

ERAS

Environmental, Inc.

1533 B Street

Hayward, CA 94541

(510) 247-9885 Facsimile: (510) 886-5399

LIMITED SOIL AND GROUNDWATER INVESTIGATION
1614 Campbell Street
Oakland, California
ERAS Project Number 03184A

Prepared for:

Mr. Mark Johnson
Nas Construction Company, Inc.
6428 Sombrero Avenue
Cypress, CA 90630

Prepared by:

ERAS Environmental, Inc.
February 18, 2004

ERAS

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Mr. Mark Johnson
Nas Construction Company, Inc.
6428 Sombrero Avenue
Cypress, CA 90630

**Subject: Limited Soil Investigation
1614 Campbell Street
Oakland, California
ERAS Project Number 03184A**

Dear Mr. Johnson:

ERAS Environmental, Inc. is pleased to present the results of the Limited Soil and Groundwater Investigation conducted at 1614 Campbell Street in Oakland, California (the "Property"). A total of 5 soil borings were drilled on the Property on January 29, 2004. One soil sample and three groundwater samples were collected 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.

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

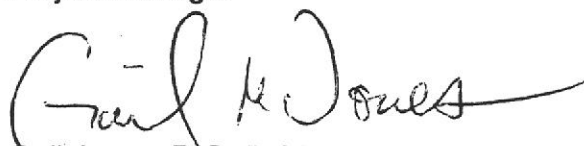

Gail Jones, R.G. 5725
Senior Geologist



TABLE OF CONTENTS

	Page
1.0 INTRODUCTION	1
2.0 BACKGROUND	1
3.0 FIELD INVESTIGATION	2
3.1 PRE-DRILLING ACTIVITIES	2
3.2 SOIL BORING AND SAMPLING	2
3.3 GROUNDWATER SAMPLING	3
3.4 WASTE REMOVAL	3
4.0 RESULTS OF INVESTIGATION	4
4.1 SUBSURFACE CONDITIONS ENCOUNTERED	4
4.2 ANALYTICAL RESULTS	4
4.2.1 <i>Soil Samples</i>	5
4.2.2 <i>Groundwater Samples</i>	5
5.0 SUMMARY AND RECOMMENDATIONS	6
6.0 LIMITATIONS	7

Figures

- 1 – Site Location Map
- 2 – Property Site Plan

Appendices

- A - Drilling Permit
- B - Standard Operating Procedures
- C - Field Boring Logs
- D - Laboratory Analytical Report and Chain-of-Custody Form

1.0 Introduction

This report presents the results of the Limited Soil and Groundwater Investigation conducted by ERAS Environmental, Inc. (ERAS) at 1614 Campbell Street in Oakland, California (hereinafter the Property). The location of the Property is shown on **Figure 1**.

2.0 Background

ERAS Environmental, Inc. (ERAS) conducted a Phase 1 Environmental Site Assessment (ESA) for the Property at 1614 Campbell Street in Oakland. The results of the ESA were presented in ERAS report dated December 15, 2003.

As part of the ESA project, ERAS reviewed historical Sanborn Fire Insurance maps, which included the Property, at the University of California, Berkeley Geoscience Library Maps dated in 1912, and 1951 were reviewed. In both years the Property was used as an industrial manufacturing warehouse. A 1,000-gallon underground storage tank (UST) for gasoline in the parking area and a fuel oil UST on the eastern side of the building were identified on the maps. It was unknown whether the fuel oil tank was an underground or aboveground tank.

The ESA also identified an off-site source of contamination that was considered a potential threat to groundwater beneath the Property. Manny Services/McKinney Gas at 1600 Peralta Street is located approximately 350 feet from the Property in an estimated up-gradient direction and was listed in the environmental database search as a State Site. This site was considered a potential environmental concern due to its location and proximity to the Property.

ERAS contacted Ms. Lule Varella of the Department of Toxic Substances Control (DTSC) to request a file review for the 1600 Peralta Street site. The DTSC reported that no files were found for the site. ERAS also contacted the California Regional Water Quality Board about 1600 Peralta Street site, and they also reported no available files regarding this site.

3.0 Field Investigation

The purpose of the investigation was to screen for the presence any residual contamination in the subsurface water-bearing zone due to the former use of the fuel storage tank and fuel oil tank. In addition, the investigation was designed to assess whether contamination may be migrating into groundwater beneath the Property from the potential up-gradient source at 1600 Peralta Street.

Prior to performing the field investigation, the depth to groundwater under the Property was expected to be at a depth of 4 to 5 feet. The groundwater flow direction was estimated to be westward toward San Francisco Bay.

3.1 Pre-Drilling Activities

A drilling permit was obtained from the County of Alameda County Public Works Agency (**Appendix A**). The proposed work area was outlined with white paint and Underground Service Alert was notified three working days prior to drilling to allow utility companies to mark their underground lines.

3.2 Soil Boring and Sampling

Based on the estimated shallow depth to groundwater under the Property, it was determined that the collection of groundwater samples would be appropriate to assess subsurface environmental conditions. On January 29, 2004, 4 soil cores were advanced to depths from 5 to 10 feet below ground surface (bgs) by Vironex, Inc. of San Leandro, California using a Geoprobe™ direct-push sampling rig. The locations of borings A through D are shown on the **Figure 2**. Boring A was drilled in the estimated location of the former gasoline UST. Boring B was drilled in the estimated location of the fuel oil UST. Borings C and D were drilled in an unused rail spur on the southeast side of the Property in locations estimated to intercept groundwater down-gradient of the property at 1600 Peralta Street.

Continuous soil cores were collected for lithologic logging in the field. One soil sample was collected from near the bottom of boring A in lieu of a water sample due to probe refusal at 5 feet bgs and the absence of water in the boring. The source of refusal in this boring was uncertain but ERAS believes may be due to concrete forming the base of the former UST pit.

A six-inch section of the acrylic liner containing the selected sample interval was cut out, and the ends will be sealed 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. Standard Operating Procedures for Geoprobe™ soil and groundwater sampling are included as **Appendix B**.

3.3 Groundwater Sampling

Temporary 0.75-inch PVC well casings with 5-foot screened intervals at the base of the casings were placed into boring B to total depth of 10 feet bgs and boring D to a total depth of 8 feet bgs. Boring C was cored to 8 feet bgs; however, the borehole collapsed as the rods were pulled so that the temporary well casing could not be placed in the saturated zone. Therefore a Hydropunch™ sampler was used to collect a groundwater sample from the depth interval from 4 to 8 feet bgs. Standard Operating Procedures for Geoprobe™ soil boring and groundwater sampling are included as **Appendix B**.

The soil and groundwater samples were labeled and stored in a cooler with ice until it was relinquished using standard chain-of-custody procedures to the analytical laboratory.

3.4 Waste Removal

Soil cuttings and decontamination water from this investigation were temporarily stored at the site in labeled 5-gallon buckets. Removal by a waste management contractor for proper disposal is pending.

4.0 Results of Investigation

4.1 Subsurface Conditions Encountered

Details of the subsurface conditions encountered are shown of the field boring logs in **Appendix C**.

Borings A and B were drilled through the concrete pavement in the outside yard at the estimated locations of the former gasoline UST (boring A) and the former fuel oil UST (boring B). The subsurface material encountered in boring A consisted of silty sand from directly under the concrete. This silty sand was observed to be oily from about four feet bgs to the base of the boring at five feet bgs. The subsurface material encountered in boring B consisted of silty sand to 4.5 feet bgs where it is underlain by fine- to medium-grained sand to at least eight feet bgs.

Borings C and D were drilled through asphalt pavement adjacent to the rail spur along the southwest property boundary. These borings encountered fine-to medium-grained sand consist from under the asphalt to the base at eight feet bgs.

Shallow groundwater was first encountered in Borings B, C, and D at depths of approximately four feet bgs. The groundwater appears to be under water table conditions (unconfined).

4.2 Analytical Results

All samples were kept refrigerated until transport to the laboratory. The soil sample and groundwater 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 D**.

4.2.1 Soil Samples

The soil sample collected from boring A at a depth of 4.5 to 5 feet bgs was analyzed for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene, total xylene isomers (BTEX), methyl-tert-butyl ether (MTBE), and total extractable petroleum hydrocarbons (TEPH) fuel scan that yields results for diesel fuel #2, kerosene, and motor oil.

Detected concentrations of diesel fuel #2 (5,720mg/Kg) and kerosene (3,270mg/Kg) were well above the California Regional Water Quality Control Board Environmental Screening Level (ESL, Shallow Soil, Not Drinking Water, July 2003) of 500 mg/Kg. Motor oil was detected at 5,810mg/Kg. This concentration is above the residual fuel ESL of 1,000 mg/Kg for commercial land use. TPH-G was detected 327 mg/Kg, a concentration below the commercial land use ESL of 400 mg/Kg but above the residential land use ESL of 100mg/Kg. Benzene and MTBE were not detected above the laboratory method reporting limits in the samples. Detected concentrations of toluene (0.398 mg/Kg) and ethylbenzene (0.772 mg/Kg) were well below the residential land use ESLs of 9.3 mg/Kg and 4.7 mg/Kg, respectively. Xylenes were detected at 3.3mg/Kg, above the commercial and residential ESL of 1.5mg/Kg.

4.2.2 Groundwater Samples

The water sample collected from boring B, located in the vicinity of the former fuel oil UST, was analyzed by fuel scan for TEPH. The sample was found to contain 3,200µg/L motor oil, a concentration well above the ESL for residual fuel in groundwater of 640µg/L. Analysis of diesel fuel #2 and kerosene yielded results that were below the laboratory method reporting limits.

The groundwater samples collected from boring C and D were analyzed for TPH-G, BTEX, MTBE, TEPH, and volatile organic compounds (VOCs). Neither of these groundwater samples was found to contain any of these compounds above the laboratory method reporting limits.

5.0 Summary and Recommendations

The groundwater samples collected along the southeast property boundary did not indicate that any groundwater contamination is migrating from the potential up-gradient source at 1600 Peralta Street to beneath the Property.

Results of the analysis of soil sample collected in the area believed to be directly under the gasoline UST indicated the presence of petroleum hydrocarbons above RWQCB ESLs. The groundwater sample collected at or near the location of the former fuel oil UST indicated the presence of petroleum hydrocarbons in the motor oil range above the current RWQCB ESL for residual fuels.

Based on the findings of this investigation, ERAS recommends additional subsurface investigation to assess the concentration of the contamination in the soil and groundwater beneath the property, and to assess if contamination has advanced offsite of the Property.

Based upon the finding of motor oil range fuel hydrocarbons in groundwater beneath the Property above the current ESL, the property owner is required by the Regional Water Quality Control Board to report this finding to the Local Oversight Program. The contact for this submission is as follows.

Mr. Barney Chan
Alameda County Environmental Health Department
1131 Harbor Bay Parkway, Ste. 250
Alameda, California 94502
(510) 567-6765

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.

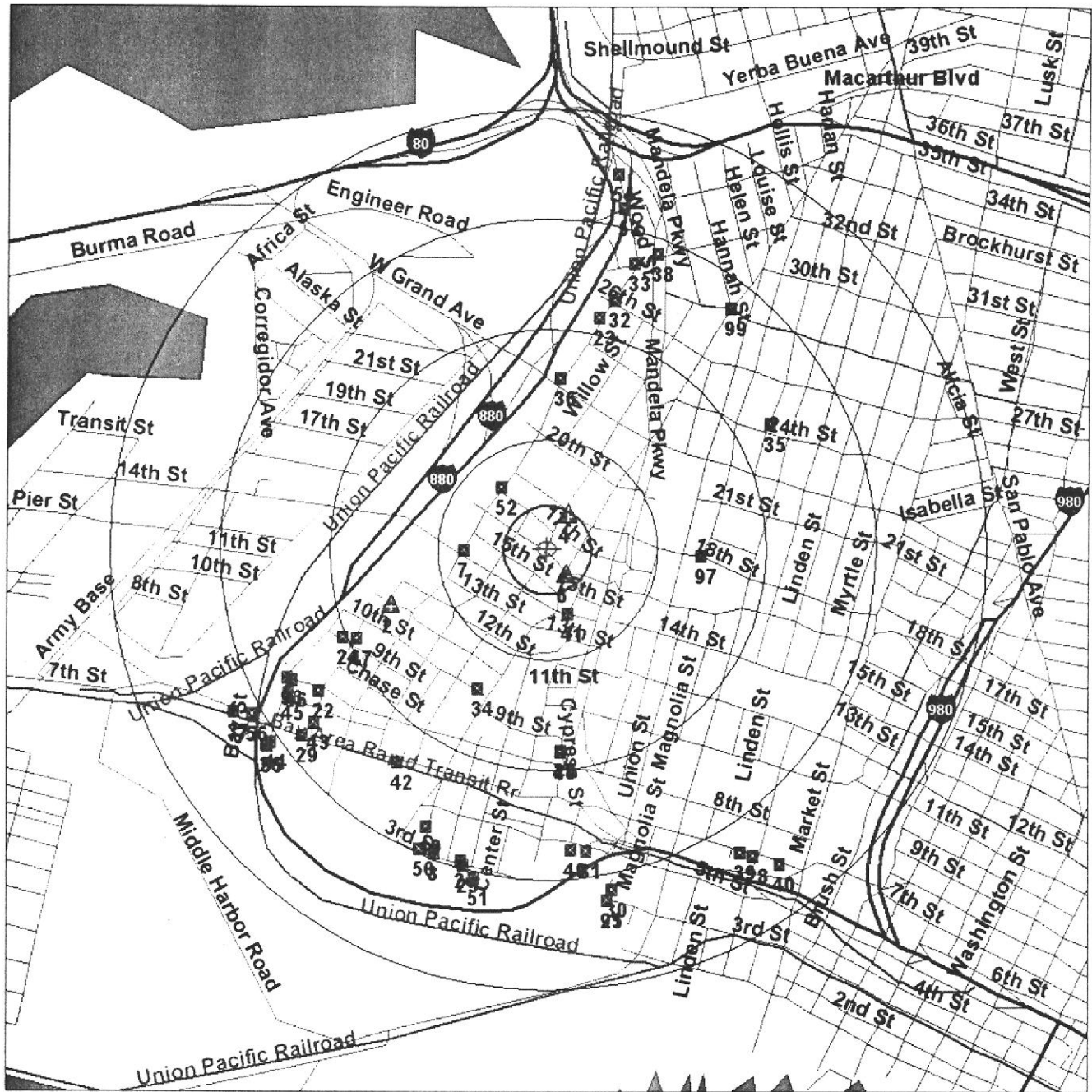


Environmental FirstSearch

1 Mile Radius
ASTM: NPL, RCRACOR, STATE



1614 CAMPBELL ST, OAKLAND CA 94607



Source: 1999 U.S. Census TIGER Files

Target Site (Latitude: 37.813568 Longitude: -122.294144)

Identified Site, Multiple Sites, Receptor

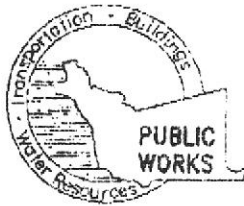
NPL, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads

Black Rings Represent 1/4 Mile Radii; Red Ring Represents 500 ft. Radius



Appendix A
Drilling Permit

**ALAMEDA COUNTY PUBLIC WORKS AGENCY****WATER RESOURCES SECTION**

399 ELMHURST ST. HAYWARD, CA. 94544-1395

PHONE (510) 670-6633 James Yoo FAX (510) 782-1939

PERMIT NO. W04-0087

WATER RESOURCES SECTION
GROUNDWATER PROTECTION ORDINANCE
B#1-GENERAL CONDITIONS: GEOTECHNICAL & CONTAMINATION BOREHOLES

1. Prior to any drilling activities shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that Federal, State, County or to the City and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained.
2. Boreholes shall not be left open for a period of more than **24 hours**. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee, permittee's, contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on-or-off site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
4. Permit is valid only for the purpose specified herein **January 29 to January 29, 2004**. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.
5. Drilling Permit(s) can be voided/ canceled only in writing. It is the applicants responsibilities to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
6. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. RAYWARD CA. 94544-1394
PHONE (510) 678-6633 Janet Yee
FAX (510) 782-1939

APPLICANTS PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 1614 Campbell St
Oakland

PERMIT NUMBER W04-0087
WELL NUMBER _____
APN _____

CLIENT
Name Stan Gritzner C/O Nas Construction Co.
Address 11841 Rock St. Suite 3 Phone _____
City Grinden Grove Zip 92041

APPLICANT
Name ERAS Environmental
Address 1633 P Street Phone 510-881-5399
City Hayward Zip 94541

TYPE OF PROJECT
Well Construction Geotechnical Investigation
Cathodic Protection General
Water Supply Contamination
Monitoring Well Destruction

PROPOSED WATER SUPPLY WELL USE
New Domestic Replacement Domestic
Municipal Irrigation
Industrial Other _____

DRILLING METHOD:
Said Rotary Air Rotary Auger
Cable Other (GeoProbe)

DRILLER'S NAME Vinomex
DRILLER'S LICENSE NO. C57-782125
705927

WELL PROJECTS
Drill Hole Diameter _____ in. Maximum _____
Casing Diameter _____ in. Depth _____ ft.
Surface Seal Depth _____ ft. Owner's Well Number _____

GEOTECHNICAL PROJECTS
Number of Borings 5 Maximum _____
Hole Diameter 2 in. Depth 6 ft.

STARTING DATE 01-29-04
COMPLETION DATE 01-29-04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 23-68.

APPLICANT'S SIGNATURE Andrew Sarge 1-21-04
PLEASE PRINT NAME Andrew Sarge Rev. 9-18-02

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

B GEOTECHNICAL / Contamination
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or well compacted cuttings.

E. CATHODIC

Fill hole erode zone with concrete placed by tremie.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

C SPECIAL CONDITIONS B#1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED _____ DATE _____

Appendix B
Standard Operating Procedures

STANDARD OPERATING PROCEDURE B- DIRECT PUSH BORINGS

SOIL CORING AND SAMPLING PROCEDURES

Prior to drilling, all boreholes will be hand dug to a depth of 4 feet below ground surface (bgs) to check for underground utility lines.

Soil and groundwater samples are collected for lithologic and chemical analyses using a direct driven soil coring system. A hydraulic hammer drives sampling rods into the ground to collect continuous soil cores. As the rods are advanced, soil is driven into an approximately 1.5-inch-diameter sample barrel that is attached to the end of the rods. Soil samples are collected in sleeves inside the sample barrel as the rods are advanced. After being driven 3 to 4 feet into the ground, the rods are removed from the borehole. The sleeve containing the soil core is removed from the sample barrel, and can then be preserved for chemical analyses, or used for lithologic description. This process is repeated until the desired depth is reached.

A soil core interval selected for analyses is cut from the sleeve using a hacksaw. The ends of the tube are covered with aluminum foil or Teflon liner and sealed with plastic caps. The soil-filled liner is labeled with the bore 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 55-gallon drums at the project site.

BOREHOLE GROUTING FOR DIRECT PUSH 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.

Appendix C
Field Boring Logs

CLIENT 1614 Campbell St	SITE NUMBER 03184	LOCATION Oakland
DRILLING AND SAMPLING METHODS Geo Probe		
WATER LEVEL		DRILLING START
TIME		FINISH
DATE		TIME 9:30
REFERENCE		DATE 1-29-04
		DATE 1-29-04

LOG OF SOIL BORING **A**
 Coordinates: middle of yard
 Elevation top of casing:
 Casing below surface:

Inches		Blow/6" Sampler	OVA Reading	WELL DETAIL	DEPTH (Feet)	GRAPHIC LOG	SURFACE CONDITIONS
Driven	Recover						Concrete
					0		DESCRIPTION by: Andrew Savage Concrete + Base Rock
					1		
					2		@ 1.5' Silty Sand, dark brown (7.5YR 3/2), medium to fine grain sand, medium dense, damp, hydrocarbon odor
					3		-hard as yet to 3 feet
					4		@ 4'
					5		Silty Sand, dark brown (7.5YR 3/2) medium to fine grain sand, medium dense, damp, free product present (oil)
					6		@ 5 feet refusal
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

CLIENT 1614 Campbell	SITE NUMBER 03184	LOCATION Oakland
DRILLING AND SAMPLING METHODS Geoprobe		
WATER LEVEL		DRILLING START
TIME		FINISH
DATE		TIME 10:05
REFERENCE		TIME 10:10
		DATE 1-29-04
		DATE 1-29-04

LOG OF SOIL BORING

Coordinates: *B next to bldg*
 Elevation top of casing:
 Casing below surface:

Inches				WELL DETAIL	DEPTH (Feet)	GRAPHIC LOG	SURFACE CONDITIONS
Driven	Recover	Blow#8 Sampler	OVA Reading				DESCRIPTION by: Andrew Savage
					0		Concrete
					1		
					2		@2 Silty Sand, dark brown (7.5R 3/2)
					3		Are to med grain sand, medium dense, damp; No Product Odor.
					4		- Hard onger to 3 feet Water hit at 4 feet
					5		
					6		@4.5 Sand, shony brown (7.5R 4/6)
					7		Are to med grain sand, medium dense, no product odor; saturated
					8		@8 lat and at Geoprobe
					9		(screen silted w/ little water)
					10		- wait 15 min no water - Hydro punched to 10 still no water
					11		- wait 15 min no water - put pic screen in ground & leave to wait for water
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

CLIENT 1614 Campbell	SITE NUMBER 03184	LOCATION Oakland
DRILLING AND SAMPLING METHODS Geoprobe		
WATER LEVEL		DRILLING START
TIME		FINISH
DATE		TIME 11:15
REFERENCE		DATE 1-29-04

LOG OF SOIL BORING

Coordinates: *C*
 next to rail road tracks
 Elevation top of casing:
 Casing below surface:

Inches		Blows/6" Sampler	OVA Reading	WELL DETAIL	DEPTH (Feet)	GRAPHIC LOG	SURFACE CONDITIONS
Driven	Recover						Asphalt
							DESCRIPTION by: Andrew Savage
					0		Asphalt + Base
					1		@1.5
					2		sand, dark brown (7 SFR 3/4) fine to medium grain, med dense, damp, no product odor
					3		
					4	<i>V</i>	had auger to 4 feet water visible whole @4'
					5		@5
					6		sand, dark brown (7 SFR 3/4) fine to med grain sand, med dense, no product odor, saturated
					7		
					8		hole caved in hydro punched to 8'
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

CLIENT 1641 Campbell	SITE NUMBER 03184	LOCATION Oakland
DRILLING AND SAMPLING METHODS Geo probe		
WATER LEVEL		DRILLING START
TIME		FINISH
DATE		TIME 12:30
REFERENCE		DATE 1-29-04
		DATE 1-29-04

LOG OF SOIL BORING **D**
 Coordinates: next to railroad
 Elevation top of casing: rocky
 Casing below surface:

Inches		Blows/6" Sampler	OVA Reading	WELL DETAIL	DEPTH (Feet)	GRAPHIC LOG	SURFACE CONDITIONS
Driven	Recover						Asphalt
							DESCRIPTION by: Andrew Savage
					0		Asphalt + Base
					1		@ 1.5
					2		Sand, dark brown (7.5 YR 3/4)
					3		fine to medium sand, medium dense, damp, no product odor
					4	V	hard auger to 4 feet water visible in hole @ 4 feet
					5		@ 5
					6		Sand Sand, dark brown (7.5 YR 3/4)
					7		fine to medium @ norm sand, medium dense, medium saturated, no product odor
					8		
					9		
					10		
					11		
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Appendix D

**Laboratory Analytical Report
Chain-of-Custody Form**



Case Narrative

Client: ERAS Environmental

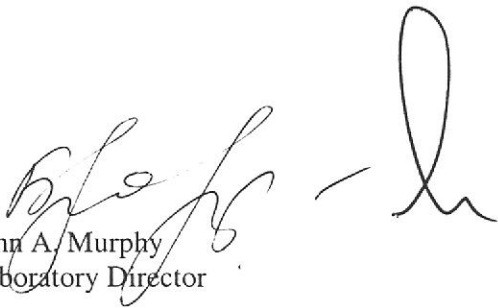
Project: 03184/1614 CAMPBELL ST.

Lab No: 04-0118

Date Received: 01/29/2004

Date reported: 02/09/2004

Here is the final report for NSLab #04-0118. Results are for one soil and three water samples received under chain of custody control on 01/29/04. Two of the water samples (04-0119-03, -04) were analyzed for diesel and gasoline range hydrocarbons by method 8015M, BTEX and MTBE by method 8021B and for halogenated hydrocarbons by GC/MS method 8260B. Third water sample (04-0118-02) was analyzed for full fuel scan by method 8015M. Soil sample (04-0119-01) was analyzed for gasoline and full fuel scan by method 8015M, BTEX and MTBE by method 8021B. For analyses of total extractable petroleum hydrocarbons method 8015M silica gel cleanup procedure was provided. No errors occurred during analysis. The QC/QA results met all requirements. No MS/MSD were analyzed for water samples for diesel, kerosene and motor oil due to insufficient amount of sample, the LCS/LCSD results have been reported.


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: 04-0118
Client: ERAS Environmental
Project: 03184/1614 CAMPBELL ST.

Date Reported: 02/09/2004

Gasoline, BTEX and MTBE by Methods 8015M/8021B
Diesel, Motor Oil, Kerosene Range by 8015M with Silica Gel

Table with 6 columns: Analyte, Method, Result, Unit, Date Sampled, Date Analyzed. Contains three sample entries (04-0118-01, 04-0118-02, 04-0118-03) with various analytes like Benzene, Ethylbenzene, Gasoline Range Organics, etc.

*Does not match typical gasoline pattern.



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

Lab Number: 04-0118
Client: ERAS Environmental
Project: 03184/1614 CAMPBELL ST.

Date Reported: 02/09/2004

Gasoline, BTEX and MTBE by Methods 8015M/8021B
Diesel, Motor Oil, Kerosene Range by 8015M with Silica Gel

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 04-0118-04	Client ID: D, 4-8			01/29/2004	W
Benzene	SW8020F	ND<0.5	UG/L		02/04/2004
Ethylbenzene	SW8020F	ND<0.5	UG/L		02/04/2004
Gasoline Range Organics	SW8020F	ND<50	UG/L		02/04/2004
Methyl-tert-butyl ether	SW8020F	ND<0.5	UG/L		02/04/2004
Toluene	SW8020F	ND<0.5	UG/L		02/04/2004
Xylenes	SW8020F	ND<1.0	UG/L		02/04/2004
Diesel Fuel #2	CATFH	ND<0.05	MG/L		02/04/2004

*Does not match typical gasoline pattern.



CERTIFICATE OF ANALYSIS

Quality Control/Quality Assurance

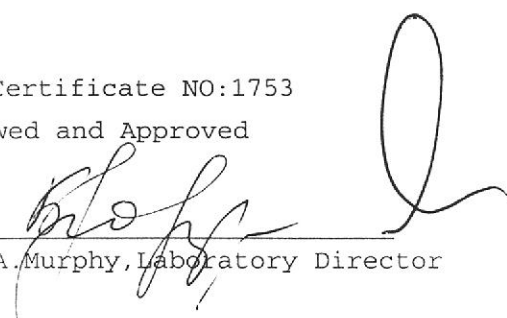
Lab Number: 04-0118
Client: ERAS Environmental
Project: 03184/1614 CAMPBELL ST.

Date Reported: 02/09/2004

Analyte	Method	Reporting Unit	Blank	MS/MSD Recovery	RPD	
Gasoline Range Organics	SW8020F	50	UG/L	ND	135/119	13
Benzene	SW8020F	0.5	UG/L	ND	96/99	3
Toluene	SW8020F	0.5	UG/L	ND	108/106	2
Ethylbenzene	SW8020F	0.5	UG/L	ND	115/111	4
Xylenes	SW8020F	1.0	UG/L	ND	119/114	4
Methyl-tert-butyl ether	SW8020F	0.5	UG/L	ND	87/93	7
Diesel Fuel #2 (02/04/04)	CATFH	0.05	MG/L	ND	92/100	8
Gasoline Range Organics	SW8020F	500	UG/KG	ND	118/120	2
Benzene	SW8020F	5	UG/KG	ND	99/100	1
Toluene	SW8020F	5	UG/KG	ND	103/104	1
Ethylbenzene	SW8020F	5	UG/KG	ND	100/102	2
Xylenes	SW8020F	10	UG/KG	ND	109/109	0
Methyl-tert-butyl ether	SW8020F	5	UG/KG	ND	84/86	2
Diesel Fuel #2 (02/06/04)	CATFH	1	MG/KG	ND	94/96	2
Kerosene (02/06/04)	CATFH	1	MG/KG	ND	NA	NA
Motor Oils (02/06/04)	CATFH	10	MG/KG	ND	NA	NA
Diesel Fuel #2 (02/06/04)	CATFH	0.05	MG/L	ND	109/111	2
Kerosene (02/06/04)	CATFH	0.05	MG/L	ND	NA	200
Motor Oils (02/06/04)	CATFH	0.5	MG/L	ND	NA	0

ELAP Certificate NO:1753

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

Job Number: 04-0118
Client : ERAS Environmental
Project : 03184/1614 CAMPBELL ST.

Date Sampled : 01/29/2004
Date Analyzed: 02/04/2004
Date Reported: 02/06/2004

Volatile Organics by GC/MS Method 8010

Laboratory Number	04-0118-03	04-0118-04
Client ID	C,4-8	D,4-8
Matrix	W	W
Analyte	UG/L	UG/L
Chloromethane	ND<1	ND<1
Vinyl chloride	ND<0.5	ND<0.5
Bromomethane	ND<1	ND<1
Chloroethane	ND<1	ND<1
Trichlorofluoromethane	ND<1	ND<1
1,1-Dichloroethene	ND<0.5	ND<0.5
Methylene chloride	ND<5	ND<5
trans-1,2-Dichloroethene	ND<1	ND<1
1,1-Dichloroethane	ND<0.5	ND<0.5
cis-1,2-Dichloroethene	ND<1	ND<1
Chloroform	ND<0.5	ND<0.5
Carbon Tetrachloride	ND<0.5	ND<0.5
1,2-Dichloroethane	ND<1	ND<1
Trichloroethene	ND<0.5	ND<0.5
Bromodichloromethane	ND<1	ND<1
trans-1,3-Dichloropropene	ND<1	ND<1
1,1,2-Trichloroethane	ND<1	ND<1
Tetrachloroethene	ND<0.5	ND<0.5
Chlorobenzene	ND<1	ND<1
1,1,2,2-Tetrachloroethane	ND<1	ND<1
1,3-Dichlorobenzene	ND<1	ND<1
1,4-Dichlorobenzene	ND<1	ND<1
1,2-Dichlorobenzene	ND<1	ND<1
1,2-Dibromoethane	ND<0.5	ND<0.5
Dichlorodifluoromethane	ND<1	ND<1
1,2-Dichloropropane	ND<1	ND<1
1,1,1,2-Tetrachloroethane	ND<1	ND<1
1,1,1-Trichloroethane	ND<1	ND<1
SUR-Dibromofluoromethane	100	106
SUR-Toluene-d8	99	101
SUR-4-Bromofluorobenzene	95	96
SUR-1,2-Dichloroethane-d4	86	95

Comments:



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

Job Number: 04-0118 Date Sampled : 01/29/2004
Client : ERAS Environmental Date Analyzed: 02/04/2004
Project : 03184/1614 CAMPBELL ST. Date Reported: 02/06/2004

Volatile Organics by GC/MS Method 8010
Quality Control/Quality Assurance Summary

Table with columns: Laboratory Number, Client ID, Matrix, Analyte, Results UG/L, %Recoveries, RPD, Recovery Limit, RPD Limit. Lists various chemical analytes and their corresponding results and recovery percentages.

Reviewed and Approved

John A. Murphy
Laboratory Director



North State Labs

90 South Spruce Avenue, Suite W, South San Francisco, CA 94080

Phone: (650) 266-4563 Fax: (650) 266-4560

04-0118

Chain of Custody / Request for Analysis

Lab Job No.: _____ Page ___ of ___

Client: <u>ERA Environmental</u>	Report to: <u>Andrew Sarge</u>	Phone: <u>510-317-9885</u>	Turnaround Time
Mailing Address: <u>1533 B-Street Hayward CA 94541</u>	Billing to: <u>1533 B Street Hayward CA 94541</u>	Fax: <u>510-886-5399</u>	<u>Standard</u>
		email: <u>ERAEnvironmental@sa.global.net</u>	Date: <u>1-29-04</u>
		PO# <u>03184</u>	Sampler: <u>Andrew</u>

Project / Site Address / Global ID: <u>03184 / 1614 Campbell St.</u>					Analysis Requested					Field Point ID	
Sample ID	Sample Type	Container No. / Type	Pres.	Sampling Date / Time	TPH-G MIX MITOX	TPH-D	TEPH	AVOC	AVOC		
1 <u>A4-S-5</u>	<u>S</u>	<u>1</u>	<u>-</u>	<u>1-29-04 / 9:35</u>	<u>X</u>		<u>X</u>				
2 <u>B4-E</u>	<u>W</u>	<u>2/1 liter</u>	<u>-</u>	<u>1-29-04 / 12:15</u>			<u>X</u>				
3 { <u>C4-E</u>	<u>W</u>	<u>4/40ml</u>	<u>HCL</u>	<u>1-29-04 / 12:00</u>	<u>X</u>			<u>1</u>			
	<u>C4-E</u>	<u>W</u>	<u>2/1 liter</u>	<u>1-29-04 / 12:00</u>		<u>X</u>					
4 { <u>D4-E</u>	<u>W</u>	<u>4/40ml</u>	<u>HCL</u>	<u>1-29-04 / 13:00</u>	<u>X</u>			<u>1</u>			
	<u>D4-E</u>	<u>W</u>	<u>2/1 liter</u>	<u>1-29-04 / 13:00</u>		<u>X</u>					

Relinquished by: <u>[Signature]</u>	Date: <u>1-29-04</u>	Time: <u>11:29</u>	Received by: <u>[Signature]</u>	Lab Comments/ Hazards
Relinquished by: <u>[Signature]</u>	Date: <u>1-29-04</u>	Time: <u>12:00</u>	Received by: <u>[Signature]</u>	
Relinquished by:	Date:	Time:	Received by:	