RECEIVED

CAMBRIA

By lopprojectop at 3:03 pm, Jan 19, 2006

January 18, 2006

Mr. Jerry Wickham Alameda County Environmental Health Services (ACEHS) 1131 Harbor Bay Parkway Alameda, CA 94502

Re:

Workplan for Site Excavation

Chevron Site #304291 (Former Chevron SS #3-0261) 3884 First Street Livermore, California Fuel Leak Case No. RO0002611, Cambria Project No. 31H-2036



Dear Mr. Wickham:

On behalf of Chevron Environmental Management Company (Chevron), Cambria Environmental Technology, Inc. (Cambria) has prepared the attached *Soil Management Plan* (SMP) for the referenced site (Figure 1). The property is in the process of being sold to a developer who proposes to develop the property as townhomes and an associated community center. Construction plans provided by the developer indicate the former Chevron site will primarily consist of a swimming pool, parking area and landscaping.

Cambria's Additional Subsurface Investigation Report, dated October 18, 2005, proposed a limited excavation of impacted soils in the vicinities of both the first and second generation USTs and the northern second generation dispenser island, to be performed prior to site development.

Excavation is proposed to begin on February 13, 2006 and is anticipated to continue through March 3, 2006, baring unforeseen circumstances. Please contact me at (510) 420-3367 with any questions or comments.

Sincerely,

Cambria Environmental Technology, Inc.

Laura Genin

Senior Staff Geologist

Tours Di

cc:

Strata

Mr. Steven Clowdsley (clowdsley@aol.com), Real Estate Consulting, 1561

Ramona Way, Alamo, CA 94507

Cambria Environmental Technology, Inc.

Attached:

Soil Management Plan

5900 Hollis Street Suite A Emeryville, CA 94608 Tel (510) 420-0700 Fax (510) 420-9170

Soil Management Plan (SMP) 3884 First Street Livermore, California November 17, 2005

Cambria Environmental Technology, Inc. (Cambria) on behalf of Chevron Environmental Management Company (Chevron) prepared this SMP. Primary contacts are listed below:

Site:

Vacant Lot – Former Standard Oil Service Station

(Chevron Site No. 30-4291)

3884 First Street Livermore, CA

9

Real Estate Agent:

Stephen Clowdsley

Real Estate Consulting 1561 Ramona Way, Alamo, CA 94507

Chevron

Laura Genin

Consultant:

Cambria Environmental Technology, Inc.

5900 Hollis Street, Suite A Emeryville, CA 94608

Oversight Agency:

Jerry Wickham

Alameda County Health Services

1121 Harbor Bay Parkway Alameda, California 94502

PURPOSE OF SMP

Cambria prepared this Soil Management Plan (SMP) for distribution to Alameda County Environmental Health Services (ACEHS). The purpose of this SMP is to establish an approved plan for managing the excavation of petroleum hydrocarbon-impacted soil at the site. Chevron shall be responsible for excavation, transportation and disposal of excavated soil.

3

This SMP is further designed to protect site workers, the public, and the environment from risk associated with exposure to or contact with petroleum hydrocarbons encountered beneath the site. Cambria personnel will be onsite to monitor work and collect confirmation soil samples. Cambria will develop a site-specific Health & Safety Plan (HASP) to cover onsite personnel and the public based on the information provided in this document. Additionally, Cambria will generate a journey management plan for approaching, accessing and departing the site, and work in conjunction with the contracted soil hauler to insure their journey management plan addresses all Chevron safety requirements.

DEVELOPMENT PLAN

The development plan includes the construction of multiple townhomes, a swimming pool, parking area and landscaping. The proposed plan includes the former Chevron property and the adjacent property to the west of the site. Chevron proposes to conduct this excavation in selected areas to protect site workers during development, alleviate the risk of hydrocarbon vapor migration after development, and accelerate site closure.

EXCAVATION PLAN

Planned excavation will encompass removal of soil to an approximate depth of 20 feet below grade (fbg) in the area of the second generation tankpit and dispenser island (Figure 2). Additionally, previous borings B-3 and B-20, indicate that hydrocarbon impact was encountered in the central portion of the site separate from the former tank pits and dispenser islands, therefore, Cambria proposes to conduct limited excavation in this area. An additional limited excavation may be conducted in the vicinity of the first generation tank pits where the developer has indicated the property is to be used as a landscaped area. The proximity of the first generation tank pit to the sidewalk and underground utilities may limit the extent of this excavation. The total depths of all excavations will be based on visual observations and vapor readings monitored with a photo-ionization detector (PID). A volume of approximately 2,500 cubic yards of excavated soil is anticipated.

Previous investigations have encountered a water bearing zone between 23 and 28 fbg. This zone occurs deeper than the proposed excavation and is not anticipated to be of concern.

It is Chevron's intention that soil excavation will remove the bulk of onsite petroleum hydrocarbon-bearing soil to a maximum depth of 20 fbg. If impacted soil is encountered below 20 fbg and is easily accessible and disposed of without jeopardizing the safety of the work crew then the soil will be removed. Impacted soil below 20 fbg may be left in place and allowed to naturally attenuate. Soil at the site is comprised of stiff to very stiff silts and clays with low permeability. No hydrocarbons have been detected in soil samples collected from offsite borings. Additionally, since the tanks were removed more than 30 years ago (1973) it is unlikely that offsite migration will occur in the future.

ENVIRONMENTAL SUMMARY



Thirty-six (36) borings have been advanced on site. Hydrocarbons in soil have been detected at maximum concentrations of 3,500 mg/kg of total petroleum hydrocarbons as gasoline (TPH-g) in a sample collected in CPT-12 at 16 fbg located in the first generation tank pit. Similar concentrations have been detected in samples collected in the second-generation tank pit and northern dispenser island.

All grab groundwater samples were collected from depths of 23.5 to 28 fbg in what is defined as a perched zone. Additional investigation consisting of CPT borings collected grab samples, where possible, to depths down to 56 fbg. Maximum concentration of hydrocarbons in grab groundwater have been detected up to 78,000 ug/L TPH-g in B-9 in the shallow perched zone, located along the product piping between the second-generation tank pit and northern dispenser island. TPH-g concentrations in all other grab groundwater samples range from below detection limits to 13,000 ug/l at 41 fbg in boring CPT-3, in the former second generation tankpit.

Hydrocarbon concentrations in soil vapor samples were detected at a maximum of 640,000 micrograms per meter cubed (ug/m3) in CPT-3 located in the second-generation tank pit at 20 fbg. Additional soil vapor samples collected from borings CPT-2, CPT-4, CPT-5, CPT-8 and CPT-10 did not contain hydrocarbons above the Regional Water Quality Control Boards (RWQCB) Environmental Screening Levels (ESLs) for soil vapor in a residential area.

PROPOSED CLEANUP GOALS

Soil and groundwater impact at the site appears to be localized within the former tank pits and second-generation dispenser island. Hydrocarbons have not migrated to deep regional groundwater. Therefore, Chevron proposes to excavate the localized areas of hydrocarbon impact to a depth of 20 fbg in order to reduce risk of hydrocarbon vapor migration after development. The total depth of the excavation may be shallower than 20 fbg and will be determined based on visual observations and vapors measured with a PID. Hydrocarbon impact greater than 20 fbg

may be left in place and allowed to attenuate naturally if it is determined that accessing the deeper soils would pose a health and safety risk to onsite personnel.

CONFIRMATION SOIL SAMPLING

Confirmation samples from sidewalls and the excavation base will be collected where soils appear clean. In areas where samples indicate that hydrocarbon concentrations exceed approved ESLs, additional soil will be removed, if possible. Once the additional excavation has been completed, a second set of confirmation samples in those areas additionally excavated will be collected. Samples are to be collected at depths where soil appears clean, and will be collected at deeper depths when necessary. Final soil samples will be used to document residual concentrations to aid in post-remediation monitoring and closure criteria.



Confirmation soil samples will be collected from the bottom of the excavation on an approximate grid pattern based on the size of the excavation and site conditions. Sidewall samples will be collected at approximately 10 fbg. Additional samples may be collected if visual inspection of the excavation indicates areas of limited impact. Samples will be collected using an excavator bucket to avoid placing personnel in confined space environments. Soil samples will be collected in 6-inch brass tubes, sealed, labeled, logged on a chain-of-custody, placed on ice, and delivered to a Chevron-approved laboratory for analysis. Soil samples will be analyzed for the following

- TPHg and TPHd by EPA Method 8015M
- BTEX by EPA Method 8260B

REMEDIAL GUIDELINES

constituents.

The following guidelines for soil excavation and worker and public safety at the site are described below.

Soil Excavation and Handling

- 1. Chevron will coordinate transport and disposal of petroleum hydrocarbon impacted soil. Any soil not immediately removed from the site will be stockpiled onsite.
- 2. Impacted soil will be pre-approved for disposal at an appropriate Chevron-approved landfill.
- 3. Stockpiled soil shall be placed on and covered with plastic sheeting at the termination of the task. Regardless of task progress, any stockpile not being actively manipulated shall be covered with plastic sheeting within one-hour of initiating stockpile generation. Stockpiled soil shall be placed in asphalt paved areas.

- 4. If deemed necessary based on soil moisture content, plastic sheeting underlying any stockpile shall include a perimeter berm to prevent the escape of liquids or wet soil from the stockpile. Plastic sheeting overlying any stockpile shall be secured with sandbags or equivalent.
- 5. Stockpiled soil will be kept moist or covered with plastic sheeting to minimize odor emanation and dust levels. Moisture levels shall be kept low enough to avoid creating mud on the site or on site access-ways. Dust control procedures shall be performed to ensure compliance with Bay Area Air Quality Management District (BAAQMD) Regulation 6, Standard 305. Excavation vapor emission minimization procedures shall be performed to ensure compliance with BAAQMD Regulation 8, Rule 40.



- 6. Cambria will direct the collection of confirmation soil samples as described above. These samples will be placed on rush laboratory turnaround time.
- 7. Where initial soil sample concentrations exceed negotiated cleanup goals and are accessible, Cambria will direct the Contractor to continue excavation to remove residual hydrocarbon-bearing soil exceeding the soil clean-up goals to the extent practical. Once additional impacted soil is excavated, Cambria will direct the collection of new confirmation soil samples in those areas excavated to document residual concentrations. These samples will also be placed on RUSH laboratory turn-around-time.
- 8. Once final excavation activities are completed, based on the final confirmation soil sample results, the excavation will be backfilled with clean soil and the top seven feet of excavated soil and compacted to a minimum 90% relative density.

Groundwater

9. There is a very low probability that groundwater will be encountered in the excavation since it is not expected to exceed 20 fbg.

Worker and Public Safety

- 10. A site-specific HASP that covers all federal, state, and local requirements will be generated prior to excavation activities. The HASP will cover all onsite personnel and the public with respect to all physical and chemical health risks including vapor issues during excavation.
- 11. All work involving contact with soil at the site shall be performed in compliance with this SMP and applicable HASP.

- 12. All workers shall read and understand the SMP and HASP prior to performing any earthwork activities at the site. A routine tailgate safety meeting will be conducted prior to work activities every day and Cambria shall keep a copy of the HASP onsite at all times.
- 13. Air quality will be monitored with an appropriate instrument during all earthwork activities. Any task that results in the emanation of excessive odors shall be ceased temporarily.
- 14. If visible soil dust is observed during earthwork, work at the subject area within the site shall be stopped and water or a dust suppressant applied until visible soil dust is eliminated from the breathing zone.



Miscellaneous

15. The Cambria shall coordinate soil transportation and disposal with Integrated Wastestream Management (IWM) with a minimum of 48-hours advance notification or as required by the Journey Management Plan.

POST REDEVELOPMENT MONITORING

It is understood that post-remedial activities may require additional investigations, possibly including well installations, where feasible, to provide monitoring of current groundwater concentrations and migration. Once excavation activities are complete, Cambria will submit a report documenting the completed work including volumes of soil removed, residual hydrocarbon concentrations, and post monitoring recommendations if applicable.

CLOSING

We thank you for your time on and consideration of this project.

Please contact me at (510) 420-3367 with any questions or comments.

Sincerely,

Cambria Environmental Technology, Inc.

Laura Genin

Senior Staff Geologist

Taura Din

Robert Foss, PG #7445 Associate Geologist

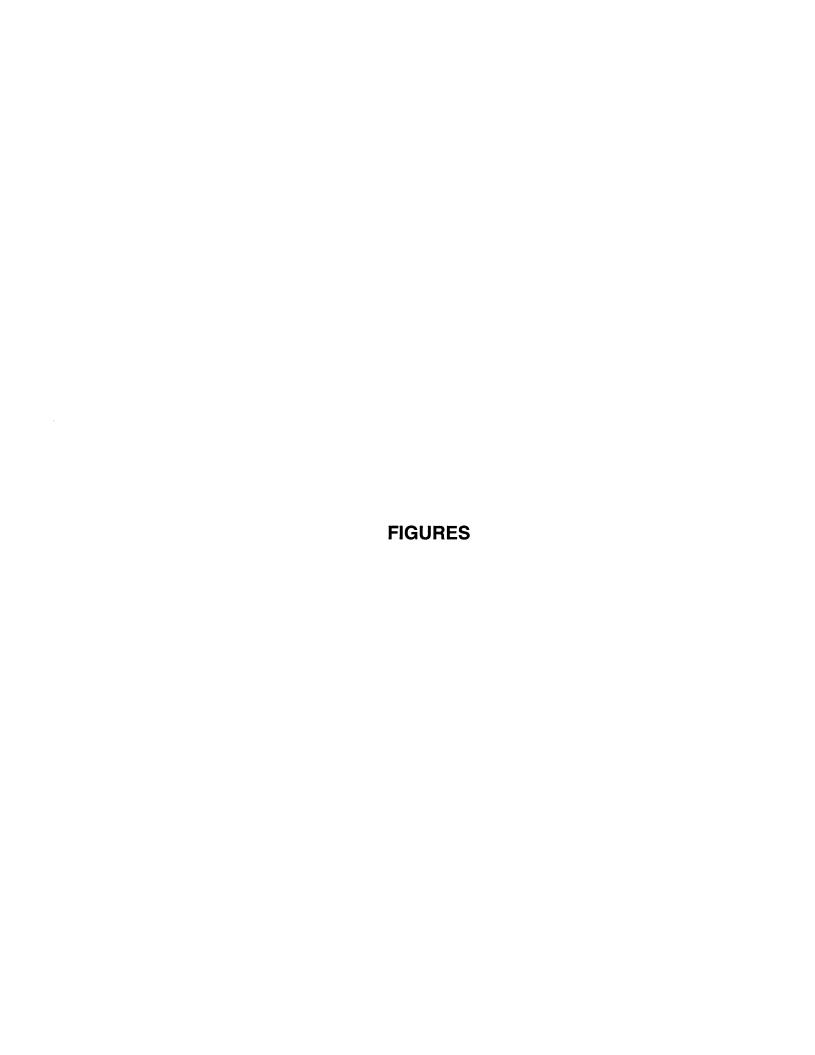


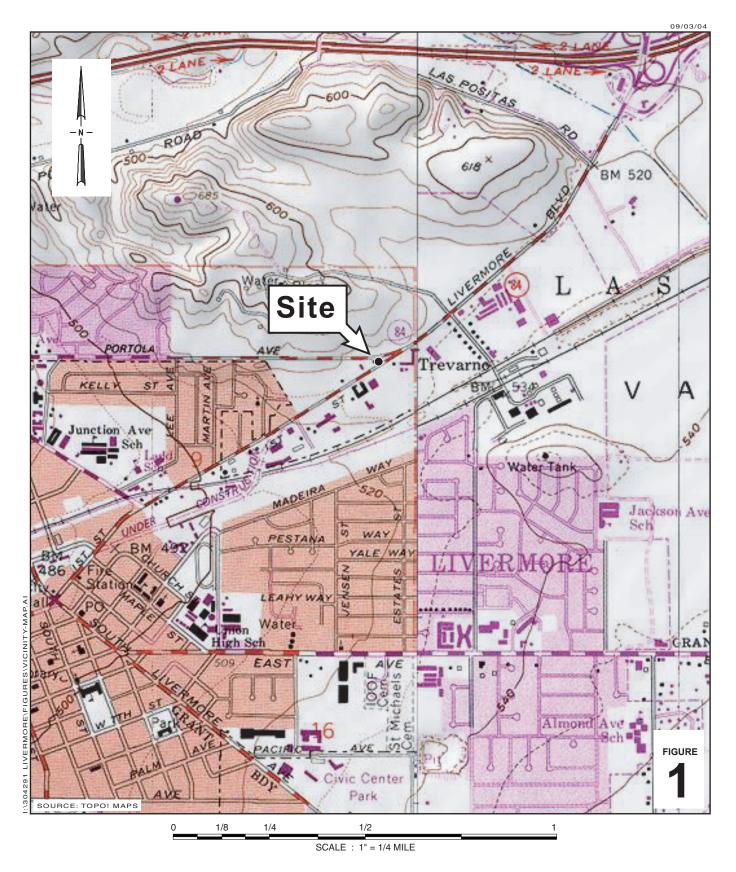
Figures:

1 - Site Vicinity Map2 - Excavation Site Plan

Attachments: A - Compilation of Soil Data





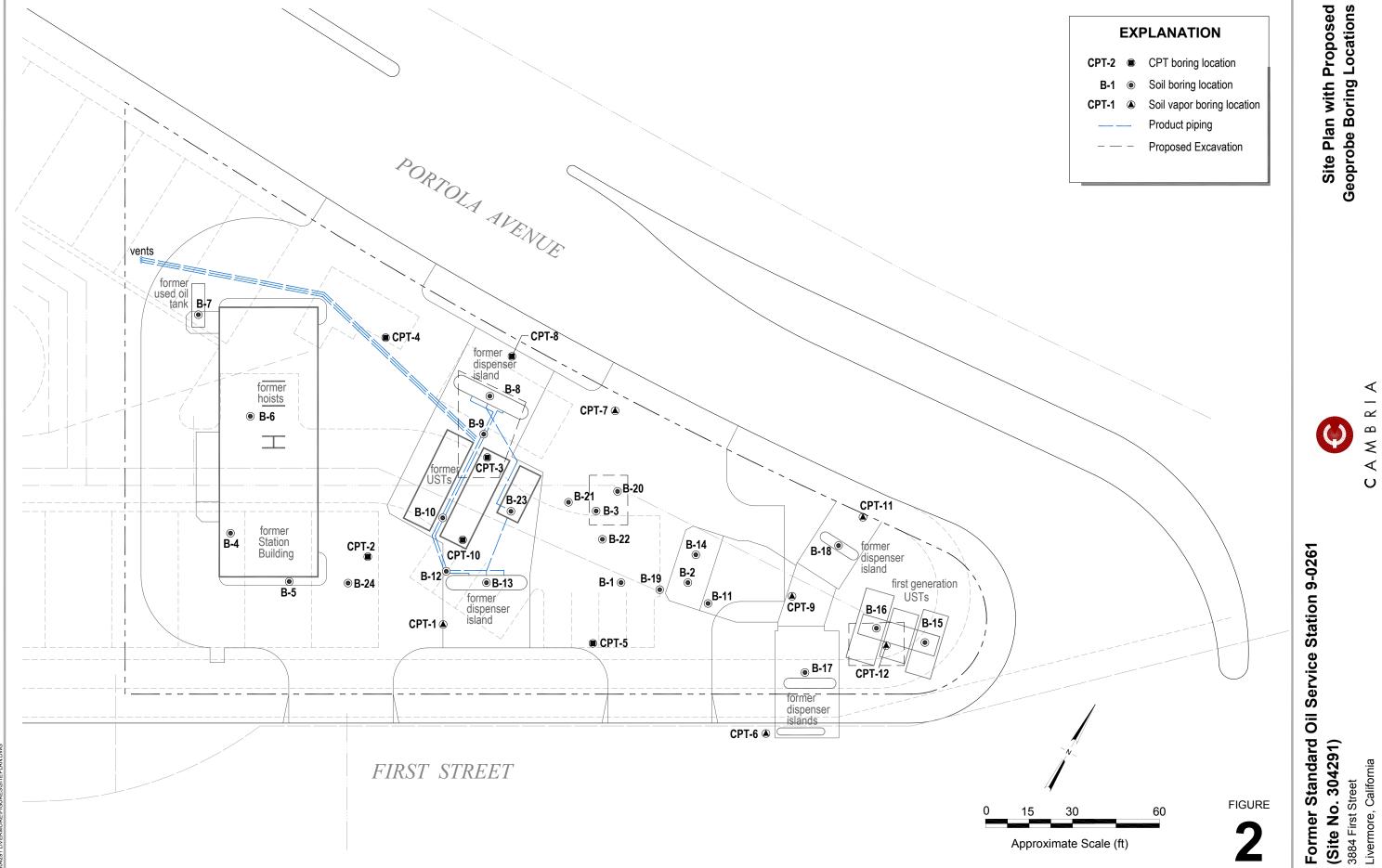


Former Standard Oil Service Station 9-0261 (Site No. 304291)



Vicinity Map

Approximate Scale (ft)



ATTACHMENT A Compilation of Soil Data

Soil Analytical Data - Former Chevron Station 30-4291 3884 1st Street, Livermore, California

Boring	Date	Depth	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
	Sampled	Sampled	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
CPT-1	9/8/2005	5-5.5	<10	<23d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	disturbed
CPT-1	9/8/2005	10.0-10.5	<10	<26d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-1	9/8/2005	15.0-15.5	<10	<21d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-1	9/8/2005	20.0-20.5	<10	<24d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-1	9/8/2005	25.0-25.5	<10	<24d	11	< 0.002	< 0.005	< 0.005	< 0.005	< 0.002	
CPT-1	9/8/2005	30.0-30.5	<10	<26d	<1.0a	0.0008	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-1	9/8/2005	40.0-40.5	<10	<25d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-1	9/8/2005	50.0-50.5	<10	<26d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-1	9/8/2005	60.0-60.5	<10	<24d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-1	9/8/2005	70.0-70.5	<10	<28d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-1	9/8/2005	80.0-80.5	<20d	<30d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
<u> </u>											
CPT-2	9/8/2005	5.0-5.5	23	220	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	disturbed
CPT-2	9/12/2005	10.5-11.0	<10	<10	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-2	9/12/2005	15.5-16.0	<10	<14d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-2	9/12/2005	20.5-21.0									HOLD
CPT-2	9/12/2005	25.5-26.0	<10	<13d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-2	9/12/2005	31.5-32.0									HOLD
CPT-2	9/12/2005	40.5-41.0	<10	<11d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-2	9/12/2005	50.5-51.0									HOLD
CPT-3	9/8/2005	5.0-5.5	<10	<35d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	disturbed
CPT-3	9/8/2005	11.5-12.0	40	79	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-3	9/8/2005	15.5-16.0	24c	<200d	59ab	1.3	0.98	4.0	14	< 0.062	
CPT-3	9/8/2005	20.5-21.0	<10	<30d	55ab	0.015	0.017	0.16	0.62	< 0.003	
CPT-3	9/8/2005	30.0-30.5	<10	<30d	1.6a	0.001	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-3	9/8/2005	40.0-40.5	<10	<30d	3.0a	0.12	0.038	0.038	0.14	< 0.0005	
CPT-3	9/8/2005	50.0-50.5	<20d	<30d	<1.0a	0.052	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-3	9/8/2005	60.0-60.5	<10	<30d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	

S	oil	An	alvtica	l Data -	Former	Chevron	Station	30-4291	3884	1st Street.	Livermore,	California

				 							
Boring	Date	Depth	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
	Sampled	Sampled	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
СРТ-4	9/8/2005	5.0-5.5	<10	<27d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	disturbed
CPT-4	9/12/2005	10.5-11.0	<10	<12d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-4	9/12/2005	15.5-16.0	<10	<13d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-4	9/12/2005	20.5-21.0									HOLD
CPT-4	9/12/2005	25.5-26.0	<10	<17d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-4	9/12/2005	30.5-31.0									HOLD
CPT-4	9/12/2005	39.5-40.0									HOLD
CPT-4	9/12/2005	50.5-51.0									HOLD
CPT-4	9/12/2005	60.5-61.0									HOLD
CPT-5	9/8/2005	4.5-5.0	<10	<30d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	disturbed
CPT-5A	9/15/2005	9.5-10.0									HOLD
CPT-5A	9/15/2005	14.5-15.0	<10	<10	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-5A	9/15/2005	19.5-20.0									HOLD
CPT-5A	9/15/2005	24.5-25.0	<13d	<10	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-5A	9/15/2005	29.5-30.0									HOLD
CPT-5A	9/15/2005	39.5-40.0	<10	<10	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-5A	9/15/2005	54.5-55.0									HOLD
CPT-6	9/15/2005	3.5-4.0	44c	160	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	disturbed
CPT-6	9/15/2005	9.5-10.0	<10	<41d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-6	9/15/2005	14.5-15.0	<10	<16d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-6	9/15/2005	19.5-20.0									HOLD
CPT-6	9/13/2005	24.5-25.0	<10	<63d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-6	9/13/2005	29.5-30.0									HOLD
CPT-6	9/13/2005	40.5-41.0	<10	<67d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CDT 7	0.11.010.005	~ o ~ ~	10	0.7.1							
CPT-7	9/12/2005	5.0-5.5	<10	<35d	<1.0a	<0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-7	9/13/2005	10.0-10.5	<10	<13d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-7	9/13/2005	15.0-15.5	40	101		0.0007	0.001	0.004			HOLD
CPT-7	9/13/2005	20.5-21.0	<10	<18d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-7	9/13/2005	25.5-26.0									HOLD
CPT-7	9/13/2005	30.5-31.0									HOLD
CPT-7	9/13/2005	39.5-40.0									HOLD
CPT-7	9/13/2005	49.5-50.0									HOLD

Soil Analytical Data - Former Chevron Station 30-4291 3884 1st Street, Livermore, California

Boring	Date	Depth	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
	Sampled	Sampled	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
CPT-8	9/8/2005	4.5-5.0	<10	<30d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-8	9/13/2005	10.0-10.5	<10	<11d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-8	9/13/2005	15.0-15.5	<10	<18d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-8	9/13/2005	20.0-20.5	<10	<10	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-8	9/13/2005	25.0-25.5									HOLD
CPT-8	9/13/2005	30.0-30.5	<10	<21d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-8	9/13/2005	40.0-40.5	<10	<12d	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-8	9/13/2005	50.5-51.0									HOLD
CPT-9	9/8/2005	5.0-5.5	<10	34	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	disturbed
CPT-9	9/16/2005	10.5-11.0	<10	NA	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-9	9/16/2005	15.5-16.0									HOLD
CPT-9	9/16/2005	20.5-21.0	<10	NA	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-9	9/16/2005	25.5-26.0	<10	NA	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-9	9/16/2005	30.5-31.0									HOLD
CPT-9	9/16/2005	40.5-41.0	<10	NA	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-10	9/14/2005	10.0-10.5	<10	<10	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-10	9/14/2005	15.0-15.5	<10e	NA	<1.0e	<0.0005e	<0.001e	<0.001e	<0.001e	<0.0005e	
CPT-10	9/14/2005	20.0-20.5	<10e	NA	<1.0e	<0.0005e	<0.001e	<0.001e	<0.001e	<0.0005e	
CPT-10	9/14/2005	25.0-25.5	<10	<10	<1.0a	0.029	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-10	9/14/2005	30.0-30.5									HOLD
CPT-10	9/14/2005	40.0-40.5	<10	<10	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-11	9/14/2005	4.5-5.0	27c	170	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	disturbed
CPT-11	9/19/2005	10.5-11.0									HOLD
CPT-11	9/19/2005	15.5-16.0									HOLD
CPT-11	9/19/2005	19.5-20.0	<10		<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-11	9/19/2005	25.5-26.0									HOLD
CPT-11	9/19/2005	30.5-31.0									HOLD
CPT-11	9/19/2005	40.5-41.0	<10		<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-11	9/19/2005	48.5-49.0									HOLD
CPT-11	9/19/2005	60.5-61.0									HOLD
CPT-11	9/19/2005	71.5-72.0									HOLD

Soil Analytical Data - Former Chevron Station 30-4291 3884 1st Street, Livermore, California

Boring	Date Sampled	Depth Sampled	TPHd (mg/kg)	TPHmo (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	Notes
CPT-12	9/14/2005	4.5-5.0	22c	62	<1.0a	< 0.0005	< 0.001	< 0.001	<0.001	< 0.0005	disturbed
CPT-12	9/16/2005	10.0-10.5	120c	NA	1,000ab	< 0.062	< 0.12	<0.12	< 0.12	< 0.062	
CPT-12	9/16/2005	15.5-16.0	330c	NA	3,500ab	0.13	< 0.13	9.4	4.7	<0063	
CPT-12	9/16/2005	20.5-21.0	70c	NA	580ab	< 0.063	< 0.13	1.5	< 0.13	< 0.063	
CPT-12	9/16/2005	25.5-26.0	49c	NA	550ab	< 0.0005	< 0.001	0.021	< 0.001	< 0.0005	
CPT-12	9/16/2005	30.5-31.0	150cd	NA	1,600ab	0.067	< 0.13	0.94	0.14	< 0.063	
CPT-12	9/16/2005	40.5-41.0	<10	NA	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	
CPT-12	9/16/2005	50.5-51.0	<10d	NA	<1.0a	0.001	< 0.001	0.002	< 0.001	< 0.0005	
CPT-12	9/16/2005	60.5-61.0	<10	NA	<1.0a	< 0.0005	< 0.001	< 0.001	< 0.001	<0.0005	
ESL's	ESL's for soils <3fbg (Residential)		100	500	100	0.044	2.9	3.3	2.3	0.023	
ESL's	ESL's for soils >3fbg (Residential)			500	100	0.044	2.9	3.3	2.3	0.023	

Abbreviations / Notes

TPHg - Total petroleum hydrocarbons as gasoline

TPHd - Total petroleum hydrocarbons as diesel

TPHmo - Total petroleum hydrocarbons as motor oil

MTBE - Methyl tertiary butyl ether

TPHg by EPA Method 8015

TPHd by EPA Method 8015

BTEX by EPA Methods 8060B

MTBE by EPA Methods 8260B

ND<X = not detected at or above laboratory reporting limit

Sample depths listed in approximate feet below grade (fbg).

- a The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. The reported concentration of TPHg does not include MTBE or ther gasoline constituents eluting prior C6 (n-hexane) TPHg range start time.
- b A poor surrogate recovery was observed due to the dilution needed to perform the analysis.
- c The observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range earlier than #2 fuel.
- d Due to insufficient sample size, we were unable to report our usual reporting limits. The values reported represent the lowest reporting limits possible.
- e Samples were analyzed outside of holding time.

HOLD - Samples were collected and sent to the laboratory, but no analysis was performed.

Soil Analy	tical Data - F	ormer Chevro	on Station 30-	4291 3884 1	st Street, Live	rmore, Califo	rnia		
Boring	Date	Depth	TPHd	TPHg	В	T	E	X	MTBE
J	Sampled	Sampled	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
B-7	4/4/2005	5.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-7	4/4/2005	15.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-7	4/4/2005	19.5	<10	<1.0	0.001	0.003	< 0.001	0.002	< 0.0005
B-7	4/4/2005	23.5	HOLD						
B-7	4/4/2005	27.5	HOLD						
B-8	4/4/2005	5.0	<10	<1.0	< 0.0005	0.002	0.001	0.004	< 0.0005
B-8	4/4/2005	11.5	440	1400	< 0.063	2.5	6.8	35	< 0.063
B-8	4/4/2005	15.5	HOLD						
B-8	4/4/2005	19.5	26	2900	0.98	19	7.7	37	< 0.062
B-8	4/4/2005	23.5	HOLD						
B-8	4/4/2005	27.5	<10	<1.0	0.014	0.027	0.006	0.025	< 0.0005
B-9	4/4/2005	5.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-9	4/4/2005	11.5	1100	1300	0.12	14	14	85	< 0.063
B-9	4/4/2005	15.5	HOLD						
B-9	4/4/2005	23.5	HOLD						
B-9	4/4/2005	27.5	<10	17	0.005	0.003	0.002	0.004	< 0.0005
B-10	4/4/2005	15.5	<10	<1.0	0.002	0.005	< 0.001	0.002	< 0.0005
B-10	4/4/2005	5.0							
B-10	4/4/2005	19.5	<10	<1.0	0.0007	0.003	0.001	0.003	< 0.0005
B-10	4/4/2005	23.5	HOLD						
B-10	4/4/2005	27.5	HOLD						
B-11	4/4/2005	5.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-11	4/21/2005	11.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-11		15.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-11	4/21/2005	19.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-11	4/21/2005	23.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-12	4/4/2005	5.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	0.001	< 0.0005
B-12	4/4/2005	11.5	<10	<1.0	0.0009	0.002	< 0.001	0.001	< 0.0005
B-12	4/4/2005	15.5	HOLD						
B-12	4/4/2005	19.5	HOLD						

Soil Analy	tical Data - F	Former Chevro	on Station 30-	4291 3884 1	st Street, Live	ermore, Califo	ornia	·	
Boring	Date	Depth	TPHd	ТРНд	В	T	E	X	MTBE
Boring	Sampled	Sampled	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
B-13	4/4/2005	5.0	<10	<1.0	<0.0005	0.001	<0.001	0.001	<0.0005
B-13	4/4/2005	11.5	<10	<1.0	< 0.0005	0.001	< 0.001	0.001	<0.0005
B-13	4/4/2005	15.5	HOLD	11.0	10.0005	0.001	\0.001	0.001	\0.000 3
B-13	4/4/2005	19.5	<10	<1.0	0.0005	0.001	< 0.001	0.001	< 0.0005
B-13	4/4/2005	23.5	HOLD	11.0	0.0002	0.001	10.001	0.001	\0.000 3
B-13	4/4/2005	27.5	HOLD						
B-13	4/4/2005	29.5	HOLD						
B-14	4/4/2005	5.0	83	<1.0	< 0.0005	0.001	0.001	0.004	<0.0005
B-14	4/21/2005	15.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-15	4/21/2005	5.0	15	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-15	4/21/2005	11.5	19	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-15	4/21/2005	19.0	69	6.4	< 0.0005	< 0.001	0.22	< 0.001	< 0.0005
B-16	4/21/2005	5.0	30	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-16	4/21/2005	11.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-16	4/21/2005	15.5	74	94	0.09	< 0.001	2.8	0.8	< 0.0005
B-17	4/21/2005	5.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-17	4/21/2005	11.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-17	4/21/2005	15.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-17	4/21/2005	19.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-17	4/21/2005	23.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-17	4/21/2005	27.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-17	4/21/2005	31.5	11	44	0.007	< 0.005	0.073	<0.008	< 0.003
B-18	4/21/2005	5.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-18	4/21/2005	11.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-18	4/21/2005	15.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-18	4/21/2005	19.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-18	4/21/2005	23.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-18	4/21/2005	27.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-19	4/21/2005	5.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-19	4/21/2005	11.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-19	4/21/2005	15.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005

Soil Analy	tical Data - F	ormer Chevro	on Station 30-	4291 3884 1	st Street, Live	rmore, Califo	ornia		
Boring	Date	Depth	TPHd	TPHg	В	T	Е	X	MTBE
	Sampled	Sampled	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
B-20	4/21/2005	5.0	400	66	< 0.003	< 0.005	< 0.005	< 0.005	< 0.003
B-20	4/21/2005	11.5	1100	160	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-20	4/21/2005	15.0	820	1900	< 0.0005	< 0.001	< 0.001	0.006	<0.0005
B-21	4/22/2005	11.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	<0.0005
B-21	4/22/2005	15.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	<0.0005
B-22	4/21/2005	5.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	<0.0005
B-22	4/22/2005	11.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-22	4/22/2005	15.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-23	4/22/2005	11.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-23	4/22/2005	15.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	<0.0005
B-24	4/22/2005	11.5	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	<0.0005
B-24	4/22/2005	16.5	HOLD						
B-24	4/22/2005	21.0	HOLD						
B-24	4/22/2005	26.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-24	4/22/2005	31.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
B-24	4/22/2005	36.0	HOLD						
B-24	4/22/2005	41.0	<10	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005

Abbreviations / Notes
TPHg by EPA Method 8015
TPHd by EPA Method 8015
BTEX by EPA Methods 8060B
MTBE by EPA Methods 8260B
ND<X = not detected at or above laboratory reporting limit
Sample depths listed in approximate feet below grade (fbg).
HOLD - Samples were collected and sent to the laboratory, but no analysis was performed.

Groundwater Analytical Data - Former Chevron Station 30-4291 3884 1st Street, Livermore, California

Sample	Date	Depth	TPHd	TPHd with	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
	Sampled	(feet)	(ug/L)	Silica Gel (ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
CPT-1-W-45	9/8/2005	43-45	420	370	NA	66	4	<0.5	<0.5	<0.5	<0.5
CPT-3-W-43	9/9/2005	41-43	3,300	2,900	NA	13,000	1,600	240	640	660	<3.0
CPT-4-W-44	9/12/2005	40-44	210bc	220bc	210e	<50a	<0.5	<0.5	<0.5	<0.5	<0.5
CPT-6-W-48	9/13/2005	44-48	80bc	92bc	85e	<50a	2	<0.5	<0.5	<0.5	<0.5
CPT-7-W-35	9/13/2005	31-35	340cf	NA	410e	<50ad	<0.5	<0.5	<0.5	<0.5	< 0.5
CPT-7-W-55	9/13/2005	51-55	NA	NA	NA	<50	NA	NA	NA	NA	NA
CPT-8-W-56	9/14/2005	51-56	160bc	100bc	170e	<50a	<0.5	<0.5	<0.5	<0.5	<0.5
CPT-9-W-45	9/16/2005	41-45	NA	NA	NA	<50a	<2	<2	<2	<2	<2
CPT-11-W-45	9/16/2005	41-45	330f	NA	190e	<50a	<2	<2	<2	<2	<2
CPT-12-W-26	9/16/2005	26-30	14000e	15000ce	4500e	9800a	73	4	110	6	<2
CPT-12-W-40	9/16/2005	36-40	NA	NA	NA	6600a	120	<2	51	. 5	<2

Abbreviations / Notes

TPHg - Total petroleum hydrocarbons as gasoline

TPHd - Total petroleum hydrocarbons as diesel

TPHmo - Total petroleum hydrocarbons as motor oil

MTBE - Methyl tertiary butyl ether

MTBE by EPA Method 8260B

ND<X = not detected at or above laboratory detection limit

NA = not applicable. Samples not analyzed for the choosen constituent due to slow recharge of groundwater.

- a The reported concentrations of TPHg does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane)
 TPHg range start time.
- b Due to the nature of the sample matrxi, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.
- c The observed sample pattern includes #2 fuel/diesel and an additional pattern which eludes later in the DRO range.
- d The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the Analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of the sample was pH = 7.
- e Due to insufficent sample size, we were unable to report our usual reporting limits. The values reported represent the lowest reporting limits obtainable.
- f Due to limited sample volume, the sample was not analyzed with a silica gel cleanup.