

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

ALEX BRISCOE, Director



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

January 11, 2011

William and Renee Sheehan
1236 Bay Street
Alameda, CA 94501

Subject: Case Closure for Fuel Leak Case No. RO0000081 and GeoTracker Global ID T0600102127, Sheehan Property, 845 Pacific Avenue, Alameda, CA 94501

Dear Mr. and Ms. Sheehan:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (<http://geotracker.swrcb.ca.gov>) and the Alameda County Environmental Health website (<http://www.acgov.org/aceh/index.htm>).

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Total Petroleum Hydrocarbons as diesel remain in soil at concentrations up to 28,300 ppm.
- Total Petroleum Hydrocarbons as gasoline remain in groundwater at concentrations up to 32,500 ppb.

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Donna L. Drogos".

Donna L. Drogos, P.E.
Division Chief

Enclosures:

1. Remedial Action Completion Certification
2. Case Closure Summary

cc:

Tridib Guha (w/enc)
Advanced Assessment and Remediation Service
1848 Willow Pass Road, Suite 201
Concord, CA 94520
(Sent via E-mail to: aaars@sbcglobal.net)

Closure Unit (w/enc)
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120
(uploaded to GeoTracker)

Donna Drogos, ACEH (Sent via E-mail to: donna.drogos@acgov.org)
Jerry Wickham, ACEH (Sent via E-mail to: jerry.wickham@acgov.org)

GeoTracker (w/enc)
File (w/orig enc)



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REMEDIAL ACTION COMPLETION CERTIFICATION

January 11, 2011

William and Renee Sheehan
1236 Bay Street
Alameda, CA 94501

Subject: Case Closure for Fuel Leak Case No. RO0000081 and GeoTracker Global ID T0600102127, Sheehan Property, 845 Pacific Avenue, Alameda, CA 94501

Dear Mr. and Ms. Sheehan:

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

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ariu Levi', written over a horizontal line.

Ariu Levi
Director
Alameda County Environmental Health

**CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM**

I. AGENCY INFORMATION

Date: July 28, 2010

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Jerry Wickham	Title: Senior Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: Sheehan Property		
Site Facility Address: 845 Pacific Avenue, Alameda, CA 94501		
RB Case No.: 01-2312	STID No.: 6063	LOP Case No.: RO0000081
URF Filing Date: 09/19/1996	Geotracker ID: T0600102127	APN: 73-409-22-3
Responsible Parties	Addresses	Phone Numbers
William and Renee Sheehan	1236 Bay Street, Alameda, CA 94501	(510) 522-0978
---	---	---
---	---	---

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	750	Home Heating Oil	Removed	9/18/1996
2	120	Gasoline	Removed	9/25/1996
Piping			Removed	9/25/1996

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown. The home heating oil tank had several holes up to ¼ inch in diameter at the time of removal. The gasoline tank had several large holes and the seams were cracked at the time of removal.		
Site characterization complete? Yes	Date Approved By Oversight Agency: ----	
Monitoring wells installed? Yes	Number: 3	Proper screened interval? Yes
Highest GW Depth Below Ground Surface: 6.78 feet bgs	Lowest Depth: 10.61 feet bgs	Flow Direction: North
Most Sensitive Current Use: Potential drinking water source.		

Summary of Production Wells in Vicinity: No water supply wells are located within 2,000 feet of the site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: San Francisco Bay is 3,300 feet southwest of the site.
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	One 750-gallon home heating oil UST One 120-gallon gasoline UST	Transported to Erickson, Inc. facility in Richmond, CA for disposal	9/18/1996 9/25/1996
Piping	Not Reported	Transported to Erickson, Inc. facility in Richmond, CA for disposal	9/18/1996 and 9/25/1996
Free Product	----	----	----
Soil	---	---	---
Groundwater	---	---	---

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
 (Please see Attachments 2 – 6 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Groundwater (ppb)	
	Before	After	Before	After
TPH (Gas)	12	12	6,100(1)	270(1)
TPH (Diesel)	28,300	28,300	430,000(2)	32,500(3)
Oil & Grease	Not analyzed	Not analyzed	Not analyzed	Not analyzed
Benzene	3.6	<0.005	35	<0.5
Toluene	2.5	0.008	2	<0.5
Ethylbenzene	2.0	0.025	27	<0.5
Xylenes	13	0.045	160	<1
Heavy Metals (Cd, Cr, Pb, Ni, Zn)	31(4)	31(4)	Not analyzed	Not analyzed
MTBE	<0.005(5)	<0.005(5)	27(6)	<0.5(7)
Other (8240/8270)	Not analyzed	Not analyzed	Not analyzed	Not analyzed

Footnotes:

- (1) The maximum concentration before cleanup is from a grab groundwater sample collected from boring B-4 on May 14, 1997; the maximum concentration after cleanup is the maximum concentration detected during the most recent sampling event on 10/24/2003.
- (2) The maximum concentration before cleanup is from a grab groundwater sample collected from boring B-4 on May 14, 1997. Based on a comparison to results from nearby monitoring wells, the grab groundwater sampling results are likely biased high.
- (3) The maximum concentration after cleanup is from a groundwater sample collected from monitoring well MW-1 on October 24, 2003. During three previous groundwater monitoring events, the maximum concentration of TPH as diesel detected in groundwater from MW-1 was 130 ppb. Therefore, the October 24, 2003 result for MW-1 may be anomalous.
- (4) Lead = 31 ppm; nickel = 40 ppm; chromium = 39 ppm; zinc = 23 ppm; and cadmium <2.0 ppm
- (5) MTBE <0.005 ppm; no other fuel oxygenates analyzed.
- (6) The maximum MTBE concentration before cleanup is from a grab groundwater sample collected from boring B-4 on October May 14, 1997 using EPA Method 8020; no other fuel oxygenates were analyzed.
- (7) MTBE was not detected in groundwater samples analyzed using EPA Method 8260; no other fuel oxygenates were analyzed.

Site History and Description of Corrective Actions:

The site is a residence at the corner of 9th Street and Pacific Avenue in Alameda, California. Surrounding land use is also residential. On September 18, 1996, one 750-gallon home heating oil underground storage tank (UST) was removed from the site. Several holes up to ¼-inch in diameter were observed during UST removal. Odor and staining were observed in soils surrounding the USTs with the most apparent presence of petroleum hydrocarbons observed in the south end of the excavation at the fill end of the tank. Three soil samples collected during UST removal contained up to 800 ppm TPH as diesel and 3.6 ppm benzene.

On September 25, 1996, one 120-gallon gasoline UST was removed from the site. The gasoline UST was reportedly installed in 1926 and had not been used for more than 18 years prior to removal in 1996. No residual product was present and the UST had several large holes in the bottom of the tank. Soils surrounding the UST had no odor or staining. Two soil samples collected below the UST did not contain petroleum hydrocarbons at concentrations above the reporting limits.

On May 13 and 14, 1997, five soil borings (B-1 through B-5) were advanced to evaluate the extent of petroleum hydrocarbons in the area of the former heating oil UST. Eighteen soil samples were collected from the borings and grab groundwater samples were collected from the five borings. TPH as diesel was detected in soil at concentrations up to 9,200 ppm in soil samples from B-3 and B-4. TPH as diesel was detected in the grab groundwater samples at concentrations up to 430,000 ppb (B-4). Based on a comparison of the grab groundwater sampling results to sampling results for groundwater samples collected from nearby monitoring wells, the grab groundwater sampling results appear to be biased high.

On October 9, 2002, four soil borings (MW-1 through MW-3 and SB-1/TW) were advanced. Soil borings MW-1 through MW-3 were converted into groundwater monitoring wells installed to a depth of 20 feet bgs. Soil boring SB-1/TW was converted into a temporary groundwater monitoring well. TPH as diesel was detected in 4 of the 6 soil samples collected at concentrations up to 28,300 ppm. TPH as diesel was detected in groundwater from monitoring well MW-2 at a concentration of 4,490 ppb but was not detected in groundwater samples from the remaining three wells.

Monitoring wells MW-1 through MW-3 were sampled on a quarterly basis from October 17, 2002 through October 24, 2003. The concentrations of petroleum hydrocarbons detected were variable during the one year period of groundwater monitoring. TPH as diesel was detected in a groundwater sample collected from well MW-1 on October 24, 2003 at a concentration of 32,500 ppb. However, during the three previous sampling events for MW-1, TPH as diesel was detected at a maximum concentration of 130 ppb. The concentration of TPH as diesel detected in groundwater samples from well MW-2 varied from 620 to 4,490 ppb.

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? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
<p>Site Management Requirements:</p> <ul style="list-style-type: none"> Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities. No crops are to be grown for human consumption within the area east of the residence. 		
Should corrective action be reviewed if land use changes? No		
Was a deed restriction or deed notification filed? No		Date Recorded: ---
Monitoring Wells Decommissioned: No	Number Decommissioned: 0	Number Retained: 3
List Enforcement Actions Taken: Second Notice of Violation dated November 30, 2001		
List Enforcement Actions Rescinded: Second Notice of Violation rescinded July 23, 2002		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

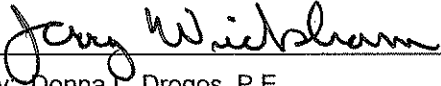

No soil vapor sampling was conducted for the site. Based on the absence or minimal concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) in groundwater and vadose zone soil samples collected during the investigations, soil vapor sampling does not appear to be warranted.

Residual soil contamination appears to remain in place in the area of MW-2 below a depth of approximately 7 feet bgs. Monitoring well MW-2 is located less than 5 feet from the residence at 845 Pacific Avenue. Based on the depth of the residual contamination and apparent localized extent, the residual contamination does not appear to pose a human health risk under current conditions.

Conclusion:

Alameda County Environmental Health (ACEH) staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment based upon the information available in our files to date and the restrictions specified in the Site Management Requirements. No further investigation or cleanup is necessary at this time. ACEH staff recommend case closure for this site.

VI. LOCAL AGENCY REPRESENTATIVE DATA


Prepared by: Jerry Wickham	Title: Senior Hazardous Materials Specialist
Signature: 	Date: 07/28/10
Approved by: Donna L. Drogos, P.E.	Title: Division Chief
Signature: 	Date: 07/28/2010

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
Notification Date: 08/05/10	

VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: 09/02/10	Date of Well Decommissioning Report: 12/31/10	
All Monitoring Wells Decommissioned: Yes	Number Decommissioned: 3	Number Retained: 0
Reason Wells Retained: --- NA		
Additional requirements for submittal of groundwater data from retained wells: --- None		
ACEH Concurrence - Signature: 	Date: 01/11/11	

Attachments:

1. Vicinity Map (1 pp)
2. Site Plan and Sampling Location Maps (3 pp)
3. Groundwater Surface Elevation Map, Cross Section, Site Maps, and TPHd Concentrations in Groundwater (4 pp)
4. Soil Analytical Data (3 pp)
5. Groundwater Analytical Data (1 pp)
6. Boring Logs (9 pp)

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.

Wickham, Jerry, Env. Health

From: Cherie McCaulou [CMccaulou@waterboards.ca.gov]
Sent: Thursday, August 05, 2010 5:18 PM
To: Wickham, Jerry, Env. Health
Subject: Re: Closure for 845 Pacific, Alameda

Hi Jerry - Yes, I received the State's letter on this matter and I have no objection to the case being closed by ACEH.
Thanks, Cherie

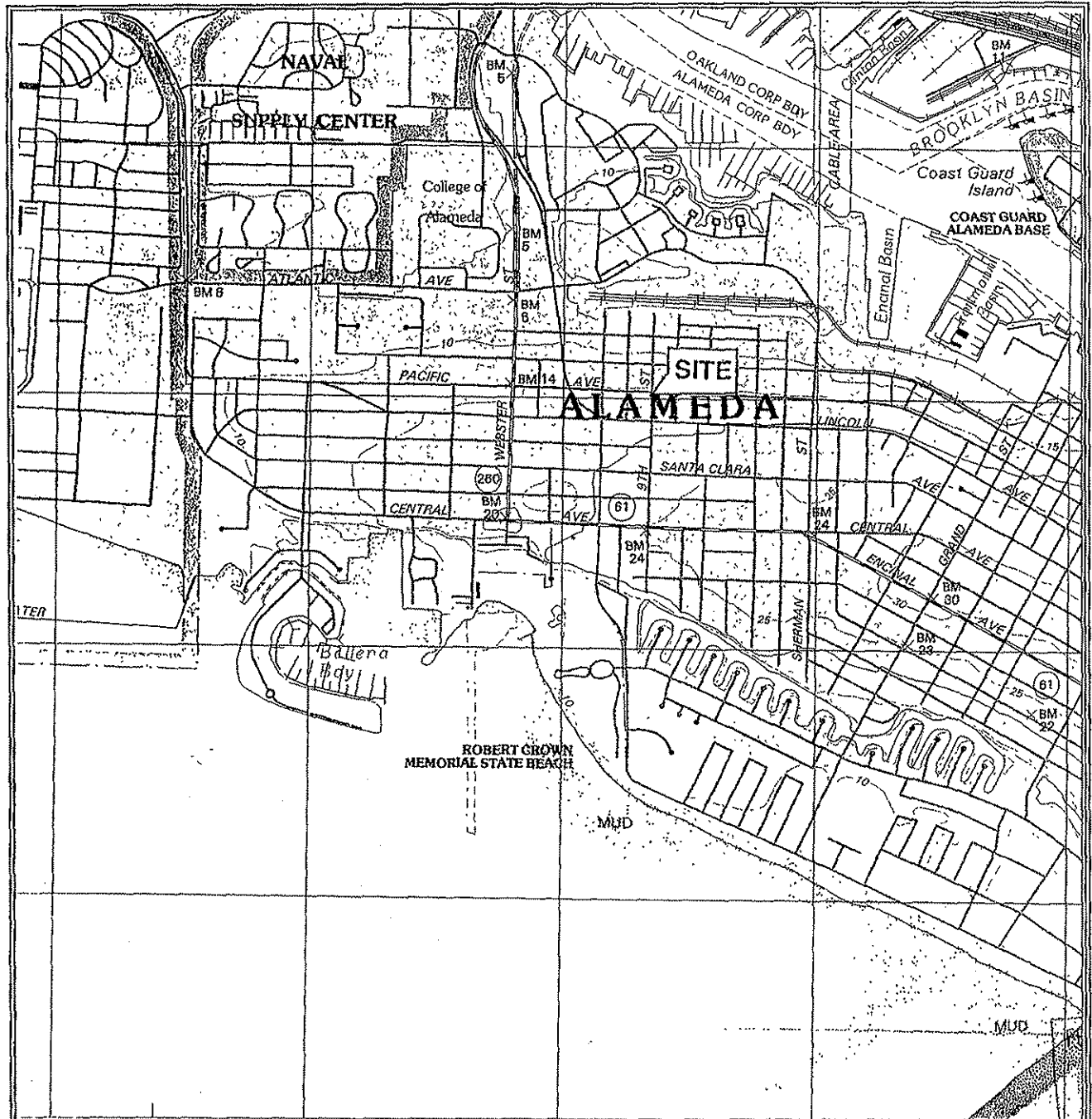
Sincerely,

Cherie McCaulou
Engineering Geologist
San Francisco Bay Regional Water Quality Control Board
cmccaulou@waterboards.ca.gov
510-622-2342

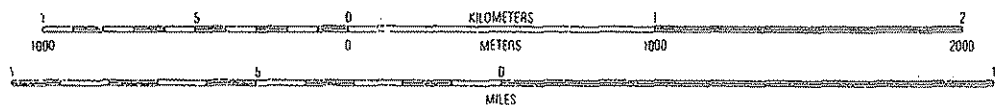
>>> "Wickham, Jerry, Env. Health" <jerry.wickham@acgov.org> 8/5/2010 4:31 PM >>>
Hi Cherie,

Attached is a closure summary for 845 Pacific Avenue, Alameda. You probably also received a letter for this site indicating we had agreed to close this potential petition case.

Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
510-567-6791
jerry.wickham@acgov.org



SCALE 1:24 000

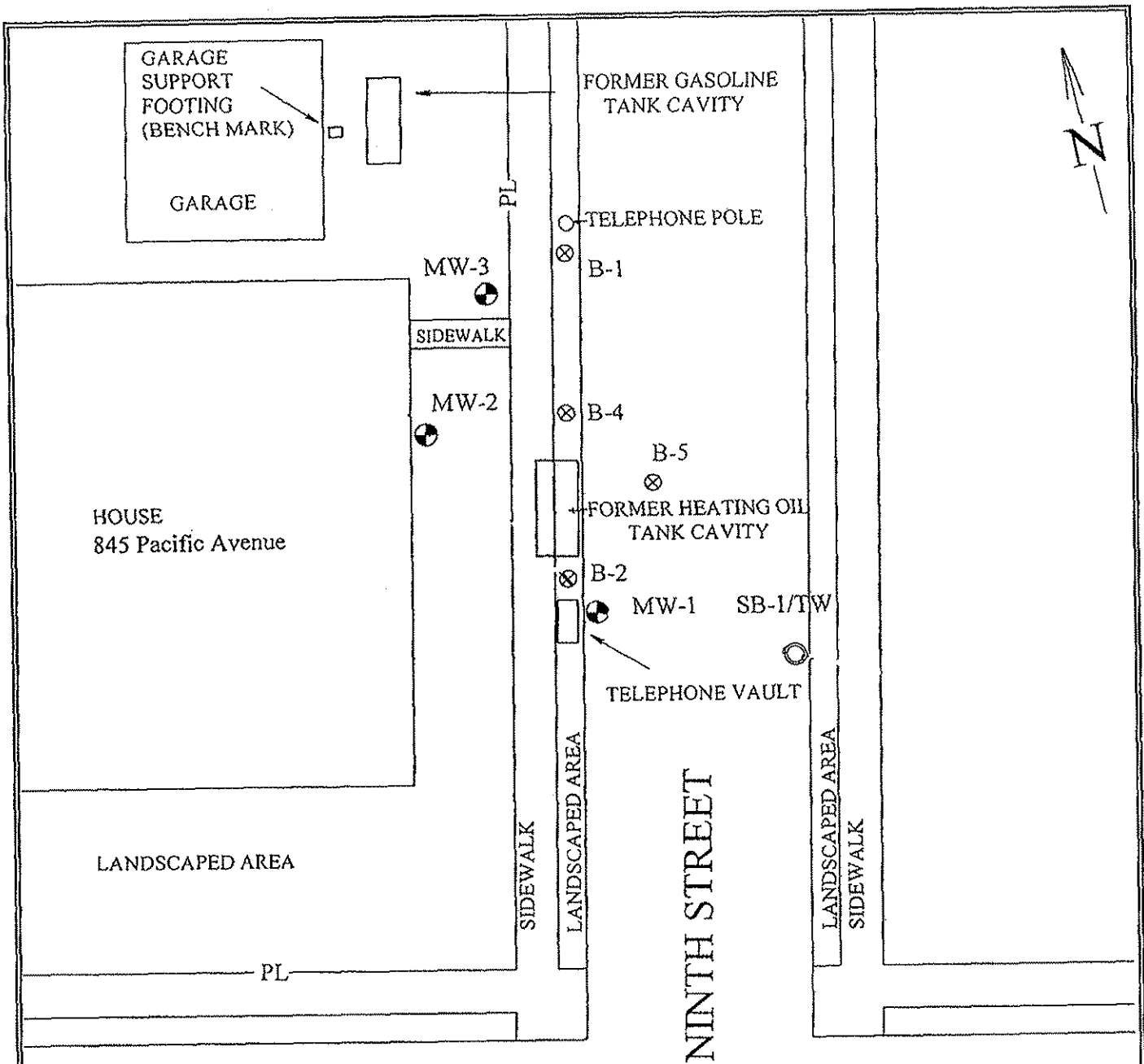


Source: U.S.G.S. Maps; 7.5 Minute Series (Topographic)
 Oakland West Quadrangle, CA
 1993 Map Edited 1996

FIGURE 1: SITE VICINITY MAP
SHEEHAN PROPERTY
 845 Pacific Avenue
 Alameda, California

**ADVANCED ASSESSMENT AND
 REMEDIATION SERVICES**
 2380 Salvio Street, Suite 202
 Concord, California

ATTACHMENT 1



PACIFIC AVENUE

NINTH STREET

LEGEND

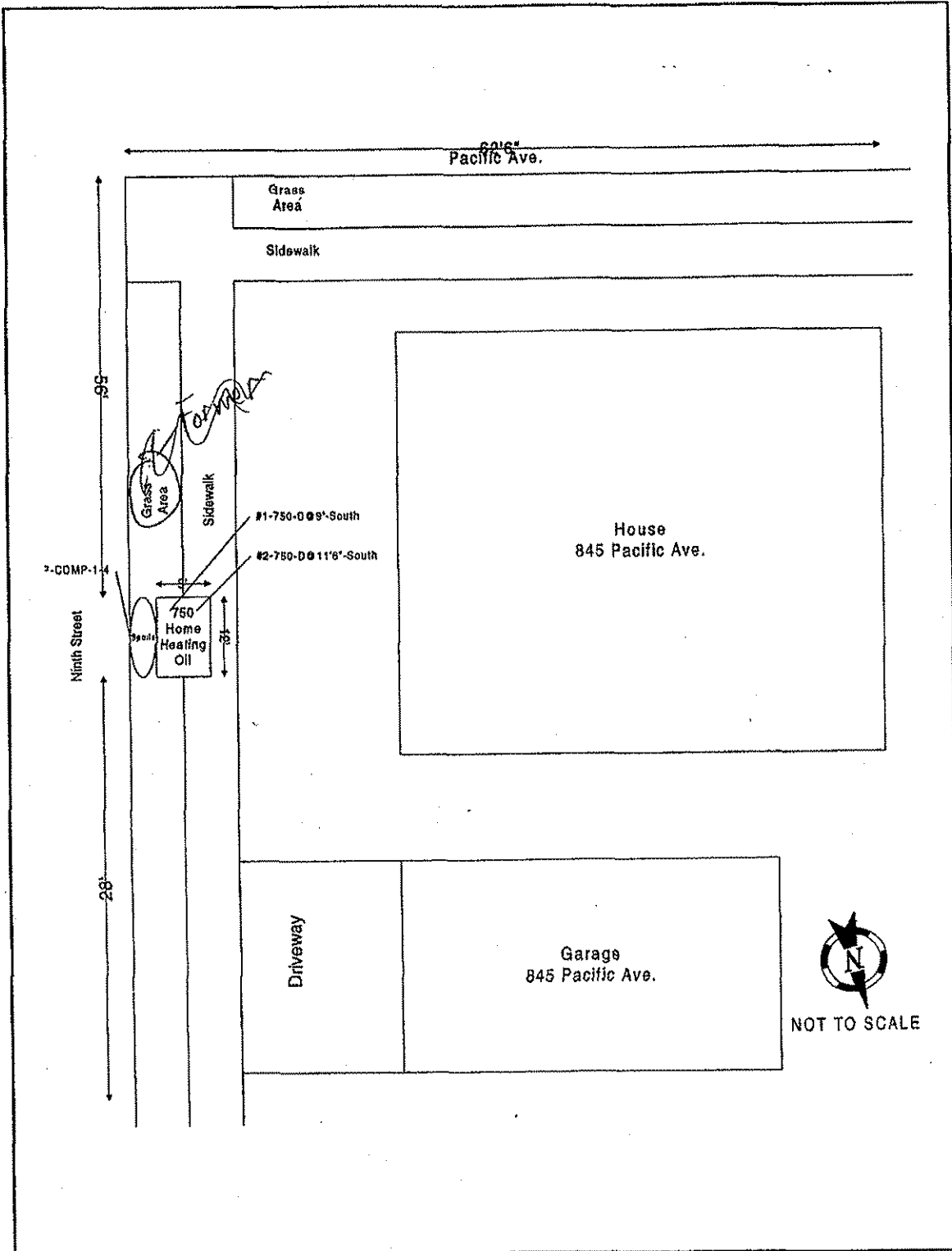
- ⊗ B-1 Soil Boring by HK2, Inc.
- ⊕ MW-1 Monitoring Well
- SB-1/TW Soil Boring/ Temporary Well
- PL Property Line



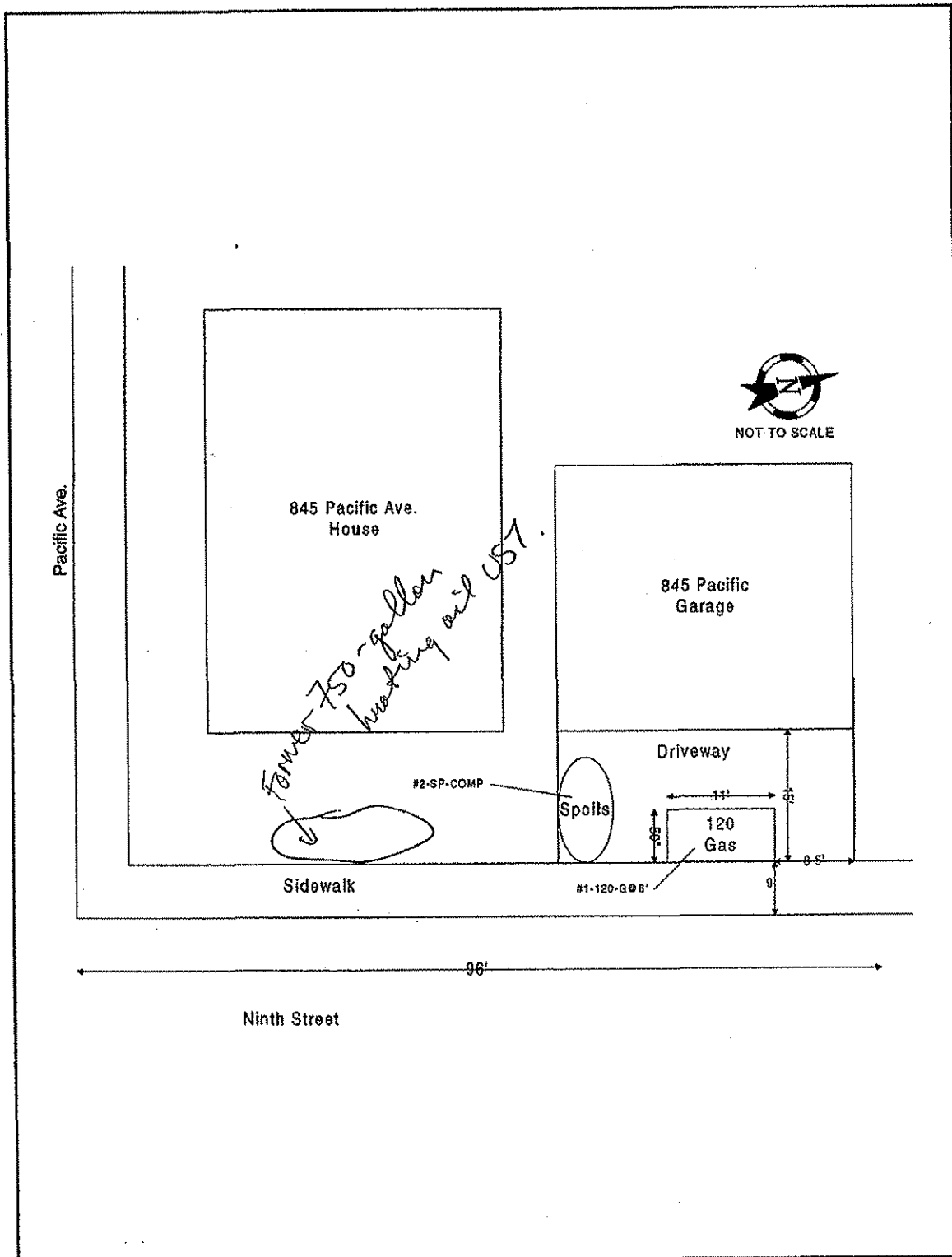
Source of the Base Map:
HK2, Inc./ SEMCO report

FIGURE 2: SITE PLAN
SHEEHAN PROPERTY
845 Pacific Avenue
Alameda, California

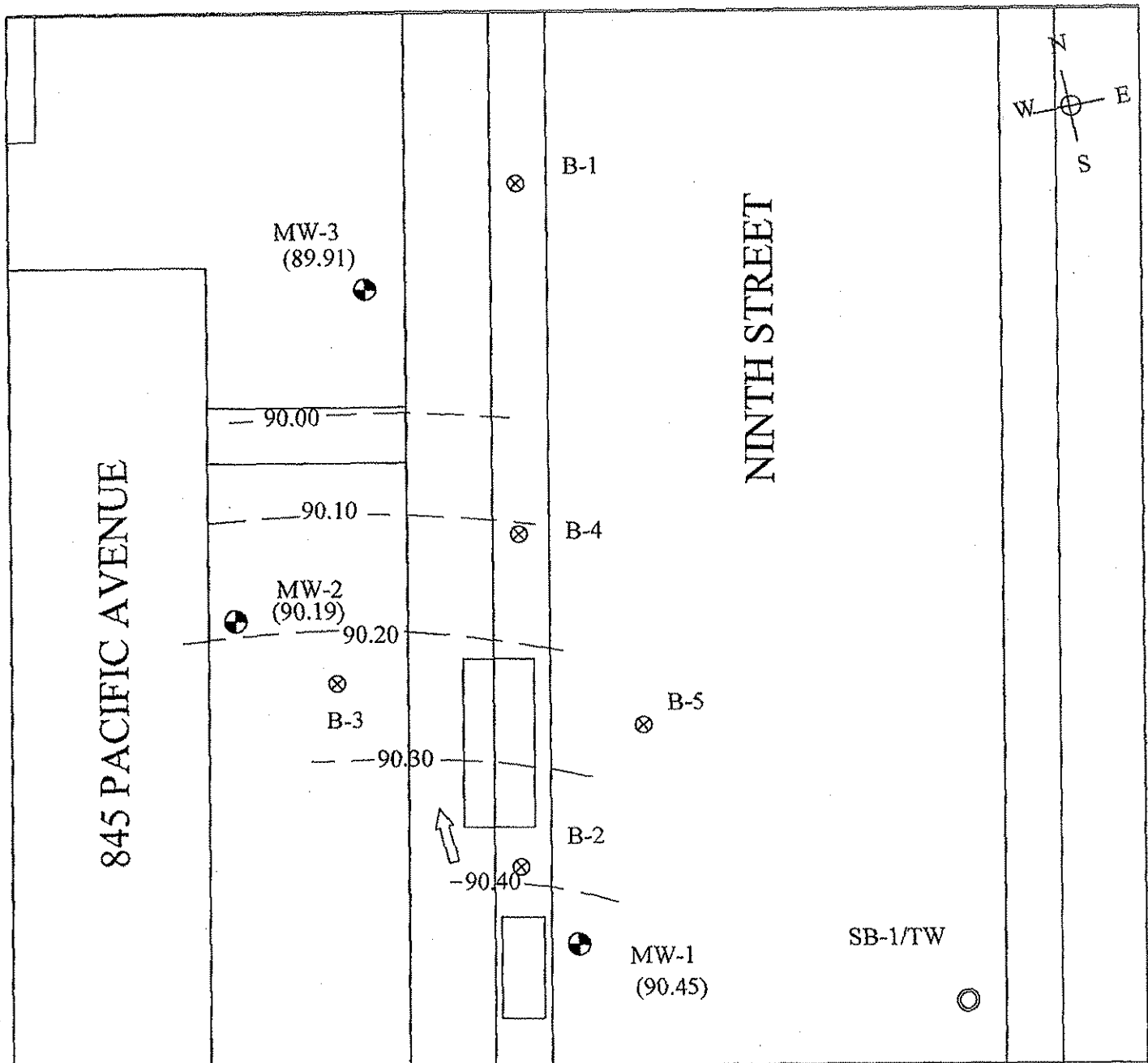
**ADVANCED ASSESSMENT AND
REMEDATION SERVICES**
2380 Salvio Street, Suite 202
Concord, California 94520



Site Layout and Sampling Locations



Site Layout and Sampling Locations



LEGEND

- ⊗ B-1 Soil Boring by HK2, Inc.
- MW-1 Monitoring Well
- SB-1/TW Soil Boring/ Temporary Well



Source of the Base Map:
HK2, Inc./ SEMCO report

- (90.19) Relative Groundwater Elevation
- 90.00- Groundwater Elevation Contour
- ↑ General Direction of Groundwater Flow

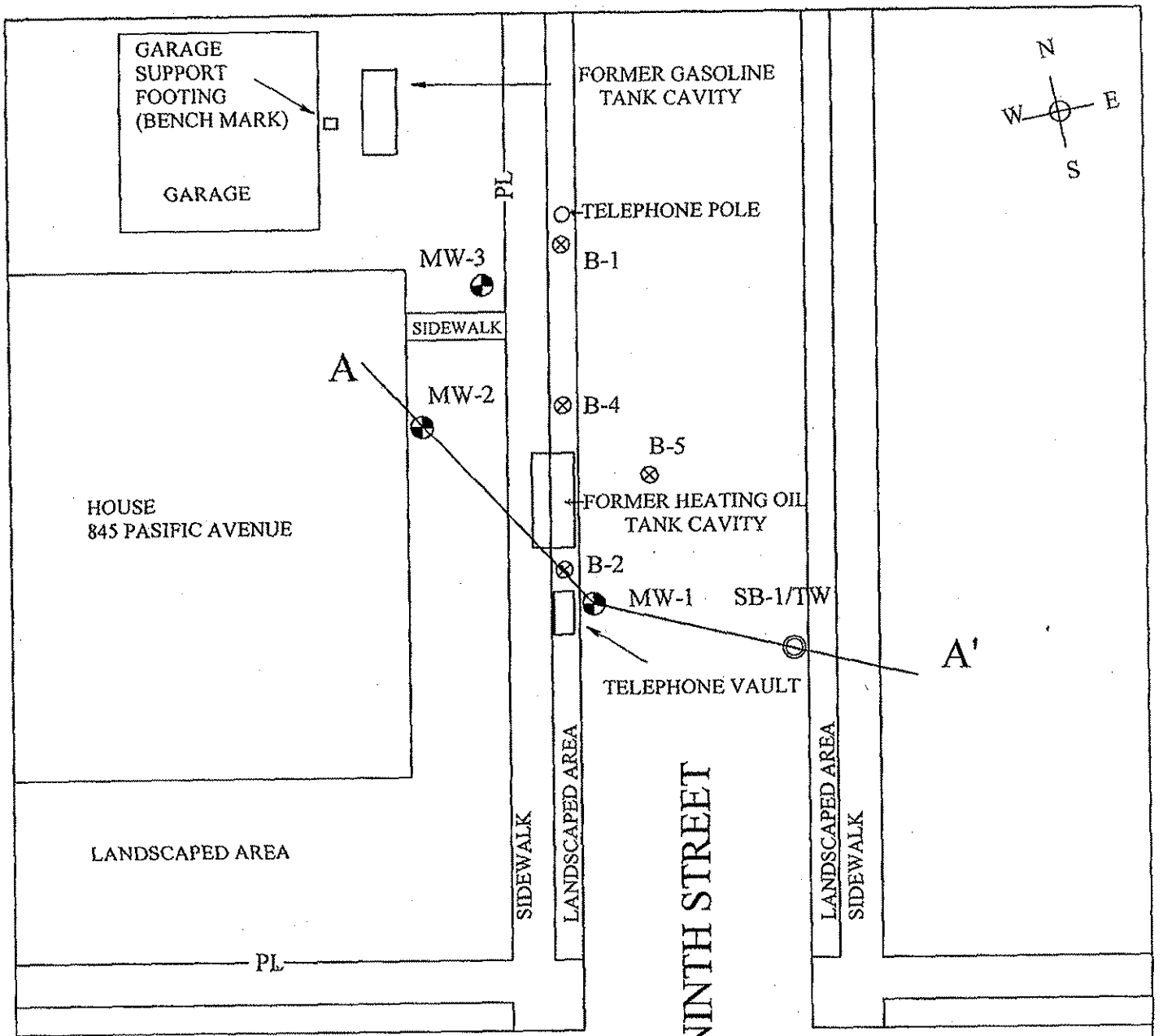
Note:

1. Water Levels in Monitoring Wells measured October 17, 2002
2. Contour Interval-0.10
3. Hydraulic Gradient- 0.011 foot/foot

FIGURE 3: GROUNDWATER SURFACE ELEVATION SHEEHAN PROPERTY
845 Pacific Avenue
Alameda, California

ADVANCED ASSESSMENT AND REMEDIATION SERVICES

ATTACHMENT 3



PACIFIC AVENUE

NINTH STREET

LEGEND



Source of the Base Map:
HK2, Inc./ SEMCO report

- ⊗ B-1 Soil Boring by HK2, Inc.
- ⊕ MW-1 Monitoring Well
- ⊙ SB-1/TW Soil Boring/ Temporary Well
- PL Property Line
- A-A' Hydrogeologic cross-section

FIGURE 2: SITE PLAN
SHEEHAN PROPERTY
845 Pacific Avenue
Alameda, California

**ADVANCED ASSESSMENT AND
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2380 Salvio Street, Suite 202
Concord, California

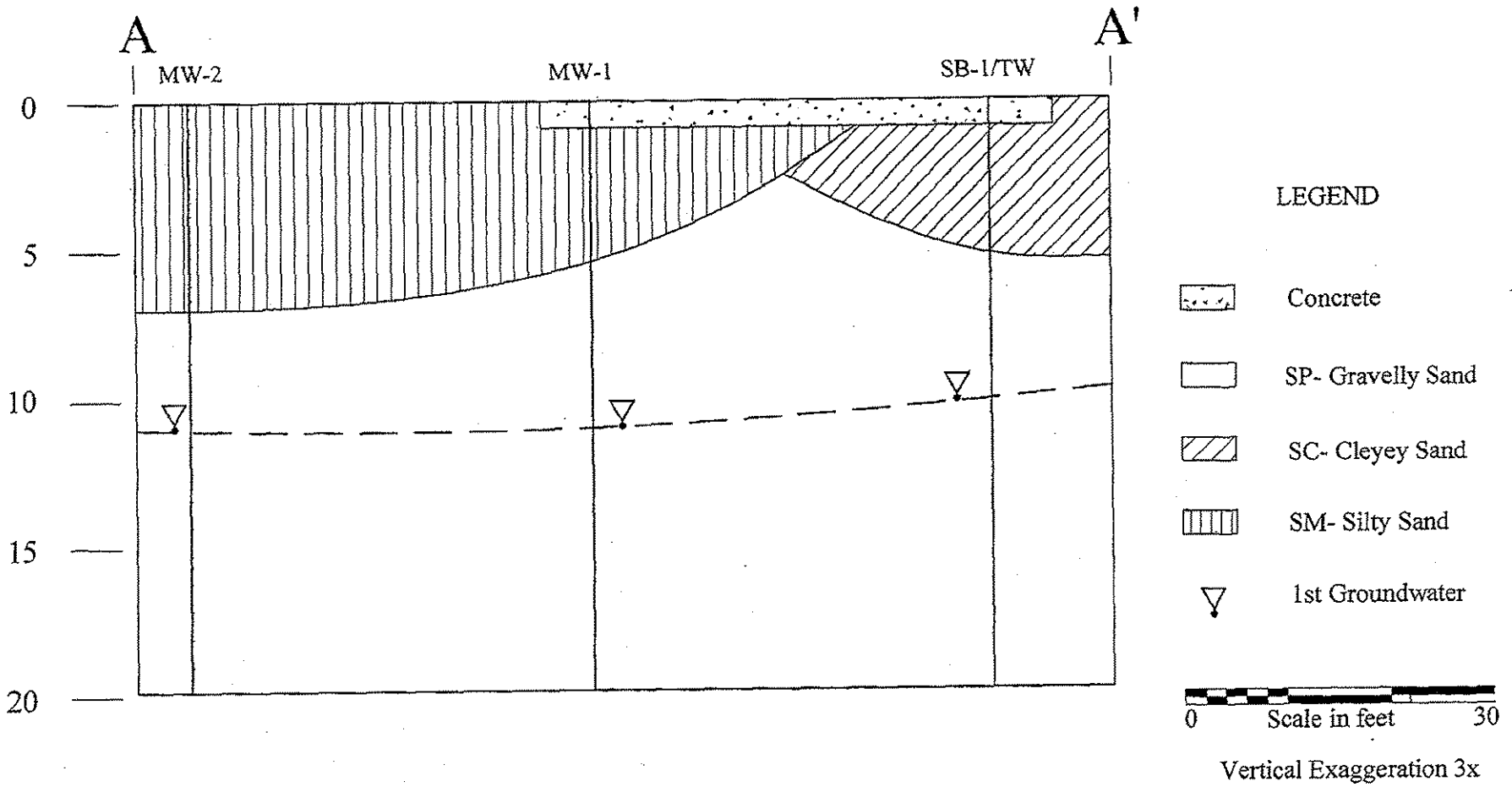
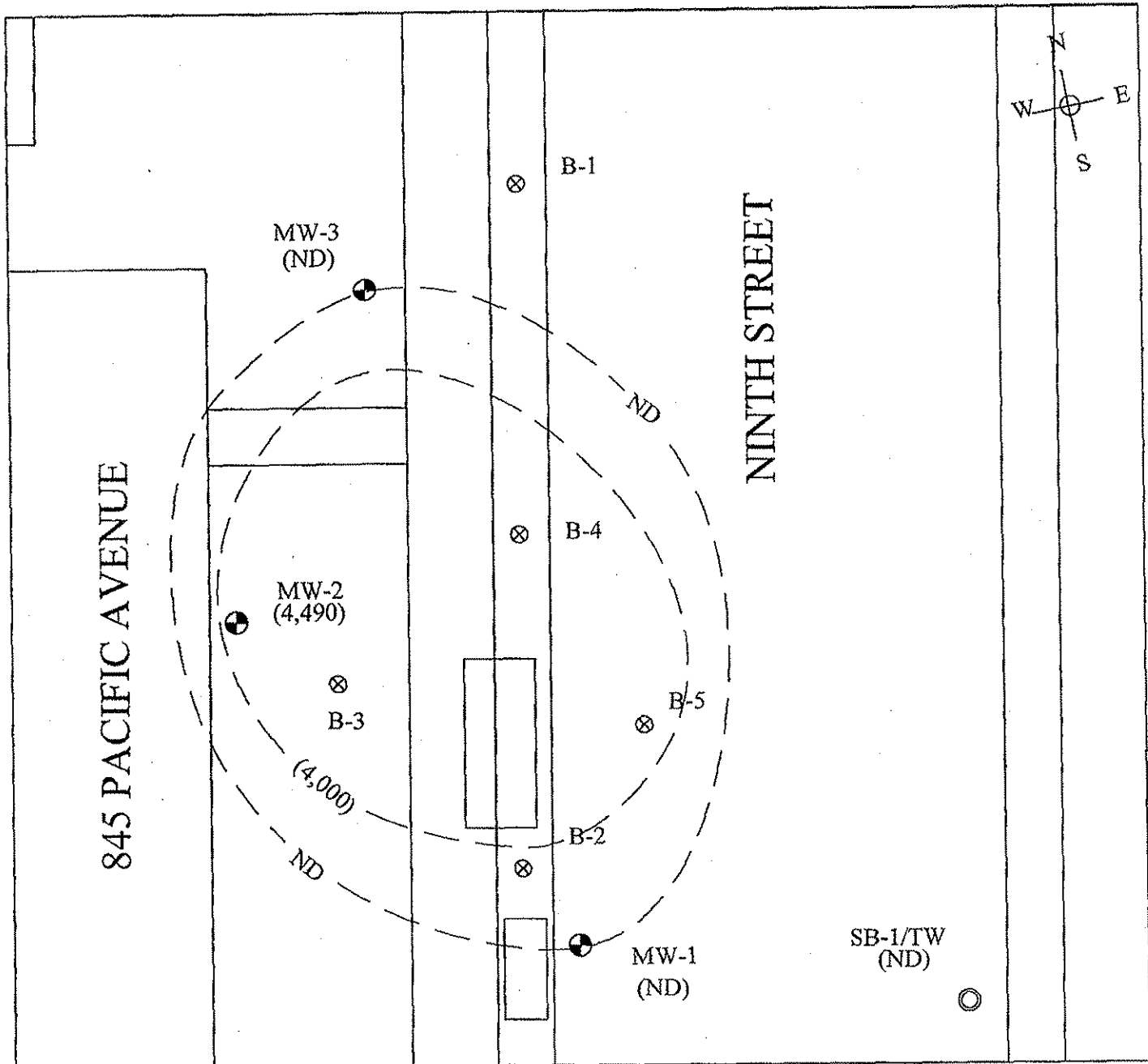


FIGURE 5:HYDROGEOLOGIC CROSS SECTION A-A'
SHEEHAN PROPERTY
 845 Pacific Avenue
 Alameda, California

ADVANCED ASSESSMENT AND REMEDIATION SERVICES
 2380 Salvio Street, Suite 202
 Concord, California 94520



LEGEND

- ⊗ B-1 Soil Boring by HK2, Inc.
- ⊕ MW-1 Monitoring Well
- ⊙ SB-1/TW Soil Boring/ Temporary Well



Source of the Base Map:
HK2, Inc./ SEMCO report

- (4,490) Total Petroleum Hydrocarbon as Diesel (TPHd) Concentration in Groundwater in Parts Per Billion (ppb)
- 4,000- TPHd Concentration contour
- ND Not Detected above Reported Detection Limit

Note:

1. Groundwater samples collected October 17, 2002
2. Contour Interval-as labeled

FIGURE 4: TPHd CONCENTRATIONS IN GROUNDWATER SHEEHAN PROPERTY
845 Pacific Avenue
Alameda, California

ADVANCED ASSESSMENT AND REMEDIATION SERVICES
2380 Salvio Street, Suite 202
Concord, California

TABLE 2: SUMMARY OF ANALYTICAL RESULTS OF SOIL SAMPLING

SHEEHAN PROPERTY

845 Pacific Avenue
Alameda, California

Sample ID	Date of Sampling	TPHg ug/kg	MTBE ug/kg	Benzene ug/kg	Toluene ug/kg	Ethylbenzene ug/kg	Xylenes ug/kg	TPHd ug/kg
B-1@6'	5/14/97	1300	ND	ND	ND	ND	ND	2,000
B-1@9'	5/14/97	ND	ND	ND	ND	ND	ND	ND
B-2@8.5'	5/13/97	ND	ND	ND	ND	ND	ND	ND
B-3@6'	5/13/97	1,200	ND	ND	ND	ND	ND	ND
B-3@9'	5/13/97	12,000	ND	ND	8	24	45	9,200,000
B-3@11'	5/13/97	NA	NA	NA	NA	NA	NA	5,700,000
B-4@8'	5/13/97	12,000	ND	ND	7	25	14	4,100,000
B-4@11'	5/13/97	NA	NA	NA	NA	NA	NA	9,200,000
B-5@8'	5/13/97	ND	ND	ND	ND	ND	ND	ND
SB-1/TW@9'	10/9/02	NA	NA	NA	NA	NA	NA	893,000
MW-1-S@7'	10/9/02	NA	NA	NA	NA	NA	NA	ND
MW-1-S@11'	10/9/02	NA	NA	NA	NA	NA	NA	2,540,000
MW-2-S@7'	10/9/02	NA	NA	NA	NA	NA	NA	28,300,000
MW-2-S@11'	10/9/02	NA	NA	NA	NA	NA	NA	14,600,000
MW-3-S@10'	10/9/02	NA	NA	NA	NA	NA	NA	ND
RL		500	5	5	5	5	10	1000

Notes:

ND- Not Detected RL- Reporting Limit NA- Not available NS- No Sample
 ug/L- Microgram per liter (parts per billion)
 TPHg- Total petroleum hydrocarbon as gasoline (EPA method modified 8015)
 TPHd- Total petroleum hydrocarbon as diesel (EPA method modified 8015)
 MTBE- Methyl Tertiary Butyl Ether (EPA Method 8020)
 Benzene, toluene, ethylbenzene, and total xylenes (EPA method 8020)



North State Environmental
Chemical Waste Disposal • Trucking • Consulting

CERTIFICATE OF ANALYSIS

Lab No:	96-702	Date Sampled:	09-25-96
Client:	SEMCO	Date Analyzed:	09-26-96
Project:	845 PACIFIC AVE.	Date Reported:	09-27-96

Total Lead by Method Atomic Absorbtion Spectroscopy Samples prepared by Method 3050
Benzene, Toluene, Ethylbenzene and Xylenes by Method 8020
Gasoline range hydrocarbons by EPA method 8015M

SAMPLE NO	CLIENT ID	ANALYTE	METHOD	RESULT
96-702-01	#1-120-G @ 6' SOIL	Benzene	8020	ND
		Toluene	8020	ND
		Ethylbenzene	8020	ND
		Xylenes	8020	ND
		Gasoline	8015M	ND
		Lead	7420	25 mg/Kg
96-702-02	#2-SP- COMP SOIL	Benzene	8020	ND
		Toluene	8020	ND
		Ethylbenzene	8020	ND
		Xylenes	8020	ND
		Gasoline	8015M	ND
		Lead	7420	31 mg/Kg

Quality Control/Quality Assurance Summary-Soil

Analyte	Method	Reporting Limit	Blank	MS/MSD Recovery	RPD
Benzene	8020	0.005 mg/Kg	ND	122	3
Toluene	8020	0.005 mg/Kg	ND	111	3
Ethylbenzene	8020	0.005 mg/Kg	ND	102	2
Xylenes	8020	0.010 mg/Kg	ND	149	5
Gasoline	8015M	0.5 mg/Kg	ND	101	4
Lead	7420	1 mg/Kg	ND	103/101	2

ELAP Certificate NO: 1753

Reviewed and Approved:

John A. Murphy, Laboratory Director

P.O. Box 5624 • South San Francisco, California 94083 • 415-588-2838 FAX 588-1950



North State Environmental
 Chemical Waste Disposal - Trucking - Consulting

CERTIFICATE OF ANALYSIS

Lab No:	96-677	Date Sampled:	09-18-96
Client:	SEMCO/112K	Date Extracted:	09-20-96
Project:	Sheehan, 845 Pacific Avenue #96-0236	Date Analyzed:	09-21-96

Benzene, Toluene, Ethylbenzene and Xylenes by Method 8020
 Diesel range hydrocarbons by EPA method 8015M
 Reactive Cyanide by SW-846 Chapter 7, Section 7.3.3.2
 Reactive Sulfide by SW-846 Chapter 7, Section 7.3.4.2
 pH of Soil Wastes by Method 9045
 Flashpoint by Method 1010 Closed Cup Pensky-Martens

SAMPLE NO	CLIENT ID	ANALYTE	METHOD	RESULT
96-677-01	#1-750-D @ 9'- South SOIL	Benzene	8020	3.6 mg/Kg
		Toluene	8020	1.4 mg/Kg
		Ethylbenzene	8020	1.9 mg/Kg
		Xylenes	8020	7.5 mg/Kg
		Diesel	8015M	135 mg/Kg
96-677-02	#2-750-D @ 11' 6"-South SOIL	Benzene	8020	3.2 mg/Kg
		Toluene	8020	2.5 mg/Kg
		Ethylbenzene	8020	2.0 mg/Kg
		Xylenes	8020	13 mg/Kg
		Diesel	8015M	800 mg/Kg
		Nickel	7520	40 mg/Kg
		Zinc	7950	23 mg/Kg
		Chromium	7190	39 mg/Kg
		Cadmium	7130	ND
		Lead	7420	6 mg/Kg
		Cyanide	CH7 7.3.3.2	ND<20mg/Kg
		Sulfide	CH7 7.3.4.2	ND<10mg/Kg
		pH	9045	7.24
Flashpoint	1010	> 200 F		
96-677-03	SP-COMP-1-4 COMPOSITE SOIL	Benzene	8020	ND
		Toluene	8020	ND
		Ethylbenzene	8020	ND
		Xylenes	8020	ND
		Diesel	8015M	490 mg/Kg

TABLE 2: SUMMARY OF ANALYTICAL RESULTS OF GROUNDWATER SAMPLING

SHEEHAN PROPERTY

845 Pacific Avenue, Alameda, California

Sample ID	Date of Sampling	TPHg ug/L	MTBE ug/L	Benzene ug/L	Toluene ug/L	Ethylbenzene ug/L	Xylenes ug/L	TPHd ug/L
B-1	5/14/97	ND	ND	2	2	3	9	ND
B-2	5/14/97	360	ND	ND	ND	1	15	2,000
B-3	5/14/97	3,200	ND	ND	ND	3	6	ND
B-4	5/14/97	6,100	ND	35	ND	27	160	430,000
B-5	5/14/97	3,100	27	2	0.5	19	34	65,000
SB-1/TW/GW	10/9/02	ND	*ND	ND	1	ND	ND	ND
MW-1/GW	10/17/02	**71	ND	ND	ND	ND	2	ND
MW-1/GW	3/7/03	ND	ND	ND	ND	ND	ND	130
MW-1/GW	6/5/03	ND	ND	ND	ND	ND	ND	ND
MW-1/GW	10/24/03	**146	NA	ND	ND	ND	ND	32,500
MW-2/GW	10/17/02	**809	*ND	ND	1.2	1.2	5.7	4,490
MW-2/GW	3/7/03	**100	ND	ND	ND	ND	ND	640
MW-2/GW	6/5/03	**132	ND	ND	ND	ND	ND	620
MW-2/GW	10/24/03	**270	NA	ND	ND	ND	ND	1,370
MW-3/GW	10/17/02	ND	ND	ND	ND	ND	ND	ND
MW-3/GW	3/7/03	ND	ND	ND	ND	ND	ND	68
MW-3/GW	6/5/03	ND	ND	ND	ND	ND	ND	ND
MW-3/GW	10/24/03	ND	NA	ND	ND	ND	ND	ND
RL		50	0.5	0.5	0.5	0.5	1	50

Notes:

ND- Not Detected RL- Reporting Limit NA- Not Analyzed

ug/L- Microgram per liter (parts per billion)

TPHg- Total petroleum hydrocarbon as gasoline (EPA method modified 8015)

TPHd- Total petroleum hydrocarbon as diesel (EPA method modified 8015)

MTBE- Methyl Tertiary Butyl Ether (EPA Method 8020; after 9/24/01 by Method 8260)

BTEX- Benzene, toluene, ethylbenzene, and xylene (EPA Method 8020)

** Does not match gasoline pattern

* Confirmed by GC/MS method 8260

LOG OF EXPLORATORY BORING NO. MW-1

Project: Sheehan Property
 Drilling Co.: Gregg Drilling & Testing
 Start Date: 10/9/02
 End Date: 10/9/02

Drill Method: HSA
 Driller: R. Nessenger
 Drill Rig: Rhino D-27

Logged By: T. Guha
 Sampler: Macro Core
 Hole Dia.: 8 inch

LITHOLOGIC DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	DRIVEN IN	RECOVERY-IN	OVA (ppm)	WELL CONSTRUCTION DETAIL
Asphalt and concrete 6"			0					
SAND: drak brown, fine grain, well sorted, dry, loose	SM		0					
SAND: light brown, medium grain, well sorted, dry, loose color changed to greenish gray	SP		-5-	■				
color changed to light brown, strong odor, wet			-10-	■				
<i>BORE HOLE TERMINATED @ 20 feet</i>			-15-					
			-20-					
			-25-					
			-30-					

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 2380 Salvio Street, Suite202
 Concord, CA 94520

Note: .

Project No.
 02002
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LOG OF EXPLORATORY BORING NO. MW-2

Project: Sheehan Property
 Drilling Co.: Gregg Drilling & Testing
 Start Date: 10/9/02
 End Date: 10/9/02

Drill Method: HSA
 Driller: R. Nessenger
 Drill Rig: Rhino D-27

Logged By: T. Guha
 Sampler: MacroCore
 Hole Dia.: 8 inch

LITHOLOGIC DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	DRIVEN in	RECOVERY-in	OVA (ppm)	WELL CONSTRUCTION DETAIL
SILTY SAND: light gray, dry, loose	SM		0					
SAND: light brown, fine grain, well sorted, dry, loose	SM		-5-				0	
SAND: brown, medium grain, well sorted, slightly moist, loose, strong odor	SP		-10-	■			20	
color changed to light grey, wet, strong odor			-15-	■			60	
same, no odor, wet			-20-				0	
<i>BORE HOLE TERMINATED @ 20 feet</i>			-25-				0	
			-30-				0	

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 Concord, CA 94520

Note:

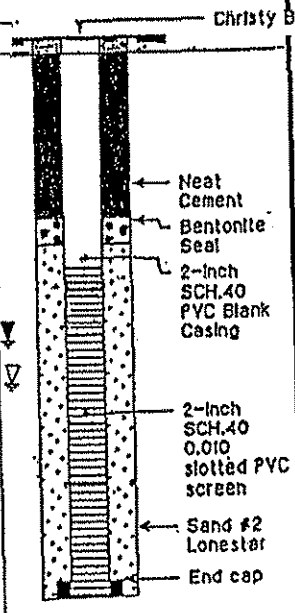
Project No.
 02002
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LOG OF EXPLORATORY BORING NO. MW-3

Project: Sheehan Property
 Drilling Co.: Gregg Drilling & Testing
 Start Date: 10/9/02
 End Date: 10/9/02

Drill Method: HSA
 Driller: R. Nessenger
 Drill Rig: Rhino D-27

Logged By: T. Guha
 Sampler: MacroCore
 Hole Dia.: 8 inch

LITHOLOGIC DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	DRIVEN in	RECOVERY-in	OVA (ppm)	WELL CONSTRUCTION DETAIL
Top soil 4"			0					 <p style="text-align: right; margin-right: 10px;">Christy Box</p> <p>Neat Cement Bentonite Seal 2-inch SCH.40 PVC Blank Casing 2-inch SCH.40 0.010 slotted PVC screen Sand #2 Lonestar End cap</p>
SAND: light brown, fine grain, well sorted, dry, loose Color changes to brown, slightly moist, loose color changes to light brown wet	SM	-	-5-				0	
SILTY SAND: dark grey, with some clay, loose, wet	SM	-	-10-	■			0	
SAND: reddish brown, medium grain, loose, wet	SP	-	-15-				0	
<i>BORE HOLE TERMINATED @ 20 feet</i>			-20-				0	
			-25-				0	
			-30-				0	

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 2380 Salvio Street, Suite 202
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Note: .




Project No. 02002
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LOG OF EXPLORATORY BORING NO. SB-1/TW

Project: Sheehan Property
 Drilling Co.: Gregg Drilling & Testing
 Start Date: 10/9/02
 End Date: 10/9/02

Drill Method: HSA
 Driller: R. Nessenger
 Drill Rig: Rhino D-27

Logged By: T. Guha
 Sampler: Macro Core
 Hole Dia.: 8 inch

LITHOLOGIC DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	DRIVEN in	RECOVERY in	OVA (ppm)	WELL CONSTRUCTION DETAIL
Asphalt, Concrete 6"			0					
SAND: dark brown, with some clay, slightly moist, loose	SC		-5-				0	
SAND: brown, well sorted, slightly moist, loose color changes to light brown, wet	SP		-10- -15- -20- -25- -30-	B			20 0	
<i>BORE HOLE TERMINATED @ 17 feet</i>								

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Note: A grab groundwater sample was collected (see text).

Project No.
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Depth (Feet)	Recovery/ Sample ID	Blow Counts	USCS Soil Type	Description	Boring Backfill Detail
	Grab Sample	N/A	ML	Dry, Moderate Brown, Sandy SILT	Neat Cement
5	B-1-5.0		SP	Moist, moderate brown, fine to medium grained SAND Bluish gray layer at approximately 6.5 feet Groundwater encountered at 9.0 feet	
	B-1-6.0				
	B-1-9.0				
10	B-1-10.5				
15					
20					

BORING NUMBER: B-1
LOCATION: 845 Pacific Avenue
Alameda, California

PROJECT NUMBER: 97-0154
CONTRACTOR: HK2/SEMCO
DRILLING METHOD: Percussion
DRILLING DATE: May 14, 1997
LOGGED BY: Keith B. Craig

REMARKS
Boring Terminated at 15 Feet
N/A = Not Applicable

Depth (Feet)	Recovery/ Sample ID	Blow Counts	USCS Soil Type	Description	Boring Backfill Detail
	Grab Sample	N/A		Asphalt	Neat Cement
			SP	Dry, moderate brown SAND with a trace amount of gravel and clay gravel and clay	
5	B-2-4.5		SP	Dry to Moist, moderate brown. medium grained SAND	
	NR				
	B-2-8.5		SP	Moist to saturated, moderate brown, medium grained SAND	
10	B-2-11.0			Groundwater encountered at 11.0 feet	
15					
20					

<p>BORING NUMBER: B-2</p> <p>LOCATION: 845 Pacific Avenue Alameda, California</p> <p>PROJECT NUMBER: 97-0154</p> <p>DRILLING CONTRACTOR: HK2/SEMCO</p> <p>DRILLING METHOD: Percussion</p> <p>DRILLING DATE: May 13, 1997</p> <p>LOGGED BY: Keith B. Craig</p>	<p>REMARKS</p> <p>Boring Terminated at 14 Feet</p> <p>N/A = Not Applicable</p> <p>NR = No Sample Recovered</p>
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Depth (Feet)	Recovery/ Sample ID	Blow Counts	USCS Soil Type	Description	Boring Backfill Detail	
	Grab Sample	N/A	SP	Dry, moderate brown SAND		Neat Cement
5	B-3-5.0		SP	Moist, moderate brown, fine to medium grained SAND		
10	B-3-9.0		SP	Moist to saturated, moderate brown to greenish gray, medium grained SAND Groundwater encountered at 8.5 feet		
	B-3-11.0					
15						
20						

BORING NUMBER: B-3
LOCATION: 845 Pacific Avenue
 Alameda, California

PROJECT NUMBER: 97-0154
DRILLING CONTRACTOR: HK2/SEMCO
DRILLING METHOD: Percussion
DRILLING DATE: May 13, 1997
LOGGED BY: Keith B. Craig

REMARKS
 Boring Terminated at 14.0 Feet
 N/A = Not Applicable

Depth (Feet)	Recovery/ Sample ID	Blow Counts	USCS Soil Type	Description	Boring Backfill Detail
	Grab Sample	N/A		Asphalt	Neat Cement
			ML	Dry, moderate brown SILT	
5	B-4-5.0		SP	Moist, moderate brown SAND Color becomes bluish gray at 6.0 feet	
	B-4-8.0		SP	Wet, bluish gray SAND Groundwater encountered at 8.5 feet	
10					
	NR				
	B-4-12.0		SP	Wet, Bluish gray SAND	
15					
20					
BORING NUMBER: B-4 LOCATION: 845 Pacific Avenue Alameda, California PROJECT NUMBER: 97-0154 DRILLING CONTRACTOR: HK2/SEMCO DRILLING METHOD: Percussion DRILLING DATE: May 13, 1997 LOGGED BY: Keith B. Craig			REMARKS Boring Terminated at 14.0 Feet N/A = Not Applicable NR = No Sample Recovered		

Depth (Feet)	Recovery/ Sample ID	Blow Counts	USCS Soil Type	Description	Boring Backfill Detail
	Grab Sample	N/A		Asphalt and Baserock	Asphalt
			SP-SC	Dry, moderate brown SAND with clay	Neat Cement
5	B-5-5.0		SP-SC	Moist, moderate brown SAND with clay	
	B-5-6.0 B-5-7.0				
	B-5-9.0		SP	Wet, moderate brown, fine-grained SAND Groundwater encountered at 9.0 feet	
10	B-5-11.0				
15					
20					
BORING NUMBER: B-5 LOCATION: 845 Pacific Avenue Alameda, California			REMARKS Boring Terminated at 15.0 Feet N/A = Not Applicable		
PROJECT NUMBER: 97-0154 DRILLING CONTRACTOR: HK2/SEMCO DRILLING METHOD: Percussion DRILLING DATE: May 14, 1997 LOGGED BY: Keith B. Craig					