GREENSFELDER & ASSOCIATES

1548 Jacob Avenue, San Jose, CA 95118 Phone: (408) 267-6427 Cell: (510) 385-4308 Fax: (510) 522-6259

2765

A REPORT DOCUMENTING
A LIMITED SITE ASSESSMENT

IN THE AREA OF
THREE FORMERLY REMOVED UNDERGROUND STORAGE TANKS (USTs)

Beneath the site at:

ALAMEDA GATEWAY
2900 MAIN STREET
ALAMEDA, CA 94501

October 2001

GREENSFELDER & ASSOCIATES

1548 Jacob Avenue, San Jose, CA 95118 Phone: (408) 267-6427 Cell: (510) 385-4308 Fax: (510) 522-6259

A REPORT DOCUMENTING
A LIMITED SITE ASSESSMENT

IN THE AREA OF
THREE FORMERLY REMOVED UNDERGROUND STORAGE TANKS (USTs)

Beneath the site at:

ALAMEDA GATEWAY
2900 MAIN STREET
ALAMEDA, CA 94501

Roger Greensfelder 9/21/01

Roger Greensfelder PhD
CA Registered Geologist # 3011

Helen Mawhinney 9/21/01

Helen Mawhinney
Senior Environmental Specialist

REGISTERED GEOLOGIST
R. W. GREENSFELDER
No. 03011
STATE OF CALIFORNIA

TABLE OF CONTENTS

1.0 INTRODUCTION

2.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

2.1 Underground Storage Tank Removal

TABLE 1a
Underground Storage Tank Removal
Soil Analytical Results
Following the Removal of Underground Storage Tanks
Analyses: TPHd, TPHg, B, T, E, X
April 11, 1990

TABLE 1b
Groundwater Analytical Results
Following the Removal of Underground Storage Tanks
TPHd, TPHg, B, T, E, X
April 11, 1990

2.2 Excavation of Contaminated Soil

2.3 Groundwater Monitoring Wells

Table IIa
Soil Analytical Results
Installation of Three Groundwater Monitoring Wells
TOG, TEH, TVH, B, T, E, X, Lead
On August 26, 1992

Table IIb
Soil Analytical Results
Installation of Three Groundwater Monitoring Wells
TVH as Gasoline
On August 26, 1992

Table IIc
Soil Analytical Results
Installation of Three Groundwater Monitoring Wells
Kerosene Range, Diesel Range
On August 26, 1992

TABLE III
Monitoring Wells
Groundwater Analytical Results
TOG, TPHd, TPHg, B, T, E, X, Lead, PAH, TDS

3.0 SCOPE OF SERVICES

3.1 Soil Boring Installation

3.2 Soil Sample QA/QC

3.3 Groundwater Sample Collection

3.4 Soil and Groundwater Analyses

3.5 Analytical Results

~~3.5 Analytical Results~~

TABLE IVa
Limited Site Assessment
Area of Former 1,100-gallon Fuel Oil UST - Tank# 137
Soil Sample Analytical Results
Performed on May 18, 2001
TPHmo, TPHd, TPHg, B, T, E, X, MTBE, PNAs

TABLE IVb
Limited Site Assessment
Area of Former 1,100-gallon Fuel Oil UST - Tank# 137
Groundwater Sample Analytical Results
Performed on May 18, 2001
TPHmo, TPHd, TPHg, B, T, E, X, MTBE, PNAs

TABLE Va
Limited Site Assessment
Area of Former 7,000-gallon Gasoline UST - Tank #85a
and
Former 600-gallon Diesel - Tank #85b
Soil Sample Analytical Results
Performed on May 18, 2001
TPHmo, TPHd, TPHg, B, T, E, X, MTBE, PNAs

TABLE Vb
Limited Site Assessment
Area of Former 7,000-gallon Gasoline UST - Tank #85a
and
Former 600-gallon Diesel - Tank #85b
Groundwater Sample Analytical Results
Performed on May 18, 2001
TPHmo, TPHd, TPHg, B, T, E, X, MTBE, PNA

3.6 Decontamination

3.7 Grouting of Soil Borings

4.0 RELEASE REPORTING

APPENDICES

APPENDIX A: FIGURES

Figure 1. Site Location Map

Figure 2. Site Plan Map

Figure 3. Former 1,100-Gallon Fuel Oil UST
Tank 137
and Sample Locations

Figure 4. Former 600-Fuel Oil/Diesel UST
Tank 133
and Sample Locations

Figure 5. Former 600-Gallon Diesel UST
7,000-Gallon Gasoline UST
and Sample Locations

Figure 6. Monitoring Well Locations

Figure 7. Soil Boring Locations Area of Tank 137

Figure 8. Soil Boring Locations Area of Tank 85A & 85B

APPENDIX B: SOIL BORING LOGS

APPENDIX C: CHAIN OF CUSTODY
LABORATORY ANALYTICAL RESULT

1.0 INTRODUCTION

The following report documents a limited site assessment in the area(s) of three former underground storage tanks (USTs). The report also presents a brief history of the removal of underground storage tanks, excavation, groundwater monitoring well installation, as well as the current limited site assessment. The site location is Alameda Gateway, 2900 Main Street, Alameda, California. The site location is shown in the map of Figure 1. (Appendix A).

The purpose of the assessment was to attempt to determine the lateral and vertical migration of contamination in soil and groundwater. These tanks are a former 1,100-gallon fuel oil (Tank# 137), 7,000-gallon gasoline and 600-gallon diesel (Tank #85a and #85b, respectively, which shared a common tank pit) UST. Each tank was named after the number of the building they were located next to. Tank #133 was not included in this investigation. Refer to Appendix A, Figure 3, 4, and 5 for UST locations.

2.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

2.1 Underground Storage Tank Removal

On April 11, 1990, four underground storage tanks (USTs) were removed from the above referenced site. These were two 600-gallon diesel, one 7,000-gallon gasoline, and a 1,100-gallon fuel oil UST.

Hereafter they are referred to as: 1,100-gallon fuel oil (Tank# 137); 600-gallon diesel (Tank# 133), 7,000-gallon gasoline and 600-gallon diesel (Tank #85a and #85b, respectively, which shared a common tank pit). Each tank was named after the site building number they were located
next to.

Groundwater was encountered within each of these tank pits at a depth of approximately 4' below ground surface. For analytical results, refer to Tables 1a and 1b. For tank locations refer to Appendix A Maps, Figure 2.

Soil samples were not collected beneath the product lines associated with the 600-gallon and 7,000-gallon USTs (tanks 85a and 85b).

For analytical results refer to Table 1a.

TABLE 1a
Soil Analytical Results
Following the Removal of Underground Storage Tanks
Soil Samples were Collected Approximately 6" Above Groundwater
April 11, 1990

All results are reported in ppm.

Tank Sample#	TPHd	TPHg	B	T	E	X
1,100-GAL. AG-137-01	6.7	ND	ND	ND	ND	ND
1,100-GAL. AG-137-02	38,000.00	850.0	2.2	4.3	4.3	29.0
1,100-GAL. *AG-137-03	ND	2.8	0.1	ND	ND	ND
600-GAL		NONE COLLECTED				
7,000-GAL. AG-85-01	NA	4.8	ND	ND	ND	ND
7,000-GAL. AG-85-02	NA	1.1	ND	ND	ND	ND
7,000-GAL. AG-85-03	ND	4.8	ND	ND	ND	ND
600-GAL AG-133-01	1,100.0	52.0	0.3	<0.1	0.4	0.7
DETECTION LIMIT	5.0	1.0	0.1	0.1	0.1	0.1

NA = Not analyzed
ND = Not detected

* Soil sample AG-137-03 was collected at the same depth as sample AG-137-02 (2.5 feet) but two feet east of the pit sidewall and outside of the tank pit cavity.

TABLE 1b
Groundwater Analytical Results
Following The Removal of Underground Storage Tanks
April 11, 1990

All groundwater results are reported in ppb

Tank Sample#	TPHd	TPHg	B	T	E	X
7,000-GAL. AG-85-03	NA	43,300.0	37.0	ND	ND	300.0
DETECTION LIMIT	NA	50.0	0.5	0.5	0.5	0.5

NA = Not analyzed
ND = Not detected

2.2 Excavation of Contaminated Soil

According to the Mittelhauser Underground Storage Tank Removal Report dated June 1990, soil along the southeast portion of the excavation, where the diesel tank (Tank #85) had been located, was over-excavated laterally ten feet to the north and east of the tank location, and approximately two-feet to the south. The southern extent of excavation was limited by the close proximity of a railroad spur. The limit of the contamination was not found and the excavation was discontinued until a later time. Soil samples were not collected subsequent to excavation.

Underground utilities in the area of Tank #137 prevented excavation in this area.

2.3 Groundwater Monitoring Wells

On August 26, 1992, three groundwater monitoring wells were installed in each former tank pit area. Each well was installed within ten-feet of and in the assumed downgradient flow of each tank pit.

These were monitoring well MW-1 located north of and adjacent to Tank #137, MW-2 located between Buildings# 133 and 72, and MW-3 located north of and adjacent to Tank #85. Analytical results are presented in Table 2a and 2b.

Table IIa
Soil Analytical Results
Installation of Three Groundwater Monitoring Wells
On August 26, 1992

All groundwater results are reported in ppm

Tank Area Sample #/Depth	TOG	TEH	TVH	B	T	E	X	Lead
MW-1 #137 3.0'	140.0	4,900.0	NA	ND	ND	ND	ND	13.0
MW-2 #133 2.5'	NA	NA	ND	ND	ND	ND	ND	ND
3.5'	65.0	NA	ND	ND	ND	ND	ND	46.0
MW-3 #85A & B 3 @ 2.5'	1,600.0	12,000.0	ND	ND	ND	ND	ND	9.0

Table IIb
Soil Analytical Results
Installation of Three Groundwater Monitoring Wells
On August 26, 1992

All groundwater results are reported in ppm.

Tank Area Sample #/Depth	TVH as Gasoline
MW-1 @ 3.0	NA
MW-2 @ 2.5'	ND
MW-2 @ 3.5'	ND
MW-3 @ 2.5'	ND

NA = Not analyzed
ND = Not detected

Table IIc

Soil Analytical Results

Installation of Two Groundwater Monitoring Wells

On August 26, 1992

All groundwater results are reported in ppm.

Tank Area Sample#/Depth	Kerosene Range	Diesel Range
MW-1 @ 3.0'	NA	4,900.0
MW-2 @ 3.5'	NA	65.0
MW-3 @ 2.5'	NA	12,000.0

NA = Not analyzed
ND = Not detected

TABLE III
Monitoring Wells
Groundwater Analytical Results

Date	TOG ppm mg/l	TPHd ppm	TPHg ppm	B ppb ug/l	T ppb	E ppb	X ppb	Lead ppb	PNA ppb	TDS ppm
MW-1										
08/17/92	< 5	4.8	NA	< 0.5	< 0.5	0.6	< 0.5	9.0	NA	NA
11/25/92	< 5	3.9	NA	ND	ND	ND	ND	< 3.0	NA	NA
02/19/93	< 5	1.9	NA	ND	ND	ND	ND	3.0	NA	NA
12/28/95	1.0	3.7	0.09	ND	ND	ND	< 2.0	NA	< 10.0	NA
03/29/96	0.7	1.5	< 0.05	ND	ND	ND	< 2.0	NA	< 10.0	NA
06/14/01	ND	0.120	ND	ND	ND	ND	ND	NA	NA	NA
MW-2										
08/17/92	<5.0	0.82	NA	<0.5	<1.0	<0.5	<0.5	10.0	NA	NA
11/25/92	12.0	5.6	NA	<0.5	<0.5	<0.5	<0.5	<3.0	NA	NA
02/19/92	10.0	9.0	NA	<0.5	<0.5	<0.5	<0.5	3.0	NA	NA
~~12/28/95~~	~~30.0~~	~~20.0~~	~~23.0~~ ✓	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<20.0~~	~~NA~~	~~24.0~~	~~NA~~
03/29/96	130.0	130.0	1.8	<0.5	<0.5	<0.5	<20.0	NA	ND	NA
06/14/01	0.25" Sheen on Water -- Well Not Sampled									
MW-3										
8/17/92	< 5.0	4.0	0.073	< 1.0	< 1.0	< 1.0	< 1.0	360	NA	NA
11/25/92	< 5.0	14.0	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5	< 3.0	NA	NA
2/19/93	< 5.0	< 0.05	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5	10.0	NA	NA
12/28/95	2.0	3.8	< 0.05	< 0.5	< 0.5	< 0.5	< 2.0	NA	< 10.0	5,000.0
3/29/96	< 0.5	0.39	< 0.05	< 0.5	< 0.5	< 0.5	< 2.0	NA	< 10.0	NA
06/14/01	Well could not be found									

NA = Not analyzed
ND = Not detected

3.0 SCOPE OF SERVICES

This report documents a limited site assessment in the area(s) of three former underground storage tanks (USTs). The purpose of the assessment was to attempt to determine the lateral and vertical migration of contamination in soil and groundwater. These tanks are a former 1,100-gallon fuel oil (Tank# 137), 7,000-gallon gasoline and 600-gallon diesel UST (Tank #85a and #85b, respectively, which shared a common tank pit). Each tank was named after the number of the building they were located next to. Tank #133 was not included in this investigation.

3.1 Soil Boring Installation

Twelve two-inch diameter soil probes were advanced using truck-mounted hydraulic equipment to push and/or hammer, the Geoprobe ®, sampler into undisturbed soil. These were six borings in the area of Tank#137, and six in the area of former Tanks #85A and 85B.

Continuous soil samples were retrieved in clear plastic liners, so as to allow continuous profiling of the lithologic column. The probes were logged by a State Licensed Registered Geologist using the Unified Soil Classification System.

Soil samples were collected at a shallow depth and within the vadose/saturated capillary zone. Refer to Table IVa and V$_a$ for sample depths. Soil samples were screened using a GasTech Model 1314.

3.2 Soil Sample QA/QC

The clear plastic liners were cut and prepared for transport to an analytical laboratory, The liner was cut to a six-inch length, using a clean cutting tool designed specifically for this purpose. Each end of the tube was be covered with 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 was entered on the chain of custody (COC) document. The samples were then placed in a clean cooler, with ice in a plastic container, pending transport to an analytical laboratory.

3.3 Groundwater Sample Collection

One groundwater sample was collected within each boring. Lowering a clean stainless steel bailer into the boring collected water samples. After allowing the bailer to fill, the water was then poured into two 40-ml volatile organics analysis vials (VOAs) and two one-liter amber bottles to a positive meniscus eliminating headspace. The bottles were labeled with a project number, name of the sampler, and time of sampling, then placed on ice for transport to a certified hazardous waste analytical laboratory, under chain of custody, for analysis.

3.4 Soil and Groundwater Analyses

Soil samples were analyzed for Total Petroleum Hydrocarbon as diesel (TPHd, using EPA Method 3550), Total Petroleum Hydrocarbons as gasoline, benzene, toluene, ethylbenzene and total xylenes and MTBE ((TPHg,, BTEX, MTBE, using EPA Method 5030/8020), Total Petroleum Hydrocarbons as diesel (TPHd, using EPA method 3550), Total Petroleum Hydrocarbons as motor oil (TPHmo, using EPA Method with silica gel std, using EPA Method 8015-modified), Soil Sample 85-1 was analyzed for Polynuclear Aromatics (PNAs, using EPA Method 8270C.

All groundwater samples were analyzed for Total Petroleum Hydrocarbons as diesel (TPHd) using EPA method 3550, Total Petroleum Hydrocarbons as gasoline, benzene, toluene, ethylbenzene and total xylenes and MTBE (TPHg, BTEX, using EPA Method 5030/8020/602), and Total Petroleum Hydrocarbons as motor oil (TPHmo, using EPA Method with silica gel std, using EPA Method 8015-modified).

3.5 Analytical Results

TABLE IVa
Limited Site Assessment
Area of Former 1,100-gallon Fuel Oil UST - Tank# 137
Soil Sample Analytical Results
Performed on May 18, 2001

Sample# Depth	TPHmo mg/Kg	TPHd mg/Kg	TPHg	B	T	E	X	MTBE	PAHs
			mg/K		----------	----------	mg/K	----------	mg/K
137-1 3.5'-4.0'	1,000.0	340.0	ND	ND	ND	ND	ND	ND	NA
137-2 3.5'-4.0'	2,900.0	ND	ND	ND	ND	ND	ND	ND	NA
137-3 3.5'-4.0'	4,900.0	ND	ND	ND	ND	ND	ND	ND	NA
137-4 3.5'-4.0'	460.0	ND	ND	ND	ND	ND	ND	ND	NA
137-5 3.5'-4.0'	1,600.0	ND	ND	ND	ND	ND	ND	ND	NA
137-6 3.5'-4.0'	29.0	13.0	ND	ND	ND	ND	ND	ND	NA

ND – Non Detect
NA = Not Analyzed

TABLE IVb
Limited Site Assessment
Area of Former 1,100-gallon Fuel Oil UST - Tank# 137
Groundwater Sample Analytical Results
Performed on May 18, 2001

Sample#	TPHmo	TPHd	TPHg	B	T	E	X	MTBE	PNAs
Depth	ug/L	ug/L	ug/L	----------ug/L----------					mg/K
137-1	ND	ND	ND	ND	ND	ND	ND	ND	NA
137-2	ND	65.0	ND	ND	ND	ND	ND	ND	NA
137-3	3,500.0	2,400.0	ND	ND	ND	ND	ND	ND	NA
137-4	ND	610.0	120.0	ND	ND	ND	ND	ND	NA
137-5	280.0	230.0	120.0	ND	ND	2.0	12.0	ND	NA
137-6	510.0	390.0	56.0	ND	ND	ND	ND	ND	NA

TABLE Va
Limited Site Assessment
Area of Former 7,000-gallon Gasoline UST - Tank #85a
and
Former 600-gallon Diesel - Tank #85b
Soil Sample Analytical Results
Performed on May 18, 2001

Sample#	TPHmo	TPHd	TPHg	B	T	E	X	MTBE	PNAs
Depth	mg/K	mg/K	mg/K	----------mg/K----------					mg/K
85-1 3'-3.5'	5,900.0	5,200.0	62.0	0.53	0.12	ND	0.99	ND	ND
85-2 3'-3.5'	4,100.0	3,200.0	71.0	0.25	0.29	0.69	1.8	ND	NA
85-3 2'-2.5'	48.0	ND	ND	ND	ND	ND	ND	ND	NA
85-4 2'-2.5'	3,500.0	ND	ND	ND	ND	ND	ND	ND	NA
85-5 2'-2.5'	320.0	ND	ND	ND	ND	ND	ND	ND	NA
85-6 2'-2.5'	140.0	ND	ND	ND	ND	ND	ND	ND	NA

TABLE Vb
Limited Site Assessment
Area of Former 7,000-gallon Gasoline UST - Tank #85a
and
Former 600-gallon Diesel - Tank #85b
Groundwater Sample Analytical Results
Performed on May 18, 2001

Sample# Depth	TPHmo ug/L	TPHd ug/L	TPHg ug/L	B	T	E	X	MTBE
				ug/L				
85-1	5,900.0	4,800.0	660.0	6.4	3.4	1.1	12.0	ND
85-2	ND	100.0	ND	ND	ND	ND	ND	ND
85-3	ND	ND	ND	ND	ND	ND	1.8	ND
85-4	ND	150.0	130.0	ND	0.81	6.6	34.0	ND
85-5	ND	160.0	75.0	0.76	0.60	ND	ND	ND
85-6	ND	240.0	ND	ND	ND	ND	ND	ND

3.6 Decontamination

Prior to arriving on site the drill rig and all parts that may approach the borings were decontaminated using a hot pressure wash.

3.7 Grouting of Soil Borings

Soil boring were grouted to grade using concrete with 3% bentonite slurry.

4.0 RELEASE REPORTING

As requested, a copy of this report was forwarded to the Alameda County Department of Environmental Health Services, Hazardous Materials Division. This address is provided for your records.

County of Alameda
Department of Environmental Health Services
Hazardous Materials Division
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
Attn: Mr. Barney M. Chan
Hazardous Materials Specialist

APPENDIX A

FIGURES

Figure 1. Site Location Map

Figure 2. Site Plan

Figure 3. 1,100-Fuel Oil UST (Tank 137)

Figure 4. 600-gallon fuel oil UST (Tank# 133)

Figure 5. 600-gallon diesel & 7,000-gallon gasoline UST (Tank 85A and 85B)

Figure 6. Groundwater Monitoring Wells Locations

Figure 7. Soil Boring Locations

APPENDIX A

FIGURES

Figure 1. Site Location Map

Figure 2. Site Plan

Figure 3. 1,100-Fuel Oil UST (Tank 137)

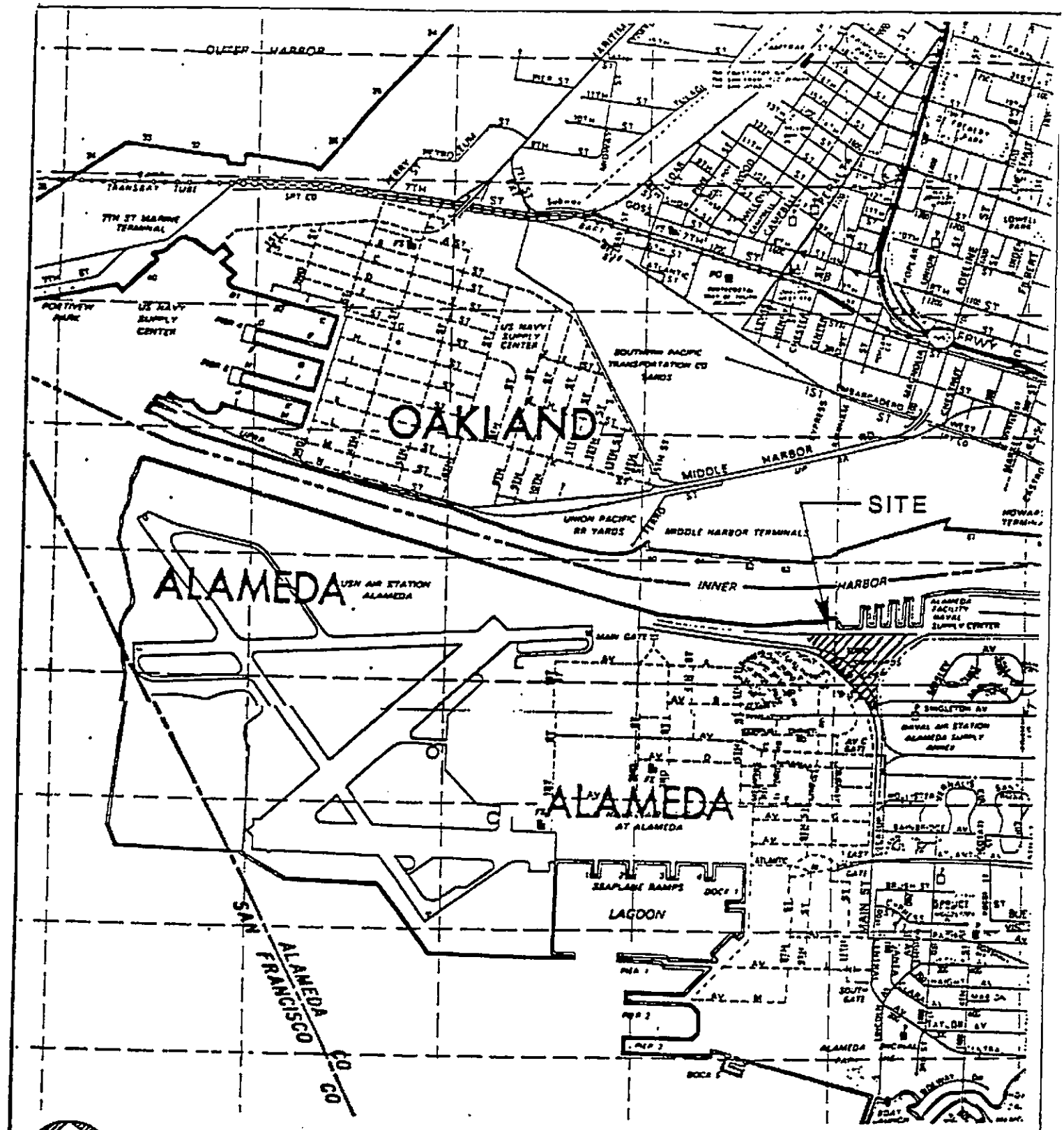
Figure 4. 600-Gallon Fuel Oil UST (Tank# 133)

Figure 5. 600-Gallon Diesel & 7,000-Gallon Gasoline UST (Tank 85a and 85b)

Figure 6. Groundwater Monitoring Wells Locations

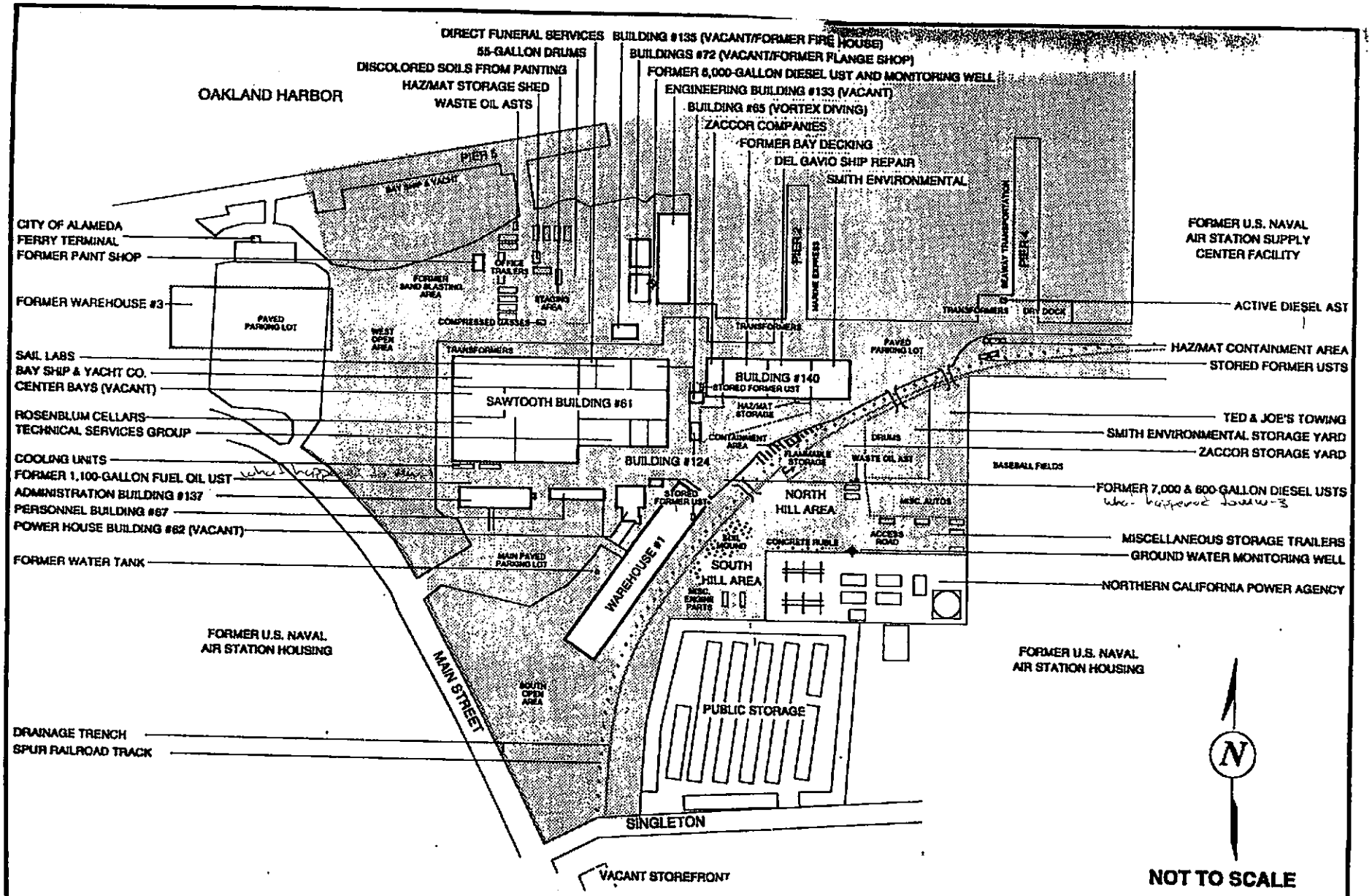
Figure 7. Soil Borings In Area Of Former 1,100-Fuel Oil UST (Tank 137)

Figure 8. Soil Borings In Area Of Former 600-Gallon Diesel & 7,000-Gallon Gasoline UST (Tank 85a And 85b)



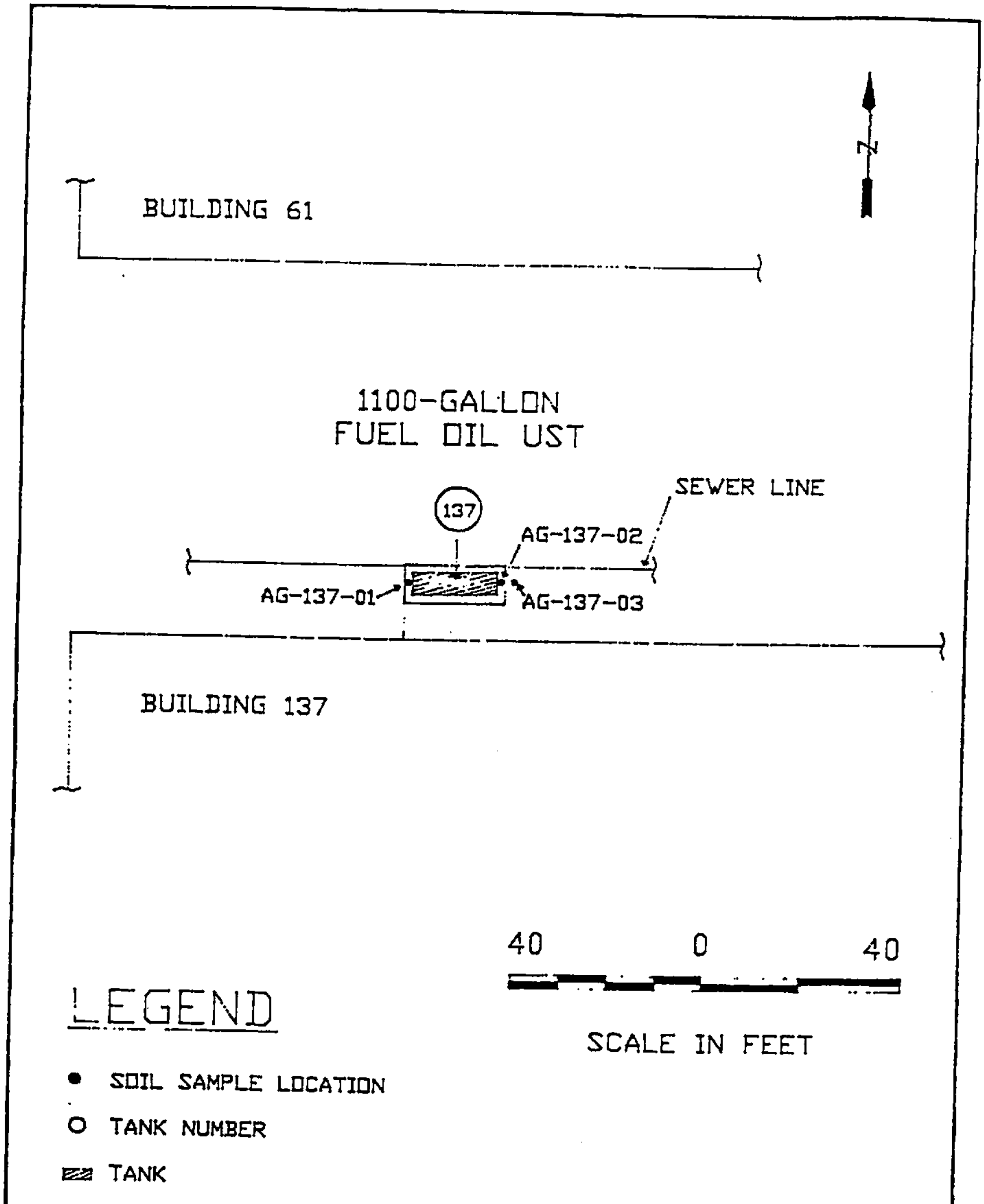
ALAMEDA GATEWAY
2900 MAIN STREET
ALAMEDA, CA 94501

Figure 1.
Site Location Map



ALAMEDA GATEWAY
2900 MAIN STREET
ALAMEDA, CA 94501

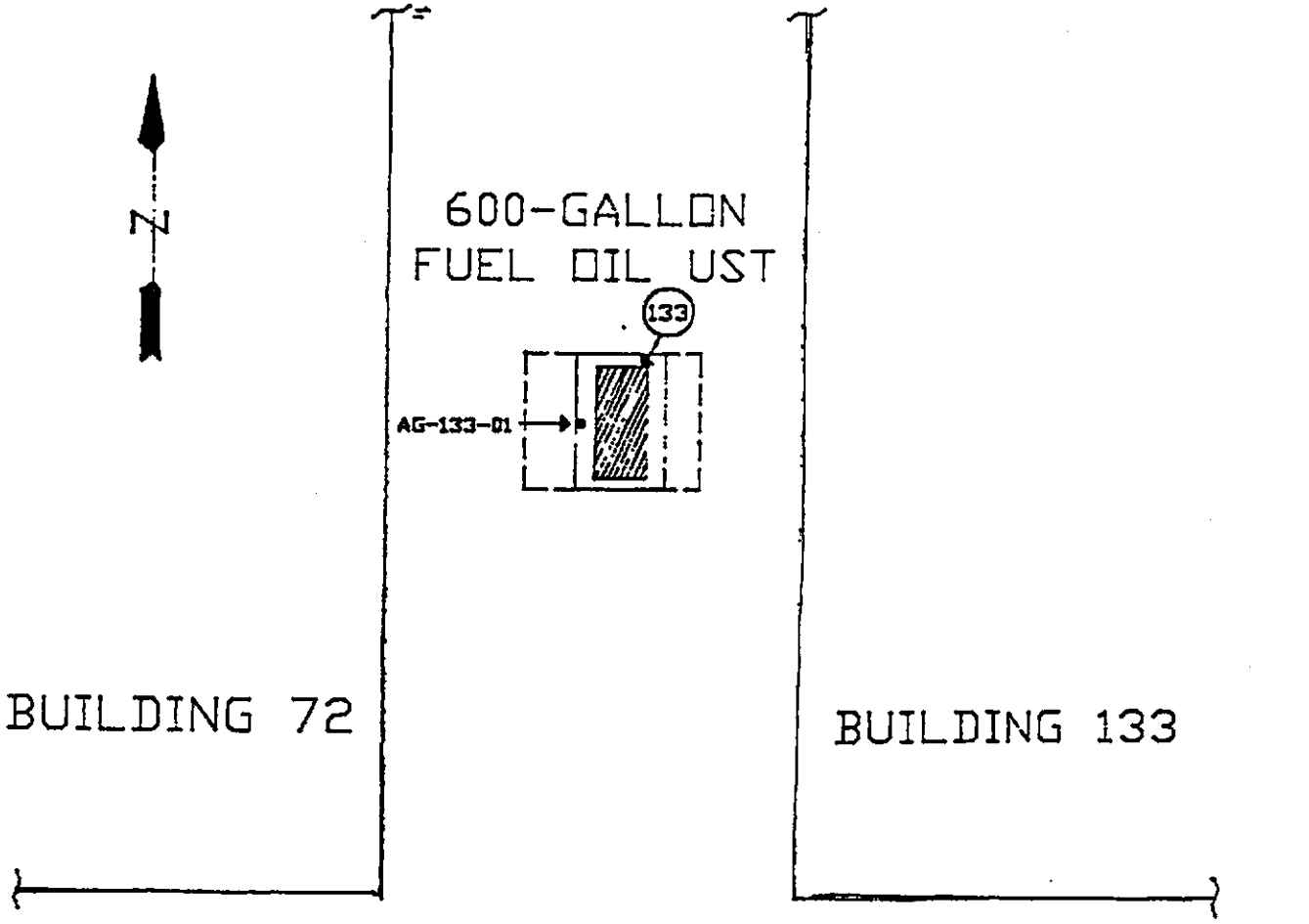
Figure 2. Site Plan



TANK 137 PILOT PLAN
ALAMEDA GATEWAY LTD.
2900 MAIN STREET
ALAMEDA, CA 94501

MITTELHAUSER CORPORATION

Figure 3.



20 0 20

SCALE IN FEET

LEGEND

- TANK
- TANK NUMBER
- SOIL SAMPLE LOCATION
- AREA OF OVEREXCAVATION

TANK 133 PLOT PLAN
ALAMEDA GATEWAY LTD.
2900 MAIN STREET
ALAMEDA, CA 94501

Figure 4.

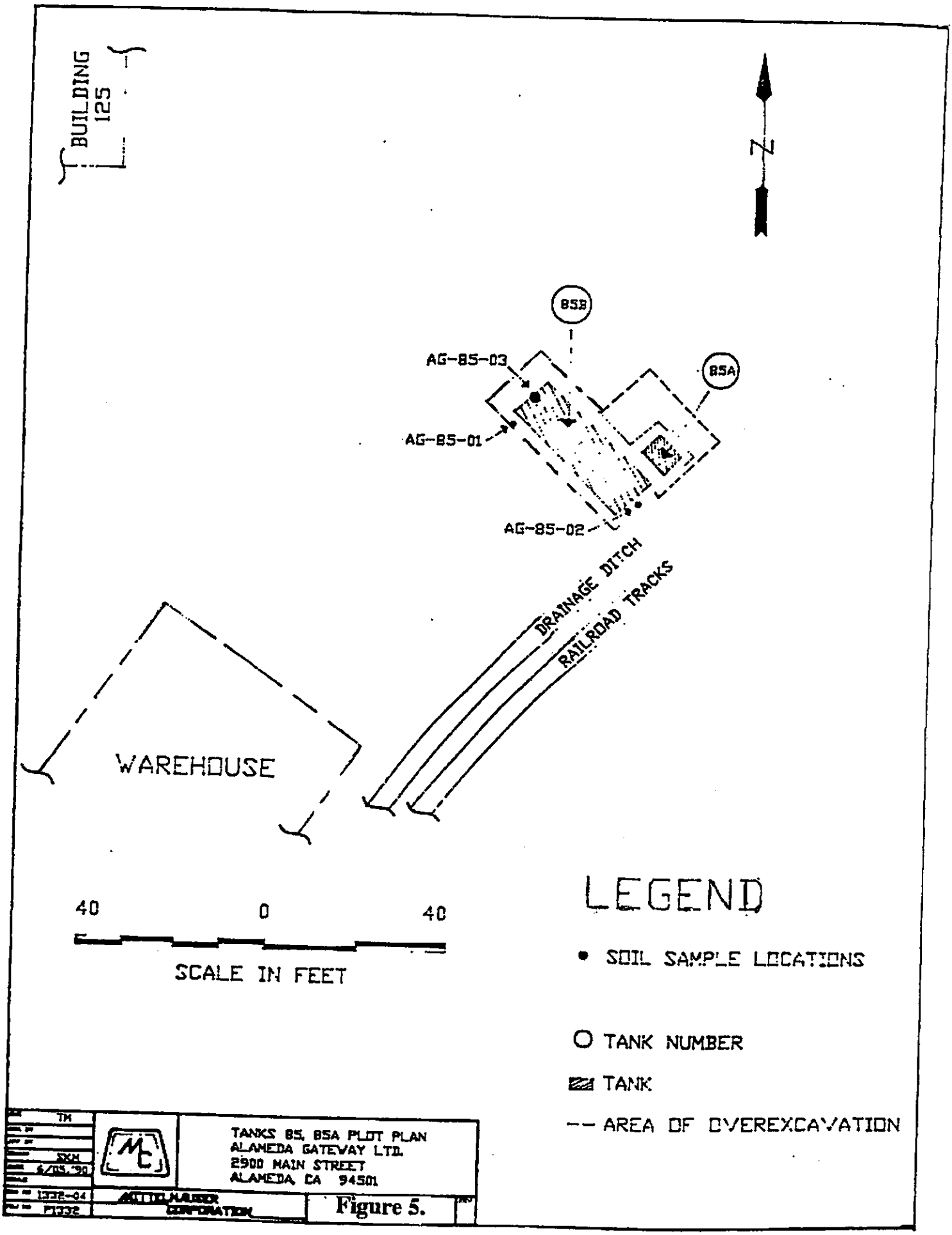
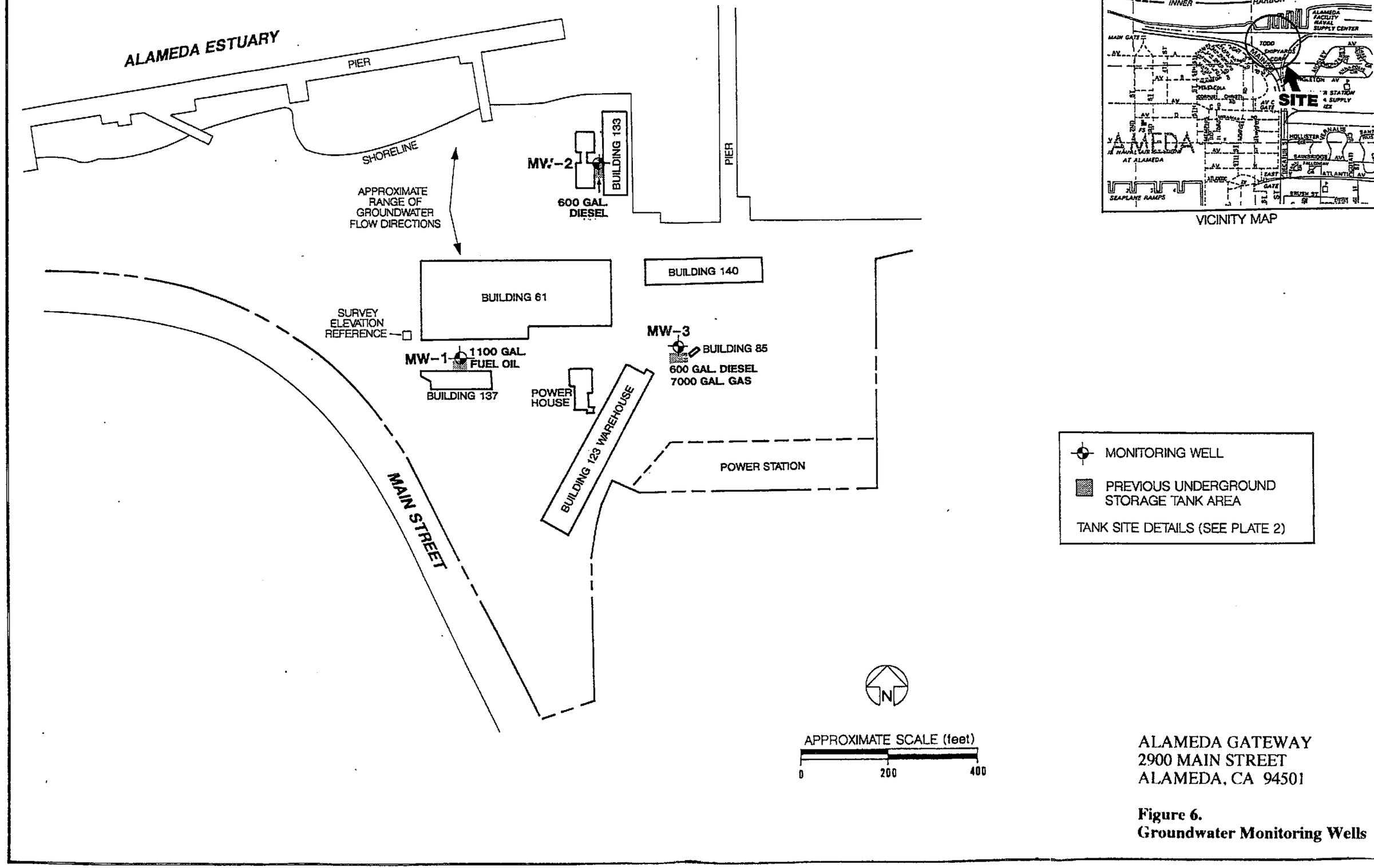
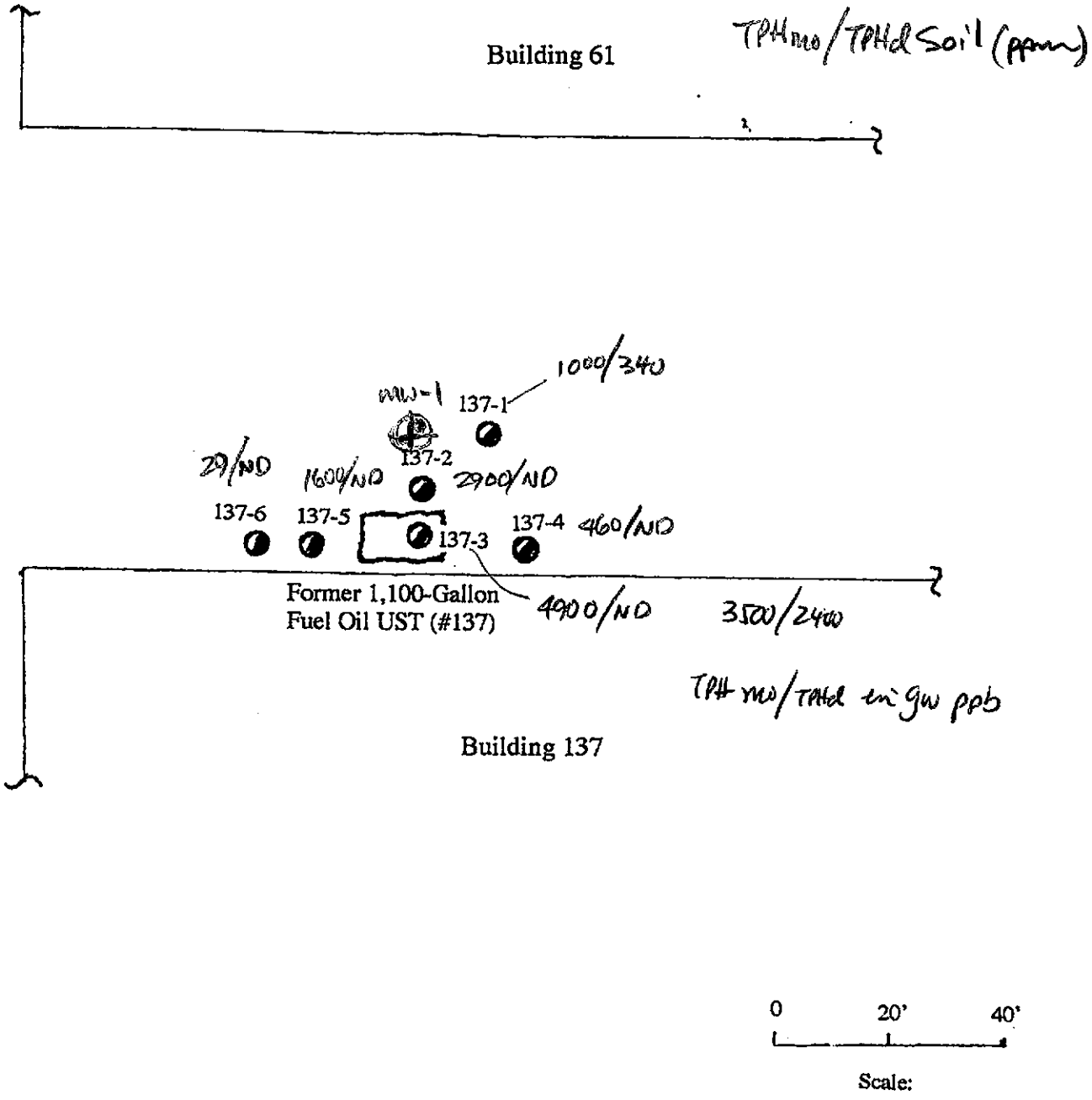

BUILDING 125
N
B5B
B5A
AG-B5-03
AG-B5-01
AG-B5-02
DRAINAGE DITCH
RAILROAD TRACKS
WAREHOUSE
40
0
40
SCALE IN FEET
LEGEND
SOIL SAMPLE LOCATIONS
TANK NUMBER
TANK
AREA OF OVEREXCAVATION
TANKS B5, B5A PLOT PLAN
ALAMEDA GATEWAY LTD.
2900 MAIN STREET
ALAMEDA, CA 94501
ACTIVE MARINE CORPORATION

Figure 5.



ALAMEDA GATEWAY
2900 MAIN STREET
ALAMEDA, CA 94501

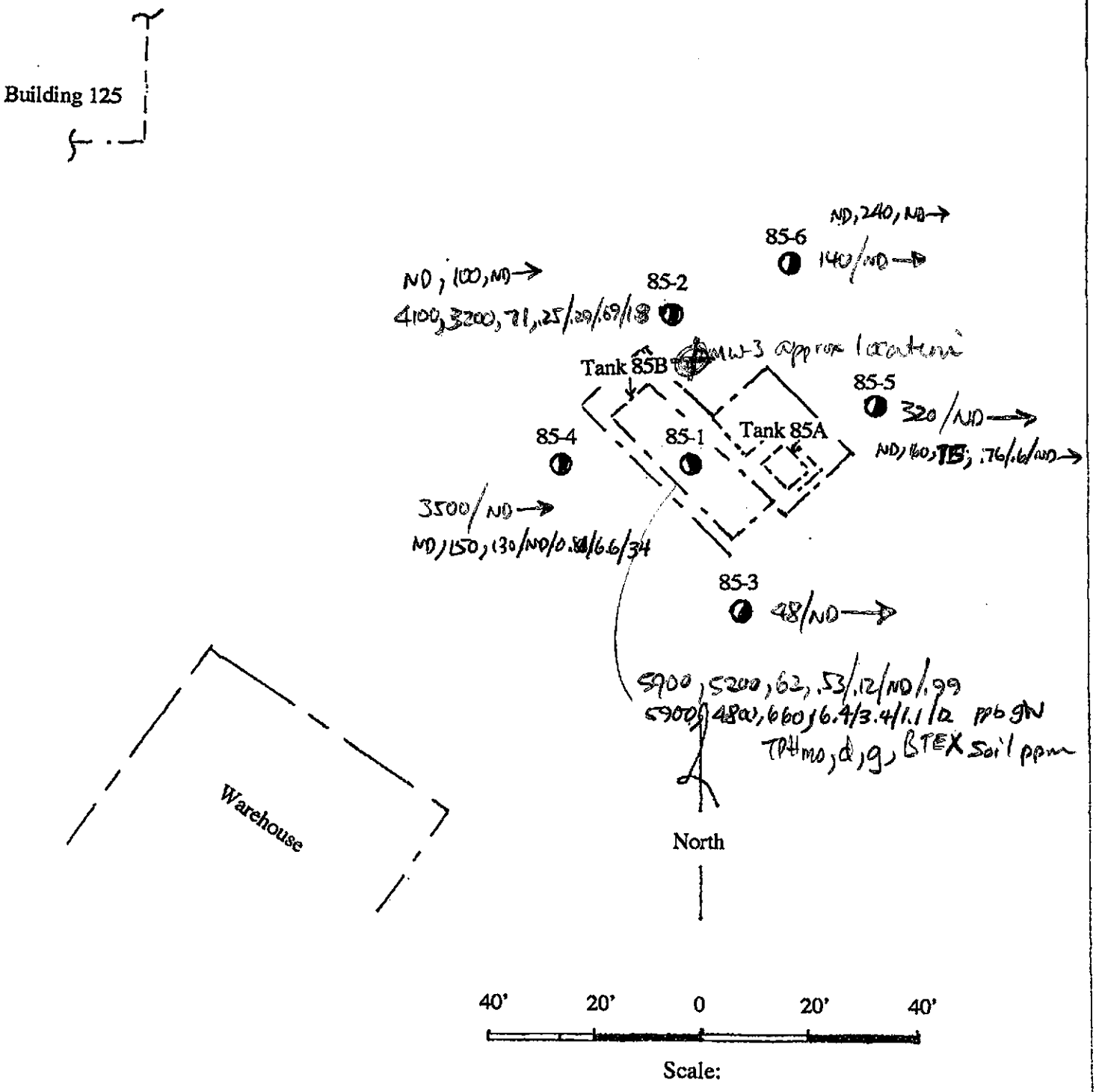
Figure 6.
Groundwater Monitoring Wells



Greensfelder & Associates

Site:
ALAMEDA GATEWAY
2900 MAIN STREET
ALAMEDA, CA

Figure 7.
UST 137
Soil Boring
Location



Greensfelder & Associates

Site:
ALAMEDA GATEWAY
2900 MAIN STREET
ALAMEDA, CA

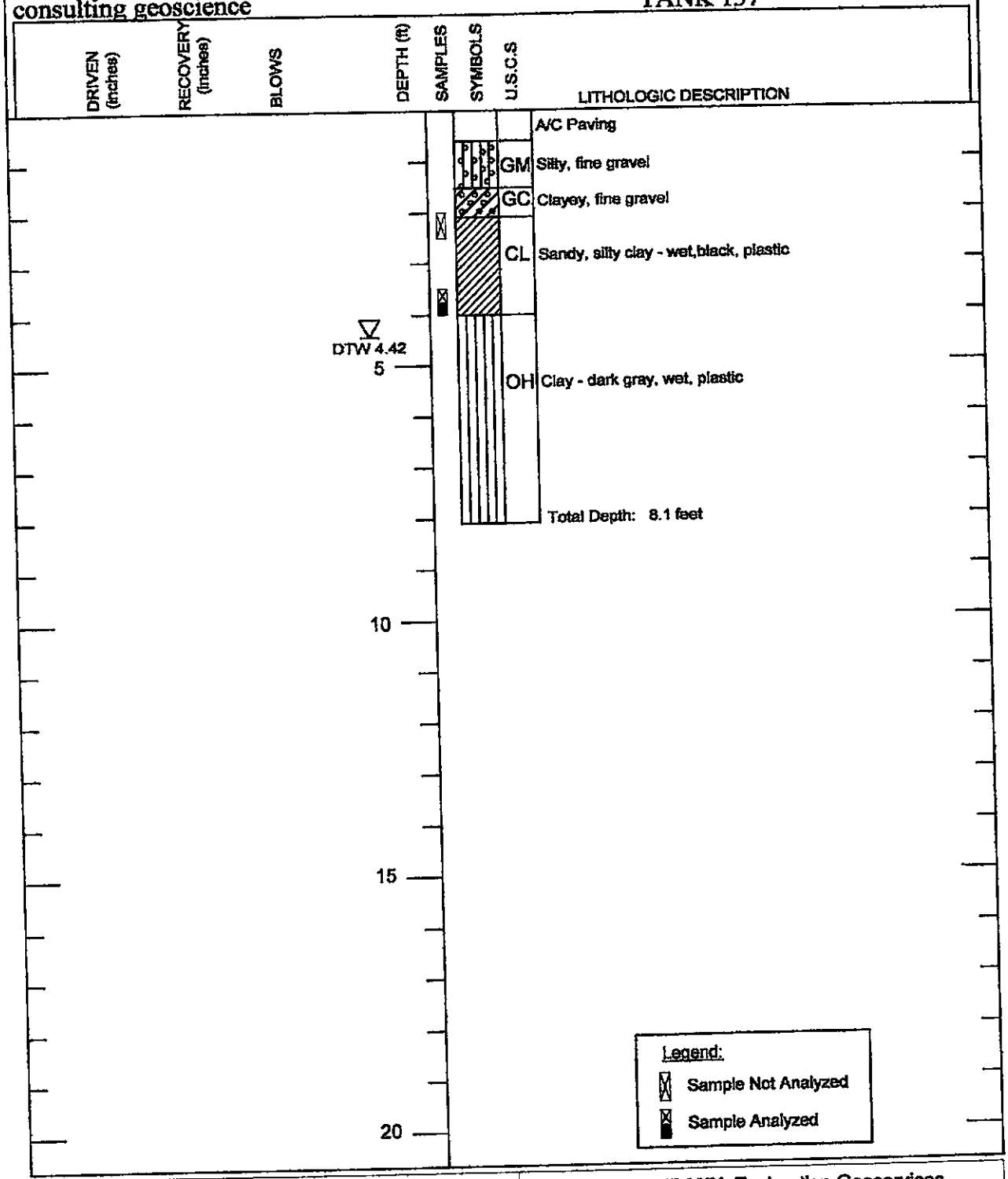
Figure 8.
UST 85A & 85B
Location
Map

APPENDIX B

SOIL BORING LOGS

Greensfelder & Associates
consulting geoscience

LOG OF BORING 137-1
TANK 137

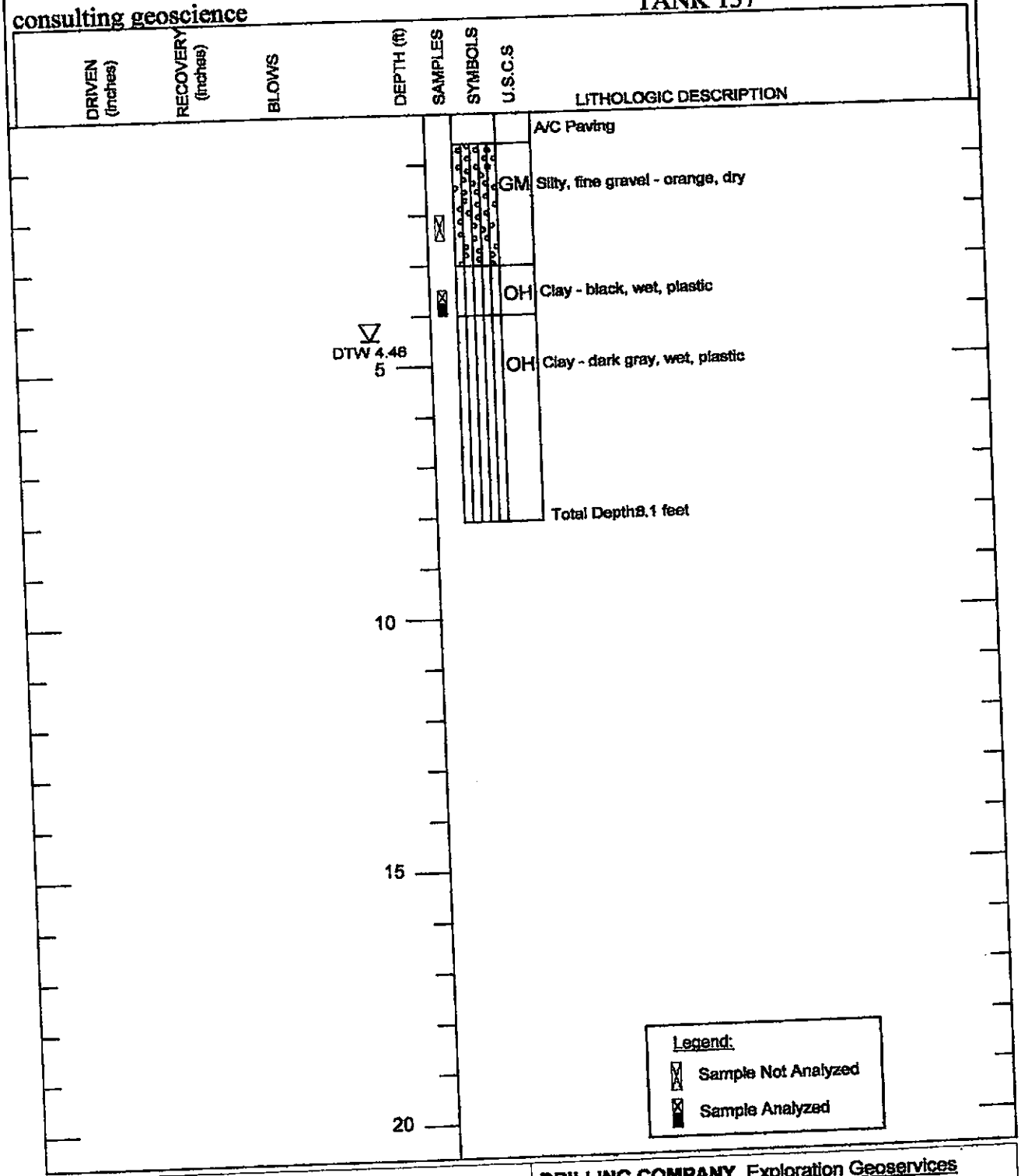


CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda, CA
LOGGED BY Roger Greensfelder CA RG #3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 18, 2001

Greensfelder & Associates
consulting geoscience

LOG OF BORING 137-2
TANK 137

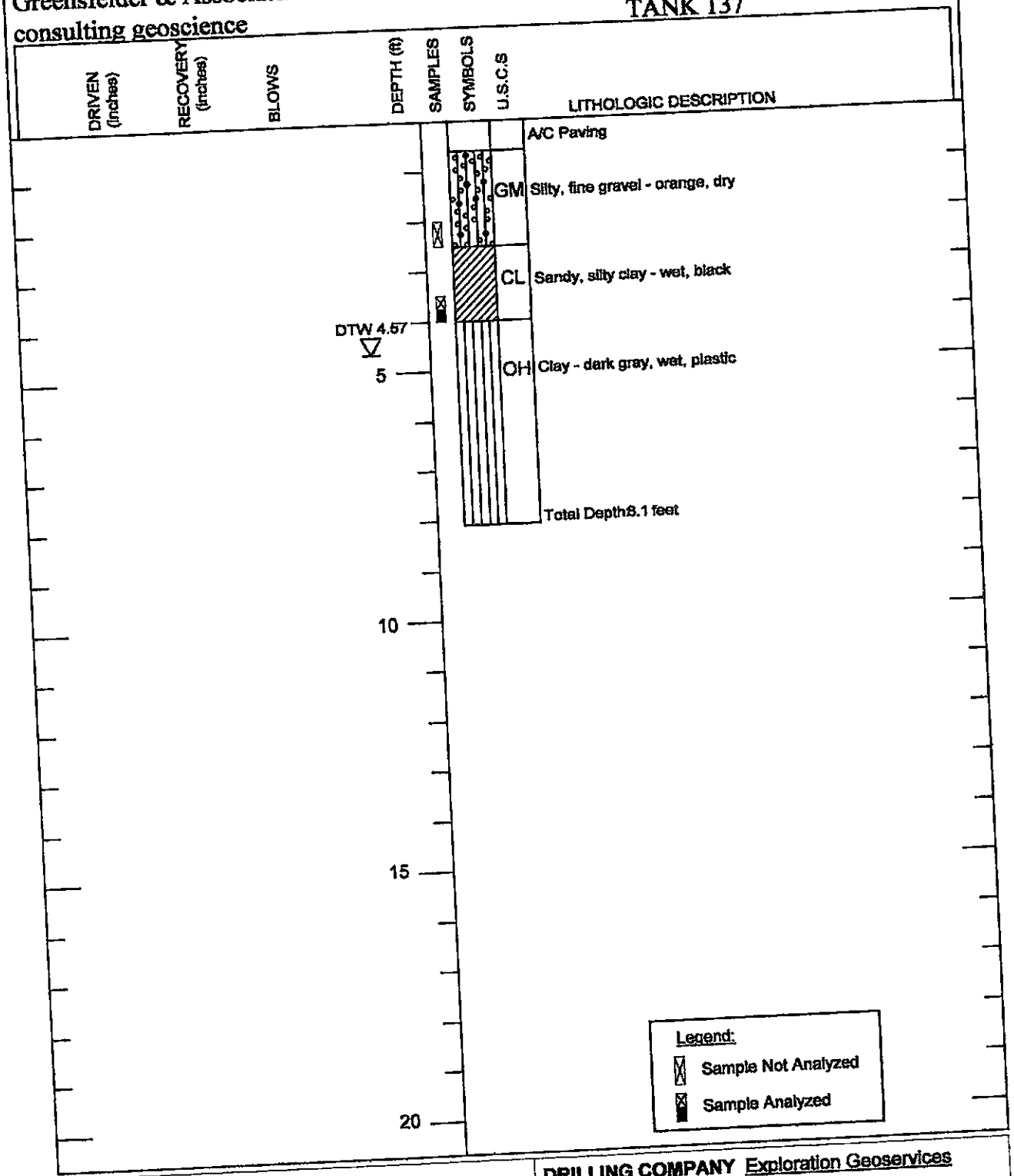


CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda, CA
LOGGED BY Roger Greensfelder CA RG #3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 18, 2001

Greensfelder & Associates
consulting geoscience

LOG OF BORING 137-3
TANK 137

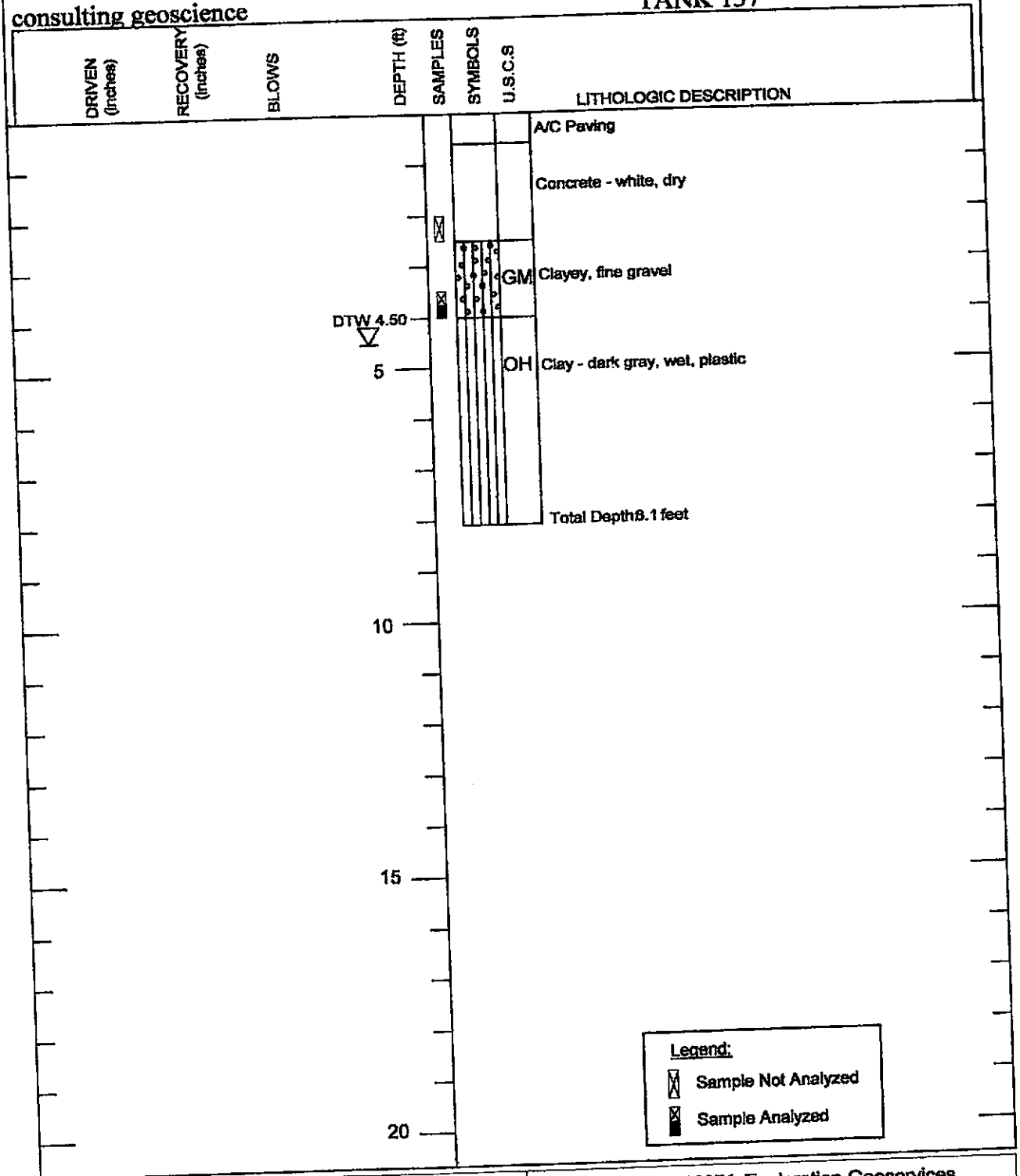


CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda, CA
LOGGED BY Roger Greensfelder CA RG #3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 18, 2001

Greensfelder & Associates
consulting geoscience

LOG OF BORING 137-4
TANK 137

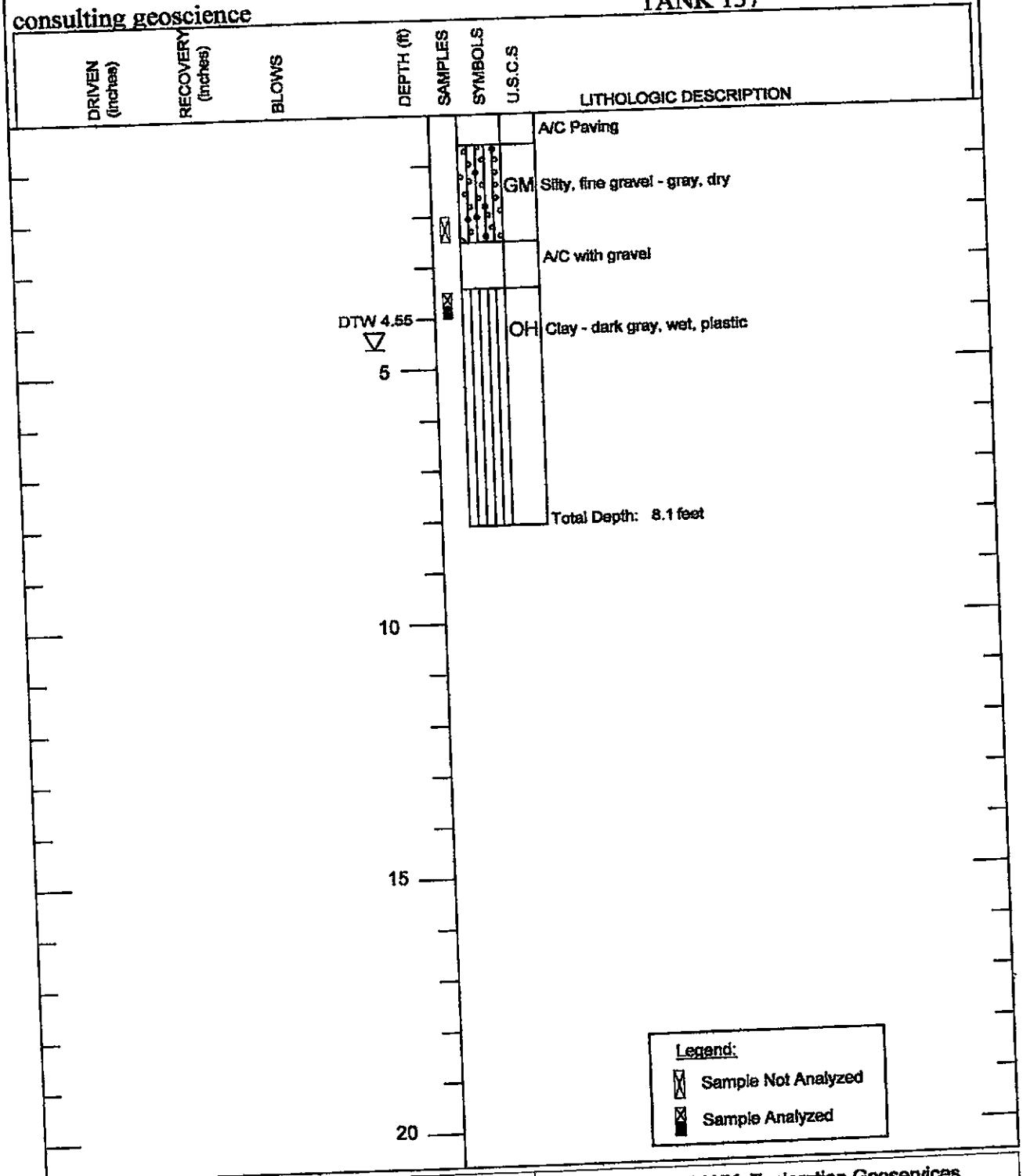


CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda, CA
LOGGED BY Roger Greensfelder CA RG #3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 16, 2001

Greensfelder & Associates
consulting geoscience

LOG OF BORING 137-5
TANK 137

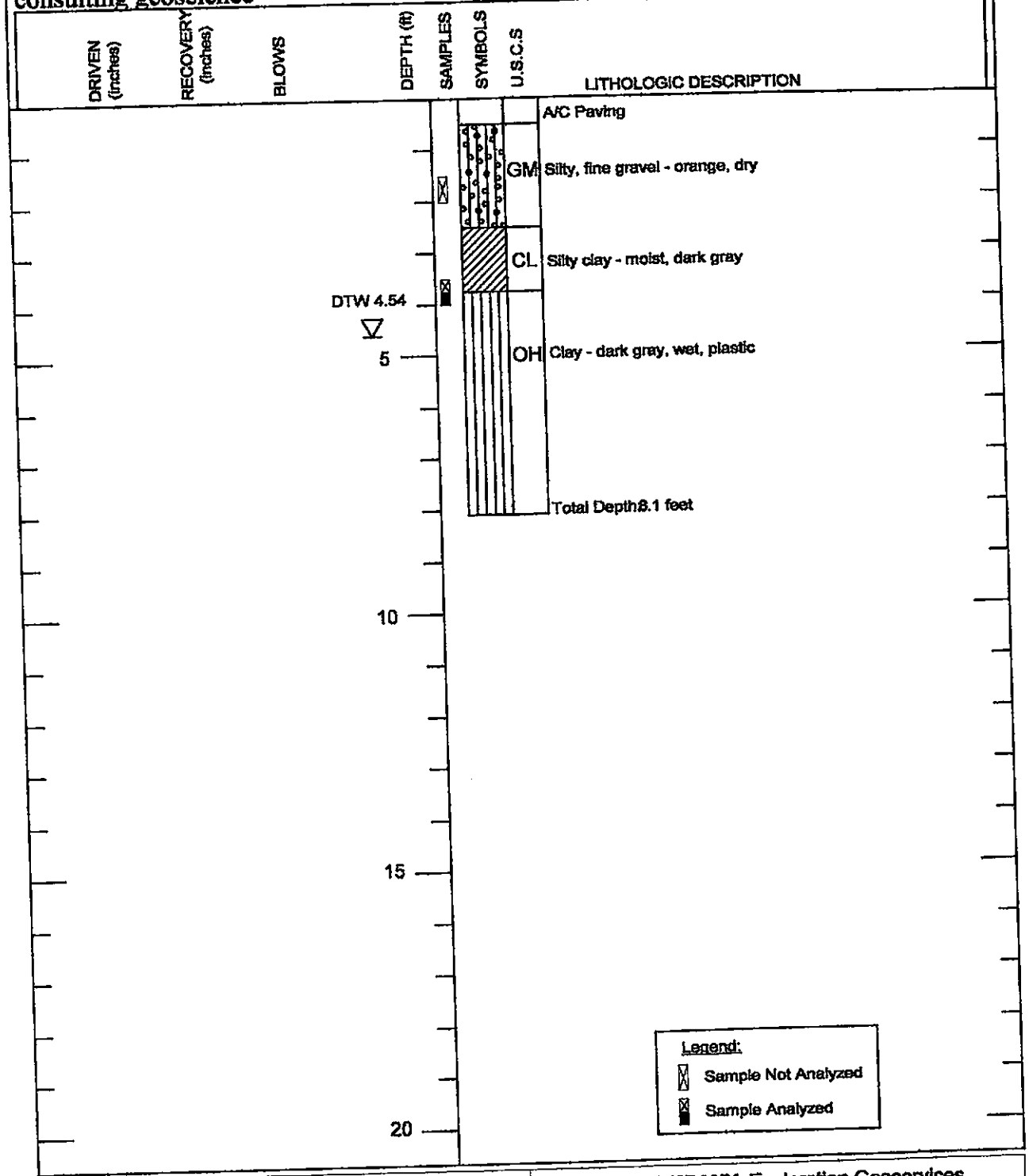


CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda, CA
LOGGED BY Roger Greensfelder CA RG # 3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 18, 2001

Greensfelder & Associates
consulting geoscience

LOG OF BORING 137-6
TANK 137

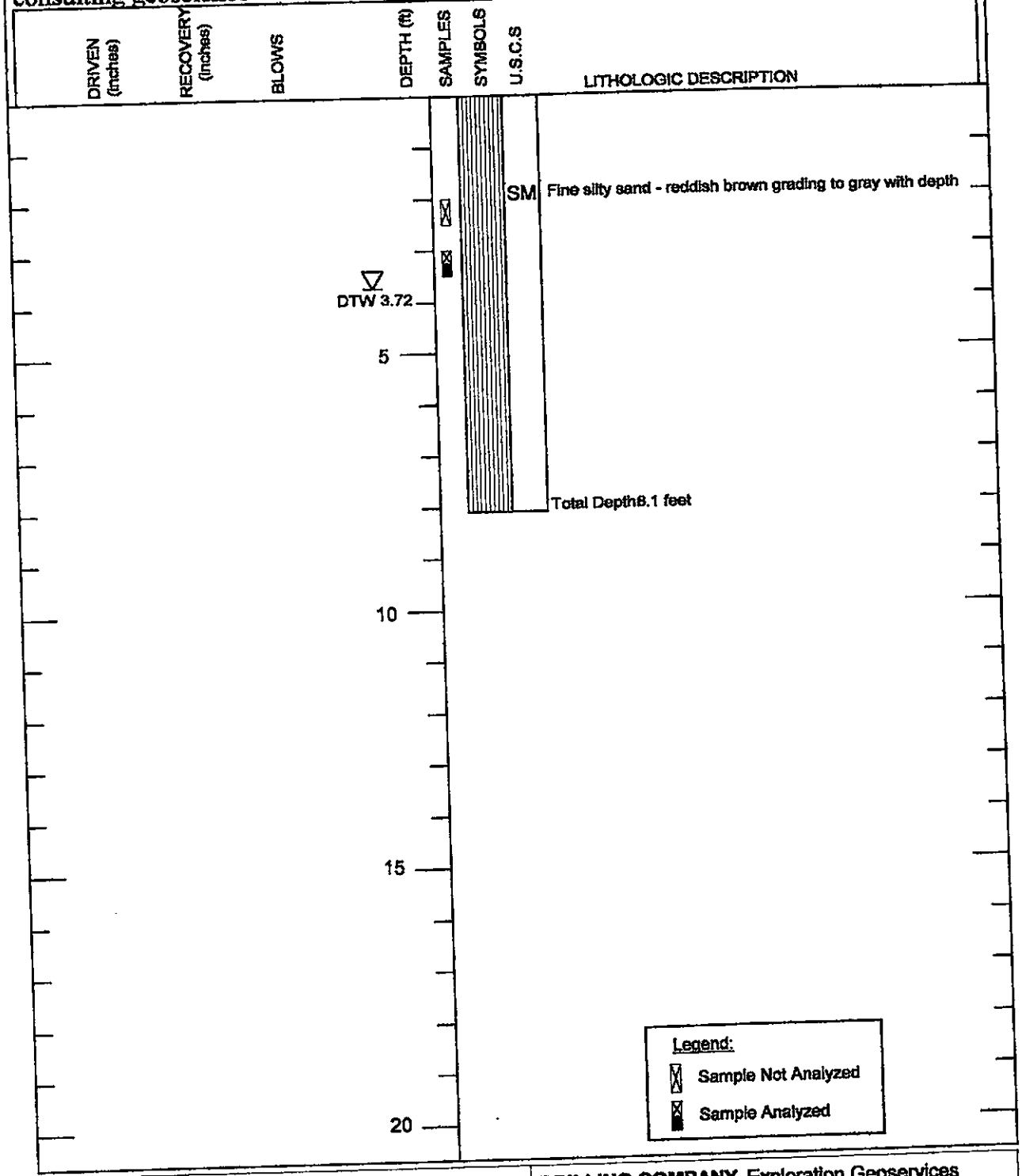


CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda CA
LOGGED BY Roger Greensfelder CA RG #3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 18, 2001

Greensfelder & Associates
consulting geoscience

LOG OF BORING 85-1
TANK 85

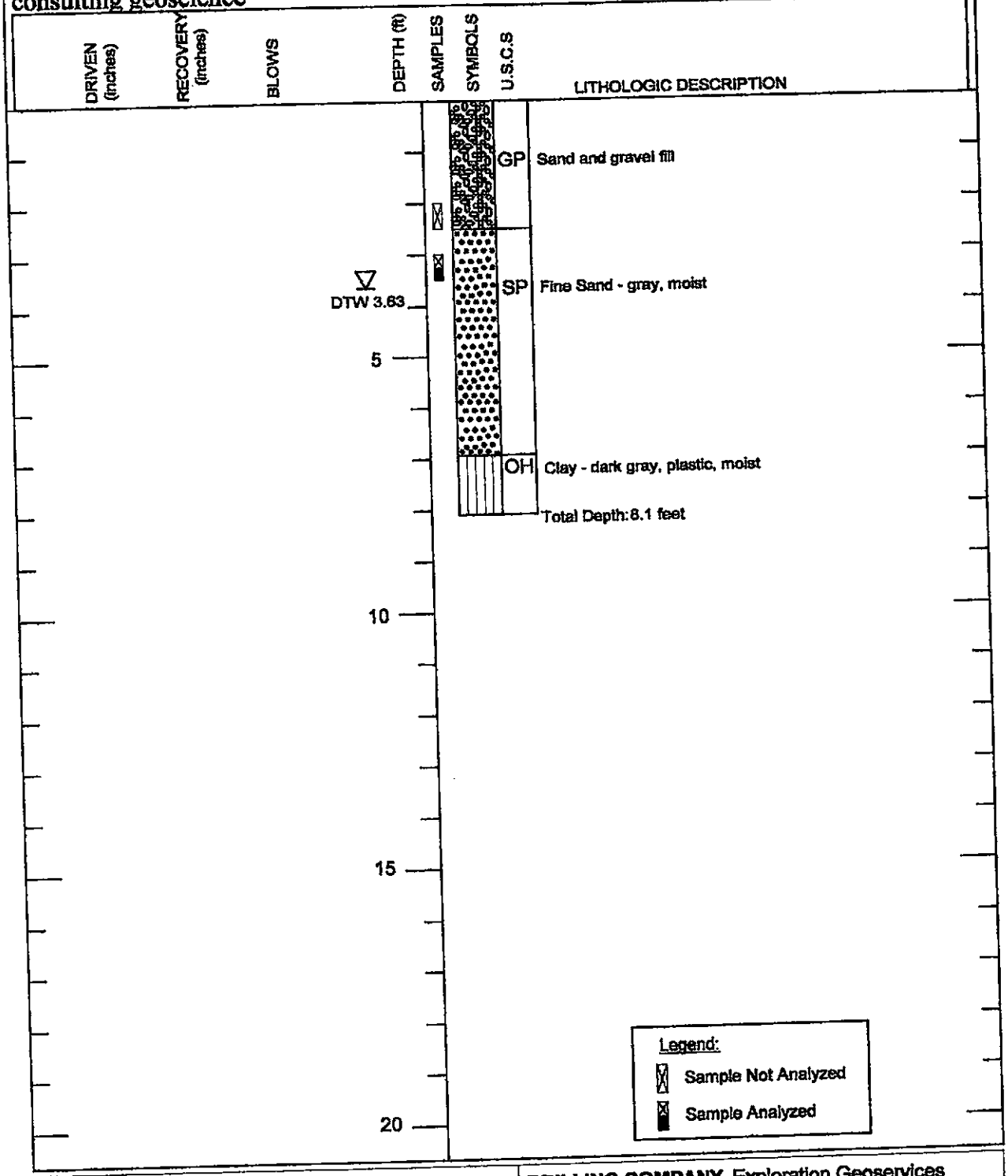


CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda, CA
LOGGED BY Roger Greensfelder CA RG #3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 18, 2001

Greensfelder & Associates
consulting geoscience

LOG OF BORING 85-2
TANK 85

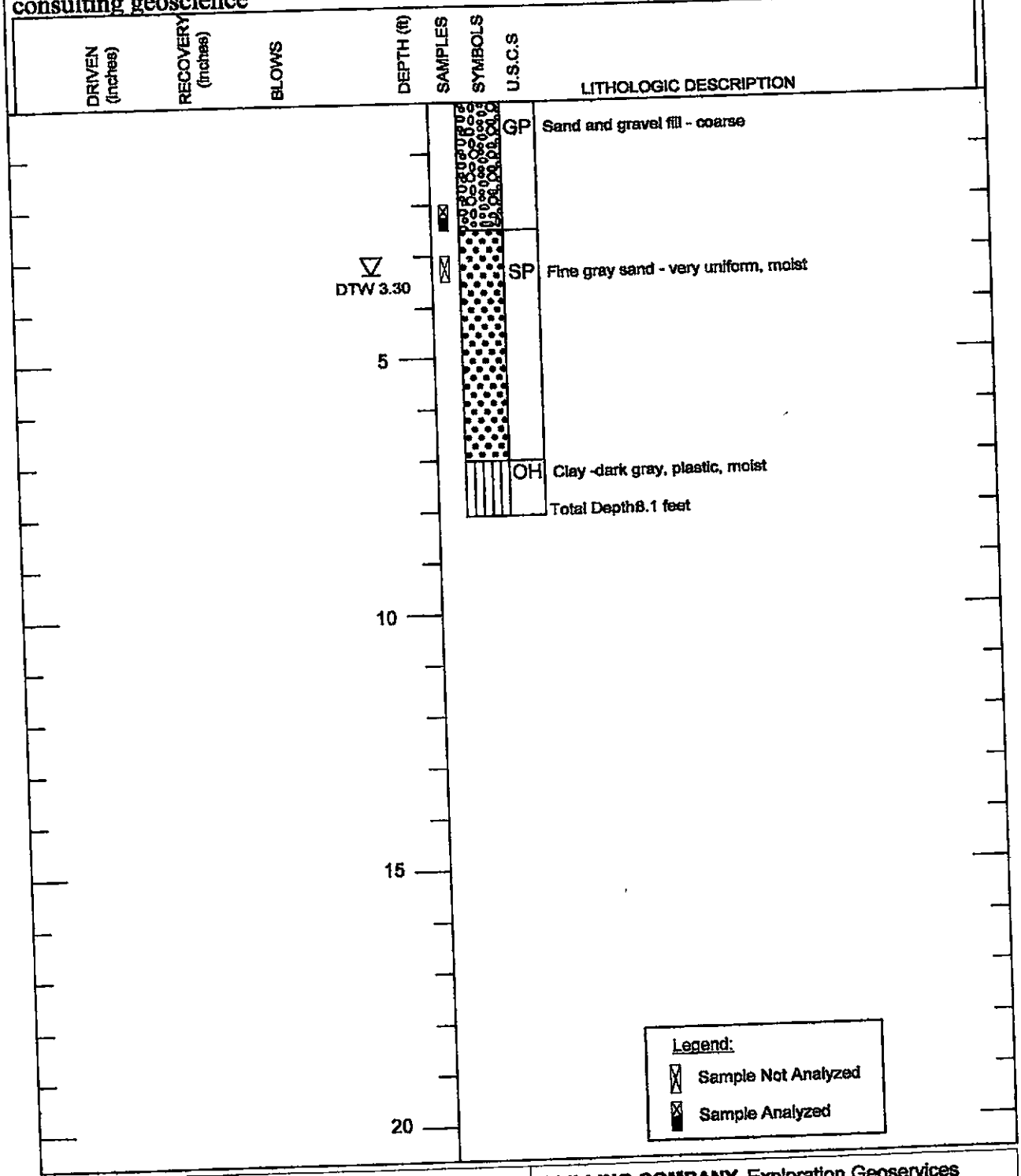


CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda, CA
LOGGED BY Roger Greensfelder CA RG #3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 18, 2001

Greensfelder & Associates
consulting geoscience

LOG OF BORING 85-3
TANK 85

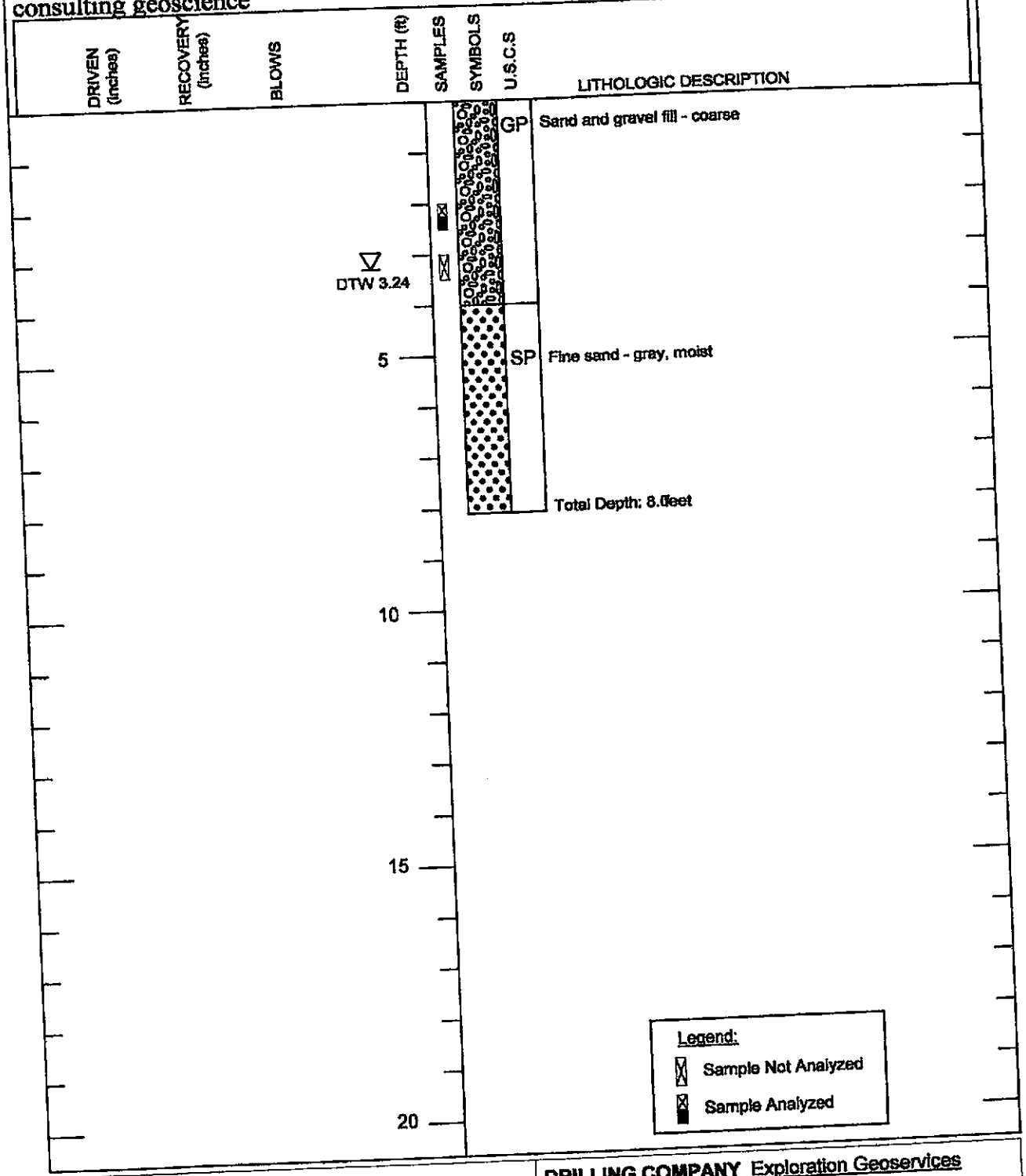


CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda, CA
LOGGED BY Roger Greensfelder CA RG #3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 18, 2001

Greensfelder & Associates
consulting geoscience

LOG OF BORING 85-4
TANK 85

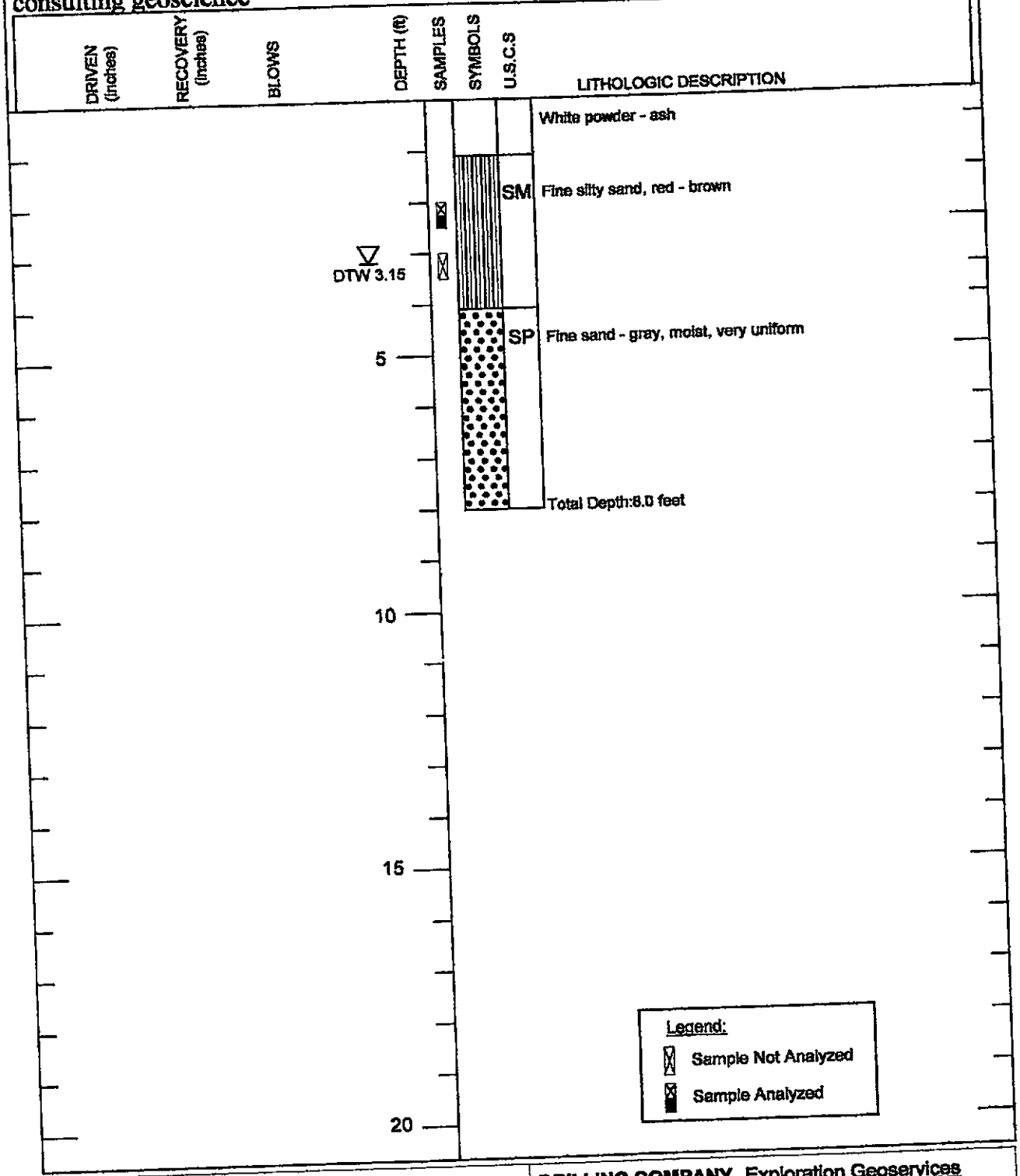


CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda, CA
LOGGED BY Roger Greensfelder CA RG # 3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 18, 2001

Greensfelder & Associates
consulting geoscience

LOG OF BORING 85-5
TANK 85

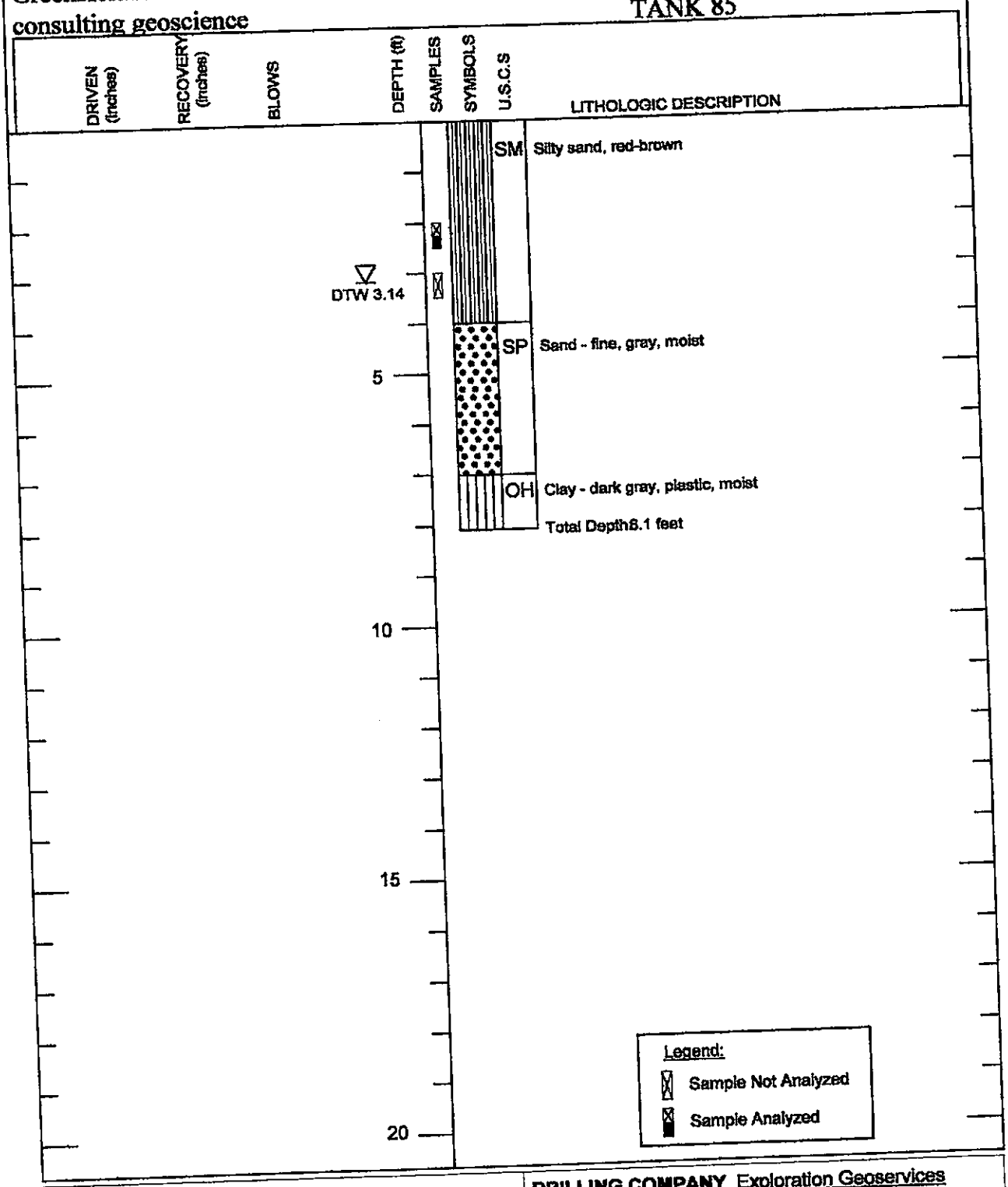


CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda, CA
LOGGED BY Roger Greensfelder CA RG #3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 18, 2001

Greensfelder & Associates
consulting geoscience

LOG OF BORING 85-6
TANK 85



CLIENT Alameda Gateway
SITE LOCATION 2900 Main Street, Alameda, CA
LOGGED BY Roger Greensfelder CA RG #3011

DRILLING COMPANY Exploration Geoservices
DRILLING METHOD Geoprobe
TYPE OF SAMPLER Clear Plastic Continuous Core
DATE May 18, 2001

APPENDIX C

LABORATORY ANALYTICAL REPORT

CHAIN OF CUSTODY

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

June 11, 2001

Helen Mawhinney
ETS
1548 Jacob Avenue
San Jose, CA 95118

Order: 25692
Project Name: Alam Gate
Project Number:
Project Notes:

Date Collected: 5/18/01
Date Received: 5/21/01
P.O. Number: Alam Gate

On May 21, 2001, samples were received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method
Solid	EPA 8270C PAH	EPA 8270C

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2346). If you have any questions regarding procedures or results, please call me at 408-588-0200.

Sincerely,

Patti Sandrock
QA/QC Manager

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 6/11/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-001 **Client Sample ID:** 85-1 3'-3.5'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Naphthalene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
2-Methylnaphthalene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
2-Chloronaphthalene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Acenaphthylene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Acenaphthene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Fluorene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Phenanthrene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Anthracene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Fluoranthene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Pyrene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Benzo(a)anthracene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Chrysene	ND		2	6.6	13.2	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Benzo(b)fluoranthene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Benzo(k)fluoranthene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Benzo(a)pyrene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Indeno(1,2,3-cd)pyrene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Dibenz(a,h)anthracene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C
Benzo(g,h,i)perylene	ND		2	3.3	6.6	mg/Kg	6/7/01	6/8/01	BS5011C	EPA 8270C

Surrogate	Surrogate Recovery	Control Limits (%)
2-Fluorobiphenyl	80	30 - 115
Nitrobenzene-d5	49	23 - 120
p-Terphenyl-d14	98	18 - 137

Comment: Sample diluted due to matrix of the sample.
Comment: Reporting limits increased due to matrix of the sample.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-007 **Client Sample ID:** 137-1 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	340	x	50	1	50	mg/Kg	5/25/01	6/4/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	86	38 - 112

Comment: TPH - Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	1000		50	13	650	mg/Kg	5/25/01	6/4/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	86	38 - 112

Comment: TPH - Motor oil extraction performed with silica gel cleanup.

Order ID: 25692 **Lab Sample ID:** 25692-008 **Client Sample ID:** 137-2 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	ND		100	1	100	mg/Kg	5/25/01	6/4/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	86	38 - 112

Comment: TPH - Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	2900		100	13	1300	mg/Kg	5/25/01	6/4/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	86	38 - 112

Comment: TPH - Motor oil extraction performed with silica gel cleanup.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-010 **Client Sample ID:** 137-3 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	ND		200	1	200	mg/Kg	5/25/01	6/4/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	71	38 - 112

Comment: TPH - Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	4900		200	13	2600	mg/Kg	5/25/01	6/4/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	71	38 - 112

Comment: TPH - Motor oil extraction performed with silica gel cleanup.

Order ID: 25692 **Lab Sample ID:** 25692-012 **Client Sample ID:** 137-4 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	ND		20	1	20	mg/Kg	5/25/01	6/4/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	76	38 - 112

Comment: TPH - Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	460		20	13	260	mg/Kg	5/25/01	6/4/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	76	38 - 112

Comment: TPH - Motor oil extraction performed with silica gel cleanup.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-016 **Client Sample ID:** 137-6 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020
Toluene	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020
Ethyl Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020
Xylenes, Total	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	135	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	0.05	0.05	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	135	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	1	1	mg/Kg	N/A	5/25/01	SGC12029	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	132	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-014 **Client Sample ID:** 137-5 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	ND		100	1	100	mg/Kg	5/25/01	6/1/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	70	38 - 112

Comment: TPH - Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	1600		100	13	1300	mg/Kg	5/25/01	6/1/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	70	38 - 112

Comment: TPH - Motor oil extraction performed with silica gel cleanup.

Order ID: 25692 **Lab Sample ID:** 25692-016 **Client Sample ID:** 137-6 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	13	x	1	1	1	mg/Kg	5/25/01	6/1/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	78	38 - 112

Comment: TPH - Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	29	x	1	13	13	mg/Kg	5/25/01	6/1/01	DS4015A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	78	38 - 112

Comment: TPH - Motor oil extraction performed with silica gel cleanup.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-007 **Client Sample ID:** 137-1 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020
Toluene	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020
Ethyl Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020
Xylenes, Total	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	118	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	0.05	0.05	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	118	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	1	1	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	139	65 - 135

Comment: Surrogate recovery out of control limits due to matrix interference.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-008 **Client Sample ID:** 137-2 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020
Toluene	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020
Ethyl Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020
Xylenes, Total	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	107	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	0.05	0.05	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	107	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	1	1	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	128	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-010 **Client Sample ID:** 137-3 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020
Toluene	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020
Ethyl Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020
Xylenes, Total	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	108	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	0.05	0.05	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	108	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	1	1	mg/Kg	N/A	5/25/01	SGC12029	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	130	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-012 **Client Sample ID:** 137-4 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020
Toluene	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020
Ethyl Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020
Xylenes, Total	ND		1	0.005	0.005	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	112	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	0.05	0.05	mg/Kg	N/A	5/25/01	SGC12029	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	112	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	1	1	mg/Kg	N/A	5/25/01	SGC12029	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	135	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-014 **Client Sample ID:** 137-5 3.5'-4'

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020
Toluene	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020
Ethyl Benzene	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020
Xylenes, Total	ND		1	0.005	0.005	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	165	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	0.05	0.05	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	165	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	1	1	mg/Kg	N/A	5/29/01	SGC12029B	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	198	65 - 135

Comment: Surrogate recovery out of control limits due to matrix interference.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-022 **Client Sample ID:** 137-5

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Ethyl Benzene	2.0		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Xylenes, Total	12		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	93	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	5/25/01	WGC22028	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	93	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	120	x	1	50	50	µg/L	N/A	5/25/01	WGC22028	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	101	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-018 **Client Sample ID:** 137-1

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	ND		1	50	50	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	71	53 - 114

Comment: TPH-Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	ND		1	250	250	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	71	38 - 114

Comment: TPH-Motor Oil extraction performed with silica gel cleanup.

Order ID: 25692 **Lab Sample ID:** 25692-019 **Client Sample ID:** 137-2

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	65		1	50	50	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	79	53 - 114

Comment: TPH-Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	ND		1	250	250	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	79	38 - 114

Comment: TPH-Motor Oil extraction performed with silica gel cleanup.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-020 **Client Sample ID:** 137-3

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	2400		10	59	590	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	44	53 - 114

Comment: TPH-Diesel extraction performed with silica gel cleanup.
Comment: Reporting limit increased due to limited sample volume.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	3500		10	294	2940	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	44	38 - 114

Comment: TPH-Motor Oil extraction performed with silica gel cleanup.
Comment: Reporting limit increased due to limited sample volume.

Order ID: 25692 **Lab Sample ID:** 25692-021 **Client Sample ID:** 137-4

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	610		1	56	56	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	78	53 - 114

Comment: TPH-Diesel extraction performed with silica gel cleanup.
Comment: Reporting limit increased due to limited sample volume.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	ND		1	281	281	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	78	38 - 114

Comment: TPH-Motor Oil extraction performed with silica gel cleanup.
Comment: Reporting limit increased due to limited sample volume.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-022 **Client Sample ID:** 137-5

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	230		1	59	59	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	79	53 - 114

Comment: TPH-Diesel extraction performed with silica gel cleanup.
Comment: Reporting limit increased due to limited sample volume.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	280		1	294	294	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	79	38 - 114

Comment: TPH-Motor Oil extraction performed with silica gel cleanup.
Comment: Reporting limit increased due to limited sample volume.

Order ID: 25692 **Lab Sample ID:** 25692-023 **Client Sample ID:** 137-6

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	390		1	50	50	µg/L	5/29/01	6/1/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	77	53 - 114

Comment: TPH - Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	510		1	250	250	µg/L	5/29/01	6/1/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	77	38 - 114

Comment: TPH - Motor oil extraction performed with silica gel cleanup.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-018 **Client Sample ID:** 137-1

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	5/29/01	WGC22028B	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	5/29/01	WGC22028B	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	5/29/01	WGC22028B	EPA 8020
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	5/29/01	WGC22028B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	90	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	5/29/01	WGC22028B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	90	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	5/29/01	WGC22028B	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	101	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: **06/04/01**
Date Received: **5/21/01**
Project Name: **Alam Gate**
Project Number:
P.O. Number: **Alam Gate**
Sampled By: **Client**

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-024 **Client Sample ID:** 85-1

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	4800		10	50	500	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	78	53 - 114

Comment: TPH-Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	5900		10	250	2500	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	78	38 - 114

Comment: TPH-Motor Oil extraction performed with silica gel cleanup.

Order ID: 25692 **Lab Sample ID:** 25692-025 **Client Sample ID:** 85-2

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	100		1	50	50	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	70	53 - 114

Comment: TPH-Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	ND		1	250	250	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	70	38 - 114

Comment: TPH-Motor Oil extraction performed with silica gel cleanup.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-026 **Client Sample ID:** 85-3

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	100		1	50	50	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	80	53 - 114

Comment: TPH-Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	ND		1	250	250	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	80	38 - 114

Comment: TPH-Motor Oil extraction performed with silica gel cleanup.

Order ID: 25692 **Lab Sample ID:** 25692-027 **Client Sample ID:** 85-4

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	150		1	50	50	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	68	53 - 114

Comment: TPH-Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	ND		1	250	250	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	68	38 - 114

Comment: TPH-Motor Oil extraction performed with silica gel cleanup.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-028 **Client Sample ID:** 85-5

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	160		1	50	50	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	65	53 - 114

Comment: TPH-Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	ND		1	250	250	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	65	38 - 114

Comment: TPH-Motor Oil extraction performed with silica gel cleanup.

Order ID: 25692 **Lab Sample ID:** 25692-029 **Client Sample ID:** 85-6

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	240		1	50	50	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	84	53 - 114

Comment: TPH-Diesel extraction performed with silica gel cleanup.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Motor Oil	ND		1	250	250	µg/L	5/29/01	5/31/01	DW4016A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	84	38 - 114

Comment: TPH-Motor Oil extraction performed with silica gel cleanup.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-024 **Client Sample ID:** 85-1

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	64		2	0.5	1	µg/L	N/A	5/29/01	WGC22028B	EPA 8020
Toluene	3.4		2	0.5	1	µg/L	N/A	5/29/01	WGC22028B	EPA 8020
Ethyl Benzene	1.1		2	0.14	0.28	µg/L	N/A	5/29/01	WGC22028B	EPA 8020
Xylenes, Total	12		2	0.2	0.4	µg/L	N/A	5/29/01	WGC22028B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	74	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		2	10	20	µg/L	N/A	5/29/01	WGC22028B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	74	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	660		2	100	200	µg/L	N/A	5/29/01	WGC22028B	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	75	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-025 **Client Sample ID:** 85-2

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	5/29/01	WGC22028B	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	5/29/01	WGC22028B	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	5/29/01	WGC22028B	EPA 8020
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	5/29/01	WGC22028B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	90	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	5/29/01	WGC22028B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	90	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	5/29/01	WGC22028B	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	100	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-026 **Client Sample ID:** 85-3

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Xylenes, Total	1.8		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	89	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	5/25/01	WGC22028	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	89	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	5/25/01	WGC22028	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	100	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-027 **Client Sample ID:** 85-4

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Toluene	0.81		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Ethyl Benzene	6.6		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Xylenes, Total	34		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	92	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	5/25/01	WGC22028	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	92	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	130		1	50	50	µg/L	N/A	5/25/01	WGC22028	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	99	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-028 **Client Sample ID:** 85-5

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	0.76		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Toluene	0.60		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	88	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	5/25/01	WGC22028	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	88	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	75		1	50	50	µg/L	N/A	5/25/01	WGC22028	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	94	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

ETS
1548 Jacob Avenue
San Jose, CA 95118
Attn: Helen Mawhinney

Date: 06/04/01
Date Received: 5/21/01
Project Name: Alam Gate
Project Number:
P.O. Number: Alam Gate
Sampled By: Client

Certified Analytical Report

Order ID: 25692 **Lab Sample ID:** 25692-029 **Client Sample ID:** 85-6

Sample Time: **Sample Date:** 5/18/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	5/25/01	WGC22028	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	91	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	5/25/01	WGC22028	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	91	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	5/25/01	WGC22028	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	100	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

STANDARD LAB QUALIFIERS (FLAGS)

All Entech lab reports now reference standard lab qualifiers. These qualifiers are noted in the adjacent column to the analytical result and are adapted from the U.S. EPA CLP program. The current qualifier list is as follows:

Qualifier (Flag)	Description
U	Compound was analyzed for but not detected
J	Estimated value for tentatively identified compounds or if result is below PQL but above MDL
N	Presumptive evidence of a compound (for Tentatively Identified Compounds)
B	Analyte is found in the associated Method Blank
E	Compounds whose concentrations exceed the upper level of the calibration range
D	Multiple dilutions reported for analysis; discrepancies between analytes may be due to dilution
X	Results within quantitation range; chromatographic pattern not typical of fuel

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Quality Control Results Summary

QC Batch #: BS5011C
Matrix: Solid
Units: mg/Kg
Date Analyzed: 6/8/01

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: EPA 8270C											
1,2,4-Trichlorobenzene	EPA 8270C	ND		1.67		.728	LCS	43.6			38.0 - 107.0
1,4-Dichlorobenzene	EPA 8270C	ND		1.67		.856	LCS	51.3			28.0 - 104.0
2,4-Dinitrotoluene	EPA 8270C	ND		1.67		.83	LCS	49.7			28.0 - 89.0
2-Chlorophenol	EPA 8270C	ND		2.5		1.384	LCS	55.4			25.0 - 102.0
4-Chloro-3-methylphenol	EPA 8270C	ND		2.5		1.183	LCS	47.3			26.0 - 103.0
4-Nitrophenol	EPA 8270C	ND		2.5		1.224	LCS	49.0			1.0 - 132.0
Acenaphthene	EPA 8270C	ND		1.67		.84	LCS	50.3			31.0 - 137.0
n-Nitroso-di-n-propylamine	EPA 8270C	ND		1.67		1.035	LCS	62.0			41.0 - 126.0
Pentachlorophenol	EPA 8270C	ND		2.5		1.088	LCS	43.5			17.0 - 109.0
Phenol	EPA 8270C	ND		2.5		1.336	LCS	53.4			5.0 - 112.0
Pyrene	EPA 8270C	ND		1.67		.958	LCS	57.4			35.0 - 142.0

Surrogate	Surrogate Recovery	Control Limits (%)
2,4,6-Tribromophenol	53	19 - 122
2-Fluorobiphenyl	46	30 - 115
2-Fluorophenol	52	25 - 121
Nitrobenzene-d5	52	23 - 120
p-Terphenyl-d14	52	18 - 137
Phenol-d6	49	24 - 113

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: EPA 8270C											
1,2,4-Trichlorobenzene	EPA 8270C	ND		1.67		.727	LCSD	43.5	0.14	28.10	38.0 - 107.0
1,4-Dichlorobenzene	EPA 8270C	ND		1.67		.705	LCSD	42.2	19.35	32.10	28.0 - 104.0
2,4-Dinitrotoluene	EPA 8270C	ND		1.67		.842	LCSD	50.4	1.44	21.80	28.0 - 89.0
2-Chlorophenol	EPA 8270C	ND		2.5		1.114	LCSD	44.6	21.62	28.70	25.0 - 102.0
4-Chloro-3-methylphenol	EPA 8270C	ND		2.5		1.178	LCSD	47.1	0.42	37.20	26.0 - 103.0
4-Nitrophenol	EPA 8270C	ND		2.5		1.184	LCSD	47.4	3.32	47.20	11.0 - 114.0
Acenaphthene	EPA 8270C	ND		1.67		.813	LCSD	48.7	3.27	27.60	31.0 - 137.0
n-Nitroso-di-n-propylamine	EPA 8270C	ND		1.67		.826	LCSD	49.5	22.46	55.40	41.0 - 126.0
Pentachlorophenol	EPA 8270C	ND		2.5		1.081	LCSD	43.2	0.65	48.90	17.0 - 109.0
Phenol	EPA 8270C	ND		2.5		1.06	LCSD	42.4	23.04	30.00	26.0 - 90.0
Pyrene	EPA 8270C	ND		1.67		.992	LCSD	59.4	3.49	25.20	35.0 - 142.0

Surrogate	Surrogate Recovery	Control Limits (%)
2,4,6-Tribromophenol	53	19 - 122
2-Fluorobiphenyl	46	30 - 115
2-Fluorophenol	42	25 - 121
Nitrobenzene-d5	43	23 - 120
p-Terphenyl-d14	51	18 - 137
Phenol-d6	42	24 - 113

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Quality Control Results Summary

QC Batch #: DW4016A
Matrix: Liquid
Units: µg/L
Date Analyzed: 5/31/01

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Diesel w/ Si-Gel Std											
TPH as Diesel	EPA 8015 M	ND		1000		912.17	LCS	91.2			50.0 - 130.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	o-Terphenyl			81		53 - 114					
Test: TPH as Diesel w/ Si-Gel Std											
TPH as Diesel	EPA 8015 M	ND		1000		796.52	LCSD	79.7	13.54	25.00	50.0 - 130.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	o-Terphenyl			70		53 - 114					

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Quality Control Results Summary

QC Batch #: DS4015A
Matrix: Solid
Units: mg/Kg
Date Analyzed: 6/1/01

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Diesel w/ Si-Gel Std											
TPH as Diesel	EPA 8015 M	ND		25		20.14	LCS	80.6			37.9 - 128.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	o-Terphenyl		79			38 - 112					
Test: TPH as Diesel w/ Si-Gel Std											
TPH as Diesel	EPA 8015 M	ND		25		22.05	LCSD	88.2	9.05	30.00	37.9 - 127.7
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	o-Terphenyl		88			38 - 112					

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Quality Control Results Summary

QC Batch #: WGC22028 **Units:** µg/L
Matrix: Liquid **Date Analyzed:** 5/25/01

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		561		479.7	LCS	85.5			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		102			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		6.2		6.55	LCS	105.6			65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		6.61	LCS	84.7			65.0 - 135.0
Toluene	EPA 8020	ND		35.8		30.7	LCS	85.8			65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		36.6	LCS	85.1			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		96			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		52.8		46.4	LCS	87.9			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		96			65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		561		468.3	LCSD	83.5	2.41	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		99			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		6.2		6.84	LCSD	110.3	4.33	25.00	65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		6.66	LCSD	85.4	0.75	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		35.8		31.0	LCSD	86.6	0.97	25.00	65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		37.0	LCSD	86.0	1.09	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		94			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		52.8		50.6	LCSD	95.8	8.66	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		94			65 - 135					

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Quality Control Results Summary

QC Batch #: WGC22028B
Matrix: Liquid
Units: µg/L
Date Analyzed: 5/29/01

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		561		458.952	LCS	81.8			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		98			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		6.2		6.680	LCS	107.7			65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		6.507	LCS	83.4			65.0 - 135.0
Toluene	EPA 8020	ND		35.8		30.494	LCS	85.2			65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		36.263	LCS	84.3			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		92			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		52.8		51.193	LCS	97.0			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		92			65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		561		461.000	LCSD	82.2	0.45	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		98			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		6.2		6.737	LCSD	108.7	0.85	25.00	65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		6.537	LCSD	83.8	0.46	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		35.8		30.418	LCSD	85.0	0.25	25.00	65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		36.257	LCSD	84.3	0.02	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		92			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		52.8		50.595	LCSD	95.8	1.17	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		92			65 - 135					

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Quality Control Results Summary

QC Batch #: SGC12029 **Units:** mg/Kg
Matrix: Solid **Date Analyzed:** 5/25/01

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		0.561		0.550	LCS	98.0			65.0 - 135.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			111		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		0.0062		0.005	LCS	80.6			55.0 - 153.0
Ethyl Benzene	EPA 8020	ND		0.0078		0.007	LCS	89.7			58.4 - 116.0
Toluene	EPA 8020	ND		0.0358		0.037	LCS	103.4			56.1 - 127.0
Xylenes, total	EPA 8020	ND		0.043		0.041	LCS	95.3			64.9 - 105.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			101		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		0.062		0.060	LCS	96.8			45.0 - 119.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			101		65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		0.561		0.575	LCSD	102.5	4.44	30.00	65.0 - 135.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			112		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		0.0062		0.005	LCSD	80.6	0.00	30.00	55.0 - 153.0
Ethyl Benzene	EPA 8020	ND		0.0078		0.008	LCSD	102.6	13.33	30.00	58.4 - 116.0
Toluene	EPA 8020	ND		0.0358		0.039	LCSD	108.9	5.26	30.00	56.1 - 127.0
Xylenes, total	EPA 8020	ND		0.043		0.043	LCSD	100.0	4.76	30.00	64.9 - 105.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			101		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		0.062		0.061	LCSD	98.4	1.65	30.00	45.0 - 119.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			101		65 - 135					

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Quality Control Results Summary

QC Batch #: SGC12029B
Matrix: Solid
Units: mg/Kg
Date Analyzed: 5/29/01

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		0.561		0.587	LCS	104.6			65.0 - 135.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			111		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		0.0062		0.006	LCS	96.8			55.0 - 153.0
Ethyl Benzene	EPA 8020	ND		0.0078		0.008	LCS	102.6			58.4 - 116.0
Toluene	EPA 8020	ND		0.0358		0.041	LCS	114.5			56.1 - 127.0
Xylenes, total	EPA 8020	ND		0.043		0.045	LCS	104.7			64.9 - 105.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			102		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		0.062		0.063	LCS	101.6			45.0 - 119.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			102		65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		0.561		0.591	LCSD	105.3	0.68	30.00	65.0 - 135.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			110		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		0.0062		0.006	LCSD	96.8	0.00	30.00	55.0 - 153.0
Ethyl Benzene	EPA 8020	ND		0.0078		0.008	LCSD	102.6	0.00	30.00	58.4 - 116.0
Toluene	EPA 8020	ND		0.0358		0.041	LCSD	114.5	0.00	30.00	56.1 - 127.0
Xylenes, total	EPA 8020	ND		0.043		0.045	LCSD	104.7	0.00	30.00	64.9 - 105.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			100		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		0.062		0.062	LCSD	100.0	1.60	30.00	45.0 - 119.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			100		65 - 135					

EMSL Analytical, Inc.
1720 S. Amphlett Blvd., Suite 130
San Mateo, CA 94402
(888) 455-3675
(650) 570-5402 (Fax)

CHAIN OF CUSTODY/ ANALYSIS REQUEST FORM

EMSL Project#:

Custody and Sample Information – Print **ALL** Information. Put N/A in blanks not applicable.

Report To:	Bill To:	Project#:	Contact:
ETS 1548 JAcob Ave San Jose, CA 95118	same	Alam Gate Tel#: 510 385 4308 Fax#: 408 267-6427 510 522 6259	Helen Mawhinney

Sampled By (signature)	# of samples	Date of Shipment:	Date results needed:
[signature]		5-21-01	Routine Routine

Indicate Analysis Requested

Item No.	Sample Number	Station Location/ Description	Water	Soil	Air	Sludge	Other	Date	TIME On	TIME Off	LPM	Total Volume	TPHG - BTEX MTBE	TPHD - silica gel clean	TPHmo	8270 PNA added 6/4/01					Laboratory Number
1	85-1	3'-3.5'		X									✓	✓	✓	X					25692-001
2	85-2	3'-3.5'		X									✓	✓	✓						002
3	85-3	2'-2.5'		X									✓	✓	✓						003
4	85-4	2'-2.5'		X									✓	✓	✓						004
5	85-5	2'-2.5'		X									✓	✓	✓						005
6	85-6	2'-2.5'		X									✓	✓	✓						006
7																					
8																					
9																					
0																					

Released By: (Signature)	Date/Time Released	Received By (Signature)	Date/Time Accepted	Shipped Via:	Condition Noted
18:44 5/18/01 [signature]	5-21-01 11:00 Helen M 18:44 ETS Fridge 5/18/01	11:00 5/21/01 F Simonoa			
F Simoa		[signature]	5/21/01 1357		

Please Indicate Standard Turn Around Time: 10Day 5Day 3Day 2Day 24hr Same Day (please call for quick turn-around) Routine

Sampled on 5/18/01 [initials] 6/4/01

Comments: Please analyze highest TPHd or MO(TPH) sample for PNA's

EMSL Analytical, Inc.
1720 S. Amphlett Blvd., Suite 130
San Mateo, CA 94402
(888) 455-3675
(650) 570-5402 (Fax)

CHAIN OF CUSTODY/ ANALYSIS REQUEST FORM

EMSL

EMSL Project#: ____________

Custody and Sample Information – Print **ALL** Information. Put N/A in blanks not applicable.

Report To:	Bill To:	Project#:	Contact:
ETS 1548 JAcob Ave San Jose, CA 95118	same	Alam Gate Tel#: 510 385 4308 Fax#: 408 267-6427 510 522 6259	Helen Mawhinney

Sampled By (signature)	# of samples	Date of Shipment:	Date results needed:
[signature]			Routine

Indicate Analysis Requested: TPHg BTEX MTBE; TPHmo; TPHd - silica gel clean up

Item No.	Sample Number	Station Location/ Description	Matrix: Water	Matrix: Soil	Matrix: Air	Matrix: Sludge	Matrix: Other	Sampling: Date	TIME On	TIME Off	LPM	Total Volume	TPHg BTEX MTBE	TPHmo	TPHd - silica gel clean up						Laboratory Number
1	137-6	3.5'-4'		X									X	X	X						25692-016
2	137-6	4'-4.5'		X					HOLD												~~-016~~ 017
3																					
4																					
5																					
6																					
7																					
8																					
9																					
0																					

Released By: (Signature)	Date/Time Released	Received By (Signature)	Date/Time Accepted	Shipped Via:	Condition Noted
18:44 5/18/01 [signature]	18:44 5/18/01	5/21/01			
[signature]	BTB Fridge	[signature]			
[signature]		[signature]	5/21/01 1357		

Please Indicate Standard Turn Around Time: 10Day 5Day 3Day 2Day 24hr Same Day (please call for quick turn-around)

Comments: If MTBE detected - analyze using EPA Method 8260

EMSL Analytical, Inc.
1720 S. Amphlett Blvd., Suite 130
San Mateo, CA 94402
(888) 455-3675
(650) 570-5402 (Fax)

CHAIN OF CUSTODY/ ANALYSIS REQUEST FORM

EMSL Project#: _____

Custody and Sample Information – Print ALL Information. Put N/A in blanks not applicable.

Report To:	Bill To:	Project#:	Contact:	Indicate Analysis Requested
ETS 1548 Jacobs Ave San Jose, CA 95118	same	Alam Gate Tel#: 510 385 4308 Fax#: 408 267-C427 510 522 6259	Helen Mawhinney	TPH-g BTEX MTBE TPH-d Silica Gel Clean TPH-mo
Sampled By (signature): Helen Mawhinney	# of samples	Date of Shipment:	Date results needed: Routine	

Item No.	Sample Number	Station Location/ Description	Matrix: Water	Soil	Air	Sludge	Other	Sampling: Date	TIME On	TIME Off	LPM	Total Volume	TPH-g	BTEX MTBE	TPH-d Silica Gel Clean	TPH-mo	Laboratory Number
1	137-1	3.5'-4'		X									X	X	X		25692-006
2	~~137-1~~	~~5'-5.5'~~		X					HOLD								Cancel per HMG/ SO.
3	137-2	3.5'-4'		X									X	X	X		-008
4	137-2	4.5'-5'		X					HOLD								-009
5	137-3	3.5'-4'		X									X	X	X		-010
6	137-3	5'-5.5'		X					HOLD								-011
7	137-4	3.5'-4'		X									X	X	X		-012
8	137-4	4.5'-5'		X					HOLD								-013
9	137-5	3.5'-4'		X									X	X	X		-014
0	137-5	5'-5.5' Helen 5-21-01		X					HOLD								-015

Released By: (Signature)	Date/Time Released	Received By (Signature)	Date/Time Accepted	Shipped Via:	Condition Noted
18:44 5-18-01 Helen Mawhinney	18:44 5-18-01 ETS Fridge	F Simon Joseph Machado	5/21/01 1357		

Please Indicate Standard Turn Around Time: 10Day 5Day 3Day 2Day 24hr Same Day (please call for quick turn-around)
F Simon

Comments: If MTBE is detected - reanalyze using EPA Method 8260

EMSL Analytical, Inc.
1720 S. Amphlett Blvd., Suite 130
San Mateo, CA 94402
(888) 455-3675
(650) 570-5402 (Fax)

CHAIN OF CUSTODY/ ANALYSIS REQUEST FORM

EMSL Project#: _____

Custody and Sample Information – Print ALL Information. Put N/A in blanks not applicable.

Report To:	Bill To:	Project#:	Contact:	Indicate Analysis Requested
ETS 1548 Jacobsen San Jose, CA 95118	same	Alam Gate Tel#: 510 385 4308 Fax#: 408 267-0427 510 522 6259	Helen Mawhinney	TPHg - BTEX - MTBE TPHd - silica gel clean TPHmo

Sampled By (signature)	# of samples	Date of Shipment:	Date results needed:
			Routine

Item No.	Sample Number	Station Location/ Description	Matrix: Water	Soil	Air	Sludge	Other	Sampling: Date	TIME On	TIME Off	LPM	Total Volume	Laboratory Number
1	137-1		X										25092-018
2	137-2		X										019
3	137-3		X										020
4	137-4		X										021
5	137-5		X										022
6	137-6		X										023
7	85-1		X										024
8	85-2		X										025
9	85-3		X										026
0	85-4	Helen M 5-21-01 11:00	X										027

Released By: (Signature)	Date/Time Released	Received By (Signature)	Date/Time Accepted	Shipped Via:	Condition Noted
18:44 5-18-01	18:44 5-18-01	11:00 5-21-01			
Helen Mawhinney	BTS Fridge	E Simon			
E Simon		Ralph Parlado	5/21/01 1357		

Please Indicate Standard Turn Around Time: 10Day 5Day 3Day 2Day 24hr Same Day (please call for quick turn-around) Routine

Comments:

EMSL Analytical, Inc.
1720 S. Amphlett Blvd., Suite 130
San Mateo, CA 94402
(888) 455-3675
(650) 570-5402 (Fax)

CHAIN OF CUSTODY/ ANALYSIS REQUEST FORM

EMSL

EMSL Project#:

Custody and Sample Information – Print ALL Information. Put N/A in blanks not applicable.

Report To:	Bill To:	Project#:	Contact:
ETS 1548 JACob Ave San Jose, CA 95118	same	Alam Gate Tel#: 510 385 4308 Fax#: 408 267-6427 510 522 6259	Helen Mawhinney

Sampled By (signature)	# of samples	Date of Shipment:	Date results needed:
Haley Mawhinney			Routine

Indicate Analysis Requested: TPHg-BTEX-MTBE; TPHd-silica gel clean; TPHmo

Item No.	Sample Number	Station Location/ Description	Water	Soil	Air	Sludge	Other	Date	TIME On	TIME Off	LPM	Total Volume	TPHg-BTEX-MTBE	TPHd-silica gel clean	TPHmo						Laboratory Number	
1	85-5		X										X	X	X						25692	-028
2	85-6		X										X	X	X							029
3	85-1	5'-5.5'											HOLD									030
4	85-2	5'-5.5'											↓	↓	↓							031
5	85-3	4'-4.5'											↓	↓	↓							032
6	85-5	5.5'											↓	↓	↓							033
7	85-6	5.5'											↓	↓	↓							034
8																						
9																						
0		Helen M 5-21-01 11:00																				

Released By: (Signature)	Date/Time Released	Received By (Signature)	Date/Time Accepted	Shipped Via:	Condition Noted
18:44 5-18-01 Haley Mawhinney	18:44 5-18-01 ETS Fridge	5/21/01			
H Simonsen		Joseph Pachecho	5/21/01 1357		

Please Indicate Standard Turn Around Time: (10Day) 5Day 3Day 2Day 24hr Same Day (please call for quick turn-around)

Comments: