ENVIRONMENTAL BIO-SYSTEMS, INC.
Innovative Solutions for a Better Environment

90 AUG 21 AM 11:08

August 14, 1990

Zaccor Corporation
791 Hamilton Avenue
Menlo Park, California 94025

Attention: Mr. Gary Zaccor

The following documentation concerns the underground storage tank (UST) removal and elementary exploration of hydrocarbon contamination in the unsaturated zone performed by Environmental Bio-Systems, Inc. (EBS) for Zaccor Corporation, on July 12, 1990 at:

KAMUR INDUSTRIES
2351 SHORELINE ROAD
ALAMEDA, CALIFORNIA

EBS was retained by Zaccor Corporation to perform the following services:

- perform soil sampling during removal of three 10,000 gallon UST's
- collect composite soil samples from excavated soils
- collect soil samples from the area surrounding the previously removed UST's to attempt to approximate the lateral extent of hydrocarbon contamination
- transfer all samples to the custody of Mobile Chem Labs, Inc. for on-site analysis
- provide a written summary of observations, procedures, and analytical results including a diagram of sampling locations

A total of three 10,000 gallon gasoline tanks were removed from the site. Subsequent sampling of the surrounding soil within the tank pit excavations was performed in the presence of Inspector Cynthia Chapman of the Alameda County Department of Environmental Health.

Also present during portions of the removal operation were Lieutenant Steve McKinley of the Alameda Fire Department and Mr. James Murphy of the City of Alameda Bureau of Electricity.

FIELD OBSERVATIONS

Tank A was a 10,000 gallon gasoline tank constructed of single walled steel with a partially intact tar wrap. A visual inspection of the tank did not reveal any rusting, pitting, or holes. The backfill and native soil underlying the tank was stained and emitted a strong hydrocarbon odor.

Tank B was a 10,000 gallon gasoline tank constructed of single walled steel with a partially intact tar wrap. A visual inspection of the tank did not reveal any rusting, pitting, or holes. The backfill and native soil underlying the tank was stained and emitted a strong hydrocarbon odor.

Tank C was a 10,000 gallon gasoline tank constructed of single walled steel with a partially intact tar wrap. A visual inspection of the tank did not reveal any rusting, pitting, or holes. The backfill and native soil underlying the tank was stained and emitted a strong hydrocarbon odor.

A black floating product was visible on water present within both tank pits.

Following removal of the tanks, the two tank pits shown on the enclosed site diagram were expanded into one excavation.

SAMPLING

Please refer to the enclosed diagram for sample locations and site details.

All samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline and benzene, toluene, ethylbenzene, and xylenes (BTEX).

Tank Removal Sampling

Soil sample #S1 was collected from an approximate depth of 8.5 feet below grade (backfill/native soil interface) beneath the fill end of tank A.

Soil sample #S2 was collected from approximately 8.5 feet below grade beneath the non-fill end of Tank A.

Soil sample #S3 was collected from an approximate depth of 8.5 feet below grade (backfill/native soil interface) beneath the fill end of tank C.

Soil sample #S4 was collected from approximately 8.5 feet below grade beneath the non-fill end of Tank B.

Soil sample #S5 was collected from an approximate depth of 8.5 feet below grade (backfill/native soil interface) beneath the fill end of tank B

Soil sample #S6 was collected from approximately 8.5 feet below grade beneath the non-fill end of Tank C.

Stockpile Sampling

From the approximate volume of 200 cubic yards of soil excavated during removal of the UST's, a total of four composite samples were collected (one sample per fifty cubic yards). The composite samples were numbered SC1 A-D, SC2 A-D, SC3 A-D, and SC4 A-D.

Additional Soil Sampling

Additional soil samples were collected from the undisturbed area surrounding the tank excavation. A hand auger was utilized to access soil through six exploratory borings (EB's). A total of 8 samples were collected from within the borings.

Boring EB1 was advanced near the northwest corner of the western side of the excavation. The boring was advanced to a total depth of 5.0 feet where a strong hydrocarbon odor was detected. No samples were collected from within this boring.

A second boring (EB2) was advanced approximately ten feet to the west of EB1. Sample #S7 was collected at a depth of between 5.5 to 6.0 feet from within boring EB2. Sample #S8 was collected from within the same boring at a depth of 6.5 to 7.0 feet. A hydrocarbon odor was noted in soils extending from approximately 5 feet to the bottom of the boring. Moist soil was encountered at an approximate depth of 7 feet.

Boring EB3, placed near the southern end of the west side of the excavation, was advanced to a total depth of 7.0 feet. Sample #S9 was collected at a depth of between 5.0 to 5.5 feet. Sample #S10 was collected at a depth of between 6.5 to 7.0 feet. A hydrocarbon odor was noted in soils extending from approximately 5 feet to the bottom of the boring. Moist soil was encountered at an approximate depth of 7 feet.

A second boring (EB4) was also advanced near the southern end of the west side of the excavation approximately ten feet to the east of EB3. Sample #S11 was collected at a depth of between 6.0 to 6.5 feet from within boring EB4. A hydrocarbon odor was noted in soils extending from approximately 6 feet to the bottom of the boring. Moist soil was encountered at an approximate depth of 6.5 feet.

Boring EB5 was advanced beyond the east side of the excavation. The boring was advanced to a total depth of 5.0 feet. Sample #S13 was collected at a depth of between 5.0 to 5.5 feet. Sample #S12 was collected at a depth of between 6.0 to 6.5 feet. A hydrocarbon odor was noted in soils extending from approximately 5 feet to the bottom of the boring. Moist soil was encountered at an approximate depth of 6.5 feet.

Boring EB6 was advanced to the north of the excavation. The boring was advanced to a total depth of 5.5 feet. Sample #S14 was collected at a depth of between 5.0 to 5.5 feet. A hydrocarbon odor was noted from within the sampled soil

RESULTS

The certified analytical report documenting the findings of sample analyses has been attached to this report.

Sample #S1 was found to contain the following contaminants at the given concentrations: TPH calculated as gasoline - 9,100 parts per million (ppm), benzene - 94 ppm, toluene - 410 ppm, xylenes - 530 ppm, ethylbenzene - 110 ppm.

Sample #S2 was found to contain the following contaminants at the given concentrations: TPH calculated as gasoline - 9,500 ppm, benzene - 67 ppm, toluene - 350 ppm, xylenes - 590 ppm, ethylbenzene - 120 ppm.

Sample #S3 was found to contain the following contaminants at the given concentrations: TPH calculated as gasoline - 360 ppm, benzene - 4.0 ppm, toluene - 17 ppm, xylenes - 21 ppm, ethylbenzene - 4.6 ppm.

Sample #S4 was found to contain the following contaminants at the given concentrations: TPH calculated as gasoline - 2,600 ppm, benzene - 27 ppm, toluene - 130 ppm, xylenes - 180 ppm, ethylbenzene - 37 ppm.

Sample #S5 was found to contain the following contaminants at the given concentrations: TPH calculated as gasoline - 2,800 ppm, benzene - 26 ppm, toluene - 150 ppm, xylenes - 210 ppm, ethylbenzene - 43 ppm.

Sample #S6 was found to contain the following contaminants at the given concentrations: TPH calculated as gasoline - 3,000 ppm, benzene - 38 ppm, toluene - 230 ppm, xylenes - 250 ppm, ethylbenzene - 73 ppm.

Sample #S7 was placed on hold and not analyzed.*

Sample #S8 was found to contain the following contaminants at the given concentrations: TPH calculated as gasoline - 700 ppm, benzene - 6.8 ppm, toluene - 31 ppm, xylenes - 43 ppm, ethylbenzene - 8.9 ppm.

Sample #S9 was found to contain the following contaminants at the given concentrations: TPH calculated as gasoline - 830 ppm, benzene - 2.6 ppm, toluene - 13 ppm, xylenes - 38 ppm, ethylbenzene - 9.2 ppm.

Sample #S10, #S11, and #S12 were placed on hold and not analyzed.*

Sample #S13 was found to contain the following contaminants at the given concentrations: TPH calculated as gasoline - 50 ppm, benzene - .24 ppm, toluene - 052 ppm, xylenes - 2.8 ppm, ethylbenzene - .6 ppm.

* Refer to RECOMMENDATIONS section of this report for explanation of why these samples were not analyzed

Sample #S14 was found to contain the following contaminants at the given concentrations: TPH calculated as gasoline - 2,400 ppm, benzene - 24 ppm, toluene - 56 ppm, xylenes - 110 ppm, ethylbenzene - 20 ppm.

Sample #SC1 A-D was found to contain the following contaminants at the given concentrations:TPH calculated as gasoline - 2,800 ppm, benzene - 8.8 ppm, toluene - 49 ppm, xylenes - 130 ppm, ethylbenzene - 25 ppm.

Sample #SC2 A-D was found to contain the following contaminants at the given concentrations:TPH calculated as gasoline - 3,500 ppm, benzene - 22 ppm, toluene - 130 ppm, xylenes - 180 ppm, ethylbenzene - 39 ppm.

Sample #SC3 A-D was found to contain the following contaminants at the given concentrations:TPH calculated as gasoline - 570 ppm, benzene - .8 ppm, toluene - 8 ppm, xylenes - 26 ppm, ethylbenzene - 4.5 ppm.

Sample #SC4 A-D was found to contain the following contaminants at the given concentrations:TPH calculated as gasoline - 2,100 ppm, benzene - 8 ppm, toluene - 58 ppm, xylenes - 110 ppm, ethylbenzene - 20 ppm.

SAMPLING METHODOLOGY

Soil sample material from the tank pits was removed using a backhoe bucket. After removing the first three to four inches of soil just above the teeth of the bucket, presumably slough, samples were contained by driving clean brass tubes (1.92" x 6") into the exposed layer of soil. Soil was packed into the tubes to eliminate the possibility of headspace. Thus prepared, the ends of the tubes were wrapped with aluminum foil and sealed with plastic caps. After removing excess foil, tape was applied to the seams between cap and tube in an effort to reduce the evaporative loss of volatile constituents.

Soil samples collected from stockpiled material were contained by driving clean brass tubes into the soil lying approximately 12 inches within the piles.

Using a hand auger sampling apparatus, four boreholes (exploratory borings) were extended into the soil until a point just above the desired point of sample acquisition was reached. At this point the augerhead was advanced an additional four to six inches into the soil. The augerhead was then removed from the boring and a clean brass tube (1.92" x 6") was driven into the soil held within the auger head. Once soil had been packed into the brass tubes in this manner they were removed from the augerhead and the ends of the tubes were wrapped with aluminum foil and sealed with plastic caps. After removing excess foil, electrical tape was applied to the seams between cap and tube in an effort to reduce the evaporative loss of volatile constituents.

All samples were presented under chain of custody manifest to a mobile laboratory (Mobile Chem Labs, Inc.) for analysis on site.

Analytical methods used by Mobile Chem Labs, Inc. were consistent with those procedures presented in EPA document SW-846.

RECOMMENDATIONS

The State Water Resources Control Board document, Leaking Underground Fuel Tank Field Manual (LUFT), supported by the San Francisco Regional Water Quality Control Board (SFRWQCB), defines acceptable limits and appropriate actions in dealing with tank removal and associated contamination.

As presented in the LUFT manual, the presence of petroleum hydrocarbons at levels exceeding 100 ppm defines the need for further assessment and/or remediation. Soil samples collected from beneath the removed tanks were found to be considerably above this level.

Although water was present within the pit below the removed tanks, water samples were not collected when sufficient recharge failed to occur following dewatering of the pits by a vacuum truck. Inspector Chapman waived more rigorous attempts at collecting such samples with the agreement that an exploration of the impact to shallow water be performed pursuant to the mandates of the SFRWQCB.

In accordance with the LUFT manual, further investigatory actions would include remediation of soils found to contain in excess of 100 ppm TPH as well as the installation of at least one groundwater monitoring well within ten feet of the contaminant source for the collection of groundwater quality data. Also in accordance with LUFT guidelines, a minimum of three groundwater reference points are necessary in order to determine groundwater flow direction beneath the site. This requirement may be satisfied by the installation of two additional groundwater reference points, either peizometers or a wells. The three reference points will allow triangulation and subsequent determination of groundwater gradient. Properly installed and screened wells located on adjacent properties (if any) may qualify as eligible reference points.

The presence of groundwater monitoring wells on two adjacent properties is a resource to be researched thoroughly. The information available from these points could be utilized not only to provide necessary groundwater elevation data but to reveal the extent and nature of contaminants originating from these offsite sources. This information would be of critical importance should the levels of hydrocarbon contaminants in groundwater beneath your site mandate future extraction and remediation.

The levels of contaminants detected in interface soil samples collected from below the tanks ranged from 360 ppm TPH (#S3) to 9,500 ppm TPH (#S2). Further excavation and/or remediation of soils should be performed at all points. The presence of a floating layer of an apparent hydrocarbon contaminant noted on water within the pit during removal activities, along with the elevated TPH levels noted in the soil should be addressed as a flammability hazard during any future subsurface activities.

The analysis of samples augered from the area surrounding the excavation suggest some degree of latcral contaminant migration. The outermost borings to the west of the pit (EB2 & EB4) were noted to exhibit strong hydrocarbon odors. The results of the analysis of soil samples taken from EB2 (#S8) and EB3 (#S9) revealed concentrations of hydrocarbons significantly in excess of the 100 ppm action level. Further analysis of samples from these borings was waived when organoleptic inspection coupled with the laboratory analysis of samples #S8 and #S9 failed to suggest significant improvement of soil quality in any of the borings.

Further exploration of the lateral contaminant migration to the west is warranted at this time. Continued investigation in this direction would necessitate an examination of soils on the adjacent property (new car wash facility).

The analysis of sample #S14, taken from EB6 at a depth of 5.0 to 5.5 feet, showed a TPH as gasoline concentration of 2,400 ppm. The magnitude and location of this boring suggest that lateral migration has occurred in the northerly direction. Further exploration into the extent of this impact should be performed.

The samples collected from the single boring placed to the east of the tank pit (EB5) did not indicate TPH concentrations in excess of 100 ppm (sample #S12).

The results of composite sampling from the stockpiled soil indicate an average TPH concentration of 2242.5 ppm. Soil containing contamination of this magnitude must be handled as a regulated waste. As such, it should remain on top of a hydrocarbon resistant liner with a cover provided to prevent rain intrusion or uncontrolled emission of volatile contaminants.

REPORTAGE

Copies of the sampling report, the chain of custody, and the certified analytical report must be submitted to the SFRWQCB and the Alameda County Department of Environmental Health.

The following addresses have been listed for your convenience:

Water Quality Control Board
San Francisco Bay Region
1800 Harrison Street
Room 700
Oakland, CA 94612
ATTN: Fuel Leaks Division

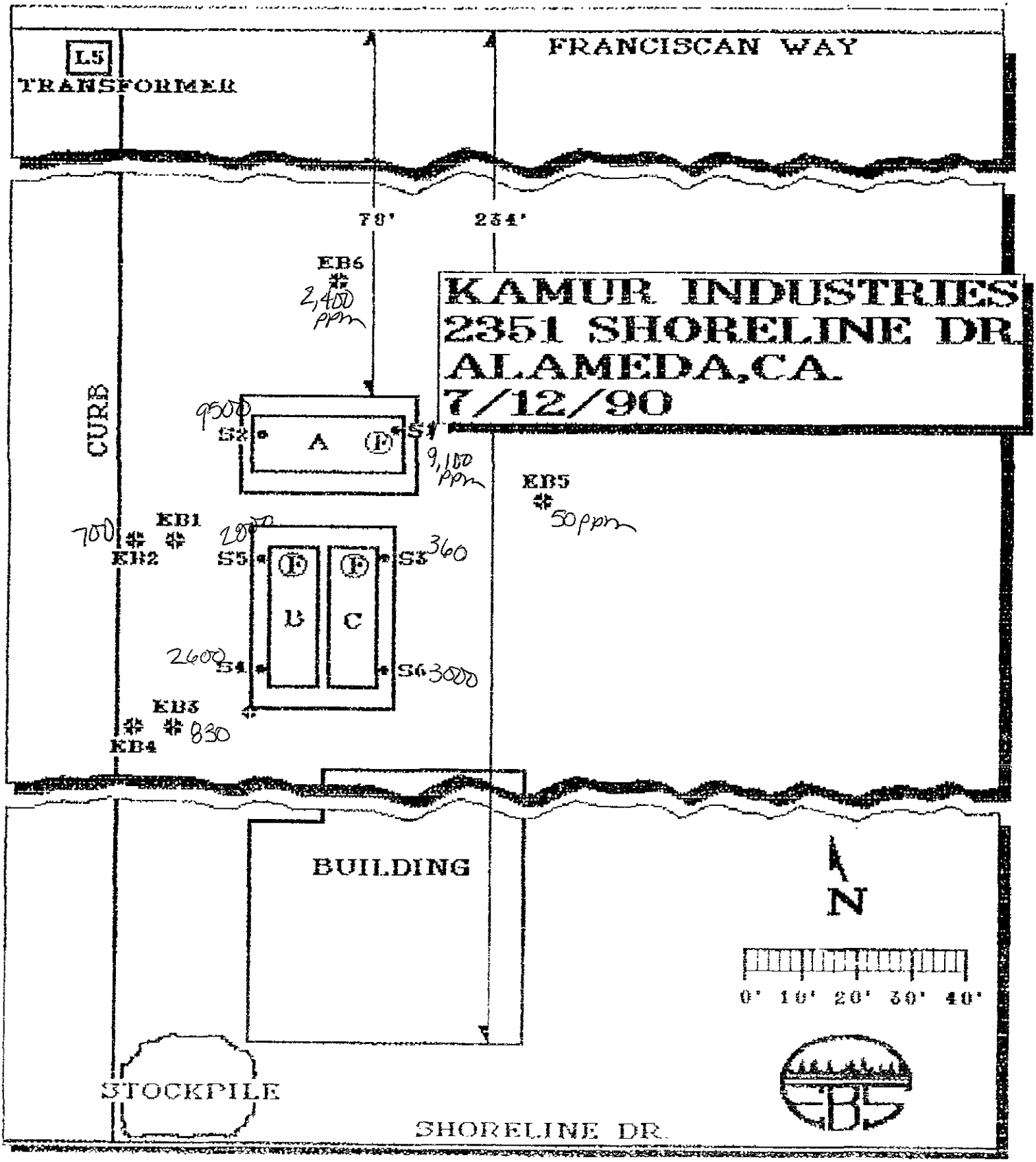
Alameda County Department of Environmental Health
Hazardous Materials Division
80 swan Way, Room 200
Oakland, CA 94621
ATTN: Cynthia Chapman

If you have any questions, or if I may be of service please contact me at (415) 429-9988.

Sincerely,
ENVIRONMENTAL BIO-SYSTEMS, INC.

Timothy M. Babcock
Environmental Scientist

TMB/so


L5
TRANSFORMER
FRANCISCAN WAY
78'
234'
EB6
2,400 ppm
KAMUR INDUSTRIES
2351 SHORELINE DR.
ALAMEDA, CA.
7/12/90
CURB
9500
S2
A
F
S1
9,100 ppm
EB5
50 ppm
700
EB1
EB2
2000
S5
F
F
S3
360
B
C
2600
S4
S6
3000
EB3
830
EB4
BUILDING
N
0' 10' 20' 30' 40'
STOCKPILE
SHORELINE DR.
EB5

MOBILE CHEM LABS INC.

1678 Reliez Valley Road
Lafayette, CA 94549 • (415) 945-1266

Zaccor Corporation
791 Hamilton Avenue
Menlo Park, CA 94205
Attn: Gary Zaccor

Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070064	Kamur Industries - Alameda EBS # 003-135 S1 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	9,100
Benzene	0.005	94
Toluene	0.005	410
Xylenes	0.005	530
Ethylbenzene	0.005	110

QA/QC: Blank is none detected
Spike Recovery is 71%

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

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Ronald G. Evans
Lab Director

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Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070065	Kamur Industries - Alameda EBS # 003-135 S2 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	9,500
Benzene	0.005	67
Toluene	0.005	350
Xylenes	0.005	590
Ethylbenzene	0.005	120

QA/QC: Blank is none detected
Duplicate Deviation is 8.9%

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

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Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070067	Kamur Industries - Alameda EBS # 003-135 S3 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	300
Benzene	0.005	4.0
Toluene	0.005	17
Xylenes	0.005	21
Ethylbenzene	0.005	4.6

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

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Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070068	Kamur Industries - Alameda EBS # 003-135 S4 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	2,600
Benzene	0.005	27
Toluene	0.005	130
Xylenes	0.005	180
Ethylbenzene	0.005	37

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

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Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070069	Kamur Industries - Alameda EBS # 003-135 S5 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	2,800
Benzene	0.005	26
Toluene	0.005	150
Xylenes	0.005	210
Ethylbenzene	0.005	43

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

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Date Sampled: 07-12-90
Date Received: 07-12-90
Date Reported: 07-12-90

Sample Number	Sample Description
B070070	Kamur Industries - Alameda EBS # 003-135 S8 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	3,000
Benzene	0.005	38
Toluene	0.005	230
Xylenes	0.005	250
Ethylbenzene	0.005	73

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

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Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070075	Kamur Industries - Alameda EBS # 003-135 S8 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	700
Benzene	0.005	6.8
Toluene	0.005	31
Xylenes	0.005	43
Ethylbenzene	0.005	8.9

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

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Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070076	Kamur Industries - Alameda EBS # 003-135 S9 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	830
Benzene	0.005	2.6
Toluene	0.005	13
Xylenes	0.005	38
Ethylbenzene	0.005	9.2

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

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Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070080	Kamur Industries - Alameda EBS # 003-135 S13 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	50
Benzene	0.005	0.24
Toluene	0.005	0.052
Xylenes	0.005	2.8
Ethylbenzene	0.005	0.6

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

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Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070081	Kamur Industries - Alameda EBS # 003-135 S14 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	2,400
Benzene	0.005	24
Toluene	0.005	56
Xylenes	0.005	110
Ethylbenzene	0.005	20

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

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Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070066	Kamur Industries - Alameda EBS # 003-135 SC 1 (A-D) SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	2,800
Benzene	0.005	8.8
Toluene	0.005	49
Xylenes	0.005	130
Ethylbenzene	0.005	25

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

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Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070071	Kamur Industries - Alameda EBS # 003-135 SC 2 (A-D) SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	3,500
Benzene	0.005	22
Toluene	0.005	130
Xylenes	0.005	180
Ethylbenzene	0.005	39

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

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Date Sampled:07-12-90
Date Received:07-12-90
Date Reported:07-12-90

Sample Number	Sample Description
B070072	Kamur Industries - Alameda EBS # 003-135 SC 3 (A-D) SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	570
Benzene	0.005	0.8
Toluene	0.005	8.0
Xylenes	0.005	26
Ethylbenzene	0.005	4.5

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

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Date Sampled: 07-12-90
Date Received: 07-12-90
Date Reported: 07-12-90

Sample Number	Sample Description
D070073	Kamur Industries - Alameda EBS # 003-135 SC 4 (A-D) SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	2,100
Benzene	0.005	8.0
Toluene	0.005	58
Xylenes	0.005	110
Ethylbenzene	0.005	20

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

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Ronald G. Evans
Lab Director

TAT 1 hr

ENVIRONMENTAL BIO-SYSTEMS, INC.
30028 INDUSTRIAL PKWY., S.W.
HAYWARD, CA. 94544
(415) 429-9988

Gen

CHAIN OF CUSTODY

SITE ADDRESS: Kramer Industries

2351 Shoreline Hwy

Alameda

CLIENT: Zaccor Corp

EBS #: ~~000-135~~ 003-135

DATE SAMPLED: 7/12/90

LABORATORY: Mobile Chem HMTL#:

SAMPLE #	MATRIX	ANALYSIS	TURNAROUND
S1	S	TPH (Gas) & BTEX	on site
S2	S	TPH (Gas) & BTEX	on site
SC.1 A-D	S	TPH (gas) & BTEX	on site
S3	S	TPH (gas) & BTEX	on site
S4	S	TPH (gas) & BTEX	on site
S5	S	TPH (gas) & BTEX	On site

Sampling Performed By Florian Deidler

Sampling Completed At _____ AM/PM

Released By:	Accepted By:	Time/Date
		5:00 P.M. 7/12/90
		___/___/___
		___/___/___

ENVIRONMENTAL BIO-SYSTEMS, INC.
30028 INDUSTRIAL PKWY., S.W.
HAYWARD, CA. 94544
(415) 429-9988

CHAIN OF CUSTODY

SITE ADDRESS: Kamur Industries
2351 Shoreline Rd
Alameda

CLIENT: Zaccor Corp

EBS #: 003-135

DATE SAMPLED: 7/12/90

LABORATORY: Mobile Chem HMTL#:

SAMPLE #	MATRIX	ANALYSIS	TURNAROUND
S7	Soil	TPH(Gas) & BTEX	not Run On site *
S8	Soil	TPH(Gas) BTEX	on Site
S9	Soil	TPH(Gas) BTEX	on site
S10	Soil	TPH(Gas) BTEX	not run On site *
S11	Soil	TPH(Gas) BTEX	not ran On Site *
S12	Soil	TPH(Gas) BTEX	not run On site *

Sampling Performed By Florian Dendler

Sampling Completed At _____ AM/PM

Released By:	Accepted By:	Time/Date
		545 PM 7/12/90

* - Hold until further notice

ENVIRONMENTAL BIO-SYSTEMS, INC.
30025 INDUSTRIAL PKWY., S.W.
HAYWARD, CA. 94544
(415) 429-9988

CHAIN OF CUSTODY

SITE ADDRESS: Kamur Industries
2351 Shoreline Rd.
Alameda, CA

CLIENT: Zaccor Corp

EBS #: 003-135

DATE SAMPLED: 7/11/90

LABORATORY: Mobile Chem HMTL#:

SAMPLE #	MATRIX	ANALYSIS	TURNAROUND
SL0	Soil	TPH(gas), BTEX	~~On Site~~ 1week
SL2 A-D	Soil	TPH(gas), BTEX	~~On Site 2week~~ on site
SC3 A-D	Soil	TPH(gas) BTEX	~~On Site 2week~~ on site
SC4 A-D	Soil	TPH(gas) BTEX	~~On Site 2week~~ on site
SL3	Soil	TPH(gas) BTEX	On Site
SL4	Soil	TPH(gas) BTEX	On Site

Sampling Performed By Florian Dendler

Sampling Completed At _____ AM/PM

Released By:	Accepted By:	Time/Date
		5:45 PM 7/12/90