

ERAS

Environmental, Inc.

R02572

1533 B Street

Hayward, CA 94541

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LIMITED SOIL INVESTIGATION
See the Doctor Transmission
16611 East 14th Street
San Leandro, California
ERAS Project Number 03088B

Prepared for:

Clayton Keats
See the Doctor Transmission
16611 East 14th Street
San Leandro, CA 94578

Prepared by:

ERAS Environmental, Inc.
December 19, 2003

ERAS

Environmental, Inc.

1533 B Street

Hayward, CA 94541

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erasenvironmental@sbcglobal.net

December 19, 2003

Mr. Clayton Keats
See the Doctor Transmission
16611 East 14th Street
San Leandro, CA

Subject: Limited Soil Investigation
See the Doctor Transmission
16611 East 14th Street
San Leandro, California
ERAS Project Number 03088B

Dear Mr. Keats:

ERAS Environmental, Inc. is pleased to present the results of the Limited Soil Investigation conducted at 16611 East 14th Street in San Leandro, California. A total of twelve soil borings were drilled on November 19, 2003. Soil samples were collected from the borings and submitted for laboratory chemical analysis. The results of the investigation are presented in the attached report.

Please call if you have any questions regarding the information presented in this report.

Respectfully,
ERAS Environmental, Inc.



A handwritten signature in cursive script that reads "David Siegel".

David Siegel, R.E.A. II 20200
Project Manager

A handwritten signature in cursive script that reads "Gail M. Jones".

Gail Jones, R.G. 5725
Senior Geologist

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1.0 Introduction

This report presents the results of the Limited Soil Investigation conducted by ERAS Environmental, Inc. (ERAS) at 16611 East 14th Street in San Leandro, California (hereinafter the Property). The location of the Property is shown on **Figure 1**.

The scope of work performed was based on the Workplan Summary for Limited Soil Investigation prepared by ERAS, dated November 7, 2003. The Workplan Summary was submitted to Mr. Barney Chan of the Alameda County Health Care Services Agency (ACHCSA). The ACHCSA approved the Workplan Summary with some requests for additional technical information, in a letter dated November 13, 2003.

2.0 Background

PIERS Phase II Investigation

On May 23, 2003, PIERS drilled six shallow soil borings at the Property. The borings were drilled through concrete or asphalt in 5 locations, the sixth was collected in an unpaved area. The samples were collected from depths of 6 inches (0.5 feet), according to PIERS and the sample descriptions on the chain-of-custody documentation. Fill beneath the paved surfaces consisted of 2-3 inches of sand, silt and gravel. No fill was present in the unpaved area.

Soil samples were collected in the parts washing machine area (PW#1 and PW#2), oil storage areas (OS#1 and OS#2) and in the transmission storage rack areas (TR#1 and TR#2). Sample PW#1 was analyzed for volatile organic compounds by EPA 8260; no VOCs were detected. Samples OS#1, OS#2 and PW#2 were analyzed for petroleum oil and grease (O&G) by method E1164. O&G concentrations were detected in samples OS#1 and PW#2 at 150mg/Kg and 270 mg/Kg. Samples were collected in the hydraulic lift area and in the fresh oil storage area but were not analyzed.

Total petroleum hydrocarbon as transmission fluid (TPH-to) was detected at 4,680 mg/Kg in the sample TR#1 collected from 6-inches below surface, directly beneath the asphalt area of the northern transmission rack storage area. TPH-to was detected at 14,700 mg/Kg in soil sample TR#2 collected from 6-inches below surface in the unpaved (western) transmission rack area. These two areas were small depressions where surface water runoff appeared to collect.

PIERS Phase 2 Investigation – Additional Sampling

PIERS excavated soil from the two locations where elevated concentrations of TPH-to were detected. On June 6, 2003, four confirmatory soil samples were collected from the excavations. Soil samples were collected from a selected sidewall at a depth of approximately 1.5 feet and from the bottom of each excavation at a depth of approximately 2.4 feet.

The soil samples were sent to McCampbell Analytical, Inc. for analysis for transmission oil. TPH-to was detected at 570 mg/Kg in the bottom sample in the transmission rack #2 area, and at 810 mg/Kg in a sidewall sample from the transmission rack #1 area. These TPH-to concentrations were above the Regional Water Quality Control Board (RWQCB) Environmental Screening Level (ESL) of 500 mg/Kg for total petroleum hydrocarbons as middle distillates. Unfortunately, it appears that PIERS may have reversed the sample numbers (TR#2 in the area designated as TR#1 in the previous investigation) so it is uncertain from which area each of these samples were collected.

3.0 Field Investigation

The purpose of the investigation was to further investigate the extent of petroleum hydrocarbons, assumed to be transmission fluid, in soil at the subject site.

3.1 Pre-Drilling Activities

ERAS received a letter dated October 20, 2003, which was sent to Mr. Clayton Keats by Mr. Barney Chan of the ACHCSA. The letter provided technical comments based on ERAS Technical Summary Report, dated September 16, 2003. Thereafter, ERAS produced a workplan summary dated November 7, 2003 which addressed the issues discussed in this letter ERAS proposed the drilling of ten soil borings in the area around the parts racks and in the parts washing area. Samples in the parts racks area would be analyzed for hydraulic oil and the samples in the parts washing area would be analyzed for mineral spirits.

The workplan was submitted to Mr. Chan who provided additional technical comments in a letter dated November 13, 2003. The ACHCSA requested an additional two borings, one additional near the parts racks and one near the hydraulic lift. The ACHCSA also requested that the type of petroleum that was found by PIERS be characterized by evaluation of chromatograms for the samples. If the petroleum release was determined to be motor oil, then it was requested that a selected sample (preferably the sample with the greatest petroleum impact) be analyzed for the entire suite of waste oil parameters.

Copies of the letters from the ACHCSA are included as **Appendix A**.

An ERAS representative visited the site on November 18, 2003 to mark the boring locations and to meet a concrete coring contractor to have the asphalt cored for borings B-1 through B-6 and B-12, and have the concrete cored at boring location B-7.

3.2 Soil Boring and Sampling

On November 19, 2003, a total of twelve three-inch diameter soil borings were advanced using a hand auger. The locations of borings B-1 through B-12 are shown on **Figure 2**.

All twelve soil borings were advanced to three feet below ground surface (bgs). Standard Operating Procedures for Geoprobe soil sampling are included in **Appendix B**. The soil observed in all borings consisted of silty clay, clayey silt, or silt.

One soil sample from the bottom of each boring at a depth of 3 to 3.5 feet was collected for chemical analysis. A hand sampling device equipped with a clean brass liner was pounded into the ground using a slide hammer. The brass liner containing the sample was sealed at each end with Teflon sheeting and plastic caps. The sample was then labeled and stored in a cooler with ice until it was relinquished to the analytical laboratory.

3.3 Waste Removal

Soil cuttings from the current and previous investigations are temporarily stored in a 30-gallon and a 55-gallon drum on the side of the parts storage shed pending proper disposal.

One soil sample was collected from each drum on November 20, 2003 following the Standard Operating Procedures for Soil Sampling By Hand, included in **Appendix B**. The two soil samples were combined by the laboratory into one composite sample for analysis. The composite sample was analyzed for diesel and motor oil hydrocarbons by EPA Method 8015M, BTEX by EPA Method 8020 and California Action Manual (CAM) 17 metals by EPA Method 6010B ICP/7471 AA.

As a result of the elevated concentration of lead in the sample, the sample was then analyzed for lead by the California WET Extraction test by EPA Method 6010B ICAP. As a result of the elevated concentration of soluble lead detected in the sample, the sample was analyzed for lead using the TCLP procedure.

The disposal is pending with a certified waste hauler and a certificate of disposal will be provided to the ACHCSA under separate cover.

4.0 Results of Investigation

4.1 Analytical Results for Soil Samples from Borings

All samples were kept refrigerated until transport to the laboratory on November 20, 2003. The soil samples were submitted to North State Labs, a State of California-certified environmental laboratory, in South San Francisco, California. The laboratory analytical reports and chain-of-custody forms are included as **Appendix C**.

The soil samples collected from all the borings were analyzed for fuel range hydrocarbons that includes diesel fuel, kerosene and motor oils by EPA Method 8015M. The carbon-chain range of hydraulic oil and transmission fluid overlaps the ranges of kerosene and diesel fuel. Samples from borings B-5 and B-6 were also analyzed for mineral spirits. None of these constituents were detected above the laboratory method reporting limits in any of the samples.

As a result of the finding of an elevated lead concentration in the samples collected for waste disposal, the soil samples were analyzed for the presence of total lead by EPA Method 6010B. Lead was detected at concentrations of 4.5 to 6.7 mg/Kg. These lead concentrations appears to be within the expected range of background concentrations (Roberts Landing Development Site, San Leandro, 1994), and below the RWQCB ESL of 200 mg/Kg (Summary Table B, residential, July 2003).

4.2 Discussion of Chromatograms

Since there were no petroleum hydrocarbon compounds detected in the samples collected by ERAS, the chromatograms for the samples collected by PIERS that contained elevated concentrations of hydraulic oil (Trans Rack #1 or TR#1 and Trans Rack #2 or TR#2) were obtained and compared to chromatograms of standards provided by North State Labs. Copies of the chromatogram patterns of the standards and samples are included in **Appendix D**.

The Trans Rack #1 consists of only heavy hydrocarbons. According to Amy Domboski of North State Labs, this pattern represents a sample of residual hydrocarbons such as oil and grease. She indicated this is a pattern that would be obtained by analyzing a samples of asphalt or a sample containing asphalt.

The Trans Rack #2 sample consists of a lighter set of peaks and a heavy set of peaks. The peaks do not match the laboratory standards for kerosene and Stoddard solvent. The lighter peaks fall within the diesel and motor oil standard range. According to Ms. Domboski transmission fluid or hydraulic oil is a mixture of crude oil mixed with additives, usually synthesized mineral oil or synthetic oil. It is the combination of these in a sample that enables an analyst to identify the presence of hydraulic oil. The Trans Rack #2 sample matches the pattern of hydraulic oil, according to Ms. Domboski.

transmission fluid

4.3 Analytical Results for Soil Samples from Drums

The laboratory reports for waste soil samples are included as **Appendix E**. The composite soil sample was found to contain toluene at a concentration of 7 micrograms per kilogram (ug/Kg) and 32 ug/Kg xylenes and hydraulic oil at a concentration of 1,110 mg/Kg. Concentrations of metals, except for lead, appeared to be within the normal range of background concentrations that would be expected and less than the RWQCB ESLs. The concentration of lead was 295 mg/Kg. The WET test indicated the concentration of soluble

lead in the sample was 93.4 milligrams per liter. The sample is being analyzed for soluble lead using the TCLP. The type of waste will be determined following the results of this test.

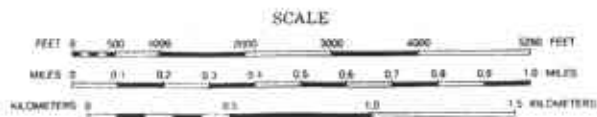
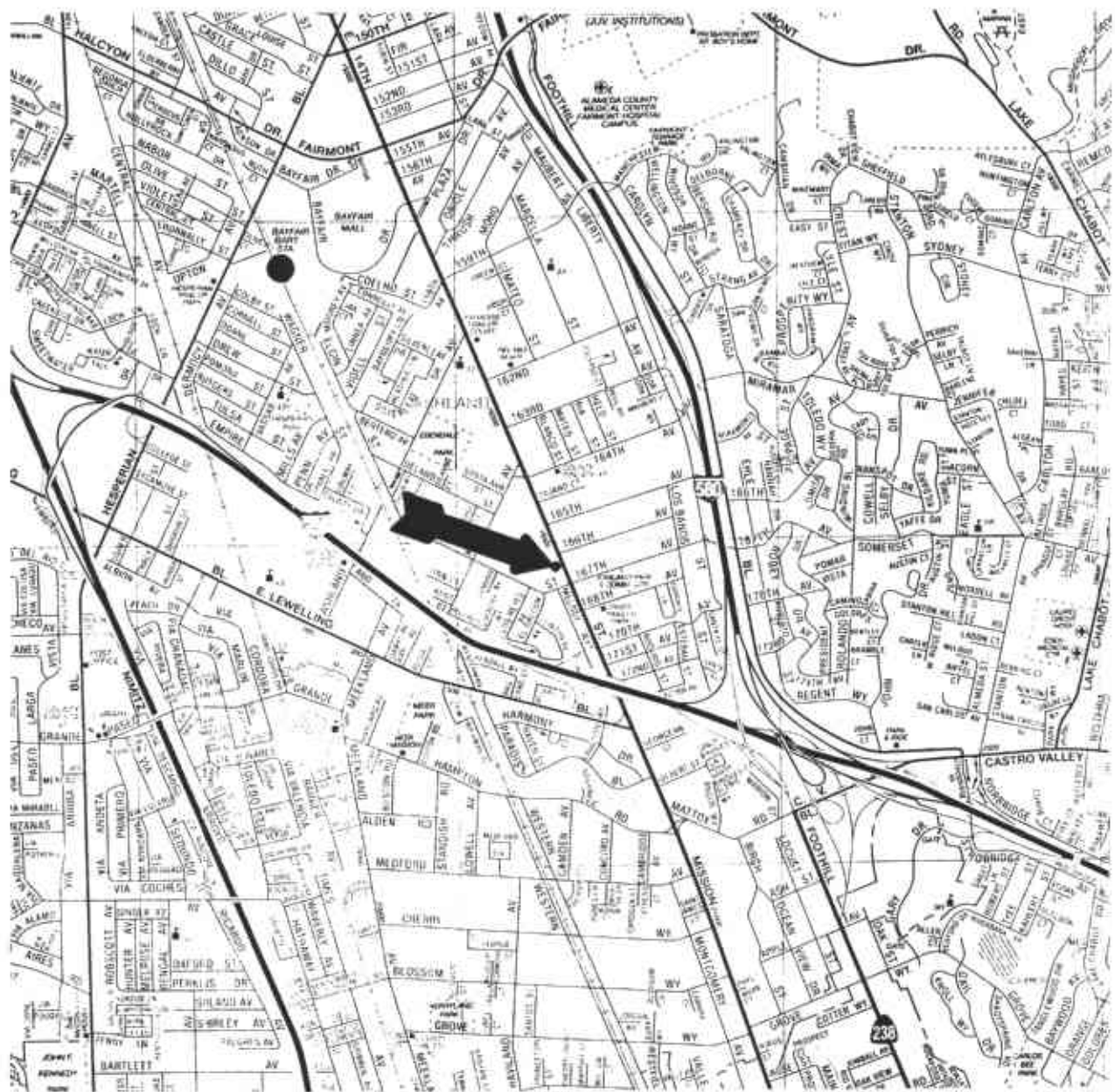
5.0 Conclusions and Recommendations

This investigation did not indicate the presence of contamination in the soil samples collected by ERAS. Concentrations of lead were within normal levels. Review of chromatograms for samples collected at the site by PIERS indicated the hydrocarbons detected at elevated concentrations were hydraulic oil. The extent of these hydrocarbons at the subject site appears to be limited to the immediate area of the PIERS excavations (see locations TR#1 and TR#2 on Figure 2).

Based on the results of this investigation, ERAS recommends no further work be performed at 16611 East 14th Street in San Leandro, California. ERAS recommends the site be considered for case closure by the ACHCSA.

6.0 Limitations

This report has been prepared by ERAS according to the State and local agency suggested guidance documents for these investigations and in general accordance with the accepted standard of practice that exists in Northern California at the time the investigation was performed. The interpretations, conclusions and recommendations made herein are based upon the data and analysis for the soil and water samples collected on-site. ERAS is not responsible for errors in laboratory analysis and reporting, or for information withheld during the course of the study. The purpose of this study is to screen for the presence of contamination that may affect the use or value of the Property. As such, the evaluation of the geologic and environmental conditions on this site is made with very limited data. Judgements leading to conclusions are generally made with an incomplete knowledge of the conditions present. Additional conditions and materials at the site could exist that were not encountered during this investigation. No warranty or guarantee is expressed or implied therein.



Base Map: California State Automobile Association, Hayward Map, dated 12-00

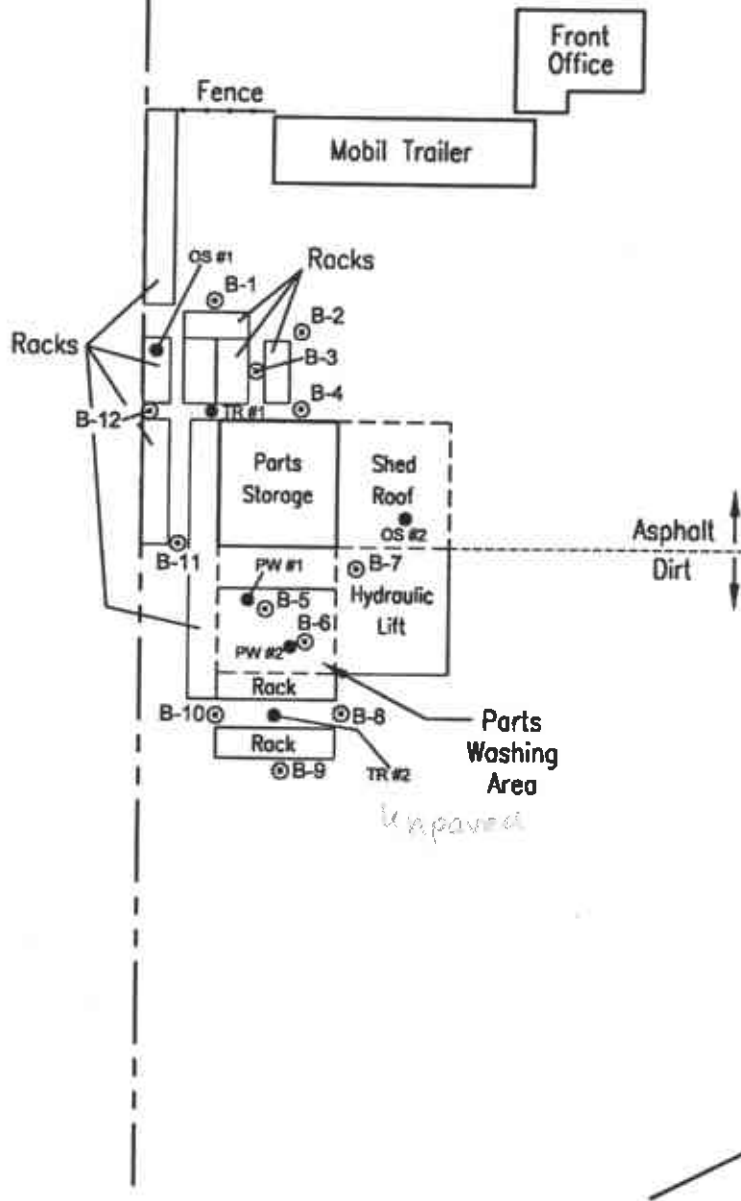
SITE LOCATION MAP

DATE
09/03
REVIEWED BY
DS

16611 East 14th Street
San Leandro, California

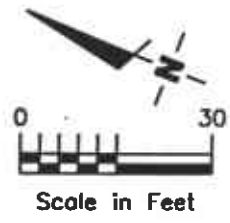
JOB NUMBER
03088A
FIGURE
1

EAST 14TH STREET



EXPLANATION

- ⊙ ERAS soil borings
- PIERS soil borings



BORING LOCATION MAP

DATE
12/03
REVIEWED BY
DS

See The Doctor Transmission
16611 East 14th Street
San Leandro, California

JOB NUMBER
3088B
FIGURE
2

ERAS Environmental Inc.

Appendix A

Letters to Mr. Clayton Keats

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



October 20, 2003

Mr. Clayton Keats
See The Doctor Transmission
16611 E. 14th St.
San Leandro, CA 94578

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Dear Mr. Keats:

Subject: Leak Case No. RO0002572, 16611 E. 14th St., San Leandro, CA 94578

Alameda County Environmental Health staff has received and reviewed the September 16, 2003 ERAS Environmental Technical Summary Report for the referenced site. This report includes the Basics Phase 1 ESA Report, the ERAS ETS Report, Piers Phase II Investigation (5/2003) and Piers Phase II Investigation (6/2003). Additional information is necessary to progress toward site closure. We request that you address the following technical comments listed below.

TECHNICAL COMMENTS

1. The area of surface releases of petroleum hydrocarbon (assumed to be transmission fluid) has not been adequately determined. Individual "hot spots" have been excavated and sampled, however, the extent of this release has not been verified. The entire transmission racks storage areas has not been characterized.
2. No evaluation of the potential impact to groundwater from the petroleum releases has been done. A discussion of soil type, depth to groundwater and health risk should be included.
3. It is believed that the cleaning solvent used in the parts wash is mineral spirits or thinner, however, these chemicals have not been analyzed in the soil samples from this area.
4. Please verify that the oil and grease and TPH as transmission fluid reported in samples does not include waste motor oil. If this cannot be shown, a minimum of one soil sample must be run for the entire waste oil parameters ie TPHmo, TPHdiesel, TPHg, BTEX, MTBE and oxygenates, lead scavengers, HVOCs, semi-volatiles and heavy metals.
5. Copies of soil disposal receipts must be provided to our office.

Please provide your written response to these items within 30 days or no later than November 21, 2003. You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, D. Drogos

Ms. Cara Wick, Capital Access Group, 300 Beale St., Suite 101, San Francisco, CA 94105
✓D. Siegel, ERAS Environmental, 20861 Wilbeam Ave., Suite 4, Castro Valley, CA 94546

Clar16611E14thSt

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES

ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

November 13, 2003

Mr. Clayton Keats
See The Doctor Transmission
16611 E. 14th St.
San Leandro, CA 94578

Dear Mr. Keats:

Subject: Leak Case No. RO0002572, 16611 E. 14th St., San Leandro, CA 94578

Alameda County Environmental Health staff has received and reviewed the November 7, 2003 ERAS Environmental Workplan Summary for Limited Soil Investigation for the referenced site. This report responds to the County's October 20, 2003 letter requesting additional technical information. We generally concur with the proposed additional soils investigation, however, please address the following technical comments when performing this work.

TECHNICAL COMMENTS

1. Our office requests that two additional locations be sampled, one to the north of former sample TR#1 (next to the property boundary) and one from the hydraulic lift area.
2. The neighboring site referenced in the work plan, 14222-14278 E. 14th St., as likely having similar geology and hydrology to the referenced site is too far away to make this statement. Our office reviewed the file for 16301 E. 14th St., RO0000212, the former Holland Oil site. Groundwater was encountered in a sand lens at approximately 10-12' bgs and gradient determined to be northwest. Please have your consultant comment on the potential of groundwater impact given this information.
3. Although Mr. Keats can attest that waste oil was not used at this site during his ownership, this only covers a time from approximately 1995 to the present. Past site use could have caused existing releases of other petroleum constituents. You were asked to verify the composition of the petroleum release. This can be done by providing the chromatograms of samples and transmission and motor oil standards supporting this claim. If this cannot be shown, a minimum of one soil sample must be run for the entire waste oil parameters ie TPHmo, TPHdiesel, TPHg, BTEX, MTBE and oxygenates, lead scavengers, HVOCs, semi-volatiles and heavy metals. Preferably, from the sample with the greatest petroleum impact.
4. A deed restriction will be required if residual soil concentrations cannot meet residential clean-up standards.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, D. Drogos

Ms. Cara Wick, Capital Access Group, 300 Beale St., Suite 101, San Francisco, CA 94105
Ms. Gail Jones,, ERAS Environmental, 15333 B Street, Hayward, CA 94541

16611E14thSt wp

Appendix B

Standard Operating Procedures

STANDARD OPERATING PROCEDURE A- HAND BORINGS

SOIL CORING AND SAMPLING PROCEDURES

Prior to drilling, the surface is either cored if concrete or hammered through using a pick, if asphalt.

A hand operated coring device equipped with a 3-inch diameter auger bit is advanced into the soil until full. The auger is removed and emptied and this process is repeated until the desired depth is reached. The hand auger is removed and a slide hammer core sampling device, equipped with two 3-inch long, 2-inch diameter brass liners is advanced six inches into the undisturbed soil at the bottom of the borehole.

One of the 3-inch liners is selected and the ends of the tube are covered with Teflon liner and sealed with plastic caps. The soil-filled liner is labeled with the borehole number, sample depth, site location, date, and time. The samples are placed in bags and stored in a cooler containing ice. Soil from the core adjacent to the interval selected for analyses is placed in a plastic zip-top bag. The soil is allowed to volatilize for a period of time, depending on the ambient temperature. The soil is scanned with a flame-ionization detector (FID) or photo-ionization detector (PID).

All sample barrels, rods, and tools are cleaned with Alconox or equivalent detergent and de-ionized water. All rinsate from the cleaning is contained in covered 5-gallon plastic buckets or 55-gallon drums at the project site.

BOREHOLE GROUTING FOR HAND BORINGS

Upon completion of soil and water sampling, boreholes will be abandoned with neat cement grout. If the borehole was advanced into groundwater, the grout is pumped through a grouting tube positioned at the bottom of the borehole.

STANDARD OPERATING PROCEDURE - SOIL SAMPLING BY HAND

Sites that require shallow soil samples such as soil stockpiles, excavation sidewalls, backhoe buckets, surface contamination, shallow subsurface contamination, drums containing soil, etc., will be collected by hand. A relatively undisturbed sample shall be obtained in a clean brass liner. For shallow (generally five feet or less) subsurface soil sampling use a steel core sampler equipped with a clean brass liner and advanced into the soil with a slide hammer. For soil stockpiles excavations and surface contamination, the outer surface of the soil is removed and a clean brass liner is immediately driven into the soil by hand or with a hammer. In deep excavations where safety factors preclude the direct sampling of the bottom or sidewall, a backhoe bucket retrieves soil.

TOOL SELECTION AND OPERATION

For soil stockpiles, backhoe buckets, surface contamination or drums, a shovel or trowel may be used to move the surface of the soil. Dig or scrape away at least four inches of soil at the selected sample location. A brass liner should immediately be pushed into the soil by hand or if necessary driven with a hammer. To avoid damaging the liner, hold a block of wood against the liner and hit the wood to drive the liner into the soil until full.

In cases where a deeper sample is required use a hand auger to dig to the required sample depth. Remove the hand auger and use a slide hammer sample equipped with a clean brass liner to obtain the sample. The sampler consists of a stainless steel shoe that holds the sample liner. Place a clean liner in the shoe and screw it tightly to the slide hammer. Place a chalk mark on the slide hammer six inches above the ground surface and drive the sampler until the chalk mark is at the surface. Remove the sample by back-hitting the slide weight up against the handle of the slide hammer until the shoe is free. The hand auger and sampler shoe will be cleaned with water, then soap solution and then rinsed with distilled water between samples to minimize the possibility of cross contamination.

SAMPLE PRESERVATION

After the liner is packed full with soil, the ends of the liner will be sealed with aluminum foil plastic caps and tape, labeled with pertinent sample information and stored in a chilled ice chest for preservation in the field. The sample information is logged on a chain-of-custody form, and the chilled samples are transported to the state-certified laboratory.

Appendix C

Laboratory Analytical Report for Soil Samples from Borings



C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 03-1673
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

Date Reported: 11/24/0200

Fuel Range Hydrocarbons by Method 8015M

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 03-1673-01	Client ID: B-1,3-3.5			11/19/2003	SO
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003
Sample: 03-1673-02	Client ID: B-2,3-3.5			11/19/2003	SO
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003
Sample: 03-1673-03	Client ID: B-3,3-3.5			11/19/2003	SO
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003
Sample: 03-1673-04	Client ID: B-4,3-3.5			11/19/2003	SO
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003



C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 03-1673
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

Date Reported: 11/24/0200

Fuel Range Hydrocarbons by Method 8015M

Table with 6 columns: Analyte, Method, Result, Unit, Date Sampled, Date Analyzed. Contains 4 sample groups (03-1673-05 to 03-1673-08) with sub-analytes like Diesel Fuel #2, Kerosene, Mineral Spirits, and Motor Oils.



C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 03-1673
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

Date Reported: 11/24/0200

Fuel Range Hydrocarbons by Method 8015M

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 03-1673-09 Client ID: B-9,3-3.5 11/19/2003 SO					
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003
Sample: 03-1673-10 Client ID: B-10,3-3.5 11/19/2003 SO					
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003
Sample: 03-1673-11 Client ID: B-11,3-3.5 11/19/2003 SO					
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003
Sample: 03-1673-12 Client ID: B-12,3-3.5 11/19/2003 SO					
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003



North State Labs

CA ELAP# 1753

90 South Spruce Avenue, Suite V • South San Francisco, CA 94080 • (650) 266-4563 • FAX (650) 266-4560

C E R T I F I C A T E O F A N A L Y S I S

Quality Control/Quality Assurance

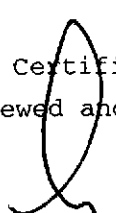
Lab Number: 03-1673
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

Date Reported: 11/24/0200
Fuel Range Hydrocarbons by Method 8015M

Analyte	Method	Reporting Unit	Blank	Avg MS/MSD	RPD
		Limit		Recovery	
Diesel Fuel #2	CATFH	1 MG/KG	ND	86/88	2
Kerosene	CATFH	1 MG/KG	ND	NA	NA
Motor Oils	CATFH	10 MG/KG	ND	NA	NA
Mineral Spirits	CATFH	1 MG/KG	ND	NA	NA

ELAP Certificate NO:1753

Reviewed and Approved


John A. Murphy, Laboratory Director



CERTIFICATE OF ANALYSIS

Lab Number: 03-1673
Client: BRAS Environmental
Project: 03080B/16611 E. 14TH STREET

Date Reported: 12/16/2003

Fuel Range Hydrocarbons by Method 8015M
Lead by Method 6010B ICAP

Table with 6 columns: Analyte, Method, Result, Unit, Date Sampled, Date Analyzed. Contains 4 sample groups (01-04) with analytes like Lead, Diesel Fuel #2, Kerosene, and Motor Oils.



North State Labs

90 South Spruce Avenue, Suite V • South San Francisco, CA 94080 • (650) 266-4563 • FAX (650) 266 4560

CA ELAP# 1753

C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 03-1673
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

Date Reported: 12/16/2003

Fuel Range Hydrocarbons by Method 8015M
Lead by Method 6010B ICAP

Table with 6 columns: Analyte, Method, Result, Unit, Date Sampled, Date Analyzed. It contains three sections of data for samples 03-1673-05, 03-1673-06, and 03-1673-07, listing analytes like Lead, Diesel Fuel #2, Kerosene, Mineral Spirits, and Motor Oils with their respective results and units.



North State Labs

CA ELAP # 1753

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C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 03-1673
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

Date Reported: 12/16/2003

Fuel Range Hydrocarbons by Method 8015M
Lead by Method 6010B ICAP

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 03-1673-08	Client ID: B-8,3-3.5			11/19/2003	SO
Lead	SW6010B	5.1	MG/KG		12/15/2003
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003
Sample: 03-1673-09	Client ID: B-9,3-3.5			11/19/2003	SO
Lead	SW6010B	5.5	MG/KG		12/15/2003
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003
Sample: 03 1673 10	Client ID: B 10,3 3.5			11/19/2003	SO
Lead	SW6010B	6.2	MG/KG		12/15/2003
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003
Sample: 03-1673-11	Client ID: B-11,3-3.5			11/19/2003	SO
Lead	SW6010B	4.6	MG/KG		12/15/2003
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003



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CA ELAP# 1753

C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 03-1673
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

Date Reported: 12/16/2003

Fuel Range Hydrocarbons by Method 8015M
Lead by Method 6010B ICAP

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 03 1673 12	Client ID: B-12,3-3.5			11/19/2003	SO
Lead	SWG010B	5.5	MG/KG		12/15/2003
Diesel Fuel #2	CATFH	ND<1	MG/KG		11/22/2003
Kerosene	CATFH	ND<1	MG/KG		11/22/2003
Motor Oils	CATFH	ND<10	MG/KG		11/22/2003



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C E R T I F I C A T E O F A N A L Y S I S

Quality Control/Quality Assurance

Lab Number: 03-1673
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

Date Reported: 12/16/2003
Fuel Range Hydrocarbons by Method 8015M
Lead by Method 6010B ICAP

Table with 7 columns: Analyte, Method, Reporting Unit Limit, Blank, Avg MS/MSD Recovery, RPD. Rows include Diesel Fuel #2, Kerosene, Motor Oils, Mineral Spirits, and Lead.

ELAP Certificate NO:1753

Reviewed and Approved

Signature of John A. Murphy, Laboratory Director



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03-1673

Chain of Custody / Request for Analysis

Lab Job No.: _____ Page ___ of ___

Client: ERAS ENVIRONMENTAL	Report to: ERAS Environmental	Phone: 510-247-9885	Turnaround Time
Mailing Address: 1533 B Street Hayward, CA 94541	Billing to: ERAS Environmental 1533 B Street Hayward, CA 94541	Fax: 510-886-5399	3-Day SBC Biolab.net
		email: ERASenvironmental@4	Date: 11-19-03
		PO# 03088B	Sampler: Andrew, Kasey

Project / Site Address / Global ID:					Analysis Requested						
03088B/16611 E. 14th Street					TEPH	Fuel Scan	Mixed Solvents	Extractable	TOTAL LEAD	EDF <input type="checkbox"/>	Field Point ID
Sample ID	Sample Type	Container No. / Type	Pres.	Sampling Date / Time						Comments	
1 B-1, 3-3.5	Soil	1		11/19/03/11:18	X				X		
2 B-2, 3-3.5	Soil	1		11/19/03/11:03	X				X		
3 B-3, 3-3.5	Soil	1		11/19/03/11:59	X				X		
4 B-4, 3-3.5	Soil	1		11/19/03/12:06	X				X		
5 B-5, 3-3.5	Soil	1		11/19/03/9:50	X				X		
6 B-6, 3-3.5	Soil	1		11/19/03/10:01	X				X		
7 B-7, 3-3.5	Soil	1		11/19/03/9:33	X				X		
8 B-8, 3-3.5	Soil	1		11/19/03/10:38	X				X		
9 B-9, 3-3.5	Soil	1		11/19/03/10:16	X				X		
10 B-10, 3-3.5	Soil	1		11/19/03/10:49	X				X		
11 B-11, 3-3.5	Soil	1		11/19/03/14:08	X				X		
12 B-12, 3-3.5	Soil	1		11/19/03/13:44	X				X		
Drum 1	Soil			11/19/03	X				X	Composite into 1	
Drum 2	Soil			11/19/03	X				X		

Relinquished by: <i>[Signature]</i>	Date: 11/20/03	Time: 9:50	Received by: <i>[Signature]</i>	Lab Comments/ Hazards
Relinquished by:	Date:	Time:	Received by:	
Relinquished by:	Date:	Time:	Received by:	

Appendix D

Laboratory Sample Chromatograms

Quantitation Report

File : E:\NPCHEM\1\DATA\06033X03.D
 : 03 Jun 2003 12:30 pm
 : 03-0722-04
 : 1 DD:06/03/2003
 File : EVENTS.E
 Print Time: Jun 3 13:02 2003

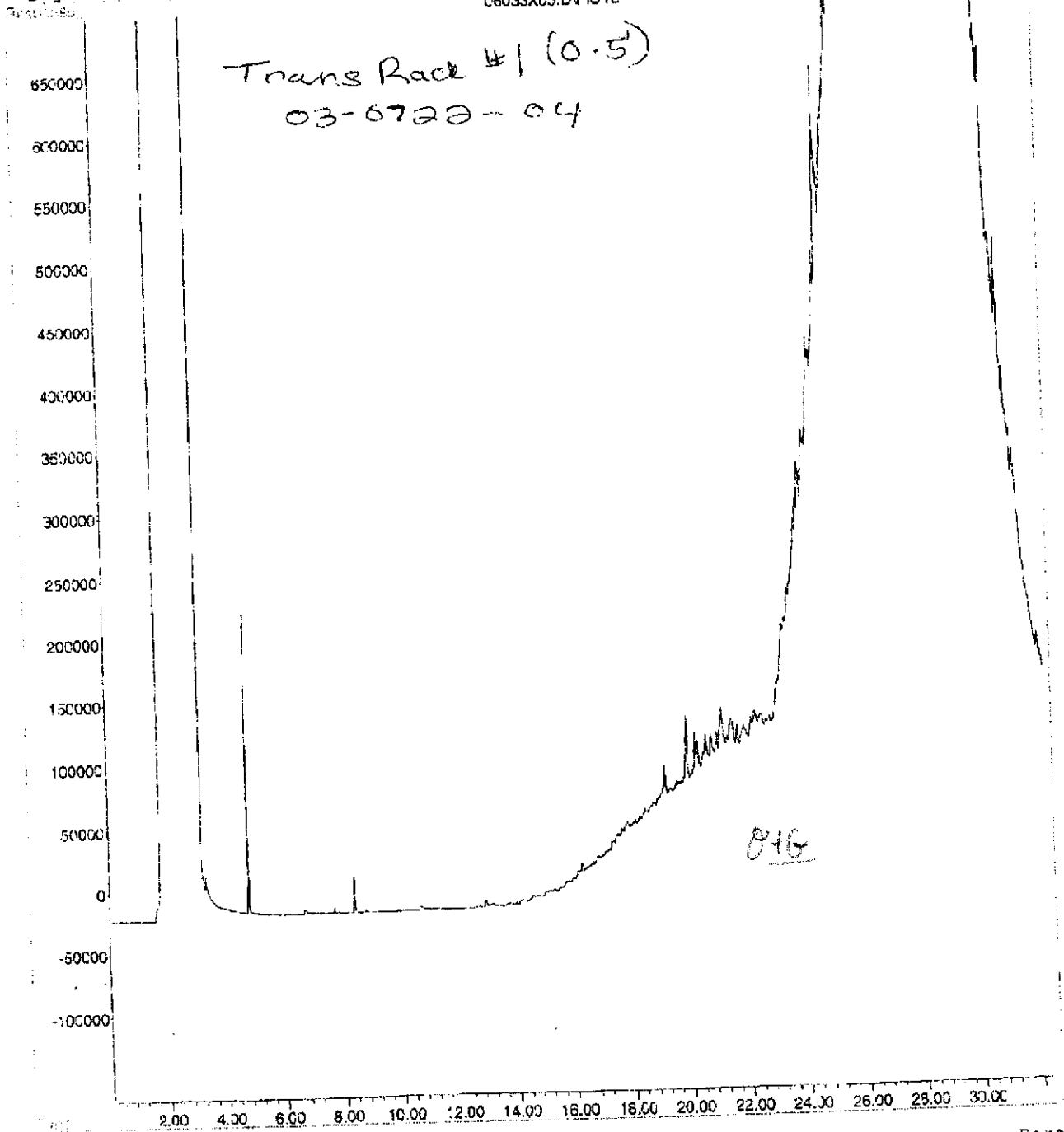
Vial: 3
 Operator: SO
 Inst : GC/MS Ins
 Multiplr: 0.50

Quant Results File: TPH.RES

Quant Method : E:\NPCHEM\1\METHODS\TPH.M (Chemstation Integrator)
 Title :
 Last Update : Tue May 06 14:45:23 2003
 Response via : Multiple Level Calibration
 DataAcq Meth : TPH.M

Volume Inj. :
 Signal Phase :
 Signal Info :

06033X03.D\FID18

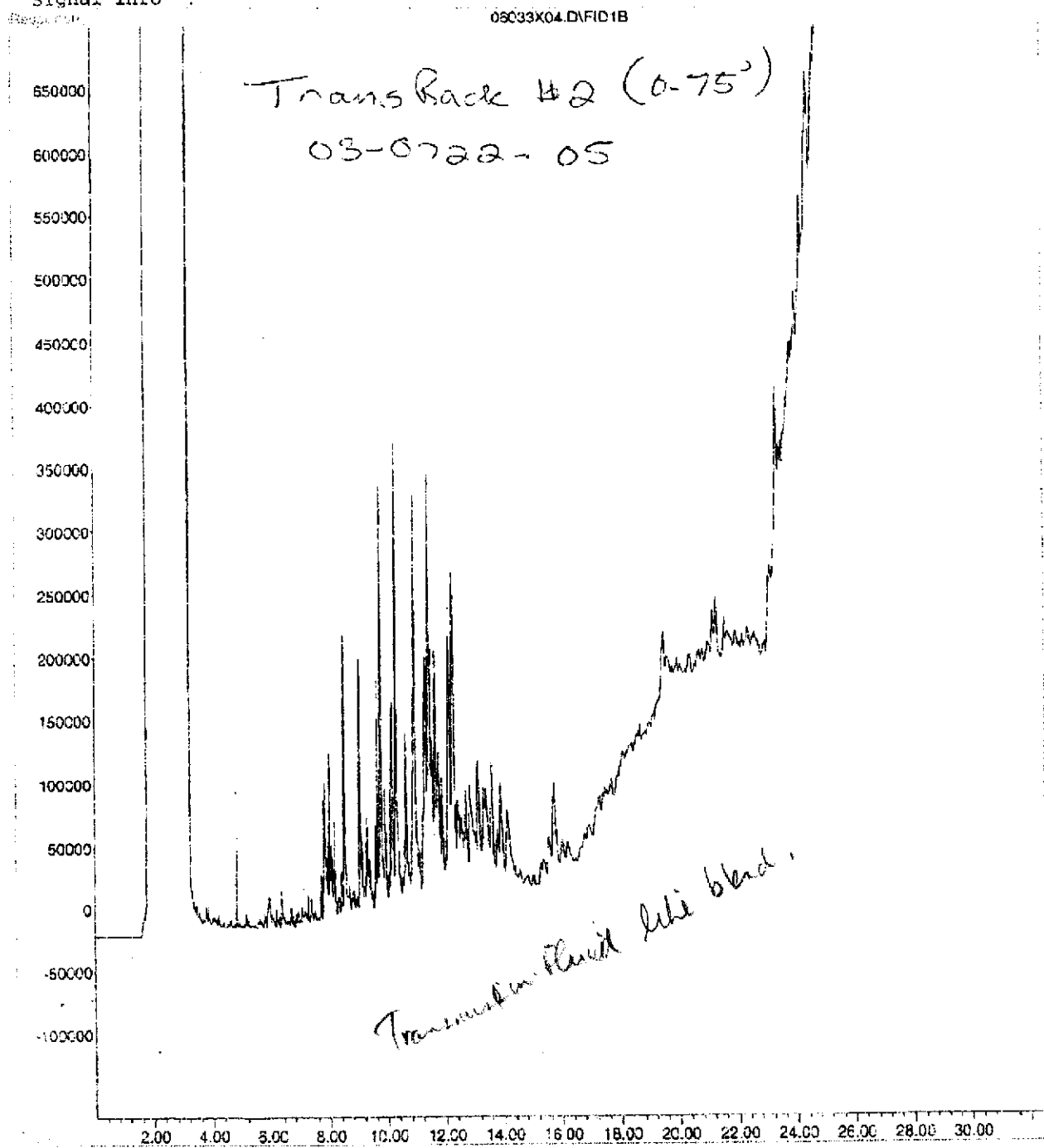


Quantitation Report

File : E:\HPCHEM\1\DATA\06033X04.D Vial: 4
 Date : 03 Jun 2003 1:16 pm Operator: SO
 Sample : 03-0722-05 Inst : GC/MS Ins
 Run : 1 DD:06/03/2003 Multiplr: 0.50
 File : EVENTS.E
 Start Time: Jun 3 13:48 2003 Quant Results File: TPH.RES

Quant Method : E:\HPCHEM\1\METHODS\TPH.M (Chemstation Integrator)
 Title :
 Last Update : Tue May 06 14:45:23 2003
 Response via : Multiple Level Calibration
 DataAcq Meth : TPH.M

Volume Inj. :
 Signal Phase :
 Signal Info :



Quantitation Report

Data File : E:\HPCHEM\1\DATA\11203X03.D
Acq On : 20 Nov 2003 11:31 am
Sample : KEROSENE 200
Misc : 1 DD:11/20/2003
IntFile : EVENTS.E
Quant Time: Nov 20 12:02 2003

Vial: 3
Operator: SO
Inst : GC/MS Ins
Multiplr: 1.00

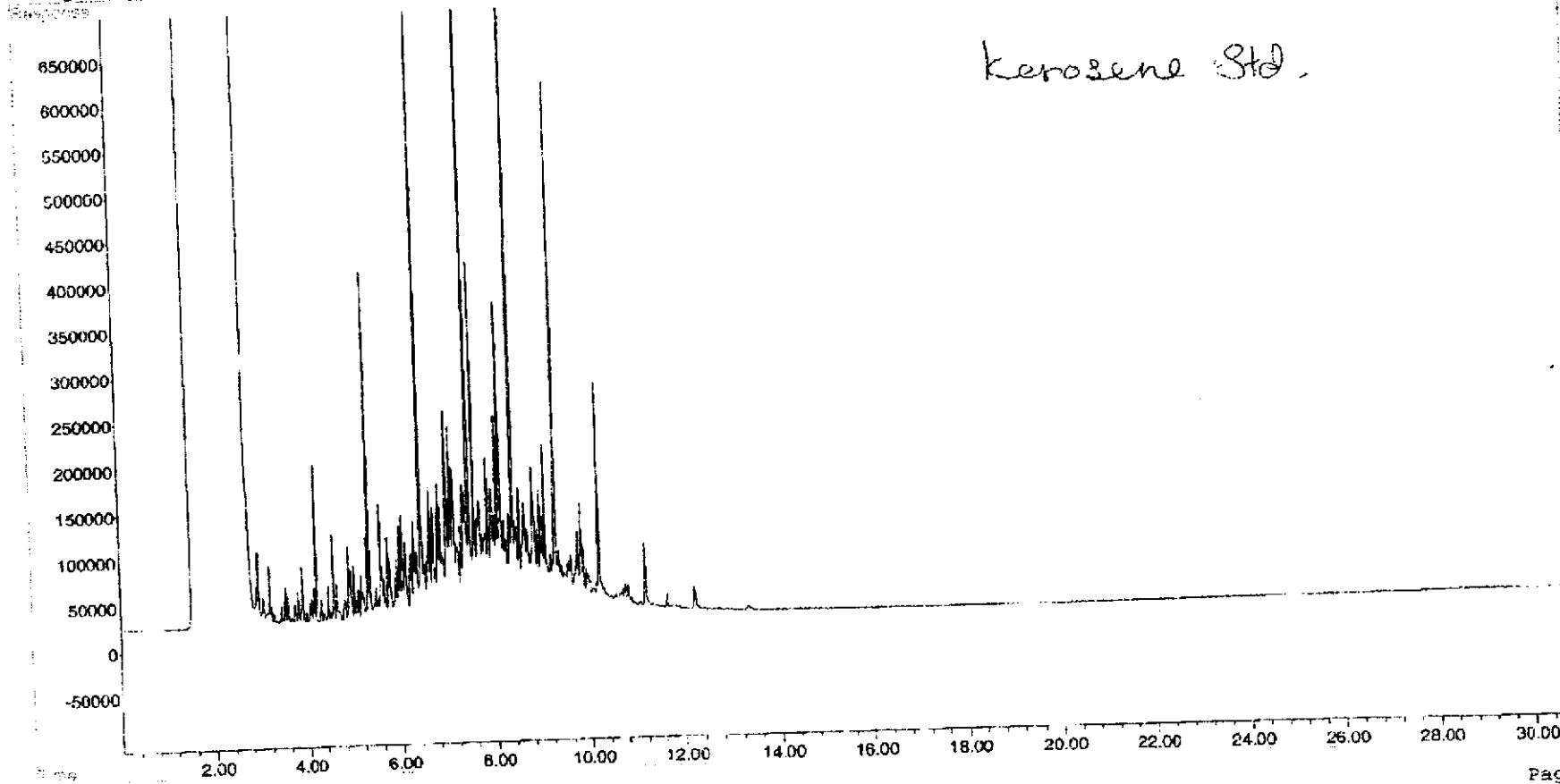
Quant Results File: TPH.RES

Quant Method : E:\HPCHEM\1\METHODS\TPH.M (Chemstation Integrator)
Title :
Last Update : Thu Nov 20 10:06:30 2003
Response via : Multiple Level Calibration
DataAcq Meth : TPH.M

Volume Inj. :
Signal Phase :
Signal Info :

11203X03.D\FID1B

Kerosene Std.

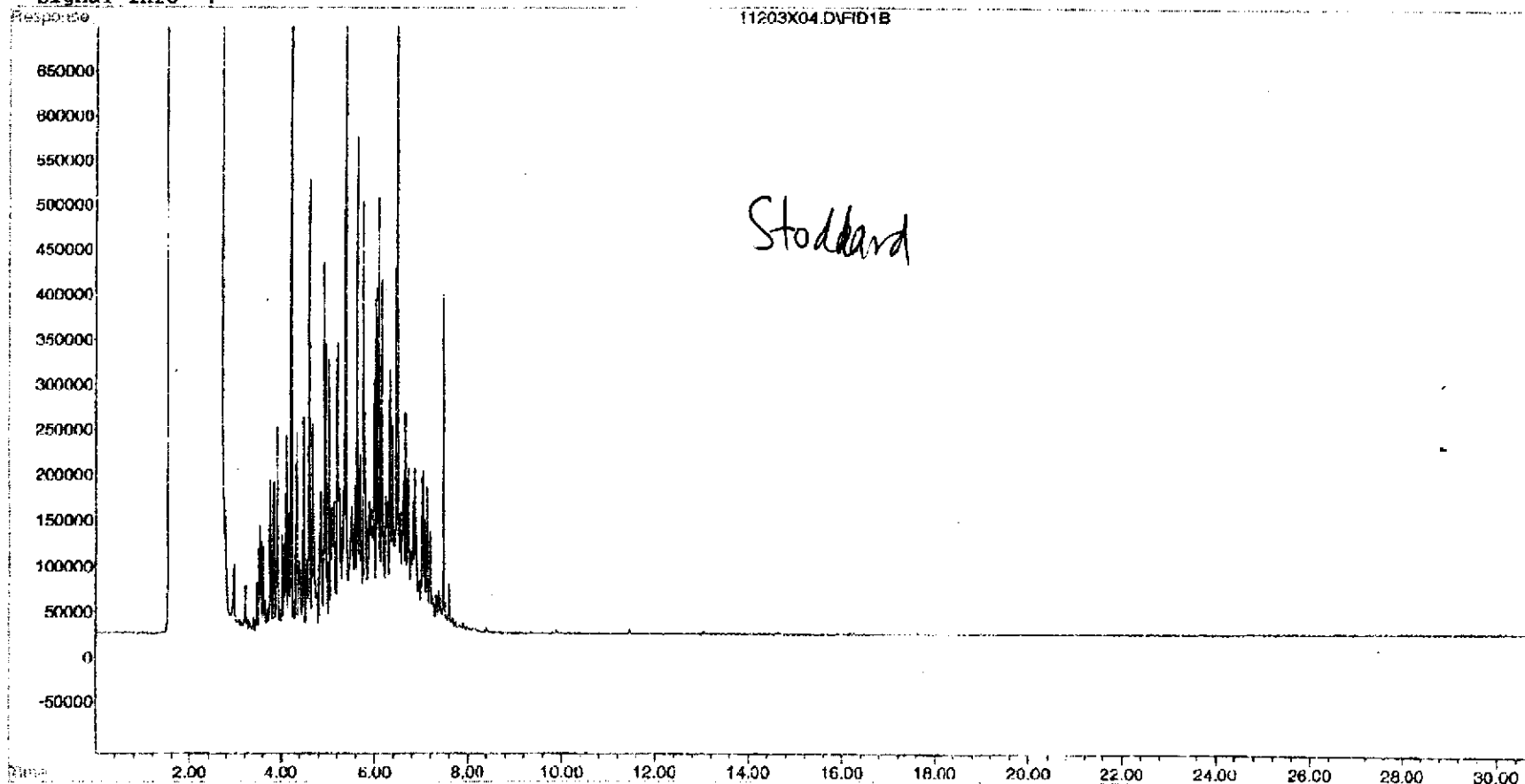


quantitation report

Data File : E:\HPCHEM\1\DATA\11203X04.D Vial: 4
Acq On : 20 Nov 2003 12:11 pm Operator: SO
Sample : STODDARD 200 Inst : GC/MS Ins
Misc : 1 DB:11/20/2003 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Nov 20 12:42 2003 Quant Results File: TPH.RES

Quant Method : E:\HPCHEM\1\METHODS\TPH.M (Chemstation Integrator)
Title :
Last Update : Thu Nov 20 10:06:30 2003
Response via : Multiple Level Calibration
DataAcq Meth : TPH.M

Volume Inj. :
Signal Phase :
Signal Info :



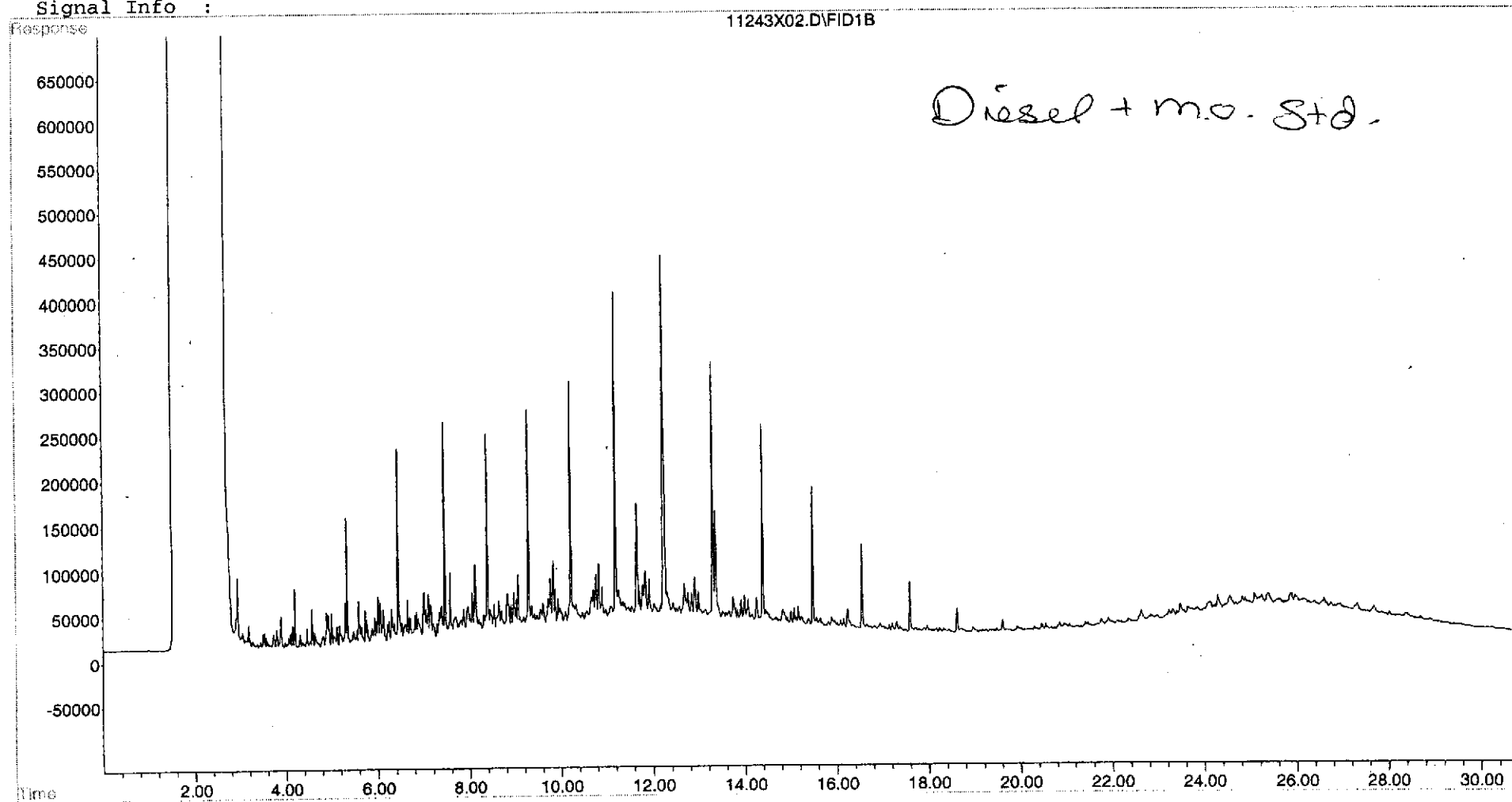
Data File : E:\HPCHEM\1\DATA\11243X02.D
Acq On : 24 Nov 2003 9:30 am
Sample : D/MO 200
Misc : 1 DD:11/24/2003
IntFile : EVENTS.E
Quant Time: Nov 24 10:01 2003

Vial: 2
Operator: SO
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: TPH.RES

Quant Method : E:\HPCHEM\1\METHODS\TPH.M (Chemstation Integrator)
Title :
Last Update : Thu Nov 20 10:06:30 2003
Response via : Multiple Level Calibration
DataAcq Meth : TPH.M

Volume Inj. :
Signal Phase :
Signal Info :



Appendix E

Laboratory Analytical Reports for Soil Samples from Drums



C E R T I F I C A T E O F A N A L Y S I S

Job Number: 03-1685
Client : ERAS Environmental
Project : 03088B/16611 E. 14TH STREET

Date Sampled : 11/20/2003
Date Analyzed: 12/02/2003
Date Reported: 12/03/2003

Metals by 6010B ICP/7471 AA

Laboratory Number	03-1685-01
Client ID	DRUM 1,2
Matrix	SO
Analyte	MG/KG
Antimony	ND<5.0
Arsenic	*ND<5.0
Barium	147
Beryllium	ND<1.0
Cadmium	ND<2.0
Chromium	27
Cobalt	9.9
Copper	50.8
Lead	295
Mercury	ND<0.05
Molybdenum	ND<1.0
Nickel	35.4
Selenium	ND<5.0
Silver	ND<1.0
Thallium	10.9
Vanadium	38.5
Zinc	159



C E R T I F I C A T E O F A N A L Y S I S

Job Number: 03-1685
Client : ERAS Environmental
Project : 03088B/16611 E. 14TH STREET

Date Sampled : 11/20/2003
Date Analyzed: 12/02/2003
Date Reported: 12/03/2003

Metals by 6010B ICP/7471 AA
Quality Control/Quality Assurance Summary

Table with columns: Laboratory Number, Client ID, Matrix, Analyte, Results, MS/MSD, %Recoveries, RPD, Recovery Limit, RPD Limit. Lists various metals like Antimony, Arsenic, Barium, etc.

Reviewed and Approved

John A. Murphy
Laboratory Director



C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 03-1685
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

Date Reported: 12/03/2003

Diesel, Motor Oil Hydrocarbons by Method 8015M
Benzene, Toluene, Ethylbenzene and Xylenes by 8021B

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 03-1685-01	Client ID: DRUM 1,2			11/20/2003	SO
Benzene	SW8020F	ND<5	UG/KG		11/25/2003
Ethylbenzene	SW8020F	ND<5	UG/KG		11/25/2003
Toluene	SW8020F	7	UG/KG		11/25/2003
Xylenes	SW8020F	32	UG/KG		11/25/2003
Hydraulic Oil	CATFH	1110	MG/KG		11/25/2003
Mineral Spirits	CATFH	ND<1	MG/KG		11/25/2003



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C E R T I F I C A T E O F A N A L Y S I S

Quality Control/Quality Assurance

Lab Number: 03-1685
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

Date Reported: 12/01/2003

Diesel, Motor Oil Hydrocarbons by Method 8015M
Benzene, Toluene, Ethylbenzene and Xylenes by 8021B

Analyte	Method	Reporting Unit	Blank	Avg MS/MSD	RPD
		Limit		Recovery	
Benzene	SW8020F	5 UG/KG	ND	98/105	7
Toluene	SW8020F	5 UG/KG	ND	102/107	5
Ethylbenzene	SW8020F	5 UG/KG	ND	104/106	2
Xylenes	SW8020F	10 UG/KG	ND	103/105	2
Diesel Fuel #2	CATFH	1 MG/KG	ND<1	92/96	4
Motor Oils	CATFH	10 MG/KG	ND<10	NA	NA

ELAP Certificate NO:1753

Reviewed and Approved


John A. Murphy, Laboratory Director



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C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 03-1685
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

Date Reported: 12/17/2003

Diesel, Motor Oil Hydrocarbons by Method 8015M
Benzene, Toluene, Ethylbenzene and Xylenes by 8021B
California WET Extraction and Lead by 6010B ICAP

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 03-1685-01	Client ID: DRUM 1,2			11/20/2003	SO
Benzene	SW8020F	ND<5	UG/KG		11/25/2003
Ethylbenzene	SW8020F	ND<5	UG/KG		11/25/2003
Toluene	SW8020F	7	UG/KG		11/25/2003
Xylenes	SW8020F	32	UG/KG		11/25/2003
STLC Lead	SW6010B	93.4	MG/L		12/17/2003
Hydraulic Oil	CATFH	1110	MG/KG		11/25/2003
Mineral Spirits	CATFH	ND<1	MG/KG		11/25/2003



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Quality Control/Quality Assurance

Lab Number: 03-1685
Client: ERAS Environmental
Project: 03088B/16611 E. 14TH STREET

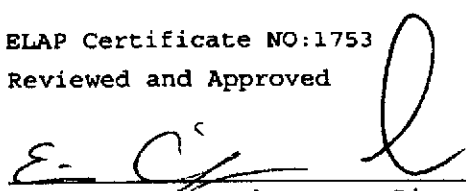
Date Reported: 12/17/2003

Diesel, Motor Oil Hydrocarbons by Method 8015M
Benzene, Toluene, Ethylbenzene and Xylenes by 8021B
California WET Extraction and Lead by 6010B ICAP

Analyte	Method	Reporting Unit Limit	Blank	Avg MS/MSD Recovery	RPD	
Gasoline Range Organics	SW8020F	500	UG/KG	ND	109/110	1
Benzene	SW8020F	5	UG/KG	ND	98/105	7
Toluene	SW8020F	5	UG/KG	ND	102/107	5
Ethylbenzene	SW8020F	5	UG/KG	ND	104/106	2
Xylenes	SW8020F	10	UG/KG	ND	103/105	2
Methyl-tert-butyl ether	SW8020F	5	UG/KG	ND	83/88	6
Diesel Fuel #2	CATFH	1	MG/KG	ND<1	92/96	4
Motor Oils	CATFH	10	MG/KG	ND<10	NA	NA
STLC Lead	SW6010B	0.50	MG/L	ND<0.50	112/112	0

ELAP Certificate NO:1753

Reviewed and Approved


John A. Murphy, Laboratory Director

03-1685
 Report# - 12/31/03



North State Labs
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 Phone: (650) 266-4563 Fax: (650) 266-4560

Chain of Custody / Request for Analysis
 Lab Job No.: _____ Page _____ of _____

12/19/2008 11:40 5198865399

Client: ERAS Environmental		Report to: ERAS Environmental		Phone: 510-247-9885		Turnaround Time - Standard					
Billing Address: 1533 B Street Hayward, CA 94541		Billing to: ERAS Environmental 1533 B Street Hayward, CA 94541		Fax: 510-886-5399		USE Global.net					
				email: ERAS.environmental@erast.com		Date: 11-19-03					
				PO#: 030888		Sampler: Andrew					
Project / Site Address / Global ID: 030888/16611 E. 14th Street /				Analysis Requested				EDF <input type="checkbox"/>			
Sample ID	Sample Type	Container No. / Type	Pres.	Sampling Date / Time	Metals Spirits Etc. (back)	Chem 17	BTEX	Hydroc. Oil	STLC Lead	TCLP Lead	Field Point ID Comments
Drum 1	Soil	1		11/20/03	X	X	X	X	X	X	Composit into 1
Drum 2	Soil	1		11/20/03	X	X	X	X	X	X	
											12/22/03 Please run sample for TCLP lead
Reinquished by: <i>[Signature]</i>		Date: 11/20/03 Time: 9:00		Received by: <i>[Signature]</i>		Lab Comment/Hazards					
Reinquished by:		Date: Time:		Received by:							
Reinquished by:		Date: Time:		Received by:							

Please run sample
for STLC & lead

ERAS ENVIRONMENTAL
 PAGE 01