



January 9, 1997  
STID 5360  
page 1 of 2

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

Attn: John Sullivan  
Majestic Insurance Co.  
400-2nd St., Suite 350  
San Francisco CA 94107

### REMEDIAL ACTION COMPLETION CERTIFICATION

RE: Former Marine Terminals Corp., 333 Market St, Oakland CA 94607  
Case File Number 5360

Dear Mr. Freitag,

This letter confirms the completion of site investigation and remedial action for the underground storage tanks formerly located at the above referenced site. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks is 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, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations.

Attached is a copy of the Case Closure Summary, which was reviewed and approved by this agency and the Regional Water Quality Control Board (RWQCB). If you have any questions regarding this letter, please contact Jennifer Eberle at (510) 567-6700, ext. 6761.

Sincerely,

Mee Ling Tung, Director

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Attn: John Sullivan

cc: Acting Chief, Environmental Protection Division  
Kevin Graves, RWQCB  
Lori Casias, SWRCB (with attachment)  
Dave Deaner, SWRCB, UST Cleanup Fund Program  
David Kleesattel, Harding Lawson Assoc., 150-4th St., Suite 527, San Francisco CA  
94103  
 Jennifer Eberle (3 copies of letter only)

LOP/Completion  
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enclosure (clos sum)

**CASE CLOSURE SUMMARY**  
**Leaking Underground Fuel Storage Tank Program**

**I. AGENCY INFORMATION**

Date: 7/2/96

Agency name: **Alameda County-HazMat**  
 City/State/Zip: **Alameda CA 94502**  
 Responsible staff person: **Jennifer Eberle**

Address: **1131 Harbor Bay Pky**  
 Phone: **(510) 567-6700**  
 Title: **Hazardous Materials Spec.**

**II. CASE INFORMATION**

Site facility name: **Former Marine Terminals Corp.**  
 Site facility address: **333 Market St., Oakland CA 94607**  
 RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **5360**  
 URF filing date: undated, but report states the "date discovered" was 4/21/87 SWEEPS No: **N/A**

**Responsible Parties:**      **Addresses:**      **Phone Numbers:**  
 Attn: John Sullivan, Majestic Insurance Co., 400-2nd St., Suite 350, San Francisco CA 94107 (415-777-5557)

<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	4/21/87
2	10,000	gasoline	removed	4/21/87
3	10,000	diesel	removed	4/21/87

**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and type of release: likely to be overfilling of the 1,000-gal UST  
 Site characterization complete? YES  
 Monitoring Wells installed? YES      Number: 4  
 Proper screened interval? YES; see section V  
 Highest Groundwater Elevation (GWE): Lowest GWE: unknown; see section V  
 Flow direction: south to southwest; see section V  
 Most sensitive current use: commercial  
 Are drinking water wells affected? NO      Aquifer name: NA  
 Is surface water affected? NO      Nearest affected SW name: NA  
 Off-site beneficial use impacts (addresses/locations): unknown

## Leaking Underground Fuel Storage Tank Program

Report(s) on file? **YES** Where is report(s) filed?  
**Alameda County, 1131 Harbor Bay Pky, Alameda Ca 94502**

### Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount (include units)</u>	<u>Action (Treatment of Disposal w/destination)</u>	<u>Date</u>
Tank	two 10K and one 1K	disposed to H&H	4/23/87
Tank rinsate	200 gal "waste haz liquid"	disposed to H&H (manifest #86316090)	4/21/87
Soil	unknown	stockpiled, aerated, sampled and reused at the site	

### III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued) Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before*	After**	Before#	After##
TPH (Gas)	2800	ND	61,000	ND
TPH (Diesel)	NA	NA	NA	NA
Benzene	15	ND	510	ND
Toluene	110	ND	3,000	ND
Ethylbenzene	NA	NA	NA	ND
Xylenes	140	ND	1,800	ND

#### Comments (Depth of Remediation, etc.):

\*soil sampled from excavation of 1,000-gal UST on 4/21/87  
 \*\* soil sampled after overexcavation of 1,000-gal UST on 7/16/87 at 14'bgs  
 # grab water from excavation of 1,000-gal UST taken on 7/16/87  
 ## groundwater from MWs from last sampling event in 8/89

## Leaking Underground Fuel Storage Tank Program

### IV. CLOSURE

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

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

Does corrective action protect public health for current land use? YES  
Site management requirements: NA

Should corrective action be reviewed if land use changes? YES  
Monitoring wells Decommissioned: not yet; waiting for RWQCB signoff  
Number Decommissioned: 0 Number Retained: 4  
List enforcement actions taken: NOV dated 2/18/88  
List enforcement actions rescinded: unknown

### V. ADDITIONAL COMMENTS, DATA, ETC.

On 4/21/87, two 10,000-gallon fiberglass USTs (one diesel and one gasoline) and one 1,000-gallon steel gasoline UST were removed from 333 Market St. in Oakland by R.S. Eagan and Co. **See Figure 1.** Two soil samples were taken from the excavation associated with each UST. Trace Analysis Laboratory reportedly collected the soil samples from the fill and vent ends of each UST. The two 10,000-gallon USTs were apparently located in one excavation, while the single 1,000-gallon UST was located in a separate excavation.

Soil results from the 1,000-gallon UST excavation indicated maximum concentrations of 2,800 mg/kg TVH (aka TPHg), 15 mg/kg benzene, 110 mg/kg toluene, and 140 mg/kg xylene (ethylbenzene was not analyzed or NA). This sample was taken from below the fill end. As per notes on a drawing attached to correspondence from R.S. Eagan, dated 6/9/87, the 1,000-gallon UST was "clean, black steel" had a "strong hydrocarbon odor," the soil was "obviously gasoline contaminated," and the Gastech 1314 reading was "500 ppm." However, no holes were noticed in the 1,000-gallon UST. Soil results from the two 10,000-gallon USTs were ND TEH (aka TPHd), ND TVH (aka TPHg), and ND BTX. No noticeable evidence of a hydrocarbon release was noted during the removal of the two 10,000-gal USTs. **See Table 1.**

## **Leaking Underground Fuel Storage Tank Program**

The remainder of this narrative refers to "the excavation" as the 1,000-gallon UST excavation. The excavation was reportedly overexcavated on 7/16/87 to a depth of 14'bgs. A confirmation soil sample was apparently collected at 14'bgs from the middle of this excavation on 7/16/87; results indicated ND TVH and ND BTX. A grab water sample was reportedly collected from the excavation on 7/16/87; results indicated 61,000 ug/L TVH, 510 ug/L benzene, 3,000 ug/L toluene, and 1,800 ug/L xylene. This information was attached to a cover letter from R.S. Eagan dated 8/6/87.

The stockpiled soil was apparently aerated and sampled on 7/16/87 in a 4-point composite; results indicated 24 mg/kg TVH, ND benzene, 0.97 mg/kg toluene, and 1.7 mg/kg xylene. The stockpiled soil was further aerated and again sampled on 8/17/87, this time in two 3-point composites; results indicated maximum concentrations of 5.5 mg/kg TVH, ND benzene, 1.2 mg/kg toluene, and 0.60 mg/kg xylene.

The excavation was apparently backfilled with this soil in late August 1987. Approval for backfilling was reportedly given by Greg Zentner of the RWQCB, as per a letter from R.S. Eagan to Marine Terminal, dated 8/5/87. Mr. Zentner also indicated that a monitoring well should be installed in the excavation.

A monitoring well was reportedly installed through the tank excavation backfill on 9/26/87, by Subsurface Consultants Inc. (SCI), as per their report dated 10/13/87. Backfill extended to a depth of 12'bgs; the underlying soils were native sands, and they extended to the depth drilled (22'bgs). Groundwater was first encountered (and later stabilized) at 12'bgs during drilling; the well was screened from 9' to 22'bgs. No free product was noted on the groundwater surface.

Although soil samples were apparently collected in brass tubes, they were not analyzed. No petroleum odors were noted in the soil samples taken from above the groundwater. Groundwater was sampled from this well by Bob Corsun of R.S. Eagan on 10/30/87; results indicated 975 ug/l TVH, 550 ug/l benzene, 38 ug/l toluene, and 390 ug/l xylene. Groundwater was again sampled from this well by Bob Corsun of R.S. Eagan on 11/05/87; they apparently sampled it twice on that date--once before purging (sample #1), and once after purging (sample #2). Sample #1 results indicated 890 ug/l TVH, 9 ug/l benzene, ND ethylbenzene, ND toluene, and 31 ug/l xylene. Sample #2 results indicated 3123 ug/l TVH, 370 ug/l benzene, 13 ug/l ethylbenzene, 140 ug/l toluene, and 900 ug/l xylene. It is unknown why they took samples before and after purging. No conclusions were drawn. The SCI report was submitted under cover letter from R.S. Eagan, dated 12/1/87; this correspondence was directed to the RWQCB.

Alameda County apparently became the lead agency for this case in January 1988.

A "Closure Report on Underground Storage Tanks," dated 4/14/88, was prepared by Harding Lawson Assoc. (HLA) and submitted to the County. This report documented activities associated with the removal of the USTs.

## Leaking Underground Fuel Storage Tank Program

Another report entitled "Petroleum Hydrocarbon Release Investigation," also dated 4/14/88, was prepared by Harding Lawson Assoc. and submitted to the County. HLA installed 3 wells in January 1988 (wells HLA-2, HLA-3, and HLA-4). See Figure 2. Wells HLA-3 and HLA-4 were installed in the presumed downgradient direction from the former UST (approximately 60' south and 80' southwest, respectively), while well HLA-2 was installed in the presumed upgradient direction (approximately 15' to the north of the former UST). Groundwater was encountered between 7.5' and 7.8'bgs in all 3 wells. The wells were screened from 6' to 26'bgs in HLA-2, and 6' to 22.5' in HLA-3 and HLA-4. Soils consisted of silty sands and clayey sands.

Soil was sampled and analyzed at depths of 9.5', 6-7', and 7'bgs. Results indicated ND for TPHg, TPHk, and TPHd. See Table 2. Note that TPHg, TPHk, and TPHd were all analyzed, and that the concentrations reported for TPH indicate TPHg. The TPHg detected in SC-1 and HLA-2 groundwater samples was typified by HLA as "a degraded product of gasoline." Groundwater was sampled from all 4 wells for a total of six events, from November 1987 through August 1989. See Table 3.

Groundwater flow direction was reported to be southwest in February 1988, as per the flow arrow in HLA's quarterly report. There is no site-specific data on groundwater elevations (GWEs) for the specific wells. However, GWE data from a nearby site (Safety Kleen at 400 Market St.) indicates that groundwater flowed consistently to the south and southwest (towards the estuary) at a very flat gradient (0.003 ft/ft to 0.005 ft/ft) from 1991 through January 1996. Due to the proximity of the Safety Kleen site and the consistent south to southwest groundwater flow direction, it is likely that groundwater at the subject site also flows south to southwest at a very flat gradient.

Given the south to southwest groundwater flow direction, wells HLA-3 and HLA-4 are the downgradient wells. These two wells have shown ND concentrations for TPHg, TPHd, and BTEX for five consecutive quarters, with the exception of 3 ppb benzene in HLA-4 in January 1989. See Table 3. The upgradient well, HLA-2 has also shown ND concentrations for TPHg, TPHd, and BTEX for the last two consecutive quarters. In addition, the tank pit well, SC-1, was ND for all contaminants during the last quarter sampled (August 1989).

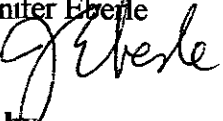
This case should be closed for the following reasons:

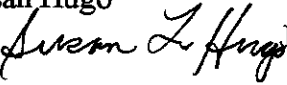
- \* The sources have been removed (three USTs);
- \* The site has been adequately characterized;
- \* The downgradient wells have been ND for TPHg, TPHd, and BTEX for five consecutive quarters;
- \* There are no sensitive environmental receptors in the site vicinity: the estuary lies approximately 1,500 feet from the site (a significant and unlikely distance for a hydrocarbon plume to travel), and the site is used as a commercial business;

## Leaking Underground Fuel Storage Tank Program

- \* There is likely no significant risk to human health due to the ND soil boring and groundwater concentrations; and
- \* The closure letter will require agency notification if there is a proposal for a change in land use, site activity, or structural configuration of the site (ie basements in new buildings where none were before).

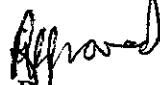

### VI. LOCAL AGENCY REPRESENTATIVE DATA

Name: Jennifer Eberle Title: Hazardous Materials Specialist  
Signature:  Date: 7-16-96

**Reviewed by**  
Name: Susan Hugo Title: Senior Hazardous Materials Specialist  
Signature:  Date: 8-22-96

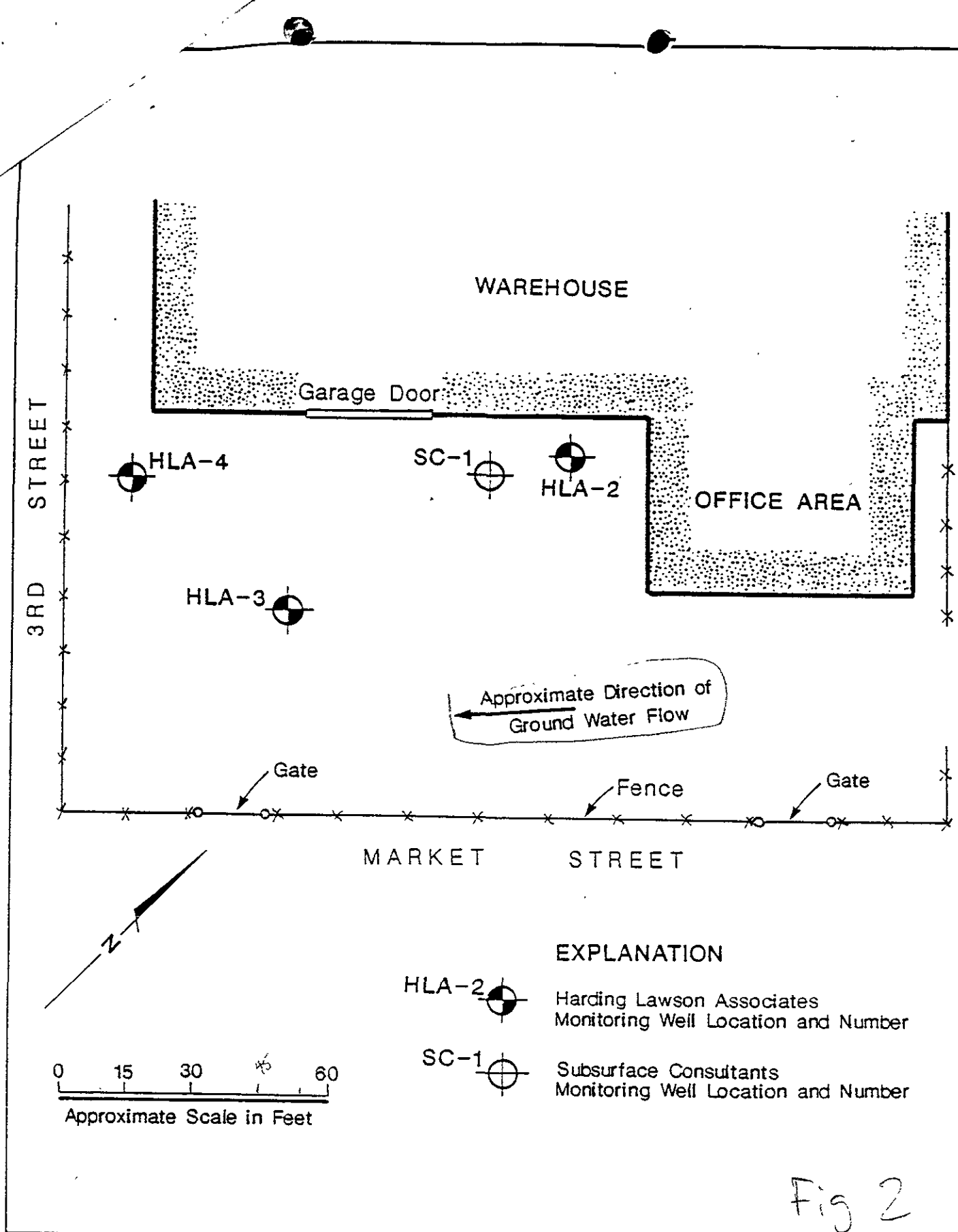
Name: Tom Peacock Title: Manager  
Signature:  Date: 9-10-96

### VII. RWQCB NOTIFICATION



Date Submitted to RWQCB: 9-12-96 RWQCB Response:   
RWQCB Staff Name: Kevin Graves Title: Associate Water Resources Control Engineer  
Date:  10-10-96







**EXPLANATION**

- 
 HLA-2     Harding Lawson Associates  
Monitoring Well Location and Number
- 
 SC-1     Subsurface Consultants  
Monitoring Well Location and Number

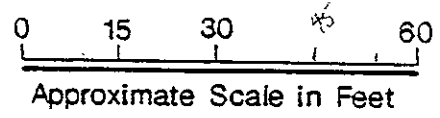


Fig 2



**Harding Lawson Associates**  
Engineers, Geologists  
& Geophysicists

**Monitoring Well Locations**  
Marine Terminals Warehouse  
333 Market Street  
Oakland, California

DRAWN RS	JOB NUMBER 18501,001.04	APPROVED <i>TLG</i>	DATE 2/88	REVISED	DATE
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abc  
 Table 2. Summary of Chemical Analysis  
 of Soils in parts per million (ppm)<sup>1</sup>

<u>Sampled 4/21/87</u>	<u>Volatile or Extractable Hydrocarbons (TPH)</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylene</u>
Tank 1 - Fiberglass				
Fill	ND <sup>2</sup>	ND	ND	ND
Vent	ND	ND	ND	ND
Tank 2 - Fiberglass				
Fill	ND (TEH)	--	--	--
Vent	ND	--	--	--
Tank 3 - Steel				
Fill	2800	15	110	140
Vent	720	3.9	27	44

- 
- 1 Analysis Methods: TPH - Modified EPA Method 8015  
Benzene, Toluene, and Total Xylenes - EPA Method 8020
  - 2 ND = None detected at detection limit reported on laboratory reports  
(see Appendix B).

## CHEMICAL ANALYSIS

One soil sample from the boring for each well installed by HLA was analyzed for TPH using EPA method 8015. Ground-water samples from all four wells were analyzed for TPH and BTX using EPA methods 8015 and 602, respectively. Two additional water samples collected from HLA-2 and HLA-4 were analyzed for total dissolved solids and chlorides. A summary of the analytical results is presented in Table 1. The laboratory reports are presented in Appendix B.

Table 2 - Summary of Chemical Analysis<sup>1</sup>

	Water <i>2-4-88</i>				Soil		
	SC-1	HLA-2	HLA-3	HLA-4	HLA-2	HLA-3	HLA-4
Depth (feet)					9.5	6-7	7
TPH (ppm) <sup>2</sup> *	1.5	81	ND <sup>3</sup>	ND	ND	ND	ND
Benzene (ppb)	23	ND	ND	ND	ND	ND	ND
Ethyl Benzene (ppb)	ND	ND	ND	ND			
Toluene (ppb)	6	ND	ND	ND			
Total Xylenes (ppb)	52	ND	ND	ND			
Total Chloride (ppm)		75		85			
Total Dissolved Solids (TDS) (ppm)		805		810			

1 Analysis Methods: TPH - Modified EPA Method 8015  
Benzene, Toluene, and Total Xylenes -  
EPA Method 602

2 ppm = parts per million; ppb = parts per billion.

3 ND = None detected at detection limit reported on laboratory reports (see Appendix A).

\* includes TPHg, TPHk & TPHd. Only TPHg was detected (+ reported here).

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Table 2. Summary of Quarterly Ground-Water Analyses Results

	November 1987	February 1988	June 1988	September 1988	January 1989	August 1989
<u>SC-1</u>						
TPH (ppm)	1.7	1.5	.49 ✓	.60	ND ✓	ND ✓
Benzene (ppb)	370	23	11 ✓	9	79	ND ✓
Ethyl benzene (ppb)	ND*	ND	14 ✓	17	ND	ND ✓
Toluene (ppb)	140	6	ND	ND	ND	ND ✓
Total Xylenes (ppb)	900	52	10 ✓	12	12 ✓	ND ✓
TPH-d			ND	ND	ND	ND
<u>HLA-2</u>						
TPH (ppm)	NA**	81	1.1 ✓	1.2	ND ✓	ND ✓
Benzene (ppb)	NA	ND	130	<del>125</del> 125	ND ✓	ND ✓
Ethyl benzene (ppb)	NA	ND	42 ✓	ND	ND ✓	ND ✓
Toluene (ppb)	NA	ND	10 ✓	65	ND ✓	ND ✓
Total Xylenes (ppb)	NA	ND	180	114	ND	ND ✓
TPH-d			ND	ND	ND	ND
<u>HLA-3</u>						
TPH (ppm)	NA	ND	ND ✓	ND	ND ✓	ND
Benzene (ppb)	NA	ND	ND ✓	ND	ND ✓	ND
Ethyl benzene (ppb)	NA	ND	ND ✓	ND	ND ✓	ND
Toluene (ppb)	NA	ND	ND ✓	ND	ND ✓	ND
Total Xylenes (ppb)	NA	ND	ND ✓	ND	ND ✓	ND
TPH-d			ND	ND	ND	ND
<u>HLA-4</u>						
TPH (ppm)	NA	ND	ND ✓	ND	ND ✓	ND
Benzene (ppb)	NA	ND	ND ✓	ND	3 ✓	ND
Ethyl benzene (ppb)	NA	ND	ND ✓	ND	ND ✓	ND
Toluene (ppb)	NA	ND	ND ✓	ND	ND ✓	ND
Total Xylenes (ppb)	NA	ND	ND ✓	ND	ND	ND
TPH-d			ND	ND	ND	ND

\* ND = None detected below laboratory detection limit.

\*\* NA = Not applicable; no samples taken.

ppm = parts per million

ppb = parts per billion

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