

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



ARNOLD PERKINS, DIRECTOR
RAFAT A. SHAHID, DEPUTY DIRECTOR

Alameda County Environmental Health Dept.
Environmental Protection Division
1131 Harbor Bay Parkway, Room 250
Alameda CA 94502-6577
(510)567-6700 fax: (510)337-9335

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 3908 - 2142 E. 12th Street, Oakland 94606

January 25, 1996

Mr. Lynn Walker
Shell Oil Co.
P.O. Box 5278
Concord, CA 94520-9998

Dear Mr. Walker:

This letter confirms the completion of site investigation and remedial action for the three former underground storage tanks (3-10,000 gallon gasoline tank) removed from the above site on May 25, 1989. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, 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. Please contact Ms. Eva Chu at (510) 567-6700 if you have any questions regarding this matter.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Jun Makishima".

Jun Makishima, Interim Director

cc: Chief, Division of Environmental Protection
Kevin Graves, RWQCB
Mike Harper, SWRCB (with attachment)
files (shell11.3)

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: October 6, 1995

Agency name: Alameda County-HazMat
City/State/Zip: Alameda, CA 94502
Responsible staff person: Eva Chu

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

II. CASE INFORMATION

Site facility name: Shell Oil Co
Site facility address: 2142 E. 12th Street, Oakland 94606
RB LUSTIS Case No: N/A
URF filing date: 6/21/89

Local Case No./LOP Case No.: 3908
SWEEPS No: N/A

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
Shell Oil Co. Attn. Lynn Walker	P.O. Box 5278 Concord, CA 94520-9998	(510) 675-6169

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	10,000	Gasoline	Removed	5/25/89
2	10,000	Gasoline	Removed	5/25/89
3	10,000	Gasoline	Removed	5/25/89

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Possible leaking pipe/dispenser
Site characterization complete? YES
Date approved by oversight agency: 7/13/95
Monitoring Wells installed? Yes Number: 4
Proper screened interval? Yes, 3 to 20' bgs
Highest GW depth below ground surface: 5.30 Lowest depth: 7.10' in MW-3
Flow direction: Southwest to southeast
Most sensitive current use: Commercial/light industrial
Are drinking water wells affected? No Aquifer name:
Is surface water affected? No Nearest affected SW name: NA
Off-site beneficial use impacts (addresses/locations): None

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</u>	<u>Amount (include units)</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tank Piping Free Product	3 USTs	Crosby & Overton, in Long Beach	5/25/89
Soil	4940 lb. 65 cy	GSX Laidlaw in Buttonwillow Aerated onsite ¹	7/20/90 6/2/89

NOTE 1 Final disposition unknown. After aeration, a 2 into 1 composite sample did not detect TPH-G or BTEX

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After ¹	Before ²	After
TPH (Gas)	210	63	29,000	760
TPH (Diesel)				
Benzene	5.3	5.3	85	ND
Toluene	1.3	1.3	140	ND
Ethylbenzene	2.0	1.3	530	1.5
Xylenes	2.8	2.8	1,900	ND
Oil & Grease	418.1	470 ³		
Heavy metals				
Other	Cl-HC			ND

Note: 1 from pipe trench sample P-2 at 7' depth
2 grab groundwater sample from tank pit
3 from boring MW-2 at 3' bgs

Comments (Depth of Remediation, etc.):

See Section VII, Additional Comments, etc...

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **YES**
 Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **YES**
 Does corrective action protect public health for current land use? **YES**
 Site management requirements: **None**
 Should corrective action be reviewed if land use changes? **YES**
 Monitoring wells Decommissioned: **None, pending site closure**
 Number Decommissioned: **0** Number Retained: **4**
 List enforcement actions taken: **None**
 List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Eva Chu Title: Haz Mat Specialist

Signature:  Date: 10/10/95

Reviewed by

Name: Barney Chan Title: Haz Mat Specialist

Signature:  Date: 10/10/95

Name: Dale Klettke Title: Haz Mat Specialist

Signature:  Date: 10/10/95

VI. RWQCB NOTIFICATION

Date Submitted to RB: 10/11/95 RB Response: 

RWQCB Staff Name: Kevin Graves Title: AWRCE

Signature:  Date: 10/23/95

VII. ADDITIONAL COMMENTS, DATA, ETC.

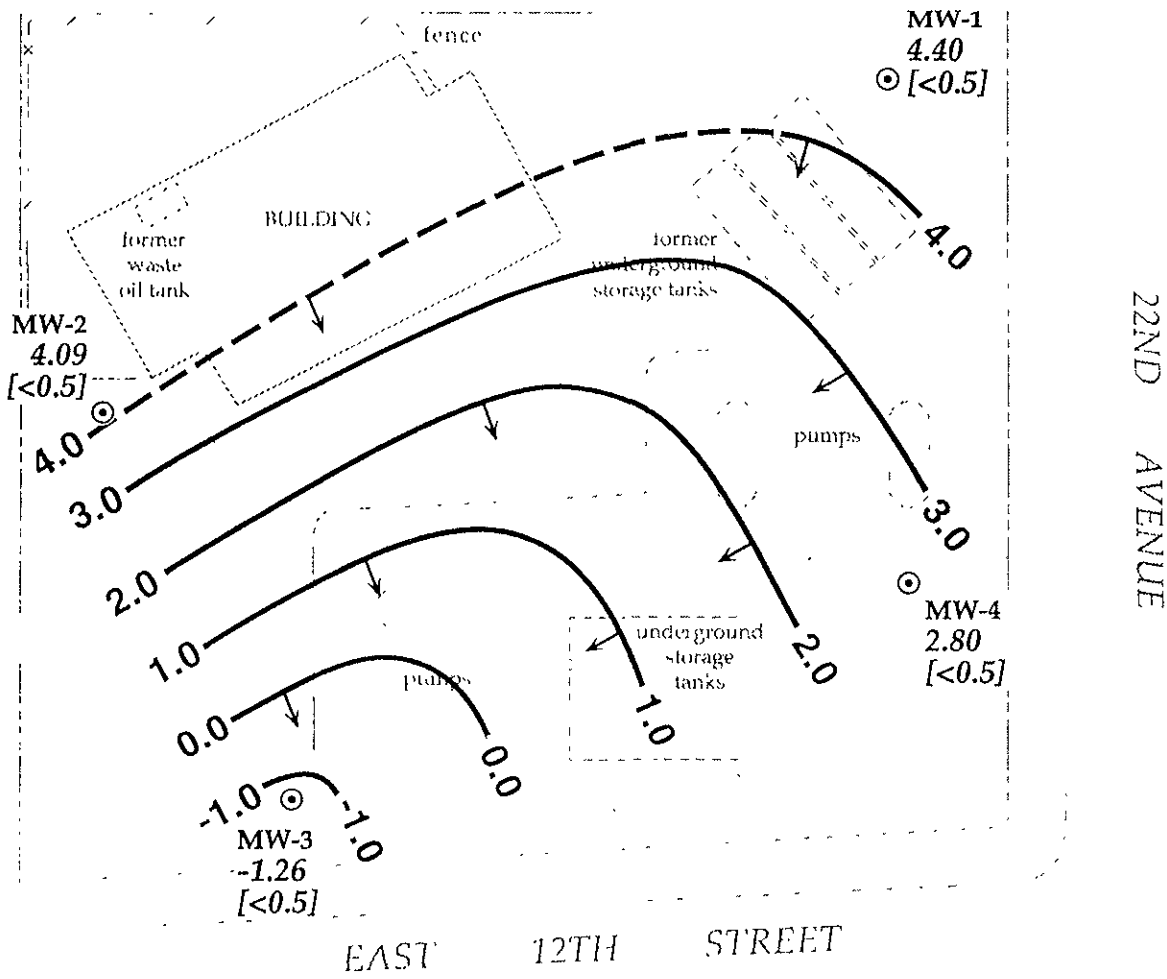
Three 10K USTs were removed on May 25, 1989. Groundwater was encountered in the pit at a depth of 7'. Six sidewall samples (SW-1 to 6) were collected at approximately 6" above the water table, and one grab groundwater sample (W-1) was collected from within the tank pit. Five soil samples were also collected along the product pipe trenches (P-1 to 5) at depths ranging from 3 to 7'. Soil from the tank pit exhibited up to 21 ppm TPH-G and ND, ND, 0.22, and ND ppm BTEX, respectively. A grab groundwater sample exhibited 29,000 ppb TPH-G, 85, 140, 530, and 1,900 ppb BTEX, respectively.

Piping trench sample P-2 from 7' depth exhibited 63 ppm TPH-G, and 5.3 ppm benzene. Sample P-5 exhibited 210 ppm TPH-G and 0.17 ppm benzene at 3' depth. The area around P-5 was overexcavated to 9' where another soil sampled collected did not detect TPH-G or BTEX. The area of P-2 was not overexcavated.

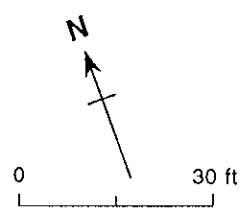
In October 1989 four soil borings were advanced to approximately 20' bgs and converted into wells MW-1 to 4. Groundwater has been sampled for at least 14 quarters, from 11/89 to 3/95. TPH-G has been <500 ppb and BTEX has been <3.5 ppb since 12/93. Continued monitoring is not warranted.

Approximately 800 cy of soil was excavated from the new tank pit. Sixteen composite samples detected a maximum of 26 ppm TPH-G and .06 ppm benzene. It is not clear if this soil was reused onsite or disposed of offsite.

shell1.1



EXPLANATION	
⊙ MW-1	Monitoring well
4.40	Ground water elevation, ft above mean sea level
[0.5]	Benzene in parts per billion (ppb)
—3.0	Ground water elevation contour, ft above mean sea level, approximately located, dashed where inferred
→	Inferred ground water flow direction



base map taken from Hart Crowser

Figure 2. Monitoring Well Locations, Ground Water Elevation Contours, and Benzene Concentrations in Ground Water - June 26, 1995 - Shell Service Station, WIC #204-5508-4507, 2142 East 12th Street, Oakland, California

Table 2. Analytical Results for Ground Water - Fomer Shell Service Station WIC #204-5508-4507, 2142 East 12th Street, Oakland, California

Well ID	Sample Date	Depth to Water (ft)	← parts per billion (ug/l) →					TOG	Halogenated Hydrocarbons ^a
			TPH-G	B	T	E	X		
MW-1 ^b	11/02/89	6.79	<50	<0.5	<0.5	<0.5	<0.5	---	
	04/13/90	6.48	1,000	10	0.41	2.4	0.63	---	
	10/26/90	6.22	600	130	1.7	0.36	4.6	---	
	09/10/91	6.89	510	2.6	<0.5	<0.5	0.9	---	
	12/10/91	8.86	380	3.4	<0.5	<0.7	1.5	---	
	03/13/92	4.95	<50	1.1	0.6	<0.5	7.9	---	
	06/05/92	6.24	150	<0.5	<0.5	<0.5	0.5	---	
	09/01/92	6.79	240	<0.5	0.7	1.3	1.6	---	
	09/01/92 ^{dup}	6.79	230	<0.5	0.8	1.7	1.8	---	
	12/04/92	6.49	170	<0.5	4.0	<0.5	6.3	---	
	12/04/92 ^{dup}	6.49	130	<0.5	3.1	<0.5	3.6	---	
	03/12/93	5.16	97	<0.5	<0.5	0.7	0.8	---	
	03/12/93 ^{dup}	5.16	100	<0.5	<0.5	0.7	0.7	---	
	06/07/93	5.86	<50	<0.5	<0.5	<0.5	<0.5	---	
	12/14/93	6.16	67	<0.5	<0.5	<0.5	4.5	---	
	12/14/93 ^{dup}	6.16	70	<0.5	<0.5	<0.5	5.6	---	
	06/16/94	5.93	70 ^c	<0.5	1.4	<0.5	<0.5	<0.5	---
	03/16/95	4.86	<50	<0.5	<0.5	<0.5	<0.5	---	ND
	06/26/95	5.82	<50	<0.5	<0.5	<0.5	<0.5	---	---
MW-2 ^b	11/02/89	6.02	<50	<0.5	<0.5	<0.5	<0.5	---	
	04/13/90	5.69	<30	<0.3	<0.3	<0.3	<0.3	---	
	10/26/90	7.01	<30	<0.3	<0.3	<0.3	<0.3	<5,000	
	09/10/91 ^d	6.15	<50	<0.5	<0.5	<0.5	<0.5	5,300	
	12/10/91	6.19	<50	<0.5	<0.5	<0.5	<0.5	<5,000	
	03/13/92	4.49	<50	0.9	<0.5	<0.5	1.3	<5,000	
	06/05/92	5.46	<50	<0.5	<0.5	<0.5	<0.5	<5,000	
	09/01/92	6.12	<50	<0.5	<0.5	<0.5	<0.5	<5,000	
	12/04/92	5.90	<50	<0.5	<0.5	<0.5	<0.5	<5,000	

Table 2. Analytical Results for Ground Water - Shell Service Station WIC #204-5508-4507, 2142 East 12th Street, Oakland, California (continued)

Well ID	Sample Date	Depth to Water (ft)	parts per billion (ug/l)					TOG	Halogenated Hydrocarbons ³
			TPH-G	B	T	E	X		
	03/12/93	5.00	<50	<0.5	<0.5	<0.5	<0.5	---	
	06/07/93	4.70	<50	<0.5	<0.5	<0.5	<0.5	---	
	06/07/93 ^{dup}	4.70	<50	<0.5	<0.5	<0.5	<0.5	---	
	12/14/93	5.21	<50	<0.5	<0.5	<0.5	<0.5	---	
	06/16/94	5.46	<50	<0.5	<0.5	<0.5	<0.5	---	
	03/16/95	4.44	<50	<0.5	<0.5	<0.5	<0.5	---	ND
	06/26/95	5.45	---	---	---	---	---	---	---
MW-3 ^b	11/02/89	6.37	<50	<0.5	<0.5	<0.5	<0.5	---	
	04/13/90	7.04	310	0.69	0.75	0.78	0.34	---	
	10/26/90	7.08	290	<0.3	<0.3	<0.3	<0.3	---	
	09/10/91	6.76	100	<0.5	<0.5	<0.5	<0.5	---	
	12/10/91	6.73	50	<0.5	<0.5	<0.5	<0.5	---	
	03/13/92	5.61	320	<0.5	<0.5	<0.5	3.2	---	
	06/05/92	6.51	310	<0.5	<0.5	<0.5	2.8	---	
	09/01/92	6.58	180	<0.5	<0.5	0.7	1.5	---	
	12/04/92	6.29	<170	1.1	1.7	<0.5	10	---	
	03/12/93	6.44	510	<0.5	1.7	<0.5	5.3	---	
	06/07/93	7.10	350	1.7	<0.5	<0.5	<0.5	---	
	12/14/93	5.99	160	<0.5	<0.5	<0.5	3.5	---	
	06/16/94	6.88	420	<0.5	<0.5	<0.5	<0.5	---	
	06/16/94 ^{dup}	6.88	340 ^c	<0.5	<0.5	<0.5	<0.5	---	
	03/16/95	5.30	420	<0.5	0.6	<0.5	<0.5	---	ND
	03/16/95 ^{dup}	5.30	390	<0.5	<0.5	1.3	3.1	---	---
	06/26/95	9.42	760	<0.5	<0.5	1.5	<0.5	---	---
	06/26/95 ^{dup}	9.42	680	<0.5	<0.5	<0.5	<0.5	---	---



Table 2. Analytical Results for Ground Water - Shell Service Station WIC #204-5508-4507, 2142 East 12th Street, Oakland, California (continued)

Well ID	Sample Date	Depth to Water (ft)	TPH-G	B	T	E	X	TOG	Halogenated Hydrocarbons ^a
MW-4 ^b	11/02/89	6.97	<0.5	<0.5	<0.5	<0.5	<0.5	---	
	04/13/90	7.42	<30	<0.3	<0.3	<0.3	<0.3	---	
	10/26/90	7.77	<30	0.55	0.71	<0.3	0.48	---	
	09/10/91	7.86	<50	<0.5	<0.5	<0.5	<0.5	---	
	12/10/91	7.20	<50	<0.5	<0.5	<0.5	<0.5	---	
	03/13/92	5.60	<50	0.5	<0.5	<0.5	2.6	---	
	06/05/92	7.16	<50	<0.5	<0.5	<0.5	<0.5	---	
	09/01/92	7.33	<50	<0.5	<0.5	<0.5	<0.5	---	
	12/04/92	6.82	59	0.7	<0.5	<0.5	20	---	
	03/12/93	6.99	<50	<0.5	<0.5	<0.5	<0.5	---	
	06/07/93	7.84	<50	<0.5	<0.5	<0.5	<0.5	---	
	12/14/93	6.52	<50	<0.5	<0.5	<0.5	<0.5	---	
	06/16/94	7.31	<50	<0.5	<0.5	<0.5	<0.5	---	
	03/16/95	6.04	<50	<0.5	<0.5	<0.5	<0.5	---	ND
	06/26/95	6.85	<50	<0.5	<0.5	<0.5	<0.5	---	---
Trip Blank	11/02/89		<50	<0.5	<0.5	<0.5	<0.5	---	
	09/10/91		<50	<0.5	<0.5	<0.5	<0.5	---	
	12/10/91		<50	<0.5	<0.5	<0.5	<0.5	---	
	03/13/92		<50	<0.5	<0.5	<0.5	<0.5	---	
	06/05/92		<50	<0.5	<0.5	<0.5	<0.5	---	
	09/01/92		<50	<0.5	<0.5	<0.5	<0.5	---	
	12/04/92		<50	<0.5	<0.5	<0.5	<0.5	---	
	03/12/93		<50	<0.5	<0.5	<0.5	<0.5	---	
	06/07/93		<50	<0.5	<0.5	<0.5	<0.5	---	
	12/14/93		<50	<0.5	<0.5	<0.5	<0.5	---	
06/16/94		<50	<0.5	<0.5	<0.5	<0.5	---		



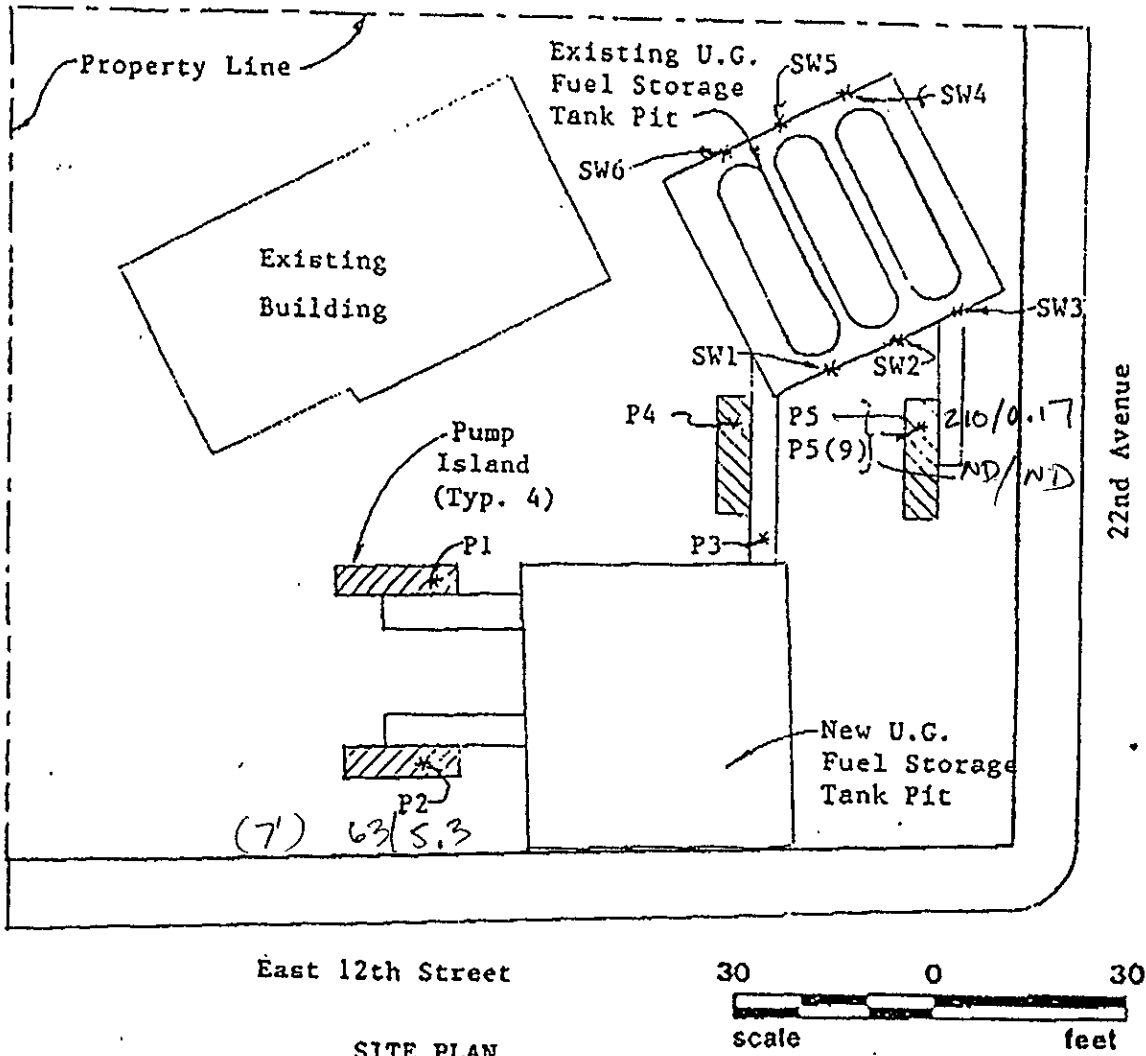
KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 676-9100 (707) 746-6915



* Sample Location

ppm T.Hg / benzene

Shell Service Station
2142 East 12th Street
Oakland, California

KEI-J89-0409.R3
June 16, 1989

TABLE 1
SUMMARY OF LABORATORY ANALYSES
SOIL
(Results in ppm)
(Samples collected on May 25 & 31, and June 2, 1989)

<u>Sample #</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl- benzene</u>
SW1	6	21	ND	ND	ND	0.22
SW2	6	5.1	ND	ND	ND	ND
SW3	6	ND	ND	ND	ND	ND
SW4	6	ND	ND	ND	ND	ND
SW5	6	ND	ND	ND	ND	ND
SW6	6	ND	ND	ND	ND	ND
P1	3	2.6	0.086	ND	ND	ND
P2	7	63	5.3	1.3	2.8	1.3
P3	4	36	0.055	ND	0.19	0.33
P4	3.5	3.8	ND	ND	ND	ND
P5	3	210	0.17	0.14	0.48	2.0
P5(9)	9	ND	ND	ND	ND	ND
Detection Limits	--	1.0	0.05	0.1	0.1	0.1

ND = Non-detectable.

KEI-J89-0409.R3
June 16, 1989

TABLE 2
SUMMARY OF LABORATORY ANALYSES
WATER
(Results in ppb)

<u>Sample #</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl- benzene</u>
W1	7	29,000	85	140	1,900	530
Detection Limits		30	0.3	0.3	0.3	0.3