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A Work Plan For The

INSTALLATION OF FIVE (5) SOIL BORINGS TO DETERMINE CONCENTRATION OF POLY AROMATIC HYDROCARBONS AND TOTAL LEAD IN TWO AREAS

Beneath the site at:

2415 MARINEER SQUARE DRIVE ALAMEDA, CALIFORNIA

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7/21/01
July 21, 2001

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7-21-01
July 21, 2001

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1.0 INTRODUCTION

The following work plan is for a limited site assessment, using the advancement of five (5) soil borings to determine the amount, if any, of poly-aromatic hydrocarbons (PAHs), and total lead (Pb), in soil and groundwater in two areas, beneath the site at **2415 Mariner Square Drive, Alameda, California**.

1.1 BACKGROUND

The site is located in an area of commercial, light manufacturing, and military use. The site was reclaimed from marshlands in the late 1920s. The site had been used previously for bulk fuel storage and distribution of motor lubricants, fuel oils, and refined oils for use by ships until 1972.

Currently a restaurant, office buildings, and businesses related to the marine industry, such as boat sales, storage, repairs, and sail manufacturing occupy the site.

Plans for the demolition of current buildings and construction of senior citizen housing and a dry boat storage facility are in process.

2.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

2.1 Summary of Previous Investigations

In April 1992, AllWest advanced twenty-four (24) Geoprobe borings, and collected and analyzed twenty-three (23) soil, and four (4) water samples. Elevated amounts of petroleum hydrocarbons were detected in twenty (20) of the soil samples. Petroleum hydrocarbons were detected in two (2) of the groundwater samples at concentrations of 13,000 ppm and 1,200 ppm. For sample numbers and analytical results refer to Appendix-B.

The December 23, 1992, Quarterly Groundwater Monitoring Report by Subsurface Consultants describes the advancement of six (6) groundwater monitoring wells, designated as MW-1 through MW-6. Petroleum hydrocarbons were reported in all soil samples collected. A record of the collection or analyses of groundwater samples was not found.

On June 14, 1994, McClaren/Hart placed thirteen (13) soil borings onsite, and analyzed twenty-eight (28) soil samples. Three groundwater monitoring wells were installed and designated as MW-7 through MW-9. Per the Hydro Environmental Technologies Report dated May 8, 1998, hydrocarbons had been detected previously in MW-1 through MW-6, and vinyl chloride and Freon-113 were detected in groundwater samples collected from wells MW-2 and MW-4.

On August 6, 1997, two underground storage tanks were removed. Hydrocarbons were present in both soil and groundwater in the excavation.

The Hydro Environmental Technologies Report dated May 8, 1998, summarizes the following for the May 1998 sampling event:

> Total petroleum hydrocarbons as motor oil (TPHmo), were not detected in any of the eight (8) wells sampled, including the MW-6 grab groundwater sample.
>
> Total petroleum hydrocarbons as diesel (TPHd), was detected in one of the eight (8) wells sampled and in the MW-6 groundwater sample. TPHg was detected in five of the eight wells sampled and in the MW-6 grab groundwater sample.
>
> Benzene was detected in five of the eight wells sampled and equaled or exceeded the state MCL in three of the samples, benzene was not detected in the MW-6 grab groundwater sample.
>
> Vinyl chloride and PNAs were not detected in any of the eight wells sampled or the MW-6 grab groundwater sample.
>
> Suspended Petroleum Hydrocarbons (SPH) was present in well MW-6 during the previous events ranging from a sheen to 0.55 feet. A PetroTrap was installed in the well on February 1998 and removed on April 28, 1998. The PetroTrap recovered 4.7 liters or approximately 1.2 gallons of SPH.
>
> Well MW-6 was destroyed on April 28, 1998, prior to the May 1998, quarterly monitoring event. The well was destroyed during the excavation of hydrocarbon-bearing soil encountered during the search for a water-main leak. The PetroTrap was removed prior to well destruction.
>
> Initial soil sample results from the MW-6 excavation indicated concentrations of TPHmo ranging up to 24,000 ppm. Follow-up soil sample results ranged from non-detect to 8 ppm TPHmo. Initial TPHd results indicated concentrations ranging up to 3,200 ppm. Follow-up soil samples were non-detect. Results from both sample sets for TPHg, BTEX, and MTBE were non detect.
>
> Based upon the four quarters of groundwater sampling, the hydrocarbon concentrations in groundwater appear to be stable or declining. The May 1998 quarterly monitoring event was the fourth consecutive event required by the ACHCSA for the former MW-6 area.
>
> Refer to Appendix B for Hydro Environmental Technologies Report, May 8, 1998, tables of analytical results.

Earth Systems Consultants, April 6, 2001, Remediation Method Discussion and Proposal for Remedial Action at MW-6A and MW-10, summarizes the following for the January 12, 2001, sampling event..

> Monitoring wells MW-6A and MW-10, had free product, motor oil in MW-2, and bunker crude in MW-6A. Both of these product plumes may be limited in area, in comparison to previously determined during excavation of the MW-6 area.
>
> Refer to Appendix C for the Earth Systems Consultants, April 6, 2001, Tables summarizing groundwater monitoring wells analytical results for wells MW-1 through MW-10, from 1992 to 2001.

2.2 Groundwater Flow Direction

Hydro Environmental Technologies Inc.'s quarterly monitoring report, dated June 12, 1998, states the general groundwater flow direction is toward the southeast and east with an approximate gradient ranging from 1.02% to 1.12%.

3.0 SCOPE OF SERVICES

Based upon the above background information, the following comprehensive work plan has been prepared for the advancement of five soil borings beneath the site at **2415 Mariner Square Drive, Alameda, California.**

3.1 Placement of Soil Borings

Three soil borings will be placed in the area of former soil borings advanced during the April 1992 assessment; these borings were MS-4, MS-13, and MS-14. Twenty-three (23) soil borings were advanced during this 1992 assessment; they exhibited elevated amounts of total recoverable hydrocarbons. Ms. Eva Chou, of Alameda County Department of Environmental Health Services, Hazardous Materials Division requested three borings be placed in this area and analyzed for PAHs and total lead.

Attached to this work plan, in Appendix D, are the Tables of Analytical Results summarizing these data. Results for total recoverable petroleum hydrocarbons are presented in Table 1A, and lead results are presented in Table 1C.

Two soil borings will be placed in the area of the proposed courtyard of the soon-to-be constructed senior citizens' residence, as the courtyard is the only area of the proposed residence that will have soil exposed (i.e., unpaved).

3.2 Advancement of Soil Borings Using Geoprobe and Soil Boring Logs

Five (5) soil borings will be placed using two-inch diameter soil probes advanced by truck-mounted hydraulic equipment to push and/or hammer, the Geoprobe ®, sampler into undisturbed soil. Continuous soil samples will be retrieved in clear plastic liners, so as to allow continuous profiling of the lithologic column. The probes will be logged by a State Licensed Geotechnical Engineer, using the Unified Soil Classification System. Soil boring logs of collected data will be presented in the final report.

3.3 Soil Sample Collection

Soil samples will be collected at 2.0' and 4.0' below ground surface, at changing lithologies, or where indications of contamination are present. One soil sample will be collected within the capillary zone.

The clear plastic liner will be cut and prepared for transport to an analytical laboratory, based upon field monitoring results. The liner will be cut to a six-inch length, using a clean cutting tool designed specifically for this purpose. Each end of the tube will be covered with a clean Teflon sheet, tightly fitting plastic caps, and labeled with the site

project number, date, and time of collection, depth interval, company and sampler ID. Pertinent data will be entered on the chain of custody (COC) document. The sample will then be placed in a clean cooler, with ice in a plastic container, pending transport to an analytical laboratory.

3.4 Soil Sample QA/QC

Immediately upon retrieval, the sampler will be opened, the selected sleeve removed, each end covered with a Teflon sheet, fitted with plastic caps, sealed with Teflon tape, labeled with a project number, name of the sampler, time of sampling, then placed on ice and transported to a state certified hazardous materials analytical laboratory, under chain of custody for analyses. During the placement of these borings, information from the collected soil samples will be obtained regarding subsurface soil lithologies and characteristics such as color, moisture, density, and depth to groundwater. A California Registered Geologist using the Unified Soil Classification System USCS will classify the collected soil samples.

3.5 Groundwater Sample Collection

A groundwater sample will be collected within each boring using a clean, dedicated disposable bailer. Collected water was decanted into two (2) one-liter amber, two 200-ml amber, and two (2) 40-ml volatile organics vials (voas), to a positive meniscus to eliminate headspace.

The groundwater samples will be labeled with the date, sampler's name, project name, and well number. The samples will be placed in sealed bags on ice within a cooler. The samples will be transported to a state certified analytical laboratory under chain of custody.

3.6 Soil and Groundwater Analyses

Selected soil and groundwater samples will be collected for analyses and transported to a certified hazardous waste analytical laboratory and analyzed for poly aromatic hydrocarbons (PAHs, using EPA Method 8270C), and total lead (pB, using EPA Method 200.7).

3.7 Decontamination

Prior to arriving on site the Geo-probe rig and all parts that may approach the soil borings will be decontaminated using a hot pressure wash. Sampling equipment will be decontaminated using an Alconox wash, tap washer rinse, followed by a de-ionized water rinse.

3.8 Grouting of Soil Borings

Soil borings will be tremie grouted using concrete slurry with 3% bentonite.

4.0 RELEASE REPORTING

Upon completion of the above work, a report will be prepared documenting the task performed, including but not limited to a description of methods of soil boring advancement, collection of soil samples, sample locations, quality assurance and quality control, laboratory analytical reports, chain of custodies, and conclusions and recommendations.

A copy of this report will be forwarded on your behalf, upon request, to the Alameda County, Department of Environmental Health Services, Division of Hazardous Materials. The address is presented below for your convenience.

County of Alameda
Department of Environmental Health Services
Hazardous Materials Division
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
Attn: Ms. Eva Chou

APPENDIX A

FIGURES

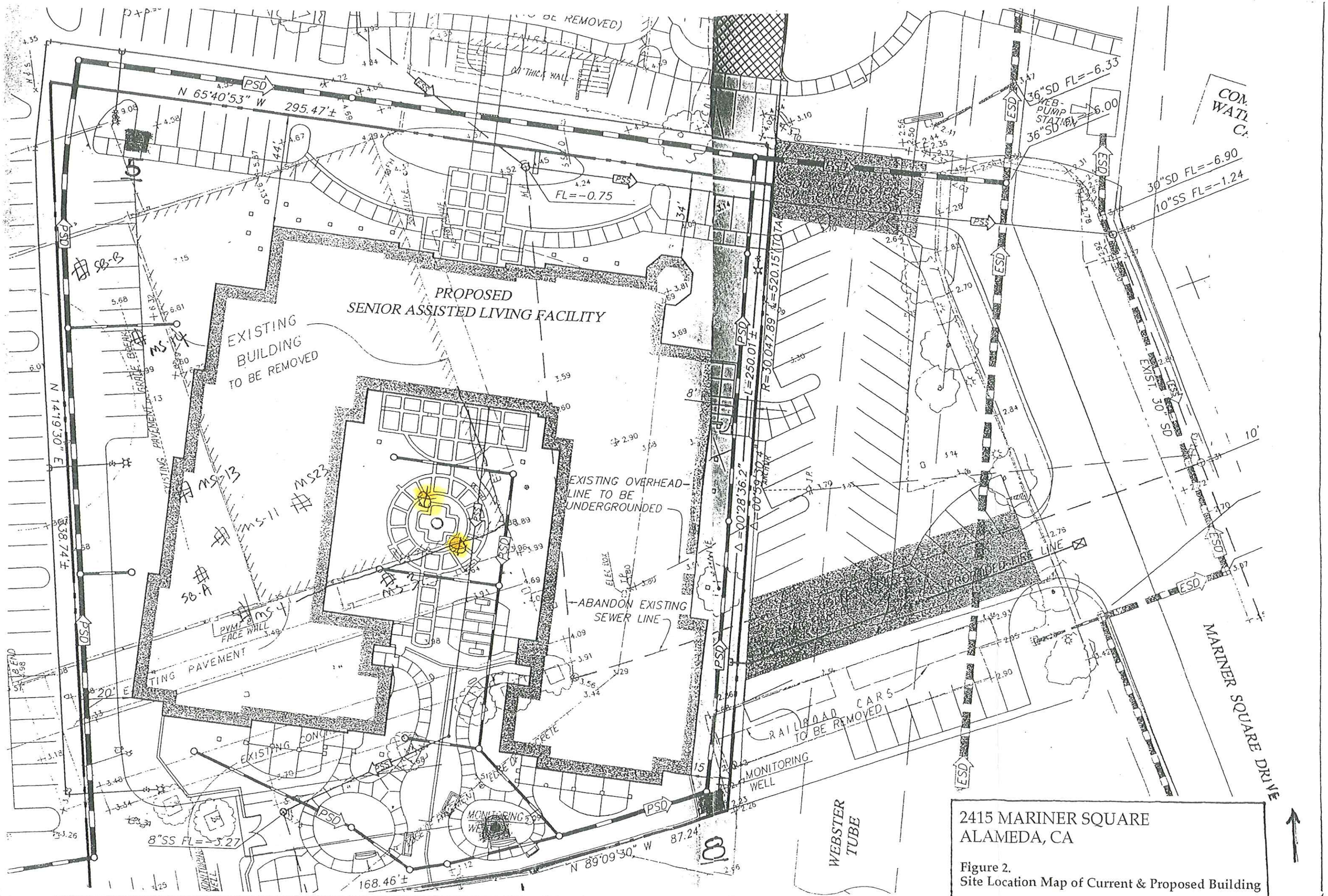
Figure 1. Site Location Map

Figure 2. Current & Proposed Building Location Map

Figure 3. Earth Systems Consultants November 1999
Map of Former Soil Borings MS-1 through MS-23
SB-A through SB-K, and DP-2
Monitoring Wells MW-1 through MW-10

Figure 4. Location of Groundwater Monitoring Wells

Figure 5. Location of Proposed Soil Borings



2415 MARINER SQUARE
ALAMEDA, CA

Figure 2.
Site Location Map of Current & Proposed Building

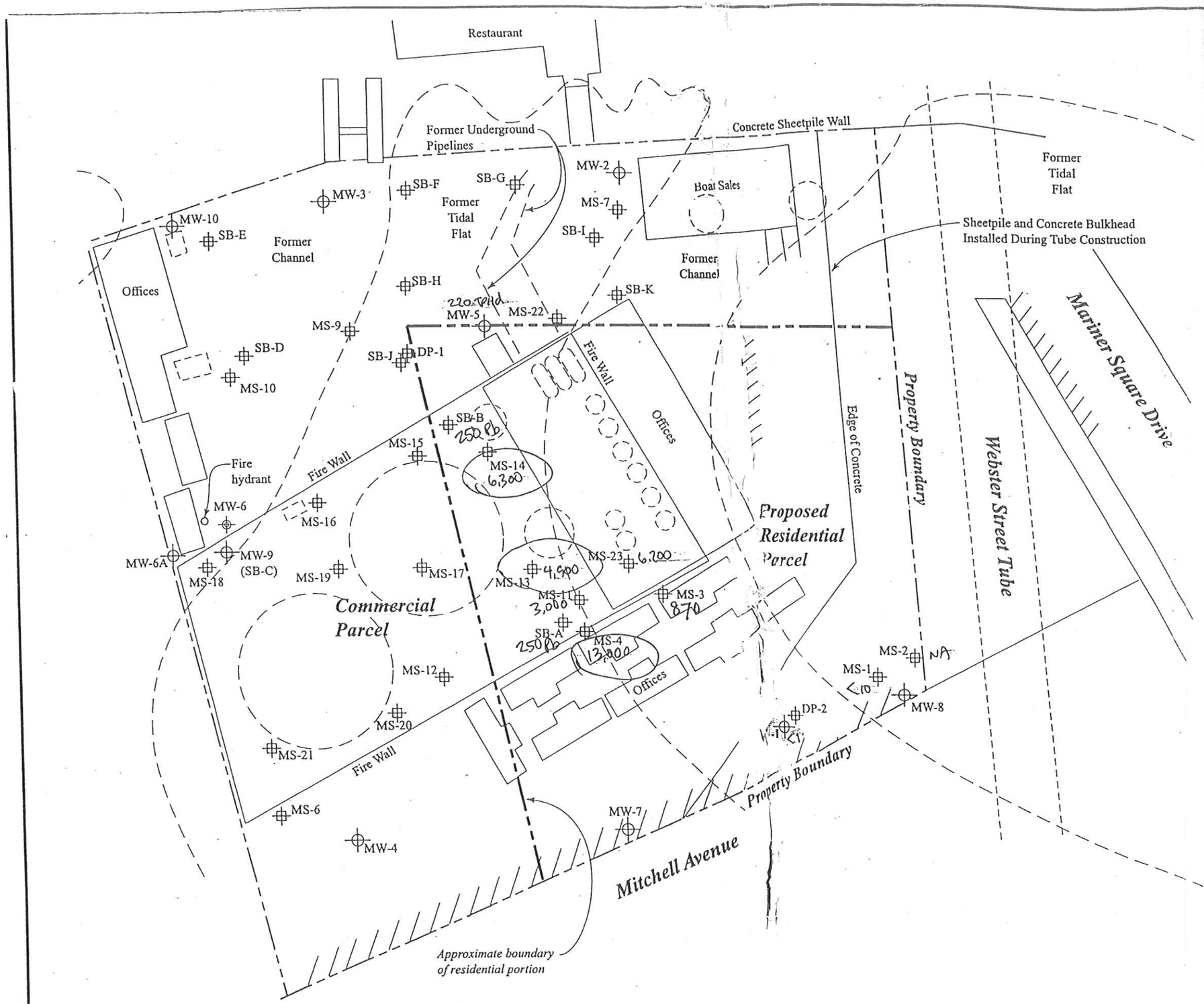


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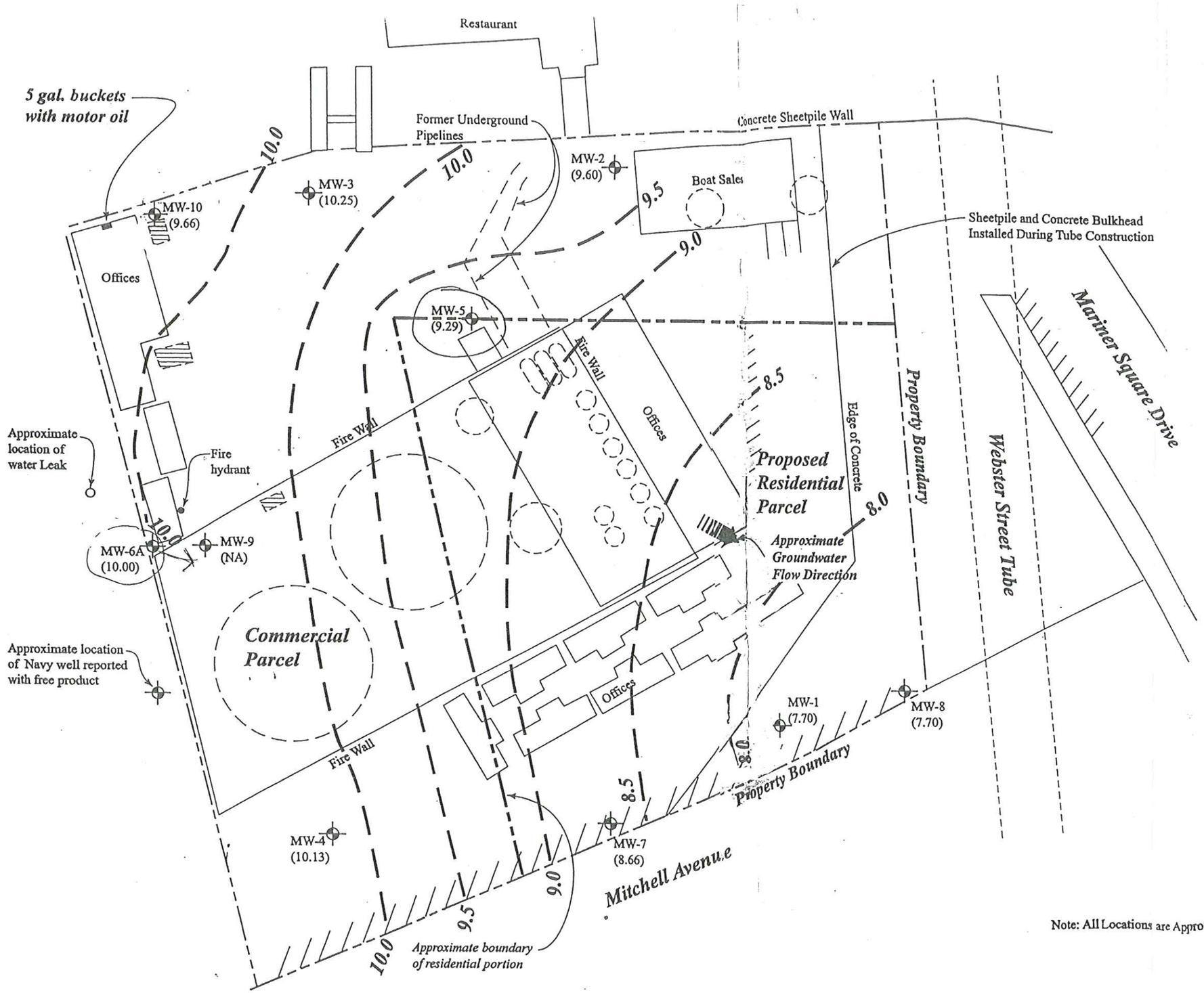
Figure 3.
Former Boring Locations



LEGEND

- MW-10 (9.66) — Monitoring Well and Groundwater Elevation (In feet above mean sea level on 1/12/01)
- Existing Structures
- Former above Ground Fuel Storage Tanks
- Former Underground Gasoline Storage Tank
- Approximate Property Boundary
- 10.0 — Line of Approximate Equal Groundwater Elevation (In feet above mean sea level)
- N/A — Not Accessible

N

60 0 60 120

Approximate Scale in Feet

Note: All Locations are Approximate

2415 MARINER SQUARE
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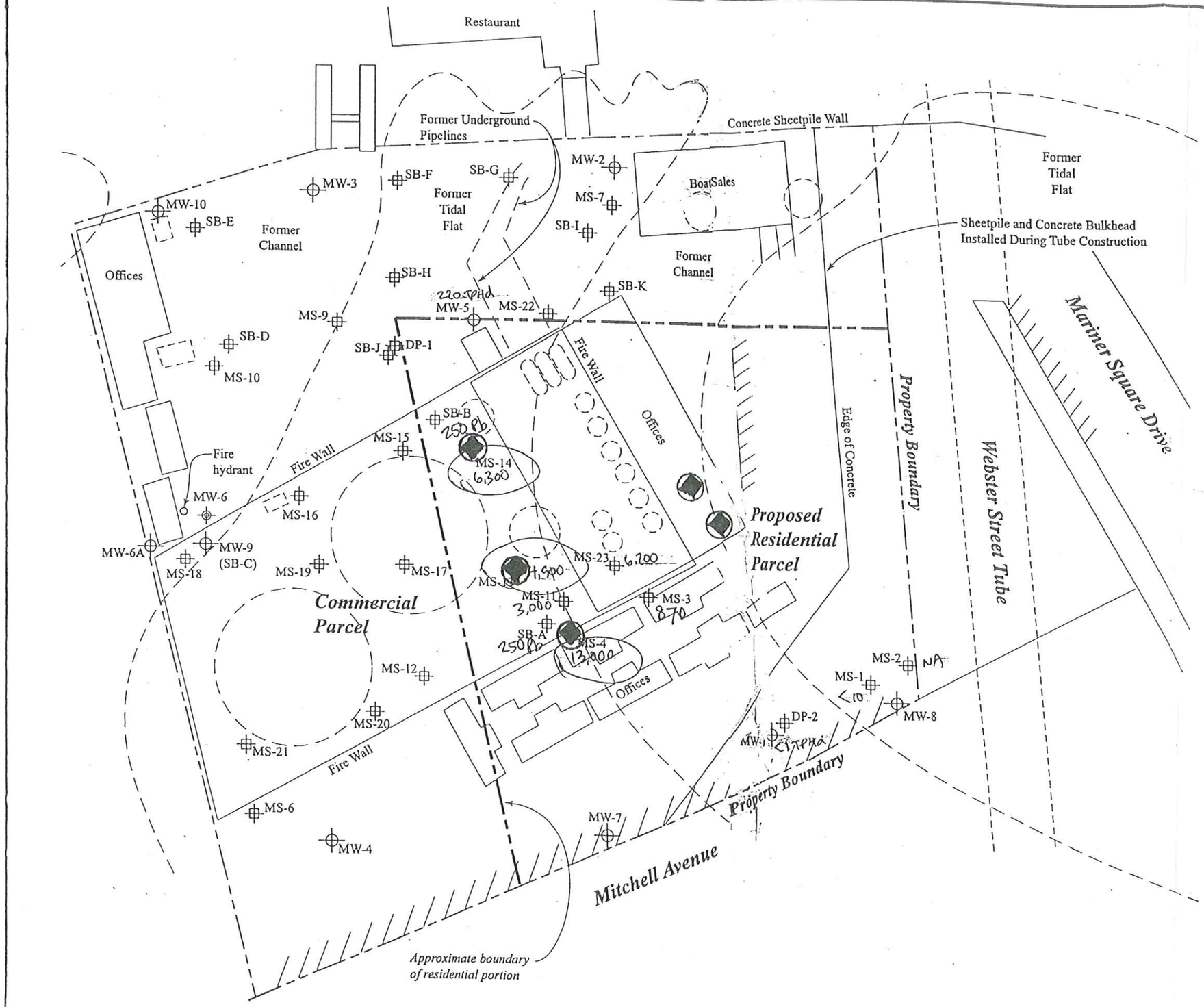
Figure 4.
Former & Current Monitoring Wells



LEGEND

- Monitoring Well
- Destroyed Well
- Soil Boring
- Existing Structures
- Former above Ground Fuel Storage Tanks
- Former Underground Gasoline Storage Tank
- Former Tidal Channel (Radbruch, 1957)
- Approximate Property Boundary
- MS-22 / DP-2 Boring Sample Location
- Proposed Soil Boring

60 0 60 120

Approximate Scale in Feet

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ALAMEDA, CA

Figure 5.
Proposed Soil Boring Locations

APPENDIX B

TABLES

Earth Systems Consultants Report
November 18, 1999
Table 1A – 1C
Soil Analytical Results

Borings T-1, T-2
Borings MS-1 through MS-23
Borings SB-A through SB-K
Borings PL1-1 through PL1-7
Borings PL2-1 through PL2-5
Boring DP-1 and DP-2

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S.S. collected at proposed residential pad
2425 Mariner Square

TABLE 1A
Soil Analytical Results -- Organics
Mariner Square, Alameda, California

BORING/ WELL NUMBER	DEPTH (feet)	DATE	TPHg (ppm)	TPHd (ppm)	TPHmo (ppm)	TRPH (ppm)	OIL & GREASE (ppm)	BENZENE (ppm)	TOLUENE (ppm)	ETHYL-BENZENE (ppm)	TOTAL XYLENES (ppm)	MTBE (ppm)	VOCs (ppm)	VINYL CHLORIDE (ppb)	TOC (ppm)
T-1	5.0	12/17/90	ND*	-	-	-	-	ND*	ND*	ND*	0.0063	-	-	-	-
T-2	5.0	12/17/90	ND*	-	-	-	-	ND*	0.017	ND*	0.020	-	-	-	-
D-1	1.0	12/17/90	ND*	-	-	-	-	ND*	ND*	ND*	ND *	-	-	-	-
MS-1	4.0	4/7/92	-	-	-	<10	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-2	4.0	4/7/92	-	-	-	-	-	-	-	-	-	-	-	-	-
MS-3	4.0	4/7/92	-	-	-	870	-	<0.005	<0.005	0.027	0.054	-	ND	-	-
MS-4	4.0	4/7/92	-	-	-	13,000	-	<0.50	<0.50	1.00	1.20	-	ND	-	-
MS-5	4.0	4/7/92	-	-	-	170	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-6	4.0	4/7/92	-	-	-	520	-	<0.10	<0.10	<0.10	<0.20	-	ND	-	-
MS-7	4.0	4/7/92	-	-	-	290	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-8	4.0	4/7/92	-	-	-	46	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-9	4.0	4/7/92	-	-	-	12	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-10	4.0	4/7/92	-	-	-	37	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-11	4.0	4/8/92	-	-	-	3,000	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-12	4.0	4/8/92	-	-	-	3,200	-	<0.10	<0.10	0.140	0.270	-	ND	-	-
MS-13	4.0	4/8/92	-	-	-	4,900	-	<0.10	<0.10	<0.10	<0.20	-	ND	-	-
MS-14	4.0	4/8/92	-	-	-	6,300	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-15	4.0	4/8/92	-	-	-	6,400	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-16	0.4	4/8/92	-	-	-	27	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-17	0.2	4/8/92	-	-	-	3,300	-	<0.50	<0.50	1.60	8.4	-	ND	-	-
MS-18	0.4	4/8/92	-	-	-	11,000	-	<0.20	<0.20	<0.20	<0.40	-	ND	-	-
MS-19	0.4	4/8/92	-	-	-	3,900	-	<0.10	<0.10	<0.10	<0.20	-	ND	-	-
MS-20	0.4	4/8/92	-	-	-	970	-	<0.005	<0.005	<0.005	<0.005	-	ND	-	-
MS-21	0.4	4/8/92	-	-	-	39	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-22	0.4	4/8/92	-	-	-	<10	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MS-23	0.3	4/8/92	-	-	-	6,200	-	<0.005	<0.005	<0.005	<0.010	-	ND	-	-
MW-1	7.0	7/22/92	-	<1	-	-	<50	<0.005	<0.005	<0.005	<0.005	-	ND	-	-
MW-2	6.0	7/22/92	-	40	-	-	66	<0.80	<0.80	21.0	10.0	-	ND	-	-
MW-3	4.5	7/22/92	-	<1	-	-	<50	<.005	<0.005	<0.005	<0.005	-	ND	-	-
MW-4	4.0	7/22/92	-	<1	-	-	<50	<0.005	<0.005	<0.005	<0.005	-	ND	-	-
MW-5	4.5	7/22/92	-	220	-	-	<50	<0.40	0.50	1.6	1.4	-	ND	-	-
SB-A	1.5	9/15/94	-	-	-	-	-	-	-	-	-	-	-	-	6,700
SB-A	5.5	9/15/94	-	-	-	-	-	<0.005	<0.0063	<0.005	<0.046	-	-	<10	960
SB-B	1.5	9/16/94	-	-	-	-	-	-	-	-	-	-	-	-	19,000

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TABLE 1A
Soil Analytical Results -- Organics
Mariner Square, Alameda, California

BORING/ WELL NUMBER	DEPTH (feet)	DATE	TPHg (ppm)	TPHd (ppm)	TPHmo (ppm)	TRPH (ppm)	OIL & GREASE (ppm)	BENZENE (ppm)	TOLUENE (ppm)	ETHYL-BENZENE (ppm)	TOTAL XYLENES (ppm)	MTBE (ppm)	VOCs (ppm)	VINYL CHLORIDE (ppb)	TOC (ppm)
SB-B	4.5	9/16/94	-	-	-	-	-	-	-	-	-	-	-	-	<500
SB-C/MW-9	1.5	9/16/94	-	-	9,200	-	-	<0.005	13	5.8	<0.005	-	-	<20	4,000
SB-C/MW-9	5.5	9/16/94	-	-	-	-	-	-	-	-	-	-	-	-	<500
SB-D	4.5	9/16/94	<50	810	140	-	-	<0.050	<0.073	<0.050	1.380	-	-	-	-
SB-E	4.5	9/16/94	<10	<10	60	-	-	<0.005	0.019	<0.005	<0.005	-	-	-	-
MW-7	**4.0**	**9/15/94**	**<30**	**<30**	**200**	-	-	**<0.005**	**0.014**	**<0.005**	**<0.005**	-	-	<10	-
MW6-N1	4.5	4/28/98	<1	<9	41	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-
MW6-S1	3	4/28/98	<1	3,200	24,000	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-
MW6-W1	3	4/28/98	<1	2,100	6,800	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-
MW6-E1	3	4/28/98	<1	47	380	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-
MW6-W2	3	5/4/98	<1	<1	<5	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-
MW6-N2	3.5	5/4/98	<1	<1	<5	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-
MW6-E2	3	5/4/98	<1	<1	8	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-
T1-5.5	5.5	8/6/97	350	230	8,900	-	-	<0.05	<0.10	0.3	0.71	<1.0	-	-	-
T2-4.5	4.5	8/6/97	0.550	10	12	-	-	<0.001	<0.002	<0.002	<0.004	<0.010	-	-	-
PL1-1	1.5	11/21/98	<1	590	1,600	-	-	<0.005	<0.005	<0.005	<0.005	<0.05	-	-	-
PL1-2	1.5	11/21/98	1,100	470	920	-	-	<1.0	<1.0	<1.0	1.7	<10	-	-	-
PL1-3	1.5	11/21/98	25	30	28	-	-	<0.05	0.065	0.087	0.17	<10	-	-	-
PL1-4	1.5	11/21/98	<1	15	24	-	-	<0.005	<0.005	<0.005	<0.005	<0.05	-	-	-
PL1-5	1.5	11/21/98	<1	<1	<1	-	-	<0.005	<0.005	<0.005	<0.005	<0.05	-	-	-
PL1-6	1.5	11/21/98	23	110	200	-	-	<0.05	0.07	0.077	0.85	<0.5	-	-	-
PL1-7	1.5	11/21/98	130	59	89	-	-	<0.5	<0.5	2.8	2	<5.0	-	-	-
PL2-1	1.5	11/21/98	<100	210	81	-	-	<0.5	0.54	1.1	<0.5	<5.0	-	-	-
PL2-2	1.5	11/21/98	8.3	28	46	-	-	<0.005	<0.005	<0.005	<0.005	<0.05	-	-	-
PL2-3	1.5	11/21/98	<1	<1	73	-	-	<0.005	<0.005	.0061	<0.005	<0.05	-	-	-
PL2-4	1.5	11/21/98	<1	<1	130	-	-	<0.005	<0.005	<0.005	<0.005	<0.05	-	-	-
PL2-5	1.5	11/21/98	150	1,000	1,400	-	-	<0.005	<0.005	<0.005	<0.005	<0.05	-	-	-

ppm	Parts per million
ppb	Parts per billion
<	Analyte not detected at or above specified laboratory reporting limit.
-	Not Analyzed
ND	No analytes detected above laboratory reporting limits, reporting limits vary for each analyte
ND*	Analyted not detected, reporting limit not specified
TPHg	Total Petroleum Hydrocarbons as gasoline
TPHd	Total Petroleum Hydrocarbons as diesel
TPHmo	Total Petroleum Hydrocarbons as motor oil
TRPH	Total Recoverable Petroleum Hydrocarbons
VOCs	Volatile Organic Compounds
TOC	Total Organic Carbon
MTBE	Methy Tert-Butyl Ether
bold	Sample located on Residential Parcel

File No. NFE-4392-01
November 18, 1999

TABLE 1B
Soil Analytical Results - Polynuclear Aromatic Compounds
Mariner Square, Alameda, California
(in parts per million)

Boring	Sample Date	Depth (feet)	Acenaphthene	Acenaphthylene	Anthracene	Benzo [a] - Anthracene	Benzo [a] - Pyrene	Benzo [b] - Fluoranthene	Benzo [g,h,i] - Perylene	Benzo [k] - Fluoranthene	Chrysene	Dibenzo [a,h] - Anthracene	Fluoranthene	Fluorene	Indeno [1,2,3-cd] - Pyrene	2-Methylnapthalene	Naphthalene	Phenanthrene	Pyrene
PL1-1	11/21/98	2.0	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4
PL1-2	11/21/98	2.0	<34	<34	<34	<34	<34	<34	<34	<34	<34	<34	<34	<34	<34	260	230	<34	<34
PL1-3	11/21/98	2.2	0.86	<0.67	0.83	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	1.2	1.2	<0.67	2.6	0.99	2.9	0.9
PL1-4	11/21/98	2.0	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	1.3	<0.67
PL1-5	11/21/98	1.8	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67
PL1-6	11/21/98	1.8	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	1.0	<0.67	<0.67	1.2	1.7	1.9	1.1
PL1-7	11/21/98	2.0	<3.4	<3.4	8.6	5.8	<3.4	3.7	<3.4	<3.4	4.3	<3.4	19	4.3	<3.4	<3.4	9.0	24	14
PL2-1	11/21/98	2.3	4.3	<0.67	2.0	0.92	0.82	1.1	<0.67	<0.67	0.76	<0.67	3.5	5.2	<0.67	<0.67	5.3	9.2	2.6
PL2-2	11/21/98	2.2	0.86	<0.67	0.91	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	1.2	1.3	<0.67	3.5	2.2	3.6	1.1
PL2-3	11/21/98	1.9	<0.67	<0.67	<0.67	<0.67	0.73	1.26	<0.67	<0.67	0.70	<0.67	1.4	<0.67	<0.67	0.81	<0.67	1.2	1.2
PL2-4	11/21/98	2.0	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67
PL2-5	11/21/98	2.0	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	0.8	<0.67	<0.67	<0.67	1.2	1.8	1.5
DP1	12/07/98	4.0	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	-	<0.67	<0.67	<0.67
DP2	**12/07/98**	**4.0**	**<0.67**	**<0.67**	**<0.67**	**<0.67**	**<0.67**	**<0.67**	**<0.67**	**<0.67**	**<0.67**	**<0.67**	**<0.67**	**<0.67**	**<0.67**	**-**	**<0.67**	**<0.67**	**<0.67**

Notes:
Shading indicates levels above detection limits.
Bold indicates samples located on the Residential Parcel
Polynuclear Aromatic Compounds analyzed using EPA Method 8310.
< Not detected at or above the specified laboratory detection limit.
- Not analyzed

File No. NFE-4392-01
November 18, 1999

TABLE 1C

Soil Analytical Results -- Inorganics

Mariner Square, Alameda, California

Boring/ Well	Depth (feet)	Date	Total Threshold Limit Concentration Metals (ppm)																STLC (ppb)
			Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn	Pb
T-1	5.0	12/16/86	-	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-
T-2	5.0	12/16/86	-	-	-	-	-	-	-	-	150	-	-	-	-	-	-	-	-	-
D-1	1.0	12/16/86	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-
MW-1	4.0	7/21/88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
MW-2	1.5	7/21/88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.0
MW-3	4.5	7/21/88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.79
MW-4	4.5	7/21/88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09
MW-5	1.5	7/21/88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.0
SB-A	1.5	9/15/94	29	7.2	410	0.32	<0.50	44	6.7	28	250	0.33	1.7	26	<0.25	<1.0	<0.50	33	370	-
	3.0	9/15/94	-	-	-	-	-	-	-	-	4.2	-	-	-	-	-	-	-	-	-
SB-B	1.5	9/16/94	<2.5	1.8	88	<0.25	1.2	40	7.3	17	250	0.20	<1.0	36	<0.25	<1.0	<0.50	28	580	-
	3.0	9/16/94	-	-	-	-	-	-	-	-	14	-	-	-	-	-	-	-	-	-
SB-C	1.5	9/16/94	<2.5	3.4	120	<0.25	<0.50	52	8.5	25	1,000	0.26	1.4	47	<0.25	<1.0	<0.50	38	210	-
	3.0	9/16/94	-	-	-	-	-	-	-	-	5.7	-	-	-	-	-	-	-	-	-
SB-D	1.5	9/16/94	<2.5	3.3	36	<0.25	<0.50	35	3.8	18	8.0	<0.10	<1.0	25	<0.25	<1.0	<0.50	20	18	-
SB-E	1.5	9/16/94	<2.5	1.4	82	<0.25	<0.50	35	4.3	14	38	<0.10	<1.0	28	<0.25	<1.0	<0.50	25	51	-
SB-F	1.5	9/16/94	<2.5	1.2	31	<0.25	<0.50	31	3.1	6.2	12	<0.10	<1.0	20	<0.25	<1.0	<0.50	18	34	-
SB-G	1.5	9/16/94	<2.5	2.2	69	<0.25	<0.50	39	4.9	13	59	<0.10	<1.0	31	<0.25	<1.0	<0.50	25	150	2.7
	3.0	9/16/94	-	-	-	-	-	-	-	-	25	-	-	-	-	-	-	-	-	-
SB-H	1.5	9/16/94	<2.5	3.0	76	<0.25	<0.50	46	5.1	47	68	<0.10	<1.0	35	<0.25	<1.0	<0.50	28	160	2.8
	3.0	9/16/94	-	-	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-	-
SB-I	1.5	9/16/94	<2.5	<5.0	48	<0.25	<0.50	36	10	90	38	<0.10	1.1	29	<0.25	<1.0	<0.50	24	100	-
SB-J	1.5	9/16/94	170	11	570	<0.25	1.9	54	11	300	5,700	0.16	2.0	43	<0.25	<1.0	<0.50	31	2,700	-
	3.0	9/16/94	<2.5	-	-	-	-	-	-	5.4	4.6	-	-	-	-	-	-	-	16	-
SB-K	1.5	9/16/94	<2.5	5.0	96	<0.25	<0.50	44	5.6	4,200	30	<0.10	1.3	33	<0.25	1.0	<0.50	28	150	21
	3.0	9/16/94	-	-	-	-	-	-	-	6.5	-	-	-	-	-	-	-	-	-	-
T1-5.5	5.5	8/6/97	-	-	-	-	<2.0	22	-	-	-	-	-	18	-	-	-	-	19.0	-
T2-4.5	4.5	8/6/97	-	-	-	-	<2.0	40	-	-	-	-	-	33	-	-	-	-	190.0	-

TABLE 1C

Soil Analytical Results -- Inorganics

Mariner Square, Alameda, California

Boring/ Well	Depth (feet)	Date	Total Threshold Limit Concentration Metals (ppm)																STLC (ppb)
			Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn	Pb
PL1-1	2.0	11/21/98	-	-	-	-	-	-	-	-	140	-	-	-	-	-	-	-	-	-
PL1-2	2.0	11/21/98	-	-	-	-	-	-	-	-	130	-	-	-	-	-	-	-	-	-
PL1-3	2.2	11/21/98	-	-	-	-	-	-	-	-	37	-	-	-	-	-	-	-	-	-
PL1-4	2.0	11/21/98	-	-	-	-	-	-	-	-	150	-	-	-	-	-	-	-	-	-
PL1-5	1.8	11/21/98	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-
PL1-6	1.8	11/21/98	-	-	-	-	-	-	-	-	33	-	-	-	-	-	-	-	-	-
PL1-7	2.0	11/21/98	-	-	-	-	-	-	-	-	63	-	-	-	-	-	-	-	-	-
PL2-1	2.3	11/21/98	-	-	-	-	-	-	-	-	120	-	-	-	-	-	-	-	-	-
PL2-2	2.2	11/21/98	-	-	-	-	-	-	-	-	28	-	-	-	-	-	-	-	-	-
PL2-3	1.9	11/21/98	-	-	-	-	-	-	-	-	150	-	-	-	-	-	-	-	-	7.8
PL2-4	2.0	11/21/98	-	-	-	-	-	-	-	-	58	-	-	-	-	-	-	-	-	-
PL2-5	2.0	11/21/98	-	-	-	-	-	-	-	-	140	-	-	-	-	-	-	-	-	-
DP-1	1.5	12/7/98	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	1.6
DP-1	4.0	12/7/98	-	-	-	-	-	-	-	-	7.5	-	-	-	-	-	-	-	-	0.64
DP-2	**4.0**	**12/7/98**	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	<0.25

<	Analyte not detected at or above specified reporting limit
ppm	parts per million
ppb	parts per billion
-	Not Analyzed
Sb	Antimony
As	Arsenic
Ba	Barium
Be	Beryllium
Cd	Cadmium
Cr	Chromium
Co	Cobalt
STLC	Soluble threshold limit concentration (CCR Title 22)
Bold	Indicates sample located on Residential Parcel
Cu	Copper
Pb	Lead
Hg	Mercury
Mo	Molybdenum
Ni	Nickel
Se	Selenium
Ag	Silver
Tl	Thallium
V	Vanadium
Zn	Zinc

APPENDIX C

TABLES

Earth Systems Consultants
First Semi-Annual Groundwater Sampling Event 2001

Table 1
Historical Groundwater Elevations
MW-1 through MW-10
1992 – 2001

Table II
Groundwater Analytical Results – Organics
MW-1 through MW-10
TRPH, TPHg, TPHd, TPHmo, BTEX, MTBE, VOC's, Vinyl Chloride

TABLE 1
Historical Groundwater Elevations
Mariner Square, Alameda, California

Well	Date	Top of Casing (feet above msl)	Depth to Water (feet)	Free Product Thickness (feet)	Groundwater Elevation (feet above msl)
MW-1	07/30/92	5.08	6.41	-	-1.33
	07/31/92	5.08	6.41	-	-1.33
	08/03/92	5.08	6.50	-	-1.42
	08/05/92	5.08	6.50	-	-1.42
	11/20/92	5.08	6.23	-	-1.15
	06/13/94	11.99	5.69	-	6.30
	09/27/94	11.99	5.64	-	6.35
	10/25/94	11.99	5.86	-	6.13
	06/28/96	11.99	5.34	-	6.65
	10/31/96	11.99	5.38	-	6.61
	09/30/97	11.99	5.08	-	6.91
	12/12/97	11.99	4.16	-	7.83
	02/18/98	11.99	2.97	-	9.02
	05/08/98	11.99	4.55	-	7.44
	06/24/99	11.99	4.75	-	7.24
	08/10/99	11.99	4.82	-	7.17
	09/09/99	11.99	4.94	-	7.05
	11/24/99	11.99	5.20	-	6.79
	03/15/00	11.99	3.92	-	8.07
	08/03/00	11.99	4.71	-	7.28
	01/12/01	11.99	4.29	-	7.70
MW-2	07/30/92	8.30	5.98	-	2.32
	07/31/92	8.30	6.07	-	2.23
	08/03/92	8.30	6.11	-	2.19
	08/05/92	8.30	6.18	-	2.12
	11/20/92	8.30	6.42	-	1.88
	06/13/94	15.21	5.92	-	9.29
	09/26/94	15.21	6.51	-	8.70
	10/25/94	15.21	6.67	-	8.54
	06/28/96	15.21	5.68	-	9.53
	10/31/96	15.21	6.37	-	8.84
	09/30/97	15.21	6.17	-	9.04
	12/12/97	15.21	5.18	-	10.03
	02/18/98	15.21	3.96	-	11.25
	05/08/98	15.21	4.82	-	10.39
	06/24/99	15.21	4.69	-	10.52
	08/10/99	15.21	4.72	-	10.49
	09/09/99	15.21	5.31	-	9.90
	11/24/99	15.21	5.83	-	9.38

TABLE 1
Historical Groundwater Elevations
Mariner Square, Alameda, California

Well	Date	Top of Casing (feet above msl)	Depth to Water (feet)	Free Product Thickness (feet)	Groundwater Elevation (feet above msl)
MW-2	03/15/00	15.21	4.00	-	11.21
	08/03/00	15.21	5.45	-	9.76
continued	01/21/01	15.21	5.61	-	9.60
MW-3	07/30/92	7.28	4.97	-	2.31
	07/31/92	7.28	5.05	-	2.23
	08/03/92	7.28	4.43	-	2.85
	08/05/92	7.28	5.06	-	2.22
	11/20/92	7.28	5.27	-	2.01
	06/13/94	14.19	4.91	-	9.28
	09/27/94	14.19	5.29	-	8.90
	10/25/94	14.19	5.42	-	8.77
	06/28/96	14.19	4.69	-	9.50
	10/31/96	14.19	5.24	-	8.95
	09/30/97	14.19	5.04	-	9.15
	12/12/97	14.19	4.32	-	9.87
	02/18/98	14.19	2.97	-	11.22
	05/08/98	14.19	3.85	-	10.34
	06/24/99	14.19	2.95	-	11.24
	08/10/99	14.19	3.01	-	11.18
	09/09/99	14.19	4.10	-	10.09
	11/24/99	14.19	4.60	-	9.59
	03/15/00	14.19	3.00	-	11.19
	08/03/00	14.19	4.11	-	10.08
	01/12/01	14.19	3.94	-	10.25
MW-4	07/30/92	7.05	4.81	-	2.24
	07/31/92	7.05	4.88	-	2.17
	08/05/92	7.05	4.96	-	2.09
	11/20/92	7.05	5.13	-	1.92
	06/13/94	13.95	4.50	-	9.45
	09/27/94	13.95	5.39	-	8.56
	10/25/94	13.95	5.55	-	8.40
	06/28/96	13.95	4.25	-	9.70
	10/31/96	13.95	5.05	-	8.90
	09/30/97	13.95	4.73	-	9.22
	12/12/97	13.95	3.65	-	10.30
	02/18/98	13.95	2.38	-	11.57
	05/08/98	13.95	3.47	-	10.48
	08/10/99	13.95	4.90	-	9.05
	09/09/99	13.95	3.99	-	9.96

TABLE 1
Historical Groundwater Elevations
Mariner Square, Alameda, California

Well	Date	Top of Casing (feet above msl)	Depth to Water (feet)	Free Product Thickness (feet)	Groundwater Elevation (feet above msl)
MW-4 continued	11/24/99	13.95	4.25	-	9.70
	03/15/00	13.95	2.50	-	11.45
	08/03/00	13.95	4.13	-	9.82
	01/12/01	13.95	3.82	-	10.13
MW-5	07/30/92	7.68	5.30	-	2.38
	07/31/92	7.68	5.42	-	2.26
	08/03/92	7.68	5.40	-	2.28
	08/05/92	7.68	5.47	-	2.21
	11/20/92	7.68	5.74	-	1.94
	06/13/94	14.60	5.30	-	9.30
	09/26/94	14.60	5.82	-	8.78
	10/25/94	14.60	5.95	-	8.65
	06/28/96	14.60	5.04	-	9.56
	10/31/96	14.60	5.73	-	8.87
	09/30/97	14.60	5.45	-	9.15
	12/12/97	14.60	4.71	-	9.89
	02/18/98	14.60	3.10	-	11.50
	05/08/98	14.60	4.13	-	10.47
	06/24/99	14.60	3.65	-	10.95
	08/10/99	14.60	3.71	-	10.89
	09/09/99	14.60	4.51	-	10.09
	11/24/99	14.60	4.91	Sheen	9.69
	03/15/00	14.60	3.03	Sheen	11.57
	08/03/00	14.60	4.57	-	10.03
	01/12/01	14.60	5.31	-	9.29
MW-6	06/13/94	14.81	5.96	0.02	8.85
	09/27/94	14.81	5.90	0.03	8.91
	10/07/94	14.81	5.82	Sheen	8.99
	10/14/94	14.81	5.89	Sheen	8.92
	10/21/94	14.81	5.90	Sheen	8.91
	10/25/94	14.81	5.99	Sheen	8.82
	06/28/96	14.81	5.33	0.16	9.48
	10/31/96	14.81	5.17	0.02	9.64
	09/30/97	14.81	5.58	Sheen	9.23
	12/12/97	14.81	4.84	0.39	9.97
	02/18/98	14.81	3.70	0.55	11.11
	04/28/98	Well Destroyed			

TABLE 1
Historical Groundwater Elevations
Mariner Square, Alameda, California

Well	Date	Top of Casing (feet above msl)	Depth to Water (feet)	Free Product Thickness (feet)	Groundwater Elevation (feet above msl)
MW-6A	08/10/99	15.22	4.96	Sheen	10.26
	09/09/99	15.22	4.35	Sheen	10.87
	11/24/99	15.22	4.90	Sheen	10.32
	03/15/00	15.22	3.61	Sheen	11.61
	08/03/00	15.22	4.44	Sheen/FP	10.78
	01/12/01	15.22	5.22		10.00
MW-7	09/27/94	13.61	5.95	-	7.66
	10/25/94	13.61	6.09	-	7.52
	06/28/96	13.61	5.42	-	8.19
	10/31/96	13.61	5.90	-	7.71
	09/30/97	13.61	5.71	-	7.90
	12/12/97	13.61	4.58	-	9.03
	02/18/98	13.61	3.21	-	10.40
	05/08/98	13.61	4.49	-	9.12
	06/24/99	13.61	4.78	-	8.83
	08/10/99	13.61	4.76	-	8.85
	09/09/99	13.61	5.14	-	8.47
	11/24/99	13.61	5.29	-	8.32
	03/15/00	13.61	3.65	-	9.96
	08/03/00	13.61	5.05	-	8.56
	01/12/01	13.61	4.95	-	8.66
MW-8	09/27/94	12.64	6.06	-	6.58
	10/25/94	12.64	6.26	-	6.38
	06/28/96	12.64	6.00	-	6.64
	10/31/96	12.64	5.85	-	6.79
	09/30/97	12.64	5.60	-	7.04
	12/12/97	12.64	4.87	-	7.77
	02/18/98	12.64	3.80	-	8.84
	05/08/98	12.64	5.30	-	7.34
	06/24/99	12.64	5.42	-	7.22
	08/10/99	12.64	5.48	-	7.16
	09/09/99	12.64	5.50	-	7.14
	11/24/99	12.64	5.89	-	6.75
	03/15/00	12.64	4.71	-	7.93
	08/03/00	12.64	5.31	-	7.33
	01/12/01	12.64	4.94	-	7.70
MW-9	09/26/94	14.92	5.88	-	9.04
	10/25/94	14.92	6.04	-	8.88
	06/28/96	14.92	5.14	-	9.78
	10/31/96	14.92	6.37	-	8.55

TABLE 1
Historical Groundwater Elevations
Mariner Square, Alameda, California

Well	Date	Top of Casing (feet above msl)	Depth to Water (feet)	Free Product Thickness (feet)	Groundwater Elevation (feet above msl)
MW-9	09/30/97	14.92	5.59	-	9.33
continued	12/12/97	14.92	4.53	-	10.39
	02/18/98	14.92	3.12	-	11.80
	05/08/98	14.92	4.20	-	10.72
	06/24/99	14.92	3.45	-	11.47
	08/10/99	14.92	3.56	-	11.36
	09/09/99	14.92	4.59	-	10.33
	11/24/99	14.92	4.72	-	10.20
	03/15/00	14.92	3.07	-	11.85
	08/03/00	14.92	4.50	-	10.42
	01/12/01	14.92	n/a	-	n/a
MW-10	08/10/99	14.91	4.55	Sheen	10.36
	09/09/99	14.91	5.08	Sheen	9.83
	11/24/99	14.91	5.30	Sheen	9.61
	03/15/00	14.91	4.12	Sheen	10.79
	08/03/00	14.91	5.67	Sheen/FP	9.24
	01/12/01	14.91	5.25	Sheen	9.66

msl Mean Sea Level
\- None measured
FP Free Product--not able to measure thickness
n/a Not accessable

File No. NFE-4392-01
February 21, 2001

TABLE 2
Groundwater Analytical Results -- Organics
Mariner Square, Alameda, California

ppb

Well	Date	TRPH	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	VOCs	Vinyl Chloride
MW-1	08/03/92	-	-	580	<5,000	<0.5	<0.5	<0.5	<0.5	-	-	-
	11/20/92	-	<50	600	<5,000	<0.5	<0.5	<0.5	<0.5	-	-	<2
	09/27/94	-	<50	530	<50	<0.3	<0.3	<0.3	<0.3	-	-	-
	06/28/96	-	<100	<50	<200	<0.5	<1.0	<1.0	<2.0	-	-	<0.5
	10/31/96	-	<100	93	<200	<0.5	<1.0	<1.0	<2.0	<10	-	<1.0
	09/30/97	-	120	<50	<200	4.7	<1.0	3.7	21	<10	-	<0.8
	12/12/97	-	<50	<50	<200	<0.5	<0.5	<0.5	<2.0	<5	-	<2
	02/18/98	-	<50	<50	<200	1.5	0.6	1.8	8	<5	-	<2
	05/08/98	-	<50	<50	<200	1.0	<0.5	0.7	5	<5	-	<2
	06/24/99	-	<50	<50	110	<0.50	<0.50	<0.50	<1.5	<5.0	-	<0.50
	09/09/99	Not Sampled										
	11/24/99	-	-	-	<250	-	-	-	-	-	-	-
	03/15/00	Not Sampled										
	08/03/00	Sampling discontinued										
MW-2	08/03/92	-	-	2,200	<5,000	<0.5	6.5	3.2	5.3	-	-	-
	11/20/92	-	340	2,100	<5,000	<0.5	<0.5	<0.5	2.4	-	-	<2
	09/26/94	-	320	<50	240	<3.0	<3.0	<3.0	<3.0	-	-	-
	06/28/96 (1)	-	980	100 (2,3)	<200	0.5	<1.0	2.3	3.1	-	-	<0.5
	10/31/96	-	220	180	<200	<0.5	<1.0	<1.0	<2.0	<10	-	<1.0
	09/30/97	-	900	150 (2)	<200	0.8	<1.0	2	6.2	<10	-	<0.8
	12/12/97	-	360	<50	<200	1.1	<0.5	2.2	3	<5	-	<2
	02/18/98	-	90	<50	<200	<0.5	<0.5	1.1	2	<5	-	<2
	05/08/98	-	170	<50	<200	<0.5	<0.5	1.7	3	<5	-	<2
	06/24/99	-	<50	<50	<100	<0.50	0.66	<0.50	<1.5	<5.0	-	<0.50
	09/09/99	-	120	130	<100	<0.50	<0.50	<0.50	<0.50	<5.0	-	-
	11/24/99	-	770	260 (4)	<250	0.92	<0.50	2.7	3.4	<5.0	-	-
	03/15/00	-	91	110 (4)	<250	<0.5	<0.5	<0.5	<0.5	<5	-	-
	08/03/00	Sampling discontinued										

TABLE 2
Groundwater Analytical Results -- Organics
Mariner Square, Alameda, California

ppb ppb

Well	Date	TRPH	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	VOCs	Vinyl Chloride
MW-5	08/03/92	-	-	2,200	<5,000	9	6	49	11	-	-	-
	11/20/92	-	4,800	1,500	<5,000	7.6	12	5.8	26	-	-	<2
	09/26/94	-	3,100	780	<500	7.9	11	8.7	14	-	-	-
	06/28/96	-	5,000	610 (2,3)	790	1.2	6.8	21	14	-	-	<0.5
	10/31/96	-	6,800	4,900	860	20	5.9	15	19	<10	-	<1.0
	09/30/97	-	9,000	4,100 (2)	520	35	5.3	36	32	12	-	<0.8
	12/12/97	-	3,400	90	<200	26	4.6	5.9	13	11	-	<2
	02/18/98	-	3,200	<50	<200	7.9	1.4	14	12	<5	-	<2
	05/08/98	-	3,900	<50	<200	8.0	22	19	10	<5	-	<2
	06/24/99	-	290	60	<100	48	8.8	8.6	33	<5.0	-	<0.50
	09/09/99	-	5,000	8,800	<100	32	16	20	14	12	-	-
	11/24/99	-	3,200	3,400 (4)	1,700	25	<2.5	15	10	<25	-	-
	03/15/00	-	1,400	6,600 (4)	4,200	4.7	6.9	3.5	2.4	<5.0	-	-
	08/03/00	-	2,700	3,500(4)	1,000(4)	19	4.6	17	18	<5.0	-	-
	01/12/01	-	250	670(4)	840	0.53	<0.5	2.1	3.5	<5.0	-	-
MW-6	05/25/93	-	460	2,700,000	-	<5.0	<5.0	<5.0	<5.0	-	-	<10
	9/27/94	-	1,100	9,900	3,200	<3.0	<3.0	<3.0	<3.0	-	-	<1.0
	06/28/96	Not Sampled--Sheen Present										
	09/30/97	Not Sampled--Sheen Present										
	12/12/97	-	21,000	1,900,000	43,000	5	<0.5	8	19	<50	-	<2
	02/18/98	-	70,000	<50	<200	20	20	20	70	<100	-	<2
	04/28/98	-	800	920	<200	<0.5	<0.5	<0.5	<2	<5	-	<2
	04/28/98	Well Destroyed										
MW-6A	08/10/99	-	770	5,400 (4)	3,900 (4)	1.7	<0.5	<0.5	1.9	<5.0	-	<0.5
	09/09/99	-	670	180,000	<5,000	<0.50	0.61	0.66	<0.50	<5.0	-	-
	11/24/99	-	29,000	7,900	11,000	<25	<25	<25	<25	<250	-	-
	03/15/00	-	4,400	6,700	8,100	1.4	<1.0	<1.0	<1.0	<10	-	-
	08/03/00	Not Sampled--Sheen Present										
	09/06/00	-	290	3,600 (4)	4,600 (4)	0.60	<0.5	0.59	0.65	<5.0	-	-
	01/12/01	-	170	2,200 (4)	4,100 (4)	<0.5	<0.5	1.4	2.6	<5.0	-	-

All results ppb

TABLE 2
Groundwater Analytical Results -- Organics
Mariner Square, Alameda, California

Well	Date	TRPH	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	VOCs	Vinyl Chloride
MW-7	09/27/94	-	<250	1,800	<250	<0.3	<0.3	<0.3	<0.3	-	-	<1.0
	06/28/96	-	560	490 (2,3)	<200	0.6	<1.0	<1.0	2.7	-	-	<0.5
	10/31/96	-	200	420	<200	1.1	<1.0	<1.0	<2.0	<10	-	<1.0
	09/30/97	-	750	190 (2)	<200	8.1	5.3	<1.0	6.9	<10	-	<0.8
	12/12/97	-	420	<50	<200	7.9	<0.5	<0.5	5	<5	-	<2
	02/18/98	-	650	<50	<200	9.5	0.6	<0.5	6	16	-	<2
	05/08/98	-	710	<50	<200	3.4	4.8	0.8	7	34	0.9 (5)	<2
	06/24/99	-	620	<250	<100	89	16	16	64	<5.0	-	<0.50
	09/09/99	-	420	400	<100	1.1	0.85	1.1	3.4	<5.0	-	-
	11/24/99	Sampling discontinued										
MW-8	09/27/94	-	<50	320	<50	<0.3	<0.3	<0.3	<0.3	-	-	-
	06/28/96	-	<100	58 (2)	<200	<0.5	<1.0	<1.0	<2.0	-	-	<0.5
	10/31/96	-	<100	120	<200	<0.5	<1.0	<1.0	<2.0	<10	-	<1.0
	09/30/97	-	110	70 (2)	<200	4.2	<1.0	3.4	16	<10	-	<0.8
	12/12/97	-	<50	<50	<200	<0.5	<0.5	<0.5	<2.0	15	-	<2
	02/18/98	-	<50	<50	<200	0.9	<0.5	0.8	3	<5	-	<2
	05/08/98	-	<50	<50	<200	<0.5	<0.5	<0.5	<2.0	<5	-	<2
	06/24/99	-	350	<50	<100	64	11	12	45	<5.0	-	<0.50
	09/09/99	-	56	120	130	<0.50	<0.50	<0.50	<0.50	<5.0	-	-
	11/24/99	-	-	-	<250	-	-	-	-	-	-	-
	03/15/00	Not Sampled										
	08/03/00	Sampling discontinued										
MW-9	09/26/94	-	<500	2,200	<500	<0.3	<0.3	<0.3	<0.3	-	-	<1.0
	06/28/96	-	390	550 (2,3)	<200	5.2	<1.0	<1.0	<2.0	-	-	<0.5
	10/31/96	-	300	590	720	5.9	<1.0	<1.0	<2.0	<10	-	<1.0
	09/30/97	-	150	460 (2)	<200	0.6	<1.0	<1.0	2.7	<10	-	<0.8
	12/12/97	-	180	<50	<200	<0.5	<0.5	<0.5	<2.0	<5	-	<2
	02/18/98	-	100	<50	<200	<0.5	0.5	<0.5	<2.0	6	-	<2
	05/08/98	-	70	130	<200	<0.5	<0.5	<0.5	<2.0	16	-	<2
	06/24/99	-	380	140	<100	51	10	11	39	<5.0	-	<0.50

TABLE 2
Groundwater Analytical Results -- Organics
Mariner Square, Alameda, California

Well	Date	TRPH	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	VOCs	Vinyl Chloride
MW-9 continued	09/09/99	-	140	340	<100	<0.50	<0.50	<0.50	1.0	<5.0	-	-
	11/24/99	Not Sampled										
	03/15/00	-	<50	650 (4)	900 (4)	<0.5	<0.5	<0.5	<0.5	<5.0	-	-
	08/03/00	-	<50	610 (4)	650 (4)	<0.5	<0.5	<0.5	<0.5	<5.0	-	-
	01/12/01	Not Sampled										
MW-10	08/10/99	-	1,300	3,000 (4)	8,200 (4)	9.2	1.9	12	46	<5.0	-	NA
	09/09/99	-	890	8,600	210,000	5.2	<0.50	13	37	<5.0	-	-
	11/24/99	-	1,700	<500	17,000	6.7	0.67	9.5	28	<5.0	-	-
	03/15/00	-	1,200	<500	14,000	3.5	<1.0	2.2	18	<10	-	-
	08/03/00	Not Sampled--Sheen Present										
	09/06/00	-	350	<260	6,400	1.4	<0.5	1.0	18	<5.0	-	-
	01/12/01	-	140	4,500 (4)	16,000	1.3	<0.5	1.0	12	<5.0	-	-

All results reported in parts per billion

TRPH Total Recoverable Petroleum Hydrocarbons
TPHg Total Petroleum Hydrocarbons as gasoline
THPd Total Petroleum Hydrocarbons as diesel
* Total Petroleum Hydrocarbons as Bunker Oil.
< Analyte not detected at or above stated detection limit
TPHmo Total Petroleum Hydrocarbons as motor oil
VOCs Volatile Organic Compounds
MTBE Methyl Tert-Butyl Ether

(1) Water sample also analyzed for Freon 113 by EPA Method 8010A. Results were below the detection limit of 1.0 ppb.
(2) Qualitative identification is uncertain because the material present does not match laboratory standards.
(3) Quantitation uncertain due to matrix interferences
(4) Results within quantitation range; chromatographic pattern not typical of fuel
(5) Tetrochloroethene reported by lab on vinyl chloride sample unedited run.