

VERIFICATION OF CONTAMINATED SOIL REMOVAL
FROM THE FORMER UNDERGROUND FUEL TANK
AREA FOR THE KAMUR INDUSTRIES PROPERTY
LOCATED AT 2351 SHORE LINE DRIVE
ALAMEDA, CALIFORNIA
FEBRUARY 11, 1991

PREPARED FOR:
KAMUR INDUSTRIES
2351 SHORE LINE DRIVE
ALAMEDA, CALIFORNIA 94501

BY:
SOIL TECH ENGINEERING, INC.
298 BROKAW ROAD
SANTA CLARA, CALIFORNIA 95050

91 FEB 11 1991

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APPENDIX "B"

Mobile Chem Labs Analytical Report with Chain-of-Custody
Anametrix, Inc. Analytical Report with Chain-of-Custody

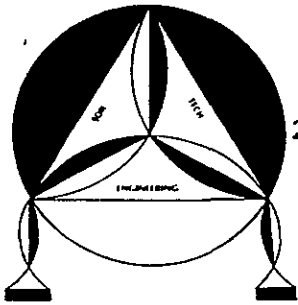
APPENXIX "C"

Excavation of Contaminated Soil Notification Form to BAAQMD
Uniform Hazardous Waste Manifest

SOIL TECH ENGINEERING

Soil, Foundation and Geological Engineers

298 BROKAW ROAD, SANTA CLARA, CA 95050 ■ (408) 866-0919 ■ (415) 791-6406



February 11, 1991

File No. 8-90-418-SI

Kamur Industries
2351 Shore Line Drive
Alameda, California 94501

ATTENTION: MR. MURRAY STEVENS

SUBJECT: VERIFICATION OF CONTAMINATED SOIL REMOVAL
FROM THE FORMER UNDERGROUND FUEL TANK
AREA FOR THE KAMUR INDUSTRIES PROPERTY
Located at 2351 Shore Line Drive, in
Alameda, California.

Dear Mr. Stevens:

The following is a progress report which briefly documents the results of our soil sampling and summarizes contaminated soil excavation work at the subject site, in Alameda, California (Figure 1). The shallow soil in the vicinity of the former underground tank area was contaminated with high levels of petroleum hydrocarbons. The main objective of this project was to excavate and to verify the removal of all accessible soils in the vicinity of the former fuel tank area.

WORK PERFORMED:

The soil excavation work began on December 6, 1990, by using a track excavator. Tom Daniels Excavating, Inc. was contracted to perform the work. Soil Tech Engineering, Inc. (STE) engineer was on-site to observe the work, provide professional guidance and to collect soil samples for laboratory analysis.

A portable photoionization detector (PID) was used to assist in making field judgments on the extent of contaminated soil and for health and safety by monitoring the worker breathing zone. The PID measures Volatile Organic Contaminants down to 0.1 parts per million (ppm) and is generally considered to be a very effective tool for evaluating hydrocarbon contamination.

On December 6, 1990, a small trench approximately 3 feet in width by 8 feet in depth, was dug around the perimeter of the former tank area to visually assess the lateral extent of hydrocarbon contamination. Figure 2 shows the approximate extent of the trench and PID readings observed in the field. Initial PID readings showed fairly high readings along the northerly and ^{easterly} southerly perimeter of the former tank area. During excavation, the contractor accidentally damaged the main electrical line and the work was shut down for three days. All excavated soil was stored on-site on thick visquine plastic sheeting and covered with visquine at the end of the day. The excavated soil consisted mostly of sandy materials.

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On December 10, 1990, soil excavation began in the vicinity of the former tank area. Excavation was terminated in mid-afternoon due to rain. Approximately 3 to 4 feet of soil was removed from the excavation.

On December 11, 1990, excavation resumed by removing the clean backfill material in the former tank area followed by obviously contaminated soil. Soil types encountered were similar to the initial excavation, which was mainly sandy soil. The approximate depth of the excavation was 14 feet below the ground surface in the northerly section and approximately 8 feet in the southerly section of the former tank area. No groundwater was encountered during the excavation; however, minor dark brown petroleum product was noted seeping into excavation at approximately 7 feet below ground surface in the northeasterly corner (see Figure 2).

On December 12, 1990, STE staff noted shallow groundwater at the deepest part of the excavation approximately 10 feet below ground surface. Apparently some groundwater had slowly seeped into the excavation. Prior to further excavation, all of the contaminated, ponded water was removed by Refineries Service, Inc., a certified waste hauler, under a Uniform Hazardous Waste Manifest which is included in Appendix "C". After removal of 2,000 gallons of contaminated water from the excavation, eight soil samples (S-1-3 to S-4-6) were taken from the northerly and westerly sidewalls at 3 and 6 feet below ground surface. The soil samples were analyzed on-site by Mobile Chem Labs. The intent of on-site analysis was to

assess the need for any additional excavation to the north and in the vicinity of the Big-5 Building (Figure 3). Copies of the chain-of-custody form and laboratory reports are provided in Appendix "B". TPH as gasoline levels ranged from non-detectable to a maximum of 20,000 parts per million (ppm). The highest levels were detected in the northeasterly corner near the Big-5 Building (Figure 2). Soil excavation continued on December 12 and 13, 1990, along the easterly and toward the southerly section of the former tank area. The PID was used to assess levels of contamination during excavation. Soil samples (S-5-3 to S-9-6) were taken at 3 and 6 feet depths along the easterly and westerly walls of the excavation (see Figure 4). The analytical results are summarized in Table 2. Most of the soil samples showed low levels of TPH, except sample S-9-6 which showed high levels (6,600 ppm) at nine feet depth. The location of this hot-spot was at the southeasterly corner of the excavation.

Prior to backfilling, approximately 4,000 gallons of groundwater was pumped from the excavation on December 17, 1990. The excavation was backfilled with clean soil on December 17 and 18, 1990.

CONCLUSIONS AND RECOMMENDATIONS:

The following summarizes our findings:

- A. Soil sample analysis verifies that high levels of TPH still exist in the shallow soil east and north of the former tank area.

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- B. A considerable amount of contaminated soil was removed and stockpiled on-site pending proper disposal.
- C. Floating product was noted in the northeasterly corner of the former tank area.
- D. The material excavated consisted of mainly sandy soil.
- E. The shallow groundwater has been impacted with dissolved petroleum hydrocarbons.
- F. Excavation activities have been effective in reducing TPH as gasoline levels in areas which were effected by the past, inadvertent spill. In addition, potential impact to the groundwater has also been reduced.

Additional work is necessary to complete the site remediation and the comply with the state and local regulatory agency requirements. STE recommends the following:

- A. Define the extent of contamination in the south section of the property by drilling 3 to 4 shallow exploratory borings and conduct soil sampling.
- B. Initiate soil remediation in the north-northeasterly section of the tank area.

- C. Installation of three monitoring wells, to define the extent of contamination in the groundwater, per STE's proposed work plan dated August 30, 1990 (File No. 8-90-418-SI).
- D. Evaluate cost-effective alternatives for disposal of the on-site stockpiled soil.

A detailed soil excavation report will be submitted after completion of the additional recommended investigations.

Please submit a copy of this progress report to Ms. Cynthia Chapman of the Alameda County Health Department and Mr. Lester Feldman of the Regional Water Quality Control Board.

If you have any questions or require additional information, please feel free to contact our office at your convenience.

Sincerely,

SOIL TECH ENGINEERING, INC.



RICHARD DOWNS
ENVIRONMENTAL EDITOR



LAWRENCE KOO, P. E.
C. E. #34928



FRANK HAMEDI-FARD
GENERAL MANAGER

SOIL TECH ENGINEERING, INC.

TABLE 1
 SUMMARY OF SOIL ANALYTICAL RESULTS
 (SAMPLES COLLECTED ON 12/12/90)
 CONCENTRATIONS IN PARTS PER MILLION (ppm)

Sample No.	Depth feet	TPHg	BTEX	T	E	X
S-1-3	3	ND	0.015	0.016	ND	0.012
S-1-6	6	34	1.7	2.7	0.5	2.3
S-2-3	3	2.4	0.17	0.21	0.033	0.150
S-2-6	6	120	7.8	13	2	8.8
S-3-3	3	5.3	0.29	0.3	0.051	0.22
S-3-6	6	20,000	400	2,000	490	2,400
S-4-3	3	4	0.15	0.18	0.031	0.15
S-4-6	6	35	4.1	4	0.57	2.8

TPHg = Total Petroleum Hydrocarbons as Gasoline
 BTEX = Benzene, Toluene, Ethylbenzene, Xylene
 ND = Not Detected (Below Detection Limit)

TABLE 2
 SUMMARY OF SOIL ANALYTICAL RESULTS
 (SAMPLES COLLECTED ON 12/13/90)
 CONCENTRATIONS IN PARTS PER MILLION (ppm)

Sample No.	Depth feet	TPHg	B	T	E	X
S-5-3	3	ND	ND	ND	ND	ND
S-5-6	6	11	0.320	0.20	0.58	1.4
S-6-3	3	ND	ND	ND	ND	ND
S-6-6	6	13	0.490	0.92	0.73	2.4
S-7-3	3	ND	ND	ND	ND	ND
S-7-6	6	14	0.850	2.60	0.66	2.3
S-8-3	3	240	ND	3.90	9.50	21
S-8-6	6	15	0.084	0.21	0.37	1.5
S-9-3	3	ND	ND	ND	ND	ND
S-9-6	6	6,600	17	190	84	330
Detection Limit		0.5	0.005	0.005	0.005	0.005

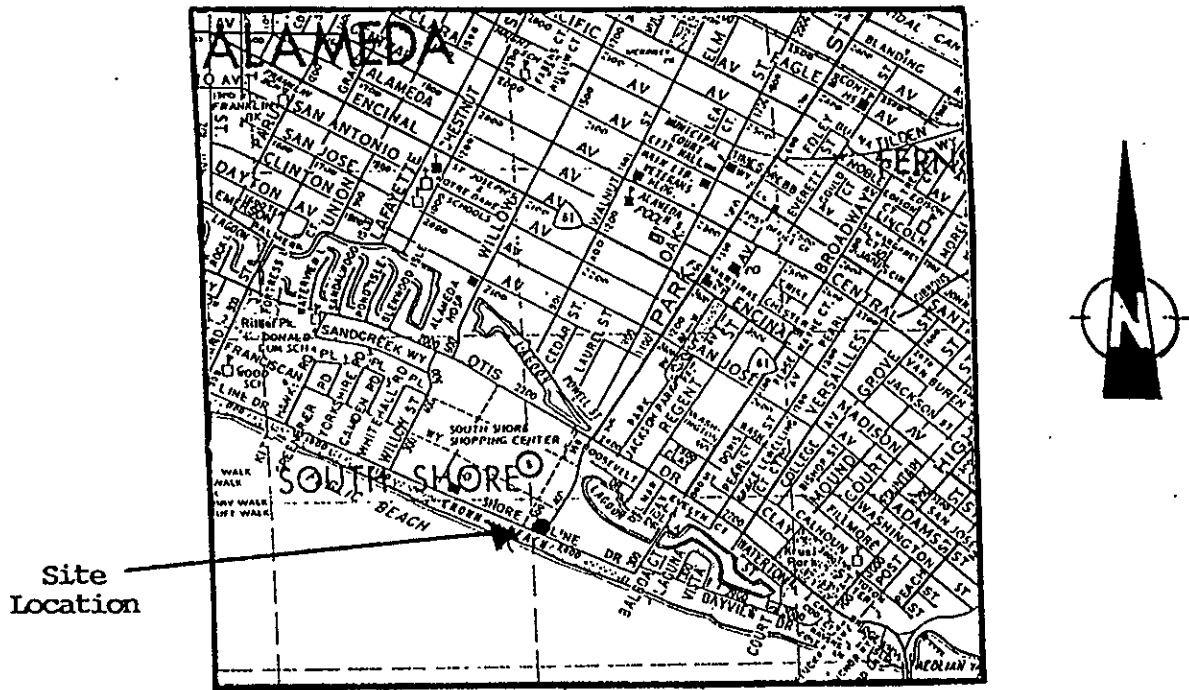
TPHg = Total Petroleum Hydrocarbons as Gasoline
 BTEX = Benzene, Toluene, Ethylbenzene, Xylene
 ND = Not Detected (Below Detection Limit)

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File No. 8-90-418-SI

A P P E N D I X "A"

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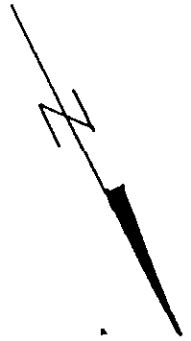


Thomas Brothers Map 1982 Edition
Alameda - Contra Costa Counties Map

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Figure 1

SHORE LINE DR



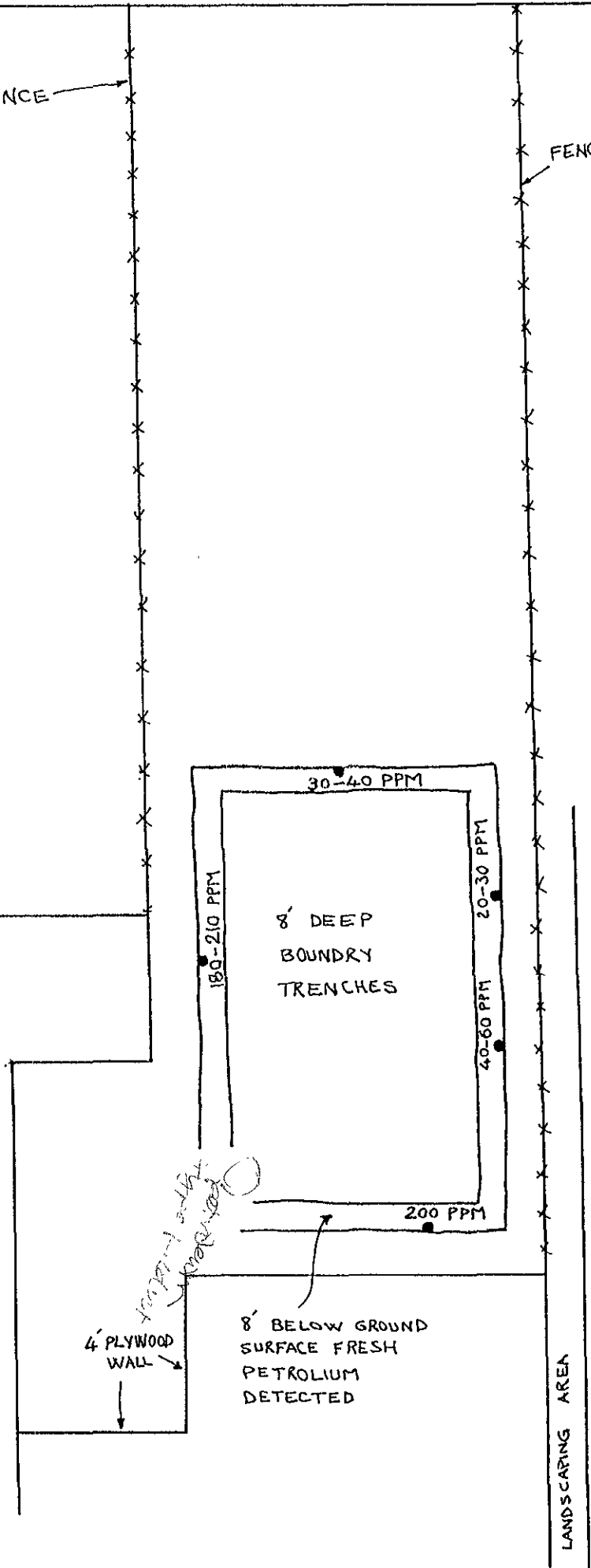
STREET FLOW LINE

FENCE

FENCE

BIG 5
SPORTING GOODS STORE

SOUTHSHORE
CAR WASH

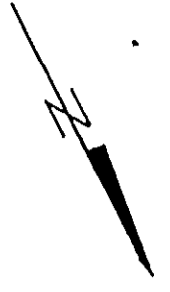


● PHOTOIONIZATION DETECTOR (PID) READINGS

2351 SHORE LINE DR ALAMEDA CA		
i=30'	PROJECT NO 8-90-418-S1	FIG-2
DRAWN BY N.A.		12-6-90
SOILTECH ENGINEERING INC. 298 BROKAW RD. SANTA CLARA CA 95050		

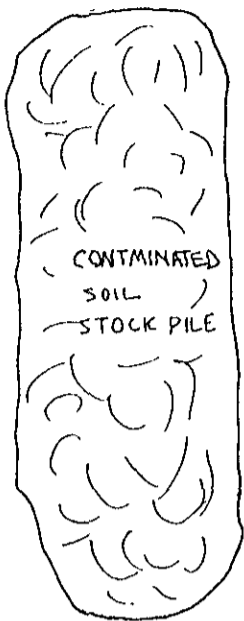
SHORE LINE DR

STREET FLOW LINE



FENCE

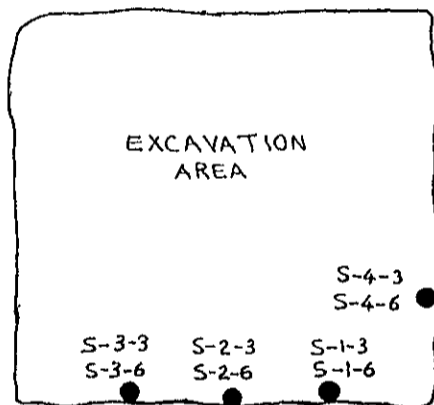
FENCE



CONTAMINATED
SOIL
STOCK PILE

BIG 5

SPORTING GOODS STORE



EXCAVATION
AREA

S-4-3
S-4-6
S-3-3 S-2-3 S-1-3
S-3-6 S-2-6 S-1-6

SOUTHSHORE
CAR WASH

4 PLYWOOD
WALL

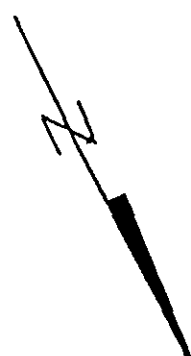
LANDSCAPING AREA

● SOIL SAMPLE LOCATIONS

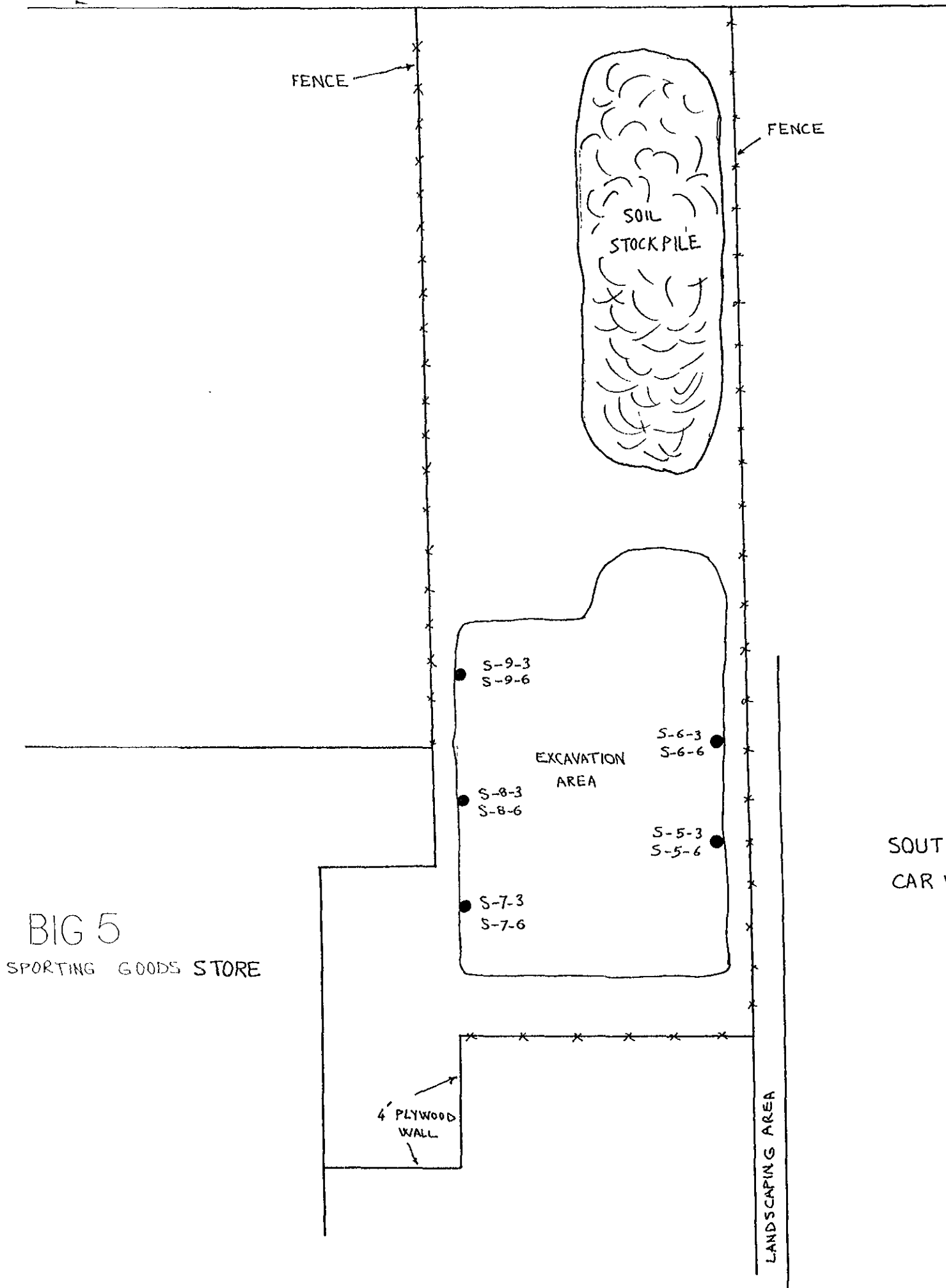
FIRST NO. IS NO. OF SAMPLE,
SECOND NO IS ITS DEPTH

2351 SHORE LINE DR ALAMEDA CA		
1"=30'	PROJECT NO 8-90-418-SI	FIG-3
DRAWN BY N.A.		12-12-90
SOIL TECH ENGINEERING INC.		
298 BROKAW RD. SANTA CLARA CA 95050		

SHORE LINE DR



STREET FLOW LINE



BIG 5
SPORTING GOODS STORE

SOUTHSHORE
CAR WASH

EXCAVATION
AREA

S-9-3
S-9-6

S-8-3
S-8-6

S-7-3
S-7-6

S-6-3
S-6-6

S-5-3
S-5-6

4 PLYWOOD
WALL

LANDSCAPING AREA

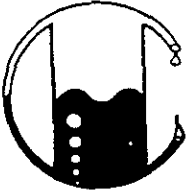
● SOIL SAMPLE LOCATIONS
FIRST # IS # OF SAMPLE,
SECOND # IS ITS DEPTH

2351 SHORE LINE DR ALAMEDA CA		
1"=30'	PROJECT NO 8-90-418-S1	FIG-A
DRAWN BY N.A.		12-13-90
SOIL TECH ENGINEERING INC. 298 BROKAW RD. SANTA CLARA CA 95050		

File No. 8-90-418-SI

A P P E N D I X "B"

SOIL TECH ENGINEERING, INC.



MOBILE CHEM LABS – CENTRAL VALLEY

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Phone (209) 632-2210 • Fax (209) 632-6595

8-90-418-S1/1741

Soil Tech Engineering
298 Brokaw Road
Santa Clara, CA 95050
Attn: Frank Hamedi
Project Manager

Date Sampled: 12-12-90
Date Received: 12-13-90
Date Reported: 12-13-90

Sample Number

012074

Sample Description

Proj. # 8-90-418-S1
Kamur Industries
S-1-3 SOIL

ANALYSIS

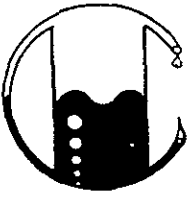
	<u>Detection Limit</u>	<u>Sample Results</u>
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	<1.0
Benzene	0.005	0.015
Toluene	0.005	0.016
Xylenes	0.005	0.012
Ethylbenzene	0.005	<0.005

Note: Analysis was performed using EPA methods 5030 and TPH LUFT
with method 8020 used for BTX distinction.

MOBILE CHEM LABS

Ronald G. Evans

Ronald G. Evans
Lab Director



MOBILE CHEM LABS – CENTRAL VALLEY

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8-90-418-S1/1741

Soil Tech Engineering
298 Brokaw Road
Santa Clara, CA 95050
Attn: Frank Hamedi
Project Manager

Date Sampled: 12-12-90
Date Received: 12-13-90
Date Reported: 12-13-90

Sample Number
012075

Sample Description
Proj. # 8-90-418-S1
Kamur Industries
S-1-6 SOIL

ANALYSIS

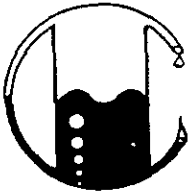
	<u>Detection Limit</u>	<u>Sample Results</u>
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	34
Benzene	0.005	1.7
Toluene	0.005	2.7
Xylenes	0.005	2.3
Ethylbenzene	0.005	0.50

Note: Analysis was performed using EPA methods 5030 and TPH LUFT
with method 8020 used for BTX distinction.

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Santa Clara, CA 95050
Attn: Frank Hamedi
Project Manager

Date Sampled: 12-12-90
Date Received: 12-13-90
Date Reported: 12-13-90

Sample Number
012076

Sample Description
Proj. # 8-90-418-S1
Kamur Industries
S-2-3 SOIL

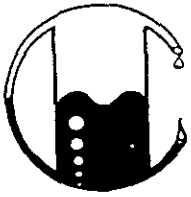
ANALYSIS

	<u>Detection Limit</u>	<u>Sample Results</u>
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	2.4
Benzene	0.005	0.17
Toluene	0.005	0.21
Xylenes	0.005	0.15
Ethylbenzene	0.005	0.033

Note: Analysis was performed using EPA methods 5030 and TPH LUFT
with method 8020 used for BTX distinction.

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Soil Tech Engineering
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Santa Clara, CA 95050
Attn: Frank Hamedi
Project Manager

Date Sampled: 12-12-90
Date Received: 12-13-90
Date Reported: 12-13-90

Sample Number
012077

Sample Description
Proj. # 8-90-418-S1
Kamur Industries
S-2-6 SOIL

ANALYSIS

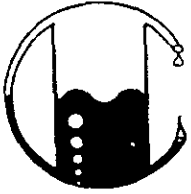
	<u>Detection Limit</u>	<u>Sample Results</u>
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	120
Benzene	0.005	7.8
Toluene	0.005	13
Xylenes	0.005	8.8
Ethylbenzene	0.005	2.0

QA/QC: Blank is none detected
Duplicate deviation is 0%

Note: Analysis was performed using EPA methods 5030 and TPH LUFT
with method 8020 used for BTX distinction.

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Joyce A.V. Dishman
Ronald G. Evans
Lab Director



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Soil Tech Engineering
298 Brokaw Road
Santa Clara, CA 95050
Attn: Frank Hamedi
Project Manager

Date Sampled: 12-12-90
Date Received: 12-13-90
Date Reported: 12-13-90

Sample Number
012078

Sample Description
Proj. # 8-90-418-S1
Kamur Industries
S-3-3 SOIL

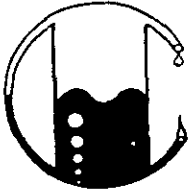
ANALYSIS

	<u>Detection Limit</u>	<u>Sample Results</u>
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	5.3
Benzene	0.005	0.29
Toluene	0.005	0.30
Xylenes	0.005	0.22
Ethylbenzene	0.005	0.051

Note: Analysis was performed using EPA methods 5030 and TPH LUFT
with method 8020 used for BTX distinction.

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Joyce A. W. Dishneau
Ronald G. Evans
Lab Director



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Soil Tech Engineering
298 Brokaw Road
Santa Clara, CA 95050
Attn: Frank Hamedi
Project Manager

Date Sampled: 12-12-90
Date Received: 12-13-90
Date Reported: 12-13-90

Sample Number
012079

Sample Description
Proj. # 8-90-418-S1
Kamur Industries
S-3-6 SOIL

ANALYSIS

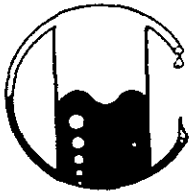
	<u>Detection Limit</u>	<u>Sample Results</u>
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	20,000
Benzene	0.005	400
Toluene	0.005	2,000
Xylenes	0.005	2,400
Ethylbenzene	0.005	490

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 8020 used for BTX distinction.

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Joyce U. Dishneau

Ronald G. Evans
Lab Director



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Soil Tech Engineering
298 Brokaw Road
Santa Clara, CA 95050
Attn: Frank Hamedi
Project Manager

Date Sampled: 12-12-90
Date Received: 12-13-90
Date Reported: 12-13-90

Sample Number
012080

Sample Description
Proj. # 8-90-418-S1
Kamur Industries
S-4-3 SOIL

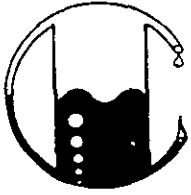
ANALYSIS

	<u>Detection Limit</u>	<u>Sample Results</u>
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	4.0
Benzene	0.005	0.15
Toluene	0.005	0.18
Xylenes	0.005	0.15
Ethylbenzene	0.005	0.031

Note: Analysis was performed using EPA methods 5030 and TPH LUFT
with method 8020 used for BTX distinction.

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Lab Director



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8-90-418-S1/1741

Soil Tech Engineering
298 Brokaw Road
Santa Clara, CA 95050
Attn: Frank Hamedi
Project Manager

Date Sampled: 12-12-90
Date Received: 12-13-90
Date Reported: 12-13-90

Sample Number
012081

Sample Description
Proj. # 8-90-418-S1
Kamur Industries
S-4-6 SOIL

ANALYSIS

	<u>Detection Limit</u>	<u>Sample Results</u>
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	35
Benzene	0.005	4.1
Toluene	0.005	4.0
Xylenes	0.005	2.8
Ethylbenzene	0.005	0.57

QA/QC: Blank is none detected
Duplicate deviation is 3.8%

Note: Analysis was performed using EPA methods 5030 and TPH LUFT
with method 8020 used for BTX distinction.

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Joyce A. Dishneau

Ronald G. Evans
Lab Director

CHAIN OF CUSTODY RECORD

PROJ NO		NAME		CON-TAINER	ANALYSES REQUESTED (2)	REMARKS				
8-90-418-SI		KAMUR INDUSTRIES								
SAMPLERS (Signature)				NO	DATE	TIME	SOIL	WATER	LOCATION	
N. Am										
1	12/12	2 ⁰⁵	✓		1	✓			S-1-3	Cold, No head space T.A.S
2	12/12	2 ¹⁵	✓		1	✓			S-1-6	
3	12/12	2 ³⁰ PM	✓		1	✓			S-2-3	
4	12/12	2 ³⁵ PM	✓		1	✓			S-2-6	
5	12/12	2 ⁵⁰ PM	✓		1	✓			S-3-3	
6	12/12	2 ⁵⁵ PM	✓		1	✓			S-3-6	
7	12/12	3 ⁰⁰ PM	✓		1	✓			S-4-3	
8	12/12	3 ¹⁰	✓		1	✓			S-4-6	

Relinquished by: (Signature) Diep Nguyen	Date / Time 12/13/90 11:45	Received by: (Signature) Tom K. O'P/E	Relinquished by: (Signature) Tom K. O'P/E	Date / Time 12/13/90 2:45 P	Received by: (Signature) J. Disbo
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature) N. Am	Date / Time 12/12/90 7 PM	Received for Laboratory by: (Signature) Michael Kelly	Date / Time 12/12/90 11:00	Remarks 24 HOURS T.A.	

Released Na Sl 12/13/90 1030AM Received H. Am. Reg. 12-13-90 10.28 AM



CHAIN OF CUSTODY RECORD

PROJ. NO.		NAME		CON-TAINER	ANALYSES REQUESTED (TPKG/BTAAE)	REMARKS			
8-90-418-SI		KAMUR INDUSTRIES							
SAMPLERS. (Signature)				NO.	DATE	TIME	SOIL	WATER	LOCATION
N. Ame									
1	12/12	2 ⁰⁵	✓		S-1-3	1	✓		Cold, No head space MS
2	12/12	2 ¹⁵	✓		S-1-6	1	✓		
3	12/12	2 ³⁰ PM	✓		S-2-3	1	✓		
4	12/12	2 ³⁵ PM	✓		S-2-6	1	✓		
5	12/12	2 ⁵⁰ PM	✓		S-3-3	1	✓		
6	12/12	2 ⁵⁸ PM	✓		S-3-6	1	✓		
7	12/12	3 ⁰⁰ PM	✓		S-4-3	1	✓		
8	12/12	3 ¹⁰	✓		S-4-6	1	✓		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
N. Ame	12/12/90 7 PM	[Signature]	12/19/90 11:00	24 HOURS T.A.	



SOIL TECH ENGINEERING
Soil, Foundation and Geological Engineers

ANAMETRIX INC

Environmental & Analytical Chemistry
 1961 Concourse Drive, Suite E, San Jose, CA 95131
 (408) 432-8192 - Fax (408) 432-8198

**REPORT**

MR. FRANK HAMEDI
 SOIL TECH ENGINEERING
 298 BROKAW ROAD
 SANTA CLARA, CA 95050

Workorder # : 9012162
 Date Received : 12/14/90
 Project ID : 8-90-418-SI
 Purchase Order: N/A

The following samples were received at Anamatrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9012162- 1	S-5-3
9012162- 2	S-5-6
9012162- 3	S-6-3
9012162- 4	S-6-6
9012162- 5	S-7-3
9012162- 6	S-7-6
9012162- 7	S-8-3
9012162- 8	S-8-6
9012162- 9	S-9-3
9012162-10	S-9-6

This report consists of 5 pages not including the cover letter, and is organized in sections according to the specific Anamatrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anamatrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anamatrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accrediation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anamatrix.


 Burt Sutherland
 Laboratory Director

12/28/90
 Date

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. FRANK HAMEDI
SOIL TECH ENGINEERING
298 BROKAW ROAD
SANTA CLARA, CA 95050

Workorder # : 9012162
Date Received : 12/14/90
Project ID : 8-90-418-SI
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9012162- 1	S-5-3	SOIL	12/13/90	TPHg/BTEX
9012162- 2	S-5-6	SOIL	12/13/90	TPHg/BTEX
9012162- 3	S-6-3	SOIL	12/13/90	TPHg/BTEX
9012162- 4	S-6-6	SOIL	12/13/90	TPHg/BTEX
9012162- 5	S-7-3	SOIL	12/13/90	TPHg/BTEX
9012162- 6	S-7-6	SOIL	12/13/90	TPHg/BTEX
9012162- 7	S-8-3	SOIL	12/13/90	TPHg/BTEX
9012162- 8	S-8-6	SOIL	12/13/90	TPHg/BTEX
9012162- 9	S-9-3	SOIL	12/13/90	TPHg/BTEX
9012162-10	S-9-6	SOIL	12/13/90	TPHg/BTEX

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. FRANK HAMEDI
SOIL TECH ENGINEERING
298 BROKAW ROAD
SANTA CLARA, CA 95050

Workorder # : 9012162
Date Received : 12/14/90
Project ID : 8-90-418-SI
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Frank Hamed 12-28-90
Department Supervisor Date

Jane Jussier 12-28-90
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anamatrix W.O.: 9012162
Matrix : SOIL
Date Sampled : 12/13/90

Project Number : 8-90-418-SI
Date Released : 12/27/90

Reporting Limit	Sample I.D.# S-5-3	Sample I.D.# S-5-6	Sample I.D.# S-6-3	Sample I.D.# S-6-6	Sample I.D.# S-7-3	
COMPOUNDS (mg/Kg)	-01	-02	-03	-04	-05	
Benzene	0.005	ND	0.32	ND	0.49	ND
Toluene	0.005	ND	0.20	ND	0.92	ND
Ethylbenzene	0.005	ND	0.58	ND	0.73	ND
Total Xylenes	0.005	ND	1.4	ND	2.4	ND
TPH as Gasoline	0.5	ND	11	ND	13	ND
% Surrogate Recovery	97%	88%	80%	65%	105%	
Instrument I.D.	HP21	HP8	HP21	HP8	HP21	
Date Analyzed	12/21/90	12/21/90	12/21/90	12/21/90	12/21/90	
RLMF	1	10	1	5	1	

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.
- RLMF - Reporting Limit Multiplication Factor.
Anamatrix Control limits for surrogate recovery are 50-150%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Spencer T. Smith 12-28-90
Analyst Date

David Johnson 12-29-90
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anamatrix W.O.: 9012162
Matrix : SOIL
Date Sampled : 12/13/90

Project Number : 8-90-418-SI
Date Released : 12/27/90

Reporting Limit	Sample I.D.# S-7-6	Sample I.D.# S-8-3	Sample I.D.# S-8-6	Sample I.D.# S-9-3	Sample I.D.# S-9-6	
COMPOUNDS (mg/Kg)	-06	-07	-08	-09	-10	
Benzene	0.005	0.85	ND	0.084	ND	17
Toluene	0.005	2.6	3.9	0.21	ND	190
Ethylbenzene	0.005	0.66	9.5	0.37	ND	84
Total Xylenes	0.005	2.3	21	1.5	ND	330
TPH as Gasoline	0.5	14	240	15	ND	6600
% Surrogate Recovery		56%	99%	122%	85%	108%
Instrument I.D.		HP8	HP8	HP8	HP8	HP8
Date Analyzed		12/27/90	12/21/90	12/21/90	12/26/90	12/26/90
RLMF		10	100	5	1	500

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.
- RLMF - Reporting Limit Multiplication Factor.
Anamatrix Control limits for surrogate recovery are 50-150%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

James J. Brown 12-28-90
Analyst Date

Paul Fisher 12-28-90
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anamatrix W.O.: 9012162
Matrix : SOIL
Date Sampled : N/A

Project Number : 8-90-418-SI
Date Released : 12/27/90

	Reporting Limit	Sample I.D.# 21B1221A	Sample I.D.# 08B1221B	Sample I.D.# 081226B	Sample I.D.# 08B1227A
COMPOUNDS	(mg/Kg)	BLANK	BLANK	BLANK	BLANK
Benzene	0.005	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	ND
Total Xylenes	0.005	ND	ND	ND	ND
TPH as Gasoline	0.5	ND	ND	ND	ND
% Surrogate Recovery		108%	63%	112%	101%
Instrument I.D.		HP21	HP8	HP8	HP8
Date Analyzed		12/21/90	12/21/90	12/26/90	12/27/90
RLMF		1	1	1	1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.
- RLMF - Reporting Limit Multiplication Factor.
Anamatrix Control limits for surrogate recovery are 50-150%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Spencer T. ... 12-24-90
Analyst Date

Paul Fisher 12-20-90
Supervisor Date

CHAIN OF CUSTODY RECORD

Amirik

PROJ NO		NAME				CONTAINER	ANALYSES REQUESTED (TPHG / BTA XE)	REMARKS
8-90-418-S1		KAMUR INDUSTRIES						
SAMPLERS (Signature)								
N. Amet								
NO	DATE	TIME	SOIL	WATER	LOCATION			
1	12/13/90	1:35 PM	✓		S-5-3	1	Brass liners, 100g	
2	12/13/90	1:45 PM	✓		S-5-6	1		
3	12/13/90	2:00 PM	✓		S-6-3	1		
4	12/13/90	2:05 PM	✓		S-6-6	1		
5	12/13/90	2:25 PM	✓		S-7-3	1		
6	12/13/90	2:35 PM	✓		S-7-6	1		
7	12/13/90	2:45 PM	✓		S-8-3	1		
8	12/13/90	2:50 PM	✓		S-8-6	1		
9	12/13/90	3:00 PM	✓		S-9-3	1		
10	12/13/90	3:10 PM	✓		S-9-6	1		

Relinquished by (Signature) N. Amet	Date / Time 12/14/90 1552	Received by: (Signature) Benny L. Conroy	Relinquished by: (Signature) Benny L. Conroy	Date / Time 12/14/90 1635	Received by: (Signature) Michael G. Kelly
Relinquished by (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	



File No. 8-90-418-SI

A P P E N D I X "C"

SOIL TECH ENGINEERING, INC.

REGULATION 8, RULE 40
Aeration of Contaminated Soil and
Removal of Underground Storage Tanks

NOTIFICATION FORM

- Removal or Replacement of Tanks
 Excavation of Contaminated Soil

INFORMATION

12/4
1501
15
above

N. Lew

ACKNOWLEDGEMENT

Bay Area Air Quality Management District
acknowledges receipt of your Tank
Removal/Contaminated Soil Excavation
Notification Form received on
12/4, 1990.

TANK REMOVAL

SCHEDULED STARTUP DATE _____

VAPORS REMOVED BY:

- WATER WASH
 VAPOR FREEING (CO²)
 VENTILATION

CONTAMINATED SOIL EXCAVATION

SCHEDULED STARTUP DATE 12/11/90

STOCKPILES WILL BE COVERED? YES _____ NO _____

ALTERNATIVE METHOD OF AERATION (DESCRIBE BELOW):

(MAY REQUIRE PERMIT)

CONTRACTOR INFORMATION

NAME Alpha Alpha Geo Services CONTACT Frank Hamedi
ADDRESS 298 Brokaw Road PHONE (408) 988-1032
CITY, STATE, ZIP Santa Clara, California 95050

CONSULTANT INFORMATION
(IF APPLICABLE)

NAME Soil Tech Engineering, Inc. CONTACT Frank Hamedi
ADDRESS 298 Brokaw Road PHONE (408) 496-0265
CITY, STATE, ZIP Santa Clara, California 95050

FOR OFFICE USE ONLY

DATE RECEIVED 12/4/90 BY Rm
CC: INSPECTOR NO. 262 DATE 12/5/90 (INIT.)
TELEPHONE UPDATE: CALLER _____ BY Rm (INIT.)
BAAQMD N # _____ CHANGE MADE _____

Please print or type. (Form designed for use on elite (12-pitch typewriter).)

**UNIFORM HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No. C1A1C101010512771316 Manifest Document No. 31301416

2. Page 1
1 of 1 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
~~DELAZ CAR WASH~~
~~400 SAN PABLO AVE ALBANY CA~~
SOUTH SHORE CAR WASH
2351 SHIRLIND DR.
ALAMEDA CA.
4. Generator's Phone (415) 523-7866 94501

A. State Manifest Document Number
89806111

B. State Generator's ID

5. Transporter 1 Company Name PAUL CRAMER 6. US EPA ID Number R10V181A198210139714

C. State Transporter's ID 103796
D. Transporter's Phone 707-374-5123

7. Transporter 2 Company Name _____ 8. US EPA ID Number _____

E. State Transporter's ID _____

F. Transporter's Phone _____

9. Designated Facility Name and Site Address
Refineries Service
13331 N. HWY. 33
Patterson, CA. 95363 10. US EPA ID Number CAD083166728

G. State Facility's ID _____

H. Facility's Phone 800-874-4444

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)
a. WASTE HAZARDOUS LIQUID N.O.S. ORM-E 9189

12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	1. Waste No.
<u>0101</u>	<u>TT</u>	<u>0170100</u>	<u>G</u>

b. _____

State	EPA/Other
<u>223</u>	<u>EXEMPT</u>

c. _____

State	EPA/Other

d. _____

State	EPA/Other

J. Additional Descriptions for Materials Listed Above
RINSATE

K. Handling Codes for Wastes Listed Above
a. 01 b. _____
c. _____ d. _____

15. Special Handling Instructions and Additional Information
WEAR GLOVES, GOGGLES & PROTECTIVE CLOTHING
IN CASE OF SPILL CALL EMERGENCY RESPONES WATER GAS
800-874-4444 OR (209) 892-6742

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name
FRANK HAMEDI

Signature [Signature] Month Day Year 11/21/290

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name
LARRY VASVICK

Signature [Signature] Month Day Year 12/1/90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name _____

Signature _____ Month Day Year _____

19. Discrepancy Indication Space
Actual Gallons 1466

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name E. FARLAN Signature [Signature] Month Day Year 11/21/90

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

GENERATOR

TRANSPORTER

FACILITY

Please print or type. Form designed for use on elite (12-pitch typewriter).

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address <i>SO Shore Plaza Carwash</i> 2351 Shoreline Blvd. Alameda, CA 94501		CIAIC101010121719121019		A. State Manifest Document Number 90998241	
4. Generator's Phone ()		6. US EPA ID Number CIAID91812141013191714		B. State Generator's ID	
5. Transporter 1 Company Name Paul Graham Drilling		8. US EPA ID Number		C. State Transporter's ID 103796	
7. Transporter 2 Company Name		10. US EPA ID Number		D. Transporter's Phone 707/374-5123	
9. Designated Facility Name and Site Address Refineries Service 1331 N. Hwy 33 Patterson, CA 95363		11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		E. State Transporter's ID	
		12. Containers No. Type		F. Transporter's Phone	
		13. Total Quantity		G. State Facility's ID	
		14. Unit Wt./Vol		H. Facility's Phone	
		1. Waste No.			
a. Waste Hazardous Liquid N.O.S. ORN-E 9189		1 1 T T		0.4 0.00	
b.				State 223	
c.				EPA/Other	
d.				State	
				EPA/Other	
J. Additional Descriptions for Materials Listed Above Rinsate		K. Handling Codes for Wastes Listed Above a. 01		b.	
		c.		d.	
15. Special Handling Instructions and Additional Information Wear Gloves, Goggles & protective clothing. In case of spill call EMERGENCY RESPONSES 800-874-4444 or 209-892-6742					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name DORRAY STEVENS		Signature <i>[Signature]</i>		Month Day Year 11/21/90	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Larry Vasvick		Signature <i>[Signature]</i>		Month Day Year 11/21/90	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space Actual Gallons 4685					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19 Printed/Typed Name MARY DELEON					
Signature <i>[Signature]</i>		Month Day Year 11/21/90			

Do Not Write Below This Line

Write TSDF SENDS THIS COPY TO DOHS WITHIN 30 DAYS
 To P.O. Box 3000, Sacramento, CA 95812