



KAPREALIAN ENGINEERING, INC.
Consulting Engineers

P.O. BOX 996 • BENICIA, CA 94510
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581

#11109

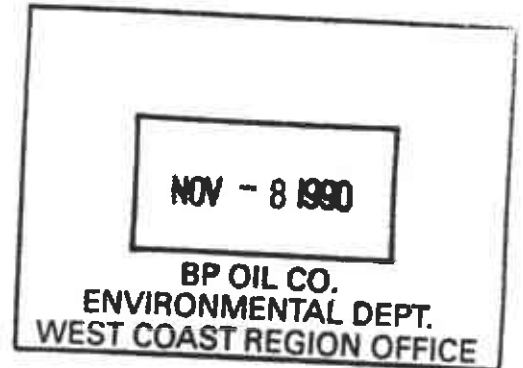
FILE

KEI-J90-0911.R1
November 1, 1990

BP Oil Company
Aetna Building, Suite 360
2868 Prospect Park Drive
Rancho Cordova, CA 95670

Attention: Mr. Peter J. DeSantis

RE: Soil Sampling Report
BP Service Station
4280 Foothill Boulevard
Oakland, California



Dear Mr. DeSantis:

This report summarizes the soil sampling performed by Kaprealian Engineering, Inc. (KEI) at the referenced site. All work was performed in compliance with the guidelines established by the Regional Water Quality Control Board (RWQCB), and the Alameda County Health Agency.

The scope of the work performed by KEI consisted of the following:

Coordination with regulatory agencies.

Collection of soil samples from beneath the fuel tanks, fuel tank pit sidewalls and at the pump island areas

Delivery of samples, including proper Chain of Custody documentation, to a certified analytical laboratory.

Preparation of this report.

SITE DESCRIPTION AND BACKGROUND

The subject site is presently used as a gasoline station. A Location Map and Site Plans are attached to this report.

FIELD ACTIVITIES

KEI's field work was conducted on September 14, 1990, when three underground fuel storage tanks were removed from the site. The tanks consisted of one 6,000 gallon leaded regular fuel tank, one 8,000 gallon super unleaded fuel tank, and one 10,000 gallon regular unleaded fuel storage tank. The 6,000 and 8,000 gallon

tanks were made of steel while the 10,000 gallon tank was made of fiberglass. No apparent cracks or holes were observed in any of the tanks. Ms. Cynthia Chapman of the Alameda County Health agency was present during tank removal and subsequent soil sampling. Mr. John Roemer of the City of Oakland Fire Department was also present during tank removal.

Four soil samples, labeled A1, A2, B1, and B2, were collected from beneath the fuel tanks at a depth of approximately 14.5 feet below grade. In addition, one soil sample, labeled SW1 was collected from the fuel tank pit southwesterly sidewall at a depth of approximately 12.0 feet. Samples were collected from bulk material excavated by backhoe. Samples were placed in clean, two-inch diameter brass tubes, sealed with aluminum foil, plastic caps and tape, and stored in a cooled ice chest for delivery to a certified laboratory. Sample locations are as shown on the attached Site Plan, Figure 1.

Per the direction of Ms. Cynthia Chapman of the ACHA, and due to observed contamination of the backfilled soil excavated during and following tank removal, KEI returned to the site on September 25, 1990, in order to collect additional sidewall samples from the fuel tank pit. Two sidewall samples, labeled SW2-19 and SW4-16, were collected at depths of 19 and 16 feet, respectively. Due to obvious contamination in the excavated soil from the new tank location area (adjacent to the old tank pit area), additional samples labeled A3-16, A4-16.5, A4-19, B3-14.5 and B3-24 were collected at depths ranging from 16 to 24 feet. These samples were collected and handled as described above. Sample locations are shown on the attached Site Plan, Figure 2.

In an attempt to define the lateral extent of soil contamination, KEI returned to the site on September 26, 1990, to collect additional sidewall samples. Two samples, labeled SW3-9.5 and SW5, were collected at depths of 9.5 and 17 feet, respectively. Samples were also handled as described above. Sample locations are as shown on the attached Site Plan, Figure 2.

KEI returned to the site on September 28, 1990, in order to collect soil samples from beneath two product dispensers. Two samples, labeled D1-4 and D2-11, were collected from bulk material excavated by backhoe at depths of 4 and 11 feet, respectively. In addition, one soil sample labeled SW6-11, was collected from the east side of sample point D2-11 at a depth of about 11 feet below grade.

KEI again returned to the site on October 16, 1990, in order to complete soil sampling in the pump island area. Four samples, labeled D3 through D6, were collected from beneath four product dispensers at depths ranging from 4 to 6 feet below grade. These samples were also collected in clean two-inch diameter brass tubes, and handled as described above. After soil sampling was completed, the pump islands were excavated to the sample points. Sample point locations are shown on the attached Site Plan, Figure 2.

SUBSURFACE CONDITIONS

The subsurface soils exposed in the tank pit excavation appeared to consist primarily of silty clay with a trace of gravel to the maximum depth explored (24 feet). Ground water was not encountered at any time during our subsurface excavation activities. The depth to ground water underlying the site is unknown to KEI at this time.

ANALYTICAL RESULTS

All samples were analyzed by Sequoia Analytical Laboratory in Redwood City, California and were accompanied by properly executed Chain of Custody documentation. All soil samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline using EPA method 5030 in conjunction with modified 8015, and benzene, toluene, xylenes and ethylbenzene (BTX&E) using EPA method 8020. Samples B1 and B2, collected from the fuel tank pit and samples D3 through D6, collected from the product pump islands were also analyzed for total lead.

Analytical results of the initial soil samples, A1, A2, B1, B2 and SW1, collected from the fuel tank pit, indicate non-detectable levels of TPH as gasoline and BTX&E for all samples. Benzene was detected at concentrations ranging from non-detectable to 0.10 ppm. Analytical results of soil samples, collected from the fuel tank pit following additional excavation, indicated levels of TPH as gasoline ranging from non-detectable to 16 ppm, except for samples B3-14.5 and SW4-16, which showed 910 ppm and 140 ppm of TPH as gasoline, respectively. However after additional excavation, analyses of the soil sample B3-24, collected beneath the sample B3-14.5 at a depth of approximately 24 feet, indicated levels of TPH as gasoline at 91 ppm. In addition, the entire area between the sidewall adjacent to sample point SW4-16 and the sidewall adjacent to sample point D2-11 was excavated as shown on the attached Site Plan, Figure 2. Analyses of soil samples collected from beneath the product dispensers, indicate levels of TPH as gasoline ranging from non-detectable to

31 ppm. Benzene was detected at concentrations ranging from non-detectable to 0.51 ppm. Results of the soil analyses are summarized in Table 1. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

DISTRIBUTION

A copy of this report should be sent to Ms. Cynthia Chapman of the Alameda County Health Agency, and to the RWQCB, San Francisco Bay Region.

LIMITATIONS

Soil deposits and rock formations may vary in thickness, lithology, saturation, strength and other properties across any site. In addition, environmental changes, either naturally-occurring or artificially-induced, may cause changes in the extent and concentration of any contaminants. Our studies assume that the field and laboratory data are reasonably representative of the site as a whole, and assume that subsurface conditions are reasonably conducive to interpolation and extrapolation.

The results of this study are based on the data obtained from the field and laboratory analyses obtained from a state certified laboratory. We have analyzed this data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, either expressed or implied, regarding the above, including laboratory analyses, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

KEI-J90-0911.R1
November 1, 1990
Page 5

Should you have any questions regarding this report, please feel free to call me at (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.



Hagop Kevork
Civil Engineer



Don R. Braun
Certified Engineering Geologist

License No. 1310
Exp. Date 6/30/92



Mardo Kaprealian
President

\bam

Attachments: Table 1
Location Map
Site Plans - Figures 1 & 2
Laboratory Analyses
Chain of Custody documentation

KEI-J90-0911.R1
November 1, 1990

TABLE 1

SUMMARY OF LABORATORY ANALYSES
SOIL SAMPLES COLLECTED FROM THE FUEL TANK PIT
AND PRODUCT DISPENSER AREA

(Collected between September 14 to 28,
and on October 16, 1990)

<u>Sample</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethylbenzene</u>
A1	14.5	ND	0.10	0.006	ND	0.006
A2	14.5	ND	ND	0.0080	ND	ND
B1*	14.5	ND	0.034	0.014	ND	ND
B2*	14.5	ND	0.0060	ND	ND	ND
SW1	12	ND	0.018	ND	ND	ND
SW2-19	19	ND	0.12	ND	0.071	0.10
SW3-9.5	9.5	ND	0.051	ND	ND	0.0050
SW4-16	16	140	0.89	0.79	0.44	4.4
SW5	17	4.2	0.040	0.029	0.058	0.069
SW6-11	11	16	0.033	0.16	0.38	0.097
A3-16	16	4.3	0.044	0.010	0.22	0.20
A4-16.5	16.5	5.3	0.058	0.026	ND	0.19
A4-19	19	ND	0.010	ND	0.037	0.050
B3-14.5	14.5	910	6.0	13	82	19
B3-24	24	91	1.7	0.46	ND	0.17
D1-4	4	ND	ND	ND	ND	ND
D2-11	11	31	0.38	1.2	2.8	0.60
D3**	4	ND	ND	0.011	ND	ND
D4**	6	1.9	0.054	0.094	0.20	0.046
D5**	4	6.8	0.0010	0.028	0.018	0.045
D6**	5.5	15	0.51	0.038	1.7	0.62

* Total lead for B1 and B2 were detected at 10 ppm and 12 ppm, respectively.

** Total lead for D3, D4, D5 and D6 were detected at 2.5 ppm, 4.5 ppm, 4.0 ppm and 2.0 ppm, respectively.

ND = Non-detectable.

Results in parts per million (ppm), unless otherwise indicated.



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LOCATION MAP

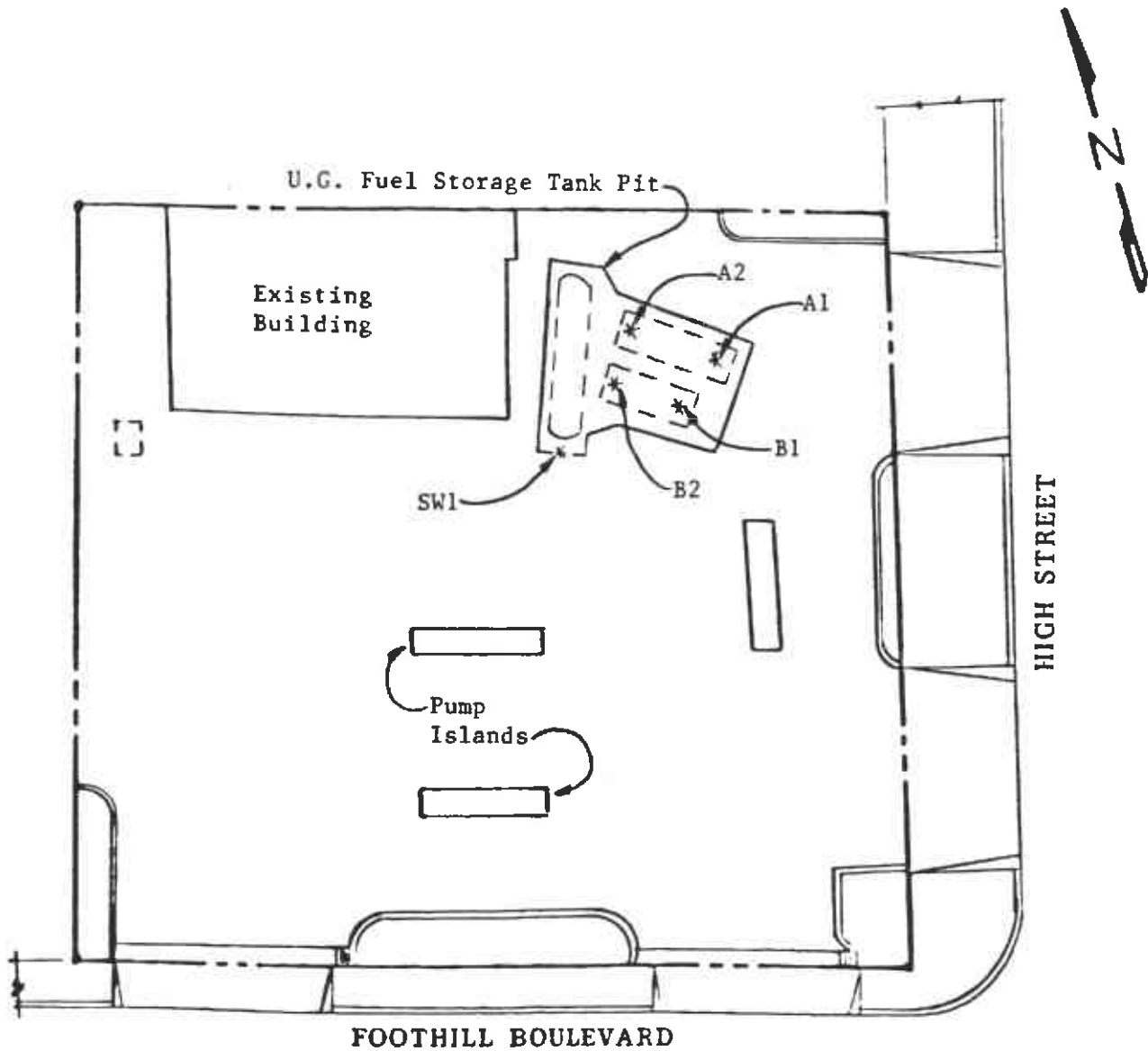
Base from U.S.G.S. 7.5 min. Oakland East Quadrangle
(photorevised 1980)

BP Service Station
4280 Foothill Boulevard
Oakland, CA



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Consulting Engineers

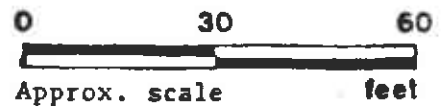
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SITE PLAN
Figure 1

LEGEND

* Sample Point Location

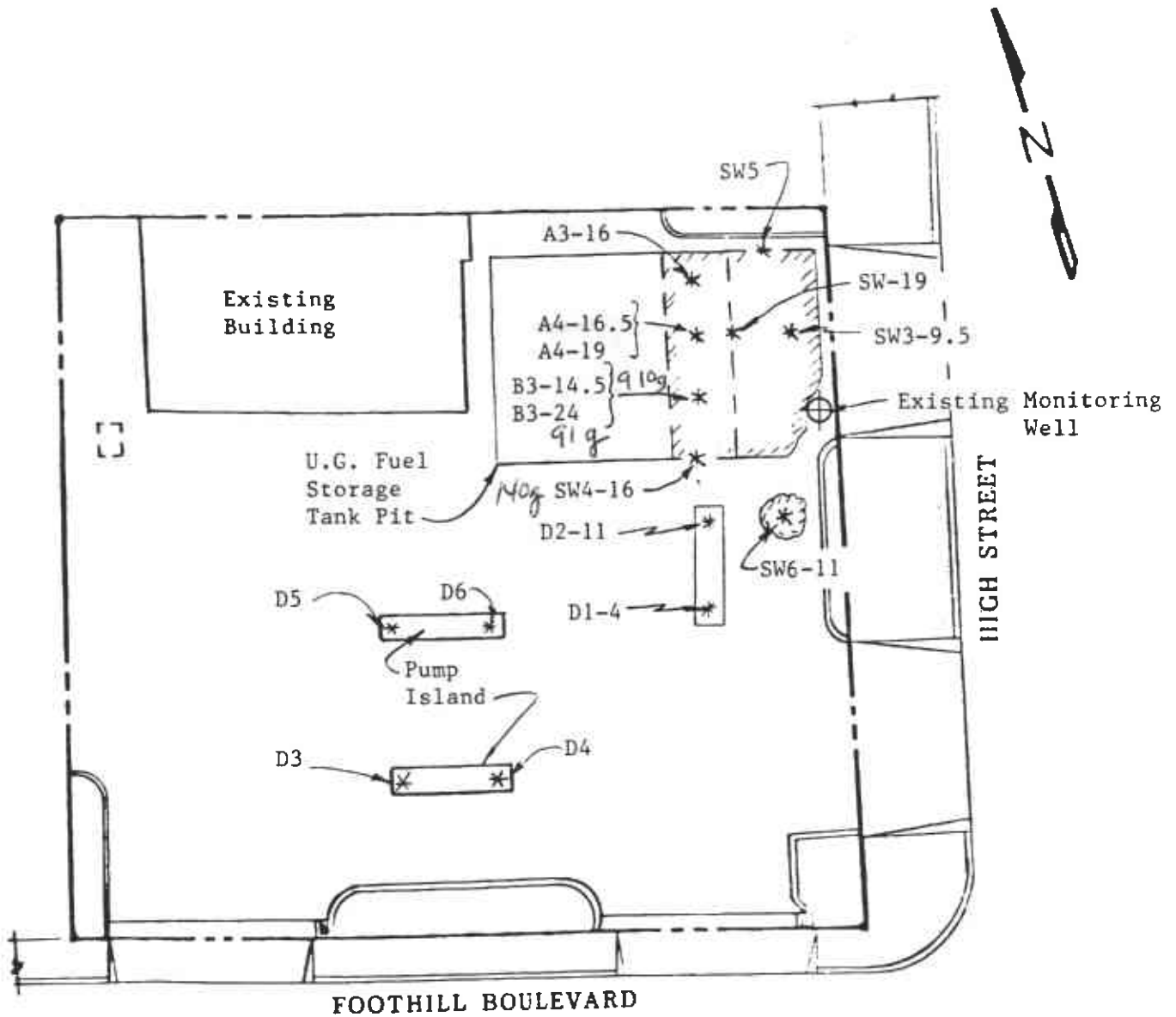


BP Service Station
4280 Foothill Boulevard
Oakland, CA



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Consulting Engineers

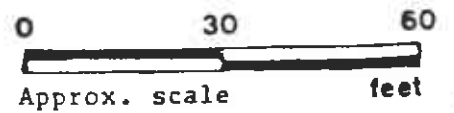
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SITE PLAN
Figure 2

LEGEND

- * Sample Point Location
- ▨ Additional Excavation



BP Service Station
4280 Foothill Boulevard
Oakland, CA



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.
P.O. Box 996
Benicia, CA 94510
Attention: Mardo Kaprealian, P.E.

Client Project ID: BP, 4280 Foothill Blvd., Oakland
Matrix Descript: Soil
Analysis Method: EPA 5030/8015/8020
First Sample #: 009-0311

Sampled: Sep 14, 1990
Received: Sep 14, 1990
Analyzed: Sep 14, 1990
Reported: Sep 18, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
009-0311	A1	N.D.	0.10	0.006	0.006	N.D.
009-0312	A2	N.D.	N.D.	0.0080	N.D.	N.D.
009-0313	B1	N.D.	0.034	0.014	N.D.	N.D.
009-0314	B2	N.D.	0.0060	N.D.	N.D.	N.D.
009-0315	SW1	N.D.	0.018	N.D.	N.D.	N.D.

Detection Limits:

1.0

0.0050

0.0050

0.0050

0.0050

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Belinda C. Vega
Laboratory Director

90311.KEI <1>



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.	Client Project ID: BP, 4280 Foothill Blvd., Oakland	Sampled: Sep 14, 1990
P.O. Box 996	Sample Descript: Soil	Received: Sep 14, 1990
Benicia, CA 94510	Analysis for: Total Lead	Extracted: Sep 17, 1990
Attention: Mardo Kaprealian, P.E.	First Sample #: 009-0313	Analyzed: Sep 17, 1990
		Reported: Sep 18, 1990

LABORATORY ANALYSIS FOR: Total Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
009-0313	B1	0.25	10
009-0314	B2	0.25	12

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director



KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER Hand		SITE NAME & ADDRESS BP station - Oakland 4280 Foothill Blvd					ANALYSES REQUESTED			TURN AROUND TIME: 24 Hrs		
WITNESSING AGENCY							TPH-G	BTXE	Total Lead			
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-G	BTXE	Total Lead	REMARKS
A1	9/14/90		✓		✓		1	Fuel Tank pit	✓	✓		0310 by the result 0312 0313 0314 0315
A2	9/14/90		✓		✓		1	Fuel Tank pit	✓	✓		
B1	9/14/90		✓		✓		1	Fuel Tank pit	✓	✓	✓	
B2	9/14/90		✓		✓		1	Fuel Tank pit	✓	✓	✓	
SW1	9/14/90		✓		✓		1	Tank Pit Sidewall	✓	✓		

Relinquished by: (Signature) Nagesh Kewalkar	Date/Time 9/14/90 3:00 pm	Received by: (Signature) Akonhet
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

- Have all samples received for analysis been stored in ice?
- Will samples remain refrigerated until analyzed?
- Did any samples received for analysis have head space? **NO**
- Were samples in appropriate containers and properly packaged?

Signature: **[Signature]** Title: **SR** Date: **9/14**



SEQUOIA ANALYTICAL

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Kaprealian Engineering, Inc.	Client Project ID: BP, 4280 Foothill Blvd., Oakland	Sampled: Sep 25, 1990
P.O. Box 996	Matrix Descript: Soil	Received: Sep 25, 1990
Benicia, CA 94510	Analysis Method: EPA 5030/8015/8020	Analyzed: Sep 25, 1990
Attention: Mardo Kaprealian, P.E.	First Sample #: 009-0688	Reported: Sep 26, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
009-0688	SW2-19	N.D.	0.12	N.D.	0.10	0.071
009-0689	SW4-16	140	0.89	0.79	4.4	0.44
009-0690	A3-16	4.3	0.044	0.010	0.20	0.22
009-0691	A4-16.5	5.3	0.058	0.026	0.19	N.D.
009-0692	A4-19	N.D.	0.010	N.D.	0.050	0.037
009-0693	B3-14.5	910	6.0	13	19	82
009-0694	B3-24	91	1.7	0.46	0.17	N.D.

Detection Limits:	1.0	0.0050	0.0050	0.0050	0.0050
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Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Belinda C. Vega
Laboratory Director



KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER <i>Wade Weston</i>		SITE NAME & ADDRESS <i>B. P. Oakland. 4280. Foothill Blvd</i>					ANALYSES REQUESTED				TURN AROUND TIME: <i>24 HR.</i>	
WITNESSING AGENCY							TPH-G	BTXE				REMARKS
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	CONT.	NO. OF	SAMPLING LOCATION	TPH-G	BTXE	REMARKS
<i>SW2-19</i>	<i>9/25/90</i>		✓		✓			1	<i>side wall</i>	✓	✓	<i>0090088</i>
<i>SU4-16</i>			✓		✓			1	<i>" "</i>	✓	✓	<i>689</i>
<i>A3-16</i>			✓		✓			1	<i>Tank P:7</i>	✓	✓	<i>690</i>
<i>A4-16.5</i>			✓		✓			1	↓	✓	✓	<i>691</i>
<i>A4-19</i>			✓		✓		1	✓		✓	<i>692</i>	
<i>B3-14.5</i>			✓		✓		1	✓		✓	<i>693</i>	
<i>B3-24</i>			✓		✓		1	✓		✓	<i>694</i>	
Relinquished by: (Signature) <i>Wade Weston</i>		Date/Time <i>9/25/90 405</i>		Received by: (Signature) <i>Tom McLean</i>		The following MUST BE completed by the laboratory accepting samples for analysis: 1. Have all samples received for analysis been stored in ice? <i>Yes</i> 2. Will samples remain refrigerated until analyzed? <i>Yes</i> 3. Did any samples received for analysis have head space? <i>N/A</i> 4. Were samples in appropriate containers and properly packaged? <i>Yes</i>						
Relinquished by: (Signature) <i>Tom McLean</i>		Date/Time <i>9/25/90 440</i>		Received by: (Signature) <i>Ed Kenick</i>								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Signature <i>Ed</i>		Title		Date <i>9-25-90</i>		



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.	Client Project ID: BP, 4280 Foothill, Oakland	Sampled: Sep 26, 1990
P.O. Box 996	Matrix Descript: Soil	Received: Sep 27, 1990
Benicia, CA 94510	Analysis Method: EPA 5030/8015/8020	Analyzed: Sep 27, 1990
Attention: Mardo Kaprealian, P.E.	First Sample #: 009-0777 A-B	Reported: Sep 28, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P.			Ethyl	Xylenes
		Hydrocarbons	Benzene	Toluene	Benzene	
		mg/kg (ppm)	mg/kg (ppm)	mg/kg (ppm)	mg/kg (ppm)	mg/kg (ppm)
009-0777 A-B	SW5	4.2	0.040	0.029	0.069	0.058
009-0778 A-B	SW3-9.5	N.D.	0.051	N.D.	0.0050	N.D.

Detection Limits:	1.0	0.0050	0.0050	0.0050	0.0050
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Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

1(707)7466915



KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER <i>Wade Weston</i>		SITE NAME & ADDRESS B. P. Oakland 4280 Foothill Blvd.						ANALYSES REQUESTED			TURN AROUND TIME: 24 HR	
WITNESSING AGENCY								TPH-6	BTEX	Organic Pb	REMARKS	
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-6	BTEX	Organic Pb	REMARKS
Comp Q	9/26/90		✓			✓	2	Stock Pile ↓	✓	✓		0090793 AB
Comp R	"		✓			✓	2		✓	✓		774
Comp S	"		✓			✓	2		✓	✓	✓	775
Comp T	"		✓			✓	2		✓	✓		776 ↓
SW5 SW4-17	9/26/90		✓		✓		1	Tank Pit	✓	✓		777
SW3-95	"		✓		✓		1	Tank Pit	✓	✓		778
Relinquished by: (Signature) <i>Wade Weston</i>		Date/Time 9/27/90 ⁸⁴⁵	Received by: (Signature) <i>Tom McLi</i>		The following MUST BE completed by the laboratory accepting samples for analysis: 1. Have all samples received for analysis been stored in ice? <u>Yes</u> 2. Will samples remain refrigerated until analyzed? <u>Yes</u> 3. Did any samples received for analysis have head space? <u>No</u> 4. Were samples in appropriate containers and properly packaged? <u>Yes</u>							
Relinquished by: (Signature) <i>Tom McLi</i>		Date/Time 9/27/90 ⁹⁰⁰	Received by: (Signature) <i>B.D.V.</i>									
Relinquished by: (Signature)		Date/Time	Received by: (Signature)									
Relinquished by: (Signature)		Date/Time	Received by: (Signature)									
					Signature <i>B.D.V.</i>		Title <i>Lab Director</i>		Date 9/27/90			



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Kaprealian Engineering, Inc.
P.O. Box 996
Benicia, CA 94510
Attention: Mardo Kaprealian, P.E.

Client Project ID: BP, 4280 Foothill Blvd., Oakland
Matrix Descript: Soil
Analysis Method: EPA 5030/8015/8020
First Sample #: 009-0798

Sampled: Sep 28, 1990
Received: Sep 28, 1990
Analyzed: Oct 1, 1990
Reported: Oct 2, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
009-0798	D1-4	N.D.	N.D.	N.D.	N.D.	N.D.
009-0799	D2-11	31	0.38	1.2	0.60	2.8
009-0800	SW6-11	16	0.033	0.16	0.097	0.38

Detection Limits:

1.0

0.0050

0.0050

0.0050

0.0050

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Belinda C. Vega
Laboratory Director



KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER <i>Wade Weston</i>		SITE NAME & ADDRESS <i>B. P. Oakland 4280 Foothill Blvd</i>						ANALYSES REQUESTED				TURN AROUND TIME: <i>24 HR</i>
WITNESSING AGENCY												
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-G	BIXE	REMARKS	
<i>D1-4</i>	<i>9/28/90</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<i>1</i>	<i>under dispenser</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>3090 FFF</i>	
<i>D2-11</i>	<i>"</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<i>1</i>	<i>" "</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>FFF</i>	
<i>SW 6-11</i>	<i>"</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<i>1</i>	<i>side wall</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>FOO</i>	

Relinquished by: (Signature) <i>Wade Weston</i>	Date/Time <i>9/28/90 5:30</i>	Received by: (Signature) <i>Tom Mc Lee</i>
Relinquished by: (Signature) <i>Tom Mc Lee</i>	Date/Time <i>9/28/90 6:00</i>	Received by: (Signature) <i>Tom Mc Lee</i>
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

- Have all samples received for analysis been stored in ice?
- Will samples remain refrigerated until analyzed?
- Did any samples received for analysis have head space? *NO*
- Were samples in appropriate containers and properly packaged?

Signature: *[Signature]* Title: *SR* Date: *9-28-90*



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.	Client Project ID: BP, Foothill/High St., Oakland	Sampled: Oct 16, 1990
P.O. Box 996	Matrix Descript: Soil	Received: Oct 17, 1990
Benicia, CA 94510	Analysis Method: EPA 5030/8015/8020	Analyzed: Oct 17, 1990
Attention: Mardo Kaprealian, P.E.	First Sample #: 010-0479	Reported: Oct 18, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P.	Benzene	Toluene	Ethyl	Xylenes
		Hydrocarbons			Benzene	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
010-0479	D3	N.D.	N.D.	0.011	N.D.	N.D.
010-0480	D4	1.9	0.054	0.094	0.046	0.20
010-0481	D5	6.8	0.0010	0.028	0.045	0.018
010-0482	D6	15	0.51	0.038	0.62	1.7

Detection Limits:	1.0	0.0050	0.0050	0.0050	0.0050
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Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director



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Kaprealian Engineering, Inc.
P.O. Box 996
Benicia, CA 94510
Attention: Mardo Kaprealian, P.E.

Client Project ID: BP, Foothill/High St., Oakland
Sample Descript: Soil
Analysis for: Total Lead
First Sample #: 010-0479


Sampled: Oct 16, 1990
Received: Oct 17, 1990
Extracted: Oct 17, 1990
Analyzed: Oct 18, 1990
Reported: Oct 18, 1990

LABORATORY ANALYSIS FOR: Total Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
010-0479	D-3	0.25	2.5
010-0480	D-4	0.25	4.5
010-0481	D-5	0.25	4.0
010-0482	D-6	0.25	2.0

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Belinda C. Vega
Laboratory Director

100479.KEI <2>



KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER Haig		SITE NAME & ADDRESS BP Station - Oakland Foothill / High St.					ANALYSES REQUESTED			TURN AROUND TIME: 24 Hrs	
WITNESSING AGENCY							TPH-G	BTXE	Total Lead	REMARKS	
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	CONT.	NO. OF	SAMPLING LOCATION		
D3	10/16		✓	✓			1		Beneath Dispenser	✓	✓
D4	10/16		✓	✓			1		↓	✓	✓
D5	10/16		✓	✓			1		↓	✓	✓
D6	10/16		✓	✓			1		↓	✓	✓

Please Fax 0100479
the results 480
481
482

Relinquished by: (Signature) Haig	Date/Time 10-16-40 18:27	Received by: (Signature) T. Bolan
Relinquished by: (Signature) T. Bolan	Date/Time 10-16 18:45	Received by: (Signature) S. Han
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

- Have all samples received for analysis been stored in ice?
485
- Will samples remain refrigerated until analyzed?
485
- Did any samples received for analysis have head space?
N/A
- Were samples in appropriate containers and properly packaged?
485

Signature: S.H. Title: _____ Date: 10-16