



AEGIS ENVIRONMENTAL, INC.

LETTER OF TRANSMITTAL

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Date: July 1, 1992 Project #90-007

Subject/Title:
Excavation Results Report
for
E.C. Buehrer 1061 Eastshore Hwy, Albany
(dated June 23, 1992)

(Final copy)

TO: E.C. Buehrer
 ATTENTION: Mr. Neil Hamre
 1061 Eastshore Highway
 Albany, California

We Are Sending: Enclosed Under Separate Cover Via _____

The Following: Draft Report / Letter Regulatory Correspondance Figures/Maps/Tables
 Final Report / Letter Laboratory Analytical Results Statement of Qualifications
 Cost Estimate Contract _____

These Are Transmitted As Checked Below:

For Approval For Review And Comment For Your Information
 As Requested Per Our Telephone Conversation As Executed
 For Your Use Approved As Submitted _____

Copies Were Sent To: None The Following:

- 1) S. Hugo, Alameda County, Department of Environmental Health
- 2) Regional Water Quality Control Board, San Francisco Bay Region,
- 3) (Alameda County Program Coordinator)
- 4) _____
- 5) _____

This Document Was Sent Via:

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Comments: The enclosed is a final copy of the "Excavation Results Report"
 for E.C. Buehrer located at 1061 Eastshore Hwy. in Albany, California.
 If you have any questions please call (916) 782-2110.
 Thank you.

Signed: Michael Kitko

SOIL EXCAVATION RESULTS REPORT

**E.C. Buehrer
1061 Eastshore Highway
Albany, California**

Aegis Project No. 90-007

July 1, 1992

Prepared By:
AEGIS ENVIRONMENTAL, INC.
1050 Melody Lane, Suite 160
Roseville, California 95678
(916) 782-2110

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1.0 INTRODUCTION

This report documents subsurface remediation and investigation activities conducted by Aegis Environmental, Inc. (Aegis), at E.C. Buehrer, Inc., located at 1061 Eastshore Highway in Albany, California (Figure 1). This report is based, in part, on information obtained by Aegis from E.C. Buehrer and regulatory agency files, and is subject to modification as newly acquired information may warrant.

1.1 Purpose

The purpose of the activities was to:

- remove an underground storage tank (UST) and associated piping;
- remediate soil containing petroleum hydrocarbons beneath the site by excavation;
- characterize and dispose of the excavated soil stockpiled on site; and,
- install a monitoring well in the area of the excavation, within 10 feet of the UST removed in 1988.

1.2 Scope

The completed scope of work, summarized below, was performed in accordance with Aegis' standard operating procedures included in Appendix A. Because depth to groundwater was known to be approximately 3.5 to 4.0 feet below grade, the maximum depth of the excavation was approximately 3.0 to 3.5 feet.

- From April 29 through May 6, 1992, approximately 1,000 to 1,200 cubic yards of soil were excavated from the site. Soil samples were collected from the excavation and submitted for laboratory analysis to characterize the soil and assess remaining hydrocarbon concentrations.
- Excavated soils were stockpiled on and covered by plastic sheeting.
- On May 4, 1992, a 1,000-gallon gasoline UST was removed. Soil and water samples were collected from beneath the tank and associated dispenser.
- On May 7 through May 13, 1992, the excavation was backfilled with crushed rock and sand, and compacted to 90+ percent.
- On May 20, 1992, concrete paving completed site restoration activities.

- On June 3, 1992, two groundwater monitoring wells were installed in the area of the excavation.
- On June 9 and 10, 1992, after soil characterization and profiling, the stockpiled soil was transported from the site, by a licensed hauler, to the Browning-Ferris Industries (BFI) landfill in Livermore.

2.0 BACKGROUND

2.1 Site Description

The site is located in an industrial area of Albany, Alameda County, California (Figure 2). Fork-lifts and other equipment are rented and maintained at the facility. An equipment maintenance building with service bays lies along the western property boundary and a welding/machine shop is on the southern portion of the property. Adjacent to the welding/machine shop was a 1,000-gallon, double-wall fiberglass UST containing regular-unleaded gasoline as well as one dispenser island. The tank, product lines, and dispenser were removed during the May 1992 excavation activities.

2.2 Site History

In December 1987, a 300-gallon UST containing waste-oil reportedly failed a precision tank test. The failed test, in part, prompted a decision to remove the waste-oil tank. On February 18, 1988, the single-wall, steel waste-oil tank and a 1,000-gallon, single-wall, steel UST gasoline tank were excavated and removed from the site. According to file documents, the 1,000-gallon UST had not been in use for the previous 2 to 3 years. Because of shallow groundwater, liquid samples were collected from the excavation instead of soil samples. The sample from the waste-oil tank excavation contained 17 parts-per-million (ppm) total oil & grease (TOG), 0.10 ppm benzene, and several chlorinated hydrocarbon compounds at concentrations up to 0.028 ppm. The liquid sample from the gasoline UST excavation contained 2.0 ppm total petroleum hydrocarbons (TPH), as gasoline, and 0.18 ppm benzene ("Proposal for Subsurface Investigation," Hageman-Shank, Inc., November 16, 1989).

2.3 Previous Investigation Activities

- In April 1990, Aegis drilled and installed four monitoring wells (MW-1 through MW-4) at the site. Volatile petroleum hydrocarbons (TPH, as gasoline, and benzene, toluene, ethylbenzene, and total xylenes (BTEX)) and non-volatile hydrocarbons (TPH, as diesel and motor oil, TOG) were detected in soil and groundwater samples from these wells (Aegis' "Hydrogeological Results Report," June 12, 1990).

- On April 2 and 3, 1991, nine soil borings were drilled and sampled to depths ranging from 3 to 14 feet below grade to further assess the vertical and lateral extent of petroleum hydrocarbons in the soil and groundwater. Four of the soil borings were converted to monitoring wells MW-5 through MW-8. All soil samples from these borings contained detectable concentrations of TPH, as motor oil (up to 280 ppm), and TOG (up to 2,400 ppm). Only one soil sample contained detectable concentrations of TPH, as gasoline (3.0 ppm), and BTEX (up to 0.12 ppm). Groundwater samples from the wells contained concentrations of TPH, as diesel (up to 230 parts-per-billion (ppb)), and BTEX (up to 1.8 ppb; Aegis' "Problem Assessment Report," August 1, 1991).
- The wells have been sampled quarterly since April 1991. Wells MW-1 through MW-4 were abandoned in August 1991 in anticipation of the excavation activities.

2.4 Adjacent Land Uses

The site is located in an industrial area of Albany, California, near the Berkeley city limits. Adjacent to the site's eastern boundary is an open area that formerly accommodated an Alcan aluminum metals plant. To the north exists an irrigation and plumbing supply business, to the south is a diesel-engine service and repair shop. Eastshore Highway is located to the west of the site, parallel to Interstate Highway 80.

Environmental investigations have been documented east of the site at the former Alcan plant and the Southern Pacific Railroad tracks, and south of the site at a bus repair shop. Underground storage tanks were being removed from this latter site in May 1992. There are numerous industrial facilities within a 1/2-mile-radius of the subject site.

2.5 General Geology and Hydrogeology

The 1977 geologic map of California indicates the site is underlain by Quaternary age alluvium. The soils types reported during excavation activities were organic, heavy clay ("bay mud") to a depth of approximately 4 feet below existing grade. Material such as glass, leaves, and metal were encountered at various depths across the site, indicating previous filling of the area had occurred.

Site surface drainage is mainly to the west, following local topography. San Francisco Bay is less than 1/2 mile west of the site. Periodic water-level measurements in the groundwater monitoring wells on site indicate groundwater is approximately 3 to 4 feet below surface, and varies with tidal fluctuations. The groundwater gradient is estimated to be approximately 0.01 ft/ft to the west.

3.0 EXCAVATION PROCEDURES AND RESULTS

3.1 Procedures

Excavation activities were conducted with a backhoe to remediate soil containing petroleum hydrocarbons beneath the site. The work was directed by Aegis personnel and performed according to Aegis' "Soil Remediation Work Plan," dated August 21, 1991, and approved by the Alameda County Department of Environmental Health (ACDEH). Because depth to groundwater was known to be approximately 3 to 4 feet below grade, the maximum excavation depth was approximately 3.5 feet. The extent of the excavation (Figure 2) was estimated based on previously acquired soil boring data and site structure constraints. Aegis personnel attempted to segregate the soil into stockpiles based on hydrocarbon content estimated by sight, odor, and with a portable photoionization detector. The field segregation effort was not completely successful because concentrations of semi- or non-volatile oil & grease constituents, the primary hydrocarbon compounds present, generally cannot be readily estimated by field observation and screening techniques. All soil was stockpiled on and covered by plastic sheeting.

Samples collected from the excavation were analyzed by Coast to Coast Analytical Services of San Luis Obispo, California, a state-certified analytical laboratory. Soil samples were collected from:

- several locations within the excavation, for soil characterization;
- beneath the removed UST and dispenser, according to underground tank closure regulatory guidelines; and,
- the sidewalls of the excavation (every 20 feet) to assess hydrocarbon concentrations remaining in the soil.

Laboratory reports and chain-of-custody forms documenting analytical methods and results and sample disposition are included in Appendix B for the soil characterization samples, Appendix C for the UST excavation samples, and Appendix D for the soil excavation samples.

3.2 Excavation Results

The excavation work began by demolishing the concrete paving on April 29, 1992. During the demolition, the water line for the welding/machine shop was damaged and was later repaired. Groundwater monitoring well MW-8 was damaged during concrete excavation activities, and subsequently completely removed.

Four soil samples (A, B, C, and D, not shown on Figure 2) were collected after concrete removal from obviously oily material in the approximate center of the proposed excavation area. The samples were collected from a depth of approximately 1 foot below ground surface for "worst case" initial soil characterization. The four soil samples were composited into two samples and submitted for analysis for soluble metals, using the California WET extraction (Waste Extraction Test), and semi-volatile TPH, using the TCLP extraction (Toxic Characteristic Leaching Procedure). The analytical results (Appendix B), indicated no soluble metals present in the soil at concentrations exceeding state-designated hazardous waste levels. No detectable concentrations of TCLP/TPH were reported.

From April 29 through May 6, 1992, approximately 1,000 to 1,200 cubic yards of soil containing petroleum hydrocarbons were excavated from the southwest portion of the site, as shown on Figure 2.

On May 4, 1992, a 1,000-gallon gasoline UST was removed from the site. Under the direction of ACDEH personnel, two soil samples were collected from the bottom of the tank excavation (#1 and #2) and one soil sample was collected from beneath the associated dispenser (#3) to assess hydrocarbon concentrations in the soil in these areas. The soil samples were analyzed for TOG, TPH, as diesel and gasoline, and BTEX. The analytical results, summarized in Table 1, indicated only TOG was detected in the soil samples, at concentrations ranging from 170 to 230 ppm. A groundwater sample (#8) was collected from water in the tank excavation. The water sample was analyzed for the same compounds as the soil samples, and for the metals cadmium, chromium, lead, nickel, and zinc. The analytical results, summarized in Table 1 and Appendix C, indicated 0.1 ppm TPH, as gasoline, and 21 ppm TOG were the only organic compounds detected. The metals results were all below applicable drinking water and/or hazardous waste limits.

From May 5 through 7, 1992, soil samples #9 through #25 were collected from the sidewalls of the excavation at a depth of approximately 3 feet below grade. All sidewall samples were analyzed for TOG. The analytical results, summarized in Table 1 and Figure 2, indicated concentrations of TOG ranging from less than 50 to 3,000 ppm, with the average concentration between 500 and 1,000 ppm.

On May 6 through 13, 1992, the excavation was backfilled with crushed rock and sand, and compacted to 90+ percent. The compaction testing report is included in Appendix F. A concrete slab was poured on the top 6 inches of the backfill material.

On June 9 and 10, 1992, after soil characterization and profiling, the stockpiled soil was transported from the site, by a licensed hauler, to the BFI landfill.

4.0 MONITORING WELL INSTALLATION

On June 3, 1992, two groundwater monitoring wells were installed in the area of the excavation. Well MW-9 was installed to monitor groundwater in the vicinity of the former UST. Well MW-8 was installed to replace the original well destroyed during site excavation activities.

Wells MW-8 and MW-9 were installed to depths of 13.5 and 10.5 feet below grade, respectively. The 4-inch-diameter wells were constructed and developed according to the Aegis SOP included in Appendix A. Boring logs and well construction details are included in Appendix E. No soil samples were collected for analysis because the wells were installed in excavation backfill. Native clays were found at a depth of 4 feet below grade. Groundwater was noted at a depth of 5.5 feet below grade in MW-9 and 11 feet below grade in MW-8.

The new wells will be sampled quarterly beginning in June 1992, along with the other wells on site.

5.0 DISCUSSION

Nearly every soil sample collected and analyzed during this investigation contained detectable concentrations of TOG, similar to results of previous investigation activities. The apparently random distribution of TOG concentrations in the excavation sidewalls implies there is no discernible source of the hydrocarbons in the subsurface. Because the site is in a filled industrial area, it is possible that the extensive heavy hydrocarbons (TOG) are a result of contaminated fill and/or a long history of surface and subsurface hydrocarbon releases from a variety of industrial activities.

6.0 REMARKS/SIGNATURES

The interpretations and conclusions contained in this report reflect our professional opinions, and were developed in accordance with currently available information and accepted geologic, hydrogeologic, and engineering practices at this time and for this specific site. Other than this, no warranty is implied or intended.

This report has been prepared solely for the use of Federated Insurance Company. Any reliance on this report by third parties shall be at such parties' sole risk.

The work reported herein was conducted under the direct supervision of the professional geologist, registered with the State of California, whose signature appears below.

AEGIS ENVIRONMENTAL, INC.



Paul Graff
Senior Geologist



Pat Wright
Registered Geologist
CRG No. 529

7-1-92

Date

MK/PW/law



7.0 REFERENCES

Aegis Environmental, Inc., June 12, 1990, "Hydrogeological Investigation Results Report."

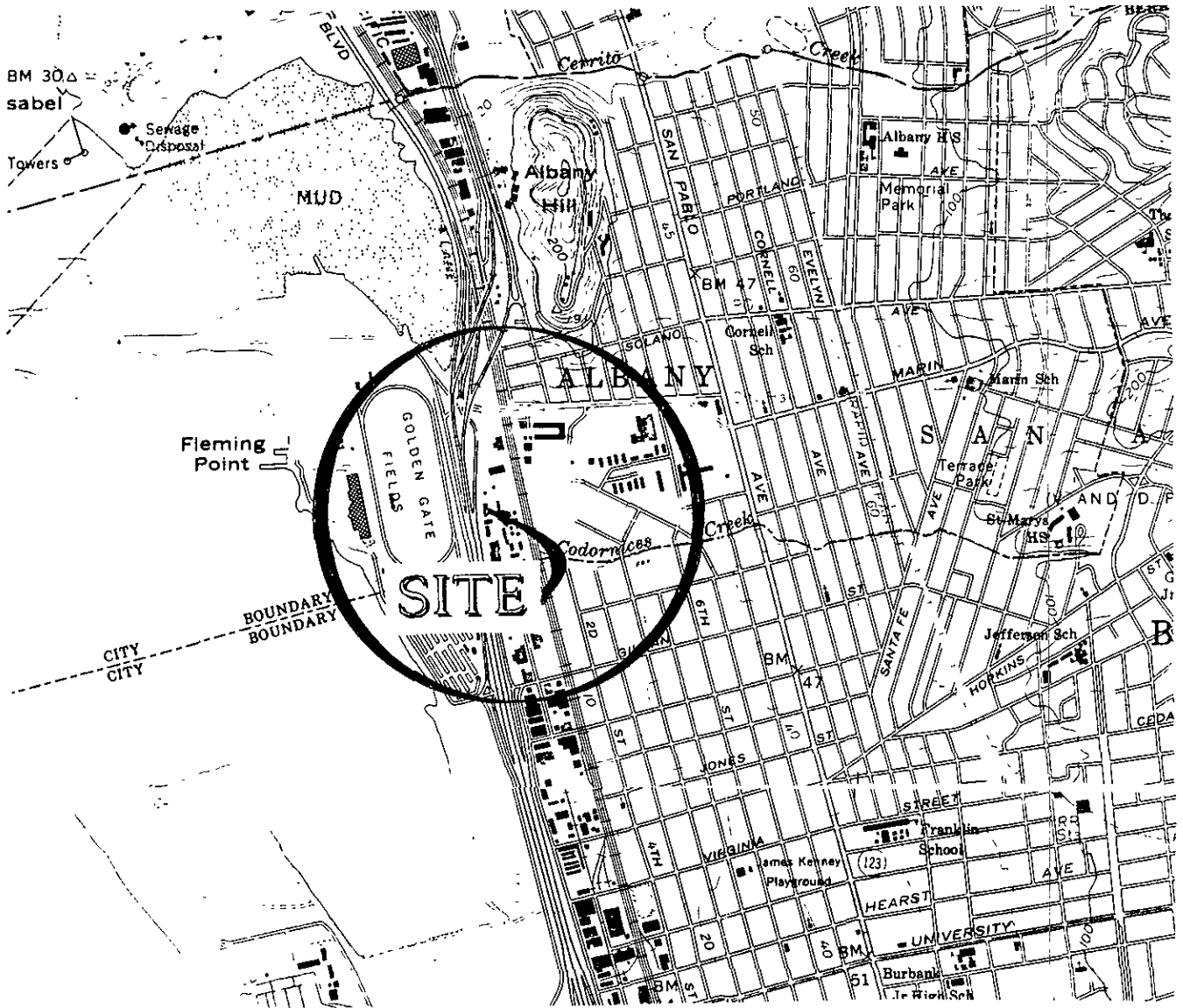
Aegis Environmental, Inc., August 1, 1991, "Problem Assessment Report."

Aegis Environmental, Inc., August 21, 1991, "Soil Remediation Work Plan."

Aegis Environmental, Inc., February 18, 1992, Letter "Revision to August 21, 1991 Soil Remediation Plan."

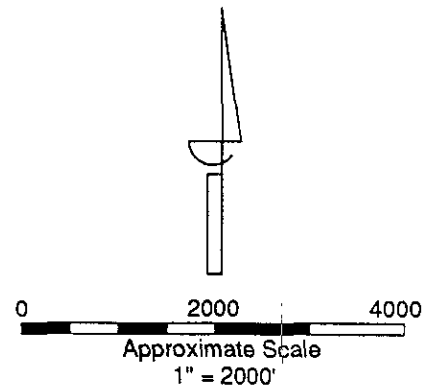
Hageman-Shank, Inc., November 16, 1989, "Proposal For Subsurface Investigation."


FIGURES



GENERAL NOTES:





BASE MAP FROM USGS
7.5 MINUTE TOPOGRAPHIC
RICHMOND & OAKLAND WEST, CALIF.



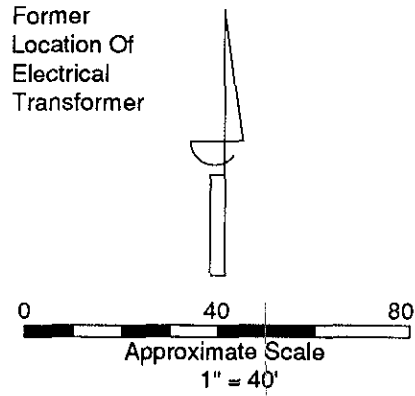
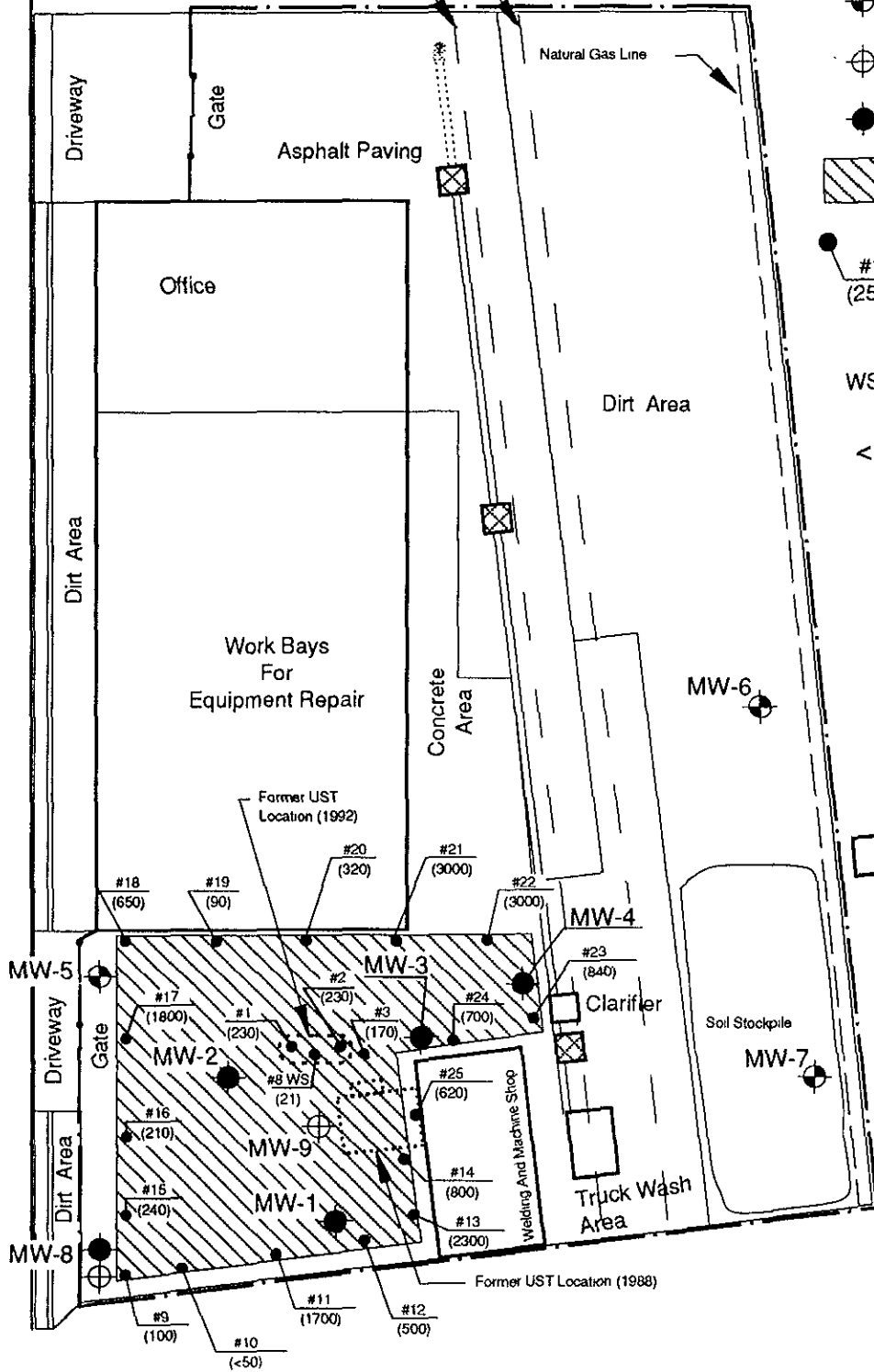
 AEGIS ENVIRONMENTAL, INC.		SITE LOCATION MAP		FIGURE 1	
DRAWN BY Ed Berand	DATE May 15, 1992	E.C. Buehrer Associates, Inc. 1061 Eastshore Highway Albany, CA		PROJECT NUMBER 10-90007	
REVISED BY	DATE				
REVIEWED BY	DATE				

Approximate Locations Of
"East Bay Municipal Utilities District"
Sanitary Sewer Pipes

LEGEND


-  Existing Monitoring Well
-  New Monitoring Wells
-  Abandoned Monitoring Well
-  Area of Excavation
- Sample #
#1
(250)
Total Oil & Grease (ppm)
(All samples collected from
1' to 4' below ground)
- WS Water Sample
- < Less Than Indicated Detection
Limit

EASTSHORE HIGHWAY (FIRST STREET)



NOTE:
Site Sketch After
Site Survey By:
Tom O. Morrow, Inc.
May, 1990

All Locations Approximate

 AEGIS ENVIRONMENTAL, INC.	
DRAWN BY. Ed Bernard	DATE May 15, 1992
REVISED BY. D. Hada	DATE June 11, 1992
REVIEWED BY	DATE

SITE MAP WITH EXCAVATION AND
SOIL SAMPLE LOCATIONS

E.C. Buehrer Associates, Inc.
1061 Eastshore Highway
Albany, CA

FIGURE
2

PROJECT NUMBER
10-90007

TABLES

TABLE 1
ANALYTICAL RESULTS: SOIL AND GROUNDWATER SAMPLES FROM BENEATH UST
MAY 4, 1992
E.C. BUEHRER, INC.
1061 EASTSHORE HIGHWAY, ALBANY, CALIFORNIA
(All results in parts-per-million)

Sample ID	Sample Type and Depth (Feet Below Grade)	Total Petroleum Hydrocarbons			Aromatic Volatile Organics				EDC ¹	EDB ²
		Gasoline	Diesel	Oil & Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes		
#1	Soil from below west side of UST, 5 feet deep	<	<	230	<	<	<	<	<<0.5	<<0.5
#2	Soil from below east side of UST, 5 feet deep	<	<	230	<	<	<	<	<<0.5	<<0.5
#3	Soil from below fuel dispenser, 1 foot deep	<	<	170	<	<	<	<	<<0.5	<<0.5
#8	Groundwater from tank excavation	0.1	<	21	<	<	<	0.028	<<0.5	<<0.5

NOTES:

- < = Below Practical Quantitation Reporting Limits per "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites" (August 10, 1990). (PQL for BTEX = 0.005ppm, TPH, as gasoline and diesel = 1.0 ppm).
- << = Below the indicated detection limit as labeled in the analytical laboratory results reports, Appendix B.
- = Not analyzed.
- NA = Not applicable.
- ¹ = 1,2-dichloroethane.
- ² = Ethylene dibromide.

Soil samples 4, 5, 6, and 7 were collected from the excavation but not analyzed.

TABLE 2

**ANALYTICAL RESULTS: EXCAVATION SOIL SAMPLES
APRIL 29 THROUGH MAY 7, 1992**

**E.C. BUEHRER, INC.
1061 EASTSHORE HIGHWAY, ALBANY, CALIFORNIA
(All results in parts-per-million)**

Sample ID	Sample Location	Oil & Grease
#9	3 feet deep, south wall	100
#10	3 feet deep, south wall	<50
#11	3 feet deep, south wall	1,700
#12	3 feet deep, south wall	500
#13	3 feet deep, east wall	2,300
#14	3 feet deep, east wall	800
#15	3 feet deep, west wall	240
#16	3 feet deep, west wall	210
#17	3 feet deep, west wall	1,800
#18	3 feet deep, north wall	650
#19	3 feet deep, north wall	90
#20	3 feet deep, north wall	320
#21	3 feet deep, north wall	3,000
#22	3 feet deep, north wall	3,000
#23	3 feet deep, northeast wall	840
#24	3 feet deep, southeast wall	700
#25	3 feet deep, southeast wall	620

NOTES: * = Analyzed after TCLP extraction.
< = Less than indicated detection limit.

APPENDIX A
STANDARD OPERATING PROCEDURES

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURES
RE: SOIL EXCAVATION AND SAMPLING
SOP-2

Excavation and subsequent soil sampling is performed under the direction of a registered geologist or civil engineer. To reduce the potential for cross-contamination, all excavation equipment is either steam-cleaned or washed prior to use and between excavations. Soil samples for chemical analysis are collected in cleaned, thin-walled brass tubes of varying diameters and lengths (e.g., 6 inches long by 2 inches outside-diameter) or other appropriate cleaned sample container. If used, one tube may be set in a 2-inch inside-diameter hand-driven sampler. To reduce the potential for cross-contamination between samples, the sampler is washed in a solution and double-rinsed between each sampling event.

Upon recovery, a portion of the soil sample is sealed for later screening with either a portable photoionization detector, flame ionization detector, or an explosimeter. Another portion of the sample is used for description of the excavated materials. A third portion of the sample is hermetically sealed, labeled and refrigerated for delivery, under strict chain-of-custody, to the analytical laboratory. These procedures minimize the potential for cross-contamination and volatilization of volatile organic compounds prior to chemical analysis.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURES
RE: SOIL CLASSIFICATION
SOP-3

Soil samples are classified according to the Unified Soil Classification System. Representative portions of the samples may be shipped under strict chain-of-custody to an analytical laboratory for further examination and verification of the in-field classification, and analysis of soil mechanical and/or petrophysical properties. The soil types are indicated on logs of either excavations or borings together with depths corresponding to the sampling points, and other pertinent information.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURES
RE: SAMPLE IDENTIFICATION AND CHAIN-OF-CUSTODY PROCEDURES
SOP-4

Sample identification and chain-of-custody procedures ensure sample integrity, and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis is labeled to identify the job number, date, time of sample collection, a sample number unique to the sample, any in-field measurements made, sampling methodology, name(s) of on site personnel and any other pertinent field observations also recorded on the field excavation or boring log.

Chain-of-custody forms are used to record possession of the sample from time of collection to its arrival at the laboratory. During shipment, the person with custody of the samples will relinquish them to the next person by signing the chain-of-custody form(s) and noting the date and time. The sample-control officer at the laboratory will verify sample integrity, correct preservation, confirm collection in the proper container(s) and ensure adequate volume for analysis.

If these conditions are met, the samples will be assigned unique laboratory log numbers for identification throughout analysis and reporting. The log numbers will be recorded on the chain-of-custody forms and in the legally-required log book maintained in the laboratory. The sample description, date received, client's name, and any other relevant information will also be recorded.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURES
RE: LABORATORY ANALYTICAL QUALITY ASSURANCE AND CONTROL
SOP-5

In addition to routine instrument calibration, replicates, spikes, blanks, spiked blanks, and certified reference materials are routinely analyzed at methods specific frequencies to monitor precision and bias. Additional components of the laboratory Quality Assurance/Quality Control program include:

1. Participation in state and federal laboratory accreditation/certification programs;
2. Participation in both U.S. EPA Performance Evaluation studies (WS and WP studies) and inter-laboratory performance evaluation programs;
3. Standard operating procedures describing routine and period instrument maintenance;
4. "Out-of-Control"/Corrective Action documentation procedures; and,
5. Multi-level review of raw data and client reports.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURE
RE: HOLLOW-STEM AUGER MONITORING WELL INSTALLATION AND
DEVELOPMENT
SOP-6

Boreholes for monitoring wells are drilled using a truck-mounted, hollow-stem auger drill rig. The borehole diameter will be a minimum of 4 inches larger than the outside-diameter of the casing when installing well screen. The hollow-stem auger provides minimal interruption of drilling while permitting soil sampling at desired intervals. Soil samples are collected by either hammering or hydraulically pushing a conventional split-barrel sampler containing pre-cleaned 2-inch-diameter brass tubes. A geologist or engineer from Aegis Environmental, Inc., continuously logs each borehole during drilling and constantly checks drill cuttings for indications of both the first occurrence of groundwater and volatile hydrocarbons using either a portable photoionization detector, flame ionization detector, or an explosimeter. The sampler is rinsed between samples and either steam-cleaned or washed with all other drilling equipment between borings to minimize the potential for cross-contamination.

Monitoring wells are cased with threaded, factory-perforated and blank Schedule 40 PVC. The perforated interval consists of slotted casing, generally with 0.020 inch wide by 1.5-inch long slots, with 42 slots per foot. A PVC cap may be secured to the bottom of the casing with stainless steel screws; no solvents or cements are used. Centering devices may be fastened to the casing to assure even distribution of filter material and grout within the borehole annulus. The well casing is thoroughly washed and/or steam-cleaned, or may be purchased as pre-cleaned, prior to installation.

After setting the casing inside the hollow-stem auger, sand or gravel filter material is poured into the annular space to fill from boring bottom to generally 1 foot above the perforated interval. A 1 to 2-foot thick bentonite plug is set above this filter material to prevent grout from infiltrating into the filter pack. Either neat cement, containing about 5 percent bentonite, or sand-cement grout is then tremmied into the annular space from the top of the bentonite plug to near surface. A traffic-rated vault is installed around each wellhead for wells located in parking lots or driveways, while steel "stovepipes" are usually set over wellheads in-landscaped areas.

After installation, the wells are thoroughly developed to remove residual drilling materials from the wellbore, and to improve well performance by removing fine material from the filter pack that may pass into the well. Well development techniques used may include pumping, surging, bailing, swabbing, jetting, flushing, and air-lifting. All development water is collected either in drums or tanks for temporary storage, and properly disposed of depending on laboratory analytical results. To minimize the potential for cross-contamination between wells, all development equipment are either steam-cleaned or properly washed prior to use.

APPENDIX B

**LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORMS:
SOIL CHARACTERIZATION SAMPLES**

RECEIVED
MAY 29 1992



Air, Water & Hazardous Waste Sampling, Analysis & Consultation
Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

Benicia Division
6006 Egret Court, Benicia, California 94510

(707) 747-2757
FAX (707) 747-2765

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0228-1
Project : 90-007 (E.C. Buehrer),
1061 Eastshore Hwy., Albany, CA
Analyzed : 05/05/92
Analyzed by: DP
Method : EPA 8270

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
Sample A (BD0228-1A) & Sample B (BD0228-1B)	Soil	Mike Kitko	04/29/92	04/29/92
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE
TOTAL SEMIVOLATILE PETROLEUM HYDROCARBONS				1,2
Total Petroleum Hydrocarbons		200.	ND	

Benicia Division Lab Certifications: CAELAP #1719; L.A.Co.CSD#10185
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
(1) Sample Preparation on 05/04/92 by TJD using EPA 3510
(2) Sample was extracted on 4/30/92 by JDS using EPA 1311 (TCLP).

05/07/92
MSD5/DE15A
MH/lap/dsp
IE04M510

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.
Mary Havlicek
Mary Havlicek, Ph.D.
President

**COAST - TO -
COAST
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Air, Water & Hazardous Waste Sampling, Analysis & Consultation
Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

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Benicia Division
6006 Egret Court, Benicia, California 94510

(707) 747-2757
FAX (707) 747-2765

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0228-2
Project : 90-007 (E.C. Buehrer),
1061 Eastshore Hwy., Albany, CA
Analyzed : 05/05/92
Analyzed by: DP
Method : EPA 8270

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
Sample C (BD0228-2A) & Sample D (BD0228-2B)	Soil	Mike Kitko	04/29/92	04/29/92
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE
TOTAL SEMIVOLATILE PETROLEUM HYDROCARBONS				1,2
Total Petroleum Hydrocarbons		200.	ND	

Benicia Division Lab Certifications: CAELAP #1719; L.A.Co.CSD#10185

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) Sample Preparation on 05/04/92 by LAP using EPA 3510
- (2) Sample was extracted on 4/30/92 by JDS using EPA 1311 (TCLP).

05/07/92
MSD5/DE16A
MH/lap/dsp
IE04M510

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President



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San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0228-1
Project : 90-007 (E.C. Buehrer),
1061 Eastshore Hwy., Albany, CA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
Sample A (BD0228-1A) & Sample B (BD0228-1B)	Soil	Mike Kitko	04/29/92	04/29/92

CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Antimony, Soluble	0.05	0.09	mg/L	EPA 7041	05/11/92	RJ	1
Arsenic, Soluble	0.05	0.23	mg/L	EPA 7060	05/11/92	RJ	1
CAL WET extraction with citrate				CAC T22	05/07/92	JB	2
Lead, Soluble	0.02	3.2	mg/L	EPA 7420	05/11/92	AS	1
Mercury, Soluble	0.001	ND	mg/L	EPA 7470	05/11/92	AS	3
Molybdenum, Soluble	0.1	ND	mg/L	EPA 7480	05/11/92	AS	1
Selenium, Soluble	0.05	ND	mg/L	EPA 7740	05/11/92	RJ	1
Silver, Soluble	0.005	0.048	mg/L	EPA 7760	05/11/92	AS	4
TCLP extraction procedure				EPA 1311	04/30/92	JS	
Thallium, Soluble	0.05	ND	mg/L	EPA 7840	05/11/92	AS	1

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

- *RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
- (1) Sample Preparation on 05/09/92 by JPB using EPA 3020
 - (2) Sample Preparation on 05/07/92 by JPB
 - (3) Sample Preparation on 05/11/92 by JPB
 - (4) Sample Preparation on 05/09/92 by JPB using EPA 3010

05/27/92
MH/rwj/bac/jpb

Respectfully submitted,
 COAST-TO-COAST ANALYTICAL SERVICES, INC.

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Roseville, CA 95678

Lab Number : BD-0228-1
Project : 90-007 (E.C. Buehrer),
1061 Eastshore Hwy., Albany, CA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
Sample A (BD0228-1A) & Sample B (BD0228-1B)	Soil	Mike Kitko	04/29/92	04/29/92

CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
CAM METALS BY ICP							1
Barium, Soluble	0.01	6.6	mg/L	EPA 6010	05/11/92	RJ	
Beryllium, Soluble	0.01	0.02	mg/L	EPA 6010	05/11/92	RJ	
Cadmium, Soluble	0.05	ND	mg/L	EPA 6010	05/11/92	RJ	
Chromium, Soluble	0.05	0.61	mg/L	EPA 6010	05/11/92	RJ	
Cobalt, Soluble	0.05	0.38	mg/L	EPA 6010	05/11/92	RJ	
Copper, Soluble	0.05	0.37	mg/L	EPA 6010	05/11/92	RJ	
Nickel, Soluble	0.05	0.97	mg/L	EPA 6010	05/11/92	RJ	
Vanadium, Soluble	0.02	0.92	mg/L	EPA 6010	05/11/92	RJ	
Zinc, Soluble	0.05	3.7	mg/L	EPA 6010	05/11/92	RJ	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
(1) Sample Preparation on 05/09/92 by JPB using EPA 3020

05/27/92
MH/rwj/bac/jpb

Respectfully submitted,
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CLIENT: Coast-to-Coast Analytical Services, Inc.

METHOD BLANK
 REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED
METHOD BLANK	Solid		
CONSTITUENT	*PQL	RESULT	UNITS METHOD ANALYZED BY NOTE
Silver, Soluble	0.005	0.071	mg/L EPA 7760 05/11/92 AS 1

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 05/09/92 by JPB using EPA 3010

05/27/92

MH
 ED0228-1

Respectfully submitted,
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CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED	
MATRIX SPIKE	Solid				
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%REC UNITS METHOD ANALYZED	BY NOTE
Antimony, Soluble	0.09	0.20	0.32	115. mg/L EPA 7041	05/11/92 RJ 1
Arsenic, Soluble	0.23	0.20	0.21	-10. mg/L EPA 7060	05/11/92 RJ 1
Lead, Soluble	3.2	4.0	6.7	88. mg/L EPA 7420	05/11/92 AS 1
Molybdenum, Soluble	ND	10.	11.	110. mg/L EPA 7480	05/11/92 AS 1
Selenium, Soluble	ND	0.20	0.19	95. mg/L EPA 7740	05/11/92 RJ 1
Silver, Soluble	0.048	0.50	0.52	94. mg/L EPA 7760	05/11/92 AS 2
Thallium, Soluble	ND	1.0	1.0	100. mg/L EPA 7840	05/11/92 AS 1
CAM METALS BY ICP					1
Barium, Soluble	6.6	10.	14.	74. mg/L EPA 6010	05/11/92 RJ
Beryllium, Soluble	0.02	1.0	1.0	98. mg/L EPA 6010	05/11/92 RJ
Cadmium, Soluble	ND	1.0	0.89	89. mg/L EPA 6010	05/11/92 RJ
Chromium, Soluble	0.61	1.0	1.5	89. mg/L EPA 6010	05/11/92 RJ
Cobalt, Soluble	0.38	1.0	1.3	92. mg/L EPA 6010	05/11/92 RJ
Copper, Soluble	0.37	1.0	1.3	93. mg/L EPA 6010	05/11/92 RJ
Nickel, Soluble	0.97	1.0	2.0	103. mg/L EPA 6010	05/11/92 RJ
Vanadium, Soluble	0.92	1.0	1.9	98. mg/L EPA 6010	05/11/92 RJ
Zinc, Soluble	3.7	1.0	5.1	140. mg/L EPA 6010	05/11/92 RJ

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) Sample Preparation on 05/09/92 by JPB using EPA 3020
- (2) Sample Preparation on 05/09/92 by JPB using EPA 3010

05/27/92

MH/rwj/bac/jpb
BD0228-1

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President

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CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
MATRIX SPIKE DUPLICATE	Solid			
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%DIFF UNITS METHOD ANALYZED BY NOTE
Antimony, Soluble	0.09	0.20	0.31	4.4 mg/L EPA 7041 05/11/92 RJ 1
Arsenic, Soluble	0.23	0.20	0.19	-67. mg/L EPA 7060 05/11/92 RJ 1
Lead, Soluble	3.2	4.0	6.6	2.9 mg/L EPA 7420 05/11/92 AS 1
Molybdenum, Soluble	ND	10.	12.	8.7 mg/L EPA 7480 05/11/92 AS 1
Selenium, Soluble	ND	0.20	0.20	5.1 mg/L EPA 7740 05/11/92 RJ 1
Silver, Soluble	0.048	0.50	0.52	0. mg/L EPA 7760 05/11/92 AS 2
Thallium, Soluble	ND	1.0	1.1	9.5 mg/L EPA 7840 05/11/92 AS 1
CAM METALS BY ICP				1
Barium, Soluble	6.6	10.	13.	14. mg/L EPA 6010 05/11/92 RJ
Beryllium, Soluble	0.02	1.0	0.95	5.2 mg/L EPA 6010 05/11/92 RJ
Cadmium, Soluble	ND	1.0	0.88	1.1 mg/L EPA 6010 05/11/92 RJ
Chromium, Soluble	0.61	1.0	1.5	0. mg/L EPA 6010 05/11/92 RJ
Cobalt, Soluble	0.38	1.0	1.3	0. mg/L EPA 6010 05/11/92 RJ
Copper, Soluble	0.37	1.0	1.3	0. mg/L EPA 6010 05/11/92 RJ
Nickel, Soluble	0.97	1.0	1.9	10. mg/L EPA 6010 05/11/92 RJ
Vanadium, Soluble	0.92	1.0	1.8	11. mg/L EPA 6010 05/11/92 RJ
Zinc, Soluble	3.7	1.0	5.0	7.4 mg/L EPA 6010 05/11/92 RJ

Lab Certifications: CAELAP#1598, UTELAP#E-142, A21A*0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) Sample Preparation on 05/09/92 by JPB using EPA 3020
- (2) Sample Preparation on 05/09/92 by JPB using EPA 3010

05/27/92

MH/rwj/bac/jpb
BD0228-1

Respectfully submitted,
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CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0228-2
Project : 90-007 (E.C. Buehrer),
1061 Eastshore Hwy., Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
Sample C (BD0228-2A) & Sample D (BD0228-2B)	Soil	Mike Kitko	04/29/92	04/29/92

CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Antimony, Soluble	0.05	0.10	mg/L	EPA 7041	05/11/92	RJ	1
Arsenic, Soluble	0.05	0.25	mg/L	EPA 7060	05/11/92	RJ	1
CAL WET extraction with citrate				CAC T22	05/07/92	JB	2
Lead, Soluble	0.02	3.4	mg/L	EPA 7420	05/11/92	AS	1
Mercury, Soluble	0.001	ND	mg/L	EPA 7470	05/11/92	AS	3
Molybdenum, Soluble	0.1	0.12	mg/L	EPA 7480	05/11/92	AS	1
Selenium, Soluble	0.05	ND	mg/L	EPA 7740	05/11/92	RJ	1
Silver, Soluble	0.005	0.047	mg/L	EPA 7760	05/11/92	AS	4
TCLP extraction procedure				EPA 1311	04/30/92	JS	
Thallium, Soluble	0.05	ND	mg/L	EPA 7840	05/11/92	AS	1

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) Sample Preparation on 05/09/92 by JPB using EPA 3020
- (2) Sample Preparation on 05/07/92 by JPB
- (3) Sample Preparation on 05/11/92 by JPB
- (4) Sample Preparation on 05/09/92 by JPB using EPA 3010

05/27/92

MH/rwj/bac

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Haylicek
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AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
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Lab Number : BD-0228-2
Project : 90-007 (E.C. Buehrer),
1061 Eastshore Hwy., Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
Sample C (BD0228-2A) & Sample D (BD0228-2B)	Soil	Mike Kitko	04/29/92	04/29/92

CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
CAM METALS BY ICP							1
Barium, Soluble	0.01	8.8	mg/L	EPA 6010	05/11/92	RJ	
Beryllium, Soluble	0.01	0.03	mg/L	EPA 6010	05/11/92	RJ	
Cadmium, Soluble	0.05	ND	mg/L	EPA 6010	05/11/92	RJ	
Chromium, Soluble	0.05	0.60	mg/L	EPA 6010	05/11/92	RJ	
Cobalt, Soluble	0.05	0.82	mg/L	EPA 6010	05/11/92	RJ	
Copper, Soluble	0.05	0.77	mg/L	EPA 6010	05/11/92	RJ	
Nickel, Soluble	0.05	1.7	mg/L	EPA 6010	05/11/92	RJ	
Vanadium, Soluble	0.02	1.3	mg/L	EPA 6010	05/11/92	RJ	
Zinc, Soluble	0.05	5.0	mg/L	EPA 6010	05/11/92	RJ	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 05/09/92 by JPB using EPA 3020

05/27/92

MH/rwj/bac

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

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CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	RECEIVED
MATRIX SPIKE	Solid				
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%REC UNITS METHOD	ANALYZED BY NOTE
Mercury, Soluble	ND	0.050	0.054	108. mg/L EPA 7470	05/11/92 AS 1

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2IA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 05/11/92 by JPB

05/27/92

MH
ED0228-2

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
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CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE
REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED					
MATRIX SPIKE DUPLICATE	Solid								
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%DIFF	UNITS	METHOD	ANALYZED	BY	NOTE
Mercury, Soluble	ND	0.050	0.054	0.	mg/L	EPA 7470	05/11/92	AS	1

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
(1) Sample Preparation on 05/11/92 by JPB

05/27/92
MH
BD0228-2

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.
Mary Havlicek
Mary Havlicek, Ph.D.
President

Phone (916) 782 2110
 FAX (916) 786-7830

AEGIS Environmental Consultants, Inc.

Sample Identification/Field Chain of Custody Record

Send results to:
 Aegis Environmental
 1050 Melody Lane, Suite 160
 Roseville, CA 95678
BDO228

Site Address: 1081 Eastshore Hwy, Albany, CA
 AEGIS Project #: 90-007 (E.C. Fisher)
 Shipped By: M.K.L.
 Shipped To: _____
 Project Manager: D. G. ...

For Shell Projects Only
 WIC: _____
 AFE: _____
 CT/DL: _____
 Shell Engineer: _____
 Hazardous Materials Suspected? (yes/no)

Sampling Point	Location	Field ID#	Date	Sample Type	No. of Containers	Analysis Required
↓	↓	Sample A	04/20/02	soil	1	STL for T, Pb, Zn, Cu, Ni, Cr, Fe
		Sample B	04/20/02	soil	1	STL for T, Pb, Zn, Cu, Ni, Cr, Fe
		Sample C	04/20/02	soil	1	STL for T, Pb, Zn, Cu, Ni, Cr, Fe
		Sample D	04/20/02	soil	1	STL for T, Pb, Zn, Cu, Ni, Cr, Fe

Sampler(s) (signature) Michael ...

Field ID	Relinquished By (signature)	Received By (signature)	Date/Time	Comments

Sealed for shipment by: (signature) Michael ... Date/Time: 04/20/02 Shipment Method: _____
 Received for Lab by: (signature) _____ Date/Time: _____ Comments: _____

Receiving Laboratory: Please return original form after signing for receipt of samples.

White/Original Yellow/Lab Copy Pink/File Copy

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REPORT OF ANALYTICAL RESULTS

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SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample C (BD0228-2A) & Sample D (BD0228-2B)	Soil	Mike Kitko	04/29/92	04/29/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
CAM METALS BY ICP							1
Barium, Soluble	0.01	8.8	mg/L	EPA 6010	05/11/92	RJ	
Beryllium, Soluble	0.01	0.03	mg/L	EPA 6010	05/11/92	RJ	
Cadmium, Soluble	0.05	ND	mg/L	EPA 6010	05/11/92	RJ	
Chromium, Soluble	0.05	0.60	mg/L	EPA 6010	05/11/92	RJ	
Cobalt, Soluble	0.05	0.82	mg/L	EPA 6010	05/11/92	RJ	
Copper, Soluble	0.05	0.77	mg/L	EPA 6010	05/11/92	RJ	
Nickel, Soluble	0.05	1.7	mg/L	EPA 6010	05/11/92	RJ	
Vanadium, Soluble	0.02	1.3	mg/L	EPA 6010	05/11/92	RJ	
Zinc, Soluble	0.05	5.0	mg/L	EPA 6010	05/11/92	RJ	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 05/09/92 by JPB using EPA 3020

05/13/92

MH/rwj/bac

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
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President

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Lab Number : BD-0228-2
Project : 90-007 (E.C. Buehrer),
1061 Eastshore Hwy., Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
Sample C (BD0228-2A) & Sample D (BD0228-2B)	Soil	Mike Kitko	04/29/92	04/29/92

CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Antimony, Soluble	0.05	0.10	mg/L	EPA 7041	05/11/92	RJ	1
Arsenic, Soluble	0.05	0.25	mg/L	EPA 7060	05/11/92	RJ	1
CAL WET extraction with citrate				CAC T22	05/07/92	JB	2
Lead, Soluble	0.02	3.4	mg/L	EPA 7420	05/11/92	AS	1
Mercury, Soluble	0.001	ND	mg/L	EPA 7470	05/11/92	AS	3
Molybdenum, Soluble	0.1	0.12	mg/L	EPA 7480	05/11/92	AS	1
Selenium, Soluble	0.05	ND	mg/L	EPA 7740	05/11/92	RJ	1
Silver, Soluble	0.005	0.047	mg/L	EPA 7760	05/11/92	AS	4
TCLP extraction procedure				EPA 1311	04/30/92	JS	
Thallium, Soluble	0.05	ND	mg/L	EPA 7840	05/11/92	AS	1

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

- *RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
- (1) Sample Preparation on 05/09/92 by JPB using EPA 3020
 - (2) Sample Preparation on 05/07/92 by JPB
 - (3) Sample Preparation on 05/11/92 by JPB
 - (4) Sample Preparation on 05/09/92 by JPB using EPA 3010

05/13/92

MH/rwj/bac

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President

San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

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CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0228-1
Project : 90-007 (E.C. Buehrer),
1061 Eastshore Hwy., Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
Sample A (BD0228-1A) & Sample B (BD0228-1B)	Soil	Mike Kitko	04/29/92	04/29/92

CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY NOTES
CAM METALS BY ICP						
Barium, Soluble	0.01	6.6	mg/L	EPA 6010	05/11/92	RJ
Beryllium, Soluble	0.01	0.02	mg/L	EPA 6010	05/11/92	RJ
Cadmium, Soluble	0.05	ND	mg/L	EPA 6010	05/11/92	RJ
Chromium, Soluble	0.05	0.61	mg/L	EPA 6010	05/11/92	RJ
Cobalt, Soluble	0.05	0.38	mg/L	EPA 6010	05/11/92	RJ
Copper, Soluble	0.05	0.37	mg/L	EPA 6010	05/11/92	RJ
Nickel, Soluble	0.05	0.97	mg/L	EPA 6010	05/11/92	RJ
Vanadium, Soluble	0.02	0.92	mg/L	EPA 6010	05/11/92	RJ
Zinc, Soluble	0.05	3.7	mg/L	EPA 6010	05/11/92	RJ

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 05/09/92 by JPB using EPA 3020

05/13/92

MH/rwj/bac/jpb

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President

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Lab Number : BD-0228-1
Project : 90-007 (E.C. Buehrer),
1061 Eastshore Hwy., Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample A (BD0228-1A) & Sample B (BD0228-1B)	Soil	Mike Kitko	04/29/92	04/29/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Antimony, Soluble	0.05	0.09	mg/L	EPA 7041	05/11/92	RJ	1
Arsenic, Soluble	0.05	0.23	mg/L	EPA 7060	05/11/92	RJ	1
CAL WET extraction with citrate				CAC T22	05/07/92	JB	2
Lead, Soluble	0.02	3.2	mg/L	EPA 7420	05/11/92	AS	1
Mercury, Soluble	0.001	ND	mg/L	EPA 7470	05/11/92	AS	3
Molybdenum, Soluble	0.1	ND	mg/L	EPA 7480	05/11/92	AS	1
Selenium, Soluble	0.05	ND	mg/L	EPA 7740	05/11/92	RJ	1
Silver, Soluble	0.005	0.048	mg/L	EPA 7760	05/11/92	AS	4
TCLP extraction procedure				EPA 1311	04/30/92	JS	
Thallium, Soluble	0.05	ND	mg/L	EPA 7840	05/11/92	AS	1

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) Sample Preparation on 05/09/92 by JPB using EPA 3020
- (2) Sample Preparation on 05/07/92 by JPB
- (3) Sample Preparation on 05/11/92 by JPB
- (4) Sample Preparation on 05/09/92 by JPB using EPA 3010

05/13/92

MH/rwj/bac/jpb

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President

APPENDIX C

**LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORMS:
UST EXCAVATION SAMPLES**



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CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : ED-0247-1
Project : 90-007 1061 Eastshore
Hwy, Albany, CA
Analyzed : 05/07/92
Analyzed by: AZ
Method : As Listed

REPORT OF ANALYTICAL RESULTS Page 1. of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
Sample #8 Underground Storage Tank ~ Excavaton Area	Aqueous	Mike Kitko	05/05/92	05/06/92

CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE
FUEL FINGERPRINT ANALYSIS				
Benzene	(71432)	0.5	ND	1,2,3
Toluene	(108883)	0.5	ND	
Ethylbenzene	(100411)	0.5	ND	
Xylenes		0.5	28.	
1,2-Dichloroethane (EDC)	(107062)	0.5	ND	
Ethylene Dibromide (EDB)	(106934)	0.5	ND	
Total Petroleum Hydrocarbons (Gasoline)		50.	100.	
Total Petroleum Hydrocarbons (Diesel 2)		50.	ND	
BTX as a percent of fuel			28.	
1,2-Dichloroethane-d4 (Surrogate)			37.4	
Toluene-d8 (Surrogate)			36.8	
p-Bromofluorobenzene (Surrogate)			36.3	

Benicia Division Lab Certifications: CAELAP #1719; L.A.Co.CSD#10185
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
(1) ANALYZED by CAL DHS DRAFT TPH (modified) and EPA 8260 (GC/MS)
(2) EXTRACTED by EPA 5030 (purge-and-trap)
(3) Surrogates were spiked at 40.0ug/L

05/13/92
INCOS 50-387
MH/trk/htc
EDE0711

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.
Mary Havlicek
Mary Havlicek, Ph.D.
President

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Roseville, CA 95678

Lab Number : BD-0247-1
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
Sample #8 Underground Storage Tank - Excavaton Area	Aqueous	Mike Kitko	05/05/92	05/06/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Cadmium, Total	0.005	0.010	mg/L	EPA 7130	05/14/92	JG	1
Chromium, Total	0.005	0.005	mg/L	EPA 7191	05/14/92	MM	1
Lead, Total	0.005	0.023	mg/L	EPA 7421	05/13/92	MM	1
Nickel, Total	0.005	0.053	mg/L	EPA 7521	05/13/92	MM	1
Zinc, Total	0.050	ND	mg/L	EPA 7950	05/11/92	MM	1

Benicia Division Lab Certifications: CAELAP #1719; L.A.Co.CSD#10185

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 05/06/92 by JBG using EPA 3020

05/19/92
PE 360
MH/mje/htc
BDE06M1

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Hawlicek
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Roseville, CA 95678

Lab Number : BD-0247-1
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
Sample #8 Underground Storage Tank - Excavaton Area	Aqueous	Mike Kitko	05/05/92	05/06/92

CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	3.	21.	mg/L	EPA 413.1	05/12/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
IE12HO

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek, Ph.D.
President

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6006 Egret Court, Benicia, California 94510

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QC Batch ID: BDE07I1

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 05/07/92
Analyzed by: AZ
Method : As Listed

METHOD BLANK
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
METHOD BLANK	Aqueous			
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE
FUEL FINGERPRINT ANALYSIS				
Benzene	(71432)	0.5	ND	1,2,3
Toluene	(108883)	0.5	ND	
Ethylbenzene	(100411)	0.5	ND	
Xylenes		0.5	ND	
1,2-Dichloroethane (EDC)	(107062)	0.5	ND	
Ethylene Dibromide (EDB)	(106934)	0.5	ND	
Total Petroleum Hydrocarbons (Gasoline)		50.	ND	
Total Petroleum Hydrocarbons (Diesel 2)		50.	ND	
BTX as a percent of fuel			Not Appl.	
1,2-Dichloroethane-d4 (Surrogate)			37.4	
Toluene-d8 (Surrogate)			38.0	
p-Bromofluorobenzene (Surrogate)			35.8	

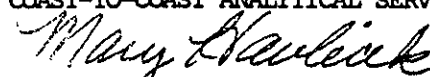
Benicia Division Lab Certifications: CAELAP #1719; L.A.Co.CSD#10185

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) ANALYZED by CAL DHS DRAFT TPH (modified) and EPA 8260 (GC/MS)
- (2) EXTRACTED by EPA 5030 (purge-and-trap)
- (3) Surrogates were spiked at 40.0ug/L

05/13/92
INCOS 50-387
MH/trk/htc
BDO247-1

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.



Mary Havlicek, Ph.D.
President



Benicia Division
6006 Egret Court, Benicia, California 94510

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FAX (707)747-2765

QC Batch ID: BDE0711

RECEIVED

MAY 27 1992

Ans'd. PKG.
90007

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 05/07/92
Analyzed by: AZ
Method : As Listed

QC SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
QC SPIKE DUPLICATE	Aqueous			
CONSTITUENT	*PQL µg/L	SPIKE AMOUNT	RESULT µg/L	%REC %DIFF NOTE
FUEL FINGERPRINT ANALYSIS				
Benzene	0.5	180.	160.	89. 6.1
Toluene	0.5	720.	660.	92. 4.4
Ethylbenzene	0.5	160.	140.	88. 0.
Xylenes	0.5	780.	720.	92. 9.3
1,2-Dichloroethane (EDC)	0.5		NS	
Ethylene Dibromide (EDB)	0.5		NS	
Total Petroleum Hydrocarbons (Gasoline)	50.	7100.	6000.	85. 6.5
Total Petroleum Hydrocarbons (Diesel 2)	50.		NS	
BTX as a percent of fuel		24.	26.	
1,2-Dichloroethane-d4 (Surrogate)		40.0	39.3	98. 2.8
Toluene-d8 (Surrogate)		40.0	39.6	99. 5.2
p-Bromofluorobenzene (Surrogate)		40.0	38.7	97. 5.3

Benicia Division Lab Certifications: CAELAP #1719; L.A.Co.CSD#10185

- * RESULTS listed as 'NS' were not spiked. PQL = Practical Quantitation Limit
- (1) ANALYZED by CAL DHS DRAFT TPH (modified) and EPA 8260 (GC/MS)
- (2) EXTRACTED by EPA 5030 (purge-and-trap)

05/11/92
INCOS 50-387
MH/trk/htc
BD0247-1

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

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QC Batch ID: BDE0711

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 05/07/92
Analyzed by: AZ
Method : As Listed

QC SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
QC SPIKE	Aqueous				
CONSTITUENT	*PQL µg/L	SPIKE AMOUNT	RESULT µg/L	%REC	NOTE
FUEL FINGERPRINT ANALYSIS					
Benzene	0.5	180.	170.	94.	1,2
Toluene	0.5	720.	690.	96.	
Ethylbenzene	0.5	160.	140.	88.	
Xylenes	0.5	780.	790.	101.	
1,2-Dichloroethane (EDC)	0.5		NS		
Ethylene Dibromide (EDB)	0.5		NS		
Total Petroleum Hydrocarbons (Gasoline)	50.	7100.	6400.	90.	
Total Petroleum Hydrocarbons (Diesel 2)	50.		NS		
BTX as a percent of fuel		24.	26.		
1,2-Dichloroethane-d4 (Surrogate)		40.0	38.2	96.	
Toluene-d8 (Surrogate)		40.0	41.7	104.	
p-Bromofluorobenzene (Surrogate)		40.0	36.7	92.	

Benicia Division Lab Certifications: CAELAP #1719; L.A.Co.CSD#10185

* RESULTS listed as 'NS' were not spiked. PQL = Practical Quantitation Limit

(1) ANALYZED by CAL DHS DRAFT TPH (modified) and EPA 8260 (GC/MS)

(2) EXTRACTED by EPA 5030 (surge-and-trap)

05/11/92
INCOS 50-387
MH/trk/htc
ED0247-1

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President

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QC Batch ID: BDE06M1

CLIENT: Coast-to-Coast Analytical Services, Inc.

METHOD BLANK
 REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE		RECEIVED
METHOD BLANK	Aqueous					
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY NOTE
Cadmium, Total	0.005	ND	mg/L	EPA 7130	05/14/92	JG 1
Chromium, Total	0.005	ND	mg/L	EPA 7191	05/14/92	MM 1
Lead, Total	0.005	ND	mg/L	EPA 7421	05/13/92	MM 1
Nickel, Total	0.005	ND	mg/L	EPA 7521	05/13/92	MM 1
Zinc, Total	0.050	ND	mg/L	EPA 7950	05/11/92	MM 1

Benicia Division Lab Certifications: CAELAP #1719; L.A.Co.CSD#10185

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 05/06/92 by JBG using EPA 3020

05/19/92
 PE 360
 MH/mje/htc
 BDO247-1

Respectfully submitted,
 COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
 Mary Havlicek, Ph.D.
 President

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QC Batch ID: BDE06M1

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MATRIX SPIKE	Aqueous							
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%REC	UNITS METHOD	ANALYZED	BY	NOTE
Cadmium, Total	0.010	0.020	0.030	100.	mg/L EPA 7130	05/14/92	JG	1
Chromium, Total	0.005	0.10	0.093	88.	mg/L EPA 7191	05/14/92	MM	1
Lead, Total	0.023	0.10	0.14	117.	mg/L EPA 7421	05/13/92	MM	1
Nickel, Total	0.053	0.50	0.46	81.	mg/L EPA 7521	05/13/92	MM	1
Zinc, Total	ND	1.0	0.97	97.	mg/L EPA 7950	05/11/92	MM	1

Benicia Division Lab Certifications: CAELAP #1719; L.A.Co.CSD#10185

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 05/06/92 by JBG using EPA 3020

05/19/92
FE 360
MH/mje/htc
ED0247-1

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Hawlicek

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(707) 747-2757
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QC Batch ID: BDE06M1

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED	
MATRIX SPIKE DUPLICATE	Aqueous				
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%DIFF	UNITS METHOD ANALYZED BY NOTE
Cadmium, Total	0.010	0.020	0.029	5.1 mg/L	EPA 7130 05/14/92 JG 1
Chromium, Total	0.005	0.10	0.097	4.4 mg/L	EPA 7191 05/14/92 MM 1
Lead, Total	0.023	0.10	0.15	8.2 mg/L	EPA 7421 05/13/92 MM 1
Nickel, Total	0.053	0.50	0.43	7.7 mg/L	EPA 7521 05/13/92 MM 1
Zinc, Total	ND	1.0	0.99	2. mg/L	EPA 7950 05/11/92 MM 1

Benicia Division Lab Certifications: CAELAP #1719; L.A.Co.CSD#10185

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 05/06/92 by JBG using EPA 3020

05/19/92
FE 360
MH/mje/htc
BD0247-1

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek

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President

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San Luis Obispo Division
 141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
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QC Batch ID: IE12HO

CLIENT: Coast-to-Coast Analytical Services, Inc.

METHOD BLANK
 REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED	
METHOD BLANK	Aqueous				
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED BY NOTE
Oil & Grease	3.	ND	mg/L	EPA 413.1	05/12/92 TW

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tnw
 BDO247-1

Respectfully submitted,
 COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
 Mary Havlicek, Ph.D.
 President



San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

QC Batch ID: IE12HO

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE
REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
QC SPIKE	Aqueous						
CONSTITUENT	*PQL	SPIKE	RESULT	%REC UNITS	METHOD	ANALYZED	BY NOTE
Oil & Grease	3.	23.	17.	74.	mg/L EPA 413.1	05/12/92	TW

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
BD0247-1

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President



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141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
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QC Batch ID: IE12HO

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE
REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED						
QC SPIKE DUPLICATE	Aqueous								
CONSTITUENT	*PQL	SPIKE	RESULT	%DIFF	UNITS	METHOD	ANALYZED	BY	NOTE
Oil & Grease	3.	23.	16.	6.1	mg/L	EPA 413.1	05/12/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
BD0247-1

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Hawlicek
Mary Hawlicek, Ph.D.
President

Phone (916) 782 2110
 FAX (916) 786-7830

AEGIS Environmental Consultants, Inc.

Sample Identification/Field Chain of Custody Record

Send results to:
 Aegis Environmental
 1050 Melody Lane, Suite 160
 Roseville, CA 95678

Site Address: 1061 Eastshore Hwy, Albany, CA
 AEGIS Project #: 90-007
 Shipped By: M. Kitko
 Shipped To: Coast to Coast Analytical Services
 Project Manager: P. Graff

320216 82247
 For Shell Projects Only
 WIC: _____
 AFE: _____
 CT/DL: _____
 Shell Engineer: _____
 Hazardous Materials Suspected? (yes/no)

Sampling Point	Location	Field ID#	Date	Sample Type	No. of Containers	Analysis Required
5 feet bgs (bottom)	underground storage tank excavation area	Sample # 8	May 5, 1992	liter/water	1	Fuel Fingerprint 8200 * TOTAL oil and grease
3 feet bgs (side)	south wall of excavation	# 9	↓	↓	↓	↓
		# 10				
		# 11				
		# 12				
	east wall of excavation	# 13				
		# 14				

Sampler(s) (signature) Michael Kitko

Field ID	Relinquished By (signature)	Received By (signature)	Date/Time	Comments
	<u>Michael Kitko</u>	<u>[Signature]</u>	5/5/92 16:35	
	<u>[Signature]</u> 5/5/92			

Sealed for shipment by: (signature) Michael Kitko Date/Time: _____ Shipment Method: Courier

Received for Lab by: (signature) _____ Date/Time: _____ Comments: Sample #8 - 5 day turn around

Samples # 9, 10, 11, 12, 13 and 14 test for Total oil and Grease with a 48 hour turn around.
 * also analyze water for total Cd, Cr, Pb, Ni, Zn ** EF ~~sample~~ SAMPLE POURED OFF OF 1 L BY JAB 5/5/92 AS REQUIRED BY MIKE KITKO

Receiving Laboratory: Please return original form after signing for receipt of samples.

White/Original Yellow/Lab Copy Pink/File Copy

APPENDIX D

**LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORMS
SOIL EXCAVATION SAMPLES**



San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0246-1
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
Sample #9 Southwall of Excavation	Soil	Mike Kitko	05/05/92	05/06/92
CONSTITUENT	*PQL	RESULT	UNITS	METHOD ANALYZED BY NOTES
Oil & Grease	50.	100	mg/Kg	EPA 9071 05/07/92 TW

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

55208

Mary Havlicek

RECEIVED

MAY 13 1992

Ans'd...CE/PLG

05/08/92

MH/oro/cdm

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek

Mary Havlicek, Ph.D.
President



San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : ED-0246-2
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED	
Sample #10 Southwall of Excavation	Soil	Mike Kitko		05/05/92	05/06/92
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED BY NOTES
Oil & Grease	50.	ND	mg/Kg	EPA 9071	05/07/92 TW

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/08/92

MH/oro/cdm

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

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President



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San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0246-3
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
Sample #11 Southwall of Excavation	Soil	Mike Kitko	05/05/92	05/06/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	1700	mg/Kg	EPA 9071	05/07/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/08/92

MH/oro/cdm

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek, Ph.D.
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**COAST - TO -
COAST
ANALYTICAL
SERVICES**

Air, Water & Hazardous Waste Sampling, Analysis & Consultation
Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : ED-0246-4
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
Sample #12 Southwall of Excavation	Soil	Mike Kitko	05/05/92	05/06/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	500	mg/Kg	EPA 9071	05/07/92	TW	

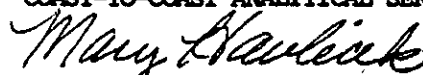
Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/08/92

MH/oro/cdm

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.



Mary Havlicek, Ph.D.
President



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141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0246-5
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
Sample #13 Eastwall of Excavation	Soil	Mike Kitko	05/05/92	05/06/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	2300	mg/Kg	EPA 9071	05/07/92	CM	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/08/92

MH/oro/cdm

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek, Ph.D.
President



San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0246-6
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
Sample #14 Eastwall of Excavation	Soil	Mike Kitko	05/05/92	05/06/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	800	mg/Kg	EPA 9071	05/07/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

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05/08/92

MH/oro/cdm

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek, Ph.D.
President

Phone (916) 782 2110
 FAX (916) 786-7830

AEGIS Environmental Consultants, Inc.

Sample Identification/Field Chain of Custody Record

Send results to:
 Aegis Environmental
 1050 Melody Lane, Suite 160
 Roseville, CA 95678

TOUCH

520246 820247

Site Address: 1061 Eastshore Hwy, Albany, CA
 AEGIS Project #: 90-007
 Shipped By: M. Kitko
 Shipped To: Coast to Coast Analytical Services
 Project Manager: P. Graff

For Shell Projects Only
 WIC: _____
 AFE: _____
 CT/DL: _____
 Shell Engineer: _____
 Hazardous Materials Suspected? (yes) (no)

Sampling Point	Location	Field ID#	Date	Sample Type	No. of Containers	Analysis Required	
5 feet bgs (bottom)	Underground Storage Tank excavation Area	Sample # 8	May 5, 1992	Liter/Water	1	Fuel Fingerprint 820 * Total oil and Grease	
3 feet bgs (side)	southwall of excavation	# 9	↓	↓	↓	↓	
		# 10					-2
		# 11					-3
		# 12					-4
	eastwall of excavation	# 13					-5
		# 14					-6

Sampler(s) (signature) Michael Kitko

Field ID	Relinquished By (signature)	Received By (signature)	Date/Time	Comments
	<u>Michael Kitko</u>	<u>[Signature]</u>	5/5/92 16:35	
	<u>[Signature]</u> 5/5/92			

Sealed for shipment by: (signature) Michael Kitko Date/Time: _____ Shipment Method: Courier

Received for Lab by: (signature) _____ Date/Time: _____ Comments: Sample # 8 - 5 day turn around, Samples # 9, 10, 11, 12, 13 and 14 test for Total oil and Grease with a 48 hour turn around. * Also analyze water for total Cd, Cr, Pb, Ni, Zn **

Receiving Laboratory: Please return original form after signing for receipt of samples.

White Original Yellow Lab Copy Pink File Copy

SAMPLE
 LAB 5/5/92 REC AS REQUESTED BY MICHAEL KITKO

MAY 19 1992



Air, Water & Hazardous Waste Sampling, Analysis & Consultation
Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

Ans'd. PKG

San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0250-1
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample #15 West Side Wall	Soil	Mike Kitko	05/06/92	05/07/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	240.	mg/Kg	EPA 9071	05/07/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
IE08HOS

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President



San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0250-2
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample #16 West Side Wall	Soil	Mike Kitko	05/06/92	05/07/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	210.	mg/Kg	EPA 9071	05/07/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/trw
IE08HOS

Respectfully submitted,
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San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0250-3
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample #17 West Side Wall	Soil	Mike Kitko	05/06/92	05/07/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	1800.	mg/Kg	EPA 9071	05/07/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

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IE08HOS

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SERVICES**

Air, Water & Hazardous Waste Sampling, Analysis & Consultation
 Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

San Luis Obispo Division (805) 543-2553
 141 Suburban Road, San Luis Obispo, California 93401 FAX (805) 543-2685

CLIENT: Paul Graff
 AEGIS Environmental Consultants, Inc
 1050 Melody Ln. Ste.160
 Roseville, CA 95678

Lab Number : BD-0250-4
 Project : 90-007 1061 Eastshore
 Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample #18 West Side Wall	Soil	Mike Kitko	05/06/92	05/07/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	650.	mg/Kg	EPA 9071	05/07/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/trw
 IE08HOS

Respectfully submitted,
 COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek

Mary Havlicek, Ph.D.
 President

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Air, Water & Hazardous Waste Sampling, Analysis & Consultation
Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : ED-0250-5
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample #19 North Side Wall	Soil	Mike Kitko	05/06/92	05/07/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	90	mg/Kg	EPA 9071	05/07/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tnw
IE08HOS

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek

Mary Havlicek, Ph.D.
President

Phone (916) 782 2110
FAX (916) 786-7830

AEGIS Environmental Consultants, Inc.

Sample Identification/Field Chain of Custody Record

Send results to:
Aegis Environmental
1050 Melody Lane, Suite 160
Roseville, CA 95678
BPO 250

Site Address: 1061 Eastshore Hwy
AEGIS Project #: 90-007
Shipped By: M. Kitko
Shipped To: Coast to Coast Analytical Services
Project Manager: P. Graff

For Shell Projects Only
WIC: _____
AFE: _____
CT/DL: _____
Shell Engineer: _____
Hazardous Materials Suspected? No

Sampling Point	Location	Field ID#	Date	Sample Type	No. of Containers	Analysis Required
3 feet bgs	West side wall	Sample # 15	May 06, 1992	Grass/soil	1	Total Oil & Grease
		# 16				
		# 17				
		# 18				
	North side wall	# 19				

Sampler(s) (signature) Michael Kitko

Field ID	Relinquished By (signature)	Received By (signature)	Date/Time	Comments
	<u>Michael Kitko</u>	<u>[Signature]</u>	<u>5/6/92 7:43</u>	

Scaled for shipment by: (signature) Michael Kitko Date/Time: May 06, 1992 Shipment Method: Courier
Received for Lab by: (signature) _____ Date/Time: _____ Comments: Test for total oil & grease. 48-hour turn-around.

MAY 19 1992

PKG
Abs'd



Air, Water & Hazardous Waste Sampling, Analysis & Consultation
Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Van Nuys, CA

San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0252-1
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample #20 North Side Wall	Soil	Mike Kitko	05/07/92	05/07/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	320.	mg/Kg	EPA 9071	05/08/92	CM	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92
MH/oro/tmw
IE08HOS

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.
Mary Havlicek
Mary Havlicek, Ph.D.
President

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ANALYTICAL
SERVICES**

Air, Water & Hazardous Waste Sampling, Analysis & Consultation
Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

San Luis Obispo Division (805) 543-2553
141 Suburban Road, San Luis Obispo, California 93401 FAX (805) 543-2685

QC Batch ID: IE08HOS

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED	
QC SPIKE	Solid				
CONSTITUENT	*PQL	SPIKE	RESULT	%REC UNITS METHOD	ANALYZED BY NOTE
Oil & Grease	50.	770.	810.	105. mg/Kg EPA 9071	05/08/92 CM

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
ED0252-1

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President



San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

QC Batch ID: IE08HOS

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
QC SPIKE DUPLICATE	Solid			
CONSTITUENT	*PQL	SPIKE	RESULT	%DIFF UNITS METHOD ANALYZED BY NOTE
Oil & Grease	50.	770.	860.	6. mg/Kg EPA 9071 05/08/92 CM

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
ED0252-1

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President



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San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0252-2
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample #21 North Side Wall	Soil	Mike Kitko	05/07/92	05/07/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	3000.	mg/Kg	EPA 9071	05/08/92	CM	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A21A#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
IE08HOS

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President

**COAST - TO -
COAST
ANALYTICAL
SERVICES**

Air, Water & Hazardous Waste Sampling, Analysis & Consultation
 Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

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San Luis Obispo Division
 141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
 FAX (805) 543-2685

CLIENT: Paul Graff
 AEGIS Environmental Consultants, Inc
 1050 Melody Ln. Ste.160
 Roseville, CA 95678

Lab Number : BD-0252-3
 Project : 90-007 1061 Eastshore
 Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample #22 North Side Wall	Soil	Mike Kitko	05/07/92	05/07/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	3000.	mg/Kg	EPA 9071	05/08/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
 IE09HOS

Respectfully submitted,
 COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Hawlicek
 Mary Hawlicek, Ph.D.
 President

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San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

QC Batch ID: IE09HOS

CLIENT: Coast-to-Coast Analytical Services, Inc.

METHOD BLANK
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
METHOD BLANK	Solid						
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTE
Oil & Grease	50.	ND	mg/Kg	EPA 9071	05/08/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
BD0252-3

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Hawlicek
Mary Hawlicek, Ph.D.
President



San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

QC Batch ID: IE09HOS

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED					
QC SPIKE	Solid								
CONSTITUENT	*PQL	SPIKE	RESULT	%REC	UNITS	METHOD	ANALYZED	BY	NOTE
Oil & Grease	50.	380.	380.	100.	mg/Kg	EPA 9071	05/08/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tnw
ED0252-3

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Hawlicek
Mary Hawlicek, Ph.D.
President

**COAST - TO -
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SERVICES**

Air, Water & Hazardous Waste Sampling, Analysis & Consultation
Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

QC Batch ID: IE09HOS

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED						
QC SPIKE DUPLICATE	Solid								
CONSTITUENT	*PQL	SPIKE	RESULT	%DIFF	UNITS	METHOD	ANALYZED	BY	NOTE
Oil & Grease	50.	380.	360.		5.4 mg/Kg	EPA 9071	05/08/92	TW	

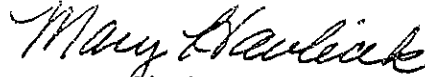
Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
BD0252-3

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.



Mary Havlicek, Ph.D.
President

**COAST - TO -
COAST
ANALYTICAL
SERVICES**

Air, Water & Hazardous Waste Sampling, Analysis & Consultation
 Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA • Newport Beach, CA • Valparaiso, IN

San Luis Obispo Division
 141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
 FAX (805) 543-2685

CLIENT: Paul Graff
 AEGIS Environmental Consultants, Inc
 1050 Melody Ln. Ste.160
 Roseville, CA 95678

Lab Number : BD-0252-4
 Project : 90-007 1061 Eastshore
 Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample #23 North Side Wall	Soil	Mike Kitko	05/07/92	05/07/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	840.	mg/Kg	EPA 9071	05/08/92	TW	

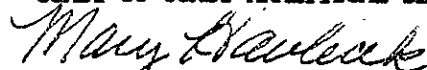
Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
 IE09HOS

Respectfully submitted,
 COAST-TO-COAST ANALYTICAL SERVICES, INC.



Mary Hawlicek, Ph.D.
 President



San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0252-5
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample #24 East Side Wall	Soil	Mike Kitko	05/07/92	05/07/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	700.	mg/Kg	EPA 9071	05/08/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/tmw
IE09HOS

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek, Ph.D.
President



San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0252-6
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED			
Sample #25 South Side Wall	Soil	Mike Kitko	05/07/92	05/07/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	620.	mg/Kg	EPA 9071	05/08/92	TW	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/15/92

MH/oro/trw
IE09HOS

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek
Mary Havlicek, Ph.D.
President

AEGIS Environmental Consultants, Inc.

Sample Identification/Field Chain of Custody Record

Send results to:
 Aegis Environmental
 1050 Melody Lane, Suite 160
 Roseville, CA 95678

3D0252

Site Address: 1061 Eastshore Hwy, Albany, CA
 AEGIS Project #: 90-007
 Shipped By: M. Kitko
 Shipped To: Coast to Coast Analytical Services
 Project Manager: P. Graft

For Shell Projects Only
 WIC: _____
 AFE: _____
 CT/DL: _____
 Shell Engineer: _____
 Hazardous Materials Suspected? (yes/no)

Sampling Point	Location	Field ID#	Date	Sample Type	No. of Containers	Analysis Required
3 feet below surface	North side wall	sample # 20	May 07, 1992	brass/soil	1	Total Oil & Grease
↓	↓	# 21	↓	↓	↓	↓
↓	↓	# 22	↓	↓	↓	↓
↓	↓	# 23	↓	↓	↓	↓
↓	East side wall	# 24	↓	↓	↓	↓
↓	south side wall	# 25	↓	↓	↓	↓
↓	↓	↓	↓	↓	↓	↓
↓	↓	↓	↓	↓	↓	↓

Sampler(s) (signature) Michael Kitko

Field ID	Relinquished By (signature)	Received By (signature)	Date/Time	Comments
	<u>Michael Kitko</u>	<u>Brenda D. [Signature]</u>	5/7/92 11:00	

Sealed for shipment by: (signature) Michael Kitko Date/Time: 05/07/92 11:00am Shipment Method: Courier
 Received for Lab by: (signature) _____ Date/Time: _____ Comments: 48-hr turnaround

RECEIVED

JUN 01 1992

Ans'd. PKG

5 DAYS TURNAROUND

CHROMALAB, INC.

Environmental Laboratory (1094)

May 26, 1992

ChromaLab File No.: 0592144

AEGIS ENVIRONMENTAL

Attn: Paul Graff

RE: Three soil samples for TCLP - Motor Oil analysis

Project Location: 1061 EASTSHORE HWY, ALBANY, CA

Project Number: 90-007

Date Sampled: May 15, 1992

Date Submitted: May 15, 1992

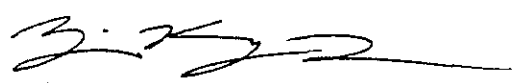
Date Extracted: May 21, 1992

Date Analyzed: May 21, 1992

RESULTS:

Sample I.D.	TCLP Motor Oil (mg/L)
SP-1	N.D.
SP-2	N.D.
SP-3	N.D.
BLANK	N.D.
SPIKED RECOVERY	92%
DUPLICATE SPIKED RECOVERY	97%
DETECTION LIMIT	0.5
METHOD OF ANALYSIS	\3510/8015

ChromaLab, Inc.



Yiu Tam
Analytical Chemist



Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

May 26, 1992

ChromaLab File No.: 0592144

AEGIS ENVIRONMENTAL

Attn: Paul Graff

RE: One soil sample for Waste Extraction CAM 17 elements analysis

Project Location: 1061 EASTSHORE HWY, ALBANY, CA

Project Number: 90-007

Date Sampled: May 15, 1992

Date Submitted: May 15, 1992

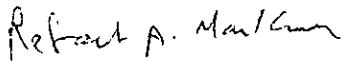
Date Analyzed: May 22, 1992

RESULTS: Sample I.D. SP-2

<u>Metals</u>	<u>Concentration</u> (mg/L)	<u>Detection</u> <u>Limit</u> (mg/L)
Antimony (Sb)	0.07	0.020
Arsenic (As)	0.22	0.005
Barium (Ba)	7.6	0.005
Beryllium (Be)	N.D.	0.001
Cadmium (Cd)	0.03	0.001
Cobalt (Co)	0.43	0.01
Chromium (Cr)	0.34	0.01
Copper (Cu)	1.2	0.005
Lead (Pb)	5.3	0.010
Mercury (Hg)	0.002	0.001
Molybdenum (Mo)	0.03	0.005
Nickel (Ni)	1.0	0.020
Selenium (Se)	N.D.	0.01
Silver (Ag)	N.D.	0.005
Thallium (Tl)	N.D.	0.04
Vanadium (V)	0.97	0.01
Zinc (Zn)	18	0.005

Method of Analysis: WET/3010/6010/7000

ChromaLab, Inc.


Refaat A. Mankarious
Inorganics Supervisor


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

May 26, 1992

ChromaLab File No.: 0592144

AEGIS ENVIRONMENTAL

Attn: Paul Graff

RE: One soil sample for Waste Extraction CAM 17 elements analysis

Project Location: 1061 EASTSHORE HWY, ALBANY, CA

Project Number: 90-007

Date Sampled: May 15, 1992

Date Submitted: May 15, 1992

Date Analyzed: May 22, 1992

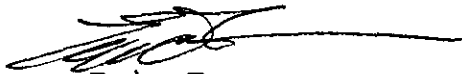
RESULTS: Sample I.D. SP-1

<u>Metals</u>	<u>Concentration</u> (mg/L)	<u>Detection</u> <u>Limit</u> (mg/L)
Antimony (Sb)	0.07	0.020
Arsenic (As)	0.20	0.005
Barium (Ba)	8.6	0.005
Beryllium (Be)	0.02	0.001
Cadmium (Cd)	0.06	0.001
Cobalt (Co)	0.84	0.01
Chromium (Cr)	0.61	0.01
Copper (Cu)	0.24	0.005
Lead (Pb)	3.6	0.010
Mercury (Hg)	0.001	0.001
Molybdenum (Mo)	0.03	0.005
Nickel (Ni)	1.0	0.020
Selenium (Se)	N.D.	0.01
Silver (Ag)	N.D.	0.005
Thallium (Tl)	N.D.	0.04
Vanadium (V)	1.6	0.01
Zinc (Zn)	14	0.005

Method of Analysis: WET/3010/6010/7000

ChromaLab, Inc.

Refaat A. Mankarious
Refaat A. Mankarious
Inorganics Supervisor


Eric Tam
Laboratory Director

Phone (916) 782 2110
 FAX (916) 786-7830

AEGIS Environmental
 Sample Identification/Field Ch:

CHROMALAB FILE # 592144
 ORDER #

6447

Send results to:
 Aegis Environmental
 1050 Melody Lane, Suite 160
 Roseville, CA 95678

Site Address: 1061 EAST SHORE HWY ALBANY CA
 AEGIS Project #: 90-007
 Shipped By: AEGIS
 Shipped To: CHIZAMA LAIS
 Project Manager: P. Huff "PAUL GRAFF"

For Shell Projects Only
 WIC: _____
 AFE: _____
 CT/DL: _____
 Shell Engineer: _____
 Hazardous Materials Suspected? (yes/no)

Sampling Point	Location	Field ID#	Date	Sample Type	No. of Containers	Analysis Required
SP-4 point field composite	Soil Stockpile	SP-1	5-15-92	Soil	1	STLC CAM17 metals TCLP/TPH on motor oil
↓	↓	SP-2	↓	↓	↓	STLC CAM17 metals TCLP/TPH on motor oil
		SP-3				TCLP/TPH on motor oil
		SP-4				Hold
		SP-5				Hold
Rerun SP-1 & SP-2, STLC CAM17 - DI water option per Paul Graff 5/27/92						

Sampler(s) (signature) Eric Huff "ISRIAN HENDERSON"

Field ID	Relinquished By (signature)	Received By (signature)	Date/Time	Comments
SP-1 & 545	<u>Eric Huff</u>	<u>Gary Cook</u>	5/15 1:15 PM	5 DAY T.A.T

Sealed for shipment by: (signature) Eric Huff Date/Time: 5/15 12:30 PM Shipment Method: LALS PICK UP ON SITE
 Received for Lab by: (signature) Gary Cook Date/Time: 5/15/92 1:15 PM Comments: _____
 * 5-DAY Turnaround

Receiving Laboratory: Please return original form after signing for receipt of samples.

White/Original Yellow/Lab Copy Pink/Field Copy



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 Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories

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 Newport Beach, CA • Valparaiso, IN • Westbrook, ME

San Luis Obispo Division

141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553

FAX (805) 543-2685

CLIENT: Paul Graff

AEGIS Environmental Consultants, Inc
 1050 Melody Ln. Ste.160
 Roseville, CA 95678

Lab Number : BD-0239-1

Project : 90-007 1061 Eastshore
 Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
Sample #1 - Bottom of UST Excavation - 5' Below Ground Surface	Soil	Mike Kitko	05/04/92	05/05/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	230.	mg/Kg	EPA 9071	05/07/92	CM	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2IA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/08/92

MI/oro/tmw
 TEOBHD

Respectfully submitted,
 COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek, Ph.D.
 President



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 Newport Beach, CA • Valparaiso, IN • Westbrook, ME

San Luis Obispo Division
 141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
 FAX (805) 543-2685

CLIENT: Paul Graff
 AEGIS Environmental Consultants, Inc
 1050 Melody Ln. Ste.160
 Roseville, CA 95678

Lab Number : BD-0239-2
 Project : 90-007 1061 Eastshore
 Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
Sample #2 - Bottom of UST Excavation - 5' Below Ground Surface	Soil	Mike Kitko	05/04/92	05/05/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	230.	mg/Kg	EPA 9071	05/07/92	CM	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A2LA#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/08/92

MH/oro/tmw

Respectfully submitted,
 COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek, Ph.D.
 President

**COAST - TO -
COAST
ANALYTICAL
SERVICES**

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San Luis Obispo, CA • Goleta, CA • Benicia, CA • Camarillo, CA
Newport Beach, CA • Valparaiso, IN • Westbrook, ME

San Luis Obispo Division
141 Suburban Road, San Luis Obispo, California 93401

(805) 543-2553
FAX (805) 543-2685

CLIENT: Paul Graff
AEGIS Environmental Consultants, Inc
1050 Melody Ln. Ste.160
Roseville, CA 95678

Lab Number : BD-0239-3
Project : 90-007 1061 Eastshore
Hwy, Albany, CA

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
Sample #3 - Below Dispenser Island - 1' Bgs	Soil	Mike Kitko	05/04/92	05/05/92			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil & Grease	50.	170.	mg/Kg	EPA 9071	05/07/92	CM	

Lab Certifications: CAELAP#1598, UTELAP#E-142, A21A#0136-01, L.A.Co.CSD#10187.

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/08/92

MH/oro/tmw
IE08HOS

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mary Havlicek

Mary Havlicek, Ph.D.
President

Phone (916) 782-2110
 FAX (916) 786-7830

AEGIS Environmental Consultants, Inc.

Sample Identification/Field Chain of Custody Record

Send results to:
 Aegis Environmental
 1050 Melody Lane, Suite 160
 Roseville, CA 95678

200239

For Shell Projects Only
 WIC: _____
 AFE: _____
 CT/DL: _____
 Shell Engineer: _____
 Hazardous Materials Suspected? (yes/no)

Site Address: 1061 Eastshore Hwy, Albany, CA
 AEGIS Project #: 90-007
 Shipped By: M. Kitko
 Shipped To: Coast to Coast Analytical Laboratory
 Project Manager: Paul Graft

Sampling Point	Location	Field ID#	Date	Sample Type	No. of Containers	Analysis Required
5 feet below ground surface	Bottom of UST Excavation *	Sample # 1	May 04, 1992	Brass/soil	1	TPH Oil & greases TPH-g, RTEK TPH-d
5 feet below ground surface	↓	Sample # 2	May 04, 1992	Brass/soil	1	
2 foot bags	Below disperser Island *	Sample # 3	May 04, 1992	Brass/soil	1	
North side	stockpile No. 1	Sample # 4	May 04, 1992	Brass/soil	1	STLC for CAM 17 Metals:
West side	stockpile No. 1	Sample # 5	May 04, 1992	Brass/soil	1	TCLP Extraction for EPA 418.1 Analysis
East side	stockpile No. 1	Sample # 6	May 04, 1992	Brass/soil	1	STLC for CAM 17 Metals
South side	stockpile No. 1	Sample # 7	May 04, 1992	Brass/soil	1	TCLP Extraction for EPA 418.1 Analysis.

Sampler(s) (signature) Michael Kitko

Field ID	Relinquished By (signature)	Received By (signature)	Date/Time	Comments
	<u>Michael Kitko</u>	<u>[Signature]</u>	May 04, 1992 4:45	
	<u>[Signature]</u>	<u>[Signature]</u>	5-5-92 1500	

Sealed for shipment by: (signature) Michael Kitko Date/Time: May 04, 1992 4:45 Shipment Method: Carrier

Received for Lab by: (signature) _____ Date/Time: _____ Comments: Hold on Samples 4 and 5, 6, 7.

Samples 4 & 6 run STLC for CAM 17 Metals. Samples 5 & 7 run TCLP Extraction for EPA 418.1 analysis. ~~STLC~~ turn-around on samples 1, 2 and 3. 046 = TOTAL OIL & GREASES &

Receiving Laboratory: Please return original form after signing for receipt of samples.

White/Original Yellow/Lab Copy Pink/File Copy

TPH-G/D = FF 512

PAUL GRAFT 5/5

05/11/92

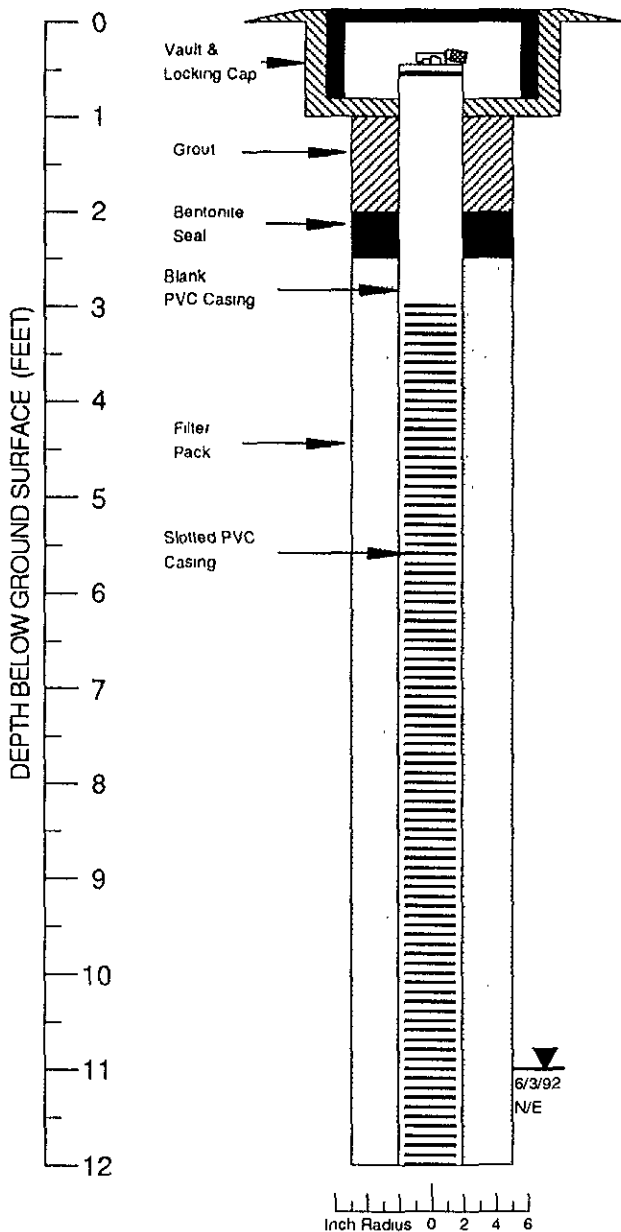
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CGPS INC/SLO 805-543-2685

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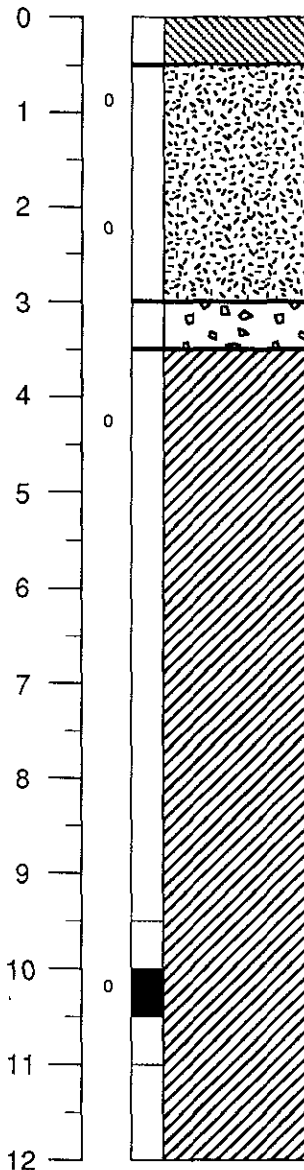
APPENDIX E
BORING LOGS

WELL CONSTRUCTION DETAIL



GRAPHIC LOG

PID (ppmv)



DESCRIPTION

Reinforced Concrete

SAND (SW); brownish yellow, fine grained, artificial fill, well graded, no odor

GRAVEL (GW); well graded, 2 to 6 inches in diameter, subangular clasts, artificial fill, no odor

CLAY (CL); grayish olive green, wet, sticky, medium plasticity, no odor

Logged by: M. Kilko
 Project Mgr: P. Grant
 Date Drilled: 6/3/92

Drilling Company: B&F Drilling
 Drilling Method: Mobile B-53
 Driller: Breece Franks, Breece III

Well Head Completion: 11:30 hrs
 Type of Sampler: Calif. Split Spoon
 TD (Total Depth): 13.5'

Explanation

- Water level during drilling
- Water level in completed well
- Location of recovered drill sample
- Location of sample sealed for chemical analysis
- Sieve sample
- Grab Sample

Contacts

- Solid where certain
- Dotted where approximate
- Dashed where uncertain
- Hachured where gradational
- est K Estimated permeability (hydraulic conductivity)
1K= primary, 2K= secondary
- NR No Recovery



AEGIS ENVIRONMENTAL, INC.

Well Log

Monitoring Well 8

E.C. Buehrer
 1061 Eastshore Highway
 Albany, CA

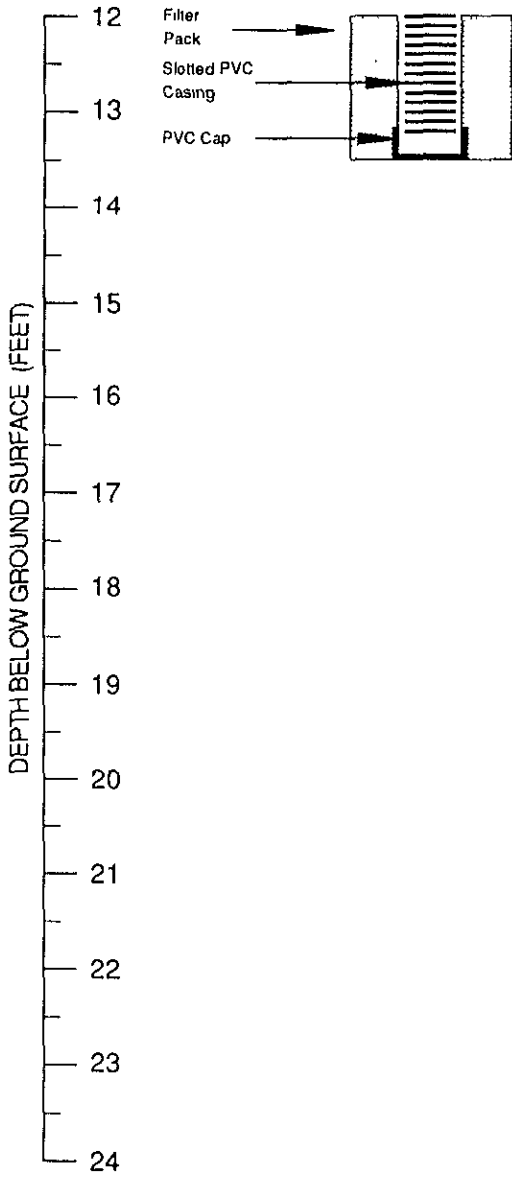
JOB NUMBER

90-007

WELL

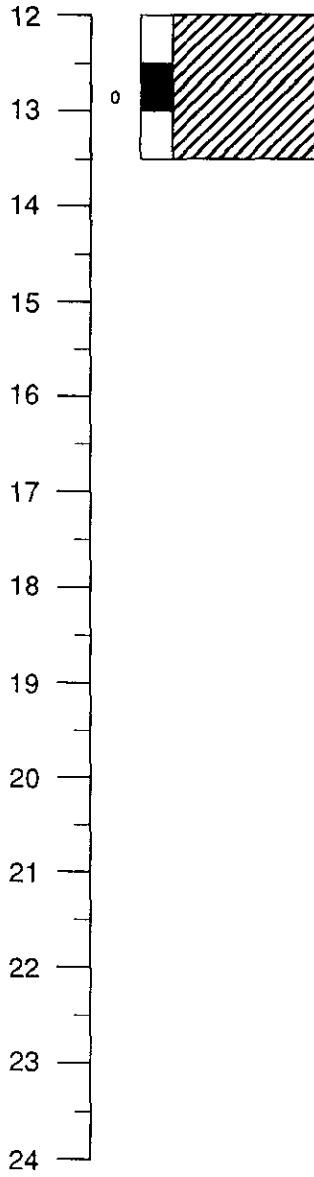
8

WELL CONSTRUCTION DETAIL



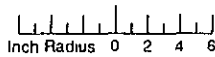
GRAPHIC LOG

PID (ppmv)



DESCRIPTION

Grayish green
Total Depth = 13.5 feet



Explanation

- Water level during drilling
- Water level in completed well
- Location of recovered drilt sample
- Location of sample sealed for chemical analysis
- Sieve sample
- Grab Sample

Contacts

- Solid where certain
- Dotted where approximate
- Dashed where uncertain
- Hachured where gradational
- est K Estimated permeability (hydraulic conductivity)
1K= primary, 2K= secondary
- NR No Recovery



AEGIS ENVIRONMENTAL, INC.

Well Log

Monitoring Well 8

E.C. Buehrer
1061 Eastshore Highway
Albany, CA

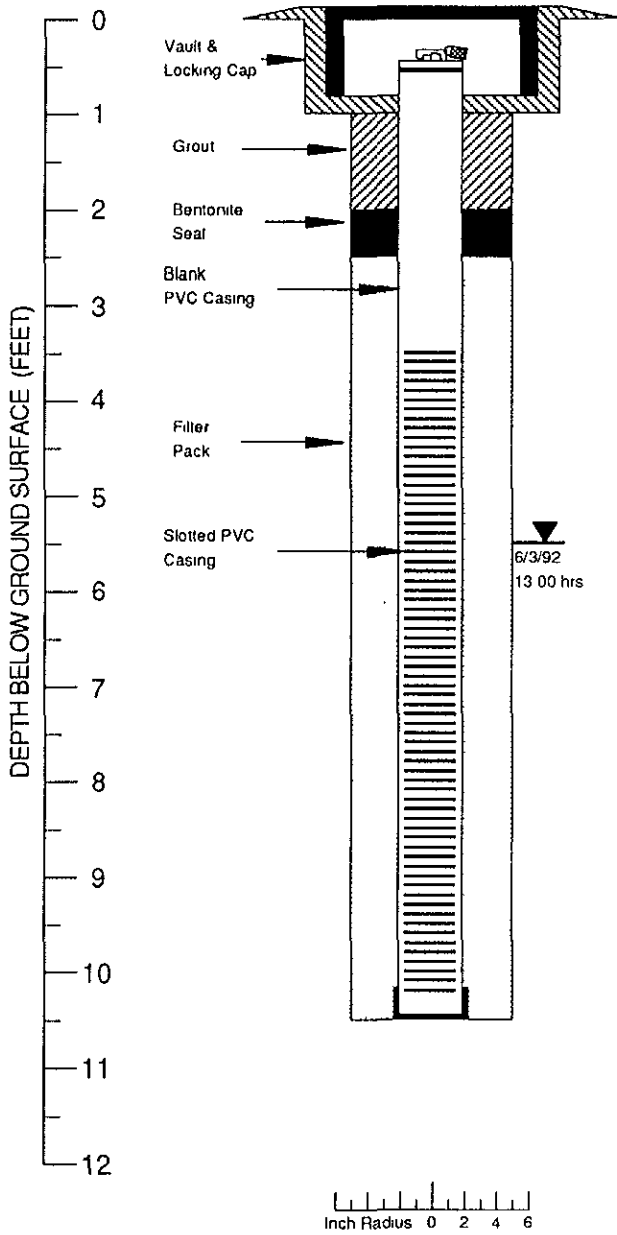
JOB NUMBER

90-007

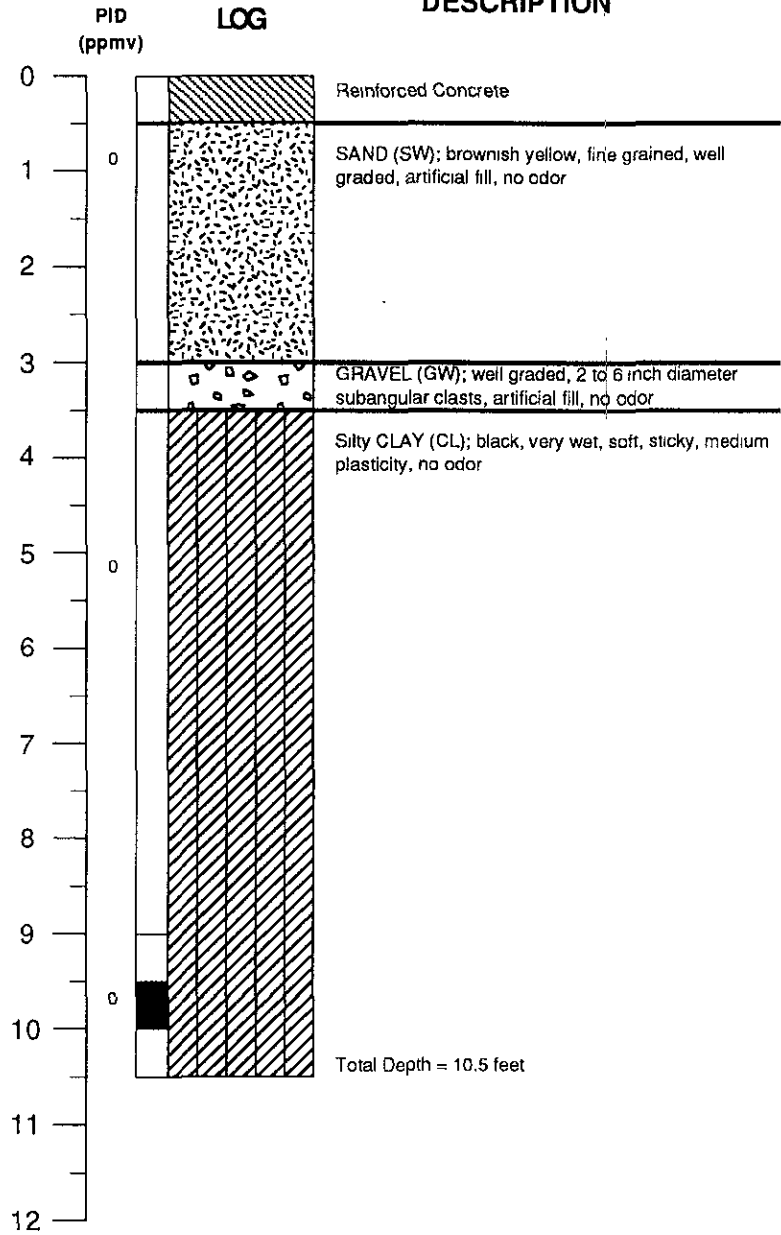
WELL

8

WELL CONSTRUCTION DETAIL



GRAPHIC LOG



DESCRIPTION

Logged by: M. Kitko
 Project Mgr: P. Graff
 Date Drilled: 6/3/92

Drilling Company: B&F Drilling
 Drilling Method: Mobile B-53
 Driller: Breece Franks, Breece III

Well Head Completion: 1:15 hrs
 Type of Sampler: Calif. Split Spoon
 TD (Total Depth): 10.5'

Explanation

- Water level during drilling
- Water level in completed well
- Location of recovered drill sample
- Location of sample sealed for chemical analysis
- Sieve sample
- Grab Sample

Contacts

- Solid where certain
- Dotted where approximate
- Dashed where uncertain
- Hachured where gradational
- est K Estimated permeability (hydraulic conductivity)
1K= primary, 2K= secondary
- NR No Recovery



AEGIS ENVIRONMENTAL, INC.

Well Log
 Monitoring Well 9

JOB NUMBER
 90-007

E.C. Buehrer
 1061 Eastshore Highway
 Albany, CA

WELL
 9

APPENDIX F
COMPACTION TESTING REPORT

VECTOR ENGINEERING INC.

May 28, 1992
Project No. 893040.33

Mr. Paul Graff
Aegis Environmental
1050 Melody Lane, Suite 160
Roseville, CA 95678

RECEIVED

JUN 04 1992

Ans'd. PKG
90007

**RE: Results of the Field and Laboratory Testing Services
E.C. Buehrer Project, Albany, California**

Dear Mr. Graff,

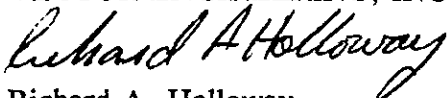
As requested, we have performed the field density and related laboratory testing services during the excavation backfill, and subgrade preparation at the E.C. Buehrer project, in Albany, California. Our services were provided to determine the degree of compaction effected by the contractor in relation to the specifications that you provided.

Field density testing was performed on the excavation backfill, and subgrade soils at random locations and elevations in accordance ASTM D-3017 and ASTM D-2922. The maximum dry density and optimum moisture content of the imported soils were determined in accordance with ASTM D-1557. The results of these testing procedures are presented on Tables I and II of this text. Areas of failing density were removed or reworked by the contractor until passing test results were attained.


The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater or air, on or below or around this site.

It has been a pleasure being of service to you on this project. If you should have any questions or need further assistance, please do not hesitate to call this office.

Respectfully Submitted,
VECTOR ENGINEERING, INC.


Richard A. Holloway
Laboratory Manager

Reviewed By


Rick Kiel, PE
Civil Engineer No. 047477



Project: E. C. Buehrer
Project No.: 893040.33

TABLE I
Maximum Density/Optimum Moisture
ASTM D-1557

Sample Number	Description	Optimum Moisture %	Maximum Dry Density, P.C.F.
1	Light Brown fine Sand	10.0	115.0

TABLE II
FIELD DENSITY TEST SUMMARY
ASTM D-3017/D-2922

TEST NO.	DATE	LOCATION	ELEV. (ft)	MOIST. (%)	DRY DENSITY (PCF)	MAX. DRY DENSITY (PCF)	OPT. MOIST. %	% COMPACTION	REMARKS
1	5-11-92	25'W/10'N-SE Corner	-2.0' ffg	8.7	108.9	115.0	10.0	94.6	
2	5-11-92	50'W/10'N-SE Corner	-2.0' ffg	9.4	108.8	115.0	10.0	94.6	
3	5-11-92	50'W/50'N-SE Corner	-1.5' ffg	6.2	109.9	115.0	10.0	95.5	
4	5-11-92	20'W/60'N-SE Corner	-1.0' ffg	8.6	108.8	115.0	10.0	94.6	
5	5-11-92	10'W/10'N-SE Corner	-1.0' ffg	7.7	108.6	115.0	10.0	94.4	
6	5-11-92	38'W/38'N-SE Corner	-1.0' ffg	8.6	107.8	115.0	10.0	93.7	
7	5-11-92	10'S/10'W-NE Corner	-1.0' ffg	8.9	107.9	115.0	10.0	93.8	
8	5-12-92	55'W/65'N-SE Corner	-0.5' ffg	9.3	109.7	115.0	10.0	95.3	
9	5-12-92	15'W/70'N-SE Corner	-0.3' ffg	6.1	109.6	115.0	10.0	95.3	
10	5-12-92	15'W/35'N-SE Corner	-0.5' ffg	8.1	109.0	115.0	10.0	94.7	
11	5-12-92	40'W/30'N-SE Corner	-0.4' ffg	9.0	110.7	115.0	10.0	96.2	
12	5-13-92	45'W/45'N-SE Corner	SG	7.0	113.3	115.0	10.0	98.3	
13	5-13-92	37'W/35'N-SE Corner	SG	6.1	112.7	115.0	10.0	98.0	
14	5-13-92	20'W/20'N-SE Corner	SG	5.7	109.7	115.0	10.0	95.3	
15	5-13-92	10'S/10'W-NE Corner	SG	10.2	112.3	115.0	10.0	97.6	

Note: ffg=from finished grade SG=Subgrade

Note:

This report presents the results of our testing of the fill placement. We have relied on the contractor to continue applying the recommended compactive effort and moisture to the fill during times when our observer is not observing operations. Tests are made of the fill only as believe necessary to calibrate our observer's judgment. Test data are not the sole basis for opinions on whether the fill meets specifications.