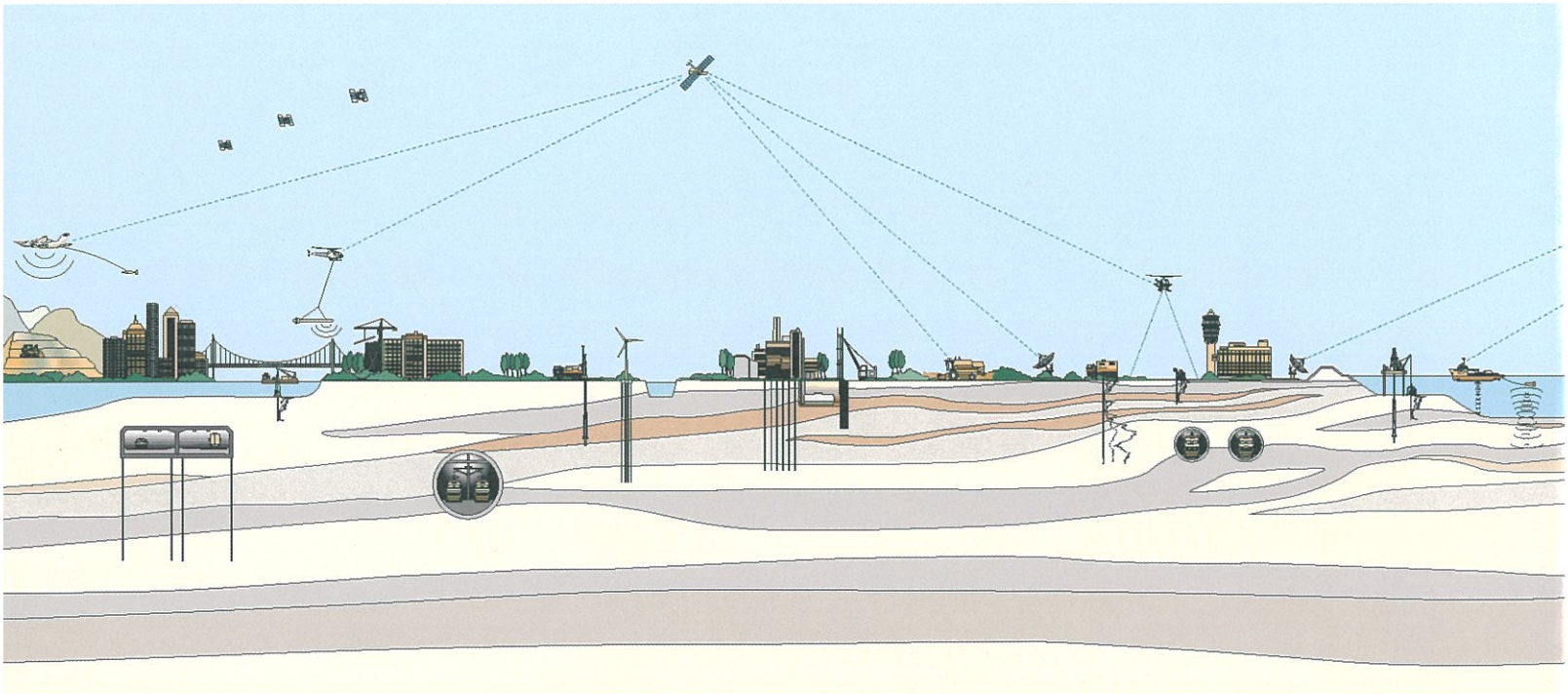
Marianne B. Robison
President

FUGRO CONSULTANTS, INC.

WELL INSTALLATION COMPLETION REPORT and SECOND QUARTER 2011 GROUNDWATER MONITORING REPORT 2250 TELEGRAPH AVENUE OAKLAND, CALIFORNIA

Prepared for:
BUTTNER PROPERTIES

September 2011
Fugro Project No. 04.B0609004



FUGRO CONSULTANTS, INC.

1000 Broadway, Suite 440
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Tel: (510) 268-0461
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September 30, 2011
Project No. 04.B0609004

Buttner Properties
600 West Grand Avenue
Oakland, California 94612

Attention: Ms. Marianne Robison

Subject: Well Installation Report and Second Quarter2011 Groundwater Monitoring Report, Dave's Station, 2250 Telegraph Avenue, Oakland, California, Fuel Leak Case No. RO0000359, GeoTracker Global ID T0600100431

Dear Ms. Robison:

Fugro Consultants, Inc., (Fugro) is pleased to present this report, which documents the installation of two new groundwater monitoring wells and records the results of the Second Quarter 2011 groundwater monitoring event for the 2250 Telegraph Avenue property (Site). The well installation and groundwater monitoring program have been implemented in general accordance with Fugro's Technical Comments and Work Plan response letter, dated October 12, 2010. 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 additional 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.

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. Based on the quantity of groundwater data collected to date, we

recommended in our 2009 Site Investigation Report, the installation of two new monitoring wells (wells MW-7 and MW-8) to better define the distal limits of the groundwater plume.

WELL INSTALLATION ACTIVITIES

Field Activities

Prior to conducting any intrusive fieldwork, the proposed well locations were marked and a utility survey was completed by a private underground utility locator. Two well installation permits were obtained from Alameda County Public Works Agency (ACPWA). As required by local jurisdiction requirements, Fugro applied for an encroachment permit from the City of Oakland Public Works Agency to install one well within West Grand Avenue right-of-way. However, due to a permit processing backlog within the City; the encroachment permit was not issued until July 7, 2011. As a result, the two new monitoring wells were installed approximately three months apart. Copies of the permits obtained from the City of Oakland and ACPWA are presented in Appendix A. The locations of the new wells are presented on Plate 2.

All field activities were completed using standard industry practices regarding worker health and safety. Drilling and sampling activities were conducted under the supervision of Fugro's field personnel. Vapor-Tech Services Inc., a State of California licensed drilling contractor, advanced two borings utilizing direct push drilling methods. On April 30, 2011, boring MW-7 was advanced within the playground of the nursery school adjacent and downgradient of the Site. On August 2, 2011, boring MW-8 was advanced within the parking lane of West Grand Avenue, downgradient of the existing onsite monitoring well MW-3. The borings were completed to a depth of 20 feet below ground surface (bgs) using direct push drilling methods. Continuous soil samples were collected and logged in accordance with the Unified Soil Classification System (USCS). Soil samples were also screened in the field using an Organic Vapor Meter (OVM).

Discrete soil samples were collected from a variety of depths from each boring depending on lithologic changes, elevated OVM readings, and field sample recovery. In general, soil samples were collected from the surface, 1.0, 2.0, 5.0, 7.5, 10, 15, and 20 feet bgs within the direct push borings.

Selected soil samples for chemical analyses were retained in polyethylene tubing, sealed with Teflon® sheeting and plastic end-caps. Samples were stored in an ice-chilled cooler pending delivery to the analytical laboratory. All samples were delivered under appropriate chain-of-custody protocol to a state-certified analytical laboratory for chemical analyses. Analytical results of soil samples obtained during well installation activities are discussed below.

Upon soil sampling completion, the borings were over-drilled using 8.0-inch hollow stem augers. Monitoring wells MW-7 and MW-8 were then constructed using 2.0-inch, Schedule 40 PVC casing. The bottom 15 feet of each well was completed using 0.010-inch slotted well screen at a depth of 5 to 20 feet bgs. The boring annulus between the well casing and the borehole wall was then filled with clean Monterey #212 sand from the bottom of the boring to one foot above the top of the screen section (4.0 to 20 feet bgs). Approximately one foot of

bentonite pellets was placed above the sand pack (3.0 to 4.0 feet bgs) and then hydrated with potable water. Neat cement grout was then placed from the top of the hydrated bentonite to the ground-surface to provide the well seal (0 to 3.0 feet bgs). Each wellhead was secured with a water-tight, traffic-rated cover installed flush with the existing pavement surface.

All drilling and sampling equipment was decontaminated prior to each use, using a high-pressure steam cleaner and/or by washing with a Liquinox/water solution followed by water rinses.

On May 7, 2011, Fugro returned to the adjacent nursery school to develop well MW-7. On August 4, 2011, Fugro returned to the Site to develop well MW-8 situated in the parking lane of West Grand Avenue. Both wells were developed by agitating and purging the groundwater within each well using a check-valve surge block and a submersible pump. Fugro's field personnel monitored and recorded field parameters during well development activities. Approximately 43 gallons of groundwater was purged from well MW-7. Due to slow groundwater recharge at well MW-8, the well was purged dry, allowed to partially recharge, and purged dry again, for a total of 15.25 gallons purged. Wells MW-7 and MW-8 were sampled once well development activities were completed as discussed further below

Soil cuttings, purged groundwater, and decontamination water were placed in Department of Transportation-approved and labeled 55-gallon drums, which were stored onsite, pending chemical classification and offsite disposal. Fugro also retained the services of Virgil Chavez Land Surveying to survey the location and elevation of the two new wells to a local datum. A copy of the survey report is attached in Appendix C, copies of the well development forms are presented in Appendix E. Groundwater elevation data is presented in Table 2.

Subsurface Conditions

In general, the investigation confirmed our previous findings that pavement in the area is underlain by a layer of fill consisting of clayey and silty gravel varying in depth from about 2 to 4 feet. In boring MW-7 we encountered a second concrete pavement surface at a depth of 1.25 feet bgs. This second concrete surface measured approximately 2.0 inches thick and was underlain by approximately 2.5 feet of a silty gravel fill. The fill in both borings was underlain by brown silty clay to fat clay to the maximum depth explored of 20 feet bgs.

Fugro's field geologist screened soil samples in the field using an OVM. Moderate to strong hydrocarbon odors were detected in boring MW-8 from depths ranging from about 12 to 15 feet bgs. Sample MW-8@14' yielded the highest OVM reading of 39.2 parts per million (ppm). Static depth to water was measured in well MW-7 at 9.35 feet bgs on May 7, 2011 and in MW-8 at 9.7 feet bgs on August 4, 2011. Copies of the Logs of Borings are presented in Appendix B.

Chemical Testing Program

Upon completion of well installation activities all soil samples were transported under chain-of-custody documentation to Curtis and Tompkins, Ltd, a State of California-certified

testing laboratory. A total of eleven (11) soil samples were submitted for chemical analyses. In accordance with our work plan and ACEH requirements, soil samples were submitted at changes in lithology and in areas with high OVM readings. Selected soil samples were analyzed for the following:

- Total Petroleum Hydrocarbons as gasoline (TPHg) and BTEX using EPA Method 5030/8260b;
- Total Petroleum Hydrocarbons as diesel and motor oil (TPHd and TPHmo) using EPA Methods 8015m, with silica gel cleanup;
- Lead scavengers (1,2,-dichloroethane and 1,2-dibromoethane) using EPA Method 5030/8260b; and
- Five fuel oxygenates (MTBE, TAME, ETBE, TBA, and DIPE) using EPA Method 5030/8260b.

It should be noted that due to an omission in completing the chain-of-custody, soil samples collected and submitted for analyses from boring MW-7 were not analyzed using silica gel cleanup. Based on the results for Sample MW-7@1.5' Fugro requested Curtis and Tompkins Ltd re-analyze this sample using silica gel cleanup to remove polar non-petroleum (organic) hydrocarbons. Fugro also requested the analytical laboratory to analyze a new aliquot (for comparison purposes) from the bottom of the core using silica gel cleanup. These additional results are included with the attached data reports.

Results of Soil Analyses

Analytical reports from Curtis and Tompkins, Ltd are presented in Appendix D. Analytical results of chemical analyses are summarized in Table 1.

Analyses did not detect the five fuel oxygenates or the two lead scavengers in any of the soil samples analyzed. Of the BTEX components, only ethylbenzene and total xylenes were detected in Sample MW-8@14' at concentrations of 25 micrograms per kilogram (µg/kg) and 8.3 µg/kg, respectively. Detected ethylbenzene and total xylene concentrations were detected well below residential and commercial land use Environmental Screening Levels (ESLs). Sample MW-8@14' is located within the groundwater fluctuation zone downgradient of the former gasoline UST and also corresponded with the highest OVM reading detected.

No TPHg was detected in samples from boring MW-7, however, TPHg was detected in Samples MW-8@10', MW-8@12', and MW-8@14' (located within the groundwater fluctuation zone) at concentrations ranging from 3.3 milligrams per kilogram (mg/kg) to 10 mg/kg. Detected TPHg concentrations were well below the residential land use ESL of 100 mg/kg.

TPHd was detected in nine out the eleven samples analyzed from both borings MW-7 and MW-8. The addition of the silica gel cleanup procedure did not have a significant affect on the TPHd data results for boring MW-7 samples, as all concentrations were below residential and commercial land use ESLs.

Analyses detected TPHmo in four out of eleven samples analyzed from the borings at concentrations ranging from 11 mg/kg to 390 mg/kg (Sample MW-8@1.0'). The initial analysis of Sample MW-7@1.5' without the silica gel cleanup procedure detected TPHmo at a concentration of 240 mg/kg. Although this result was below the residential land use ESL of 370 mg/kg, Fugro requested the analytical laboratory re-analyze the sample utilizing the silica gel cleanup procedure. Fugro also instructed the laboratory to collect and analyze an aliquot from the bottom of the core of Sample MW-7@1.5' following the silica gel cleanup for comparison purposes. Results of the re-analysis following the silica gel cleanup procedure showed a reduction in the TPHmo to a concentration of 170 mg/kg. Analysis of the bottom of the sample detected TPHmo at a concentration of 160 mg/kg, indicating a similar TPHmo concentration throughout the six-inch sample. Results of the re-analysis detected lower concentrations of TPHmo than the analysis without the silica gel cleanup, which in our opinion, indicates that the cleanup process prior to analysis is effective in removing non-petroleum hydrocarbons.

Elevated TPHmo concentrations exceeding the residential land use ESL of 370 mg/kg was only detected in Sample MW-8@1.0' at a concentration of 390 mg/kg. All detected TPHmo concentrations during this investigation were well below the ESL for a commercial land use of 2,500 mg/kg. Analytical results of soil samples obtained at 2.0 feet bgs in boring MW-7 and 3.0 feet bgs in boring MW-8 detected TPHmo below residential land use ESLs. The source of the elevated motor oil in the shallow soil samples at these two locations is unknown but is most likely associated with historic paving practices.

GROUNDWATER MONITORING – SECOND QUARTER 2011 AND NEW WELL SAMPLING

Field Collection Activities

For the Second Quarter event, wells MW-3, MW-4, MW-7, and MW-8 were sampled. Prior to sampling, the presence of free product was checked and the depth to groundwater was measured in all wells except for MW-6 due to access restrictions.

Wells MW-3 and MW-4 were purged of approximately three casing volumes of water while monitoring for changes in pH, conductivity, and temperature. Due to the slow recharge of these wells, wells MW-3 and MW-4 were sampled the next day once the groundwater levels had stabilized. Wells MW-7 and MW-8 were sampled following well development activities on May 7, 2011 and August 4, 2011, respectively.

Fugro's field personnel noticed hydrocarbon odor during purging and sampling of monitoring wells MW-3, MW-4, and MW-8; however, no free product was observed. All four 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 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 was analyzed for the following constituents:

- TPHg and BTEX using EPA Methods 5030/8260;
- TPHd and TPHmo using EPA Methods 8015m with silica gel cleanup;
- Lead scavengers (1,2,-dichloroethane and 1,2-dibromoethane) using EPA Method 8260; and
- Five fuel oxygenates (MTBE, TAME, ETBE, TBA, and DIPE) using EPA Method 8260.

Laboratory analytical reports (including chain-of-custody documentation) and well gauging and sampling forms are presented in Appendices D and E, respectively. Groundwater elevation data is summarized in Table 2. Analytical test results are summarized 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/feet[1] directed towards the south-southeast. Based on the groundwater elevation data presented in Table 2, the groundwater gradient remains generally consistent with previous measurements. Groundwater was generally encountered at lower elevations compared to the October 2010 monitoring event, which is expected given that this monitoring event was conducted during a dry summer season.

Results of Groundwater Analyses

Concentrations of the analytes detected in wells MW-3 and MW-4 during this sampling event are generally within the historic range of data. TPHg was detected during this event in wells MW-3 and MW-4 at concentrations of 600 μg/L and 260 μg/L, respectively. No TPHg was detected in well MW-7, located downgradient of MW-4. However, analyses detected 1,700 μg/L of TPHg in well MW-8, located downgradient of MW-3.

TPHd was detected in samples from Wells MW-3 and MW-4 at concentrations of 130 μg/L and 1,200 μg/L, respectively. Similar to TPHg, TPHd was detected in well MW-8 at a concentration of 260 μg/L, higher then the concentrations detected in well MW-3. TPHd was not detected in well MW-7. TPHmo was only detected in the groundwater sample collected from well MW-4 at a concentration of 1,500 μg/L.

Analysis detected benzene in well MW-3 at a concentration of 300 μg/L and in downgradient well MW-8 at 1.8 μg/L. Analyses detected toluene, ethylbenzene, and total xylenes in monitoring well MW-3 at concentrations of 12 μg/L, 5.2 μg/L, and 11.81 μg/L, respectively. At well MW-8, concentrations of toluene, ethylbenzene, and total xylenes were detected at concentrations of 9.4 μg/L, 57 μg/L, and 17.1 μg/L, respectively. Of the five fuel oxygenates and lead scavengers, only TBA was detected in MW-3 at a concentration of 12

[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 their conditions are not representative of onsite conditions.

μg/L. No fuel oxygenates were detected in Well MW-8, however, 1,2-DCA was detected at a concentration of 3.0 μg/L.

No BTEX, fuel oxygenates, or lead scavengers were detected in the groundwater samples obtained from Well MW-4. Analyses only detected toluene at a concentration of 2.4 μg/L in the sample obtained from MW-7; no other BTEX, fuel oxygenates, or lead scavengers were detected in the groundwater obtained from this well. No MTBE concentrations were detected in any of the samples analyzed during this event.

REPORTING REQUIREMENTS

In accordance with reporting requirements, Fugro has uploaded a PDF copy of this 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 is preparing a Corrective Action Plan (CAP) and a Third Quarter Groundwater Monitoring Report for submittal to ACEH. 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.

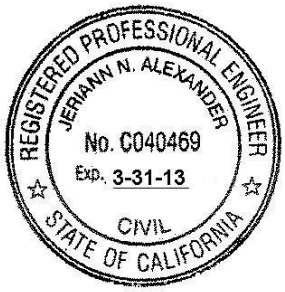
CLOSING STATEMENT

The next scheduled monitoring event will be conducted during the fourth quarter of 2011. If you have any questions, please call either of the undersigned at (510) 268-0461.

Sincerely,
FUGRO WEST, INC.

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

Jeriann Alexander, PE, R.E.A
R.E.A. No. 03130 (exp. 6/12)
Civil Engineer 40469 (exp. 3/13)



KAE/JNA:ke

Attachments:
Table 1 – Summary of Chemical Concentrations – 2011 Well Installation, Soil
Table 2 – Summary of Groundwater Elevation Data
Table 3 – Summary of Chemical Concentrations – Groundwater Monitoring Wells

Plate 1 - Vicinity Map
Plate 2 - Site Plan

Appendix A	City and County Permits
Appendix B	Logs of Borings MW-7 and MW-8
Appendix C	Well Survey Report
Appendix D	Laboratory Analytical Reports
Appendix E	Well Development and Sampling Forms

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 Chemical Concentrations in Soil - 2011 Well Installation
2250 Telegraph Avenue
Oakland, California

		Sample ID													Regulatory Screening Criteria	
Analyte	Units	MW-7 @ 1.5	MW-7 @ 1.5 RT	MW-7 @ 1.5 BOC	MW-7 @ 2	MW-7 @ 5	MW-7 @ 7	MW-7 @ 10	MW-7 @ 15	MW-8@1'	MW-8@3'	MW-8@10'	MW-8@12'	MW-8@14'	ESLs Residential Land Use*	ESLs Commercial Industrial Worker*
Sample Depth	ft	1.5'	1.5'	1.5'	2'	5'	7'	10'	15'	1.0'	3.0'	10'	12'	14'		
Sample Date		4/30/2011	4/30/2011	4/30/2011	4/30/2011	4/30/2011	4/30/2011	4/30/2011	4/30/2011	8/2/2011	8/2/2011	8/2/2011	8/2/2011	8/2/2011		
Hydrocarbons																
TPHg	mg/kg	<1.1	--	--	<1.1[b]	<1.0	<1.0	<0.94	<0.93	<0.99	<0.99	**10** [Y]	**3.3** [Y]	**8.1** [Y]	100	180
TPHd	mg/kg	**41**[Y]	**45**[Y**]	**36**[Y**]	**14**[Yb]	<1.0	**2.6**[Y]	**1.4**[Y]	**2.7**[Y]	**70** [Y]	<0.99	**18** [Y]	**11** [Y]	**2.7** [Y]	100	180
TPHmo	mg/kg	**240**	**170****	**160****	**66**[b]	<5.0	<5.0	<5.0	<5.0	**390**	**11** [Y]	<5.0	<5.0	<5.0	370	2,500
VOCs																
Benzene	µg/kg	<4.8	--	--	<5.0[b]	<4.6	<4.8	<4.7	<4.6	<4.9	<4.6	<4.9	<4.8	<4.9	120	270
Toluene	µg/kg	<4.8	--	--	<5.0[b]	<4.6	<4.8	<4.7	<4.6	<4.9	<4.6	<4.9	<4.8	<4.9	9,300	9,300
Ethylbenzene	µg/kg	<4.8	--	--	<5.0[b]	<4.6	<4.8	<4.7	<4.6	<4.9	<4.6	<4.9	<4.8	**25**	2,300	4,700
Total Xylenes	µg/kg	<9.6	--	--	<10.0[b]	<9.2	<9.6	<9.4	<9.2	<9.8	<9.2	<9.8	<9.6	**8.3**	11,000	11,000
MTBE	µg/kg	<4.8	--	--	<5.0[b]	<4.6	<4.8	<4.7	<4.6	<4.9	<4.6	<4.9	<4.8	<4.9	8,400	8,400
TBA	µg/kg	<95	--	--	<99[b]	<93	<97	<94	<92	<98	<92	<97	<97	<97	100,000	110,000
DIPE	µg/kg	<4.8	--	--	<5.0[b]	<4.6	<4.8	<4.7	<4.6	<4.9	<4.6	<4.9	<4.8	<4.9	NE	NE
ETBE	µg/kg	<4.8	--	--	<5.0[b]	<4.6	<4.8	<4.7	<4.6	<4.9	<4.6	<4.9	<4.8	<4.9	NE	NE
TAME	µg/kg	<4.8	--	--	<5.0[b]	<4.6	<4.8	<4.7	<4.6	<4.9	<4.6	<4.9	<4.8	<4.9	NE	NE
1,2-DCA	µg/kg	<4.8	--	--	<5.0[b]	<4.6	<4.8	<4.7	<4.6	<4.9	<4.6	<4.9	<4.8	<4.9	220	480
1,2-DBA	µg/kg	<4.8	--	--	<5.0[b]	<4.6	<4.8	<4.7	<4.6	<4.9	<4.6	<4.9	<4.8	<4.9	19	44

Notes:

TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TPHmo = Total Petroleum Hydrocarbons as motor oil
VOCs = Volatile Organic Compounds
MTBE = Methyl tert-butyl ether
TBA = tert-butyl alcohol
DIPE = Isopropyl Ether
ETBE = Ethyl terbt-butyl ether
TAME = Methyl tert-amyl ehter
1, 2-DCA = 1, 2-Dichloroethane
1,2-DBA = 1, 2-Dibromoethane
mg/kg = Milograms per kilogram
µg/kg = micrograms per kilogram

Detected Concetrations shown in **Bold**
<25 = Not detected above laboratory detection limit
-- = Not Analyzed
[Y] = Sample exhibits chromatographic pattern which does not resemble standard
[b] = Sample was analyzed outside of hold time
ESL = Environmental Screening Levels, RWQCB Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater
-- Interim Final, November 2007, Revised May 2008
* = Table B - Groundwater is not a Current or Potential Source of Drinking Water
[**] = TPHd and mo with Silica Gel Cleanup
RT = Retested using Silica Gel Cleanup
BOC = Bottom of core
NE = Not Established

Table 2
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
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

Table 2
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
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

Table 2
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
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	
MW-7	5/9/2011	18.67	9.42	9.25
	9/9/2011		9.88	8.79
MW-8	8/4/2011	18.95	9.70	9.25
	9/9/2011		9.99	8.96

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 Chemical Concentrations - Groundwater Monitoring Wells
2250 Telegraph Avenue
Oakland, California

Well	Date	Groundwater Elevation (Feet MSL)	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	Ethylbenzene µg/L	Total 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	PCE µg/L	Chlorobenzene µg/L
Soil Gas ESL*			**NE**	**NE**	**NE**	**NE**	**540**	**380,000**	**170,000**	**160,000**	**24,000**	**24,000**	**310,000**	**NE**	**NE**	**NE**	**130,000**	**200**	**150**	**120**	**13,000**
Groundwater ESL**			**100**	**100**	**100**	**100**	**1.0**	**40**	**30**	**20**	**5.0**	**5.0**	**12**	**NE**	**NE**	**NE**	**62**	**0.5**	**0.05**	**5.0**	**25**
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
	06/06/94	9.19	**430**	**180+**	<50	<500	**10**	**2.2**	**6.1**	**7.6**	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	09/07/94	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
	03/17/95	10.82	**1,600**	**170**	<50	<500	**29**	<0.5	**9.1**	**6.9**	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	06/27/95	10.04	**1,100**	<50	<50	<500	**14**	<0.5	**7.1**	**5.0**	--	--	--	--	--	--	<0.5	**3.3**	--	<0.5	<0.5
	09/18/95	9.43	**370**	--	**110+**	--	**4.4**	**0.6**	**2.0**	**1.4**	--	--	--	--	--	--	<0.5	**2.4**	--	<0.5	<0.5
	08/21/98	9.55	**170**	--	**62+**	--	<0.5	**0.76**	**0.79**	<0.5	<2.0	--	--	--	--	--	--	--	--	--	--
	02/24/99	10.81	**20**	--	**280+**	--	<0.5	<0.5	<0.5	<0.5	--	<2.0	--	--	--	--	--	--	--	--	--
	06/30/00	13.47	**240**	--	<50	--	**0.7**	**0.8**	<0.5	**0.74**	**4.0**	--	--	--	--	--	--	--	--	--	--
	04/27/01	9.99	**160**	--	<50	--	**3.3**	<0.5	**0.86**	<0.50	<2.0	--	--	--	--	--	--	--	--	--	--
	04/15/05	10.43	**520**	--	**99** [LY]	<300	**3.3**[C]	**1.8**	**<0.5**	**4.6**	--	<0.5	<10	<0.5	<0.5	<0.5	--	**0.6**	<0.5	--	--
	08/01/05	9.99	**480**	--	**62** [LY]	<300	<0.5	<0.5	<0.5	**2.3**	--	<0.5	**18**	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	11/09/05	8.02	**290**[Y]	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	**14**	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	03/21/06	10.84	**390**	--	**97**[LY]	<300	**1.0**	<0.5	**0.6**	<0.5	--	<0.5	**16**	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/07/06	9.15	**720**	--	**130**[LY]	<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	--	--
	03/20/07	9.61	**290**[Y]	--	**74**[LY]	<300	<0.5	<0.5	**0.58**	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/08/07	9.34	**300**[LY]	--	**95**[LY]	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	02/05/08	11.03	**100**[Y]	--	**62**[Y]	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/14/08	9.55	**71**[Y]	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	03/03/09	10.86	**73**[Y]	--	**93**[Y]	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	07/30/09	9.45	**160**[Y]	--	<50	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	09/08/09	8.78	**56**[Y]	--	--	--	<0.5	<0.5	<0.5	**0.56**[C]	--	<2.0	--	--	--	--	--	--	--	--	--
	03/24/10	10.40	**82**[Y]	--	**53**[Y]	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	10/06/10	9.57	**68**[Y]	--	**64**[Y]	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	05/07/11	10.38	NOT SAMPLED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	03/03/94	9.66	**110**	<50	<50	<500	<0.5	**1.7**	**0.58**	**2.7**	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	06/06/94	8.88	**100**	<50	<50	<500	**11**	<0.5	**0.7**	**1.1**	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	09/07/94	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
	03/17/95	10.18	**180**	**100**	<50	<500	**31**	<0.5	**1.0**	**1.8**	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	06/27/95	9.33	**80**	<50	<50	<500	**6.0**	<0.5	<0.5	<0.5	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	09/18/95	8.36	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	08/21/98	8.12	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	--	--
	02/24/99	10.12	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	<2.0	--	--	--	--	--	--	--	--	--
	06/30/00	14.24	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	**2.0**	--	--	--	--	--	--	--	--	--	--
	04/27/01	8.71	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	--	--
	04/15/05	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	--	--
	08/01/05	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	--	--
	11/09/05	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	--	--
	03/21/06	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	--	--
	08/07/06	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	--	--
	03/20/07	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	--	--
	08/08/07	7.21	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	02/05/08	9.64	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/14/08	10.93	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	03/03/09	7.72	<50	--	<50	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	07/30/09	8.62	<50		<50	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	03/24/10	NOT SAMPLED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/05/10	7.71	NOT SAMPLED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/07/11	9.50	NOT SAMPLED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 3
Summary of Chemical Concentrations - Groundwater Monitoring Wells
2250 Telegraph Avenue
Oakland, California

Well	Date	Groundwater Elevation (Feet MSL)	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	Ethylbenzene µg/L	Total 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	PCE µg/L	Chlorobenzene µg/L
Soil Gas ESL*			NE	NE	NE	NE	540	380,000	170,000	160,000	24,000	24,000	310,000	NE	NE	NE	130,000	200	150	120	13,000
Groundwater ESL**			100	100	100	100	1.0	40	30	20	5.0	5.0	12	NE	NE	NE	62	0.5	0.05	5.0	25
MW-3	03/03/94	9.47	**85**	<50	<50	<500	<0.5	**0.77**	<0.5	**3.7**	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	06/06/94	8.69	**100**	**110+**	<50	<500	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	**2.5**	**0.8**	--	**2.1**	<0.5
	09/07/94	8.22	**220**	<50	<50	<500	**11**	**1.8**	**2.6**	**3.5**	--	--	--	--	--	--	<0.5	<0.5	--	**0.6**	<0.5
	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
	03/17/95	10.12	**1,500**	**270**	<50	<500	**83**	**6.0**	**10**	**15**	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	06/27/95	9.03	**2,500**	<50	<50	<500	**330**	**8.9**	**8.1**	**20**	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	09/18/95	8.43	**1,500**	--	**770+**	--	**400**	**11**	**2.2**	**3.3**	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	08/21/98	8.61	**2,300**	--	**600+**	--	**410**	**9.3**	**36**	**25**	<10	--	--	--	--	--	--	--	--	--	--
	02/24/99	10.39	**55**	--	**110+**	--	<0.5	<0.5	<0.5	<0.5	--	<2.0	--	--	--	--	--	--	--	--	--
	06/30/00	10.83	**110**	--	**83+**	--	<0.5	<0.5	**0.51**	<0.5	<2.0	--	--	--	--	--	--	--	--	--	--
	04/27/01	8.67	<50	--	**690+**	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	--	--
	04/14/05	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	--	--
	08/01/05	9.39	**410**	--	**150** [HLY]	**750**	**17**	<0.5	**0.87c**	**1.4**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	11/09/05	8.73	**1,100**[Y]	--	**110**[LY]	<300	**150**	**3.4**	**6.1**	**3.8**	--	<0.5	**13**	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	03/21/06	10.20	**100**	--	**61**[Y]	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	**12**	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/07/06	8.67	**4,000**[y]	--	**280**[LY]	<300	**630**	**9**	**31**	**12**	--	<0.5	**18**	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	10/27/06	8.34	**5,300**	--	**240**[LY]	<300	**950**	**13**	**17**	**11**	--	<10	<200	<10	<10	<10	--	<10	<10	--	--
	03/20/07	9.25	**1,000**[LY]	--	**180**[LY]	<300	**100**	**1.5**	**2.1**	**3.3**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/08/07	8.49	**2,100**[LY]	--	**130**[LY]	<300	**260**	**5.1**	**5.8**	**3.6**	--	<2.0	<40	<2.0	<2.0	<2.0	--	<2.0	<2.0	--	--
	02/05/08	10.36	**100**	--	**50**[Y]	<300	**7.6**	<0.5	<0.5	**0.5**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/14/08	8.44	**1,400**	--	**200**[Y]	<300	**510**	**8.2**	**22**	**7.2**	--	<3.6	<71	<3.6	<3.6	<3.6	--	<3.6	<3.6	--	--
	03/02/09	10.86	**170**[Y]	--	<50	<300	**16**	<0.5	<0.5	**2.4**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	07/30/09	8.56	**360**	--	**71**[Y]	<300	**14**	<0.5	**1.2**	<1.0	--	<0.5	**13**	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	09/08/09	8.37	**1200**[Y]	--	**--**	--	**280**	**2.4**	**9.2**[C]	**3.08**[C]	--	<2.0	--	--	--	--	--	--	--	--	--
	03/24/10	10.10	**300**	--	**130**[Y]	<300	**64**	**2.5**	**0.78**	**3.3**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	10/06/10	8.46	**450**	--	**76**[Y]	<300	**89**	**3.7**	**4.6**	**5.2**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	05/07/11	9.63	**600**	--	**130**[Y]	<300	**300**	**12**	**5.2**	**11.81**	--	<0.5	**12**	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
MW-4	03/03/94	8.99	**4,300**	<50	**240**	<500	**220**	**20**	**7.5**	**17**	--	--	--	--	--	--	<0.5	**5.9**	--	<0.5	**4.4**
	06/06/94	8.03	**4,400**	<50	**800+**	<500	**140**	<0.5	<0.5	<0.5	--	--	--	--	--	--	<0.5	<0.5	--	<0.5	<0.5
	09/07/94	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
	03/17/95	9.78	**2,200**	**380**	**160+**	<500	<0.5	<0.5	**7.9**	**10**	--	--	--	--	--	--	<0.5	**1.7**	--	<0.5	**4.5**
	06/27/95	8.83	**3,100**	<50	**82**	<500	<0.5	<0.5	**13**	**19**	--	--	--	--	--	--	<0.5	**2.3**	--	<0.5	**4.8**
	09/18/95	8.04	**3,000**	--	**1,231+**	--	**12**	<0.7	**6.9**	**8.3**	--	--	--	--	--	--	<0.5	**1.9**	--	<0.5	**4.0**
	08/21/98	8.02	**1,700**	--	**600+**	--	**8.2**	**12**	**13**	**5.2**	<2.0	-	--	--	--	--	--	--	--	--	--
	02/24/99	9.09	**2,700**	--	**2,100+**	--	**4.3**	**0.64**	<0.5	**0.54**	--	<2.0	--	--	--	--	--	--	--	--	--
	06/30/00	11.74	**6,700**	--	**3,200+**	--	**3.1**	**1.7**	**11**	**16.7**	**27**	--	--	--	--	--	--	--	--	--	--
	04/27/01	8.62	**1,900**	--	**710**	--	<0.5	<0.5	<0.5	<0.5	**14**	--	--	--	--	--	--	--	--	--	--
	04/14/05	7.87	**2,900**	--	**2,200** [HLY]	**2,500**	<0.5	<0.5	<0.5	**5.1**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/01/05	8.10	**2,000**	--	**2,100** [HLY]	**3400**[L]	<0.5	<0.5	<0.5	**5.8c**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	11/09/05	7.46	**2,000Y**	--	**1,900**[HLY]	**2,300**[L]	**1.2**	<0.5	<0.5	**0.8**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	03/21/06	9.88	**2,200**	--	**2,800**[HLY]	**4,000**[L]	**1.2**	<0.5	<0.5	**0.7**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/07/06	7.98	**2,500**[y]	--	**4,700**[HLY]	**7,200**[L]	**0.6**	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	10/27/06	7.13	**2,200**[y]	--	**2,500**[HLY]	**3,200**[L]	**0.5**	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	03/20/07	8.68	**2,700**	--	**2,900**[HLY]	**3,500**[L]	**0.77**	<0.5	<0.5	**0.67**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/08/07	7.88	**6,100**[LY]	--	**9,200**[HL]	**12,000**[HL]	**0.7**	<0.5	<0.5	**0.5**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	02/05/08	9.48	**2,100**	--	**2,100**[Y]	**2,200**	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/14/08	8.41	**1,900**[Y]	--	**370**[Y]	<300	**1.4**	**0.59**	<0.5	**0.85**	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	03/02/09	8.75	**1,300**[Y]	--	**880**[Y]	**850**	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	07/30/09	8.07	**1,400**[Y]	--	**1,100**[Y]	**1,300**	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	09/08/09	7.77	**580**[Y]	--	**--**	**--**	<0.5	<0.5	<0.5	**7.5**[C]	--	**2.4**[C]	--	--	--	--	--	--	--	--	--
	03/24/10	9.93	**510**[Y]	--	**670**	**980**	<0.5	<0.5	<0.5	<1.0	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	10/06/10	8.50	**560**[Y]	--	**130**[Y]	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	05/07/11	8.95	**260**	--	**1,200**	**1,500**	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--

Table 3
Summary of Chemical Concentrations - Groundwater Monitoring Wells
2250 Telegraph Avenue
Oakland, California

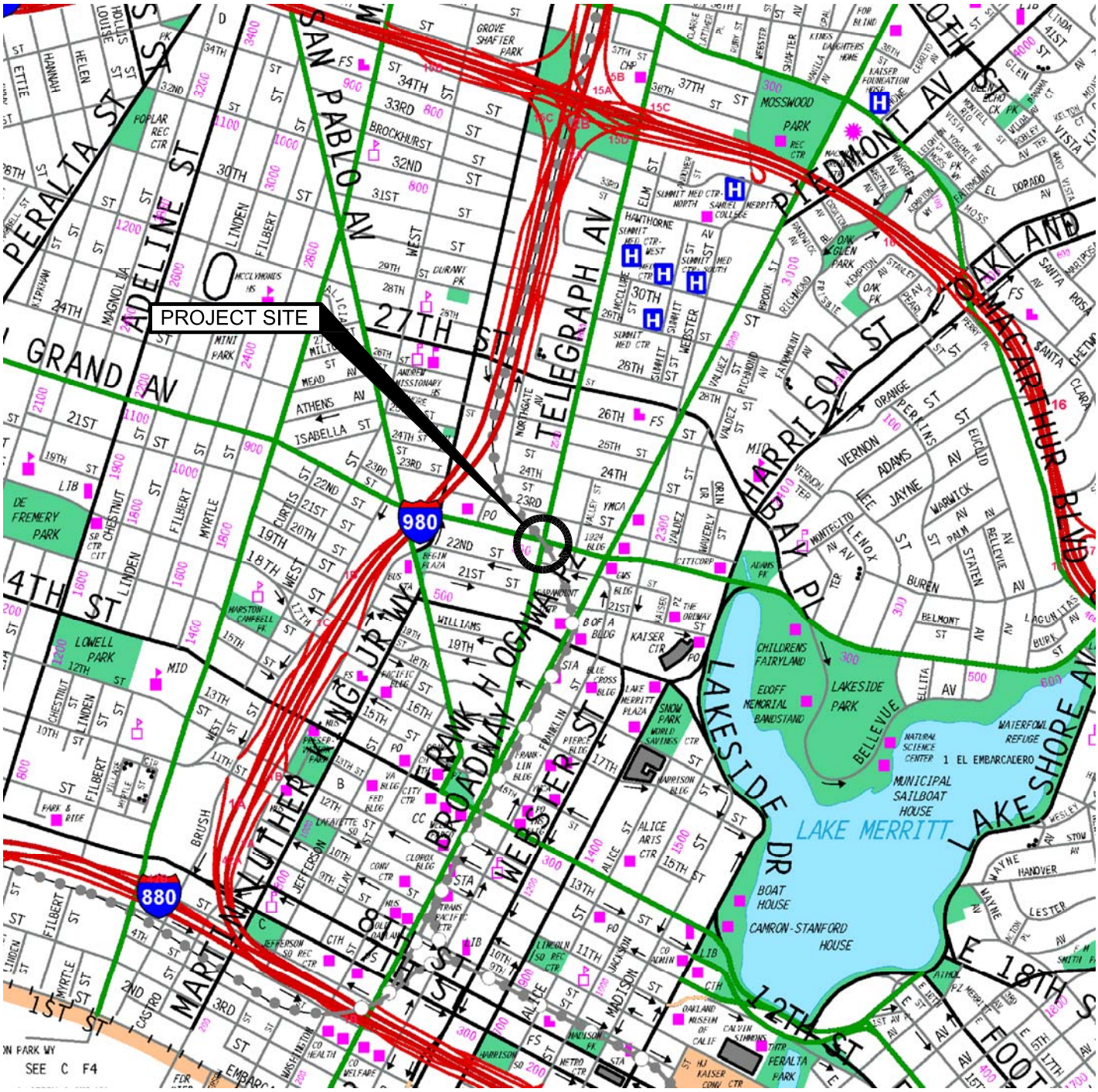
Well	Date	Groundwater Elevation (Feet MSL)	Petroleum Hydrocarbons: TVH as Gasoline µg/L	TEH as Kerosene µg/L	TEH as Diesel µg/L	TEH as Motor Oil µg/L	Volatile Organics: Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	MTBE -8020 µg/L	MTBE -8260 µg/L	TBA µg/L	DIPE µg/L	ETBE µg/L	TAME µg/L	1,1,1-TCA µg/L	1,2-DCA µg/L	1,2-DBA µg/L	PCE µg/L	Chlorobenzene µg/L
Soil Gas ESL*			**NE**	**NE**	**NE**	**NE**	**540**	**380,000**	**170,000**	**160,000**	**24,000**	**24,000**	**310,000**	**NE**	**NE**	**NE**	**130,000**	**200**	**150**	**120**	**13,000**
Groundwater ESL**			**100**	**100**	**100**	**100**	**1.0**	**40**	**30**	**20**	**5.0**	**5.0**	**12**	**NE**	**NE**	**NE**	**62**	**0.5**	**0.05**	**5.0**	**25**
MW-5	06/26/97	7.58	**120**	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	<0.5	<0.5	--	**1.6**	<0.5
	08/21/98	7.70	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	--	--
	02/24/99	9.16	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	<2.0	--	--	--	--	--	--	--	--	--
	06/30/00	8.39	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	**5.1**	--	--	--	--	--	--	--	--	--	--
	04/27/01	8.42	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--	--	--	--	--
	04/14/05	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	--	--
	08/01/05	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	--	--
	11/09/05	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	--	--
	03/21/06	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	--	--
	08/07/06	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	--	--
	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	--	--
	03/20/07	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	--	--
	08/08/07	7.59	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	02/05/08	9.26	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/14/08	7.71	<50	--	<50	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	03/02/09	9.82	<50	--	<50	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	07/30/09	7.89	<50	--	<50	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	03/24/10	NOT SAMPLED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/05/10	7.84	<50	--	<50	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	05/07/11	8.58	NOT SAMPLED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	06/26/97	7.47	**1,500+**	--	**450+**	--	<0.5	<0.5	**11**	<0.5	-	-	--	--	--	--	<0.5	<0.5	--	<0.5	**1.7**
	08/21/98	7.36	**1,400**	--	**540+**	--	<0.5	**3.6**	**5.6**	**0.4**	**5.7**	**3.2**	--	--	--	--	--	--	--	--	--
	02/24/99	9.04	**1,600**	--	**600+**	--	<0.5	<0.5	**0.56**	<0.5	--	**2.3**	--	--	--	--	--	--	--	--	--
	06/30/00	8.04	**1,900**	--	**360+**	--	**0.56**	**3.0**	**5.4**	**3.5**	**30**	--	--	--	--	--	--	--	--	--	--
	04/27/01	8.26	**1,600**	--	**440**	--	<0.5	<0.5	<0.5	<0.5	**3.3**	--	--	--	--	--	--	--	--	--	--
	04/14/05	8.81	**2,100**	--	**890** [LY]	<300	<0.5	<0.5	<0.5	**5.9**	--	**0.7**	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/01/05	7.82	**2,100**	--	**670** [LY]	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	11/09/05	NO ACCESS	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/21/06	9.25	**1,900**	--	**850** [LY]	<300	<0.5	<0.5	<0.5	<0.5	--	**0.5**	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/07/06	7.77	**2,200** [Y]	--	**940** [LY]	<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	NO ACCESS	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/20/07	8.26	**2,000** [Y]	--	**670L** [Y]	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/08/07	7.51	**2,100** [HLY]	--	**680** [LY]	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	02/05/08	9.09	**1,400**	--	**560** [Y]	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	08/14/08	7.65	**1,100** [Y]	--	**390** [Y]	<300	<0.5	<0.5	<0.5	<0.5	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	03/03/09	9.76	**990** [Y]	--	**230** [Y]	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	07/30/09	NO ACCESS	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/24/10	NOT SAMPLED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/05/10	7.74	**910** [Y]	--	**420**	<300	<0.5	<0.5	<0.5	<1.0	--	<0.5	**14**	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
	05/07/11	NO ACCESS	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-7	05/07/11	9.25	<50	--	<50	<300	<0.5	**2.4**	<0.5	<1.0	--	<0.5	<10	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	--
MW-8	08/04/11	9.25	**1,700**	--	**260** [Y]	<300	**1.8**	**9.4**	**57**	**17.1**	--	<0.5	<10	<0.5	<0.5	<0.5	--	**3.0**	<0.5	--	--

Notes:

TVH = Total Volatile Hydrocarbons
TEH = Total Extractable Hydrocarbons
DCA = Dichloroethane
DBA = Dibromoethane
TCA = Trichloroethane
PCE = Tetrachloroethene
MTBE = tert-Butyl methyl ether
TBA = Tert butyl alcohol
DIPE = Diisopropyl Ether
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 specifiec

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 colums exceeds 40%
Y = Sample exhibits chromatographic pattern which does not resemble standarc
H = Heavier hydrocarbon contributed to the quantitation
L = Lighter hydrocarbon contributed to the quantitation
ESLs = San Francisco Bay Regional Water Quality Control Board, Screening for Environmental Concerns at Sites with Contaminated Soil and Grounwater, Interim Final November 2007, Revised May 200
* = Table E-1 Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns
** = Table F-1a Groundwater Screening Levels (groundwater is a current potential drinking water resource)
NA = Not Accessible During This Sampling Event
NE = Not Evaluated

PLATES



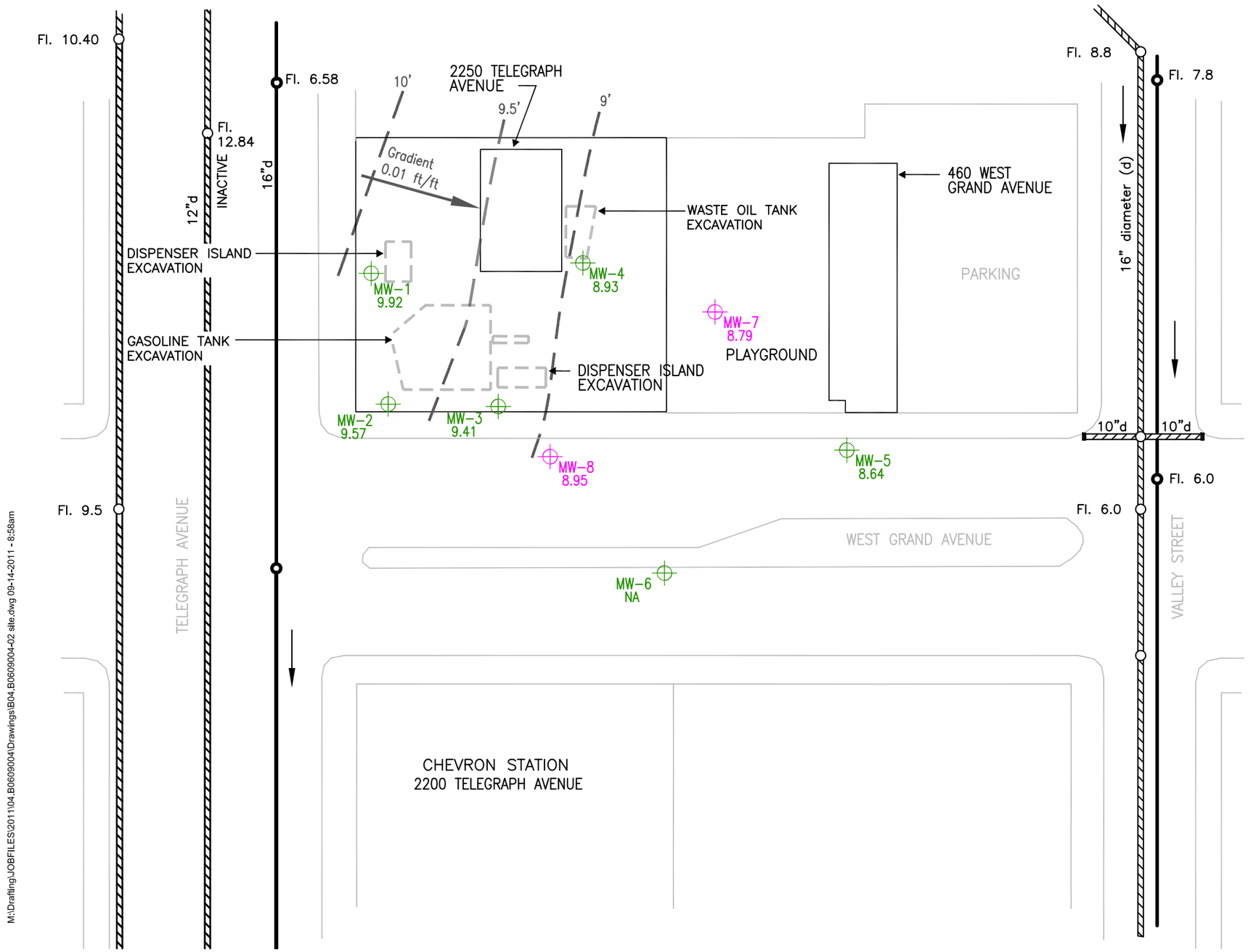
M:\Drafting\JOBFILES\2011\04.B0609004\Drawings\A04.B0609004-01 vicn.dwg 9-13-11 01:29:38 PM began

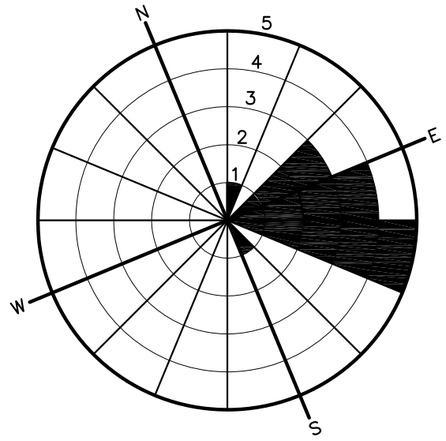
SOURCE: This Site Vicinity Map is based on The Thomas Guide Digital Edition 2003, Bay Area Metro, Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara Counties.

NORTH
0 1500 3000
FEET

VICINITY MAP
2250 Telegraph Avenue
Oakland, California

PLATE 1





ROSE DIAGRAM SHOWING
GROUNDWATER FLOW DIRECTION
(2004–2011)

LEGEND

- STRUCTURE
- LIMITS OF EXCAVATION
- MONITORING WELL LOCATION
- MW-7 LOCATION OF NEW MONITORING WELL

NORTH

0 40 80
FEET

SITE PLAN
2250 Telegraph Avenue
Oakland, California

PLATE 2

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APPENDIX A
CITY AND COUNTY PERMITS

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Appl# OB110455 Job Site 2250 TELEGRAPH AV Parcel# 008 -0658-006-02

Reserve Meters on W Grand. (One NO FEE Ref: X1100708) Permit Issued 07/07/11
WG-494;-496. NON-CONSECUTIVE DAYS on West Grand Av
Install one additional monitoring well within West Grand Av.

NON-CONSECUTIVE DAYS

Nbr of days: 2 Nbr of meters: 1
Effective: 08/02/11 Expiration: 08/04/11

SHORT TERM METERED

		Applcnt	Phone#	Lic#	--License Classes--
Owner	COMMERCIAL & IND SUPPLY				
Contractor	VAPOR TECH SERVICES	X	(415)378-0415	916085	C57
Arch/Engr					
Agent	FUGRO/M D'ANNA		(510)267-4469		
Applic Addr	1348 66TH ST, BERKELEY CA, 94702				

$160.65 FEES TO BE PAID AT ISSUANCE

$71.00 Applic	$69.00 Permit
$.00 Process	$13.30 Rec Mgmt
$.00 Gen Plan	$.00 Invstg
$.00 Other	$7.35 Tech Enh

JOB SITE

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

ADDRESS:

Applicant: _____ _____

Issued by: _____ _____

DIST:

PAID
SMK 7/7/11

CITY OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Appl# X1100708 Job Site 2250 TELEGRAPH AV Parcel# 008 -0658-006-02

Descr Install one additional monitoring well within West Grand Ave Permit Issued 07/07/11
Rescission needed to final permit.
Call PWA INSPECTION prior to start: 510-238-3651, 4th FLOOR.
Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
Util Fund #:

		Applcnt	Phone#	Lic#	--License Classes--
Owner	COMMERCIAL & IND SUPPLY				
Contractor	VAPOR TECH SERVICES	X	(415)378-0415	916085	C57
Arch/Engr					
Agent	FUGRO/M D'ANNA		(510)267-4469		
Applic Addr	1348 66TH ST, BERKELEY CA, 94702				

$436.05 FEES TO BE PAID AT ISSUANCE

$71.00	Applic	$309.00	Permit
$.00	Process	$36.10	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$19.95	Tech Enh

JOB SITE

Permit Issued By _____ Date: _____

Finaled By _____ Date: _____

ADDRESS:

DIST:

PAID
Sue 7/7/11

CITY OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Permit No. X1100708 Parcel #: 008 -0658-006-02
Project Address: 2250 TELEGRAPH AV

Licensed Contractors' Declaration
I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Construction Lending Agency Declaration
I hereby affirm under penalty of perjury that there is a construction-lending agency for the performance of the work for which this permit is issued, as provided by Section 3097 of the Business and Professions Code. N/A under Lender implies No Lending Agency.

Lender_____ Address_____

Workers' Compensation Declaration

I hereby affirm under penalty of perjury one of the following declarations:

[ ] I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

[ ] I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

CARRIER:_____POLICY NO. _____

[ ] I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS, IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3707 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

Hazardous Materials Declaration

I hereby affirm that the intended occupancy [ ] WILL [ ] WILL NOT use, handle or store any hazardous, or acutely hazardous, materials. (Checking "WILL" acknowledges that Sections 25505, 25533, & 25534 of the Health & Safety Code, as well as filing instructions, were made available to you.)

I HEREBY CERTIFY THE FOLLOWING: That I have read this document; that the above information is correct; and that I have truthfully affirmed all applicable declarations contained in this document. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection. I am fully authorized by the owner and to perform the work authorized by this permit.

ADDRESS:

DIST:

PRINT NAME _____ Signature [ ] Contractor, or [ ] Agent _____ Date _____

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 04/15/2011 By jamesy

Permit Numbers: W2011-0281 to W2011-0282
Permits Valid from 04/30/2011 to 05/07/2011

Application Id: 1302728335508 **City of Project Site:** Oakland
Site Location: 2250 Telegraph Ave
Project Start Date: 04/30/2011 **Completion Date:** 05/07/2011
Assigned Inspector: Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org

Applicant: Fugro Consultants - Mike D'Anna **Phone:** 510-267-4469
1000 Broadway Suite 440, Oakland, CA 94607
Property Owner: Buttner Properties **Phone:** --
600 West Grnad Ave, Oakland, CA 94612
Client: ** same as Property Owner **

Total Due: $794.00
Receipt Number: WR2011-0112 **Total Amount Paid:** $794.00
Payer Name : Mike D'Anna Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Well Construction-Monitoring-Monitoring - 2 Wells
Driller: Vapor Tech Services - Lic #: 916085 - Method: hstem **Work Total: $794.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2011-0281	04/15/2011	07/29/2011	MW-7	8.00 in.	2.00 in.	4.50 ft	20.00 ft
W2011-0282	04/15/2011	07/29/2011	MW-8	8.00 in.	2.00 in.	4.50 ft	20.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755

(Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

5. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

7. Minimum surface seal thickness is two inches of cement grout placed by tremie

8. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

PROGRAMS AND SERVICES

Well Standards Program

The Alameda County Public Works Agency, Water Resources is located at:
399 Elmhurst Street
Hayward, CA 94544
For Driving Directions or General Info, Please Contact 510-670-5480 or wells@acpwa.org
For Drilling Permit information and process contact James Yoo at
Phone: 510-670-6633
FAX: 510-782-1939
Email: Jamesy@acpwa.org

Alameda County Public Works is the administering agency of General Ordinance Code, Chapter 6.88 . The purpose of this chapter is to provide for the regulation of groundwater wells and exploratory holes as required by California Water Code. The provisions of these laws are administered and enforced by Alameda County Public Works Agency through its Well Standards Program.

Drilling Permit Jurisdictions in Alameda County: There are four jurisdictions in Alameda County.

Location: Agency with Jurisdiction Contact Number

Berkeley City of Berkeley Ph: 510-981-7460
Fax: 510-540-5672

Fremont, Newark, Union City Alameda County Water District Ph: 510-668-4460
Fax: 510-651-1760

Pleasanton, Dublin, Livermore, Sunol Zone 7 Water Agency Ph: 925-454-5000
Fax: 510-454-5728

The Alameda County Public Works Agency, Water Resources has the responsibility and authority to issue drilling permits and to enforce the County Water Well Ordinance 73-68. This jurisdiction covers the western Alameda County area of **Oakland**, **Alameda**,**Piedmont**, **Emeryville**, **Albany**, **San Leandro**, **San Lorenzo**, **Castro Valley**, and **Hayward** . The purpose of the drilling permits are to ensure that any new well or the destruction of wells, including geotechnical investigations and environmental sampling within the above jurisdiction and within Alameda County will not cause pollution or contamination of ground water or otherwise jeopardize the health, safety or welfare of the people of Alameda County.

Permits are required for all work pertaining to wells and exploratory holes at any depth within the jurisdiction of the Well Standards Program. A completed permit application *(30 Kb)** , along with a site map, should be submitted at least **ten (10) working days prior to the planned start of work**. Submittals should be sent to the address or fax number provided on the application form. When submitting an application via fax, please use a high resolution scan to retain legibility.

Fees
Beginning April 11, 2005 , the following fees shall apply:

A permit to construct, rehabilitate, or destroy wells, including cathodic protection wells, but excluding dewatering wells (*Horizontal hillside dewatering and dewatering for construction period only), shall cost $300.00 per well.

A permit to bore exploratory holes, including temporary test wells, shall cost $200 per site. A site includes the project parcel as well as any adjoining parcels.

Please make checks payable to: **Treasurer, County of Alameda**

Permit Fees are exempt to State & Federal Projects
Applicants shall submit a letter from the agency requesting the fee exemption.

Scheduling Work/Inspections:
Alameda County Public Works Agency (ACPWA), Water Resources Section requires scheduling and inspection of permitted work. All drilling activities must be scheduled in advance. Availability of inspections will vary from week to week and will come on a first come, first served bases. To ensure inspection availability on your desired or driller scheduled date, the following procedures are required:

Please contact **James Yoo at 510-670-6633** to schedule the inspection date and time (You must have drilling permit approved prior to scheduling).

Schedule the work as far in advance as possible (at least 5 days in advance); and confirm the scheduled drilling date(s) at least 24 hours prior to drilling.

Once the work has been scheduled, an ACPWA Inspector will coordinate the inspection requirements as well as how the Inspector can be reached if they are not at the site when Inspection is required. Expect for special circumstances given, all work will require the inspection to be conducted during the working hours of 8:30am to 2:30pm., Monday to Friday, excluding holidays.

Request for Permit Extension:
Permits are only valid from the start date to the completion date as stated on the drilling permit application and Conditions of Approval. To request an extension of a drilling permit application, applicants must request in writing prior to the completion date as set forth in the Conditions of Approval of the drilling permit application. Please send fax or email to Water Resources Section, Fax 510-782-1939 or email at wells@acpwa.org. There are no additional fees for permit extensions or for re-scheduling inspection dates. You may not extend your drilling permit dates beyond 90 days from the approval date of the permit application. **NO refunds** shall be given back after 90 days and the permit shall be deemed voided.

Cancel a Drilling Permit:
Applicants may cancel a drilling permit only in writing by mail, fax or email to Water Resources Section, Fax 510-782-1939 or email at wells@acpwa.org. If you do not cancel your drilling permit application before the drilling completion date or notify in writing within 90 days, Alameda County Public Works Agency, Water Resources Section may void the permit and No refunds may be given back.

Refunds/Service Charge:
A service charge of $25.00 dollars for the first check returned and $35.00 dollars for each subsequent check returned.

Applicants who cancel a drilling permit application **before** we issue the approved permit(s), will receive a **FULL** refund (at any amount) and will be mailed back within two weeks.

Applicants who cancel a drilling permit application **after** a permit has been issued will then be charged a service fee of $50.00 (fifty Dollars).

To collect the remaining funds will be determined by the amount of the refund to be refunded (see process below).

Board of Supervisors Minute Order, File No. 9763, dated January 9, 1996, gives blanket authority to the Auditor-Controller to process claims, from all County departments for the refund of fees which do not exceed $500 (Five Hundred Dollars)(with the exception of the County Clerk whose limit is $1,500).

Refunds over the amounts must be authorized by the Board of Supervisors Minute Order, File No. 9763 require specific approval by the Board of Supervisors. The forms to request for refunds under $500.00 (Five Hundred Dollars) are available at this office or any County Offices. If the amount is exceeded, a Board letter and Minute Order must accompany the claim. Applicant shall fill out the request form and the County Fiscal department will process the request.

Enforcement
Penalty. Any person who does any work for which a permit is required by this chapter and who fails to obtain a permit shall be guilty of a misdemeanor punishable by fine not exceeding Five Hundred Dollars ($500.00) or by imprisonment not exceeding six months, or by both such fine and imprisonment, and such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any such

violation is committed, continued, or permitted, and shall be subject to the same punishment as for the original offense. (Prior gen. code §3-160.6)

Enforcement actions will be determined by this office on a case-by-case basis
Drilling without a permit shall be the cost of the permit(s) and a fine of $500.00 (Five Hundred Dollars).

Well Completion Reports (State DWR-188 forms) must be filed with the Well Standards Program within 60 days of completing work. Staff will review the report, assign a state well number, and then forward it to the California Department of Water Resources (DWR). Drillers should not send completed reports to DWR directly. Failure to file a Well Completion Report or deliberate falsification of the information is a misdemeanor; it is also grounds for disciplinary action by the Contractors' State License Board. Also note that filed Well Completion Reports are considered private record protected by state law and can only be released to the well owner or those specifically authorized by government agencies.

See our website (www.acgov.org/pwa/wells/index.shtml) for links to additional forms.

APPENDIX B
LOGS OF BORINGS MW-7 AND MW-8

CLASSIFICATION AND MATERIAL SYMBOLS

MAJOR DIVISIONS PER ASTM D2488-06			MAJOR GROUP NAMES AND MATERIAL SYMBOLS		
COARSE-GRAINED SOILS More than 50% retained on the No. 200 sieve	GRAVELS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	Clean gravels less than 5% fines	GW		Well-Graded Gravel
			GP		Poorly Graded Gravel
		Gravels with more than 12% fines	GM		Silty Gravel
			GC		Clayey Gravel
	SANDS MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	Clean sand less than 5% fines	SW		Well-Graded Sand
			SP		Poorly Graded Sand
		Sands with more than 12% fines	SM		Silty Sand
			SC		Clayey Sand
FINE-GRAINED SOILS 50% or more passes the No. 200 sieve	SILTS AND CLAYS Liquid Limit Less than 50%		ML		Silt
			CL		Lean Clay
			OL		Organic Silt
	SILTS AND CLAYS A Liquid Limit Greater than 50%		MH		Elastic Silt
			CH		Fat Clay
			OH		Organic Clay
HIGHLY ORGANIC SOILS			PT		Peat or Highly Organic Soils

Notes:
Classification of soils on the boring logs is in general accordance with ASTM D2488, or D2487 if appropriate laboratory data are available.
The geologic formation is noted in bold font at the top of interpreted interval on the boring logs.

OTHER MATERIAL SYMBOLS

- Debris or Mixed Fill
- Pavement with Aggregate Base

SAMPLER TYPE

- SPT (Driven) 1-3/8" ID 2" OD
- Modified California (Driven) 2-3/8" ID 3" OD
- Modified California (Driven) 1-7/8" ID 2-1/2" OD
- Shelby Tube (Pushed) 2-7/8" ID 3" OD
- Pitcher Barrel (Rotary-cut) 2-7/8" ID
- Osterberg (Piston) 2-7/8" ID
- 101 Geobarrel (Rotary-cut) 2-7/8" ID
- Rock Core (Rotary-cut) See log for size
- Vibracore (Vibrated) See log for size
- Push-core (Pushed) See log for size
- Collected from Auger
- Other See log for details

Note: Refer to text of report for additional details or other sampler types.

BLOW COUNT

Number of blows with to drive sampler each of three 6-in. intervals, as measured in the field (uncorrected). An SPT hammer (140 lb., falling 30-in.) was used unless otherwise noted on the boring log. For example:

Blow Count	Description
5 7 8	5, 7, and 8 blows for first, second, and third interval, respectively.
35 50/3"	35 blows for the first interval. 50 blows for the first 3 inches of the second interval. Lack of third value implies that driving was stopped after 3 inches into the second interval.
WOH WOH 5	"WOH" indicates that the weight of the hammer was sufficient to advance the sampler over the first two intervals. 5 blows were required to advance the sampler over the third interval.

N-VALUE

The N-Value represents the blowcount for the last 12 inches of the sample drive if three 6-inch intervals were driven. If 50 hammer blows were insufficient to drive through either the second or the third interval, the total number of blows and total length driven are reported (excluding the first interval). "ref" (refusal) indicates that 50 blows were insufficient to drive through the first 6-inch interval.

Parenthesis indicate that an approximate correction has been applied for non-SPT drive samplers. For example, a factor of 0.63 is commonly used to adjust blow counts obtained using a 3-inch outside diameter modified California sampler to correspond to Standard Peneteration Test.

UNDRAINED SHEAR STRENGTH

A value of undrained shear strength is reported. The value is followed by a letter code indicating the type of test that was performed, as follows:

U - Unconfined Compression
Q - Unconsolidated Undrained Triaxial
T - Torvane
P - Pocket Penetrometer
M - Miniature Vane
F - Field Vane
R - R-value

OTHER TESTS

Field or laboratory tests without a dedicated column on the boring log are reported in the Other Tests column. A letter code is used to indicate the type of test. For certain tests, a value representing the test result is also provided. Typical letter codes are as follows. Additional codes may be used. Refer to the report text and the laboratory testing results for additional information.

k - Permeability (cm/s)
Consol - Consolidation
Gs - Specific Gravity
MA - Particle Size Analysis
EI - Expansion Index
OVM - Organic Vapor Meter

WATER LEVEL SYMBOLS

- Initial water level
- Stabilized water level
- Seepage encountered

INCREASING MOISTURE CONTENT

Dry
Moist
Wet

CONSISTENCY OF COHESIVE SOIL

CONSISTENCY	UNDRAINED SHEAR STRENGTH (KIPS PER SQUARE FOOT)
Very Soft	< 0.25
Soft	0.25 to 0.50
Medium Stiff	0.50 to 1.0
Stiff	1.0 to 2.0
Very Stiff	2.0 to 4.0
Hard	> 4.0
Note: In absence of test data, consistency has been estimated based on manual observation.	

APPARENT DENSITY OF COHESIONLESS SOIL

APPARENT DENSITY	N-VALUE
Very Loose	0 to 4
Loose	5 to 9
Medium Dense	10 to 29
Dense	30 to 49
Very Stiff	> 49

TERMS AND SYMBOLS USED ON BORING LOGS

Buttner Properties
Project No. 04.B0609004

DEPTH, ft	MATERIAL SYMBOL	SAMPLER TYPE	BLOW COUNT OR PRESSURE, psi	N VALUE OR RQD%	RECOVERY	LOCATION: MATERIAL DESCRIPTION	DRY UNIT WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX	UNDRAINED SHEAR STRENGTH, S_u, ksf	OTHER TESTS	INSTRUMENTATION
						2.5 inches Asphalt / Concrete Pavement								Locking Well Cap, Flush Mounted Traffic Rated Cover
						5 inches Base Rock								
						ARTIFICIAL FILL (af) SILT with gravel (ML): dark brown, moist, fine to course gravel, angular to subangular gravel, slight hydrocarbon odor, no staining								
						2 inches of old concrete								
					6/6	SILT with gravel (ML): light brown, moist, fine to course gravel, angular to subangular gravel, slight hydrocarbon odor, no staining							OVM = 0.6	2" Schedule 40 PVC, Blank Section with Neat Cement Grout
					6/6	- color change to dark brown							OVM = 0.6	
						Silty CLAY (CL-ML): dark brown to black, moist, medium plasticity, trace amounts of gravels, no odor, no staining								Bentonite Chips
5					6/6								OVM = 0.6	Monterey #3 Sand
						Fat CLAY (CH): brown, moist, medium to high plasticity, slight hydrocarbon odor, no staining								2" Schedule 40 PVC, 0.020 Slotted Screen
					6/6	- color change to dark brown, high plasticity, no odor, no staining							OVM = 1.3	
						- color change to gray brown with red brown mottling, no odor, no staining								
						- static water at 9.35 ft 5/7/11 0905 hrs								
10					6/6								OVM = 0.6	

Continued

BORING DEPTH: 20.0 ft
BACKFILL: Converted to Monitoring Well
DEPTH TO WATER: 9.4 ft
FIELDWORK DATE: April 30, 2011
DRILLING METHOD: Upper 5.5 ft Hand Auger, remaining 14.5 ft Direct Push

HAMMER TYPE: Automatic
RIG TYPE: Geoprobe 7822DT
DRILLED BY: Vapor Tech Services
LOGGED BY: M D'Anna
CHECKED BY:

LOG OF BORING NO. MW-7
2250 Telegraph Ave
Oakland, California

DEPTH, ft	MATERIAL SYMBO	SAMPLER TYPE	BLOW COUNT OR PRESSURE, psi	N VALUE OR RQD%	RECOVERY	LOCATION: MATERIAL DESCRIPTION	DRY UNIT WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX	UNDRAINED SHEAR STRENGTH, S_u, ksf	OTHER TESTS	INSTRUMEN-TATION
						- moisture change to moist to wet								
						▽ - intitial water at 12.5 ft 4/30/11 1013 hrs								
						- color change to brown								
15					6/6	Silty CLAY (CL-ML): brown, moist to wet, high plasticity, no odor, no staining							OVM = 1.9	
						- trace amounts of fine, angular gravel, red brown mottling, no odor, no staining								
20					6/6	- Bottom of Boring at 20 feet							OVM = 1.9	

NOTES:
1. Terms and symbols defined on Plate A-1.

FWI STANDARD LOG BETA01 G:\JOBDOCS\609609.004\GINT\04.74110007.GPJ SOIL-ROCK_NOPLATENUM_20100113.GLB 5/13/11 12:58 p

LOG OF BORING NO. MW-7
2250 Telegraph Ave
Oakland, California

DEPTH, ft	MATERIAL SYMBOL	SAMPLER TYPE	BLOW COUNT OR PRESSURE, psi	N VALUE OR RQD%	RECOVERY	LOCATION: MATERIAL DESCRIPTION	DRY UNIT WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX	UNDRAINED SHEAR STRENGTH, S_u, ksf	OTHER TESTS	INSTRUMENTATION
						3 inches Asphalt / Concrete Pavement								Locking Well Cap, Flush Mounted Traffic Rated Cover
						6 inches Base Rock								
					6/6	**ARTIFICIAL FILL (af)** Clayey SAND with gravel (SC): brown, moist, fine sand, medium to coarse gravel, sub-rounded to sub-angular gravel, no odor, no staining								2" Schedule 40 PVC, Blank Section with Neat Cement Grout
					6/6									
													OVM = 0.2	
					6/6	**ARTIFICIAL FILL (af)** Poorly-graded SAND (SP): orange brown, moist, fine to medium sand, no odor , no staining								
													OVM = 0	
					6/6	Silty CLAY (CL-ML): black, moist, low plasticity, slight hydrocarbon odor, no staining								
													OVM = 0.6	
						- red mottling, slight hydrocarbon odor, no staining								
						- gray mottling, no odor, no staining								Bentonite Chips
														Monterey #3 Sand
5					6/6	- color change to gray, no odor, no staining								
													OVM = 0.1	
														2" Schedule 40 PVC, 0.020 Slotted Screen
					6/6								OVM = 0.2	
						- color change to tan brown, red / gray mottling, no odor, no staining								
					6/6									
													OVM = 0.2	
						- static water at 9.7 ft 8/4/11 0827 hrs								
10					6/6									
													OVM = 5.1	

Continued

FWI STANDARD LOG BETA01 G:\JOBDOCS\609\609.004\GINTMW-8004.74110007.GPJ SOIL-ROCK_NOPLATENUM_20100113.GLB 8/23/11 09:01 a

BORING DEPTH: 20.0 ft
BACKFILL: Converted to Monitoring Well
DEPTH TO WATER: 9.7 ft
FIELDWORK DATE: August 2, 2011
DRILLING METHOD: Upper 5.5 ft Hand Auger, remaining 14.5 ft Direct Push

HAMMER TYPE: Automatic
RIG TYPE: Geoprobe 7822DT
DRILLED BY: Vapor Tech Services
LOGGED BY: M D'Anna
CHECKED BY:

LOG OF BORING NO. MW-8
2250 Telegraph Ave
Oakland, California

DEPTH, ft	MATERIAL SYMBOL	SAMPLER TYPE	BLOW COUNT OR PRESSURE, psi	N VALUE OR RQD%	RECOVERY	LOCATION: MATERIAL DESCRIPTION	DRY UNIT WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX	UNDRAINED SHEAR STRENGTH, S_u, ksf	OTHER TESTS	INSTRUMENTATION
					6/6	Poorly-graded SAND with clay (SP-SC): gray brown, moist, fine to medium sand, moderate plasticity, red staining, no odor								
						- hydrocarbon odor							OVM = 12.6	
					6/6	Poorly-graded SAND with silt (SP-SM): gray, moist to wet, fine to medium sand, hydrocarbon odor, no staining								
						- initial water at 12.5 ft 8/2/11 0955 hrs							OVM = 2.1	
						Lean CLAY with sand (CL): gray, moist, medium plasticity, fine grainedsand, hydrocarbon odor, no staining								
					6/6								OVM = 39.2	
15					6/6	Silty CLAY (CL-ML): gray tan, moist, moderate to high plasticity, hydrocarbon odor, tan staining							OVM = 4.3	
						- color change to brown, no odor, no staining								
						- gray mottling, no odor, no staining								
					6/6									
20						- Bottom of Boring at 20 feet							OVM = 1.2	

NOTES:
1. Terms and symbols defined on Plate A-1.

FWI STANDARD LOG BETA01 G:\JOBDOCS\609609.004\GINTMW-8\04.74110007.GPJ SOIL-ROCK_NOPLATENUM_20100113.GLB 8/23/11 09:01 a

LOG OF BORING NO. MW-8
2250 Telegraph Ave
Oakland, California

APPENDIX C
WELL SURVEY REPORT

Virgil Chavez Land Surveying
721 Tuolumne Street
Vallejo, California 94590
(707) 553-2476 • Fax (707) 553-8698

August 12, 2011
Project No.: 2043-08
Rev 8/12/11 well added

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

Subject: Monitoring Well Survey
2250 Telegraph Ave.
Oakland, CA

Dear Karen:

This is to confirm that we have proceeded at your request to survey the repaired ground water monitoring well located at the above referenced location. The survey was performed on May 7 and August 11, 2011. The benchmark for this survey was a City of Oakland benchmark being a well monument at approximate centerline of Telegraph & 26th Street. The latitude, longitude and coordinates are for top of casings and are based on the California State Coordinate System, Zone III (NAD83).
Benchmark Elevation = 27.54 feet (NGVD 29).

Latitude	Longitude	Northing	Easting	Elev.	Desc.
				18.97	RIM MW-7
37.8120081	-122.2683202	2122958.40	6050869.28	18.67	TOC MW-7
				19.21	RIM MW-8
37.8119048	-122.2685637	2122922.13	6050798.22	18.95	TOC MW-8

Sincerely,

Virgil D. Chavez, PLS 6323

APPENDIX D
LABORTORY ANALTYCAL REPORTS


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 227757
ANALYTICAL REPORT

Fugro West Inc.	Project : 04.B0609004
1000 Broadway	Location : 2250 Telegraph Avenue
Oakland, CA 94607	Level : II

Sample ID	Lab ID
MW-7 @ 1.5	227757-001
MW-7 @ 5	227757-002
MW-7 @ 7	227757-003
MW-7 @ 10	227757-004
MW-7 @ 15	227757-005

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: _____ Date: 05/10/2011
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**227757**
Client:	**Fugro West Inc.**
Project:	**04.B0609004**
Location:	**2250 Telegraph Avenue**
Request Date:	**05/04/11**
Samples Received:	**05/04/11**

This data package contains sample and QC results for five soil samples, requested for the above referenced project on 05/04/11. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
MW-7 @ 1.5 (lab # 227757-001) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

-227757

ES-F10 CHAIN OF CUSTODY

PAGE 1 OF 1

PROJECT NAME: 2250 Telegraph Avenue

PROJECT NO.: 04.B0609004 — LAB: Curtis and Tompkins

PROJECT CONTACT: Karen Emery — TURNAROUND: 5 Day TAT

SAMPLED BY: M. D'Anna

LABORATORY I.D. NUMBER	FIELD SAMPLE I.D.	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	CONTAINERS: VOA	CONTAINERS: LITER	CONTAINERS: PINT	CONTAINERS: TUBE	PRESERVATIVE: HCL	PRESERVATIVE: H_2SO_4	PRESERVATIVE: HNO_3	PRESERVATIVE: ICE	PRESERVATIVE: OTHER	PRESERVATIVE: NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	QUANTITY	TVHg	TEHd and TEHmo	Lead Scavengers	Five fuel oxygenates	BTEX	EDF Reporting
	MW-7 @ 1.5		X					X				X			0 4	3 0	1 1	0923	1	X	X	X	X	X	X
	MW-7 @ 5		X					X				X			0 4	3 0	1 1	0943	1	X	X	X	X	X	X
	MW-7 @ 7		X					X				X			0 4	3 0	1 1	1004	1	X	X	X	X	X	X
	MW-7 @ 10		X					X				X			0 4	3 0	1 1	1008	1	X	X	X	X	X	X
	MW-7 @ 15		X					X				X			0 4	3 0	1 1	1020	1	X	X	X	X	X	X

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
Karen Emery	5-4-11 13:38	[signature]	5/4/11 1339

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.

intact cold RC

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 227757 Date Received 5/4/11 Number of coolers 1
Client ES-FID Project 3250 Telegraph Ave

Date Opened 5/4/11 By (print) Vidya Gandhi (sign) Vidya Gandhi
Date Logged in 5/5/11 By (print) R. Panic (sign)

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 ☐ Foam blocks ☐ Bags ☒ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.0

VOA ☒ Samples Received on ice & cold without a temperature blank

☐ 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 samples in the appropriate containers for indicated tests? _____ (YES) NO
11. Are sample labels present, in good condition and complete? _____ (YES) NO
12. Do the sample labels agree with custody papers? _____ (YES) NO
13. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
14. Are the samples appropriately preserved? _____ YES NO (N/A)
15. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
16. Did you document your preservative check _____ YES NO (N/A)
17. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
18. Was the client contacted concerning this sample delivery? _____ YES (NO)
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____
_____
_____

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	174517
Units:	mg/Kg	Sampled:	04/30/11
Basis:	as received	Received:	05/04/11
Diln Fac:	1.000		

Field ID: MW-7 @ 1.5 Lab ID: 227757-001
Type: SAMPLE Analyzed: 05/06/11

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	67-140

Field ID: MW-7 @ 5 Lab ID: 227757-002
Type: SAMPLE Analyzed: 05/07/11

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	67-140

Field ID: MW-7 @ 7 Lab ID: 227757-003
Type: SAMPLE Analyzed: 05/07/11

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	67-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	174517
Units:	mg/Kg	Sampled:	04/30/11
Basis:	as received	Received:	05/04/11
Diln Fac:	1.000		

Field ID: MW-7 @ 10 Lab ID: 227757-004
Type: SAMPLE Analyzed: 05/07/11

Analyte	Result	RL
Gasoline C7-C12	ND	0.94

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	67-140

Field ID: MW-7 @ 15 Lab ID: 227757-005
Type: SAMPLE Analyzed: 05/07/11

Analyte	Result	RL
Gasoline C7-C12	ND	0.93

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	67-140

Type: BLANK Analyzed: 05/06/11
Lab ID: QC590677

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	67-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC590676	Batch#:	174517
Matrix:	Soil	Analyzed:	05/06/11
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.054	105	79-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	67-140

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	227775-002	Batch#:	174517
Matrix:	Soil	Sampled:	05/03/11
Units:	mg/Kg	Received:	05/05/11
Basis:	as received	Analyzed:	05/06/11

Type: MS Lab ID: QC590678

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.06953	10.10	7.754	76	41-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	67-140

Type: MSD Lab ID: QC590679

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.804	8.669	88	41-120	14	47

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	67-140

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0609004	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	04/30/11
Units:	mg/Kg	Received:	05/04/11
Basis:	as received	Prepared:	05/09/11
Batch#:	174551		

Field ID: MW-7 @ 1.5 Diln Fac: 5.000
Type: SAMPLE Analyzed: 05/10/11
Lab ID: 227757-001

Analyte	Result	RL
Diesel C10-C24	41 Y	5.0
Motor Oil C24-C36	240	25

Surrogate	%REC	Limits
o-Terphenyl	93	52-130

Field ID: MW-7 @ 5 Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/10/11
Lab ID: 227757-002

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	94	52-130

Field ID: MW-7 @ 7 Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/10/11
Lab ID: 227757-003

Analyte	Result	RL
Diesel C10-C24	2.6 Y	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	99	52-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0609004	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	04/30/11
Units:	mg/Kg	Received:	05/04/11
Basis:	as received	Prepared:	05/09/11
Batch#:	174551		

Field ID: MW-7 @ 10 Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/10/11
Lab ID: 227757-004

Analyte	Result	RL
Diesel C10-C24	1.4 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	103	52-130

Field ID: MW-7 @ 15 Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/09/11
Lab ID: 227757-005

Analyte	Result	RL
Diesel C10-C24	2.7 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	100	52-130

Type: BLANK Diln Fac: 1.000
Lab ID: QC590814 Analyzed: 05/09/11

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	99	52-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0609004	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC590815	Batch#:	174551
Matrix:	Soil	Prepared:	05/09/11
Units:	mg/Kg	Analyzed:	05/09/11

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.33	44.84	89	44-151

Surrogate	%REC	Limits
o-Terphenyl	96	52-130

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0609004	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	174551
MSS Lab ID:	227800-004	Sampled:	05/06/11
Matrix:	Soil	Received:	05/06/11
Units:	mg/Kg	Prepared:	05/09/11
Basis:	as received	Analyzed:	05/09/11
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC590816

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	4.467	49.89	42.13	75	39-146

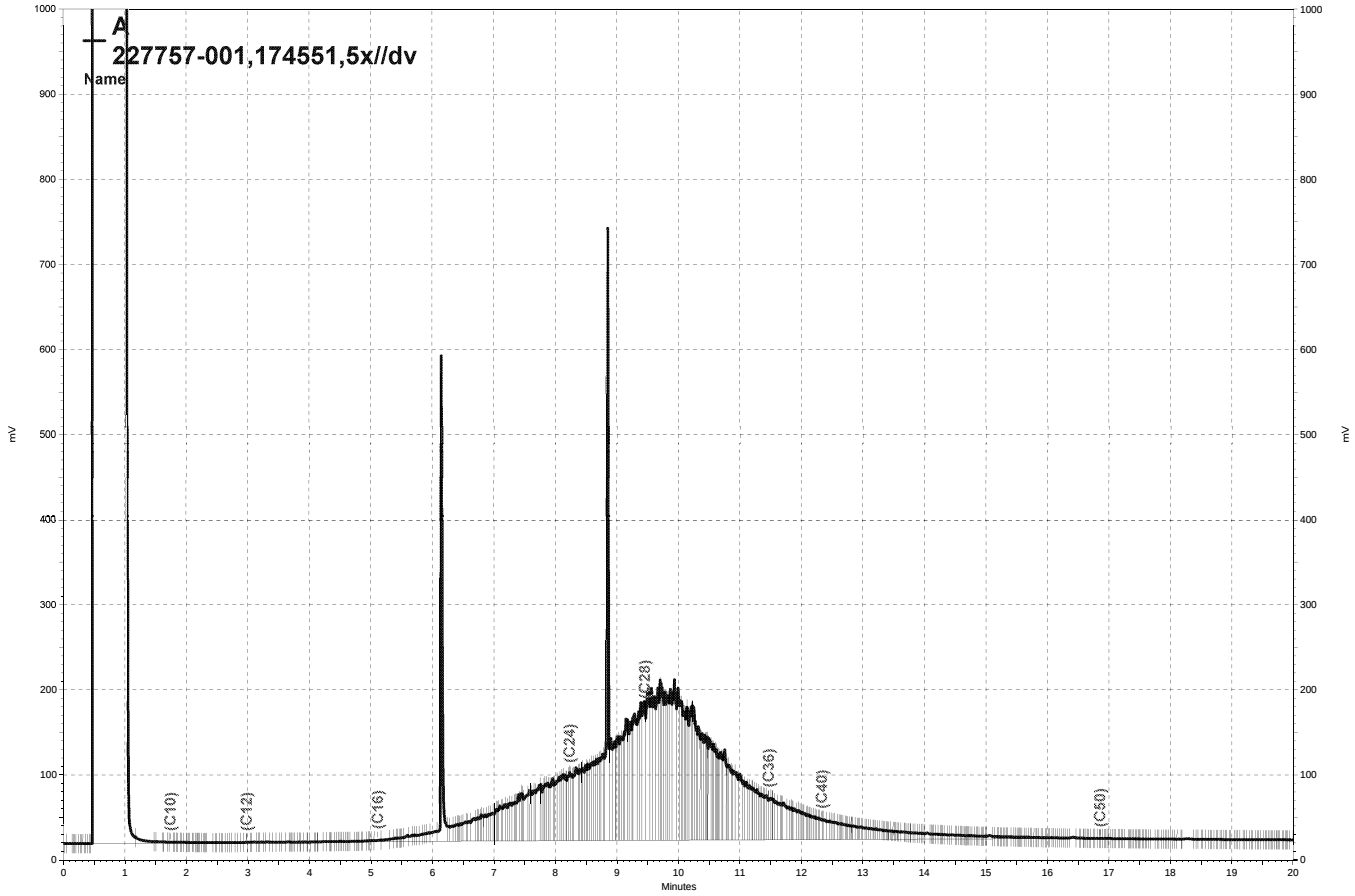
Surrogate	%REC	Limits
o-Terphenyl	85	52-130

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC590817

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.14	49.81	90	39-146	16	61

Surrogate	%REC	Limits
o-Terphenyl	99	52-130

RPD= Relative Percent Difference



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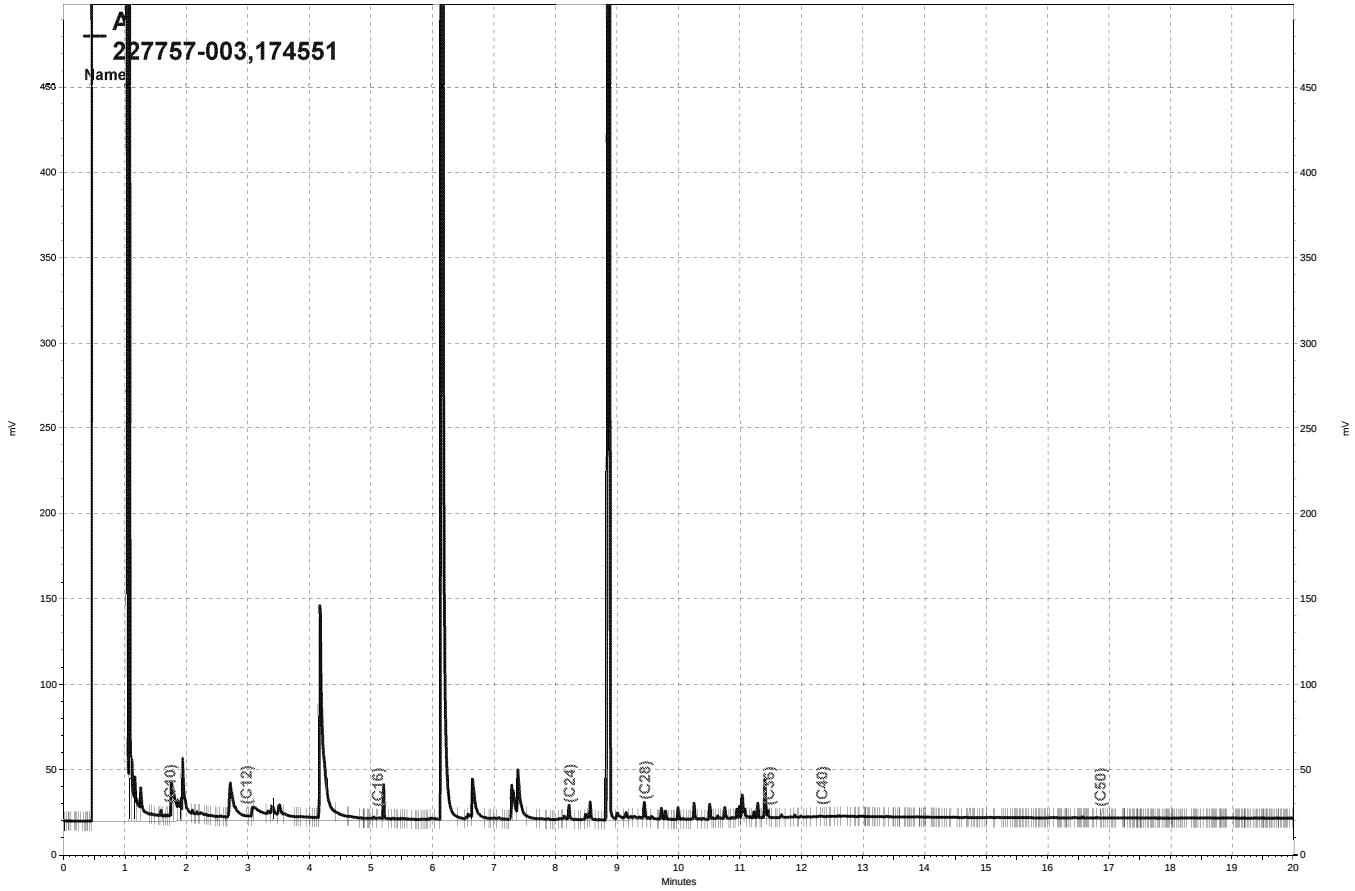

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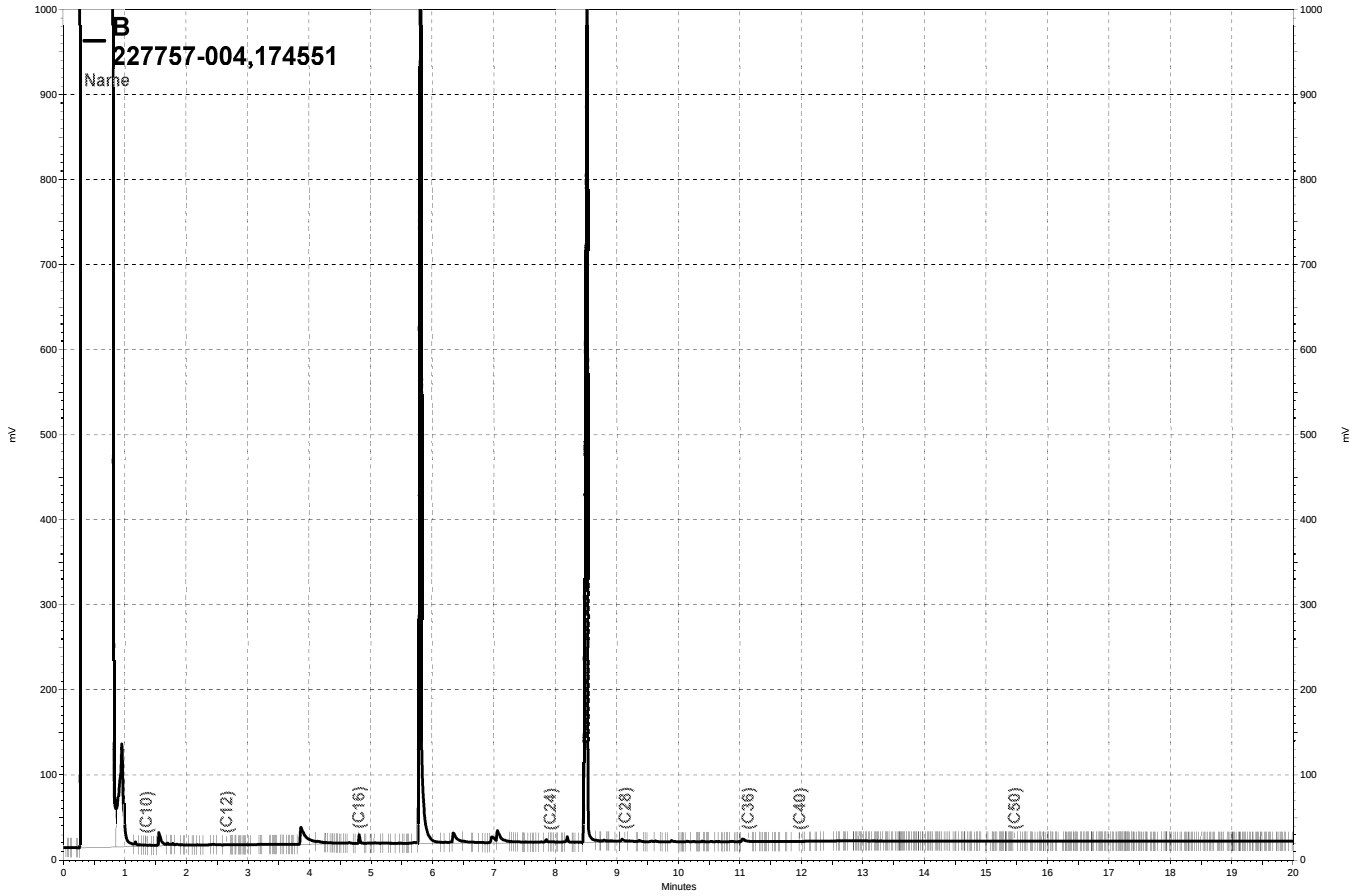

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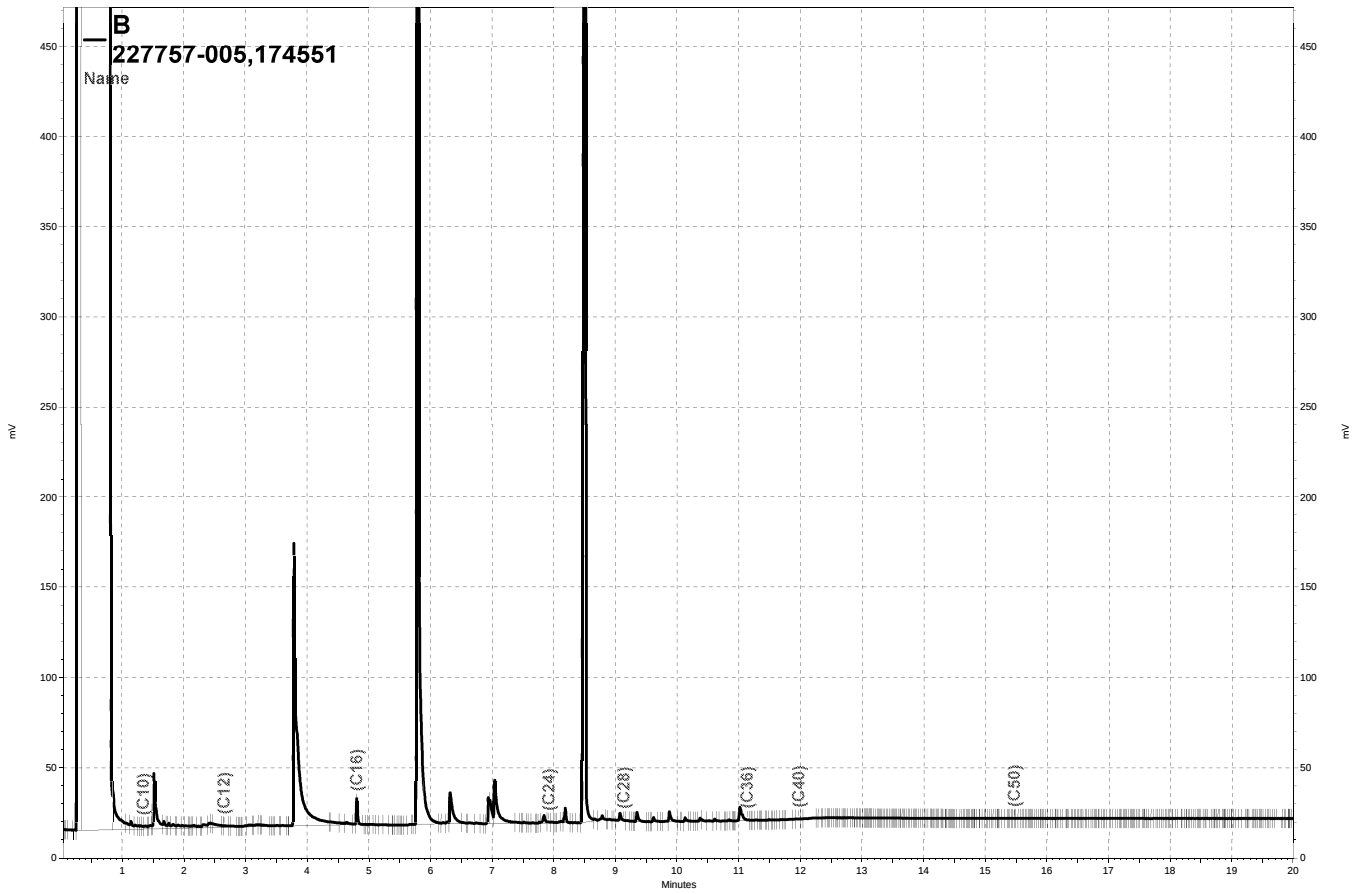

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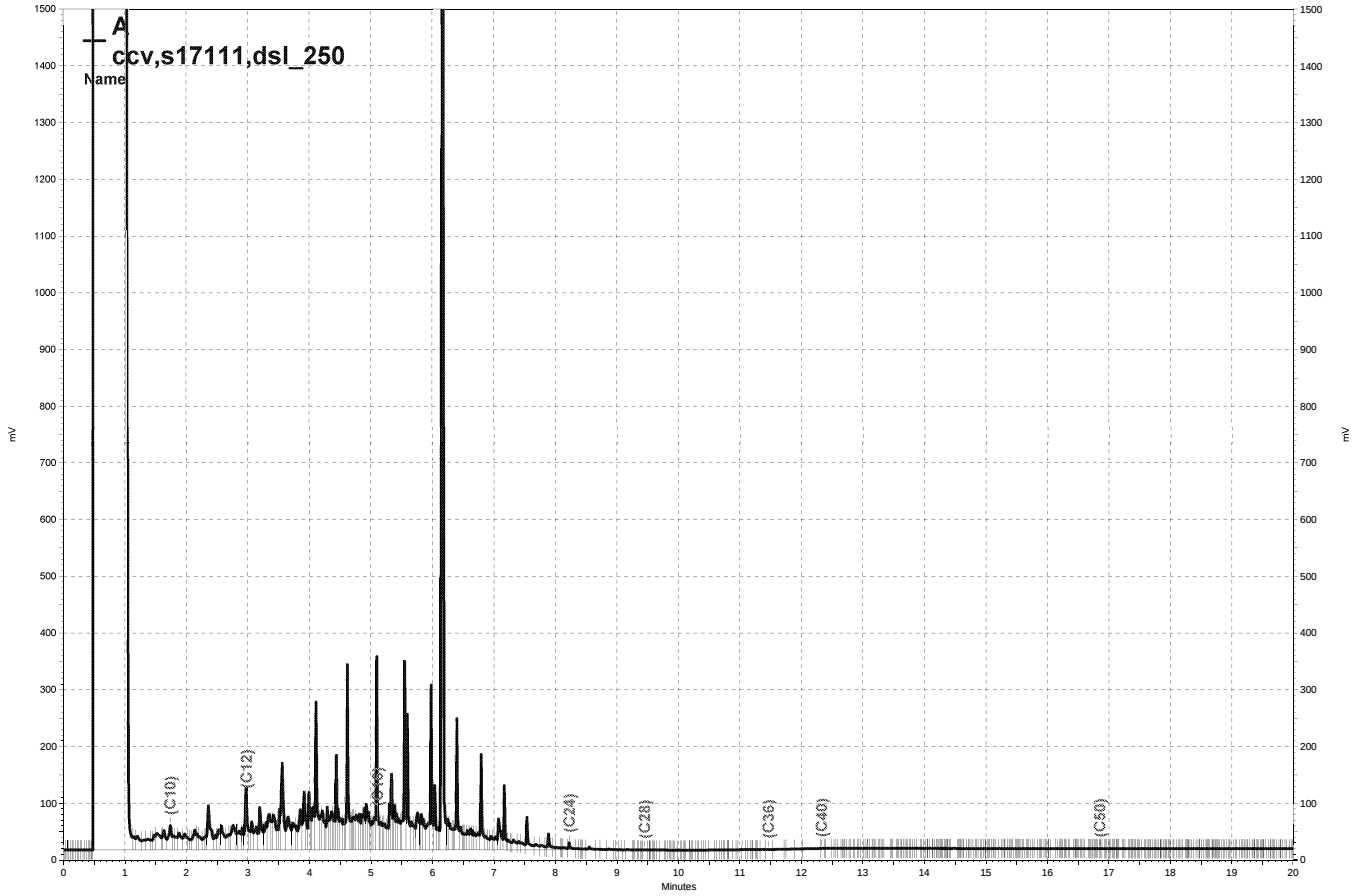

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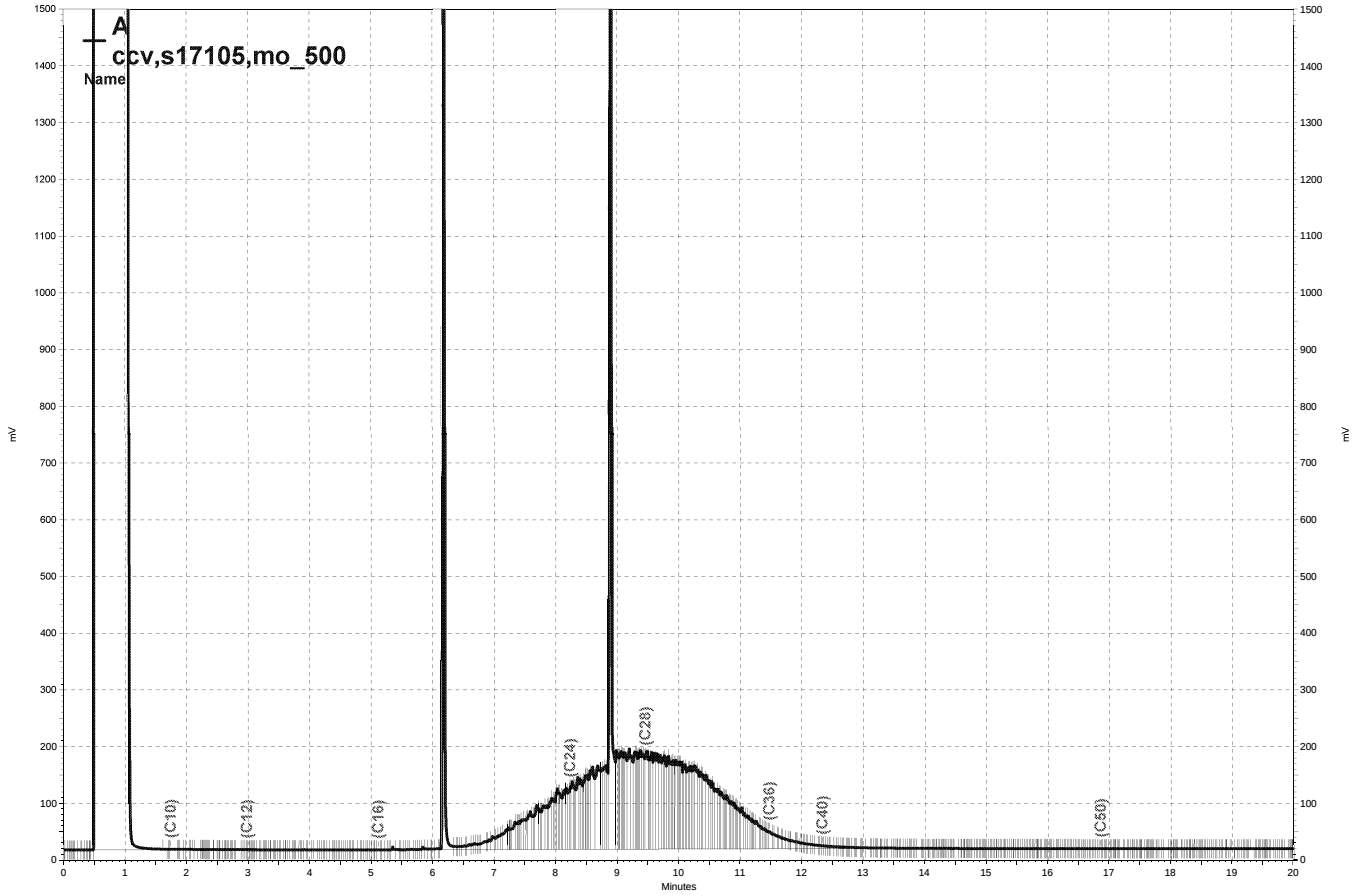

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Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	MW-7 @ 1.5	Diln Fac:	0.9524
Lab ID:	227757-001	Batch#:	174525
Matrix:	Soil	Sampled:	04/30/11
Units:	ug/Kg	Received:	05/04/11
Basis:	as received	Analyzed:	05/07/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	95
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	92	79-120
1,2-Dichloroethane-d4	96	72-148
Toluene-d8	102	80-120
Bromofluorobenzene	96	78-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	MW-7 @ 5	Diln Fac:	0.9276
Lab ID:	227757-002	Batch#:	174525
Matrix:	Soil	Sampled:	04/30/11
Units:	ug/Kg	Received:	05/04/11
Basis:	as received	Analyzed:	05/07/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	93
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	90	79-120
1,2-Dichloroethane-d4	94	72-148
Toluene-d8	99	80-120
Bromofluorobenzene	95	78-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	MW-7 @ 7	Diln Fac:	0.9671
Lab ID:	227757-003	Batch#:	174525
Matrix:	Soil	Sampled:	04/30/11
Units:	ug/Kg	Received:	05/04/11
Basis:	as received	Analyzed:	05/07/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	91	79-120
1,2-Dichloroethane-d4	97	72-148
Toluene-d8	103	80-120
Bromofluorobenzene	99	78-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	MW-7 @ 10	Diln Fac:	0.9416
Lab ID:	227757-004	Batch#:	174524
Matrix:	Soil	Sampled:	04/30/11
Units:	ug/Kg	Received:	05/04/11
Basis:	as received	Analyzed:	05/08/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	97	79-120
1,2-Dichloroethane-d4	95	72-148
Toluene-d8	94	80-120
Bromofluorobenzene	100	78-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	MW-7 @ 15	Diln Fac:	0.9208
Lab ID:	227757-005	Batch#:	174525
Matrix:	Soil	Sampled:	04/30/11
Units:	ug/Kg	Received:	05/04/11
Basis:	as received	Analyzed:	05/07/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	92
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	89	79-120
1,2-Dichloroethane-d4	101	72-148
Toluene-d8	97	80-120
Bromofluorobenzene	99	78-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC590709	Batch#:	174524
Matrix:	Soil	Analyzed:	05/07/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	96	79-120
1,2-Dichloroethane-d4	94	72-148
Toluene-d8	94	80-120
Bromofluorobenzene	103	78-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC590710	Batch#:	174524
Matrix:	Soil	Analyzed:	05/07/11
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	95.76	96	49-144
MTBE	20.00	18.94	95	64-122
Isopropyl Ether (DIPE)	20.00	17.57	88	55-135
Ethyl tert-Butyl Ether (ETBE)	20.00	17.89	89	60-129
1,2-Dichloroethane	20.00	19.11	96	70-139
Benzene	20.00	19.74	99	80-128
Methyl tert-Amyl Ether (TAME)	20.00	18.30	92	65-125
Toluene	20.00	19.60	98	80-130
1,2-Dibromoethane	20.00	20.34	102	79-120
Ethylbenzene	20.00	19.89	99	80-133
m,p-Xylenes	40.00	41.04	103	80-134
o-Xylene	20.00	20.46	102	79-130

Surrogate	%REC	Limits
Dibromofluoromethane	93	79-120
1,2-Dichloroethane-d4	93	72-148
Toluene-d8	96	80-120
Bromofluorobenzene	96	78-130

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	MW-7 @ 10	Batch#:	174524
MSS Lab ID:	227757-004	Sampled:	04/30/11
Matrix:	Soil	Received:	05/04/11
Units:	ug/Kg	Analyzed:	05/08/11
Basis:	as received		

Type: MS Diln Fac: 0.9766
Lab ID: QC590711

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<1.739	244.1	172.7	71	46-136
MTBE	<0.1446	48.83	38.16	78	60-120
Isopropyl Ether (DIPE)	<0.1893	48.83	38.88	80	57-122
Ethyl tert-Butyl Ether (ETBE)	<0.1392	48.83	40.61	83	59-121
1,2-Dichloroethane	<0.3235	48.83	39.29	80	59-135
Benzene	<0.4108	48.83	46.22	95	69-125
Methyl tert-Amyl Ether (TAME)	<0.2168	48.83	40.60	83	60-121
Toluene	<0.2984	48.83	46.08	94	62-128
1,2-Dibromoethane	<0.2001	48.83	41.37	85	61-122
Ethylbenzene	<0.3570	48.83	45.68	94	57-136
m,p-Xylenes	<0.8532	97.66	92.35	95	57-136
o-Xylene	<0.2550	48.83	46.39	95	56-134

Surrogate	%REC	Limits
Dibromofluoromethane	98	79-120
1,2-Dichloroethane-d4	92	72-148
Toluene-d8	95	80-120
Bromofluorobenzene	93	78-130

Type: MSD Diln Fac: 0.9804
Lab ID: QC590712

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	245.1	167.6	68	46-136	3	48
MTBE	49.02	36.60	75	60-120	5	33
Isopropyl Ether (DIPE)	49.02	37.29	76	57-122	5	35
Ethyl tert-Butyl Ether (ETBE)	49.02	37.76	77	59-121	8	35
1,2-Dichloroethane	49.02	38.38	78	59-135	3	32
Benzene	49.02	43.07	88	69-125	7	36
Methyl tert-Amyl Ether (TAME)	49.02	37.79	77	60-121	8	32
Toluene	49.02	41.46	85	62-128	11	41
1,2-Dibromoethane	49.02	37.89	77	61-122	9	35
Ethylbenzene	49.02	41.85	85	57-136	9	43
m,p-Xylenes	98.04	84.33	86	57-136	9	46
o-Xylene	49.02	42.22	86	56-134	10	40

Surrogate	%REC	Limits
Dibromofluoromethane	102	79-120
1,2-Dichloroethane-d4	96	72-148
Toluene-d8	95	80-120
Bromofluorobenzene	95	78-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC590713	Batch#:	174525
Matrix:	Soil	Analyzed:	05/07/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	103	79-120
1,2-Dichloroethane-d4	104	72-148
Toluene-d8	90	80-120
Bromofluorobenzene	102	78-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC590714	Batch#:	174525
Matrix:	Soil	Analyzed:	05/07/11
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	91.26	91	49-144
MTBE	20.00	18.87	94	64-122
Isopropyl Ether (DIPE)	20.00	18.14	91	55-135
Ethyl tert-Butyl Ether (ETBE)	20.00	20.95	105	60-129
1,2-Dichloroethane	20.00	22.20	111	70-139
Benzene	20.00	20.27	101	80-128
Methyl tert-Amyl Ether (TAME)	20.00	19.44	97	65-125
Toluene	20.00	19.80	99	80-130
1,2-Dibromoethane	20.00	19.38	97	79-120
Ethylbenzene	20.00	20.02	100	80-133
m,p-Xylenes	40.00	40.57	101	80-134
o-Xylene	20.00	21.18	106	79-130

Surrogate	%REC	Limits
Dibromofluoromethane	105	79-120
1,2-Dichloroethane-d4	106	72-148
Toluene-d8	94	80-120
Bromofluorobenzene	100	78-130

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	227757	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	MW-7 @ 15	Batch#:	174525
MSS Lab ID:	227757-005	Sampled:	04/30/11
Matrix:	Soil	Received:	05/04/11
Units:	ug/Kg	Analyzed:	05/07/11
Basis:	as received		

Type: MS Diln Fac: 0.9506
Lab ID: QC590715

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<14.36	237.6	176.2	74	46-136
MTBE	<1.388	47.53	38.08	80	60-120
Isopropyl Ether (DIPE)	<1.184	47.53	38.43	81	57-122
Ethyl tert-Butyl Ether (ETBE)	<0.8924	47.53	35.14	74	59-121
1,2-Dichloroethane	<0.8580	47.53	38.59	81	59-135
Benzene	<0.8902	47.53	41.09	86	69-125
Methyl tert-Amyl Ether (TAME)	<0.5813	47.53	36.39	77	60-121
Toluene	<1.201	47.53	39.27	83	62-128
1,2-Dibromoethane	<0.5522	47.53	37.90	80	61-122
Ethylbenzene	<1.105	47.53	39.14	82	57-136
m,p-Xylenes	<0.5668	95.06	73.35	77	57-136
o-Xylene	<1.035	47.53	37.08	78	56-134

Surrogate	%REC	Limits
Dibromofluoromethane	94	79-120
1,2-Dichloroethane-d4	100	72-148
Toluene-d8	98	80-120
Bromofluorobenzene	98	78-130

Type: MSD Diln Fac: 0.9294
Lab ID: QC590716

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	232.3	189.1	81	46-136	9	48
MTBE	46.47	39.30	85	60-120	5	33
Isopropyl Ether (DIPE)	46.47	42.33	91	57-122	12	35
Ethyl tert-Butyl Ether (ETBE)	46.47	38.77	83	59-121	12	35
1,2-Dichloroethane	46.47	38.00	82	59-135	1	32
Benzene	46.47	41.71	90	69-125	4	36
Methyl tert-Amyl Ether (TAME)	46.47	38.36	83	60-121	8	32
Toluene	46.47	40.08	86	62-128	4	41
1,2-Dibromoethane	46.47	35.68	77	61-122	4	35
Ethylbenzene	46.47	39.93	86	57-136	4	43
m,p-Xylenes	92.94	74.54	80	57-136	4	46
o-Xylene	46.47	36.88	79	56-134	2	40

Surrogate	%REC	Limits
Dibromofluoromethane	94	79-120
1,2-Dichloroethane-d4	99	72-148
Toluene-d8	97	80-120
Bromofluorobenzene	97	78-130

RPD= Relative Percent Difference


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 227821
ANALYTICAL REPORT

Fugro West Inc.	Project : 04.B0609004
1000 Broadway	Location : Buttner
Oakland, CA 94607	Level : II

Sample ID	Lab ID
MW-3	227821-001
MW-4	227821-002
MW-7	227821-003

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: _____ Date: 05/23/2011
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**227821**
Client:	**Fugro West Inc.**
Project:	**04.B0609004**
Location:	**Buttner**
Request Date:	**05/09/11**
Samples Received:	**05/09/11**

This data package contains sample and QC results for three water samples, requested for the above referenced project on 05/09/11. 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):
High surrogate recovery was observed for dibromofluoromethane in MW-7 (lab # 227821-003); no associated target analytes were detected in the sample. High surrogate recovery was observed for 1,2-dichloroethane-d4 in MW-7 (lab # 227821-003); no associated target analytes were detected in the sample. No other analytical problems were encountered.

227821

ES-F10 CHAIN OF CUSTODY

PAGE 1 OF 1

PROJECT NAME: Buttner
PROJECT NO.: 04.B0609004 LAB: CT
PROJECT CONTACT: M. DAnna, K. Emery TURNAROUND: 5 day tat
SAMPLED BY: M. DAnna

LABORATORY I.D. NUMBER	FIELD SAMPLE I.D.	MATRIX: WATER	SOIL	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	500ml	PRESERVATIVE: HCL	H_2SO_4	HNO_3	ICE	OTHER	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TPHg	TEHd & mo w/si gel	Lead scavengers	5 fuel oxygenates	BTEX	EDF Reporting
1	MW-3	X			3				2	X			X			05	07	11	1012		X	X	X	X	X	X
2	MW-4	X			3				2	X			X			05	07	11	0945		X	X	X	X	X	X
3	MW-7	X			3				2	X			X			05	07	11	1110		X	X	X	X	X	X

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
[signature]	5-9-11 11:08	[signature]	5/9/11 1308

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.

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 227821 Date Received 5/9/11 Number of coolers 1
Client Fluor West Inc Project Betta Buttner

Date Opened 5/9/11 By (print) Vidia Oarshi (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

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 ☐ Foam blocks ☐ Bags ☒ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☒ Samples Received on ice & cold without a temperature blank

☐ 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 samples in the appropriate containers for indicated tests? _____ (YES) NO
11. Are sample labels present, in good condition and complete? _____ (YES) NO
12. Do the sample labels agree with custody papers? _____ (YES) NO
13. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
14. Are the samples appropriately preserved? _____ (YES) NO N/A
15. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
16. Did you document your preservative check _____ YES NO (N/A)
17. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
18. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____
_____
_____

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 3520C
Project#:	04.B0609004	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	05/07/11
Units:	ug/L	Received:	05/09/11
Diln Fac:	1.000	Prepared:	05/09/11
Batch#:	174576	Analyzed:	05/11/11

Field ID: MW-3 Lab ID: 227821-001
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	130 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	115	60-129

Field ID: MW-4 Lab ID: 227821-002
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1,200	50
Motor Oil C24-C36	1,500	300

Surrogate	%REC	Limits
o-Terphenyl	93	60-129

Field ID: MW-7 Lab ID: 227821-003
Type: SAMPLE Cleanup Method: EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	104	60-129

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC590923

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

Surrogate	%REC	Limits
o-Terphenyl	112	60-129

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 3520C
Project#:	04.B0609004	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC590924	Batch#:	174576
Matrix:	Water	Prepared:	05/09/11
Units:	ug/L	Analyzed:	05/11/11

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,665	107	53-128

Surrogate	%REC	Limits
o-Terphenyl	115	60-129

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 3520C
Project#:	04.B0609004	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	174576
MSS Lab ID:	227786-006	Sampled:	05/04/11
Matrix:	Water	Received:	05/05/11
Units:	ug/L	Prepared:	05/09/11
Diln Fac:	1.000	Analyzed:	05/12/11

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC590925

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	10.14	2,500	1,967	78	50-126

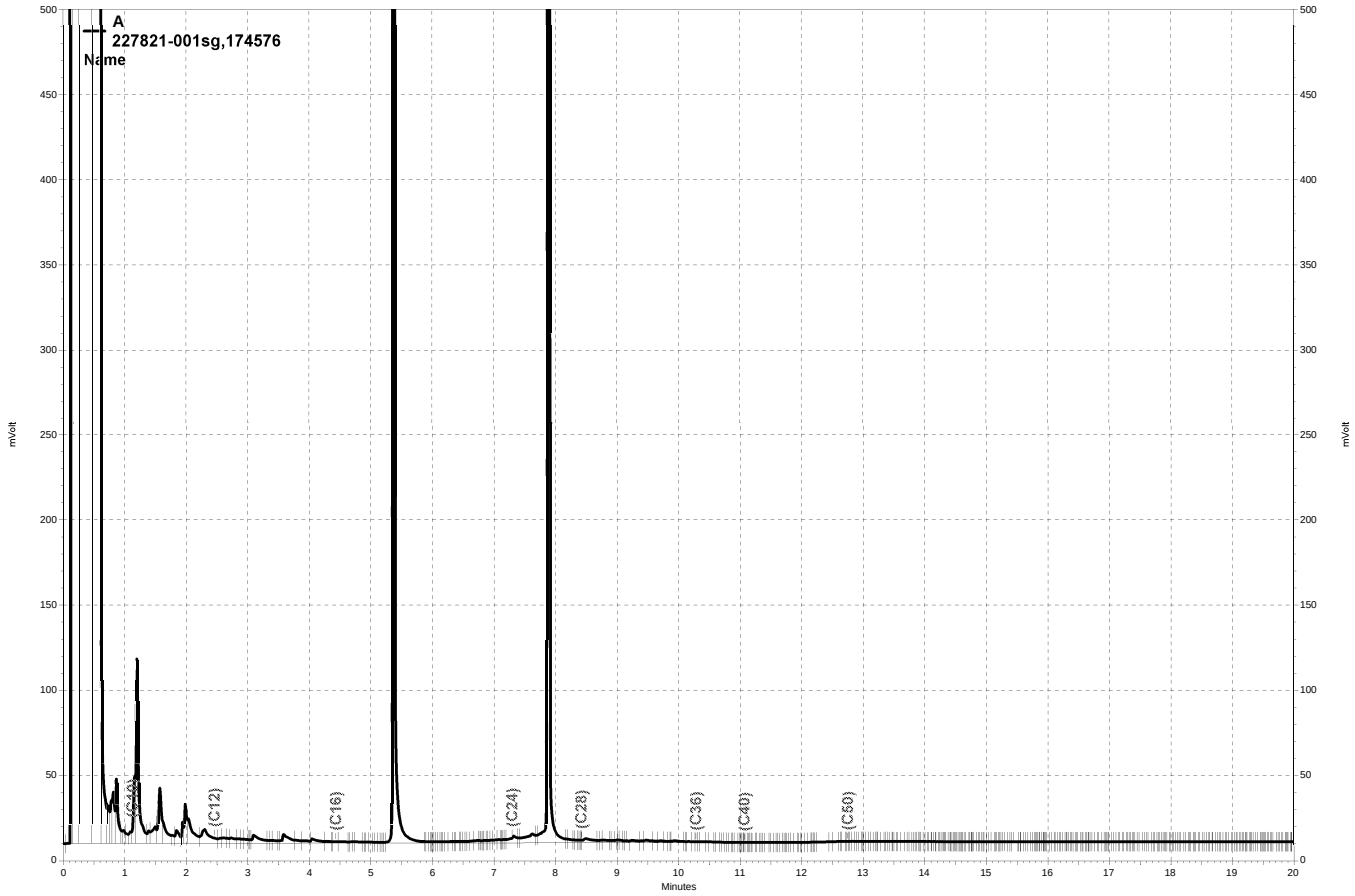
Surrogate	%REC	Limits
o-Terphenyl	96	60-129

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC590926

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,065	82	50-126	5	47

Surrogate	%REC	Limits
o-Terphenyl	97	60-129

RPD= Relative Percent Difference



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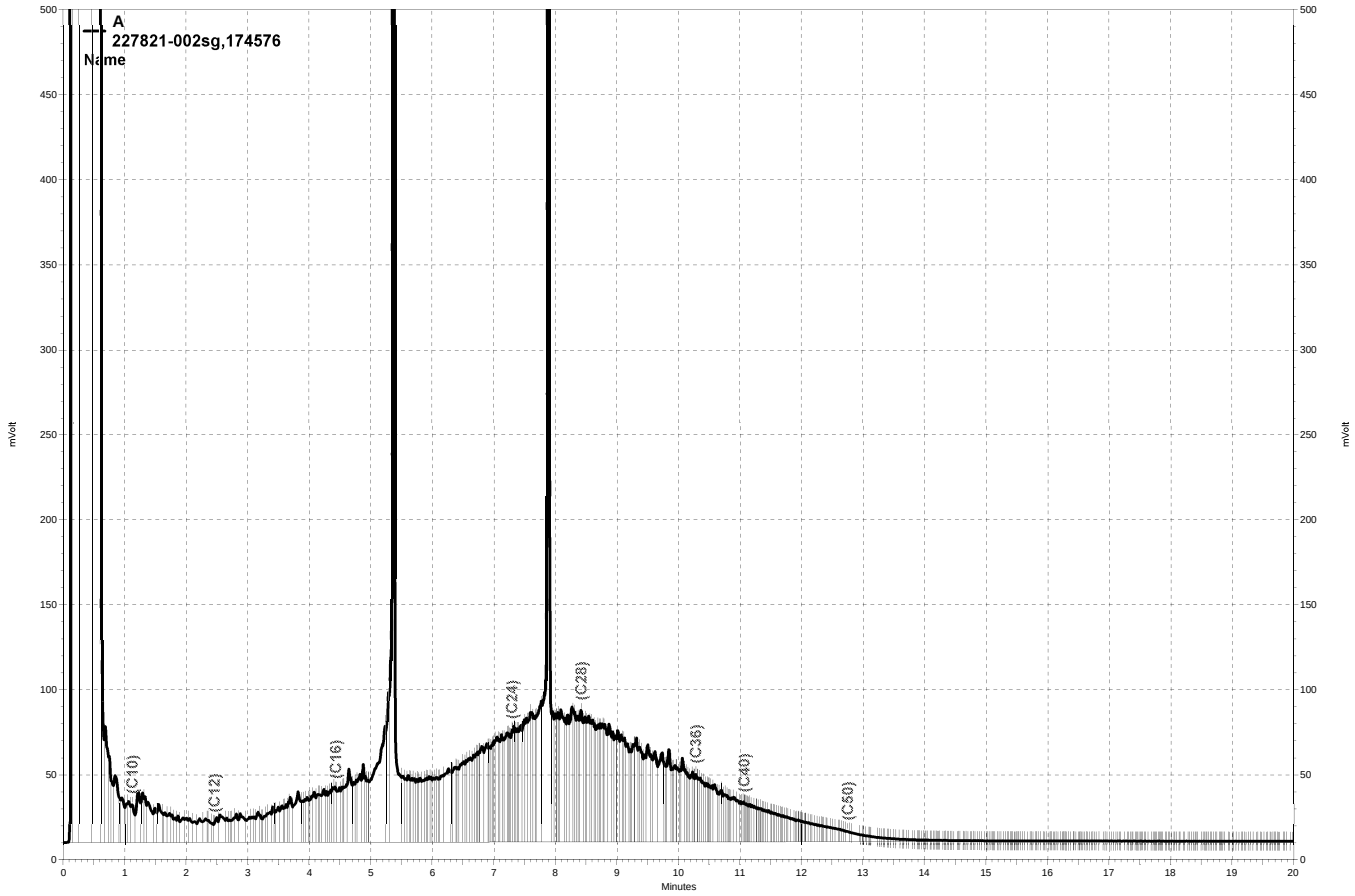

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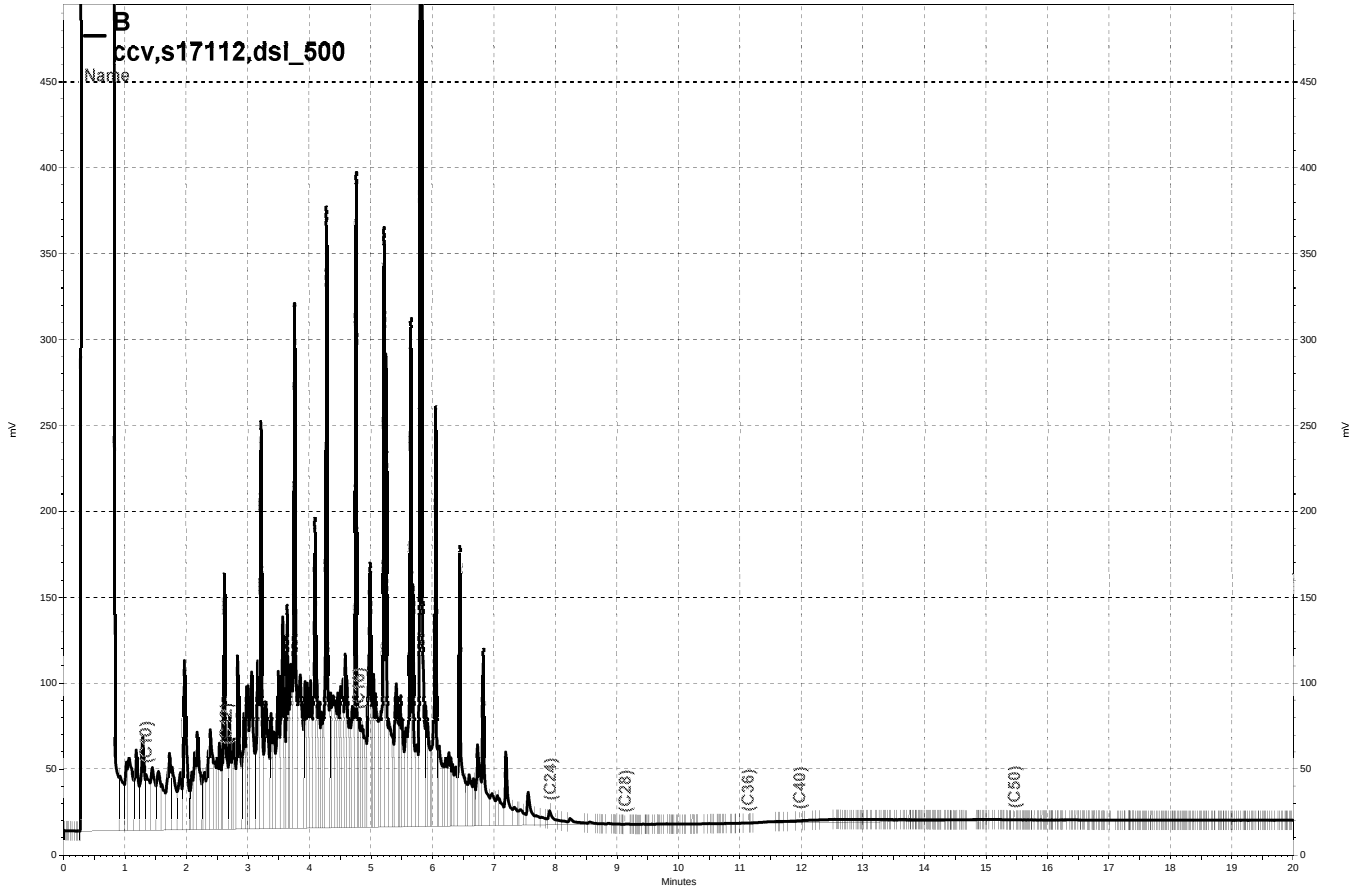

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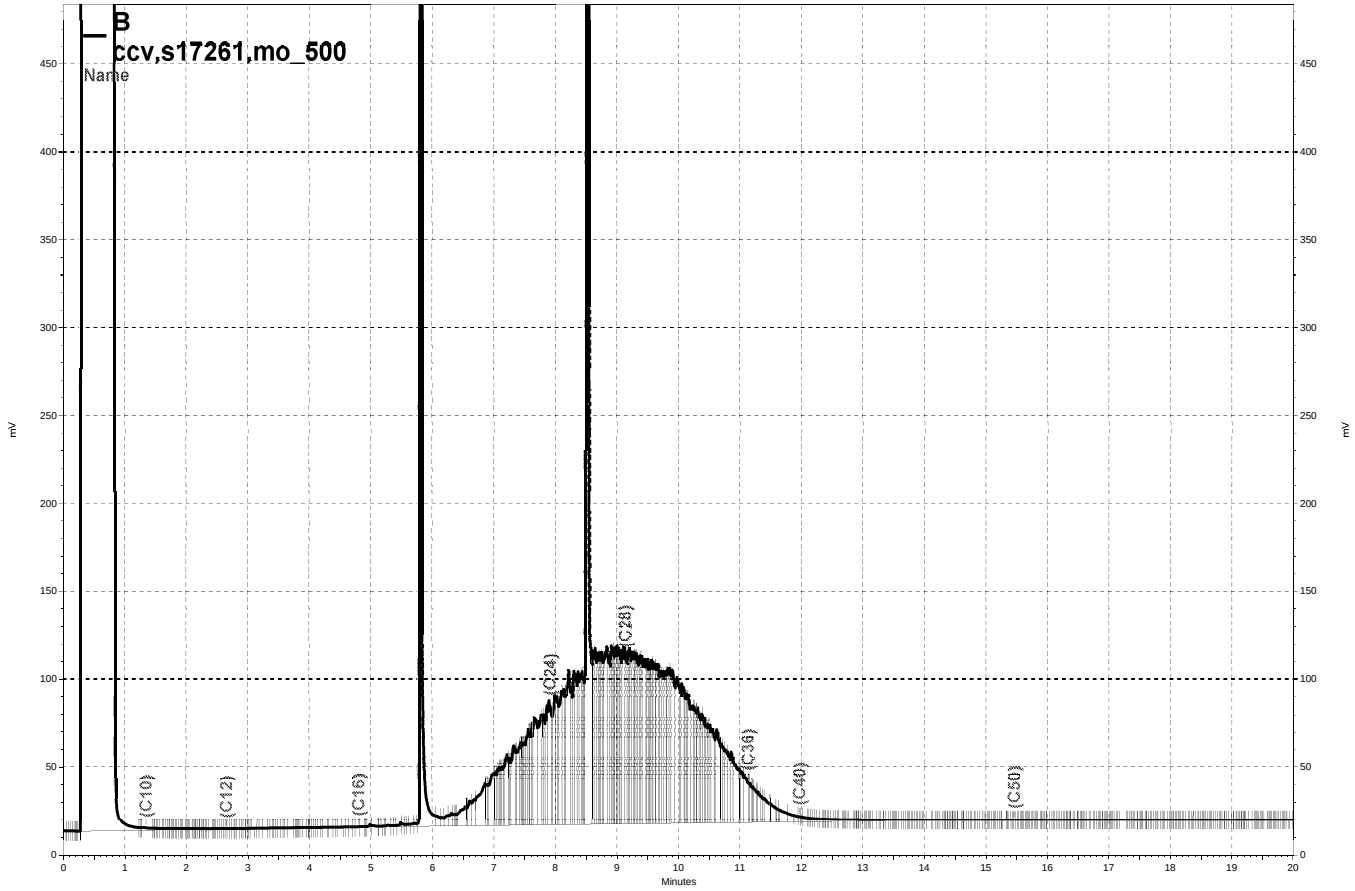

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Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	MW-3	Units:	ug/L
Lab ID:	227821-001	Sampled:	05/07/11
Matrix:	Water	Received:	05/09/11

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	600	50	1.000	174686	05/12/11
tert-Butyl Alcohol (TBA)	12	10	1.000	174686	05/12/11
Isopropyl Ether (DIPE)	ND	0.50	1.000	174686	05/12/11
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	174686	05/12/11
Methyl tert-Amyl Ether (TAME)	ND	0.50	1.000	174686	05/12/11
MTBE	ND	0.50	1.000	174686	05/12/11
1,2-Dichloroethane	ND	0.50	1.000	174686	05/12/11
Benzene	300	2.0	4.000	174964	05/20/11
Toluene	12	0.50	1.000	174686	05/12/11
1,2-Dibromoethane	ND	0.50	1.000	174686	05/12/11
Ethylbenzene	5.2	0.50	1.000	174686	05/12/11
m,p-Xylenes	11	0.50	1.000	174686	05/12/11
o-Xylene	0.81	0.50	1.000	174686	05/12/11

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	110	80-125	4.000	174964	05/20/11
1,2-Dichloroethane-d4	114	71-146	4.000	174964	05/20/11
Toluene-d8	102	80-120	4.000	174964	05/20/11
Bromofluorobenzene	104	80-120	4.000	174964	05/20/11

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	174964
Lab ID:	227821-002	Sampled:	05/07/11
Matrix:	Water	Received:	05/09/11
Units:	ug/L	Analyzed:	05/20/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	260	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	107	80-125
1,2-Dichloroethane-d4	120	71-146
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	MW-7	Batch#:	174686
Lab ID:	227821-003	Sampled:	05/07/11
Matrix:	Water	Received:	05/09/11
Units:	ug/L	Analyzed:	05/12/11
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	2.4	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	126 *	80-125
1,2-Dichloroethane-d4	169 *	71-146
Toluene-d8	113	80-120
Bromofluorobenzene	118	80-120

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	174686
Units:	ug/L	Analyzed:	05/12/11
Diln Fac:	1.000		

Type: BS Lab ID: QC591360

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	116.9	94	45-152
Isopropyl Ether (DIPE)	25.00	26.28	105	53-138
Ethyl tert-Butyl Ether (ETBE)	25.00	25.38	102	56-130
Methyl tert-Amyl Ether (TAME)	25.00	23.20	93	63-120
MTBE	25.00	22.48	90	60-123
1,2-Dichloroethane	25.00	31.09	124	70-136
Benzene	25.00	27.83	111	80-124
Toluene	25.00	28.43	114	80-120
1,2-Dibromoethane	25.00	25.56	102	80-120
Ethylbenzene	25.00	29.77	119	80-122
m,p-Xylenes	50.00	54.22	108	80-123
o-Xylene	25.00	26.56	106	80-121

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	114	71-146
Toluene-d8	104	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC591361

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	125.4	100	45-152	7	32
Isopropyl Ether (DIPE)	25.00	26.99	108	53-138	3	20
Ethyl tert-Butyl Ether (ETBE)	25.00	27.35	109	56-130	7	20
Methyl tert-Amyl Ether (TAME)	25.00	24.69	99	63-120	6	20
MTBE	25.00	24.53	98	60-123	9	20
1,2-Dichloroethane	25.00	32.42	130	70-136	4	20
Benzene	25.00	27.73	111	80-124	0	20
Toluene	25.00	27.62	110	80-120	3	20
1,2-Dibromoethane	25.00	26.06	104	80-120	2	20
Ethylbenzene	25.00	29.39	118	80-122	1	20
m,p-Xylenes	50.00	55.03	110	80-123	1	20
o-Xylene	25.00	27.42	110	80-121	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-125
1,2-Dichloroethane-d4	122	71-146
Toluene-d8	104	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	174686
Units:	ug/L	Analyzed:	05/12/11
Diln Fac:	1.000		

Type: BS Lab ID: QC591362

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,079	108	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-125
1,2-Dichloroethane-d4	129	71-146
Toluene-d8	105	80-120
Bromofluorobenzene	100	80-120

Type: BSD Lab ID: QC591363

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,007	101	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-125
1,2-Dichloroethane-d4	131	71-146
Toluene-d8	105	80-120
Bromofluorobenzene	102	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC591364	Batch#:	174686
Matrix:	Water	Analyzed:	05/12/11
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	114	80-125
1,2-Dichloroethane-d4	144	71-146
Toluene-d8	110	80-120
Bromofluorobenzene	115	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	174964
Units:	ug/L	Analyzed:	05/20/11
Diln Fac:	1.000		

Type: BS Lab ID: QC592529

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	103.9	83	45-152
Isopropyl Ether (DIPE)	25.00	25.71	103	53-138
Ethyl tert-Butyl Ether (ETBE)	25.00	25.16	101	56-130
Methyl tert-Amyl Ether (TAME)	25.00	20.91	84	63-120
MTBE	25.00	22.65	91	60-123
1,2-Dichloroethane	25.00	24.39	98	70-136
Benzene	25.00	24.01	96	80-124
Toluene	25.00	25.65	103	80-120
1,2-Dibromoethane	25.00	24.01	96	80-120
Ethylbenzene	25.00	27.21	109	80-122
m,p-Xylenes	50.00	53.25	107	80-123
o-Xylene	25.00	26.15	105	80-121

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	107	71-146
Toluene-d8	105	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC592530

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	109.1	87	45-152	5	32
Isopropyl Ether (DIPE)	25.00	25.41	102	53-138	1	20
Ethyl tert-Butyl Ether (ETBE)	25.00	25.74	103	56-130	2	20
Methyl tert-Amyl Ether (TAME)	25.00	23.35	93	63-120	11	20
MTBE	25.00	23.18	93	60-123	2	20
1,2-Dichloroethane	25.00	26.00	104	70-136	6	20
Benzene	25.00	26.26	105	80-124	9	20
Toluene	25.00	26.00	104	80-120	1	20
1,2-Dibromoethane	25.00	24.25	97	80-120	1	20
Ethylbenzene	25.00	26.69	107	80-122	2	20
m,p-Xylenes	50.00	51.67	103	80-123	3	20
o-Xylene	25.00	25.70	103	80-121	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-125
1,2-Dichloroethane-d4	114	71-146
Toluene-d8	104	80-120
Bromofluorobenzene	103	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC592531	Batch#:	174964
Matrix:	Water	Analyzed:	05/20/11
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	80-125
1,2-Dichloroethane-d4	112	71-146
Toluene-d8	107	80-120
Bromofluorobenzene	105	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	227821	Location:	Buttner
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	174964
Units:	ug/L	Analyzed:	05/20/11
Diln Fac:	1.000		

Type: BS Lab ID: QC592565

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,040	104	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	118	71-146
Toluene-d8	99	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC592566

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,078	108	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	111	71-146
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-120

RPD= Relative Percent Difference

Data File: \\Gcmsserver\DD\chem\MSVOA09.i\051211.b\IEC10TVH.D

Date : 12-MAY-2011 12:50

Client ID: DYNA P&T

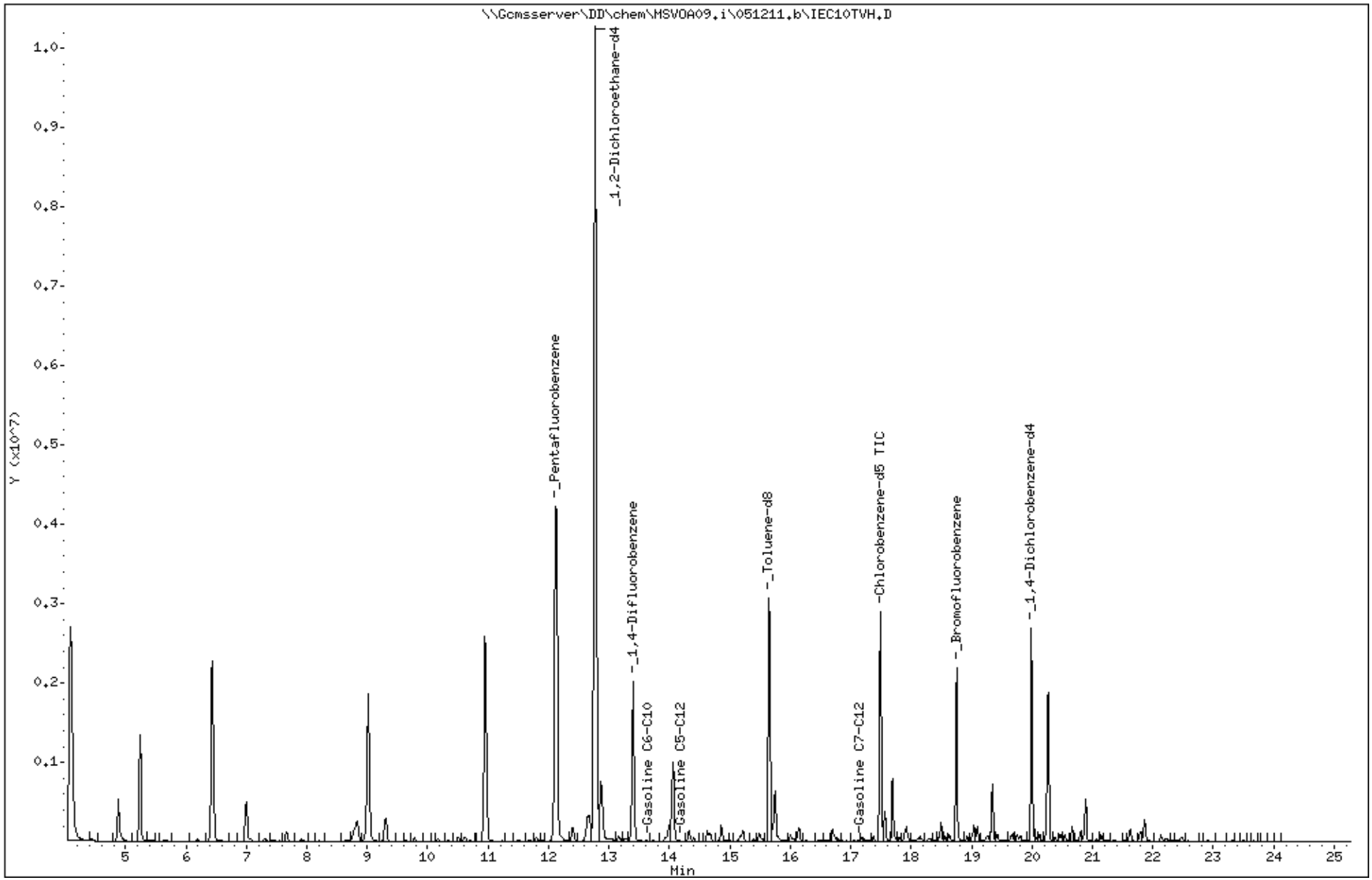
Instrument: MSVOA09.i

Sample Info: S,227821-001

Operator: VOC

Column phase:

Column diameter: 2.00



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Date : 20-MAY-2011 19:36

Client ID: DYNA P&T

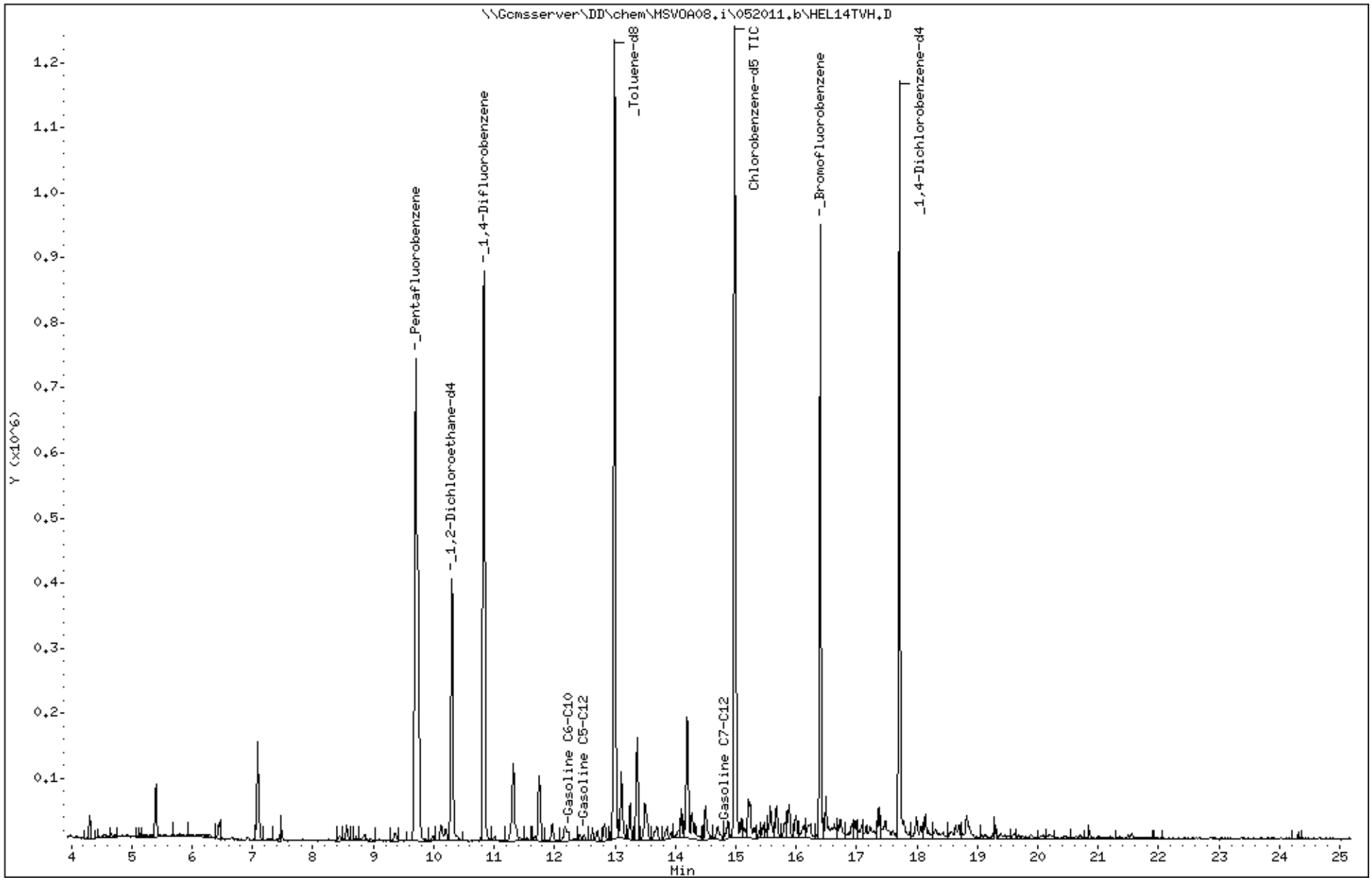
Instrument: MSVOA08.i

Sample Info: S,227821-002

Operator: VOC

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\052011.b\HEL09TVH.D

Date : 20-MAY-2011 15:31

Client ID: DYNA P&T

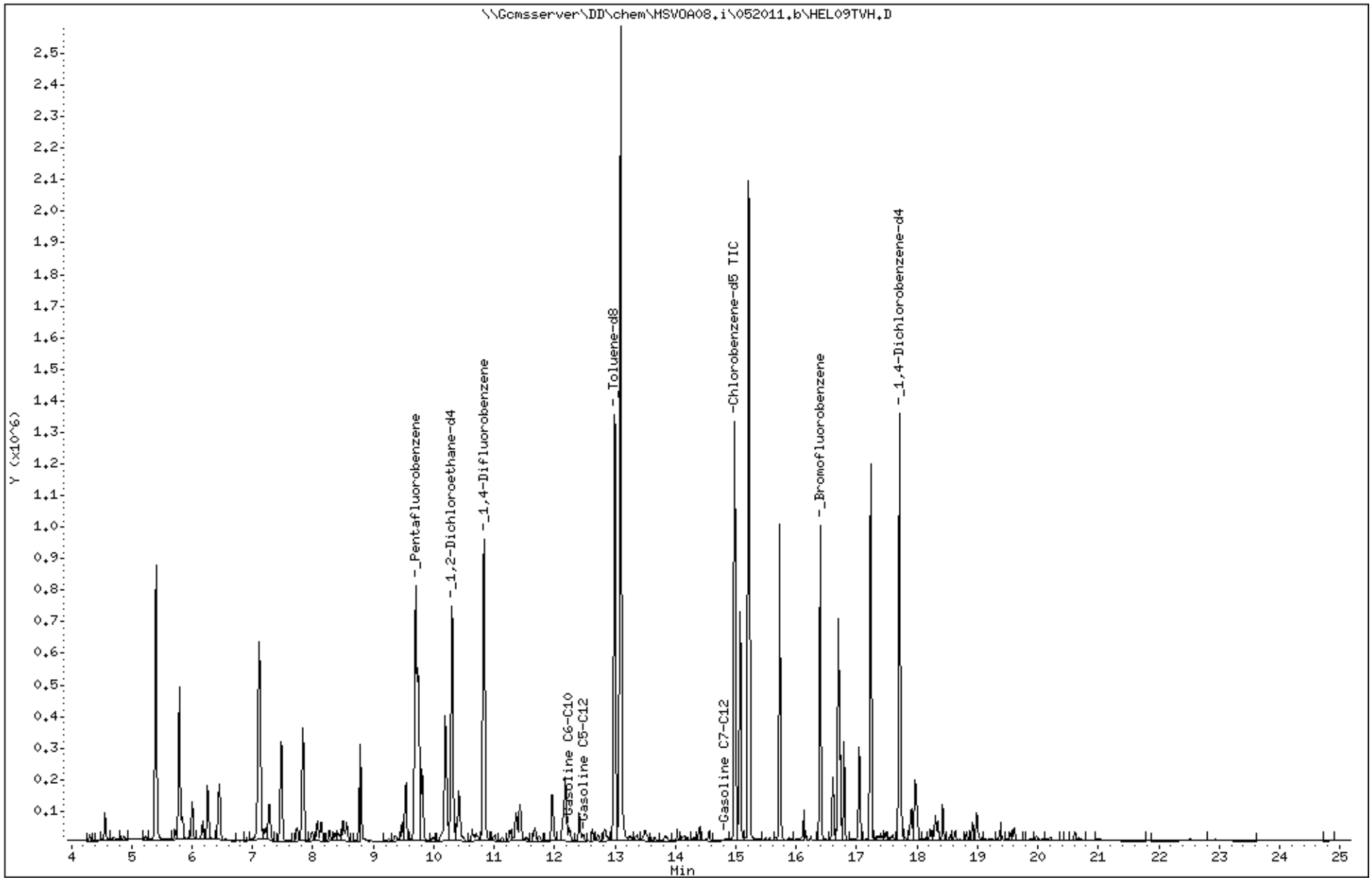
Instrument: MSVOA08.i

Sample Info: CCV/BS,QC592565,174964,S17254,.01/100

Operator: VOC

Column phase:

Column diameter: 2.00




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 227874
ANALYTICAL REPORT

Fugro West Inc.	Project : 04.B0609004
1000 Broadway	Location : 2250 Telegraph Avenue
Oakland, CA 94607	Level : II

Sample ID	Lab ID
MW-7 @ 1.5	227874-001
MW-7 @ 1.5 (BOTTOM OF CORE)	227874-002

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: _____ Date: 05/17/2011
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**227874**
Client:	**Fugro West Inc.**
Project:	**04.B0609004**
Location:	**2250 Telegraph Avenue**
Request Date:	**05/11/11**
Samples Received:	**05/04/11**

This data package contains sample and QC results for two soil samples, requested for the above referenced project on 05/11/11. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

227874

Subject: RE: Lab Test results
From: "Alexander, Jeriann [FCL]" <jalexander@fugro.com>
Date: Wed, 11 May 2011 10:39:12 -0700
To: "Micah Smith" <micah.smith@ctberk.com>
CC: "Emery, Karen [FCL]" <kemery@fugro.com>, <kaemery1025@comcast.net>

As we just discussed, please rerun the extract with the silica gel cleanup AND conduct a new analysis from the other end of the tube.

Thank you.

From: Micah Smith [mailto:micah.smith@ctberk.com]
Sent: Wednesday, May 11, 2011 10:30 AM
To: Alexander, Jeriann [FCL]
Cc: Emery, Karen [FCL]; kaemery1025@comcast.net
Subject: Re: Lab Test results

Jeriann,
We can run the original extract with a silica gel clean up for $45 or we can re-extract and analyze from the other end with silica gel for $70. Would you like to do the complete re-extraction?
Thanks

Micah Smith
Project Manager
Curtis and Tompkins, Ltd
2323 Fifth Street
Berkeley CA 94710
510.204.2223
www.curtisandtompkins.com

On 5/11/2011 9:33 AM, Alexander, Jeriann [FCL] wrote:

> Micah,
> Please run the diesel/motor oil with silica gel cleanup again on the following sample.
> Take the test sample from the other end of the tube from where the first sample was collected.
>
> | Sample ID | Lab ID |
> |---|---|
> | MW-7 @ 1.5 | 227757-001 |
>
> Jeriann
>
> Jeriann Alexander
> Principal Engineer, PE, REA
>
> Fugro Consultants, Inc.
>
> Oakland Office: (510) 267-4401

Roseville Office: (916) 773-2600, ext. 128
Cell Number: (510) 610-8052
jalexander@fugro.com

www.fugrowest.com <http://www.fugrowest.com>

227757

ES-F10 CHAIN OF CUSTODY

PAGE 1 OF 1

PROJECT NAME: 2250 Telegraph Avenue

PROJECT NO.: 04.B0609004

LAB: Curtis and Tompkins

PROJECT CONTACT: Karen Emery

TURNAROUND: 5 Day TAT

SAMPLED BY: M. D'Anna

LABORATORY I.D. NUMBER	FIELD SAMPLE I.D.	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	CONTAINERS: VOA	CONTAINERS: LITER	CONTAINERS: PINT	CONTAINERS: TUBE	PRESERVATIVE: HCL	PRESERVATIVE: H_2SO_4	PRESERVATIVE: HNO_3	PRESERVATIVE: ICE	PRESERVATIVE: OTHER	PRESERVATIVE: NONE	SAMPLING DATE: MONTH	SAMPLING DATE: DAY	SAMPLING DATE: YEAR	SAMPLING DATE: TIME	QUANTITY	TVHg	TEHd and TEHmo	Lead Scavengers	Five fuel oxygenates	BTEX	EDF Reporting
	MW-7 @ 1.5		X					X				X			0 4	3 0	1 1	0 9 2 3	1	X	X	X	X	X	X
	MW-7 @ 5		X					X				X			0 4	3 0	1 1	0 9 4 8	1	X	X	X	X	X	X
	MW-7 @ 7		X					X				X			0 4	3 0	1 1	1 0 0 4	1	X	X	X	X	X	X
	MW-7 @ 10		X					X				X			0 4	3 0	1 1	1 0 0 8	1	X	X	X	X	X	X
	MW-7 @ 15		X					X				X			0 4	3 0	1 1	1 0 2 0	1	X	X	X	X	X	X

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
Karen Emery	5-4-11 13:35	Ruby [signature]	5/4/11 1359
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

COMMENTS & NOTES:

FUGRO

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.

intact cold RL

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 227757 Date Received 5/4/11 Number of coolers 1
Client ES-FID Project 2250 Telegraph Ave

Date Opened 5/4/11 By (print) Vidya Gautai (sign) Vidya Gautai
Date Logged in 5/5/11 By (print) R. Panic (sign)

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 ☐ Foam blocks ☐ Bags ☒ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.0

VB ☒ Samples Received on ice & cold without a temperature blank

☐ 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 samples in the appropriate containers for indicated tests? _____ (YES) NO
11. Are sample labels present, in good condition and complete? _____ (YES) NO
12. Do the sample labels agree with custody papers? _____ (YES) NO
13. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
14. Are the samples appropriately preserved? _____ YES NO (N/A)
15. Did you check preservatives for all bottles for each sample?_____ YES NO (N/A)
16. Did you document your preservative check_____ YES NO (N/A)
17. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
18. Was the client contacted concerning this sample delivery? _____ YES (NO)
If YES, Who was called?_____ By_____ Date:_____

COMMENTS

_____

_____

_____

_____

_____

_____

_____

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	227874	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0609004	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	04/30/11
Units:	mg/Kg	Received:	05/04/11
Basis:	as received		

Field ID:	MW-7 @ 1.5	Batch#:	174551
Type:	SAMPLE	Prepared:	05/09/11
Lab ID:	227874-001	Analyzed:	05/11/11
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	45 Y	1.0
Motor Oil C24-C36	170	5.0

Surrogate	%REC	Limits
o-Terphenyl	104	52-130

Field ID:	MW-7 @ 1.5 (BOTTOM OF CORE)	Batch#:	174623
Type:	SAMPLE	Prepared:	05/11/11
Lab ID:	227874-002	Analyzed:	05/13/11
Diln Fac:	3.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	36 Y	3.0
Motor Oil C24-C36	160	15

Surrogate	%REC	Limits
o-Terphenyl	76	52-130

Type:	BLANK	Prepared:	05/09/11
Lab ID:	QC590814	Analyzed:	05/09/11
Diln Fac:	1.000	Cleanup Method:	EPA 3630C
Batch#:	174551		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	89	52-130

Type:	BLANK	Prepared:	05/10/11
Lab ID:	QC591107	Analyzed:	05/11/11
Diln Fac:	1.000	Cleanup Method:	EPA 3630C
Batch#:	174623		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	96	52-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	227874	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0609004	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC590815	Batch#:	174551
Matrix:	Soil	Prepared:	05/09/11
Units:	mg/Kg	Analyzed:	05/09/11

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.33	44.84	89	44-151

Surrogate	%REC	Limits
o-Terphenyl	96	52-130

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	227874	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0609004	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	174551
MSS Lab ID:	227800-004	Sampled:	05/06/11
Matrix:	Soil	Received:	05/06/11
Units:	mg/Kg	Prepared:	05/09/11
Basis:	as received	Analyzed:	05/09/11
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC590816

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	4.467	49.89	42.13	75	39-146

Surrogate	%REC	Limits
o-Terphenyl	85	52-130

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC590817

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.14	49.81	90	39-146	16	61

Surrogate	%REC	Limits
o-Terphenyl	99	52-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	227874	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0609004	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC591108	Batch#:	174623
Matrix:	Soil	Prepared:	05/10/11
Units:	mg/Kg	Analyzed:	05/11/11

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	45.02	90	44-151

Surrogate	%REC	Limits
o-Terphenyl	99	52-130

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	227874	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0609004	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	174623
MSS Lab ID:	227814-001	Sampled:	05/06/11
Matrix:	Soil	Received:	05/09/11
Units:	mg/Kg	Prepared:	05/11/11
Basis:	as received	Analyzed:	05/11/11
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC591271

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	2.994	49.65	42.47	80	39-146

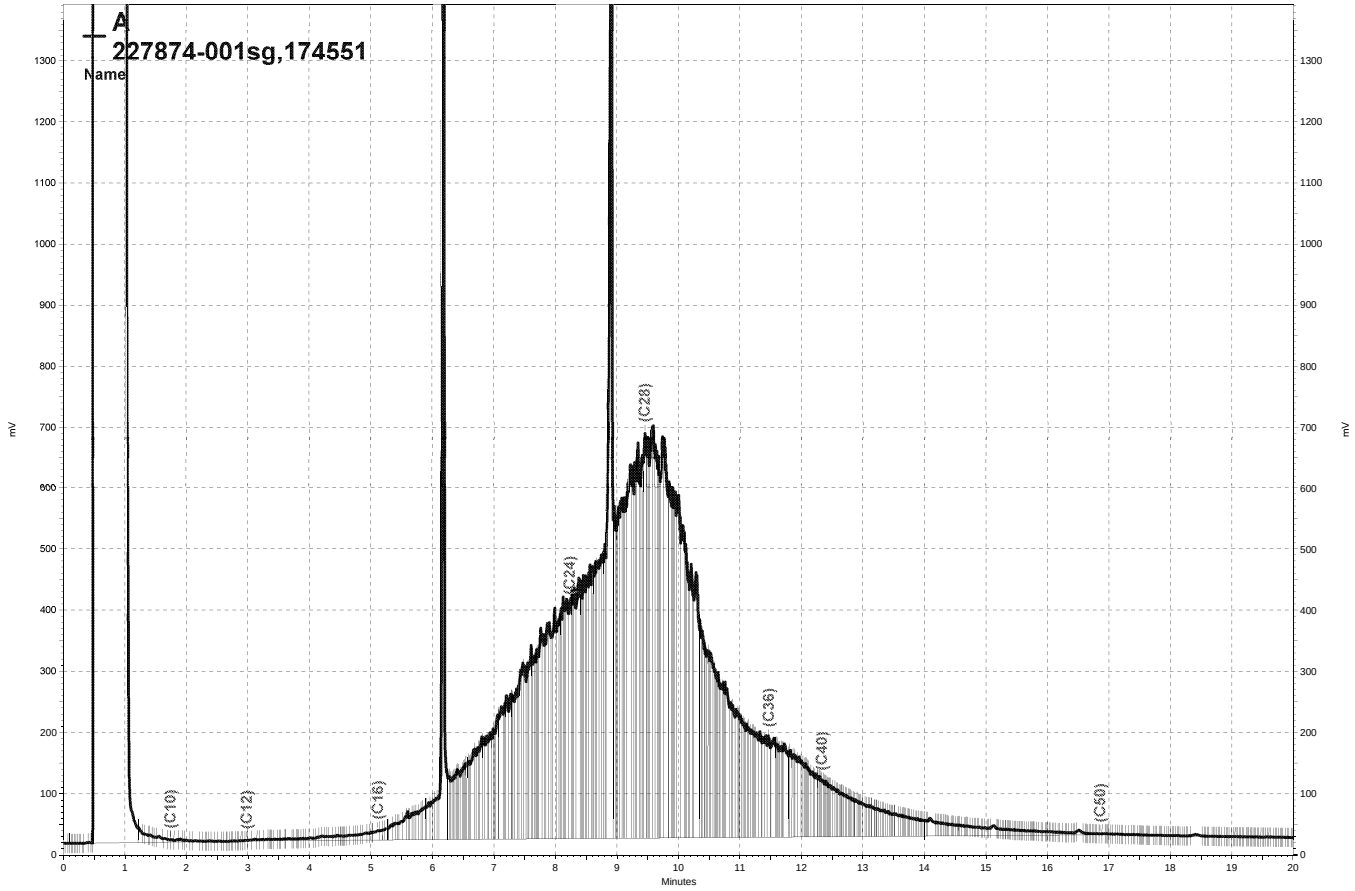
Surrogate	%REC	Limits
o-Terphenyl	86	52-130

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC591272

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.00	48.04	90	39-146	12	61

Surrogate	%REC	Limits
o-Terphenyl	93	52-130

RPD= Relative Percent Difference



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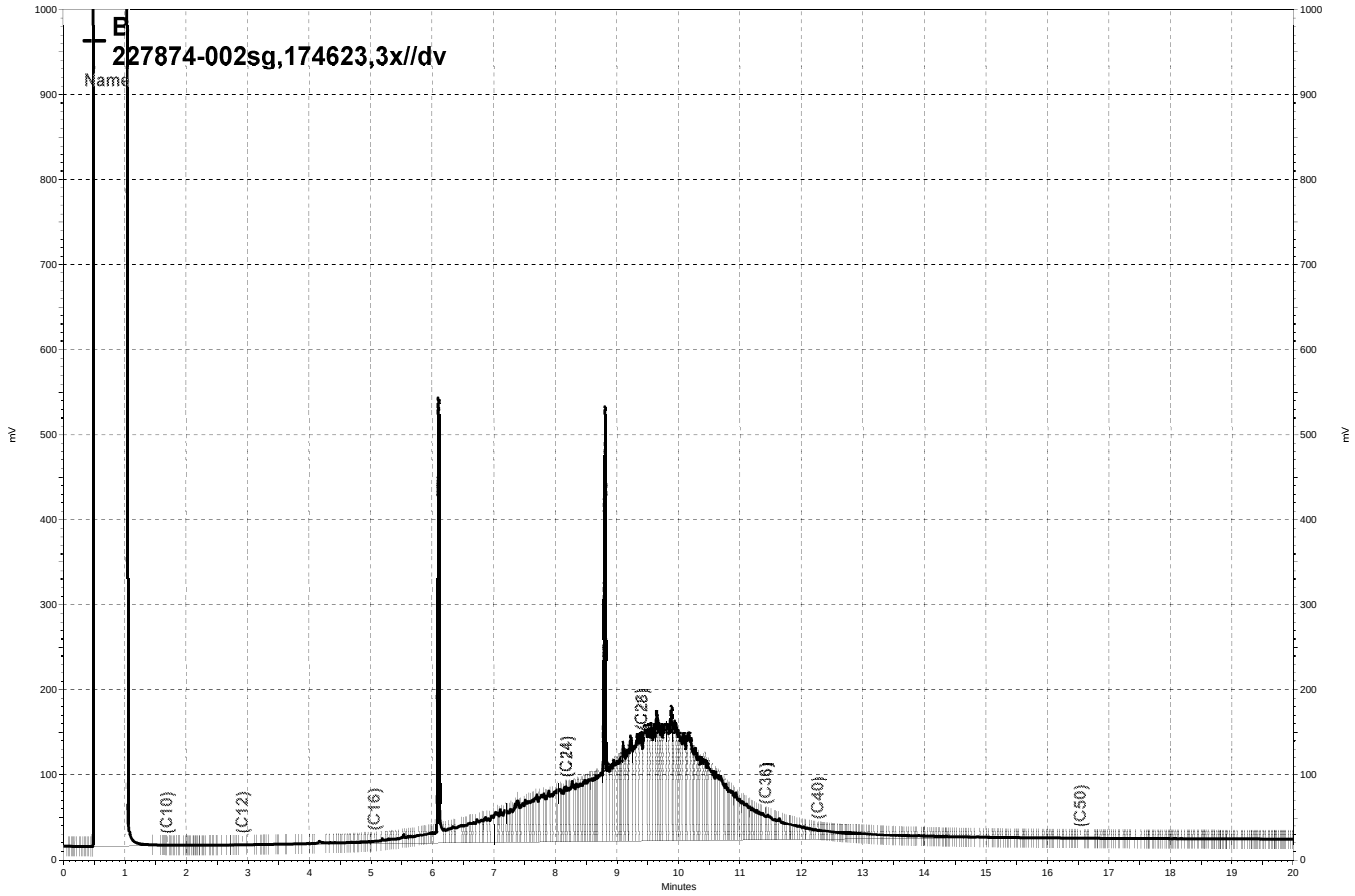

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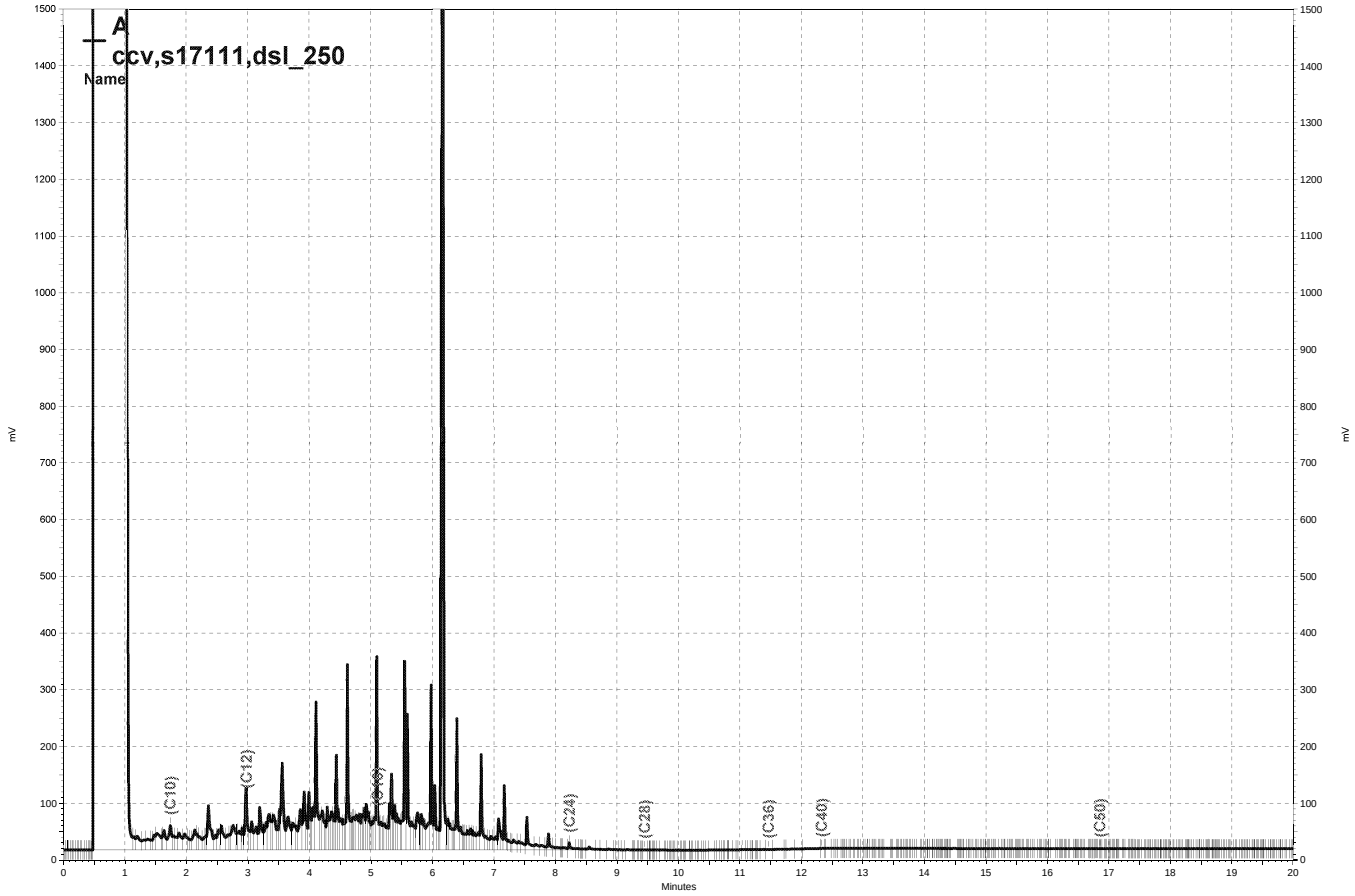

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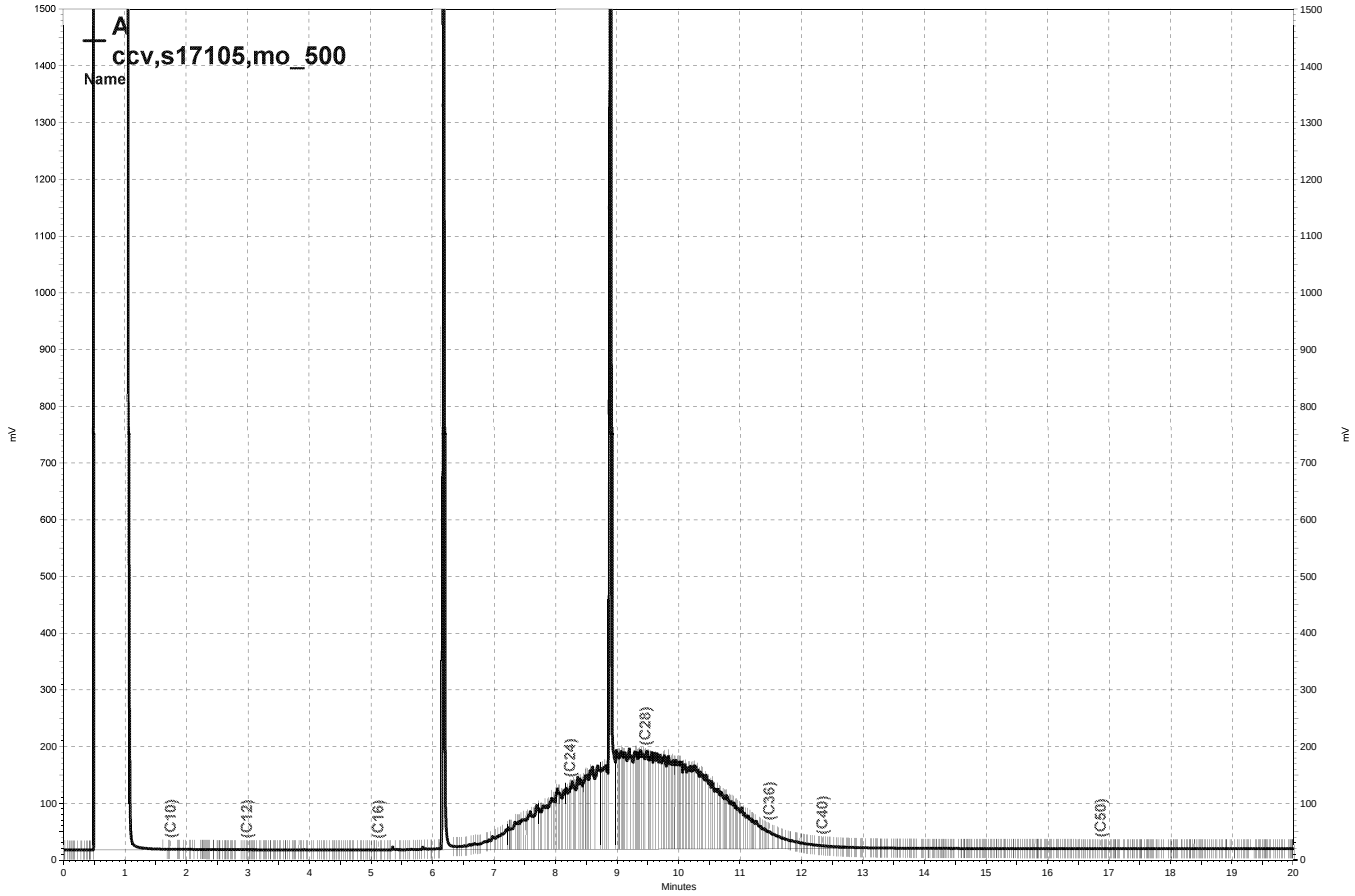

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Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 228154
ANALYTICAL REPORT

Fugro West Inc.	Project : 04.B0609004
1000 Broadway	Location : 2250 Telegraph Avenue
Oakland, CA 94607	Level : II

Sample ID	Lab ID
MW-7 @ 2	228154-001

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: _____ Date: 05/27/2011
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**228154**
Client:	**Fugro West Inc.**
Project:	**04.B0609004**
Location:	**2250 Telegraph Avenue**
Request Date:	**05/20/11**
Samples Received:	**05/20/11**

This data package contains sample and QC results for one soil sample, requested for the above referenced project on 05/20/11. The sample was received intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
228154-001 was received and analyzed outside of hold time; affected data was qualified with "b". No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
228154-001 was received and prepared outside of hold time; affected data was qualified with "b". No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High surrogate recovery was observed for dibromofluoromethane in MW-7 @ 2 (lab # 228154-001); no target analytes were detected in the sample.
228154-001 was received and analyzed outside of hold time; affected data was qualified with "b". No other analytical problems were encountered.

228154

ES-F10 CHAIN OF CUSTODY

PROJECT NAME: 2250 Telegraph Avenue

PROJECT NO.: 04.B0609004 LAB: Curtis and Tompkins

PROJECT CONTACT: Karen Emery TURNAROUND: 5 Day TAT

SAMPLED BY:M. D'Anna

LABORATORY I.D. NUMBER	FIELD SAMPLE I.D.	MATRIX				CONTAINERS						PRESERVATIVE						SAMPLING DATE										QUANTITY	ANALYSIS REQUESTED										
		WATER	SOIL	AIR		VOA	LITER	PINT	TUBE			HCL	H_2SO_4	HNO_3	ICE	OTHER	NONE	MONTH		DAY		YEAR		TIME					TVHg	TEHd and TEHmo w/ Silica gel	Lead Scavengers	Five fuel oxygenates	BTEX						
	MW-7 @ 2		X						X						X			0	4	3	0	1	1	0	9	3	2	1	X	X	X	X	X						

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
Karen Emery	5/20/11 14:33	Tom Bjr	5/20/11 1433
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

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.

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 228154 Date Received 5/20/11 Number of coolers 0
Client Fugro Project 2250 Telegraph Ave.

Date Opened 5/20/11 By (print) Micah Smith (sign)
Date Logged in 5/22/11 By (print) R. Rams (sign)

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 ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None Temp(°C) _____

☐ Samples Received on ice & cold without a temperature blank

☐ 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 samples in the appropriate containers for indicated tests? _____ (YES) NO
11. Are sample labels present, in good condition and complete? _____ (YES) NO
12. Do the sample labels agree with custody papers? _____ (YES) NO
13. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
14. Are the samples appropriately preserved? _____ YES NO (N/A)
15. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
16. Did you document your preservative check _____ YES NO (N/A)
17. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
18. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

_____

_____

_____

_____

_____

_____

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	228154	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8015B
Field ID:	MW-7 @ 2	Batch#:	175056
Matrix:	Soil	Sampled:	04/30/11
Units:	mg/Kg	Received:	05/20/11
Basis:	as received	Analyzed:	05/24/11
Diln Fac:	1.000		

Type: SAMPLE Lab ID: 228154-001

Analyte	Result	RL
Gasoline C7-C12	ND b	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100 b	67-140

Type: BLANK Lab ID: QC592889

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	67-140

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	228154	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC592888	Batch#:	175056
Matrix:	Soil	Analyzed:	05/24/11
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2.000	1.896	95	79-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	67-140

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	228154	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8015B
Field ID:	MW-7 @ 2	Diln Fac:	1.000
MSS Lab ID:	228154-001	Batch#:	175056
Matrix:	Soil	Sampled:	04/30/11
Units:	mg/Kg	Received:	05/20/11
Basis:	as received	Analyzed:	05/24/11

Type: MS Lab ID: QC592890

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.05016	10.75	7.294	67	41-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	67-140

Type: MSD Lab ID: QC592891

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.901	6.988	70	41-120	4	47

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	67-140

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	228154	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	SHAKER TABLE
Project#:	04.B0609004	Analysis:	EPA 8015B
Field ID:	MW-7 @ 2	Batch#:	175110
Matrix:	Soil	Sampled:	04/30/11
Units:	mg/Kg	Received:	05/20/11
Basis:	as received	Prepared:	05/24/11
Diln Fac:	1.000	Analyzed:	05/25/11

Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 228154-001

Analyte	Result	RL
Diesel C10-C24	14 Y b	1.0
Motor Oil C24-C36	66 b	5.0

Surrogate	%REC	Limits
o-Terphenyl	52 b	52-130

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC593131

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	87	52-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	228154	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	SHAKER TABLE
Project#:	04.B0609004	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC593132	Batch#:	175110
Matrix:	Soil	Prepared:	05/24/11
Units:	mg/Kg	Analyzed:	05/25/11

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.34	31.29	62	44-151

Surrogate	%REC	Limits
o-Terphenyl	87	52-130

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	228154	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	SHAKER TABLE
Project#:	04.B0609004	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	175110
MSS Lab ID:	228171-002	Sampled:	05/19/11
Matrix:	Soil	Received:	05/23/11
Units:	mg/Kg	Prepared:	05/24/11
Basis:	as received	Analyzed:	05/26/11
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC593133

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	25.97	50.18	48.97	46	39-146

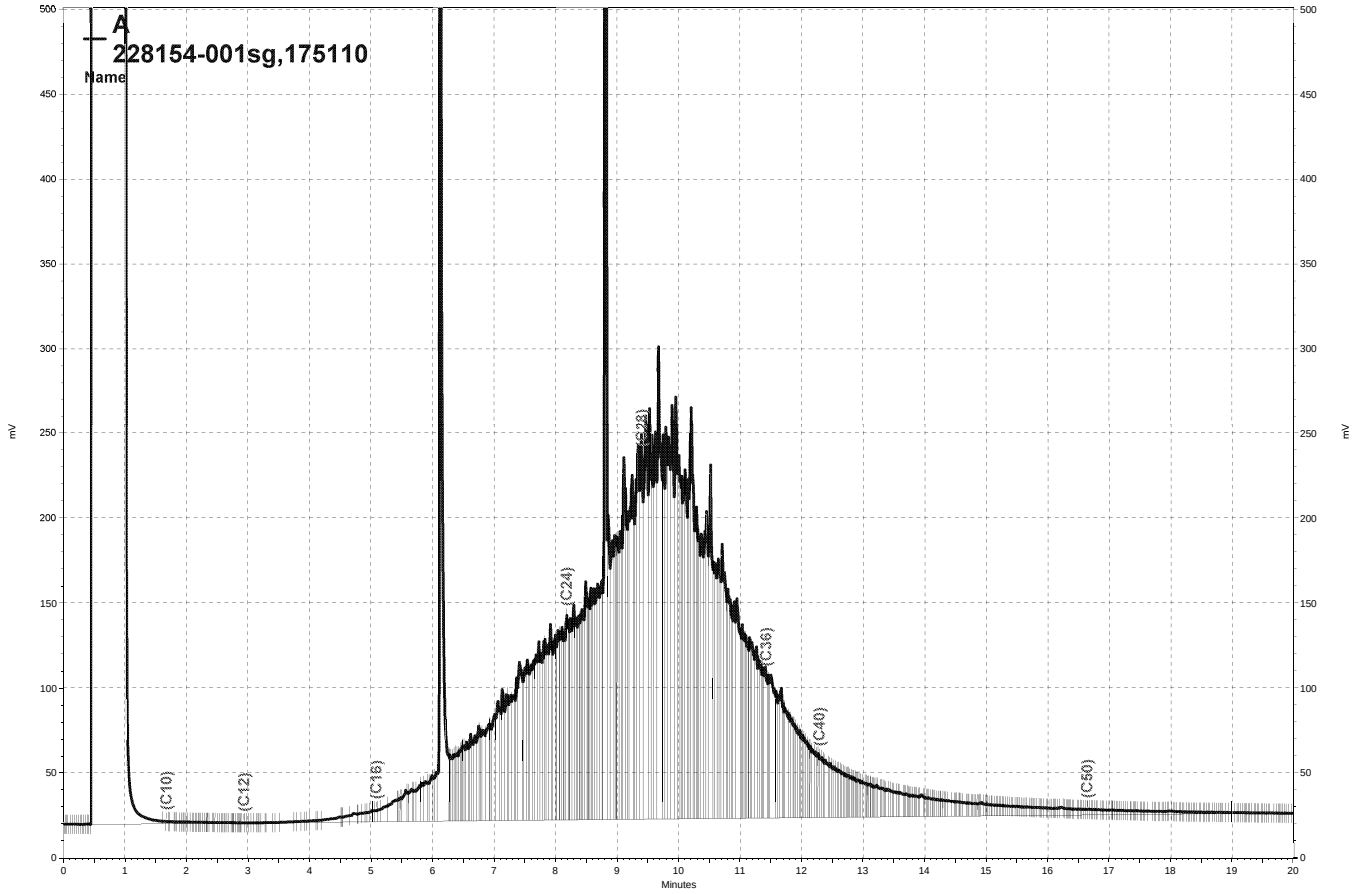
Surrogate	%REC	Limits
o-Terphenyl	67	52-130

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC593134

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.47	53.81	55	39-146	9	61

Surrogate	%REC	Limits
o-Terphenyl	71	52-130

RPD= Relative Percent Difference



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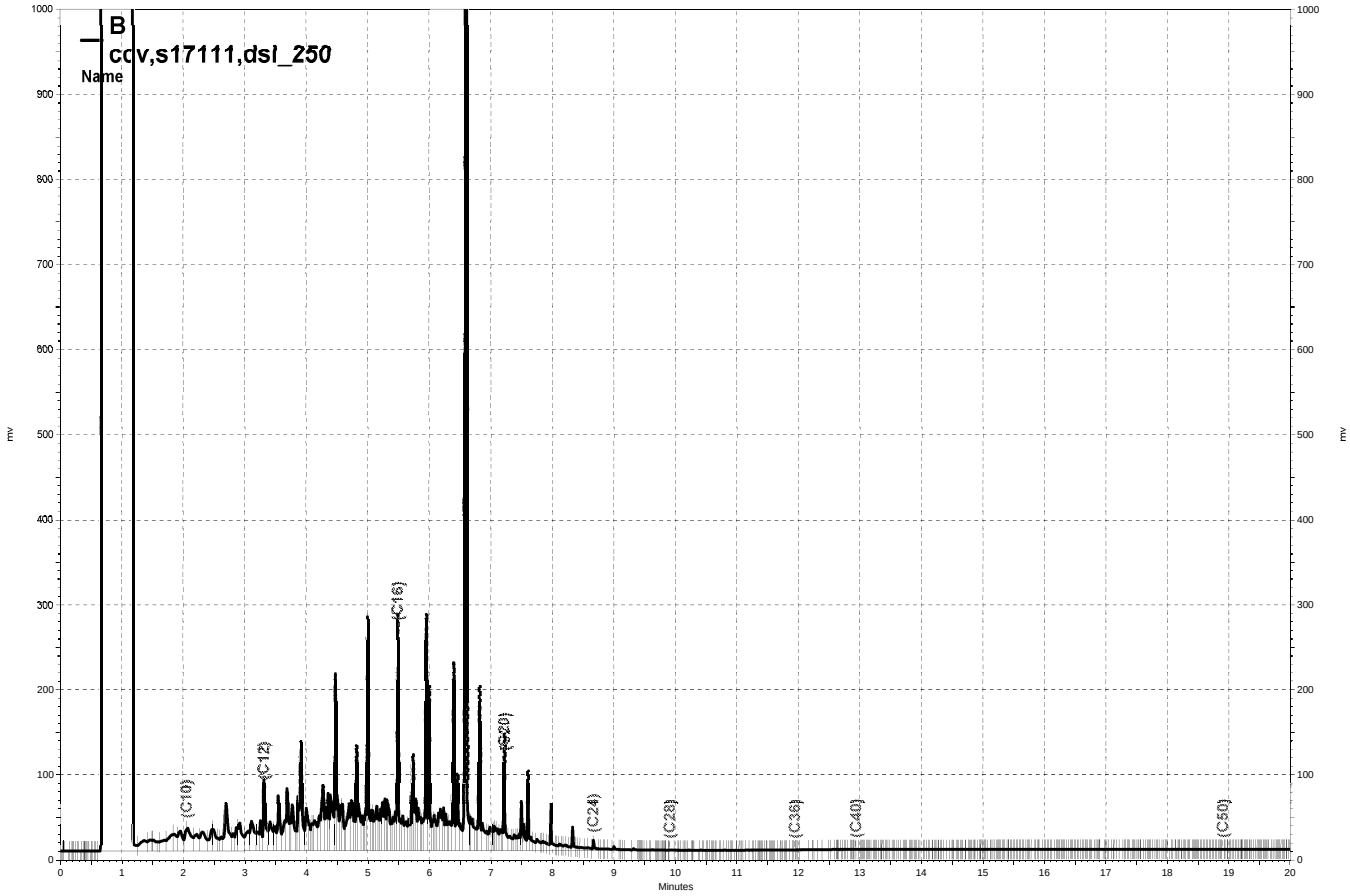

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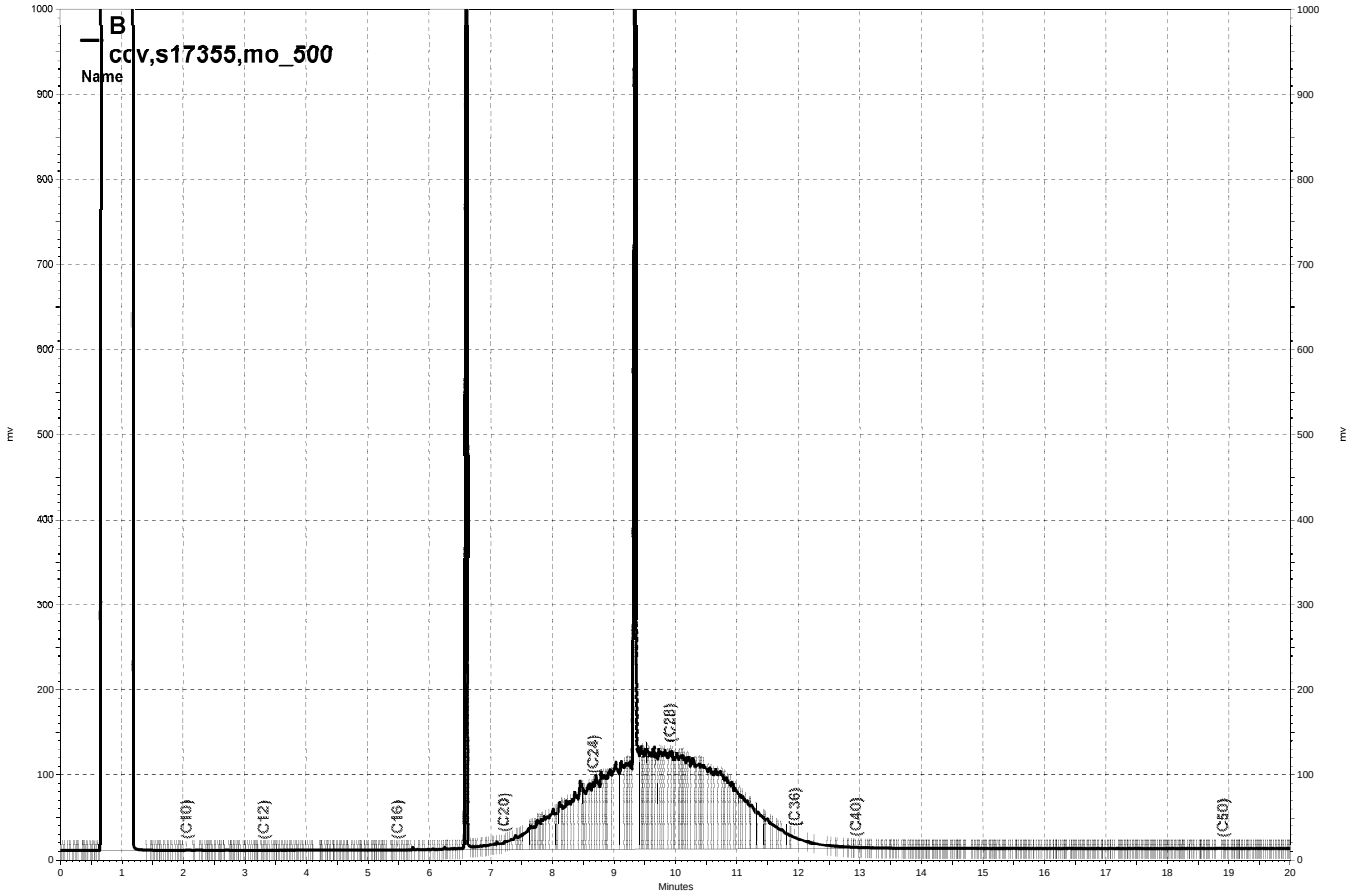

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Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	228154	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	MW-7 @ 2	Diln Fac:	0.9940
Lab ID:	228154-001	Batch#:	175033
Matrix:	Soil	Sampled:	04/30/11
Units:	ug/Kg	Received:	05/20/11
Basis:	as received	Analyzed:	05/23/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND b	99
MTBE	ND b	5.0
Isopropyl Ether (DIPE)	ND b	5.0
Ethyl tert-Butyl Ether (ETBE)	ND b	5.0
1,2-Dichloroethane	ND b	5.0
Benzene	ND b	5.0
Methyl tert-Amyl Ether (TAME)	ND b	5.0
Toluene	ND b	5.0
1,2-Dibromoethane	ND b	5.0
Ethylbenzene	ND b	5.0
m,p-Xylenes	ND b	5.0
o-Xylene	ND b	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	125 * b	79-120
1,2-Dichloroethane-d4	131 b	72-148
Toluene-d8	97 b	80-120
Bromofluorobenzene	92 b	78-130

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	228154	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC592793	Batch#:	175033
Matrix:	Soil	Analyzed:	05/23/11
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	89.69	72	49-144
MTBE	25.00	21.83	87	64-122
Isopropyl Ether (DIPE)	25.00	22.74	91	55-135
Ethyl tert-Butyl Ether (ETBE)	25.00	24.47	98	60-129
1,2-Dichloroethane	25.00	22.83	91	70-139
Benzene	25.00	24.64	99	80-128
Methyl tert-Amyl Ether (TAME)	25.00	23.35	93	65-125
Toluene	25.00	24.28	97	80-130
1,2-Dibromoethane	25.00	22.62	90	79-120
Ethylbenzene	25.00	25.22	101	80-133
m,p-Xylenes	50.00	52.91	106	80-134
o-Xylene	25.00	26.06	104	79-130

Surrogate	%REC	Limits
Dibromofluoromethane	92	79-120
1,2-Dichloroethane-d4	92	72-148
Toluene-d8	93	80-120
Bromofluorobenzene	97	78-130

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	228154	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC592794	Batch#:	175033
Matrix:	Soil	Analyzed:	05/23/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	96	79-120
1,2-Dichloroethane-d4	90	72-148
Toluene-d8	98	80-120
Bromofluorobenzene	98	78-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	228154	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC592821	Batch#:	175033
Matrix:	Soil	Analyzed:	05/23/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	102	79-120
1,2-Dichloroethane-d4	102	72-148
Toluene-d8	98	80-120
Bromofluorobenzene	94	78-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	228154	Location:	2250 Telegraph Avenue
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0609004	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	175033
MSS Lab ID:	228106-026	Sampled:	05/17/11
Matrix:	Soil	Received:	05/19/11
Units:	ug/Kg	Analyzed:	05/23/11
Basis:	as received		

Type: MS Diln Fac: 0.9690
Lab ID: QC592873

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<17.62	242.2	174.6	72	46-136
MTBE	<0.9873	48.45	47.30	98	60-120
Isopropyl Ether (DIPE)	<1.429	48.45	48.10	99	57-122
Ethyl tert-Butyl Ether (ETBE)	<0.5676	48.45	49.74	103	59-121
1,2-Dichloroethane	<0.6917	48.45	49.63	102	59-135
Benzene	<0.6792	48.45	52.36	108	69-125
Methyl tert-Amyl Ether (TAME)	<0.5695	48.45	48.09	99	60-121
Toluene	<0.4571	48.45	45.57	94	62-128
1,2-Dibromoethane	<0.4848	48.45	39.85	82	61-122
Ethylbenzene	<0.6014	48.45	46.43	96	57-136
m,p-Xylenes	<1.297	96.90	97.11	100	57-136
o-Xylene	<0.6684	48.45	46.91	97	56-134

Surrogate	%REC	Limits
Dibromofluoromethane	110	79-120
1,2-Dichloroethane-d4	113	72-148
Toluene-d8	95	80-120
Bromofluorobenzene	105	78-130

Type: MSD Diln Fac: 0.9615
Lab ID: QC592874

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	240.4	211.8	88	46-136	20	48
MTBE	48.08	43.88	91	60-120	7	33
Isopropyl Ether (DIPE)	48.08	44.88	93	57-122	6	35
Ethyl tert-Butyl Ether (ETBE)	48.08	47.21	98	59-121	4	35
1,2-Dichloroethane	48.08	48.19	100	59-135	2	32
Benzene	48.08	50.01	104	69-125	4	36
Methyl tert-Amyl Ether (TAME)	48.08	45.98	96	60-121	4	32
Toluene	48.08	46.60	97	62-128	3	41
1,2-Dibromoethane	48.08	41.61	87	61-122	5	35
Ethylbenzene	48.08	46.59	97	57-136	1	43
m,p-Xylenes	96.15	96.08	100	57-136	0	46
o-Xylene	48.08	46.94	98	56-134	1	40

Surrogate	%REC	Limits
Dibromofluoromethane	106	79-120
1,2-Dichloroethane-d4	111	72-148
Toluene-d8	97	80-120
Bromofluorobenzene	105	78-130

RPD= Relative Percent Difference


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 229977
ANALYTICAL REPORT

Fugro West Inc.	Project : 609.004
1000 Broadway	Location : Buttner Properties
Oakland, CA 94607	Level : II

Sample ID	Lab ID
MW-8 @ 1'	229977-001
MW-8 @ 3'	229977-002
MW-8 @ 10'	229977-003
MW-8 @ 12'	229977-004
MW-8 @ 14'	229977-005
MW-8	229977-006

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: Desiree N. Tetrault Date: 08/11/2011
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**229977**
Client:	**Fugro West Inc.**
Project:	**609.004**
Location:	**Buttner Properties**
Request Date:	**08/04/11**
Samples Received:	**08/04/11**

This data package contains sample and QC results for five soil samples and one water sample, requested for the above referenced project on 08/04/11. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B) Water:
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B) Soil:
MW-8 @ 1' (lab # 229977-001) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Water:
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Soil:
No analytical problems were encountered.

229977

ES-F10 CHAIN OF CUSTODY

PROJECT NAME: Buttner Properties

PROJECT NO.: 609.004 LAB: C&T

PROJECT CONTACT: K Emery TURNAROUND: 5 day

SAMPLED BY:MDAnna

LABORATORY I.D. NUMBER	FIELD SAMPLE I.D.	MATRIX				CONTAINERS						PRESERVATIVE						SAMPLING DATE										Quantity	ANALYSIS REQUESTED									
		WATER	SOIL	AIR		VOA	LITER	PINT	TUBE	1 liter		HCL	H_2SO_4	HNO_3	ICE	OTHER	NONE	MONTH		DAY		YEAR		TIME					TVHg, BTEX	TEHd & mo with Si Gel	lead scavengers	Five fuel oxygenates						EDF Reporting
	MW-8 @ 1'		x						x						x			0	8	0	2	1	1	0	8	4	7	1	x	x	x	x						x
	MW-8 @ 3'		x						x						x			0	8	0	2	1	1	0	8	5	5	1	x	x	x	x						X
	MW-8 @ 10'		x						x						x			0	8	0	2	1	1	0	9	3	9	1	x	x	x	x						X
	MW-8 @ 12'		x						x						x			0	8	0	2	1	1	0	9	4	7	1	x	x	x	x						X
	MW-8 @ 14'		x						x						x			0	8	0	2	1	1	1	0	0	2	1	x	x	x	x						X
	MW-8	x				3				2		x			x			0	8	0	4	1	1	0	3	0	5	x	x	x	x						

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
	8.4.11 15:44		8/4/11 1944
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

COMMENTS & NOTES:

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

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 229977 Date Received 3/4/11 Number of coolers 1
Client FUGRO Project Buttner Properties

Date Opened 3/4/11 By (print) R. Paris (sign)
Date Logged in ↓ By (print) ↓ (sign)

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 (X) 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 ☐ Foam blocks (X) Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

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

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

(X) Samples Received on ice & cold without a temperature blank

(X) 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 samples in the appropriate containers for indicated tests? (YES) NO
11. Are sample labels present, in good condition and complete? (YES) NO
12. Do the sample labels agree with custody papers? (YES) NO — PM
13. Was sufficient amount of sample sent for tests requested? (YES) NO
14. Are the samples appropriately preserved? (YES) NO N/A
15. Did you check preservatives for all bottles for each sample? YES NO (N/A)
16. Did you document your preservative check? YES NO (N/A)
17. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
18. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
19. Was the client contacted concerning this sample delivery? YES (NO)
   If YES, Who was called? By Date:

COMMENTS

Rev 8, 6/11

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	177539
Units:	mg/Kg	Sampled:	08/02/11
Basis:	as received	Received:	08/04/11
Diln Fac:	1.000	Analyzed:	08/05/11

Field ID: MW-8 @ 1' Lab ID: 229977-001
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	ND	0.99

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	74-132

Field ID: MW-8 @ 3' Lab ID: 229977-002
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	ND	0.99

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	74-132

Field ID: MW-8 @ 10' Lab ID: 229977-003
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	10 Y	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	115	74-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	177539
Units:	mg/Kg	Sampled:	08/02/11
Basis:	as received	Received:	08/04/11
Diln Fac:	1.000	Analyzed:	08/05/11

Field ID: MW-8 @ 12' Lab ID: 229977-004
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	3.3 Y	0.94

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	74-132

Field ID: MW-8 @ 14' Lab ID: 229977-005
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	8.1 Y	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	74-132

Type: BLANK Lab ID: QC603145

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	74-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC603144	Batch#:	177539
Matrix:	Soil	Analyzed:	08/05/11
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.077	108	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	74-132

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8015B
Field ID:	MW-8 @ 1'	Diln Fac:	1.000
MSS Lab ID:	229977-001	Batch#:	177539
Matrix:	Soil	Sampled:	08/02/11
Units:	mg/Kg	Received:	08/04/11
Basis:	as received	Analyzed:	08/05/11

Type: MS Lab ID: QC603178

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.07011	9.804	7.901	80	43-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	74-132

Type: MSD Lab ID: QC603179

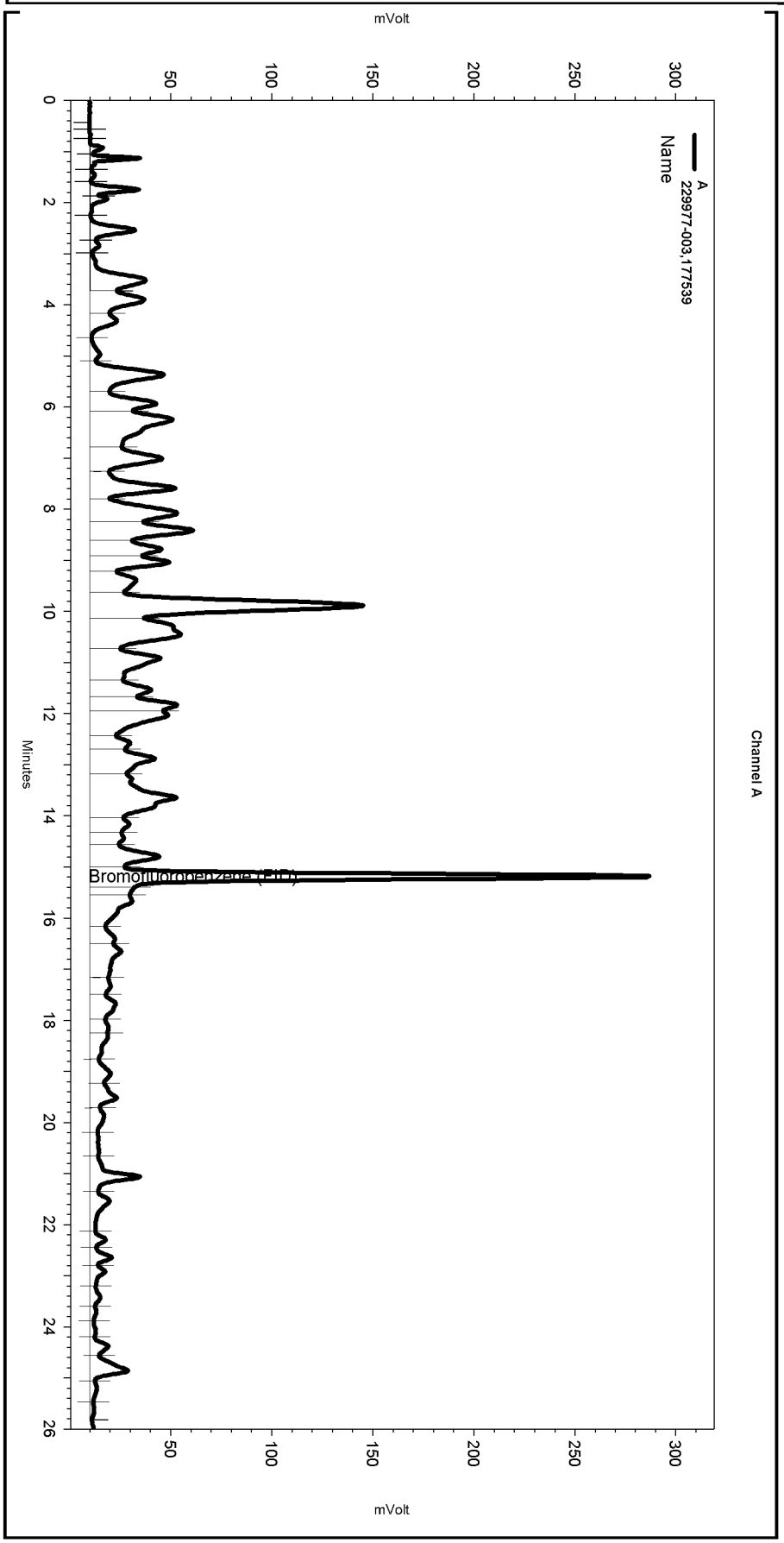
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.804	8.103	82	43-120	3	34

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	74-132

RPD= Relative Percent Difference

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\217.seq**
Sample Name: **229977-003,177539**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\217-015**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe153.met

Software Version 3.1.7
Run Date: 8/5/2011 10:02:40 PM
Analysis Date: 8/8/2011 11:16:03 AM
Sample Amount: 0.91 Multiplier: 0.91
Vial & pH or Core ID: b



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\217-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Split Peak	15.397	0	0

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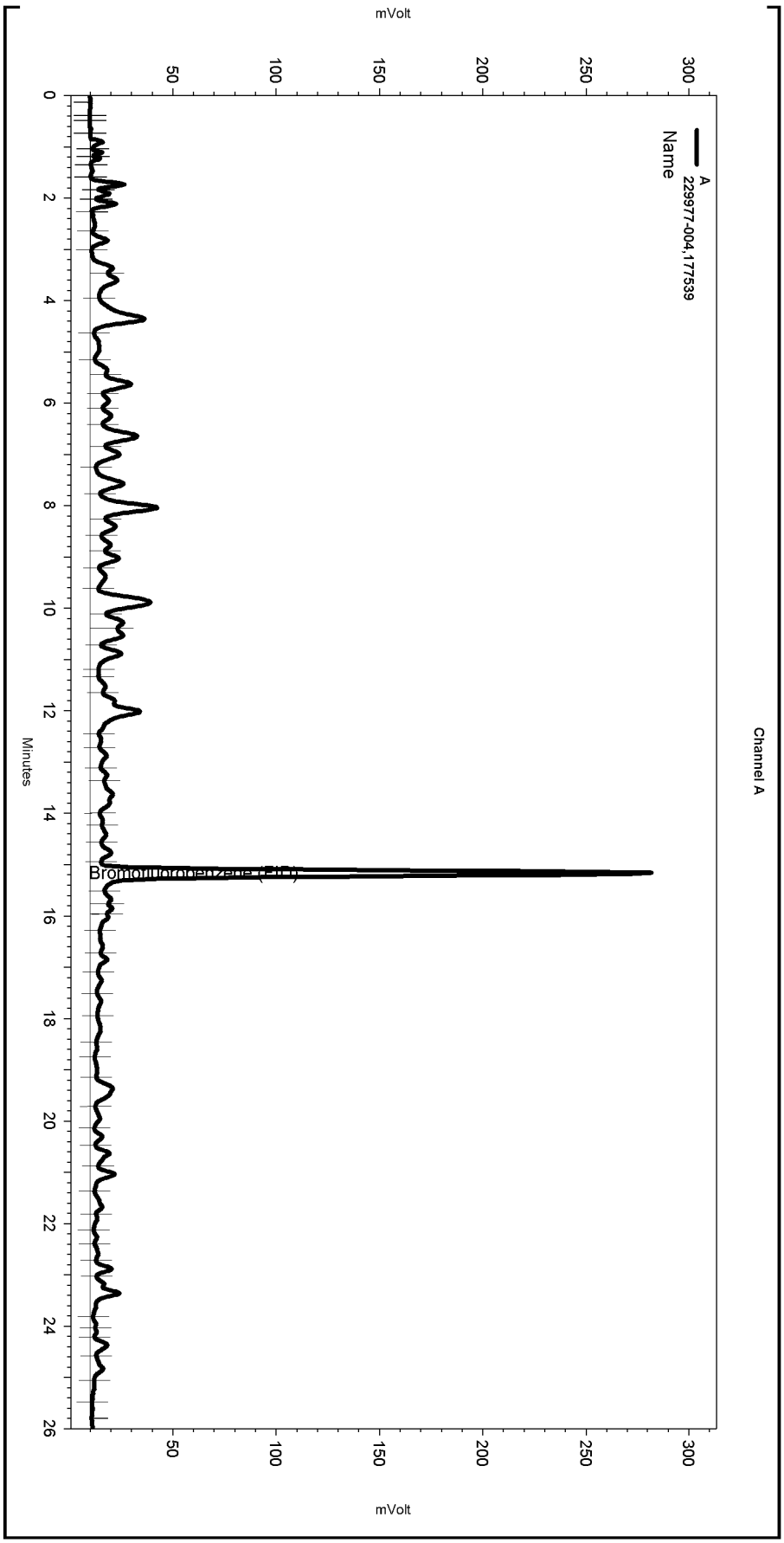
Sample Name: **229977-004,177539**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\217-016**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe153.met

Software Version 3.1.7
Run Date: 8/5/2011 10:40:55 PM
Analysis Date: 8/8/2011 11:13:32 AM
Sample Amount: 1.06 Multiplier: 1.06
Vial & pH or Core ID: b



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

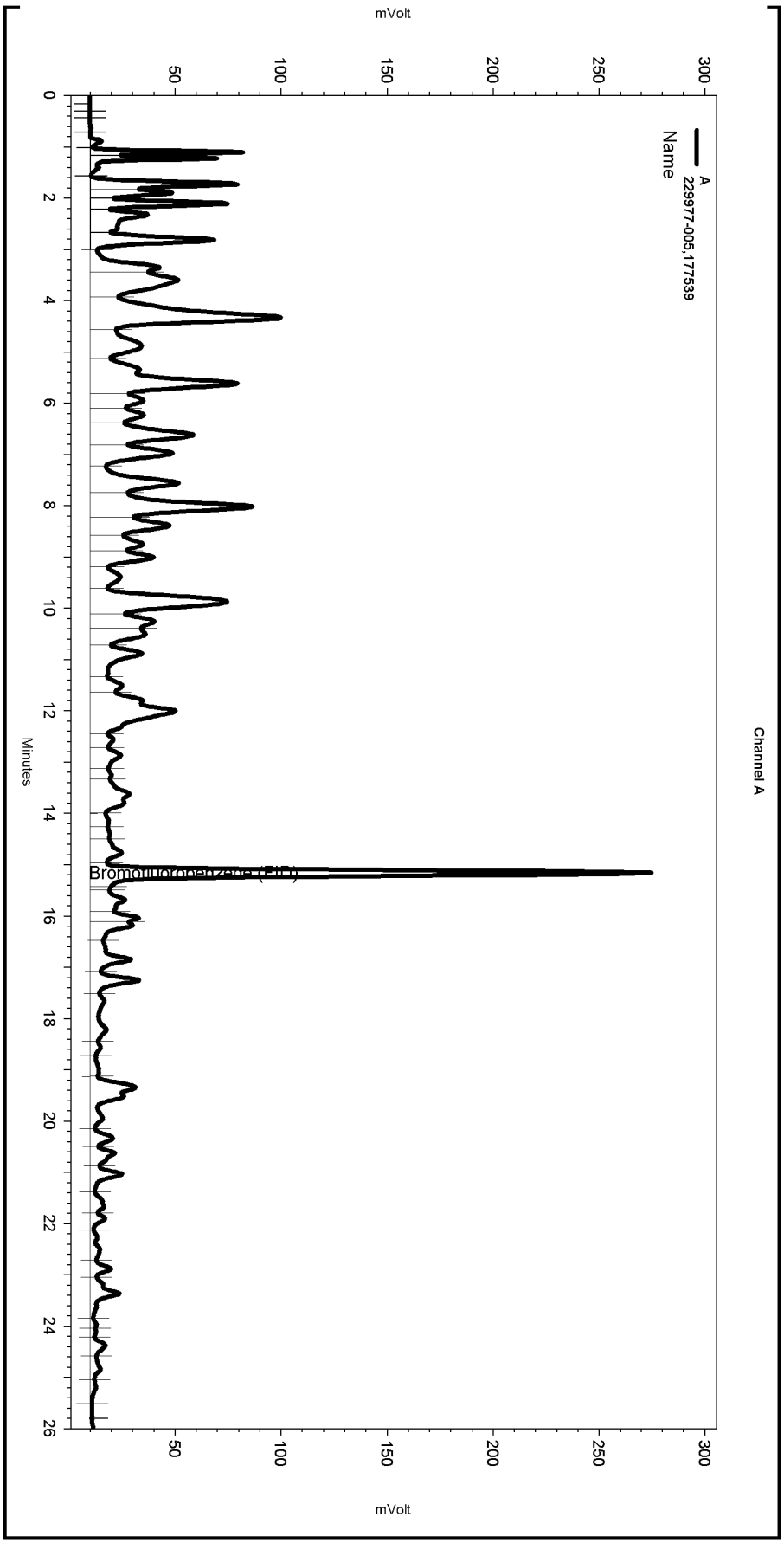
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\217-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\217.seq**
Sample Name: **229977-005,177539**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\217-017**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe153.met

Software Version 3.1.7
Run Date: 8/5/2011 11:19:04 PM
Analysis Date: 8/8/2011 11:18:18 AM
Sample Amount: 0.9 Multiplier: 0.9
Vial & pH or Core ID: b



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

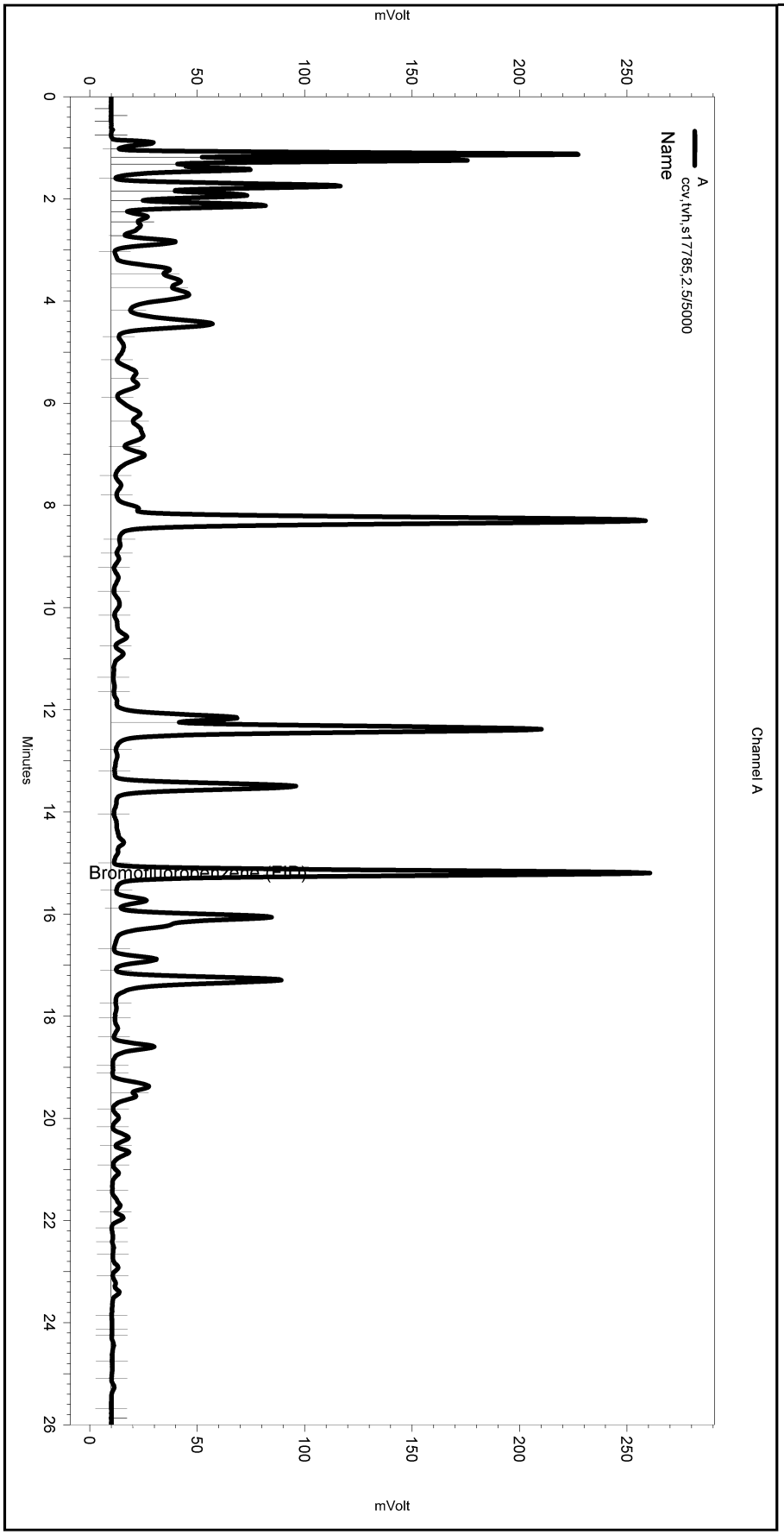
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\217-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	15.427	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\217.seq**
Sample Name: **ccv,tvh,s17785,2.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\217-003**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe153.met

Software Version 3.1.7
Run Date: 8/5/2011 12:19:45 PM
Analysis Date: 8/5/2011 12:48:28 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\217-003_D9B3.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 3520C
Project#:	609.004	Analysis:	EPA 8015B
Field ID:	MW-8	Batch#:	177554
Matrix:	Water	Sampled:	08/04/11
Units:	ug/L	Received:	08/04/11
Diln Fac:	1.000	Prepared:	08/05/11

Type:	SAMPLE	Analyzed:	08/08/11
Lab ID:	229977-006	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	260 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	113	68-120

Type:	BLANK	Analyzed:	08/07/11
Lab ID:	QC603196	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	104	68-120

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 3520C
Project#:	609.004	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	177554
Units:	ug/L	Prepared:	08/05/11
Diln Fac:	1.000		

Type: BS
Lab ID: QC603197
Analyzed: 08/07/11
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,601	104	61-120

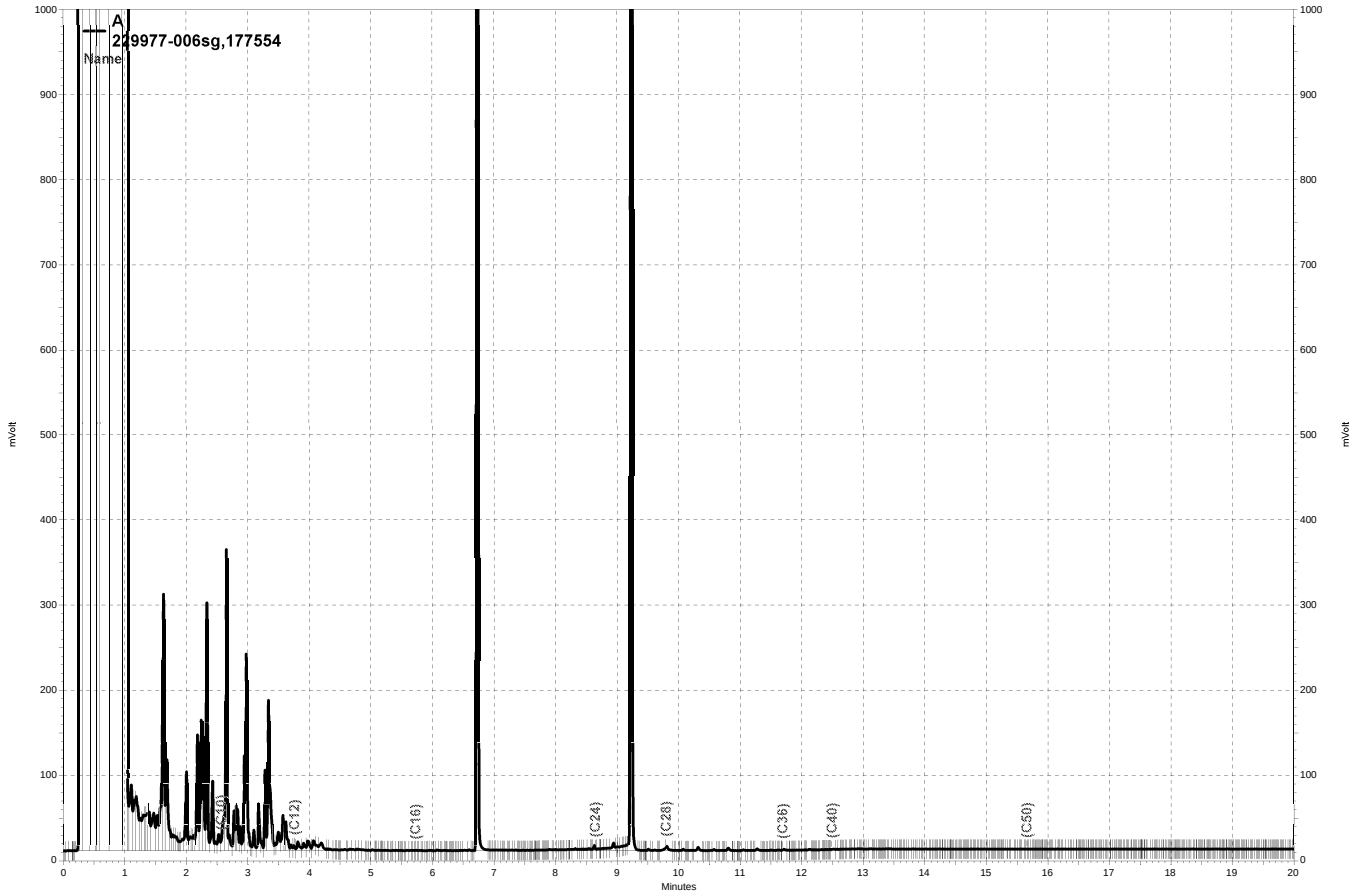
Surrogate	%REC	Limits
o-Terphenyl	118	68-120

Type: BSD
Lab ID: QC603198
Analyzed: 08/08/11
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,659	106	61-120	2	20

Surrogate	%REC	Limits
o-Terphenyl	117	68-120

RPD= Relative Percent Difference



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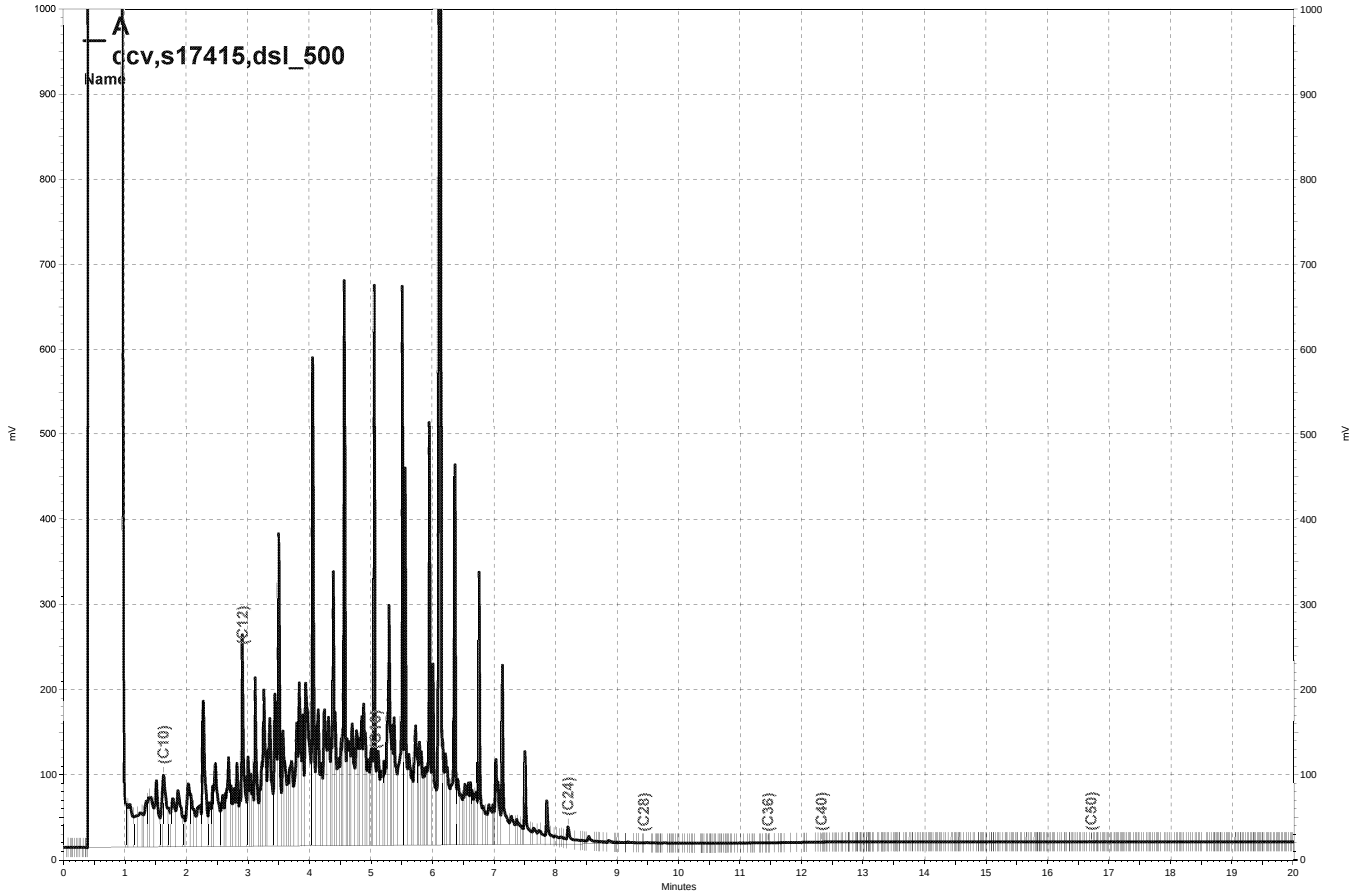

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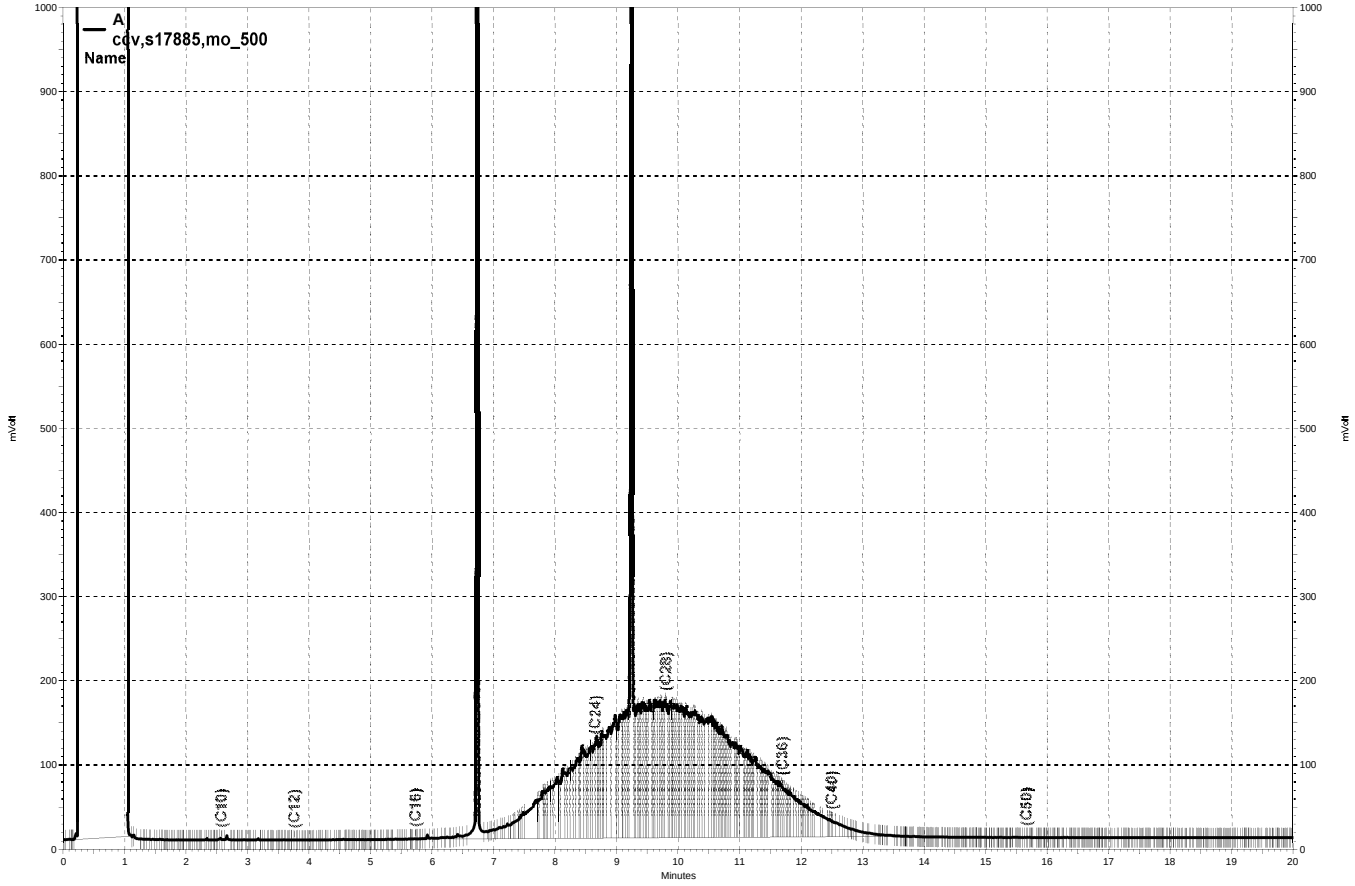

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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	SHAKER TABLE
Project#:	609.004	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	08/02/11
Units:	mg/Kg	Received:	08/04/11
Basis:	as received	Prepared:	08/05/11
Batch#:	177542		

Field ID:	MW-8 @ 1'	Diln Fac:	5.000
Type:	SAMPLE	Analyzed:	08/08/11
Lab ID:	229977-001	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	70 Y	5.0
Motor Oil C24-C36	390	25

Surrogate	%REC	Limits
o-Terphenyl	112	62-120

Field ID:	MW-8 @ 3'	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	08/08/11
Lab ID:	229977-002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	0.99
Motor Oil C24-C36	11 Y	5.0

Surrogate	%REC	Limits
o-Terphenyl	89	62-120

Field ID:	MW-8 @ 10'	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	08/09/11
Lab ID:	229977-003	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	18 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	95	62-120

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	SHAKER TABLE
Project#:	609.004	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	08/02/11
Units:	mg/Kg	Received:	08/04/11
Basis:	as received	Prepared:	08/05/11
Batch#:	177542		

Field ID:	MW-8 @ 12'	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	08/08/11
Lab ID:	229977-004	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	11 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	92	62-120

Field ID:	MW-8 @ 14'	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	08/08/11
Lab ID:	229977-005	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	2.7 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	90	62-120

Type:	BLANK	Analyzed:	08/07/11
Lab ID:	QC603156	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	91	62-120

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	SHAKER TABLE
Project#:	609.004	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC603157	Batch#:	177542
Matrix:	Soil	Prepared:	08/05/11
Units:	mg/Kg	Analyzed:	08/07/11

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.42	45.96	91	54-138

Surrogate	%REC	Limits
o-Terphenyl	95	62-120

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	SHAKER TABLE
Project#:	609.004	Analysis:	EPA 8015B
Field ID:	MW-8 @ 3'	Batch#:	177542
MSS Lab ID:	229977-002	Sampled:	08/02/11
Matrix:	Soil	Received:	08/04/11
Units:	mg/Kg	Prepared:	08/05/11
Basis:	as received	Analyzed:	08/08/11
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC603158

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	0.8469	49.61	40.75	80	35-150

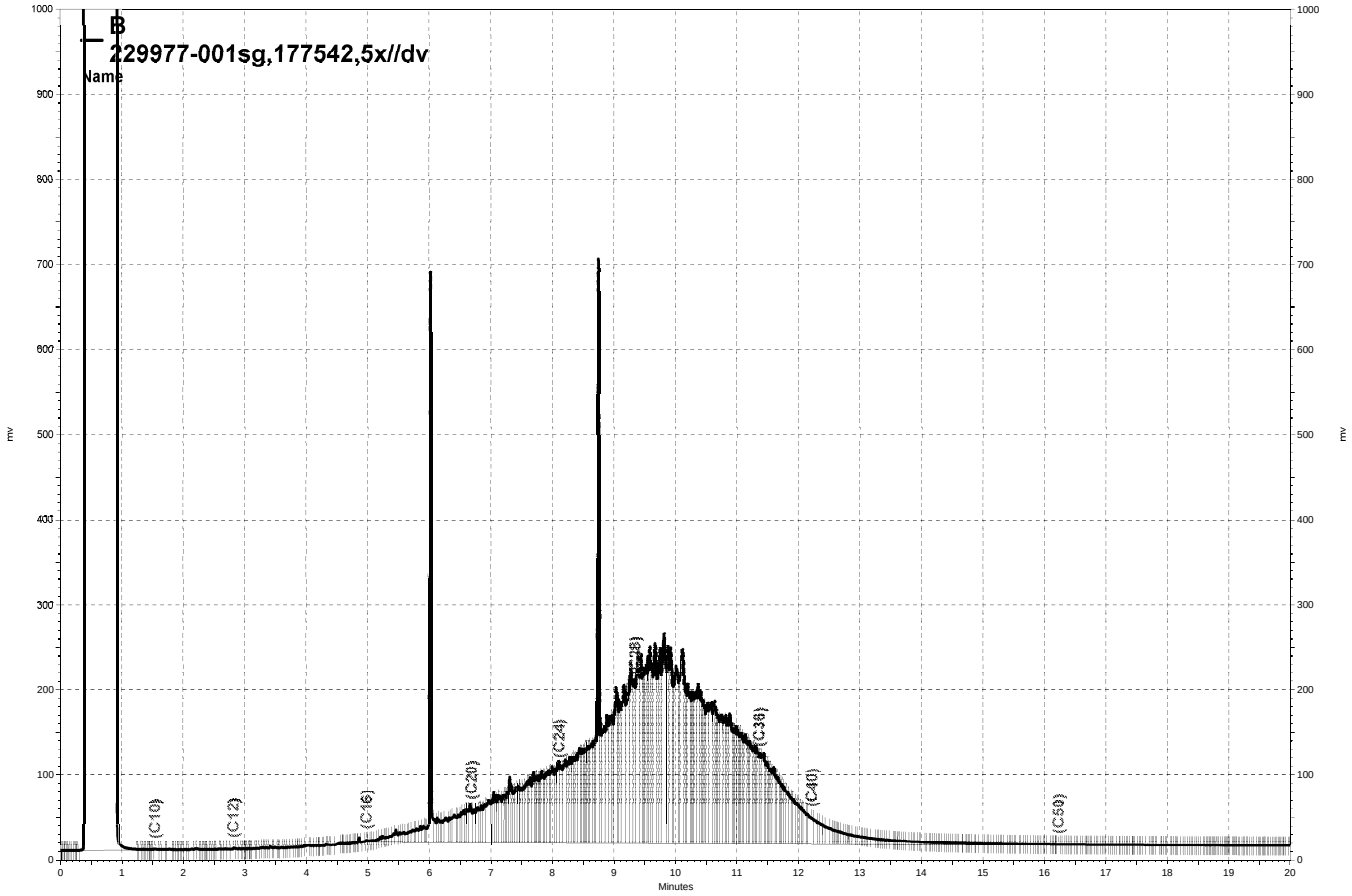
Surrogate	%REC	Limits
o-Terphenyl	98	62-120

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC603159

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.76	44.84	88	35-150	9	71

Surrogate	%REC	Limits
o-Terphenyl	98	62-120

RPD= Relative Percent Difference



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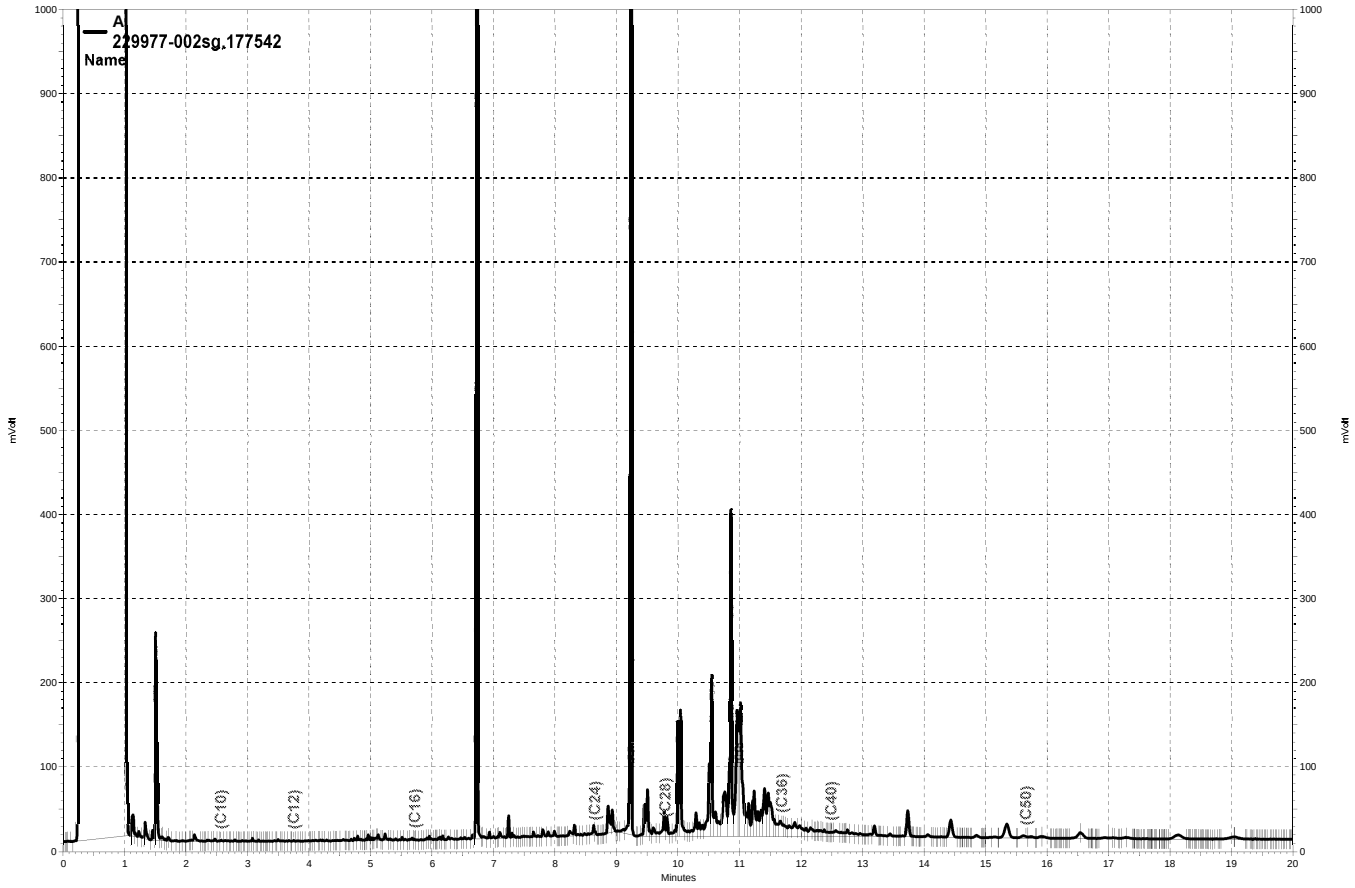

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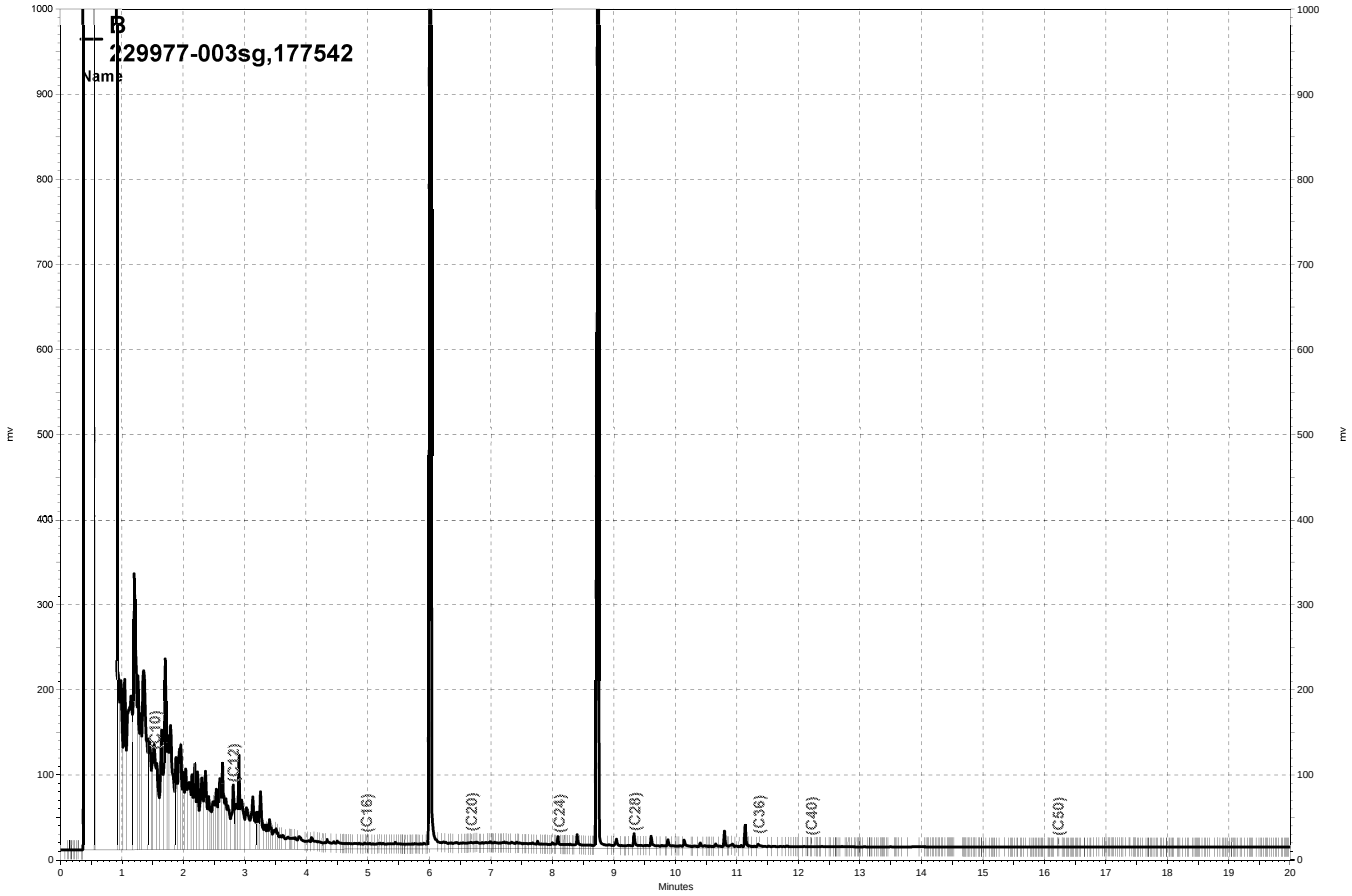

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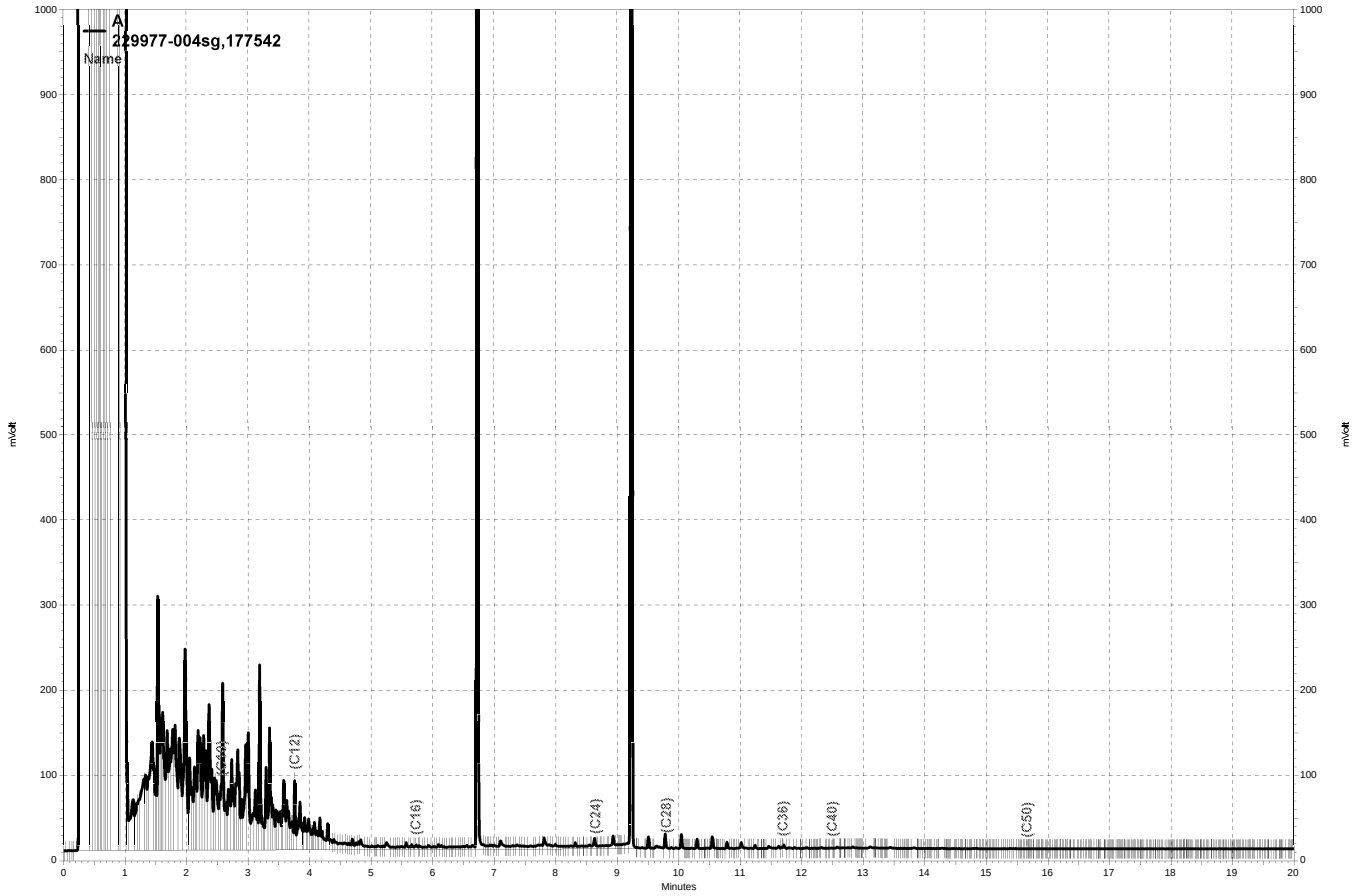

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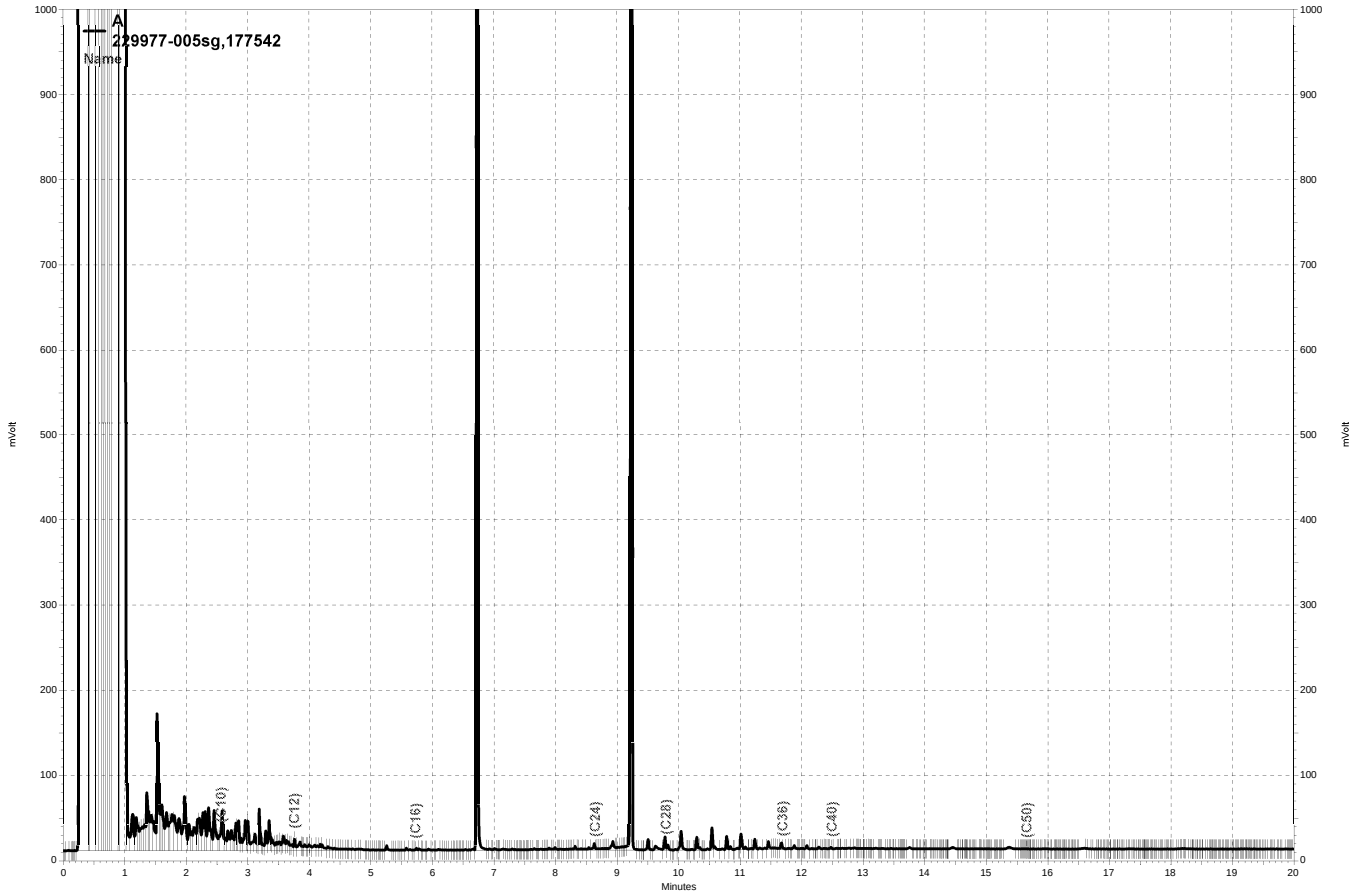

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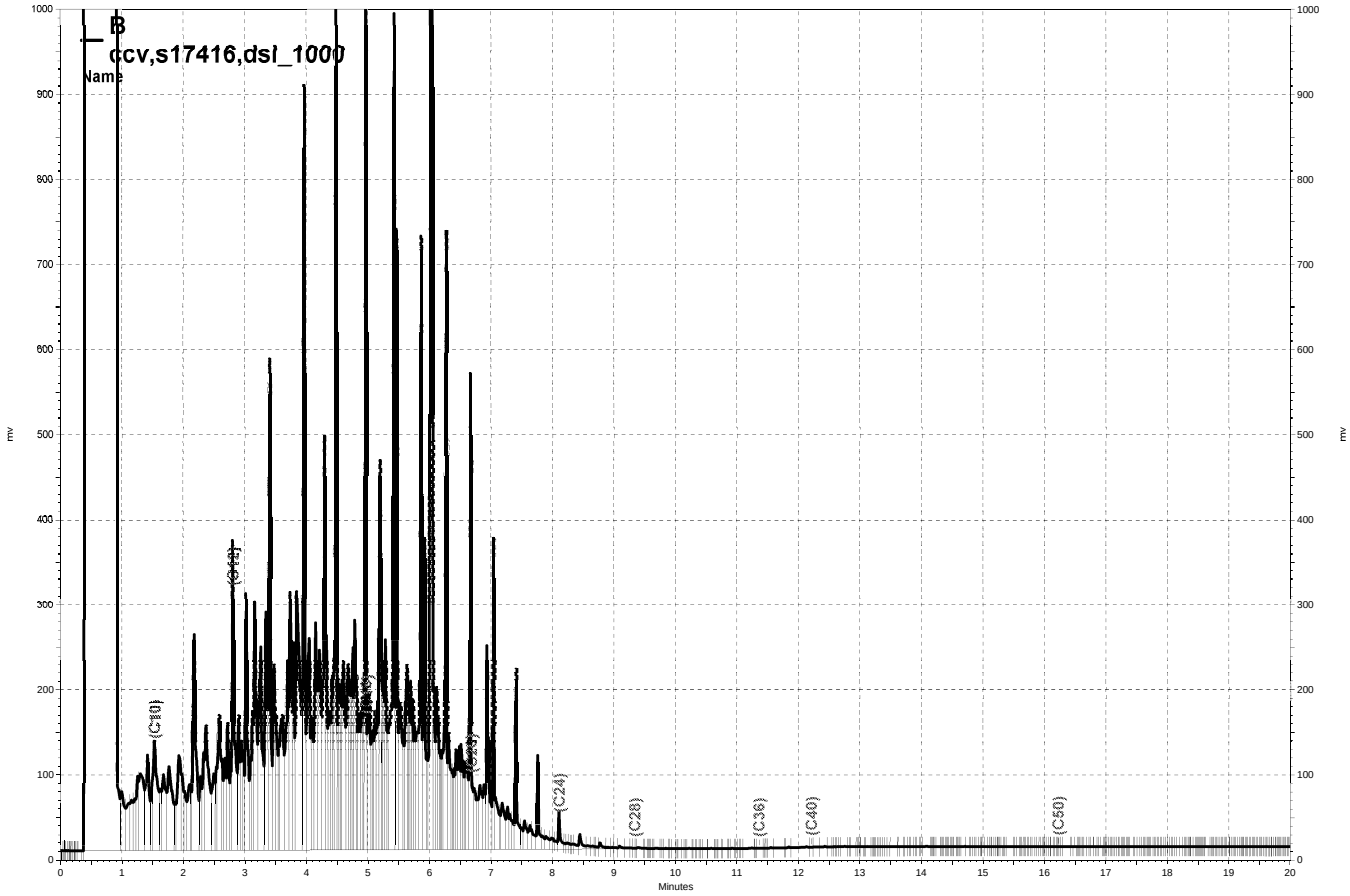

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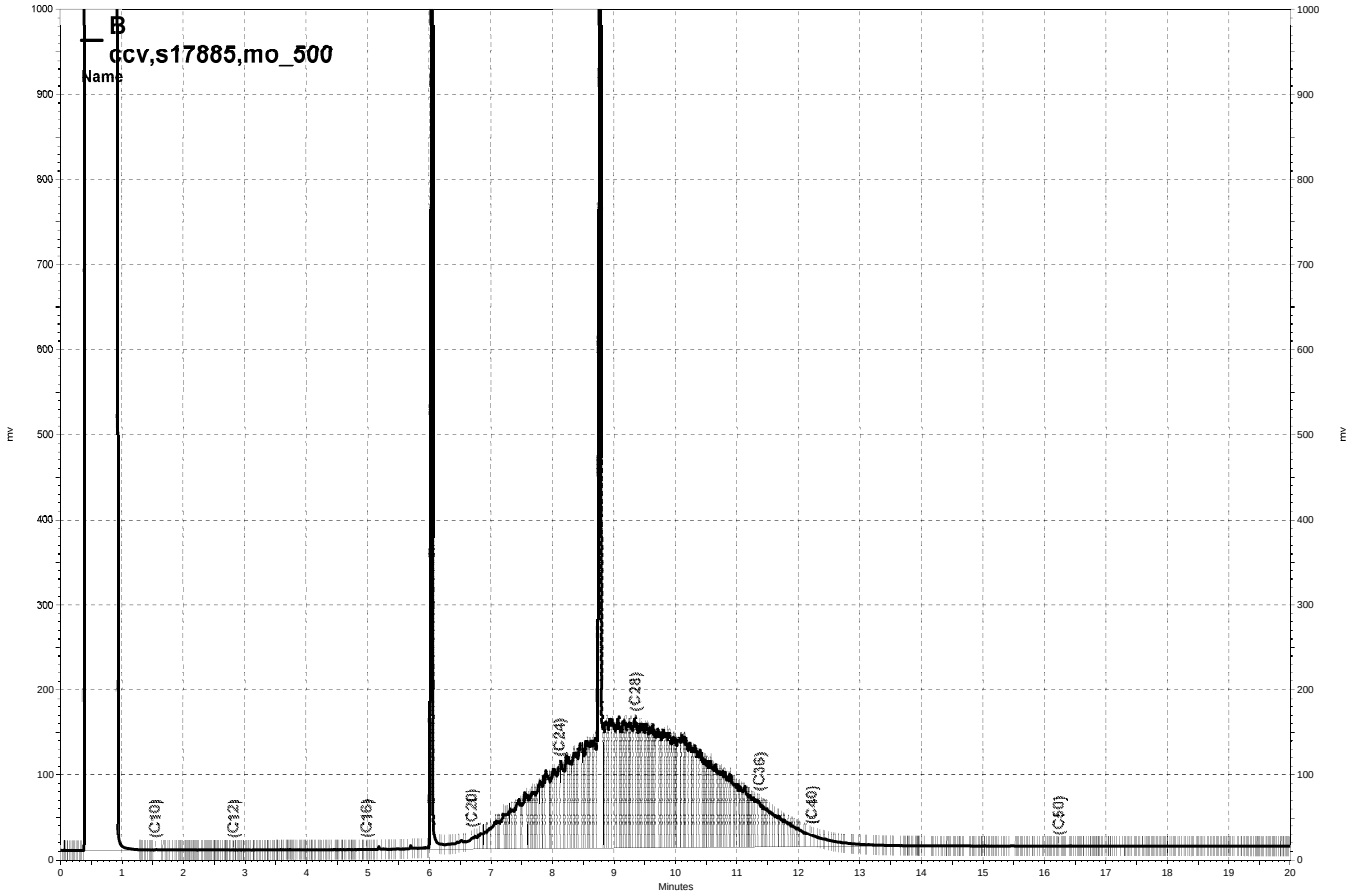

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Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-8	Batch#:	177624
Lab ID:	229977-006	Sampled:	08/04/11
Matrix:	Water	Received:	08/04/11
Units:	ug/L	Analyzed:	08/09/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	1,700	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	3.0	0.50
Benzene	1.8	0.50
Toluene	9.4	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	57	0.50
m,p-Xylenes	16	0.50
o-Xylene	1.1	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	104	73-145
Toluene-d8	108	80-120
Bromofluorobenzene	106	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	177624
Units:	ug/L	Analyzed:	08/09/11
Diln Fac:	1.000		

Type: BS Lab ID: QC603494

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	122.8	98	46-141
Isopropyl Ether (DIPE)	25.00	24.10	96	52-139
Ethyl tert-Butyl Ether (ETBE)	25.00	24.73	99	56-131
Methyl tert-Amyl Ether (TAME)	25.00	22.62	90	65-120
MTBE	25.00	22.86	91	59-123
1,2-Dichloroethane	25.00	26.17	105	71-135
Benzene	25.00	26.24	105	80-122
Toluene	25.00	25.78	103	80-120
1,2-Dibromoethane	25.00	25.70	103	79-120
Ethylbenzene	25.00	27.32	109	80-120
m,p-Xylenes	50.00	54.50	109	80-120
o-Xylene	25.00	25.77	103	80-120

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

Type: BSD Lab ID: QC603495

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	117.8	94	46-141	4	31
Isopropyl Ether (DIPE)	25.00	25.60	102	52-139	6	20
Ethyl tert-Butyl Ether (ETBE)	25.00	25.18	101	56-131	2	20
Methyl tert-Amyl Ether (TAME)	25.00	21.10	84	65-120	7	20
MTBE	25.00	23.76	95	59-123	4	20
1,2-Dichloroethane	25.00	24.46	98	71-135	7	20
Benzene	25.00	25.04	100	80-122	5	20
Toluene	25.00	24.66	99	80-120	4	20
1,2-Dibromoethane	25.00	24.45	98	79-120	5	20
Ethylbenzene	25.00	26.53	106	80-120	3	20
m,p-Xylenes	50.00	55.02	110	80-120	1	20
o-Xylene	25.00	24.75	99	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-127
1,2-Dichloroethane-d4	100	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	177624
Units:	ug/L	Analyzed:	08/09/11
Diln Fac:	1.000		

Type: BS Lab ID: QC603496

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

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	104	73-145
Toluene-d8	103	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC603497

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	927.1	93	80-120	12	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	109	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	102	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC603498	Batch#:	177624
Matrix:	Water	Analyzed:	08/09/11
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	102	80-127
1,2-Dichloroethane-d4	108	73-145
Toluene-d8	96	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

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Date : 09-AUG-2011 17:25

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Instrument: MSVOA08.i

Sample Info: S,229977-006

Operator: VOC

Column phase:

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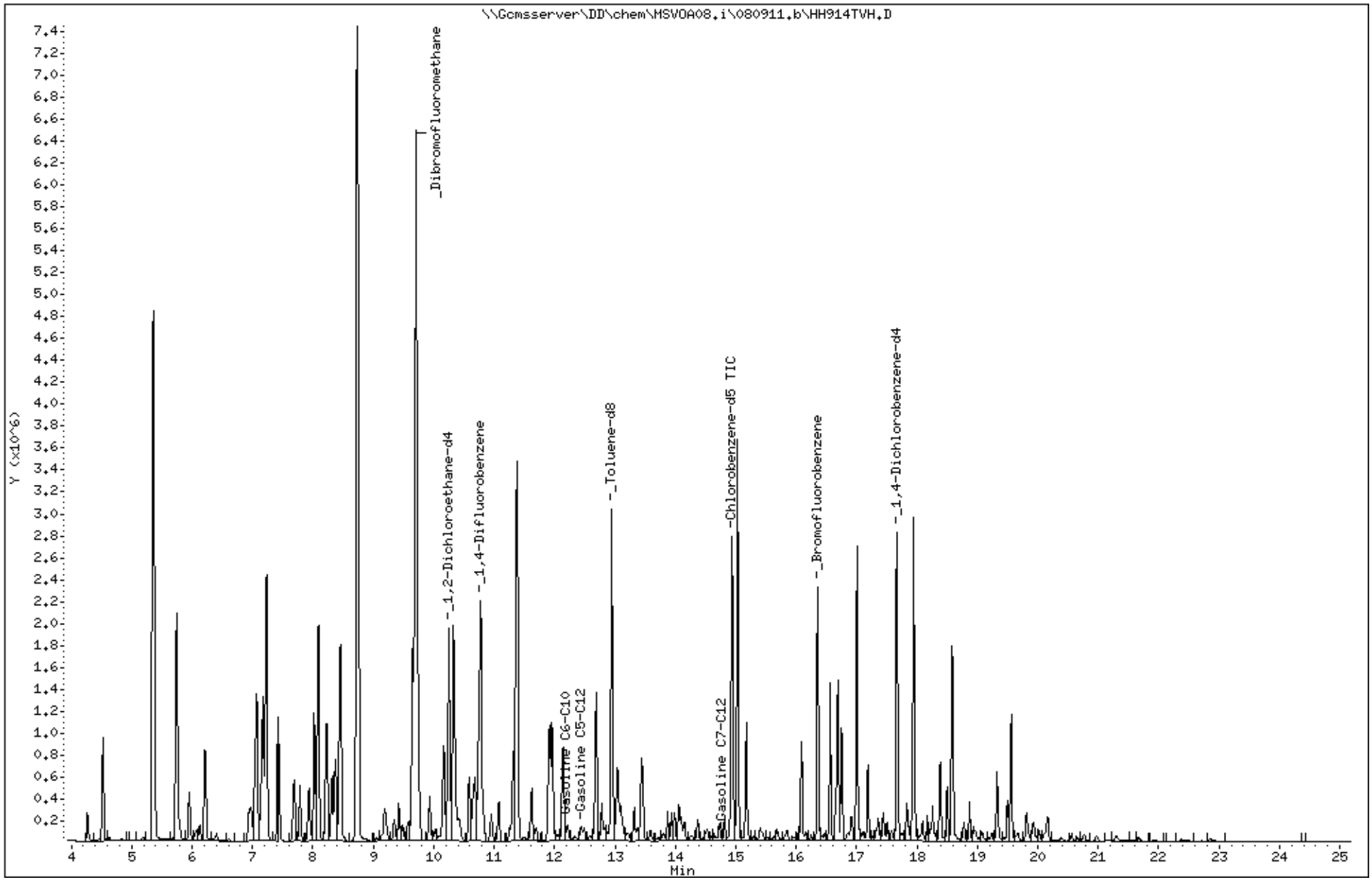

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Instrument: MSVOA08.i

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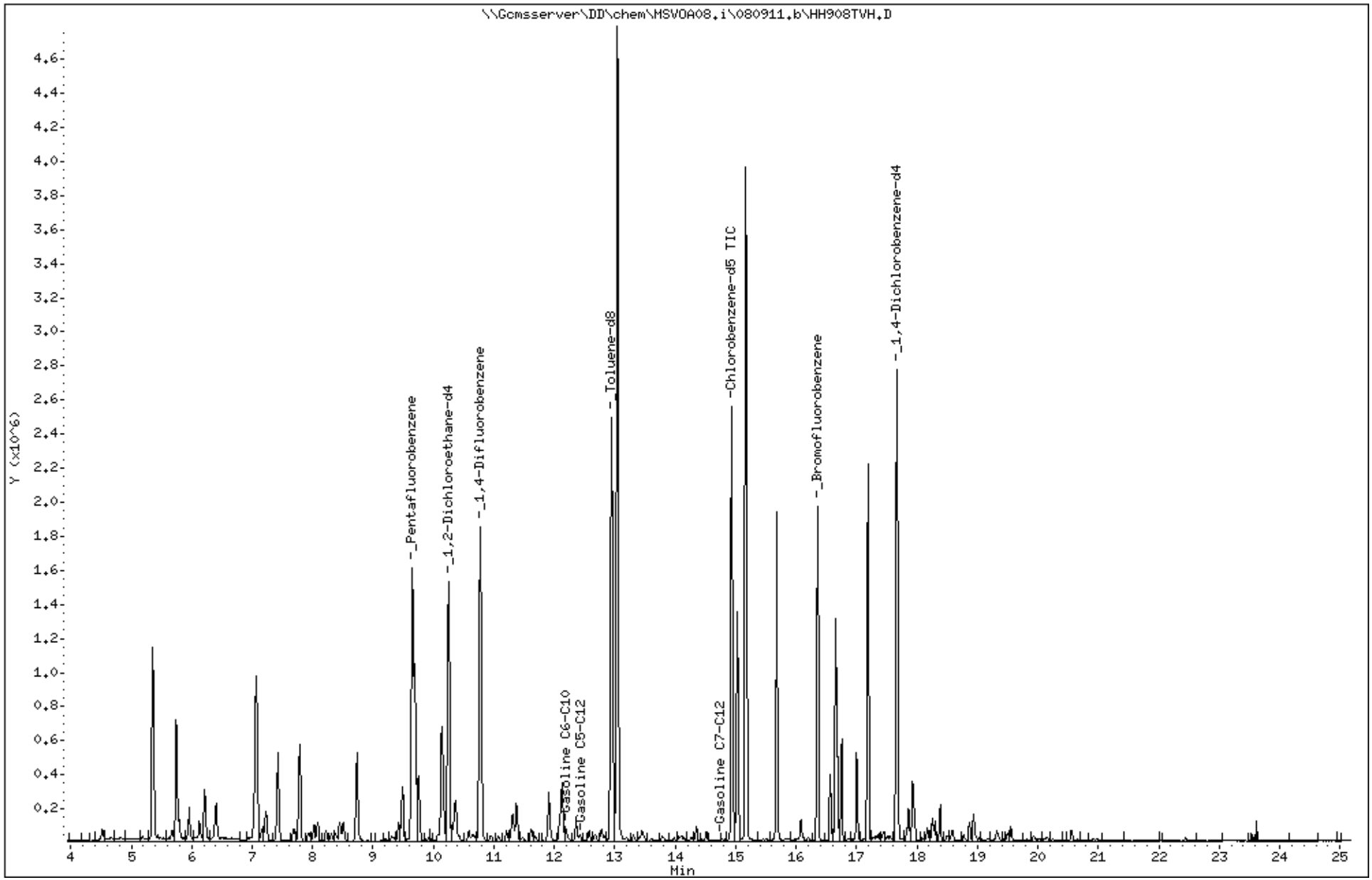
Operator: VOC

Column phase:

Column diameter: 2.00



Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-8 @ 1'	Diln Fac:	0.9823
Lab ID:	229977-001	Batch#:	177533
Matrix:	Soil	Sampled:	08/02/11
Units:	ug/Kg	Received:	08/04/11
Basis:	as received	Analyzed:	08/05/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	118	71-126
1,2-Dichloroethane-d4	110	74-130
Toluene-d8	98	80-120
Bromofluorobenzene	97	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-8 @ 3'	Diln Fac:	0.9242
Lab ID:	229977-002	Batch#:	177533
Matrix:	Soil	Sampled:	08/02/11
Units:	ug/Kg	Received:	08/04/11
Basis:	as received	Analyzed:	08/05/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	92
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	123	71-126
1,2-Dichloroethane-d4	114	74-130
Toluene-d8	98	80-120
Bromofluorobenzene	94	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-8 @ 10'	Diln Fac:	0.9728
Lab ID:	229977-003	Batch#:	177533
Matrix:	Soil	Sampled:	08/02/11
Units:	ug/Kg	Received:	08/04/11
Basis:	as received	Analyzed:	08/05/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	108	71-126
1,2-Dichloroethane-d4	111	74-130
Toluene-d8	90	80-120
Bromofluorobenzene	112	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-8 @ 12'	Diln Fac:	0.9690
Lab ID:	229977-004	Batch#:	177533
Matrix:	Soil	Sampled:	08/02/11
Units:	ug/Kg	Received:	08/04/11
Basis:	as received	Analyzed:	08/05/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	94	71-126
1,2-Dichloroethane-d4	95	74-130
Toluene-d8	94	80-120
Bromofluorobenzene	101	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-8 @ 14'	Diln Fac:	0.9728
Lab ID:	229977-005	Batch#:	177533
Matrix:	Soil	Sampled:	08/02/11
Units:	ug/Kg	Received:	08/04/11
Basis:	as received	Analyzed:	08/05/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	25	4.9
m,p-Xylenes	8.3	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	91	71-126
1,2-Dichloroethane-d4	92	74-130
Toluene-d8	92	80-120
Bromofluorobenzene	106	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC603120	Batch#:	177533
Matrix:	Soil	Analyzed:	08/05/11
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	110.3	88	44-138
MTBE	25.00	22.81	91	59-120
Isopropyl Ether (DIPE)	25.00	23.03	92	54-130
Ethyl tert-Butyl Ether (ETBE)	25.00	23.83	95	58-124
1,2-Dichloroethane	25.00	27.79	111	71-126
Benzene	25.00	27.49	110	80-122
Methyl tert-Amyl Ether (TAME)	25.00	22.52	90	63-120
Toluene	25.00	24.13	97	80-120
1,2-Dibromoethane	25.00	23.97	96	78-120
Ethylbenzene	25.00	24.21	97	80-122
m,p-Xylenes	50.00	50.47	101	79-126
o-Xylene	25.00	23.43	94	79-122

Surrogate	%REC	Limits
Dibromofluoromethane	111	71-126
1,2-Dichloroethane-d4	106	74-130
Toluene-d8	96	80-120
Bromofluorobenzene	97	76-131

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC603121	Batch#:	177533
Matrix:	Soil	Analyzed:	08/05/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	112	71-126
1,2-Dichloroethane-d4	106	74-130
Toluene-d8	97	80-120
Bromofluorobenzene	96	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229977	Location:	Buttner Properties
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	609.004	Analysis:	EPA 8260B
Field ID:	MW-8 @ 3'	Batch#:	177533
MSS Lab ID:	229977-002	Sampled:	08/02/11
Matrix:	Soil	Received:	08/04/11
Units:	ug/Kg	Analyzed:	08/05/11
Basis:	as received		

Type: MS Diln Fac: 0.9634
Lab ID: QC603160

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<8.004	240.8	167.6	70	45-131
MTBE	<0.4473	48.17	40.06	83	52-120
Isopropyl Ether (DIPE)	<0.5223	48.17	34.92	72	53-120
Ethyl tert-Butyl Ether (ETBE)	<0.5260	48.17	38.64	80	53-120
1,2-Dichloroethane	<0.5772	48.17	41.45	86	58-122
Benzene	<0.6446	48.17	40.71	85	62-123
Methyl tert-Amyl Ether (TAME)	<0.4487	48.17	38.10	79	56-120
Toluene	<0.7061	48.17	36.03	75	59-120
1,2-Dibromoethane	<0.4742	48.17	39.20	81	55-120
Ethylbenzene	<0.6594	48.17	34.00	71	53-123
m,p-Xylenes	<1.275	96.34	67.22	70	52-125
o-Xylene	<0.5502	48.17	34.12	71	52-123

Surrogate	%REC	Limits
Dibromofluoromethane	98	71-126
1,2-Dichloroethane-d4	95	74-130
Toluene-d8	94	80-120
Bromofluorobenzene	99	76-131

Type: MSD Diln Fac: 0.9862
Lab ID: QC603161

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	246.5	182.2	74	45-131	6	44
MTBE	49.31	45.07	91	52-120	9	37
Isopropyl Ether (DIPE)	49.31	39.87	81	53-120	11	39
Ethyl tert-Butyl Ether (ETBE)	49.31	43.75	89	53-120	10	39
1,2-Dichloroethane	49.31	44.47	90	58-122	5	37
Benzene	49.31	42.43	86	62-123	2	40
Methyl tert-Amyl Ether (TAME)	49.31	42.47	86	56-120	9	39
Toluene	49.31	37.61	76	59-120	2	43
1,2-Dibromoethane	49.31	40.56	82	55-120	1	37
Ethylbenzene	49.31	35.73	72	53-123	3	43
m,p-Xylenes	98.62	70.99	72	52-125	3	45
o-Xylene	49.31	35.66	72	52-123	2	41

Surrogate	%REC	Limits
Dibromofluoromethane	100	71-126
1,2-Dichloroethane-d4	98	74-130
Toluene-d8	95	80-120
Bromofluorobenzene	98	76-131

RPD= Relative Percent Difference

APPENDIX E
WELL DEVELOPMENT AND SAMPLING FORMS

Vapor Tech Services

Well Development Data Sheet

Project Name: *Buttner Properties*

Site Address: *2250 Telegraph Ave, Oakland, CA*

Date: *5/7/2011* Technician(s): *GR/EZ*

Project No.: *04.B0609004*

Weather: *Overcast*

Monitoring Well ID: ***MW-7***

Casing Diameter: ☑ 2" ☐ 4" ☐ 6" ☑ Other

Casing Material: ☑ SCH 40-PVC ☑ Other: S. Steel

Total Well Depth (ft bgs):	*20.22*	Floating Immiscible Layer Observed?:	*No*
Total Casing Depth (ft-TOC):	*19.92*	Floating Immiscible Layer Thickness (feet):	*N/A*
Depth to Water (ft-TOC):	*9.35*	Sheen Observed?	*No*
Water Column Height (feet):	*10.57*	Casing Volumes Notes:	
(1) Casing Volume (gallons)	1.69	2-Inch Dia: 0.16 gallons per ft (Water Column Height (ft) X 0.16)	
(10) Casing Volumes (gallons)	16.91	4-Inch Dia: 0.65 gallons per ft (Water Column Height (ft) X 0.65)	

Surging Method/Equipment: *Check valve surge block on steel development pipe. Mechanical surging using drill winch*

Purging Method/Equipment: *Check valve tubing and electric submersible pump (approx 2-3 gpm)*

Temp./pH/Conductivity/Turbidity Meter: *YSI 650 Multi Meter & YSI Turbidity Meter*

Calibration Notes: *Calibrated By Equipco on 5/3/11*

Oil/Water Interface Probe: *Envirotech Water Meter*

	Purge Volumes		Groundwater Parameters					
TIME	Purge Vol.(Gal)	Totalizer Reading (Gal)	TEMP. (°C)	pH	COND. (µS/cm)	Turbidity (NTU)	Comments:	
9:10	--	--	--	--	--	--	Begin surge	
9:38	1.0	1.0	--	--	--	--	End Surge	
9:47	0.0	1.0	--	--	--	maximum	Begin purging silly water w/ check valve tubing	
10:11	20.0	21.0	Purged approx 20 gallons using check valve tubing. Sediment content appears to be decreasing, although water is still brown in color. Switch purging method from tubing to submersible pump.					
10:33	2.0	23.0	18.9	6.26	1039	1062	DO: 3.89 mg/L	ORP: 63.3
10:36	2.0	25.0	18.7	6.24	1049	1500 (est.)	DO: 4.55 mg/L	ORP: 70.0
10:43	3.0	28.0	18.5	6.22	1011	1609	DO: 3.37 mg/L	ORP: 72.0
10:47	3.0	31.0	18.7	6.43	1002	1609	DO: 3.44 mg/L	ORP: 73.7
10:52	3.0	34.0	18.5	6.35	991	1604	DO: 3.45 mg/L	ORP: 71.5
10:57	3.0	37.0	18.7	6.32	972	1074	DO: 3.39 mg/L	ORP: 70.7
11:01	3.0	40.0	18.7	6.35	964	877	DO: 3.31 mg/L	ORP: 68.5
11:05	3.0	43.0	18.6	6.30	954	759	DO: 3.77 mg/L	ORP: 68.4

Total Volume Purged (gallons): 43 Time Finished Purging: 11:05

Vapor Tech Services

Well Development Data Sheet

Project Name: *Buttner Properties*

Site Address: *2250 Telegraph Ave, Oakland, CA* Date: *8/4/2011* Technician(s): *EZ*

Project No.: *04.B0609004* Weather: *Overcast/foggy*

Monitoring Well ID: ***MW-8***

Casing Diameter: ☑ 2" ☐ 4" ☐ 6" ☐ Other Casing Material: ☑ SCH 40-PVC ☐ Other:

Total Well Depth (ft bgs):	*20.54*	Floating Immiscible Layer Observed?:	*N/A*
Total Casing Depth (ft-TOC):	*20.24*	Floating Immiscible Layer Thickness (feet):	*N/A*
Depth to Water (ft-TOC):	*9.70*	Sheen Observed?	*Yes*
Water Column Height (feet):	*10.54*	Casing Volumes Notes:	
(1) Casing Volume (gallons)	1.69	2-Inch Dia: 0.16 gallons per ft (Water Column Height (ft) X 0.16)	
(10) Casing Volumes (gallons)	16.90	4-Inch Dia: 0.65 gallons per ft (Water Column Height (ft) X 0.65)	

Surging Method/Equipment: *Check valve surge block on steel development pipe. Mechanical surging using crane*

Purging Method/Equipment: *Check valve tubing and electric submersible pump (approx 2-3 gpm)*

Temp./pH/Conductivity/Turbidity Meter: *YSI 650 Multimeter & YSI Turbidity Meter*

Calibration Notes: *Calibrated byEquipco*

Oil/Water Interface Probe: *Envirotech Water Meter*

	Purge Volumes		Groundwater Parameters				
TIME	**Purge Vol.(Gal)**	**Totalizer Reading (Gal)**	**TEMP. (°C)**	**pH**	**COND. (µS/cm)**	**Turbidity (NTU)**	**Comments:**
8:48	--	--	--	--	--	--	Begin surge
9:28	--	--	--	--	--	--	End surge
9:30	--	--	--	--	--	--	Begin purge using check valve tubing
9:45	10.0	10.0	--	--	--	--	Finish purge with check valve tubing
Purged approx 10 gallons using check valve tubing; water appears relatively clear; switch purging method to submersible pump							
9:57	2.0	12.0	20.73	7.00	1660	289.5	DO: 6.21 mg/L ORP: 389.2
Well Dewatered							
10:45	2.0	14.0	21.01	6.90	1207	66.1	DO: 6.13 mg/L ORP: 263.9
10:52	1.25	15.25	20.9	6.99	1348	84.5	DO: 7.15 mg/L ORP: 324.5
Well Dewatered							

Total Volume Purged (gallons): 15.25 Time Finished Purging: 10:52

FUGRO

ES-F50 WELL SAMPLING FORM

PROJECT NAME: Buttner
PROJECT NO.: 04.B0609004
SAMPLED BY: M. D'Anna
DATE: 5-6-11
WEATHER: sunny

WELL NO.: MW-3
WELL CASING DIAMETER: 2"
TOC ELEVATION: 18.77

TOTAL DEPTH OF CASING (BTOC): 5-6-11 18.28 FEET 5-7-11 18.3

DEPTH TO GROUNDWATER (BTOC): 9.35 FEET

FEET OF WATER IN WELL: 8.93 FEET

CALCULATED PURGE VOLUME: 4.3 gallons
(feet of water * casing dia^2 * .0408 * # of Volumes)

FREE PRODUCT: No

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)	9:36	17.85	6.19	784	—	79.8	2.14	— Lt Brown ~~clear~~ w/ Blk suspended particles
1.4	9:40	17.87	6.29	781	—	85.9	3.87	hydrocarbon odor/Gray/sheen
2.8	9:44	17.94	6.32	794	—	80.6	3.37	" "
3.8 ~~4.2~~	9:50	18.4	6.37	810	—	76.6	3.66	" "
	purged Dry @ 3.8 gal							

CALCULATED DEPTH TO WATER @ 80% RECHARGE 11.14
(Total depth of casing - (feet of water in well *0.80)

DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 9.5

DTW GREATER THAN 80%? (circle) (YES) NO

OKAY TO SAMPLE? (circle) (YES) NO

SAMPLING METHOD: Disposable Bailer

TIME SAMPLED: ~~9:45~~ 10:12

CONTAINERS / PRESERVATIVE:
3 / HCL — 40 ML
/ — LITER
/ — Poly
2 / 500ml No Pres — OTHER

ANALYSES: (Note if any samples are field filtered)

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

MISC FIELD OBSERVATION: Lead Scavengers & Fuel oxygenates

Equipment	Serial No.	Calibration
Conductivity		YSI 600
pH		
Turbidity		EquipCo Cal.
Temperature		

FUGRO

ES-F50 WELL SAMPLING FORM

PROJECT NAME: Buffner
PROJECT NO.: 04.30609004
SAMPLED BY: M. D'Anna
DATE: 5-26-11
WEATHER: sunny

WELL NO.: MW-4
WELL CASING DIAMETER: 2"
TOC ELEVATION: 19.88

TOTAL DEPTH OF CASING (BTOC): 18.30 FEET
DEPTH TO GROUNDWATER (BTOC): 10.78 FEET
FEET OF WATER IN WELL: 7.52 FEET

CALCULATED PURGE VOLUME: 3.67 gallons
(feet of water * casing dia^2 * .0408 * # of Volumes)
7.52 * 4 * 3
FREE PRODUCT: No
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)	9:04	19.62	7.1	1177	—	-111.9	1.54	—
1.2	9:11	18.30	6.52	1175	—	-111.9	2.29	Hydrocarbon odor / sheen / gray
2.4	9:17	18.34	6.62	1183	—	-106.5	2.22	"
3.6	9:22	18.45	6.61	1201	—	-101.7	2.87	" " "

CALCULATED DEPTH TO WATER @ 80% RECHARGE 12.28
(Total depth of casing - (feet of water in well *0.80)

DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 11.02

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

SAMPLING METHOD: Disposable Bailer TIME SAMPLED: 9:45

CONTAINERS / PRESERVATIVE: 7 / HCL (40 ML) / (LITER) / (Poly) / 2 / 500mL No Pres. (OTHER)

ANALYSES: (Note if any samples are field filtered)

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

MISC FIELD OBSERVATION: Lead Scavengers & fuel oxygenates

Equipment	Serial No.	Calibration
Conductivity		YSI 600
pH		
Turbidity		Equipto Cal.
Temperature		

FUGRO

ES-F50 WELL SAMPLING FORM

PROJECT NAME: Buttner
PROJECT NO.: 04.80609007
SAMPLED BY: M. D'Annel
DATE: 5-2-10
WEATHER: Sunny

WELL NO.: MW-7
WELL CASING DIAMETER: 2"
TOC ELEVATION: 19.67

TOTAL DEPTH OF CASING (BTOC): 19.92 FEET
DEPTH TO GROUNDWATER (BTOC): 9.35 FEET
FEET OF WATER IN WELL: 10.57 FEET

CALCULATED PURGE VOLUME: _____ gallons
(feet of water * casing dia^2 * .0408 * # of Volumes)

FREE PRODUCT: No

PURGE METHOD: submersable pump

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)								
well developed by VTS								

CALCULATED DEPTH TO WATER @ 80% RECHARGE: 11.46
(Total depth of casing - (feet of water in well *0.80)

DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): ~~9.35~~ 9.44

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

SAMPLING METHOD: Disposable Bailer TIME SAMPLED: 11:10

CONTAINERS / PRESERVATIVE: 3 / HCl (40 ML) _____ / _____ (LITER) _____ / _____ (Poly) 2 / 500ml No Pres. (OTHER)

ANALYSES: (Note if any samples are field filtered)

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

MISC FIELD OBSERVATION: head scavengers & rust oxygenators

Equipment	Serial No.	Calibration
Conductivity		YSI 600
pH		
Turbidity		
Temperature		Equipco Cal.

FUGRO

ES-F50 WELL SAMPLING FORM

PROJECT NAME: Buttner Properties
PROJECT NO.: 609.0024
SAMPLED BY: MDANNA
DATE: 8-4-11
WEATHER:

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

TOTAL DEPTH OF CASING (BTOC): 20.54 FEET
DEPTH TO GROUNDWATER (BTOC): 9.7 FEET
FEET OF WATER IN WELL: 10.84 FEET

CALCULATED PURGE VOLUME: 17.69 gallons
(feet of water * casing dia^2 * .0408 * # of Volumes) 10
FREE PRODUCT: No
PURGE METHOD: submersible pump

MEASUREMENT METHOD: ELECTRONIC SOUNDER (circled) or OTHER

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	Temp	pH	CONDUCTIVITY (µMHOS/CM)	Turbidity ~~TDS~~ (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
Downhole (Pre-Purge)	8:44	21.61	6.75	1258	47.2	327.0	6.87	
	UTS	Purged		Well				

CALCULATED DEPTH TO WATER @ 80% RECHARGE 12.78
(Total depth of casing - (feet of water in well *0.80)

DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 12.08

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

SAMPLING METHOD: Disposable Bailer
TIME SAMPLED: 3:00

CONTAINERS / PRESERVATIVE: 3 / HCL — 40 ML; 2 / None Amber — LITER
/ — Poly; / — OTHER

ANALYSES: (Note if any samples are field filtered)

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

MISC FIELD OBSERVATION: Five fuel Oxygenates, Lead Scavengers

Equipment	Serial No.	Calibration
Conductivity		YSI 600
pH		
Turbidity		
Temperature		EquipCo.

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/08
Note: If this is a printed copy, please check the online QMS to ensure that it is the latest version