2740 98th Avenue
Oakland, CA 94605

Freeway
Station & Service

(510) 562-4505

June 16, 1994

Ms. Juliet Shin
Alameda County Health care services.

Refer to work plan for the investigation at 2740 98th ave. Oakland Ca. 94603

Dear Ms. Shin.

Inclosed is a copy of the preliminary site assessment at freeway service and station. for any further actions.

Sincerely,
Q. Ghofrani

Q. Ghofrani

File No. 7-93-556-SI

PRELIMINARY SITE ASSESSMENT AT FREEWAY STATION AND SERVICE PROPERTY LOCATED AT 2740 98TH AVENUE OAKLAND, CALIFORNIA APRIL 21, 1994

PREPARED FOR:
MR. KIYOUMARS GHOFRANI
FREEWAY STATION AND SERVICE
2740 98TH AVENUE
OAKLAND, CALIFORNIA 94605

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

SOIL TECH ENGINEERING, INC.

File No. 7-93-556-SI

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SOIL TECH ENGINEERING
Soil, Foundation and Geological Engineers
298 BROKAW ROAD, SANTA CLARA, CA 95050 ■ (408) 496-0265 OR (408) 496-0266

April 21, 1994

File No. 7-93-556-SI

Mr. Kiyoumars Ghofrani
Freeway Station and Service
2740 98th Avenue
Oakland, California 94605

SUBJECT: PRELIMINARY SITE ASSESSMENT AT
FREEWAY STATION AND SERVICE PROPERTY
Located at 2740 98th Avenue, in
Oakland, California

Dear Mr. Ghofrani:

Enclosed is a report summarizing the results of Soil Tech Engineering, Inc. (STE) preliminary subsurface investigation conducted in the vicinity of product pipeline at the property located at 2749 98th Avenue, in Oakland, California.

During the current phase of investigation at this site, four soil borings were drilled, and a grab sample was collected. The shallow soil at the site are predominantly composed of silty clay. Groundwater was first encountered while drilling approximately 10 feet below grade. The soil and water analytical results detected elevated levels of dissolved petroleum hydrocarbons. Per existing County and State requirements, you will be required to define the extent of petroleum hydrocarbons contamination by conducting further investigation.

File No. 7-93-556-SI

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

Sincerely,

SOIL TECH ENGINEERING, INC.

FRANK HAMEDI-FARD
GENERAL MANAGER

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

File No. 7-93-556-SI

PRELIMINARY SITE ASSESSMENT
AT FREEWAY STATION AND SERVICE PROPERTY
LOCATED AT 2740 98TH AVENUE
OAKLAND, CALIFORNIA
APRIL 21, 1994

INTRODUCTION:

This report summarizes the results of Soil Tech Engineering, Inc. (STE) preliminary subsurface investigation in the vicinity of the product pipeline excavation area at the subject site located at 2740 98th Avenue, in Oakland, California.

This assessment was initiated in response to a request from the Alameda County Department of Environmental Health--UST Local Oversight Program (ACDEH--USTOP) in the letter dated September 1, 1993, for preliminary site assessment related to soil and groundwater in the vicinity of the product pipeline area.

STE prepared a work plan dated December 15, 1993, to address the request of ACDEH--USTOP department. The work plan was approved by the ACDEH--USTOP on December 30, 1993.

PURPOSE:

The purpose of the preliminary site assessment described in this report was to characterize and further delineate the extent of dissolved petroleum hydrocarbons in soil and groundwater in the vicinity of product pipeline area.

SCOPE OF WORK:

The scope of the work completed is intended to provide data to satisfy the objectives stated above. The basic tasks included in this investigation are summarized below:

- Drill and sample four soil borings.
- Collect a grab water sample from one of the boring.
- Analyze the grab groundwater and selected soil samples for petroleum hydrocarbons [TPHg and Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX)].
- Evaluate field and laboratory data and prepare a technical report of the assessment.

SITE LOCATION:

The site is on the southeasterly corner of 98th Avenue and Stanley Avenue, which bound the property on the north and east in the City of Oakland. On the south , the site is bordered by homes and business establishments, the surrounding area has similar types of use. The subject site consist of approximately 2,000 square feet structure. The structure is set on approximately 9,000 square feet paved parcel.

SITE HISTORY:

There are four underground storage tanks located on the subject property. Based on information from Phase I environmental site assessment, dated June 22, 1992, by Northwest Envirocon, Inc., there are two 10,000 gallons tanks and one 5,000 gallons tank used for the storage of gasoline, and one 500 gallons tank used for the storage of waste oils. Based on the same report, the three gasoline storage tanks were installed in July of 1975 and are constructed of fiberglass. The waste oil tank is constructed of metal. As installation date for this tank could not be confirmed. These tanks are tested yearly for tightness by American River Testing of Sacramento. Tightness refers to a precision test which determines the integrity of the tank. This test is required annually by the State of California.

In May of 1989, there was release of an unknown quantity of waste oil during removal by Evergreen. The oil drained into exposed soil, leached onto/into a collection pipe that emptied onto Stanley Avenue and drained down Stanley Avenue approximately fifty feet. In response to this spill, the following actions were taken: The waste oil was removed by U. S. Waste Oil Group, and three surface soil samples were sent to Brown and Caldwell Laboratories for Total Oil and Grease (TOG) analysis. No further remediation was performed for this spill.

A Phase I Environmental Site Assessment for the subject site was conducted by Northwest Envirocon, Inc. of Sacramento. The detail of the site assessment is described in a report, dated July 22, 1992, prepared by Northwest Envirocon, Inc.

In June 18, 1993, E&G Construction removed the product pipeline and conducted a soil sampling in the pipeline trenches. Eight sol samples were collected from the depth of approximately 3.5 feet below grade, under the supervision of Alameda County Health Department Inspector, Mr. Ron Owcarz. Five of the shallow soil samples detected elevated levels of Total Petroleum Hydrocarbons as gasoline (TPHg) ranging from 310 milligrams per kilogram (mg/Kg) to a maximum of 2,900 mg/Kg. E&G Construction then excavated additional soil from three locations (1, 4 & 5) where TPHg levels were 550, 1,900 and 2,900 mg/Kg, respectively, to a depth of approximately 12 to 13 feet below grade. Three confirmed soil samples (A-1, B-1 and C-1) were collected on July 1 and 2, 1993. Two of the three soil samples detected no TPHg, and one sample, TPHg level was 15 mg/Kg. **The lateral extent of TPHg or impact to groundwater was not evaluated at that time.**

Alameda County Health Department requested a preliminary site assessment in a letter, dated September 1, 1993. However in a letter dated October 5, 1993, the Department agreed to conduct 4 exploratory soil borings in the vicinity of the contaminated areas and collect one grab water sample to assess whether the groundwater has been impacted.

SUBSURFACE ASSESSMENT:

This section describes the methods and procedures used in soil boring, collect soil and water samples.

SOIL BORING AND SAMPLING:

Alpha Geo Services drilled four soil borings at the site on March 28, 1994. The approximate locations of these borings are shown on Figure 2. The boring was drilled to the depth of approximately 15 feet below ground surface using eight-inch hollow-stem auger equipment power by mobile drill rig B-40L. All downhole equipment were steam cleaned before use and between boreholes to minimize the potential for cross-contamination.

A detailed lithologic log of each boring was prepared by STE's project engineer on-site. These logs provide a record of subsurface materials encountered and hydrogeologic information. Boring logs are included in Appendix "D".

Groundwater was first encountered at approximately 10 feet below grade in the borings B-1, 6 feet in B-2, 12 feet in B-3 and 8 feet in B-4 during drilling.

Discrete soil samples were collected approximately five foot depth intervals using a California modified sampler with stainless steel liners. The selected soil sample was immediately sealed with Teflon tape, plastic caps, labeled and then stored in a cold ice

chest. The soil samples were later transported on ice to the laboratory using STE's chain-of-custody. Copies of laboratory report and chain-of-custody record are included in Appendix "E".

Soil cuttings from drilling operation were placed on and covered with plastic sheeting and temporarily stored on-site pending the results of laboratory analyses. All borings were sealed with concrete per Local Well Standards after completion of soil sampling.

WATER SAMPLING:

A grab water sample was collected from boring B-1 using a clean stainless steel bailer. No free floating product was observed except a moderate petroleum odor was noted in the grab water sample.

LABORATORY ANALYTICAL RESULTS:

SOIL SAMPLES RESULTS:

Selected soil samples from the four borings (B-1 to B-4) were submitted to Argon Mobile Labs in Ceres, California, on March 30, 1994. These samples were analyzed for Total Petroleum Hydrocarbon as gasoline (TPHg), Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX). Copies of laboratory reports and chain-of-custody record are included in Appendix "E".

The results of laboratory analysis of soil samples are presented in Table 1. These results show the presence of elevated TPHg in boring B-1, where as B-2 and B-4 showed a low levels of TPHg. No TPHg or BTEX was detected in boring B-3. Low to moderate levels of BTEX were also detected in the borings B-1, B-2 and B-4.

WATER SAMPLE RESULTS:

The grab water sample results did show an elevated TPHg and BTEX.

SUMMARY:

The results of this study are summarized as follows:

- The site is immediately underlain by native soils consisting predominantly of silty clay.
- Laboratory chemical analyses of selected soil samples collected from borings B-1, B-2 and B-4 detected elevated levels of TPHg and low levels of BTEX. TPHg and BTEX compounds were not detected in boring B-3.
- Groundwater was encountered at the depth of 6 to 12 feet while drilling. The boring B-1 detected an elevated level of TPHg and BTEX.

RECOMMENDATION:

The preliminary subsurface assessment in the vicinity of the product line and tank area detected an elevated levels of TPH as gasoline in soil. The grab water sample also detected an elevated concentrations of TPHg and BTEX. Therefore, per existing ACDEH--USTOP and the California Regional Water Quality Control Board (CRWQCB), an additional investigation will be required to define the extent of the contamination in the soil and groundwater.

Please submit this report to ACDEH--USTOP and CRWQCB.

LIMITATIONS:

This report and the associated work has been provided in accordance with the general principles and practices currently employed in the environmental consulting profession. The contents of this report reflect the conditions of the subject site at this particular time. No other warranties, expressed or implied, as to the professional advice provided are made.

File No. 7-93-556-SI

TABLE 2
SUMMARY OF WATER ANALYTICAL RESULTS
IN
PARTS PER MILLION (ppm)

Date	Sample No.	TPHg	B	T	E	X
3/28/94	W-B-1	990	11.0	6.8	11.0	49.0

TPHg - Total Petroleum Hydrocarbons as gasoline
BTEX - Benzene, Toluene, Ethylbenzene, Total Xylenes

File No. 7-93-556-SI

A P P E N D I X "A"

File No. 7-93-556-SI

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
IN
PARTS PER MILLION (ppm)

Date	Sample Number	Depth feet	TPHg	B	T	E	X
3/28/94	1-5	5	ND	0.038	ND	ND	ND
	1-9	9	1,500	2.4	5.0	9.1	50
	1-15	15	220	0.27	2.0	1.9	8.4
	2-5	5	ND	0.086	ND	ND	0.014
	2-9	9	2.6	0.35	0.032	0.046	0.037
	3-5	5	ND	ND	ND	ND	ND
	3-9	9	ND	ND	ND	ND	ND
	4-5	5	1.2	0.15	0.01	0.011	0.027
	4-9	9	1.3	0.14	0.022	0.053	0.045

TPHg - Total Petroleum Hydrocarbons as gasoline
BTEX - Benzene, Toluene, Ethylbenzene, Total Xylenes
ND - Not Detected (Below Laboratory Detection Limit)

File No. 7-93-556-SI

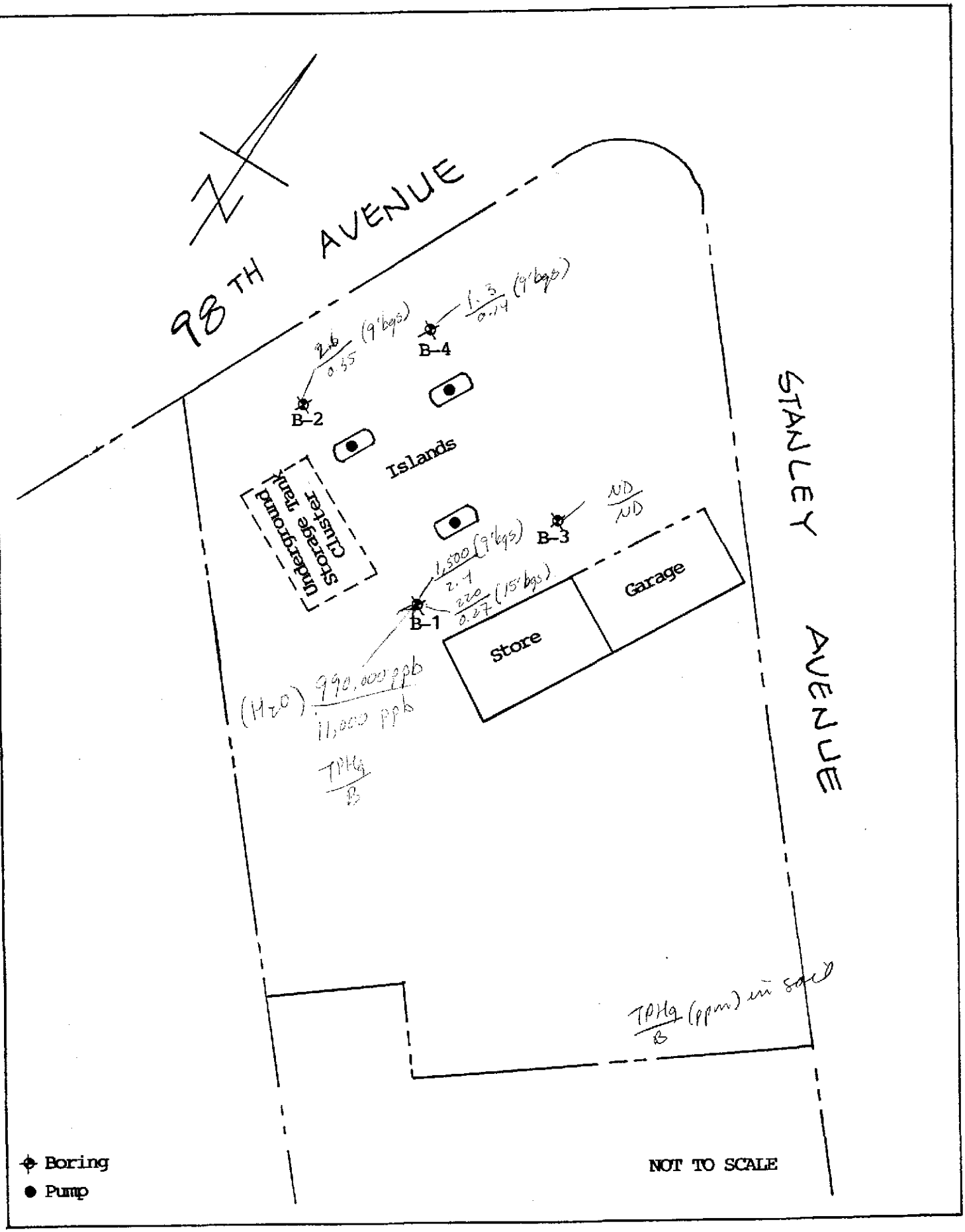

Figure 2

M2

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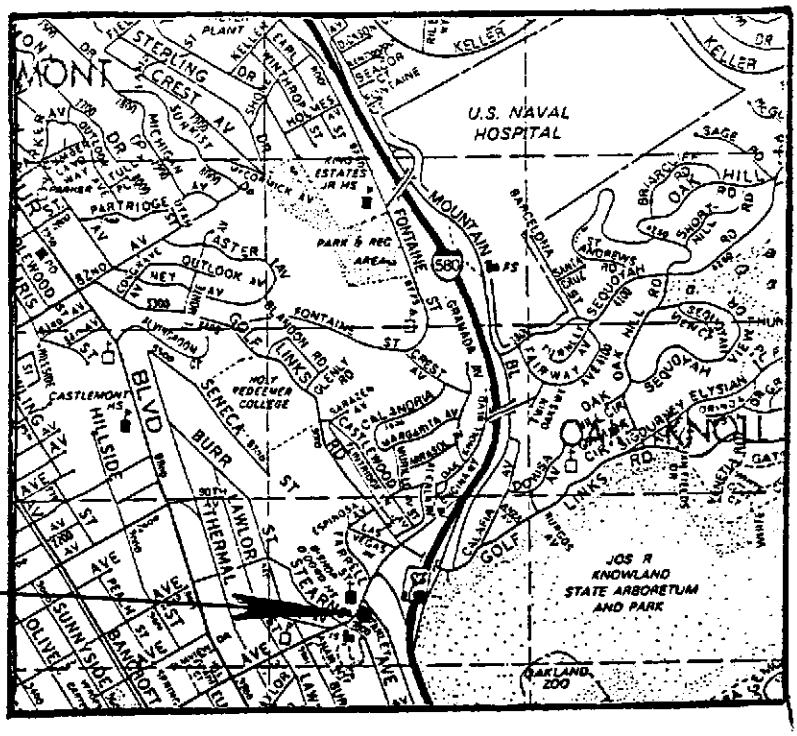
A P P E N D I X "B"

SOIL TECH ENGINEERING, INC.

File No. 7-93-556-SI



Site Location

Thomas Brothers Map 1993 Edition
San Francisco, Alameda
and Contra Costa Counties

Page 15 C7

Figure 1

SOIL TECH ENGINEERING, INC.

M1

File No. 7-93-556-SI

A P P E N D I X "C"

SOIL TECH ENGINEERING, INC.

File No. 7-93-556-SI

DRILLING AND SOIL SAMPLING PROCEDURE

A truck-mounted drill rig, using a continuous, solid-flight, hollow stem auger was used in drilling the soil borings to the desired depths.

Prior to drilling, all drilling equipment (auger, pin, drilling head) were thoroughly steam-cleaned to minimize the possibility of cross-contamination and/or vertical migration of possible contaminants.

In addition, prior to obtaining each individual soil sample, all sampling tools, including the split-spoon sampler and brass liners were thoroughly washed in a Trisodium Phosphate (TSP) solution followed by a rinse in distilled water.

During the drilling operation, relatively undisturbed soil samples were taken from the required depth by forcing a 2-inch I.D. split-spoon sampler insert with a brass liner into the ground at various depths by means of a 140-lb. hammer falling 30-inches or by hydraulic forces.

The samplers were contained relatively undisturbed soil. In general, the first section of soil from the sampler (shoe) was used in the field for lithologic inspection and evidence of contamination. The selected brass liner was immediately trimmed, the ends of the brass liner were covered tightly with aluminum foil and

plastic caps, sealed with tape, labelled, placed in a plastic bag and stored in a cold ice chest in order to minimize the escape of any volatiles present in the samples. Soil samples for analysis were then sent to a state-certified hazardous waste laboratory accompanied by a chain-of-custody record.

Soil samples collected at each sampling interval were inspected for possible contamination (odor or peculiar colors). Soil vapor concentrations was measured in the field by using a Photoionization Detector (PID), PhotoVac Tip Air Analyzer. The soil sample was sealed in a Zip-Loc plastic bag and placed in the sun to enhance volatilization of the hydrocarbons from the sample. The purpose of this field analysis is to qualitatively determine the presence or absence of hydrocarbons and to establish which soil samples will be analyzed at the laboratory. The data was recorded on the drilling log at the depth corresponding to the sampling point.

Other soil samples may be collected to document the stratigraphy and estimate relative permeability of the subsurface materials.

Soil tailings that are obtained during drilling are stored at the site, pending the analytical test results to determine proper disposal.

File No. 7-93-556-SI

A P P E N D I X "D"

File No. 7-93-556-SI

Logged By: Frank Hamedi	Exploratory Boring Log	Boring No. B-1
Date Drilled: 3/28/94	Approx. Elevation	Boring Diameter 8-inch
Drilling Method: Mobile drill rig B-40L		Sampling Method

Depth, Ft.	Sample No.	Field Test for Total Ionization	Penetration Resistance Blows/6"	Unified Soil Classification	DESCRIPTION
1					$2\frac{1}{2}$-inches asphalt. Reddish-brown baserock.
2				CL	Greyish-brown silty clay with some gravel, damp, stiff.
3					
4					
5	1-5		N=35	CL	Dark brown silty clay, damp, very stiff.
6					
				CL	Dark green silty clay, stiff, petroleum odor.
7					
8					
9	1-9		N=39		Very hard.
10					▽ First groundwater encountered at 10 feet.
11					
12					
13					
14					
15	1-15		N=45		Boring terminated at 15 feet.
16					

Remarks

7-93-556-SI

Logged By: Frank Hamedi	Exploratory Boring Log	Boring No. B-2
Date Drilled: 3/28/94	Approx. Elevation	Boring Diameter 8-inch
Drilling Method: Mobile drill rig B-40L		Sampling Method

Depth, Ft.	Sample No.	Field Test for Total Ionization	Penetration Resistance Blows/6"	Unified Soil Classification	DESCRIPTION
1					2-inches asphalt. Light brown baserock.
2				CL	Dark brown silty clay with gravel.
3					
4					
5	2-5		N=32		Petroleum odor.
6					▽ First groundwater encountered at 6 feet.
7				CL	Dark green silty clay.
8					
9	2-9		N=36	CL	Dark green silty clay.
10					Boring terminated at 10 feet.
11					
12					
13					
14					
15					
16					

Remarks

File No. 7-93-556-SI

Logged By: Frank Hamedi	Exploratory Boring Log	Boring No. B-3
Date Drilled: 3/28/94	Approx. Elevation	Boring Diameter 8-inch
Drilling Method: Mobile drill rig B-40L		Sampling Method

Depth, Ft.	Sample No.	Field Test for Total Ionization	Penetration Resistance Blows/6"	Unified Soil Classification	DESCRIPTION
1				CL	3-inches asphalt, 6-inches baserock. Brown silty clay with gravel.
2					
3					
4					
5	3-5		N=30	CL	Brown silty clay with gravel.
6					
7				CL	Very dark brown silty clay, stiff.
8					
9	3-9		N=32	CL	Very dark brown silty clay, stiff.
10					
11					
12					▽ First groundwater encountered at 12 feet.
13					Boring terminated at 13 feet.
14					
15					
16					

Remarks

File No. 7-93-556-SI

Logged By: Frank Hamedi	Exploratory Boring Log	Boring No. B-4
Date Drilled: 3/28/94	Approx. Elevation	Boring Diameter 8-inch
Drilling Method: Mobile drill rig B-40L		Sampling Method

Depth, Ft.	Sample No.	Field Test for Total Ionization	Penetration Resistance Blows/6"	Unified Soil Classification	DESCRIPTION
1				CL	4-inches concrete, 6-inches baserock. Dark brown silty clay with gravel.
2					
3					
4	4-4		N=33	CL	Dark brown silty clay with gravel.
5					
6					
7	4-7		N=31	CL	Dark brown silty clay with gravel.
8					▽ First groundwater encountered at 8 feet.
9					
10					Boring terminated at 10 feet.
11					
12					
13					
14					
15					
16					

Remarks

File No. 7-93-556-SI

A P P E N D I X "E"

Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd
Santa Clara, CA 95050

Date Sampled: 03/28/94
Date Received: 03/30/94
Date Reported: 04/04/94

Project ID: 7-93-556-SI
Sample ID: 1-5

Lab Number: T403101
Matrix: Soil

TPH-gas/BTXE

ANALYTE	Detection Limit ppb	Sample Results ppb
Total Petroleum Hydrocarbons as Gasoline	1.0	<1.0
Benzene	0.005	0.038
Toluene	0.005	<0.005
Xylenes	0.005	<0.005
Ethylbenzene	0.005	<0.005

QA/QC: Blank is none detected.
78% Surrogate Spike Recovery
84% Matrix Spike Recovery
4.0% Duplicate Spike Deviation

Note: Analysis was performed using EPA methods 5030/8015/8020
ppb = ug/L

ARGON MOBILE LABS

Hiram Cueto
Lab Director

Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd
Santa Clara, CA 95050

Date Sampled: 03/28/94
Date Received: 03/30/94
Date Reported: 04/04/94

Project ID: 7-93-556-SI
Sample ID: 1-9

Lab Number: T403102
Matrix: Soil

TPH-gas/BTXE

ANALYTE	Detection Limit ppb	Sample Results ppb
Total Petroleum Hydrocarbons as Gasoline	160	1500
Benzene	0.80	2.4
Toluene	0.80	5.0
Xylenes	0.80	50
Ethylbenzene	0.80	9.1

Note: Analysis was performed using EPA methods 5030/8015/8020
ppb = ug/L

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Hiram Cueto
Lab Director

Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd
Santa Clara, CA 95050

Date Sampled: 03/28/94
Date Received: 03/30/94
Date Reported: 04/04/94

Project ID: 7-93-556-SI
Sample ID: 1-15

Lab Number: T403103
Matrix: Soil

TPH-gas/BTXE

ANALYTE	Detection Limit ppb	Sample Results ppb
Total Petroleum Hydrocarbons as Gasoline	40	220
Benzene	0.20	0.27
Toluene	0.20	2.0
Xylenes	0.20	8.4
Ethylbenzene	0.20	1.9

Note: Analysis was performed using EPA methods 5030/8015/8020
ppb = ug/L

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Hiram Cueto
Lab Director

Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd
Santa Clara, CA 95050

Date Sampled: 03/28/94
Date Received: 03/30/94
Date Reported: 04/04/94

Project ID: 7-93-556-SI
Sample ID: 2-5

Lab Number: T403104
Matrix: Soil

TPH-gas/BTXE

ANALYTE	Detection Limit ppb	Sample Results ppb
Total Petroleum Hydrocarbons as Gasoline	1.0	<1.0
Benzene	0.005	0.086
Toluene	0.005	<0.005
Xylenes	0.005	0.014
Ethylbenzene	0.005	<0.005

QA/QC: 90% Surrogate Spike Recovery

Note: Analysis was performed using EPA methods 5030/8015/8020
ppb = ug/L

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Lab Director

Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd
Santa Clara, CA 95050

Date Sampled: 03/28/94
Date Received: 03/30/94
Date Reported: 04/04/94

Project ID: 7-93-556-SI
Sample ID: 2-9

Lab Number: T403105
Matrix: Soil

TPH-gas/BTXE

ANALYTE	Detection Limit ppb	Sample Results ppb
Total Petroleum Hydrocarbons as Gasoline	1.0	2.6
Benzene	0.005	0.35
Toluene	0.005	0.032
Xylenes	0.005	0.046
Ethylbenzene	0.005	0.037

Note: Analysis was performed using EPA methods 5030/8015/8020
ppb = ug/L

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Lab Director

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SOIL TECH ENGINEERING, INC.
298 Brokaw Rd
Santa Clara, CA 95050

Date Sampled: 03/28/94
Date Received: 03/30/94
Date Reported: 04/04/94

Project ID: 7-93-556-SI
Sample ID: 3-5

Lab Number: T403106
Matrix: Soil

TPH-gas/BTXE

ANALYTE	Detection Limit ppb	Sample Results ppb
Total Petroleum Hydrocarbons as Gasoline	1.0	<1.0
Benzene	0.005	<0.005
Toluene	0.005	<0.005
Xylenes	0.005	<0.005
Ethylbenzene	0.005	<0.005

Note: Analysis was performed using EPA methods 5030/8015/8020
ppb = ug/L

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Hiram Cueto
Lab Director

Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd
Santa Clara, CA 95050

Date Sampled: 03/28/94
Date Received: 03/30/94
Date Reported: 04/04/94

Project ID: 7-93-556-SI
Sample ID: 3-9

Lab Number: T403107
Matrix: Soil

TPH-gas/BTXE

ANALYTE	Detection Limit ppb	Sample Results ppb
Total Petroleum Hydrocarbons as Gasoline	1.0	<1.0
Benzene	0.005	<0.005
Toluene	0.005	<0.005
Xylenes	0.005	<0.005
Ethylbenzene	0.005	<0.005

QA/QC: 94% Surrogate Spike Recovery

Note: Analysis was performed using EPA methods 5030/8015/8020
ppb = ug/L

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Hiram Cueto
Lab Director

Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd
Santa Clara, CA 95050

Date Sampled: 03/28/94
Date Received: 03/30/94
Date Reported: 04/04/94

Project ID: 7-93-556-SI
Sample ID: 4-5

Lab Number: T403108
Matrix: Soil

TPH-gas/BTXE

ANALYTE	Detection Limit ppb	Sample Results ppb
Total Petroleum Hydrocarbons as Gasoline	1.0	1.2
Benzene	0.005	0.15
Toluene	0.005	0.010
Xylenes	0.005	0.027
Ethylbenzene	0.005	0.011

QA/QC: 84% Surrogate Spike Recovery

Note: Analysis was performed using EPA methods 5030/8015/8020
ppb = ug/L

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Lab Director

Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd
Santa Clara, CA 95050

Date Sampled: 03/28/94
Date Received: 03/30/94
Date Reported: 04/04/94

Project ID: 7-93-556-SI
Sample ID: 4-9

Lab Number: T403109
Matrix: Soil

TPH-gas/BTXE

ANALYTE	Detection Limit ppb	Sample Results ppb
Total Petroleum Hydrocarbons as Gasoline	1.0	1.3
Benzene	0.005	0.14
Toluene	0.005	0.022
Xylenes	0.005	0.053
Ethylbenzene	0.005	0.045

QA/QC: 73% Surrogate Spike Recovery

Note: Analysis was performed using EPA methods 5030/8015/8020
ppb = ug/L

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Hiram Cueto
Lab Director

Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd
Santa Clara, CA 95050

Date Sampled: 03/28/94
Date Received: 03/30/94
Date Reported: 04/05/94

Project ID: 7-93-556-SI
Sample ID: W-B-1

Lab Number: T403110
Matrix: Water

TPH-gas/BTXE

ANALYTE	Detection Limit ppb	Sample Results ppb
Total Petroleum Hydrocarbons as Gasoline	16,000	990,000
Benzene	160	11,000
Toluene	160	6,800
Xylenes	160	49,000
Ethylbenzene	160	11,000

QA/QC: Blank is none detected.
14.7% Duplicate Deviation
105% Matrix Spike Recovery (T404041)

Note: Analysis was performed using EPA methods 5030/8015/602
Higher Detection Limits are due to dilution factors
ppb = ug/L

ARGON MOBILE LABS

Hiram Cueto
Lab Director

CHAIN OF CUSTODY RECORD

PROJ. NO. 7-93-556-51 | NAME

SAMPLERS: (Signature) [signature]

NO.	DATE	TIME	SOIL	WATER	LOCATION	CONTAINER	ANALYSES REQUESTED (2) TPHG BTEX	REMARKS
	3/28/94	12:30	✓		1-5		✓	
		1:00	✓		1-9		✓	
		1:15	✓		1-15		✓	
		1:45	✓		2-5		✓	
		2:05	✓		2-9		✓	
		2:25	✓		3-5		✓	
		2:40	✓		3-9		✓	
		4:05	✓		4-5		✓	
		4:20	✓		4-9		✓	
		3:25		✓	W-B-1		✓	

	Date / Time			
Relinquished by: (Signature) [signature]	3/30/94 13:5	Received by: (Signature) [signature]	Relinquished by: (Signature)	Receive by: (Signature)
Relinquished by: (Signature)		Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
Relinquished by: (Signature)		Received for Laboratory by: (Signature)		Remarks

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