



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

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 3925 - 1685 34th Street, Oakland, CA 94608
(1-1,000 gallon gasoline and 1-2,000 gallon gasoline
tanks removed in March 27, 1996)

May 21, 1997

Mr. Harvey D. and Ms. Priscilla LaFlamme
Estate of Geraldine Short
P.O. Box 8127
Emeryville, California 94662

Dear Mr. and Ms. LaFlamme:

This letter confirms the completion of site investigation and remedial action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Section 2721(e) of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

cc: Gordon Coleman, Chief, Division of Environmental Protection
Kevin Graves, RWQCB
Lori Casias, SWRCB (with attachment-case closure summary)
Cheryl Gordon, UST Cleanup Fund
files-KT (LaFlamme)

ALAMEDA COUNTY
HEALTH CARE SERVICES

May 21, 1997 AGENCY
DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES

Mr. Harvey D. and Ms. Priscilla LaFlamme
P.O. Box 8127
Emeryville, California 94662

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

and

Estate of Geraldine Short
1685 - 34th Street
Oakland, California 94608

**RE: Case Closure - STID #3925, Tasco, 1685 - 34th Street,
Oakland, California 94608**

Dear Mr. Harvey D. and Ms. Priscilla LaFlamme:

The Alameda County Department of Environmental Health, Environmental Protection Division has recently received concurrence from the Regional Water Quality Control Board regarding this office determination that no further action is required concerning the removal of two underground storage tanks (a 1,000-gallon tank and 2,000-gallon tank) at the above referenced site.

Please be advised that the groundwater monitoring well (MW-1) at the site must be properly decommissioned before our agency will issue the "Remedial Action Completion Certification" (closure letter) for the subject site. A report must be submitted documenting the abandonment of the monitoring well. Additionally, you will need to notify this office 72 hours in advance of the well abandonment field activities.

If you have any questions concerning this letter, please contact me at (510) 567-6731.

Sincerely,

Kevin Tinsley
Hazardous Materials Specialist

cc: Mee Ling Tung, Director Environmental Health, E.P.S.
Kevin Graves, San Francisco Bay, RWQCB
Gordon Coleman, Chief, Environmental Protection Div.
David Allen, REA Aqua Science Engineers, 2411 Old Crow
Canyon Road # 4, San Ramon, California 94583

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION **Date: May 20, 1997**

Agency name: **Alameda County-E.P.D.** Address: **1131 Harbor Bay Pkwy**
City/State/Zip: **Alameda, CA 94502** Phone: **(510) 567-6700**
Responsible staff person: **Kevin Tinsley** Title: **Hazardous Materials Specialist**

II. CASE INFORMATION

Site facility name: **Tasco, Estate of Geraldine Short**
Site facility address: **1685 - 34th Street**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **3925**
URF filing date: **Not Filed** SWEEPS No: **N/A**

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
Thomas LaFlamme, President, TASCO	1685 34th Street	(510) 567-6731

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	1,000	Gasoline	Removed	3/27/96
2	2,000.	Gasoline	Removed	3/27/96

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Tank leak
Site characterization complete? YES
Date approved by oversight agency: April 21, 1997
Monitoring Wells installed? Yes Number: 1
Proper screened interval? Yes (3ft. - 23 ft)
Highest GW depth below ground surface: 5ft. Lowest depth: 12ft.
Flow direction: west, south-west
Most sensitive current use: Industrial / Commercial
Are drinking water wells affected? no Aquifer name: N/A

3925 Closure Summary con't.

Is Surface water affected? No Nearest affected SW name: N/A
 Off-site beneficial use impacts (addresses/locations): unknown
 Report(s) on file? YES Where is report(s) filed? Alameda County
 1131 Harbor Bay Pkwy
 Alameda, CA 94502

Treatment and Disposal of Affected Material:

<u>Material (include units)</u>	<u>Amount</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tank (2 @ UST's)	1,000 gal. 2,000 gal.	Erickson # 95898149	3/27/96
Piping	included with tanks	Erickson	3/27/96
Free Product	----		
Soil	10 - 15 cubic yds.	waiting disposal	
Groundwater	----		
Barrels	400 gallons of residual product 1,200 gallons of rinsate	CWI to Seaport Petroleum same as above	3/27/96

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

<u>Contaminant</u>	<u>Soil (ppm)</u>		<u>Water (ppb)</u>	
	<u>Before</u>	<u>After</u>	<u>Before **</u>	<u>After ***</u>
TPH (Gas)	610	1.9	280,000**	1,300
Benzene	---	---	1,400**	38
Toluene	---	---	1,500**	3.3
Ethylbenzene	5.1	---	4,900**	7.5
Xylenes	2.16	---	7,400**	3.3
MTBE	n/a	0.013	n/a	23
Lead	7.4*	n/a	n/a	n/a

- * Sample taken from the stockpiled soil.
- ** Sample taken from the pit water immediately following tank removal.
- Sample results were just above detection limits.
- *** Groundwater sample results taken from borings made on 4/16/97.

3925 Closure Summary con't.

Comments (Depth of Remediation, etc.):

Two underground storage tanks consisting of 1,000-gallon and 2,000-gallon capacities were removed from a common excavation on March 27, 1996. Both tanks previous contained gasoline. Upon removal, holes were observed in the bottom of the 2,000-gallon tank and in the fill-pipe on top of the 1,000-gallon tank. Refer to figure one (fig. 1) for the plot plan and positions of the tanks on site.

Following the tanks removal, odorous and stained soil was noted in the tank pit. Approximately 10-15 cubic yards of soil was removed from the excavation before sampling. After reaching approximately 10 ft. bgs groundwater began seeping into the excavation and the soil removal was terminated.

Four soil samples were collected from the excavation. One sample collected along the east wall detected up to 610 ppm TPH, 5.1 ppm ethyl benzene and 2.16 ppm total xylene. In addition, a grab groundwater sample taken from the pit water exhibited 280 ppm of TPH-g and 1.4 ppm benzene, 1.5 ppm toluene 4.9 ppm ethyl-benzene and 7.4 ppm xylene (BTEX).

Further investigation was conducted by installing one groundwater monitoring well on 1-30-97. It was placed in the assumed down gradient position, 15 ft. west of the tank pit. A soil sample was collected at 5 ft bgs and groundwater was collected after the well was purged of four well casing volumes. Both sample results were non-detect for TPHg, TPHd, TPHk, HVOC, BTEX and MTBE.

On April 16, 1997, two additonal borings were drilled to evaluate the contaminants found, during the tank removal. One boring (BH-B) was placed in the former UST location and the other boring (BH-A) was drilled 10 ft east of the UST excavation. A total of three soil samples and two groundwater samples were collected. Soil sample results were below the MCL's, exhibiting concentrations just above the detection limits. Groundwater samples exhibited up to 1,300 ppb TPHg, east of the former tank pit and 210 ppb TPHg in the pit boring. Benzene exceeded the MCL with levels of 38 ppb and 22 ppb east of the excavated area and the former pit location respectively. Toluene, ethyl benzene and total xylenes were relatively low. MTBE was detected at 23 ppb in the groundwater sample collected from the boring placed in the former tank location.

The concentration of petroleum hydrocarbon contaminants detected in groundwater from the final two borings are considerably lower than concentrations in the pit water following tank removal. The higher concentration was located just east of the former tank excavation, as expected. Water sample analyses shows benzene exceeding the maximum contaminant levels (MCLs) for drinking water. However, the groundwater beneath the site is not a current or future source of drinking water. Finally, since the soil and groundwater samples from the installation MW-1 exhibited non-detect for all constituents, further groundwater monitoring is not warranted.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? ----

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? ----

Does corrective action protect public health for the current land use? Undetermined

Site management requirements? Yes

Should corrective action be reviewed if land use changes? Yes

Monitoring wells Decommissioned: None

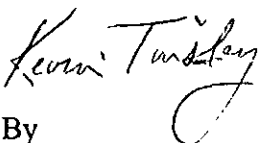
Number decommissioned: None Number retained: 1

List enforcement action taken: None

List enforcement action recinded: None

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Kevin Tinsley Title: Hazardous Materials Specialist

Signature:  Date: 5/20/97

Reviewed By

Name: Susan Hugo Title: Senior Hazardous Materials Specialist

Signature:  Date: 5/20/97

Name: Tom Peacock Title: L.O.P. Manager

Signature:  Date: 5-20-97

VI. RWQCB NOTIFICATION

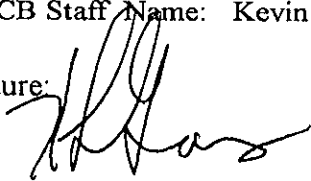
Date Submitted to RB:

RB Response:

Approved

RWQCB Staff Name: Kevin Graves Title: AWRCE

Signature:



Date:

5/21/97

VII. ADDITIONAL COMMENTS, DATA, ETC.

Case Closure, as a "Low Risk Groundwater Case", is recommended for the following reasons:

- a) The source appears to have been sufficiently removed.

Following tank removal, ASE removed approximately 10-15 cubic yards of contaminated soil from the excavation. Confirmation soil samples were collected from the sidewalls at the capillary fringe (see figure 2 attached) after overexcavation.

- b) The site has been adequately characterized.

Plume boundaries have not been delineated to non-detectable limits. However, the groundwater flow direction was established at 3430 - 34th street, a neighboring site. The groundwater gradient suggest this plume is reasonably anticipated to be confined within site boundaries.

- c) The dissolve hydrocarbon plume appears to be stable and not migrating.

Samples collected from the borings and developed monitoring well (MW-1) found no detectable concentrations of petroleum hydrocarbons, BTEX or MTBE. In addition, the levels of contaminants from BH-B and BH-A appear to be localized.

- d) No water wells, deeper drinking water wells, surface water or other sensitive receptors are likely to be impacted.

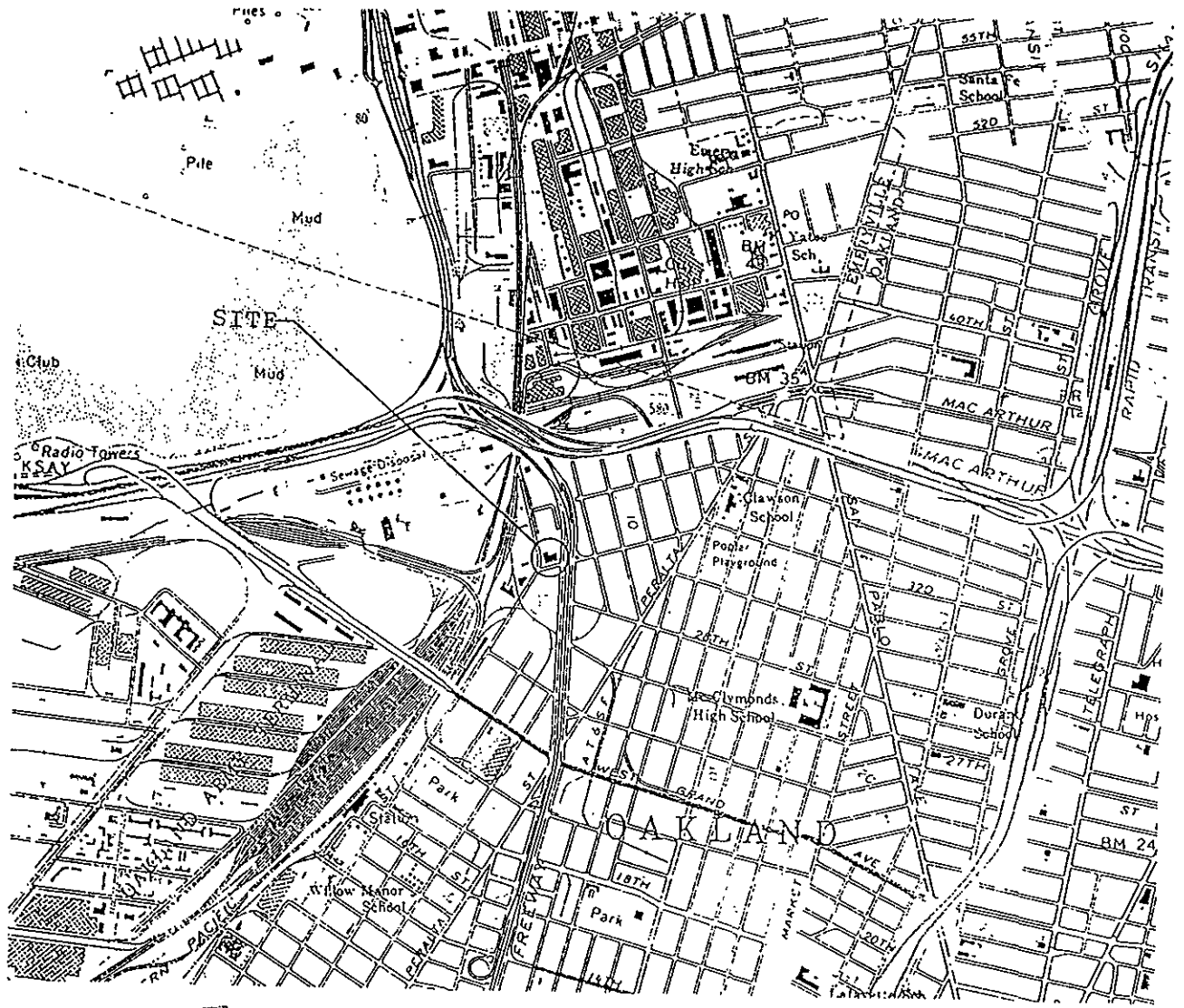
There are no known sensitive receptors which can be impacted.

- e) The site presents no significant risk to human health or the environment.

3925 Closure Summary con't.

Benzene concentrations identified in the groundwater collected from boring BH-A (38 ppb) and BH-B (22 ppb) are well below the ASTM RBSL target levels of 3,190 ppb (residential scenerio) and 5,340 ppb (commercial / industrial scenerio) for the exposure pathway, " Groundwater Volatilization to Outdoor Air". However, the benzene concentrations at 38 ppb exceeds the exposure pathway for groundwater vapor intrusion to building in a residential scenerio (ie, 24 ppb for a risk category of 1E-06e). The commercial / industrial scenerio at 74 ppb is more appropriate for comparison because the site includes a manufacturing building. In addition, the site can be categorize as a low risk site due to the following:

1. Overexcavation of the former tank pit removed the bulk of the contminated soil.
2. Boring BH-A and the former tank pit are located approximately 100 yards from the nearest residential area, where potential sensitive receptors may be present. The commercial building on site is situated to the south-east, of the former tank pit, upgradient of the effected areas.
3. Soil and groundwater volitilization to indoor and outdoor air is greatly impeded due to the asphalt and concrete capping throughout the area.



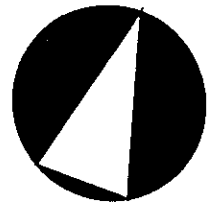
SITE LOCATION MAP

1685 34th Street
Oakland, California

Aqua Science Engineers, Inc.

Figure A

BASE: Oakland West 7.5 minute quadrangle topographic map, dated 1980, scale 1:24,000.



NORTH
Not to Scale

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MW-1 Pit Water 34TH STREET

SIDEWALK

Sample TE1

2000 GALLON GASOLINE UST

1000 GALLON GASOLINE UST

TASCO BUILDING
1685 34TH STREET

MONITORING WELL
LOCATION MAP

1685 34th Street
Oakland, California

Aqua Science Engineers, Inc.

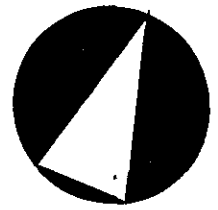
Figure 1

LEGEND

● MONITORING WELL LOCATION

□ UNDERGROUND STORAGE TANK (UST)

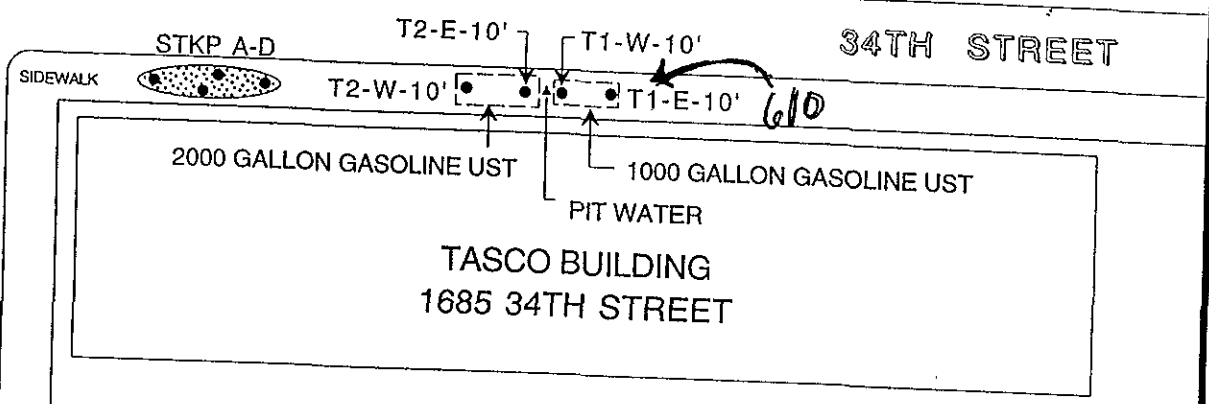
Figure 1



NORTH
Not to Scale

3430 Wood St.

WOOD STREET



LEGEND

- SOIL SAMPLE LOCATION
- ▲ PIT WATER SAMPLE LOCATION
- UNDERGROUND STORAGE TANK (UST)
- ◉ STOCKPILED/CONTAMINATED SOIL

SITE & SAMPLING PLAN

1685 34th Street
Oakland, California

Aqua Science Engineers, Inc. Figure 2

BORING LOG AND WELL COMPLETION DETAILS

Monitoring Well MW-1

Project Name: LaFlamme Property

Project Location: 1685 - 34th Street, Oakland, CA

Page 1 of 1

Driller: Soils Exploration Services

Type of Rig: CME 55

Size of Drill: 8" O.D. Hollow-Stem Augers

Logged By: Robert E. Kitay, R.G.

Date Drilled: January 28, 1997

Checked By: David M. Schultz, P.E.

WATER AND WELL DATA

Depth of Water First Encountered: 5.5'

Total Depth of Well Completed: 23.0'

Well Screen Type and Diameter: 2" Diameter PVC

Static Depth of Water in Well: 11.5'

Well Screen Slot Size: 0.020"

Total Depth of Boring: 23.0'

Type and Size of Soil Sampler: 2.0" I.D. California Sampler

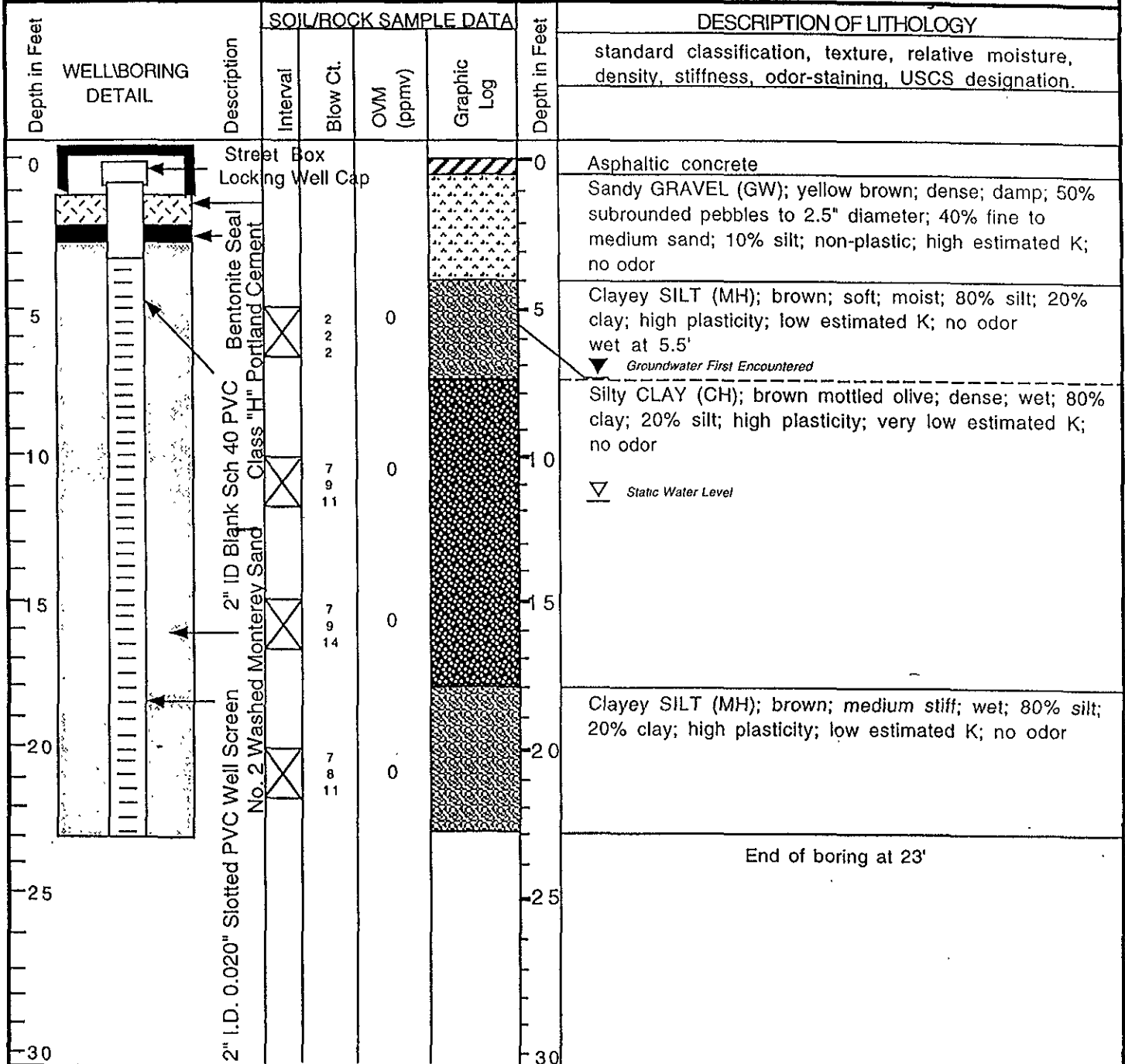


FIGURE 3

modified EPA Method 5030/8015 and BTEX and MTBE by EPA Method 8020. The analytical results are tabulated in Table One, and the certified analytical report and chain of custody forms are included in Appendix B.

TABLE ONE
Summary of Chemical Analysis of SOIL Samples
TPH-G, BTEX and MTBE

All results are in parts per million

Boring	Depth Sampled	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
BH-A	3.5'	1.9	0.056	0.012	0.0065	0.025	0.013
	11.5'	<1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
BH-B	7.0'	<1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PRG		NE	1.4	880	230	320	NE

Notes:

Non-detectable concentrations are noted by the less than symbol (<) followed by the detection limit.

Detectable concentrations are in bold.

PRG is the United States Environmental Protection Agency (US EPA) Region IX Preliminary Remediation Goal (PRG) for industrial soil.

The soil sample collected from 3.5-foot bgs in boring BH-A contained 1.9 parts per million (ppm) TPH-G and low BTEX and MTBE concentrations well below United States Environmental Protection Agency (US EPA) Region IX Preliminary Remediation Goals (PRGs) for industrial soil. No hydrocarbons were detected in soil samples collected from 11.5-foot bgs in boring BH-A and 7.0-foot bgs in boring BH-B.

6.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples were analyzed by Chromalab for TPH-G by modified EPA Method 5030/8015 and BTEX and MTBE by EPA Method 8020. The analytical results are tabulated in Table Two, and the certified analytical report and chain of custody forms are included in Appendix B.

TABLE TWO
Summary of Chemical Analysis of GROUNDWATER Samples
TPH-G, BTEX and MTBE

All results are in parts per billion

Boring	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
BH-A	1,300	38	3.3	7.5	3.3	9.9
BH-B	210	22	1.8	3.1	15	23
DTSC MCL	NE	100*	100*	680	1,750	NE

Notes:

DTSC MCL is the California Department of Toxic Substances Control maximum contaminant level for drinking water.

NE = DTSC MCLs are not established.

* = DTSC recommended action level for drinking water; MCL is not established.

1,300 parts per billion (ppb) TPH-G, 38 ppb benzene and low toluene, ethylbenzene, total xylene and MTBE concentrations, below California Department of Toxic Substances Control (DTSC) maximum contaminant levels (MCLs) for drinking water, were detected in groundwater samples collected from boring BH-A. 210 ppb TPH-G, 22 ppb benzene and low toluene, ethylbenzene, total xylene and MTBE concentrations, below DTSC MCLs, were detected in groundwater samples collected from boring BH-B.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The soil sample collected from 3.5-foot bgs in boring BH-A contained 1.9 ppm TPH-G and low BTEX and MTBE concentrations well below US EPA Region IX PRGs for industrial soil. No hydrocarbons were detected in soil samples collected from 11.5-foot bgs in boring BH-A and 7.0-foot bgs in boring BH-B.

1,300 ppb and 210 ppb TPH-G were detected in groundwater samples collected from borings BH-A and BH-B, respectively. 38 ppb and 22 ppb benzene were detected in groundwater samples collected from borings BH-A and BH-B, respectively. Although these benzene concentrations exceed the DTSC MCL for drinking water of 1 ppb, groundwater in the site vicinity is not utilized for drinking water. Since it is unlikely that benzene