Stacie H. Frerichs
Team Lead
Marketing Business Unit

Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 842-9655
Fax (925) 842-8370

March 28, 2008
(date)

Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Facility # 9-8341

Address: 3530 MacArther Boulevard, Oakland, California

I have reviewed the attached report titled Subsurface Investigation Report and dated March 28, 2008.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Conestoga Rovers & Associates, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

SH Frerichs

Stacie H. Frerichs
Project Manager

Enclosure: Report

CONESTOGA-ROVERS
& ASSOCIATES

2000 Opportunity Dr, Suite 110, Roseville, California 95678
Telephone: 916-677-3407, ext. 100 Facsimile: 916-677-3687
www.CRAworld.com

March 28, 2008

Ms. Donna Drogos
Alameda County Health Care Services Agency (ACHCSA)
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Subsurface Investigation Report**
Chevron Station # 9-8341
3530 MacArthur Boulevard
Oakland, California

Dear Ms. Drogos:

Conestoga-Rovers & Associates (CRA) is submitting this Subsurface Investigation Report for the site referenced above on behalf of the Chevron Environmental Management Company (Chevron). The work was performed in accordance with CRA's *Revised Investigation Workplan*, dated June 23, 2006, which was approved by the ACHCSA in a letter dated July 25, 2006 (Attachment A). CRA attempted six soil borings (B-10, B-11, B-12, B-13, B-14, and B-15) to further define the lateral and vertical extent of hydrocarbons in soil and groundwater. One boring was advanced on the site. The remaining five borings could not be advanced due to subsurface shallow refusal or the presence of underground utilities. The site background, details of the investigation and our conclusions and recommendations are presented below.

SITE DESCRIPTION AND BACKGROUND

The site is currently an active United Gasoline branded service station located on the northern corner of the intersection of MacArthur Boulevard and Magee Avenue in Oakland, California (Figures 1 and 2).

The site was previously occupied by a Chevron station until February 2004. Chevron renovated the site in 1994. As part of renovation activities, one 1,000-gallon single-walled fiberglass used-oil underground storage tank (UST) with associated product lines was replaced at the site.

The site is approximately 210 feet above sea level and local topography slopes gently toward the southwest. The site is surrounded by small commercial properties, with residential properties located upslope to the northeast. Current station facilities include a station building with two dispenser islands

beneath a common canopy. Three gasoline USTs in a common pit are located directly north of the dispenser islands (Figure 2).

Site Geology: Sediments beneath the site are characterized as alluvial deposits, consisting primarily of sand, sandy clay, silty clay, silty sand, silt and gravel with silt and sand to the total depth explored of 45 feet below grade (fbg).

Site Hydrology: Depth to groundwater has varied from approximately 2.5 fbg to 10 fbg. Groundwater flow has been predominantly southward to southeastward at a gradient ranging from 0.02 to 0.08 foot per foot. A rose diagram showing the flow direction and gradient since 1999 is presented in Figure 2. The nearest surface water to the site is Peralta Creek located approximately 400 feet north-northwest of the site and a small ephemeral creek is located approximately 1,200 feet west of the site.

Previous Investigations

1994 Used-Oil UST and Product Line Removal: In May 1994, a 1,000-gallon single-walled fiberglass used-oil UST was removed and compliance soil samples collected. No hydrocarbon impacts were detected beneath the UST. Additionally, product piping was removed and soil was over-excavated to remove hydrocarbon impacted soil at the north end of the western dispenser island. Residual hydrocarbon concentrations of 1,300 mg/kg total petroleum hydrocarbon as gasoline (TPHg) were detected at 5 fbg. The results of this investigation are presented in Touchstone Development's *Waste Oil Tank and Product Line Removal and Overexcavation Report* dated June 28, 1994.

1996 Monitoring Well Installation: In March 1996, Touchstone Developments installed groundwater monitoring wells MW-1 through MW-3 to assess and document soil and groundwater conditions beneath the site. Only well MW-2 contained detectable hydrocarbons with 6,100 µg/l methyl tert-butyl ether (MTBE). No TPHg and benzene was detected in groundwater. The results of this investigation are presented in Touchstone Development's *Well Installation Report* dated July 11, 1996.

2003 Soil Borings: In July 2003, Cambria Environmental Technology, Inc. (Cambria) advanced soil borings B-1 and B-3 through B-9 to the total depth between 6 and 10.5 fbg to further define the extent of hydrocarbons in soil and groundwater onsite. Soil and groundwater samples were collected from each boring. The highest concentrations of TPHg and MTBE detected in the soil samples were 3.5 mg/kg and 0.13 mg/kg, respectively. No benzene was detected in any of the soil samples. The highest concentrations of TPHg, benzene and MTBE were detected at 5,200 µg/l, 3 µg/l, and 980 µg/l, respectively, in groundwater

groundwater samples collected from boring B-8. The results of this investigation are presented in Cambria's *Additional Subsurface/Baseline Investigation Report* dated September 2, 2003.

Quarterly Monitoring: Wells at this site have been monitored and sampled since April 1986. Wells are currently being monitored and sampled quarterly. Groundwater samples are currently analyzed for TPHg, BTEX, and MTBE.

INVESTIGATION RESULTS

The objective of this investigation was to delineate the vertical and lateral extent of hydrocarbons in soil and groundwater. CRA advanced direct-push boring B-11 onsite and up-gradient of the former USTs. Soil samples were collected from B-11 at 5 ft. intervals beginning with the 5 fbg sample. Groundwater was not encountered and subsequently not sampled. Soil analytical results are summarized in Table 1. The drilling permit is presented as Attachment B. Boring logs are presented as Attachment C. The laboratory analytical report is presented in Attachment D. CRA's Standard Field Procedures for GeoProbe borings are presented in Attachment E. Details of the investigation and results are summarized below.

Permits: Alameda County Public Works Agency Well Permit #W2006-1032, and City of Oakland Community and Economic Development Agency Excavation Permit #X0602337 and Obstruction Permit #OB070089 (Attachment B).

Drilling Dates: December 14, 2006.

Drilling Company: Gregg Drilling and Testing, Inc. of Martinez, CA (C-57 Lic. # 485165).

Sampling Personnel: Staff Scientists John Bostick and Rebecca Rouas conducted all fieldwork under the supervision of California Professional Geologist David Herzog (P.G. #7211).

Number of Borings: One boring completed (B-11), five borings not completed (B-10, B-12, B-13, B-14, and B-15) due to subsurface utility conflicts

Drilling Method: The first 8 feet of the borings were cleared using an air-knife to ensure no subsurface utilities were encountered. Below 8 feet, each boring was

advanced using direct push.

Soil Sampling: Soil samples were collected every five feet, beginning at 5 fbg, for the purpose of soil logging and organic vapor screening. The 5 fbg samples were collected cuttings during hand clearing. Samples below 5 feet were collected in an acetate sleeve housed in a steel tube, advanced by direct push technology. Table 1 summarizes the soil analytical data

Encountered Lithology: Sediments encountered during boring advancement predominantly consisted of interbedded clayey sand, clayey gravel, clay with gravel, and clay to a total explored depth of 24 fbg.

Laboratory Analyses: All soil samples were analyzed for:

- TPHg by Northern California LUFT method
- Benzene, toluene, ethylbenzene, and xylenes (BTEX), fuel oxygenates MTBE, tert-butyl alcohol (TBA), di-isopropyl ether (DIPE), tert-amyl methyl ether (TAME), and ethyl tert-butyl ether (ETBE), by EPA Method 8260B, and
- Ethanol by EPA Method 8260B.

Soil Disposal: Soil cuttings were stored in 55-gallon steel drums on-site, sampled for waste characterization, removed by Integrated Waste Management and transported for disposal.

Groundwater Depth: Groundwater was not encountered in B-11.

HYDROCARBONS IN SOIL

TPHg, benzene, ethylbenzene, xylene, MTBE, DIPE, ETBE, TAME, TBA 1,2 DCA, EDB and ethanol were not detected in soil samples from boring B-11. Toluene was detected at a concentration of 0.002 mg/kg (10 fbg). Methanol was detected in B-11 at concentrations of 0.26 mg/kg (5 fbg), 0.33 mg/kg (10 fbg), 0.27 mg/kg (15 fbg), and 0.23 mg/kg (24 fbg).

CONCLUSIONS

CRA oversaw advancement of soil boring B-11 to a depth of 24 fbg. Maximum concentrations of 0.002 mg/kg toluene and 0.33 mg/kg methanol were detected in soil in B-11. The vertical extent of hydrocarbons in soil is adequately defined in B-11 based on low concentration or non-detect soil samples at depth (Table 1). The up-gradient lateral extent of hydrocarbons in soil has been adequately defined based on low concentration or non-detect soil samples.

Multiple subsurface utilities in Magee Avenue and MacArthur Boulevard prevented advancing borings B-10 and B-12 through B-15. CRA contacted the property owner of the parcel south and southwest of the MacArthur Boulevard (Assessor's Parcel Number 030-1980-059-00) and the original B-12 through B-15 locations. They would not allow CRA or Chevron to submit access agreements and denied access to their property to advance soil borings downgradient of MacArthur Boulevard. Since the City of Oakland does not allow soil borings in the sidewalk, there are no alternate locations downgradient to advance the borings. CRA request that ACHCSA submit a letter to the owner of the parcel to allow access to their property to continue the investigation.

CONESTOGA-ROVERS
& ASSOCIATES

CLOSING

Please contact Brian Carey at (916) 677-3407 (ext. 106) or Chris Benedict at (916) 677-3407 (ext. 125) with any questions or if you require additional information.

Sincerely,

Conestoga-Rovers & Associates

Chris Benedict
Staff Scientist

Brian P. Carey, P.G. #7820
Senior Project Geologist

PROFESSIONAL GEOLOGIST
BRIAN P. CAREY
No. 7820
Exp 1/10
STATE OF CALIFORNIA

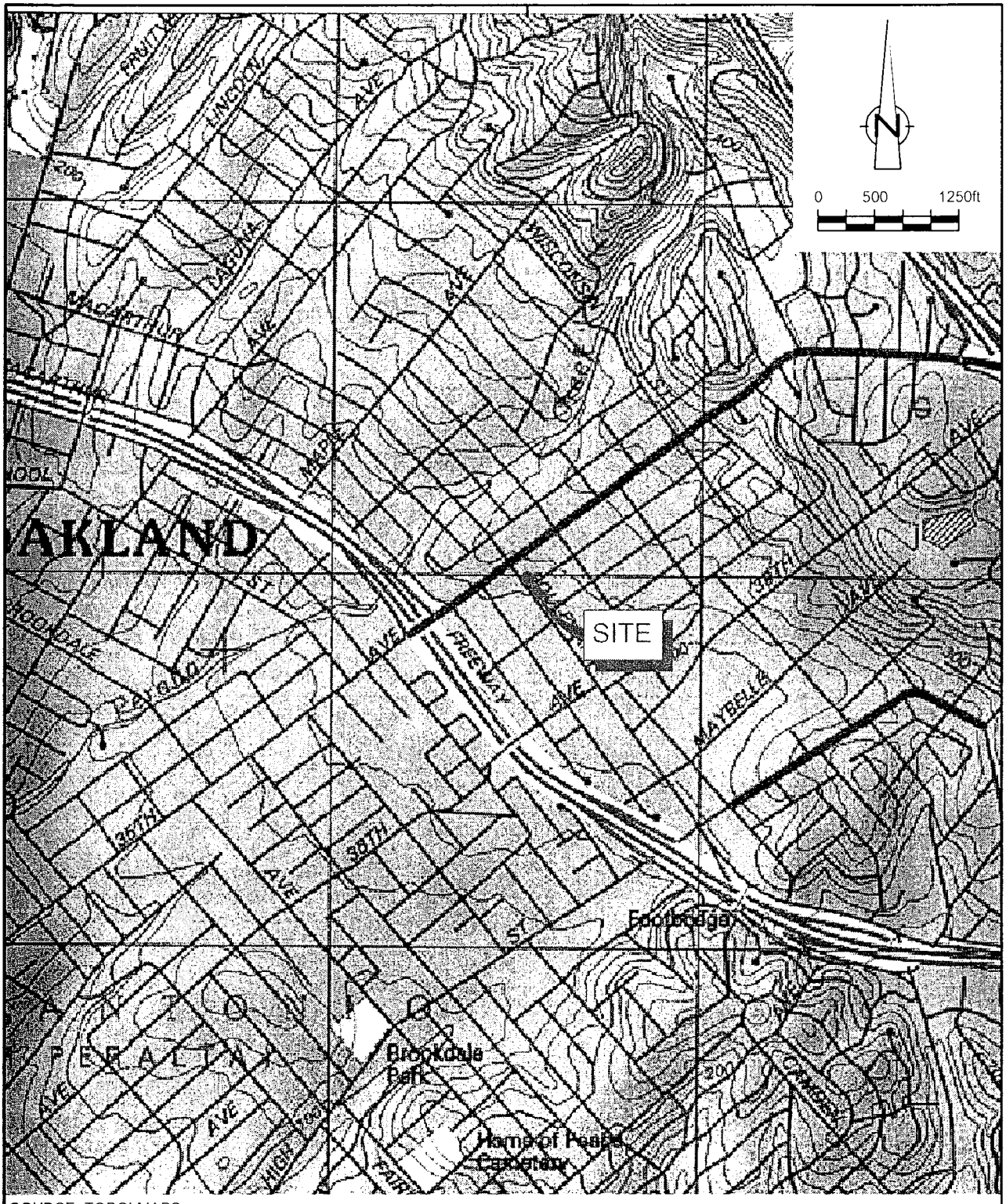
Figures: 1 – Vicinity Map
2 – Site Plan

Tables: 1 – Analytical Results for Soil

Attachments: A – Regulatory Correspondence
B – Drilling Permit
C – Boring Log
D – Laboratory Analytical Report
E – Standard Field Procedures for GeoProbe Borings

cc: Ms. Stacie H. Frerichs, Chevron Environmental Management Company, P.O. Box 6012, San Ramon, CA 94583
CRA file copy

\\sac-s1\shared\Rocklin.Chevron\9-8341 Oakland\Investigation 2006\9-8341 SSI Mar 2008.doc



SOURCE: TOPO! MAPS

figure 1

VICINITY MAP
CHEVRON SERVICE STATION 9-8341
3530 MACARTHER BOULEVARD
Oakland, California

611650-203(PRES001)GN-WA001 MAR 10/2008

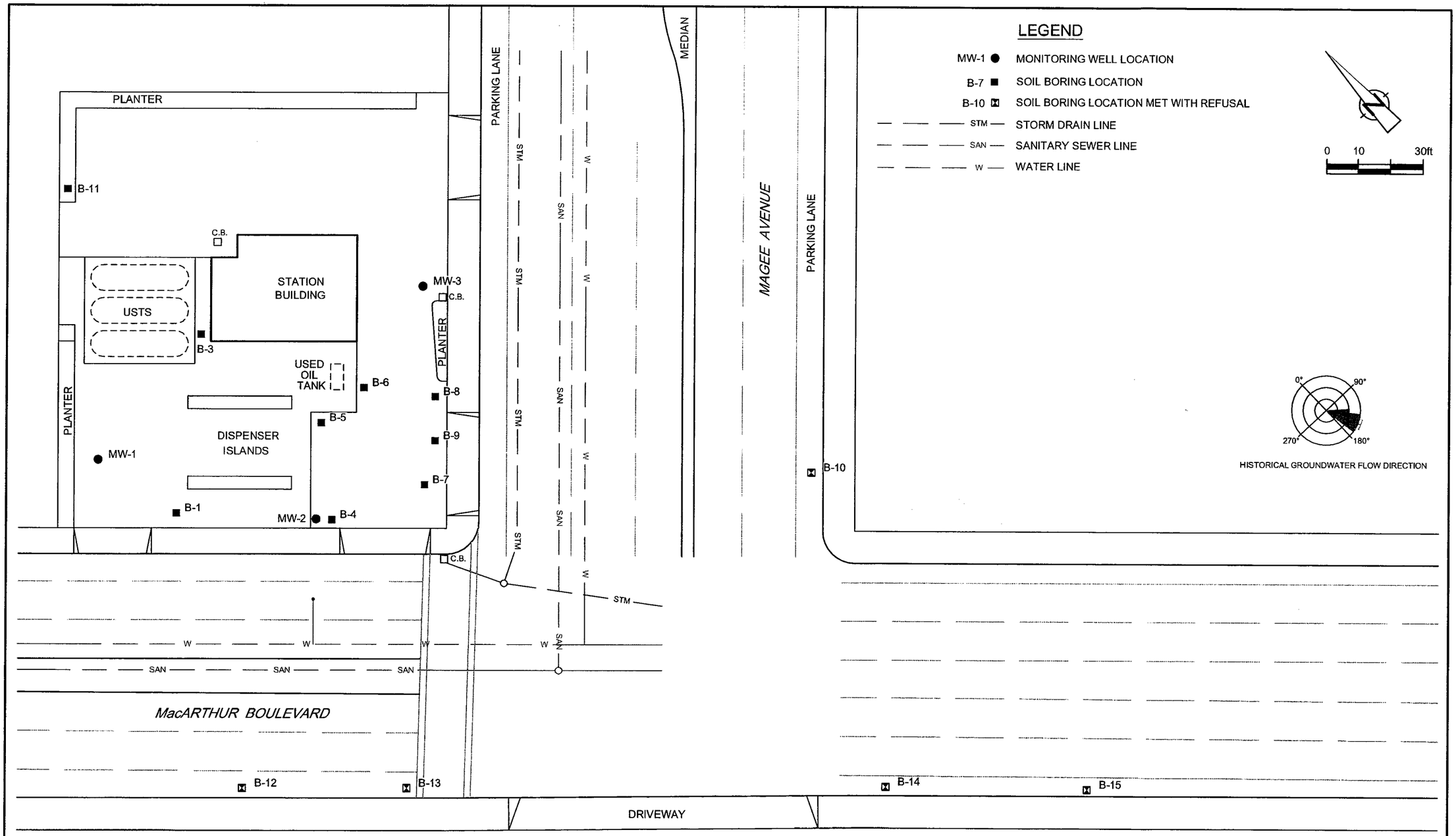


figure 2

SITE PLAN
CHEVRON SERVICE STATION 9-8341
3530 MACARTHER BOULEVARD
Oakland, California

BASEMAP MODIFIED FROM DRAWING PROVIDED BY

611650-203(PRES001)GN-WA002 MAR 10/2008

Table 1

Soil Analytical Data

Chevron Station #9-8341, 3530 MacArthur Boulevard, Oakland, CA

Sample ID	Sample Depth (ft)	Sample Date	TPHd	TPHg	Benzene	Toluene	Ethylenzene	Xylene	MTBE	Methanol	DIPE	ETBE	TAME	TBA	1,2 DCA	EDB	Ethanol
			milligrams per kilogram														
Soil Borings																	
B-1-A	3.5	7/29/03	--	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
B-3-A	3.5	7/29/03	--	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
B-3-B	10.0	7/29/03	--	<1.0	<0.001	<0.001	<0.001	<0.001	**0.001**	--	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
B-4-A	2.5	7/30/03	--	<1.0	<0.001	<0.001	<0.001	<0.001	**0.029**	--	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
B-4-B	9.5	7/30/03	--	<1.0	<0.001	<0.001	<0.001	<0.001	**0.13**	--	<0.001	<0.001	**0.002**	<0.020	<0.001	<0.001	--
B-5-A	3.0	7/29/03	--	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
B-5-B	9.5	7/29/03	--	<1.0	<0.001	<0.001	<0.001	<0.001	**0.003**	--	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
B-6-A	2.0	7/29/03	--	<1.0	<0.001	<0.001	<0.001	<0.001	**0.003**	--	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
B-6-B	9.5	7/29/03	--	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
B-7-A	1.5	7/30/03	--	**2.5**	<0.001	<0.001	<0.001	<0.001	**0.020**	--	<0.001	<0.001	**0.001**	<0.020	<0.001	<0.001	--
B-8-A	2.0	7/30/03	--	**3.3**	<0.001	<0.001	**0.001**	**0.002**	**0.11**	--	<0.001	<0.001	**0.002**	**0.044**	<0.001	<0.001	--
B-8-B	9.5	7/30/03	--	<1.0	<0.001	<0.001	<0.001	**0.001**	**0.034**	--	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
B-9-A	3.0	7/30/03	--	<1.0	<0.001	<0.001	<0.001	<0.001	**0.004**	--	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
B-9-B	8.0	7/30/03	--	<1.0	<0.001	<0.001	<0.001	<0.001	**0.001**	--	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
B-11	5	12/14/06	--	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	**0.26**	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	<0.099
	10	12/14/06	--	<1.0	<0.0005	**0.002**	<0.001	<0.001	<0.0005	**0.33**	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	<0.10
	15	12/14/06	--	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	**0.27**	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	<0.099
	20	12/14/06	--	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.20	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	<0.099
	24	12/14/06	--	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	**0.23**	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	<0.099

Abbreviations/Notes:

Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015M

Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260B

Oxygenates and lead scavengers by EPA Method 8260B

<x = Not detected above method detection limit

fbg = Feet below grade

-- = Not analyzed

CONESTOGA-ROVERS
& ASSOCIATES

ATTACHMENT A
Regulatory Correspondence

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

July 25, 2006

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Mr. Dana Thurman
Chevron
6001 Bollinger Canyon Rd., K2236
San Ramon, CA 94583-2324

Dear Mr. Thurman:

Subject: Fuel Leak Case RO0000405, Chevron Station #9-8341, 3530 MacArthur Blvd., Oakland, CA

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the subject site including the June 23, 2006 Revised Investigation Workplan by Cambria. Six soil borings with depth discrete soil and groundwater sampling are proposed to further characterize the petroleum release from the subject site. We approve the work plan. Please address the following technical comments and submit the report requested below.

TECHNICAL COMMENTS

1. Please include EDB and EDC with the proposed analytes for soil and water analysis.
2. Please include in your soil and groundwater investigation report a proposal for off-site well installation(s). To avoid potential delays, your are encouraged to determine which location(s) would be appropriate for a permanent well(s) and whether multi-depth wells would be recommended. We encourage well installation be done during this same field event.

Please submit your soil and groundwater report within 45 days of completion of your field work.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board, (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting) for more information on these requirements

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6765.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

cc: files, D. Drogos
Mr. David Herzog, Cambria Environmental, 2000 Opportunity Drive, Suite 110, Roseville, CA, 95678

7_17_06 3530 MacArthur Blvd

CONESTOGA-ROVERS
& ASSOCIATES

ATTACHMENT B
Drilling Permit

ATTACHMENT B
Drilling Permit

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: 12/08/2006 By vickyh1

Permit Numbers: W2006-1032
Permits Valid from 12/14/2006 to 12/15/2006

Application Id:	1165515224779	**City of Project Site:**Oakland
Site Location:	3530 MacArthur Blvd, Oakland, CA 94619	
Project Start Date:	12/14/2006	**Completion Date:**12/15/2006
Applicant:	Cambria - John Bostick 2000 Opportunity Dr #110, Rosevile, CA 95678	**Phone:** 916-677-3407
Property Owner:	Chevron Environmental Mgt. 6001 Bollinger Canyon Rd. #K2236, San Ramon, CA 94583	**Phone:** 925-842-9559
Client:	** same as Property Owner **	

	Total Due:	$200.00
Receipt Number: WR2006-0546	**Total Amount Paid:**	$200.00
Payer Name : Cambria	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 6 Boreholes
Driller: Gregg Drilling - Lic #: 9253135800 - Method: other **Work Total: $200.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2006-1032	12/08/2006	03/14/2007	6	3.00 in.	25.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. 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.

4. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 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.

5. 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.

6. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

CONESTOGA-ROVERS
& ASSOCIATES

ATTACHMENT C
Boring Log

Conestoga-Rovers & Associates
2000 Opportunity Drive, Suite 110
Roseville, CA 95678
Telephone: (916) 677-3407
Fax: (916) 677-3687

BORING/WELL LOG

CLIENT NAME	Chevron Products Company	**BORING/WELL NAME**	B-11
JOB/SITE NAME	9-8341	**DRILLING STARTED**	14-Dec-06
LOCATION	3530 Macarthur Boulevard, Oakland, CA	**DRILLING COMPLETED**	14-Dec-06
PROJECT NUMBER	61H-1650	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling & Testing, Inc.	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3"	**SCREENED INTERVAL**	NA
LOGGED BY	R. Rouas	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	D. Herzog, PG# 7211	**DEPTH TO WATER (Static)**	NA ▼
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Asphalt	0.5	Concrete
					SC		**Clayey SAND with gravel:** tan; moist; coarse sand; fine gravel; 35% sand, 30% gravel, 35% clay; moderate to high estimated permeability.		
0		B-11@ 5		5	GC		**Clayey GRAVEL with sand:** tan; wet; 40% gravel, 15% sand, 40% clay, 5% silt; high estimated permeability.	5.0	
					GC		**Clayey GRAVEL:** brown; wet; fine and coarse gravel; fine sand; 50% gravel, 5% sand, 25% clay, 20% silt; high estimated permeability.	8.0	
0		B-11@ 10		10	CH		**CLAY with gravel:** brown; moist; fine gravel; stiff; 70% clay, 20% gravel, 10% silt; high plasticity; low estimated permeability.	10.0	Portland Type I/II
0		B-11@ 15		15	CH		**CLAY:** orange with brown and grey mottling; moist; fine and coarse gravel; fine sand; very stiff; 80% clay, 10% silt, 5% sand, 5% gravel; medium plasticity; low estimated permeability.	15.0	
0		B-11@ 20		20	CL		**CLAY with gravel:** brown with light brown mottling; dry; fine and coarse gravel; medium sand; very stiff; 70% clay, 15% gravel, 10% sand, 5% silt; high plasticity; low estimated permeability.	20.0	
0		B-11@ 24					@ 24 fbg: refusal.	24.0	Bottom of Boring @ 24 fbg

WELL LOG (PID) \\SAC-S11\SHARED\ROCKLI~1.CHE\9-8341~1\GINT\9-8341.GPJ DEFAULT.GDT 3/17/08

CONESTOGA-ROVERS
& ASSOCIATES

ATTACHMENT D
Laboratory Analytical Report

Lancaster Laboratories

2425 New Holland Pike. PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared for:

Chevron c/o Cambria
Suite 110
2000 Opportunity Drive
Roseville CA 95678

916-677-3407

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1018942. Samples arrived at the laboratory on Wednesday, December 20, 2006. The PO# for this group is 98341 and the release number is MTI.

Client Description			Lancaster Labs Number
B-11-S-5-061214	Grab	Soil	4944701
B-11-S-10-061214	Grab	Soil	4944702
B-11-S-15-061214	Grab	Soil	4944703
B-11-S-20-061214	Grab	Soil	4944704
B-11-S-24-061214	Grab	Soil	4944705

ELECTRONIC COPY TO Cambria Environmental Attn: Jami Shaffer

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Angela M Miller at (717) 656-2300

Respectfully Submitted,

Marla S. Lord

Marla S. Lord
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. SW 4944701

B-11-S-5-061214 Grab Soil
Facility# 98341 MTI# 61H-1969 CETR
3530 MacArthur-Oakland T0600101790 B-11
Collected:12/14/2006 10:32 by JB

Account Number: 11997

Submitted: 12/20/2006 10:10
Reported: 01/02/2007 at 18:16
Discard: 02/02/2007

Chevron c/o Cambria
Suite 110
2000 Opportunity Drive
Roseville CA 95678

83411

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. Therefore, the reporting limits were raised. The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
01428	Methanol and Ethanol					
01431	Methanol (by Direct Injection)	67-56-1	0.26	0.20	mg/kg	1
03983	EPA SW 846/8260 - Soil					
06089	Ethanol	64-17-5	N.D.	0.099	mg/kg	0.99
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	mg/kg	0.99
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	0.99
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	0.99
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	0.99
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	0.99
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	0.99
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	0.99
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	0.99
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	0.99
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	0.99
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	0.99

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor

Lancaster Laboratories Sample No. SW 4944701

B-11-S-5-061214 Grab Soil
Facility# 98341 MTI# 61H-1969 CETR
3530 MacArthur-Oakland T0600101790 B-11
Collected:12/14/2006 10:32 by JB

Account Number: 11997

Submitted: 12/20/2006 10:10
Reported: 01/02/2007 at 18:16
Discard: 02/02/2007

Chevron c/o Cambria
Suite 110
2000 Opportunity Drive
Roseville CA 95678

83411

01725	TPH-GRO - Soils	TPH GRO SW-846 8015B mod	1	12/27/2006 00:48	Linda C Pape	25
01428	Methanol and Ethanol	SW-846 8015B modified	1	12/22/2006 20:44	Hai D Nguyen	1
03983	EPA SW 846/8260 - Soil	SW-846 8260B	1	12/22/2006 18:19	Nicholas R Rossi	0.99
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	12/22/2006 18:19	Nicholas R Rossi	0.99
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	12/22/2006 14:37	Emiley A King	n.a.
00380	Direct Injection Solids Ext	SW-846 8015B	1	12/22/2006 11:00	Hai D Nguyen	1
01150	GC - Bulk Soil Prep	SW-846 5035	1	12/20/2006 18:48	Eric L Vera	n.a.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. SW 4944702

B-11-S-10-061214 Grab Soil
Facility# 98341 MTI# 61H-1969 CETR
3530 MacArthur-Oakland T0600101790 B-11
Collected:12/14/2006 15:39 by JB

Account Number: 11997

Submitted: 12/20/2006 10:10
Reported: 01/02/2007 at 18:16
Discard: 02/02/2007

Chevron c/o Cambria
Suite 110
2000 Opportunity Drive
Roseville CA 95678

83412

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. Therefore, the reporting limits were raised. The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
01428	Methanol and Ethanol					
01431	Methanol (by Direct Injection)	67-56-1	0.33	0.20	mg/kg	1
03983	EPA SW 846/8260 - Soil					
06089	Ethanol	64-17-5	N.D.	0.10	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	0.002	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. SW 4944702

B-11-S-10-061214 Grab Soil
Facility# 98341 MTI# 61H-1969 CETR
3530 MacArthur-Oakland T0600101790 B-11
Collected:12/14/2006 15:39 by JB

Account Number: 11997

Submitted: 12/20/2006 10:10
Reported: 01/02/2007 at 18:16
Discard: 02/02/2007

Chevron c/o Cambria
Suite 110
2000 Opportunity Drive
Roseville CA 95678

83412

01725	TPH-GRO - Soils	TPH GRO SW-846 8015B mod	1	12/27/2006 09:25	Linda C Pape	25
01428	Methanol and Ethanol	SW-846 8015B modified	1	12/22/2006 21:01	Hai D Nguyen	1
03983	EPA SW 846/8260 - Soil	SW-846 8260B	1	12/22/2006 18:42	Nicholas R Rossi	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	12/22/2006 18:42	Nicholas R Rossi	1
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	12/22/2006 14:38	Emiley A King	n.a.
00380	Direct Injection Solids Ext	SW-846 8015B	1	12/22/2006 11:00	Hai D Nguyen	1
01150	GC - Bulk Soil Prep	SW-846 5035	1	12/20/2006 18:52	Eric L Vera	n.a.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. SW 4944703

B-11-S-15-061214 Grab Soil
Facility# 98341 MTI# 61H-1969 CETR
3530 MacArthur-Oakland T0600101790 B-11
Collected:12/14/2006 16:00 by JB

Account Number: 11997

Submitted: 12/20/2006 10:10
Reported: 01/02/2007 at 18:16
Discard: 02/02/2007

Chevron c/o Cambria
Suite 110
2000 Opportunity Drive
Roseville CA 95678

83413

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. Therefore, the reporting limits were raised. The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
01428	Methanol and Ethanol					
01431	Methanol (by Direct Injection)	67-56-1	0.27	0.20	mg/kg	1
03983	EPA SW 846/8260 - Soil					
06089	Ethanol	64-17-5	N.D.	0.099	mg/kg	0.99
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	mg/kg	0.99
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	0.99
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	0.99
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	0.99
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	0.99
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	0.99
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	0.99
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	0.99
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	0.99
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	0.99
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	0.99

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor

Lancaster Laboratories

2425 New Holland Pike. PO Box 12425. Lancaster. PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. SW 4944703

B-11-S-15-061214 Grab Soil
Facility# 98341 MTI# 61H-1969 CETR
3530 MacArthur-Oakland T0600101790 B-11
Collected:12/14/2006 16:00 by JB

Account Number: 11997

Submitted: 12/20/2006 10:10
Reported: 01/02/2007 at 18:16
Discard: 02/02/2007

Chevron c/o Cambria
Suite 110
2000 Opportunity Drive
Roseville CA 95678

83413

01725	TPH-GRO - Soils	TPH GRO SW-846 8015B mod	1	12/27/2006 10:01	Linda C Pape	25
01428	Methanol and Ethanol	SW-846 8015B modified	1	12/22/2006 21:19	Hai D Nguyen	1
03983	EPA SW 846/8260 - Soil	SW-846 8260B	1	12/22/2006 19:05	Nicholas R Rossi	0.99
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	12/22/2006 19:05	Nicholas R Rossi	0.99
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	12/22/2006 14:40	Emiley A King	n.a.
00380	Direct Injection Solids Ext	SW-846 8015B	1	12/22/2006 11:00	Hai D Nguyen	1
01150	GC - Bulk Soil Prep	SW-846 5035	1	12/20/2006 18:55	Eric L Vera	n.a.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. SW 4944704

B-11-S-20-061214 Grab Soil
Facility# 98341 MTI# 61H-1969 CETR
3530 MacArthur-Oakland T0600101790 B-11
Collected:12/14/2006 16:10 by JB

Account Number: 11997

Submitted: 12/20/2006 10:10
Reported: 01/02/2007 at 18:16
Discard: 02/02/2007

Chevron c/o Cambria
Suite 110
2000 Opportunity Drive
Roseville CA 95678

83414

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. Therefore, the reporting limits were raised. The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
01428	Methanol and Ethanol					
01431	Methanol (by Direct Injection)	67-56-1	N.D.	0.20	mg/kg	1
03983	EPA SW 846/8260 - Soil					
06089	Ethanol	64-17-5	N.D.	0.099	mg/kg	0.99
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	mg/kg	0.99
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	0.99
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	0.99
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	0.99
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	0.99
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	0.99
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	0.99
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	0.99
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	0.99
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	0.99
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	0.99

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor

Lancaster Laboratories Sample No. SW 4944704

B-11-S-20-061214 Grab Soil
Facility# 98341 MTI# 61H-1969 CETR
3530 MacArthur-Oakland T0600101790 B-11
Collected:12/14/2006 16:10 by JB

Account Number: 11997

Submitted: 12/20/2006 10:10
Reported: 01/02/2007 at 18:16
Discard: 02/02/2007

Chevron c/o Cambria
Suite 110
2000 Opportunity Drive
Roseville CA 95678

83414

01725	TPH-GRO - Soils	TPH GRO SW-846 8015B mod	1	12/27/2006 10:37	Linda C Pape	25
01428	Methanol and Ethanol	SW-846 8015B modified	1	12/22/2006 21:36	Hai D Nguyen	1
03983	EPA SW 846/8260 - Soil	SW-846 8260B	1	12/22/2006 20:13	Nicholas R Rossi	0.99
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	12/22/2006 20:13	Nicholas R Rossi	0.99
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	12/22/2006 14:44	Emiley A King	n.a.
00380	Direct Injection Solids Ext	SW-846 8015B	1	12/22/2006 11:00	Hai D Nguyen	1
01150	GC - Bulk Soil Prep	SW-846 5035	1	12/20/2006 19:00	Eric L Vera	n.a.

Lancaster Laboratories

2425 New Holland Pike. PO Box 12425. Lancaster. PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. SW 4944705

B-11-S-24-061214 Grab Soil
Facility# 98341 MTI# 61H-1969 CETR
3530 MacArthur-Oakland T0600101790 B-11
Collected:12/14/2006 16:19 by JB

Account Number: 11997

Submitted: 12/20/2006 10:10
Reported: 01/02/2007 at 18:16
Discard: 02/02/2007

Chevron c/o Cambria
Suite 110
2000 Opportunity Drive
Roseville CA 95678

83415

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. Therefore, the reporting limits were raised. The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
01428	Methanol and Ethanol					
01431	Methanol (by Direct Injection)	67-56-1	0.23	0.20	mg/kg	1
03983	EPA SW 846/8260 - Soil					
06089	Ethanol	64-17-5	N.D.	0.099	mg/kg	0.99
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	mg/kg	0.99
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	0.99
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	0.99
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	0.99
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	0.99
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	0.99
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	0.99
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	0.99
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	0.99
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	0.99
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	0.99

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor

Lancaster Laboratories Sample No. SW 4944705

B-11-S-24-061214 Grab Soil
Facility# 98341 MTI# 61H-1969 CETR
3530 MacArthur-Oakland T0600101790 B-11
Collected:12/14/2006 16:19 by JB

Account Number: 11997

Submitted: 12/20/2006 10:10
Reported: 01/02/2007 at 18:16
Discard: 02/02/2007

Chevron c/o Cambria
Suite 110
2000 Opportunity Drive
Roseville CA 95678

83415

01725	TPH-GRO - Soils	TPH GRO SW-846 8015B mod	1	12/27/2006 11:13	Linda C Pape	25
01428	Methanol and Ethanol	SW-846 8015B modified	1	12/22/2006 22:28	Hai D Nguyen	1
03983	EPA SW 846/8260 - Soil	SW-846 8260B	1	12/22/2006 20:35	Nicholas R Rossi	0.99
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	12/22/2006 20:35	Nicholas R Rossi	0.99
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	12/22/2006 14:45	Emiley A King	n.a.
00380	Direct Injection Solids Ext	SW-846 8015B	1	12/22/2006 11:00	Hai D Nguyen	1
01150	GC - Bulk Soil Prep	SW-846 5035	1	12/20/2006 19:04	Eric L Vera	n.a.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: Chevron c/o Cambria
Group Number: 1018942
Reported: 01/02/07 at 06:16 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 063560011A	Sample number(s): 4944701-4944705							
Methanol (by Direct Injection)	N.D.	0.20	mg/kg	97		64-125		
Batch number: 06356A34B	Sample number(s): 4944701							
TPH-GRO - Soils	N.D.	1.0	mg/kg	78		67-119		
Batch number: 06356A34C	Sample number(s): 4944702-4944705							
TPH-GRO - Soils	N.D.	1.0	mg/kg	78		67-119		
Batch number: A063562AA	Sample number(s): 4944701-4944705							
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/kg	106		72-117		
di-Isopropyl ether	N.D.	1.	ug/kg	102		72-120		
Ethyl t-butyl ether	N.D.	1.	ug/kg	103		72-115		
t-Amyl methyl ether	N.D.	1.	ug/kg	105		73-116		
t-Butyl alcohol	N.D.	20.	ug/kg	125		52-153		
Benzene	N.D.	0.5	ug/kg	107		77-119		
1,2-Dichloroethane	N.D.	1.	ug/kg	109		76-126		
Toluene	N.D.	1.	ug/kg	94		81-116		
1,2-Dibromoethane	N.D.	1.	ug/kg	106		77-114		
Ethylbenzene	N.D.	1.	ug/kg	105		82-115		
Ethanol	N.D.	100.	ug/kg	109		30-160		
Xylene (Total)	N.D.	1.	ug/kg	106		82-117		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 063560011A	Sample number(s): 4944701-4944705 UNSPK: P944032								
Methanol (by Direct Injection)	82	82	23-144	0	20				
Batch number: 06356A34B	Sample number(s): 4944701 UNSPK: P919622								
TPH-GRO - Soils	61	75	39-118	18	30				
Batch number: 06356A34C	Sample number(s): 4944702-4944705 UNSPK: P919622								
TPH-GRO - Soils	61	75	39-118	18	30				
Batch number: A063562AA	Sample number(s): 4944701-4944705 UNSPK: 4944703								
Methyl Tertiary Butyl Ether	91	87	47-130	4	30				
di-Isopropyl ether	88	84	58-122	4	30				
Ethyl t-butyl ether	87	84	57-122	4	30				
t-Amyl methyl ether	89	85	58-119	4	30				
t-Butyl alcohol	105	101	51-134	3	30				

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron c/o Cambria Group Number: 1018942
Reported: 01/02/07 at 06:16 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzene	90	85	59-120	5	30				
1,2-Dichloroethane	95	92	62-130	4	30				
Toluene	80	77	52-121	3	30				
1,2-Dibromoethane	92	88	62-116	4	30				
Ethylbenzene	87	83	54-116	4	30				
Ethanol	88	84	7-170	4	30				
Xylene (Total)	88	84	44-127	5	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Methanol and Ethanol
Batch number: 063560011A

	Acetone
4944701	87
4944702	90
4944703	91
4944704	80
4944705	84
Blank	106
LCS	100
MS	89
MSD	88
Limits:	29-164

Analysis Name: TPH-GRO - Soils
Batch number: 06356A34B

	Trifluorotoluene-F
4944701	64
Blank	87
LCS	92
MS	151*
MSD	162*
Limits:	61-122

Analysis Name: TPH-GRO - Soils
Batch number: 06356A34C

	Trifluorotoluene-F
4944702	67
4944703	63
4944704	69
4944705	66
Blank	90

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron c/o Cambria
Group Number: 1018942
Reported: 01/02/07 at 06:16 PM

Surrogate Quality Control

LCS	92
MS	151*
MSD	162*
Limits:	61-122

Analysis Name: EPA SW 846/8260 - Soil
Batch number: A063562AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4944701	88	87	89	83
4944702	88	86	90	83
4944703	89	88	89	84
4944704	89	88	89	85
4944705	90	90	88	85
Blank	88	87	89	85
LCS	90	89	91	87
MS	91	90	90	87
MSD	91	89	90	87
Limits:	71-114	70-109	70-123	70-111

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Chevron California Region Analysis Request/Chain of Custody

244458

Lancaster Laboratories
Where quality is a science.

Acct. #: 11997 For Lancaster Laboratories use only Sample #: 4944701-05 SCR#: 1018942

MTI # 61H-1969

Facility #: Chevron 9-8341
Site Address: 3530 MacArthur Blvd, Oakland, CA
Chevron PM: Dana Thurman Lead Consultant: Cambria
Consultant/Office: Roseville
Consultant Prj. Mgr.: David Herzog
Consultant Phone #: 916 677 3407 Fax #: 916 677 3687
Sampler: John Bostick
Service Order #: ☐ Non SAR:

Analyses Requested

Preservation Codes

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	BTEX + MTBE 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Oxygenates 4	Lead 7420 ☐ 7421 ☐	Total Lead
B-11@5	S		4.5	061214	1032	y	X		1	X	X			X		
B-11@10	S		9.5		1539	y	X		1	X	X			X		
B-11@15	S		14.5		1600	y	X		1	X	X			X		
B-11@20	S		19.5		1610	y	X		1	X	X			X		
B-11@24	S		23.5		1619	y	X		1	X	X			X		
Waste-S	S				1647			X	1	X	X					X

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds
8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks
All samples on standard TAT

Send waste-S Analytical to Jay @ IWM

Turnaround Time Requested (TAT) (please circle)
(STD. TAT) 72 hour 48 hour
24 hour 4 day 5 day

Data Package Options (please circle if required)
QC Summary Type I – Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

	Relinquished by:	Date	Time	Received by:	Date	Time
1	John Bostick	12/15/04	1400			
2	Relinquished by:	Date	Time	Received by:	Date	Time
3	Relinquished by:	Date	Time	Received by:	Date	Time
4	Relinquished by Commercial Carrier: UPS (FedEx) Other ____			Received by:	Date 12/16/04	Time 1010
	Temperature Upon Receipt 2.0° C°			Custody Seals Intact? (Yes) No		

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY – In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.

CONESTOGA-ROVERS
& ASSOCIATES

ATTACHMENT E
Standard Field Procedures for GeoProbe Borings

STANDARD FIELD PROCEDURES FOR GEOPROBE® SAMPLING

This document describes Conestoga-Rovers & Associates' standard field methods for GeoProbe® soil and ground water sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor odor or staining, estimate ground water depth and quality and to submit samples for chemical analysis.

Soil Classification/Logging

All soil samples are classified according to the Unified Soil Classification System by a trained geologist or engineer working under the supervision of a California Professional Geologist (PG) or a Certified Engineering Geologist (CEG). The following soil properties are noted for each soil sample:

- Principal and secondary grain size category (i.e., sand, silt, clay or gravel)
- Approximate percentage of each grain size category,
- Color,
- Approximate water or separate-phase hydrocarbon saturation percentage,
- Observed odor and/or discoloration,
- Other significant observations (i.e., cementation, presence of marker horizons, mineralogy), and
- Estimated permeability.

Soil Sampling

GeoProbe® soil samples are collected from borings driven using hydraulic push technologies. Prior to drilling, the first 8 ft of the boring are cleared using an air or water knife and vacuum extraction. This minimizes the potential for impacting utilities.

A minimum of one and one half ft of the soil column is collected for every five ft of drilled depth. Additional soil samples can be collected near the water table and at lithologic changes. Samples are collected using samplers lined with polyethylene or brass tubes driven into undisturbed sediments at the bottom of the borehole. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. The horizontal location of each boring is measured in the field relative to a permanent on-site reference using a measuring wheel or tape measure.

Drilling and sampling equipment is steam-cleaned or washed prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Storage, Handling, and Transport

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon® tape and plastic end caps. Soil samples are labeled and stored at or below 4°C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Field Screening

After a soil sample has been collected, soil from the remaining tubing is placed inside a sealed plastic bag and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable GasTech® or photo ionization detector measures volatile hydrocarbon vapor concentrations in the bag's headspace, extracting the vapor through a slit in the plastic bag. The measurements are used along with the field observations, odors, stratigraphy and ground water depth to select soil samples for analysis.

Grab Ground Water Sampling

Ground water samples are collected from the open borehole using bailers, advancing disposable Tygon® tubing into the borehole and extracting ground water using a diaphragm pump, or using a hydro-punch style sampler with a bailer or tubing. The ground water samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4° C, and transported under chain-of-custody to the laboratory.

Duplicates and Blanks

Blind duplicate water samples are usually collected only for monitoring well sampling programs, at a rate of one blind sample for every 10 wells sampled. Laboratory-supplied trip blanks accompany samples collected for all sampling programs to check for cross-contamination caused by sample handling and transport. These trip blanks are analyzed if the internal laboratory quality assurance/quality control (QA/QC) blanks contain the suspected field contaminants. An equipment blank may also be analyzed if non-dedicated sampling equipment is used.

Grouting

If the borings are not completed as wells, the borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.