7020 Koll Center Parkway, Suite 134, Pleasanton, CA 94566 (510) 426-5395 FAX (510) 426-5391

Compliance & Closure, Inc.

April 30, 1996

Ms. Barbara Holland
20993 Foothill Boulevard
Hayward, California 94541

Subject: Preliminary Site Assessment
Former Jack Holland Sr. Oil Company
16301 East 14th Street, San Leandro, California
(CCI Project No. 12059-1)

Dear Ms. Holland:

Compliance & Closure, Inc. is pleased to present this Preliminary Site Assessment Report for the former Jack Holland Sr. Oil Company property, located at 16301 East 14th Street in the City of San Leandro, Alameda County, California.

This report includes a written description of field procedures, all laboratory data, and conclusions and recommendations based on the data generated during this investigation. If you have any questions, please call me at (510) 426-5395.

Sincerely,
Compliance & Closure, Inc.

Gary R. Mulkey, R.G. 5842

REGISTERED GEOLOGIST
GARY R. MULKEY
NO. 5842
STATE OF CALIFORNIA

PRELIMINARY SITE ASSESSMENT

AT

FORMER JACK HOLLAND SR. OIL COMPANY

16301 East 14th Street

SAN LEANDRO, CALIFORNIA

FOR

Ms. Barbara Holland

PREPARED BY:

COMPLIANCE & CLOSURE, INC.

Project No. 12059-1

May, 1996

Compliance & Closure, Inc.

C O N T E N T S

C O N T E N T S

Appendices

PRELIMINARY SITE ASSESSMENT

AT

FORMER JACK HOLLAND SR. OIL COMPANY

16301 EAST 14TH STREET, SAN LEANDRO, CALIFORNIA

Compliance & Closure, Inc. (CCI), is pleased to present this report of the Preliminary Site Assessment conducted at the former Jack Holland Sr. Oil Company property, located at 16301 East 14th Street in the City of San Leandro, Alameda County, California.

BACKGROUND

The Jack Holland Sr. Oil Company property is comprised of approximately 3.5 acres and was formerly a bulk fuel storage and retail facility. There are several above-ground storage tanks and eight known underground fuel storage tanks currently on the site. The site is located in a commercial area, bound on the south and west sides by a park and recreation facility and an elementary school and by used car lots on the north and east sides. The facility was in operation from approximately 1960 to the mid-1980s.

In 1990, the firm of Crosby and Overton conducted a limited site investigation around the underground fuel tanks located toward the southwest end of the property (see Figure 1). The investigation involved drilling 5 soil borings. Total petroleum hydrocarbons as diesel (TPHD) were reported in soil samples collected from the fuel tank area. TPHD concentrations were reported as high as 25,000 parts-per-million (ppm). Groundwater was encountered at approximately 15 feet below the ground surface. Due to the close proximity of the groundwater to the contaminated soil, the Alameda County Health Care Agency (County) had requested that further investigation of the contamination be conducted. On November 14, 1995, CCI prepared a Work Plan for Preliminary Site Assessment for the subject site. The County approved the Work Plan in December 1995, and CCI began field work in February 1996.

SCOPE OF WORK

The purpose of this Preliminary Site Assessment is to determine the location of all underground storage tanks on the property, and to survey the site to a common datum. In addition, CCI installed 3 groundwater monitoring wells. The purpose of the wells is to a) determine the groundwater flow direction at the site, and b) determine whether groundwaater has been impacted and the extent of any groundwater contamination. Since the investigation conducted by Crosby & Overton, Inc. in September 1990 was limited to the area adjacent to two underground diesel storage tanks on the southwest side of the property, the location of the three monitoring wells was determined based upon the following factors:

1. They are some distance from the areas of known contamination, in order to provide information regarding the lateral extent of groundwater contamination, if any;

2. They are positioned to provide groundwater directional data;

3. They should not interfere with any tank removal activities.

The following activities were performed during the course of this site assessment:

1) Explored subsurface soil and groundwater conditions at the site by drilling, sampling and logging three exploratory soil borings;

2) Installed three, 2-inch diameter, PVC groundwater monitoring wells in each of the exploratory borings and surveyed the wells to mean sea level;

3) Obtained soil and groundwater samples to be analyzed for the presence of total petroleum hydrocarbons as gasoline (TPHG), Benzene, Toluene, Ethlybenzene, and Total Xylenes (BTEX), total petroleum hydrocarbons as diesel (TPHD), selected samples for total recoverable petroleum hydrocarbons (TRPH), and for chlorinated hydrocarbons;

4) Presented the results of the investigation and findings in a summary report.

FIELD INVESTIGATION

On February 6, 1996, CCI subcontracted Subdynamic Locating Services (Subdynamic) of San Jose, California to search the former Jack Holland Sr. Oil Company property for additional underground fuel tanks. Previous maps of the site, provided by Ms. Barbara Holland, indicated that there were eighteen aboveground fuel tanks and at least three underground tanks located at the subject site (Figure 2). The purpose of this phase of the investigation was to locate and map the existence of all underground fuel tanks at the subject site.

The locating equipment Subdynmic used was a T-W6 M-Scope by Fisher Industries, which sends a radio signal into the subsurface to search for the tanks. When metal is encountered, the radio signal is reflected back to the surface where it is picked up by the instrument in the form of an audible sound. The perimeter of the underground tank is located by working a specific area and recording the sound, then marking the tank location on the surface with paint. The instrument is capable of detecting metal to a depth of 9 feet.

Subdynamic started its search of the property near building C (Figure 2), in the vicinity of two known underground tanks. The search of that area revealed the existence of two additional 10,000

gallon tanks located at approximately a 90 degree angle to the known tanks. The loading dock area was also searched. Two 10,000 gallon full tanks, positioned end to end, and parallel to building A, were located in this area. Another underground fuel tank was located next to the aboveground fuel pump in the vicinity of building B. The size of this tank is thought to be approximately 5,000 gallons. A total of five additional underground fuel tanks were located during this phase of work. All together, there appear to be eight underground tanks and eighteen aboveground tanks at the site.

Exploratory Drilling and Soil Sampling

CCI conducted exploratory drilling for the site assessment on April 1, 1996. The field work included drilling three exploratory borings, installing groundwater monitoring wells in each of the borings, and developing and sampling the wells. Prior to starting field work, permits were obtained from Zone 7 Water Agency (Appendix C). In addition, the proposed monitoring well locations were cleared using an underground line location service and by notifying U.S.A. Underground Alert prior to drilling.

CCI drilled the three exploratory borings at the locations shown on Figure 2. The borings were drilled with a truck-mounted, Mobile B-53 drill rig with continuous-flight, hollow-stem auger, with a 4-1/4-inch-inside-diameter. The auger and other tools were steam-cleaned before drilling each boring to minimize the possibility of cross-contamination. All drill cuttings were placed on and covered by plastic and left at the site, pending laboratory results. The borings were drilled in the following manner: the drill rig was situated over the boring location, and the hollow-stem auger was used to advance the hole to the desired sampling depth. A CCI geologist logged the borehole by collecting relatively undisturbed soil samples at 5-foot depth intervals to the bottom of the boring. Above the potentiometric surface, samples were collected using a precleaned modified California split-spoon sampler with internal 2-inch-diameter by 6-inch-long brass liners. Beneath the potentiometric surface, a standard penetrometer was lowered to the bottom of the hole. The sampler was driven 1-1/2 feet ahead of the auger with a 140-pound, rig-operated hammer. The sampler was then removed and disassembled into its component parts. The soils encountered were characterized using the Unified Soil Classification System. Boring logs for each well and boring are included in Appendix A. CCI's soil and groundwater sampling protocol is attached in Appendix B.

The samples were field checked for hydrocarbon vapors using a portable photoionization detector (PID). One of the brass liners was selected for chemical analysis. The ends of the selected liner(s) were sealed with aluminum foil, capped with plastic caps, labeled on chain-of-custody forms and stored in a chilled chest containing ice for preservation in the field and during transport to the analytical laboratory.

Subsurface Conditions

Subsurface conditions in the vicinity of monitoring well MW-1 consisted of a grey green-to-dark grey silty-clay from just below the surface to a depth of approximately 20 feet. The silty-clay was found to be moist, stiff, medium-to-high plasticity with some open rootholes. **There was a moderate to strong petroleum odor noted in samples collected at 5 and 10 feet.** Below 20 feet to the bottom of the boring, at 22 feet, a yellow-brown sandy-clay was noted. This material was found to be moist, and stiff with approximately 5% open rootholes.

Soil conditions in monitoring **well MW-2** were found to be slightly more granular at selected intervals. Between 1.5 feet and 4.5 feet below the groundsurface (BGS), a grey green, loose silty-sand was encountered. This sand was of medium grain and poorly sorted. From 4.5 feet to 18.5 feet a dark grey, silty-clay, moist, and stiff with medium plasticity was encountered. From 18.5 feet to 20 feet, a yellow-brown loose sand was noted. This sand was of medium grain and poorly sorted. From 20 feet to the bottom of the boring at 22 feet, a yellow-brown, moist, stiff sandy clay was noted.

Soil conditions logged at monitoring well MW-3 were found to be very clayey. Silty-clay was encountered from the surface to the bottom of the boring. The silty-clay was noted to be black near the surface then turning grey with depth. The clay material was found to moist, stiff, of medium plasticity and with generally less than 5% open rootholes. **Some visible oil staining was noted on samples collected near the surface, at 5 and 10 feet BGS.** Groundwater was encountered at depths of approximately 10 feet in all three wells, and after several hours, was recorded at approximately 7 feet below the groundsurface. Geologic Cross-Section A-A' is presented in Figure 4.

DTW ≈ 10'

Monitoring Well Construction

The three groundwater monitoring wells were constructed using 2-inch diameter, schedule 40 polyvinyl chloride (PVC) well casing. Fifteen feet of screen were used in each well. The annulus between the casing and the borehole was backfilled with 2/12 sand to about 1 foot above the screen interval. A bentonite clay spacer, 1 foot thick, was then placed above the sand pack, and cement grout was pumped from above the bentonite to the surface. A watertight, locking, vault box caps each well. Details of the monitoring well construction are included in Appendix A.

Well Development

On April 8, 1996, **the new wells were developed by manually bailing the wells** to: (a) remove residual silts and clays left from the drilling and (b) improve the hydraulic conductivity between the wells and the natural formation. **After development, the wells were allowed to recharge for at least 24 hours,** enabling CCI to collect

a representative water sample and to measure the thickness of any floating product encountered. All water collected during well development was placed in labeled drums and left on-site pending the results of the analytical testing.

Groundwater Sampling

Before groundwater sampling, CCI measured the depth-to-groundwater using an electronic sounding tape and field-checked the wells for the presence of free-floating product by collecting a sample in a clear, acrylic bailer. **Free-floating product was not observed. However, a sheen was noted on the water surface in water purged from well MW-1.** Each well was purged of stagnant water prior to collection of a sample. Normal field measurements, including pH, conductivity, and water temperature, were periodically recorded during the purging process. A sample was collected when these parameters stabilized to within 10% of each other. At least three well casing volumes of groundwater were purged from each well before sampling. Samples were (a) collected with a clean Teflon bailer, (b) transferred to appropriate laboratory-supplied bottles, labeled, (d) logged on a chain-of-custody form, and (e) placed in a chilled ice chest for transportation to a state-certified laboratory. Appendix B contains CCI's Groundwater Sampling Protocol. **The wells were sampled on April 9, 1996.**

"sheen"

SURVEYING

A licensed land surveyor was retained to survey the monitoring wells accurately and determine the elevation of each well casing. The survey ensures accuracy so that the plot plans will portray the data in a manner useful for determining groundwater flow direction. The survey included both horizontal and vertical measurements. The survey was conducted using modern surveying equipment and methods so that accuracy is maintained. Elevation readings were measured to the nearest 0.01 feet and corrected to mean sea level. The data from the surveyor is included in Appendix D.

LABORATORY ANALYSES AND RESULTS

Soil and groundwater samples collected from each monitoring well were submitted to Onsite Environmental Laboratories, Inc., (Onsite) a state-certified laboratory located in Fremont, California for chemical analysis. Onsite employed methods approved by the California Regional Water Quality Control Board (CRWQCB) and Environmental Protection Agency (EPA).

Analytes
TPH-G
" -D
BTEX
HVOC
TRPH

All samples were analyzed for total petroleum hydrocarbons as gasoline (TPHG), benzene, toluene, ethyl benzene and total xylenes (BTEX), using GCFID 5030 and 8020 for soil and GCFID 5030 and 602 for water and total petroleum hydrocarbons as diesel (TPHD), using EPA Method 8015 Modified. The soil and water samples from MW-3 were also analyzed for total recoverable petroleum hydrocarbons (TRPH), using EPA Method 418.1. **The initial set of soil and groundwater samples collected from the three monitoring**

wells were also analyzed for chlorinated hydrocarbons using EPA Test Method 8010. The samples were analyzed on a normal (7 working day) turnaround time frame.

Soil and Groundwater Chemical Analysis

CCI submitted six soil samples to Onsite Environmental Laboratories for analysis. Five of the six soil samples were reported to have petroleum hydrocarbons at or above the laboratory detection limits. In addition, minor concentrations of chlorinated solvents were reported in all six soil samples.

Soil sample [redacted], collected at a depth of five feet, was reported by the laboratory to contain the highest levels of petroleum hydrocarbon contamination, at 4,400 ppm TPHG and 8,200 ppm TPHD. [redacted], also collected at a depth of 5 feet, was reported to have 3,500 ppm TRPH, 420 ppm TPHG and 2,600 ppm TPHD. Soil [redacted] was reported to contain 300 ppm TRPH, 160 ppm TPHG, and 290 ppm TPHD. All of the soil samples, with the exception of MW-1-1, were reported to have minor amounts of BTEX contamination. The six soil samples were also analyzed for chlorinated solvents, using EPA Method 8010. All six samples were reported by the laboratory to contain minor methylene chloride contamination, at concentrations ranging between 0.014 ppm and 0.04 ppm. Two samples, MW-2-2 and MW-3-2, were reported to contain 0.008 ppm and 0.024 ppm 1,4-dichlorobenzene, respectively. No other chlorinated solvent compound were reported by the laboratory. Table 1 presents a summary of the soil analysis results.

Groundwater samples collected from the monitoring wells, revealed all three wells to have petroleum hydrocarbon contamination. TPHG contamination ranged from below the laboratory reporting limit of 0.5 parts-per-billion (ppb) in well MW-3 to 33,000 ppb in well MW-1. All three monitoring wells were found to have TPHD at concentrations ranging from 9,700 ppb in MW-1 to 8,200 ppb in MW-3. Benzene was only reported in MW-1, at a concentration of 12 ppb. Toluene was reported at 83 ppb in well MW-1, 5.3 ppb in well MW-2. MW-3 was reported by the laboratory to be non-detect for all BTEX compounds. Ethylbenzene ranged from 22 ppb in MW-1 to 4.8 ppb in MW-2. Total xylenes were reported to range from 160 ppb in well MW-2 to 91 ppb in well MW-1. The water sample from well MW-3 was analyzed for and reported to contain 41,000 ppb TRPH. None of the other water samples were analyzed for TRPH compounds. Monitoring wells MW-2 and MW-3 were reported to contain 3.1 ppb and 1.4 ppb 1, 2-dichlorobenzene, respectively. No other chlorinated compounds were reported. Table 2 presents a summary of the groundwater analysis results. Copies of all laboratory reports and chain-of-custody forms are attached in Appendix D.

DISCUSSION AND RECOMMENDATIONS

CCI conducted and located five additional underground storage tanks at the subject site. In addition to the eighteen above-ground tanks, there appear to be a total of eight underground storage

tanks at the subject site. Of the eight tanks, there appears to be six 10,000-gallon tanks, one 5,000-gallon tank and one 20,000 gallon tank.

CCI has installed three groundwater monitoring wells at selected locations at the former Jack Holland Sr. Oil Company property to determine the extent of petroleum hydrocarbon contamination and to determine the groundwater flow direction. Soil samples collected were found to be generally composed of silty-clay near the surface, with thin layers of silty-sand and sand at depths ranging from 2 feet to 18 feet in MW-2. These soil conditions were encountered in all three monitoring wells (See Cross Section A-A',Figure 4).

Five of the six soil samples submitted for laboratory analysis were found to have hydrocarbon contamination. Soil sample MW-2-1, collected from a depth of five feet, was reported by the laboratory to contain the highest levels of petroleum hydrocarbons contamination, at 4,400 ppm TPHG and 8,200 ppm TPHD. In general, petroleum hydrocarbon contamination was found in the upper ten feet of the soil column, with the exception of MW-1-1, which was reported to be free of petroleum hydrocarbon contamination at a depth of five feet. The contamination reported in the soil samples from a depth of 10 feet is most likely the result of the contaminated groundwater table rising and falling during seasonal changes. The shallow soil in the vicinity of MW-3 is contaminated with oil. During drilling of that well, visible oil was noted on the soil cuttings in the upper five feet. This oil is probably the result of spillage from oil canning operation that formerly took place in building A. Very small quantities of chlorinated solvents were report in the soil samples collected from the three borings. Soil sample MW-3-2 was reported to contain 1,4-dichlorobenzene, at a concentration of 0.024 ppm. Methylene chloride was reported in all six soil samples, at concentrations ranging from 0.014 to 0.4 ppm. No other chlorinated solvent compounds were reported in soil samples collected.

Groundwater measurements taken in the three monitoring wells on April 9, 1996 indicated that depth-to-groundwater ranged from approximately 6.49 to 6.61 feet below the top of the well casings. Groundwater contours indicate a groundwater surface sloping to the [redacted] at an approximate gradient of 0.007 feet/foot (Figure 3). The groundwater flow direction at the subject site may be influenced by local variations in stratigraphy and/or variations in groundwater levels due to seasonal groundwater changes.

Laboratory analyses of the groundwater samples collected during the investigation revealed petroleum hydrocarbon contamination in the groundwater in all three monitoring wells. During sampling of the wells, a sheen was noted on the surface of the purge water collected from monitoring well MW-1. Monitoring well MW-1 was reported to contain 33,000 ppb TPHG and 9,700 ppb TPHD in the water. Monitoring well MW-2 also contained high levels of TPHG and TPHD at 6,900 ppb and 8,900 ppb, respectively. Monitoring well MW-3 was found to be free of detectable TPHG/BTEX compounds. However,

this well was reported to contain 1,100 ppb TPHD and 41,000 ppb TRPH.

CONCLUSION AND RECOMMENDATIONS

Based on the data obtained during this investigation, soil samples revealed vadose zone contamination in the area of the three monitoring wells. Of the six soil samples collected, five of the six were reported to contain petroleum hydrocarbon contamination. Groundwater contamination appears in the aquifer stratum and appears to be moving toward the northwest at a gradient of 0.007 feet/foot.

CCI recommends the following course of action for the site:

A) Quarterly groundwater monitoring should be initiated at the site to establish groundwater contaminant levels at the site over time and to monitor the groundwater flow direction over time;

B) Additional investigative work should be conducted in order to determine the extent of the soil and groundwater contamination;

C) Existing underground storage tanks should be removed from the site. In addition, the aboveground tanks should be decontaminated, cleaned and removed along with the debris that has been deposited on the site. CCI will assist Hollands in accomplishing this task within a reasonable length of time.

REPORTING REQUIREMENTS

Ms. Barbara Holland should forward a copy of this report to the following agencies in a timely manner:

Alameda County Health Care Agency
Environmental Protection Division
1131 Harbor Bay Parkway, # 250
Alameda, California 94502-6577
Attention: Mr. Scott Seery

California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Ste. 500
Oakland, California 94612
Attention: Mr. Kevin Graves

LIMITATIONS

The discussions and recommendations presented in this report are based on the following:

1. Exploratory test borings drilled at the site;

2. Observations by field personnel;

3. Results of laboratory analyses performed by a state-certified laboratory;

4. Our understanding of the regulations of the State of California, County of Alameda, and the City of San Leandro.

It is possible that variations in the soil or groundwater conditions could exist beyond the points explored in this investigation. Also, changes in the groundwater conditions could occur at some time in the future because of variations in rainfall, temperature, regional water usage, or other factors.

The services performed by CCI, have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the Alameda County area. Please note that contamination of soil and groundwater must be reported to the appropriate agencies in a timely manner. No other warranty, expressed or implied, is made.

CCI includes in this report chemical analytical data from a state-certified laboratory. The analytical results are performed according to the procedures suggested by the U.S. EPA and the state of California. CCI is not responsible for laboratory errors in procedure or result reporting.

Former Jack Holland Oil Company
CCI Project No. 12059-1

April 30, 1996

TABLE 1

SOIL ANALYSIS DATA

Sample No.	Date Sampled	Depth	TRPH mg/kg	TPHG mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	TPHD mg/kg	1,4-Dichloro-benzene mg/kg	Methylene Chloride mg/kg
MW-1-1	04/01/96	6'	N.R.	<1	<0.005	<0.005	<0.005	<0.005	<1	<0.005	0.022
MW-1-2	04/01/96	11	N.R.	200	0.48	0.53	0.55	0.96	130	<0.005	0.02
MW-2-1	04/01/96	6	N.R.	4,400	<0.005	2.1	4.0	17	8,200	<0.005	0.04
MW-2-2	04/01/96	11	N.R.	9.3	<0.005	<0.005	0.009	0.10	68	0.008	0.016
MW-3-1	04/01/96	6	[illegible]	420	0.69	1.3	1.0	2.0	2,900	<0.005	0.018
MW-3-2	04/01/96	11	300	160	<0.005	<0.005	0.16	0.96	290	0.024	0.014

lab error?
" contam.?

TRPH	Total Recoverable Petroleum Hydrocarbons
TPHD	Total Petroleum Hydrocarbons as Diesel
TPHG	Total Petroleum Hydrocarbons as Gasoline
mg/kg	Milligrams per kilogram - parts per million equivalent
<	Below laboratory detection limit
N.R.	Not Requested

Compliance & Closure, Inc.

Former Jack Holland Oil Company
CCI Project No. 12059-1

April 30, 1996

TABLE 2

WATER ANALYSIS DATA

Sample No.	Date Sampled	TPHG ug/kg	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	TPHD (ppb)	TRPH (ppb)	1,2-Dichloro benzene (ppb)
MW-1	04/09/96	33,000	12	83	22	91	9,700	N.R.	<1
MW-2	04/09/96	6,900	<0.5	5.1	4.8	160	8,900	N.R.	3.1
MW-3	04/09/96	<50	<0.5	<0.5	<0.5	<0.5	1,100	41,000	1.4
BB-1	04/09/96	<50	<0.5	0.5	<0.5	0.83	N.R.	N.R.	N.R.

TRPH Total Recoverable Petroleum Hydrocarbons
TPHD Total Petroleum Hydrocarbons as Diesel
TPHG Total Petroleum Hydrocarbons as Gasoline
ug/kg Micrograms per kilogram - equivalent to parts per billion
< Below laboratory detection limit

Current Department of Health Services Drinking Water Standards
Benzene 1ppb (MCL)
Toluene 100 ppb (AL)
Ethylbenzene 680 ppb (MCL)
Xylenes 1,750 ppb (MCL)

Note: Subject to change as reviewed by Department of Health Services

MCL: Maximum Contaminant Level
AL: Action Level

Compliance & Closure, Inc.

Former Jack Holland Oil Company
CCI Project No. 12059-1

April 30, 1996

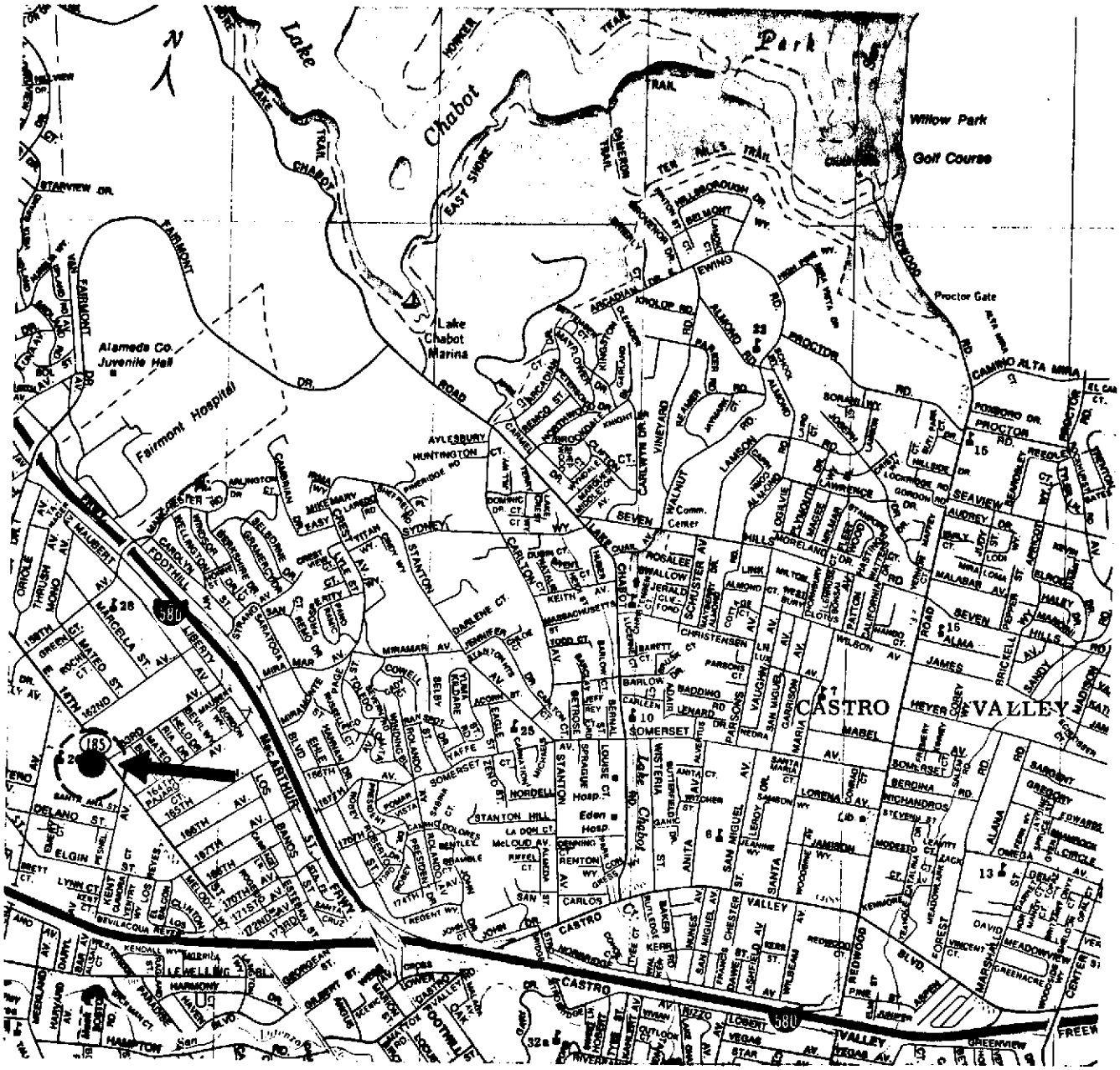
TABLE 3

GROUNDWATER PURGE DATA

Sample No.	Date Sampled	Depth to Water (ft)	Well Depth (ft)	Purge Volume (gal)	Temp. (F)	Cond. (umhos/cm)	pH
MW-1	02/14/95	6.49	18.75	10	63.4	1827	7.25
MW-2	04/28/95	6.54	21.53	10	60.5	1520	7.20
MW-3	07/20/95	6.61	22.90	10	63.2	1324	7.30

ft	Feet below top of PVC casing
gal	Gallons
Temp.	Temperature
F	Degrees Fahrenheit
Cond.	Conductivity
unhos/cm	Micromhos per centimeter

Compliance & Closure, Inc.



reviewed by:	VICINITY MAP	Compliance & Closure, Inc.	
approved by:	FORMER JACK HOLLAND SR. OIL COMPANY		
drawn by: GM	16301 EAST 14TH STREET		
job no. 12059-1	SAN LEANDRO, CALIFORNIA	date: 11/14/95	drawing no. FIG. 1

EAST 14TH STREET

Sidewalk

Sidewalk

Used Car Lot

Used Car Lot

Used Car Lot

Building D

Building E

Building F

above-ground tanks

Building B

Gate

Gate

MW-3

Building A

fuel pump

Cargo Container

Underground Solvent Tank

Loading Rack (canopy)

above-ground tanks

School

MW-1

fuel pump

shed

cargo containers

Baseball Diamond

Building C

Baseball Diamond

above-ground tanks

MW-2

LEGEND

monitoring well

underground storage tank

A A' cross-section

0 50 100

approximate scale in feet

Base: Cambria Environmental - locations are approximate

REVIEWED BY:	SITE MAP	Compliance & Closure, Inc.
	FORMER JACK HOLLAND SR. OIL COMPANY	
APPROVED BY:	16301 EAST 14TH STREET	JOB #: 12059-1 / DRAWN BY: GM
	SAN LEANDRO, CALIFORNIA	DATE: 4/30/96 / DRAWING #: FIG. 2

EAST 14 TH STREET

Sidewalk

Sidewalk

Used Car Lot

Used Car Lot

Used Car Lot

Building D

Building E

Building F

Building A

Building B

Gate

Gate

above-ground tanks

MW-3
(30.76)

fuel pump

Underground Solvent Tank

Loading Rack (Canopy)

above-ground tanks

Cargo Container

School

MW-1
(30.02)

fuel pump

shed

cargo containers

30.2

groundwater flow direction

30.4

Building C

(30.81)

MW-2

above-ground tanks

Baseball Diamond

Baseball Diamond

LEGEND

monitoring well

underground storage tank

(30.76) groundwater surface elevation in feet (datum:m.s.l.)

30.2 groundwater surface contour line in feet (datum: m.s.l.)

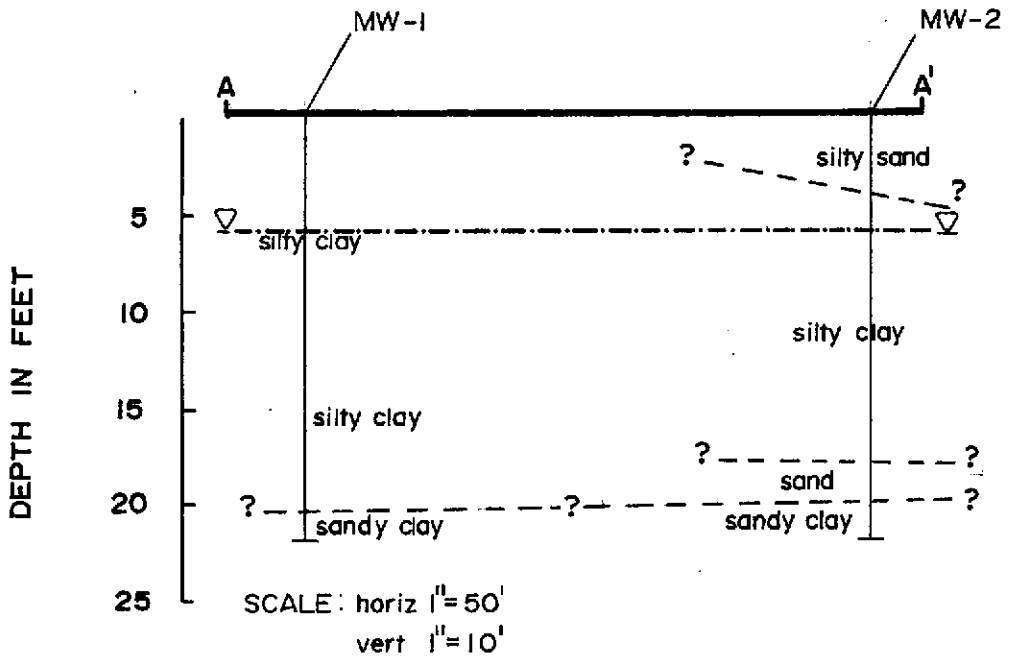
0 50 100

approximate scale in feet

Base: Cambria Environmental – locations are approximate

REVIEWED BY:	GROUNDWATER SURFACE CONTOUR MAP (04/09/96)	Compliance & Closure, Inc.
	FORMER JACK HOLLAND SR. OIL COMPANY	
APPROVED BY:	16301 EAST 14TH STREET	JOB #: 12059-1 / DRAWN BY: GM
	SAN LEANDRO, CALIFORNIA	DATE: 4/30/96 / DRAWING #: FIG. 3

NORTH TO SOUTH CROSS-SECTION



LEGEND

monitoring well

water table – (4/9/96)

reviewed by:	GEOLOGIC CROSS-SECTION A-A'	Compliance & Closure, Inc.	
approved by:	FORMER JACK HOLLAND SR. OIL COMPANY		
drawn by: GM	16301 EAST 14TH STREET		
job no. 12059-1	SAN LEANDRO, CALIFORNIA	date: 5/6/96	drawing no. FIG. 4

Compliance & Closure, Inc.

STANDARD SYMBOLS

Legend

Penetration Sample drive hammer weight - 140 pounds falling 30 inches. Blows required to drive sampler 1 foot are indicated on the logs

- Soil Sample Location
- Soil Sample Collected for Laboratory Analysis
- No Soil Recovery
- First Encountered Ground Water Level
- Piezometric Ground Water Level
- Disturbed or Bag Soil Sample

NOS No Odor or Sheen

YR 6/2 Soil color according to Munsell Soil Color Charts. (1975 Edition)

UNIFIED SOIL CLASSIFICATION SYSTEM

Compiled by B.W. Pipkin, Univ. of Southern California

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS More than half of material is larger than no. 200 sieve size	GRAVELS More than half of coarse fraction is larger than no. 4 sieve size	Clean Gravels	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels, gravel-sand mixture, little or no fines
		Gravels with Fines	GM	Silty gravels, gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS More than half of coarse fraction is smaller than no. 4 sieve size	Clean Sands	SW	Well-graded sands, gravelly sand, little or no fines
			SP	Poorly graded sands, gravelly sands, little or no fines
		Sands with Fines	SM	Silty sands, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS More than half of material is smaller than no. 200 sieve size	SILTS AND CLAYS	Low Liquid Limit	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts, with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
		High Liquid Limit	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
Highly Organic Soils			Pt	Peat and other highly organic soils

NOTES:

1. Boundary Classification: Soils possessing characteristics of two groups are designated by combinations of group symbols. For example, GW-GC, well-graded gravel-sand mixture with clay binder
2. All sieve sizes on this chart are U.S. Standard.
3. The terms "silt" and "clay" are used respectively to distinguish materials exhibiting lower plasticity from those with higher plasticity.
4. For a complete description of the Unified Soil Classification System, see "Technical Memorandum No. 3-357," prepared for Office, Chief of Engineers, by Waterways Equipment Station, Vicksburg Mississippi, March 1953. (See also Data Sheet 17.)

Compliance & Closure, Inc.

EXPLORATORY BORING LOG

Project Name: Former Jack Holland Oil Company

Boring No. MW-1

Date Drilled: 4/1/96

Project Number: 12059-1

Logged By: GM

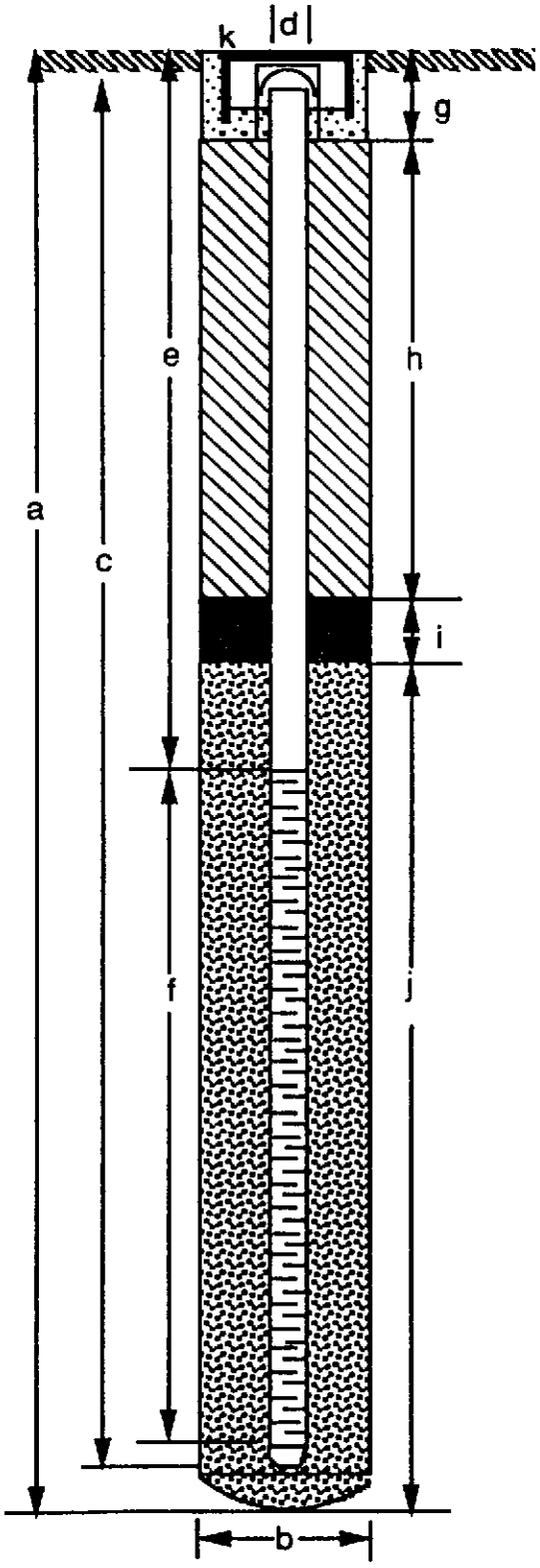
Depth (ft.)	Sample No.	Blows/Foot	Unified Soil Classification	SOIL DESCRIPTION	Water Level	OVM Reading (ppm)
1-4			CL	Grey green SILTY CLAY, moist, stiff, 5% very fine sand, 5% open rootholes, medium plasticity, slight petroleum odor.		
5	MW-1-1	10				10
6-7				Stabilized	▼	
8-9						
10	MW-1-2	8		Dark grey SILTY CLAY, moist, stiff, medium plasticity, strong petroleum odor.		35
11					▽	
12-14						
15	Terzaggi	13	CL	Dark grey to black SILTY CLAY, moist, stiff, less than 5% open rootholes, medium to high plasticity, some caliche material, no odor.		
16-19						
20	Terzaggi	15	CL	Yellow-brown SANDY CLAY, moist, stiff, 5% open rootholes, no petroleum odor.		
21				Bottom at 21 feet		
22						

REVIEWED BY R.G./C.E.G.

Compliance & Closure, Inc.

MONITORING WELL DETAIL

Project Number	12059-1	**Boring/Well No.**	MW-1
Project Name	Former Jack Holland Oil Company	**Top of Casing Elev.**	36.51
County	Alameda	**Ground Surface Elev.**	37.30
Well Permit No.	96232	**Datum**	Mean Sea Level



EXPLORATORY BORING

a. **Total depth** 22 ft.

b. **Diameter** 8 in.

Drilling method Hollow Stem Auger

WELL CONSTRUCTION

c. **Casing length** 22 ft.

Material PVC - Schedule 40

d. **Diameter** 2 in.

e. **Depth to top perforations** 7 ft.

f. **Perforated length** 15 ft.

Perforated interval from 22 **to** 7 ft.

Perforation type Machine Slot

Perforation size 0.020 in.

g. **Surface seal** 1 ft.

Seal material Grout

h. **Backfill** 4 ft.

Backfill material Portland Cement

i. **Seal** 1 ft.

Seal material Bentonite

j. **Gravel pack** 16 ft.

Pack material Lonestar # 3

k. Traffic rated, water tight vault box.

Compliance & Closure, Inc.

EXPLORATORY BORING LOG

Project Name: Former Jack Holland Oil Company

Boring No. MW-2

Date Drilled: 4/1/96

Project Number: 12059-1

Logged By: GM

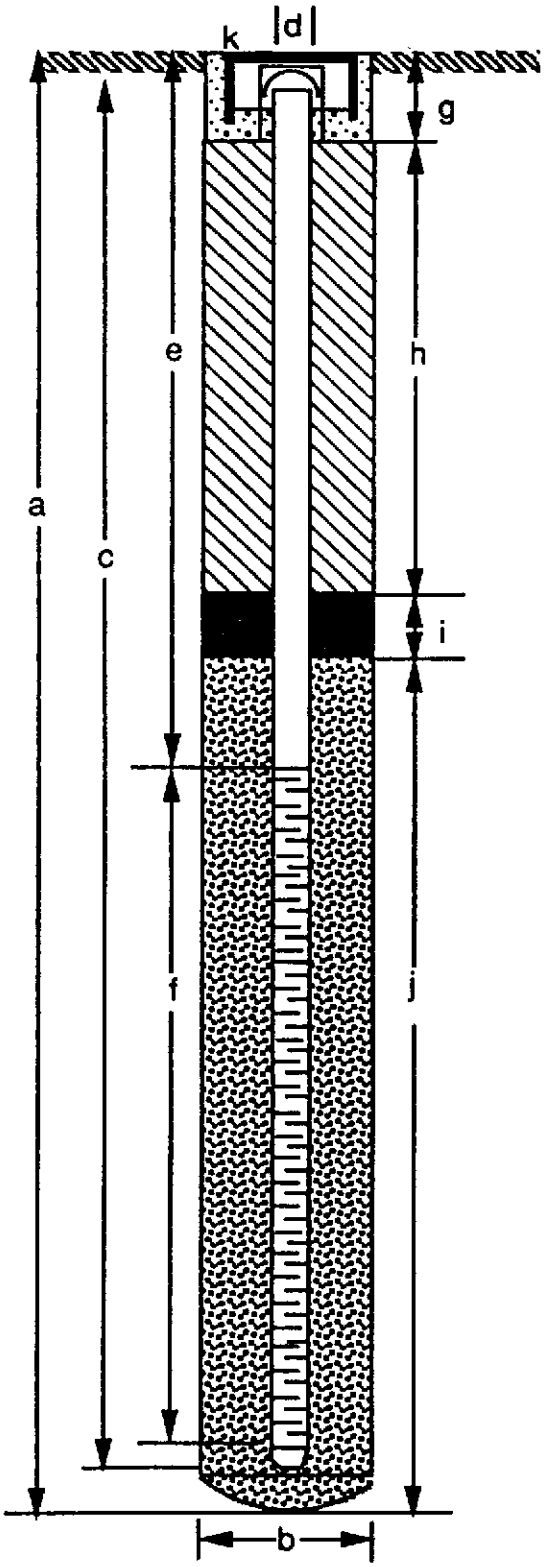
Depth (ft.)	Sample No.	Blows/Foot	Unified Soil Classification	SOIL DESCRIPTION	Water Level	OVM Reading (ppm)
1				1 foot baserock		
2			SM	Grey green SILTY SAND, moist, loose, moderate petroleum odor, sand is medium grain, poorly sorted.		
3						
4						
5	MW-2-1	7	CL	Dark grey SILTY CLAY, moist, stiff, slight odor, medium plasticity, less than 5% open roottholes.		9
6				stabilized	▼	
7						
8						
9						
10	MW-2-2	14				5
11					▽	
12						
13			CL	Dark grey SILTY CLAY, moist, stiff, slight odor medium plasticity, less than 5% open roottholes, rare organic material, some caliche material, slight odor.		
14						
15	Terzaggi	13				
16						
17						
18			SW	Yellow-brown SAND, wet, loose, fine to medium grain, poorly sorted, no petroleum odor.		
19						
20	Terzaggi	16	CL	Yellow-brown SANDY CLAY, moist, stiff, 5% open roottholes, rare organic material, no odor.		
21						
22				Bottom at 22 feet		

REVIEWED BY R.G./C.E.G.

Compliance & Closure, Inc.

MONITORING WELL DETAIL

Project Number	12059-1	**Boring/Well No.**	MW-2
Project Name	Former Jack Holland Oil Company	**Top of Casing Elev.**	37.35
County	Alameda	**Ground Surface Elev.**	37.73
Well Permit No.	96232	**Datum**	Mean Sea Level



EXPLORATORY BORING

a. **Total depth** 22 ft.

b. **Diameter** 8 in.

Drilling method Hollow Stem

WELL CONSTRUCTION

c. **Casing length** 22 ft.

Material PVC Schedule 40

d. **Diameter** 2 in.

e. **Depth to top perforations** 7 ft.

f. **Perforated length** 15 ft.

Perforated interval from 22 **to** 7 ft.

Perforation type Machine slot

Perforation size 0.020 in.

g. **Surface seal** 1 ft.

Seal material Grout

h. **Backfill** 4 ft.

Backfill material Portland Cement

i. **Seal** 1 ft.

Seal material Bentonite

j. **Gravel pack** 16 ft.

Pack material Lonestar # 3

k. Traffic rated, water tight vault box.

Compliance & Closure, Inc.

EXPLORATORY BORING LOG

Project Name: Former Jack Holland Oil Company

Boring No. MW-3

Date Drilled: 4/1/96

Project Number: 12059-1

Logged By: GM

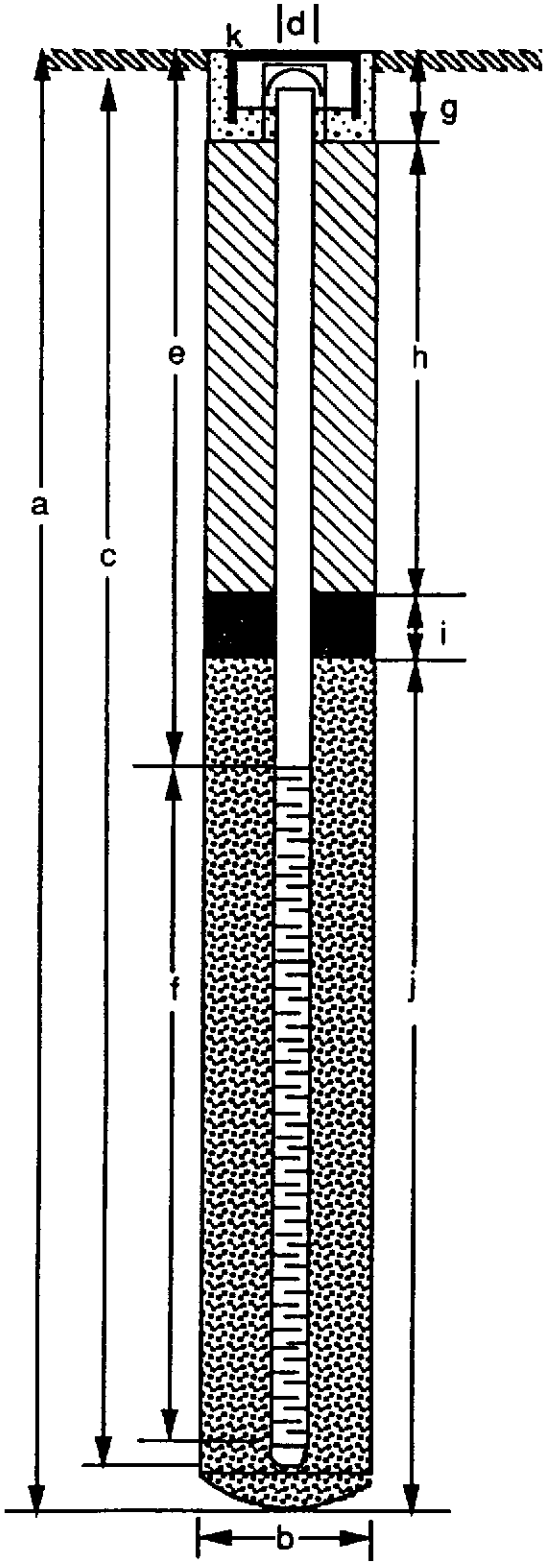
Depth (ft.)	Sample No.	Blows/Foot	Unified Soil Classification	SOIL DESCRIPTION	Water Level	OVM Reading (ppm)
1			CL	Black [illegible] CLAY, moist, stiff, visible oil in soil, slight odor.		
5	MW-3-1	13		Grey green SILTY CLAY TO SANDY CLAY, moist, stiff, rare open rootholes, slight odor. stabilized	▼	2
10	MW-3-2	18		Dark grey [illegible] CLAY, moist, stiff, medium plasticity, slight odor, some visible oil staining on soil surface.	▽	5
15	Terzaggi	11		Grey [illegible] CLAY, moist, stiff, medium plasticity, less than 5% open rootholes		
17				Yellow-brown sandy clay at 17 feet		
21	Terzaggi	16		Bottom at 22 feet		

REVIEWED BY R.G./C.E.G.

Compliance & Closure, Inc.

MONITORING WELL DETAIL

Project Number	12059-1	**Boring/Well No.**	MW-3
Project Name	Former Jack Holland Oil Company	**Top of Casing Elev.**	37.37 feet
County	Alameda	**Ground Surface Elev.**	37.60 feet
Well Permit No.	96232	**Datum**	Mean Sea Level



EXPLORATORY BORING

a. **Total depth** 22 ft.

b. **Diameter** 8 in.

Drilling method Hollow Stem Auger

WELL CONSTRUCTION

c. **Casing length** 22 ft.

Material PVC Schedule 40

d. **Diameter** 2 in.

e. **Depth to top perforations** 7 ft.

f. **Perforated length** 15 ft.

Perforated interval from 22 **to** 7 ft.

Perforation type Machine slot

Perforation size 0.020 in.

g. **Surface seal** 1 ft.

Seal material Grout

h. **Backfill** 4 ft.

Backfill material Portland Cement

i. **Seal** 1 ft.

Seal material Bentonite

j. **Gravel pack** 16 ft.

Pack material Lonestar # 3

k. Traffic rated, water tight vault box.

S O I L S A M P L I N G P R O T O C O L

I. SOIL SAMPLING BY DRILLING RIG

1) Review site proposal for boring locations and special instructions. Confirm boring locations in field with client. Have Underground Service Alert (USA) mark utilities in area prior to drilling.

2) Prior to initiating an exploratory boring, all equipment to be used during drilling and sampling operation is steam cleaned. Such equipment includes, but is not limited to, augers, bits, drilling rod, and soil samplers. Additionally, before each sampling event, the sampler and any sample liners are thoroughly cleaned with a dilute trisodium phosphate solution and rinsed with clean tap water or distilled water. Additional decontamination procedures are implemented as needed by specific projects.

3) Each exploratory boring is drilled with a truck-mounted drilling rig using either solid flight or hollow stem augers. The boring is advanced to the desired sampling depth and the sampler is lowered to the bottom of the hole. The sampler is driven a maximum of 18 inches into the undisturbed soils ahead of the auger by a 140-pound, rig-operated hammer falling 30 inches. The number of blows required to drive the sampler the final 12 inches is recorded on the boring log. When necessary, the sampler may be pushed by the drill rig hydraulics. In this case, the pressure exerted (in pounds per square inch) is recorded. After the sampler has penetrated the full depth, it is retrieved to the surface.

4) The samplers commonly used are either a California modified sampler (3 inch or 2.5 inch O.D.) or a standard penetrometer (2 inch O.D.). The standard penetrometer does not contain sample liners and is used to determine soil strength characteristics and visually characterize the subsurface materials. If samples are collected for laboratory analysis, the California modified sampler, equippped with brass liners, is used except when the analysis will include copper or zinc. In this instance, the sample should be taken with the standard penetrometer and placed in a labeled plastic bag.

Upon retrieval, the sampler is disassembled into its component parts. One or more of the liners is selected for chemical analysis. The ends of the selected liner(s) are sealed with aluminum foil or teflon tape, capped with plastic caps, labeled, logged on chain-of-custody forms and stored in a chilled ice chest for preservation in the field and during transport to the analytical laboratory. All labels are pre-written to the extent possible with indelible ink to minimize handling time.

5) Samples not sealed for chemical analysis are checked for the presence of contamination in the field by the geologist. Any discoloration or odor is noted on the boring log. Each sample is classified in the field by a geologist using the Unified Soil Classification System and a Munsell soil color chart. In addition, samples may also be field-screened with a photoionization detector (calibrated daily) or threshold limit value sniffer. In either case, the instrument probe is held adjacent to freshly crumbled soil and the stabilized reading value is recorded on the log. Values of volatile vapors measured in the field are reconnaissance only and are not meant to supplant chemical analysis in a certified laboratory. Other visual screening techniques include examination of the sample under hand-lens magnification as well as floating-sheen inspection resulting from immersion in water.

   Lithology logging will collect geologic data as required, using conventional geologic and hydrogeologic terminology. When rock is logged, a GSA Rock Color Chart and appropriate terminology will be employed to describe rock, fractures, bedding, etc. Soil or rock coring may be specified by the supervising geologist on a project-specific basis.

6) Samples are held in the possession of CCI personnel until transferred to the analytical laboratory. Transfer to the laboratory is accomplished with either delivery by CCI personnel, pick-up by laboratory personnel, or transfer by a personal delivery service. Each transfer of responsibility is recorded on a chain-of-custody record that accompanies the samples.

7) Conditions occasionally arise when other drilling equipment is used given site-specific formation conditions. Rotary drilling may be selected if coring or bearing conditions arise. Rotary or casing hammer may be used as deep drilling, flowing sands, or formation-specific conditions require.

8) When drilling through an aquifer known to be contaminated, a staged drilling approach will be used. This would involve using either a temporary or permanent conductor casing placed adjacent to the contaminated aquifer and pressed or advanced slightly into the underlying aquitard. The cased hole will be cleaned as necessary, following which, a smaller diameter drill bit/auger will be advanced to the next underlying water bearing stratum. An impermeable seal will be placed in the borehole or annular space as appropriate upon completion of exploratory boring/well construction.

II. SOIL SAMPLING BY HAND

1) Some situations require that samples be collected by hand without the assistance of a drill rig (e.g., soil stock piles, excavation sidewall sampling, etc.). When possible, soil samples will be collected using a steel core sampler, equipped with clean brass liners, which is advanced into the soil with a slide hammer. In other cases, the outer surface of the soil is removed and a brass liner is driven into the soil by hand or with a hammer. To avoid damaging the liner, a block of wood can be held next to the liner so that the hammer strikes the block rather than the liner. The liner is removed and handled as described above. In deep excavations where safety factors preclude the direct sampling of the bottom or side wall, soil is retrieved by a backhoe bucket and this soil is sampled.

G R O U N D W A T E R S A M P L I N G P R O T O C O L

Sampling of groundwater is performed by Compliance & Closure, Inc. sampling technicians. Summarized field sampling procedures are as follows:

1. Proceed to first well with clean and decontaminated equipment.

2. Measurements of liquid surface(s) in the well, and total depth of monitoring well. Note presence of silt accumulation.

3. Field check for presence of floating product; measure apparent thickness.

4. Purge well prior to collecting samples; purge volume (casing volumes) calculated prior to removal.

5. Monitor groundwater for temperature, pH, and specific conductance during purging. Allow well to recover.

6. Collect samples using Environmental Protection Agency (EPA) approved sample collection devices, i.e., teflon or stainless steel bailers or pumps.

7. Transfer samples into laboratory-supplied EPA-approved containers.

8. Label samples and log onto chain-of-custody form.

9. Store samples in a chilled ice chest for shipment to a state-certified analytical laboratory.

10. Decontaminate equipment prior to sampling next well.

Equipment Cleaning and Decontamination

All water samples are placed in precleaned laboratory-supplied bottles. Sample bottles and caps remain sealed until actual usage at the site. All equipment which comes in contact with the well or groundwater is thoroughly cleaned with trisodium phosphate (TSP) solution and rinsed with deionized or distilled water before each use at the site. This cleaning procedure is followed between each well sampled. Wells are sampled in approximate order of increasing contamination. If a teflon cord is used, the cord is cleaned. If a nylon or cotton cord is used, a new cord is used in each well. All equipment blanks are collected prior to sampling. The blanks are analyzed periodically to ensure proper cleaning procedures are used.

Water Level Measurements

Depth to groundwater is measured in each well using a sealed sampling tape or scaled electric sounder prior to purging or sampling. If the well is known or suspected of containing free-phase petroleum hydrocarbons, an optical interface probe is used to measure the hydrocarbon thickness and groundwater level. Measurements are collected and recorded to the nearest 0.01 foot. Each monitoring well's total depth will be measured; this will allow a relative judgment of well siltation to be made and need for redevelopment.

Bailer Sheen Check

If no measureable free-phase petroleum hydrocarbons are detected, a clear acrylic bailer is used to determine the presence of a sheen. Any observed film, as well as odor and color of the water is recorded.

Groundwater Sampling

Prior to groundwater sampling, each well is purged of "standing" groundwater. Either a bailer, hand pump, or submersible pump is used to purge the well. The amount of purging is dependent on the well yield. In a high yield formation, samples will be collected when normal field measurement, including temperature, pH, and specific conductance stabilize, provided a minimum of three well-casing volumes of water have been removed. Field measurements will be taken after purging each well volume. Physical parameter

measurements (temperature, pH, and specific conductance) are closely monitored throughout the well purging process and are used as indicators for assessing sufficient purging. The purging parameters are measured to observe stabilization to a range of values typical for that aquifer and well. Stable field parameters are recognized as indicative of groundwater aquifer chemistry entering the well. Specific conductance (conductivity) meters are read to the nearest ±10 umhos/cm and are calibrated daily, if possible. Temperature is read to the nearest 0.1 F. Calibration of physical parameter meters will follow manufacturer's specifications. Collected field data during purging activities will be entered on the Well Sampling Field Data Sheet.

In low yield formations, the well is purged such that the "standing" water is removed and the well is allowed to recharge. (Normal field measurements will be periodically recorded during the purging process). In situations where recovery to 80% of static water level is estimated, or observed to exceed a two hour duration, a sample will be collected when sufficient volume is available for a sample for each parameter. Attempts will be made so the well is not purged dry such that the recharge rate causes the formation water to cascade into the well.

In wells where free-phase hydrocarbons are detected, the free-phase portion will be bailed from the well and the estimated volume removed and recorded. A groundwater sample will be collected if bailing reduces the amount of free-phase hydrocarbons to the point where they are not present in the well. Well sampling will be conducted using one of the aforementioned methods depending on the formation yield. However, if free-phase hydrocarbons persis throughout bailing, then a groundwater sample will not be collected.

Volatile organic groundwater samples are collected so that air passage through the sample does not occur or is minimal (to prevent volatiles from being stripped from the samples): sample bottles are filled by slowly running the sample down the side of the bottle until there is a positive convex meniscus over the neck of the bottle; the teflon side of the septum (in cap) is positioned against the meniscus, and the cap screwed on tightly; the sample is inverted and the bottle lightly tapped. The absence of an air bubble indicates a successful seal; if a bubble is evident, the cap is removed, more sample is added, and the bottle is resealed.

Chain-of-Custody

Groundwater sample containers are labeled with a unique sample number, location, and date of collection. All samples are logged into a chain-of-custody form and placed in a chilled ice chest for shipment to a laboratory certified by the State of California Department of Health Services.

Laboratory and field handling procedures of samples are monitored by including QC samples for analysis with every submitted sample lot from a project site. QC samples may include any combination of the following:

- **Trip Blanks:** Used for purgeable organic compounds only; QC samples are collected in 40 milliliter (ml) sample vials filled in the analytical laboratory with organic-free water. Trip blanks are sent to the project site, and travel with project site samples. Trip blanks are **not** opened, and are returned from a project site with the project site samples for analysis.

- **Field Blank:** Prepared in the field using organic-free water. These QC samples accompany project site samples to the laboratory and are analyzed for specific chemical parameters unique to the project site where they were prepared.

- **Duplicates:** Duplicated samples are collected "second samples" from a selected well and project site. They are collected as either split samples or second-run samples collected from the same well.

- **Equipment Blank:** Periodic QC samples collected from field equipment rinseate to verify decontamination procedures.

The number and types of QC samples are determined and analyzed on a project-specific basis.

Shallow Groundwater Survey

A shallow groundwater survey employes reconnaissance field sampling and chemical analysis for rapid plume mapping. Occasionally, a state-certified laboratory subcontractor may be used. The subcontractor would sample for analysis at locations marked by the CCI field geologist. The thin-diameter probes from which groundwater is collected are advanced to the water bearing stratum, sample is withdrawn to the surface, and analyzed immediately thereafter. Probe holes are backfilled with a grout slurry or as the local permitting agency requires. The shallow survey contractor will supply sampling, purging, and field chemical analysis to CCI in their report. CCI considers this type of shallow probe mapping (together with shallow groundwater sampling) to be a reconnaissance technique only.

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588 VOICE (510) 484-26
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 16301 East 14th Street
San Leandro, California

CLIENT
Name Ms. Barbara Holland
Address 20993 Foothill Blvd. Voice (510) 889-0404
City Hayward, California Zip 94541

APPLICANT
Name Compliance & Closure, Inc.
7020 Koll Center Fax 426-5391
Address Pkwy, Ste. 134 Voice 426-5395
City Pleasanton, CA Zip 94566

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection		General	
Water Supply		Contamination	
Monitoring (3)	x	Well Destruction	

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other Monitoring
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger Hollow Stem x
Cable ___ Other ___

DRILLER'S LICENSE NO. 265556

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 30 ft.
Surface Seal Depth 5 ft. Number 3

GEOTECHNICAL PROJECTS
Number of Borings ___ Maximum
Hole Diameter ___ in. Depth ___ ft.

ESTIMATED STARTING DATE 3/28/96
ESTIMATED COMPLETION DATE 3/29/96

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE On behalf of Barbara Holland Gary R. McCoy Date 3/18/96

FOR OFFICE USE

PERMIT NUMBER 96232
LOCATION NUMBER ___

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as to ar Zone 7 office five days prior to proposed starting da
2. Submit to Zone 7 within 60 days after completion of work the original Department of Water Resources W Drillers Report or equivalent for well Projects, or drill and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of a date.

(B.) WATER WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cem placed by tremie.
2. Minimum seal depth is 50 feet for municipal and indu or 20 feet for domestic and irrigation wells unless a le depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable o

C. GEOTECHNICAL. Backfill bore hole with compacted cuttin heavy bentonite and upper two feet with compacted materia areas of known or suspected contamination, tremied cemer shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete plac tremie.

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 27
Wyman Hong

James William Rasp P.E.
5134 Elrose Avenue
San Jose, California 95124
408.448.6768

April 17, 1996
Project No.96042

Mr. Gary Mulkey
Compliance & Closure Inc.
7020 Koll Center Parkway, Suite 134
Pleasanton, California 94566

Subject: Monitoring wells at Jack Holland Sr. Oil Company property at 16301 East 14th Street, San Leandro, CA (Alameda County) (Your Job No. 12059-1)

Dear Mr. Mulkey

On April 13, 1996 at your request I determined the locations and elevations of the 3 monitoring wells located on the subject property. Well elevations were determined to mean sea level (MSL) based upon benchmark information for Alameda County Benchmark E14-164 that I received from the Alameda County Public Works Department. The well elevations, locations and the calculated distances between the wells are shown on the attached sketch, and the elevations and calculated distances between the wells are tabulated below.

Mean Sea Level Elevations

MW-1	36.51 ft	PVC well casing
	37.30 ft	Top of well cover
MW-2	37.35 ft	PVC well casing
	37.73 ft	Top of well cover
MW-3	37.37 ft	PVC well casing
	37.60 ft	Top of well cover

Distances Between Wells

MW-1 to MW-2	146.85 ft
MW-1 to MW-3	139.78 ft
MW-2 to MW-3	164.26 ft

We marked the northerly side of the well casings where the elevations were taken. It appeared that MW-2 had been previously marked and we remarked in that location. We did not see previous marks on wells MW-1 or MW-3. The elevations of the well covers were determined with the covers secured. We obtained property line information for the site from the Alameda County Tax Assessors Map for the area (Book 080C, Map 0479, Sheet 2 of 3). Please let us know if you need this information.

We are pleased that we can be of service to you for this job. Please do not hesitate to call us if you have any questions or comments concerning our work.

Very truly yours,

James W. Rasp P.E.

96042RPT.046

JAMES RASP P.E.
Civil and Structural Engineering
5134 Elrose Avenue
San Jose, California 95124
(408) 448-6768

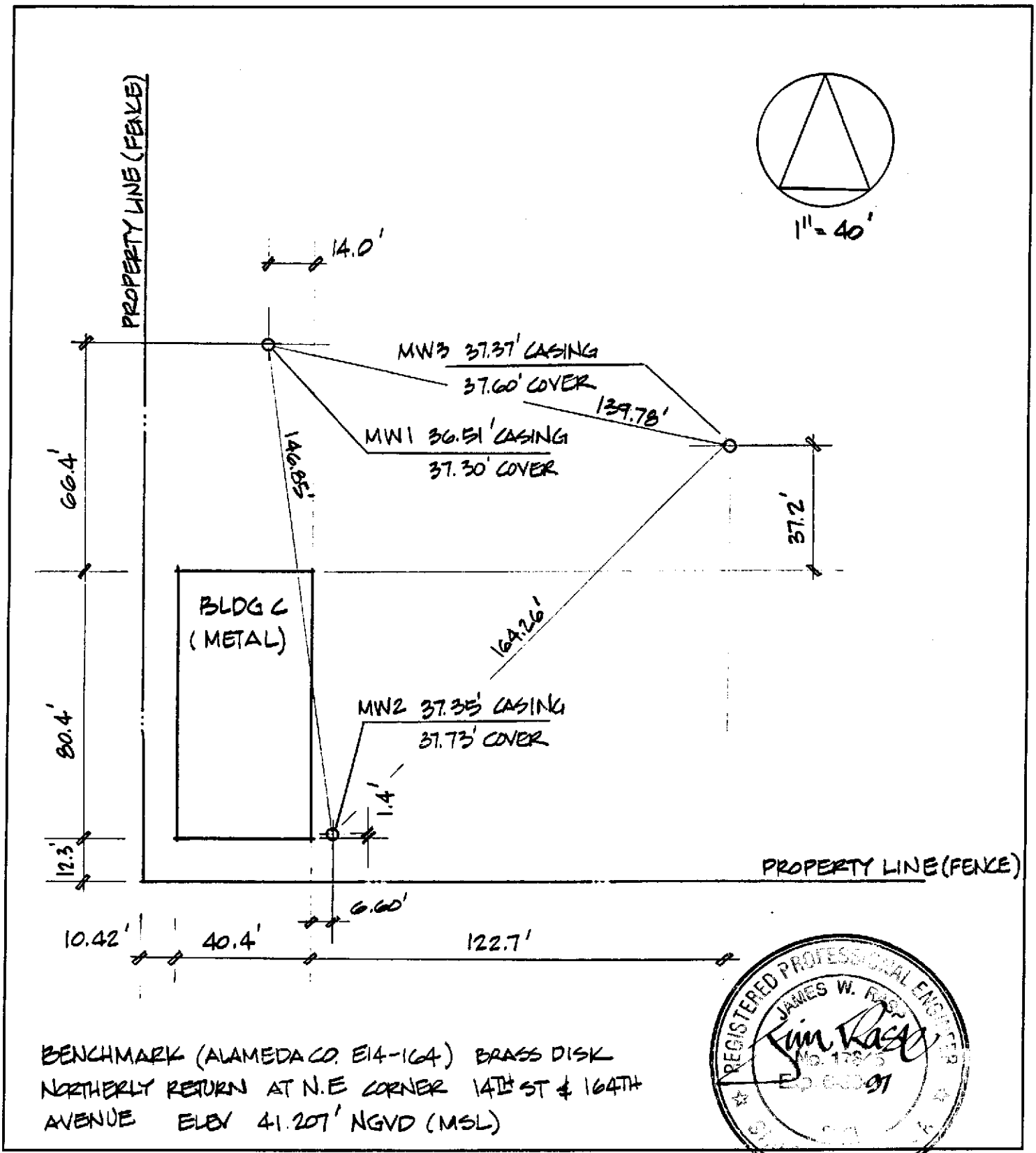
JOB 96042/C&C INC

SHEET NO. 1 OF 1

CALCULATED BY JIM RASP DATE 4/16/96

CHECKED BY _____ DATE _____

SCALE 1" = 40'



BENCHMARK (ALAMEDA CO. E14-164) BRASS DISK NORTHERLY RETURN AT N.E CORNER 14TH ST & 164TH AVENUE ELEV 41.207' NGVD (MSL)

REGISTERED PROFESSIONAL ENGINEER
JAMES W. RASP
No. 17845
Exp. 6-30-97

ONSITE
ENVIRONMENTAL
LABORATORIES, INC.
[redacted]

Analytical Laboratory Report
BTEX
EPA Method 8020

Date Sampled:	4/1/96	**Proj Mgr:**	Gary Mulkey
Date Received:	4/2/96	**Client:**	Compliance & Closure
Report Number:	1C029.RPT	**Project #:**	12059-1
Lab Number:	1C029	**Project:**	Jack Holland S.R. Oil
Date Reported:	4/5/96	**Units Soil:**	mg/Kg
		Units Water:	ug/L

Lab ID No.	Field ID No.	Date Analyzed	Benzene	Toluene	Ethyl-benzene	Xylenes total	TPH-Gasoline	Sur Rec. %	DF	Matrix
1C029-01	MW-1-1	4/3/96	ND	ND	ND	ND	ND	84	1	Soil
1C029-02	MW-1-2	4/4/96	0.48	0.53	0.55	0.96	200	100	20	Soil
1C029-03	MW-2-1	4/4/96	ND	2.1	4.0	17	4400*	93	200	Soil
1C029-04	MW-2-2	4/3/96	ND	ND	0.0090	0.10	9.3	76	1	Soil
1C029-05	MW-3-1	4/4/96	0.83	1.3	1.0	2.0	420*	97	20	Soil
1C029-06	MW-3-2	4/4/96	ND	ND	0.16	0.96	160*	81	20	Soil

Reporting Limits SOIL mg/Kg	0.005	0.005	0.005	0.005	1
Reporting Limits WATER ug/L	0.5	0.5	0.5	0.5	50

NOTES:
NR - Not requested
NC - Not confirmed
COC - Chain of custody
ND - Analytes not detected at, or above the reporting limit
Sur. % - Percent surrogate recovery
mg/Kg - Milligrams per kilogram (PPM)
ug/L - Micrograms per liter (PPB)
PQL - Practical Quantitation Limit. Equals detection limit times the dilution factor.
D - Surrogate was diluted out
M - Matrix effects
DF - Dilution Factor
* - Sample chromatogram does not match standard chromatogram.

PROCEDURES:
BTEX - This analysis was performed using EPA Method 8020 and EPA Method 5030
TPH Gasoline - This analysis was performed using EPA Method 8015 Mod. and EPA Method 5030

CERTIFICATION:
California Department of Health Services ELAP
Onsite Environmental Laboratories, 5500 Boscell Common, Fremont, CA 94538 (510) 490-8571

David Voget
Laboratory Director

4/18/96
Date

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ANALYTICAL LABORATORY REPORT

EPA Method 418.1

Date Sampled:	4/1/96	**Project Mgr:**	Gary R. Mulkey
Date Received:	4/2/96	**Client:**	Compliance & Closure
Date Analyzed:	4/8/96	**Project:**	12059-1
Date Reported:	4/9/96	**Matrix:**	Soil
Report #:	1C029B.RPT	**Units:**	ug/g
Lab #:	1C029		

Lab ID No.	Field ID No.	*TRPH DL Factor*	TRPH 418.1 (ppm)	*DETECTION LIMIT*
1C029-05	**MW-3-1**	30	3500	300
1C029-06	**MW-3-2**	3	300	30

NOTES:
NR - Analysis not requested.
COC - Chain of Custody
ND - Analytes not detected at, or above the stated detection limit.
mg/Kg - Milligrams per kilogram (ppm).
mg/L - Micrograms per litre (ppm).
DL - Detection Limit
DF - Dilution factor.
PQL - Practical Quantitation Limit - Multiply DL by the DF to obtain the PQL for a specific sample.

PROCEDURES:
TRPH - Total Recoverable Petroleum Hydrocarbons by EPA Method 418.1.

CERTIFICATION:
California Department of Health Services ELAP Certificate #1842
Onsite Environmental Laboratories, Inc., 5500 Boscell Common, Fremont, CA 94538 (510) 490-8571/(510) 490-8572/Fax

Laboratory Director

4/18/96
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Analytical Laboratory Report
TPH-E Diesel, TPH-E Motor Oil
EPA Method 8015 Modified

Date Sampled:	See below	**Proj Mgr:**	Gary Mulkey
Date Received:	4/2/96	**Client:**	Compliance & Closure, Inc.
Date Extracted:	See below	**Project:**	Jack Holland S.R. Oil
Date Analyzed:	See below	**Project #:**	12059-1
Report Number:	1C029D.RPT	**Units Soil:**	mg/Kg
Lab Number:	1C029	**Units Water:**	ug/L

Lab ID No.	Field ID No.	Date Sampled	Date Extracted	Date Analyzed	TPH-E Diesel	TPH-E Sur. %	TPH-E DF	Matrix
1C029-01	MW-1-1	4/1/96	4/3/96	4/3/96	ND	83	1	Soil
1C029-02	MW-1-2	4/1/96	4/3/96	4/3/96	130*	69	1	Soil
1C029-03	MW-2-1	4/1/96	4/3/96	4/4/96	8200*	D	100	Soil
1C029-04	MW-2-2	4/1/96	4/3/96	4/3/96	68*	72	1	Soil
1C029-05	MW-3-1	4/1/96	4/3/96	4/4/96	2600*	D	100	Soil
1C029-06	MW-3-2	4/1/96	4/3/96	4/3/96	290*	87	1	Soil

Reporting Limits SOIL mg/Kg	1
Reporting Limits WATER ug/L	50

NOTES:
NR - Not requested
NC - Not confirmed
COC - Chain of custody
ND - Analytes not detected at, or above the reporting limit
Sur. % - Percent surrogate recovery
mg/Kg - Milligrams per kilogram (PPM)
ug/L - Micrograms per liter (PPB)
PQL - Practical Quantitation Limit. Equals detection limit times the dilution factor.
D - Surrogate was diluted out
M - Matrix effects
DF - Dilution Factor
* - Sample chromatogram does not match standard chromatogram.
TPH-E Diesel - Total petroleum hydrocarbons extractable quantitated as Diesel

PROCEDURES:
TPH-E - This analysis was performed using EPA Method 8015 Mod. and EPA Method 3550B

CERTIFICATION:
California Department of Health Services ELAP
Onsite Environmental Laboratories, 5500 Boscell Common, Fremont, CA 94538 (510) 490-8571

Garth Voigt 4/18/96
Laboratory Director

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QC DATA REPORT
TPH-E
EPA Method 8015 Modified

Date Sampled:	4/1/96	**Proj Mgr:**	Gary Mulkey
Date Received:	4/2/96	**Client:**	Compliance & Closure
Date Analyzed:	4/3/96	**Project:**	Jack Holland S.R. Oil
Date Extracted:	4/3/96	**Project #:**	12059-1
Report Number:	0403DM.QAC	**Matrix:**	Soil
Lab Number:	1C029-01	**Units:**	mg/Kg

Parameter	Blank Result mg/Kg	Spike Level mg/Kg	LCS Result mg/Kg	LCS Recov. %	Sample Result mg/Kg	MS Result mg/Kg	MS Recov. %	MSD Result mg/Kg	MSD Recov. %	RPD %
TPH-E diesel	ND	33.3	28.3	85	ND	42.3	127	41.7	125	1.4
surr %rec dies.	74	-	-	93	84	-	89	-	98	-

DEFINITION OF TERMS:

ND - Analytes not detected at, or above the reporting limit
MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference: (MS - MSD) /((MS + MSD)/2) X 100
LCS - Laboratory Control Spike
LCSD- Laboratory Control Spike Duplicate

LABORATORY QC CRITERIA

Parameter	Acceptable % Recoveries		
TPH-E	65%	to	135%
%RPD	0%	to	35%

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QC DATA REPORT
BTEX
EPA Method 8020

Date Sampled:	4/1/96	**Proj Mgr:**	Gary Mulkey
Date Received:	4/2/96	**Client:**	Compliance & Closure
Date Analyzed:	4/4/96	**Project #:**	12059-1
Report Number:	0404GB.QAC	**Project:**	Jack Holland S.R. Oil
Lab Number:	1C029-01	**Matrix:**	Soil
		Units:	mg/Kg

Parameter	Blank Result mg/Kg	Spike Level mg/Kg	LCS Result mg/Kg	LCS Recov. %	LCSD Result mg/Kg	LCSD Recov. %	RPD %
Benzene	ND	0.025	0.0196	78	0.0207	83	5.5
Toluene	ND	0.025	0.0207	83	0.022	88	6.1
Ethyl benzene	ND	0.025	0.0203	81	0.022	88	8.0
total Xylenes	ND	0.075	0.0648	86	0.0696	93	7.1
TPH-Gas	ND	2.5	2.1	84	-	-	-
surr %rec	72	-	-	90	-	88	-

DEFINITION OF TERMS:
ND - Analytes not detected at, or above the reporting limit
MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference: (MS - MSD) /((MS + MSD)/2) X 100
LCS - Laboratory Control Spike
LCSD- Laboratory Control Spike Duplicate

LABORATORY QC CRITERIA

Parameter	Acceptable % Recoveries		
Benzene	70%	to	130%
Toluene	70%	to	130%
Ethylbenzene	70%	to	130%
Xylenes Total	70%	to	130%
TPH-Gasoline	70%	to	130%
%RPD	0%	to	30%

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QC DATA REPORT

Date Sampled:	4/1/96	Proj Mgr:	Gary R. Mulkey
Date Extracted:	4/8/96	Client:	Compliance & Closure
Date Analyzed:	4/8/96	Project:	12059-1
Lab ID #:	1C029	Matrix:	Soil
Report #:	1C029B.QAC		

Parameter	Blank mg/kg	SP mg/kg	LCS mg/kg	LCSD mg/kg	PR1 %	PR2 %	RPD %
TRPH	ND	200	234	240	117	120	2.5

DEFINITION OF TERMS:

R - Results of Analysis
SP - Spike Concentration Added to Sample
MS - Matrix Spike Results
MSD - Matrix Spike Duplicate Results
PR1 - Percent Recovery of MS: (MS - R) / SP X 100
PR2 - Percent Recovery of MSD: (MSD - R) / SP x 100
RPD - Relative Percent Difference: (MS - MSD) / (MS + MSD/ 2) X 100

Laboratory QC Criteria

Parameter	Acceptable % Recoveries	
Surrogate	70%	130%
%RPD	0%	30%

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Analytical Laboratory Report
EPA Methods 8010 / 8020

Date Sampled:	01-Apr-96	**Project Manager:**	Gary Mulkey
Date Received:	02-Apr-96	**Client:**	Compliance & Closure, Inc.
Date Analyzed:	09-Apr-96	**Project Number:**	12059-1
Date Reported:	10-Apr-96	**Report Number:**	1C03201.hal
Lab ID Number:	1C032-01	**Units:**	mg/Kg
Field ID Number:	MW1-1	**Matrix:**	Soil
		Dilution Factor:	1

Analytes	DL	Results	Analytes	DL	Results
Bromodichloromethane	0.0025	ND	1,2-dichloropropane	0.0025	ND
Bromoform	0.005	ND	c-1,3-dichloropropene	0.0025	ND
Bromomethane	0.005	ND	t-1,3-dichloropropene	0.0025	ND
Carbon tetrachloride	0.0025	ND	Methylene chloride	0.005	0.022
Chlorobenzene	0.005	ND	1,1,2,2-tetrachlorethane	0.0025	ND
Chloroethane	0.005	ND	Tetrachloroethene	0.0025	ND
2-chloroethylvinylether	0.005	ND	1,1,1-trichloroethane	0.0025	ND
Chloroform	0.0025	ND	1,1,2-trichloroethane	0.0025	ND
Chloromethane	0.005	ND	Trichloroethene	0.0025	ND
Dibromochloromethane	0.0025	ND	Trichlorofluoromethane	0.005	ND
1,2-dichlorobenzene	0.005	ND	Vinyl chloride	0.005	ND
1,3-dichlorobenzene	0.005	ND	Benzene	0.005	NR
1,4-dichlorobenzene	0.005	ND	Ethyl benzene	0.005	NR
Dichlorodifluoromethane	0.005	ND	Toluene	0.005	NR
1,1-dichloroethane	0.0025	ND	total-Xylenes	0.005	NR
1,2-dichloroethane	0.0025	ND			
1,1-dichloroethene	0.0025	ND	Surrogates:		
cis-1,2-dichloroethene	0.0025	NR	8010	65-135%	86
trans-1,2-dichloroethene	0.0025	ND	8020	65-135%	NR

NOTES:
NR - Not requested
COC - Chain of custody
ND - Analytes not detected at, or above the stated detection limit.
mg/Kg - Milligrams per kilogram (PPM)
DL - Detection limit.
PQL - Practical quantiation limit, multiply the DL by the dilution factor

PROCEDURES:
This analysis was performed using EPA Method 8010, EPA Method 8020, and EPA Method 5030 .

CERTIFICATION:
California Department of Health Services, ELAP certificate #1774
Onsite Environmental Laboratories, Inc.; 5500 Boscell Common, Fremont, CA, 94538; (510) 490-8571

Laboratory Director

4/18/96
Date

ONSITE
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Analytical Laboratory Report

EPA Methods 8010 / 8020

Date Sampled:	01-Apr-96	**Project Manager:**	Gary Mulkey
Date Received:	02-Apr-96	**Client:**	Compliance & Closure, Inc.
Date Analyzed:	09-Apr-96	**Project Number:**	12059-1
Date Reported:	10-Apr-96	**Report Number:**	1C03202.hal
Lab ID Number:	1C032-02	**Units:**	mg/Kg
Field ID Number:	MW1-2	**Matrix:**	Soil
		Dilution Factor:	1

Analytes	DL	Results	Analytes	DL	Results
Bromodichloromethane	0.0025	ND	1,2-dichloropropane	0.0025	ND
Bromoform	0.005	ND	c-1,3-dichloropropene	0.0025	ND
Bromomethane	0.005	ND	t-1,3-dichloropropene	0.0025	ND
Carbon tetrachloride	0.0025	ND	Methylene chloride	0.005	0.02
Chlorobenzene	0.005	ND	1,1,2,2-tetrachlorethane	0.0025	ND
Chloroethane	0.005	ND	Tetrachloroethene	0.0025	ND
2-chloroethylvinylether	0.005	ND	1,1,1-trichloroethane	0.0025	ND
Chloroform	0.0025	ND	1,1,2-trichloroethane	0.0025	ND
Chloromethane	0.005	ND	Trichloroethene	0.0025	ND
Dibromochloromethane	0.0025	ND	Trichlorofluoromethane	0.005	ND
1,2-dichlorobenzene	0.005	ND	Vinyl chloride	0.005	ND
1,3-dichlorobenzene	0.005	ND	Benzene	0.005	NR
1,4-dichlorobenzene	0.005	ND	Ethyl benzene	0.005	NR
Dichlorodifluoromethane	0.005	ND	Toluene	0.005	NR
1,1-dichloroethane	0.0025	ND	total-Xylenes	0.005	NR
1,2-dichloroethane	0.0025	ND			
1,1-dichloroethene	0.0025	ND	Surrogates:		
cis-1,2-dichloroethene	0.0025	NR	8010	65-135%	65
trans-1,2-dichloroethene	0.0025	ND	8020	65-135%	NR

NOTES:
NR - Not requested
COC - Chain of custody
ND - Analytes not detected at, or above the stated detection limit.
mg/Kg - Milligrams per kilogram (PPM)
DL - Detection limit.
PQL - Practical quantiation limit, multiply the DL by the dilution factor

PROCEDURES:
This analysis was performed using EPA Method 8010, EPA Method 8020, and EPA Method 5030 .

CERTIFICATION:
California Department of Health Services, ELAP certificate #1774
Onsite Environmental Laboratories, Inc.; 5500 Boscell Common, Fremont, CA, 94538; (510) 490-8571

Gareth Vogt
Laboratory Director

4/18/96
Date

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Analytical Laboratory Report
EPA Methods 8010 / 8020

Date Sampled:	01-Apr-96	**Project Manager:**	Gary Mulkey
Date Received:	02-Apr-96	**Client:**	Compliance & Closure, Inc.
Date Analyzed:	09-Apr-96	**Project Number:**	12059-1
Date Reported:	10-Apr-96	**Report Number:**	1C03203.hal
Lab ID Number:	1C032-03	**Units:**	mg/Kg
Field ID Number:	MW2-1	**Matrix:**	Soil
		Dilution Factor:	2

Analytes	DL	Results	Analytes	DL	Results
Bromodichloromethane	0.0025	ND	1,2-dichloropropane	0.0025	ND
Bromoform	0.005	ND	c-1,3-dichloropropene	0.0025	ND
Bromomethane	0.005	ND	t-1,3-dichloropropene	0.0025	ND
Carbon tetrachloride	0.0025	ND	Methylene chloride	0.005	0.04
Chlorobenzene	0.005	ND	1,1,2,2-tetrachlorethane	0.0025	ND
Chloroethane	0.005	ND	Tetrachloroethene	0.0025	ND
2-chloroethylvinylether	0.005	ND	1,1,1-trichloroethane	0.0025	ND
Chloroform	0.0025	ND	1,1,2-trichloroethane	0.0025	ND
Chloromethane	0.005	ND	Trichloroethene	0.0025	ND
Dibromochloromethane	0.0025	ND	Trichlorofluoromethane	0.005	ND
1,2-dichlorobenzene	0.005	ND	Vinyl chloride	0.005	ND
1,3-dichlorobenzene	0.005	ND	Benzene	0.005	NR
1,4-dichlorobenzene	0.005	ND	Ethyl benzene	0.005	NR
Dichlorodifluoromethane	0.005	ND	Toluene	0.005	NR
1,1-dichloroethane	0.0025	ND	total-Xylenes	0.005	NR
1,2-dichloroethane	0.0025	ND			
1,1-dichloroethene	0.0025	ND	Surrogates:		
cis-1,2-dichloroethene	0.0025	NR	8010	65-135%	89
trans-1,2-dichloroethene	0.0025	ND	8020	65-135%	NR

NOTES:
NR - Not requested
COC - Chain of custody
ND - Analytes not detected at, or above the stated detection limit.
mg/Kg - Milligrams per kilogram (PPM)
DL - Detection limit.
PQL - Practical quantiation limit, multiply the DL by the dilution factor

PROCEDURES:
This analysis was performed using EPA Method 8010, EPA Method 8020, and EPA Method 5030 .

CERTIFICATION:
California Department of Health Services, ELAP certificate #1774
Onsite Environmental Laboratories, Inc.; 5500 Boscell Common, Fremont, CA, 94538; (510) 490-8571

Laboratory Director

4/18/96
Date

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Analytical Laboratory Report

EPA Methods 8010 / 8020

Date Sampled:	01-Apr-96	**Project Manager:**	Gary Mulkey
Date Received:	02-Apr-96	**Client:**	Compliance & Closure, Inc.
Date Analyzed:	09-Apr-96	**Project Number:**	12059-1
Date Reported:	10-Apr-96	**Report Number:**	1C03204.hal
Lab ID Number:	1C032-04	**Units:**	mg/Kg
Field ID Number:	MW2-2	**Matrix:**	Soil
		Dilution Factor:	1

Analytes	DL	Results	Analytes	DL	Results
Bromodichloromethane	0.0025	ND	1,2-dichloropropane	0.0025	ND
Bromoform	0.005	ND	c-1,3-dichloropropene	0.0025	ND
Bromomethane	0.005	ND	t-1,3-dichloropropene	0.0025	ND
Carbon tetrachloride	0.0025	ND	Methylene chloride	0.005	0.016
Chlorobenzene	0.005	ND	1,1,2,2-tetrachlorethane	0.0025	ND
Chloroethane	0.005	ND	Tetrachloroethene	0.0025	ND
2-chloroethylvinylether	0.005	ND	1,1,1-trichloroethane	0.0025	ND
Chloroform	0.0025	ND	1,1,2-trichloroethane	0.0025	ND
Chloromethane	0.005	ND	Trichloroethene	0.0025	ND
Dibromochloromethane	0.0025	ND	Trichlorofluoromethane	0.005	ND
1,2-dichlorobenzene	0.005	ND	Vinyl chloride	0.005	ND
1,3-dichlorobenzene	0.005	ND	Benzene	0.005	NR
1,4-dichlorobenzene	0.005	0.008	Ethyl benzene	0.005	NR
Dichlorodifluoromethane	0.005	ND	Toluene	0.005	NR
1,1-dichloroethane	0.0025	ND	total-Xylenes	0.005	NR
1,2-dichloroethane	0.0025	ND			
1,1-dichloroethene	0.0025	ND	Surrogates:		
cis-1,2-dichloroethene	0.0025	NR	8010	65-135%	71
trans-1,2-dichloroethene	0.0025	ND	8020	65-135%	NR

NOTES:
NR - Not requested
COC - Chain of custody
ND - Analytes not detected at, or above the stated detection limit.
mg/Kg - Milligrams per kilogram (PPM)
DL - Detection limit.
PQL - Practical quantiation limit, multiply the DL by the dilution factor

PROCEDURES:
This analysis was performed using EPA Method 8010, EPA Method 8020, and EPA Method 5030 .

CERTIFICATION:
California Department of Health Services, ELAP certificate #1774
Onsite Environmental Laboratories, Inc.; 5500 Boscell Common, Fremont, CA, 94538; (510) 490-8571

Gareth Voight
Laboratory Director

4/18/96
Date

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Analytical Laboratory Report

EPA Methods 8010 / 8020

Date Sampled:	01-Apr-96	**Project Manager:**	Gary Mulkey
Date Received:	02-Apr-96	**Client:**	Compliance & Closure, Inc.
Date Analyzed:	09-Apr-96	**Project Number:**	12059-1
Date Reported:	10-Apr-96	**Report Number:**	1C03205.hal
Lab ID Number:	1C032-05	**Units:**	mg/Kg
Field ID Number:	MW3-1	**Matrix:**	Soil
		Dilution Factor:	1

Analytes	DL	Results	Analytes	DL	Results
Bromodichloromethane	0.0025	ND	1,2-dichloropropane	0.0025	ND
Bromoform	0.005	ND	c-1,3-dichloropropene	0.0025	ND
Bromomethane	0.005	ND	t-1,3-dichloropropene	0.0025	ND
Carbon tetrachloride	0.0025	ND	Methylene chloride	0.005	0.018
Chlorobenzene	0.005	ND	1,1,2,2-tetrachlorethane	0.0025	ND
Chloroethane	0.005	ND	Tetrachloroethene	0.0025	ND
2-chloroethylvinylether	0.005	ND	1,1,1-trichloroethane	0.0025	ND
Chloroform	0.0025	ND	1,1,2-trichloroethane	0.0025	ND
Chloromethane	0.005	ND	Trichloroethene	0.0025	ND
Dibromochloromethane	0.0025	ND	Trichlorofluoromethane	0.005	ND
1,2-dichlorobenzene	0.005	ND	Vinyl chloride	0.005	ND
1,3-dichlorobenzene	0.005	ND	Benzene	0.005	NR
1,4-dichlorobenzene	0.005	ND	Ethyl benzene	0.005	NR
Dichlorodifluoromethane	0.005	ND	Toluene	0.005	NR
1,1-dichloroethane	0.0025	ND	total-Xylenes	0.005	NR
1,2-dichloroethane	0.0025	ND			
1,1-dichloroethene	0.0025	ND	Surrogates:		
cis-1,2-dichloroethene	0.0025	NR	8010	65-135%	81
trans-1,2-dichloroethene	0.0025	ND	8020	65-135%	NR

NOTES:
NR - Not requested
COC - Chain of custody
ND - Analytes not detected at, or above the stated detection limit.
mg/Kg - Milligrams per kilogram (PPM)
DL - Detection limit.
PQL - Practical quantiation limit, multiply the DL by the dilution factor

PROCEDURES:
This analysis was performed using EPA Method 8010, EPA Method 8020, and EPA Method 5030 .

CERTIFICATION:
California Department of Health Services, ELAP certificate #1774
Onsite Environmental Laboratories, Inc.; 5500 Boscell Common, Fremont, CA, 94538; (510) 490-8571

Gordon Voight
Laboratory Director

4/12/96
Date

ONSITE
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Analytical Laboratory Report

EPA Methods 8010 / 8020

Date Sampled:	01-Apr-96	**Project Manager:**	Gary Mulkey
Date Received:	02-Apr-96	**Client:**	Compliance & Closure, Inc.
Date Analyzed:	09-Apr-96	**Project Number:**	12059-1
Date Reported:	10-Apr-96	**Report Number:**	1C03206.hal
Lab ID Number:	1C032-06	**Units:**	mg/Kg
Field ID Number:	MW3-2	**Matrix:**	Soil
		Dilution Factor:	2

Analytes	DL	Results	Analytes	DL	Results
Bromodichloromethane	0.0025	ND	1,2-dichloropropane	0.0025	ND
Bromoform	0.005	ND	c-1,3-dichloropropene	0.0025	ND
Bromomethane	0.005	ND	t-1,3-dichloropropene	0.0025	ND
Carbon tetrachloride	0.0025	ND	Methylene chloride	0.005	0.014
Chlorobenzene	0.005	ND	1,1,2,2-tetrachlorethane	0.0025	ND
Chloroethane	0.005	ND	Tetrachloroethene	0.0025	ND
2-chloroethylvinylether	0.005	ND	1,1,1-trichloroethane	0.0025	ND
Chloroform	0.0025	ND	1,1,2-trichloroethane	0.0025	ND
Chloromethane	0.005	ND	Trichloroethene	0.0025	ND
Dibromochloromethane	0.0025	ND	Trichlorofluoromethane	0.005	ND
1,2-dichlorobenzene	0.005	ND	Vinyl chloride	0.005	ND
1,3-dichlorobenzene	0.005	ND	Benzene	0.005	NR
1,4-dichlorobenzene	0.005	0.024	Ethyl benzene	0.005	NR
Dichlorodifluoromethane	0.005	ND	Toluene	0.005	NR
1,1-dichloroethane	0.0025	ND	total-Xylenes	0.005	NR
1,2-dichloroethane	0.0025	ND			
1,1-dichloroethene	0.0025	ND	Surrogates:		
cis-1,2-dichloroethene	0.0025	NR	8010	65-135%	79
trans-1,2-dichloroethene	0.0025	ND	8020	65-135%	NR

NOTES:
NR - Not requested
COC - Chain of custody
ND - Analytes not detected at, or above the stated detection limit.
mg/Kg - Milligrams per kilogram (PPM)
DL - Detection limit.
PQL - Practical quantiation limit, multiply the DL by the dilution factor

PROCEDURES:
This analysis was performed using EPA Method 8010, EPA Method 8020, and EPA Method 5030 .

CERTIFICATION:
California Department of Health Services, ELAP certificate #1774
Onsite Environmental Laboratories, Inc.; 5500 Boscell Common, Fremont, CA, 94538; (510) 490-8571

Kenneth Voyt
Laboratory Director

4/18/96
Date

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LABORATORIES, INC.
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QC Data Report

EPA Methods 8010 / 8020

Date Sampled:	01-Apr-96	**Project Manager:**	Gary Mulkey
Date Received:	02-Apr-96	**Client:**	Compliance & Closure,Inc.
Date Analyzed:	09-Apr-96	**Project Number:**	12059-1
Date Reported:	09-Apr-96	**Report Number:**	1C032.QAC
Lab ID Number:	1C032-01	**Units:**	mg/Kg
Field ID Number:	MW1-1	**Matrix:**	Soil

Analytes	SpikeAmount	MS %Rec.	MSD %Rec.	RPD	LCS %Rec.	Blank
Bromodichloromethane						ND
Bromoform						ND
Bromomethane						ND
Carbon tetrachloride						ND
Chlorobenzene	0.025	90	93	3	103	ND
Chloroethane						ND
2-chloroethylvinylether						ND
Chloroform						ND
Chloromethane						ND
Dibromochloromethane						ND
1,2-dichlorobenzene						ND
1,3-dichlorobenzene						ND
1,4-dichlorobenzene						ND
Dichlorodifluoromethane						ND
1,1-dichloroethane						ND
1,2-dichloroethane						ND
1,1-dichloroethene	0.025	97	99	2	104	ND
cis-1,2-dichloroethene						NR
trans-1,2-dichloroethene						ND
1,2-dichloropropane						ND
c-1,3-dichloropropene						ND
t-1,3-dichloropropene						ND
Methylene chloride						ND
1,1,2,2-tetrachlorethane						ND
Tetrachloroethene						ND
1,1,1-trichloroethane						ND
1,1,2-trichloroethane						ND
Trichloroethene	0.025	96	99	3	103	ND
Trichlorofluoromethane						ND
Vinyl chloride						ND
Benzene						NR
Ethyl benzene						NR
Toluene						NR
total-Xylenes						NR
Surrogates:						
8010	65-135%	97	94		107	99
8020	65-135%	NR	NR		NR	NR

Scott Voigt
Laboratory Director

4/12/96
Date

Compliance & Closure, Inc.

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

PROJECT NO.	PROJECT NAME/SITE
1059-1	Jack Holland Sr. Oil

SAMPLERS (SIGN) Gary R. Mulkey (PRINT) Gary R. Mulkey

ANALYSIS REQUESTED — P.O. #:

Samples kept @ 4°C

SAMPLE IDENTIFICATION	DATE	TIME	COMP	GRAB	PRES. USED	ICED	NO. CONTAINERS	SAMPLE TYPE	BTEX (602/8020)	TPHg (8015)	TPHd (8015)	TOG (1664/5520)	601(8010)	624/8240	625/8270	REMARKS
MW-1-1	4/1/96	9:35		X	None	X	1	Soil	X	X	X		X			
MW-1-2	4/1/96	10:00		X		X	1	Soil	X	X	X		X			
MW-2-1	4/1/96	11:39		X		X	1	Soil	X	X	X		X			
MW-2-2	4/1/96	12:10		X		X	1	Soil	X	X	X		X			
MW-3-1	4/1/96	2:15		X		X	1	Soil	X	X	X	X	X			
MW-8-2	4/1/96	2:35		X		X	1	Soil	X	X	X	X	X			

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	LABORATORY:	PLEASE SEND RESULTS TO:
Gary R. Mulkey	4/2/96	10:25	4/2/96	Onsite Environmental Lab Fremont, CA	COMPLIANCE & CLOSURE 7020 KOLL CENTER SUITE 134 PLEASANTON, CA 94566 (510) 426-5395 426-5391 - Fax
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	REQUESTED TURNAROUND TIME: Normal	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:		
RELINQUISHED BY:	DATE	TIME	RECEIVED BY LABORATORY:	RECEIPT CONDITION	PROJECT MANAGER: GARY R. MULKEY

ONSITE
ENVIRONMENTAL
LABORATORIES, INC.
[redacted]

Analytical Laboratory Report

EPA Methods 8010 / 8020

Date Sampled: 09-Apr-96
Date Received: 09-Apr-96
Date Analyzed: 11-Apr-96
Date Reported: 12-Apr-96
Lab ID Number: 1C037-02
Field ID Number: MW-1

Project Manager: Gary Mulkey
Client: Compliance & Closure, Inc.
Project Number: 12059-1
Report Number: 1C03702.hal
Units: ug/l
Matrix: Water
Dilution Factor: 1

Analytes	DL	Results	Analytes	DL	Results
Bromodichloromethane	0.5	ND	1,2-dichloropropane	0.5	ND
Bromoform	1	ND	c-1,3-dichloropropene	0.5	ND
Bromomethane	1	ND	t-1,3-dichloropropene	0.5	ND
Carbon tetrachloride	0.5	ND	Methylene chloride	1	ND
Chlorobenzene	1	ND	1,1,2,2-tetrachlorethane	0.5	ND
Chloroethane	1	ND	Tetrachloroethene	0.5	ND
2-chloroethylvinylether	1	ND	1,1,1-trichloroethane	0.5	ND
Chloroform	0.5	ND	1,1,2-trichloroethane	0.5	ND
Chloromethane	1	ND	Trichloroethene	0.5	ND
Dibromochloromethane	0.5	ND	Trichlorofluoromethane	1	ND
1,2-dichlorobenzene	1	ND	Vinyl chloride	1	ND
1,3-dichlorobenzene	1	ND	Benzene	0.5	NR
1,4-dichlorobenzene	1	ND	Ethyl benzene	0.5	NR
Dichlorodifluoromethane	1	ND	Toluene	0.5	NR
1,1-dichloroethane	0.5	ND	total-Xylenes	0.5	NR
1,2-dichloroethane	0.5	ND			
1,1-dichloroethene	0.5	ND	Surrogates:		
cis-1,2-dichloroethene	0.5	NR	8010	65-135%	96
trans-1,2-dichloroethene	0.5	ND	8020	65-135%	NR

NOTES:
NR - Not requested
COC - Chain of custody
ND - Analytes not detected at, or above the stated detection limit.
ug/l - Micrograms per liter (PPB)
DL - Detection limit.
PQL - Practical quantiation limit, multiply the DL by the dilution factor

PROCEDURES:
This analysis was performed using EPA Method 8010, EPA Method 8020, and EPA Method 5030 .

CERTIFICATION:
California Department of Health Services, ELAP certificate #1774
Onsite Environmental Laboratories, Inc.; 5500 Boscell Common, Fremont, CA, 94538; (510) 490-8571

Gareth Vogt
Laboratory Director

4/19/96
Date

ONSITE
ENVIRONMENTAL
LABORATORIES, INC.
[redacted]

Analytical Laboratory Report

EPA Methods 8010 / 8020

Date Sampled: 09-Apr-96
Date Received: 09-Apr-96
Date Analyzed: 11-Apr-96
Date Reported: 12-Apr-96
Lab ID Number: 1C037-03
Field ID Number: MW-2

Project Manager: Gary Mulkey
Client: Compliance & Closure, Inc.
Project Number: 12059-1
Report Number: 1C03703.hal
Units: ug/l
Matrix: Water
Dilution Factor: 1

Analytes	DL	Results	Analytes	DL	Results
Bromodichloromethane	0.5	ND	1,2-dichloropropane	0.5	ND
Bromoform	1	ND	c-1,3-dichloropropene	0.5	ND
Bromomethane	1	ND	t-1,3-dichloropropene	0.5	ND
Carbon tetrachloride	0.5	ND	Methylene chloride	1	ND
Chlorobenzene	1	ND	1,1,2,2-tetrachlorethane	0.5	ND
Chloroethane	1	ND	Tetrachloroethene	0.5	ND
2-chloroethylvinylether	1	ND	1,1,1-trichloroethane	0.5	ND
Chloroform	0.5	ND	1,1,2-trichloroethane	0.5	ND
Chloromethane	1	ND	Trichloroethene	0.5	ND
Dibromochloromethane	0.5	ND	Trichlorofluoromethane	1	ND
1,2-dichlorobenzene	1	3.1	Vinyl chloride	1	ND
1,3-dichlorobenzene	1	ND	Benzene	0.5	NR
1,4-dichlorobenzene	1	ND	Ethyl benzene	0.5	NR
Dichlorodifluoromethane	1	ND	Toluene	0.5	NR
1,1-dichloroethane	0.5	ND	total-Xylenes	0.5	NR
1,2-dichloroethane	0.5	ND			
1,1-dichloroethene	0.5	ND	Surrogates:		
cis-1,2-dichloroethene	0.5	NR	8010	65-135%	97
trans-1,2-dichloroethene	0.5	ND	8020	65-135%	NR

NOTES:
NR - Not requested
COC - Chain of custody
ND - Analytes not detected at, or above the stated detection limit.
ug/l - Micrograms per liter (PPB)
DL - Detection limit.
PQL - Practical quantiation limit, multiply the DL by the dilution factor

PROCEDURES:
This analysis was performed using EPA Method 8010, EPA Method 8020, and EPA Method 5030 .

CERTIFICATION:
California Department of Health Services, ELAP certificate #1774
Onsite Environmental Laboratories, Inc.; 5500 Boscell Common, Fremont, CA, 94538; (510) 490-8571

David Wright
Laboratory Director

4/19/96
Date

ONSITE
ENVIRONMENTAL
LABORATORIES, INC.
[redacted]

Analytical Laboratory Report

EPA Methods 8010 / 8020

Date Sampled: 09-Apr-96
Date Received: 09-Apr-96
Date Analyzed: 11-Apr-96
Date Reported: 12-Apr-96
Lab ID Number: 1C037-04
Field ID Number: MW-3

Project Manager: Gary Mulkey
Client: Compliance & Closure, Inc.
Project Number: 12059-1
Report Number: 1C03704.hal
Units: ug/l
Matrix: Water
Dilution Factor: 1

Analytes	DL	Results	Analytes	DL	Results
Bromodichloromethane	0.5	ND	1,2-dichloropropane	0.5	ND
Bromoform	1	ND	c-1,3-dichloropropene	0.5	ND
Bromomethane	1	ND	t-1,3-dichloropropene	0.5	ND
Carbon tetrachloride	0.5	ND	Methylene chloride	1	ND
Chlorobenzene	1	ND	1,1,2,2-tetrachlorethane	0.5	ND
Chloroethane	1	ND	Tetrachloroethene	0.5	ND
2-chloroethylvinylether	1	ND	1,1,1-trichloroethane	0.5	ND
Chloroform	0.5	ND	1,1,2-trichloroethane	0.5	ND
Chloromethane	1	ND	Trichloroethene	0.5	ND
Dibromochloromethane	0.5	ND	Trichlorofluoromethane	1	ND
1,2-dichlorobenzene	1	1.4	Vinyl chloride	1	ND
1,3-dichlorobenzene	1	ND	Benzene	0.5	NR
1,4-dichlorobenzene	1	ND	Ethyl benzene	0.5	NR
Dichlorodifluoromethane	1	ND	Toluene	0.5	NR
1,1-dichloroethane	0.5	ND	total-Xylenes	0.5	NR
1,2-dichloroethane	0.5	ND			
1,1-dichloroethene	0.5	ND	Surrogates:		
cis-1,2-dichloroethene	0.5	NR	8010	65-135%	103
trans-1,2-dichloroethene	0.5	ND	8020	65-135%	NR

NOTES:
NR - Not requested
COC - Chain of custody
ND - Analytes not detected at, or above the stated detection limit.
ug/l - Micrograms per liter (PPB)
DL - Detection limit.
PQL - Practical quantiation limit, multiply the DL by the dilution factor

PROCEDURES:
This analysis was performed using EPA Method 8010, EPA Method 8020, and EPA Method 5030 .

CERTIFICATION:
California Department of Health Services, ELAP certificate #1774
Onsite Environmental Laboratories, Inc.; 5500 Boscell Common, Fremont, CA, 94538; (510) 490-8571

Gareth Voight
Laboratory Director

4/19/96
Date

ONSITE
ENVIRONMENTAL
LABORATORIES, INC.
[redacted]

QC Data Report

EPA Methods 8010 / 8020

Date Sampled: 11-Apr-96
Date Received: 11-Apr-96
Date Analyzed: 11-Apr-96
Date Reported: 11-Apr-96
Lab ID Number: 1C035-04
Field ID Number: 102-105

Project Manager: Gary Mulkey
Client: Compliance & Closure, Inc.
Project Number: 12059-1
Report Number: 1C037.QAC
Units: ug/l
Matrix: Water

Analytes	SpikeAmount	MS %Rec.	MSD %Rec.	RPD	LCS %Rec.	Blank
Bromodichloromethane						ND
Bromoform						ND
Bromomethane						ND
Carbon tetrachloride						ND
Chlorobenzene	10	101	100	1	103	ND
Chloroethane						ND
2-chloroethylvinylether						ND
Chloroform						ND
Chloromethane						ND
Dibromochloromethane						ND
1,2-dichlorobenzene						ND
1,3-dichlorobenzene						ND
1,4-dichlorobenzene						ND
Dichlorodifluoromethane						ND
1,1-dichloroethane						ND
1,2-dichloroethane						ND
1,1-dichloroethene	10	105	103	2	105	ND
cis-1,2-dichloroethene						NR
trans-1,2-dichloroethene						ND
1,2-dichloropropane						ND
c-1,3-dichloropropene						ND
t-1,3-dichloropropene						ND
Methylene chloride						ND
1,1,2,2-tetrachlorethane						ND
Tetrachloroethene						ND
1,1,1-trichloroethane						ND
1,1,2-trichloroethane						ND
Trichloroethene	10	100	98	2	102	ND
Trichlorofluoromethane						ND
Vinyl chloride						ND
Benzene						NR
Ethyl benzene						NR
Toluene						NR
total-Xylenes						NR
Surrogates:						
8010	65-135%	107	108		105	100
8020	65-135%	NR	NR		NR	NR

David Voget
Laboratory Director

4/19/96
Date

ONSITE
ENVIRONMENTAL
LABORATORIES, INC.
[redacted]

ANALYTICAL LABORATORY REPORT

EPA Method 418.1

Date Sampled:	4/9/96	**Project Manager**	Gary R. Mulkey
Date Received:	4/9/96	**Client:**	Compliance & Closure
Date Analyzed:	4/17/96	**Project:**	12059-1
Date Reported:		**Matrix:**	WATER
Report #:	1C037Z.RPT	**COC #:**	NA
Lab #:	6C042	**Units:**	ug/L

Lab ID No.	Field ID No.	*TRPH DL Factor*	TRPH 418.1 (ppb)	*DETECTION LIMIT*
1C037-04	MW-3	41	41000	5000

NOTES:
NR - Analysis not requested.
COC - Chain of Custody
ND - Analytes not detected at, or above the stated detection limit.
mg/Kg - Milligrams per kilogram (ppm).
mg/L - Micrograms per litre (ppm).
DL - Detection Limit
DF - Dilution factor.
PQL - Practical Quantitation Limit - Multiply DL by the DF to obtain the PQL for a specific sample.

PROCEDURES:
TRPH - Total Recoverable Petroleum Hydrocarbons by EPA Method 418.1.

CERTIFICATION:
California Department of Health Services ELAP Certificate #1842
Onsite Environmental Laboratories, Inc., 5500 Boscell Common, Fremont, CA 94538 (510) 490-8571/(510) 490-8572/Fax

Gerald Voight
Laboratory Director

4/19/96
Date

ONSITE
ENVIRONMENTAL
LABORATORIES, INC.
[redacted]

Analytical Laboratory Report
TPH-E Diesel
EPA Method 8015 Modified

COC #:	NA	**Proj Mgr:**	Gary R. Mulkey
Date Sampled:	4/9/96	**Client:**	Compliance & Closure
Date Received:	4/9/96	**Project:**	12059-1
Date Extracted:	4/11/96	**Matrix:**	See below
Report Number:	6C043D.RPT	**Units Soil:**	mg/Kg
Lab Number:	6C043	**Units Water:**	ug/L

Lab ID No.	Field ID No.	Date Sampled	Date Extracted	Date Analyzed	TPH-E Diesel	TPH-E Sur. %	TPH-E DF	Matrix
6C043-02	MW-1	4/9/96	4/11/96	4/12/96	9700*	D	10	Water
6C043-03	MW-2	4/9/96	4/11/96	4/12/96	8900*	D	10	Water
6C043-04	MW-3	4/9/96	4/11/96	4/12/96	1100*	65	1	Water

Reporting Limits SOIL mg/Kg	1
Reporting Limits WATER ug/L	50

NOTES:
NR - Not requested
NC - Not confirmed
COC - Chain of custody
ND - Analytes not detected at, or above the reporting limit
Sur. % - Percent surrogate recovery
mg/Kg - Milligrams per kilogram (PPM)
ug/L - Micrograms per liter (PPB)
PQL - Practical Quantitation Limit. Equals detection limit times the dilution factor.
D - Surrogate was diluted out
M - Matrix effects
DF - Dilution Factor
* - Sample chromatogram does not match standard chromatogram.
TPH-E Diesel - Total petroleum hydrocarbons extractable quantitated as Diesel

PROCEDURES:
TPH-E - This analysis was performed using EPA Method 8015 Mod. and EPA Method 3550B

CERTIFICATION:
California Department of Health Services ELAP
Onsite Environmental Laboratories, 5500 Boscell Common, Fremont, CA 94538 (510) 490-8571

Mark Voigt
Laboratory Director

4/19/96
Date

ONSITE
ENVIRONMENTAL
LABORATORIES, INC.
[redacted]

Analytical Laboratory Report
TPH-P GASOLINE / BTEX
EPA Methods 8015 Modified / 8020

COC #:	NA	**Proj Mgr:**	Gary R. Mulkey
Date Sampled:	4/9/96	**Client:**	Compliance & Closure
Date Received:	4/9/96	**Project:**	12059-1
Report Number:	6C043GB.RPT	**Matrix:**	See below
Lab Number:	6C043	**Units Soil:**	mg/Kg
		Units Water:	ug/L

Lab ID No.	Field ID No.	Date Analyzed	Benzene	Toluene	Ethyl-benzene	Xylenes total	TPH-P Gasoline	BTEX Sur. %	BTEX DF	Matrix
6C043-01	**BB-1**	4/13/96	ND	0.5	ND	0.83	ND	106	1	Water
6C043-02	**MW-1**	4/13/96	12	83	22	91	33000	105	5	Water
6C043-03	**MW-2**	4/13/96	ND	5.1	4.8	160	6900*	99	5	Water
6C043-04	**MW-3**	4/13/96	ND	ND	ND	ND	ND	98	5	Water

Reporting Limits SOIL mg/Kg	0.005	0.005	0.005	0.005	1
Reporting Limits WATER ug/L	0.5	0.5	0.5	0.5	50

NOTES:
NR - Not requested
NC - Not confirmed
COC - Chain of custody
ND - Analytes not detected at, or above the reporting limit
Sur. % - Percent surrogate recovery
mg/Kg - Milligrams per kilogram (PPM)
ug/L - Micrograms per liter (PPB)
PQL - Practical Quantitation Limit. Equals detection limit times the dilution factor.
D - Surrogate was diluted out
M - Matrix effects
DF - Dilution Factor
* - Sample chromatogram does not match standard chromatogram.

PROCEDURES:
BTEX - This analysis was performed using EPA Method 8020 and EPA Method 5030
TPH-P Gasoline - This analysis was performed using EPA Method 8015 Mod. and EPA Method 5030

CERTIFICATION:
California Department of Health Services ELAP
Onsite Environmental Laboratories, 5500 Boscell Common, Fremont, CA 94538 (510) 490-8571

Laboratory Director

4/19/96
Date

ONSITE
ENVIRONMENTAL
LABORATORIES, INC.
[redacted]

QC DATA REPORT

Date Sampled:	4/9/96	Proj Mgr:	Gary R. Mulkey
Date Extracted:	4/17/96	Client:	Compliance and Closure
Date Analyzed:	4/17/96	Project:	12059-1
Lab ID #:	1C037-04	Matrix:	Water
Report #:	0417Z.QAC	C-O-C #:	NA

Parameter	Blank mg/kg	SP mg/kg	LCS mg/kg	LCSD mg/kg	PR1 %	PR2 %	RPD %
TRPH	ND	48	54	57	113	119	5.4

DEFINITION OF TERMS:

R - Results of Analysis
SP - Spike Concentration Added to Sample
MS - Matrix Spike Results
MSD - Matrix Spike Duplicate Results
PR1 - Percent Recovery of MS: (MS - R) / SP X 100
PR2 - Percent Recovery of MSD: (MSD - R) / SP x 100
RPD - Relative Percent Difference: (MS - MSD) /((MS + MSD)/2) X 100

Laboratory QC Criteria

Parameter	
Surrogate	130%
%RPD	30%

ONSITE
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LABORATORIES, INC.
[redacted]

QC DATA REPORT
TPH-E
EPA Method 8015 Modified

COC #:	NA	**Proj Mgr:**	Gary R. Mulkey
Date Sampled:	4/4/96	**Client:**	Compliance & Closure
Date Received:	4/5/96	**Project:**	12050-2
Date Analyzed:	4/9/96		
Date Extracted:	4/9/96	**Matrix:**	Soil
Report Number:	0409DM.QAC	**Units:**	mg/Kg
Lab Number:	6c040		

Parameter	Blank Result mg/Kg	Spike Level mg/Kg	LCS Result mg/Kg	LCS Recov. %	Sample Result mg/Kg	MS Result mg/Kg	MS Recov. %	MSD Result mg/Kg	MSD Recov. %	RPD %
TPH-E diesel	ND	33.3	29.6	89	ND	31.9	96	27.9	84	13.4
surr %rec dies.	103	-	-	97	114	-	109	-	92	-

DEFINITION OF TERMS:

ND - Analytes not detected at, or above the reporting limit
MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference: (MS - MSD) /((MS + MSD)/2) X 100
LCS - Laboratory Control Spike
LCSD- Laboratory Control Spike Duplicate

LABORATORY QC CRITERIA

Parameter	Acceptable % Recoveries		
TPH-E	65%	to	135%
%RPD	0%	to	35%

ONSITE
ENVIRONMENTAL
LABORATORIES, INC.

[redacted]

QC DATA REPORT
TPH-P GASOLINE / BTEX
EPA Methods 8015 Modified / 8020

COC #:	NA	**Proj Mgr:**	Gary Mulkey
Date Sampled:	4/8/96	**Client:**	Compliance & Closure
Date Received:	4/8/96	**Project:**	12059-1
Date Analyzed:	4/13/96	**Matrix:**	Water
Report Number:	0413B.QAC	**Units:**	ug/L
Lab Number:	6C043QC		

Parameter	Blank Result ug/L	Spike Level ug/L	LCS Result mg/Kg	LCS Recov. %	LCSD Result mg/Kg	LCSD Recov. %	RPD %
MTBE	ND	10	10.7	107	11.6	116	8.1
Benzene	ND	10	10.9	109	11.0	110	0.9
Toluene	ND	10	10.7	107	10.7	107	<1%
Ethyl benzene	ND	10	10.5	105	10.6	106	0.9
total Xylenes	ND	30	32.0	107	31.8	106	0.6
TPH-P Gasoline	ND	2180	2612	120	2539	116	2.8
surr %rec BTEX	96	-	-	104	-	106	-

DEFINITION OF TERMS:
ND - Analytes not detected at, or above the reporting limit
MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference: (MS - MSD) /((MS + MSD)/2) X 100
LCS - Laboratory Control Spike
LCSD- Laboratory Control Spike Duplicate

LABORATORY QC CRITERIA

Parameter	Acceptable % Recoveries		
Benzene	70%	to	130%
Toluene	70%	to	130%
Ethylbenzene	70%	to	130%
Xylenes Total	70%	to	130%
%RPD	0%	to	30%

Compliance & Closure, Inc.

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

PROJECT NO.	PROJECT NAME/SITE
12057-1	Holland Oil Company San Leandro, CA

SAMPLERS (SIGN) Gary R. Mulkey (PRINT) Gary R. Mulkey

ANALYSIS REQUESTED

P.O. #:

Samples kept @ 4°C

SAMPLE IDENTIFICATION	DATE	TIME	COMP	GRAB	PRES. USED	ICED	NO. CONTAINERS	SAMPLE TYPE	BTEX (602/8020)	TPHg (8015)	TPHd (8015)	EOG (418.1/5520)	601/8010	624/8240	625/8270	REMARKS
BB-1	4/9/96	8:45		X	HCl	X	2	Water	X	X	[redacted]		[redacted]			
MW-1	4/9/96	8:50		X		X	6		X	X	X		X			
MW-2	4/9/96	9:30		X		X	6		X	X	X		X			
MW-3	4/9/96	10:35		X	↓	X	6	↓	X	X	X	X	X			

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
Gary R. Mulkey	4/9/96	1131	Theresa Roberts 4/9/96
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY	DATE	TIME	RECEIVED BY LABORATORY

LABORATORY: Onsite Environmental Labs Fremont, CA

REQUESTED TURNAROUND TIME: NORMAL

RECEIPT CONDITION:

PLEASE SEND RESULTS TO:

COMPLIANCE & CLOSURE
7020 KOLL CENTER
SUITE 134
PLEASANTON, CA 94566
(510) 426-5395

PROJECT MANAGER: GARY R. MULKEY