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

Paradiso Job No. 1011
March 18, 1999

Mr. Norm Albert
Berkeley Farms
25500 Clawiter Road
Hayward, California

Re: Installation of Monitoring Wells
Former Berkeley Farms Dairy Facility
4550 San Pablo Avenue
Emeryville, California 94608

Dear Mr. Albert:

This report presents the results of the recent installation and sampling of two monitoring wells at the subject site. The purpose of the well installation was to determine the ground water flow direction, and to further investigate the degree and extent of petroleum hydrocarbon impacts to soil and ground water at the site. The work performed was in accordance with Geo-Logic's workplan/proposal (GL-98-120.P2) dated February 13, 1999. The scope of the work performed by Geo-Logic consisted of the following:

Coordination with regulatory agencies

Geologic logging of two borings for the installation of two monitoring wells

Soil sampling, including disposal profiling

Well development and ground water monitoring and sampling

Delivery of soil and ground water samples, including properly executed Chain of Custody documentation, to a California-certified analytical laboratory for laboratory analyses

Data analysis, interpretation, and report preparation

SITE DESCRIPTION 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 - Potentiometric Surface Map) is attached to this report.

PREVIOUS FIELD ACTIVITIES

Geo-Logic's field work at the 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 trenches excavated to a depth of 3 feet below grade. The area of the dispenser island has also been excavated approximately 8 feet by 8 feet laterally and to a depth of 4 feet below grade. The former tank and dispenser island locations are shown 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 Alameda County Department of Environmental Health (ACDEH) was present during the tank removal.

Upon removal of the tanks, dark brown oily residue (liquid) 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 backfill and sampling soil and groundwater, sampling of pit under the observation of the ACDEH was scheduled for September 14, 1998.

Six soil samples, were collected every 20 linear feet from the product piping trenches at approximately 3.5 feet below grade and 0.5 feet below the trench bottom. Mr. Rob Weston of the ACDEH was present during a portion of the soil sampling. All excavated soil was stockpiled on-site.

The six product piping trench samples were analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline, benzene, toluene, ethylbenzene and xylenes (BTEX), and methyl-tert-butyl ether (MTBE). The samples yielded nondetectable results for all of these analytes.

On September 14, 1998, Geo-Logic returned to the site for sampling of soil and groundwater from the tank pit, and to sample the stockpile for disposal profiling. 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, exposed in the sidewalls at approximately 12.8 feet below grade. 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 were collected from the sidewalls of the excavation at approximately 12 feet below grade. Mr. Larry Seto of the ACDEH witnessed the soil sampling activities.

The six soil samples were analyzed for TPH as gasoline, TPH as diesel, BTEX, and MTBE. All of the samples yielded nondetectable results of TPH as gasoline, BTEX, and MTBE, except for the sample collected from the northern half of the eastern sidewall, which contained 22 parts per million (ppm) of TPH as gasoline, and BTEX constituents ranging between 0.77 and 3.7 ppm. MTBE was nondetectable in this sample. TPH as diesel was detected in all of the samples except for the sample collected from the southern half of the western sidewall, at concentrations ranging from 72 to 6,700 ppm. The largest concentration (6,700 ppm) of TPH as diesel was detected in the sample collected from the southern sidewall.

A water sample 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. Mr. Larry Seto of the ACDEH witnessed the water sampling.

The water sample analyses indicated no detectable concentrations of TPH as gasoline, BTEX, or MTBE. TPH as diesel was detected at a concentration of 600 parts per billion (ppb).

On September 9 and 10, 1998, prior to removing the tanks, approximately 3,800 gallons of gasoline and 900 gallons of diesel were pumped from the tanks and then the tanks were rinsed. The fuel and the rinse water was transported under manifest by Clearwater Environmental Management, Inc. (Clearwater) of Fremont, California, and taken to Alviso Independent Oil (Alviso) in Alviso, California.

Following removal on September 11, 1998, the 10,000-gallon diesel tank and the 10,000-gallon gasoline tank were transported by Trident Trucking to Erickson, Inc., of Richmond, California.

The sampling performed on September 11, 1998 of the product piping trench, and the sampling and removal of the two 10,000-gallon fuel tanks performed on September 14, 1998, was summarized in Geo-Logic's workplan/report (GL-98-120.R1/P1) dated September 23, 1998.

Geo-Logic returned to the site on September 25, 1998, when additional overexcation of the tank pit sidewalls had been completed. The pit had been dewatered to an onsite Baker tank prior to overexcavation. The north, south, and west sidewalls had been overexcavated approximately 5 feet laterally. The eastern sidewall was overexcavated only 1.5 feet laterally due to the presence of underground utilities.

Groundwater had stabilized in the tank pit at a depth of approximately 13.0 feet below grade. Six soil samples were collected from the sidewalls of the excavation at approximately 12 feet below grade. On September 30, Ms. Susan Hugo of the ACDEH inspected the open excavations.

All of the samples were analyzed for TPH as diesel. TPH as diesel was detected in all of the samples at concentrations ranging from 59 to 770 ppm. The highest concentration (770 ppm) was again detected in the sample from the southern sidewall. The sample from the northern half of the eastern sidewall, adjacent to a gasoline piping trench, was also analyzed for TPH as gasoline and BTEX, which were nondetectable.

As of October 1, 1998, a total of approximately 32,200 gallons of purged groundwater had been removed from the tank pit. An onsite 21,000-gallon Baker tank was used for temporary storage.

On October 5, 1998, Geo-Logic returned to the site and sampled a gasoline and diesel product piping trench and the former dispenser island area. Five soil samples were collected every 20 linear feet from the product piping trench at depths of between 3 and 5.5 feet below grade, approximately 0.5 feet below the trench bottom. One sample was taken at approximately four feet below grade from beneath a drive slab area directly adjacent to and west of the product piping trench. Two samples were taken at between 5.5 and 6 feet below grade from the former dispenser island location. On October 8, 1998, Ms. Susan Hugo of the ACDEH visited the site and viewed these sample locations within the open excavations. All of the samples (eight samples) yielded nondetectable results for TPH as diesel, TPH as gasoline, and BTEX.

On October 1, 1998, approximately 200 gallons of water with oil sheen that had been removed from the tank pit was transported by Clearwater under manifest to Alviso. Also on October 1, 1998, approximately 33,000 gallons of groundwater that had been removed from the tank pit was transported by NG Chemical (NG) under manifest to Seaport Environmental in Redwood City, California. During the period September 25, 1998 through October 23, 1998, approximately 1152.35 tons of excavated soil was transported by

Conrad and Sons of Escalon, California, under proper manifest, to Forward Landfill in Manteca, California.

The overexcavation and resampling of the tank pit on September 25, 1998, and the sampling of the product piping trench on October 5, 1998, was documented in Geo-Logic's report (GL-98-120.R2) dated November 20, 1998.

On February 4, 1999, Geo-Logic returned to the site for removal of a fuel oil tank. The tank consisted of an approximately 2,000-gallon single-wall steel tank that had previously contained fuel oil to power a boiler. Ms. Susan Hugo of the ACDEH and Mr. George Warren of the City of Emeryville Fire Department witnessed the tank removal. The location of the tank is shown on Figures 1 and 2.

The tank was approximately 4 feet in diameter by 16 feet in length. The tank bottom rested approximately 4 feet below a concrete slab that had had another concrete slab placed over it. The tank pit backfill had been removed to lateral dimensions of approximately 7 feet by 20 feet.

No apparent holes or cracks were observed in the tank. According to Paradiso Mechanical, Inc. personnel, upon uncovering, the tank was found to contain water and approximately 4 inches of product. Groundwater was not encountered in the tank pit excavation.

Two soil samples, were obtained from the sidewalls at the north and south ends of the excavation at four feet below grade, just above the excavation bottom. The two tank pit soil samples, and the composite stockpile sample, yielded nondetectable results for TPH as fuel oil, BTEX, and MTBE. 7.7 parts per million (ppm) of total lead was detected in the stockpile sample (below regulatory limits).

On January 15, 1999, prior to removing the tank, water with some fuel oil was pumped from the tank and then the tank was triple rinsed. The liquid from within the tank and the rinsate water, totalling approximately 2950 gallons, was transported under manifest by Clearwater Environmental Management, Inc. and taken to Alviso Independent Oil Co. in Alviso, California. Following removal on February 4, 1999, the 2,000-gallon fuel oil was transported under manifest by Ecology Control Industries to Erickson, Inc., of Richmond, California.

Following receipt of the laboratory analytical results indicating nondetectable results for all of the petroleum hydrocarbon analytes, and with the concurrence of Ms. Susan Hugo of the ACDEH, the excavated soil from the fuel oil tank pit was placed back in

the pit. 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 fuel oil tank was considered warranted. The work associated with removal of the fuel oil tank was summarized in Geo-Logic's report dated March 10, 1999.

RECENT FIELD ACTIVITIES

On February 26, 1999, two two-inch diameter monitoring wells (designated as MW1 and MW2 on the attached Figure 1) were installed at the site. Prior to drilling, a permit was obtained from the Alameda County Public Works Agency - Water Resources Section. Also, prior to drilling, the boring locations were marked with white paint and Underground Service Alert was notified, as required by law.

The wells were each drilled, constructed, and completed in accordance with the guidelines of the Regional Water Quality Control Board (RWQCB) and the California Well Standards (per Bulletin 74-90). Verbal approval of the workplan was given by Ms. Susan Hugo of the ACDEH (telephone conversation on February 25, 1999). The subsurface materials penetrated and details of the construction of the wells are described on the attached Boring Logs.

The two wells were each drilled and completed to a total depth of 22 feet below grade. The uppermost five feet of each borehole was hand augered to confirm the absence of underground utilities. Ground water was encountered at depths ranging from approximately 11 to 12 feet below grade during drilling. Soil samples were collected for laboratory analysis and for lithologic logging purposes continuously in MW-1 beginning at 5 feet below grade and continuing until groundwater was encountered. Samples obtained at areas of contamination and at the soil/groundwater interface were retained and submitted for laboratory analysis. Soil sampling was conducted below the water table at intervals of 3 feet or less, for lithologic logging purposes only.

The undisturbed soil samples were collected by driving a California-modified split-spoon sampler (lined with brass liners) ahead of the drilling augers. The two-inch diameter brass liners holding the samples were sealed with Teflon-lined plastic caps, labeled, and placed in individually sealed plastic bags, which were then stored in a cooler, on ice, until delivery to a state-certified laboratory.

Each well casing was installed with a watertight cap and padlock. A round, watertight, flush-mounted well cover was cemented in place

over each well casing. The surface of each well cover and the top of each well casing was surveyed by Kier and Wright of Pleasanton, California, to Mean Sea Level (MSL) and to a vertical accuracy of 0.01 foot.

The new wells were developed on March 1, 1999. Prior to development, the wells were checked for the depth to the water table and the presence of free product. Droplets of oily liquid were noted in well MW-1. No free product was noted in well MW-2.

After recording the monitoring data, the wells were each purged of between 22 and 23 gallons of water, until the evacuated water was relatively clear and free of visible suspended sediment. Monitoring and well development data are summarized in Table 1.

The two wells (MW1 and MW2) were sampled on March 4, 1999. Prior to sampling, the wells were checked for depth to water, and the presence of free product and sheen. Droplets of oily liquid were again noted in well MW-1. No free product was noted in well MW-2. After recording the monitoring data, the wells were each purged of approximately eight gallons of water. Once a minimum of approximately three to four casing volumes had been removed from each well and the groundwater level was observed to have stabilized, 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

Water and selected soil samples from the borings for MW1 and MW2 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 5030/modified 8015, and BTEX and MTBE by EPA Method 8020.

The concentrations of TPH as gasoline, benzene, and TPH as diesel detected in the ground water samples collected on March 4, 1999, are shown on the attached Figure 2. The results of the soil analyses are summarized in Table 3 and the results of the water analyses are summarized in Table 2. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

HYDROLOGY AND GEOLOGY

On March 4, 1999, the measured depth to ground water in monitoring wells MW1 and MW2 was 4.34 and 4.21 feet below the tops of the well casings, respectively. Monitoring of the wells was performed in conjunction with the monitoring of wells at 4575 San Pablo Avenue. Using the data from the wells at both sites, the ground water flow direction appeared to be to the west, as shown on the attached Figure 1. The hydraulic gradient at the site on March 4, 1999, was approximately 0.01.

DISCUSSION AND RECOMMENDATIONS

Based on the analytical results of the ground water samples collected and evaluated to date, Geo-Logic recommends the implementation of a monitoring and sampling program. The wells should be monitored and sampled on a quarterly basis. The proposed program should be conducted for a period of 12 months. The results of the monitoring program will be documented and evaluated after each monitoring and sampling event. Recommendations for altering or terminating the program will be made, as warranted.

DISTRIBUTION

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

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.

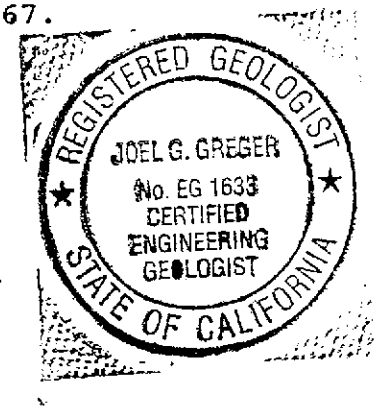
Should you have any questions regarding this report, please feel free to call me at (510) 787-6867.

Sincerely,

Geo-Logic, Inc.

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

License No. EG 1633
Exp. Date 8/31/2000



Attachments: Tables 1 to 3
Figures 1 & 2
Boring Logs
Laboratory Analyses and
Chain of Custody documentation

Geo-Logic
Paradiso Job No. 1011
March 18, 1999

TABLE 1

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 March 4, 1999)						
MW1		(Well inacessible, damaged)				
MW2	34.69	5.49	16.58	0	No	8
MW3	35.26	5.76	16.57	0	No	8
MW1-Dairy	38.59	4.34	21.77	oily droplets		10
MW2-Dairy	37.91	4.21	21.80	0	No	10
(Monitored and Developed on March 1, 1999)						
MW1-Dairy	38.58	4.35	16.59	oily droplets		22
MW2-Dairy	37.91	4.21	16.58	0	No	23

Well #	Top of Casing Elevation* (feet)
MW1	42.01
MW2	40.78
MW3	41.08
MW1 - Dairy	42.93
MW2 - Dairy	42.12

♦ 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
Paradiso Job No. 1011
March 18, 1999

TABLE 2

SUMMARY OF LABORATORY ANALYSES
WATER

Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
		(Samples collected on March 4, 1998)					
MW1 -Dairy	447,000	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW2 -Dairy	16,000	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
Method Blank/ Det. Limit	5.0	5.0	0.5	0.5	0.5	0.5	0.5

Results are in parts per billion.

Geo-Logic
Paradiso Job No. 1011
March 18, 1999

TABLE 3

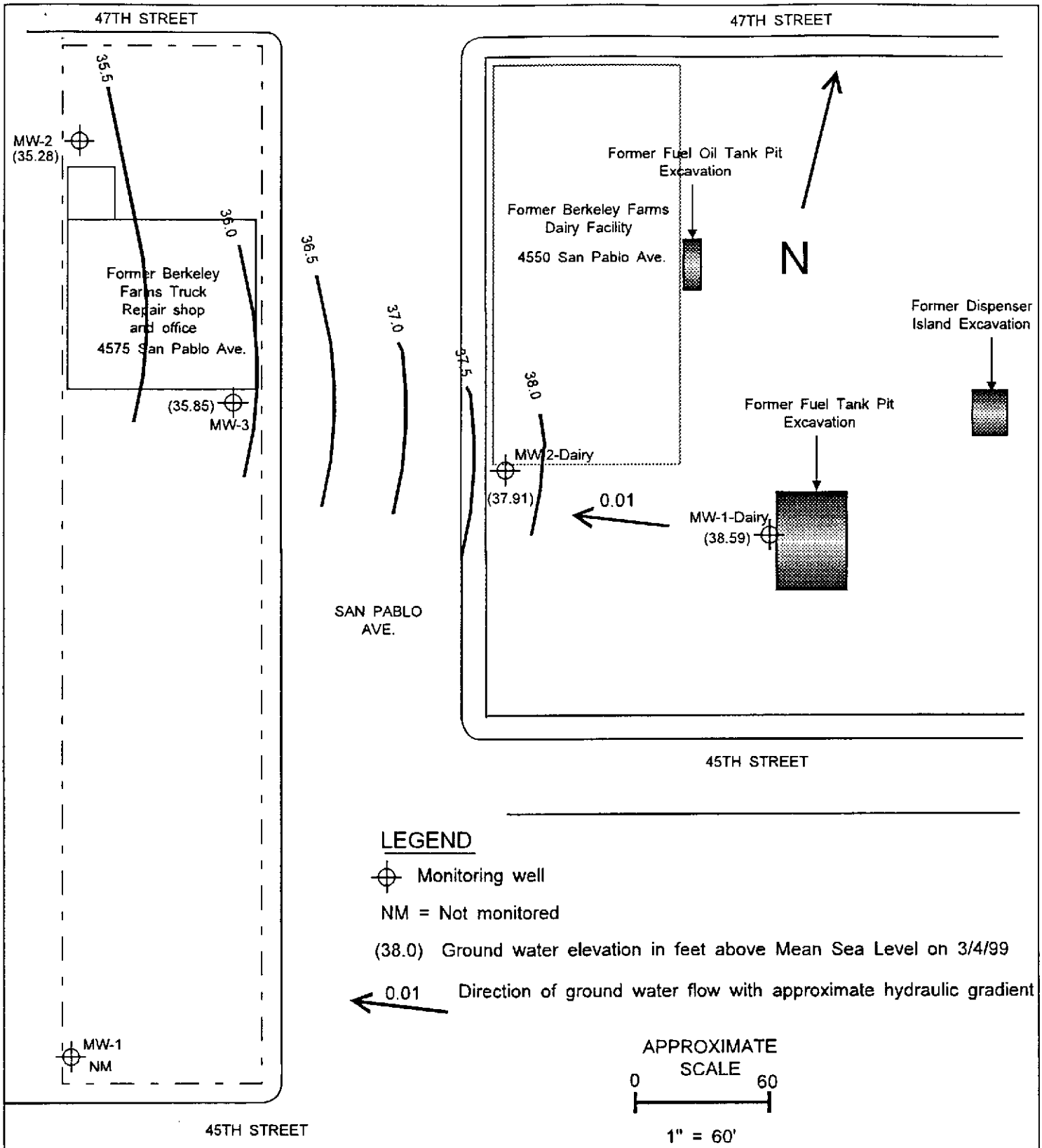
SUMMARY OF LABORATORY ANALYSES
SOIL

(Samples collected on February 26, 1999)

Sample No./Depth	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
MW1 (10')	1,300	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
MW1 (12')	97	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
MW2 (12')	<0.1	1.7	0.049	0.026	0.047	0.076	<0.005
MW2 (13')	<0.1	0.28	<0.005	0.058	0.092	0.081	<0.005
Comp S1 *	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
Method Blank/ Det. Limit	0.1	0.1	0.005	0.005	0.005	0.005	0.005

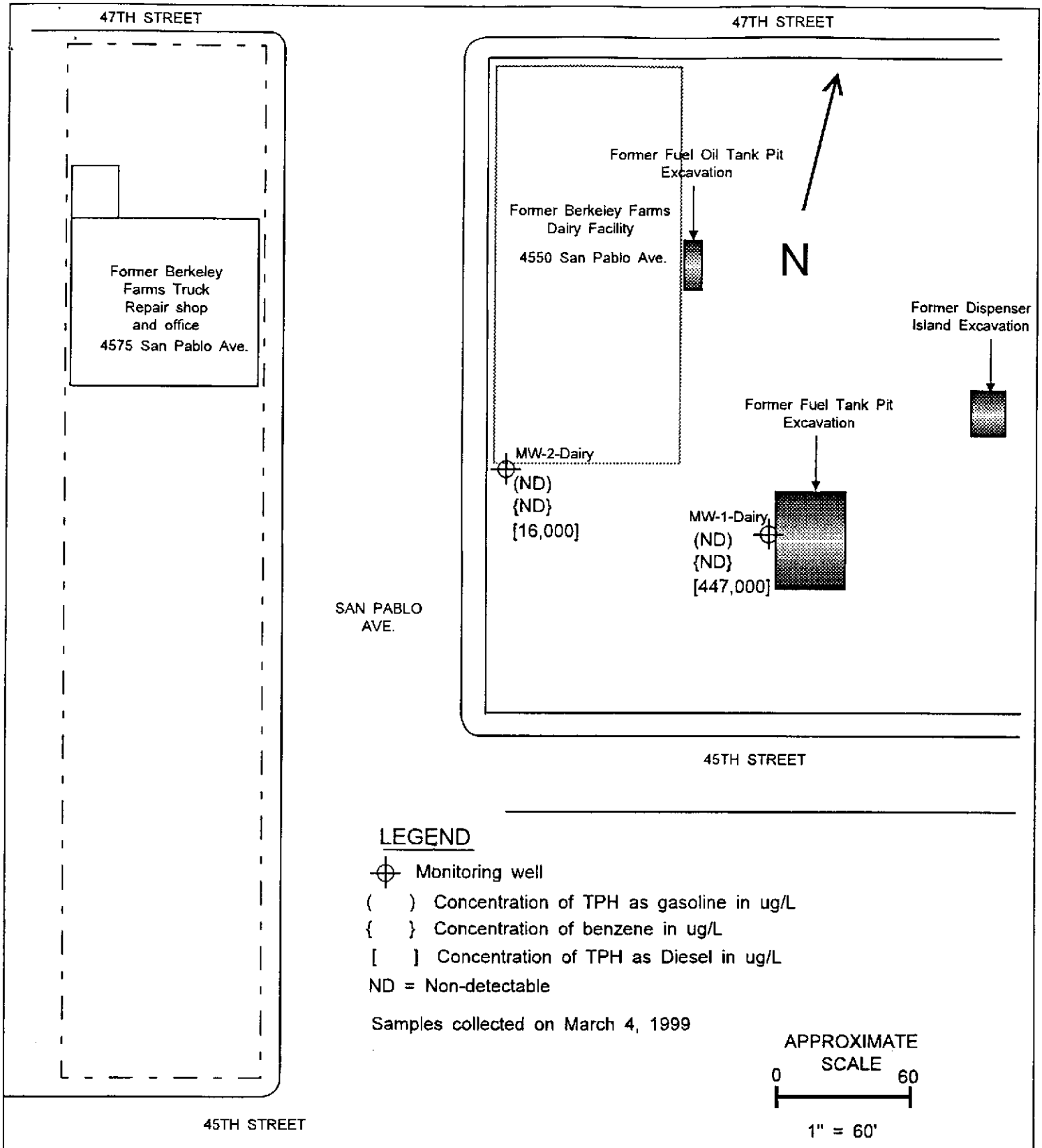
* Total Lead was detected at a concentration of 29 ppm.

Results are in parts per million.



Former Berkeley Farms Dairy Facility 4550 San Pablo Avenue Emeryville, California	Figure No: 1	Date: March 12, 1999 Drawn By: JG/Geo-Logic

Potentiometric Surface Map



LEGEND

⊕ Monitoring well

( ) Concentration of TPH as gasoline in ug/L

{ } Concentration of benzene in ug/L

[ ] Concentration of TPH as Diesel in ug/L

ND = Non-detectable

Samples collected on March 4, 1999

APPROXIMATE SCALE

0 60

1" = 60'

Former Berkeley Farms Dairy Facility 4550 San Pablo Avenue Emeryville, California	Figure No: 2	Date: March 12, 1999 Drawn By: JG/Geo-Logic

Petroleum Hydrocarbons in Groundwater

BORING LOG

Project No. 1011	Boring and casing diameter: 8", 2"	Logged By: JG
Project: Former Berkeley Farms Dairy	Well Cover Elevation: 43.27	Date drilled: 2/26/99
Boring No. MW-1-Dairy	Drilling Method: Hollow Stem Auger	Drilling Company: Woodward Drilling

Penetration Blows/6" PID	G.W. level	Sample Depth (ft)	Stratigraphy (USCS)	Description
		0		8" of concrete pavement over 4" of sand and gravel base.
			CL	@1' - Silty clay (CL), black (5Y 2.5/2), moist, very stiff.
3/6/12/15		5		@5' - Silty clay (CL), very dark gray (5Y 3/1), moist, very stiff, estimated 10% subangular gravels to 1/4" diameter.
5/6/10/14	PID-0			@7' - As above except gray (5Y 5/1), very moist, very stiff, slight odor of hydrocarbons.
9/14/14/15	▽	10	ML	@9' - Clayey silt with gravel (ML), dark greenish gray (5G 4/1), wet, estimated 15-30% variable gravel content, mod. odor of hydrocarbons.
15/15/8/11			GW	@11' - Sandy gravel, dk. greenish gray (5G 4/1), saturated, v. stiff, v. fine to med.-grained, angular gravels to 1/2", est. 10% silt, str. odor.
				@12.4' - Sandy silt (ML), yellowish brown (10YR 5/4), saturated, slight odor of hydrocarbons.
		15	ML	
18/26/50-6"				@16' - Sandy silt, as above except very hard.
		20		@20' - Clayey silt with gravel (ML), yellowish brown (10YR 5/4), saturated, hard, up to 15% variable subangular gravels to 3/8" diameter, trace to 10% v. fine-grained sand, sl. of hydrocarbons.
16/20/20/36				
		25		Total Depth: 22 feet Screen: 0.010 slot from 6-22 feet Sandpack: #2/12 sand from 5-22 feet Seal: Bentonite 3,5-5 feet, neat cement grout 0-3.5 feet.
		30		

Former Berkeley Farms Dairy
4550 San Pablo Avenue
Emeryville, California

MW1
-Dairy

Date: March 12,1999

Drawn By: JG/Geo-Logic

Boring Log and Well Completion Details

BORING LOG

Project No. 1011	Boring and casing diameter: 8", 2"	Logged By: JG
Project: Former Berkeley Farms Dairy	Well Cover Elevation: 42.43	Date drilled: 2/26/99
Boring No. MW-2-Dairy	Drilling Method: Hollow Stem Auger	Drilling Company: Woodward Drilling

Penetration Blows/6" PID	G.W. level	Sample Depth (ft)	Stratigraphy (USCS)	Description
		0		8" of concrete pavement over 4" of sand and gravel base.
			CL	@1' - Silty clay (CL), black (5Y 2.5/2), moist, very stiff.
5/6/10/12	PID-0	5	ML	@ 5' - Clayey silt (ML), dark olive gray (5Y 3/2), moist, very stiff, trace angular gravels to 3/8" diameter.
10/14/15/15	▽	10		@ 10' - Clayey silt with gravel (ML), olive gray (5Y 5/3), very moist, very stiff, estimated 15--25% variable gravel content, gravels are angular, to 1.5" diameter.
13/6/15/20				@ 11.5'-Sandy silt (ML), yellowish brown (10YR 5/4), v. moist, v. stiff.
		15		@ 13' - Silt (ML), light olive gray (5Y 6/2), saturated, very stiff, locally with up to 15% angular gravels to 1/2" diameter, locally clayey to sandy. Abundant Fe0 staining.
				@ 20' - Silty sand with gravel, weak red (2.5Y 4/2), saturated, medium dense, sand very fine to coarse-grained, 15% subangular gravels to 1/4" diameter, 10-15% silt and clay.
8/12/19/22		20	SM	@ 20.5' - Clayey silt (ML), olive gray (5Y 5/3), saturated, hard, trace angular gravels to 1/8" diameter, abundant Feo and MnO staining.
			ML	
		25		Total Depth: 22 feet Screen: 0.010 slot from 6-22 feet Sandpack: #2/12 sand from 5-22 feet Seal: Bentonite 3,5-5 feet, neat cement grout 0-3.5 feet.
		30		

Former Berkeley Farms Dairy
4550 San Pablo Avenue
Emeryville, California

MW2
-Dairy

Date: March 12,1999

Drawn By: JG/Geo-Logic

Boring Log and Well Completion Details

CALCOAST ANALYTICAL

Materials Chemistry

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

March 10, 1999

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

Attn: Mr. Joel Greger

Ref: Lab File No.: 0304-9A/B-99

1. SAMPLES:

Two (2) water samples, each contained in one (1) liter bottle and two (2) VOAs;

Project: Former Berkeley Farms Dairy, 4550 San Pablo, Emeryville
Project No: 1011
Samples: A. MW1 - Dairy
B. MW2 - Dairy

Collected: March 4, 1999
Received: March 4, 1999

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.

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

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 (µg/L)
A. MW1 - Dairy	< 5.0 (ND)
B. MW2 - Dairy	< 5.0 (ND)

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

B. TPH - diesel

SAMPLE	TPH - diesel (µg/L)
A. MW1 - Dairy	447,000
B. MW2 - Dairy	16,000

Method Blank / Detection Limit = < 5.0 µg/L (none detected)
Mean Spike Recovery = 91%

C. BTEX

Sample	Concentration - (mg/kg)			
	Benzene	Toluene	Ethylbenzene	Xylene
A. MW1	< 0.5 (ND)	< 0.5 (ND)	< 0.5 (ND)	< 0.5 (ND)
B. MW2	< 0.5 (ND)	< 0.5 (ND)	< 0.5 (ND)	< 0.5 (ND)
Method Blank	< 0.5 (ND)	< 0.5 (ND)	< 0.5 (ND)	< 0.5 (ND)
Mean Spike Recovery	104%	111%	104%	96%

D. MTBE

SAMPLE	MTBE (µg/L)
A. MW1 - Dairy	< 0.5 (ND)
B. MW2 - Dairy	< 0.5 (ND)

Method Blank / Detection Limit = < 0.5 µg/L (none detected)

Ronald W. Shrewsbury
Analytical Chemist

RWS: swr

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.

Chain of Custody

Date 3/4/99 Page 1 of 1

Proj. Mgr.: Joe Gregan - Geo Logic
Company: For Paradise Mechanical
Address: POB 1836
2600 Williams St
San Leandro CA
Samples (signature) Joe M
(Phone No.) 510 787 6867
(Fax No.) 510 787 1457

Analysis Request

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
MW 1-Dairy		3/4/99	2:45pm	water			X	X																			2 VOAs 1 liter each
MW 2-Dairy		↓	↓	↓			X	X																			

Project Information

Project Name: For Berkeley Farms Dairy
Project No.: 4550 San Pablo
PO #: 1011
TAT: (Standard) 5-Day | 24 | 48 | 72 | Other

Sample Receipt

Total No. of Containers
Head Space
Cool/Good Condition/Cold
Conforms To Record

Special Instructions / Comments:
Refer to Job Address + Job # on Lab sheets + invoice
Former Berkeley Farms Dairy
4550 San Pablo Ave
Emeryville CA

	1.	2.	3.
Relinquished By: (Signature)	Joe M		
(Printed Name)	Joe G. Gregan		
(Date) (Time)	3/4/99 4:31		
Received By: (Signature)			
(Printed Name)	Aaron Bloch		
(Date) (Time)	3/4/99 4:35pm		

Paradeso Job No. 1011

CALCOAST ANALYTICAL

Materials Chemistry

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

March 1, 1999

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

Attn: Mr. Joel Greger

Ref: Lab File No.: 0226-3A/K-99

1. SAMPLES:

Five (5) soil samples;

Project:	Berkeley Farms; 4550 San Pablo Ave., Emeryville, CA.
Project No:	1011
Samples:	A. MW1 (10')
	B. MW1 (12)
	C. MW2 (12')
	D. MW2 (13')
	E. Comp S1

Collected: February 26, 1999
Received: February 26, 1999

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.
E. Total lead (Pb) content, on Sample E only, by Atomic Absorption Spectroscopy (AAS).

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

4. RESULTS:

A. TPH - gasoline

SAMPLE	TPH-G (MG/KG)
A. MW1 (10')	< 0.1 (ND)
B. MW1 (12')	< 0.1 (ND)
C. MW2 (12')	1.7
D. MW2 (13')	0.28
E. Comp S1	< 0.1 (ND)

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

A. TPH - diesel

SAMPLE	TPH-D (MG/KG)
A. MW1 (10')	1,300
B. MW1 (12')	97
C. MW2 (12')	< 0.1 (ND)
D. MW2 (13')	< 0.1 (ND)
E. Comp S1	< 0.1 (ND)

Method Blank/Detection Limit = <0.1mg/kg (none detected)
Mean Spike Recovery = 91%

4. RESULTS - continued:

B. BTEX

Sample	Concentration - (mg/kg)			
	Benzene	Toluene	Ethylbenzene	Xylene
A. MW1 (10')	<0.005(ND)	<0.005(ND)	<0.005(ND)	<0.005(ND)
B. MW1 (12')	<0.005(ND)	<0.005(ND)	<0.005(ND)	<0.005(ND)
C. MW2 (12')	0.049	0.026	0.047	0.076
D. MW2 (13')	<0.005(ND)	0.058	0.092	0.081
E. Comp S1	<0.005(ND)	<0.005(ND)	<0.005(ND)	<0.005(ND)
Method Blank	<0.005(ND)	<0.005(ND)	<0.005(ND)	<0.005(ND)
Mean Spike Recovery	107%	110%	104%	103%

C. MTBE

SAMPLE	MTBE (MG/KG)
A. MW1 (10')	< 0.005 (ND)
B. MW1 (12')	< 0.005 (ND)
C. MW2 (12')	< 0.005 (ND)
D. MW2 (13')	< 0.005 (ND)
E. Comp S1	< 0.005 (ND)

Method Blank/Detection Limit = <0.005mg/kg (none detected)

D. Total Lead

SAMPLE	TOTAL LEAD (MG/KG)
E. Comp S1	29

Method Blank/Detection Limit = <2.0 mg/kg (none detected)
Mean Spike Recovery = 106%

Ronald W. Shrewsbury
Analytical Chemist
RWS: swr

Calcoast Analytical, Inc.

Chain of Custody

Date 2/26/99 Page 1 of 1

Proj. Mgr.: Joel Gregor - Geologic
Company: for Cardoza Mechanical
Address: POB 1836
2600 Williams St
San Leandro CA
Samples (signature) Joel M (Phone No.) 5107876867
(Fax No.) 5107871457

Analysis Report

Sample ID	Type	Date	Time	Matrix	Preserva.	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
																MTBE - 8020											
MW1(6')	Liner	2/26/99	AM	SOIL			(hold)																				1
MW1(8')							(hold)																				1
MW1(10')						X	X									X											1
MW1(12')							X	X								X											1
MW2(6')							(hold)																				1
MW2(8')							X	X								X											1
MW2(13')							X	X								X											1
Comp 5'							X	X								X				X							4

Project Information

Project Name: Berkeley Farms
4550 San Pablo Ave
Project No.: Emeryville
PO # 1011
TAT: (Standard) 5-Day | 24 | 48 | 72 | Other

Sample Receipt

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

Special Instructions / Comments:
Refer to Job # + address on lab sheets + invoice!
Berkeley Farms
4550 San Pablo Ave
Emeryville, CA

	1.	2.	3.
Relinquished By: (Signature)	Joel M		
(Printed Name)	Joel G. Gregor		
(Date) (Time)	2/26/99 11:08 AM		
Received By: (Signature)			
(Printed Name)	Ronald Shrewsbury		
(Date) (Time)	2/26/99 11:08 AM		

Paradise Job # 1011