STID 1754

ENVIRONMENTAL PROTECTION

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

September 23, 1998

Ms. Susan Hugo
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

RE: Report and Workplan for
Former Berkeley Farms
4550 San Pablo Avenue
Emeryville, California 94608

Dear Ms. Hugo:

Based on a conversation yesterday with Mr. Larry Seto and Mr. Tom Peacock of your department, I have prepared a report summarizing the tank removal and excavation work performed to date at the referenced site. With this report is a workplan for additional proposed excavation work.

Should you have any questions regarding this, 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 8/31/2000

Attachments: Report/workplan

STID

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

GL-98-120.R1/P1
September 23, 1998

Berkeley Farms
25500 Clawiter Road
Hayward California

Attention : Mr. Norm Alberts

RE: Report of Soil and Groundwater Sampling during Removal of Fuel Tanks and Product Piping, and WorkPlan/Proposal for Additional Excavation and Sampling - Former Berkeley Farms Dairy Facility
4550 San Pablo Avenue
Emeryville, California 94608

Dear Mr. Alberts:

Geo-Logic is pleased to provide you with this report documenting the soil and groundwater sampling conducted during the recent removal of the fuel tanks and product piping at the referenced site. This work was conducted in compliance with the guidelines established by the Regional Water Quality Control Board (RWQCB) and the Alameda County Health Care Services Agency (ACHCSA). A workplan/proposal to collect soil and groundwater samples during additional excavation of impacted soil surrounding the former fuel tanks, dispenser island, and product piping, is also included.

SITE HISTORY AND BACKGROUND

The subject site is located on the east side of San Pablo Avenue between 45th and 47th Streets in Emeryville, California, and formerly operated as a Berkeley Farms dairy facility. A Site Plan (Figure 1) is attached to this report.

FIELD ACTIVITIES

Geo-Logic's field work at the subject site began on September 11, 1998, when one 10,000-gallon diesel tank and one 10,000-gallon gasoline tank were removed from the site. Approximately 150 feet of gasoline product piping had previously been removed and the piping trench excavated to a depth of 3 feet below grade (fbg). The area of the dispenser island has also been excavated approximately 8 feet by 8 feet laterally and to a depth of 4 fbg. The locations of the tank pit, dispenser island, and product piping are depicted on Figures 1 and 2.

Removal of the tanks was performed by Paradiso Mechanical, Inc. of San Leandro, California. The tanks were made of steel and appeared to be in good condition. Mr. Rob Weston of the ACHCSA was present during the tank removal.

Upon removal of the tanks, a liquid dark brown oily residue was observed beneath the tank locations, and additional petroleum-impacted backfill material was still present. In addition, an area of petroleum-impacted native soil several feet wide and the length of the tank pit was present between the two tank locations. Because it was necessary to pump out the tank pit prior to excavating the remaining material, sampling of soil and groundwater from the pit under the observation of the ACHCSA was scheduled for September 14, 1998.

All excavated soil was stockpiled on-site and profiled pending proper disposal at an approved landfill facility.

Six soil samples, labelled P1(3.5'), P2(3.5'), P3(3.5'), P4(3.5'), P5(3.5'), and P6(3.5'), were collected approximately every 20 lineare feet from the product piping trenches at approximately 0.5 feet below the excavated bottom. Mr. Rob Weston of the ACHCSA was present during a portion of the piping trench sampling.

The samples were each placed in clean, two-inch diameter brass tubes, sealed with teflon and plastic caps, and stored in a cooled ice chest for delivery to a certified laboratory. Sample locations are shown on Figure 2.

On September 14, 1998, Geo-Logic returned to the site for sampling of soil and groundwater from the tank pit. Mr. Larry Seto of the ACHCSA was present during the sampling activities. Following dewatering of the tank pit, the pit was excavated to a depth of approximately 13 feet below grade, and to the limits of the sawcut concrete (approximately 25 feet by 39 feet). The excavation bottom at this depth consisted of a orangish brown sandy silt. Some petroleum-impacted backfill material was still present on the sidewalls.

Water was encountered in the tank pit at a depth of approximately 13.0 feet below grade and entered the excavation slowly. Six soil samples, labeled N(12'), S(12'), NE(12'), NW(12'), SE(12'), and SW(12'), were collected from native soils at the sidewalls of the excavation, at the depths indicated.

The undisturbed soil samples were collected from bulk material excavated by backhoe and were handled, stored, and transported as described above. Sample locations are shown on Figure 2.

One water sample, labeled Water-1, was collected from the groundwater that had collected within the excavation. The sample was collected from the northwest corner of the excavation beneath the diesel tank location, where sufficient water had collected, and

where a brown oily residue was noted on the water. The sample was placed in two clean glass VOA vials and one amber one-liter bottle. The water sample was stored and delivered as described above. Mr. Larry Seto of the ACHCSA was present during the water sampling.

SUBSURFACE CONDITIONS

The soils encountered in the excavations consisted predominantly of dark brown to brown stiff silty clay and clay fill 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 12.5 feet below grade. The predominantly clayey soils are inturn underlain by light brown sandy silt. Groundwater was seen to enter the excavation upon exposing the sandy silt soils.

ANALYTICAL RESULTS

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, benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA method 8240/SW-846, and methyl tert-butyl ether (MTBE) by EPA method 8020. The results of the soil analyses are summarized in Tables 1 and 2, and the results of the water analyses are summarized in Table 3. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

DISCUSSION AND RECOMMENDATIONS

The analytical results of the soil samples collected from the product piping trench indicated nondetectable concentrations of TPH as gasoline, BTEX, and MTBE. No further work associated with this product piping trench appears to be warranted.

On September 14, 1998, impacted fill material was removed from the former fuel tank pit to the limits of the sawcut concrete, and soil samples of native material were taken. However, areas of impacted fill were observed remaining on the sidewalls of the excavation. The analytical results of the sidewall samples taken from the tank pit indicated concentrations of TPH as diesel ranging up to 6,700 parts per million. The analytical results of the grab water sample taken from the tank pit indicated a concentration of TPH as diesel of 600 parts per billion (ppb). Based on this, additional source removal consisting of excavation of remaining impacted fill material and overexcavation to remove impacted native soils is proposed. It is estimated that the additional excavation will

consist of approximately 5 feet in each direction. At the south end of the excavation where the sidewall sample indicated a concentration of 6,700 ppm of TPH as diesel, the area of overexcavation may be extended.

Visibly impacted soils were present beneath the dispenser island, which had been excavated to a depth of approximately 4 fbg. Excavation of visibly impacted soil is also proposed for this area.

Finally, the existing second product piping trench will be located and excavated and the piping removed. Visibly impacted soil, if encountered, will be removed within practical limits.

PROPOSED WORK

Soil samples will be collected from the bottoms and/or sidewalls of the excavations. Soil samples will also be collected from all additional stockpiled soil for disposal profiling. The samples collected from the bottoms and/or sidewalls of the fuel tank pit, dispenser island excavation, product piping trenches, and the samples collected from the excavated stockpiled soil, will be analyzed at a minimum for TPH as gasoline, BTEX, TPH as diesel, and methyl tert-butyl ether (MTBE). In addition, the soil profile samples will be analyzed for total lead.

A technical report documenting this excavation work and sampling will be prepared and submitted to the regulatory agencies.

DISTRIBUTION

A copy of this report and workplan/proposal should be sent to Ms. Susan Hugo of the ACHCSA.

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

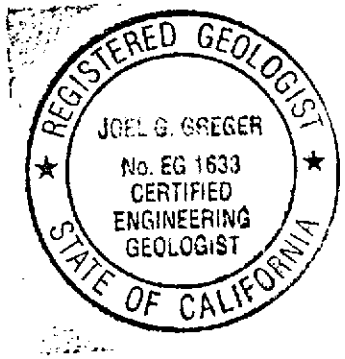
Northern California region. We make no warranty, either expressed or implied, regarding the above, including laboratory analyses, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

If you have any questions regarding this report and proposal, please do not hesitate to call me at (510) 787-6867.

Sincerely,

Geo-Logic

Joel G. Greger, C.E.G.
Certified Engineering Geologist
License No. EG 1633
Exp. Date 8/31/2000



Attachments: Tables 1 through 3
Figures 1 & 2
Laboratory Analyses and
Chain of Custody documentation

Geo-Logic
GL-98-120.R1/P1
September 23, 1998

TABLE 1

SUMMARY OF LABORATORY ANALYSES
SOIL

(Collected on September 11, 1998)

Sample/depth	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
P1 (3.5')	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1
P2 (3.5')	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1
P3 (3.5')	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1
P4 (3.5')	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1
P5 (3.5')	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1
P6 (3.5')	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1
Method Blank/ Detection Limit	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1

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

Geo-Logic
GL-98-120.R1/P1
September 23, 1998

TABLE 2

SUMMARY OF LABORATORY ANALYSES
SOIL

(Collected on September 14, 1998)

Sample/ depth	TPH Gas	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
N(12')	<0.1	290	<0.005	<0.005	<0.005	<0.005	<0.1
S(12')	<0.1	6,700	<0.005	<0.005	<0.005	<0.005	<0.1
NE(12')	22	72	2.1	1.3	0.77	3.7	<0.1
SE(12')	<0.1	150	<0.005	<0.005	<0.005	<0.005	<0.1
SW(12')	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1
NW(12')	<0.1	410	<0.005	<0.005	<0.005	<0.005	<0.1
Comp S1*	<0.1	1110	<0.005	<0.005	<0.005	<0.005	--
Method Blank/ Detection Limit	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1

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

-- analysis not performed

* Total Lead was detected at a concentration of 7.3 mg/kg.

Geo-Logic
GL-98-120.R1/P1
September 23, 1998

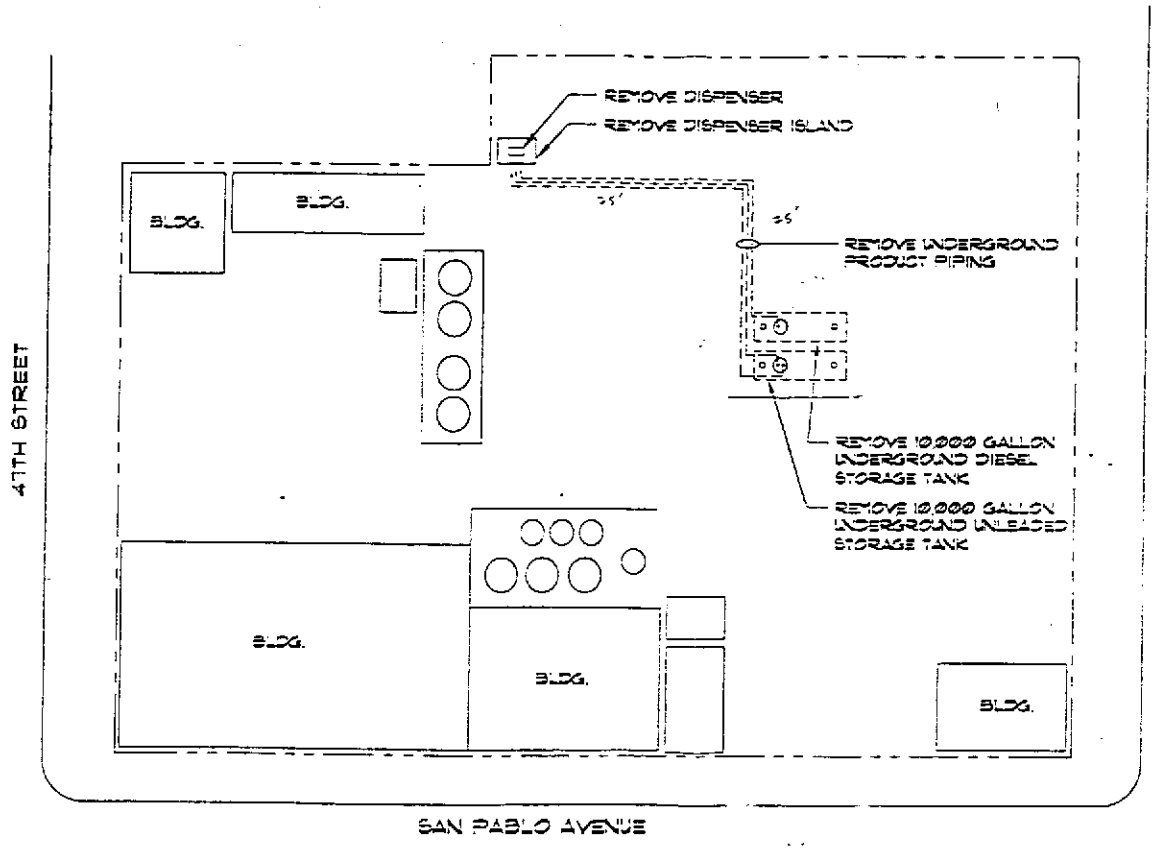
TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

(Collected on September 14, 1998)

Sample	TPH Gas	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
Water-1	<5.0	600	<0.5	<0.5	<0.5	<0.5	<5.0
Method Blank/ Detection Limit	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<5.0

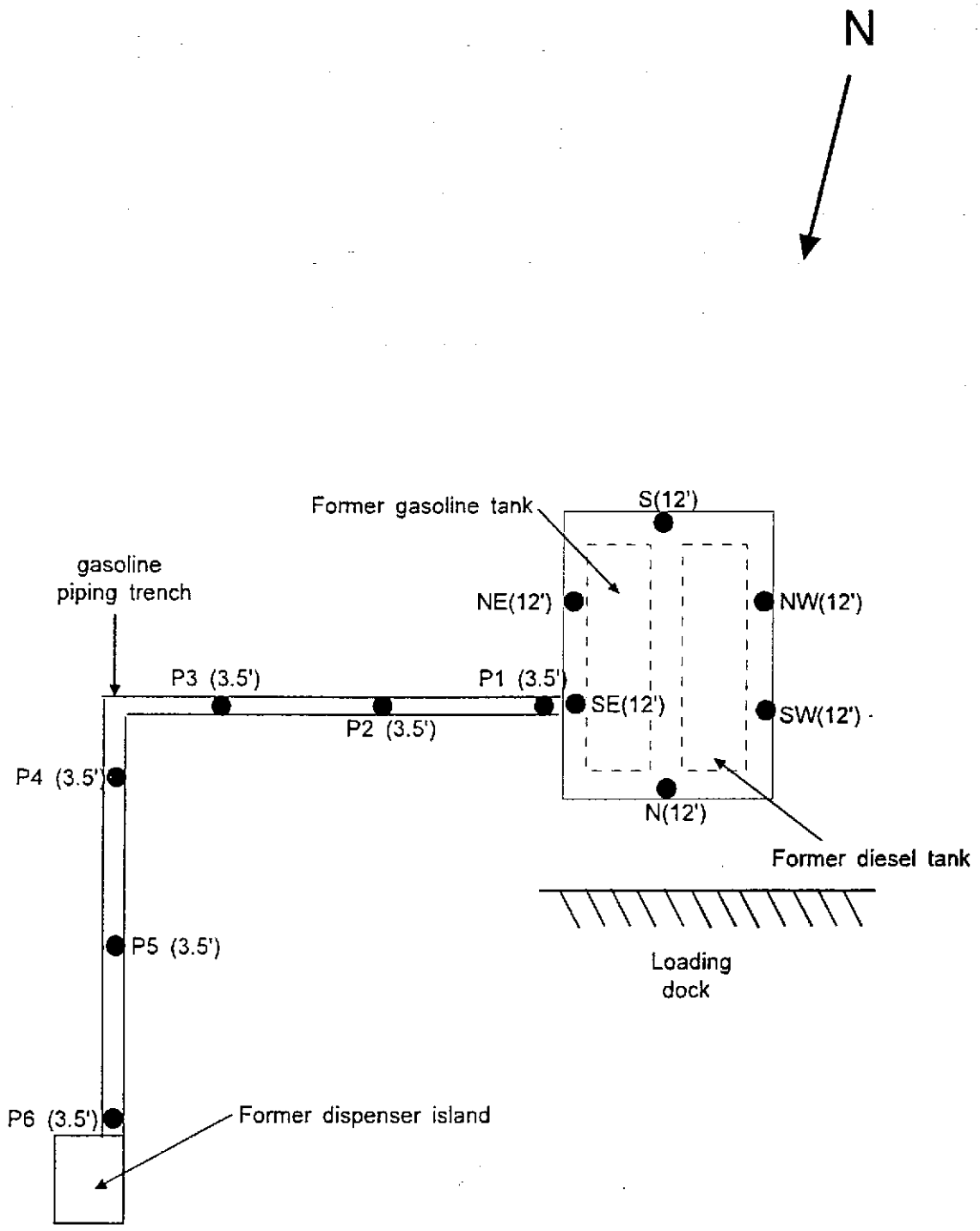
Results are in micrograms per liter (ug/l).



NOT TO SCALE

FORMER BERKELEY FARMS DAIRY 4550 SAN PABLO AVENUE EMERYVILLE, CALIFORNIA	Figure No: 1	Date: September 22, 1998 Drawn By: JG/Geo-Logic

Site Plan



SCALE: 1" = 20'

FORMER BERKELEY FARMS DAIRY 4550 SAN PABLO AVENUE EMERYVILLE, CALIFORNIA	Figure No: 2	Date: September 20, 1998 Drawn By: JG/Geo-Logic

Sample Location Map

CALCOAST ANALYTICAL

Materials Chemistry

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

September 14, 1998

Geo-Logic
1140 5th Avenue
Crockett, CA 94525

Attn.: Mr. Joel Greger

Ref: Lab File #0911-3A/F-98

1. SAMPLE(S):

Six (6) soil cores from Berkeley Farms; 4550 San Pablo. Job No. 1074.

A. P1, (3.5')
B. P2, (3.5')
C. P3, (3.5')
D. P4, (3.5')
E. P5, (3.5')
F. P6, (3.5')

Collected: September 11, 1998 / Received: September 11, 1998

2. ANALYSIS REQUIRED:

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

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

C. Methyl-tert-butyl ether (MTBE) 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 8020; SW-846

C. EPA Method 8020; SW-846.

4. RESULTS:

A. TPH - gasoline

SAMPLE	TPH - GASOLINE (mg/kg)
A. P1 (3.5')	< 0.1 (none detected)
B. P2 (3.5')	< 0.1 (none detected)
C. P3 (3.5')	< 0.1 (none detected)
D. P4 (3.5')	< 0.1 (none detected)
E. P5 (3.5')	< 0.1 (none detected)
F. P6 (3.5')	< 0.1 (none detected)

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

B. BTEX

SAMPLE	CONCENTRATION (mg/kg)			
	BENZENE	TOLUENE	ETHYLBENZENE	XYLENE
A. P1 (3.5')	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
B. P2 (3.5')	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
C. P3 (3.5')	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
D. P4 (3.5')	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
E. P5 (3.5')	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
F. P6 (3.5')	< 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	107%	106%	91%	107%

4. RESULTS - Continued:

C. MBTE

Sample	MBTE (mg/kg)
A. P1 (3.5')	<0.1 (none detected)
B. P2 (3.5')	<0.1 (none detected)
C. P3 (3.5')	<0.1 (none detected)
D. P4 (3.5')	<0.1 (none detected)
E. P5 (3.5')	<0.1 (none detected)
F. P6 (3.5')	<0.1 (none detected)

Ronald W. Shrewsbury
Analytical Chemist
RWS:dg(2)

ALL SAMPLES SUBMITTED FOR TESTING WILL BE HELD 30 DAYS FROM REPORT DATE AT WHICH TIME THEY WILL BE RETURNED TO CLIENT OR DESTROYED. CLIENT WILL BE RESPONSIBLE FOR ALL SHIPPING, HANDLING, AND DISPOSAL CHARGES. SAMPLES WILL BE STORED UPON WRITTEN INSTRUCTIONS AND FEE ARRANGEMENTS.

Calcoast Analytical, Inc.

+ MTBE

Chain of Custody

Date 9/11/98 Page 1 of 1

Proj. Mgr.: Joel Greger (Geologic)
Company: Paradiso Mechanical
Address: 2660 Williams St
PO B 1856
San Leandro CA
Samples (signature)
(Phone No.) 510 787 6867
(Fax No.) 510 787 1457

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, 5242)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, E-F, B-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
P1 (3.5')	Liner	9/11/98	12	Soil			X																			1
P2 (3.5')							X																			
P3 (3.5')							X																			
P4 (3.5')							X																			
P5 (3.5')							X																			
P6 (3.5')							X																			

Project Information

Project Name: Berkeley Farms Dairy
Project No.: 4550 San Pablo Emeryville
PO #: 1074
TAT: Standard / 5-Day

Sample Receipt

	24	48	72	Other
Total No. of Containers				6
Head Space				
Rec'd Good Condition/Cold				
Conforms to Record				

Special Instructions / Comments:
Refer to Paradiso Job # 1074 on invoice

	1.	2.	3.
Relinquished By: (Signature)			
(Printed Name)	Joel Greger		
(Date) (Time)	9/11/98 1230		
Received By: (Signature)			
(Printed Name)	Ronald Shrewsbury		
(Date) (Time)	9/10/98 12:30		

CALCOAST ANALYTICAL

Materials Chemistry

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

September 15, 1998

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

Attn: Mr. Joel Greger

Ref: Lab File #0914-5A/98

1. SAMPLE(s):

Four (4) soil cores, which are composited into one (1) sample for analysis, from Berkeley Farms, 4550 San Pablo, Emeryville. Job No. 1074

Collected: September 14, 1998
Received: September 14, 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.

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

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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

D. Sample Digestion-EPA Method 3050;SW-846
AAS Analysis-EPA Method 7420;SW-846

4. RESULTS:

A. TPH - gasoline

Sample	TPH - gasoline (mg/kg)
Composite	<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)
Composite	1,100

Method Blank / Detection Limit = < 0.1 mg/kg (none detected)
Mean Spike Recovery = 108%

C. BTEX

Sample	Concentration (µg/kg)			
	Benzene	Toluene	Ethylbenzene	Xylene
Composite	<0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.0005 (ND)
Method Blank / Detection Limit	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
Mean Spike Recovery	106%	109%	103%	96%

D. Total Lead

Sample	Total Pb (mg/kg)
Composite	7.3

Method Blank / Detection Limit = < 2.0 mg/kg (none detected)
Mean Spike Recovery = 107%

Ronald W. Shrewsbury
Analytical Chemist

RS/ki(1)

ALL SAMPLES SUBMITTED FOR TESTING WILL BE HELD 30 DAYS FROM REPORT DATE AT WHICH TIME THEY WILL BE RETURNED TO CLIENT OR DESTROYED. CLIENT WILL BE RESPONSIBLE FOR ALL SHIPPING, HANDLING, AND DISPOSAL CHARGES. SAMPLES WILL BE STORED UPON WRITTEN INSTRUCTIONS AND FEE ARRANGEMENTS.

CALCOAST ANALYTICAL, INC.

MATERIALS CHEMISTRY
Chain of Custody Record
Sample Log sheet

ACCOUNT STATUS_____

FILE #CA-0914-5 A/98

SAMPLES RECEIVED:

DATE: 9/14/98

COMPANY: Paradiso Mechanical, Inc.

DELIVERED BY: Joel Greger - GeoLogic

RECEIVED BY: [signature] 9/14/98

SAMPLES RELINQUISHED:

DATE:_____

COMPANY:_____

RELINQUISHED BY:_____

RECEIVED BY:_____

Sample Description:

How many samples / Type of sample(s):

Comp-S1 - 4 liners (soil)
(Composite as one)
Fmr. Berkeley Farms Dairy
4550 San Pablo Ave
Emeryville

Test(s) type: (see attached ☐)

TPHG, BTEX, TPHas diesel, Total Pb

PO # (if any): 1074

Comments:_____

TEST(S) TO BE PERFORMED BY: (check one) Bob☐ Ron☑ Tony☐ Fintan☐ Justin☐ Kevin☐

CALCOAST ANALYTICAL

Materials Chemistry

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

September 18, 1998

Geo-Logic
1140 5th Avenue
Crockett, CA 94525

Attn.: Mr. Joel Greger

Ref: Lab File #0914-7A/G-98(a)

1. **SAMPLE(S):**

Six (6) soil cores from Berkeley Farms; 4550 San Pablo. Job No. 1074.

A. N (12')
B. S(12')
C. NE(12')
D. SE(12')
E. SW(12')
F. NW(12')

Collected: September 141, 1998 / Received: September 14, 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.

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

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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

D. EPA Method 8020; SW-846.

4. RESULTS:

A. TPH - gasoline

SAMPLE	TPH - GASOLINE (mg/kg)
A. N (12')	< 0.1 (none detected)
B. S (12')	< 0.1 (none detected)
C. NE(12')	22
D. SE (12')	< 0.1 (none detected)
E. SW (12')	< 0.1 (none detected)
F. NW (12')	< 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. N (12')	290
B. S (12')	6,700
C. NE(12')	72
D. SE (12')	150
E. SW (12')	< 0.1 (none detected)
F. NW (12')	410

Method Blank / Detection Limit = < 0.1 mg/kg (none detected)
Mean Spike Recovery = 105%

4. RESULTS - Continued:

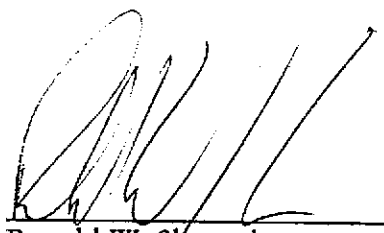
C. BTEX

SAMPLE	CONCENTRATION (mg/kg)			
	BENZENE	TOLUENE	ETHYLBENZENE	XYLENE
A. N (12')	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
B. S (12')	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
C. NE(12')	2.1	1.3	0.77	3.7
D. SE (12')	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
E. SW (12')	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
F. NW (12')	< 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	104%	105%	109%	104%

D. MBTE

Sample	MBTE (mg/kg)
A. N (12')	<0.1 (none detected)
B. S (12')	<0.1 (none detected)
C. NE(12')	<0.1 (none detected)
D. SE (12')	<0.1 (none detected)
E. SW (12')	<0.1 (none detected)
F. NW (12')	<0.1 (none detected)

**Method Blank/Detection Limit = <0.1 mg/kg (none detected)*



Ronald W. Shrewsbury
Analytical Chemist
RWS:dg(2)

ALL SAMPLES SUBMITTED FOR TESTING WILL BE HELD 30 DAYS FROM REPORT DATE AT WHICH TIME THEY WILL BE RETURNED TO CLIENT OR DESTROYED. CLIENT WILL BE RESPONSIBLE FOR ALL SHIPPING, HANDLING, AND DISPOSAL CHARGES. SAMPLES WILL BE STORED UPON WRITTEN INSTRUCTIONS AND FEE ARRANGEMENTS.

CALCOAST ANALYTICAL, INC.

MATERIALS CHEMISTRY
Chain of Custody Record
Sample Log sheet

ACCOUNT STATUS_____

FILE #CA-0914-TA/G-98

SAMPLES RECEIVED:

DATE: 9/14/98

COMPANY: Paradiso Mechanical, Inc-

DELIVERED BY: Joel Gregor- Geo-Logic

RECEIVED BY: [signature]

SAMPLES RELINQUISHED:

DATE:_____

COMPANY:_____

RELINQUISHED BY:_____

RECEIVED BY:_____

Sample Description: soil in liners N (12') S (12') NE (12') SE (12') SW (12') NW (12') Water #1 1-liter 2 VOAs

How many samples / Type of sample(s):

For Former Berkeley Farms Dairy
4550 San Pablo Ave
Emeryville CA

Test(s) type: (see attached ☐)
TPH G
TPH as diesel
BTEX
MTBE

PO # (if any): 1074
Comments:

TEST(S) TO BE PERFORMED BY: (check one) Bob☐ Rob☑ Tony☐ Fintan☐ Justin☐ Kevin☐

CALCOAST ANALYTICAL

Materials Chemistry

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

September 18, 1998

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

Attn: Mr. Joel Greger

Ref: Lab File #0914-7A/G-98(b)

1. SAMPLE(s):

One (1) sample of water contained in two (2) VOAs and one (1) liter bottle.

Project: Berkeley Farms - San Pablo
Project No.: 1074
Sample: Water #1

Collected: September 14, 1998
Received: September 14, 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.

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

D. EPA Method 8020; SW-846

4. RESULTS:

A. TPH - gasoline

Sample	TPH-g (µg/L)
A. Water #1	< 5.0 (none detected)

Method Blank / Detection Limit = < 5.0µg/L (none detected)
Mean Spike Recovery = 107%

B. TPH - diesel

Sample	TPH-d (µg/L)
A. Water #1	600

Method Blank / Detection Limit = < 5.0µg/L (none detected)
Mean Spike Recovery = 102%

C. BTEX

Sample	Concentration (µg/L)			
	Benzene	Toluene	Ethylbenzene	Xylene
A. Water #1	< 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%	109%	95%	104%

4. RESULTS, continued:

D. MTBE

Sample	MTBE (µg/L)
A. Water #1	< 5.0 (none detected)

Method Blank / Detection Limit = < 5.0µg/L (none detected)

Ronald W. Shrewsbury
Analytical Chemist

RS/ki(1)

CALCOAST ANALYTICAL, INC.

MATERIALS CHEMISTRY
Chain of Custody Record
Sample Log sheet

ACCOUNT STATUS_____

FILE #CA-0514-TA/G-98

SAMPLES RECEIVED:

DATE: 9/14/98

COMPANY: Paradiso Mechanical, Inc-

DELIVERED BY: Joel Gregger- GeoLogic

RECEIVED BY:

SAMPLES RELINQUISHED:

DATE:

COMPANY:

RELINQUISHED BY:

RECEIVED BY:

Sample Description: soil in liners N(12') S(12') NE(12') SE(12') SW(12') NW(12') Water #1 1-liter 2 voas

How many samples / Type of sample(s):

For Former Berkeley Farms Dairy
4550 San Pablo Ave
Emeryville CA

Test(s) type: (see attached ☐)
TPH G
TPH as diesel
BTEX
MTBE

PO # (if any): 7074

Comments:

TEST(S) TO BE PERFORMED BY: (check one) Bob☐ Rob☑ Tony☐ Fintan☐ Justin☐ Kevin☐