

October 8 2003

Ms. Karen Streich
ChevronTexaco
P.O. Box 6012
San Ramon, CA 94583

NO 427

Re: **Well Installation Report/Site Summary**
Chevron Station #9-0076
4265 Foothill Boulevard
Oakland, California
Cambria Project No. 41D-1977

Alameda County
Environmental Health
Department



Dear Ms. Streich:

On behalf of ChevronTexaco (Chevron), Cambria Environmental Technology, Inc. (Cambria) submits the results of a subsurface investigation at the site referenced above and a comprehensive site summary that was requested related to a proposed property transfer. Cambria installed monitoring well C-10 to evaluate whether hydrocarbons from the adjacent BP station may have migrated and impacted groundwater beneath the site. The scope of work was outlined in Cambria's *Additional Well Installation Workplan* dated July 7, 2003. Presented below are site description details, investigation results, conclusions, and the site summary.

SITE BACKGROUND

The site is an operating Chevron service station located at the northwest corner of High Street and Foothill Boulevard in Oakland, California (Figure 1). The site is located on the East Bay Plain, approximately 1-mile northeast of the Oakland Estuary. The site is relatively flat at an elevation of approximately 35 feet above mean sea level. The nearest surface water body is Brooklyn Basin Tidal Canal approximately 0.75 miles southwest of the site. Shallow groundwater beneath the site flows to the southwest. The surrounding land use is characterized by commercial and residential developments. A Union 76 station (former BP) is located to the northeast across Foothill Blvd. and a former Shell station is located across High Street to the southeast. Both adjacent stations have ongoing environmental monitoring programs. Chevron purchased the subject property, developed it into a service station, and began operations in 1966. The station and all site facilities were reconstructed in 1987 into its current configuration. Product lines were upgraded in 1997.

Current site facilities consist of a kiosk and five dispenser islands beneath a common canopy. Three 10,000-gallon double-walled fiberglass gasoline USTs are located in a common excavation directly southwest of the kiosk. Former USTs were located in the same excavation. A former used-oil UST

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was located southwest of the kiosk and adjacent to the gasoline UST complex. The used-oil UST was removed and not replaced.

SITE HISTORY

May 1987, Tank Removal and Replacement: In May 1987, Blaine Tech Services removed three steel fuel USTs and one fiberglass used-oil UST. An unknown volume of excavated backfill material was aerated and reused onsite. Additional impacted soil was disposed of at a Chevron-approved non-hazardous landfill. Three 10,000-gallon double-walled fiberglass USTs were installed in the same excavation in June 1987. The used-oil UST was not replaced. Soil samples collected beneath the former fuel USTs contained maximum concentrations of TPHg and benzene at 21 mg/kg and 0.57 mg/kg, respectively. Soil samples collected beneath the former used-oil UST contained maximum concentrations of oil and grease (TOG) and benzene at 100 mg/kg and 5.0 mg/kg, respectively. Details are available in Blaine Tech's June 4, 1987 *Sampling Report*.

July 1987, Excavation: On July 8, 1987, during excavation work to install a sign along Foothill Blvd., petroleum hydrocarbon odors and a small amount of water with a product sheen were reported in the 11-foot deep pit. Details are available in Blaine Tech's June 4, 1987 *Sampling Report*.

August 1987, Well Installation: In August 1987, Pacific Environmental Group, Inc. (PEG) advanced one boring C-A and drilled and installed four 3-inch diameter groundwater monitoring wells C-1 through C-4. No hydrocarbons were detected in soil from C-1. Maximum concentrations of TPHg and benzene in soil were detected in boring C-A at 3,600 mg/kg and 33 mg/kg, respectively. Maximum concentrations from all borings were detected from the first interval of soil samples collected between 8.5 to 10.5 feet below grade (fbg). Initial groundwater samples contained maximum concentrations of TPHg and benzene at 22,000 µg/l and 800 µg/l, respectively, in C-1 located near C-A. C-2 was reported to contain non-aqueous phase liquid (NAPL) at a measured thickness of >2.0 feet and was not sampled. Details are available in PEG's September 23, 1987 *Soil and Groundwater Investigation report*.

July/August 1990, Monitoring Well Installation: In July and August 1990, Weiss Associates (Weiss) drilled and installed 2-inch diameter wells C-5 through C-7. Additional well C-8 was subsequently installed in November 1990. C-5 was installed onsite and the remaining wells were installed offsite. No hydrocarbons were detected in soil from C-8. Maximum concentrations of TPHg and benzene in soil were detected at 54 mg/kg and 0.5 mg/kg in onsite boring C-5 at approximately 11 fbg. The first groundwater sampling event including all wells indicated that only offsite wells C-6 and C-7 contained impacts. The maximum concentrations of TPHg and benzene in offsite wells were 7,200 µg/l and

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2,100 µg/l, respectively, in C-6. Weiss also conducted a well survey within a one-half mile radius of the site. The well survey identified 40 wells in the search area. Of these, two were cathodic protection wells, one irrigation, one industrial, and the remaining were monitoring wells. The irrigation well was reported <0.75 miles upgradient of the site. No domestic or municipal water supply wells were identified within the search area. Based on depth to water measurements, Weiss suggested that groundwater beneath the site may be perched. Depth to water in onsite well C-4 and offsite well C-6 differed by approximately 14 feet in 1990. Details are available in Weiss's December 18, 1990 *Subsurface Investigation* report.



November 1991, Groundwater Extraction: In an attempt to achieve hydraulic control of dissolved hydrocarbons, Weiss began operating a groundwater treatment system extracting groundwater from C-2 in November 1991. The system operated until October of 1993 and extracted approximately 11,200-gallons of impacted groundwater. System operations were terminated due to noise complaints from the neighbors and low flow rates. Details were obtained from Weiss's July 30, 1993 *Monthly Monitoring Report*.

July 1996, Well Installation: PEG installed 2-inch diameter well C-9 on July 10, 1996, downgradient of C-7 in the Lucky's supermarket (now Albertson's) parking lot. No BTEX was detected in any soil sample. TPHg was detected at 1.2 and 1.1 mg/kg in soil collected at 10 and 20 fbg, respectively. These TPHg concentrations were characterized as unidentified hydrocarbons <C8. No hydrocarbons were detected in groundwater in C-9, including MTBE, during the first round of sampling. Details are available in PEG's October 2, 1996 *Off-Site Monitoring Well installation Report*.

July 1997, Product Line Upgrades: In July 1997, Gettler-Ryan (GR) collected soil samples during partial product piping replacement in conjunction with dispenser and UST containment upgrades. Five soil samples were collected, PL1 through PL5, at approximately 4 fbg. Hydrocarbons were detected in all samples. Maximum concentrations of TPHg, benzene, and MTBE were 210 mg/kg, 0.64 m/kg, and 10 mg/kg. Soil was excavated beneath the dispensers to accommodate new containment requirements and beneath the product piping. Approximately 46 tons of soil were excavated and disposed of. Details are available in GR's September 24, 1997, *Soil Sampling During Product Dispenser Upgrade and Partial Product Line Replacement* report.

1998-2000, Site conceptual Model and Risk-Based Corrective Action Plan: In May 1998, Delta Environmental Consultants, Inc. (Delta) completed a risk based corrective action (RBCA) site assessment using analytical results from soil and groundwater assessment activities. This was followed by a site conceptual model (SCM) and proposed RBCA plan. The SCM indicated that the primary potential exposure receptors are current and future residents of properties bound by the intersection of High and Bond Streets and, possibly, in the Lucky's parking lot along the southern side

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of High street. The potential exposure medium is indoor inhalation of benzene vapors. The only complete exposure pathway is hydrocarbon volatilization from groundwater to ambient (outside) and indoor air (residential receptor). Secondary potential exposure receptors are hydrocarbon volatilization from soil or direct dermal contact from onsite residual impacted vadose zone soils in the vicinity of C-4, and, based on depth to groundwater (7 to 30 fbg), dermal contact with hydrocarbon impacted soil and groundwater the utility maintenance workers. Two separate risk scenarios for residential indoor air inhalation were calculated. One represented onsite conditions using data from C-2 through C-5. The second represented offsite conditions using data from C-6 through C-9. Based on the Tier 2 RBCA analysis, onsite and offsite representative concentrations exceeded the site-specific target levels (SSTLs) for benzene. The SSTLs for benzene were 0.0063 mg/kg in soil and 0.045 µg/l in groundwater. Average onsite benzene concentrations in soil and groundwater were 1.2 mg/kg and 0.79 µg/l, respectively. Average offsite benzene concentrations in soil and groundwater (vicinity of C-4) were 0.021 mg/kg and 0.23 µg/l, respectively. Delta concluded the adjacent residence with a basement may be at risk for benzene inhalation and recommended that site specific soil-vapor samples should be collected to evaluate current soil vapor levels. Intrinsic bioremediation of soil and groundwater is occurring at the site and Delta additionally recommended continued use of ORC to enhance bioremediation and over-purging of C-1 through C-4. Details are available in Delta's July 28, 2000 Site Conceptual Model and Risk-Based Corrective Action Plan.

INVESTIGATION RESULTS

To complete our scope of work, Cambria installed groundwater monitoring well C-10. The investigation findings are presented below. The boring log is presented as Attachment A. The laboratory analytic report for soil is presented as Attachment B. The laboratory report for groundwater is presented as Attachment C. A copy of the Alameda County Public Works Agency well permit is presented as Attachment D. The Second Quarter 2003 Monitoring Report is presented as Attachment E.

Well Installation

Personnel Present: Cambria Staff Geologist Ian Robb conducted fieldwork under the direction of California Registered Geologist Robert C. Foss, R.G. #7445.

Permits: Alameda County Public Works Agency permit #W030680

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Drilling Company: Gregg Drilling of Martinez, California, C57 No. 485165.

Drilling Date: August 8, 2003.

Drilling Method: Hollow-stem auger, 8-inch diameter.

Number of Wells: One 2-inch-diameter well, C-10.

Lithologic Description: Soil encountered during this investigation consisted of fill, containing small to large cobbles and gravels, from the surface to approximately 4 fbg. This was underlain by silty sand, clayey silts and sands, and silty clay to the total depth explored of 30 fbg.

Groundwater: Historically, depth to groundwater has ranged from approximately 7 fbg to 30 fbg. Groundwater typically flows to the southwest.

Sampling Technique: The boring was vacuum cleared to 8 fbg. Soil samples for analysis were collected at approximately 5-foot intervals using a split-spoon sampler lined with 2 x 6 inch brass sample tubes. Samples were properly sealed, logged on the chain-of-custody form, preserved on ice, and released to the laboratory for analysis.

Soil Disposal: Soil cuttings were placed in DOT approved 55 gallon drums and sampled for disposal profiling. Integrated Waste Management of Milpitas, California transported the soil cuttings to an appropriate Chevron-approved landfill.

Laboratory Analyses: The analytic results are summarized in Tables 1 & 2. Selected soil and groundwater samples were analyzed for the following analytes:


- TPHg by EPA Method 8015M,
- BTEX and oxygenates (MTBE, TBA, TAME, ETBE, DIPE, Ethanol) and lead scavengers (1,2 DCA and EDB) by EPA Method 8260B.

Soil Analytic Results: No hydrocarbons were detected in any soil sample from the installation of C-10.

Groundwater Analytic Results: No TPHg, benzene, toluene, ethylbenzene, or ethanol were detected in initial groundwater sampling of C-10. MTBE and xylenes were detected at 14 µg/l and 0.5 µg/l, respectively.

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HYDROCARBON DISTRIBUTION IN SOIL



The station was remodeled in 1987. The first generation of USTs were replaced at that time. The used-oil UST was also removed, but not replaced, thereby removing the potential source for future impacts in that vicinity. Maximum residual concentrations in soil beneath the USTs were 21 mg/kg TPHg and 0.57 mg/kg benzene. Maximum residual concentrations in soil beneath the used-oil UST were 100 mg/kg TOG and 5.0 mg/kg benzene. An undocumented volume of impacted soil was disposed of at that time, thus primary and secondary sources were removed. Between 1987 and 1996, ten borings, of which nine were constructed into monitoring wells, were installed on and offsite. No hydrocarbons were detected in soil in onsite well C-1 and offsite well C-8. Maximum historical concentrations of TPHg and benzene were detected in soil from onsite boring C-A, located northeast and upgradient of the dispenser islands, at 3,600 mg/kg and 33 mg/kg, respectively, in 1987. Hydrocarbons detected in soil samples from offsite wells were low and often appeared as detections of dissolved hydrocarbons in groundwater at or below the smear zone. Additional station upgrades occurred in 1997 replacing a portion of product piping and the installation of containment basins beneath the dispensers and UST fill ports. A maximum of 210 mg/kg TPHg, 0.64 mg/kg benzene, and 10 mg/kg MTBE were detected in samples collected beneath the former piping. Well C-10 was installed in June 2003 in the northeast corner of the site and no hydrocarbons were detected in any soil sample.

HYDROCARBON DISTRIBUTION IN GROUNDWATER

No groundwater was encountered during site redevelopment activities in 1987. Groundwater, reported as impacted with gasoline, was encountered in 1987 during the installation of a station sign, but was not sampled. Quarterly groundwater monitoring and sampling began in April 1989 with wells C-1 through C-4. Wells C-5 through C-7 were added to the schedule in September 1990, C-8 in November 1990, C-9 in August 1996, and C-10 in August 2003. Due to consistent low to non-detect concentrations, C-5, C-8, and C-9 were placed on an annual sampling frequency following the June 1997 event. Since 1989 all wells have been analyzed for TPHg and BTEX. MTBE analysis began in December 1995.

Historical maximum concentrations of TPHg, benzene, and MTBE in groundwater were 1,000,000 µg/l, (C-2, 6/98), 30,000 µg/l (C-2, 4/89), and 4,600 µg/l (C-4, 9/97), respectively. C-2 is located onsite downgradient and adjacent to the dispenser islands and down to crossgradient of the UST complex. Results of the third quarter 2003 event indicated maximum concentrations of TPHg, benzene, and MTBE remain in C-2 at 6,800 µg/l, 1,100 µg/l, and 1,300 µg/l, respectively. These current concentrations represent a significant decrease in overall concentrations. Additional remediation has been in the form of oxygen release compound (ORC). ORC socks were installed in

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wells C-2 and C-6 in June 1998 and in C-1 and C-4 in June 2000. Although concentration trends over time appear to decrease steadily, concentrations have exhibited significant fluctuations that appear to be a direct result of fluctuating groundwater elevations.


Groundwater beneath the site has fluctuated a maximum of 21 feet (C-1). Wells C-5 through C-8 were installed in 1990, a period when groundwater levels were apparently lower than usual. This occurrence may have been due to drought or possibly human induced such as pumping of groundwater. Over several years, groundwater elevations increased in these wells and appeared to have stabilized by 1995. This resulted in submerged well screens during most subsequent sampling events. Well C-9, installed in 1996, was also screened too deep and is also typically submerged. This occurrence appears solely as a misjudgment in the groundwater and subsurface conditions during the time of installation. NAPL was never observed in these wells prior to becoming submerged. Dissolved hydrocarbon concentrations in these wells did not fluctuate dramatically after groundwater elevations increased above the screens. Given the wells are purged prior to sampling, the presence of NAPL would be observed as water is drawn down below the top of the screens. Hydrocarbons reported in these wells have never been at concentrations necessary for the formation of NAPL. These conditions suggest that all reported dissolved concentrations and trends observed in these wells should be representative of actual groundwater conditions regardless of well construction.

Non-aqueous phase liquids (NAPL) have been reported in onsite well C-2 in the past. The highest measured thickness was documented following its installation at >2 feet. NAPL was observed sporadically in this well primarily as a result of the fluctuating water table. Depth to water in C-2 has historically fluctuated from 7.13 to 27.61 fbg. NAPL last appeared in December 1996 at a measured thickness of 0.03-inches. Between 1989 and 1996, approximately 0.3-gallons of NAPL were removed from C-2. NAPL has not been observed since 1996.

It has been reported that groundwater beneath the site may be perched as onsite depth to water has differed by up to 14 feet from offsite locations. Additional reports have suggested, based on depth to water in adjacent site wells, that up to four waterbearing zones may exist. Upon review of regional geology, borings logs, and historical groundwater data, it appears that groundwater flows primarily through laterally discontinuous, relatively thin, moderate to high permeability zones that are bounded by relatively thick, continuous, low permeability soils. Each of the higher permeability zones appear at varying depths and thicknesses on and offsite and are composed of varying compositions. This suggests that each higher permeability zone may have differing head pressures causing the variability seen in depth to water across the plume length as it extends offsite. Chevron wells were installed in the first encountered waterbearing zone and do not appear to have encountered or penetrated a possible second waterbearing zone at depth. Based on this information, it appears that dissolved hydrocarbons exist in various shallow waterbearing zones with limited hydraulic communication and the existing network of wells have adequately defined the plume on and offsite.

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CONCLUSIONS AND RECOMMENDATIONS



Based on system upgrades and a network of borings and monitoring wells, hydrocarbon impacts to soil and groundwater have been adequately defined on and offsite. System upgrades and over-excavation of impacted soil have removed the primary and secondary sources. Groundwater extraction, bailing of NAPL, and the addition of ORC has aided remediation of groundwater. Groundwater monitoring has occurred since April 1989 providing groundwater flow characteristics and defining the plume extent. Depth to groundwater measurements have shown that groundwater fluctuates significantly both seasonally and often over several year spans. As a result, concentrations have fluctuated, often dramatically, following very shallow groundwater periods. This suggests that a large smear zone may exist and is an ongoing source for future groundwater impacts. NAPL, previously observed in only C-2, however, has not been observed since December 1996. Dissolved hydrocarbons, as a result of NAPL in upgradient Union 76 well MW-5, appear not to have migrated across Foothill Blvd. as evident by recently installed onsite well C-10. Well C-10 defines the plume boundary to the southeast and only contained minor xylenes and MTBE concentrations.

Historical groundwater analytical results have exhibited an overall decreasing trend in TPHg, benzene, and MTBE concentrations. However, as hydrocarbons within the smear zone continue to act as a source for future groundwater impacts, it appears that decreasing trends will remain slow but consistent. ORC has aided in reducing levels in higher concentration wells. However, the zone of effective influence of ORC installed in individual wells is often limited to a small radius and once removed, rebound is likely to occur exhibiting increasing concentrations in those wells.

Groundwater has been previously suggested to exist at different zones on and offsite. However, it does not appear that these zones underlie each other but are laterally discontinuous zones at various depths and are underlain by low permeability soil inhibiting vertical migration. Based on all available site data, it appears that impacts are limited to shallow soil and groundwater and further vertical delineation is not warranted.

Current concentrations of benzene remain above the SSTLs in the vicinity of the adjacent residential building. As a result, additional soil-vapor probes may be required to monitor actual soil-vapor concentrations near the residential structure to determine if an actual risk to indoor benzene inhalation exists. If actual soil-vapor concentrations exceed the SSTL for benzene, additional work may be necessary to mitigate vapor intrusion to the residential structure. The investigation and possible subsequent system installation and operation may require access to the site for an unknown period of time.

Current concentrations and site conditions suggest that groundwater monitoring will likely be required for several more years. Groundwater trends, although fluctuating, do not appear to indicate any new releases of petroleum hydrocarbons to the subsurface. Spikes in concentrations are likely to occur in

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the future and would need to be evaluated against past increases and baseline concentrations to determine if the increases are groundwater elevation related (smear zone) or the result of a new release. In addition, the removal of ORC, or non-effectiveness of spent ORC socks, may also cause limited rebound of concentrations and should not be concluded as representing a new release.

CLOSING

Cambria appreciates the opportunity to work with you on this project. Please contact Albert Simmons at (510) 420-3353 if you have any questions or comments.

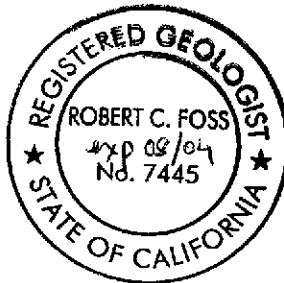


Sincerely,
Cambria Environmental Technology, Inc.

Ian Robb
Staff Geologist

Albert Simmons
Project Geologist

Robert C. Foss, R.G. #7445
Senior Project Geologist



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Figures: 1 - Vicinity Map
2 - Site Map

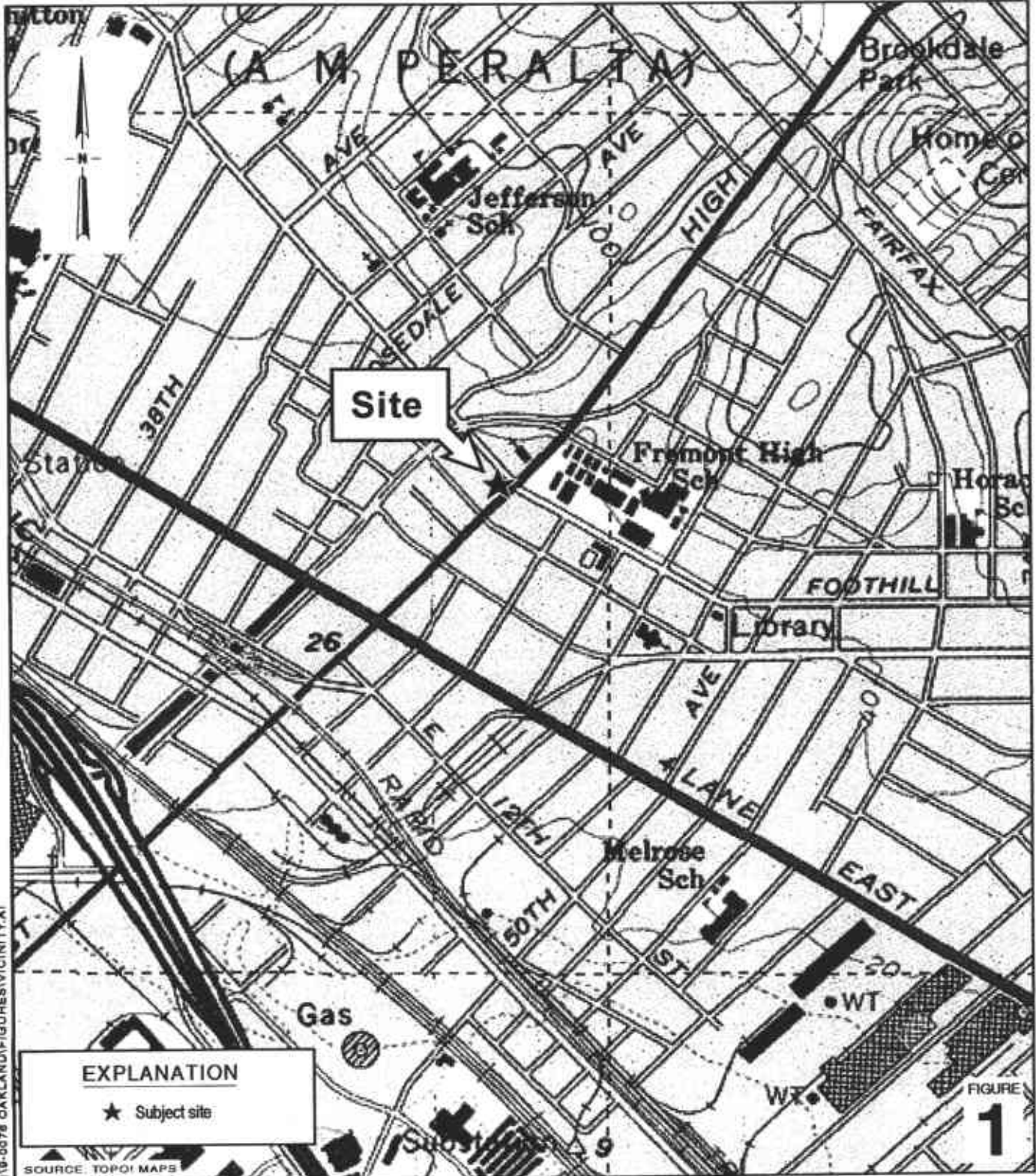
Tables: 1 - Analytic Results for Soil
2 - Analytic Results for Groundwater

Attachments: A - Boring Log
B - Laboratory Analytic Report for Soil
C - Laboratory Analytic Report for Groundwater
D - Alameda County Public Works Agency Well Installation Permit
E - Second Quarter 2003 Monitoring Report
F - Copies of Environmental Reports



CC: Mr. Amir Gholami, Alameda County Health Care Services Agency,
Dept. of Environmental Health, 1131 Harbor Bay Parkway, Alameda, CA 94502
(w/o Attachment F)

I:\9-0076 Oakland\9-0076 add1 investigation for divestment\9-0076 summary-report.doc



1:19-0076 OAKLAND\FIGURES\VICINITY.A1

EXPLANATION

★ Subject site

SOURCE: TOPOI MAPS

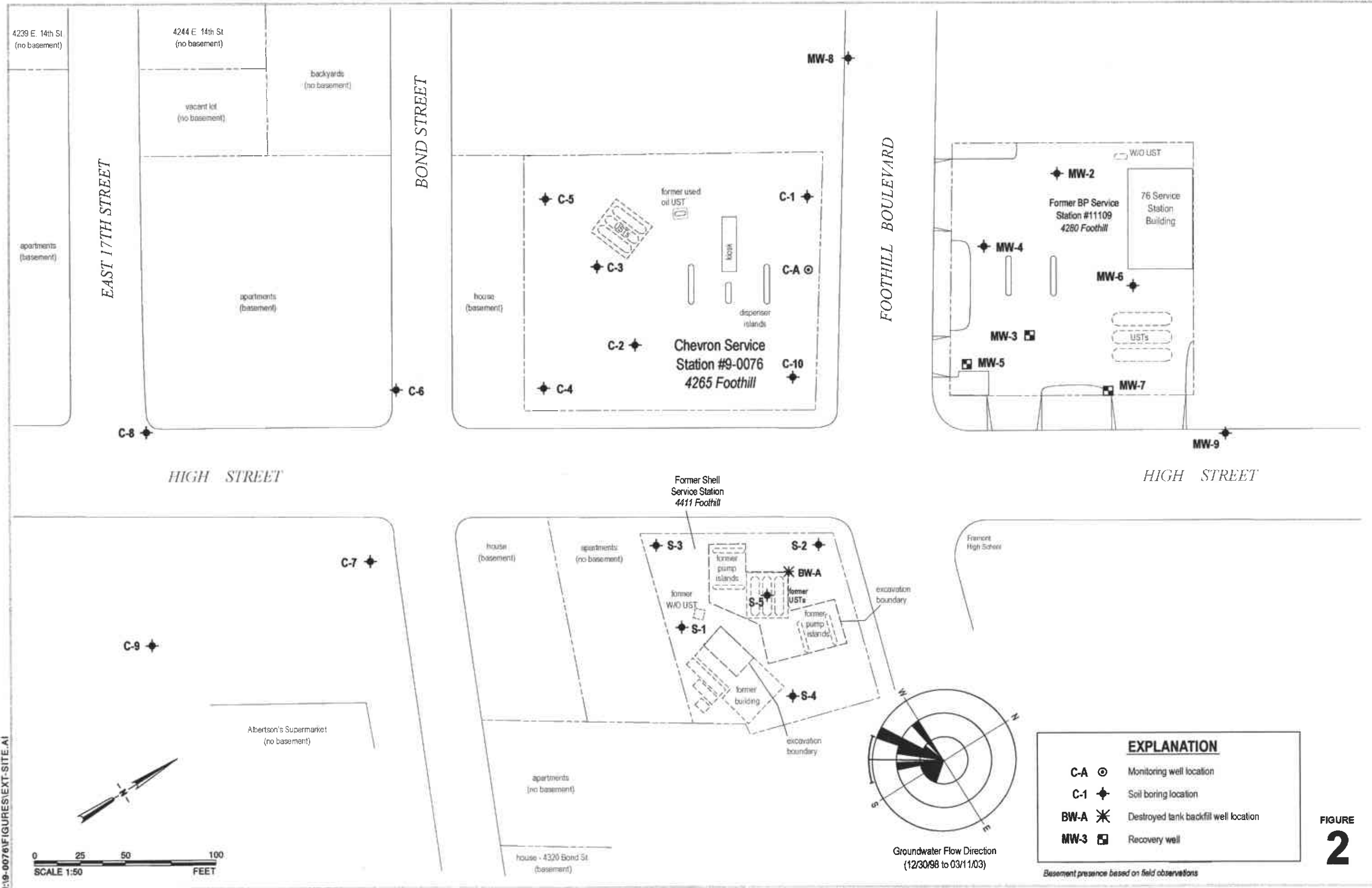
0 1/6 1/3 1/2 1
SCALE : 1" = 1/6 MILE

Chevron Service Station 9-0076
4265 Foothill Boulevard
Oakland, California



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Vicinity Map



Chevron Service Station 9-0076
 4265 Foothill Boulevard
 Oakland, California

FIGURE
2

EXPLANATION	
C-A	Monitoring well location
C-1	Soil boring location
BW-A	Destroyed tank backfill well location
MW-3	Recovery well

Basement presence based on field observations

I:\9-0076\FIGURES\EXT-SITE.A1

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Table 1. Analytic Results for Soil - Chevron Station No. 9-0076,4265 Foothill Boulevard, Oakland, CA

Sample ID	Sample Date	Sample Depth (fbg)	TPHg	B	T	E	X	MTBE*
Concentrations reported in milligrams per kilogram - mg/kg								
C-10@10'	8/8/2003	10	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
C-10@15'	8/8/2003	15	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
C-10@20'	8/8/2003	20	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
C-10@25'	8/8/2003	25	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
C-10@30'	8/8/2003	30	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001

Abbreviations/Notes:

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

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

(MTBE, TBA, ETBE, DIPE, ethanol, 1,2- DCA and EDB) by EPA Method 8260B

<x = Not detected above method detection limit

* no other analytes detected under EPA Method 8260B

fbg = Feet below grade

Table 2. Analytic Results for Groundwater - Chevron Station No. 9-0076,4265 Foothill Boulevard, Oakland, CA

Sample ID	Sample Date	TPHg	B	T	E	X	MTBE	Notes
Concentrations reported in micrograms per liter - µg/l								
C-1	9/9/2003	290	4.0	<1.0	1.0	3.0	710	
C-2	9/9/2003	6,800	1,100	9.0	83	47	1,300	
C-3	9/9/2003	<50	2.0	<0.5	<0.5	<0.5	160	
C-4	9/9/2003	690	8.0	0.8	5.0	5.0	30	
C-5	9/9/2003	-	-	-	-	-	-	Monitored only
C-6	9/9/2003	-	-	-	-	-	-	Inaccessible
C-7	9/9/2003	3,900	310	9.0	110	130	5.0	
C-8	9/9/2003	-	-	-	-	-	-	Monitored only
C-9	9/9/2003	-	-	-	-	-	-	Monitored only
C-10	9/9/2003	<50	<0.5	<0.5	<0.5	0.5	14	

Abbreviations/Notes:

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

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

<x = Not detected above method detection limit

fbg = Feet below grade

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ATTACHMENT A

Boring Log



Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Chevron Products Company	BORING/WELL NAME	C-10
JOB/SITE NAME	9-0076	DRILLING STARTED	08-Aug-03
LOCATION	4265 Foothill Boulevard, Oakland CA	DRILLING COMPLETED	08-Aug-03
PROJECT NUMBER	41D-1977	WELL DEVELOPMENT DATE (YIELD)	09-Sep-03
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	38.69 ft above msl
DRILLING METHOD	Hollow-stem auger	TOP OF CASING ELEVATION	38.37 ft above msl
BORING DIAMETER	8"	SCREENED INTERVAL	10 to 30 fbg
LOGGED BY	I. Robb	DEPTH TO WATER (First Encountered)	24.0 fbg (08-Aug-03)
REVIEWED BY	B. Foss	DEPTH TO WATER (Static)	17.18 fbg (09-Sep-03)
REMARKS	Well installed with limited access drill rig (no blow counts available)		

WELL LOG (TPH-G) 119-0076 OAKLAND-9-0076 ADDL INVESTIGATION FOR DIVESTMENT-9-0076.GPJ DEFAULT.GDT 10/8/03

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
						Vac cleared to 8 fbg		Concrete
								Portland Type I/II
								Bentonite Seal
								Monterey Sand #2/16
<50	NA	C-10@10'	10	SM		Silty SAND with clay: Light Brown; dry; 50% sand, 35% silt, 15% clay; low plasticity, low permeability.	10.5	
<50	NA	C-10@15'	15	SM		Silty Clayey SAND: Light Brown; dry; 40% sand, 35% silt, 20% clay, 5% gravel; moderate plasticity, low permeability.	15.5	
<50	NA	C-10@20'	20	SC		Clayey Sandy SILT: Light Brown; dry; 40% silt, 35% clay, 20% sand, 5% gravel; high plasticity, low permeability.	20.5	
<50	NA	C-10@25'	25	SC		Clayey Sandy SILT: Light Brown; dry; 40% silt, 35% clay, 20% sand, 5% gravel; high plasticity, low permeability.	25.5	
<50	NA	C-10@30'	30	CL		Silty CLAY: Light Brown; dry; 65% clay, 35% silt; high plasticity, low permeability.	30.0	
								2"-diam., 0.010" Slotted Schedule 40 PVC
								Bottom of Boring @ 30 fbg

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ATTACHMENT B

Laboratory Analytic Report for Soil



REPRINT

ANALYTICAL RESULTS

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310

San Ramon CA 94583
925-842-8582

Prepared by:

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

SAMPLE GROUP

The sample group for this submittal is 862623. Samples arrived at the laboratory on Saturday, August 09, 2003. The PO# for this group is 99011184 and the release number is STREICH.

<u>Client Description</u>			<u>Lancaster Labs Number</u>
C-10-S-10-030808	NA	Soil	4098257
C-10-S-15-030808	NA	Soil	4098258
C-10-S-20-030808	NA	Soil	4098259
C-10-S-25-030808	NA	Soil	4098260
C-10-S-30-030808	NA	Soil	4098261

1 COPY TO ChevronTexaco

Attn: Mr. Ian Robb

Questions? Contact your Client Services Representative
Alison M O'Connor at (717) 656-2300.

Respectfully Submitted,


Robert E. Mellinger
Sr. Chemist/Coordinator



Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681



REPRINT

Lancaster Laboratories Sample No. SW 4098257

Collected: 08/08/2003 10:30 by IR

Account Number: 10880

Submitted: 08/09/2003 10:20

ChevronTexaco

Reported: 08/27/2003 at 18:23

6001 Bollinger Canyon Rd L4310

Discard: 09/27/2003

C-10-S-10-030808

NA

Soil

San Ramon CA 94583

Facility# 90076

CETR

4265 Foothill Blvd

T0600100339 C-10

C610-

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Detection Limit	
01725	TPH-GRO - Soils	n.a.	N.D.		1.0	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. 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					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.		0.20	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.001	1.01
02017	di-Isopropyl ether	108-20-3	N.D.		0.001	1.01
02018	Ethyl t-butyl ether	637-92-3	N.D.		0.001	1.01
02019	t-Amyl methyl ether	994-05-8	N.D.		0.001	1.01
02020	t-Butyl alcohol	75-65-0	N.D.		0.020	1.01
05460	Benzene	71-43-2	N.D.		0.001	1.01
05461	1,2-Dichloroethane	107-06-2	N.D.		0.001	1.01
05466	Toluene	108-88-3	N.D.		0.001	1.01
05471	1,2-Dibromoethane	106-93-4	N.D.		0.001	1.01
05474	Ethylbenzene	100-41-4	N.D.		0.001	1.01
06301	Xylene (Total)	1330-20-7	N.D.		0.001	1.01

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date and Time			
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/11/2003	22:29	Steven A Skiles	25



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REPRINT

Lancaster Laboratories Sample No. SW 4098257

Collected: 08/08/2003 10:30 by IR

Account Number: 10880

Submitted: 08/09/2003 10:20

ChevronTexaco

Reported: 08/27/2003 at 18:23

6001 Bollinger Canyon Rd L4310

Discard: 09/27/2003

C-10-S-10-030808 NA Soil

San Ramon CA 94583

Facility# 90076

CETR

4265 Foothill Blvd T0600100339 C-10

C610-

01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/20/2003 20:20	Lisa A Johnson	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	08/15/2003 04:35	Anastasia Papadoplos	1.01
00374	GC/MS VOA Soil Prep	SW-846 5030A	1	08/15/2003 02:34	Anastasia Papadoplos	n.a.
00380	Direct Injection Solids Ext	SW-846 8015B	1	08/20/2003 14:00	Lisa A Johnson	1
01150	GC VOA Soil Prep	SW-846 5035	1	08/11/2003 11:25	Steven A Skiles	n.a.



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REPRINT

Lancaster Laboratories Sample No. SW 4098258

Collected: 08/08/2003 10:37 by IR

Account Number: 10880

Submitted: 08/09/2003 10:20

ChevronTexaco

Reported: 08/27/2003 at 18:23

6001 Bollinger Canyon Rd L4310

Discard: 09/27/2003

C-10-S-15-030808

NA

Soil

San Ramon CA 94583

Facility# 90076

CETR

4265 Foothill Blvd

T0600100339 C-10

C615-

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. The reporting limits were adjusted appropriately. 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					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.001	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.	0.001	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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/11/2003 23:07	Steven A Skiles	25



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REPRINT

Lancaster Laboratories Sample No. SW 4098258

Collected: 08/08/2003 10:37 by IR

Account Number: 10880

Submitted: 08/09/2003 10:20

ChevronTexaco

Reported: 08/27/2003 at 18:23

6001 Bollinger Canyon Rd L4310

Discard: 09/27/2003

C-10-S-15-030808 NA Soil

San Ramon CA 94583

Facility# 90076

CETR

4265 Foothill Blvd T0600100339 C-10

C615-						
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/20/2003 20:59	Lisa A Johnson	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	08/15/2003 05:01	Anastasia Papadoplos	0.99
00374	GC/MS VOA Soil Prep	SW-846 5030A	1	08/15/2003 02:37	Anastasia Papadoplos	n.a.
00380	Direct Injection Solids Ext	SW-846 8015B	1	08/20/2003 14:00	Lisa A Johnson	1
01150	GC VOA Soil Prep	SW-846 5035	1	08/11/2003 11:24	Steven A Skiles	n.a.





REPRINT

Lancaster Laboratories Sample No. SW 4098259

Collected: 08/08/2003 10:42 by IR

Account Number: 10880

Submitted: 08/09/2003 10:20

ChevronTexaco

Reported: 08/27/2003 at 18:23

6001 Bollinger Canyon Rd L4310

Discard: 09/27/2003

C-10-S-20-030808

NA

Soil

San Ramon CA 94583

Facility# 90076

CETR

4265 Foothill Blvd

T0600100339 C-10

C620-

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Detection Limit	
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. The reporting limits were adjusted appropriately. 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					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.		0.20	mg/kg 1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.001	mg/kg 1.01
02017	di-Isopropyl ether	108-20-3	N.D.		0.001	mg/kg 1.01
02018	Ethyl t-butyl ether	637-92-3	N.D.		0.001	mg/kg 1.01
02019	t-Amyl methyl ether	994-05-8	N.D.		0.001	mg/kg 1.01
02020	t-Butyl alcohol	75-65-0	N.D.		0.020	mg/kg 1.01
05460	Benzene	71-43-2	N.D.		0.001	mg/kg 1.01
05461	1,2-Dichloroethane	107-06-2	N.D.		0.001	mg/kg 1.01
05466	Toluene	108-88-3	N.D.		0.001	mg/kg 1.01
05471	1,2-Dibromoethane	106-93-4	N.D.		0.001	mg/kg 1.01
05474	Ethylbenzene	100-41-4	N.D.		0.001	mg/kg 1.01
06301	Xylene (Total)	1330-20-7	N.D.		0.001	mg/kg 1.01

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date and Time			
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/11/2003 23:45		Steven A Skiles	25



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REPRINT

Lancaster Laboratories Sample No. SW 4098259

Collected: 08/08/2003 10:42 by IR

Account Number: 10880

Submitted: 08/09/2003 10:20

ChevronTexaco

Reported: 08/27/2003 at 18:23

6001 Bollinger Canyon Rd L4310

Discard: 09/27/2003

C-10-S-20-030808

NA

Soil

San Ramon CA 94583

Facility# 90076

CETR

4265 Foothill Blvd

T0600100339 C-10

C620-						
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/20/2003 21:12	Lisa A Johnson	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	08/15/2003 05:28	Anastasia Papadoplos	1.01
00374	GC/MS VOA Soil Prep	SW-846 5030A	1	08/15/2003 02:42	Anastasia Papadoplos	n.a.
00380	Direct Injection Solids Ext	SW-846 8015B	1	08/20/2003 14:00	Lisa A Johnson	1
01150	GC VOA Soil Prep	SW-846 5035	1	08/11/2003 11:23	Steven A Skiles	n.a.





REPRINT

Lancaster Laboratories Sample No. SW 4098260

Collected: 08/08/2003 10:52 by IR Account Number: 10880

Submitted: 08/09/2003 10:20 ChevronTexaco
 Reported: 08/27/2003 at 18:23 6001 Bollinger Canyon Rd L4310

Discard: 09/27/2003
 C-10-S-25-030808 NA Soil San Ramon CA 94583

Facility# 90076 CETR
 4265 Foothill Blvd T0600100339 C-10

C625-

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
01725	TPH-GRO - Soils	n.a.	N.D.	Detection Limit	mg/kg	25
The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. 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					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.001	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.	0.001	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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/12/2003 00:23	Steven A Skiles	25



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REPRINT

Lancaster Laboratories Sample No. SW 4098260

Collected: 08/08/2003 10:52 by IR

Account Number: 10880

Submitted: 08/09/2003 10:20

ChevronTexaco

Reported: 08/27/2003 at 18:23

6001 Bollinger Canyon Rd L4310

Discard: 09/27/2003

C-10-S-25-030808 NA Soil

San Ramon CA 94583

Facility# 90076

CETR

4265 Foothill Blvd T0600100339 C-10

Sample ID	Description	SW ID	Quantity	Date/Time	Analyst	Result
C625-01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/20/2003 21:25	Lisa A Johnson	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	08/15/2003 05:54	Anastasia Papadoplos	0.99
00374	GC/MS VOA Soil Prep	SW-846 5030A	1	08/15/2003 02:45	Anastasia Papadoplos	n.a.
00380	Direct Injection Solids Ext	SW-846 8015B	1	08/20/2003 14:00	Lisa A Johnson	1
01150	GC VOA Soil Prep	SW-846 5035	1	08/11/2003 11:22	Steven A Skiles	n.a.





REPRINT

Lancaster Laboratories Sample No. SW 4098261

Collected: 08/08/2003 10:56 by IR

Account Number: 10880

Submitted: 08/09/2003 10:20

ChevronTexaco

Reported: 08/27/2003 at 18:23

6001 Bollinger Canyon Rd L4310

Discard: 09/27/2003

C-10-S-30-030808

NA

Soil

San Ramon CA 94583

Facility# 90076

CETR

4265 Foothill Blvd

T0600100339 C-10

C630-

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
01725	TPH-GRO - Soils	n.a.	N.D.	Detection Limit	mg/kg	25
The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. 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					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.001	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.	0.001	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/12/2003 01:01	Steven A Skiles	25



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REPRINT

Lancaster Laboratories Sample No. SW 4098261

Collected: 08/08/2003 10:56 by IR

Account Number: 10880

Submitted: 08/09/2003 10:20

ChevronTexaco

Reported: 08/27/2003 at 18:23

6001 Bollinger Canyon Rd L4310

Discard: 09/27/2003

C-10-S-30-030808

NA

Soil

San Ramon CA 94583

Facility# 90076

CETR

4265 Foothill Blvd

T0600100339 C-10

C630-						
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/20/2003 21:38	Lisa A Johnson	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	08/15/2003 06:20	Anastasia Papadoplos	1
00374	GC/MS VOA Soil Prep	SW-846 5030A	1	08/15/2003 02:48	Anastasia Papadoplos	n.a.
00380	Direct Injection Solids Ext	SW-846 8015B	1	08/20/2003 14:00	Lisa A Johnson	1
01150	GC VOA Soil Prep	SW-846 5035	1	08/11/2003 11:21	Steven A Skiles	n.a.



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REPRINT

Quality Control Summary

Client Name: ChevronTexaco
 Reported: 08/27/03 at 06:23 PM

Group Number: 862623

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 03220A34B TPH-GRO - Soils	N.D.	1.0	mg/kg	93		70-130		
Batch number: 032320000A Ethanol (by Direct Injection)	N.D.	200.	ug/kg	98		85-121		
Batch number: X032251AB Methyl Tertiary Butyl Ether	N.D.	1.	ug/kg	104		75-125		
di-Isopropyl ether	N.D.	1.	ug/kg	97		70-129		
Ethyl t-butyl ether	N.D.	1.	ug/kg	99		71-124		
t-Amyl methyl ether	N.D.	1.	ug/kg	98		70-122		
t-Butyl alcohol	N.D.	20.	ug/kg	97		46-158		
Benzene	N.D.	1.	ug/kg	93		83-118		
1,2-Dichloroethane	N.D.	1.	ug/kg	100		76-126		
Toluene	N.D.	1.	ug/kg	86		81-116		
1,2-Dibromoethane	N.D.	1.	ug/kg	91		77-114		
Ethylbenzene	N.D.	1.	ug/kg	87		82-115		
Xylene (Total)	N.D.	1.	ug/kg	89		82-117		

Sample Matrix Quality Control

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 03220A34B TPH-GRO - Soils	92	82	70-130	11	30				
Batch number: 032320000A Ethanol (by Direct Injection)	93	92	73-109	1	20				
Batch number: X032251AB Methyl Tertiary Butyl Ether	87	91	57-136	4	30				
di-Isopropyl ether	70	83	55-132	17	30				
Ethyl t-butyl ether	75	86	58-127	14	30				
t-Amyl methyl ether	78	88	58-126	12	30				
t-Butyl alcohol	81	96	14-185	17	30				
Benzene	61	76	52-141	21	30				
1,2-Dichloroethane	75	84	57-137	12	30				
Toluene	58	71	53-137	20	30				
1,2-Dibromoethane	74	83	61-125	12	30				
Ethylbenzene	56	69	50-136	21	30				

*- Outside of specification

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





REPRINT

Quality Control Summary

Client Name: ChevronTexaco
 Reported: 08/27/03 at 06:23 PM

Group Number: 862623

Sample Matrix Quality Control

<u>Analysis Name</u>	<u>MS</u>	<u>MSD</u>	<u>MS/MSD</u>	<u>RPD</u>	<u>BKG</u>	<u>DUP</u>	<u>DUP</u>	<u>Dup</u>
	<u>%REC</u>	<u>%REC</u>	<u>Limits</u>	<u>RPD</u>	<u>MAX</u>	<u>Conc</u>	<u>Conc</u>	<u>RPD</u>
								<u>Max</u>
Xylene (Total)	58	71	47-139	21	30			

Surrogate Quality Control

Analysis Name: TPH-GRO - Soils
 Batch number: 03220A34B
 Trifluorotoluene-F

4098257	99
4098258	95
4098259	99
4098260	93
4098261	98
lank	102
LS	105
MS	90
MSD	91

Limits: 66-117

Analysis Name: Methanol and Ethanol
 Batch number: 032320000A
 Acetone

4098257	94
4098258	97
4098259	106
4098260	101
4098261	112
Blank	105
LCS	103
MS	98
MSD	98

Limits: 55-127

Analysis Name: BTEX+5 Oxygenates+EDC+EDB
 Batch number: X032251AB

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4098257	92	92	94	91

*- Outside of specification

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





REPRINT

Quality Control Summary

Client Name: ChevronTexaco
Reported: 08/27/03 at 06:23 PM

Group Number: 862623

Surrogate Quality Control

4098258	94	97	92	91
4098259	91	93	94	91
4098260	93	96	93	93
4098261	93	98	95	91
Blank	90	88	95	92
LCS	95	93	90	94
MS	95	94	92	94
MSD	92	92	91	94

Limits:	70-129	70-121	70-130	70-128
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*- Outside of specification

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



Lancaster Laboratories, Inc.
2425 New Holland Pike
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Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Chevron California Region Analysis Request/Chain of Custody



080803-011

For Lancaster Laboratories use only
 Acct. #: 10880 Sample #: 4098257-61 SCR#: 862623

Facility #: 9-0076
 Site Address: 4265 Foothill Blvd OAKLAND, CA
 Chevron PM: Karen Strick Lead Consultant: CAMBERIA
 Consultant/Office: EMERYVILLE
 Consultant Prj. Mgr.: IAN REBB
 Consultant Phone #: (510) 420-3357 Fax #: (510) 420-4170
 Sampler: IAN REBB
 Service Order #: _____ Non SAR:

Analyses Requested

Preservation Codes									
Total Number of Containers									
BTEX + MTBE	8260	8021							
TPH 8015 MOD	GRO								
TPH 8015 MOD DRO	<input type="checkbox"/> Silica Gel Cleanup								
8260 full scan									
Oxygenates									
Lead 7420	<input type="checkbox"/> 7421								

Preservative Codes

H = HCl T = Thiosulfate
 N = HNO₃ B = NaOH
 S = H₂SO₄ 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

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	Lead 7420	7421	
C-6 @ 10'				03-08-08	10:30				1	X	X									X	
C-6 @ 15'				03-08-08	10:37				↓	↓	↓									↓	
C-6 @ 20'				03-08-08	10:42				↓	↓	↓									↓	
C-6 @ 25'				03-08-08	10:52				↓	↓	↓									↓	
C-6 @ 30'				03-08-08	10:56				↓	↓	↓									↓	

Comments / Remarks

*Remall with
 TRA
 TAME
 ETBE
 DIPE
 ETHANOL
 leads... (1/2 OA, and EDB)
 by SAGCB

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: <u>[Signature]</u>	Date: <u>8/8/03</u>	Time: <u>14:30</u>	Received by: <u>[Signature]</u>	Date: <u>8/8/03</u>	Time: <u>17:30</u>
Relinquished by: <u>[Signature]</u>	Date: <u>8/8/03</u>	Time: <u>14:50</u>	Received by: <u>[Signature]</u>	Date: <u>8/8/03</u>	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by Commercial Carrier: _____	Received by: <u>[Signature]</u>		Date: <u>8/19/03</u>	Time: <u>8:100</u>	
UPS FedEx Other: <u>Airborne</u>	Temperature Upon Receipt: <u>41.0</u> C°		Custody Seals Intact: <u>Yes</u> No		

Chevron California Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only

Acct. #: _____ Sample #: _____ SCR#: _____

Facility #: 9-0076
 Site Address: 4365 Redwood Blvd. OAKLAND, CA
 Chevron PM: Kenan Strick Lead Consultant: CAMPBELL
 Consultant/Office: EMERYVILLE
 Consultant Prj. Mgr.: Jan R. Lb
 Consultant Phone #: (916) 420-3383 Fax #: (916) 420-9170
 Sampler: Jan R. Lb
 Service Order #: _____ Non SAR: _____

Analyses Requested

Preservation Codes

Total Number of Containers	BTEX + MTBE 8260 <input type="checkbox"/> 8021 <input type="checkbox"/>	TPH 8015 MOD GRO	TPH 8015 MOD DRO <input type="checkbox"/> Silica Gel Cleanup	8260 full scan	Oxygenates	Lead 7420 <input type="checkbox"/> 7421 <input type="checkbox"/>														

Preservative Codes
 H = HCl T = Thiosulfate
 N = HNO₃ B = NaOH
 S = H₂SO₄ 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

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 <input type="checkbox"/> 8021 <input type="checkbox"/>	TPH 8015 MOD GRO	TPH 8015 MOD DRO <input type="checkbox"/> Silica Gel Cleanup	8260 full scan	Oxygenates	Lead 7420 <input type="checkbox"/> 7421 <input type="checkbox"/>
C-10 @ 10'				03-02-08	10:30					X	X				
C-10 @ 15'				03-08-08	10:37										
C-10 @ 20'				03-08-08	10:42										
C-10 @ 25'				03-08-08	10:47										
C-10 @ 30'				03-08-08	10:52										
↑															
all C-6 should be C-10 															

Comments / Remarks
 TGA
 DIME
 DIME
 DIME
 DIME
 out of calibration (-100 ppm and 0.1%)
 by WCB

Turnaround Time Requested (TAT) (please circle) STD. TAT: 72 hour 48 hour 24 hour 4 day 5 day	Relinquished by:	Date: 03/10/08	Time: 10:00	Received by:	Date:	Time:
	Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	Relinquished by Commercial Carrier: UPS FedEx Other _____	Received by:			Date:	Time:
Data Package Options (please circle if required)	QC Summary Type I - Full Type VI (Raw Data) <input type="checkbox"/> Coelt Deliverable not needed WIP (RWQCB) Disk					
Temperature Upon Receipt _____ C°				Custody Seals Intact? Yes No		

C A M B R I A



ATTACHMENT C

Laboratory Analytical Report for Groundwater



GETTLER-RYAN Inc.
TRANSMITTAL

September 24, 2003

G-R #386495

TO: Mr. Robert Foss
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, California 94608

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

RE: **Chevron Service Station**
#9-0076
4265 Foothill Blvd.
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
1	Field Data Sheets & Laboratory Analytical Results Well Development Event of September 9, 2003

COMMENTS:

Pursuant to your request, we are providing you with copies of the Field Data Sheets and Laboratory Analytical Results for the Well Development Event.

Enclosures

cc: Ms. Karen Streich, Chevron Products Company, P.O. Box 6004, San Ramon, CA 94583



GETTLER-RYAN INC.

GROUNDWATER MONITORING SUMMARY SHEET

CLIENT/
 FACILITY: ChevronTexaco #9-0076
 ADDRESS: 4265 Foothill Blvd.
 CITY: Oakland, CA

JOB #: 386495
 DATE: 9.9.03 (inclusive)
 SAMPLER: FT

Well ID	Total Well Depth	Depth to Water	Product Thickness (ft)	List Item IN Well	Additional Comments	
C-1	38.05	16.75	⊕	ORC	24.0	
C-2	36.55	21.14	↓	ORC	17.5	
C-3	39.51	20.70		21.0		
C-4	39.52	20.79		ORC	21.0	
C-5	44.11	20.68		"MONITORED ONLY"		
C-6	53.73				"INACCESSIBLE"	
C-7	50.93	31.81	⊕		10.0	
C-8	56.32	26.11	↓		"MONITORED ONLY"	
C-9	45.18	25.80				↓
C-10	29.98 (30.00)	17.18				22.0
					115.5 TOTAL	
					PURPOSE	

Comments _____

WELL MONITORING/DEVELOPMENT FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-0076 Job Number: 386495
 Site Address: 4265 Foothill Blvd. Event Date: 9.9.03
 City: Oakland, CA Sampler: FT

Well ID: C-10 Date Monitored: 9.9.03 Well Condition: NEW WELL
 Well Diameter: 2 in.
 Initial Total Depth: 29.98 ft.
 Final Total Depth: 30.00 ft.
 Depth to Water: 17.18 ft.
12.80 xVF .17 = 2.17 x10 (case volume) = Estimated Purge Volume: 21.76 gal.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Purge Equipment:
 Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump
 Suction Pump _____
 Grundfos _____
 Other: _____

Sampling Equipment:
 Disposable Bailer
 Pressure Bailer _____
 Discrete Bailer _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Bailed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: _____ ft
 Visual Confirmation/Description: _____
 Skimmer / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Product Transferred to: _____

Start Time (purge): 4:43 Weather Conditions: CLOUDY
 Sample Time/Date: 5:15 / 9.9.03 Water Color: MILKY/BL. TRP Odor: NO
 Purging Flow Rate: 2.0 gpm. Sediment Description: _____
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (°C)	D.O. (mg/L)	ORP (mV)
4:44	2.2	7.89	135.6	20.7		
4:45	4.4	7.78	127.6	20.5		
4:46	6.6	7.69	123.0	20.2		
4:47	8.8	7.72	119.9	20.0		
4:48	11.0	7.67	117.7	19.8		
4:49	13.2	7.62	139.8	19.8		
4:51	15.4	7.61	160.7	20.0		
4:54	17.6	7.70	162.8	20.1		
4:57	19.8	7.75	157.6	20.4		
5:00	22.0	7.74	155.4	20.3		

slow
: change
↓

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
C-10	6 x voa vial	YES	HCL	LANCASTER	TPH-G(8015)/BTEX+MTBE(8260Y) ETHANOL(8260)

COMMENTS: _____

Add/Replaced Lock: Add/Replaced Plug: _____ Size: _____

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to well development, each well is monitored for the presence of free-phase hydrocarbons and the depth to water is recorded. Wells are then developed by alternately surging the well with the bailer, then purging the well with a pump to remove accumulated sediments and draw groundwater into the well. Development continues until the groundwater parameters (temperature, pH, and conductivity) have stabilized.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4NC for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Products Company, the purge water and decontamination water generated during sampling activities is transported by IWM to McKittrick Waste Management located in McKittrick, California.

Chevron California Region Analysis Request/Chain of Custody



091003-001

Acct. #: 10904 For Lancaster Laboratories use only Sample #: 4119645-51 SCR#: _____
 Cr. # 866597

Facility #: SS#9-0076 G-R#386495 Global ID#T0600100339
 Site Address: 4265 FOOTHILL BLVD., OAKLAND, CA
 Chevron PM: KS Lead Consultant: CAMBRIA
 Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, Ca. 94568
 Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)
 Consultant Phone #: 925-551-7555 Fax #: 925-551-7899
 Sampler: FRANK TERRINONI
 Service Order #: _____ Non SAR: _____

Matrix		Analyses Requested																		
		Preservation Codes																		
Soil	Water	Oil	Air	Total Number of Containers							ETHANOL (8260)									
<input type="checkbox"/> Potable <input type="checkbox"/> NPDES																				

Preservative Codes
 H = HCl T = Thiosulfate
 N = HNO₃ B = NaOH
 S = H₂SO₄ 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

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	ETHANOL (8260)
QA	9.9.03								2	XX
C-1		1149		X					6	XX
C-2		1155		X					6	XX
C-3		1035		X					6	XX
C-4		1219		X					6	XX
C-7		1112		X					6	XX
C-10		1715		X					6	XX

Comments / Remarks

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: <u>[Signature]</u>	Date: <u>9.9.03</u>	Time: <u>1530</u>	Received by: <u>[Signature]</u>	Date: <u>9/10/03</u>	Time: <u>0600</u>
Relinquished by: <u>[Signature]</u>	Date: <u>9/10/03</u>	Time: <u>1130</u>	Received by: <u>[Signature]</u>	Date: <u>9/10/03</u>	Time: <u>1145</u>
Relinquished by: <u>[Signature]</u>	Date: <u>9/10/03</u>	Time: <u>1445</u>	Received by: <u>Airborne</u>	Date: <u>9/10/03</u>	Time: _____
Relinquished by Commercial Carrier: <u>Airborne</u>	UPS	FedEx	Other: <u>Airborne</u>	Received by: <u>[Signature]</u>	Date: <u>9/10/03</u>
Temperature Upon Receipt: <u>25</u> °C	Custody Seals Intact? <input checked="" type="radio"/> Yes <input type="radio"/> No				

ANALYTICAL RESULTS

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310San Ramon CA 94583
925-842-8582

Prepared by:

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

SAMPLE GROUP

The sample group for this submittal is 866597. Samples arrived at the laboratory on Thursday, September 11, 2003. The PO# for this group is 99011184 and the release number is STREICH.

<u>Client Description</u>		<u>Lancaster Labs Number</u>
QA-T-030909	NA Water	4119645
C-1-W-030909	Grab Water	4119646
C-2-W-030909	Grab Water	4119647
C-3-W-030909	Grab Water	4119648
C-4-W-030909	Grab Water	4119649
C-7-W-030909	Grab Water	4119650
C-10-W-030909	Grab Water	4119651

ELECTRONIC Gettler-Ryan

Attn: Cheryl Hansen

COPY TO

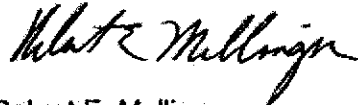
1 COPY TO

Cambria C/O Gettler- Ryan

Attn: Deanna L. Harding

Questions? Contact your Client Services Representative
Teresa L Cunningham at (717) 656-2300.

Respectfully Submitted,



Robert E. Mellinger
Senior Chemist, Coordinator

Lancaster Laboratories Sample No. WW 4119645

Collected: 09/09/2003 00:00

Account Number: 10904

Submitted: 09/11/2003 09:20

ChevronTexaco

Reported: 09/21/2003 at 21:45

6001 Bollinger Canyon Rd L4310

Discard: 10/22/2003

QA-T-030909

NA

Water

San Ramon CA 94583

Facility# 90076 Job# 386495

GRD

4265 Foothill Oakland T0600100339 QA

495QA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
01728	TPH-GRO - Waters	n.a.	N.D.	Detection Limit 50.	ug/l	1
	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.					
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
06054	BTEX+MTBE by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date and Time			
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	09/15/2003 02:46		Linda C Pape	1
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	09/15/2003 04:13		Elizabeth M Taylor	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/15/2003 02:46		Linda C Pape	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	09/15/2003 04:13		Elizabeth M Taylor	n.a.

Lancaster Laboratories Sample No. WW 4119646

Collected: 09/09/2003 11:49 by FT

Account Number: 10904

 Submitted: 09/11/2003 09:20
 Reported: 09/21/2003 at 21:46
 Discard: 10/22/2003

 ChevronTexaco
 6001 Bollinger Canyon Rd L4310

C-1-W-030909

Grab Water

San Ramon CA 94583

 Facility# 90076 Job# 386495 GRD
 4265 Foothill Oakland T0600100339 C-1

495C1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	290.	50.	ug/l	1
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. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.						
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	100.	ug/l	2
02010	Methyl Tertiary Butyl Ether	1634-04-4	710.	10.	ug/l	20
05401	Benzene	71-43-2	4.	1.	ug/l	2
05407	Toluene	108-88-3	N.D.	1.	ug/l	2
05415	Ethylbenzene	100-41-4	1.	1.	ug/l	2
06310	Xylene (Total)	1330-20-7	3.	1.	ug/l	2
Due to the level of methyl tertiary butyl ether, the reporting limits for all GC/MS volatile compounds were raised.						

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	09/14/2003 01:36	Martha L Seidel	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	09/18/2003 04:08	Elizabeth M Taylor	2
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	09/18/2003 04:34	Elizabeth M Taylor	20
01146	GC VOA Water Prep	SW-846 5030B	1	09/14/2003 01:36	Martha L Seidel	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	09/18/2003 04:08	Elizabeth M Taylor	n.a.

Lancaster Laboratories Sample No. WW 4119647

Collected: 09/09/2003 11:55 by FT

Account Number: 10904

Submitted: 09/11/2003 09:20

ChevronTexaco

Reported: 09/21/2003 at 21:46

6001 Bollinger Canyon Rd L4310

Discard: 10/22/2003

C-2-W-030909

Grab

Water

San Ramon CA 94583

Facility# 90076 Job# 386495

GRD

4265 Foothill Oakland T0600100339 C-2

495C2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received	Units	Dilution Factor
				Method Detection Limit		
01728	TPH-GRO - Waters	n.a.	6,800.	1,000.	ug/l	20
	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.					
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	200.	ug/l	4
02010	Methyl Tertiary Butyl Ether	1634-04-4	1,300.	20.	ug/l	40
05401	Benzene	71-43-2	1,100.	2.	ug/l	4
05407	Toluene	108-88-3	9.	2.	ug/l	4
05415	Ethylbenzene	100-41-4	83.	2.	ug/l	4
06310	Xylene (Total)	1330-20-7	47.	2.	ug/l	4

The reporting limits for the GC/MS volatile compounds were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis	Analyst	Dilution Factor
				Date and Time		
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	09/15/2003 12:06	Michael F Barrow	20
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	09/18/2003 05:00	Elizabeth M Taylor	4
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	09/18/2003 05:27	Elizabeth M Taylor	40
01146	GC VOA Water Prep	SW-846 5030B	1	09/15/2003 12:06	Michael F Barrow	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	09/18/2003 05:00	Elizabeth M Taylor	n.a.

Lancaster Laboratories Sample No. WW 4119648

Collected: 09/09/2003 10:35 by FT

Account Number: 10904

Submitted: 09/11/2003 09:20

ChevronTexaco

Reported: 09/21/2003 at 21:46

6001 Bollinger Canyon Rd L4310

Discard: 10/22/2003

C-3-W-030909

Grab Water

San Ramon CA 94583

Facility# 90076 Job# 386495

GRD

4265 Foothill Oakland T0600100339 C-3

495C3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
01728	TPH-GRO - Waters	n.a.	N.D.	Detection Limit 50.	ug/l	1
	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.					
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	160.	0.5	ug/l	1
05401	Benzene	71-43-2	2.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01728	TPH-GRO - Waters	N. CA LUFT Gasoline	1	09/15/2003 09:24	Todd T Smythe	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	09/18/2003 05:54	Elizabeth M Taylor	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/15/2003 09:24	Todd T Smythe	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	09/18/2003 05:54	Elizabeth M Taylor	n.a.

Lancaster Laboratories Sample No. WW 4119649

Collected: 09/09/2003 12:19 by FT

Account Number: 10904

Submitted: 09/11/2003 09:20

ChevronTexaco

Reported: 09/21/2003 at 21:46

6001 Bollinger Canyon Rd L4310

Discard: 10/22/2003

C-4-W-030909

Grab Water

San Ramon CA 94583

Facility# 90076 Job# 386495

GRD

4265 Foothill Oakland T0600100339 C-4

495C4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01728	TPH-GRO - Waters	n.a.	690.		50.	ug/l	1
	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.						
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH						
01587	Ethanol	64-17-5	N.D.		50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	30.		0.5	ug/l	1
05401	Benzene	71-43-2	8.		0.5	ug/l	1
05407	Toluene	108-88-3	0.8		0.5	ug/l	1
05415	Ethylbenzene	100-41-4	5.		0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	5.		0.5	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	09/15/2003 09:56	Todd T Smythe	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	09/18/2003 06:20	Elizabeth M Taylor	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/15/2003 09:56	Todd T Smythe	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	09/18/2003 06:20	Elizabeth M Taylor	n.a.

Lancaster Laboratories Sample No. WW 4119650

Collected: 09/09/2003 11:12 by FT

Account Number: 10904

Submitted: 09/11/2003 09:20

ChevronTexaco

Reported: 09/21/2003 at 21:46

6001 Bollinger Canyon Rd L4310

Discard: 10/22/2003

C-7-W-030909

Grab

Water

San Ramon CA 94583

Facility# 90076 Job# 386495

GRD

4265 Foothill Oakland T0600100339 C-7

495C7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01728	TPH-GRO - Waters	n.a.	3,900.		250.	ug/l	5
	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.						
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH						
01587	Ethanol	64-17-5	N.D.		50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	5.		0.5	ug/l	1
05401	Benzene	71-43-2	310.		2.	ug/l	4
05407	Toluene	108-88-3	9.		0.5	ug/l	1
05415	Ethylbenzene	100-41-4	110.		0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	130.		0.5	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date and Time			
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	09/15/2003	11:34	Michael F Barrow	5
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	09/18/2003	06:46	Elizabeth M Taylor	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	09/19/2003	18:59	Elizabeth M Taylor	4
01146	GC VOA Water Prep	SW-846 5030B	1	09/15/2003	11:34	Michael F Barrow	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	09/18/2003	06:46	Elizabeth M Taylor	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	2	09/19/2003	18:59	Elizabeth M Taylor	n.a.

Lancaster Laboratories Sample No. WW 4119651

Collected: 09/09/2003 17:15 by FT

Account Number: 10904

Submitted: 09/11/2003 09:20

ChevronTexaco

Reported: 09/21/2003 at 21:46

6001 Bollinger Canyon Rd L4310

Discard: 10/22/2003

C-10-W-030909

Grab

Water

San Ramon CA 94583

Facility# 90076 Job# 386495

GRD

4265 Foothill Oakland T0600100339 C-10

49510

CAT No.	Analysis Name	CAS Number	As Received Result	As Received	Units	Dilution Factor
				Method		
				Detection Limit		
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
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.						
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	14.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	0.5	0.5	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis	Analyst	Dilution Factor
				Date and Time		
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	09/15/2003 10:29	Michael F Barrow	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	09/18/2003 07:39	Elizabeth M Taylor	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/15/2003 10:29	Michael F Barrow	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	09/18/2003 07:39	Elizabeth M Taylor	n.a.

Quality Control Summary

Client Name: ChevronTexaco

Group Number: 866597

Reported: 09/21/03 at 09:46 PM

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 03256A51A TPH-GRO - Waters	Sample number(s): 4119646 N.D.	50.	ug/l	105	111	70-130	5	30
Batch number: 03256A51B TPH-GRO - Waters	Sample number(s): 4119645 N.D.	50.	ug/l	105	111	70-130	5	30
Batch number: 03258A07A TPH-GRO - Waters	Sample number(s): 4119647-4119651 N.D.	50.	ug/l	96		70-130		
Batch number: P032572AA Methyl Tertiary Butyl Ether	Sample number(s): 4119645 N.D.	0.5	ug/l	97		77-127		
Benzene	N.D.	0.5	ug/l	100		85-117		
Toluene	N.D.	0.5	ug/l	100		85-115		
Ethylbenzene	N.D.	0.5	ug/l	100		82-119		
Xylene (Total)	N.D.	0.5	ug/l	100		84-120		
Batch number: P032603AA Ethanol	Sample number(s): 4119646-4119651 N.D.	50.	ug/l	106		46-145		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	99		77-127		
Benzene	N.D.	0.5	ug/l	98		85-117		
Toluene	N.D.	0.5	ug/l	95		85-115		
Ethylbenzene	N.D.	0.5	ug/l	96		82-119		
Xylene (Total)	N.D.	0.5	ug/l	97		84-120		
Batch number: P032621AA Benzene	Sample number(s): 4119650 N.D.	0.5	ug/l	101		85-117		

Sample Matrix Quality Control

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 03256A51A TPH-GRO - Waters	Sample number(s): 4119646 118		63-154					
Batch number: 03256A51B TPH-GRO - Waters	Sample number(s): 4119645 118		63-154					
Batch number: 03258A07A TPH-GRO - Waters	Sample number(s): 4119647-4119651 104	103	63-154	1	30			
Batch number: P032572AA Methyl Tertiary Butyl Ether	Sample number(s): 4119645 106	105	69-134	0	30			
Benzene	107	107	83-128	0	30			
Toluene	109	108	83-127	1	30			
Ethylbenzene	108	108	82-129	0	30			
Xylene (Total)	108	107	82-130	1	30			
Batch number: P032603AA Ethanol	Sample number(s): 4119646-4119651 110	112	38-149	2	30			
Methyl Tertiary Butyl Ether	99	100	69-134	1	30			
Benzene	104	105	83-128	1	30			
Toluene	103	104	83-127	2	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: ChevronTexaco
Reported: 09/21/03 at 09:46 PM

Group Number: 866597

Sample Matrix Quality Control

Analysis Name	MS	MSD	MS/MSD	RPD	BKG	DUP	DUP	Dup RPD
	%REC	%REC	Limits	RPD	MAX	Conc	Conc	RPD
								Max
Ethylbenzene	102	104	82-129	2	30			
Xylene (Total)	103	103	82-130	1	30			
Batch number: P032621AA	Sample number(s): 4119650							
Benzene	107	107	83-128	0	30			

Surrogate Quality Control

Analysis Name: TPH-GRO - Waters
Batch number: 03256A51A
Trifluorotoluene-F

4119646	105
Blank	105
LCS	105
LCSD	104
MS	103

Limits: 57-146

Analysis Name: TPH-GRO - Waters
Batch number: 03256A51B
Trifluorotoluene-F

4119645	100
Blank	102
LCS	105
LCSD	104
MS	103

Limits: 57-146

Analysis Name: TPH-GRO - Waters
Batch number: 03258A07A
Trifluorotoluene-F

4119647	92
4119648	87
4119649	101
4119650	106
4119651	80
Blank	80
LCS	104
MS	110
MSD	108

Limits: 57-146

Analysis Name: BTEX+MTBE by 8260B
Batch number: P032572AA
Dibromofluoromethane

1,2-Dichloroethane-d4

Toluene-d8

4-Bromofluorobenzene

*- 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: ChevronTexaco
 Reported: 09/21/03 at 09:46 PM

Group Number: 866597

Surrogate Quality Control

4119645	92	94	92	90
Blank	90	91	93	91
LCS	91	91	91	89
MS	93	93	92	88
MSD	91	92	92	90

Limits:	81-120	82-112	85-112	83-113
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 Analysis Name: BTEX+5 Oxygenates+EDC+EDB+ETOH
 Batch number: P032603AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4119646	100	100	97	98
4119647	101	99	96	101
4119648	100	99	97	99
4119649	100	98	98	100
4119650	99	95	97	101
4119651	100	100	98	99
Blank	101	99	96	99
LCS	100	98	98	100
MS	100	96	96	100
MSD	100	98	97	100

Limits:	81-120	82-112	85-112	83-113
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 Analysis Name: 8260 Master Scan (water)
 Batch number: P032621AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Blank	101	99	96	99
LCS	101	99	97	100
MS	101	99	96	100
MSD	100	99	96	100

Limits:	81-120	82-112	85-112	83-113
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*- 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.

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
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value - The result falls within the Method Detection Limit (MDL) and Limit of Quantitation (LOQ).		
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. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	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.

Measurement uncertainty values, as applicable, are available upon request.

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.

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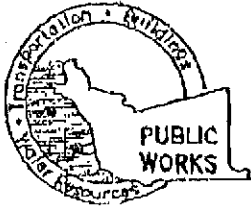
C A M B R I A

Alameda County
1001 170
Environmental Health



ATTACHMENT D

**Alameda County Public Works Agency
Well Installation Permit**



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
 399 ELMHURST ST. HAYWARD CA. 94544-1395
 PHONE (510) 670-5553
 FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT _____
4825 Foothill Boulevard
OAKLAND, CA

CLIENT
 Name CHARLES TEXACO, ATTN: KAREN STREICH
 Address 6601 BOLLINGER CANYON Phone (415) 842-1587
 City SAN RAMON Zip 94583

APPLICANT
 Name IAN Robb of CAMBRIA
ENVIRONMENTAL Fax (510) 420-9170
 Address _____ Phone _____
 City _____ Zip _____

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input checked="" type="checkbox"/>
Monitoring	<input checked="" type="checkbox"/>	Well Destruction	<input type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other _____	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Gregg Drilling

DRILLER'S LICENSE NO. 485-165

WELL PROJECTS

Drill Hole Diameter	<u>8</u> in.	Maximum Depth	<u>55</u> ft.
Casing Diameter	<u>2</u> in.	Owner's Well Number	<u>MW-X</u>
Surface Seal Depth	<u>15</u> ft.		

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum Depth	<u>55</u> ft.
Hole Diameter	_____ in.		

ESTIMATED STARTING DATE 8/15/03
 ESTIMATED COMPLETION DATE 9/15/03

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] DATE 7/16/03

PLEASE PRINT NAME Ian Robb Rev. 5-13-00

FOR OFFICE USE

PERMIT NUMBER W03 0680
 WELL NUMBER _____
 APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

1 MWL ATTACHED

APPROVED [Signature] DATE 8/21/03

C A M B R I A



ATTACHMENT E

Second Quarter 2003 Monitoring Report