STID 6558

geo - logic geotechnical and environmental consulting services
1140 - 5th Avenue, Crockett, CA 94525 (510) 787-6867 - Fax (510) 787-1457

GL-97-110.R4
June 9, 1998

Paradiso Mechanical, Inc.
P. O. Box 1836
2600 Williams Street
San Leandro, California

Attention : Mr. Rick Montesano

RE: Soil Sampling Report for
Overexcavation of Former Fuel Storage Tank Pit, and
Second Quarterly Monitoring and Sampling
Berkeley Farms Truck Repair Shop and Yard (KFC Site)
4575 San Pablo Avenue
Emeryville, California 94608

Dear Mr. Montesano:

This report summarizes the results of soil sampling performed by GEO-LOGIC at the referenced site during the recent overexcavation of the former fuel storage tank pit at the southern portion of the property. This report also includes the second quarterly monitoring and sampling of the three wells. All work was performed in compliance with the guidelines established by the Regional Water Quality Control Board (RWQCB) and the Alameda County Health Care Services Agency (ACHCSA).

The scope of the work performed by GEO-LOGIC consisted of the following:

Coordination with the regulatory agencies

Collection of soil samples on three occasions from the sidewalls or bottom of the former fuel tank pit excavation

Monitoring and sampling of the three onsite wells

Delivery of soil and water samples with properly executed Chain of Custody documentation to a certified analytical laboratory

Technical review of data and preparation of this report

SITE HISTORY AND BACKGROUND

The subject site is located on the western side of San Pablo Avenue between 45th and 47th Streets in Emeryville, California, and formerly contained a service station facility at the southern portion of the property. Until recently, the site operated as a truck repair shop and yard for Berkeley Farms. A Site Plan (Figure 1) is attached to this report.

GEO-LOGIC's previous work at the site includes sampling during overexcavation of a waste oil tank at the northern end of the property. This work is summarized in GEO-LOGIC's reports (GL-97-110.R1 and GL-97-110.R2), both dated February 10, 1998.

Following this work, installation of three monitoring wells was proposed (workplan/proposal GL-98-110, dated November 15, 1997). The wells were installed in February, 1998. This work was documented in GEO-LOGIC's report (GL-97-110.R3) dated March 7, 1998.

FIELD ACTIVITIES - OVEREXCAVATION OF FORMER TANK PIT

GEO-LOGIC's field work related to this overexcavation began on April 30, 1998, when the former fuel storage tank pit was reexcavated. The concrete over an area of approximately 20 feet by 20 feet (see Site Plan, Figure 1) near 45th Street at the southern portion of the property had been removed in preparation for excavation.

On this date, the excavation was completed laterally to the limit of the removed concrete (20 by 20 feet). The eastern half of the excavation was completed to a depth of about 7.5 feet below grade (fbg). The western half, where hydrocarbon impacted pea gravel fill was encountered, was extended to about 11.5 fbg, where native material was encountered. Based on piping and other debris contained within the backfill, it appeared that some or all of the original tankpit backfill material had been replaced in the pit following tank removal.

Groundwater was seen to enter the bottom of the excavation on the western half, and rose to approximately 9.5 fbg. A brown frothy residue was present on the groundwater, presumably from degradation of the tank coating.

A sidewall sample, KS (8.5'), was collected from the southern sidewall of the excavation at an elevation of about 8.5 fbg and submitted for analyses. The location of the sample point is shown on the attached Figure 1.

The undisturbed sample was collected from bulk material excavated by backhoe. The sample was placed in a clean, two-inch diameter brass tube, sealed with teflon and plastic caps, and stored in a cooled ice chest for delivery to a certified laboratory.

GEO-LOGIC inspected the pit on May 5, 1998. Groundwater had stabilized at about 7.5 fbg. The water was generally clear except for a few areas with an emulsion (sheen).

GEO-LOGIC returned to the site on May 8, 1998, when additional excavation of the sidewalls and bottom of the excavation was performed. Groundwater was stabilized in the excavation at approximately 7.5 to 8 fbg. On this date, additional concrete paving was removed and the lateral limits of the excavation were extended approximately 3 to 4 feet in each direction, except for on the western side, where the excavation was extended about 2 feet. Some remaining pea gravel on the sidewalls in the western half of the excavation was also removed.

Four soil samples, labeled KN-W (7.5'), KS (7.5'), KE (7.5'), and KW (7.5'), were collected from the sidewalls of the excavation, at the depths indicated. One additional soil sample, labeled KB1 (7.5') was collected from the higher part of the bottom of the excavation (eastern half) at the depth indicated. The samples were collected and handled as described above. It should be noted that soil sample KS (7.5') represents confirmation sampling of the area of sample point KS (8.5'), following additional excavation.
On May 15, 1998, GEO-LOGIC was present on site while the pit was completely dewatered to an onsite Baker tank, in an effort to remove hydrocarbons. Following dewatering, the pit was prepared for backfilling by further removal of concrete where sidewall failures had undermined, and removal of slough. Several feet of additional soil was removed from the eastern and western corners of the northern side of the excavation.

Additional excavation was also performed in the vicinity of sample point KB1 (7.5'). Upon removal of slough from this part of the excavation, hydrocarbon-impacted fill, piping, and debris was encountered and removed, extending and deepening this portion of the excavation (east side) approximately eight feet laterally and to a depth of 11.5 fbg (depth of remainder of excavation and below groundwater).

One additional sidewall soil sample, labelled KE2 (7'), was collected and handled as described above. This soil sample represents confirmation sampling of the vicinity of sample points KB1(7.5') and KE (7.5'), following additional excavation. The location of the sample points are shown on the attached Figure 1.

Following this overexcavation work, the excavation dimensions were approximately 34 feet north to south and 25 feet east to west, and approximately 400 yards of soil had been removed. Also, approximately 15,000 gallons of water had been purged from the pit to the onsite Baker tank. Native soils were exposed in all of the sidewalls and bottom of the excavation (beneath the surficial fill), and all of the old tankpit backfill material containing piping and debris had been removed.

The excavated soil was stockpiled onsite and profiled, pending proper disposal. Proper disposal of the soil and groundwater will be documented in a separate technical report.

On June 1, 1998, GEO-LOGIC met onsite with Ms. Susan Hugo of the ACHCSA to inspect site conditions. Water in the excavation was stabilized at about 8 fbg. The water was predominantly clear, with small spots on the surface showing a sheen. Ms. Hugo approved backfilling of the pit, with the understanding that the well located downgradient of the former tank pit (MW1) would be sampled to allow evaluation of groundwater conditions.

SUBSURFACE CONDITIONS

The native soils encountered in the excavations consisted predominantly of dark brown to brown stiff silty clay and clay materials to a depth of about 5 to 6 feet below grade, underlain by brownish green to light green clay and silty clay to about 10.5 feet below grade. The predominantly clayey soils are in turn underlain by light brown sandy silt. Groundwater was seen to enter the excavation upon exposing the sandy silt soils.

ANALYTICAL RESULTS - SAMPLING OF FORMER FUEL TANK PIT

The samples were analyzed by Calcoast Analytical in Emeryville, California, and were accompanied by properly executed Chain of Custody documentation. The samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline by EPA method 8015/SW-846, TPH as diesel by EPA method 8015/SW-846, and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA method 8240/SW-846. The 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.

water samples were then collected by the use of a clean Teflon bailer. The samples were decanted into clean VOA vials and/or one-liter amber bottles, as appropriate, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory.

ANALYTICAL RESULTS- MONITORING AND SAMPLING

The water samples from wells MW1 through MW3 were analyzed at Calcoast Analytical, Inc., in Emeryville, California. All samples analyzed were accompanied by properly executed Chain of Custody documentation. The samples were analyzed for TPH as gasoline and TPH as diesel by EPA method 8015, benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020, Total Extractable Petroleum Hydrocarbons (TRPH) by EPA Methods 3510 and 8015, Purgeable Halocarbons by EPA Method 601 (8010), and Total Lead by EPA Methods 3005 and 7240.

The results of the water analyses are summarized in Table 3. The concentrations of TPH as gasoline, benzene, and TPH as diesel detected in the ground water samples collected on June 2, 1998, are shown on the attached Figure 3. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

HYDROLOGY

On June 2, 1998, the measured depth to ground water in the monitoring wells ranged from 5.66 to 6.61 feet below the tops of the well casings. The ground water flow direction appeared to be to the west, as shown on the attached Figure 2. The hydraulic gradient at the site on June 2, 1998, was approximately 0.013. Monitoring and sampling data for this event and the intial sampling is summarized in Table 2.

DISCUSSION AND RECOMMENDATIONS

Based on the analytical results of the soil samples, and in accordance with the guidelines established by the RWQCB, no further excavation work at the site associated with the former fuel tanks at this location appears to be warranted. However, to comply with the requirements of the RWQCB, GEO-LOGIC recommends continuation of the current monitoring and sampling program for the three onsite wells. It is GEO-LOGIC's understanding that the ACHCSA will complete a review of this case with respect to site development and provide comments.

DISTRIBUTION

A copy of this report should be sent to Ms. Susan Hugo of the CHCSA.

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.

Should you have any questions regarding this report, please feel free to call me at (510) 787-6867.

Sincerely,

GEO-LOGIC, Inc.

Joel G. Greger, C.E.G.
Senior Engineering Geologist

License No. EG 1633
Exp. Date 8/31/98

REGISTERED GEOLOGIST
JOEL G. GREGER
No. EG 1633
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Attachments: Tables 1 through 3
Figures 1 through 3
Laboratory Analyses and
Chain of Custody documentation

GEO-LOGIC
GL-97-110.R4
June 9, 1998

TABLE 1

SUMMARY OF LABORATORY ANALYSES
SOIL

Sample/depth	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
(Collected on April 30, 1998)						
KS (8.5')	NA	<0.1	5.0	4.1	5.8	90
(Collected on May 8, 1998)						
KN (7.5')	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005
KS (7.5')	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005
KE (7.5')	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005
KW (7.5')	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005
KB1 (7.5')	removed 3,900	<0.1	<0.005	30	<0.005	<0.005
(Collected on May 15, 1998)						
KE2 (7.0')	confirmatory sample 60	<0.1	<0.005	<0.005	<0.005	<0.005
Method Blank/ Detection Limit	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005

Results are in milligrams per kilogram (mg/kg).

GEO-LOGIC
GL-97-110.R4
June 9, 1998

TABLE 2

SUMMARY OF GROUND WATER MONITORING AND PURGING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)♦	Total Well Depth (feet)♦	Product Thickness (feet)	Sheen	Water Purged (gallons)
(Monitored and Sampled on June 2, 1998)						
MW1	35.51	6.50	16.60	0	No	8
MW2	34.17	6.61	16.57	0	No	8
MW3	35.42	5.66	16.62	0	No	8
(Monitored and Sampled on February 27, 1998)						
MW1	37.51	4.50	16.61	0	No	8
MW2	35.61	5.17	16.58	0	No	8
MW3	37.28	3.80	16.63	0	No	8
(Monitored and Developed on February 24, 1998)						
MW1	37.57	4.44	16.59	0	No	24
MW2	35.69	5.09	16.58	0	No	21
MW3	37.38	3.70	16.62	0	No	25

Well #	Top of Casing Elevation* (feet)
MW1	42.01
MW2	40.78
MW3	41.08

♦ Depth to water and total well depth measurements are taken from the top of the well casings.

* The elevation of the tops of the well casings have been surveyed relative to City of Oakland Benchmark No. 241.

GEO-LOGIC
GL-97-110.R4
June 9, 1998

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
6/2/98	MW1	105,000	34,000	1,900	1,600	2,400	3,500
	MW2	7,600	60	220	510	800	1,100
	MW3	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5
2/27/98	MW1	81,000	27,000	2,200	910	1,700	2,700
	MW2	14,000	<5.0	<0.5	120	460	730
	MW3	--	<5.0	<0.5	<0.5	<0.5	<0.5
Method Blank/ Detection Limit		5.0	5.0	0.5	0.5	0.5	0.5

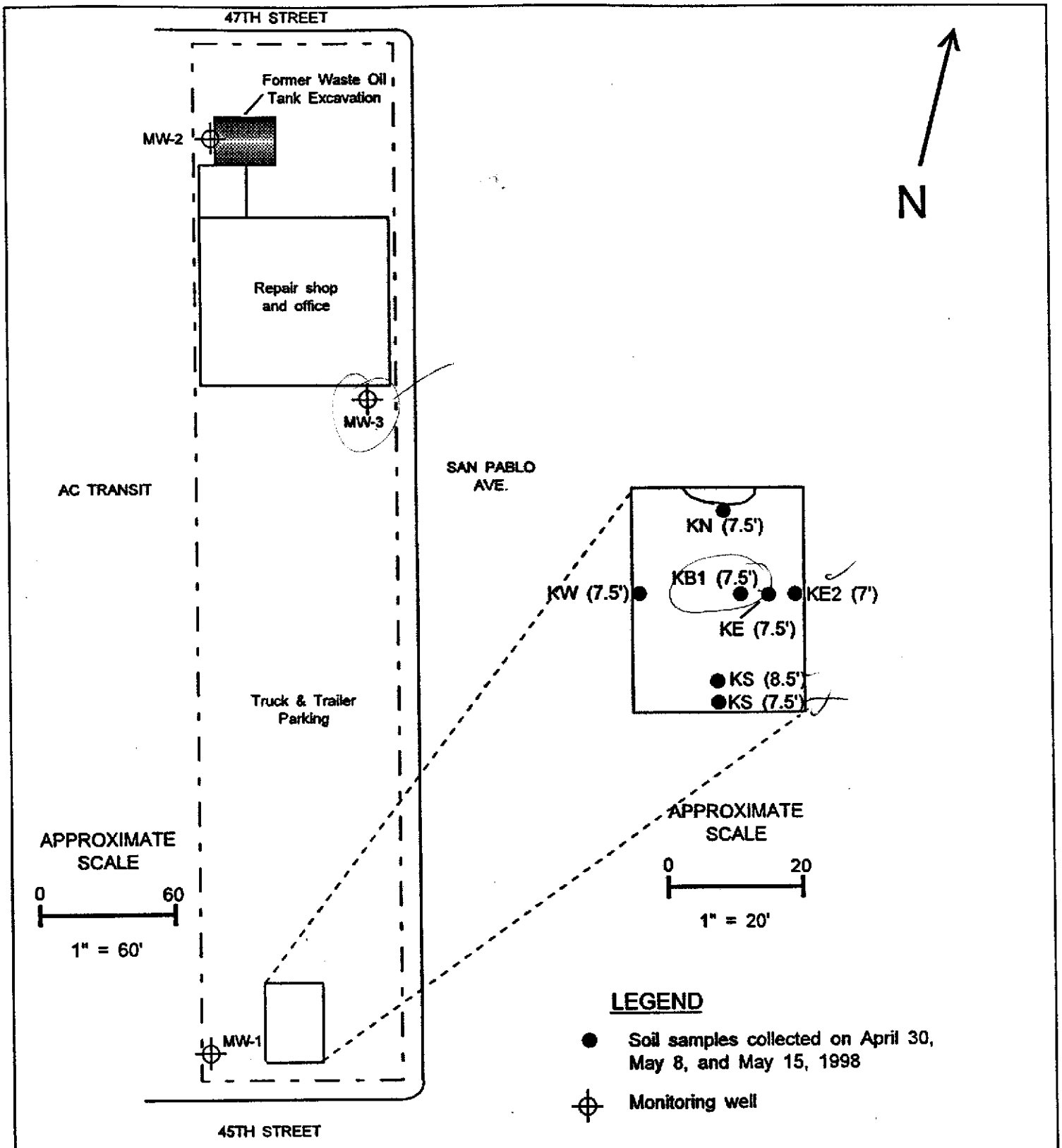
Date	Sample Number	TEPH	MTBE	TOTAL LEAD
6/2/98	MW1*	80,000	<0.5	<5.0
	MW2*	3,800	<0.5	<5.0
	MW3*	<5.0	<0.5	<5.0
2/27/98	MW1	--	<0.5	--
	MW2	20,000**	<0.5	--
	MW3	--	<0.5	--
Method Blank/ Detection Limit		500	0.5	5.0

* All EPA Method 8010 constituents were nondetectable.

** 20,000 ppb of Total Recoverable Petroleum Hydrocarbons by EPA Method 418.1

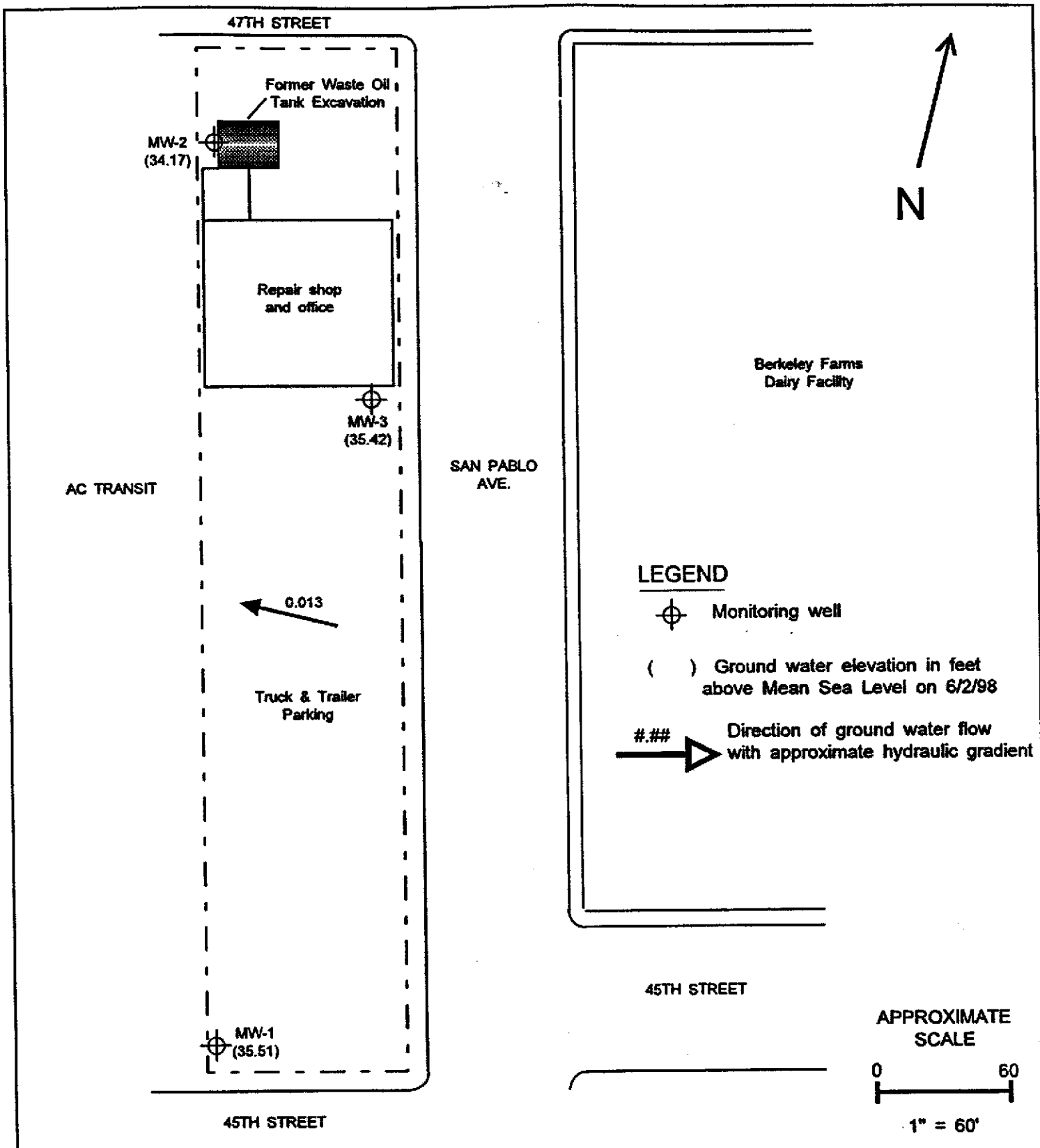
-- analyses not performed

Results are in micrograms per liter (µg/L), unless otherwise indicated.



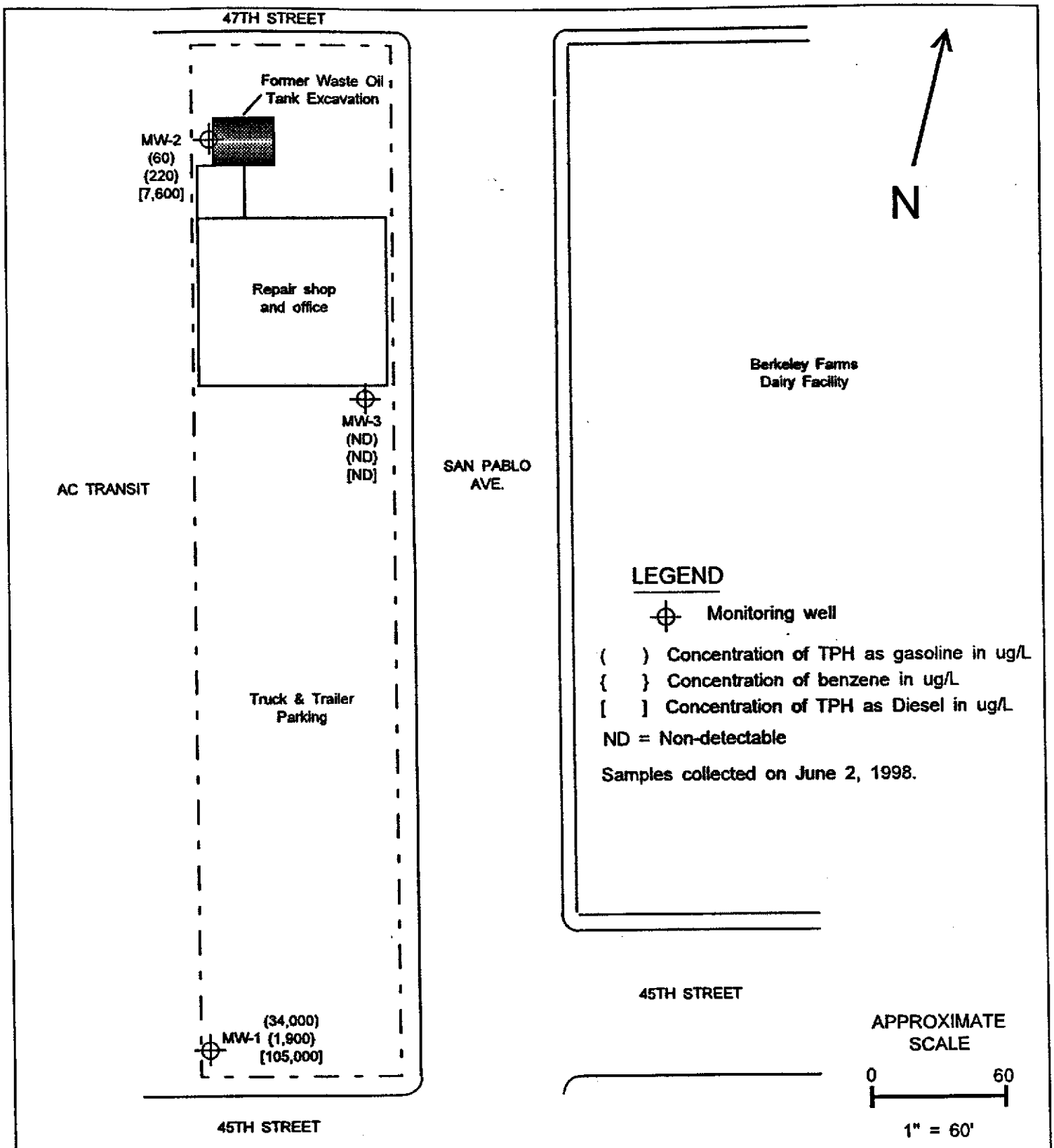
Berkeley Farms Truck Repair Shop & Yard 4575 San Pablo Avenue Emeryville, California	Figure No: 1	Date: June 3, 1998 Drawn By: JG/GEO-LOGIC

Site Plan



Berkeley Farms Truck Repair Shop & Yard 4575 San Pablo Avenue Emeryville, California	Figure No: 2	Date: June 3, 1998 Drawn By: JG/GEO-LOGIC

Potentiometric Surface Map



Berkeley Farms Truck Repair Shop & Yard 4575 San Pablo Avenue Emeryville, California	Figure No: 3	Date: June 8, 1998 Drawn By: JG/GEO-LOGIC

Petroleum Hydrocarbons in Groundwater

CALCOAST ANALYTICAL

Materials Chemistry

Certified by

California Department of Health Services
City of Los Angeles, Dept. of Building & Safety

May 4, 1998

Geo-Logic
1140 5th Avenue
Crockett, CA 94525

Attn: Mr. Joel Greger

Ref: Lab File #0430-5A/98

1. SAMPLE(S):

One (1) soil core from Berkeley Farms; 4575 San Pablo, Emeryville. Sample: KS (8.5').

Collected: April 30, 1998 / Received: April 30, 1998

2. ANALYSIS PERFORMED:

A. Total Petroleum Hydrocarbons - gasoline (TPH-g) by Gas Chromatography (GC).

B. Benzene, Toluene, Ethylbenzene and Xylene (BTEX) by GC.

3. METHODS OF ANALYSIS:

A. EPA Method 8015; SW-846.

B. EPA Method 8020; SW-846.

TELEPHONE (510) 652-2979
FAX (510) 652-3085
P.O. BOX 8702 • EMERYVILLE, CA 94662
4072 WATTS STREET • EMERYVILLE, CA 94608

4. RESULTS:

A. TPH - gasoline

SAMPLE	TPH - GASOLINE (mg/kg)
KS (8.5')	< 0.1 (none detected)

Method Blank / Detection Limit = < 0.1 mg/kg (none detected)
Mean Spike Recovery = 102%

B. BTEX

SAMPLE	CONCENTRATION (mg/kg)			
	BENZENE	TOLUENE	ETHYLBENZENE	XYLENE
KS (8.5')	5.0	4.1	5.8	90
Method Blank / Detection Limit	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
Mean Spike Recovery	110%	104%	111%	108%

Ronald W. Shrewsbury
Analytical Chemist

RWS:mc

CALCOAST ANALYTICAL

Materials Chemistry

Certified by
California Department of Health Services
City of Los Angeles, Dept. of Building & Safety

May 13, 1998

Geo-Logic
1140 5th Avenue
Crockett, CA 94525

Attn: Mr. Joel Greger

Ref: Lab File #0508-1A/D-98

1. SAMPLE(S):

Four (4) soil cores from Berkeley Farms / KFC.

A. KN 7.5
B. KS 7.5
C. KE 7.5
D. KW 7.5

Collected: May 8, 1998 / Received: May 8, 1998

2. ANALYSIS REQUIRED:

A. Total Petroleum Hydrocarbons - gasoline (TPH-g) by Gas Chromatography (GC).

B. Total Petroleum Hydrocarbons - diesel (TPH-d) by GC.

C. Benzene, Toluene, Ethylbenzene and Xylene (BTEX) by GC.

3. METHODS OF ANALYSIS:

A. EPA Method 8015; SW-846.

B. EPA Method 8015; SW-846

C. EPA Method 8020; SW-846.

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4. RESULTS:

A. TPH - gasoline

SAMPLE	TPH - GASOLINE (mg/kg)
A. KN 7.5	< 0.1 (none detected)
B. KS 7.5	< 0.1 (none detected)
C. KE 7.5	< 0.1 (none detected)
D. KW 7.5	< 0.1 (none detected)

Method Blank / Detection Limit = < 0.1 mg/kg (none detected)
Mean Spike Recovery = 109%

B. TPH - diesel

SAMPLE	TPH - DIESEL (mg/kg)
A. KN 7.5	< 0.1 (none detected)
B. KS 7.5	< 0.1 (none detected)
C. KE 7.5	< 0.1 (none detected)
D. KW 7.5	< 0.1 (none detected)

Method Blank / Detection Limit = < 0.1 mg/kg (none detected)
Mean Spike Recovery = 106%

C. BTEX

SAMPLE	CONCENTRATION (mg/kg)			
	BENZENE	TOLUENE	ETHYLBENZENE	XYLENE
A. KN 7.5	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
B. KS 7.5	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
C. KE 7.5	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
D. KW 7.5	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
Method Blank / Detection Limit	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
Mean Spike Recovery	102%	111%	108%	110%

Ronald W. Shrewsbury
Analytical Chemist

RWS:mc

4. RESULTS:

A. TPH - gasoline

SAMPLE	TPH - Gasoline (mg/kg)
KBI (7.5')	< 0.1 (none detected)

Method Blank / Detection Limit = < 0.1 mg/kg (none detected)
Mean Spike Recovery = 109%

B. TPH - diesel

SAMPLE	TPH - Diesel (mg/kg)
KBI (7.5')	3,900

Method Blank / Detection Limit = < 0.1 mg/kg (none detected)
Mean Spike Recovery = 106%

C. BTEX

SAMPLE	CONCENTRATION (mg/kg)			
	BENZENE	TOLUENE	ETHYLBENZENE	XYLENE
KBI (7.5')	< 0.005 (ND)	30	< 0.005 (ND)	< 0.005 (ND)
Method Blank / Detection Limit	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
Mean Spike Recovery	102%	111%	108%	110%

Ronald W. Shrewsbury
Analytical Chemist

RWS:mc

Calcoast Analytical, Inc.

Chain of Custody

Date 5/8/98 Page 1 of 1

Proj. Mgr.: Joel Gregor
Company: GEOLOGIC-for Paradiso
Address: 2600 William St.
San Leandro

Samples (signature): Joel M

(Phone No.) 510 7876867
(Fax No.) 510 7871457

Sample ID	Type	Date	Time	Matrix	Preserve.
KN 7.5	Soil	5/8/98	AM	Soil	
KS 7.5	↓	↓	↓	↓	
KE 7.5					
KW 7.5	↓	↓	↓	↓	

Analysis Report

Sample ID	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/ BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)						NUMBER OF CONTAINERS
KN 7.5		X	X																					
KS 7.5		X	X																					
KE 7.5		X	X																					
KW 7.5		X	X																					

Project Information

Project Name: Berkeley Farms / KFC
Project No.:
PO #:
TAT: (Standard) 5-Day | 24 | 48 | 72 | Other

Sample Receipt

Total No. of Containers	4
Head Space	
Rec'd Good Condition/Cold	
Conforms To Record	

Special Instructions / Comments:

	1.	2.	3.
Relinquished By:	Joel M		
(Signature) (Time)	Joel G Gregor 11:05 5/8/98		
(Printed Name) (Date)			
(Company)			
Received By:			
(Signature) (Time)	Ronald Shrewsbury		
(Printed Name) (Date)	Calcoast 5/8/98		
(Company)			

CALCOAST ANALYTICAL

Materials Chemistry

Certified by
California Department of Health Services
City of Los Angeles, Dept. of Building & Safety

May 13, 1998

Geo-Logic
1140 5th Avenue
Crockett, CA 94525

Attn: Mr. Joel Greger

Ref: Lab File #0508-5A/98

1. SAMPLE(S):

   One (1) soil core from Berkeley Farms / KFC. Sample: KBI (7.5').

   Collected: May 8, 1998 / Received: May 8, 1998

2. ANALYSIS PERFORMED:

   A. Total Petroleum Hydrocarbons - gasoline (TPH-g) by Gas Chromatography (GC).

   B. Total Petroleum Hydrocarbons - diesel (TPH-d) by GC.

   C. Benzene, Toluene, Ethylbenzene and Xylene (BTEX) by GC.

3. METHODS OF ANALYSIS:

   A. EPA Method 8015; SW-846.

   B. EPA Method 8015; SW-846.

   C. EPA Method 8020; SW-846.

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4072 WATTS STREET • EMERYVILLE, CA 94608

4. RESULTS:

A. TPH - gasoline

SAMPLE	TPH - GASOLINE (mg/kg)
KBI (7.5')	< 0.1 (none detected)

Method Blank / Detection Limit = < 0.1 mg/kg (none detected)
Mean Spike Recovery = 109%

B. TPH - diesel

SAMPLE	TPH - GASOLINE (mg/kg)
KBI (7.5')	3,900

Method Blank / Detection Limit = < 0.1 mg/kg (none detected)
Mean Spike Recovery = 106%

C. BTEX

SAMPLE	CONCENTRATION (mg/kg)			
	BENZENE	TOLUENE	ETHYLBENZENE	XYLENE
KBI (7.5')	< 0.005 (ND)	30	< 0.005 (ND)	< 0.005 (ND)
Method Blank / Detection Limit	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
Mean Spike Recovery	102%	111%	108%	110%

Ronald W. Shrewsbury
Analytical Chemist

RWS:mc

Calcoast Analytical, Inc.

Chain of Custody

Date 5/8/98 Page 1 of 1

Proj. Mgr.: Joe Gregor (GEOLOGIC)
Company: Paradiso Mech., Inc.
Address: 260 Williams St
San Leandro

Samples (signature): Joe Gregor
(Phone No.) 510 7876867
(Fax No.) 510 7871457

Analysis Report

Sample ID	Type	Date	Time	Matrix	Preserve.	TPH - Gasoline (EPA 5030, 5015)	TPH - Gasoline (5030, 8015) w/ BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B-F, E-F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)						NUMBER OF CONTAINERS
KB1(7.5')	Soil	5/8/98	Am	Soil		~~X~~	X	X																				

Project Information

Project Name: Berkeley Farms/RFC
Project No.:
PO #:
TAT: (Standard) 5-Day

Sample Receipt

Total No. of Containers	1			
Head Space				
Rec'd Good Condition/Cold				
Conforms To Record				
24	48	72	Other	

Special Instructions / Comments:

	1.	2.	3.
Relinquished By: (Signature)	Joe Gregor		
(Printed Name)	Joe G. Gregor		
(Date) (Time)	5/8/98 12:25		
Received By: (Signature)			
(Printed Name)	Ronald Shrewsbury		
(Date) (Time)	5/8/98 12:25		

CALCOAST ANALYTICAL

Materials Chemistry

Certified by
California Department of Health Services
City of Los Angeles, Dept. of Building & Safety

May 19, 1998

Geo-Logic
1140 5th Avenue
Crockett, CA 94523

Attn: Joel Greger

Ref: Lab File #0515-6A/98

1. SAMPLE(s):

One (1) soil core from Berkeley Farms / KFC; Project #1093; Sample: KE2(7').

Collected: May 15, 1998
Received: May 15, 1998

2. ANALYSIS PERFORMED:

A. Total Petroleum Hydrocarbons - gasoline (TPH-g) by Gas Chromatography (GC).

B. Total Petroleum Hydrocarbons - diesel (TPH-d) by GC.

C. Benzene, Toluene, Ethylbenzene and Xylene (BTEX by GC.

TELEPHONE (510) 652-2979
FAX (510) 652-3085
P.O. BOX 8702 • EMERYVILLE, CA 94662
4072 WATTS STREET • EMERYVILLE, CA 94608

3. METHODS OF ANALYSIS:

A. EPA Method 8015; SW-846

B. EPA Method 8015; SW-846

C. EPA Method 8020; SW-846

4. RESULTS:

A. TPH - gasoline

Sample	TPH - Gasoline (mg/kg)
KE2(7')	< 0.1 (none detected)

Method Blank / Detection Limit = < 0.1 mg/kg (none detected)
Mean Spike Recovery = 103%

B. TPH - diesel

Sample	TPH - Diesel (mg/kg)
KE2(7')	60

Method Blank / Detection Limit = < 0.1 mg/kg (none detected)
Mean Spike Recovery = 110%

C. BTEX

Sample	Concentration (mg/kg)			
	Benzene	Toluene	Ethylbenzene	Xylene
KE2(7')	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
Method Blank / Detection Limit	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
Mean Spike Recovery	107%	107%	111%	102%

Ronald W. Shrewsbury
Analytical Chemist

RS/ag

Chain of Custody

Date 5/15/98 Page 1 of 1

Calcoast Analytical, Inc.

Proj. Mgr.: Joel Greger - GEOLOGIC
Company: Paradiso Mechanical, Inc.
Address: 2600 Williams St
POB 1836
San Leandro CA
Samples (signature) [signature]
(Phone No.) 5107876867
(Fax No.) 510 7871457

Analysis Report

Sample ID	Type	Date	Time	Matrix	Preserve.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B-F, E-F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)						NUMBER OF CONTAINERS
KE 2 (7')	liner	5/15/98	pm	Soil	—		X	X																				

Project Information

Project Name: Berkeley Farms / KFC
Project No. 1093
PO #
TAT: Standard 5-Day (circled)

Sample Receipt

Total No. of Containers	1
Head Space	
Rec'd Good Condition/Cold	
Conforms To Record	

24	48	72	Other

Special Instructions / Comments:

	1.	2.	3.
Relinquished By: (Signature)	[signature]		
(Printed Name)	Joel G. Greger		
(Date)	5/15/98		
(Time)	2:35		
Received By: (Signature)	Amanda [signature]		
(Printed Name)			
(Date)	5/15/98		
(Time)	2:36 pm		

CALCOAST ANALYTICAL

Materials Chemistry

Certified by
California Department of Health Services
City of Los Angeles, Dept. of Building & Safety

June 3, 1998

Geo-Logic
1140 - 5th Avenue
Crockett, CA 94525

Attn: Mr. Joel Greger

Ref: Lab File #0602-1A/C-98

1. SAMPLE(s):

Six (6) VOA containers and five (5) liter bottles of water from Berkeley Farms, Truck Shop & Yard;

A. MW1; Two (2) VOAs and two (2) liter bottles
B. MW2; Two (2) VOAs and one (1) liter bottle
C. MW3; Two (2) VOAs and two (2) liter bottles

Collected: June 2, 1998
Received: June 2, 1998

2. ANALYSIS REQUIRED:

A. Total Petroleum Hydrocarbons - gasoline (TPH-g) by Gas Chromatography (GC).

B. Total Petroleum Hydrocarbons - diesel (TPH-d) by GC.

C. Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) by GC.

D. Methyl-tert-butyl ether (MTBE) by GC.

E. Total Extractable Petroleum Hydrocarbons by Extraction / GC.

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2. ANALYSIS REQUIRED, continued:

F. Purgeable Halocarbons by GC.

G. Total lead (Pb) concentration by Atomic Absorption Spectroscopy (AAS).

3. METHODS OF ANALYSIS:

A. EPA Method 8015; SW-846

B. EPA Method 8015; SW-846

C. EPA Method 8020; SW-846

D. EPA Method 8020; SW-846

E. EPA Methods 3510 and 8015; SW-846

F. EPA Method 601; EPA-600/4-82-057

G. Sample Digestion - EPA Method 3005; SW-846
AAS Analysis - EPA Method 7420; SW-846

4. RESULTS:

A. TPH - gasoline

Sample	TPH - gasoline (µg/l)
A. MW1	34,000
B. MW2	60
C. MW3	< 5.0 (ND)

Method Blank/Detection Limit = < 5.0 µg/l) (none detected)
Mean Spike Recovery = 109%

Calcoast Analytical, Inc.

Chain of Custody

Date 6/2/98 Page 1 of 1

Proj. Mgr.: Joel G. Gregan (GEO-LOGIC)
Company: Paradise Mechanical, Inc
Address: 2660 Williams St
PO B 1836
San Leandro CA

Samples (signature): Joel
(Phone No.) 510 787 6867
(Fax No.) 510 787 1457

Sample ID	Type	Date	Time	Matrix	Preserve.
MW1	MW	6/2/98	AM	water	—
MW2	↓	↓	↓	↓	↓
MW3	↓	↓	↓	↓	↓

Analysis Report

Sample ID	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/ BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	TEPH	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	NUMBER OF CONTAINERS
MW1		X	X		X							X				X		4
MW2		X	X		X							X				X		4
MW3		X	X		X							X				X		4

Project Information

Project Name: Berkeley Farms Truck Shop + Yard
Project No.:
PO #: 1095

TAT: Standard 5-Day

Sample Receipt

Total No. of Containers	11
Head Space	
Rec'd Good Condition/Cold	
Conforms To Record	

24	48	72	Other

Special Instructions / Comments:

1. Relinquished By: (Signature)	2. Relinquished By: (Signature)	3. Relinquished By: (Signature)
Joel G. Gregan		
(Printed Name)	(Printed Name)	(Printed Name)
6/2/98 8:40 AM		
(Date) (Time)	(Date) (Time)	(Date) (Time)
1. Received By: (Signature)	**2. Received By: (Signature)**	**3. Received By: (Signature)**
Ronald Shrewsbury		
(Printed Name)	(Printed Name) (Date)	(Printed Name)
6/2/98 8:40 (Date) (Time)	(Date) (Time)	(Date) (Time)

DATA SHEET

PURGEABLE HALOCARBONS

SAMPLE: *GEO-LOGIC; BERKELEY FARMS; MW1*

Compound	Compound Detected (µg/L)	Method Blank (µg/L)	Method Detection Limit (µg/L)
Chloromethane	< MDL (ND)	< MDL (ND)	0.08
Bromomethane	< MDL (ND)	< MDL (ND)	1.18
Dichlorodifluoromethane	< MDL (ND)	< MDL (ND)	1.81
Vinyl chloride	< MDL (ND)	< MDL (ND)	0.18
Chloroethane	< MDL (ND)	< MDL (ND)	0.52
Methylene chloride	< MDL (ND)	< MDL (ND)	0.25
Trichlorofluoromethane	< MDL (ND)	< MDL (ND)	ND
1, 1-Dichloroethene	< MDL (ND)	< MDL (ND)	0.13
1, 1-Dichloroethane	< MDL (ND)	< MDL (ND)	0.17
trans-1, 2-Dichloroethene	< MDL (ND)	< MDL (ND)	0.10
Chloroform	< MDL (ND)	< MDL (ND)	0.05
1, 2-Dichloroethane	< MDL (ND)	< MDL (ND)	0.03
1, 1, 1-Trichloroethane	< MDL (ND)	< MDL (ND)	0.03
Carbon tetrachloride	< MDL (ND)	< MDL (ND)	0.12
Bromodichloromethane	< MDL (ND)	< MDL (ND)	0.10
1, 2-Dichloropropane	< MDL (ND)	< MDL (ND)	0.04
trans-1, 3-Dichloropropene	< MDL (ND)	< MDL (ND)	0.34
Trichloroethene	< MDL (ND)	< MDL (ND)	0.12
Dibromochloromethane	< MDL (ND)	< MDL (ND)	0.09
1, 1, 2-Trichloroethane	< MDL (ND)	< MDL (ND)	0.02
cis-1, 3-Dichloropropene	< MDL (ND)	< MDL (ND)	0.20
2-Chloroethylvinyl ether	< MDL (ND)	< MDL (ND)	0.13
Bromoform	< MDL (ND)	< MDL (ND)	0.20
1, 1, 2, 2-Tetrachloroethane	< MDL (ND)	< MDL (ND)	0.03
Tetrachloroethene	< MDL (ND)	< MDL (ND)	0.03
Chlorobenzene	< MDL (ND)	< MDL (ND)	0.25
1, 3-Dichlorobenzene	< MDL (ND)	< MDL (ND)	0.32
1, 2-Dichlorobenzene	< MDL (ND)	< MDL (ND)	0.15
1, 4-Dichlorobenzene	< MDL (ND)	< MDL (ND)	0.24

(ND) = None Detected

DATA SHEET

PURGEABLE HALOCARBONS

SAMPLE: *GEO-LOGIC; BERKELEY FARMS; MW2*

Compound	Compound Detected (µg/L)	Method Blank (µg/L)	Method Detection Limit (µg/L)
Chloromethane	< MDL (ND)	< MDL (ND)	0.08
Bromomethane	< MDL (ND)	< MDL (ND)	1.18
Dichlorodifluoromethane	< MDL (ND)	< MDL (ND)	1.81
Vinyl chloride	< MDL (ND)	< MDL (ND)	0.18
Chloroethane	< MDL (ND)	< MDL (ND)	0.52
Methylene chloride	< MDL (ND)	< MDL (ND)	0.25
Trichlorofluoromethane	< MDL (ND)	< MDL (ND)	ND
1, 1-Dichloroethene	< MDL (ND)	< MDL (ND)	0.13
1, 1-Dichloroethane	< MDL (ND)	< MDL (ND)	0.17
trans-1, 2-Dichloroethene	< MDL (ND)	< MDL (ND)	0.10
Chloroform	< MDL (ND)	< MDL (ND)	0.05
1, 2-Dichloroethane	< MDL (ND)	< MDL (ND)	0.03
1, 1, 1-Trichloroethane	< MDL (ND)	< MDL (ND)	0.03
Carbon tetrachloride	< MDL (ND)	< MDL (ND)	0.12
Bromodichloromethane	< MDL (ND)	< MDL (ND)	0.10
1, 2-Dichloropropane	< MDL (ND)	< MDL (ND)	0.04
trans-1, 3-Dichloropropene	< MDL (ND)	< MDL (ND)	0.34
Trichloroethene	< MDL (ND)	< MDL (ND)	0.12
Dibromochloromethane	< MDL (ND)	< MDL (ND)	0.09
1, 1, 2-Trichloroethane	< MDL (ND)	< MDL (ND)	0.02
cis-1, 3-Dichloropropene	< MDL (ND)	< MDL (ND)	0.20
2-Chloroethylvinyl ether	< MDL (ND)	< MDL (ND)	0.13
Bromoform	< MDL (ND)	< MDL (ND)	0.20
1, 1, 2, 2-Tetrachloroethane	< MDL (ND)	< MDL (ND)	0.03
Tetrachloroethene	< MDL (ND)	< MDL (ND)	0.03
Chlorobenzene	< MDL (ND)	< MDL (ND)	0.25
1, 3-Dichlorobenzene	< MDL (ND)	< MDL (ND)	0.32
1, 2-Dichlorobenzene	< MDL (ND)	< MDL (ND)	0.15
1, 4-Dichlorobenzene	< MDL (ND)	< MDL (ND)	0.24

(ND) = None Detected

DATA SHEET

PURGEABLE HALOCARBONS

SAMPLE: *GEO-LOGIC; BERKELEY FARMS; MW3*

Compound	Compound Detected (µg/L)	Method Blank (µg/L)	Method Detection Limit (µg/L)
Chloromethane	< MDL (ND)	< MDL (ND)	0.08
Bromomethane	< MDL (ND)	< MDL (ND)	1.18
Dichlorodifluoromethane	< MDL (ND)	< MDL (ND)	1.81
Vinyl chloride	< MDL (ND)	< MDL (ND)	0.18
Chloroethane	< MDL (ND)	< MDL (ND)	0.52
Methylene chloride	< MDL (ND)	< MDL (ND)	0.25
Trichlorofluoromethane	< MDL (ND)	< MDL (ND)	ND
1, 1-Dichloroethene	< MDL (ND)	< MDL (ND)	0.13
1, 1-Dichloroethane	< MDL (ND)	< MDL (ND)	0.17
trans-1, 2-Dichloroethene	< MDL (ND)	< MDL (ND)	0.10
Chloroform	< MDL (ND)	< MDL (ND)	0.05
1, 2-Dichloroethane	< MDL (ND)	< MDL (ND)	0.03
1, 1, 1-Trichloroethane	< MDL (ND)	< MDL (ND)	0.03
Carbon tetrachloride	< MDL (ND)	< MDL (ND)	0.12
Bromodichloromethane	< MDL (ND)	< MDL (ND)	0.10
1, 2-Dichloropropane	< MDL (ND)	< MDL (ND)	0.04
trans-1, 3-Dichloropropene	< MDL (ND)	< MDL (ND)	0.34
Trichloroethene	< MDL (ND)	< MDL (ND)	0.12
Dibromochloromethane	< MDL (ND)	< MDL (ND)	0.09
1, 1, 2-Trichloroethane	< MDL (ND)	< MDL (ND)	0.02
cis-1, 3-Dichloropropene	< MDL (ND)	< MDL (ND)	0.20
2-Chloroethylvinyl ether	< MDL (ND)	< MDL (ND)	0.13
Bromoform	< MDL (ND)	< MDL (ND)	0.20
1, 1, 2, 2-Tetrachloroethane	< MDL (ND)	< MDL (ND)	0.03
Tetrachloroethene	< MDL (ND)	< MDL (ND)	0.03
Chlorobenzene	< MDL (ND)	< MDL (ND)	0.25
1, 3-Dichlorobenzene	< MDL (ND)	< MDL (ND)	0.32
1, 2-Dichlorobenzene	< MDL (ND)	< MDL (ND)	0.15
1, 4-Dichlorobenzene	< MDL (ND)	< MDL (ND)	0.24

(ND) = None Detected

4. RESULTS, continued:

B. TPH - diesel

Sample	TPH - diesel (µg/l)
A. MW1	105,000
B. MW2	7,600
C. MW3	< 5.0 (ND)

Method Blank/Detection Limit = < 5.0 µg/l) (none detected)
Mean Spike Recovery = 111%

C. BTEX

Sample	Concentration (µg/l)			
	Benzene	Toluene	Ethylbenzene	Xylene
A. MW1	1,900	1,600	2,400	3,500
B. MW2	220	510	800	1,100
C. MW3	< 0.5 (ND)	< 0.5 (ND)	< 0.5 (ND)	< 0.5 (ND)
Method Blank / Detection Limit	< 0.5 (ND)	< 0.5 (ND)	< 0.5 (ND)	< 0.5 (ND)
Mean Spike Recovery	103%	110%	109%	94%

D. MTBE

Sample	MTBE (µg/l)
A. MW1	< 0.5 (ND)
B. MW2	< 0.5 (ND)
C. MW3	< 0.5 (ND)

Method Blank/Detection Limit = < 5.0 µg/l) (none detected)
Mean Spike Recovery = 104%