Technology, Engineering & Construction, Inc.

35 South Linden Avenue • South San Francisco, CA 94080-6407

Tel: (650) 952-5551 • Fax: (650) 952-7631 • Contractor's Lic. #762034

NO.
- Were pump islands over exc. before
- Has MTBE been confirmed.
Yes. 11,000ppb in MW-1
an 12/99

December 15, 1999

Ms. Eva Chu
Hazardous Materials Specialist
Alameda County Health Agency
Division of Environmental Protection
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

SUBJECT: **INSTALLATION OF THREE MONITORING WELLS, SAMPLING AND ANALYSIS AT THE FORMER OLYMPIAN GASOLINE STATION, 1435 WEBSTER STREET IN ALAMEDA, CALIFORNIA**

Dear Ms. Chu:

TEC Accutite is pleased to enclose the report for the installation and sampling of three additional monitoring wells at former Olympian Gasoline Station, 1435 Webster Street in Alameda, California. In addition to the installation and sampling of the new wells, Accutite sampled the existing three wells onsite. For speedy review of the report, please refer to the conclusion and recommendation sections.

Thank you for your cooperation. If you have any questions, please call the undersigned at (650) 952-5551, Ext. 209.

Sincerely,
TEC Accutite

Sami Malaeb, P.E., R.E.A.
Project Manager

cc: Mr. Dan Koch, Olympian, 260 Michelle Court, South San Francisco, CA 94080
Mr. David Harris, Esq., Trump, Alioto, Trump & Prescott, LLP, 2280 Union Street, San Francisco, CA 94123
Mr. Jeff Farrar, 3100 Cohasset Road, Chico, CA 95973

99 DEC 22 PM 4:14

ENVIRONMENTAL PROTECTION

1435mwr

Technology, Engineering & Construction, Inc.
35 South Linden Avenue • South San Francisco, CA 94080-6407
Tel: (650) 952-5551 • Fax: (650) 952-7631 • Contractor's Lic. #762034

INSTALLATION OF THREE MONITORING WELLS & SAMPLING AND ANALYSIS

AT

FORMER OLYMPIAN STATION
1435 WEBSTER STREET
IN
ALAMEDA, CALIFORNIA

PREPARED BY
SAMI MALAEB
CALIFORNIA REGISTERED ENGINEER # CH004743 PE

REVIEWED BY:
EDDY TABET
CALIFORNIA REGISTERED ENGINEER # 43041 PE

TEC ACCUTITE
35 SOUTH LINDEN AVENUE
SOUTH SAN FRANCISCO, CALIFORNIA, 94080

DECEMBER 15, 1999

TABLE OF CONTENTS

I. INTRODUCTION

Olympian contracted TEC Accutite to install three additional monitoring wells at its former site located at 1435 Webster Street in Alameda, California. The site location map is attached as Figure 1. The work performed followed Accutite's workplan dated July 12, 1999 and its addendum dated September 20, 1999.

II. BACKGROUND AND PURPOSE

The subject site used to operate as a gasoline station prior to 1989. In September 1989, the following underground storage tanks (USTs) were removed from the site (Figure 2):

- Two 10,000-gallon gasoline USTs
- One 7,500-gallon diesel UST
- One 500-gallon waste oil UST

The soil samples collected after removing the USTs showed up to 220 parts per million (ppm) of Total Petroleum Hydrocarbons as Gasoline (TPH-G), 430 ppm as Total Petroleum Hydrocarbons as Diesel (TPH-D), and 650 ppm of Total Recoverable Petroleum Hydrocarbons as Oil and Grease (TRPH).

In 1991, approximately 950 cubic yards of soil were removed from the former location of the USTs. Subsequently, this soil was bioremediated onsite and returned to the former excavation.

In January 1993, three monitoring wells were installed onsite (MW-1, MW-2, and MW-3). The groundwater samples collected to date from these wells showed fluctuating concentrations of TPH-G, BTEX, and TPH-D. For more information on the latest analytical data from these wells, please refer to Accutite's report dated July 12, 1999.

To determine the extent of the impact of petroleum hydrocarbons on the soil and groundwater, on February 11, 1999, Accutite advanced four borings (B1 through B4) and sampled soil and groundwater (Figure 2). The soil laboratory results showed non-detect to non-significant concentrations of TPH-G, BTEX, and MTBE. The groundwater analytical results from the groundwater samples, collected from the borings are depicted in Figure 2.

Based on noticeable concentrations of TPH-G, BTEX, and MTBE, Alameda County Environmental Health Services (ACEHS) suggested the installation of three additional wells on and offsite to assess the extent and the stability of the plume. Below we detail the installation of three additional monitoring wells and the sampling of all wells onsite.

III. INSTALLATION OF THREE MONITORING WELLS

A. PERMITTING

Before installing the wells, Accutite obtained a drilling permit from Alameda County Public Works Agency. Also, Accutite obtained encroachment and excavation permits from the City of Alameda. Accutite informed USA for clearing the underground utilities. A copy of the permits is provided in Appendix A.

B. MONITORING WELL DRILLING AND SOIL SAMPLING

On November 10 and 11, 1999, West Hazmat drilled the three wells (MW-4, MW-5, and MW-6) with the use of a power rig, equipped with an 8-inch, hollow-stem auger. Figure 3 shows the locations of the installed wells. All drill cuttings were left on site, in labeled drums, pending receipt of analytical results. Well construction consisted of a 2-inch diameter PVC casing. All three wells were terminated at a depth of 20 feet. Five feet of blank and 15 feet of slotted casing were used in each well. All screened casings were 0.010" slotted. The well logs are included in Appendix B.

Sand pack consisted of No. 2-216 clean Monterey sand. The cement used consisted of five gallons of clean water mixed with one 94-lb bag of Portland cement. Well head was fitted with a locking cap, covered by a Christy manhole cover, and set in concrete.

The soil samples were collected in a thin-walled brass cylinder (6" X 2" diameter) which was placed within a California Modified split spoon sampler. The spoon sampler was driven through the hollow stem of the drilling augers by a 140-pound hammer, dropping 30 inches. No headspace was present in the cylinder when the sample was collected. To seal the sample, each end of the cylinder was covered with Teflon sheeting and then capped with a polyethylene lid, taped, and labeled. Soil samples were collected at approximately 5-foot intervals. The samples were then immediately placed in an ice chest, containing blue ice and kept cold (approximately 4° C) for delivery to the laboratory. Soil samples were sent within 24 hours under chain of custody to North State Environmental Laboratory. Selected samples (samples with signs of contamination such as staining or odor of hydrocarbons) were analyzed for TPH-G, BTEX, MTBE, and TPH-D.

C. WELL DEVELOPMENT

Well development was performed on 11/19/99. The wells were developed with the use of a hydrolift pump and surge block. Development water was collected in labeled drums, pending receipt of analytical results. Well development was intended to clear the well casing and surrounding sand pack of the fine sands and silts. Please see the well development and sampling forms in Appendix C.

D. GROUND WATER SAMPLING

On December 06, 1999, after purging all 6 wells (MW-1 through MW-6), ground water samples were obtained through disposable bailers, directly transferred into VOA laboratory cleaned glass vials and containers. Containers were labeled, placed on blue ice in an ice chest, and transported under chain of custody to North State Environmental Laboratory for analysis. Please see the well sampling forms in Appendix C.

E. ELEVATION DATA AND GROUND WATER FLOW DIRECTION

On December 2, 1999, Louis Wade Hammond, a Professional Land Surveyor, surveyed the Top of casings in all Six wells. A copy of Mr. Hammond's elevation Figure is included in Appendix D. The calculated ground water flow direction was to the south with a gradient of 0.0025 ft/ft. Table 1 below summarizes the elevation data (Figure 4):

Table 1 Elevation Data

Well Identification	Elevation of Casing from Datum (ft)	Depth to Groundwater Measured on 12/06/99 in ft	Ground Water Elevation in ft
MW-1	19.53	10.86	8.67
MW-2	19.80	11.20	8.60
MW-3	19.79	11.12	8.67
MW-4	19.30	10.79	8.51
MW-5	18.99	10.17	8.82
MW-6	20.27	11.46	8.81

F. LABORATORY RESULTS

SOIL

The analytical results for the soil samples are summarized in Table 2 below. A copy of the Laboratory report is included in Appendix E.

Table 2 Soil Analytical Results for TPH-G, BTEX, MTBE, and TPH-D

Sample ID	TPH-G(1) In ppm(2)	Benzene In ppm	Toluene in ppm	Ethyl-Benzene ppm	Xylenes In ppm	MTBE ppm	TPH-D(4) ppm
MW-4@9.5'	<0.5	<0.005	<0.005	0.006	<0.01	<0.005	<1.0
MW-5@9.5'	1100	3.4	21	14	70	<0.02(3)	200
MW-6@9'	<0.5	<0.005	<0.005	0.006	<0.01	<0.005	<1.0

(1) **TPH-G: Total Petroleum Hydrocarbons as Gasoline**
(2) **ppm: part per million or mg/kg**
(3) **Confirmed by using the GC/MS Method, EPA 8260**
(4) **TPH-D: Total Petroleum Hydrocarbons as Diesel**

GROUND WATER

The analytical results for the ground water samples from MW-1 through MW-6 are summarized in Table 3 below. A copy of the Laboratory report is included in Appendix E.
See also Figure 4 for the depiction of the latest groundwater analytical results.

Table 2. Cumulative Groundwater Analytical Results

Sample ID	Date Of Sampling	Depth to Water (ft)	TPH-D [1] in ppb [2]	TPH-G [3] in ppb	Benzene in ppb	Toluene in ppb	Ethyl Benzene in ppb	Xylenes in ppb	MTBE [4] in ppb	TRPH [5] ppm [6]
MW-1	6/03/93	N/A[7]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/14/94	11.46	<50	14,000	44	28	25	50	NA [8]	0.8
	12/30/94	9.22	<50	4,000	12	9	6.8	30	NA	<0.5
	3/26/95	6.76	<50	1,000	21	10	7.1	25	NA	2.1
	07/9/95	8.92	<50	16,000	57	28	25	53	NA	NA
	07/31/98	8.30	1,700	4,700	1,300	48	140	150	6,600	<5
	02/11/99	7.91	2000	25,000	18,000	1,600	1,400	500	28,000	NA
	6/23/99	9.03	4,900	42,000	11,000	1,100	1,500	2,300	15,000	NA
	12/06/99	10.86	4,000	44,000	8,900	3,400	1,900	5,100	11.000 *	NA
MW-2	6/03/93	9.54	<50	<50	5.8	<0.5	<0.5	<0.5	NA	<0.5
	9/14/94	11.82	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	12/30/94	9.46	<50	160	1.4	1.4	0.8	5.0	NA	<0.5
	3/26/95	6.82	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	07/9/95	9.22	NA	NA	NA	NA	NA	NA	NA	NA
	07/31/98	8.56	220	<50	<0.5	<0.5	<0.5	<0.5	73	<5
	02/11/99	8.12	<50	<50	<0.5	<0.5	<0.5	<0.5	75	NA
	6/23/99	9.33	420	<50	<0.5	<0.5	<0.5	<0.5	96	NA
	12/06/99	11.20	<110	300	28	45	6	37	210	NA
MW-3	6/03/93	9.80	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	9/14/94	12.19	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	12/30/94	9.72	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	3/26/95	6.88	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	07/9/95	9.52	NA	NA	NA	NA	NA	NA	NA	NA
	07/31/98	8.40	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	02/11/99	7.77	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	06/23/99	9.21	<50	<50	<0.5	<0.5	<0.5	<0.5	3.0	NA
	12/06/99	11.12	<110	<50	3	1	<0.5	1	0.6	NA
MW-4	12/06/99	10.79	160	<50	3	2	0.6	4	140	NA
MW-5	12/06/99	10.17	2800	30,000	2,200	3,300	910	7000	670	NA
MW-6	12/06/99	11.46	110	<50	2	2	0.8	8	1	NA

(1) TPH-D = Total Petroleum Hydrocarbons as Diesel
(2) ppb = part per billion or microgram per liter
(3) TPH-G = Total Petroleum Hydrocarbons as Gasoline
(4) MTBE = Methyl tertiatry butyl ether
(5) TRPH = Total Recoverable Petroleum Hydrocarbons as Oil and Grease
(6) ppm = part per million or milligram per liter
(7) Well was not accessible because of a parking car in its location
(8) NA denotes not analyzed for the indicated compound

* MtBE confirmed w/ GC/MS 8260

IV CONCLUSIONS AND RECOMMENDATIONS

- The soil sample, collected from the boring of the newly installed well (MW-5), at 9.5 feet below surface grade (bsg), detected 1,100 ppm TPH-G, 3.4 ppm benzene, and 200 ppm TPH-D. The groundwater samples collected from MW-5 detected 30,000 ppb TPH-G, 2,200 ppb benzene, and 670 ppb MTBE (Figure 4). It is likely that the former gasoline dispenser, upgradient form MW-5, to be the source of the soil and groundwater impact. The groundwater in MW-1 still shows significant concentrations of TPH-G, BTEX, and MTBE.

- The remaining soil and groundwater samples, collected from the new monitoring wells (MW-4 and MW-6) detected less significant concentrations than the samples collected from MW-1 and MW-5 (Figure 4).

- Based on the analytical findings to date, the projected petroleum hydrocarbon plume is estimated to be as shown in the attached Figure 5. MW-1 and MW-5 are located in or near the source area (former dispensers). MW-4 is located downgradient and at the edge of the plume.

- The calculated groundwater flow direction is toward the south with a gradient of 0.0025 ft/ft.

- To monitor the stability of the plume, Accutite recommends continuing the quarterly groundwater sampling and analysis of all six monitoring wells at this site.

V LIMITATIONS

Accutite's services consist of professional opinions, conclusions and recommendations made today in accordance with generally accepted engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied.

Thank you for the opportunity to provide you with our services. If you have any questions, please call the undersigned at (650) 952-5551, EXT 209.

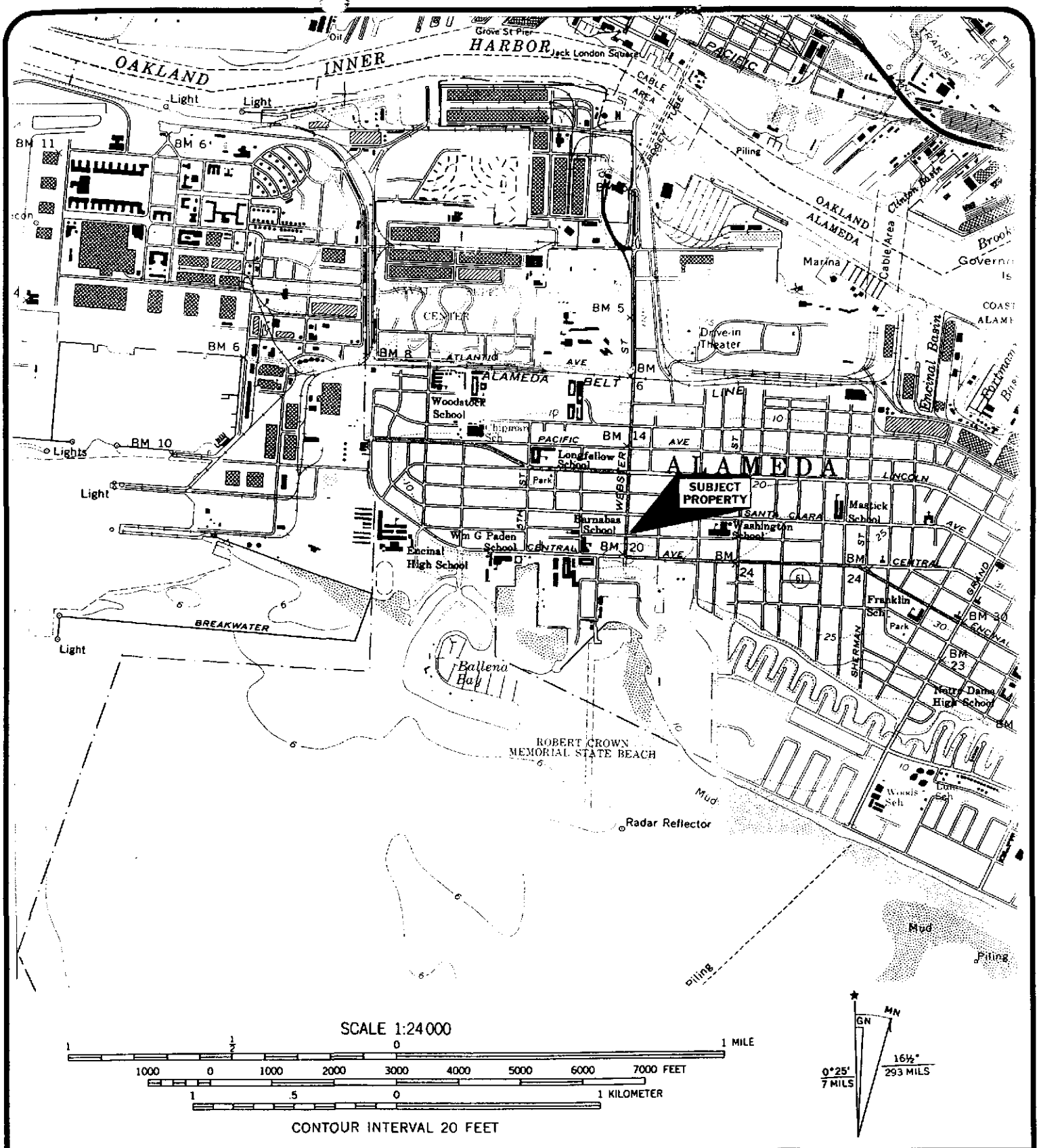
Sincerely,
TEC Accutite

Sami Malaeb, P.E., R.E.A.
Project Manager

Reviewed by:
Eddy Tabet, P.E., R.E.A
General Manager

REGISTERED PROFESSIONAL ENGINEER
EDDY A. TABET
No. 43041
EXP. 3/31/00
CIVIL
STATE OF CALIFORNIA

cc: Mr. Dan Koch, Olympian, 260 Michelle Court, South San Francisco, CA 94080
Mr. David Harris, Esq., Trump, Alioto, Trump & Prescott, LLP, 2280 Union Street, San Francisco, CA 94123
Mr. Jeff Farrar, 3100 Cohasset Road, Chico, CA 95973



REVISIONS	DATE	PAGE
	7/30/98	1 of 1

SCALE:
AS INDICATED ABOVE

CALIF

LEGEND:

ACCUTITE ENVIRONMENTAL ENGINEERING

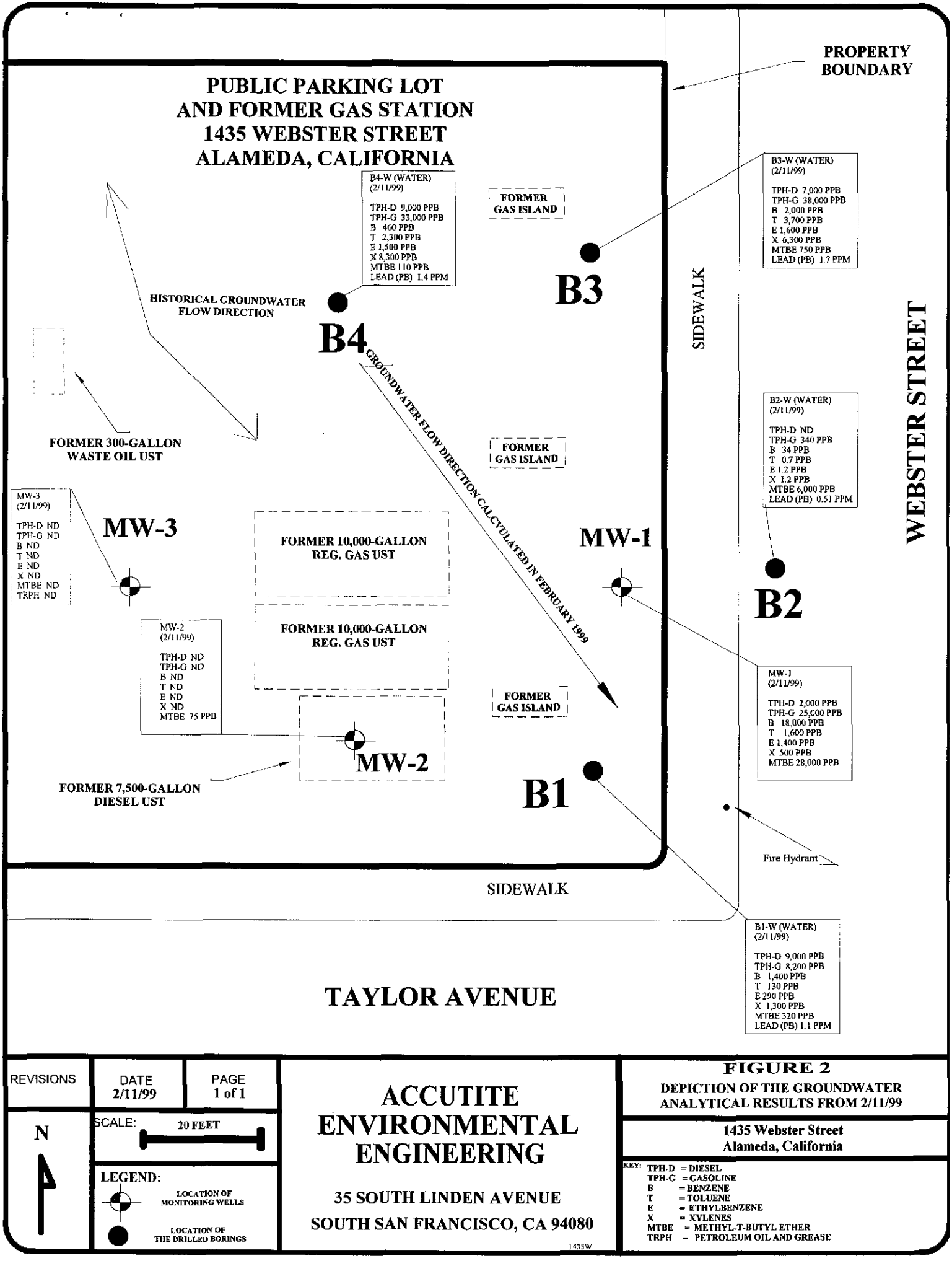
35 SOUTH LINDEN AVENUE
SOUTH SAN FRANCISCO, CA 94080
1435

FIGURE 1

SITE LOCATION

SITE:

1435 Webster Street Alameda, California



REVISIONS	DATE	PAGE
	2/11/99	1 of 1

N

SCALE: 20 FEET

LEGEND:
- LOCATION OF MONITORING WELLS
- LOCATION OF THE DRILLED BORINGS

ACCUTITE ENVIRONMENTAL ENGINEERING

35 SOUTH LINDEN AVENUE
SOUTH SAN FRANCISCO, CA 94080

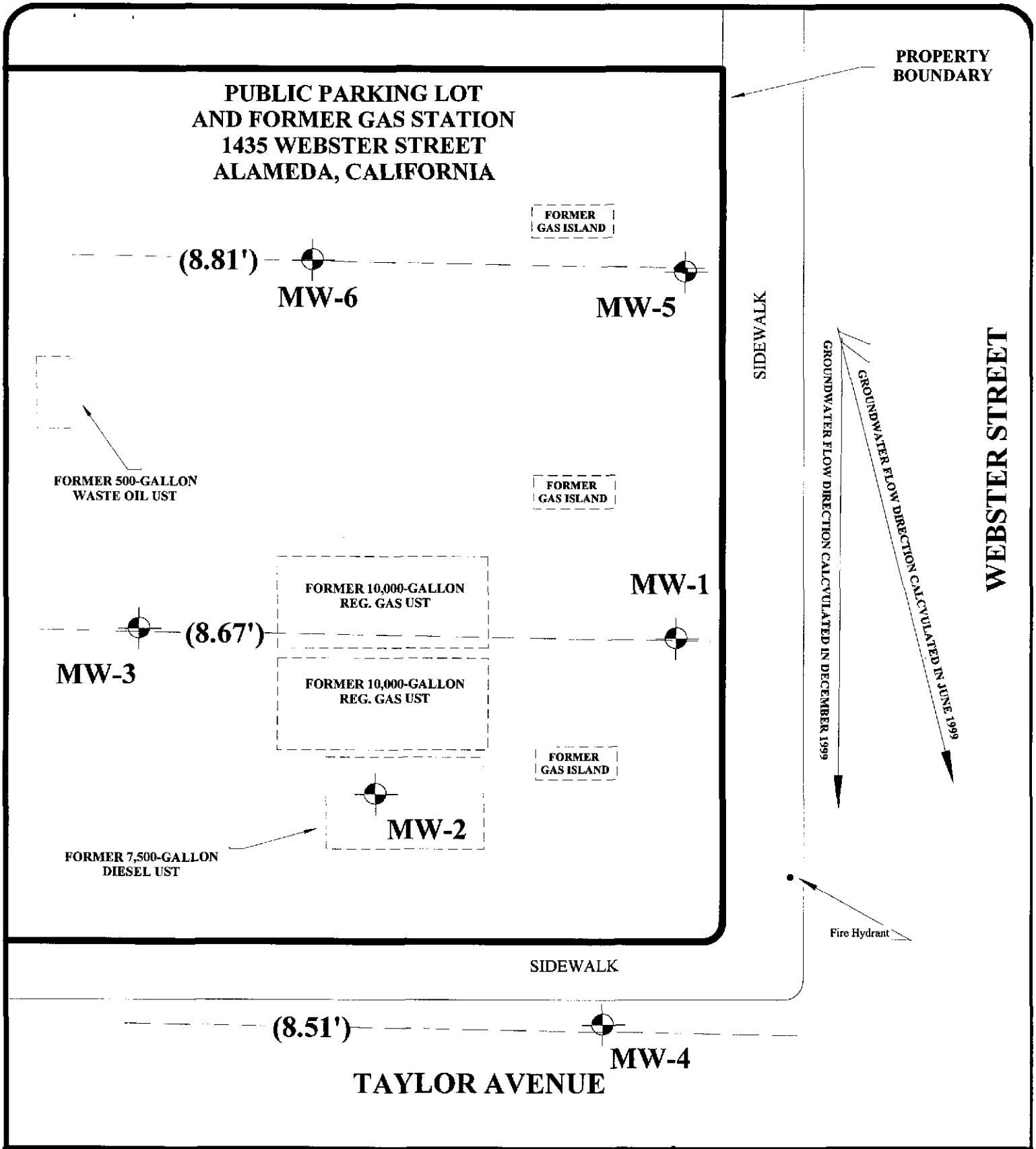
1435W

FIGURE 2

DEPICTION OF THE GROUNDWATER ANALYTICAL RESULTS FROM 2/11/99

1435 Webster Street
Alameda, California

KEY:
- TPH-D = DIESEL
- TPH-G = GASOLINE
- B = BENZENE
- T = TOLUENE
- E = ETHYLBENZENE
- X = XYLENES
- MTBE = METHYL-T-BUTYL ETHER
- TRPH = PETROLEUM OIL AND GREASE



REVISIONS	DATE	PAGE
	12/13/99	1 of 1

N

LEGEND:

MONITORING WELLS

NUMBERS BETWEEN PARENTHESIS (8.81'), (8.67'), AND (8.51') DENOTE ELEVATION OF GROUNDWATER

TEC ACCUTITE

35 SOUTH LINDEN AVENUE

SOUTH SAN FRANCISCO, CA 94080

1435MWL121399

FIGURE 3

LOCATION OF THE MONITORING WELLS

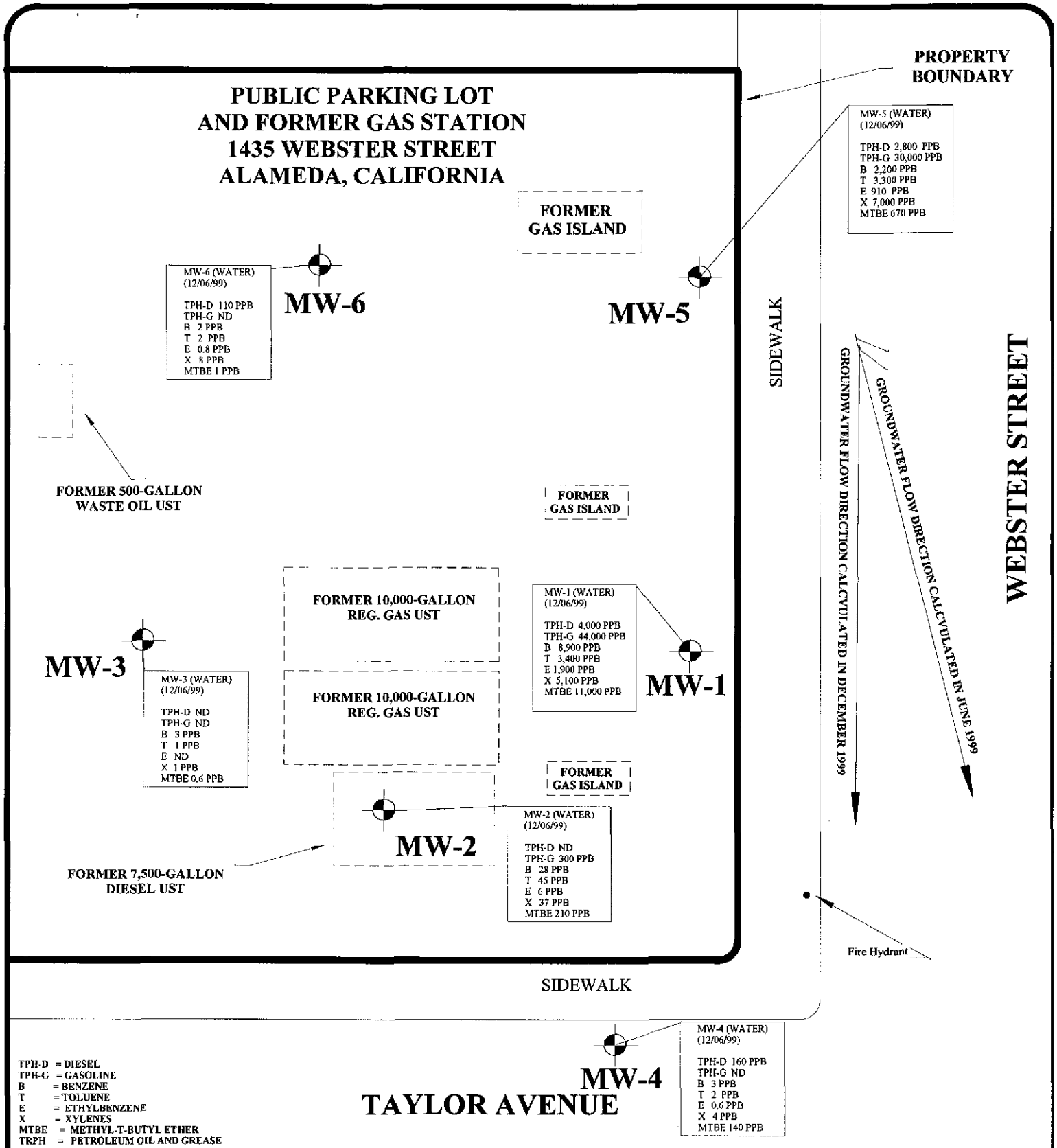
1435 Webster Street
Alameda, California

KEY:

SCALE:
ONE INCH = 20 FEET

MW-1, MW-2, AND MW-3 WERE INSTALLED IN JANUARY 1993

MW-4, MW-5, AND MW-6 WERE INSTALLED IN DECEMBER 1999



TPH-D = DIESEL
TPH-G = GASOLINE
B = BENZENE
T = TOLUENE
E = ETHYLBENZENE
X = XYLENES
MTBE = METHYL-T-BUTYL ETHER
TRPH = PETROLEUM OIL AND GREASE

REVISIONS	DATE	PAGE
	12/13/99	1 of 1

N

LEGEND:

MONITORING WELLS

TEC ACCUTITE

35 SOUTH LINDEN AVENUE

SOUTH SAN FRANCISCO, CA 94080

1435AR121399

FIGURE 4
DEPICTION OF THE ANALYTICAL RESULTS

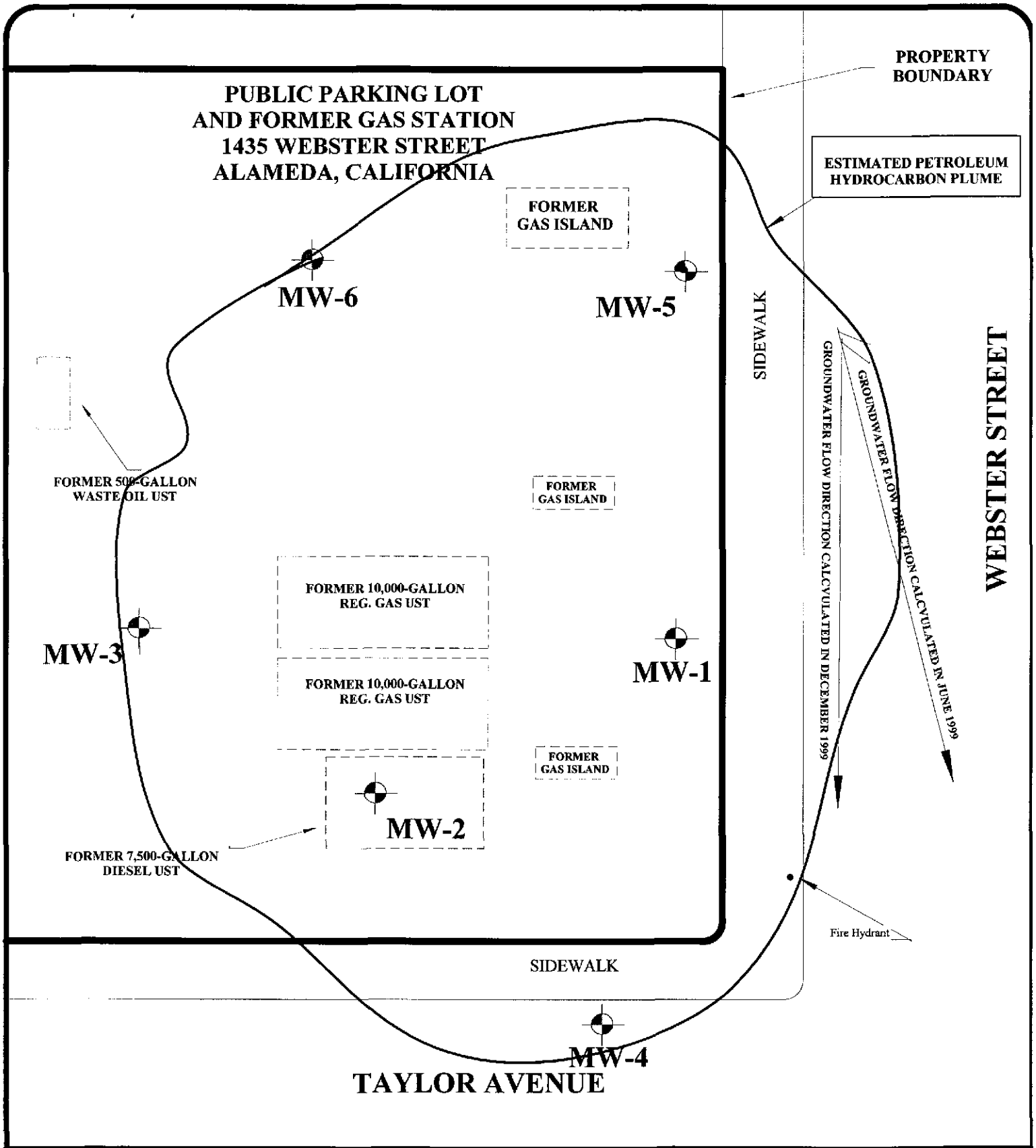
1435 Webster Street
Alameda, California

KEY:

SCALE:
ONE INCH = 20 FEET

MW-1, MW-2, AND MW-3 WERE INSTALLED IN JANUARY 1993

MW-4, MW-5, AND MW-6 WERE INSTALLED IN DECEMBER 1999



REVISIONS	DATE	PAGE
	12/13/99	1 of 1

N

LEGEND:

MONITORING WELLS

TEC ACCUTITE

35 SOUTH LINDEN AVENUE

SOUTH SAN FRANCISCO, CA 94080

1435EXT

FIGURE 5

DEPICTION OF THE PROJECTED PLUME

1435 Webster Street
Alameda, California

KEY:

SCALE:
ONE INCH = 20 FEET

MW-1, MW-2, AND MW-3 WERE INSTALLED IN JANUARY 1993

MW-4, MW-5, AND MW-6 WERE INSTALLED IN DECEMBER 1999

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1435 Webster Street
Alameda, California 94501

California Coordinates Source ____ ft Accuracy ± ____ ft.
CCN ____ ft. CCE ____ ft.
APN ____

CLIENT
Name OLYMPIAN
Address 260 Michelle Court Phone (650) 952-5551 Ext. 204
City South San Francisco, CA Zip 94080

APPLICANT
Name Accutite Fax (650) 952-7631
Address 35 South Linden Phone (650) 952-5551, Ext. 204
City South San Francisco Zip 94080
CA

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☐
Monitoring	☒	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other ____	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☒
Cable	☐	Other	☐		

DRILLER'S LICENSE NO. C57 5549

WELL PROJECTS
Drill Hole Diameter 12 in. Maximum
Casing Diameter 2 in. Depth 25 ft.
Surface Seal Depth 4 ft. Number 3
(For drilling MW-4, MW-5, and MW-6 (See attached drawing))

GEOTECHNICAL PROJECTS
Number of Borings ____ Maximum
Hole Diameter ____ in. Depth ____ ft.

ESTIMATED STARTING DATE 11/10/99
ESTIMATED COMPLETION DATE 11/11/99

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [signature] DATE 11/02/99

FOR OFFICE USE

PERMIT NUMBER 99WR-1044
WELL NUMBER ____
APN ____

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A) GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

(C) GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

E. CATHODIC
Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
See attached.

G. SPECIAL CONDITIONS

APPROVED [signature] DATE 11-2-99

950 West Mall Square, #110
Alameda Point
Alameda, CA 94501

CITY OF ALAMEDA

Public Works Department

(510) 749-5840
Fax (510) 749-5867

Printed: ***10-19-1999***

Right-of-Way Permit

Permit #
EX99-0069

Applicant	Contractor Information	Owner Information
TEC ACCUTITE	**TEC ACCUTITE**	
FARRAR GEOFFREY A & HARRISON GEO		
35 SOUTH LINDEN AVE	**35 SOUTH LINDEN AVE**	**PO BOX 1701**
SOUTH SAN FRANCISCO, CA	**SOUTH SAN FRANCISCO, CA**	**CHICO CA**
94080		
650-952-5551 X 209	**94080**	**95927**

Project Information

RTOFWAY - Right-of-Way Permit - ***APPROVED***
Sub-Type:

Applied: **10/06/1999**
Finaled:

Issued: **10/19/1999**
Expires: **10/18/2000**
Valuation: **$0.00**

Job Address: **1435 WEBSTER ST**
Suite / Unit:
Work Description: **EXCAVATE: DRILL 3 MONITORING WELLS DRILLING IN PARKING LOT #D ON TAYLOR AVE**

Parcel Number: **074 042700501**

Total Fees:	$35.00
Total Payments:	$35.00
BALANCE DUE	**$0.00**

Payments Made:

RECEIPT

Receipt #:

Total Payment: **$.00**

Payee:

Current Payment Made to the Following Items:

Payments Made for this Receipt:

Type	Method	Description	Amount

Account Summary for Fees and Payments:

Item#	Description	Account Code	Tot Fee	Paid	Prev. Pmts	Cur. Pmts
250	Permit Filing Fees	4520-37450 (1050)	20.00	20.00	20.00	.00
620	Microfiche / Scanning	99409-37900 (1464)	15.00	15.00	15.00	.00

**** See application for additional requirements ****

INSPECTIONS **510-749-5840**

NOTE: All construction within the public right of way must have barricades with flashers for night time protection.

This is to certify that the above work has been completed to my satisfaction and approval.

Date

Inspector

950 West Mall Square, #110
Alameda Point
Alameda, CA 94501

CITY OF ALAMEDA

Public Works Department

(510) 749-5840

Fax (510) 749-5867

Printed: ***11-02-1999***

Encroachment Permit

Permit #
EN99-075

Applicant
TEC ACCUTITE
FARRAR GEOFFREY A & HARRISON GEO
35 SOUTH LINDEN AVE
SOUTH SAN FRANCISCO, CA
94080
650-952-5551 X 209

Contractor Information

Owner Information
PO BOX 1701
CHICO CA
95927

Project Information
ENCROACH - Encroachment Permit - ***APPROVED***
Sub-Type:

Applied: **11/02/1999**
Finaled:

Issued: **11/02/1999**
Expires: **11/01/2000**
Valuation: **$0.00**

Job Address: **1435 WEBSTER ST**
Suite / Unit:
Work Description: **6 METERED SPACES FOR 2 DAYS (11/8-9)** 10-11
6 SIGNS

Parcel Number: **074 042700501**

Total Fees:	$54.00
Total Payments:	$54.00
BALANCE DUE	**$0.00**

Payments Made: 11/02/1999 09:37 AM

RECEIPT

Receipt #: R99005824

Total Payment: **$54.00**

Payee: TEC

Current Payment Made to the Following Items:

Account Code	Description	Amount
224-37330 (8763)	Parking Meter Revenue	54.00

Payments Made for this Receipt:

Type	Method	Description	Amount
Payment	Check	3942 /3943	54.00

Account Summary for Fees and Payments:

Item#	Description	Account Code	Tot Fee	Paid	Prev. Pmts	Cur. Pmts
1150	Parking Meter Revenue	224-37330 (8763)	54.00	54.00	.00	54.00

INSPECTIONS **510-749-5840**
Call for an inspection when work is complete.

This is to certify that the above work has been completed to my satisfaction and approval.

Date

Inspector

APPENDIX B

BORING LOGS

TEC ACCUTITE SOIL BORING LOG

CLIENT	OLYMPIAN	LOCATION	1435 Webster Street
Contact	DAN KOCH		Alameda, California
BORING N0.	MW-4	MONITORING WELL N0.	MW-4
DATE DRILLED	11/11/99	START	7:00 am
DRILLING METHOD	HOLLOW STEM AUGER	SAMPLING METHOD	SPLIT SPOON

ELEVATION	NA feet msl
LOGGED BY	Walter Cuculic
DRILLED BY	West Hazmat Drilling, Inc.

DEPTH BELOW SURFACE	SAMPLES COLLECTED: INT	TPHg ppm	SAMPLE ID	LITHOLOGY	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	WELL CONSTRUCTION DETAILS
0 FT				ASPHALT; 3-inches thick	ASPHALT		STREET BOX WITH CONCRETE SEAL; LOCKING CAP
1–5				SILTY SAND; (SM); fine-grained; poorly graded; light brown; moist; no odor; no plasticity, moderate estimated permeability.	SM		Portland I/II; 2-inch diameter blank pvc casing schedule 40; Bentonite Seal
6			MW-4 @ 6.0				
7–8							
9				GW ▽			
10			MW-4 @ 9.5				
11–19				SAND; (SP); fine-grained; poorly graded; tan; damp to wet; no plasticity, high estimated permeability.	SP		2-inch diameter schedule 40 PVC 0.010" slotted casing; #2/12 MONTEREY SAND
				Bottom of boring at 20 feet bgs			BOTTOM CAP
20–35				Total depth of monitoring well at 20 feet bgs			

1435Webste

TEC ACCUTITE SOIL BORING LOG

CLIENT	OLYMPIAN	LOCATION	1435 Webster Street
Contact	DAN KOCH		Alameda, California
BORING NO.	MW-5	MONITORING WELL NO.	MW-5
ELEVATION	NA feet msl		
DATE DRILLED	11/10/99	START	2:30 pm
FINISH	5:00 pm	LOGGED BY	Walter Cuculic
DRILLING METHOD	HOLLOW STEM AUGER	SAMPLING METHOD	SPLIT SPOON
DRILLED BY	West Hazmat Drilling, Inc.		

DEPTH BELOW SURFACE	SAMPLES COLLECTED: INT	TPHg ppm	SAMPLE ID	LITHOLOGY	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	WELL CONSTRUCTION DETAILS
0 FT				ASPHALT; 3-inches thick	ASPHALT		STREET BOX WITH CONCRETE SEAL; LOCKING CAP
1–5				SILTY SAND; (SM); fine-grained; poorly graded; light brown; moist; no odor; no plasticity, moderate estimated permeability.	SM		Portland I/II; 2-inch diameter blank pvc casing schedule 40; Bentonite Seal
6–9			MW-5 @ 6.0	GW			
10			MW-5 @ 9.5				
11–19				SAND; (SP); fine-grained; poorly graded; tan; damp to wet; no plasticity, high estimated permeability.	SP		2-inch diameter schedule 40 PVC 0.010" slotted casing; #2/12 MONTERREY SAND; BOTTOM CAP
				Bottom of boring at 20 feet bgs			
20–35				Total depth of monitoring well at 20 feet bgs			

1435Webstc

TEC ACCUTITE SOIL BORING LOG

CLIENT: OLYMPIAN
Contact: DAN KOCH
LOCATION: 1435 Webster Street, Alameda, California
BORING NO.: MW-6
MONITORING WELL NO.: MW-6
ELEVATION: NA feet msl
DATE DRILLED: 11/10/99
START: 10:30 am
FINISH: 2:30 pm
LOGGED BY: Walter Cuculic
DRILLING METHOD: HOLLOW STEM AUGER
SAMPLING METHOD: SPLIT SPOON
DRILLED BY: West Hazmat Drilling, Inc.

DEPTH BELOW SURFACE	SAMPLES COLLECTED: INT	TPHg ppm	SAMPLE ID	LITHOLOGY	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	WELL CONSTRUCTION DETAILS
0 FT				ASPHALT; 3-inches thick	ASPHALT		STREET BOX WITH CONCRETE SEAL; LOCKING CAP
1–7			MW-6 @ 5.0	SILTY SAND; (SM); fine-grained; poorly graded; light brown; moist; no odor; no plasticity, moderate estimated permeability.	SM		Portland I/II; 2-inch diameter blank pvc casing schedule 40; Bentonite Seal
8–19			MW-6 @ 9.0	GW ▽ SAND; (SP); fine-grained; poorly graded; tan; damp to wet; no plasticity, high estimated permeability. Bottom of boring at 20 feet bgs	SP		2-inch diameter schedule 40 PVC 0.010" slotted casing; #2/12 MONTERRY SAND; BOTTOM CAP
20–35				Total depth of monitoring well at 20 feet bgs			

1435Webste

APPENDIX C

WELL DEVELOPMENT AND SAMPLING FORMS

11.19.99

= 1 CLOSED TOP DRUM USED FOR DEVELOPMENT

WELL DEVELOPMENT / ACCUTITE
ALAMEDA, CA

7:15 ON THE ROAD RAIN / COLD
7:45 ON SITE

MW-4 DTW = 10.79' TD = 18.01' 3 CASE VOL. = 3.68 GAL
@ 09:10 =
MW-6 = 11.46' = 19.55' = 4.13 GAL
@ 09:14
MW-5 = 10.13' = 18.57' = 4.30 GAL
@ 09:19

10:45 OFF SITE
11:15 AT NEXT SITE

MW-4 SURGED 15 MIN / LOTS OF SILT/SANDS / PURGED 4 GAL THEN DEWATERED LET RECHARGE AND PURGED 4 GAL

MW-6 SURGED 15 MIN / LOTS OF SILT/SANDS / PURGED 4 GAL THEN DEWATERED LET RECHARGE AND PURGED 4 GAL

MW-5 SURGED 15 MIN / PURGED 4 GAL THEN DEWATERED LET RECHARGE AND PURGED 2 GAL

PURGED ~ 24 GAL STORED ON SITE

NOTE: ALL WELL ELEV. REF TO N. SIDE OF CASING
WELLS DO NOT PRODUCE WELL. WORST TO BEST PRODUCERS
↪ MW-5, MW-4, MW-6

WATER SAMPLING FORM

CLIENT:
ADDRESS: 1435 WEBSTER STREET, ALAMEDA, CA
WELL # TESTED MW-1

To convert water column height to total amount of gallons in one (1) well volume, multiply the water colum height by A.

WELL DIAMETER	A
(2")	(0.17)
3"	0.36
4"	0.65

22.60' TOTAL WELL DEPTH
10.86' - DEPTH TO WATER
11.74' = WATER COLUM HEIGHT x A = 2.0 GAL (1 well volume)

Multiply one (1) well volume by three (3) to obtain the minimum # of gallons to be extracted before taking well sample(s)

3 x 2.0 = 6 (3 well volume)

DATE: 12-6-99
TIME: 0925
WATER LEVEL 10.86'

TIME:	GALS PUMPED	TEMP °F	COND. µs/cm	PH
1110	0	66.2	459	6.66
1115	2	66.9	369	6.69
1120	4	65.9	404	6.63
1125	6	66.3	384	6.67

SAMPLE Time: 1215
Volume Pumped 6 GAL
Sampler: M. DYSERT / NSE

Sheen or inches of free product ~~SLIGHT~~ STRONG ~~SHEEN~~ ODOR
Analyzed for: G/D/BTEX/M

WATER SAMPLING FORM

CLIENT:
ADDRESS: 1435 WEBSTER STREET, ALAMEDA, CA
WELL # TESTED MW-2

To convert water column height to total amount of gallons in one (1) well volume, multiply the water colum height by A.

WELL DIAMETER	A
2"	0.17
3"	0.36
4"	0.65

19.11' TOTAL WELL DEPTH
11.20' - DEPTH TO WATER
7.91' = WATER COLUM HEIGHT x A = 1.34 GAL (1 well volume)

Multiply one (1) well volume by three (3) to obtain the minimum # of gallons to be extracted before taking well sample(s)

3 x 1.34 = 4.02 (3 well volume)

DATE: 12.6.99
TIME: 0905
WATER LEVEL 11.20'

TIME:	GALS PUMPED	TEMP °F	COND. us/cm	PH
0955	0	65.5	878	6.80
0959	2	66.5	840	6.94
1003	3	67.2	785	6.86
1008	4	66.9	769	6.89

SAMPLE Time: 1145
Volume Pumped > 4 GAL
Sampler: M. DYSERT / NJE

Sheen or inches of free product N/A
Analyzed for: G/D/BTEX/M

WATER SAMPLING FORM

CLIENT:
ADDRESS: 1435 WEBSTER STREET, ALAMEDA, CA
WELL # TESTED MW-3

To convert water column height to total amount of gallons in one (1) well volume, multiply the water colum height by A.

WELL DIAMETER	A
(2")	(0.17)
3"	0.36
4"	0.65

21.91' TOTAL WELL DEPTH
11.12' - DEPTH TO WATER
10.79' = WATER COLUM HEIGHT x A = 1.83 GAL (1 well volume)

Multiply one (1) well volume by three (3) to obtain the minimum # of gallons to be extracted before taking well sample(s)

3 x 1.83 = 5.49 (3 well volume)

DATE: 12.6.99
TIME: 0900
WATER LEVEL 11.12'

TIME:	GALS PUMPED	TEMP °F	COND us/cm	PH
0930	0	62.6	332	7.25
0935	2	66.7	333	6.66
0940	4	66.9	334	6.58
0945	6	67.2	333	6.59

SAMPLE Time: 1135
Volume Pumped 6 GAL
Sampler: M.DYSART/NSE

Sheen or inches of free product N/A
Analyzed for: G/D/BTEX/M

WATER SAMPLING FORM

CLIENT:
ADDRESS: 1435 WEBSTER STREET, ALAMEDA, CA
WELL # TESTED MW-4

To convert water column height to total amount of gallons in one (1) well volume, multiply the water colum height by A.

WELL DIAMETER	A
2"	0.17
3"	0.36
4"	0.65

18.01' TOTAL WELL DEPTH
10.79' - DEPTH TO WATER
7.22 = WATER COLUM HEIGHT x A = 1.23 GAL (1 well volume)

Multiply one (1) well volume by three (3) to obtain the minimum # of gallons to be extracted before taking well sample(s)

3 x 1.23 = 3.69 (3 well volume)

DATE: 12.6.99
TIME: 0910
WATER LEVEL 10.79'

TIME:	GALS PUMPED	TEMP °F	COND. µs/cm	PH
1015	0	61.8	939	6.98
1018	2	61.7	899	7.12
1022	3	62.3	910	7.09
1025	4	62.6	922	7.13

SAMPLE Time: 1155
Volume Pumped 4 GAL.
Sampler: M.DY/SRT/NSE

Sheen or inches of free product N/A
Analyzed for: G/D/BTEX/M

WATER SAMPLING FORM

CLIENT:
ADDRESS: 1435 WEBSTER STREET, ALAMEDA, CA
WELL # TESTED MW-5

To convert water column height to total amount of gallons in one (1) well volume, multiply the water colum height by A.

WELL DIAMETER	A
(2")	(0.17)
3"	0.36
4"	0.65

18.57' TOTAL WELL DEPTH
10.17' - DEPTH TO WATER
8.40' = WATER COLUM HEIGHT x A = 1.43 GAL (1 well volume)

Multiply one (1) well volume by three (3) to obtain the minimum # of gallons to be extracted before taking well sample(s)

3 x 1.43 = 4.29 (3 well volume)

DATE: 12.6.99
TIME: 0920
WATER LEVEL 10.17'

TIME:	GALS PUMPED	TEMP °F	COND. µs/cm	PH
1050	0	67.0 ~~66.3~~	1089	7.20
1053	1.5	68.0	1061	7.14
1059	3.0	67.6	1005	7.12
1104	4.5	67.8	1016	7.16

SAMPLE Time: 1210
Volume Pumped 4.5 GAL.
Sampler: M. DYJERT/NSE

Sheen or inches of free product ~~SLIGHT~~ ODOR
Analyzed for: G/D/BTEX/M

WATER SAMPLING FORM

CLIENT:
ADDRESS: 1435 WEBSTER STREET, ALAMEDA, CA
WELL # TESTED MW-6

To convert water column height to total amount of gallons in one (1) well volume, multiply the water colum height by A.

WELL DIAMETER	A
2"	0.17
3"	0.36
4"	0.65

19.55' TOTAL WELL DEPTH
11.46' - DEPTH TO WATER
8.09' = WATER COLUM HEIGHT x A = 1.38 GAL (1 well volume)

Multiply one (1) well volume by three (3) to obtain the minimum # of gallons to be extracted before taking well sample(s)

3 x 1.38 = 4.14 (3 well volume)

DATE: 12.6.99
TIME: 0915
WATER LEVEL 11.46'

TIME:	GALS PUMPED	TEMP °F	COND. µs/cm	PH
1030	0	64.6	1019	7.15
1034	1.5	66.3	998	7.11
1039	3.0	66.7	924	7.10
1043	4.5	67.1	899	7.06

SAMPLE Time: 1200
Volume Pumped 4.5 GAL
Sampler: M.DYSERT/NSE

Sheen or inches of free product N/A
Analyzed for: G/D/BTEX/M

APPENDIX D

SURVEYOR'S DATA

GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 inch = 20 ft.

12-2-99

MW-6
× PVC=20.27
RIM=20.54
N 5059.0
E 4945.0

MW-5
× PVC=18.99
RIM=19.23
N 5057.5
E 5001.0

PROFESSIONAL LAND SURVEYOR
LOUIS WADE HAMMOND
EXP. 3-31-02
NO 6163
STATE OF CALIFORNIA

Louis Wade Hammond

FACE OF CURB

WEBSTER ST.

MW-1
× PVC=19.53 – BENCHMARK
RIM=19.70 DATUM PER ACCUTITE
N 5000.0
E 5000.0

MW-3
× PVC=19.79
RIM=20.37
N 5000.2
E 4917.4

MW-2
× PVC=19.80
RIM=19.97
N 4976.3
E 4953.4

INLET
× TC=19.33
LOCAL BENCHMARK

FACE OF CURB

MW-4
× PVC=19.30
RIM=19.52
N 4939.6
E 4988.6

TAYLOR AVE.

WELL SURVEY
1435 WEBSTER ST.
ALAMEDA, CALIF.

L. Wade Hammond
Licensed Land Surveyor
No. 6163
36660 Newark Blvd. Suite D
Newark, California
94560
Tel:(510) 739-1600
Fax:(510) 739-1620

APPENDIX E

LABORATORY RESULTS

North State Environmental Laboratory
90 South Spruce Avenue, Suite V • South San Francisco, CA 94080 • (650) 266-4563 • FAX (650) 266-4560
CA ELAP # 1753

C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 99-1788
Client: Technology Eng. Const.
Project: 2967/1435 Webster St. Alameda

Date Reported: 11/19/99

Gasoline, BTEX and MTBE by Methods 8015M and 8020
Diesel Range Hydrocarbons by Method 8015 M

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 99-1788-01	Client ID: MW-4@9.5			11/11/99	SOIL
Gasoline	8015M	ND			11/16/99
Benzene	8020	ND			
Ethylbenzene	8020	ND			
MTBE	8020	ND			
Toluene	8020	ND			
Xylenes	8020	ND			
Diesel	8015M	ND			11/16/99

North State Environmental Laboratory
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CA ELAP # 1753

C E R T I F I C A T E O F A N A L Y S I S

Quality Control/Quality Assurance

Lab Number: 99-1788
Client: Technology Eng. Const.
Project: 2967/1435 Webster St. Alameda

Date Reported: 11/19/99

Gasoline, BTEX and MTBE by Methods 8015M and 8020
Diesel Range Hydrocarbons by Method 8015 M

Analyte	Method	Reporting Limit	Unit	Blank	Avg MS/MSD Recovery	RPD
Gasoline	8015M	0.5	mg/Kg	ND	126	0
Benzene	8020	.005	mg/Kg	ND	96	2
Ethylbenzene	8020	.005	mg/Kg	ND	111	2
Toluene	8020	.005	mg/Kg	ND	106	1
Xylenes	8020	.010	mg/Kg	ND	112	2
MTBE	8020	.005	mg/Kg	ND	88	1
Diesel	8015M	1.0	mg/Kg	ND	105	2

ELAP Certificate NO:1753
Reviewed and Approved

John A.Murphy, Laboratory Director

Chain of Custody Accutite Environmental Engineering

99-1788

Client	Accutite Environmental Engineering	Report To	Walter Cuculic
Address	35 South Linden Avenue South San Francisco, CA 94080	Bill To:	Accutite 2967
		Billing Reference#	
Phone	650-952-5551		
Project Name/Address	Olympian, 1435 Webster St, Alameda		
Sampler	Walter	Date:	11-11-99

Turnaround: ASAP | 1 Day | 2 Day | 3 Day | 1 Week | 2 Week | Others

Sample ID	Sample Matrix	#of Containers	Container Type	Sample Date/Time	TPHd	TPHg	BTEX	MTBE	Remarks
MW-1 @60	Soil	1	Brass tube	11-11-99					
MW-1 @95	S	S			X	X	X	X	confirm highest MTBE hit 8260

Analysis Required

Relinquished by:	Date	Time	Received by:	Date	Time
Walter Cuculic	11-11	1:50		11/11/99	1:50
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

North State Environmental Laboratory
CA ELAP # 1753
90 South Spruce Avenue, Suite V • South San Francisco, CA 94080 • (650) 266-4563 • FAX (650) 266-4560

C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 99-1789
Client: Technology Eng. Const.
Project: 2967/1435 Webster St. Alameda

Date Reported: 11/22/99

Gasoline,BTEX and MTBE by Methods 8015M and 8020
Diesel Range Hydrocarbons by Method 8015 M

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 99-1789-01 Client ID: MW6@9.0'				11/10/99	SOIL
Gasoline	8015M	ND			11/16/99
Benzene	8020	ND			
Ethylbenzene	8020	ND			
MTBE	8020	ND			
Toluene	8020	ND			
Xylenes	8020	ND			
Diesel	8015M	ND			11/16/99
Sample: 99-1789-02 Client ID: MW-5@9.5'				11/10/99	SOIL
Gasoline	8015M	1100	mg/Kg		11/16/99
Benzene	8020	3.4	mg/Kg		
Ethylbenzene	8020	14	mg/Kg		
MTBE	8020	*ND<0.02	mg/Kg		
Toluene	8020	21	mg/Kg		
Xylenes	8020	70	mg/Kg		
Diesel	8015M	200	mg/Kg		11/16/99

*Confirmed by GC/MS method 8250.

North State Environmental Laboratory
CA ELAP # 1753
90 South Spruce Avenue, Suite V • South San Francisco, CA 94080 • (650) 266-4563 • FAX (650) 266-4560

C E R T I F I C A T E O F A N A L Y S I S

Quality Control/Quality Assurance

Lab Number: 99-1789
Client: Technology Eng. Const.
Project: 2967/1435 Webster St. Alameda

Date Reported: 11/22/99

Gasoline,BTEX and MTBE by Methods 8015M and 8020
Diesel Range Hydrocarbons by Method 8015 M

Analyte	Method	Reporting Limit	Unit	Blank	Avg MS/MSD Recovery	RPD
Gasoline	8015M	0.5	mg/Kg	ND	126	0
Benzene	8020	.005	mg/Kg	ND	96	2
Ethylbenzene	8020	.005	mg/Kg	ND	111	2
Toluene	8020	.005	mg/Kg	ND	106	1
Xylenes	8020	.010	mg/Kg	ND	112	2
MTBE	8020	.005	mg/Kg	ND	88	1
Diesel	8015M	1.0	mg/Kg	ND	105	2

ELAP Certificate NO:1753
Reviewed and Approved

John A.Murphy, Laboratory Director

Chain of Custody Accutite Environmental Engineering

99-1789

Client	Accutite Environmental Engineering	Report To	Walter Cucalic
Address	35 South Linden Avenue South San Francisco, CA 94080	Bill To:	Accutite
		Billing Reference#	2967
Phone	650-952-5551		
Project Name/Address	Olympian, 1435 Webster St. Alameda		
Sampler	Walter	Date:	11-10-99

Turnaround: ASAP | 1 Day | 2 Day | 3 Day | 1 Week | 2 Week | Others

Sample ID	Sample Matrix	#of Containers	Container Type	Sample Date/Time	TPHd	TPHg	BTEX	MTBE	Remarks
MW-6250	Soil	6	brass tube	11-10-99/11:00					
MW-6290				11:10	X	X	X	X	
MW-5260				13:50					confirm w/ shell MTBE by 8260
MW-5240				14:00	X	X	X	X	
	9.5								

Analysis Required

	Date	Time		Date	Time
Relinquished by: Walter Cucalic	11-11	1:50	Received by:	11/11/99	1:50
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

North State Environmental Laboratory
CA ELAP # 1753
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C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 99-1885
Client: Technology Eng. Const.
Project: 1435 Webster St./ PO#3080

Date Reported: 12/10/99

Diesel Range Hydrocarbons by Method 8015M
Gasoline, BTEX and MTBE by Methods 8015M and 8020

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 99-1885-01 Client ID: MW-1				12/06/99	WATER
Gasoline	8015M	44000	ug/L		12/07/99
Benzene	8020	8900	ug/L		
Ethylbenzene	8020	1900	ug/L		
MTBE	8020	***11000**	ug/L		
Toluene	8020	3400	ug/L		
Xylenes	8020	5100	ug/L		
Diesel	8015M	**4.0	mg/L		12/07/99
Sample: 99-1885-02 Client ID: MW-2				12/06/99	WATER
Gasoline	8015M	300	ug/L		12/06/99
Benzene	8020	28	ug/L		
Ethylbenzene	8020	6	ug/L		
MTBE	8020	210	ug/L		
Toluene	8020	45	ug/L		
Xylenes	8020	37	ug/L		
Diesel	8015M	ND			12/07/99
Sample: 99-1885-03 Client ID: MW-3				12/06/99	WATER
Gasoline	8015M	ND			12/06/99
Benzene	8020	3	ug/L		
Ethylbenzene	8020	ND			
MTBE	8020	0.6	ug/L		
Toluene	8020	1	ug/L		

***Confirmed by GC/MS **Does not match diesel pattern**

North State Environmental Laboratory
CA ELAP # 1753
90 South Spruce Avenue, Suite V • South San Francisco, CA 94080 • **(650) 266-4563** • FAX (650) 266-4560

C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 99-1885
Client: Technology Eng. Const.
Project: 1435 Webster St./ PO#3080

Date Reported: 12/10/99

Diesel Range Hydrocarbons by Method 8015M
Gasoline,BTEX and MTBE by Methods 8015M and 8020

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 99-1885-03 Client ID: MW-3				12/06/99	WATER
Xylenes	8020	1	ug/L		
Diesel	8015M	ND			12/07/99
Sample: 99-1885-04 Client ID: MW-4				12/06/99	WATER
Gasoline	8015M	ND			12/06/99
Benzene	8020	3	ug/L		
Ethylbenzene	8020	0.6	ug/L		
MTBE	8020	140	ug/L		
Toluene	8020	2	ug/L		
Xylenes	8020	4	ug/L		
Diesel	8015M	0.16	mg/L		12/07/99
Sample: 99-1885-05 Client ID: MW-5				12/06/99	WATER
Gasoline	8015M	30000	ug/L		12/07/99
Benzene	8020	2200	ug/L		
Ethylbenzene	8020	910	ug/L		
MTBE	8020	670	ug/L		
Toluene	8020	3300	ug/L		
Xylenes	8020	7000	ug/L		
Diesel	8015M	**2.8	mg/L		12/07/99

*Confirmed by GC/MS **Does not match diesel pattern

North State Environmental Laboratory
CA ELAP # 1753
90 South Spruce Avenue, Suite V • South San Francisco, CA 94080 • (650) 266-4563 • FAX (650) 266-4560

C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 99-1885
Client: Technology Eng. Const.
Project: 1435 Webster St./ PO#3080

Date Reported: 12/10/99

Diesel Range Hydrocarbons by Method 8015M
Gasoline,BTEX and MTBE by Methods 8015M and 8020

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 99-1885-06 Client ID: MW-6				12/06/99	WATER
Gasoline	8015M	ND			12/06/99
Benzene	8020	2	ug/L		
Ethylbenzene	8020	0.8	ug/L		
MTBE	8020	1	ug/L		
Toluene	8020	2	ug/L		
Xylenes	8020	8	ug/L		
Diesel	8015M	0.11	mg/L		12/07/99

*Confirmed by GC/MS **Does not match diesel pattern

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C E R T I F I C A T E O F A N A L Y S I S

Quality Control/Quality Assurance

Lab Number: 99-1885
Client: Technology Eng. Const.
Project: 1435 Webster St./ PO#3080

Date Reported: 12/10/99

Diesel Range Hydrocarbons by Method 8015M
Gasoline, BTEX and MTBE by Methods 8015M and 8020

Analyte	Method	Reporting Limit	Unit	Blank	Avg MS/MSD Recovery	RPD
Gasoline	8015M	0.5	mg/Kg	ND	89	3
Benzene	8020	.005	mg/Kg	ND	107	2
Ethylbenzene	8020	.005	mg/Kg	ND	110	1
Toluene	8020	.005	mg/Kg	ND	111	1
Xylenes	8020	.010	mg/Kg	ND	115	0
MTBE	8020	.005	mg/Kg	ND	102	5
Gasoline	8015M	50	ug/L	ND	100	0
Benzene	8020	0.5	ug/L	ND	98	0
Ethylbenzene	8020	0.5	ug/L	ND	102	1
Toluene	8020	0.5	ug/L	ND	103	0
Xylenes	8020	1.0	ug/L	ND	106	1
MTBE	8020	0.5	ug/L	ND	94	7

ELAP Certificate NO:1753
Reviewed and Approved

John A.Murphy, Laboratory Director

PO# 3080

Chain of Custody Accutite Environmental Engineering

#99-1885

Client	Accutite Environmental Engineering	Report To	SAME
Address	35 South Linden Avenue South San Francisco, CA 94080	Bill To:	Accutite
		Billing Reference#	PO# 3080
Phone	650-952-5551		
Project Name/Address	1435 WEBSTER ST. ALAMEDA, CA		
Sampler	MARK DYSERT/NSE	Date:	DEC. 6, 1999

Turnaround: ASAP | (1 Day) | 2 Day | 3 Day | 1 Week | 2 Week | Others

24HR RUSH!

Sample ID	Sample Matrix	#of Containers	Container Type	Sample Date/Time	TPH-D	TPH-G	BTEX	MTBE	Remarks
MW-1	AQ	4	3VOA/1L	12.6.99/1215	X	X	X	X	PLEASE CONFIRM THE HIGHEST MTBE RESULT BY EPA METHOD 8260
MW-2	↓	↓	↓	/1145	X	X	X	X	
MW-3				/1135	X	X	X	X	
MW-4				/1155	X	X	X	X	
MW-5				/1210	X	X	X	X	
MW-6	↓	↓	↓	/1200	X	X	X	X	

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12.6.99	1330	[signature]	12/6/99	13:30
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time