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& ASSOCIATES**

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Alameda County  
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August 13, 2007

Mr. Steven Plunkett  
Alameda County Health Care Services Agency  
Division of Environmental Protection  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Re: **Site Assessment Report and Site Closure Request**  
Olympian Cardlock Facility  
8515 San Leandro Street,  
Oakland, California  
ACEHS Case #RO0002516  
CRA Project # 161-560

Dear Mr. Plunkett:

On behalf of Olympian JV (Olympian), Conestoga-Rovers & Associates, Inc. (CRA) has prepared this *Site Assessment Report and Site Closure Request* for the above referenced site.

If you have any questions or comments regarding this submittal, please call me at (510) 420327.

Sincerely,  
**Conestoga-Rovers & Associates, Inc.**

Ron Scheele, P.G.  
Senior Geologist

Attachment: *Site Assessment Report and Site Closure Request*

cc: Ms. Janet Heikel, Olympian JV, 1300 Industrial Road, Suite 2, San Carlos, CA 94070  
Mr. Ruben Hausauer, 2672 Warwick Place, Hayward, CA 94542

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## **SITE ASSESSMENT REPORT AND SITE CLOSURE REQUEST**

**Olympian Cardlock Facility  
8515 San Leandro Street  
Oakland, CA  
ACEHS Case # RO0002516  
CRA Project #161560**

**AUGUST 13, 2007**

*Prepared for:*

Ms. Janet Heikel  
Olympian JV  
1300 Industrial Road, Suite 2  
San Carlos, California 94070

*Prepared by:*

Conestoga-Rovers & Associates, Inc.  
5900 Hollis Street, Suite A  
Emeryville, California 94608

Glenn Reiss  
Senior Staff Geologist

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I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Ron Scheele, P.G.  
Senior Geologist





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## **SITE ASSESSMENT REPORT AND SITE CLOSURE REQUEST**

**Olympian Cardlock Facility  
8515 San Leandro Street  
Oakland, CA**

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## **SITE ASSESSMENT REPORT AND SITE CLOSURE REQUEST**

**Olympian Cardlock Facility  
8515 San Leandro Street  
Oakland, CA**

### **1.0 INTRODUCTION**

On behalf of Olympian JV, Conestoga-Rovers & Associates, Inc. (CRA) has prepared this *Site Assessment Report and Site Closure Request* for the above referenced site. Site assessment activities were conducted in accordance with CRA's May 4, 2007 *Site Assessment Work Plan* (work plan). In a letter dated May 8, 2007, Alameda County Environmental Health Services (ACEHS) approved the work plan (Appendix A). Presented below is the site background, a summary of previous investigations, a description of site assessment activities, an evaluation of the contaminant distribution, a comparison of site conditions to low risk groundwater closure guidelines, and our conclusions and recommendations.

The objective of the proposed scope of work was to further verify the magnitude and extent of dissolved-phase hydrocarbons beneath the site. To achieve this objective, CRA oversaw the advancement of 5 soil borings to first encountered groundwater, and the collection of soil and grab groundwater samples. Details and findings of the aforementioned activities are described herein.

### **2.0 SITE BACKGROUND**

#### **2.1 Site Description**

The site is located near the corner of San Leandro Street and 85th Avenue in Oakland, CA (Figure 1). Since 1995, the site has been occupied by a cardlock diesel and gasoline service station. Station facilities consist of one 12,000-gallon gasoline underground storage tank (UST), one 5,000-gallon gasoline UST, one 8,000-gallon gasoline UST, one 15,000-gallon diesel UST, and dispensers for diesel, gas, and a small storage building (Figure 2). The USTs and dispensing facilities are in compliance with 1998 upgrade requirements (City of Oakland, EHS upgrade compliance certificate # 11815). Surrounding the site is an autoshop to the northwest, a towing yard to the southwest, and a railroad track to the south and southeast.

The topography of the site is flat with an elevation of approximately 13 feet above mean sea level. The site is situated in a heavy industrial area and is currently owned by the Ruben and Catherine Hausauer Trust and operated by Nella Oil Company as a fuelcardlock service station.



## **2.2 Geology and Hydrogeology**

**Geology:** The site is located within the Coast Range geomorphic province of California. In general, the Coast Range province consists of Jurassic eugeosynclinal basement rocks and Cretaceous and Cenozoic sedimentary and volcanic rocks that have been faulted and folded with a northwest-southeast trend. The site lies within the Bay Plains Basin. Sediments beneath the site consist of coalescing alluvial deposits from the Diablo Range to the east known as the San Leandro Cone. According to the Department of Water Resources, Bulletin 118 (2004), the site is located on quaternary age alluvial deposits consisting of medium-grained, unconsolidated, moderately sorted, and permeable, fine sand, silt, and clayey silt with thin beds of coarse sand. Soil beneath the site consists of clayey/sandy silt and silty clay to a maximum explored depth of 17 feet below ground surface (ft bgs) (Appendix B)

**Hydrogeology:** According to the Department of Water Resources, Bulletin 118 (2004), the site is located within the East Bay Plain Subbasin. Historically, groundwater has been encountered between 7 and 9.5 feet (Table 2).

## **2.3 Previous Investigations**

Below is the chronology of site assessment activities at the site. Historical soil and groundwater analytical data are presented in Tables 1 and 2.

**June 1994, Phase I ESA and Phase II Soil Analysis:** Artesian Environmental Consultants conducted a *Phase I Environmental Site Assessment* (ESA) and seven soil borings (B1 through B7) were advanced. Two soil samples and two grab groundwater samples (WB1 and WB7) were collected and submitted for laboratory analysis. All samples results were below laboratory detection limits for petroleum hydrocarbons.

**June 2002, Environmental Baseline Report:** In May 2002, GHH Engineering, Inc. (GHH) conducted a baseline environmental review as part of a property transaction between Olympian JV and Nella Oil Company. GHH staff inspected the property and determined that the subject property appeared clean and free of any notable petroleum hydrocarbon staining that could be indicative of surface spills. The oil/water separator appeared to be in good condition, with no evidence of cracks or significant staining.

GHH advanced a total of seven soil borings (GP1 through GP7), and collected seven soil samples and one grab groundwater sample from the area of the underground storage tanks (USTs) and dispenser islands. Soil sampling indicated little to no presence of petroleum hydrocarbons in soil. The only detections included 238 milligram per kilogram (mg/kg) total petroleum hydrocarbons as motor oil (TPH<sub>no</sub>) in a soil sample taken near the dispenser area (GP6@5'), 80 mg/kg total recoverable petroleum hydrocarbons in a soil sample taken at the oil/water separator area (GP7@5'), and 0.012 mg/kg methyl-tert-butyl ether



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(MTBE) in a soil sample taken near a dispenser island (GP5@5'). Groundwater sampling indicated no presence of petroleum hydrocarbons except for 7.0 microgram per liter ( $\mu\text{g/L}$ ) MTBE in a groundwater sample collected on the west side of the UST cavity (GP1).

**March 2003, Notice of Responsibility:** On March 14, 2003, Olympian received a letter from Alameda County Environmental Health Services (ACEHS) of notification that the site had been placed in the Local Oversight Program and identified Olympian Oil as the primary or active responsible party. The rationale for this determination by ACEHS is unclear.

**January 2004, Site Status:** On January 22, 2004, TEC Accutite prepared a letter report to summarize the site status. TEC Accutite recommended drilling and collecting additional soil and groundwater samples from this site to complete the site characterization. The ACEHS concurred with TEC Accutite's recommendations in a regulatory letter dated March 6, 2006. Subsequently, TEC Accutite prepared a *Site Conceptual Model* (SCM) and revised their initial conclusions, recommending that no further assessment be performed and that the site be closed according to the "Low Risk Groundwater Case" guidelines.

**March 2006, Site Characterization Work Plan:** ACEHS did not acknowledge the findings in the *Site Conceptual Model* which resulted in the TEC Accutite's submittal of a *Site Characterization Work Plan*. The work plan proposed additional assessment of the soil and groundwater.

**September 2006, Revised Site Characterization Work Plan:** TEC Accutite submitted a *Revised Site Characterization Work Plan* based on regulatory review of the initial work plan.

### 3.0 SITE ASSESSMENT ACTIVITIES

The objective of the proposed scope of work was to further verify the magnitude and extent of dissolved-phase hydrocarbons beneath the site. To achieve this objective, CRA oversaw the advancement of 5 soil borings to first encountered groundwater and the collection of soil samples and a grab groundwater sample from each boring. All work was conducted according to CRA's May 4, 2007 *Site Assessment Work Plan* and CRA's Standard Operating Procedures presented in Appendix B.

**Personnel Present:** CRA's Senior Staff Geologist Glenn Reiss supervised the drilling of 5 hand auger borings (SB-1 through SB-5) to collect soil and grab groundwater samples. All soil boring and sampling activities were overseen by CRA's Senior Geologist Ron Scheele, a California Professional Geologist.

**Permits:** Alameda County Public Works Agency issued a subsurface drilling permit for soil boring activities. A copy of the permit is included in Appendix C.



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**Drilling Company:** RSI Drilling (C57# 802335) of Woodland, California performed all drilling and soil and grab groundwater sampling activities, under the supervision of CRA.

**Drilling Dates:** Drilling activities were conducted on June 5 and 6, 2007.

**Drilling Method:** CRA marked out the boring locations with white paint and notified underground service alert (USA) to have the utilities marked out. In addition, CRA retained OHJ Subsurface Utility Locator of Oakland, California to locate and mark out underground utilities that were not marked by USA. Eight soil borings (SB-1 through SB-5) were drilled using a 3.25-inch diameter hand auger. Upon completion of grab groundwater sampling, each soil boring was backfilled with Portland cement to grade.

**Soil Sampling Method:** Two undisturbed soil samples were collected from each boring in 2-inch diameter stainless steel liners using a hand driven slide hammer. Soil lithology was logged for each boring and the encountered soils were screened with a photo-ionization detector (PID) at approximately 2.5 foot intervals. Soil boring logs including lithology descriptions and PID screening data are presented in Appendix D.

**Boring Depths:** Soil borings SB-1 through SB-5 were drilled to 10 ft bgs.

**Soil Sample Analyses:** Based on approval from Steven Plunkett with ACEHS, two of the ten soil samples were analyzed for TPHg and TPHd by EPA Method 8015Cm; and for BTEX, EDB, EDC, MTBE, TAME, ETBE, DIPE, TBA and EtOH by EPA Method 8260 by McCampbell Analytical of Pittsburg, CA, a state-certified laboratory. The analytical laboratory report is included in Appendix E.

**Groundwater Depths:** Saturated soil was encountered in all borings at depths between 8.5 and 9.5 ft bgs. Static groundwater levels were not determined from drilling activities.

**Grab Groundwater Sampling:** Grab groundwater samples were collected from four of the five soil borings using temporary PVC casing and disposable bailers. In the remaining boring, SB-4, a grab groundwater sample was collected using temporary PVC casing and a peristaltic pump with disposable tubing due to a relatively slow infiltration rate into that boring. The soil borings were drilled approximately one foot below first encountered moist soil and temporary casing with 5 ft of screened casing was installed in the borehole. After groundwater infiltrated the boreholes, a grab groundwater sample was collected using a disposal bailer gently lowered to the bottom of the casing or with a peristaltic pump running at low speed. The temporary casings, bailers, and tubing were not reused.

**Grab Groundwater Sample Analyses:** Grab groundwater samples collected from borings SB-1 through SB-5 were analyzed for TPHg and TPHd by EPA Method 8015Cm; and for BTEX, EDB, EDC, MTBE, TAME, ETBE, DIPE, TBA and EtOH by EPA Method 8260 by McCampbell Analytical of Pittsburg, CA, a state-certified laboratory. The analytical laboratory report is included in Appendix E.





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**Site Survey:** On June 6, 2007, Virgil Chavez Land Surveying (Chavez) of Vallejo, California, completed a site survey; including the latitude, longitude, and elevations of the recent and previous soil borings, and relevant site structures. The survey was based on the California State Coordinate System, Zone III (NAD83) relative to a PK nail and shiner in the median island on Hegenberger Avenue, opposite the site, in Oakland, California. This monument's benchmark elevation was 10.76 feet (NGVD 29). The survey report is presented in Appendix F.

**Geotracker:** All required data has been uploaded to the California State Water Resources Control Board's Geotracker Database as required by Title 23, Division 3, Chapter 30, Articles 1 and 2, Sections 3890-3895 of the California Code of Regulations.

**Soil Disposal:** Soil cuttings and waste water generated during drilling activities were drummed pending disposal by Clean Harbors to their disposal facility in San Jose, California.

## **4.0 INVESTIGATION RESULTS**

### **4.1 Petroleum Hydrocarbon Distribution in Soil**

Soil sampling indicates that little to no petroleum hydrocarbon impact exists beneath the site. No TPHd, TPHg, BTEX or fuel oxygenates were detected during recent soil sampling (Figures 3, 4, and 5). Soil results from borings SB-2 and SB-5 confirm that the previously detected low levels of MTBE and high-boiling point hydrocarbons are no longer present.

### **4.2 Petroleum Hydrocarbon Distribution in Groundwater**

Groundwater sampling indicates that little to no dissolved-phase petroleum hydrocarbons are present beneath the site, except for low levels of fuel oxygenates (MTBE and TAME) and diesel-range hydrocarbons (Figure 6). MTBE is present below drinking water maximum contaminant levels (MCLs) in three of the four borings where it was detected. The MTBE plume is of very limited extent and is fully defined in all directions (Figures 7). Dissolved-phase diesel-range concentrations were detected just above laboratory detection limits and are considered insignificant. Impacted groundwater is limited to onsite and the low concentrations pose no threat to human health or the environment.

## **5.0 LOW RISK GROUNDWATER CASE CLOSURE**

The following criteria should be met for a site to qualify for closure as per the RWQCB's *Interim Guidance on Required Cleanup at Low-Risk Fuel Sites*.



- The leak has stopped and ongoing sources, including free product, have been removed or remediated;
- The site has been adequately characterized;
- The dissolved hydrocarbon plume is not migrating;
- No water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted; and
- The site presents no significant risk to human health or the environment.

### **5.1 Leak Has Stopped and Ongoing Sources Have Been Removed**

There is no evidence of there ever being a significant leak or source area. The current USTs and dispensing facilities are in compliance with the 1998 upgrade requirements.

### **5.2 Site Is Adequately Characterized**

Since 1994, three subsurface investigations have been performed and site assessment activities have included the collection of 11 soil samples, and 8 grab groundwater samples. Soil and groundwater sampling indicates that little to no petroleum hydrocarbon impact exists beneath the site. No BTEX concentrations are present in groundwater, and only low levels of dissolved-phase MTBE are present. The MTBE plume is limited to onsite and is fully defined in all directions. The subsurface impact has been fully defined to determine whether the site poses a risk to human health or the environment.

### **5.3 Dissolved Hydrocarbon Plume Is Not Migrating**

The MTBE plume is limited to onsite and based on the low concentrations, MTBE is unlikely to be migrating offsite. The lower dissolved-phase MTBE concentrations detected in boring SB-4 as compared to adjacent boring GP1 suggest that the MTBE plume is shrinking.

### **5.4 No Water Wells or Other Sensitive Receptors Are Likely To Be Impacted**

A sensitive receptor survey was recently performed in March 2006 by TEC Accutite. No drinking water wells were identified within the 2,000 foot survey radius and the closest surface water body was 700 north of the site. As a result, MTBE is not likely to impact any drinking water wells or surface water bodies.



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## **5.5 Site Presents No Significant Risk to Human Health or Environment**

The site presents no significant risk to human health and the environment. The remaining hydrocarbon concentrations are extremely low and will likely naturally attenuate to below drinking water levels in a very short period of time. No potential exposure pathways that would adversely impact surface water, wetlands, or other sensitive receptors have been identified in the vicinity of the site. Therefore, the site does not pose a risk to human health or the environment.

## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

Based on the results of this investigation, CRA offers the following conclusions:

- Residual hydrocarbon concentrations in soil and/or groundwater do not pose a significant risk to human health or the environment.
- The site meets all the criteria to be qualified as a low-risk groundwater case per RWQCB guidelines and hence qualifies for complete closure as a low-risk groundwater case. Therefore, CRA recommends closing the case and properly abandoning all site wells.

## **7.0 REFERENCES**

Artesian Environmental, 1994: Phase I Environmental Site Assessment, Phase II Soil Analysis, 8515 San Leandro Street Oakland, California, June 9.

Department of Water Resources, 2004: *California's Groundwater, Bulletin 118*.

GHH Engineering, Inc., 2002: *Environmental Baseline Report*, Olympian Service Station, 8515 San Leandro Street Oakland, California, June.

TEC Accutite, 2004: *Site Status*, Olympian Service Station, 8515 San Leandro Street Oakland, California, January 22.

TEC Accutite, 2006: *Site Conceptual Model*, Olympian Service Station, 8515 San Leandro Street Oakland, California, March 27.

TEC Accutite, 2006: *Site Characterization WorkPlan*, Olympian Cardlock Station, 8515 San Leandro Street Oakland, California, September 29.

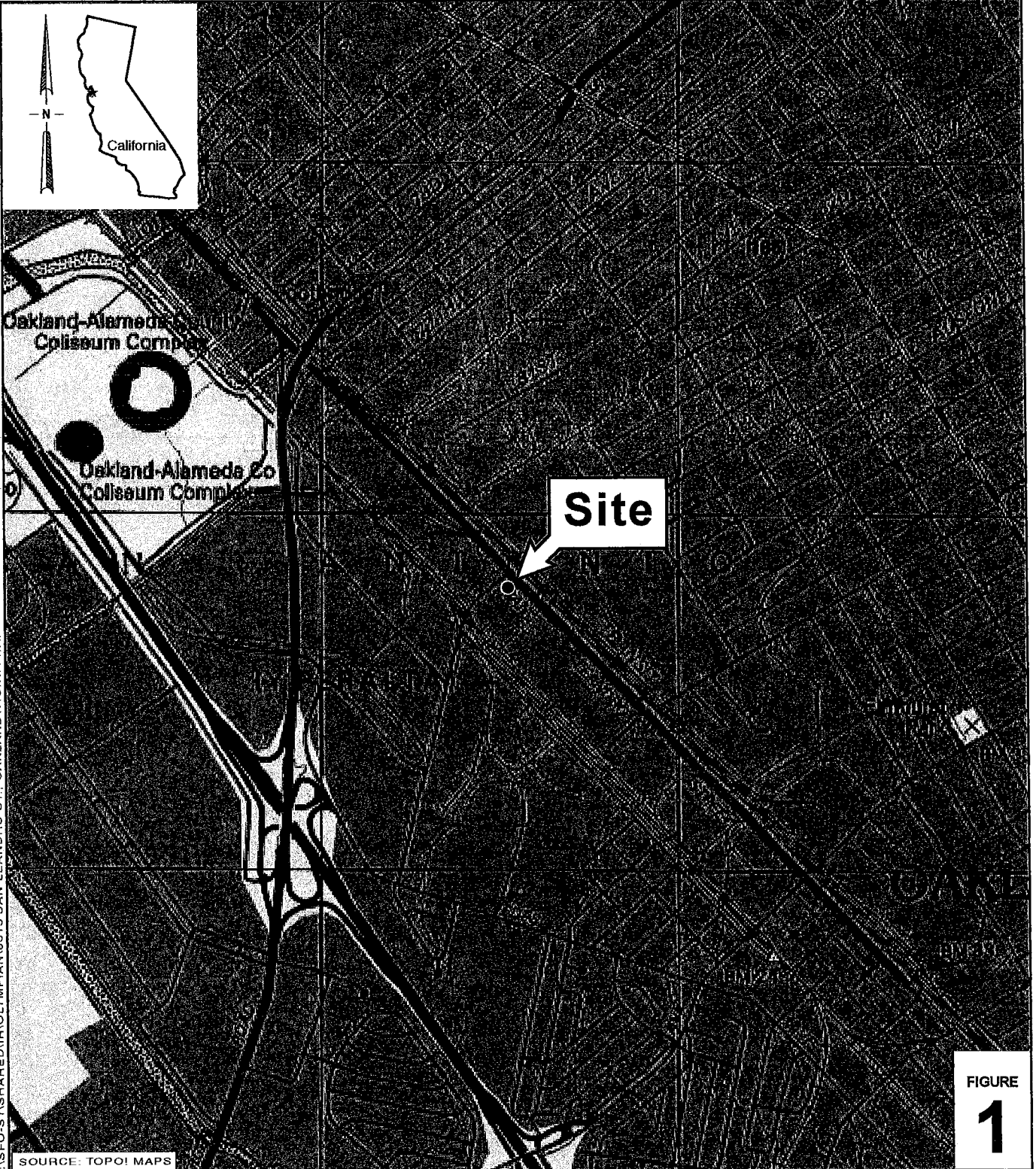


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Conestoga-Rovers & Associates, 2007: *Site Assessment Work Plan*, Olympic Cardlock Station, 8515 San Leandro Street Oakland, California, May 4

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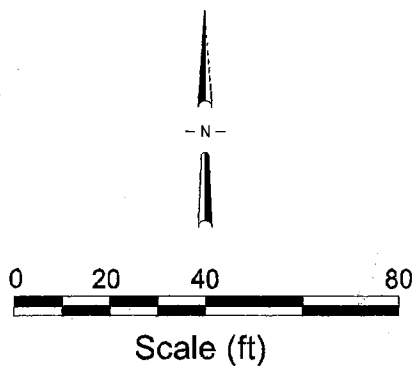
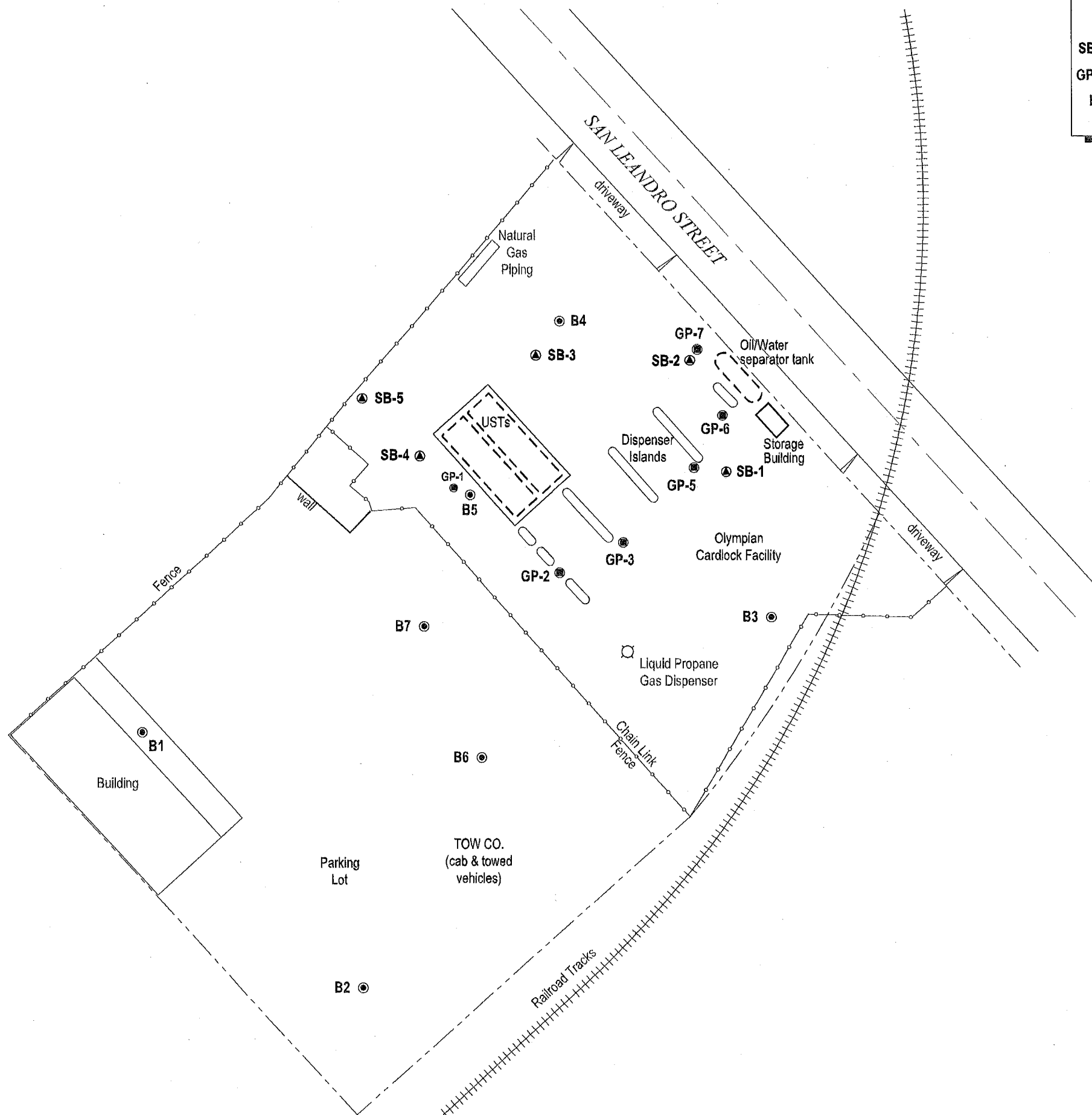


**Olympian Cardlock Facility**  
 8515 San Leandro Street  
 Oakland, California



**Vicinity Map**

EXPLANATION	
SB-1	▲ Soil boring location (CRA, 2007)
GP-1	● Soil boring location (GHH Eng., 2002)
B1	⊙ Soil boring location (Artesian Env., 1994)



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Basemap modified from drawing provided by Virgil Chavez Surveying

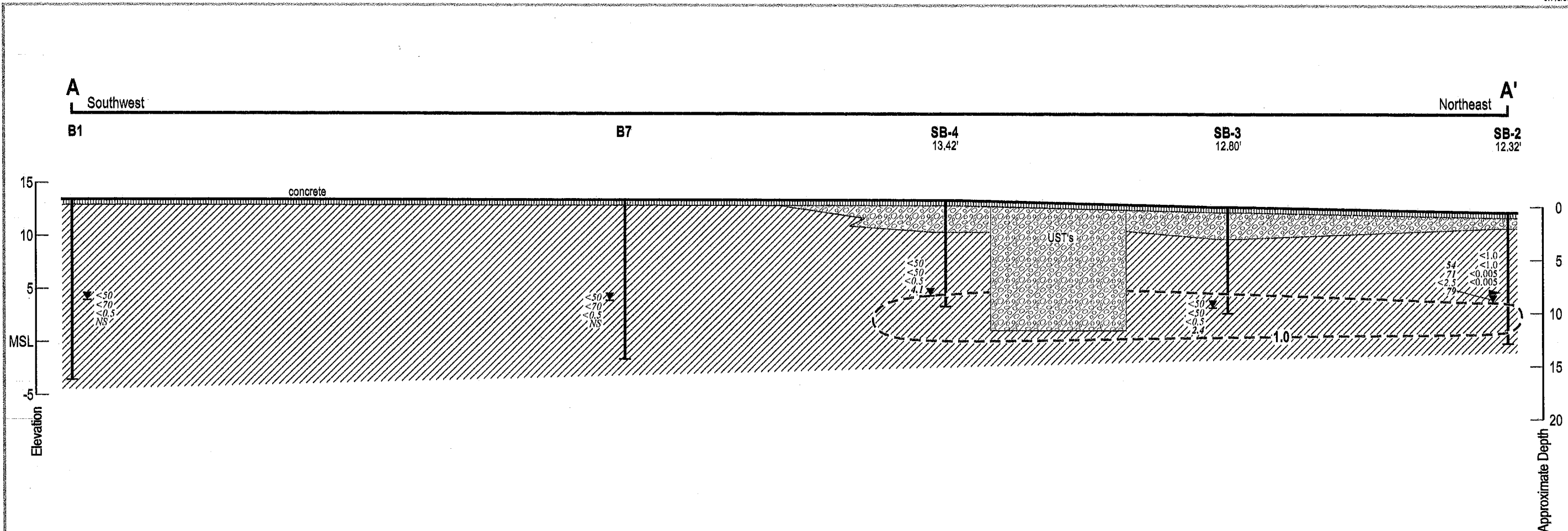
FIGURE  
**2**



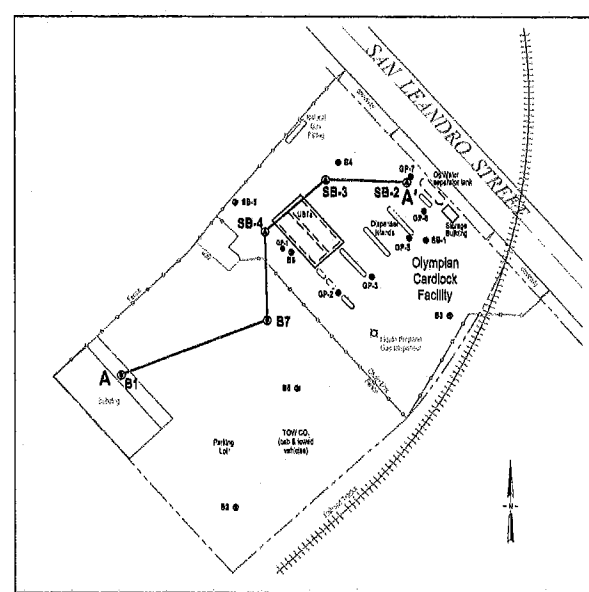
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Geologic Cross Section A-A'



**EXPLANATION**

	= Low Permeability Soils (clay, silt)	<b>Boring ID</b> — Boring Designation
	= Moderate Permeability Soils (sandy clay, silty sand)	Elev. — Surface Elevation
	= High Permeability Soils (sand, gravel)	(offset)
	= Fill (sandy gravel, pea gravel)	— Soil boring
◀	Approximate sample location	— Bottom of boring
TPHd	Hydrocarbon concentrations In Soil, in milligrams per kilogram (mg/kg)	- - - 1.0
TPHg		Dissolved phase MTBE Isoconcentration contour
Benzene		▼
MTBE		Depth of first encountered Groundwater
		NS
		TPHd
		TPHg
		Benzene
		MTBE

Note: Lab results of composite soil samples from borings B1 through B7 are not shown.

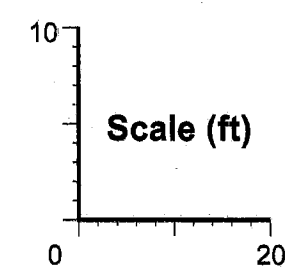
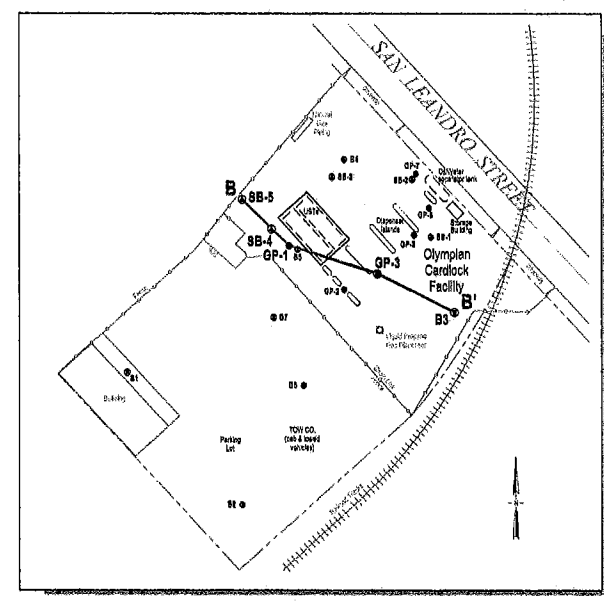
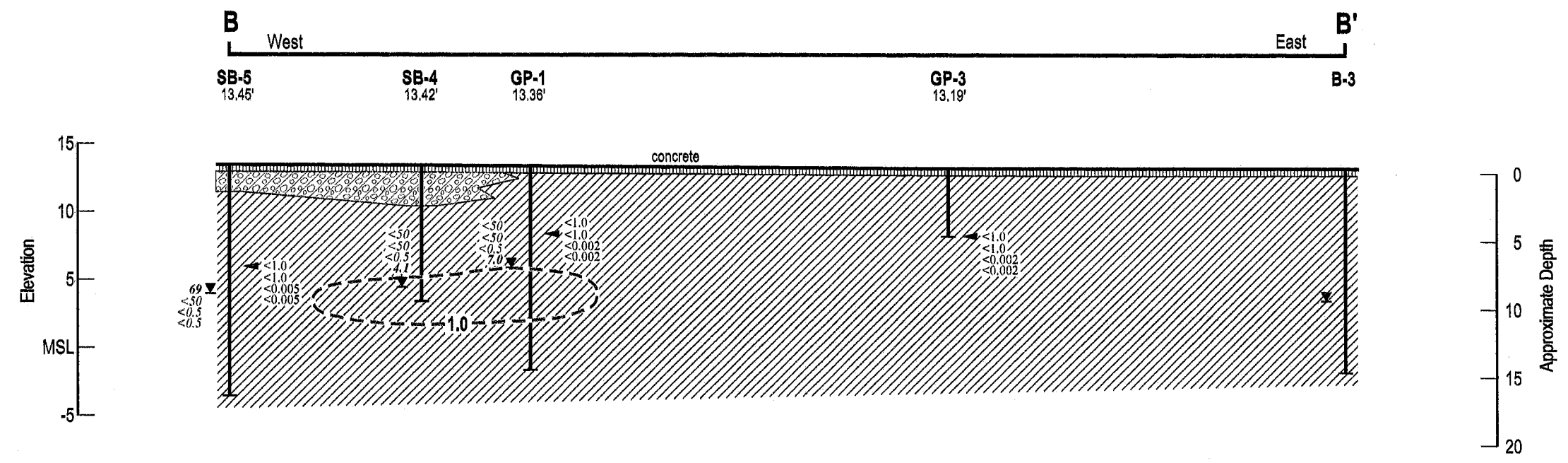


FIGURE 3

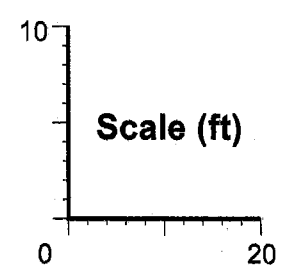
**Olympian Cardlock Facility**  
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K:\POLYMER\8515 SAN LEANDRO\FIG3-SECTION A-A.DWG



**EXPLANATION**

- [Hatched pattern] = Low Permeability Soils (clay, silt)
- [Diagonal lines] = Moderate Permeability Soils (sandy clay, silty sand)
- [Stippled pattern] = High Permeability Soils (sand, gravel)
- [Cross-hatched pattern] = Fill (sandy gravel, pea gravel)
- [Arrow] = Approximate sample location
- [TPHd, TPHg, Benzene, MTBE] = Hydrocarbon concentrations in Soil, in milligrams per kilogram (mg/kg)
- [Boring ID] = Boring Designation
- [Elev. (offset)] = Surface Elevation
- [Vertical line] = Soil boring
- [Bottom tick] = Bottom of boring
- [Dashed line 1.0] = Dissolved phase MTBE Isoconcentration contour
- [Inverted triangle] = Depth of first encountered Groundwater
- [TPHd, TPHg, Benzene, MTBE] = Hydrocarbon concentrations in Groundwater, in micrograms per liter (µg/L)



Note: Lab results of composite soil samples from borings B1 through B7 are not shown.

FIGURE 4

I:\PROJECTS\15 SAN LEANDRO\FIGURE 4 SECTION B-B'.DWG



Geologic Cross Section B-B'

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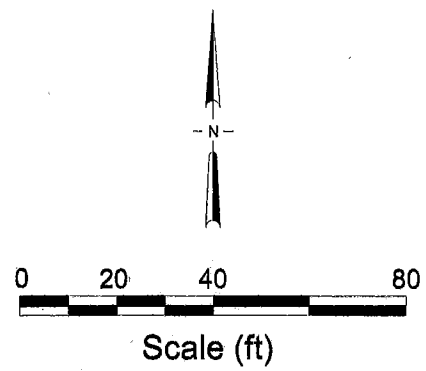
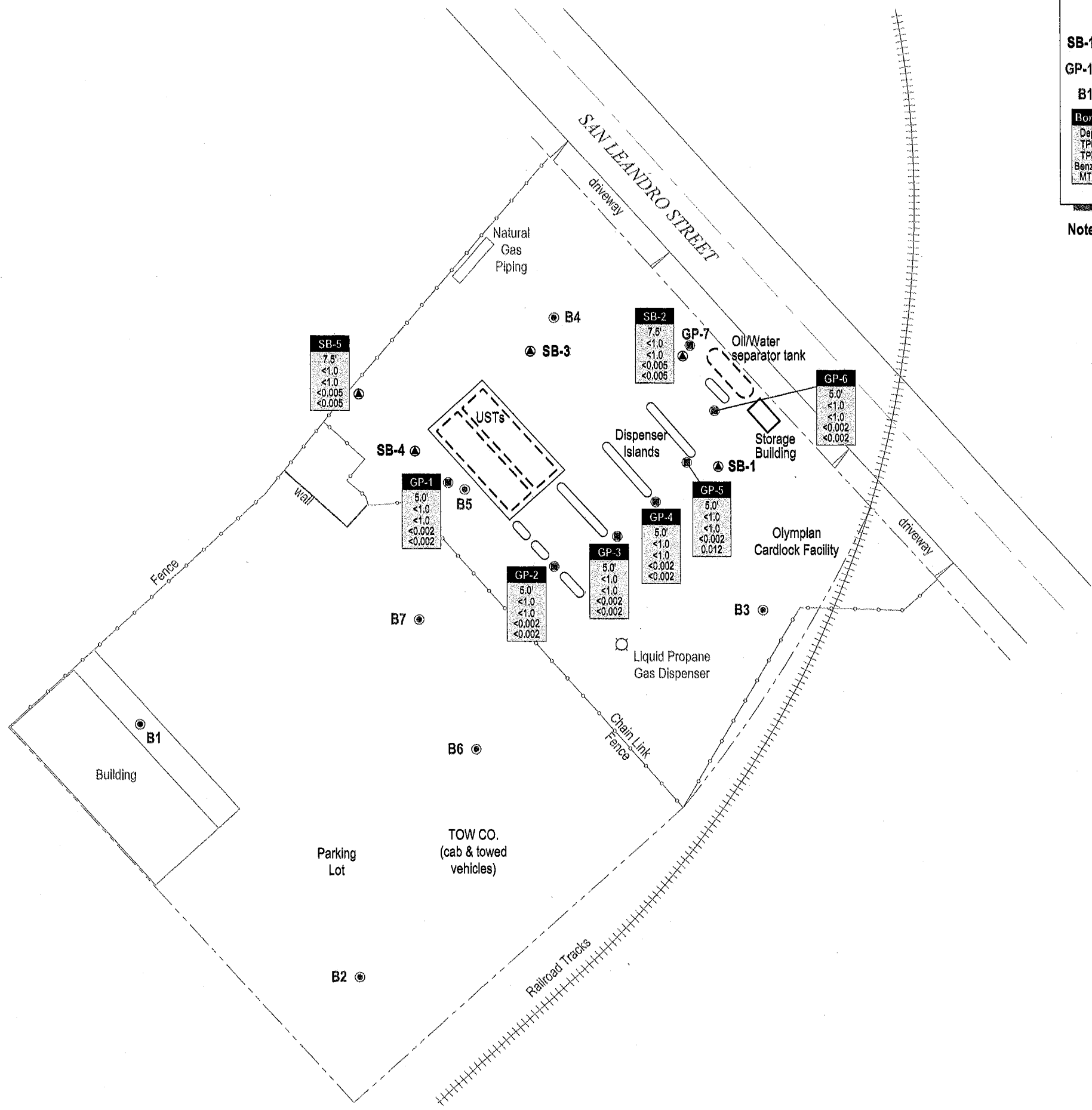
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**EXPLANATION**

- SB-1 Soil boring location (CRA, 2007)
- GP-1 Soil boring location (GHH Eng., 2002)
- B1 Soil boring location (Artesian Env., 1994)
- Soil boring designation

Boring	Depth	TPHd	TPHg	Benzene	MTBE
SB-5	7.5'	<1.0	<1.0	<0.005	<0.005
SB-2	7.5'	<1.0	<1.0	<0.005	<0.005
GP-7	5.0'	<1.0	<0.002	<0.002	<0.002
GP-6	5.0'	<1.0	<0.002	<0.002	<0.002
SB-1	5.0'	<1.0	<0.002	0.012	<0.002
GP-5	5.0'	<1.0	<0.002	<0.002	<0.002
GP-4	5.0'	<1.0	<0.002	<0.002	<0.002
GP-3	5.0'	<1.0	<0.002	<0.002	<0.002
GP-2	5.0'	<1.0	<0.002	<0.002	<0.002
GP-1	5.0'	<1.0	<0.002	<0.002	<0.002

**Note:** Lab results for composite soil samples from borings B1 through B7 are not shown.



Basemap modified from drawing provided by Virgil Chavez Surveying

Hydrocarbon Concentrations in Soil



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FIGURE

**5**

**EXPLANATION**

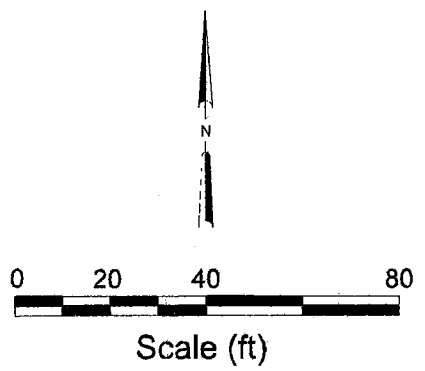
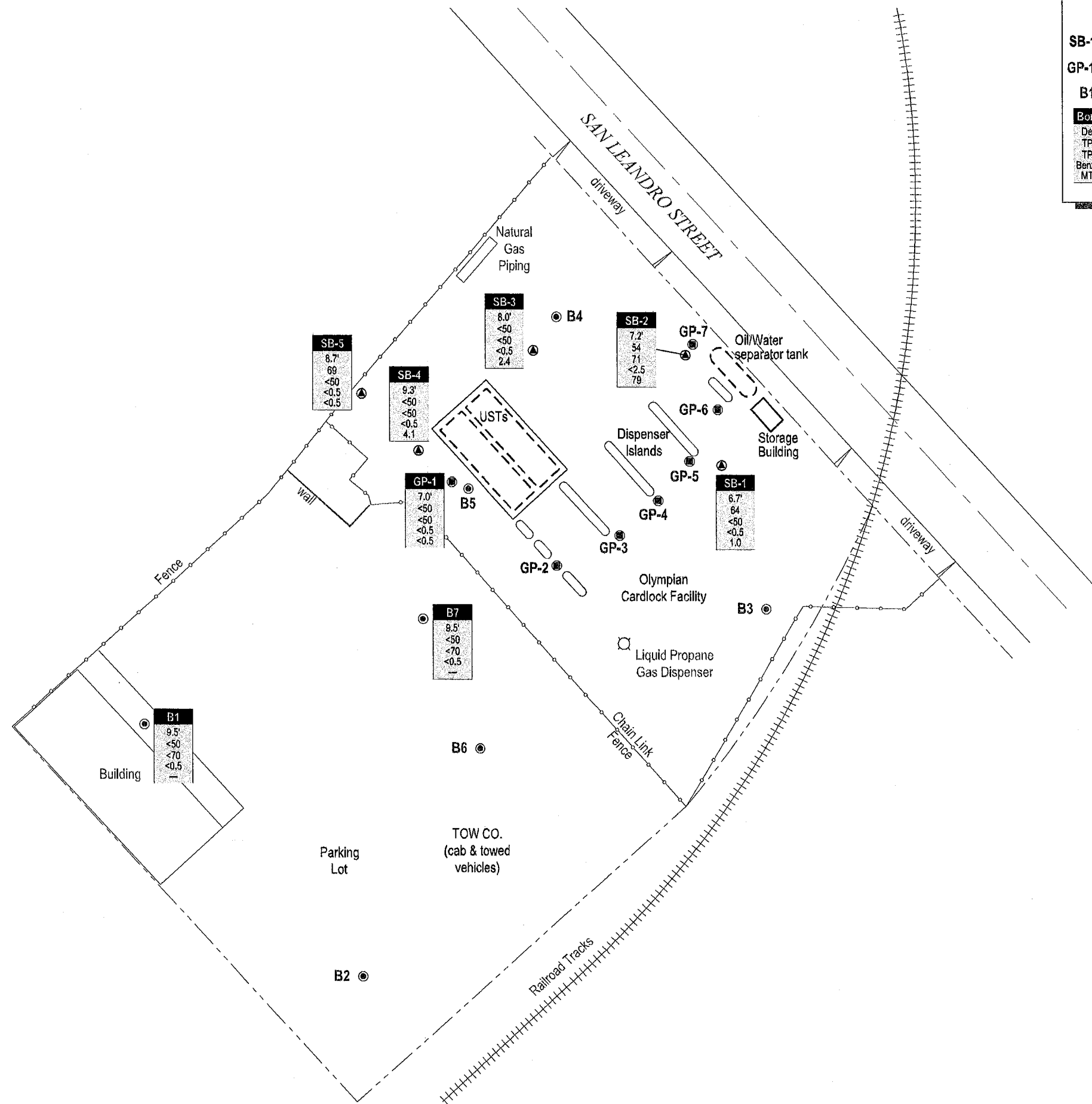
SB-1 Soil boring location (CRA, 2007)

GP-1 Soil boring location (GHH Eng., 2002)

B1 Soil boring location (Artesian Env., 1994)

**Boring** Soil boring designation

Depth	Depth and Hydrocarbon concentrations in groundwater, in micrograms per liter (µg/L)
TPHd	
TPHg	
Benzene	
MTBE	



I:\STO-S1\SHAREDIR\OLYMPIAN\8515 SAN LEANDRO\_OAKLAND\FIGURES\OLY\_SL\_HC-GW.DWG

Basemap modified from drawing provided by Virgil Chavez Surveying

FIGURE

6

Hydrocarbon Concentrations in Groundwater

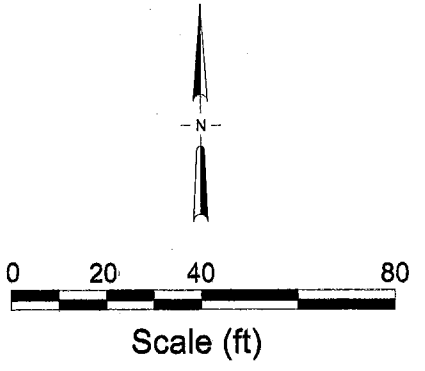
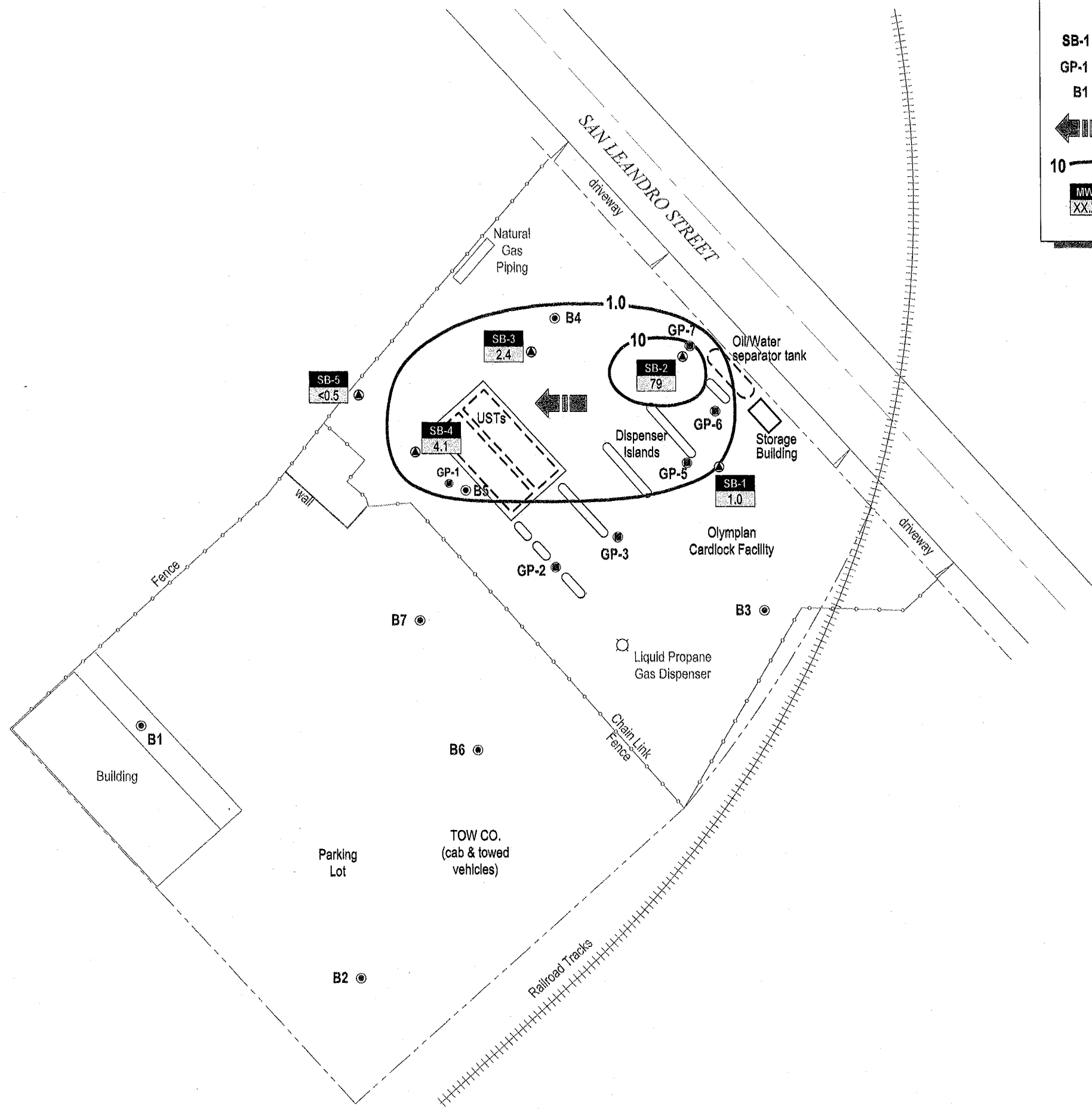
Olympian Cardlock Facility

8515 San Leandro Street  
Oakland, California



**EXPLANATION**

- SB-1 ● Soil boring location (CRA, 2007)
- GP-1 ● Soil boring location (GHH Eng., 2002)
- B1 ● Soil boring location (Artesian Env., 1994)
- ← Estimated groundwater flow direction
- 10 — MTBE Isoconcentration contour line (µg/L)
- MW-1 Well / Boring designation
- XX.XX MTBE concentrations in soil



Basemap modified from drawing provided by Virgil Chavez Surveying

Dissolved-Phase MTBE Isoconcentration Contour Map



Olympian Cardlock Facility  
8515 San Leandro Street  
Oakland, California

FIGURE 7

I:\SFO-ST\SHAREDIR\OLYMPIAN\8515 SAN LEANDRO, OAKLAND\FIGURES\OLY-SL\_DP-MTBE.DWG

# Conestoga-Rovers & Associates

Table 1. Soil Analytical Data - Olympian Cardlock Facility, 8515 San Leandro Street, Oakland, CA

Sample ID	Date	Depth (ft bgs)	TPHd	TPHmo	TPHg	TRPH	Oil & Grease	Benzene	Toluene	Ethyl- benzene	Xylenes mg/kg	MTBE	DIPE	ETBE	TAME	TBA	EDB	1,2-DCA	Ethanol
<b>Soil Borings</b>																			
B1/B2/B3/B4/B7	05/25/94	5	<50	--	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--	<0.005	--
B5/B6 (comp)	05/26/94	5	--	--	--	--	<50	--	--	--	--	--	--	--	--	--	--	--	--
GP1	05/15/02	5	<1.0	<10	<1.0	--	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.010	<0.002	<0.002	<1.0
GP2	05/15/02	5	<1.0	<10	<1.0	--	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.010	<0.002	<0.002	<1.0
GP3	05/15/02	5	<1.0	<10	<1.0	--	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.010	<0.002	<0.002	<1.0
GP4	05/15/02	5	<1.0	<10	<1.0	--	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.010	<0.002	<0.002	<1.0
GP5	05/15/02	5	<1.0	<10	<1.0	--	--	<0.002	<0.002	<0.002	<0.002	0.012	<0.005	<0.005	<0.005	<0.010	<0.002	<0.002	<1.0
GP6	05/15/02	5	<1.0	238	<1.0	--	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.010	<0.002	<0.002	<1.0
GP7	05/14/02	5	--	--	--	80	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2	6/5/2007	7.5	<1.0	--	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.25
SB-5	6/6/2007	7.5	<1.0	--	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.25

**Notes:**

TPHd = Total petroleum hydrocarbons as diesel analyzed by modified EPA Method SW8015C.

TPHmo = Total petroleum hydrocarbons as motor oil analyzed by modified EPA Method SW8015C.

TPHg = Total petroleum hydrocarbons as gasoline analyzed by modified EPA Method SW8015C.

TRPH = Total Recoverable Petroleum Hydrocarbons analyzed by EPA Method 1664.

Oil & Grease analyzed by EPA Method 5520.

MTBE = Methyl tertiary-butyl ether analyzed by EPA Method SW8260B.

DIPE, ETBE, TAME, TBA, EDB, and 1,2-DCA = Di-isopropyl ether, ethyl tertiary-butyl ether, tertiary-amyl methyl ether, tertiary butyl alcohol, ethylene dibromide, and 1,2-dichloroethane analyzed by EPA Method SW8260B.

Ethanol analyzed by EPA Method SW8260B.

1994 data collected by Artesian Environmental

2002 data collected by GHH Engineering

mg/kg: milligrams per kilogram

---: Indicates sample was not analyzed for the specific analyte

# Conestoga-Rovers & Associates

Table 2. Groundwater Analytical Data - Olympian Cardlock Facility, 8515 San Leandro Street, Oakland, CA

Sample ID	Date	Depth (ft bgs)	TPHd	TPHg	Benzene	Toluene	Ethyl- benzene	Xylenes	MTBE µg/L	DIPE	ETBE	TAME	TBA	EDB	1,2-DCA	Ethanol
<b>Grab Groundwater Samples</b>																
WB1	5/25/1994	9.5	<50	<70	<0.5	<0.5	<0.5	<0.8	--	--	--	--	--	--	--	--
WB7	5/26/1994	9.5	<50	<70	<0.5	<0.5	<0.5	<0.8	--	--	--	--	--	--	<2.0	--
GP1	5/15/2002	7	<50	<50	<0.5	<0.5	<0.5	<0.5	7.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0	<1,000
SB-1	6/5/2007	6.7	64 <sup>b</sup>	<50	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<50
SB-2	6/5/2007	7.2	54 <sup>b</sup>	71 <sup>f</sup>	<2.5	<2.5	<2.5	<2.5	79	<2.5	<2.5	20	<25	<2.5	<2.5	<250
SB-3	6/6/2007	8.0	<50	<50	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<50
SB-4	6/5/2007	9.3	<50	<50	<0.5	<0.5	<0.5	<0.5	4.1	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<50
SB-5	6/6/2007	8.7	69 <sup>b,g</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<50

**Notes:**

-- = Not Applicable

<n = Not detected in sample above n µg/L

TPHd = Total petroleum hydrocarbons as diesel analyzed by modified EPA Method SW8015C with silica gel cleanup, and without silica gel cleanup in parenthesis.

TPHmo = Total petroleum hydrocarbons as motor oil analyzed by modified EPA Method SW8015C with silica gel cleanup, and without silica gel cleanup in parenthesis.

TPHg = Total petroleum hydrocarbons as gasoline analyzed by modified EPA Method SW8015C.

Benzene, Toluene Ethylbenzene and xylenes, Ethanol, and Methanol analyzed by EPA Method 8260B.

MTBE = Methyl tertiary-butyl ether analyzed by EPA Method SW8260B

DIPE, ETBE, TAME, TBA, EDB, and 1,2-DCA = Di-isopropyl ether, ethyl tertiary-butyl ether, tertiary-amyl methyl ether, tertiary butyl alcohol, ethylene dibromide, and 1,2-dichloroethane analyzed by EPA Method SW8260B.

1994 data collected by Artesian Environmental

2002 data collected by GHH Engineering

b = diesel range compounds are significant

f = one to a few isolated non-target peaks present

g = oil range compounds are significant



**CONESTOGA-ROVERS  
& ASSOCIATES**

**APPENDIX A**  
Agency Correspondence

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



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

May 8, 2007

MAY 11 2007

Ms. Janet Heikel  
Olympian Oil  
1300 San Carlos Road  
San Carlos, CA 94070

Mr. Ruben Hausauer  
Ruben & Catherine Hausauer Trust  
2672 Warwick Place  
Hayward, CA 94542

Dear Ms. Heikel and Mr. Hausauer

Subject: Fuel Leak Case Number RO0002516, Olympian #975, 8515 San Leandro Street, Oakland, CA.

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site and the document entitled, "Site Assessment Work Plan," dated May 4, 2007 prepared by Conestoga Rover Associates (CRA). The scope of work in the Work Plan proposes the installation of five soil borings. ACEH generally agrees with the proposed scope of work as recommended in the Work Plan, provided the following technical comments are addressed prior to the implementation of the Work Plan.

Based on ACEH staff review of the case file, we request that you address the following technical comments and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to [steven.plunkett@acgov.org](mailto:steven.plunkett@acgov.org)) prior to the start of field activities.

**TECHNICAL COMMENTS**

1. **Soil Sampling.** ACEH requests that any interval where staining, odor, or elevated PID readings occur a soil sample is to be collected and submitted for laboratory analysis. If no staining, odor, or elevated PID readings are observed, soil samples are to be collected from each boring at the capillary fringe, where groundwater is first encountered. In addition, we request that one soil sample be collected from the capillary fringe in all soil borings advanced on site. ACEH agrees with the proposed laboratory analysis recommended by CRA. Please present the results from soil sampling in the Soil and Groundwater Investigation Report requested below.
2. **Groundwater Sampling and Analysis.** ACEH agrees with the soil sample analysis as recommended in the Work Plan. Please include results from groundwater sampling in the Soil and Groundwater Investigation Report requested below.

3. **Hydrogeologic Cross Sections.** We request that you prepare a minimum of two hydrogeologic cross sections for the site. One of the cross sections should extend from soil boring B1 through soil boring SB2. The cross sections are to depict the lateral and vertical extent of soil layers encountered, the location of the tank pit, where groundwater was first encountered in borings and the static water levels, and grab groundwater samples, staining, odor, and analytical results for soil and groundwater samples. Please present the cross sections in the Soil and Groundwater Investigation Report requested below.

#### **TECHNICAL REPORT REQUEST**

Please submit technical reports to Alameda County Environmental Health (Attention: Steve Plunkett), according to the following schedule:

- **June 30, 2007** – Soil and Groundwater Investigation Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10, 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

#### **ELECTRONIC SUBMITTAL OF REPORTS**

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

#### **PERJURY STATEMENT**

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

#### **PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS**



Ms. Heikel and Mr. Hausauer  
May 7, 2007  
Page 3

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

#### UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

#### AGENCY OVERSIGHT

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

If you have any questions, please call me at (510) 383-1767.

Sincerely,



Steven Plunkett  
Hazardous Materials Specialist

cc: Ron Scheele  
Cambria Environmental Technology, Inc.  
5900 Hollis Street, Suite A  
Emeryville, Ca 94608

Donna Drogos, ACEH  
Steven Plunkett, ACEH  
File

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



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

March 22, 2007

Ms. Janet Heikel  
Olympian Oil  
2000 Alameda de Las Pulgas, Suite 242  
San Mateo, CA 94403

Mr. Ruben Hausauer  
Ruben & Catherine Hausauer Trust  
2672 Warwick Place  
Hayward, CA 94542

Dear Ms. Heikel and Mr. Hausauer

Subject: Fuel Leak Case Number RO0002516, Olympian #975, 8515 San Leandro Street, Oakland, CA.

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site and the document entitled, "Site Characterization Work Plan," dated September 29, 2006 prepared by TEC Accutite (TEC). ACEH issued an approval letter for the Work Plan in November 2006. Subsequently, an informal request for closure initiated by Cambria Environmental Technology Inc. (Cambria) was submitted to ACEH in December 2006, following our approval of the previously mentioned Work Plan. As a result of the informal closure request and subsequent review by ACEH your report is late and your site is out of compliance with directives from this office. In order for your site to return to compliance, please **submit the previously requested Revised Work Plan by April 20, 2007**. This date is not an extension of your due date, reports for this site are late and your site is out of compliance.

After consideration and review of the informal request for closure presented by Cambria, ACEH has concluded that additional investigation is essential in order to evaluate potential dissolved phase petroleum hydrocarbon contamination associated with the unauthorized release at your site. If groundwater quality data indicate that dissolved phase petroleum hydrocarbon contamination is not a concern at the site, ACEH will move forward with the site closure process. However, if water quality data indicate residual groundwater contamination exists beneath your site, additional work may be required.

Based on ACEH staff review of the case file, we request that you address the following technical comments and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to [steven.plunkett@acgov.org](mailto:steven.plunkett@acgov.org)) prior to the start of field activities.

**TECHNICAL COMMENTS**

1. **Grab Groundwater Sample Locations.** To satisfy ACEH requirements for case closure, collection and analysis of additional groundwater samples shall be conducted in the location

of the fuel dispensers and USTs (see Figure 3). The lack of groundwater data near the fuel dispensers, combined with the presence of MtBE in soil collected from soil boring GP-5 demonstrate that grab groundwater sampling is necessary to evaluate the extent of MtBE contamination associated with the unauthorized release from the fuel dispensers. In addition, no grab groundwater sample was collected from soil boring GP-7, where petroleum hydrocarbon contamination was also detected in soil. Furthermore, MtBE was detected in groundwater collected from soil boring GP-1, which is adjacent to the USTs, and may indicate a separate release associated with the USTs. Following additional review of the Work Plan, ACEH has concluded that soil borings SB-4, SB-5 and SB-6 are not needed at this time. However, soil boring SB-1 should be moved adjacent to soil boring GP-5, and thus assess the extent of possible groundwater contamination at this location. Soil samples are to be collected in conjunction with the grab groundwater samples, but placed on laboratory hold pending review of groundwater analytical data. Lastly, soil boring SB-3 should be relocated adjacent to the east side of the UST tank pit. Please prepare a revised work plan for the proposed investigation.

2. **Groundwater Sampling and Analysis.** ACEH requests that all groundwater samples be analyzed for the following constituents: TPHg and TPHd by EPA Method 8015M or 8260, BTEX, EDB, EDC, MtBE, TAME, ETBE, DIPE, TBA and EtOH by EPA Method 8260. Please include results from groundwater sampling in the Soil and Groundwater Investigation Report requested below.
3. **Soil Sampling and Analysis.** Should soil analysis be necessary, all soil samples are to be analyzed for the following constituents: TPHg and TPHd by EPA Method 8015M or 8260, BTEX, EDB, EDC, MtBE, TAME, ETBE, DIPE, TBA and EtOH by EPA Method 8260.

#### TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Steve Plunkett), according to the following schedule:

- **April 20, 2007** – Revised Work Plan
- **June 5, 2007** – Soil and Groundwater Investigation Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

#### ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup

programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information on these requirements ([http://www.swrcb.ca.gov/ust/cleanup/electronic\\_reporting](http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting)).

#### PERJURY STATEMENT

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

#### PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

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

#### UNDERGROUND STORAGE TANK CLEANUP FUND

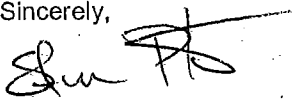
Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

#### AGENCY OVERSIGHT

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

If you have any questions, please call me at (510) 383-1767.

Sincerely,



Steven Plunkett  
Hazardous Materials Specialist

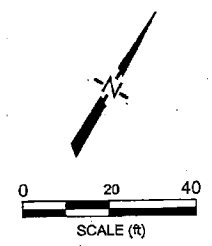
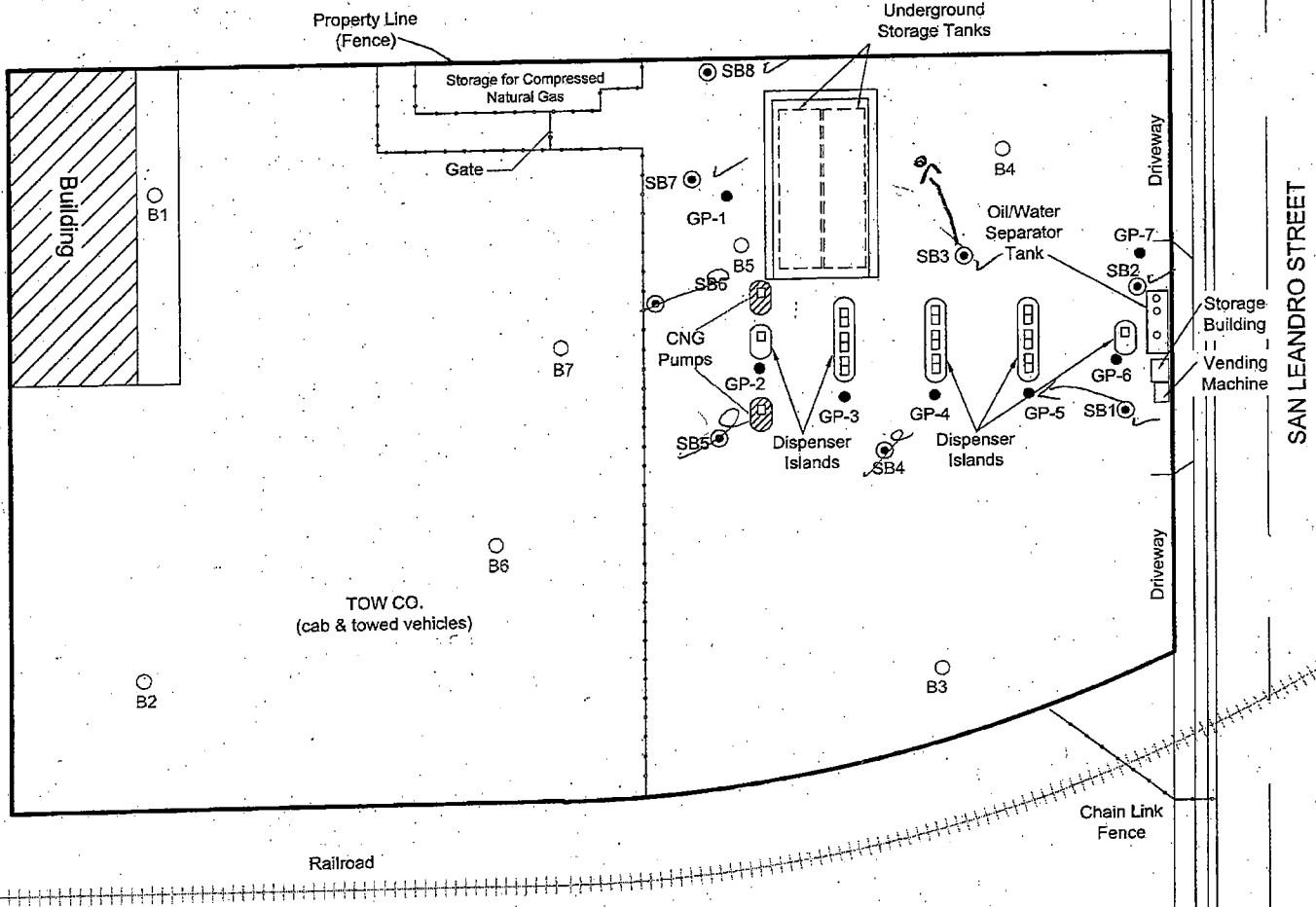
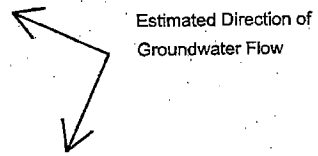
Ms. Heikel and Mr. Hausauer  
March 19, 2007  
Page 4

cc: Ron Scheele  
Cambria Environmental Technology, Inc.  
5900 Hollis Street, Suite A  
Emeryville, Ca 94608

Donna Drogos, ACEH  
Steven Plunkett, ACEH  
File

SITE Environmental Deplivative Status/Map/Part 35 San Leandro Street, Oakland Figure 09\_27\_06.dwg

upto 100ppb



**LEGEND**

Locations are estimated.  
Map source:  
Artesian, 1994  
GHH, 2002

- 1994 Borings (B-series)  
B1 by Artesian Environmental
- 2002 Borings (GP-series)  
GP-1 by GHH Engineering
- ⊙ Proposed Boring Locations  
SB5 (SB - series)

CNG = Compressed Natural Gas

**SITE**  
8515 San Leandro Street  
Oakland, California

**FIGURE**  
**3**  
**Proposed Sampling Locations**

Revision: 2  
Date: 09/27/2006  
Drafted By: LC

**TEC** 262 Michelle Court  
So. San Francisco, CA 94080  
Main: (650) 616-1200  
Fax: (650) 616-1244



**CONESTOGA-ROVERS  
& ASSOCIATES**

**APPENDIX B**  
Standard Operating Procedures

# Conestoga-Rovers & Associates

## STANDARD FIELD PROCEDURES FOR HAND-AUGER SOIL BORINGS

This document describes Cambria Environmental Technology's standard field methods for drilling and sampling soil borings using a hand-auger. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

### Objectives

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

### Soil Classification/Logging

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

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

### Soil Boring and Sampling

Hand-auger borings are typically drilled using a hand-held bucket auger to remove soil to the desired sampling depth. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments beyond the bottom of the augered hole. The vertical location of each soil sample is determined using a tape measure. All sample depths use the ground surface immediately adjacent to the boring as a datum. The horizontal location of each boring is measured in the field from an onsite permanent reference using a measuring wheel or tape measure.

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

### Sample Storage, Handling and Transport

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



# Conestoga-Rovers & Associates

## **Field Screening**

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable photoionization detector (PID) measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. PID measurements are used along with the field observations, odors, stratigraphy and ground water depth to select soil samples for analysis.

## **Water Sampling**

Water samples, if they are collected from the boring, are collected from the open borehole using bailers. The ground water samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory.

## **Duplicates and Blanks**

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

## **Grouting**

The borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.

## **Waste Handling and Disposal**

Soil cuttings from drilling activities are usually stockpiled onsite on top of and covered by plastic sheeting. At least four individual soil samples are collected from the stockpiles for later compositing at the analytic laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples. Soil cuttings are transported by licensed waste haulers and disposed in secure, licensed facilities based on the composite analytic results.

Ground water removed during sampling and/or rinsate generated during decontamination procedures are stored onsite in sealed 55-gallon drums. Each drum is labeled with the drum number, date of generation, suspected contents, generator identification and consultant contact. Disposal of the water is based on the analytic results for the well samples. The water is either pumped out using a vacuum truck for transport to a licensed waste treatment/disposal facility or the individual drums are picked up and transported to the waste facility where the drum contents are removed and appropriately disposed.



**CONESTOGA-ROVERS  
& ASSOCIATES**

## **APPENDIX C**

### Permits

# Alameda County Public Works Agency - Water Resources Well Permit



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

**Application Approved on: 05/23/2007 By jamesy**

**Permit Numbers: W2007-0643**  
**Permits Valid from 05/29/2007 to 06/30/2007**

**Application Id:** 1179417366680  
**Site Location:** Olympian Cardlock Facility  
8515 San Leandro Street  
Oakland, CA 94621

**City of Project Site:Oakland**

**Project Start Date:** 05/29/2007

**Completion Date:06/30/2007**

**Applicant:** Conestoga-Rovers & Associates - Glenn Reiss  
5900 Hollis Street, Sutie A, Emeryville, CA 94608

**Phone: 510-420-0700**

**Property Owner:** Janet Heikel  
Olympian JV - 1300 Industrial Road, Suite 2, San Carlos, CA 94070

**Phone: 650-596-8950**

**Client:** \*\* same as Property Owner \*\*  
**Contact:** Glenn Reiss

**Phone: 510-420-3360**  
**Cell: 510-385-0437**

	<b>Total Due:</b>	\$200.00
<b>Receipt Number: WR2007-0233</b>	<b>Total Amount Paid:</b>	\$200.00
<b>Payer Name : Conestoga-Rovers &amp; Associates</b>		<b>PAID IN FULL</b>
<b>Associates</b>		

**Works Requesting Permits:**

Borehole(s) for Investigation-Contamination Study - 5 Boreholes  
Driller: RSI Drilling - Lic #: 802335 - Method: other

**Work Total: \$200.00**

**Specifications**

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2007-0643	05/23/2007	08/27/2007	5	3.25 in.	15.00 ft

**Specific Work Permit Conditions**

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
  
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
  
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
  
4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities

## Alameda County Public Works Agency - Water Resources Well Permit

or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

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

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

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

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

9. Note: May 28 is a County Holiday (Memorial Day).  
No drilling will be allowed on this date.

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**CONESTOGA-ROVERS  
& ASSOCIATES**

**APPENDIX D**  
Soil Boring Logs

## Boring/Well Log Legend

### KEY TO SYMBOLS/ABBREVIATIONS

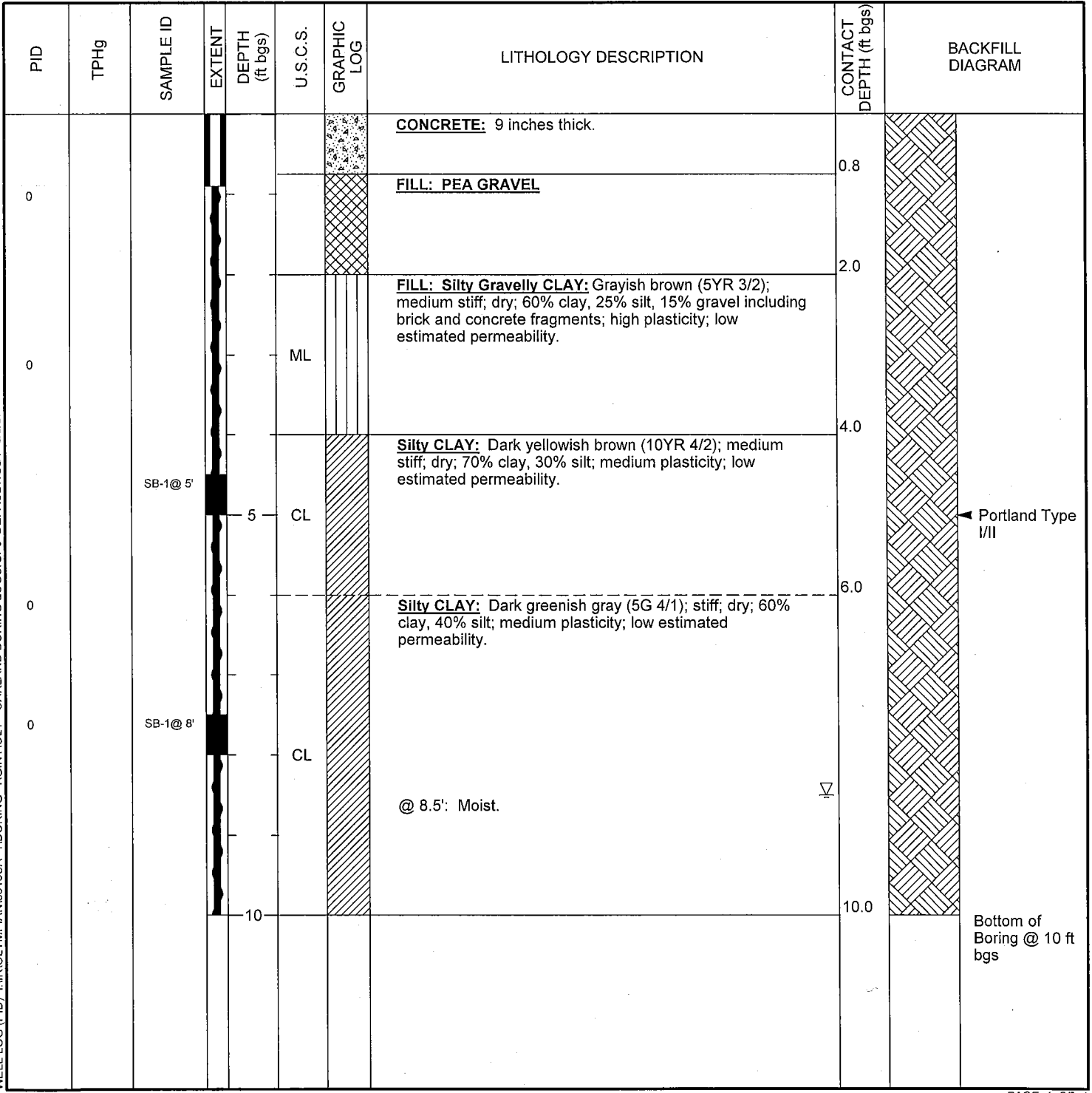
- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li> First encountered groundwater</li> <li> Static groundwater</li> <li> Soils logged by hand-auger or air-knife cuttings</li> <li> Soils logged by drill cuttings or disturbed sample</li> <li> Undisturbed soil sample interval</li> <li> Soil sample retained for submittal to analytical laboratory</li> <li> No recovery within interval</li> <li> Hydropunch screen interval</li> </ul> | <ul style="list-style-type: none"> <li>PID = Photo-ionization detector or organic vapor meter reading in parts per million (ppm)</li> <li>fbg = Feet below grade</li> <li>Blow Counts = Number of blows required to drive a California-modified split-spoon sampler using a 140-pound hammer falling freely 30 inches, recorded per 6-inch interval of a total 18-inch sample interval</li> <li>(10YR 4/4) = Soil color according to Munsell Soil Color Charts</li> <li>msl = Mean sea level</li> <li>Soils logged according to the USCS.</li> </ul> |
|---|--|

### UNIFIED SOILS CLASSIFICATION SYSTEM (USCS) SUMMARY

Major Divisions		Graphic	Group Symbol	Typical Description
Coarse-Grained Soils (>50% Sands and/or Gravels)	Gravel and Gravelly Soils		GW	Well-graded gravels, gravel-sand mixtures, little or no fines
			GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
			GM	Silty gravels, gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	Sand and Sandy Soils		SW	Well-graded sands, gravelly sands, little or no fines
			SP	Poorly-graded sands, gravelly sand, little or no fines
		SM	Silty sands, sand-silt mixtures	
		SC	Clayey sands, sand-clay mixtures	
Fine-Grained Soils (>50% Silts and/or Clays)	Silts and Clays		ML	Inorganic silts, very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	Silts and Clays		MH	Inorganic silts, micaceous or diatomaceous fine sand or silty soils
			CH	Inorganic clays of high plasticity
			OH	Organic clays of medium to high plasticity, organic silts
Highly Organic Soils			PT	Peat, humus, swamp soils with high organic contents

CLIENT NAME	Olympian JV	BORING NAME	SB-1
JOB/SITE NAME	Olympian - Oakland	DRILLING STARTED	05-Jun-07
LOCATION	8515 San Leandro Street, Oakland, CA	DRILLING COMPLETED	05-Jun-07
PROJECT NUMBER	161560	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	RSI Drilling, C57#802335	GROUND SURFACE ELEVATION	12.66
DRILLING METHOD	Hand Auger	TOP OF CASING ELEVATION	NA
BORING DIAMETER	3.25 inches	SCREENED INTERVAL	NA
LOGGED BY	G. Reiss	DEPTH TO WATER (First Encountered)	8.5 ft bgs (05-Jun-07)
REVIEWED BY	R. Scheele, PG# 6842	DEPTH TO WATER (Static)	NA
REMARKS	Grab groundwater sample collected using temporary PVC casing and a disposable bailer		

WELL LOG (PID) I:\RIROLYMPIAN\8515SA-1BORING-1GINTOLY - OAKLAND BORING LOGS.GPJ DEFAULT.GDT 8/8/07



CLIENT NAME	Olympian JV	BORING NAME	SB-2
JOB/SITE NAME	Olympian - Oakland	DRILLING STARTED	05-Jun-07
LOCATION	8515 San Leandro Street, Oakland, CA	DRILLING COMPLETED	05-Jun-07
PROJECT NUMBER	161560	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	RSI Drilling, C57#802335	GROUND SURFACE ELEVATION	12.32
DRILLING METHOD	Hand Auger	TOP OF CASING ELEVATION	NA
BORING DIAMETER	3.25 inches	SCREENED INTERVAL	NA
LOGGED BY	G. Reiss	DEPTH TO WATER (First Encountered)	8.5 ft bgs (05-Jun-07)
REVIEWED BY	R. Scheele, PG# 6842	DEPTH TO WATER (Static)	NA
REMARKS	Grab groundwater sample collected using temporary PVC casing and a disposable bailer		

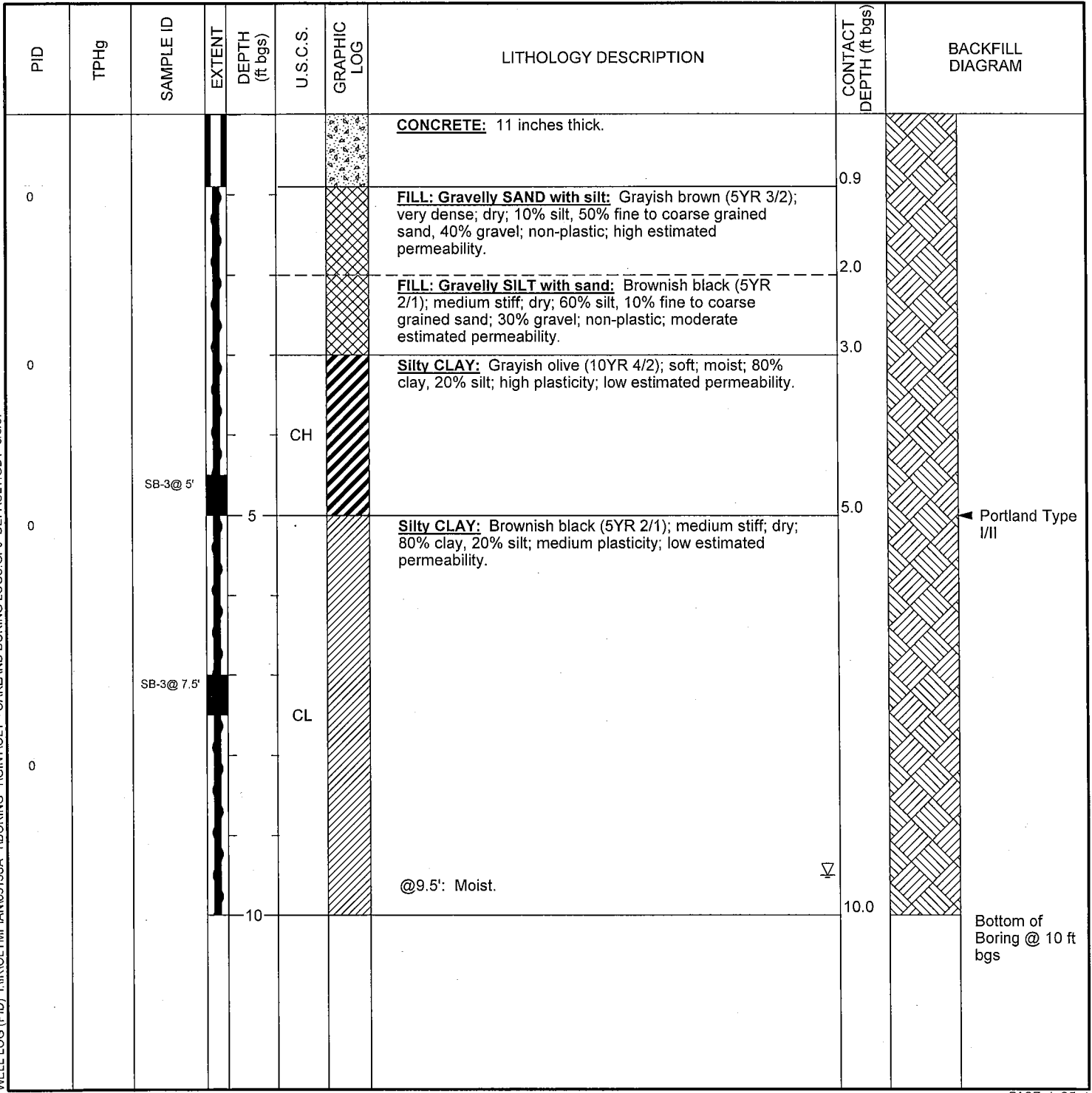
WELL LOG (PID) \\\NROLYMPIAN\8515SA-1BORING-1\GINTOLY - OAKLAND BORING LOGS.GPJ, DEFAULT.GDT 8/8/07

PID	TPHg	SAMPLE ID	EXTENT DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGY DESCRIPTION	CONTACT DEPTH (ft bgs)	BACKFILL DIAGRAM
0						<b>CONCRETE:</b> 9 inches thick.	0.8	
						<b>FILL: PEA GRAVEL</b>	1.5	
						<b>FILL: Clayey SILT:</b> Brownish black (5YR 2/1); medium stiff; dry; 30% clay, 65% silt, 5% sub-angular fine gravel; low plasticity; low estimated permeability.	3.0	
5				CL		<b>Silty CLAY with sand:</b> Grayish brown (5YR 3/2); medium stiff; dry; 60% clay, 30% silt, 10% fine grained sand; medium plasticity; low estimated permeability.	5.0	
9		SB-2@ 5'	5			<b>Silty CLAY:</b> Greenish black (5GY 2/1); dry; stiff; 70% clay, 30% silt; medium plasticity; low estimated permeability.	5.0	← Portland Type I/II
	<1.0	SB-2@ 7.5'		CL		@8.5': Moist; medium stiff.		
0							10.0	Bottom of Boring @ 10 ft bgs

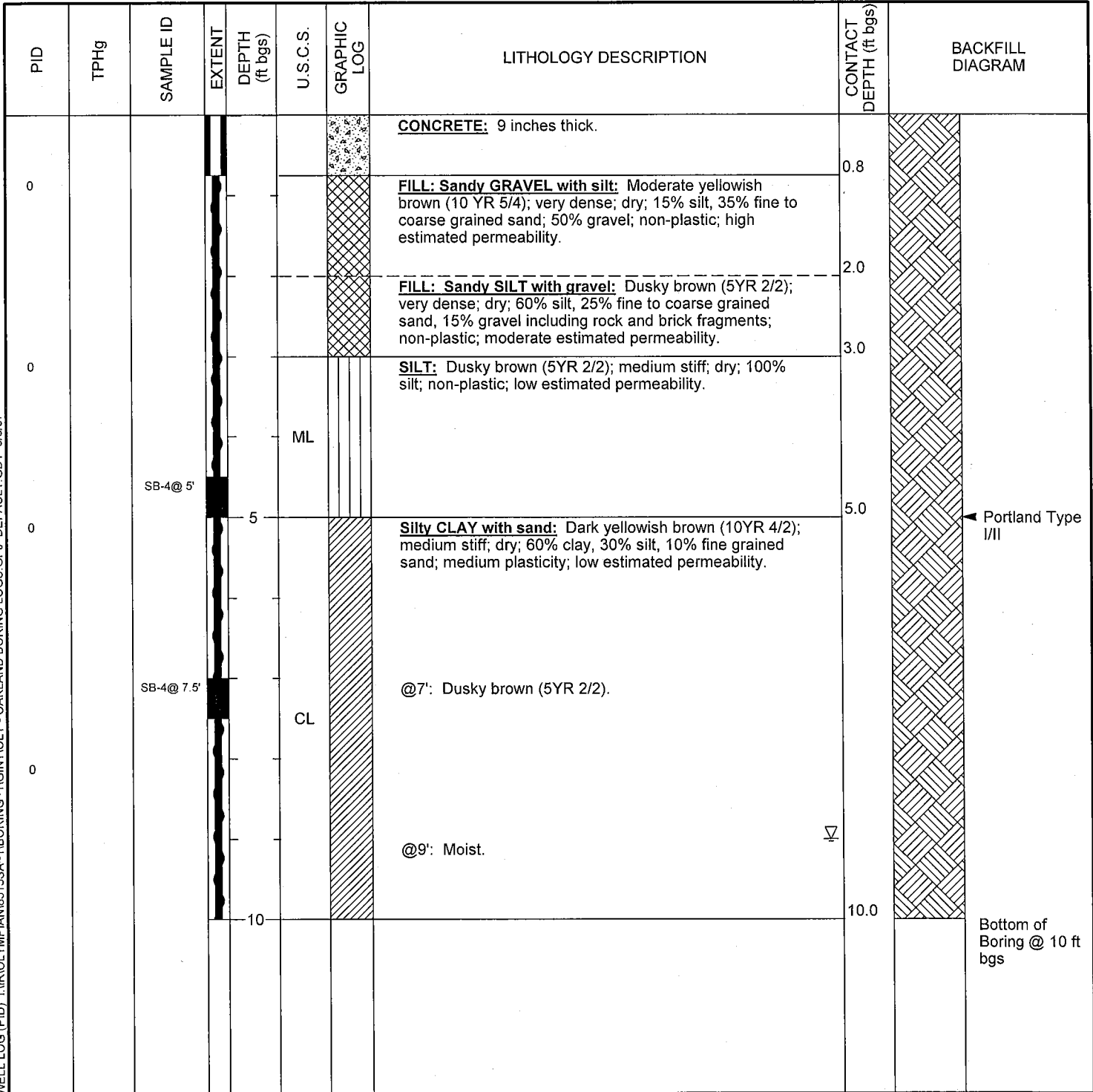


CLIENT NAME	Olympian JV	BORING NAME	SB-3
JOB/SITE NAME	Olympian - Oakland	DRILLING STARTED	06-Jun-07
LOCATION	8515 San Leandro Street, Oakland, CA	DRILLING COMPLETED	06-Jun-07
PROJECT NUMBER	161560	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	RSI Drilling, C57#802335	GROUND SURFACE ELEVATION	12.80
DRILLING METHOD	Hand Auger	TOP OF CASING ELEVATION	NA
BORING DIAMETER	3.25 inches	SCREENED INTERVAL	NA
LOGGED BY	G. Reiss	DEPTH TO WATER (First Encountered)	9.5 ft bgs (06-Jun-07)
REVIEWED BY	R. Scheele, PG# 6842	DEPTH TO WATER (Static)	NA
REMARKS	Grab groundwater sample collected using temporary PVC casing and a disposable bailer		

WELL LOG (PID) I:\RI\OLYMPIAN\8515SA-1BORING-1\GINTIOLY - OAKLAND BORING LOGS.GPJ DEFAULT.GDT 8/8/07



CLIENT NAME	Olympian JV	BORING NAME	SB-4
JOB/SITE NAME	Olympian - Oakland	DRILLING STARTED	05-Jun-07
LOCATION	8515 San Leandro Street, Oakland, CA	DRILLING COMPLETED	05-Jun-07
PROJECT NUMBER	161560	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	RSI Drilling, C57#802335	GROUND SURFACE ELEVATION	13.43
DRILLING METHOD	Hand Auger	TOP OF CASING ELEVATION	NA
BORING DIAMETER	3.25 inches	SCREENED INTERVAL	NA
LOGGED BY	G. Reiss	DEPTH TO WATER (First Encountered)	9.0 ft bgs (05-Jun-07) ▽
REVIEWED BY	R. Scheele, PG# 6842	DEPTH TO WATER (Static)	NA ▼
REMARKS	Grab groundwater sample collected using temporary PVC casing and a peristaltic pump.		



WELL LOG (PID) \R\O\LYMPIAN\8515SA-1\BORING-1\GINTO\LY - OAKLAND BORING LOGS.GPJ DEFAULT.GDT 8/8/07

CLIENT NAME	Olympian JV	BORING NAME	SB-5
JOB/SITE NAME	Olympian - Oakland	DRILLING STARTED	06-Jun-07
LOCATION	8515 San Leandro Street, Oakland, CA	DRILLING COMPLETED	06-Jun-07
PROJECT NUMBER	161560	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	RSI Drilling, C57#802335	GROUND SURFACE ELEVATION	13.45
DRILLING METHOD	Hand Auger	TOP OF CASING ELEVATION	NA
BORING DIAMETER	3.25 inches	SCREENED INTERVAL	NA
LOGGED BY	G. Reiss	DEPTH TO WATER (First Encountered)	9.5 ft bgs (06-Jun-07)
REVIEWED BY	R. Scheele, PG# 6842	DEPTH TO WATER (Static)	NA
REMARKS	Grab groundwater sample collected using temporary PVC casing and a disposable bailer		

PID	TPHg	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGY DESCRIPTION	CONTACT DEPTH (ft bgs)	BACKFILL DIAGRAM
							<b>CONCRETE:</b> 11 inches thick.	0.9	
0							<b>FILL: Clayey SAND with gravel and silt:</b> Grayish brown (5YR 3/2); medium dense; dry; 15% clay, 10% silt, 65% sand; 10% gravel; low plasticity; high estimated permeability.	2.0	
0					ML		<b>SILT with clay:</b> Brownish black (5YR 2/1); medium stiff; dry; 10% clay, 90% silt; low plasticity; low estimated permeability.	4.0	
0		SB-5@ 5'		5	CH		<b>Silty CLAY:</b> Dark yellowish brown (10 YR 4/2); soft; moist; 80% clay, 20% silt; high plasticity; low estimated permeability.	6.0	
	<1.0	SB-5@ 7.5'			CH		<b>CLAY with silt:</b> Brownish black (5YR 2/1); medium stiff; dry; 90% clay, 10% silt; high plasticity; low estimated permeability.	10.0	Bottom of Boring @ 10 ft bgs
							@9.5': Moist.		

WELL LOG (PID) I:\PIR\OLYMPIAN\8515SA-1\BORING-1\GINTIOLY - OAKLAND BORING LOGS.GPJ DEFAULT.GDT 8/8/07



**CONESTOGA-ROVERS  
& ASSOCIATES**

**APPENDIX E**  
Laboratory Analytical Reports



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #161560-004; Olympian Cardlock Facility	Date Sampled: 06/05/07-06/06/07
		Date Received: 06/07/07
	Client Contact: Glenn Reiss	Date Reported: 06/14/07
	Client P.O.:	Date Completed: 06/14/07

**WorkOrder: 0706218**

June 14, 2007

Dear Glenn:

Enclosed are:

- 1). the results of 5 analyzed samples from your #161560-004; Olympian Cardlock Facility project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

770628

CE 78

### McCAMPBELL ANALYTICAL INC.

1534 Willowpass Road  
Pittsburg, CA 94565

Telephone: (925) 252-9262

Fax: (925) 252-9269

### CHAIN OF CUSTODY RECORD

TURN AROUND TIME: 0 0 0  X  
RUSH 24 HOUR 48 HOUR 5 DAY

EDF Required?  Yes  No

Analysis Request

Other

Comments

Report To: Glenn Reiss Bill To: CRA  
 Company: Conestoga-Rovers & Associates (CRA)  
 5900 Hollis Street, Suite A  
 Emeryville, CA 94608  
 E-mail: rscheele@croworld.com  
 CC: greiss@croworld.com  
 Tele: (510) 420-3360 Fax: (510) 420-9170  
 Project #: 161560-004 Project Name: Olympian Cardlock Facility  
 Project Location: 8515 San Leandro Street, Oakland  
 Sampler Signature: *Glenn D. Reiss*

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED				Analysis Request	Other	Comments
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO <sub>3</sub>	Other			
SB-1		6/5/07	11:40	6	VOA	X						X	X				
SB-2			11:55	6		X						X	X				
SB-4		↓	15:50	6		X						X	X				
SB-3		6/5/07	10:10	6		X						X	X				
SB-5		↓	10:25	5	↓	X						X	X				

TPH by modified EPA Method 801.1C  
 TPHd by modified EPA Method 801.1C  
 BTEX, EDB, EDC, MYBE, TAME, ETBE, DIBP,  
 TBA, FROH by EPA Method 8260

+  
+  
+  
+  
+

10.4%  
 APPROPRIATE  
 PRESERVED  
 LAB  
 VOA GAG METALS OTHER

Relinquished By: *Glenn D. Reiss* Date: *6/5/07* Time: *2:30* Received By: *Severe Location*  
 Relinquished By: *[Signature]* Date: *6/5/07* Time: *1:30* Received By: *[Signature]*  
 Relinquished By: *[Signature]* Date: *6/2/07* Time: *9:05* Received By: *[Signature]*

Use lowest possible detection limits.  
Email EDF to Glenn Reiss

**McC Campbell Analytical, Inc.**



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

**CHAIN-OF-CUSTODY RECORD**

WorkOrder: 0706218

ClientID: CETE

EDF     Excel     Fax     Email     HardCopy     ThirdParty

Report to:

Glenn Reiss  
Conestoga-Rovers & Associates  
5900 Hollis St, Suite A  
Emeryville, CA 94608

Email: greiss@CRAworld.com  
TEL: (510) 420-070    FAX: (510) 420-917  
ProjectNo: #161560-004; Olympian Cardlock Facili  
PO:

Bill to:

Accounts Payable  
Conestoga-Rovers & Associates  
5900 Hollis St, Ste. A  
Emeryville, CA 94608

Requested TAT: 5 days

Date Received 06/07/2007

Date Printed: 06/07/2007

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0706218-001	SB-1	Water	6/5/2007 11:40:00	<input type="checkbox"/>	A	B	A										
0706218-002	SB-2	Water	6/5/2007 11:55:00	<input type="checkbox"/>	A	B											
0706218-003	SB-4	Water	6/5/2007 3:50:00	<input type="checkbox"/>	A	B											
0706218-004	SB-3	Water	6/6/2007 10:10:00	<input type="checkbox"/>	A	B											
0706218-005	SB-5	Water	6/6/2007 10:25:00	<input type="checkbox"/>	A	B											

Test Legend:

1	G-MBTX_W	2	MBTEXOXY-8260B_W	3	PREDF REPORT	4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A, 005A contain testgroup.

Prepared by: Chloe Lam

Comments: pls CC to rscheele@craworld.com

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



### Sample Receipt Checklist

Client Name: **Conestoga-Rovers & Associates**  
Project Name: **#161560-004; Olympian Cardlock Facility**  
WorkOrder N°: **0706218** Matrix Water

Date and Time Received: **6/7/2007 8:19:50 PM**  
Checklist completed and reviewed by: **Chloe Lam**  
Carrier: Client Drop-In

#### Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

#### Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

#### Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 14.4°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>



Client contacted:

Date contacted:

Contacted by:

Comments:







# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #161560-004; Olympian Cardlock Facility	Date Sampled: 06/05/07-06/06/07
	Client Contact: Glenn Reiss	Date Received: 06/07/07
	Client P.O.:	Date Extracted: 06/09/07-06/11/07
		Date Analyzed: 06/09/07-06/11/07

### Oxygenates and BTEX by GC/MS\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0706218

Lab ID	0706218-001B	0706218-002B	0706218-003B	0706218-004B	Reporting Limit for DF =1	
Client ID	SB-1	SB-2	SB-4	SB-3		
Matrix	W	W	W	W		
DF	1	5	1	1		

Compound	Concentration				ug/kg	ug/L
tert-Amyl methyl ether (TAME)	ND	20	ND	ND	NA	0.5
Benzene	ND	ND<2.5	ND	ND	NA	0.5
t-Butyl alcohol (TBA)	ND	ND<25	ND	ND	NA	5.0
1,2-Dibromoethane (EDB)	ND	ND<2.5	ND	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND<2.5	ND	ND	NA	0.5
Diisopropyl ether (DIPE)	ND	ND<2.5	ND	ND	NA	0.5
Ethanol	ND	ND<250	ND	ND	NA	50
Ethylbenzene	ND	ND<2.5	ND	ND	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND	ND<2.5	ND	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	1.0	79	4.1	2.4	NA	0.5
Toluene	ND	ND<2.5	ND	ND	NA	0.5
Xylenes	ND	ND<2.5	ND	ND	NA	0.5

### Surrogate Recoveries (%)

%SS1:	97	95	98	99
%SS2:	94	94	94	92
%SS3:	90	92	90	89

### Comments

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #161560-004; Olympian Cardlock Facility	Date Sampled: 06/05/07-06/06/07
	Client Contact: Glenn Reiss	Date Received: 06/07/07
	Client P.O.:	Date Extracted: 06/09/07-06/11/07
		Date Analyzed: 06/09/07-06/11/07

### Oxygenates and BTEX by GC/MS\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0706218

Lab ID	0706218-005B				Reporting Limit for DF =1
Client ID	SB-5				
Matrix	W				
DF	1				

Compound	Concentration			ug/kg	ug/L
tert-Amyl methyl ether (TAME)	ND			NA	0.5
Benzene	ND			NA	0.5
t-Butyl alcohol (TBA)	ND			NA	5.0
1,2-Dibromoethane (EDB)	ND			NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND			NA	0.5
Diisopropyl ether (DIPE)	ND			NA	0.5
Ethanol	ND			NA	50
Ethylbenzene	ND			NA	0.5
Ethyl tert-butyl ether (ETBE)	ND			NA	0.5
Methyl-t-butyl ether (MTBE)	ND			NA	0.5
Toluene	ND			NA	0.5
Xylenes	ND			NA	0.5

### Surrogate Recoveries (%)

%SS1:	99			
%SS2:	93			
%SS3:	93			

### Comments

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.





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## QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0706218

EPA Method SW8015Cm	Extraction SW5030B			BatchID: 28612			Spiked Sample ID: 0706226-004A					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>f</sup>	ND	60	76.5	82.1	7.07	82.4	95.2	14.5	70 - 130	30	70 - 130	30
MTBE	ND	10	103	111	7.60	113	109	3.97	70 - 130	30	70 - 130	30
Benzene	ND	10	92.2	97.4	5.47	99.9	97.9	1.95	70 - 130	30	70 - 130	30
Toluene	ND	10	84.9	91.6	7.27	97.1	95.6	1.61	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	89.7	95.5	6.30	97	95.8	1.26	70 - 130	30	70 - 130	30
Xylenes	ND	30	85	90.3	6.08	90.7	90	0.738	70 - 130	30	70 - 130	30
%SS:	111	10	106	107	0.514	107	105	2.13	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

### BATCH 28612 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706218-001A	06/05/07 11:40 AM	06/09/07	06/09/07 5:06 PM	0706218-002A	06/05/07 11:55 AM	06/09/07	06/09/07 6:39 PM
0706218-003A	06/05/07 3:50 PM	06/11/07	06/11/07 8:39 PM	0706218-004A	06/06/07 10:10 AM	06/11/07	06/11/07 9:09 PM
0706218-005A	06/06/07 10:25 AM	06/10/07	06/10/07 2:16 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



**QC SUMMARY REPORT FOR SW8260B**

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0706218

Analyte	Extraction SW5030B			BatchID: 28603					Spiked Sample ID: 0706218-001B			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	96	95.3	0.753	95	96.7	1.81	70 - 130	30	70 - 130	30
Benzene	ND	10	93.2	91.2	2.10	94.3	93.7	0.667	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	86.7	85.6	1.26	93.9	95.7	1.88	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	101	98.3	2.84	96.5	95	1.53	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	101	98.7	1.86	99.8	100	0.635	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	103	101	2.34	102	103	1.00	70 - 130	30	70 - 130	30
Ethanol	ND	500	99.2	96	3.09	100	105	5.17	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	97.9	96.2	1.84	96.5	97.1	0.612	70 - 130	30	70 - 130	30
Methanol	ND	2500	101	100	0.687	101	101	0	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	1.0	10	90.7	90.7	0	100	102	1.94	70 - 130	30	70 - 130	30
Toluene	ND	10	109	106	3.30	106	104	2.62	70 - 130	30	70 - 130	30
%SS1:	97	10	107	105	2.07	103	105	2.02	70 - 130	30	70 - 130	30
%SS2:	94	10	104	102	1.69	101	99	2.79	70 - 130	30	70 - 130	30
%SS3:	90	10	93	93	0	92	91	1.01	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

**BATCH 28603 SUMMARY**

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706218-001B	06/05/07 11:40 AM	06/09/07	06/09/07 5:57 PM	0706218-002B	06/05/07 11:55 AM	06/11/07	06/11/07 1:32 PM
0706218-003B	06/05/07 3:50 PM	06/09/07	06/09/07 7:23 PM	0706218-004B	06/06/07 10:10 AM	06/09/07	06/09/07 8:06 PM
0706218-005B	06/06/07 10:25 AM	06/09/07	06/09/07 8:51 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0706218

Analyte	Extraction SW3510C		BatchID: 28591						Spiked Sample ID: N/A			
	Sample µg/L	Spiked µg/L	MS % Rec.	MSD % Rec.	MS-MSD % RPD	LCS % Rec.	LCSD % Rec.	LCS-LCSD % RPD	Acceptance Criteria (%)			
TPH(d)	N/A	1000	N/A	N/A	N/A	108	110	1.94	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	118	120	1.53	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 28591 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706218-001A	06/05/07 11:40 AM	06/07/07	06/11/07 6:01 PM	0706218-002A	06/05/07 11:55 AM	06/07/07	06/11/07 7:10 PM
0706218-003A	06/05/07 3:50 PM	06/07/07	06/13/07 6:41 PM	0706218-004A	06/06/07 10:10 AM	06/07/07	06/13/07 7:51 PM
0706218-005A	06/06/07 10:25 AM	06/07/07	06/13/07 10:08 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



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Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #161560-004; Olympian Cardlock Facility	Date Sampled: 06/05/07-06/06/07
		Date Received: 06/07/07
	Client Contact: Glenn Reiss	Date Reported: 06/25/07
	Client P.O.:	Date Completed: 06/25/07

**WorkOrder 0706498**

June 25, 2007

Dear Glenn:

Enclosed are:

- 1). the results of 2 analyzed samples from your **#161560-004; Olympian Cardlock Facility project,**
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager





**McC Campbell Analytical, Inc.**



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

**CHAIN-OF-CUSTODY RECORD**

WorkOrder: 0706498

ClientID: CETE

EDF     Excel     Fax     Email     HardCopy     ThirdParty

Report to:

Glenn Reiss  
Conestoga-Rovers & Associates  
5900 Hollis St, Suite A  
Emeryville, CA 94608

Email: greiss@CRAworld.com  
TEL: (510) 420-070    FAX: (510) 420-917  
ProjectNo: #161560-004; Olympian Cardlock Facili  
PO:

Bill to

Accounts Payable  
Conestoga-Rovers & Associates  
5900 Hollis St, Ste. A  
Emeryville, CA 94608

Requested TAT: 5 days

Date Received 06/07/2007

Date Printed: 06/19/2007

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0706498-004	SB-2@7.5'	Soil	6/5/07 11:20:00	<input type="checkbox"/>	A	A											
0706498-010	SB-5@7.5'	Soil	6/6/07 9:45:00 AM	<input type="checkbox"/>	A	A	A										

Test Legend:

1	G-MBTEX S
6	
11	

2	MBTEXOXY-8260B S
7	
12	

3	PREDF REPORT
8	

4	
9	

5	
10	

The following SampIDs: 004A, 010A contain testgroup.

Prepared by: Melissa Valles

Comments: Received 6/7/06; Off hold 6/19/07

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



**Sample Receipt Checklist**

Client Name: **Conestoga-Rovers & Associates**  
Project Name: **#161560-004; Olympian Cardlock Facility**  
WorkOrder N°: **0706498** Matrix Soil

Date and Time Received: **6/7/07**  
Checklist completed and reviewed by: **Melissa Valles**  
Carrier: Rob Pringle (MAI Courier)

**Chain of Custody (COC) Information**

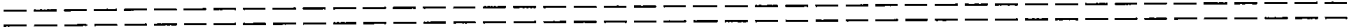
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

**Sample Receipt Information**

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

**Sample Preservation and Hold Time (HT) Information**

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 10.4°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
TTLIC Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>



Client contacted: \_\_\_\_\_ Date contacted: \_\_\_\_\_ Contacted by: \_\_\_\_\_

Comments:





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Conestoga-Rovers & Associates  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #161560-004; Olympian Cardlock Facility	Date Sampled: 06/05/07-06/06/07
	Client Contact: Glenn Reiss	Date Received: 06/07/07
	Client P.O.:	Date Extracted: 06/19/07
		Date Analyzed: 06/20/07

### Oxygenates and BTEX by GC/MS\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0706498

Lab ID	0706498-004A	0706498-010A			Reporting Limit for DF =1
Client ID	SB-2@7.5'	SB-5@7.5'			
Matrix	S	S			
DF	1	1			

Compound	Concentration				mg/kg	ug/L
	tert-Amyl methyl ether (TAME)	ND	ND			0.005
Benzene	ND	ND			0.005	NA
t-Butyl alcohol (TBA)	ND	ND			0.05	NA
1,2-Dibromoethane (EDB)	ND	ND			0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND	ND			0.005	NA
Diisopropyl ether (DIPE)	ND	ND			0.005	NA
Ethanol	ND	ND			0.25	NA
Ethylbenzene	ND	ND			0.005	NA
Ethyl tert-butyl ether (ETBE)	ND	ND			0.005	NA
Methyl-t-butyl ether (MTBE)	ND	ND			0.005	NA
Toluene	ND	ND			0.005	NA
Xylenes	ND	ND			0.005	NA

### Surrogate Recoveries (%)

%SS1:	97	98		
%SS2:	100	99		
%SS3:	106	105		

### Comments

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.





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### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0706498

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 28746			Spiked Sample ID: 0706401-018A			
	Sample mg/Kg	Spiked mg/Kg	MS % Rec.	MSD % Rec.	MS-MSD % RPD	LCS % Rec.	LCSD % Rec.	LCS-LCSD % RPD	Acceptance Criteria (%)			
TPH(btex) <sup>f</sup>	ND	0.60	95.1	105	10.3	114	112	1.57	70 - 130	30	70 - 130	30
MTBE	ND	0.10	100	98.1	1.92	103	112	8.70	70 - 130	30	70 - 130	30
Benzene	ND	0.10	77.8	82.4	5.79	85.5	88.8	3.76	70 - 130	30	70 - 130	30
Toluene	ND	0.10	96.9	102	5.41	107	110	3.24	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	93.1	98.1	5.18	103	106	3.15	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	103	110	6.25	113	120	5.71	70 - 130	30	70 - 130	30
%SS:	90	0.10	84	89	5.41	92	96	3.84	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

#### BATCH 28746 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706498-004A	06/05/07 11:20 AM	06/19/07	06/19/07 8:41 PM	0706498-010A	06/06/07 9:45 AM	06/19/07	06/19/07 8:08 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



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Telephone: 877-252-9262 Fax: 925-252-9269

## QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0706498

EPA Method SW8260B	Extraction SW5030B			BatchID: 28807			Spiked Sample ID: 0706478-001A					
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	100	99.9	0.262	101	101	0	70 - 130	30	70 - 130	30
Benzene	ND	0.050	96.6	96.1	0.458	98.3	96.5	1.78	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	102	101	1.62	104	101	3.36	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	99.3	100	1.18	95.1	96.2	1.20	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	100	100	0	103	103	0	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	106	107	0.242	105	106	0.827	70 - 130	30	70 - 130	30
Ethanol	ND	2.5	91.7	93.9	2.15	108	102	5.62	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.0509	9	98.4	0.639	98	97.5	0.458	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	98.8	98.9	0.0495	101	100	0.607	70 - 130	30	70 - 130	30
Toluene	ND	0.050	108	109	0.336	104	105	0.589	70 - 130	30	70 - 130	30
%SS1:	96	0.050	100	100	0	101	102	0.526	70 - 130	30	70 - 130	30
%SS2:	99	0.0509	3	93	0	89	91	2.20	70 - 130	30	70 - 130	30
%SS3:	105	0.0508	8	89	0.222	83	86	4.19	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

### BATCH 28807 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706498-004A	06/05/07 11:20 AM	06/19/07	06/20/07 1:08 AM	0706498-010A	06/06/07 9:45 AM	06/19/07	06/20/07 1:56 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.





**McCampbell Analytical, Inc.**

"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder: 0706498

EPA Method SW8015C	Extraction SW3550C			BatchID: 28806			Spiked Sample ID: 0706478-016A					
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	530	20	NR	NR	NR	108	108	0	70 - 130	30	70 - 130	30
%SS:	102	50	102	109	7.01	110	109	0.288	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

#### BATCH 28806 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706498-004A	06/05/07 11:20 AM	06/19/07	06/20/07 3:01 PM	0706498-010A	06/06/07 9:45 AM	06/19/07	06/20/07 4:10 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**CONESTOGA-ROVERS  
& ASSOCIATES**

**APPENDIX F**  
Site Survey Data

June 15, 2007  
Project No.: 2817-05

Glenn Reiss  
Cambria Environmental  
5900 Hollis Street, Suite A  
Emeryville, CA 94608

Subject: Monitoring Well Survey  
Olympian Cardlock Facility  
8515 San Leandro St.  
Oakland, CA

Dear Glen:

This is to confirm that we have proceeded at your request to survey the soil boring locations at the above referenced location. The survey was completed on June 14, 2007. The benchmark for this survey was a PK nail and shiner in the median island on Hegenberger opposite the site. The latitude, longitude and coordinates are for top of casings and are based on the Calif. State Coordinate System, Zone III (NAD83). Benchmark Elevation 10.76 feet (NGVD 29).

<u>Latitude</u>	<u>Longitude</u>	<u>Northing</u>	<u>Easting</u>	<u>Elev.</u>	<u>Desc.</u>
37.7461168	-122.1887061	2098545.12	6073431.15	13.36	GP-1
37.7460385	-122.1885814	2098515.95	6073466.70	13.44	GP-2
37.7460684	-122.1885063	2098526.44	6073488.58	13.19	GP-3
37.7461406	-122.1884240	2098552.29	6073512.87	12.78	GP-5
37.7461905	-122.1883911	2098570.30	6073522.69	12.51	GP-6
37.7462526	-122.1884226	2098593.05	6073514.01	12.27	GP-7
37.7461376	-122.1883857	2098550.99	6073523.93	12.66	SB-1
37.7462424	-122.1884311	2098589.40	6073511.48	12.32	SB-2
37.7462443	-122.1886142	2098591.04	6073458.55	12.80	SB-3
37.7461466	-122.1887514	2098556.20	6073418.26	13.43	SB-4
37.7462002	-122.1888203	2098576.05	6073398.68	13.45	SB-5

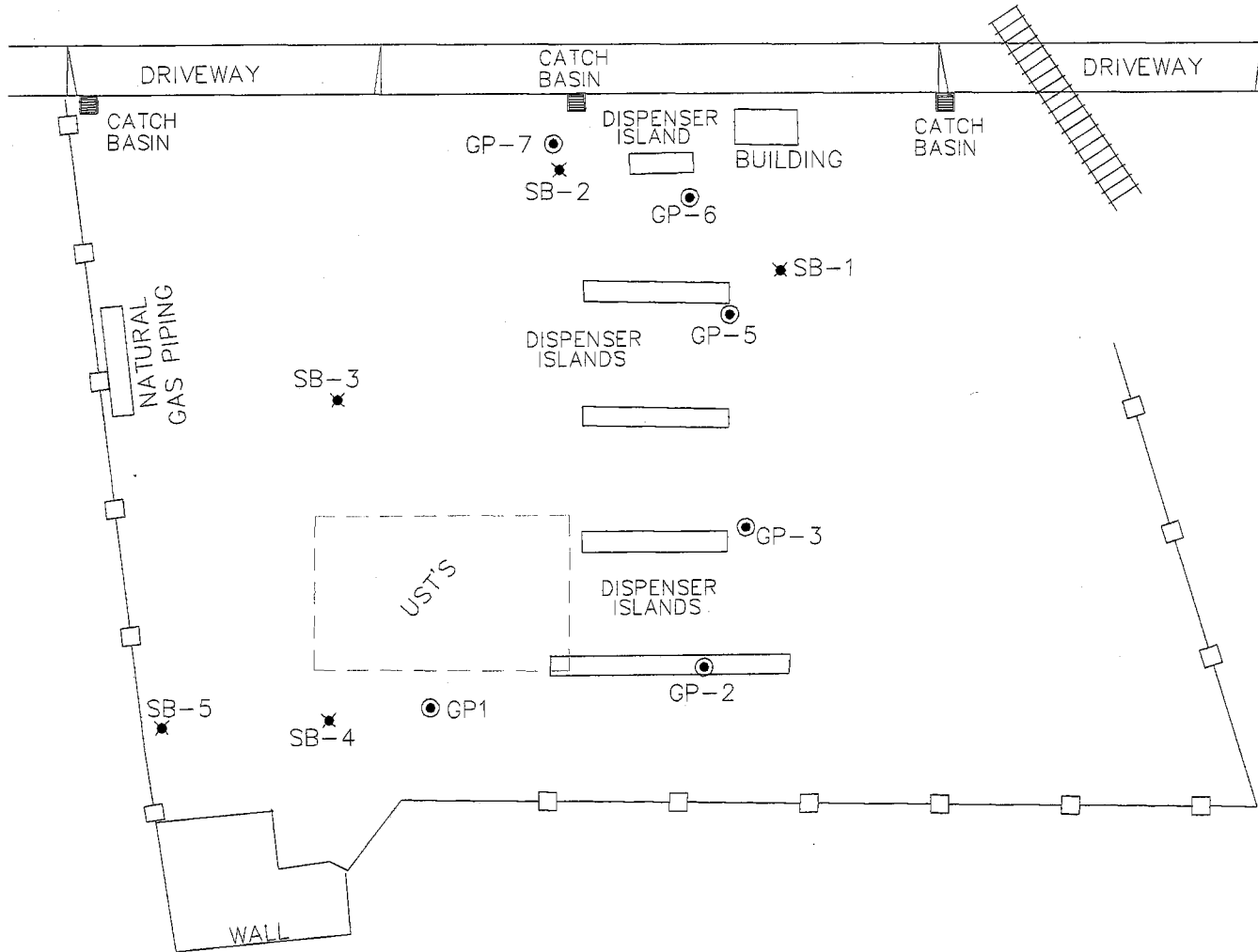
Sincerely,

---

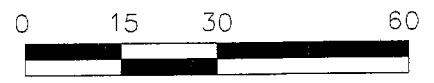
Virgil D. Chavez, PLS 6323

SITE MAP  
 OLYMPIAN CARDLOCK FACILITY  
 8515 SAN LEANDRO STREET  
 OAKLAND, CA

SAN LEANDRO STREET



SCALE: 1"=30'



VIRGIL CHAVEZ LAND SURVEYING  
 721 TUOLUMNE STREET  
 VALLEJO, CALIFORNIA  
 (707) 553-2476  
 JUNE, 2007